### RICHARD T. BISSEN, JR.

Mayor

#### JOSIAH K. NISHITA

Managing Director

GINA M. YOUNG
Director





### **EAST MAUI WATER AUTHORITY**

COUNTY OF MAUI 200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAI'I 96793

December 08, 2025

Dawn N.S, Chang, Chair And Members of the State of Hawai'i Board of Land and Natural Resources Kalanimoku Building 1151 Punchbowl Street Honolulu, Hawai'i 96813

# RE: EAST MAUI STAKEHOLDERS COMMITTEE 2025 FINAL ANNUAL REPORT

Aloha e Chair Chang and Members of the BLNR:

Mahalo for the opportunity to facilitate the East Maui Stakeholders Committee over the last year. Please find enclosed the final copy of the Committee's Annual report pursuant to Condition 6 of the Board of Land and Natural Resources 2025 Revocable Permit, for your reference at the scheduled Board of Land and Natural Resources meeting on December 12, 2025, related to Agenda Item No. D.15.

Should you have any questions or would like additional information please do not hesitate to contact me at Gina. Young@co.maui.hi.us or at 808-250-6589

Mahalo,

Gena >

**GINA YOUNG** 

Director, Dept. of East Maui Water Authority

County of Maui

Dawn N.S. Chang, Chairperson and Members State of Hawai'i Dept. of Land and Natural Resources December 08, 2025 Page 2

### Enclosures

cc: Ian Hirokawa, Interim Administrator, DLNR land Division Richard T. Bissen, Jr., Mayor, County of Maui Josiah K. Nishita, Managing Director, County of Maui John Stufflebean, P.E., Director, County of Maui Department of Water Supply Shane Sinenci, Councilmember Maui Hikina Residency Area East Maui Stakeholders Committee Members Jonathan Likeke Scheuer, Chair 'Aha Wai O Maui Hikina East Regional Community Board and Members

# 2025 East Maui Water Stakeholder Committee Meeting Report and Recommendations

----- FINAL -----

November 12, 2025

# Contents

202	5 East Maui Water Stakeholder Committee Meeting Report and Recommendations	s 1
	Summary of Main Discussion Topics	3
	November 6, 2025 Meeting Topics	3
	Input on 2026 Revocable Permit Conditions Based Upon	9
	Committee Discussions	9
E	ast Maui Stakeholders Committee Participants	11
P	olicy Items for Discussion as Requested by East Maui Stakeholders	12
S	takeholder Meeting Notes	14
	February 27, 2025	14
	March 27, 2025	19
	April 24, 2025	28
	May 22, 2025	31
	June 26, 2025	36
	July 24, 2025	42
	August 28, 2025	45
	September 25, 2025	48
	November 6, 2025	57

**Background:** The committee was formed pursuant to Condition 6 of the Board of Land and Natural Resoruces 2025 Revocable Permit as follows:

<u>Permit Condition 6:</u> The County of Maui shall coordinate with an interim committee to discuss water usage issues in the areas where the streams that water may be diverted from under this revocable permit are located. The committee shall consist of eight members, representing EMI/Mahi Pono, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation, the Huelo Haiku Community Association, the Sierra Club, Na Moku Aupuni O Koʻolau Hui, and the County of Maui, the Department of Hawaiian Home Lands, the Aha Moku Advisory Council, and interested members of the Huelo community as determined by the County of Maui. The interim committee shall meet at least monthly. The County of Maui shall be responsible for organizing and scheduling these meetings.

In 2025, the Interim Committee of East Maui Water Stakeholders met monthly beginning in February with a consistent participant base of approximately 15-25 representatives from member groups. Attached is a list of the member groups, their missions, and a list of policy items relating to the management of East Maui water. The meetings focused on discussions around Mahi Pono's monthly and quarterly reports and had topic experts to enhance participants' understanding of policy issues.

The intent of the group is to foster discussion to:

- Build trust among participants
- Bring a better understand of each other's perspectives
- Bring expertise into discussions to better understand issues
- Work to find alignment where possible
- Provide a cohesive summary of input to the Department of Land and Natural Resources and the Board of Land and Natural Resources

This report summarizes those discussions and makes recommendations based upon discussions while recognizing that consensus conclusions between Mahi Pono and the stakeholders was not a main focus. The purpose of the meetings in 2025 has been to build a foundation and to provide a productive vehicle for stakeholder input to the DLNR and BLNR members. It is important to acknowledge that this report was written by the meeting facilitator, Gina Young, Director of the County of Maui Department of the East Maui Water Authority. As such, this is her work product, however it was provided to all stakeholders and reviewed at committee meetings on October 23, 2025, and November 6, 2025. New discussion topics from the November meeting have been included separately. Each main topic is first listed below and then again in later sections with detailed discussion points and then below the discussion points in an open bullet point is a summary of specific stakeholder language on the topic. It is also important to note while there are specific notations in this report of Mahi Pono's disagreements with the recommendations, they stated during the meetings other disagreements with statements and instead of noting each one they will provide testimony directly to the Board. They also noted that discussion on issues is healthy, and disagreements can be expected when discussing these issues. Overall, the process has been beneficial.

# **Summary of Main Discussion Topics**

- Observations of severe drought from all stakeholders, even at the most recent November 6 meeting.
- 2. Stakeholders have observed that full restoration of streams is not actually happening. Stakeholders repeatedly note that local observations do not match the data, and they need to both be considered when making decisions. It has been suggested that 30-year allocation amounts should not be granted prior to fully understanding existing conditions.
- 3. Many stakeholders see a need to reframe water management from a focus on meeting demands to protecting future water availability or at a minimum better balance water needs and water restoration. This is a cultural perspective as well as a practical perspective that aligns with the public trust doctrine.
- 4. Many stakeholders want policymakers to integrate the traditional Hawaiian perspective which includes community observations, knowledge of local systems, and an understanding of the water environmental system as a whole. They also want to ensure that cultural practices are being protected in these changing climate patterns.
- 5. Some stakeholders discussed the need to improve efficiency, especially with changing weather patterns and more frequent drought conditions
- 6. Stakeholders felt that the diversion removal process should be proceeding at a faster pace. EMI noted the lengthy agency transmittal process. Some stakeholders expressed that the agency bottlenecks need to be more actively handled by DLNR and the applicant.
- 7. The Department of Hawaiian Home Lands use of water is a protected public trust use and allocation amounts need to continue to include their reservation of 11 mgd.

# November 6, 2025, Meeting Topics

- 1. There was no water surface available to water Mahi Pono crops from August 28- mid October. Mahi Pono did not plant crops during the 3<sup>rd</sup> quarter, but is intending to plant more crops in Q4, primarily consisting of coffee and avocado.
- Stakeholders are observing continued drought even with recent additional rainfall. It is inappropriate in this time of historic drought to be considering taking more water through a longterm allocation right or by reducing IIFS.
- 3. The public trust doctrine is not being upheld and in these historic drought conditions. We need to fulfill our constitutionally mandated responsibilities to protect water resources and regulate the use of water the way our Constitution directs us to.
- 4. SHPD has responded to Huelo diversion removal permit applications. Once diversion walls are removed and ditch bridges are complete, then water in the streams will bypass the ditch system and remain in the streams. The amounts of water have been stated as small amounts that are the first to dry up, and the bridges which allow flow to happen again will improve stream biology and health.

5. DWS will be able to process a total of 12 mgd once Kamole Weir treatment new filters are installed. A request was made to have DWS articulate average need, not peak need.

#### **Detailed Summary of Discussion Topics**

- 1. Observations of continued severe drought from all stakeholders, even at November meeting. Note: all commentary included in this document, unless presented in quotes, is a paraphrasing account for clarity using as much original dialogue as possible.
  - a. Persistent drought conditions have resulted in significantly reduced amounts of stream water for all users. Community members in Nahiku, Ke'anae and Huelo have reported unprecedented low levels of stream water resulting in poor stream water quality and an inability to grow food and other crops. Mahi Pono noted dry conditions, less surface water availability, increasing use of well water and inadequate water for existing crops.
    - We're all in a bad situation. I think we can all agree on that.
    - My long-term observation is over 50 years and my current rainfall collection data shows we're living at half of that and I'm seeing less and less water enter the ocean.
    - o It seems to me we don't have the same weather we did 40 or 50 years ago.
    - o Our stream level has just in the month of January gone down half as much.
    - o The water flows are very low, almost no water available for us.
    - EMI noted severe drought conditions raising red alert status for water availability: "I have never seen it this dry in my 33-year career."
    - EMI noted reliance on 100 years of historical rainfall data and highlighted changing conditions, requiring flexibility in planning: "The weather patterns have changed a little bit. It's harder to rely on historical records so flexibility and adjustments are necessary."
    - If conditions really are changing in East Maui and all of us have been observing for 40-50 years, you know, I think that's our anecdotal observation. Maybe we need to redefine what acceptable system loss levels are because we just ain't got the extra in our bank account
    - Water availability today is considerably less than a decade ago; weather patterns have changed making calculations hard. Streams are flashy with sharp spikes and drop-offs depending on rainfall intensity.
- Stakeholders have observed that full restoration of streams is not actually happening. Stakeholders repeatedly note that local observations do not match the data, and they need to both be considered when making decisions. It has been suggested that 30-year allocation amounts should not be granted prior to fully understanding existing conditions.
  - a. During meetings stakeholders have stated that:
    - o The restoration is only on paper. We only read about it. The rain is not there.
    - The observation in the communities is that these fully restored streams have a trickle or nothing. So it's not like, oh gosh, if we could only divert these streams again, we'd be in good shape. It's like those streams have no water to speak of, at least from the observations that those of us in the community are making
    - For various reasons, there is both a distrust of the existing data and concern that there's a significant lack of other sources of data on diversion, ditch flow and other things and uses. And that again, those the data that we do have doesn't seem to match the experience of the folks who are living and working and ancestrally from Maui Hikina.

- b. A holistic perspective is needed. Data numbers need to be examined next to local observations and the entire natural water system and all related surface, ground, spring and rainfall need to be considered together. All user needs should be considered.
  - o If we only if we only look at data, then we need to have the comparison with local knowledge. We need to compare it. The ancestral knowledge gets muddled, muddled in bureaucracy, or whatever you may call it, but the data for some reason prevails and decisions are only made on that. I have the hardest time trying to understand that concept. Because if we don't look at it in in a whole we all are in trouble. Look at Lahaina
  - I'd like to have more study on percolation because how long does it take before it there
    is full restoration underneath in the aquifer? I would like to see data on what will it take to
    resolve the injury underneath.
  - Data collection from kalo farmers was suggested so we understand their needs and the larger picture of water usage, suggesting that when the full scope is looked at there's a balance. Mahi Pono did not support imposing data collection onto others. There was a suggestion that a third-party be hired to assist with outreach and compiling information.
  - I do agree that we do need to hear from our taro farmers from East Maui because we are the ones that are suffering when we don't have water, and now that we have drought, you know more suffering. But because of the diversions been happening so long, you know, the stream beds crack. And when we do have water, the water run away in the crack and it's not fully coming down to our lo'i unless we have flash flooding or what we call it big water, and the water going overflow and then it'll reach down to us, you know, but, other than that, if we have normal then no stream flow. We ain't got no water down in our territory, so I agree that we should hear from our kalo farmers, even though they say we have first priority."
- c. Many stakeholders asked for a better understanding of data. At the April meeting, University of Hawaii UH Mānoa Water Research Center hydrologist Chris Shuler presented an overview of climate change data and modeling. The Hawaii Climate Data Portal has found that Hawaii has been in a continued drought since 2000, and the long-term trend is negative; however other modeling shows contradictory results. There is also a lack of data in the area and understanding of where surface water comes from due to the complexity of surface and groundwater interactions in East Maui. Research focuses could include aquifer interconnectivity, watershed runoff affected by native vegetation and invasive animals, and soil moisture dynamics.
- d. Some stakeholders have asked for better regulatory and enforcement tracking. Members urged more community outreach and accessible resources such as maps and data hubs for information and the need to recognize the quantity of stream water will be less after diversions are removed:
  - o If you look at the what the Water Commission produced in November 2022, they produced a report on page 31 of this report, which you should have. There is a table that indicates there is going to be 13 million gallons of water less available to Central Maui after the Huelo recommendations implemented then they expect it before. So there's going to be a significant. Certificate reduction of water that's going to go to central Maui, about 13 million gallons. It also estimates that 5% of the time, and maybe we're in this 5% time right now, only 10 million gallons a day are gonna be available. From East Maui to central Maui. 10% of the time only 13 million gallons a day. There is a pretty. So this is, this report is what almost three years old now. It may already be outdated, but back then the estimate was. Back then, the Water Commission recognized the numbers in the EIS were wrong,

- not through any fault of anybody. It just time had passed and there was better data and it shows way less water being available to be taken from East Maui streams and that number's going to go down once the Huelo modification are made.
- The first thing we need to do is to actually figure out how much water is actually being offered to the streams, more rainfall gauges so we have better tracking from different locales because it might rain one thing at Wailua lke. They have a rain gauge there, but at another stream might be very different.
- "We need to figure out the kind of data we need to plan accordingly for a future that may be a lot less rainy. And if we are wrong, wow, there's really no downside."
- "We should get the data we need, so that includes multiple types of data, aquifer recharge, all, all those kinds of things, including what is currently being displaced from the aquifer. All of that needs to be assembled so that we can make good decisions. Otherwise, we just kind of batting at something that's coming at us and we have very little understanding of, you know, where it's coming from and where it's going to go."
- One of the things Chris Schuler talked about too, is better understanding what's going on in the connection between groundwater and surface water and perch water and the need to understand that.
- 3. Many stakeholders see a need to reframe water management from a focus on meeting demands to protecting future water availability or at a minimum better balance water needs and water restoration. This is a cultural perspective as well as a practical perspective that aligns with the public trust doctrine.
  - a. Stakeholders expressed concerns about Mahi Pono's continued planting and its impacts of increasing the demand for water in an era of historic drought. Mahi Pono has commented on the lack of water availability and negative effects on tree crops, noting that some trees are dying on the farm due to a lack of water, however during the November meeting they announced they would resume planting in the 4<sup>th</sup> quarter.
    - There was no water surface available to water Mahi Pono crops from August 28- mid October. Mahi Pono did not plant crops during the 3<sup>rd</sup> quarter, but is intending to plant more crops in Q4, primarily consisting of coffee and avocado.
    - The new August 2024 plan is calling for irrigation of 26,600 acres... That's quite an increase of 6000 acres.
    - Keeping the central valley planted is positive because fire mitigation is important, and we
      may want to look at native trees because they are more drought and fire resistant.
  - b. Stakeholders expressed concerns over focus to meet increasing demands over protecting the eco-system to ensure future water availability.
    - We need to look at water in a new lens. Now we have heard Grant guys say that they think that this is sort of a cyclical thing. It won't be our forever situation, and of course we all hope that that is true. We need to look at the amount of water that's realistically available. We do need to think about 7 generations long term.
    - I just had a meeting at the OHA office last night with trustee Lindsay and the topic was around water, but it wasn't so much about the current needs. It was how the current needs are creating this problem. We're thinking that we just got to put it on paper, that we have these needs and all of a sudden the water's gonna appear. And we haven't even addressed if we even have the water. No matter which way we look at it, our focus cannot be meeting the needs. It needs to be on living within our means. We need to focus on the reality that we live on an island."

- What will happen when there is no more water for everyone? The recharging of our aquifers should be a consideration that everyone must be looking at and proactively managing before we have a dire crisis.
- There's not going to be enough water out there. We really need to find a way to share it a little bit more eagerly.
- c. Concern over meeting current and long-term water needs which includes Kula Ag Park build out and expansion of new Park, DWS domestic needs as treatment capacity expands, Department of Hawaiian Home Lands, and Mahi Pono. The Department of Agriculture manages Kula Ag Park with 445 acres and a planned an expansion by 262 acres (Upcountry Maui Ag Park project) expected by 2027, increasing water demand significantly. Only 1/3 of the current Ag Park is being used and the second Ag Park will add an additional 262 acres. Less water will be available to the permittee once the diversions are removed and IIFS becomes mandated, adding to concerns about the state over promising stream water.
- d. The need to maintain water for DHHL was discussed.
  - We must ensure water availability for the long-term reservation for Hawaiian Home Lands and protection of traditional and protected Hawaiian practices: Our reservation that has not yet been fully granted for our Waiohuli and Pulehunui lands and tangentially beneficiaries in the area have constitutionally protected traditional and customary practices.
- 4. Many stakeholders want policymakers to integrate the traditional Hawaiian perspective which includes community observations, knowledge of local systems, and an understanding of the water environmental system as a whole. They also want to ensure that cultural practices are being protected in these changing climate patterns.
  - a. Many stakeholders repeatedly emphasized the need to integrate traditional Native Hawaiian knowledge and stewardship practices with modern science in order to have sustainable watershed management.
    - o If this conversation and this whole policy process were in, was actually sort of grounded in and informed from native intelligence and ancestral perspective, we wouldn't be having this discussion at this time. And instead the discussion would be focused on stream restoration and stream flow protection in Maui Hikina for the communities that had been focused on it, addressing that until conditions change in these fundamental issues are addressed.
  - b. Calls for protecting customary practices and ensuring active community input mechanisms, including the need for continued updates and reporting from water users and practitioners.
    - Do we need a Ka Pa'akai analysis? Is the IIFS process and standards adequate for the protection of these rights? How do we incorporate all stakeholders?
    - We must ensure protection of traditional and protected Hawaiian practices: Our reservation that has not yet been fully granted for our Waiohuli and Pulehunui lands and tangentially beneficiaries in the area have constitutionally protected traditional and customary practices.
  - c. Many stakeholders cited a value in kūpuna knowledge and educational curricula incorporating local knowledge and stewardship values.
- 5. Some stakeholders discussed the need to improve efficiency, especially with changing weather patterns and more frequent drought conditions

- a. Stakeholders specifically discussed ditch and reservoir lining and more storage and the unforgiving nature of the system to take everything the way it is designed.
  - o It's a low hanging fruit if you're diverting water and you can somehow make the process more efficient and retain as much of the water as possible to its intended destination. And you're experiencing, you know, periods of drought that are more frequent. You should be adapting your system to just do all you can to make sure that every drop gets where it's intended to go.
  - And the county is, you know, moving forward with Kamole storage and once that is done.
     I think they are looking at other storage Upcountry at least. For when there are storm flows in the gulches, perhaps, and in other words, using water beyond just what's in the streams of East Maui. But water that using water that comes with the rain.
  - We need a cooperative approach with Mahi Pono and the Water Authority to just look at some sections of the ditches in East Maui which supposedly don't lose any water and see how they're holding up now under low flows.
  - Is there some kind of plan to capture rainfall?
  - Water efficiency is part of our kuleana. If people thought that water wasn't being taken care of properly, they want somebody new.
  - If water flowed into lined reservoirs, it would better conserve water during flashy stream events.
  - The delivery system as a whole is the problem. That is our number one thing draining of our waters. It's unforgiving. Can we actually try to regulate it? Try to make it more efficient. It's just the way it's designed. It's unforgiving. Whatever falls in there, it will get pushed somewhere else. And wherever that ditch leads to and it ends up. Whatever sprinkles we had these past days, weeks is falling in that ditch and going somewhere else. But what's really what's really discouraging is that the talk is still continuing. It's like the system is the only thing that we have. But it's unforgiving, unforgiving. No one can actually control it. Even no matter how much gates we open. The effect is still there. All in that tunnel, there's side ditches going up into the mountain, capturing all the punawai exposed. The springs that's nearby. It's falling in that ditch. And heading West. Now that's the data that that is real. Walk take a walk in there. Right now it's all on paper. Use that paper and take a walk up in there.
- 6. Stakeholders felt that the diversion removal process should be proceeding at a faster pace. EMI noted the lengthy agency transmittal process. Some stakeholders expressed that the agency bottlenecks need to be more actively handled by DLNR and the applicant.
  - a. The IIFS Work Summary reports were reviewed and stakeholders found them difficult to understand. Including agency transmittal and response dates would useful. Mahi Pono generally does not support more date reporting from them and views the current level of reporting as extensive.
  - b. Recommended more accessible, clear updates for the community on restoration and permit statuses: "A colored spreadsheet or visual chart showing permit progress would help keep the community informed."
- 7. The Department of Hawaiian Home Lands use of water is a protected public trust use and allocation amounts need to continue to include their reservation of 11 mgd.

