From: john meier
To: DLNR.BLNR.Testimony
Subject: [EXTERNAL] Public testimony for agenda item D5 of BLNR November 10, 2022 meeting
Date: Saturday, November 5, 2022 1:16:21 PM

To: Board of Land and Natural Resources, State of Hawaii
Re: Written testimony for agenda item D5 of BLNR November 10, 2022 meeting

Continuation of Revocable Permits S-7263 (Tax Map Key (2) 1-1-001:044), S-7264 (Tax Map Keys (2) 1-1-001:050, 2-9-014:001, 005, 011, 012 & 017) and S-7265 (Tax Map Key (2) 1-1-002:por. 002) to Alexander and Baldwin, Inc., and S-7266 (Tax Map Keys (2) 1-2-004:005 & 007) to East Maui Irrigation Company, Limited, for Water Use on the Island of Maui.

We request that any renewal of these revokable water permits should have an added condition:

"For areas in the Ko'olau Forest Reserve covered by the permits, the Department of Forestry and Wildlife has the authority to set rules for recreational and cultural access"

This condition is necessary because EMI employees continue to harass and intimidate hikers and attempt to block public access.

The last time this happened to me personally was on March 3rd, 2022. We were walking in the Ko'olau Forest Reserve and a group of EMI employees confronted me. The leader said I was on EMI land and needed to leave. I said he was mistaken and I was in the Ko'olau forest reserve. He said EMI had leased the land. I said that EMI has a permit allowing them to collect water but they do not lease the land.

This kind of encounter has happened repeatedly. I have been sworn at by EMI employees, called racial slurs, and threatened with arrest. It should be made clear to EMI that DOFAW has the authority to manage access in the forest reserve. We trust that DOFAW will make reasonable rules.

We are just a couple of old people who like to walk in the forest. Please help us.

-John and Melissa Meier, 210 Crestview Rd, Lahaia HI

SIERRA CLUB OF HAWAI'I

Testimony to
Board of Land and Natural Resources

November 10, 2022 9:15 AM Room 132

COMMENTS on D-5:

Continuation of Revocable Permits S-7263 (Tax Map Key(2)1-1-001:044),S-7264 (Tax Map Keys (2) 1-1-001:050, 2-9-014:001, 005, 011, 012 & 017) and S-7265 (Tax Map Key (2) 1-1- 002:por. 002) to Alexander and Baldwin, Inc., and S-7266 (Tax Map Keys (2) 1-2-004:005 & 007) to East Maui Irrigation Company, Limited, for Water Use on the Island of Maui.

Aloha mai e Chair Case and members of the Board of Land and Natural Resources,

The Sierra Club of Hawai'i submits this testimony in **OPPOSITION** to the staff recommendation in agenda item D-5, and urges you to defer this matter for one additional month, so that conditions to better uphold the public trust can be developed and incorporated into any decisionmaking that may impact East Maui's streams and the watersheds, estuaries, communities, and cultural practices that depend on them.

After discovery, a trial, a contested case hearing, and nearly three years of quarterly reports, the truth is becoming abundantly clear: too little water taken out of East Maui streams is put to reasonable or beneficial uses. The Public Trust Doctrine and well-established precedent counsels that this board should not be allowing streams to be drained dry, when more than 40 percent of that water is not used – and when there is uncontroverted evidence of avoidable and unjustifiable harm that would result. Unfortunately, that is precisely what would be allowed under the permit recommendation before you today.

The Sierra Club is gratified that your staff has finally acknowledged the concerns that we have been raising for years. Yet, the proposed conditions are inadequate to address a host of issues identified in our legal interventions that need to be addressed in any continuation of the subject revocable permits. The Sierra Club focuses on just some of the more important ones in the discussion below.

Too Much Water is Not Being Put to Reasonable or Beneficial Use

In its 2018 decision setting instream flow standards for many (but not all) of East Maui's streams, the Water Commission wrote:

> although estimates of over **20 percent transmission system losses** may comport with current industry standards, they do not reflect best practices, will not serve the interests of future generations and **are not acceptable**. Modern agribusiness investors should not expect to build a new industry on the back of **century-old infrastructure**. Investment in **ditch systems must be made to avoid leakage and waste**, install modern ground water storage technologies, optimize use of non-potable water, and improve water capture and storage from storm events that increase total flow availability. (emphases added).

In sharp contrast to the Water Commission's position, all available data show that system losses for water taken from East Maui exceed 40%. In 2020, Alexander & Baldwin and East Maui Irrigation (collectively "A&B" herein) conceded that "the rate of system losses is higher [than 22.7%] since most of the seepage losses occur in the reservoirs. . . . The **seepage losses thus represent significantly more than 22.7%** of current EMI deliveries. . . . Again, total 'system losses' west of Maliko Gulch are currently higher than the 22.7% rate."[1] None of the water in the category A&B calls "Reservoir/Seepage/Fire Protection/Evaporation/Dust Control/Hydroelectric" is put to reasonable or beneficial use. We now know that less than 100,000 gallons of this water is actually used daily for dust control – and it makes no sense to take all the water from a stream to control dust miles away (particularly when groundwater is available). Despite having the burden of proof, A&B has produced no evidence that any water is actually used for hydroelectricity.[2] Very little water is used annually, let alone daily, for firefighting, as your staff recognizes. As a whole, the water in this category is, as this board concluded this past June, presumptively lost. System losses accordingly exceed 40% of the water taken out of East Maui streams (not counting additional surface and ground water sources outside the revocable permit area – see table and caption below).

Not surprisingly, the deputy director of the Water Commission has also testified under oath that taking water from East Maui streams to sit in reservoirs and percolate into the aquifer is not a reasonable and beneficial use of water.

Despite these significant and ongoing losses, and notwithstanding the directions of this very board, A&B has done little to prevent such losses from continuing. Two years ago, this board required A&B to "submit to the Department a plan for their proposed upgrades, including an implementation timeline, to the irrigation system intended to address CWRM's concerns no later than June 30, 2021." A&B's one-page plan "includes no information as to the 'implementation timeline' for the 'future lining of reservoirs to reduce seepage loss.' . . . It provides no information as to when the 'analysis' of the operational significance of the existing reservoirs will be completed. It lacks detailed information regarding cost estimates and timeframes."[3] The foot-dragging on producing a plan – let alone its implementation – has gone on for far too long. The

[1] *See* Nov. 13, 2020 staff submittal at 12.
[2] FOF 113 of BLNR's June 2022 decision.
[3] FOF 168 of BLNR's June 2022 decision.

Supreme Court has mandated that decisions involving the use of stream water "must include provisions that encourage system repairs and limit losses." *In re Water Use Permit Applications*, 105 Hawai'i 1, 27, 93 P.3d 643, 669 (2004). This board accordingly should not continue the permits without first mandating concrete actions to actually reduce system losses.

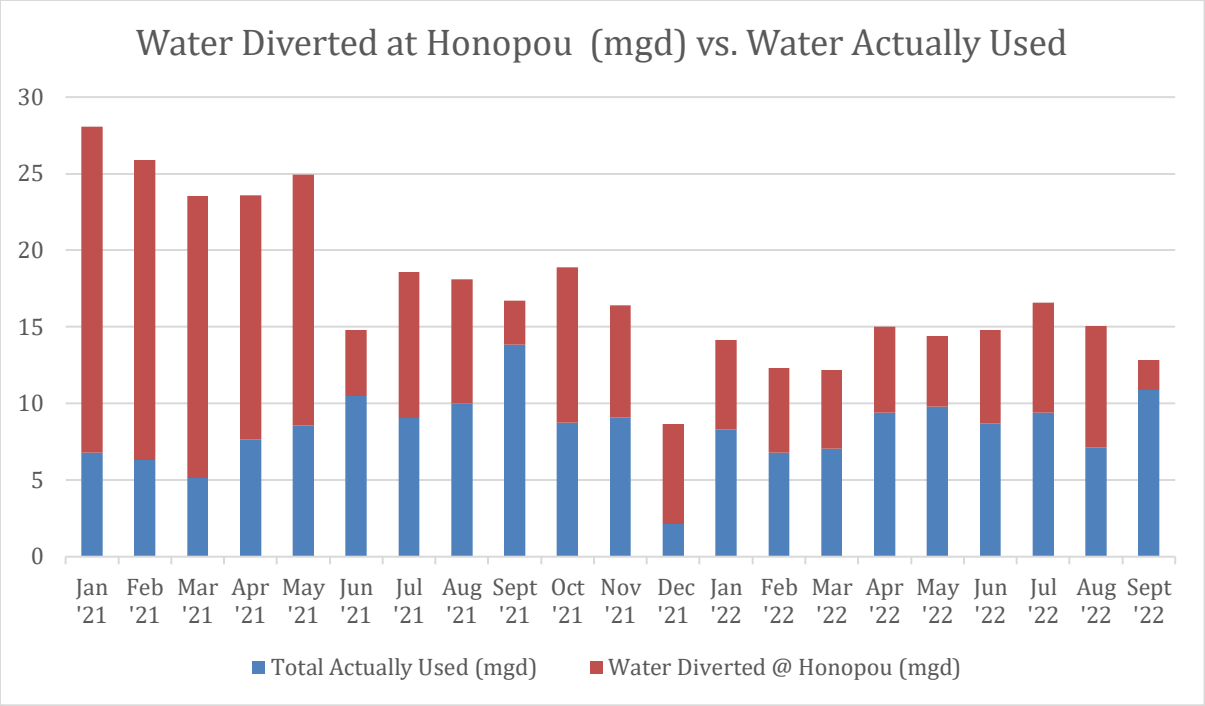
Opportunities to make such reductions and conserve water are not difficult to identify. As this board has noted, "Testimony revealed that using reservoir #23 (which is lined and has a capacity of 13 million gallons) instead of reservoirs #22, #33, #35. #40, #42 to irrigate fields 501, 509, 510, 511, and 512 would help conserve water."[4] None of the reservoirs currently being used are lined. So why not require the use of reservoir #23? In addition, at least one reservoir should be lined within 12 months (unless it can be shown that government agencies caused delays in any necessary permitting). If reservoir #25, #61, #81, **or** #90 were lined, they would not only conserve surface water, but they would also retain groundwater which is pumped into them.