# Input on 2026 Revocable Permit Conditions Based Upon

### **Committee Discussions**

- 1. Condition 7: Continue to require monthly stakeholder meetings with County facilitation. Trust has been built over the past 8 months and Mahi Pono has been very good at explaining operations and developing a positive rapport with stakeholders. Mahi Pono has had an opportunity to develop positive relationships with stakeholders. EMI/Mahi Pono agreed to conduct site visits with limited vehicles to minimize impacts at the September meeting. There are still items on the policy list that have not been discussed in the 8 meetings held in 2025. See comments below:
  - Mahi Pono stated that: "Trust has been built over the last eight months and these discussions have been generally good."
  - I'm trying to understand what crops use what amount of water and having that be transparent, which your process is doing, which is good.
  - Wow, I never knew that. Thank you for explaining.
  - o Thank you for explaining that. That wasn't made too clear in the past.
  - I hope we continue to have this opportunity to work on the trust first so we can have collaboration.
- 2. Condition 7: Require additional data on Monthly & Annual Average Water Use Report: Reporting of additional water left in the streams that is below the cap and reporting of water left in the streams that is above the cap. This provides a better idea of the amount of water Mahi Pono needs in relation to the cap amounts.
  - Mahi Pono's response to disagree with the recommendation is any additional reporting requirements: "I just wanted to make a note that we appreciate the conversation on these conditions, both as it applies to Mahi Pono and potentially as it could maybe apply to other uses of water. But from our perspective, this is not a discussion about us seeking to impose the same conditions on other users. I think our main point is that the level of reporting imposed by these conditions, even on Mahi Pono, is a little bit excessive. And if we're going to be adding conditions like this, it was good to hear an acknowledgement that it would be difficult, if not impossible, for any other user to meet this level of reporting. So for us, I just wanted to make a note of that. My appreciation that you know the level of reporting that we're providing was acknowledged as being a lot. And also that you know like I mentioned before: I didn't have a chance to go over this report in too much detail, but just hearing the discussion, hearing where I think this report is going, it's seeking to add a number of new conditions to our level of reporting. So although this is gonna be kind of submitted as the committee's report. There are gonna be things that we just need to agree to disagree on. I think this is one of them."
- 3. The amount of surface allocated should be reduced by the amount of groundwater that is available. Well water is a large source of irrigation water on the farm and as such should be factored into the permit allocation amounts. Total crop irrigation has historically—and are currently being met through—a combination of both surface and well water. The intent is to reduce surface water amounts allocated to leave more in the streams, not to regulate well water usage through the BLNR revocable permit.
  - Mahi Pono response is that they disagree with this recommendation: "We are pumping a significant amount of groundwater currently through the first nine months of the year, so I don't have the September numbers finalized, but generally we've pumped on average about

17,000,000 gallons of water per day. We've diverted on average 23.57 gallons of water per day. Now we're not pumping groundwater because we like to or that it's there. We're pumping it because we need to because we have a irrigation shortfall because of a lack of surface water from Smalling. So if you look at that, if you look at that split currently it's 23 million gallons diverted 17,000,000 gallons pumped. That's not a ratio that we feel is feasible in the long term to pump about 40% of your overall water. I mean the fact that it's available doesn't make it feasible. It's there, but is it a feasible way to water crops? We are relying on groundwater currently as a supplement to overcome an irrigation. That's a need-based practice, not a desired practice, and not one that's feasible long term."

4. Require reservoir lining. A plan for water infrastructure improvements needs to be made and become the benchmark for system management. Reservoir lining has been mentioned by both committee members and during community engagement meetings as a reasonable best management for managing water resources, especially during drought periods. Reservoir 40, shared by Kula Ag Park and Mahi Pono should be lined to ensure water is not lost due to seepage. With lining, there's more water to remain in our streams and provide Mahi Pono more water to irrigate their crops so they don't lose water that seeps into the ground. This is even more critical with increased and more severe drought conditions.

**Mahi Pono response is to disagree with this condition recommendation**: "To require it as a condition of a one-year permit, I think that goes back to our general position that it's hard to make a significant investment like lining reservoirs when we have a water commitment of such a short term."

**Stakeholder response:** "We've been talking about this for years. Revocable permits have been going on for decades and have become a de facto long-term permit. The lining of reservoirs that are more than 100 years old needs to be addressed. Mahi Pono received \$55 million back from A&B and that payment can be used on lining reservoirs. More water for crops and for streams will be available."

- 5. Continued investments in real time data need to be made by permittee and government. Good governance requires an understanding of current conditions. Information on water diversions at each stream needs to be provided to better understand current stream conditions and to monitor IIFS, specifically:
  - a. The amount of water taken per day from each stream should be reported.
  - b. Meters in the diversions above and below intakes to accurately track water removed from streams.
  - c. Gauges in each stream to track how much water is present to track whether the IIFS are being met.
- 8. Allocation amounts need to continue to include the DHHL reservation of 11 mgd and their status as a public trust use of water.
- 7. **Ensure the protection of cultural practices under current conditions.** A current assessment needs to be confirmed through a Ka Pa'akai Analysis. Environmental conditions have significantly changed since the EIS consultations were done, making it outdated and likely inaccurate in today's conditions.

Mahi Pono response is to support cultural protections; however, they disagree with the notion that the EIS is outdated and thus inaccurate.

# East Maui Stakeholders Committee Participants

### 1. Haiku Community Association:

Scott Werden, Philip Lowenthal and Mary Ann Kamalani Pahukoa

#### 2. Sierra Club:

Lucienne de Naie and David Kimo Frankel

### 3. Huelo Community

Lurlyn Scott and Laf Young

### 4. DLNR State Aha Moku Council: pending

### 5. Hāmākualoa Aha Moku Council:

Joyclynn Costa

# 6. Koʻolau Aha Moku Council: pending

### 7. Na Moku 'Aupuni O Ko'olau Hui:

Jerome Kekiwi, Jr and Norman Bush Martin, Jr.

## 8. Native Hawaiian Legal Corporation:

Ashely Obrey

# 9. Department of Hawaiian Home Lands:

Cherie-Noelle Ka'anana and Dr. Jonathan Likeke Scheuer

### 10. Office of Hawaiian Affairs:

Chair Kai Kahele (invited), Kauikeaolani Wailehua, and Leina'ala Ley (temporary), Sharde Freitas

#### 11. Farm Bureau:

Darren Strand and Warren Watanabe

### 12. County of Maui East Maui Water Authority:

Moses Bergau, Jr. and Gina Young

# 13. County of Maui County Council:

Councilmember Shane Sinenci and Mavis Oliveira-Medeiros

### 14. County of Maui Department of Water Supply:

John Stufflebean, James Kimo Landgraf, Eva Blumenstein, Robert Robles

### 15. County of Maui Department of Agriculture:

Travis "Koa" Hewahewa (invited), Jeff Jurickovich (retired August 2025), Lauren Nelson, Jeannine Rossa (joined Nov, 2025)

### 16. Commission on Water Resource Management:

Dean Uyeno (as of June 2025)

### 17. Mahi Pono and EMI:

Grant Nakama, Mark Vaught, Jenna Shibano

 $\overline{\phantom{a}}$ 

East Maui Water Stakeholders Committee Meeting - Attendance Report

	East Mai	ui Wateı	Stakeho	East Maui Water Stakeholders Committee Meeting - Attendance Report	nmittee	Meeting .	Attend	ance Rep	ort		
Full Name	2/27	3/27	4/24	5/22	6/26	7/24	8/28	9/25	10/23	11/6	12/18
Ashley Obrey	Ь	Z	Ь	Р	Ν	Р	Ь	Ь	Ь	Ь	
Bush Martin	Z	Ь	Ь	Ν	N	N	Z	Z	Z	Ν	
Cherie-Noelle K. Kaanana	Ь	Ь	Ь	Ь	N	Ь	Ь	Ь	Ь	d	
Darren Strand	Ь	Ь	Ь	Ь	Ν	N	Ь	Z	Ь	d	
David Kimo Frankel	Ь	Ь	Ь	Р	Χ	Е	Ь	Ь	Ь	Ь	
Eva M. Blumenstein	Ь	Ь	Z	Р	N	N	Z	Z	Z	d	
Gina M. Young, Organizer	Ь	Ь	Ь	Ь	d	Ь	Ь	Ь	Ь	d	
Grant Nakama	Ь	Ь	Ь	Р	d	Ь	Ь	Ь	Ь	d	
lan C Hirokawa	Z	Z	Z	Ν	d	Р	Ь	Ь	Ь	d	
Jeffery J. Jurickovich	Ь	Z	Z	Р	d	Р	Ь	Retired			
Jeannine Rosa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Ь	d	
Jerome Kekiwi Jr./	Ъ	Ь									
Jessie Kekiwi-Aweau									Р		
John Stufflebean	Ь	Ь	Ь	Ν	N	N	Ь	Ь	Z	d	
Jonathan L. Scheuer	Z	Z	Z	Ν	Ν	Ν	Z	Z	Z	Ь	
Joyclynn Costa	Z	Ь	Ν	Ν	N	Р	Ь	Ь	Ь		
Kaialii Kahele (Chair-OHA)	Z	Z	Z	Ν	Ν	N	Z	Z	Z	Z	
Kauikeaolani Wailehua	Ь	Ь									
Kimo Landgraff	Ь	Ь	Ь	Р	Ν	Р	Ь	Ь	Z	Z	
Koa Hewahewa	Ь	Z	Z	Ν	Ν	N	Z	Z	Z	Z	
Laf Young	Ь	Ь	Z	Ν	Ν	N	Z	Ь	Z	Z	
Lauren Nelson	Ь	Z	Z	Ν	d	Р	Z	Ь	Z	Z	
Leina'ala Ley (OHA)	Ъ	z	Ь	Z	Ь	Ν	Ь				
Lucienne de Naie	Ь	Р	Z	Р	Z	Р	Ь	Ь	Р	Ь	
Lyn Scott	Ъ	Р	z	Р	Z	Р	Ь	Ь	Р	Ь	
Mark Vaught	Ъ	Р	z	Р	Ь	Р	Ь	Ь	Р	Ь	
Mary Ann Kamalani Pahukoa	۵	z	z	Ь	Z	Z	۵	Ь	Ь	z	
Moke Bergau	Ъ	Р	Ь	Р	Ь	Ν	Ь	Ь	Р	Ь	
Philip Lowenthal	۵	Ь									
Robert C. De Robles						Ь	z	Ь	z	z	
									Ī		

	East Mau	ui Water	Stakeho	ast Maui Water Stakeholders Committee Meeting - Attendance Report	nmittee	Meeting.	- Attenda	ince Rep	ort		
Full Name	2/27	3/27	4/24	5/22	6/26	7/24	8/28	9/25	10/23	11/6	12/18
Scott Werden	Ь	Ь	Z	Ь	Ь	Р	Ь	d	Ь	Ь	
Shane M. Sinenci	Ь	Z	Ь	Z	Z	Ν	Ν	Ν	Z	Z	
Sharde Freitas (OHA)	Ь	Z	Z	Z	Z	Ν	Ь	d	Ь	Ь	
Dean Uyeno								Ь	Ь	Ь	
Warren Watanabe	Z	Z	Ь					Ν	Ь		
Staff:											
Cory Lynn M. Vicens	Ь	Ь	Ь	Ь	Ь	Р	Ь	Ь	Ь	Ь	
Jenna Shibano	Ь	Ь		Ь		Р	Ь	Ь	Ь	Ь	
Linda Kimura											
Dawn Lono				Ь	Ь	Р	Ь				
Mavis I. Medeiros	Ь	Ь	Ь		Ь	Р	Ь	d		Ь	
Serena Fukushima						Р	Ь				
Leslie Tamribuchi						Р	Ь	Ь	Ь	Ь	
Mary-Eliza Beaumont								Ь	Ь	Ь	

# Policy Items for Discussion as Requested by East Maui Stakeholders

- 1. Water usage/allocation
  - Annual vs monthly averages
  - Specific crop watering needs
  - Unused DWS water
  - Use of ground water for irrigation
  - Alternate ground sources
  - Automatic increases of maximum amounts
  - Surface water availability: updated data
  - o Incorporation of rainfall data and implications for the future
  - o Incorporation of Maui WUDP information
  - Competing local agricultural needs
  - o Equitable water allocation/balancing watershed community water needs
- 2. Efficient use of water
  - Purpose of efficiency and loss reduction
  - o Definitions of efficiency, system loss and standards
  - Best practices
  - o Incentives for efficient water use and use of best practice measure, use of a cap
  - Irrigation efficiencies
  - Storage efficiencies
- 3. Long term planning
  - o Rainfall and climate: what does it tell us about future water availability and usage
  - o Length of the license
  - o Long term use and planting plan sustainability
  - Support for local and statewide self-sufficiency and economic stability, resilience and food security
    - Food Security and Nutrition Plan:
    - Access to water for mahi'ai and food production.
- 4. Sustainable management and environmental protection for watershed, stream and near shore coastal waters
  - o Roles of CWRM and BLNR
  - o Compliance with BLNR conditions
  - o Compliance with CWRM conditions
    - Progress on modifications to stream diversions
    - Reporting and enforcement
  - o Watershed restoration contributions and formula
  - o Regulatory obligations under public trust doctrine
  - o Practice of all water above IIFS to one permittee
  - Watershed management in cooperation with local communities
  - o Use of cultural and traditional sustainability practices and generational knowledge in the management of our public trust water resources
- 5. Protection of Traditional and Customary practices
  - o Regulatory obligations under public trust doctrine
    - Ka Pa'akai analysis
  - IIFS standards and relationship to maximization of rights and environmental health

- o How to incorporate all stakeholders
- Support cultural and traditional sustainability in the management of our public trust water resources
- o Promote native Hawaiian well-being through watershed restoration and community reengagement of kuleana to care for natural resources
- o Support kanaka mahi'ai
- 6. Equitable water management and watershed responsibility
  - o Local community participation in political decision making
    - Identification of affected communities
  - o Practice of all water above IIFS to one permittee
  - o Watershed management done in cooperation with local watershed communities
  - o Equitable formula for watershed restoration contributions
- 7. Food Security and local community economic resilience
  - o County Food Nutrition and Security Plan support for mahi'ai
  - o Long-term planning needs
- 8. Upcountry DWS water usage and future needs
  - o 30-year timeframe and known data
- 9. Kula Park expansion usage and future needs
  - o 30-year time frame and known data
- 10. DHHL water usage and future needs
  - o 30-year time frame and known data

# Stakeholder Meeting Notes

Note that all dialogue has been edited for clarity. For exact quotes, please request the raw transcripts.

# February 27, 2025

11:00a.m. – 12:30p.m.

# A. Update from Department of Agriculture: Jeffery J. Jurickovich Background

Since the mid-1980s, the park consisted of 445 acres of land with 31 farm lots on the property. At that time, an estimated  $\frac{1}{2}$  of the land was being used for production.

### Water usage

The average monthly water usage from 2020-2024 was about 17 million gallons per month (or 205 million gallons a year). If all of the land were being used for farming—which was their goal—they estimated tenants would use 50 million gallons a month (or 600 million gallons a year). In the following month they were breaking ground on adding another 262 acres (called UMAP Upcountry Maui AG Park), which would provide space for adding approximately 28 farm lots. The agreement allowed them to use up to 1.5 million gallons of water a day. The expansion would allot them an additional 1 million gallons a day, which would add up to 2.5 million gallons a day (or 900 million gallons in a year). Phase one of the UMAP project was replacing the booster pumps and moving them inside the reservoir at the base of the Mahi Pono Reservoir 40. Phase two was expanding the 4.4 million gallons of storage they currently had to around 7 million gallons on site (this was expected to take place in 2026). Phase three was extending the existing service line down to the UMP site in 2026. Phase four was developing the park itself in 2027. There was nothing "in the works" for any additional parks being built by the AG in the next 30 years.

### <u>Information from question-and-answer period:</u>

*Question*: The county owned around 20 acres in Haiku where a new fire station was to be built. There was discussion of delegating the remaining 16 acres to AG Park in the future. Was this on the Dept of Ag's radar?

Answer: Yes, he had heard of this but there was nothing in the works currently for the Dept of AG.

**Question**: Would this be beyond the 2027/2028 timeline in which Kula Ag Park would be completed? **Answer**: Correct, their priority was the UMAP project development for which they had already received most of the funding.

Question: Would Reservoir 40 work only as their pumping source for their two existing reservoirs?

Were these reservoirs lined? *Answer*: Yes, they were both lined.

**Question**: How much did it cost to line those reservoirs?

Answer: An engineer gave them a now outdated estimate in 2024 for lining Reservoir 40: \$4.8

million.

*Question*: Reservoir 40 was owned by Mahi Pono, yet they got an estimate for it? *Answer*: Yes, only an estimate was made. There was no further planning or action.

Question: How much did it cost to build a new reservoir?

Answer: An estimated \$22 million.

**Question**: Was an estimate done on how much lining a reservoir contributed to water saving costs? **Answer**: No.

*Question*: Was the lining to be concrete or plastic? *Answer*: Fabric, 8 inch non-woven geo textile fabric.

**Question**: Was it true that there were elevation issues and water had to be stored somewhere on site to cool AG Park?

*Answer*: He believed they were referring to the booster pump relocation, which wouldn't pull from the ditch.

Question: Was it possible that the county would pay for the lining?

Answer: He did not have an answer to that question.

Question: If no water entered (percolated) Reservoir 40, how long would it last?

Answer: He did not know.

Question: He said it would cost 22 million alone just for the new reservoir?

*Answer*: Correct. They were working on getting more funding, including congressional funding, to make up the difference.

Question: Was the approximately 150 acres of cultivation consistent over the past four years? Answer: He did not have an accurate estimate for cultivation, only for water usage. In the 1980s there were farm leases on the land that required farming for the first two years, so there was a lot of farmable land that wasn't necessarily being used then. Their rough estimate of ⅓ of the land being used for farming was based off of Google Earth.

Question: What did they define as cultivation?

Answer: A rough estimate of land that was being planted on.

**Question**: Was the Department of AG going to recommend that there was any greater requirement for people to actually farm the land?

*Answer*: The leases that existed were all different, he wasn't sure. They were 50 year leases that were coming up in the next 10 years, and most of them would be renewed.

*Question*: He recalled the County Council discussing the purchasing of land that several upcountry farmers brought up–possibly around 2016-2018–that there was no waiting list for the current Kula AG Park. Was that still the case?

Answer: That wasn't the case. He currently had around 40 interests on his file from people asking if there was any land available. Currently, Kula Park hadn't had land available for a long time. They were about to put two lots up for lease, for which there were about 40 people interested.

Question: Were there any specific planting plans during times of drought? Answer: No.

Question: Could they include requirements in the new leases they were developing to not only keep farmers farming the land but to also use it like Mahi Pono was using drip irrigation?

Answer: The Department of AG had not gotten into the means and methods of the farmer practices. One of the big issues they needed to work out was that they were going to have about 700 acres and 50 farms. They were going to need to determine what each acre of usable space could use based on the water

available. He was open to doing a pilot study to show how much drought water-use requirements could save, and probably even in increased production as well by proper watering on a daily basis.

## **B. Questions for EMI: Mark Vaught**

Question: Was Reservoir 40 also supplying some of the Mahi Pono lands?

*Answer*: Yes, Reservoir 40 did provide some water to some of the AG fields at Mahi Pono. He didn't know how many acres off the top of his head.

Question: By moving that pump, did that affect the amount of water that would be available to Mahi

Pono? Or was it just engineering improvement?

Answer: It shouldn't affect his opponent's operation at all.

### C. Update from Mahi Pono: Grant Nakama

In January they averaged a diverted amount of 31.28 million gallons of water per day (as measured by Hornopol) that supported 12,243 acres of crops in their East Maui fields, which was the same number of acres that was planted as of the end of 2024. After planting 1600 acres in December, they planned to take a breather through most of March. The 31.28 million gallons a day (mgd) was below their typical amount, mainly because they had a relatively dry January. The amount of water that was applied to diversified agriculture during January was 30 parts 34.64 mgd. So they applied more than they diverted in East Maui.

Question: Where was that from?

Answer: From the groundwater they pumped on farm, as well as surface water from the areas

between Honolulu and Maliko.

*Question*: So they just had some presentations over the past few months about this new flex fuel biodiesel plant that was proposed along Pulehu Rd, and they had a number of fields along Poulet Rd. Were there any thoughts in partnering with Hico and providing the biofuels type of crops? He knew that long ago when A and B had the land, they had plans for some biofuel crops, but he wasn't sure. He thought the area was more out in central Maui, but was there any discussion or any thought about biofuel crops as being part of the eventual plantings?

*Answer*: Yes, many had approached them. One specific developer kept in contact with them, although mostly with questions regarding access. But no, it was something they always kept an eye on. He knew that eco would probably continue to issue these RFPs and the need for those types of crops would probably exist for at least a while.

**Question**: So there was no preferred fields or anything that might be likely for biofuel at that time? **Answer**: No. They were primarily focused on food crops, but as far as earmarking specific fields for that use, currently no.

Question: Were alfalfa or forage crops being grown?

Answer: Not on any significant scale, no.

**Question**: Were the crops going to be harvested and bailed and used as feed off of that land? **Answer**: Yes. They were currently harvesting and bailing those fields and using that as part of their molecular company operation.

Question: Would grazing continue to take place where they saw cattle then?

*Answer*: Primarily, although cattle was rotated into the fields between Haleakala highway and Pulehu Rd. More toward the Malka fields in that area. But yeah, they were right for the most part, the main grazing areas for Marie Cattle Company were in their more eastern fields above Ho'okipa.

Question: Would planting start again in March, April?

*Answer*: Primarily. They were going to start their road crop planting in March or April and that would consist primarily of watermelon and onions.

*Question*: In the extending drought periods, what would be their role in scaling back the growth that the water was being required for?

*Answer*: Yes, they had agronomists on staff. They tended to the trees, took soil samples, moisture readings and used those measurements to adjust their water use plan day-to-day and month to month, depending on the amount of water that was available. They also had sources that could help supplement surface water from yeast. For example, the groundwater that they used in the last month, although from a long-term perspective especially annual or longer, the main supply for the farm would always be surface water. Of course, in diverting that surface water, they were always compliant with its flow standards first. So no amount of water was taken out of East Mali.

**Question**: So the IFS standards CWRM would be based on rainfall? What would they do with very inadequate rainfall?

Answer Pt. I: For them, they were just focused on complying with what CWRM put out there and what the IFS was currently based on was stream flow standards, which obviously were indirectly affected by rainfall, but maybe did not necessarily take rainfall directly into account.