For several years now, the Sierra Club has been pointing out that far too much stream water is being lost. We are pleased to see that your staff has finally recognized this obvious fact. The staff recommendation, however, suggests that this board wait until after March 2023 to get additional information to determine[5] if too much water is being lost. But it is A&B's burden to justify its uses first,[6] before you vote on the continuation of its permits, and it is your duty to ensure that A&B meets its burden. A&B's failure to demonstrate that its system losses are not excessive of what the Water Commission determined would be reasonable, would be a failure to meet its legal burden, and your approval of the permits as proposed would not fulfill your oath to uphold the constitution and laws of our state, and safeguard the public trust. At minimum, this board should include a condition in the permits ordering A&B to ensure that system losses are reduced to less than 20% (as recommended by the Water Commission) by March 30, 2023.

[4] FOF 167 of BLNR's June 2022 decision.

[5] Who makes this determination? A&B? Ian Hirokawa? BLNR? When will this determination be made? Will the Sierra Club have an opportunity to comment?

[6] Permit applicants have the burden to "demonstrate their actual needs and the propriety of draining water from public streams to satisfy those needs" and that the requested use is "reasonable and beneficial." *Kauai Springs, Inc. v. Planning Comm'n of the Cnty. of Kaua'i*, 133 Hawai'i 141, 174-75, 324 P.3d 951, 985-85 (2014) (emphasis added). When water diverted from a stream is **not used**, it is **not** used in a reasonable and beneficial manner. The supreme court described "nonuse" of water as "the perceived biggest waste of all." *In Re Water Use Permit Applications*, 94 Hawai'i 97, 140, 9 P.3d 409, 452 (2000) ("*Waiāhole*"). The court recognized that "the policy against waste dictates that any water above the designated minimum flows and not otherwise needed for use remain in the streams in any event." *Id.* at 156, 9 P.3d at 468. "The value of diverting water, only to lose the water due to avoidable or unreasonable circumstances is unlikely to outweigh the value of retaining the water for instream uses." *In re 'Īao Ground Water Mgmt. Area High-Level Source Water Use Permit Applications*, 128 Hawai'i 228, 257, 287 P.3d 129, 158 (2012). As BLNR Chair Case explained at BLNR's October 11, 2019 meeting, "And you know, I mean, the other consideration, obviously, is waste, you don't want to be running water through the system that's not being used."



Graph showing the amount of East Maui water actually used (i.e. reported as used for the Maui DWS, the County Ag Park, Diversified Agriculture, and Historic/Industrial uses), as a proportion of the total water diverted from East Maui at Honopou (i.e. in January of 2021, approx. 28 mgd of water was reportedly diverted from East Maui; of this, less than 7 mgd of water was reported as actually used). NOTE 1: Recent data suggests that reported Historic/Industrial uses may have been overestimated by at least 1 mgd for the periods prior to the second quarter of 2022. Accordingly, less water may have actually been used than indicated in the graph for these dates. NOTE 2: Amounts of groundwater pumped has been subtracted from the amount of water reported as "used," since this water did not originate in East Maui and system losses are presumed to be relatively minimal. However, amounts of water reported as gained between Honopou and Maliko have not been subtracted from the amount reported as used; accordingly, some of the water indicated as "used" may have actually originated from this region and not the East Maui streams at issue. In other words, less East Maui water may have actually been used (and more East Maui water lost or wasted) than what is indicated in the graph.

A&B and Mahi Pono Have Continually Misled and Exaggerated

In last year's contested case hearing, A&B and Mahi Pono asserted – without any basis whatsoever – that 1.1 mgd of East Maui stream water was being used for what they call "historic/industrial" uses, for well over 18 months. Finally, this year, A&B actually measured how much water was being used for these purposes. Unsurprisingly, it was less than 0.1 mgd. A&B's estimate was off by more than an entire order of magnitude. The discrepancy indicates that 1 mgd supposedly needed for "historic/industrial" uses was in fact not used for these purposes at all. It was lost. Wasted. For years, it now appears that Mahi Pono has failed to account for the waste of more than a million gallons of water every day.

Last year, Mahi Pono's Ceil Howe testified under oath that it would need 21.79 mgd for diversified agriculture in 2022. The data demonstrate that his claim was wildly exaggerated. In the month it used the most water, September, Mahi Pono used

approximately half that amount.

The November 2020 staff submittal for the continuation of these revocable permits notes that A&B and Mahi Pono estimated that 24.5 mgd would be needed for diversified agriculture in 2020 and 32.3 mgd in 2021. As we approach 2023, Mahi Pono is not even close to using what it claimed that it would use two years ago.

Mahi Pono claimed in August 2020 that it would need approximately 43 mgd (for all uses) by the end of 2020, but it wound up using 28.13 mgd in December 2020. Mahi Pono's estimates were off by 35%.

In August 2020, Mahi Pono claimed that a cap of 25 mgd "would have a high detrimental impact on the expansion of our farming operations," but it suffered no effects from the cap imposed by the court on July 31, 2021.

In 2019, A&B claimed that East Maui stream water was being used to irrigate 6,500 acres of pasture when no such use was being made of the water.

In October 2019, Mahi Pono estimated it would need 56.1 mgd (for all uses) by the end of 2020. But at the end of 2020, total uses were 28.13 mgd. Mahi Pono's estimates were off by fifty percent.

In October 2019, Mahi Pono estimated that by the end of 2020, it would plant more than 5,000 acres. But by January 2021, only 2,302 acres had been planted. Mahi Pono's estimate was off by more than 50%.

Given this track record, it is time to stop bending backward to accommodate all of A&B's desires.

Date	What A&B/Mahi Pono Asserted	What Actually Happened
Oct. 2019	5,000 acres planted by the end of 2020	Only 2,302 acres planted by January 2021
Oct. 2019	56.1 mgd needed by the end of 2020	Only 28.13 mgd used at the end of 2020
2019	East Maui water was being used to irrigate 6,500 acres of pasture	No water was used for pasture irrigation
Aug. 2020	A 25 mgd cap would "have a high detrimental impact" on farm expansion	No effects or consequences from the 25 mgd cap imposed by the court in 2021
Aug. 2020	43 mgd would be needed for all uses by the end of 2020	Only 28.13 mgd actually used at the end of 2020
Nov. 2020	24.5 mgd would be needed for diversified agriculture in 2020 and 32.3 mgd in 2021	From January 2020 to the latest water use report (Sept. 2022), diversified agriculture has never used more than

		12 mgd, and rarely exceeded 10 mgd.
2021	21.79 mgd would be needed for diversified agriculture in 2022	Less than 10 mgd were used for diversified agriculture for the majority of the first 3 quarters of 2022, and diversified agriculture did not use more than 12 mgd at any point during this time
2021	1.1 mgd were used for "Historic/Industrial" uses every month for the prior 18 months	Beginning from the second quarter of 2022 to September, measured "Historic/Industrial" uses actually ranged between 0.3-0.12 mgd – indicating 1 mgd or more may have been unaccounted for and presumably lost/wasted.