Answer Pt. II: They provided for the County Ag Park and then if any, whatever was in between there, they were able to kind of distribute to the rest of the farm. But if there wasn't enough water, then the farm took the short. People came first. It was hard to plan around this because the weather patterns changed.

Question: With these lower flows, did that mean that new Hamakua and Lowry ditch were being utilized?

Answer: Yes, they were utilizing where they could.

Question: Which ditches were being used in tunnels?

*Answer*: They provided those reports to the state and through CWRM they reported monthly to CWRM. They did not give a quarterly report to the DLNR.

*Question*: Were there any ideas on how to examine system loss and improvements that could be made on the changing conditions in East Maui?

*Answer*: Yes, in the way the strategy was written, it was kind of like a public private partnership in terms of funding and initiative.

*Question*: What happened to the unused DWS water? How did that factor into the allocation amount? *Answer*: He was looking at their reservation that had not yet been fully granted and he was trying to determine where that would be incorporated. So he guessed for long term planning, their reservation of 11.5 million gallons for their KO KO WIAHULI and Palako NUI lands and, he guessed, tangentially any beneficiaries or native wines that they may want to conduct constitutionally protected traditional customary practices in the area.

*Question*: The county of Maui had completed its Commission to study and supposedly it was completed. He didn't think it had been released yet in its entirety on the potential for stream restoration of the streams between Maliko Gulch and the K. When would this Department of Water Supply report be made public?

*Answer*: The December stream restoration was completed, and they would be sharing with Lucan folks or the plaintiffs for the East Miamai consent decree first. They could make that report public, but they wanted to make sure it was shared with the plaintiffs first.

Question: Would that sharing happen soon?

Answer: Hopefully in a week or two once Corp council could make their edits.

### **D. Closing Commentary**

*Question*: Were they going to have any check in with folks that actually were using the water in East Maui about how their streams were looking? If there was enough for agriculture, if there was enough for kalo, anything like that, did they have any section where folks could contribute that information? Ashley, did she have any ideas on the best format to hear from some of her clients?

Answer: There was space for updates from folks previously, they could do that.

*Question*: He also had protection of traditional and customary practices. Did they need a **Ka Pa**'akai analysis? Was the IIFS process and standards adequate for the protection of these rights? How to incorporate all stakeholders?

Answer: Yeah.

Question: What else should they discuss at the next meeting?

Answer: Evapotranspiration.

**Question**: Did they handle the irrigation on the farmland? Was that them or was that Grant? **Answer**: That was neither of them, but the evapotranspiration numbers were gathered using weather stations distributed on farms by their agronomists. And those played a large part in determining their irrigation plan for the upcoming week or two. So that was already being implemented.

*Question*: Did they have all of those numbers on their precipitation? How were streams looking out there in East Maui?

*Answer*: It was extraordinarily dry. In the month of January alone, their stream level had gone down half as much. Hopefully they could get some rain real soon. Otherwise, they would have to be like Mani Pono and really stretch their water.

# March 27, 2025

11:00a.m. - 12:30p.m.

**Recap of permit condition and Chair Chang's guidance on the meetings.** The Interim committee meetings were a condition of the 2024 East Maui annual revocable permit. The condition listed out the participating organizations which were represented that day. The facilitator was directed by Chair Chang when they met with her in January 2025 to identify policy issues and through meeting discussions, try to find alignment amongst the different stakeholders and provide recommendations relating to the water permit.

**Committee organizational mission statement.** The first question for participants on the agenda asked for a representative of each organization to share their organizational mission and purpose. The plan was for them to identify alignment amongst all the organizations and develop a mission, vision, values statement to use as a framework for their discussions.

**Draft Policy items.** A list of 43 policy items grouped into 10 broad categories was attached to the agenda. The policy items were derived from questions and discussion at the December 12, 2024 BLNR meeting and from discussion with the committee participants. One of the goals of this meeting was to narrow down the issues and pick topics for the next few meetings. Participants were also asked to identify information needed and potential experts that may have that information.

### **Participant Organizations Mission statements:**

- 1. Haiku Community Association. Haiku nonprofit Community Association was a nonprofit that facilitated solutions to community issues and spoke for the community consensus. There was a great community concern for their water resources, including water sources, the needs, uses, diversions and future plans. Water was critical for all of them. Small farmers, cultural practitioners every resident in Haiku, as well as their ecosystem that survived on water. The trustees, who controlled most of the water were the state land board, CWRM, EMI Mahi Pono, the Maui Department of Water Supply. And at that point, East Maui Water Authority also. So part of their mission was educational to make sure the community was aware of events that may affect them in regards to water. But another part of their advocacy was to represent the community interest to the trustees that controlled the water.
- 2. Sierra Club. Their mission as it related to this item was to make sure streams ran from out to Makai uninterrupted. They wanted to make sure that the water that was taken from their streams was used efficiently, that it wasn't wasted, lost or not reasonably used. There were many ways to improve efficiency. They understood there was a need for some water to be taken, but water stream should not be essentially killed where there were dry stretches because of diversions.
  - The Sierra Club had a long history of involvement with the East Maui area. They had a hiking program where they had duly obtained permission for many, many years, 40 years plus to go and lead educational hikes in this area. They had generations of hike leaders who had reported on conditions shared thoughts about the streams, about the trails, about the watershed itself. Their mission in short was to educate, explore and protect the places of natural places of Earth. They were concerned about what happened to people and the interaction between people and the environment. Their general mission outlook was for people to have a decent life and pass on their environment to the next generation in a way that it would be something useful, generation after generation.
- Huelo community members: Their mission had always been to keep water in the streams, creating water and building up their forests to retain water, advocating for equitable water distribution and transparent accurate data collection through integration of smart technology and

understanding that water in the mountains was not a permanent state given declining rainfall and degradation of the watershed.

Their community had been advocating for their streams from day one, when their water battle first started out there. The main issue they were concerned about was their forest. They needed to concentrate on creating water and building up their forest which had lost a lot of native plants that kept the water in the soil. In their area of Honopou their natural forest was taken out and replaced with invasive plants that they thought would generate income. But it wasn't helping them. Water was not going to be in that mountain forever; if there was no rain, there was no water. It was important to them to keep their water and support their watershed to produce more water.

They had 50 years of observation of the area. 50 years ago Honopou EMI rain gauges showed an average rainfall of 160 inches and at that time it was less than 80 inches. Less rainfall was resulting in less continuous stream flows at lower levels. Less forest floor saturation was resulting increased mud disrupting native flora and fauna, inundating streams. This was evident at the mouth of Honopou stream where the number of prawns had nearly disappeared, likely due to muddy run off, infrequent storms and warner water temperatures. Their family business, Maui water tanks, completed its first rainwater storage tank 50 years ago that summer. They understood storage needs, catchment strategies, pumping and fire suppression. At that time, they advocated that families install twice the storage volume for rain catchment systems than they did decades ago.

In summary, they advocated for the East Maui water stakeholders to consolidate and manage the rainfall reporting system to assure accuracy and transparency. The concepts of water supply and demand for potable water suggested that there may be an inexhaustible supply. They needed accurate measuring through smart rain gauges that reported in real time rainfall and forest saturation to better understand supply and water availability so that the demand could be modulated or adjusted based on this. Demand may and would outpace supply. An equitable solution to this dilemma needed to be created. Taro growers and other local farmers should not be denied access to stream water in their agricultural undertakings. Locals had to be served first.

- 4. Na Moku Aupuna O Ko'olau represented farmers, hunters, fishers. In their area, they were experiencing low stream flow and also a stream direction adjustment caused by heavier episodic storms which was greatly reducing the flow of water into their area. They were working with Mark Vaught from EMI to help address it with state approval
- 5. **Department of Hawaiian Home Lands (DHHL).** The purpose of the DHHL was declared in Section 101 of the Hawaiian Homes Commission Act. One of those purposes as stated in Section 101(b)(4) was "Providing adequate amounts of water and supporting infrastructure, so that homestead lands will always be usable and accessible." The Hawaiian Homes Commission adopted a Water Policy Plan in 2014 to guide management of their water kuleana. The plan identified the following four primary goals: a) affirmatively communicate with beneficiaries regarding water decisions, performance, and water rights on a regional and annual basis, b) aggressively, proactively, consistently and comprehensively advocate for the kuleana of the beneficiaries, the DHHL, and the HHC to water before all relevant agencies and entities, c) develop and manage a Water Assets Inventory, and d) support watershed protection and restoration on DHHL lands and source areas.

The Department had the following three distinct interests related to the EMI system. The first was the right to have water reserved for its future use before any lease was issued. At that time DHHL did not have a fully granted reservation for their lands in Kēōkea, Waiohuli, and Pūlehunui. EMI

had historically dewatered streams relied upon by the Maui Hikina community, including DHHL lands at Ke'anae and Wailuanui. Their second interest was the right for their beneficiaries to exercise constitutionally protected traditional and customary practices related to the water that the state sought to demise. Lastly, they had a constitutional right to thirty percent of the revenue generated by water leases.

### 6. Maui County Farm Bureau

7. **East Maui Water Authority and 'Aha Wai O Maui Hikina East Maui Regional Community Board.** The mission of the board was set forth in the county charter. Broadly it was to ensure local control of water resources and future availability for all, grow water for future generations by conducting watershed restoration guided by the local community and done in a sustainable manner with traditional and cultural knowledge and methods, operate with transparency, and provide a voice and seat at the decision-making table for affected communities.

Our Motto: Eia no o kūlanihākoʻi, no kakou e mālama ai! "Here indeed is Heaven reflected on Earth, it is for all of us to Protect, Preserve and Sustain"

The watershed and their water resources were for all of them to protect, preserve and sustain. Everyone in Maui Nui and at the state level needed to lend a hand and needed to share the manao to fulfill their mission. They were formed so that the community could finally have a seat at the table. It was critical that all the information and things that they did was transparent and guided by their legal framework of the public trust doctrine.

### 8. Maui County Council

9. Maui County Department of Water Supply. Their mission as it related to the East Maui was to supply domestic supply for Upcountry water system, it was about 8,000,000 gallons per day. Their interests went beyond that to understand the watershed better and figure out what could be done to make it healthier for ecological reasons and to allow it to generate more water. They also wanted to get a better understanding of the water delivery system by asking: was it efficient, how could it be improved, how could it be fixed. They were interested in working towards achieving a better balance between all the water needs, including the in-stream needs of all the public trust needs, as well as agriculture, and having the domestic needs meeting the existing demand. They had the meter list and one of their prime missions was to assist with affordable housing on Maui.

To what extent could affordable housing be supported given the limiting factor on Maui was availability of water. They also needed to address the fact that they were very tight in their water allocation and supply at that time. They would be more comfortable if there was a bit more of a buffer in their supply. They were right at the point where supply just met demand. They needed a buffer to account for potential drought periods. They were working on creating a mix of water supplies and increasing storage. Their number one project priority was a reservoir at Kamole and they were moving forward on that with CIP funding secured, for then, and the following year they could begin the project design work. It was also important for DWS to get rights to additional water to allow them to fully utilize that plant. What they really wanted was a robust and resilient water system, not one that was just on the very edge of barely meeting demand.

10. **County of Maui Department of Agriculture.** The five-year strategic plan mission was to advocate for thriving lands in hands that fed and sustained Maui County, provide economic opportunities for the Ag sector, for a market value for Ag products to increase by 50%, food security for residents with healthy local food for residents to increase by 50% and the responsible

agriculture practices responsible agriculture practices goal was to increase by 100%. The Kula Ag Park which was approximately 450 acres and about 31 farms and then they were also developing the new 262-acre Upcountry Maui Park with 20 new farm lots estimated to be operational in 2028. Combined these two Ag parks, which were located within a mile of each would be 700 acres and a little over 50 farms.

Representing County Ag Parks, their interest as a stakeholder was to make sure they had long-term access to water. Their short-term needs were 1.5 million gallons of day water for the existing Park, which was established in the mid 80s and in about three years, they would need another million gallons of day totally 2.5 million gallons a day. They did not have numbers for beyond that time frame. Specific concerns included ensuring access to water from reservoir 40. They were putting the booster pumps in the reservoir at that time. They got the water right out of the ditch right before it went in the reservoir and it was at the very end of the line. They were looking for an established daily communication process that allowed them to anticipate low water or no water that way they could as soon as possible. This was important since they were at the end and it affected so many farms.

- 11. **Mahi Pono.** Mahi Pono was a farming company striving to develop a large diversified farm in central Maui. As shown on their website, they were committed to improving food security and creating economic opportunity for Hawaii through responsible agriculture. They believed that everyone deserved access to fresh, healthy and affordable food. They were committed to creating a more sustainable future for Hawaii through farming. They had transformed sugar cane land into a driving hub by diversified agriculture that produced high quality food products, created good paying jobs, supported local businesses and communities, and respected Hawaii's natural resources as natural resources and environment.
- 12. **East Maui Irrigation.** EMI had managed the ditch system itself and all of the appurtenance that went along with it delivering water to the Central Valley for use by the county, by upcountry farms used by Mahi Pono or whomever. Their main purpose was just to help manage, repair and maintain the system.

### C. Desire for meeting structure and outcomes:

- Structuring the meetings to look at one or two topics in depth and find consensus on policies or recommendations. All the issues were important. They should work through all of them and look for opportunities to combine related items. There was a lot of common ground. They all needed these watersheds to work.
- Greater transparency about the EMI water system
- Real time stream flow reporting: for more accurate water availability estimates so they could see ISFS were being met.
  - Detailed loss calculations for ditches and tunnels before Honopou
  - Sensible balance of water stream and water allocation for East Maui
- Watershed management and cooperation with local communities. Community management
  of their streams with management objectives. Ke'anae folk knew their area best. Same with
  Huelo and Maliko and other areas. The EMWA could convene the watershed communities to
  better understand where their water came from. In some areas a lot of water was produced
  at lower areas, but they were affected by what was going on above at higher elevations. It all
  needed to be managed together. Water came from watersheds and forests. It didn't just come
  from pipes that were put there or ditches that were there.
- Easier to understand reports: Dashboard that showed their progress.
- Community baselines for each area.
- Better watershed restoration to build the forest's capacity to grow and retain water

- Documented understandings of the policy items listed that may be incorporated as a deliverable should a water disposition be pursued. Specifically, it should include, but not be limited to: What allocation of water would each requesting entity receive? Calculations that backed up requests of water. Had alternatives been considered?
- Information and representation of the local communities reflected in decision making
- An understanding of water measurement and how that became sustainable yield.
- An accurate rainfall data and collection in real time had to be upgraded and all decision had to be made on that on real time.
- Data rainfall collection. No one knew what went underneath their feet. Deep inside, where the water came from, where they pumped it out from. They only could see what was falling. It was central to water resource management to understand what was available. They didn't think there was a solution to finding out actually what was under there to make a determination of sustainable or sustainable yield.
- An understanding of Hawaiian sustainability science and how they determined and managed water resources.
- A better understanding of sustainability. People had different ideas of what that term meant.
  What was sustainable for each of the decision making and affected participants. What was
  sustainable for one may be different. Well, they believed that was a scientific term which was
  used that day.
- They would like to see solutions to their water problems, maybe repairing the ditches necessary and removing those that weren't, especially those that were not being used.
- A better understanding of the sources of water in Haiku. Sources of the waters that had historically through harder and it was really unclear where the sources were.
- Observation of the streams and see areas that needed work. A lot of the streams were full of trees and bushes and grass, and one hardly even knew that it was running until going through the bridge because one could not see the water coming down. Who was responsible?
- A better understanding of individual streams and why certain rivers were perennial, and why
  Nahiku was experiencing such a lack of water and becoming a community always suffering
  for water.
- Better mauka to makai connectivity
- Outcomes for Mahi Pono were to continue to have a forum to share their farming progress and to address any concerns that the group may have related to the 2025 revocable permit.

### **D. Policy item discussions:**

- Long term planning in the face of climate change and acknowledging new risk. Incorporation of rainfall data and implications for the future.
- Sustainable use of both ground and surface water.
- An IIFS review to see if the standards were sufficient for environmental and cultural needs.
- Legal framework: the Constitution, Statutes, case law, regulations so they could have a clearer understanding. As an example, was there consensus as to what due diligence meant for a fiduciary? Who was responsible to adhere to the constitutional requirements? What were other legal requirements. In the management of water, and they thought if they had consensus through an expert, perhaps some discussions as to what the law really required there. They would have more confidence that those managing water were actually complying with the requirements and they thought there had been concern that there was a real disconnect. In terms of what it meant to have a fiduciary duty, which was the highest duty of responsibility? What people thought they could do was might made right or was it a rule of law? How were they doing this?
- Water use allocation, annual versus monthly. It was important that they got that right.
- Unused DWS water. Could they have a better system so that the county had what they needed when they needed it so that unneeded water didn't just get dumped into a reservoir.

- The proper balance of the use of groundwater. Groundwater had been historically been used for central valley crops. For irrigation, they needed information about large capacity gigantic wells that they heard could pump 20 million gallons a day. Were they sustainable when they were used.
- Efficient use of water, and everything under that category
- Sustainability, food security, access to water for mahi'ai, traditional and local farming, Upcountry farmers. There was a lot of farming going on that deserved to have enough water for its needs
- Compliance: they kind of got these terse reports, but they were not user friendly
- the AG Park being able to function successfully
- How to record rainfall and who? Transparent community collection done through smart technologies with real time data of rainfall and forest floor saturation and other factors that informed about eco system fragility and soundness. Who controlled and reported the data? Who was in charge of describing the availability? In these Mahi Pono public meetings they were given flows and volumes, but who was in charge of collection and how. How could they rely on it?
- Feral animal control and disposal and reduction of invasive species.
- DHHL having a fair share
- DHHL water usage and future needs. In 2020, DHHL requested a water reservation of 11.455 mgd for their lands in Kēōkea, Waiohuli, and Pūlehunui. This request had not yet been fully granted by CWRM. Furthermore, a reservation of paper water did not directly translate to wet water immediately available and deliverable to their lands. Preservation of water did not directly translate to wet water that was immediately available and deliverable to their lands.
- Sustainable management and environmental protection for watershed, stream, and nearshore coastal waters
- Equitable water management and watershed responsibility
- Efficient use of water
- Protection of Traditional and Customary practices
- More recommendations and outcomes they would like to see documented understandings of the
  policy items listed that may be incorporated as a deliverable should a water disposition be
  pursued. Specifically, it should include but not be limited to what allocation of water would
  requesting entity receive.
- How would the water be maintained to ensure sustainable management and Environmental Protection to ensure the prospering and longevity of this resource?
- How would public trust purposes of water be prioritized in a manner that did not emphasize one public trust purpose over another, but did elevate public trust uses above nonpublic trust uses?
- Use Maui County Water Use and Development Plan The Department of Water Supply recently had a meeting with Hana Stakeholders and came out with a lot of suggestions and ideas that were useful.
- Mahi Pono: Their intention in participating in these meetings was just to take part in discussions which could inform policy opinions, but they were not entirely sure that this was the right form for a policy debate due to active litigation between some of the parties in this meeting and a policy debate in the room of 20 or 30 people may be unfair to the parties to that litigation. Historically these meetings did not include discussions about policy issues. It was generally a forum to share ideas about what could be improved with Mahi Pono's farm plan or to be an educational type meeting. But it didn't involve a debate about policy issues. They planned to listen and learn from those discussions if they happened there, they would continue to share their farming updates, IIFS work progress, water use figures, and address questions about those items. But they may limit their discussions in regard to policy debates. Their hands were a little bit tied. They weren't even the decision makers for their respective organizations. So a policy debate, would it be productive if they weren't the ones to actually make the decisions, and they weren't. They may be limited in their participation there, but looked forward to open discussion.

### E. Other Stakeholders that should be included:

- Existing DHHL homestead lessees and wait list beneficiaries. We have a lot of very great homestead leaders able to be part of the conversation to provide their manao and understanding.
- Community groups working in the mountains
- DoFAW, they are doing the work and making observations
- Maui Tomorrow

#### F. Experts

- Aaron Strauch, CWRM hydrologist
- Others from CWRM
- Climate change experts, Climatologist from University of Hawaii, who studies climate change as it affects Hawaii, would be also hugely important and beneficial to our effort here. (most stakeholders requested this)
- Dr. Chris Shuler, UH
- Hydrologist Matt Rosner, worked on projects in Kauai and Molokai, works with Kanaka Maoli farmers and their water supplies
- Local watershed Kūpuna. There are people who have observed things for 50 plus years. No better experts than them because they've lived it. Their manao comes from inside. These are people who have done this not just for so many years. It's their lifestyle.
- Watershed restoration and forestry experts
- Experts on watershed protection and management
- Experts on minimizing system loss and locating areas of improvement
- Experts on long-term planning to account for climate change.

### **G. Field Trips Requests**

- The water collection and delivery system many requests
  - o Water flow gauges such as the one at Honopou. Information from gauges go into the EMI water usage reports and I'm just sort of curious to see how they works.
  - Seeing the watersheds themselves that surround the streams and the intakes and so forth
  - o An EMI reservoir because there's certain amount of tension around them
  - Stream diversions that are supposed to be dismantled. it'd be great to go out and visit some of those and see exactly what the problem is, why the diversions haven't been dismantled or disabled. Also suggested was to see an area before and after modifications have been met.
- Watershed, Huelo forest areas above Honopou
- There's tunnels up the mountain that we don't understand that and if we could that would be helpful to view the whole situation.