Timeline of selected misrepresentations and inaccurate estimates regarding water use by Mahi Pono and A&B.

Too Much Water is Allocated

A careful reading of the quarterly reports demonstrates that A&B did not need to take more than 20 mgd of East Maui stream water for the past two years. Indeed, this year, it has not needed to take more than 16.6 mgd. The County actually needs 7 mgd to flow past its treatment plant (not 7.5 mgd), but has never needed more than 4.02 mgd (as averaged monthly). Even if Mahi Pono were to need 40% more water in 2023, diversified agriculture would not need more than 16 mgd. Of that 16 mgd, Mahi Pono can use approximately 3 mgd that the County does not use. It can also pump 4 mgd of groundwater. It does not need more than 9 mgd from East Maui streams.

In its EIS, A&B admits that the "sustainable yield" of the aquifers from which it has pumped groundwater is 32 mgd. Mahi Pono has been irrigating its fields with groundwater. The vast majority of Mahi Pono's currently cultivated fields can be served by pumped groundwater. Mahi Pono routinely pumps more than 4 mgd (September 2021, October 2021, November 2021, February 2022, March 2022, June 2022, July 2022, August 2022, September 2022). Thus, A&B can easily satisfy its desires by supplementing East Maui stream water with groundwater.

Imposing a 20 mgd cap also creates a real incentive for Mahi Pono to use water more efficiently. According to A&B's EIS, water from East Maui streams is really cheap: 4.8 cents per 1,000 gallons. At that price, Mahi Pono has no incentive to use water efficiently. Farmers in Central Oʻahu— who compete with Maui farmers in the Honolulu and export markets—are charged 58 cents per 1,000 gallons for surface water from Waiāhole Ditch.

A&B's Debris Still Litters Public Land

On October 16, 2018, A&B claimed "there was little other debris" in the revocable permit

area. A&B's claim is demonstratively false. In 2021 and the first half of 2022, A&B stopped providing any photographs of any debris removed from the revocable permit area during that quarter. Instead, it copied and pasted the same paragraph about its standard operating procedures. For the third quarter of 2022, A&B finally provided photographs (as it has in the beginning of 2020) proving that its October 2018 statement was false. This board needs to require photographs in the quarterly reports so that you know that A&B is actually cleaning up its mess.

DOFAW

The staff submittal continues to punt down the road important issues that have been raised for years: (a) implementation of a watershed management fee; (b) provision for public access pursuant to HRS § 171-26; and (c) restoration of forest reserve lands within the revocable permit area to the Division of Forestry & Wildlife's control and management.

The Need to Defer Decisionmaking Until Next Month

The staff at the Water Commission, the Division of Aquatic Resources, and A&B's consultant have all concluded that streams in the Huelo area of East Maui need more water. The Division of Aquatic Resources determined that restoring four of the streams in the Huelo area (Oʻopuola, Nailiilihaele, Kailua, and Hoʻolawa streams) should be a high priority given the presence of native species and potential habitat benefits. For example, a check of Nailiilihaele Stream in October 2020 revealed an occurrence of ʻoʻopu nākea and ʻōpae kalaʻole; per the Division of Aquatic Resources, "This stream has a high potential for habitat units, an identified estuary, and a recent confirmed presence of indigenous aquatic resources." A&B's EIS reveals that full diversion of the 12 Huelo streams unaddressed by the 2018 CWRM order reduces the available habitat units by 88.2%.

As currently drafted, the permits as proposed would allow these 12 streams to be drained dry. They authorize A&B to take all the baseflow from these 12 streams. Yet, the Water Commission and the Division of Aquatic Resources have already determined that a minimum of 64% of each stream's median base flow is necessary to provide suitable habitat conditions for recruitment, growth and reproduction of native stream animals. According to DLNR Division of Aquatic Resources biologist Glenn Higashi, this 64% figure is the figure that **all** streams need.

Dewatering streams adversely affects traditional and customary practices. Yet, no one has assessed this impact as required by the supreme court. *Ka Paʻakai O Kaʻaina v. Land Use Comm'n*, 94 Hawai`i 31, 7 P.3d. 1068 (2000); *In Matter of Conservation District Use Application HA-3568*, 143 Hawaiʻi 379, 395, 431 P.3d 752, 768 (2018).