### H. Information participants would like:

- EMI procedures used to manage stream diversions while maintaining IIFS. We hear anecdotally about streams that are not flowing at all. And these are streams that are supposed to have an IIFS set for them. So the question is what's going on? Why is the stream flow stopping? It'd be interesting to hear what EMI does to gauge in the stream and measure stream flow to ensure that they can divert some water without affecting its IIFS. That would be useful, and perhaps to do this as a demo during a field trip would be interesting.
- Watershed restoration practices to create an optimal environment and opportunities to grow water for our future.
- Are these allocations accounting for climate change and future full build out? Or will that be discussed at another time?
- What are the calculations that back up permit water requests and have alternatives been considered

- How will the water be maintained to ensure sustainable management and environmental protection to ensure the prospering and longevity of this resource?
- How will public trust purposes of water be prioritized in a manner that does not emphasize
  one public trust purpose over another but does elevate public trust uses above non-public
  trust uses?
- How will high flow and low flow operations and communications protocols be developed?

### I. Update from Mahi Pono: Grant Nakama

Water diversions in February were 21.04 mgd as measured at Honopou. This is the amount of water available once the ifs were met. We applied to our crops 24.09 mgd, which is more than what we diverted. The gap was made-up primarily with groundwater that we pumped on farm.

**Question:** The approximately 8,000,000 gallons that needed to be pumped from the wells. Did you notice with kind of our lower rainfall that that pumping affected their salinity levels very much?

Answer: Not sure if we measured salinity during the month of February. We typically measure that quarterly and submit that quarterly reading along with our report for each quarter. That typically happens in the last month of each quarter. I believe it happened this month. I don't know the status of that reading, though, in terms of how it relates to the previous guarter and whether or not the salinity levels moved, but we'll see that in the quarterly report that we submitted April. As a general comment it was a very dry February. It was dry on farm, however there was some rain. As a comparison, February's diversified Aq water use number, it was 24. As I mentioned mgd, but in January it was 34 and the reason why we cut back there is not only because the water wasn't necessarily available, but because on farm there was a lot of rain. So we may not have needed to apply as much surface water from east maui to our crops in central Mali. In regard to farming progress: In our report we corrected an acreage discrepancy from the previous month that was a crop discrepancy from a field that we moved out of. So that acreage was reduced, but it was partially replaced with a new crop planting of 40 acres, primarily of onions and watermelons. We removed some of the crops in one field, I believe field 68. And then we planted an additional 30 or 40 acres of row crops primarily comprised of onions and watermelons which are our seasonal summer crops. We're continuing to plant those crops over the next, I believe 6 to 8 weeks. And then we'll harvest those during the summer months, probably June, July, maybe August. Citrus and orchard plantings have stopped for now, as is usual, and then we usually gear up toward the second-half of the of the year to prepare for those plantings. The overall planted acres in in our East Maui fields is 12,224 acres.

#### J. Update from EMI: Mark Vaught

We continue to respect ifs. Dr Strauch from CWRM follow-ups often, and always calls to let me know if there's any questions. We completed all of the newer group Category One and Category Two permit applications. Category One applications have had some follow up modifications to them and are permits for diversion removals. The hardest ones are the Army Corps determinations, and the historic preservation division. Those generally take a long time to do.

For the Huelo ifs the paperwork has been submitted. Everything is in the regulator's hands again, with just pending sitting on Army Corps and historic preservation. For the category two permits, the paperwork has been completed. For the category three permits we are still working on them doing the design work. Our consultant that is talking through some of the design work, but they are making sure that whatever permits could be turned in have been turned over to the regulator so that we can get this thing moving and get it on. The hard part is like I said this. Before the permitting is the long part, the actual physical work is the short part. So, you know, once we get the permits, we're able to get out there and really make a dent in this so. I appreciate everybody's patience.

*Question:* For the category one follow-ups, you mentioned the historic review process. In the past you used an old determination letter for all of your original category ones, category twos that that was what was in your records. Are you no longer using that old determination letter in lieu of SHPD review?

*Answer:* We are required to do something completely different now so it has to be reviewed at a different level through historic preservation and the Army Corps.

*Follow-up question:* When then you prepare a archaeological survey to send to SHPD do you just sent them a letter asking for concurrence, as was done in the past?

*Answer:* We send them the plan and then they review the plan and then they tell us if changes are required or more information is needed. They have not asked us for additional information, they just haven't reviewed the plan.

*Question:* What does Army Corp of Engineers have authority over? Do they review the portions that would be modified in the stream bed? So if something is not in a stream bed, they actually probably don't have authority over it.

*Answer:* Yes, that's correct. In the past, all they do is they would provide us with an exemption letter saying, OK, you don't have to get a permit from us for this. They have not reviewed the permit yet so we don't know what their response will be. I don't deal directly with the with the Army Corps. They go through our consultants, go through them.

Question: Are you including the county archaeologist? CC her on it?

Answer: That would be between SHPD and our county.

*Follow-up comment:* I think it's actually up to the applicant. SHPD doesn't require applicants to send anything to the county archaeologist, but it's just it's a courtesy thing because sometimes they can review things faster and make recommendations to SHPD and actually speed things up. This has been a few people's experience. You might pass that on to your consultant.

## April 24, 2025

11:00a.m. - 12:30p.m.

### Update from the University of Hawaii System: Chris Shuler

Chris Shuler has a background in hydrogeology and groundwater. The Hawaii Climate Data Portal (HCDP) is essentially this tool that our team developed to put daily rainfall maps onto the Internet. for public access. It is a "one stop shop for interactive climate data for the whole state." They are working on adding 100 new weather stations across Hawaii (about 35 in the county of Maui alone). The HCDP found that Hawaii has been in "basically a drought since the year 2000" and that the "long term 100 year trend" is "negative as well." Using statistical and dynamical models, Shuler states that in 2100 Maui and specifically Haiku will be wetter by a slim margin in comparison to today. Those same models suggest that Kihei Mahina will be drier.

*Question:* Your data shows contradictions: that there will be both less and more rainfall by 2100. Is that a fair summary?

Answer: Yes, the two models conflict.

*Question:* Do you have projections for 20 or 30 years from now that would be more accurate than predicting for 2100?

*Answer:* Yes, folks are focusing on creating better models for near term climate. What I hear most about is increased storm intensities. The working theory right now on why we're seeing discrepancies is because of how the data is collected and when.

*Question:* Is there a way to measure soil absorption and how we're getting heavier intensity rains? Is it recharging the aquifers or is it just taking soil down into the ocean? Is there a way to get some kind of understanding of rainfall patterns?

Answer: In terms of soil moisture, we do soil moisture measuring with the Mezzanet Project. That's one of the key parameters that we measure, and we're also interested in getting a better understanding of how soil measures control stream flow through our hydrological research (runoff, basically). The streams run high when it rains a lot, and they run even higher if there is a lot of antecedent soil moisture. We don't really have a great theoretical understanding of how that works in Hawaii. There's a lot of ongoing research understanding the relationship between soil moisture and runoff and how absorbent the soil surface is versus how prone to runoff the erosion is. Deer and pig activity has a really significant impact on runoff dynamics and infiltration as well, as it increases erosion.

*Question:* Have you looked at the length of days below particular rainfall thresholds? Like, if I say "drop severity" maybe that means how many inches during a drought period versus how many days without any rainfall or below a particular threshold?

Answer: Yes. I think they get into that with their drought metrics here. I'll admit, I'm not a drought guy. A couple folks on my team—Ryan and Derek—run the Pacific Drought Knowledge Exchange and make a proposal to look at the drought in American Samoa. I don't think I can answer your question well, but I can put you in touch with Ryan and Derek so that you know their operation for taking drought information and making it relevant to farms and stakeholders in the field.

*Question:* The staff at the Water Commission prepared some reports about two years ago where they look at rainfall data. They come to the conclusion that there's going to be less rainfall available than there is in the past. Did you look at that report in the data set?

*Answer:* I look at a couple of their reports but I'm not sure exactly which one you're referencing. I believe that their data is derived from a subset of this data utilizing the USGS and National Weather Service gauges.

*Question:* In terms of understanding water availability in the future, what information would you find to be the most useful indicators?

Answer: Yes, in two parts. Part one is how much falls from the sky. Part two is what happens to the rain once it hits the ground. I think the ground surface is changing pretty quickly. In our forests, because of invasive species, we really do need more work to constrain and quantify how much runoff we have. We look at native forests and there's no bare soil and everything's spongy. Obviously, the water moves slower across the land surface. I was talking with an aide for Senator Schatz a while ago and he was saying that what we really need is data because we're pouring all this money into watershed conservation and there are just not that many studies that show how well it pays off. In terms of the research space, it's difficult to quantify that effect. In terms of what's actually happening on the ground, it seems like in the short time I've been in Haiku, people are saying there are pigs and deer when there never used to be pigs and deer, and that affects our runoff dynamics. In order to understand water availability, I'd love to have the time or project to analyze the stream flow data. CWRM puts out a lot of stream gauges recently, and that data could be looked into to understand how the watersheds are responding to runoff events. I think that would be the other big mine of data that we could use to understand water availability and what's going on in different watersheds and how much runoff versus base flow that they're producing.

Question: What about recharge versus extraction and perched water?

Answer: This is something that I've been thinking about for a bit. We put together a small-scale study with the Haiku Community Association to try and get a better understanding of groundwater and surface water interactions in the Haiku area. That is a good opportunity for us to gather data and look at evidence regarding connectivity between streams, the aguifers, etc. I think that one of the key things that we've derived from that study is that in different areas the streams seem to be fed from different kinds of sources. Haiku is located in a rift zone, for example. Maui has three rift zones: Ulupalakua Ranch where the Skyline Trail is, the other side towards Kipahulu and Hana, and then Haiku. Geographically in a rift area, you end up with basically conduits where that lava flows through the shield volcano to pop out-as you know, lava fountains. Underneath the ground, those conduits are usually fractures in the country rock and those fractures get full of lava that solidifies into impermeable rock that ends up holding up water. This is super evident over on the windward side of Oahu where we have tunnels that are drilled into the deck compartments. It's less evident here in Haiku and East Maui because it's still covered by shield lavas. There's a mix of impounded water and basal water that are being accessed in at least the Haiku area and into the Huelo area, I think. Many of the wells in Haiku and Huelo tap into the basal aquifer so they supply a lot of the wealth. Some of them tap into seemingly higher level aquifers, but those perched or die compounded. It seems the western side of Haiku draws more from either perched or Daikin-found compounded compartments. We have some isotopic water isotope data that suggests that. As you move towards Puello and Haiku, the likelihood of those streams intersecting the Basel aguifer is variable in many places, but mostly for one reason: the base aquifers are higher due to more rainfall.

The real question is: how much water is in each of these aquifers? This is difficult to constrain because we're not completely sure where the water is and if it's in perch data for the basal aquifer or to decompound it. The other challenge is that we don't have a lot of wells out here. The Basal lens is considered to be our primary groundwater resource. The thickness of that is dependent on how conductive the lavas are, which is variable for many reasons. Basically, the challenge for basal groundwater is the lack of data. Interestingly, a lot of the time the streams that are other water resources in East Maui are actually detached from the basal ground water. In some instances, it doesn't matter what's going on at the base aquifer because it's really these higher level aquifers that

are feeding the streams. In some instances, I think it does matter because I think those are connected. The short answer: data is limited in this area.

## B. 2025 Quarter 1 Report Update from Mahi Pono: Grant Nakama

This is the first quarterly report under the new RP. Monthly reports are due by the end of the month. Once submitted, copies are sent to the stakeholder committee. By the end of March, Mahi Pono plants 20 acres of row crops and diverts 23.58 mgd. For the division of water, they apply 31.2 mgd and the shortfall is made up of mostly groundwater. In the next quarterly report, Nakama states that he hopes to show more streamlined reporting for all the work items. Mark Vaught does not attend the April stakeholder meeting as he is attending a wildfire prevention meeting.

## May 22, 2025

11:00a.m. - 12:30p.m.

### A. Update from East Maui Water Authority: Gina Young

Announcement of a series of watershed-focused community meetings from June 16-18th to start creating the basis for the watershed plan. Meetings will be held with the Public Finance Initiative.

### B. Update from Mahi Pono: Grant Nakama

Mahi Pono is required by permit conditions to submit a report each quarter documenting their progress and water use from the previous quarter. The report lists conditions the board imposes on the permit. As of March 31st, Mahi Pono has planted 12,244 acres and diverts 25.3 mgd. They divert 25 mgd and apply 29.98 mgd to their crops. The amount of water applied to crops is more than the amount diverted from East Maui, primarily due to the use of groundwater and the lack of availability of surface water from East Maui during that time period. If they could divert more while remaining in compliance with the IFS and their permit, they would.

There are 12 total Mahi Pono reports: 4 quarterly reports and 8 monthly reports. The monthly reports primarily focus on the amount of acreage planted and water that is diverted and applied to crops. The quarterly reports are much more in-depth. In April, Mahi Pono diverts 27.37 mgd from East Maui and applies 34.17 mgd to crops. 34.17 mgd is not ideal for their plants, as they have been reducing the water applications for their crops because of the lack of surface water during the first four months of the year. They would prefer upwards of 40 mgd, comparable to the end of 2024.

There are 18 conditions imposed on the permit ranging from updates of Mahi Pono's IFS work to their use of reservoirs and water. Their work with Dolph and Sewer is to determine if there are alternatives to diversion.

*Question:* Will that report be sent to everyone? When will it be sent, and is that the plan? *Answer:* Yes, that is the plan.

Question: Mahi Pono was diverting 165 mgd from East Maui during the HC&S days, and they testified that 80% of the time they were short of water. What is the farm plan to make sure you know that you are not facing the same condition? It seems that your anticipated water use is around 4-5 thousand gallons per day per acre. Do you have any plans to adjust acreage or crops based on the amount of rainfall? Up until around 1998 or 2000, they used 40-45% of irrigation from their wells, and 55% from East Maui Water. I believe you folks are looking at a percentage of maybe 20% of your water use from your wells and then 80% from East Maui Water. Who do we talk to to find out more about the long-term water strategy that Mahi Pono has?

Answer: Sure, although the idea that our current crop plan uses an equivalent amount of water to sugar cane is not true.

*Question:* Is the following correct: Your EIS water use and development plan is based on estimates between 4-5 thousand gallons a day when your trees are mature?

Answer: Composite overall, our per-acre water demand listed in the EIS is about 3,900 gallons per acre per day. There are certain crops that are in the 4-5 thousand gallons per day range, but that's not representative of our farm as a whole. The 3,900 gallons per day is an average. Additionally, the planting has to stay under the amount of water that's available while staying in compliance with the IFS. The number that you mention that HC&S diverted in its heyday was 160 mgd. Our farm plan in the EIS has basically half that: 82 mgd. In no way is this a comparable farm plan to what HC&S had, or the water monitoring team. In addition to that, the IFS could use a higher amount of groundwater

because of the enormous amounts of artificial recharge due to the 160 mgd that was applied every day. For us, our groundwater use is essentially not capped, but our projection is that the maximum that we can use at full build is about 19 mgd, and I think that is stated in the EIS. As far as the farm plan, we do not plan on deviating from the EIS farm plan much, if at all. I think the closest crop that we have currently to the final EIS buildout is citrus crops.

Question: I'm wondering about how Aaron Strauss says that realistically, the 82 mgd is probably closer to 40 mgd that will be available long term from the streams based on what we know about changes in rainfall, wind patterns, etc. As an East Maui resident, I can tell you that in 40 years things have changed, and I'm sure that Moki, Auntie Lin, and others can testify the same thing. I'm wondering: are there adjustments to your plan? Will there be adjustments if the weather doesn't fit your predictions? I understand that you can't pump as much if you're not recharging as much, but have you been doing any research on underground water that doesn't depend upon water being imported from East Maui? Water flowing down from the natural volcanic formations of Haleakala, for example. I'm wondering if there's research being done on which of your wells still utilize those lava tube flows?

Answer: Yes, I think we will research all options available to us if an adjustment is forced by Mother Nature or other factors. If the weather patterns deteriorate, we will be forced to adjust in some way. As of now, we remain unconvinced that this is a long-term pattern. Last week's rainfall expert Chris Shuler presents data looking at long-term trends past 2100. I think the conclusion is that we are in a drought pattern as of the last 5-10 years, but that is too short of a period to draw any long-term conclusions from.

Question: Does Mahi Pono still have the data from when you started collecting?

Answer: Yes, much of which Chris Shuler relies upon for his findings, I believe. All of our rainfall data collected back then is turned over to the National Weather Service. The data that he refers to is probably collected by us and other people out in the watershed area who are reporting, but we have been reporting for some stations for 100 years. As far as the groundwater pumping from each HC&S, we rely a lot on what they had, but we also know that moving forward we have to make adjustments in the groundwater for sustainable yields. Not to mention, the lack of recharge because we're not irrigating everything that was being irrigated at 160 mgd and putting that kind of recharge and infiltration back into the system, so we have to make adjustments accordingly. That's why, if you look at the quarterly reports, you see well level data. For every quarter we have to measure well levels and salinity to give an indicator of what's happening at the groundwater level.

Question: I've had two people call me in the last couple of months from old plantation family backgrounds who remember abundant water in the 1950s: there was good, clear, clean water coming down from a lava tube. I'm a bit confused: It seems to me that the Mahi Pono farm plan is based on irrigating around 26,600 acres in central Maui overall. That's quite an increase from 20,000. Am I reading that correctly?

Answer: I believe a lot of the excess acreage is due to our plan at the time to institute irrigated pasture. Since then, we've employed more center pivots, so we have 3-4 of them already up and running that primarily irrigate areas that are growing cattle feed for Maui Cattle Company's operation like alfalfa and corn. That has taken the place of the more significant acreage for irrigated pasture that I think we report in August of 2024.

*Question:* You thought last year in August that you were going to have additional irrigated pasture that wasn't using those pivot units?

Answer: Yes, center pivots.

*Question:* Are you still thinking you're irrigating the extra 6,000 acres, just more efficiently now? I'm not quite sure what the response is here.

*Answer:* No, we are more closely adhering to the farm plan in the EIS and the 2024 number includes irrigated pasture that may or may not be on the table, but will most likely not be on the table going forward.

**Question:** You're anticipating it would be closer to what is in the EIS of the 20,600-some acres? **Answer:** Correct.

Question: I remember at the end of the year, one of your water reports talks about how you have to use a lot of the groundwater and then you have to come in later and flood the crops because of the salinity of the groundwater. Do you? Are you going to do this? You just talk about issues with using groundwater. Are you going to find yourself in the position again?

Answer: Yes, I think if we continue to use a high amount of groundwater, the salt deposits eventually build up in the soil, and when the water is available, we'll need to flush it out, which is what happened at the end of last year. We've been using upwards of 10 mgd of groundwater for the first three or four months of this year, and we monitor the salt build up in the soil as we go. I'm assuming that they're probably more elevated than if we were using surface water exclusively. If we were to use well water exclusively as the water goes onto the plants, the salts would deposit in the root zone and the salts end up staying in the root zone and making it more difficult for the plant to grow. This is why we use surface water when it's available, not necessarily to flush, but to help the plant be healthier and for root development to take place.

Question: What are the orchard crops listed on page 12?

*Answer:* Limes, lemons, oranges, coffee, macadamia nuts, avocados: anything that is not a row crop.

**Question:** But you also have tropical fruits? **Answer:** I need to look at how we classify them.

*Question:* Once they're mature, they use about 5,000 gallons per acre per day, correct? And more water will be needed in the future?

*Answer:* Correct. That water can come from a number of sources, either through irrigation or rainfall. Depending on the rainfall, we would need to use more or less than 5,000 gallons per day. The plant itself needs 5,000 gallons per day regardless of where it comes from. Sometimes less depending on the time of year and the amount of evapotranspiration.

Question: What are energy crops?

*Answer:* Pongamia, which is a lease we inherited from A&B.

Question: And what are your forage plants?

Answer: I believe the cattle feed and alfalfa fall under "forage."

Question: Is that what was in the pastures that you were temporarily using?

Answer: Correct.

*Question:* Are you going to continue to grow the alfalfa sudan grass type plantings for cattle feed under center pivots?

Answer: We hope to continue it, but we don't know. As of now, it looks promising.

Question: What kind of water usage is that?

*Answer:* I'm not sure, but that answer can be found in the supplemental materials that we report to the state.

*Question:* The data submitted by Mahi Pono to DLNR shows that in March the forage crops use 7,546 gallons per acre, which is a huge amount. Where is that located?

Answer: They spread out across the front of the farm, so the most prominently located one is at the corner of Hana Highway and Haleakala Highway. It's located on the left of the hill as you're heading up.

Question: Does your farm have a map of the rainfall? A map showing where there's more and less rainfall on the property?

*Answer:* We have weather monitoring stations and there's a really good one that's publicly available. They're not as detailed in specific small areas. We plant things with the hope that they'll be supplemented by rainfall. There are detailed maps of rainfall areas from a 2008/2009 A&B AG Lands petition to the Land Use Commission. The higher rainfall areas are towards the border with Haiku.

*Question:* Has Mahi Pono put any thought into having a reforesting program started to reforest the lower elevations to catch some of those rainfalls?

Answer: I think we talked briefly about that early on.

Question: Why is there a protective fencing section along Hana Highway?

*Answer:* It's a historical rock pile that we're conducting some analysis on, so it's an active work site. The fence you see from the road is a dust fence to keep people out and protect the site from wind.

Question: Is there potential asbestos contamination in there?

*Answer:* We don't know. In the 40s and 50s there were plantation camps built with asbestos ceilings and lead, and when they broke down the camps they would often throw the debris into a pile and cover them with rocks. We are doing extensive testing on the rock piles to investigate them before we relocate them in case that is the type of rock pile that we're dealing with.

*Question:* Does Mahi Pono have a plan for mitigating evaporation? A way to retain the water? *Answer:* One thing we do is put up weed mats that provide shade and slow down evaporation. We also use weed mats so we can use fewer herbicides.

Question: Is there any rainfall that is helpful for bringing down water use on the trees?

*Answer:* There is some that is useful, but these are really big trees and a lot of it evaporates almost instantly.

Question: Is there a way to calculate in how much rain can be used?

*Answer:* Yes. Evapotranspiration rates are measured by soil moisture sensors that take into account rainfall that reaches the root ball. We take both the rainfall and soil moisture data into account. I want to make clear, though, that rainfall is not an equivalent type of irrigation.

*Question:* Do you find that the use of water is more when there are young plants as opposed to full-grown plants?

Answer: Yes. The smaller the plants, the smaller the root structure which allows water to permeate more easily. The larger the plant, the larger the root structure and the larger the canopy taking in sun, thus requiring more water, but also providing more shade and water retention. We use a lot of water on the young plants to establish their root structures. We use more water at the start, then less water once they have grown a bit, then more once they're older near harvest time.

*Question:* Is the build up of sodium in the water so extreme that the water could become useless? *Answer:* We do have salts, but the salts are not at a point where they're immediately harmful.

*Question:* Do the crops need 5,000 gallons a day all of the time, or do they need more as a baby, less as a juvenile, and more as a mature plant? These cannot be the same. *Answer:* There is ambiguity. This is something that is not easily quantifiable.

*Question:* Is there a way you can pressure the County of Maui with EMI to help move things along with the accountability and compliance?

Answer: Yes, the county archaeologist is trying to get in there and take a look at things.

# June 26, 2025

11:00a.m. – 12:30p.m.

# A. Update on Wells from Mahi Pono: Grant Nakama

*Question:* I notice in the last couple of reports that the chloride levels in your wells are holding up nicely. Are you using those wells because you check the chlorides and those are the ones that have the best chlorides? Or are you using those wells because they are convenient to fields that you know need extra water?

*Answer:* All of the above. We are fortunate that we have not seen any chloride changes thus far. Although, with pumping this amount of groundwater long term, we expect to see changes soon. Chloride levels in the actual wells are low, but if we continue to apply any groundwater at this amount to our fields, salt eventually builds up in the soils and we have to eventually flush them out. I think it is a variety of factors: wells that have good water and have shown that they have not been moving in the chloride sense, but also they are conveniently located to fields that we need to irrigate.

Question: The chloride levels you are showing are not potable levels, so although there is some salt present, it seems that it may take a long time for those salt levels to build up. There are homeowners in my neighborhood that have wells they use for irrigation on their farms with those same chloride levels, but you are saying that your testing has found that even if you have chloride levels of 210 or 230 that those build up because you use so much water from the wells?

Answer: Correct. That is backed up by our agronomy team that conducts testing regularly.

*Question:* Is the Water Commission staff looking at the data that EMI is providing to BLNR regarding the chloride levels in the wells and whether you analyze to see whether the levels are increasing over time or not?

*Answer:* To my knowledge, not actively, but I would have to check with our groundwater specialists. We just hired a new groundwater geologist, so that is something we can look at.

*Question:* That would be good. We have maybe two years worth of data now and there are different wells that are used. It would be good to know if you analyze whether it is increasing or not. Is it possible to get a full data dump from that?

Answer: Bob Shinee is in charge of that. He has the data and monitors all of our wells.

Question: Nothing separate then from the BLNR that has been submitted?

Answer: Correct.

## B. Update on Planting from Mahi Pono: Grant Nakama

In May, Mahi Pono planted 102 acres total consisting of 24 acres of watermelon, 8 acres of onion, and 70 acres of forage crops (mostly corn) for Maui Cattle. In the past week, Mahi Pono made an agreement with A&B, and presents the following press statement:

"In 2018, Mahi Pono acquired a 50% stake in East Smart Irrigation from Alexander and Baldwin as part of a larger deal that included the purchase of 41,000 acres of farmer sugar cane land. This acquisition ensured the continued use of the Central Maui lands for farming and diversified agriculture. From its inception, Mahi Pono's mission has been centered around improving food security and creating economic opportunities for Hawaii through responsible farming. Well, Mahi Pono continues to focus on agricultural operations and has moved to focus on developing its core commercial real estate business with diverging missions. The parties have agreed to proceed on separate paths under the terms of this agreement. Mahi Pono is now the sole owner and operator of Ismail Irrigation. Mahi Pono

has served as managing partner of VMI since 2019 and this transition will not result in any changes to EMI's operations, staffing, and service to water users. EMI will continue its mission to support farming and to provide water to the county Department of Water Supply for its over 35,000 residents in upcountry Maui. We look forward to advancing the production of fresh and locally grown food. The creation of meaningful jobs for Maori families and contributing to a sustainable future for Hawaii."

**Question**: The annual revocable permit is under the name A&B and EMI. Will A&B be taken off and it will just become EMI?

*Answer:* It is our understanding that the permit continues under East Maui Irrigation.

*Question:* Does this mean that EMI might be hiring additional staff? I know you folks have low levels, and we hope to get back to higher staffing.

*Answer:* Yes, we are consistently recruiting to add to the staff, but generally there is no operational change triggered by this agreement.

Question: When people want to contact Mahi Pono about EMI matters, do we still go to Mark? And if someone wants to contact Mahi Pono about farming matters, do they go to Mark or another operational staff person?

Answer: Yes. The staffing and contacts remain the same. There is very low impact from an operational perspective.

*Question:* Is there any communication that our community can have with the financial backers of Mahi Pono? What is the organizational structure for decision making processes?

Answer: Our investors put a very strong local team in place that is capable of answering any questions that the public may have about our future plans for farming. Feel free to give me a call.

*Question:* So virtually anything we need to know, you probably have the answer to? Does this include lands that EMI might have leases with?

Answer: I can disclose lease terms or answer questions about properties that are leased, yes.

*Question:* For people that have questions about what is going on in adjoining fields to where they live, do they reach out to Mark or Grant? Even if the land is not farmed?

Answer: Grant. Even if the land is not farmed, they contact Grant.

*Question:* Who makes the decisions as to what will be planted?

Answer: That is a collective decision with a lot of input provided by the local team.

*Question:* As the revenue from the A&B agreement comes in over the next four years, will it impact your operations at all? Where does that money go?

Answer: The main point to keep in mind is that we continue to invest in farming. We now have 13,000 acres planted, much of which is driven by heavy investments in new infrastructure, irrigation, weed management, planting, and funding local jobs. We have a budget that regularly exceeds \$100 million on an annual basis. We have a payment structure in place through this agreement, but compared to our operational budget, it is business as usual.

Question: There has been some back-and-forth about what the agreement really means. What does the \$55 million equate to? It is not about selling the EMI system, it is saying that they have been a good partner?

*Answer:* It is a global settlement that covers every single outstanding obligation and term from the 2018 agreement that is not related to any one particular item.

Question: I thought they already bought the thing except for the EMI part. What is this other money for?

No answer was given.

# C. Update on Permit Categories from Mahi Pono: Mark Vaught

In June 2018, the Water Commission comes up with IFS that encompasses a large portion of the state land in East Maui. At the time they come up with this, they are still under A&B, and we are still under them, although there is no Mahi Pono at the time. Category one is viewed as relatively routine maintenance and construction to go ahead and make that alteration, which in turn facilitates that being done, so very minimal permit requirements exist. This is basically routine maintenance because there is not a huge alteration taking place, so that can be addressed immediately. There are 15 original category one diversions that need to be taken care of.

Category two comes along and is a bit more involved and requires additional guidance, particularly from the Army Corps and the Department of Health Safe Drinking Water because of alterations that could cause turbidity and other water issues. Category two is a little bit more involved and requires similar construction yet has a bigger impact on the stream itself. This involves more regulations and meeting the requirements of getting the permits.

Category three is the most difficult category because those have immediate interruptions in the stream that require major construction and alter the stream. This requires a host of permits and the most scrutiny.

There are no category fours shown here today; those are basically administrative. Those are intakes that are closed, particularly along the Waikamoi stream where all of those tributaries on the front of the mountain come through and contribute to Waikamoi all the way to Koʻolau. All of those were taken care of in 2019 and we closed all of those intakes—about 29 of them total—because Waikamoi is deemed "full restoration," so water from mauka to makai has to be put back into the Waikamoi stream (category four). I believe this comes from either the Water Commission or the Land Board and is deemed something along the lines of an "emergency proclamation" with the implication being to work first and worry about permits second. That is taken care of, but the paperwork is not completed. In short, category four is a separate category that we need to do the paperwork on.

Question: I am trying to differentiate between categories two and three. Is it all the same agency review?

Answer: No, the SHPD approval is more involved, especially in category three.

Statement by Uyeno: One thing to note: I think we consulted SHPD back then, but they did not have the Hi-CHRIS system back then. The guidance at the time was to take photos and document, so we proceed by issuing permits for those that go through. The most recent permit applications are going through the current SHPD Hi-CHRIS system, so the delay is getting the review on the new permits.

Category four, as it relates to a land board, contests a case that went through the courts and--at the time--there was a court order that EMI had to restore (I believe it was 6 million gallons to the stream, while Waikamoi does not produce that much). EMI and HCNS decided to abandon all the diversion infrastructure within the Waikamoi watershed at the time, so that is the process that we go through at this point. When EMI is efficient, they collect all the seeps and springs, so a lot of these things are small catchment basins that capture a seep or spring off the hillside and transport the water to either the main diversion or the main tunnel. We think EMI abandons all of the diversions in the Waikamoi hydrologic unit.

Question: You are talking about the category fours?

Answer: Yes.

Question: The Quarter 1 of 2025 chart that we send out shows the status of each stream. Is there

something that shows permits by category?

*Answer:* Yes, I believe that chart includes permits by category, or at least the required permits.

Question: So these are all new?

*Answer:* Yes. It includes the categories, but a lot of those that you see are under the new permits. That is the Honopou license area (formerly the Po'o license area). I believe only the category threes and ones are from the original commission contested case.

Question: Are the category two's done?

Answer: Yes.

Question: So that's why they are not there?

*Answer:* Yes. The Water Commission meets with many of the community members and they have additional questions that require more construction to return many of the abandoned areas back to more of the natural stream course. This would remove some of the infrastructure that is left in place because it is abandoned. Those are category ones, and the ones that say category one are usually modification construction.

Question: Is there a quick overview of what is left to do and what will make the biggest differences in the communities?

Answer: The biggest differences are already being seen through many of the ones that are fully released, like Hanawi. Po'o is also a good example. Hanawi Stream mauka to makai is fully released, so you see that there are a couple small tributaries that probably need to be worked on, but they do not make as big of a difference. Some, particularly in the Huelo area, are not perennial. Others are where water collects in a pasture above and spills into one location after rainfall, so we have to put a bypass there so that rain will not go into the ditch and it will go back further down. If there is no consistent rain, there is not any water in some of them.

Question: What do you mean by 'category three requires an overpass'?

*Answer:* The stream comes down and the ditch runs right across it, so the water has to fall into the ditch. Basically, we put concrete over the top of the ditch so that the water avoids the ditch and goes straight past the stream.

*Question:* How far along is the category three capping of the new Haiku ditch at Honopou? *Answer:* We turn everything over to our consultants who are working on organizing and submitting.

*Question:* What happens to the ditches that are still on the books but are no longer used? Are they subject to being reopened? They have been closed for over 30 years.

Answer: I do not know specifically what areas or ditches you are referring to, but within the last 30 years, the expectation is that we can continue using them unless they were abandoned prior to 30 years ago.

Question: Have you followed up with the SHPD or Army Corps of Engineers about this? What is going on there?

*Answer:* The SHPD review we handle, and the US Army Corps review is up to EMI, HCNS, or Mahi Pono. We try to get SHPD through numerous attempts to complete their review, and for whatever reason, they have delays. We are still actively trying to communicate with SHPD and get the review done.

*Question:* Have you asked EMI about why things are delayed with the Army Corps until January of 2025? It is very frustrating. Dawn Chang is in charge, so it would be good to get her involved as well. *Answer:* Not that I am aware of. I cannot speak to that.

**Question**: Is there no requirement for SHPD or Army Corps of Engineers to submit an application? Why has that not been submitted yet?

*Answer:* Honopou issued that permit prior to SHPD having their Hi-CHRIS system. At the time we asked SHPD to go through a different process akin to an internal agency review memo. Either we receive no comments, or they comment and that is incorporated into the permit, but those permits are issued so now it is subject to EMI to work on those.

Question: So there is no bureaucratic obstruction? This could be done today?

Answer: That's a question for EMI.

Question: Are you going to get EMI to finally look into this?

Answer: We can, we will.

*Question:* Are all of these permit applications due because of conditions based upon the 2018 D&O? *Answer:* Yes.

*Question:* Who is in charge of coordinating all of the permit review? Does it come into the CWRM? And then you do the agency review?

*Answer:* We do not monitor that. On the initial applications, we start our own agency review. The Army Corps may or may not require a permit, and typically the applicant goes directly to the Army Corps because that gets them a faster review. It depends on the case, but ultimately no, we monitor it for our own purposes.

Question: Is there any public record of how the other agency review process occurs?

*Answer:* You would have to ask the applicant that.

*Question:* The first three pages—except for the last line—are from the Water Commission's decision in May 2023. Below that are the categories from 2018. The staff of the Water Commission has two separate submittals to the Water Commission in May 2024, and the first packet is approved. The second packet they send back for more work and coordination. Has the staff ever brought that back to the Water Commission?

Answer: Yes, we did. I believe it was January 2024.

Question: What was approved? It looks like everything on page four has been approved and that we are waiting for the applicant to do the work. Can you communicate to EMI that they have to get this done?

Answer: Yes, we can schedule regular meetings with them.

Question: On the last page, is that what we are referring to?

Answer: The approval is pending.

Question: What would make this chart easier to understand?

*Answer:* That is my whole intent. I want a way for the public, agencies, etc. to envision the process a little differently. It is a rough attempt, but maybe some of the Water Commission could have their students help make things more visual.

Question: As I read the chart, it looks like category threes all have bureaucratic approval, so construction can begin immediately. We are just waiting for the Water Commission staff to get EMI

to get it done. One of the category one permits on page four is not applied for until April 2025. This was ordered to be done back in 2018. We have been waiting a long time. Dean, can you give us any more progress on the status of these? What is the status on getting the permits done?

*Answer:* I think the reason for some of the delays for permitting is because there is more work that we require. More infrastructure needs to be removed from these diversions, which causes significant delays. We can include that in our regular meetings with EMI to get them going on some of these projects and keeping tabs.

*Question:* On page six there are no approvals that need to be done. Are those things that they just need to go out into the field and do?

*Answer:* Correct. If you look through this report, there are over 150 applications that are detailed by this report. A lot of them involve engineering beyond my comprehension, and that is why they are resourced out. Contemplate the amount of work that Mark is being asked to simultaneously perform all at once and then decide whether that is a reasonable expectation to meet. Asking Dean to put pressure on Mark and his team feels unfair.

Question: Are there specific deadlines that you have to meet? If you look at the amount of earth being moved or replaced, it is centuries of work to do.

Question: Is the Lowry ditch being used?

*Answer:* Yes, the Lowry ditch is being used in the high school area: more in the Haiku area than further out in the Huelo area. There may be some water coming from the Huelo area, but the majority of the water in the Lowry ditch that is being moved from east to west is in the Haiku area.

*Question:* Where are the numbers for the East Maui Ditch system? It seems like it is always zero. *Answer:* The ditch is strictly monitored. We monitor and take readings.

Question: All 72 miles of them?

Answer: We monitor 62 miles, so pretty much all of it. Anything coming into the farm and then anything coming out of the state regulated license areas are all monitored

Question: What amount is moving in that ditch and coming out at the end if it really coordinates to be able to determine seepage loss?

Answer: Page 15 on the report gives you a summary of that.

#### D. Closing Commentary

Grant Nakama discussed operational difficulties of ditch monitoring. Mark Vaught drove USGS to field locations in August where they measured the water loss and diversions and found eight areas losing water and groundwater seeping into ditches in other areas. This lead them to the conclusion of a net zero and the responsibility being shifted to EMI. They then conducted measurements from the EMI side of Nahiku and state land. Vaught continues to explain that the Makapipi river no longer has a gate and that it freely flows from top to bottom.

Mavis Medeiros shared that one of the biggest complaints they receive at the Councilman's office is that the water is out in Lower Nahiku. Dean Uyeno advises the group that if they want to track the USGS gauging stations they can look at Wailua Iki and Honopou.

# July 24, 2025

11:00a.m. – 12:30p.m.

# A. Update from Mahi Pono: Jenna Shibano

In June, Mahi Pono's acreage totals 12,585 with the average amount of water diverted being 24.65 mgd and 40.77 mg.

## B. Update from Mahi Pono: Mark Vaught

There is positive movement, and exemptions were received from the Army Corps and submitted to the Department of Health. Mahi Pono sent out BMP plans. Vaught gives a shoutout in gratitude to CWRM for initiating conversations with SHPD. He clarifies that he thinks SHPD is on board with Mahi Pono's missions.

# C. Update from East Maui Water Authority: Director Gina Young

The East Maui Water Authority hosted a series of community meetings to provide general education on the watershed. The Water Resource Specialist position description is being worked on and should be finalized in the fall. This position will essentially be responsible for putting together a watershed plan. Currently, DLNR has a watershed plan for East Maui and will most likely take the higher zones, while EMWA will focus on the more community-centric middle and lower areas. The plan is to be operational as well as foundational to help obtain grant funding and will have more background than a traditional operational watershed plan. EMWA had two site visits in Keʻanae and Haiku.

The first site visit is in Ke'anae at the Makapipi stream and Namoku taro fields. There is acknowledgement that despite the 28 decision, which brings much stream restoration, the community is still healing from 150 years of damage to cultural practices and the community at large. EMWA's goal is to create a path forward that helps those communities thrive through building trust through consistency. The Ke'anae community expressed the desire to pass watershed environmental knowledge through the generations and to use the watershed as a living classroom and use it as a method of malama. They also emphasize the importance of water's spiritual function.

EMWA is looking to establish a local base yard for a foundational presence in the community and looking at the watershed work as a means of bringing economic opportunity to the area. They have a daytime financial seminar with experts, one of whom is the head of the Public Finance Initiative who works to bring equitable financing to communities to implement food security, climate resilience, and other public good projects. Their focus is on how to use traditional financial markets for cultural types of products and financial products. PFI is developing programs to ensure private foundations' investments align with their missions. Robert Wood Johnson is a pioneer in low interest, not just municipal investing. In Kula, there is a meeting with discussion about the general inequity in the water distribution and infrastructure and how it's pricing out local residents and bringing in new people that are changing the community. The Kula community also emphasizes the importance of bringing the younger generation into farming and how the government must have a comprehensive water plan. The current DWS water use and development plan is 13,159 pages with a 60-page summary sheet that the community is largely unaware of. The community also expresses a need for information on cost reservoirs. The government needs to set priorities, one of which is educating the public on the budget process and the CIP project budget information.

The Haiku site visit is above Twin Falls the following day, where you can see the change in the watershed from areas that have invasive species at the lower levels to areas higher up with much more native species. We hear concern about the lack of rainfall in Haiku and hear from long-term residents who have seen the almost 50% reduction in stream water flow. It is discussed how important historical stream identities are and the importance of their nomenclature.

An overarching theme at both sites is that the lack of water has contributed to general government distrust over crisis-specific reactions modeled after often outdated information. CWRM is working to conduct accurate modeling and gather information, yet it is not easy.

Mayor Bisson, EMWA, the board, DWS, and the Managing Director lead discussions with Mahi Pono and EMI that include historical awareness and the need for equitable outcomes with the goal of a mutually beneficial agreement where both Mahi Pono and the island community thrive. There are, of course, constraints—environmental, economic, and educational. It is crucial that we begin our consultation with stakeholder communities so that we understand their needs. *We have a lot of support for the community from Mahi Pono and EMI already.* Food security is critical to our island, and we need a healthy agricultural sector because it recycles economic benefits through our community and prevents fire risks in Central Maui.

# **D. Closing Commentary**

Robert C. De Robles—manager of protection grants at DWS—provided an update on his meeting with Leslie Tamaribuchi, EMWA grant coordinator this morning. He mentions having grantees in the east side and that they have a watershed partnership and TNC and SC that do the work in those areas. Gina Young mentions that Robert's advice in setting up the grant program would be helpful, as there will most likely be smaller grantees working with his team. Robert suggests asking the community, "What are the opportunities here and how can we help?" Gina emphasizes her deliberate effort to not tap into the same funding sources as Robert's team. Robert explains that most of their work is in the upper watershed, although they're interested in the urban wildlife interface and how DOFAW has a broader grant that offers work in a watershed both Mauka and Makai. Gina agrees and states she thinks it'd be most useful for her team to "focus on the middle," more makai near the shore ecosystem area.

Question: Invasive species is something that we're all working on. What would be the best coordination? In Huelo, there's been talk about reforestation with native plants and maybe just identifying pilot projects in smaller areas.

*Answer:* Yeah, that's a great approach. And I know Art Maderos with our Wahi project knows a lot about forestry and the species of KOA, reforestation; our grantees are a good source of information with these things, and they may even have seed banking. If you need seeds, we could maybe coordinate with them.