Voting to approve the permits as proposed before you today would authorize A&B to drain these streams dry – in spite of the conclusions of A&B's own consultant, your Division of Aquatic Resources, and the staff at the Water Commission. Such a vote

constitutes a breach of your constitutional obligations. The Sierra Club urges you to defer this item until your December meeting – after the Water Commission acts on the Sierra Club's petition to protect the flow of a dozen east Maui streams and after A&B turns in the long-delayed system loss plan.

New and revised conditions that BLNR should impose

At a minimum, and during its future consideration of these permits, the BLNR should impose these additional conditions in the permits:

> *(1) All diverted water shall be for reasonable and beneficial uses. There shall be no waste of water. System losses shall be limited to 20% of all water taken by March 30, 2023. Water in the "Reservoir/ Seepage/Fire Protection/ Evaporation/Dust Control/Hydroelectric" category shall not be considered a "reasonable use," but instead be counted as system losses. All water diverted shall be put to beneficial agricultural use or municipal use.*
>
> *(2) The Permittee may not divert an amount of water exceeding an average of 20 million gallons per day (mgd), averaged monthly, for all permits combined. All water diverted shall only be for reasonable and beneficial uses.*
>
> *(3) For water used for agricultural crops, the Permittee shall disclose in each quarterly report how much water was required on average for each crop per acre per day for the previous quarter and how much water is projected to be required for each crop per acre per day for the forthcoming quarter.*
>
> *(4) The Permittee shall provide to DLNR by March 30, 2023, a plan that describes the minimum requirements to fight fires in Central Maui. The plan shall describe the volume of water that needs to be available, the minimum depth of reservoirs that would be used, the minimum number of reservoirs that are needed, the maximum distance separating these reservoirs, and the identity of those reservoirs best suited for fire fighting.*
>
> *(5) The Permittee shall clean up and remove debris from the permit areas. Its staff shall inspect every three months on the progress of the clean-up. Its quarterly reports shall include photographs of the debris removed in that three-month period. Debris does not include structure and equipment that is currently used for the water diversions. It also does not include structure and equipment that CWRM has authorized to remain in place. It includes unused pipes.*
>
> *(6) The permittee shall participate in DLNR's quarterly meetings hosted by DLNR staff (including staff from the Land Division, the Division of Forestry and Wildlife, the Division of Aquatic Resources, and the Commission on Water Resource Management) to discuss water use issues and compliance with permit conditions. Groups invited to attend the quarterly meetings include representatives of BLNR, Alexander & Baldwin, East Maui Irrigation, Mahi Pono,*

the Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation, Nā Moku ʻAupuni o Koʻolau Hui, the Hāʻiku Community Association, the Sierra Club, the Huelo community, and the County of Maui.

For the above reasons, the Sierra Club of Hawaiʻi respectfully urges you to **defer** decisionmaking on this matter, and ensure that the subsequent staff recommendation for the continuation of these subject permits addresses the aforementioned issues and others that fly in the face of the Public Trust Doctrine, our constitution, and your fiduciary duties as trustees of our public trust resources. Mahalo nui for your consideration of our testimony today

From: John Conti
To: DLNR.BLNR.Testimony
Subject: [EXTERNAL] Water waste
Date: Wednesday, November 9, 2022 1:09:31 PM

Dear Chair Case and members of the Board of Land and Natural Resources,

Thank you for the acknowledgements you have made regarding long standing concerns about the diversion of East Maui stream water.

In consideration of the continued issuance of revocable permits through the end of 2023, I ask that you hold A&B accountable for their water losses. Quarterly reports demonstrate over 40% of diverted water is regularly wasted – this cannot be considered a reasonable and beneficial use. Please require A&B/EMI to make the necessary adjustments and/or investments to bring system losses under the threshold of 22.7% immediately, as a condition of the permit.

In addition, please lower the water allocation amount — 35 mgd is more than double the amount of water Mahi Pono diverted in 2022. Over the years Mahi Pono has consistently exaggerated their water demand and uses only a small fraction of the water they take for diversified agriculture. The majority of diverted water ends up in reservoirs that facilitate continued water waste. Allowing such a high allocation ceiling does not create any incentive for large end users to increase water efficiency or invest in reducing system losses, and 35 mgd far exceeds demonstrated need.

Finally, I ask that you delay voting on this matter until after IIFS are established for the 12 Huelo streams. It seems irresponsible to permit any amount of water until we know how much is legally required to remain in East Maui streams.

Thank you very much for your attention to this important matter and for the opportunity to testify.

Mahalo nui, Jacqueline Skill