Statement: Yeah, but we need an organization that's willing to do that and comes in for a grant. There is also talk in Kainia this weekend. I am out for the Ko Ola Leya, and there is talk about help with the allies, the existing allies. There's always work that needs to be done there: clearing, repairing, etc. That's something our grant program could be open to. I look forward to seeing who we end up working with and also what we can incorporate into the watershed plan as priorities. I think what would be useful in terms of getting input is to develop a list of questions for people to think about what their priorities are. I think what I'll do is reach out to people and start with discussion points designed to get what your priorities would be and what your community needs are. That is part of what our meeting out in the community is about, but it's hard in a group setting to do that. Anybody can e-mail me if you want to have that discussion. I don't have the August agenda yet. I will tell you, coming down the pike, we've hired cultural specialist Kepa Maly to help us understand how to incorporate this cultural basis into the watershed plan. As part of that, he is going back and looking at interviews of Kūpuna from 1910 to 1930 and also using historic documents that have been translated from Hawaiian documents to show what the watershed looks like 150 years ago: What are expectations in the community about maintaining it? How do they do it? What are actual methods of doing it? Then, how can we translate that into the future? And with that, there might be a

component of what happens to the communities over the years. What are the effects of it? And then how can we acknowledge that and then move on, you know, move forward while also looking back and acknowledging it? But then what would be a useful way to focus our energies at this point and rebuild community? He's going to be at our Aha Kilo Maui Hikina meeting this Friday.

*Question:* I just wonder about the things that Kamalani brings to our attention. Or can we bring those up in August?

*Answer:* Let's bring them, because we only have Jenna here from Mahi Pono, and I think there will be some questions about taro fields.

**Question:** Do you want to give the questions and then we can send them separately ahead of time?

Answer: Yeah, I think they are for CWRM and Mahi Pono, so it'd be nice to have both reps.

# August 28, 2025

11 a.m. – 12:30 p.m.

## A. Update from East Maui Water Authority: Glna Young

Gina starts off the meeting by introducing Kepā Maly of Kimo Pono Associates. EMWA hired Kepa to do a report to help with both watershed planning and the department's perspective as they start to fund operations and build on the goals of the community. The report's recommendations are based on EMI's work, who hired Kepa and his firm to do interviews with Kūpuna that are born between 1910 and 1930 to provide a deeper richness and understanding. One of the main themes that comes from the interviews is "continuity of knowledge."

## B. Update from Kumu Pono Associates: Kepā Maly

Kepā Maly first speaks on the work that Kumu Pono Associates did in 2001-2002 and its "Wai o ke Ola" from Maui Hikina at that time. They continually build archival repositories focused on Hawaiian language materials and the complicated history of residency, traditional, and customary practices through the period of "economic developments." Going off of Gina's mention of "continuity," Kepa states that there is continuity of relationship with place even when 'ohana are displaced from specific land areas or water resources through any number of potential reasons, but it also demonstrates that there is continuity of an ongoing cultural attachment and Aloha for the honua ola, the bio cultural living landscape. Kumu Pono Associates is expanding upon those sentiments and focusing on a collection of resources that amounts to about 1500 pages.

Kepa goes on to say that at the time of the Mahele in 1848, there had already been great disruption to native lives by Captain Cook's influence beginning in 1778. In Lana'i there was a population of 6,000 native people in 1778, yet only 604 native people remained at the time of the Mahele. The resources of the Kumu Pono Association go towards capturing solid documentation of the population, land, water, ocean, and forest use through mapping.

During a July meeting with 'Aha Wai, a series of potential governance pathways and recommendations was developed. One of the themes they find repeatedly is the "faultiness of science when it is detached from place." According to Kepa, much of the science focuses on short term economic gain, but there is a big difference between sustainability, the traditional norms of Kanaka, and short term economic gain.

The Kumu Pono Associates digitized the entire Mahele of the Royal Patent Grant and Land Patent Grants up to the 1920s, amounting to some 1600 primary source documents spanning the Hawaiian language, English, and the broad "history of place" dating back to the 1820s. This information was put into a program, with the goal of creating a curriculum to turn the knowledge into stewardship

**Question**: Is the database you've mentioned searchable under different parameters? Can you search by stream names?

*Answer:* We organize the communications into what will be a searchable table format by year, month, and date. If it's, say, an award from the Land Commission, we will have that searchable by the book, page, who, and where.

Question: Will you have a great table like in your earlier book that you did for EMI?

Answer: Yes, we are doing our best to answer this, but this is also something that the communities may want to continue. We provide information as to where the information is collected so that people know what sources to go to for their own further research. We try to continually improve this and do a good job of identifying specific resources. It's complicated to go through a lot of this stuff, particularly if you are no ma'a to the processes.

Question: Do you have any sense as to what was most popular to each in the 19th century? 'O'opu, 'ōpae, and the wī? Do you have documentation from then in terms of what's mentioned in that regard?

*Answer:* The early documents have limited documentation of that. We start to see it when we have Kūpuna born–around 1910–who were raised by their own Kūpuna –born around 1850–to see what traditional and customary practices were passed down.

*Question:* How can we use the records and the work that you're doing to bring insight to decision makers and do something good with the information?

Answer: First of all, people need to know the information. One of our recommendations we have thrown out is to create a curriculum that is legacy based. We also need to reengage with acts of stewardship and bring it forward. We need to intertwine traditional knowledge and modern science.

*Question:* Are there archival maps or links to maps attached to the report? Is there any attempt to synthesize any of the maps? For example, a map that will show you different species that were in different spots at different points in time?

Answer: This will be something Gina and her team will need to figure out.

Question: Is there any part of the report that addresses references to traditional trails like Mauka Makai? Is there some guidance on that like references we've seen to the trails in those areas? Answer: We have tried to cover those things at an introductory level. We've had discussions with some of the people about those "ala pi'i uka," or what we now call mauka-makai trails. It is clear that if you have kuleana or Royal Patent Grant and various parcels running from 1 area to Lele, detached parcels in other zones, that we know they weren't levitating up there, right? That's where the surveys become helpful because they will start to tell you about features, ilina (burials). Just real quickly we take a 2004 map that is produced identifying all of the water transportation systems that are within the EMI family and we then take that as our base map and overlay what we feel are the best representative historic maps that show kuleana, grants and things like that. So it helps to set the foundation for this greater work that the community can come together and do. Because if the community does the work, one of the things in the curriculum that Onaona and I always develop is we include a simple outline for students to be going into their communities, interviewing their own Kūpuna or their grandparents, whatever the nationality, about their experience. The more communities that do this, the better the opportunities for successful stewardship. Because you know, I'm back to it again, if we take kuleana, "wai o ke ola." But at some point it will run out like that glass with a straw in it.

Question: Does this report also cover the Haiku area?

*Answer:* Yes, the region is included.

Question: Is this a published document?

*Answer:* It will become so if you draw that to us. We cite it the way the State Archives do, so I'll need to go back and look through that.

Question (from Kepa Maly): It's a historic photo, is that correct?

Answer (from Mary Ann Pahukoa): It's a historic photo. However, it's not related to East Maui. It is East Maui, but it's more Kīpahulu-Kaupō, not directly related to perhaps, what the watershed paper's about. Although it says Māliko Gulch, it is not. And I have some notes looking at, you know, some things, but I'd love to send that in a private e-mail.

# C. Closing Commentary

The topics to be discussed in the next meeting include the public confusion regarding restored streams and the data from water study projects. The Pi'ina'au Stream, Palahulu Stream, Homomanu,

Makapipi, Kailua, and Ho'olawa water levels are specifically mentioned. The EMI stream report is mentioned, as well as possible case examples on the stream and diversion updates. Chair Chang is grateful for all the progress made in the report, and it is signed by Mayor Bissen and Shan Tsutsui, the COO of Mahi Pono, acknowledging that discussions are starting with them about the long term water user agreement that would include the county taking over the system.

Question (from Gina Young): Before we go, I want to ask Joyclynn a question because we're planning a phase two and trying to figure out what that's going to be. At the Ha'ikū Community Association you talk about the streams having purpose. I want to use the word personality, though you don't use that. Do you remember that? Is there a way to talk more about your recommendation of us capturing that?

Answer (from Joyclynn Costa): I think he touches on it because diacritics and how you identify them will then give it its intention and purpose—or restrictions—or you know, relationships. We look at it like a stream or a brook or a body of water, and it's not. I don't mean to use it as a cliche, but it's a living force as well. The Kūpuna identify it because of its heartbeat within the 'aina. It's like if you look at your hand: You take the circulation out of your thumb and you still have four fingers, but you lose your thumb, that's critical. If I'm going to lose one digit, I don't want to lose the thumb, and losing a stream or river is the same thing.

Question (from Mary Ann Pahukoa): Would it be appropriate to have a separate meeting with him with less people? Do we need BLNR mandated requirements of EMI, Mahi Pono, etc.? Answer (from Gina Young): With these meetings we are under contract to do public meetings, but it is possible to have separate smaller meetings with Kepa Maly.

# September 25, 2025

11 a.m. – 12:30 p.m.

# A. Update from East Maui Water Authority: Gina Young

Director Gina Young started the meeting stating that she put the notes from the June community conversation series on the agenda, along with the PowerPoint notes from a couple of meetings ago, so that members could see how the different communities were different in their perspectives.

*Question*: A number of suggestions that were made were specific suggestions. We should get this information. Are these folks going to speak to the actual funding for those things, or is this more of a high-level discussion?

Answer: We captured as much of the verbal information as we could. We want to get a clearer idea of what projects and programs that people want. Then we want to ask TFI to explain ow those can be funded. It's more practical than what it was last time. We're looking to come out with actual programs that people want to see. Robert Wood Johnson wants to give us money and we just met with them and made it through the first cycle. Johnson was really excited. Robert Wood Johnson tends to be health related but the understand the connection between watersheds, health, and community well-being.

## B. Update from Mahi Pono: Grant Nakama

Grant Nakama started by updating the board on Janash's submittal of the monthly report for August earlier in the week to the Land Board. For August, 14.4 mgd were diverted on average. Mahi Pono had to supplement that water "significantly and disproportionately" with about 25 mgd of groundwater pumped on farm. The total amount of water applied to division crops was 32.8 mgd, which is below the annual average thus far (35.2 mgd on average for the first eight months of 2025). The system losses continue to below: 1.9 mgd for August. 2.4 mgd is the annual average.

Mahi Pono did not plant anything in August. The total acreage planted in East Maui is 12,734 acres.

Question: How is the water measured?

*Answer*: We have a device that helps us measure those.

Question: Are they submerging the device into the stream?

*Answer*: No, they're in the ditch and measure the ditch system. The ruler-like device on the side is called a "staff gauge" and we installed many years ago. We also have steeling wells corresponding to those gauges, and in those steeling wells is where we have devices connected to measure the ditch system.

*Question*: People ask me: How do they know how much water they take? And I say: I think they have some way of measuring it. What does it mean that you're taking water from Honopou? I though Honopou is not diverted, so when you're measuring does that include water from Honopou at any of the ditches?

*Answer*: It does not include any of the water from Honopou that's there to maintain the IFS, so anything that's running through a stream that has an IFS, the IFS is met first before we're allowed to draft anyone.

**Question**: Is it possible for the Community Water Authority to arrange a site visit to the upper diversions of Honopou?

Answer: I can add that to the list.

Question: How many people could come?

Answer: Minimize the traffic there, but the more the merrier.

Question: Like 3 EMI vehicles and two other vehicles?

Answer: That's possible.

Question: What would the intent of the visit be?

Answer (Lucienne): I'd just love to take a look up there and several community members have asked me about it.

*Question*: Is the gauge sampling at regular intervals even when you're not there? Do you take an instantaneous measurement when you drive up there and then extrapolate that to the whole month? How does that work?

Answer: We have instantaneous readings and it's recorded, and every month we collect those recorded amounts and submit them. What we're reporting now is not an average, it's a total draw. We'll average per day in the report—say 14 point whatever million per day—but some days it's 7, some days it's 25. So that's the average, but we report the total number. So if you look at what we report to CWRM (Commission on Water Resource Management), it's the total amount of water that we drew for that entire month.

Question: Is that for each intake that you do that, or do you just do it for areas where you have the wells next to it?

*Answer*: No, we do that—not at each intake. That's done in the ditches in specified locations, with Honopou being the most important location. *Question*: Follow-up question on the intake at Huelo Ditch—so that intake there is sealed. I'm just curious where the measurement is taken before Huelo.

*Answer*: The intake is not sealed, but we do have the control gates just beyond the intake, and those are completely shut. And then the measurement is taken beyond that.

**Question**: The water can still go from Honopou as far as the control gate, and then it's sort of sent back. Is that how the restoration is accomplished there?

*Answer*: The control gate right now is set. Nothing passes it. So whatever falls into that intake pops right out of that intake and continues down on the host stream.

*Question*: So the Huelo ditch passes the stream and takes a little bit out of the stream. You measure it and then it hits the control gate?

*Answer*: No, the control gate is after. I mean, the measuring device is after the control gate. The measuring device will always be zero because no water passes Honopou.

*Question*: So that means no water from Huelo ditch is going anywhere, or just your measuring device can't measure any of the water that's going anywhere?

*Answer*: No water from the Huelo ditch that comes across from the water license area passes Honopou.

Question: Well, where does it go then?

*Answer*: All of the streams that are taking water from there are all going back into their own streams.

Question: So the Huelo ditch at any stream is not diverting any water?

*Answer*: It's not the actual Huelo ditch. The Huelo ditch begins at Kailua, and that intake is shut. We have the gate shut all the way. We have all the gates—Waipi'o, everything is shut all the way through. Once it gets to Honopou, everything shuts, or whatever comes down Honopou stream that falls in through the grate pops out right there at the grate.

Question: Wow, I never knew that. Thank you for explaining. I thought that the Huelo ditch diverted a number of streams in the Huelo area and then somehow you bypassed the diversion at Honopou, but then is it still operational for the streams past there, like at Kapaula, Kailua, and those other areas?

*Answer*: Kapaula has a control gate that is completely shut as well.

Question: Okay. So all the Huelo control gates are shut, or are some open?

Answer: They're shut.

*Question*: That letter was only .22 taken in August. Or is that why there was only .22 taken in August, or what was it from? It's probably just lack of rain, right? But when she's saying .22, that's the difference between the amount that was measured at Honopou and the amount that was measured at Maliko.

*Answer*: Oh, that's collectively. That's all the ditches. Whatever water does come from the east side—so that's basically going to be on two separate ditches. That's going to be on the Wailoa and the Lowrie.

*Question*: Mark, how long have those control gates in the past—Kapaula, past Honopou—been shut? Has this just been a newer thing for the last year, or has this been for some time?

*Answer*: Since the IFS came, I think. Before the IFS, the Huelo ditch one was shut quite a while ago. The siphon at Maliko was perforated, so it made no sense to bring water across. It was not going to go anywhere, so that would be a waste.

Question: But didn't that siphon get fixed though? Or is that just for Lowrie?

Answer: The Huelo siphon? We just finished fixing it weeks ago, but there hasn't been any rain, so we don't have any water to water test it. I will say this—let me be the first one to say this: I've been working in East Maui water for 33 years. I have never seen it this dry in my career, my entire career. Myself and Kailana—he's been there for 30 years—and we both just sit there scratching our heads like, I've never, ever, ever in my career seen it like this. And I've been in East Maui water firsthand, as you all have. Mulkey, you've been in it forever. Have you ever seen it this dry? I have never seen it like this before. This is red alert status.

*Question*: Yeah, that's what we all observe. Anyone who's been in it 40 or 50 years—you know, that's our lifetime—and never like this. How's Mahi Pono doing with that, Grant?

*Answer*: There are areas on our farm that we cannot get well water to just because of the logistics and the location. And those trees have been without water for a long time. They're starting to die.

*Question*: So the averages, you say that they collect off after Honopou—that's coming just from the Lowrie ditch and the Waikō ditch, you said?

Answer: Yes, the Lowrie Ditch and Wailoa Ditch.

Question: Oh, okay. So because, oh, the Wailoa ditch is the one that goes to the weir?

Answer: Yes, exactly.

*Comment*: Which is very low.

**Response**: It is low enough that over the last I want to say two and a half weeks, three weeks—yeah, they're using everything. We don't have any water available for us.

Comment: Wow, that's really sad.

*Response*: Yeah, but that's the progression. That's how it's supposed to be.

*Comment*: That was very interesting. Going to the weir after being there when Garrett Hughes was with you guys—I think we went in like '05, '03, '05, and '08 when you guys were pumping 160 million gallons, and now you're just down to 8, I mean.

Response: Okay. We're probably even lower than that. Probably even lower than eight right now.

Question: But maybe this next question might be for Grant. As I was coming home the other day from Kahului, between Hāli'imaile Road and Spreckelsville—but Stable Road—is that corn you guys are growing there with that round sprinkler that goes on? Could you guys irrigate that differently? Because coming home and the sprinkler was going and it was a very windy day, I wonder how much water actually gets to your plants. I mean, is that something you guys use a lot? Maybe you guys can do better with more ground irrigation.

Answer: Yeah, we can take a look at that. That was kind of just deemed the most efficient way to irrigate those crops at kind of a high density without using too much land. But we'll talk to our farm team and reassess the operations of that system and see if maybe we should cut down irrigation during high wind times. One of the things I wanted to add to that is that those pivots are some of the most efficient ways that we found to operate irrigation in those areas because they can be programmed to put a specific amount of water just where it needs to go. Every droplet that falls, every nozzle size, every drip length, and every drop that falls is specific to an area. So when you say, "This is the amount of water that I want to put in an area," it either speeds up or slows down to provide that amount of water.

Comment: Water was shooting wild on one side of it, you know, not even—it's like shooting at the ground, so that kind of concerned me a bit.

**Response**: Okay. We can take that into consideration. I'll find out from the farm team what the deal is.

Question: Good. All right, everyone. Mark, I just want to comment on your last statement that you made about how we as Maui County, as a people, are in a red status as water is concerned. And I was just trying to figure out how to alleviate or how to speak more on what actually needs to be done rather than the problems that we're addressing with trying to grab all this data and try to make better decisions for the future. It's like this is where our whole discussion is running, and it seems like it's the everyday common discussion: What are we going to do about it? And I do believe that Mark has mentioned at the end the ultimate—the only thing that we must look at is how dry we are and completely understand it. Because there are all the alternatives that can be done, but hard decisions have got to be made. And I'm pretty sure the data does have significance in our decision-making today, but as far as USGS has mentioned, one has been destroyed. Another one is being proposed—I think Mark and Grant are aware of it. A USGS station to be set up on Honapi'ilani. On the Honapi'ilani—right next to the beach, I think that looks like it's about Pauwela.

Answer: Yeah, it's mauka of the intake that we have on Hanawī, and it's an old USGS gauging site that they had. They think they want to revive that site. They've got to see if they need to do repairs to the weir or whatever they need to do to set up the proper controls. But I know what they really want is to revive that to get some accurate data.

Question: Yeah. And that was a major concern—what Lucienne has mentioned earlier about it being vandalized. And I do acknowledge that concern. I believe that we need to make that more secure because data is important within the parameters of what USGS has to offer. But yeah, I just wanted to follow you, Mark, in bringing out that main problem—that we are, you know, in a drought worse than drought.

Question: Follow-up. I'm sorry. Have you folks any chance of maybe using that upper well in Pā'ia? I don't know—it's about a million gallons a day capacity, and I don't know exactly how you'd get it to your reservoirs, but it's there and it's way above where your guys' wells are, you know.

*Answer*: Yeah, I think Maui Pine is also kind of exploring that. So I think Grant would probably be able to speak more on that. I think just generally, we're looking at all of our options just given the severity of the situation that Mark just mentioned. So even though that well is, I think, only rated at a capacity of 1.2 million gallons a day at this point, we'll take as much help as we could get, so we're exploring that and all other options.

Comment: Yeah, well, it could get to your upper reservoirs because of its location.

*Question*: We were just wondering—when you report your amount that you're taking each month, are you taking the full amount that you're allowed up to the IFS? Hope I'm asking that correctly.

Answer: Yeah. So we are taking as much as we can while staying compliant with the IFS. The problem with that is, as much as we can, that compliant amount is just represented by the table that Janash reports every month. It's not enough. So, you know, there were a few months last year where there was an abundance of water—maybe we may not have taken everything that was there because it exceeded our need at the time. But those instances have been rare this calendar year, bordering on nonexistent. So to answer your question, yes, the current practice is that we are taking as much water as we can while staying compliant with the flow requirements of the IFS. But as Mark mentioned, that's just not enough currently. If I'm understanding your question correctly, you're saying that once the IFS is met, if there's additional water in the stream that is allowed to be drawn and put into the ditch to bring across, we haven't always done that.

Question: I think the question was—and this is from a little while ago—I think the question was, is there ever extra water in the streams above the IFS that you folks just aren't taking? Are we able to find that through the report? Is there a way that that becomes clear?

*Answer*: In very rare cases, I think. But because those numbers are blended into monthly averages—you know, and those spikes are probably much shorter in duration than one month—you wouldn't be able to see specifically when those spikes happen. And Mark, you can correct me if I'm wrong, but I don't know if we've ever gone an entire month where the amount of available water has significantly exceeded both the IFS and also what we could take under the permit.

Question: Just to provide more clarity on what we want to ask—I think we're more interested if the report shows it.

Answer: It would capture it if it happened over a whole month, and then obviously I think at that point it'd be pretty obvious just based on the amount of water that's reported. But you know, if it happens day-to-day, one or two days a month, then those spikes are flattened and blended with the remaining days of the month where that's not the case. I think everyone here who lives in East Maui can attest to this: East Maui streams are some of the most flashy that you're going to find. They never come up to a spot where, oh, it's perfect for everyone and it stays there. It either goes super high to where there's just brown water flushing into the ocean and everybody's satisfied, and then within 24 hours, it starts to drop off and it levels off. Now when it rains a lot more consistently—and everyone here will agree—when it rains more consistently, that drop-off is a lot more gradual. It takes a little while. The streams continue to flow and they continue to get water and it slowly comes down. But when it's so dry, it goes all the way up and it spikes on the way down because the ground is so dry, it's not percolating water as much. The flow just ends—the ditch will go from zero to 40, or from 7 million gallons a day to 40 million gallons a day, and then tomorrow go right back down to like 13, 12, 11, 10. It does that. Whereas in the past, if it rained all the time and we went from 8, or you know, 9 or 10, and it goes up to 40 or 45, when it starts to drop off, it'll go 45 to 43 to 42 to 40—it'll drop off a lot slower when there's more active rainfall.

Question: Yeah. So how do you verify IFS compliance? You know, some of those IFS values set by CWRM are expressed as percentages, so it seems like you would have to gauge the stream before diversion and after diversion. And so anyway, can you talk about how you verify?

Answer: Yeah. So for us, they're not expressed in percentages. The current IFS values are expressed in specific amounts in cubic feet per second that are set by the Water Commission. They set the IFS, and so what we do is initially we work with them to make an adjustment to a gate or an intake whatever we need to adjust to make sure that water is passing by. The Water Commission—Dr. Ayron Strauch—actually takes a physical measurement downstream at the IFS location to verify whether or not that's being met. If it's being met, he lets us know it is being met currently, and you're good wherever that gate setting is marked out, because that's how much water you need to make sure stays in there. And so that's what we do. Then he does that for a bunch of different streams, and he comes out quite often. At the very least, he comes out quarterly, if not more often, to measure the streams. So he does the measurements to verify if the IFS is being met, and if for some reason it's not being met and we don't go out with him, he'll go out to the intake to double-check and say, "Hey, is there anything going in the intake?" If it is going in the intake and the IFS is not being met, he immediately phones us and tells us this is happening. That hasn't occurred. We have things set up—he usually, like I said—let's take the gates, for instance. The gates that are there usually take water off the bottom at the lowest part of where the stream is, where the stream and the intake intersect. So the gate is set at the bottom, so the water that goes out the bottom of that gate to make sure we meet the IFS—that's what I like to call, and I don't know if there's a technical term for it, "first water." First water goes through the stream. First water comes in the bottom of the gate, meaning that has to be satisfied before any other diversions can take place.

Question: Fascinating topic. So the nature of the streams is characterized as flashy, etc. Yet all of us in our neighborhoods have the edifices—we have these lo'i that were built with great labor, probably 400, 500, 300 years ago. Someone built those because there was a regular supply of water. You wouldn't put that much effort into it if you didn't really have some sort of reliable supply of water. And even when you read the old native testimonies from, you know, the 1840s, they'll say, "Good kalogrowing land," and they're right by the stream. It's like maybe these streams weren't always quite so flashy in nature, is I guess what I'm trying to say, because the people of old invested a lot of time just building edifices that could be flooded with the stream water. And, you know, I'm sure I'm not saying anything I haven't heard from others in the East Maui community—there's just a lot of places where kalo was along the stream, and these terraces after terraces after terraces were created with an 'auwai through them. They were designed for wetland. They were designed to be irrigated by the streams, and that fed people. So if that's not going to be the case anymore, you know, I think we all have a new reality. And back to what Moses has said in the past—Grant, is your planting plan being reexamined at all for Mahi Pono? Or is it just okay to lose a certain percentage of trees in the bad years?

Answer: So like any other weather trend, we're not sure if this is a long-term thing or a short-term thing. It's unfortunate, and of course we don't want to lose any trees. No farmer aims to do that, but we're kind of dealt the hand that we've been dealt, and we're making do the best we can. To your original question about whether we're reanalyzing our crop plan—I mean, I think every good farmer analyzes their crop all the time and tries to make prudent adjustments based on all factors. It's not just weather. So to me, yeah, I mean, I think we're analyzing it all the time. I don't know if we've made any firm commitments to make any permanent changes. But, you know, hopefully with the winter season coming up, we'll just see more rain.

*Question*: I do have a question I think maybe we can ask now. How do you guys figure out, when all these stream diversion modifications are done, how much less water will be available? Are you going to get less water once the modifications are made?

*Answer*: For the most part, yes, we are going to get less water.

Question: Have you done that calculation yet?

Answer: So again, the calculation is so hard. If we look at—and I hate to be that guy that does this—but if we look at data that was collected prior, because the game and the rules have changed quite a bit on how much water you can actually draft, what's available, what's not available, how much rain—we can all agree that the weather patterns have changed in the last ten years. All of the data that was collected was for considerable years before that, all the way up to ten years ago. So that data—I'm not saying it's out the window, but it's difficult to follow just because conditions are so completely different today than they were just ten years ago, not to mention 100 years ago when the data had begun to be collected. So that's difficult to do. And then to calculate—if somebody told me, "How can you calculate what the lowest amount of water that's going to come in is?"—I would have never guessed that the amount of water that's available today, 7 or 8 million gallons, I would never have guessed that that's all that would be available. I would have thought, "Nah, it's got to be considerably more," because it just didn't go down like that before. With the IFS in place and being met in many of these streams, that number has gotten considerably smaller. And so to see if we can calculate, it's hard because we'd be calculating based on not a whole lot of data. I'm not saying that it's impossible, it's just that it's very difficult to do.

**Question**: I was wondering if your team—when you guys made, as part of your permit requirements for the removal of the diversions, did you do any of the calculations at that time to see what kind of effect it would have?

*Answer*: I don't believe we did. I think the remaining flow after the IFS was met is reflected in the EIS, but that was before the Huelo IFS. The amount that Mark is talking about that would be decreased is primarily related to Huelo. I believe the 2018 IFS order has been generally met, if not entirely met, as far as flow requirements. So if we wanted to have some kind of indication of what the projection was back then, it's the amount of water that supposedly we projected to be available in that document, the EIS, which I believe was 81 million gallons a day.

Comment: So, Gina, if you look at what the Water Commission produced in November 2022, they produced a report. On page 31 of this report, which you should have, there is a table. And the table indicates there is going to be 13 million gallons of water less available to Central Maui after the Huelo recommendations are implemented than they expected before. So there's going to be a significant reduction of water that's going to go to Central Maui, about 13 million gallons. It also estimates that 5% of the time—and maybe we're in this 5% time right now—only 10 million gallons a day are going to be available from East Maui to Central Maui. You know, 10% of the time, only 13 million gallons a day. So this report is, you know, almost three years old now. It may already be outdated, but back then the estimate was—back then, the Water Commission recognized the numbers in the EIS were wrong. Not through any fault of anybody; it's just time had passed and there was better data, and it shows way less water being available to be taken from East Maui streams, and that number's going to go down once the Huelo modifications are made.

**Response**: To Mr. Frampton's point, when he was saying we're probably in that 5%, we're probably in 1% of that 5% right now. Today, you're exactly right. We're probably in 1% of that 5%.

Question: Thanks for sharing. I know that that's difficult. We're all in a bad situation. I think we can all agree on that. My question—I think you might have answered this, but you can go into a little more detail: The water that's diverted at each intake and each stream, you said some of it is measured. Do you have like a list of what's measured and what kind of devices actually do the measuring like that?

Answer: I don't. We don't measure any streams. For us to measure streams is very difficult. We've never completed weirs or set up control points for measuring. The Water Commission does that, and the Commission themselves, between them and the USGS, set up these stream gauging sites that let them know how much water is actually available in the stream. And then they can go down below all the intakes and do measurements at the bottom where they have set up kind of another roving control. I want to say they're much more scientifically geared towards this. They go in completely below the intakes and then they'll measure exactly how much water is there. And then they'll be able to know with simple math how much is available above the ditches, how much is available below the ditches, and know how much is being drafted.

Comment: They have the gauges, correct?

Response: Correct.

.

# November 6, 2025

11 a.m. – 12:30 p.m.

# A. Update from Mahi Pono: Grant Nakama

Mahi Pono didn't have any additional plantings during the quarter, but we did divert an average of 19,000,000 gallons of surface water per day. That amount is skewed a little bit because we had a fairly normal diversion amount in July, followed by two excessively low diversion months in August and September. That reflects the very low rainfall that we had during those months in East Maui, so that average is a little misleading given the last two months, but in let me actually tell you the exact number. In July, we diverted 35.6 MGD, but in August we diverted 14 and in September we diverted 8. So luckily it's starting to rain in October and it's kind of continued through the first week in November, so we're seeing that number creep back up. So hopefully we're past that low point in the cycle. We didn't plan any additional crops in Q3, but we expect to plant some more crops in Q4, primarily consisting of coffee and avocado. For the amount that water that we applied during the quarter, we applied 45 essentially 1,000,000 gallons of water per day in July, followed by 32 and 33 MG in August and September respectively 2 crops. So that shortfall was made-up by groundwater that we obtained from our wells on farm.

## B. Update from Mahi Pono (Q3 IIFS Work Summary Report): Mark Vaught

EMI has just been doing general maintenance on the system. Good news: SHPD got back to us with the conclusion of their review for all the Huelo IIFS stuff. They're working on the next batch. They've concluded so we can move on from there. And now it's just a matter of the package that the Army Corps has and clearing that package then we will be passing that on to Department of Health Clean Water branch and usually if the Army Corps gives us any guidance, usually Department of Health usually goes along with that so it'll be a big help in moving things forward.

Category 1 projects were all abandoned diversions that were sealed. Then they came back and said now you need to remove the stuff still in the stream. You've abandoned the intake. Now you have this big concrete wing wall that directs water that way. I don't want that wall in there. That Wall's got to come out. You got to add stuff in here to make sure that we have adequate fish passage. You know, good stream biology, that kind of stuff. That work triggers a bunch of different new permits.

**Dean Uyeno, CWRM:** I want to explain a little further. Mark is doing a good job. The Huelo streams, at the lower ditch level there's actually relatively small trickles and they're the 1st to dry up, but they flow directly into the ditch system. And so that's why Army Corps has is looking at those because in order for EMI to bypass the ditch they need to construct like a little bridge or overpass over the ditch to convey that water across the Waiola ditch. So it's for a very small amount of water, there's a lot of work that needs to be done, and that's why it's triggering all these reviews with Army Corps and possibly Department of Health. So that's why the Huelo ones are in particular taking a little longer.

**Gina Young:** Question on Maho Pono long-term planting plan given recent drought conditions and announcement of additional planting in quarter 4.

**Grant Nakama:** The CWRM process lives with CWRM. So that entire deliberation and Aaron's presentation. That discussion kind of happens at the government level and for us as a private entity, we just got to do with whatever circumstances were dealt in the best way that we can deal with them. So that's what we're we've been doing as farmers try to move water around to the best of our ability, trying to keep the trees as irrigated as possible. But beyond those operational measures. Whatever happens from regulatory perspective at the state level, we're monitoring it of course, but as you probably noticed, we didn't participate in.

**Gina Young:** How is Mahi Pono looking at dealing with the changing weather patterns?

Response (Grant Nakama): That's an ongoing process. If water's short, our irrigation team does a great job of moving the available water around, trying to distribute it as evenly as possible, addressing maybe the areas on a need basis more so than just a uniform application, but those are real high level general operational things. But you know obviously the specific operational adjustments that we make depends on that date circumstances and it changes all the time. I mean, we just went over the rainfall amounts and although it's been categorized as this extremely dry period, really it's only been. for the last two months at that excessive dry level. So prior to that, you know, I think we're doing pretty well diverting the amount that we've been diverting, but just the last two months forced us into a little bit of a heightened awareness about how we need to operationally deal with water, but I think our team did a good job.

**Scott Werden:** This is a comment to Mark about your observation that the county took all of the water that was delivered by EMI just recently. Last week, Director Stufflebean presented to upcountry that the Department of Water Supply is going to ask for an additional 12 million gallons a day from the Land Board has an enhancement to their current allocation, so if you know that's going to create additional stresses on our demands on the water, and if we're going to continue to have this kind of these low flow conditions. You might not be able to meet the county's needs as well as mahi Pono's needs. You know, with additional 12 million gallons going in the county I'm curious if you're aware of that and planning for it and what if you have any comments on that?

**Mark Vaught:** So that's a that's a source. That's Mother Nature is the only one who makes that determination and not me. So it's not as if I'm withholding water from the county. There just isn't any there. It's a quantity thing, so if there's more water that he's requesting. If it's not there, it's not there. I don't know what director Stufflebean's plan is to address that.

**Director Stufflebean:** For clarification, we're asking for a total of 12, not an additional 12, just a total of 12.

**David Kimo Frankel:** Is a 12 million gallon a day just because of the new filters and you think you can absorb that now before the reservoir is built? Are you seeing that demand being there - that there's a bunch of people who want meters, just to deal with the meter issue or are you dealing with not enough water being above so you have to pump water up? What is the reasoning behind the increase to 12?

**Director Stufflebean:** Yeah, with just the filters, the plant capacity will be 12 million gallons per day, that's correct. I just did a couple of Upcountry presentations which are now online if you want to take a look at them to explain kind of all the details of that. But in general, the answer is our first objective is to meet the existing demand and at. This point, the peak demand is greater than the reliable capacity. So we're already a little short, which is why we don't we haven't been processing meter requests with the filters with the new filters. Just with our existing allocation from the ditch, we can start processing meters for to some degree. But the new filters will have capacity. That's it. In excess of our total allocation that we are that we currently get so that's why we're asking for more to be able to maximize the use of those of those filters. So yeah, so at first we meet existing demand, then we'll start processing the meter list.

**David Kimo Frankel:** I understand it does. So here's my concern and you guys have changed your position in the last couple years, which has been great. Or maybe the last year. I think you understand this, but I just want to make sure. So one of the problems in the past has been the county has said we need a lot of water. In fact, even a few years ago it was 8,000,000 gallons, which was never true.

But anyway, there's this high request. And that has been, but you haven't been using that much water because you couldn't? And the problem is because the board authorized that water to go to the county. A&B took that to mean well, does your contract really allowed to have all this water? The board's letting you have it so you can have all this water, but you wouldn't use it and the water would then be wasted. Literally it was wasted. It was dumped into the unlined reservoirs was seeping to the ground and what didn't need to come from the east Maui streams. So one of the concerns is there, there is a difference between peak need and an average need. And we if the board authorizes based on peak need every single day that water is wasted unless there's a revision that says you know what, Mahi Pono has to their allocation. Needs to use this water that the county can't use on a daily basis and we know on average what that is. We have known on average what that is. And so if you guys just come in and ask to increase it to 12 million gallons a day, that's going to be a huge problem without the caveat language in terms of the Mahi Pono having to use the water that you don't use. And we also have to do so. This is a prelude to next week Friday. If you guys don't articulate a reasonable conservative average of what you need. It's gonna be a big blow as it is. We'll probably have a contested case here anyway, but it's going to cause a problem. And so I would strongly encourage you for that meeting if you could come in and, you know, articulate what the average amount of water you would need and as well as the provider of how much you think you needed a peak basis and then support ensuring that that water that you don't use on a daily basis is available to Mahi Pono in the allocation. Does that kind of make sense?

**Director Stufflebean:** It does. Thank you for that suggestion.

## C. Observations on environmental conditions from Stakeholders

**Mark Vaught:** Many years as I've worked here, many, many, many years that I've worked here, I've never seen it this dry. This earlier this year never, never seen it this dry. To give a little bit of context to how dry it is: on August 28th through September until October 14th or 15th, Mahi Pono wasn't able to apply any East Maui water to our fields. All of it was for the county. The county took all of it. There wasn't enough water for both. So the county, was able to use that water for upcountry Maui. The good thing to remember is that it was dry. We're starting to see the rainfall come back and I'm not 100% sold, but it is coming back and we're starting to see a little bit more regular rainfall, not excessive, but we're starting to see a little more East Maui type weather.

**Scott Werden:** thankfully we've gotten some rain in the last couple weeks, but I'm experiencing what everybody else is, which is brown lawn and dying fruit trees, but I don't live on a stream bed and there's people that are who rely upon stream water who are suffering a lot worse than I am.

**Lurlyn Scott:** So the stream but the invasives are back. I guess 'cause, everything's coming up again. I just tried to go online to see what the water engages were saying and they're not coming up.

**Moke Bergau:** What is being observed: No effect on the actual stream. There, there's no flashing or anything else of the sort. So no, it's still continuing the story from September last year. It's under the same conditions with no water. That's why what we are talking about is very, very discouraging. We're speaking of water and we're trying to figure out how to how to do without that rainfall, consistent rainfall that we need, which is nobody has control over. But the discussion is still continuing on. How can we get availability sorted out? And that's a two sided discussion.

I saw the CWRM presentation from Ayron Strauch and recommendations that he was putting on the board. And this, and it seems, sounded like they're still looking for more water and the four streams that was discussed in this meeting. They're looking at lower elevations to get it, and the only four remaining streams that's available right now. And then that's the one there. You know the discussion

and all the data pointed out you. I'm just trying trying to figure out what you know how. How can we do this? Where will it continue on in the future. Yes, I appreciate what the director of the Water department has to say and also all the representatives that has done that report.

My concern is that that wells they've been pumping for during this drought period all show that that it's has been salt in water. And I've we've heard it on here. And by the continuation of the pumping is worrisome because it's already contaminated from those two pumps. No one has any idea if it'll affect on other wells our aquifer and where we are taking surface water. We are only talking about surface water, which is very, very limited, no matter how much rain we get in a day or so a month, but yet the discussion is always has been always looking for that water and it unfortunately it's narrowing down to four streams in the lower elevation. And the only available way to get that water is there's that there's a well that sits on the Hanawi. Aside from the Koeva well. When that goes online. It will affect all our flora and fauna all the animal life in the streams. Our coastal seepage will disappear. It's already affecting it. With this little rainfall. And when you keep pumping. I'm not just putting it on Mahi Pono. All the wells, all the private wells that that are pumping. The recharge is not there. So it will affect outlining aquifers or whatever you may call it underground water. Without any clear idea what's in that well, how much it's to assume that there's water. There it's. It's a really, really not a good discussion although we had the IFS standard and they are talking about lowering it. What is that all about? It's kind of a concern. It really it really hits home.

I would appreciate it if you'd start considering ancestral knowledge. Put it into the discussion. What it means, what it did? What? Where is that? It's water. No one knows. Unless we do that. It all goes back to the knowledge ancestral knowledge. We've been at this at this ditch here for the longest time, decades. And it's still being treated as a transmittal, a possibility of watering out central plains. And why we are still talking about how can we get more water? How can we utilize it? How can we utilize the ditch? Make it more efficient. It just doesn't. Doesn't work anymore. Look at the rainfall

**Gina Young:** Can I ask a question that someone recently asked me: Why are restored streams still dry?

Moke Bergau: The restoration is only on paper. We only read about it. The rain is not there. And that system, the delivery system, the delivery system there. That is a whole. I'll actually say problem, but it's beyond problem. That is our number one thing draining of our waters. It's unforgiving. Can we actually try to regulate it. Try to make it more efficient. It's just the way it's designed. It's unforgiving. And that has been mentioned for years, decades, that it will affect that water in the Ko'olau. Whatever falls in there, it will get pushed somewhere else. And wherever that ditch leads to and ends up, that's what. That's what we're looking at. That's where it'll go today. We don't know rainfall. Today, that ditch is just unforgiving. Whatever sprinkles we had these past days, weeks or however. It's falling in that dish and going somewhere else. At the end of that, at the end, no matter where you you take it out. But what's really what's really discouraging is that. The talk is still continuing. It's like the it's like the system is like the only thing that we have. But it's unforgiving, unforgiving. No one can actually control it. Even no matter how much gates we open. The effect is still there. All in that tunnel, there's side ditches es going up into the mountain, capturing all the punawai exposed. The springs that's nearby. It's falling in that ditch. And heading West. Now that's the data that that is real. Walk take a walk in there. Right now it's all on paper. Use that paper and take a walk up in there. That's all I you know, that's the only thing that I can offer. If we only if we only look at data, then we need to have the comparison with that knowledge. We need to compare it. I do understand as a higher these stock goals it gets muddled. The ancestral knowledge gets muddled, muddled in bureaucracy, or whatever. You may call it, but the data is all ready for some reason prevails. To make decisions on. And that. I have the hardest time to to try to understand that concept. Because if we don't look at it in in a whole we all are in trouble. Look at Lahaina. Look

at Maui Kahoma. We need to. There's our Hawaii constitution. Does that serve as a base? We need to understand it and use it.

**Jonathan Scheuer:** Aloha everyone. Long time listener, first time caller. I usually have a conflict during this meeting, but obviously have tracked it closely. I have the honor and pleasure of working with Uncle Moke on the 'Aha Wai O Maui Hikina, and he is dedicated so much effort to our work. I've heard Uncle speak a few times recently about these concerns and so for myself, but also perhaps for others I wanted to give my summary of what I think I'm hearing from Uncle Moke and give him the opportunity to say, yeah, you got it or no you didn't get it.

There's four basic points and not necessarily an order, but the first point is like during these times. This past year and these times of historic drought. It's really inappropriate to continue to have conversations about taking more water through the system. Whether changing the IIFS or increasing allocations to any parties. Discussing issuance of either a long-term lease or a set aside to the county that it's just the wrong time. To be talking about this, when there's such drought being experienced in Maui Hikina.

The 2nd is that if that I'm hearing is that if this conversation and this whole policy process were in, was actually sort of grounded in and informed from native intelligence and ancestral perspective, we wouldn't be having this discussion at this time. And instead the discussion would be focused on stream restoration and stream flow protection in Maui Hikina for the communities that had been focused on it, addressing that until conditions change in these fundamental issues are addressed.

The third thing is there's just for various reasons, both the distrust of the existing data and concern that there's a significant lack of other sources of data on diversion, ditch flow and other things and uses. And that again, those the data that we do have doesn't seem to match the experience. The folks who are living and working and ancestrally from Maui Hikina.

And the fourth thing is aren't our laws supposed to be informing us to proceed in this direction to first protect these public trust uses and native rights before having these other discussions. So Moke did I did I come close.

**Response (Moke Bergau):** Mahalo, Jonathan. You have covered all what I said. You have clarified really good the points that I was referring to, that I spoke of and I just want to thank you for doing it. And yes, you came not only close but you have covered it, all what I have shared today, Mahalo.

#### Question: How often does CWRM come out to look at the conditions?

Response (Dean Uyeno): I don't personally, but Aaron and his and his team. they're on Big Island today. They were actually just in East Maui on Monday, I believe. So we do have a number of gauges in East Maui we typically do.A A. Quarterly run to download all those gauges and maintain them. So I believe it takes about two to three days for East Maui, so typically I think around Maui for at least a full, you know, 5-days every quarter t o maintain all our gauges on both West, Central and and East Maui. Ayron's also been doing 6 some stream survey work. Biological work in conjunction with DAR and others. So.That was why they were on the big. Excuse me, I'm on Maui on Monday. They've been taking some doing some biological surveys across multiple streams up to.

# Question: Many gauges do you have out in East Maui?

**Response: Uyeno, Dean:** I would have to defer to Aaron. I think it's less than 10.But you know, but we do also have a network of USGS stages, right? So we try to have make sure that they kind of complement each other. One thing to one thing I want to mention, just to Moke's point about,

especially in Huelo, you know that that's one that's an example of where the streams the those small stream tributaries are flowing directly into the ditch system. At the Wailoa ditch level, and so they haven't been able to do the work because that's the review that that Army Corps is currently doing.

Response: So the IFS numbers can't be enforced until those diversions are removed.

# Clarification from Ian Hirokawa that the FY 26 RP permit will be on December 12 BLNR agenda.

## D. Review of the Committee Report and Recommendations

**Gina:** Dec 12 for the RP is actually good for me trying to summarize what everybody has to say. It gives a little more time for input from the stakeholders and then also in the report I'm going to add another sentence about this is my staff product worked. It's been me and my staff that's been working on summarizing it too. So I've kind of done the best to to capture what I what I've heard. But and we've had opportunities for input. So I'm going to go through it now. You guys can give me your input now. But you can also send it to me too, and then I can send out something. When we've got a kind of a list, a little better organized and summarized. And then I can still submit it in time to to have it be and I. Maybe I'm thinking of just giving a draft now to the board to look at and make sure it kind of meets what they were expecting of us and it does give us

Let me jump into this draft report and then I'll explain some. I'm just gonna add another sentence in there reflecting. That this is my work is the facilitator. And that the comments under here are just summaries of stakeholder comments, but each each of these transcripts is about 60 plus pages. So I had my staff go through and and try to take out formatting and put it into to something that's more understandable. It's surprising when you actually read a transcript. How much of it is extraneous or just the word. So I'll put some more language about that. Is there something in the chat? Let me take a quick look and see. Oh, thank you.

Can everybody see my screen here? People feel free to jump in or put raise your hand as we go through the different items. What I did add from last time was what the intent of the group was, and I took some of the language. I tried to take some of the language from Grant. And Grant, feel free if you want to summarize better, you know that we were, this is really what our goals were was to build trust and to better understand our perspectives. And I tried to bring in experts where possible and this was not in negotiating consensus. This is really just about establishing trust and discussing things. And this is where I'll put my language in about providing each topic area the summaries of stakeholder comments. It was too hard to do the quotes because it was easier just to summarize. And then what I did is in the beginning I just put down what the main topics were. And then I think you know some of this still needs some clarification. So and some of them overlap, but I got some really good input on how to how to better write all this. So feel free to keep providing me that kind of input.

So if we go through the first one, it's just these observations of severe drought and I think some of what Moke just said would fit under here as well. What the implications are from looking at that severe drought. I think you all have a copy of this, but does anybody want to provide any comments kind of on this first? And did you want me to collapse subjects again or reword them? I had some good comments last time. And I may use some of the organization that Jonathan just put into. With some of this as well. I can keep going unless somebody. So how it works?

What I did the intent was to provide with the number what the overall topic was and then kind of summarize below it. And then anytime there's these little open ones, those were originally quotes.

Or at least they're summaries of people's comments and attached in the exhibits will be summaries of the detailed meetings. I think all the transcripts are available to each of you as Members as well.

And then if we go to #2, this reflected last meetings discussion about reframing water management and I think that's a little bit what Moke and Jonathan summarized too. So probably it may incorporate some of that. Any observations or comments on on this section? And then we had a lot of discussions about efficiency, especially that might think talked about that today as well too. So I separated that out as a separate topic. And then I separated out the mandated diversion removals. Also, just as its own just said. So it didn't get kind of lost in in #5 and the data collection. If anybody has any more detailed I did find it useful but additions that Mark made during the last time and I think the one of the benefits of this group has been trying to understand that process. And what it what it means for the what's actually happening in the streams and I hope we can do more. More discussions on that to better understand what's going on and understand the time. And even just identify the agency bottlenecks. I think that's really useful too. I'm not sure what got shpd if they just finally got around to it, or if CWRM kind of was asking? As a sister agency to take a look at them on the data, I do think I need to include a little bit more of today's comments under there, but I tried to capture it. It seemed to come up through a lot. It just kind of sprinkled through out a lot of our meetings. I did mention that we had Chris Schuler at one of our meetings and that was a lot of expert really good information and leading us to where other information is captured.

And I included comments from last week. Jocelyn had a lot of comments about that. And then this. I like the comment about Native intelligence. I think that's what number six is really talking about. And I think that relates to to framing the subject as well. So maybe there'll be a way I can kind of link those two. And then before I move on to the, you know these recommendations that that I'm just providing input on this last section here, just kind of based on the discussions, I recognize that that we didn't have any kind of consensus, but things that they might consider, I don't know. Does that seem? I don't know grant. Did you want to jump in now? Maybe. And and talk about. So this.

Response (Grant Nakama) About the general response under condition 7.

**Gina Young:** Did you want to provide more information that you want me to include in the report on this? If you want to send it to me later or not, or provide, I thought what you said last time was really useful. I tried to incorporate it as best I could, but I think maybe you seeing it now might have some other ideas.

Response: (Grant Nakama) No, I mean, I think we wanted to participate in these discussions that we have been doing that and we're glad that you know the report notes that for the most part, I think the information provided is useful and beneficial to the group and we appreciate being here, but. Just you know, we are on opposite sides of things for certain things and I think that's captured by that general response to additional reporting requirements. But I did mention to Gina just for the groups awareness. That there might be other things that we disagree on the final report. So we just wanna they don't misconstrue .Are. We didn't want to say that we're agreeing with everything, just 'cause we're not debating it here. I mean, there's a lot to debate. This is primarily on informational meetings. I think we're fulfilling our obligations there, but just wanted to let the group know that just because we disagree doesn't mean we can't do that respectfully. So we'll try to do that to the best of our ability.

**Gina M. Young:** I like that term primary informational too. I can incorporate that and then there's any specific language you want me to actually put in here. Feel free to stuff to e-mail it to me too. And then I know you might provide your own testimony too. And of course we would. We would do that. OK, great. So I what I heard from everybody is you light up the glass meeting. You like the meetings? You're good with them. You like the cadence of monthly. You'd like a little more structure now that we've kind of trust. I mean, I've got some staff now which can help me focus a little more. Open to

suggestions on how to do that, but I think and feel free to call me if you want to talk about the structure going forward, but I think for the BLNR's most important input, they want to hear. Do we want to continue and do we want to do it in the way we've been doing it with, with our department facilitating this? Does everybody feel any disagreement on that? Is it? Not really offering twice a month, but. We could go every other month, month monthly seem like it's a good. Yeah. OK, seeing about your nodding heads there, OK. I'll try to get some more experts on there too. It does take time. We had an expert plan for the last one, but there were some issues with that.

OK, now I really changed what will come with condition 7 and what kind of additional data was on there. If anybody feels like they want to put some other things back in there. Let me know, but I felt like maybe. I think Mark adding some of the stuff on there and understanding that that maybe we need to just make those charts a little easier to read. I thought maybe that could be something a little more informal and less. Anybody feels like you want to mandate or change what that condition, #7 reads. The one thing I didn't take out was the fact that we did talk about. It's very rare, Grant had said that sometimes there might be additional water that's left in the stream. I don't know if it happens much, but there was a request to to understand that information. When it does happen. I don't know if there's still. We still want to see that in there. I think we all recognize it's rare. OK. So that was kind of the only additional reporting then that. I use the words from the I heard in the last meeting for #3 about the amount of surface water allocated to be reduced by groundwater available. And just have an understanding of that. Well, water is a part of of what's used, even though we did, we haven't gotten to talk into too much detail about how much water is used per acre is there. Did I capture that that language correctly? For those of you that were interested in that, does that look good?

**David Kimo Frankel:** I don't think the per acre is relevant to the groundwater issue.

**Gina Young:** I thought my understanding was the suggestion was the per acre number should include both the fact that a well waters meeting it as well as surface water. Did I not understand that?

**David Kimo Frankel** Oh, yeah, that's fair. You what you just said makes sense.

**Grant Nakama:** This one is kind of a new thought. So I think if the suggestion is to have the amount of water applied be capped? Or both groundwater and surface water. Then I think you in a way you're directly dictating how much water we get to apply to crops, right? When we have two sources of water. Is that the intent, Gina? Or am I misreading that?

**Gina Young:** I think was the intent is to reflect this on the allocation only of surface water. The the surface water allocation amount itself should just reflect that there's another water source that's being used, that the entire burden of the per acre amount is met by two different sources, not only surface water. I think that was the intent was just to reflect that that's what's actually happening.

Grant Nakama Right. Ok

**Gina Young:** I don't think BLNR has the ability to cap your use of groundwater.

**Grant Nakama:** No, no, I think if it turned into a per acre requirement that is consisting of both groundwater and surface water. If you did it the opposite way, then you're telling us we cannot exceed that amount even through groundwater sources, so.

**Gina M. Young:** I think I understand what you're saying, no.

**Grant Nakama:** As long as, yeah, as long as that's not the intent.

**Gina M. Young:** Sounds like I just need to clarify that in.

**Grant Nakama:** On the rest of it, obviously, you know, we are in disagreement with that suggestion. But you know, I think it's well noted by this response that you have there.

**Gina Young:** Do you want me to add anything to that? Do you want me to start with? We're in disagreement or just?

**Grant Nakama:** No, I think. I think generally we disagree. Could have more detail, could have less but, but it yeah, the general point is just to note the disagreement.

Gina Young OK.

**Grant Nakama**: Yeah, that was good.

Gina Young: I just wanna make sure I'm reflecting what I hear. I'm trying to be a facilitator.

Grant Nakama: Thanks Gina.

**Gina Young**: On #4, I did change that For reservoir line, this is just one of the reasons I put this in. Here is because when I met with Sher Chang last year, she said go back and review what the topics were in the previous meeting and there was a couple. This was one of the ones that was debated the most during the meeting and the infrastructure upgrades, including reservoir lining did come up. So I tried to relate it back to last year's. discussion that they had. The board, assuming it would probably come up again. I included your response Grant. I don't know if you want to add addition to that. First of all, did I capture the feeling of the group. D id I capture grant your response and then I capture the tresponse back. It's the language accurate. Does anybody wanna add a take away?

**Grant Nakama:** So, and I mean off the top of my head, I think that captures it, I just. And the reason why I had that note about us submitting separate testimony and potentially clarifying our positions is because I'm not the only one with a perspective on my side.

Gina M. Young: Understood.

Grant Nakama: But yeah.

**Gina Young:** OK. I think it's probably reasonable. #5 is just a general comment which I mean I'm sure SeaWorld would love to have extra money to do monitoring and data. And it was just something that I heard throughout almost every meeting, including today. And I think I tried to reflect that. The burden is kind of on everybody to do. We're not just expecting the permitee to be doing this, but there needs to be. And understanding of how important that is, I think I do need to add in there that the point that was talked about today is that it doesn't necessarily the data that we're seeing doesn't necessarily comport with the observational data that we're hearing in these meetings. So maybe that'll be 1 addition in there. But also just in terms of understanding compliance, I just heard repeatedly that having more data above and below the divergent and understanding exactly what's happening before Honopou would be useful, so I tried to capture that but also recognize that it this is everybody's responsibility. We got any comments in there on that? There's been some moving on number six, there's been some great comments recognizing DHHL. Sorry about auto correct. We'll do a search and that I don't think there's been any opposition or any other comments saying that that number shouldn't be reflected in that it's it's recognizing it's a public trust use of water. Are there any

other comments that anybody from DHHL or even any other stakeholder want to add to the discussion.

**Cherie-Noelle Kaanana:** None, at the moment, Gina. Thank you, But I'll think about it more.

**Gina Young:** Great Let me know. For #7 today that this is actually a little more broad that we should not just ensure the protection of these practices, but we should also start. Reflecting the cultural perspective in our decision making and in the way we look at, does anybody wanna? Verbalize or summarize, I can go back and take the language earlier, but if anybody else wants to jump in. And then and maybe we just kind of broaden this one out to reflect. All right, I'll take the early. There's a lot of earlier language on that, and then the exhibit lesson. Yeah, go ahead.

**Grant Nakama:** Sorry, just one quick note on #7. This is one good example of something that you know the language: Ensure the protection of cultural practices. Under current conditions, I don't think Mahi Poni disagrees with that. Obviously we want cultural practices to be protected, but I think what follows is something that we might have some disagreement with. You know the notion that the EIS is outdated and likely inaccurate. In two days conditions I mean. There are certain things sprinkled throughout the report that if we were to note our disagreement with it would just be a lot of notes. So that kind of is a good example of why we maybe cannot note every disagreement, but since we're on this topic, just like to call it out.

**Gina Young:** Yeah, if you want to do a disclaimer in the beginning. To that I can put in that earlier paragraph too. I'm welcome and am happy to include that that I don't think anybody's expecting consensus from us. So any language you want to give me in the beginning of that report, I'm happy to include it too.

Grant Nakama: Thanks Gina.

**Gina Young:** This is we're working on the exhibit list. Not only did I at that one meeting, have the community engagement, I had a PowerPoint in there too. That's gonna go in there. And that was the one that I gave to the group. So before we go on to when do we wanna meet again? Anybody. Have any general I'm gonna stop. Sharing. Anybody have any general, any comments now on?

OK. Alright, thanks everybody. I appreciate the feedback that I've gotten and all your comments that you've made in there. It's been really spent a lot of work to read the transcripts. It's been great training for my staff to understand the issues by going through it. So just me, understanding your perspective, it's been a really good exercise and I hope that I did some kind of justice to showing the board that what we've done and I hope to improve on it too. Do you? Since the we're now looking at December 12th. For the the meeting, do we want to meet and I would assume we would want to get this into deal in our or yeah. By the end of the month. Do you want me just to make these changes and send it out to the group and then you can each of you tell me if you want any changes or you know what your thoughts are or did you actually wanna meet again? I didn't ask lan. I mean, we're mandated to meet monthly, do we? Do we? Do we need to meet in December? Is there is there a what? What do people think about if if the point is to get this report to DLNR by the end of November so that it's for to be, I mean, I can, I can submit a draft for them to look at and ask them what they want for next Friday. But. Do we want to meet again? Before the end of November and then the second question is, do you guys want to meeting December? Which I'm happy to do.I mean, not obviously. Oh, actually the 4th Tuesday or 4th Thursday is Christmas, so let me know what you think. Just. Ian, is it? Is it OK to skip December?

**Hirokawa, lan:** I'm just gonna. I'll say this, I think. Do I think the board will deem the permit in default because you guys didn't meet over the holidays? I

My guess is probably not. You know, I think there's rational some, you know, some reasonableness here, so the report will be filed. You know, you may meet twice in November, I think maybe the effort should be acknowledged and you know, maybe we have a little flexibility on this one. That's just my. Yeah, as a staff perspective, that's what I would say, yeah.

**Lucienne de Naie**: I think it would be good to meet in. Maybe earlier in December if if we needed to to just digest what happens at the land board meeting in in November. If people are willing, so not on Christmas, obviously, but you know sometime before that, I think if we have a clear process on finalizing the report. Basically, do you need a certain percentage of the stakeholders group to weigh in and say, yes, we've reviewed it and everything looks like what we've discussed, so send it out is is that, is that the process you're looking for?

**Gina Young:** I'm open to doing that what I was.I mean, I'm open to doing that. It's just I'm also open to just including the sentence. Some sentences in the first paragraph that this is my work product and it was my attempt as the facilitator to capture the discussions.

Lucienne de Naie: Well, that that makes sense to me. I mean, I think that the Community Water Authority has done a decent job, not a perfect job, but a decent job of reaching out. And I've been at several the meetings and there's individuals I've never seen before. You know it's not the same old people just coming and saying the same old things. So there is an honest attempt engage a variety to I think there are some very important messages that were heard, at least at the meetings I attended, and as long as those are included, I think your report should be your work product. But reflecting on what you heard.

**Gina Young**: what are the rest of the group think? Are you comfortable with what's in here? Is everybody comfortable with the approach of me? With what I just said, I mean, or do you want to do something where each person I contact individually?

**Lucienne de Naie:** No, I think you're supposed to be the administrator. That coalesces things. And you know, it's appreciated that you really don't want to say, oh, yeah, I just sent this in. None of you saw it, but you know it's good. You know, you know very appreciated that you don't want to take that approach. But. You know you need a way to to to wrap it up and get it so that even if it's not perfect, that it's useful.

**Gina Young:** OK. Thanks. There's a lot to improve. I'll be the first person to say that. I spent a lot of Sundays on this.

**Moke Bergau:** Lucienne just mentioned about having another meeting in early December. Just to go over what came out of the November 14th meeting? Yeah.

**Gina Young:** OK. Great. How does everybody? And maybe even the 12th if we did it on the 18th of December if we don't want to switch days. We could do it on Tuesday, December 16th. I wish we could have a holiday party and invite all you guys. Much more enjoyable, but I'm open to those two days.

**Cherie-Noelle Kaanana:** You know what we wanted do this so I know it would be after the November 14th meeting, but would we want it to be before or after the December 12th bill in our meeting?

**Gina Young:** If we wanted to do it before the December 12th meeting and look at the report one more time, we would need to do that by the end of this month. So we would twice in November and

we wouldn't be and we could also meet again at. The end of this month and then meet again in December after both meetings.

**lan Hirokawa"** Sorry, just so everybody's aware this. Yeah, the submittal for the RP would be due the Wednesday before Thanksgiving, and that's like completed into the chair, so.

**Gina Young**: So we would have to meet next week to give more comments on and have another meeting to discuss the report.

**Lucienne de Naie:** Well, how many people have read it in detail and want to give input? I think that's, you know, that's the key. I have. I have read sections. I haven't read the whole thing.

lan Hirokawa: Sorry, can I just add: I don't wanna rush the, you know, you folks doing the report? I wanted to be sure it's you're comfortable with it. In theory it could be provided as testimony to the board, literally, like maybe two days before the meeting. You know, I know it's it won't be in the Staffs in the middle, but I'll kind of have some idea of I'm, I'm. I'm assuming we're not gonna see too. Many big changes and I won't, you know, maybe get into. Too much to it. But you know, I do wanna give the group sufficient time to do it. So like I said, you could just submit it as like testimony literally a few days before the meeting.

**Gina Young:** Thanks for that. This is the second time we've looked at the report, though. Everybody's had the had it for about a month. So what are the thoughts? Two meetings, one meeting.

**Grant Nakama:** Hi everyone. Sorry, I got a drop off, but just before I leave I probably won't be able to make another November meeting, but I think our general staff's pretty clear. But so I'll leave the scheduling up to you folks. As far as December, I'll try to make the meeting in December. If it stays in one meeting per month.

**Gina M. Young:** OK, I'll have Cory send out the link to everybody for Thursday, November 18h at 11:00 a.m. And then if you feel like you want to meet again just to talk about the report. I mean, I'll make some minor changes. What I reflected today, but my goal is to send it in probably on well Tuesday's a holiday, but I share with Wednesday. It would be good to actually have it to BLNR. I'll see how quickly I can. Today is Thursday. I'll see if I can get it out to you over the weekend. They're going to be very minor changes you guys have. It'll give you a chance to take a look at everything. Any final? Comments from any before we wrap up a couple minutes early. No, we sound good, OK. Well, thanks everybody. It's been really good. I appreciate all of you for coming and spending your time here. Oh yeah, Eva.

**Eva M. Blumenstein:** No, I was just going to give you a thumbs up.

**Gina Young:** Thank you. I appreciate that. Thanks for coming to our meetings. OK, good. Are we good? Thanks everybody. I'll see you in December and look for my e-mail