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BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

In the Matter of a Contested Case
Regarding the Continuation of Revocable
Permits (RPs) for Tax Map Key Nos.
(2) 1-1-001 :044 & 050; (2) 2-9-014:001,
005, 011, 012 & 017; (2) 1-1-002:002 (por.)
and (2) 1-2-004:005 & 007 for Water Use on
the Island of Maui to Alexander & Baldwin,
Inc. (A&B) and East Maui Irrigation
Company, LLC (EMI) for the remainder of
the 2021 RPs, if applicable, and for their
continuation through the end of 2022

DLNR File No. CCH-LD-21-01

APPLICANTS ALEXANDER &
BALDWIN, INC. AND EAST MAUI
IRRIGATION COMPANY, LLC'S
**PROPOSED FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
DECISION & ORDER**

**APPLICANTS ALEXANDER & BALDWIN, INC. AND
EAST MAUI IRRIGATION COMPANY, LLC'S PROPOSED
FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION & ORDER**

Applicants Alexander & Baldwin, Inc. ("A&B") and East Maui Irrigation Company, LLC ("EMI") respectfully submit the attached Proposed Findings of Fact, Conclusions of Law, and Decision & Order, for adoption by the Hearing Officer.

DATED: Honolulu, Hawai‘i, December 22, 2021.

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/s/ Trisha H.S.T. Akagi _____

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FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION & ORDER

Introduction

A contested case hearing commenced in the above matter pursuant to Hawai'i Administrative Rules (“**HAR**”) § 13-1-28 on December 8, 2021, at 9:00 a.m., via interactive technology, before Hearing Officer Suzanne D. Case (the “**Hearing Officer**”). The hearing continued on December 9, December 13, and December 14, and concluded on December 15, 2021.

Applicants Alexander & Baldwin, Inc. (“**A&B**”) and East Maui Irrigation Company, LLC (“**EMI**”) (together, “**A&B/EMI**” or “**Applicant**”) were represented by David Schulmeister and Trisha H.S.T. Akagi. Sierra Club was represented by David Kimo Frankel. The County of Maui (“**County**”) was represented by Caleb P. Rowe.

Testimony from the following witnesses was received by the Hearing Officer (listed in order of appearance at the hearing):

- | | |
|----------------------|----------------------|
| 1. Mark Vaught | 8. Scott Fretz |
| 2. Grant Nakama | 9. Michael H. Kido |
| 3. Ian Hirokawa | 10. Tony Linder |
| 4. Ayron Strauch | 11. Lurlyn Scott |
| 5. Ceil Howe III | 12. Lucienne de Naie |
| 6. Michelle Reynolds | 13. Dalton Beauprez |
| 7. Kaleo Manuel | 14. Wayne Tanaka |

Exhibits D-1 through D-3, X-1 through X-24, Y-1, Y-4 through Y-22, Y-25 through Y-42, Y-44 through Y-59, Y-61 through Y-68, Z-1 through Z-10, M-3, J-14, J-25, and AB-7 were admitted into evidence.

The Hearing Officer also took notice of the docket and transcripts from *Sierra Club v. Dept. of Land & Natural Resources*; Civil No. 19-1-0019-01 JPC (Haw. 1st Cir.) (“**Sierra Club Direct Action**”), including any filings or hearings that take place in that action while the contested case is ongoing. The Hearing Officer took notice of all exhibits identified by the parties in the trial held in August 2020 in the Sierra Club Direct Action (the “**Trial**”), whether the exhibits were accepted into evidence or not. *See* Minute Order No. 18.

Upon consideration of the briefs, testimony, exhibits, and submissions made by the parties, and the evidence adduced at the hearing, the following Findings of Fact, Conclusions of Law, and Decision & Order are entered. To the extent any of these findings of fact are deemed conclusions of law or conclusions of law are deemed findings of fact, they shall be so construed.

Scope of Hearing

The authority for the instant hearing is set forth in Hawai‘i Revised Statutes (“**HRS**”) Chapter 91, HRS §§ 91-1, et seq., and Subchapter 5 of Title 13 to HAR, HAR §§ 13-1-28, et seq. See Minute Order No. 18. Pursuant to Minute Order No. 8, issued on November 5, 2021, the “purpose of this contested case hearing is to decide whether A&B/EMI’s request for the continued holdover of the four Revocable Permits for the 2021 and 2022 calendar years should be granted.” See also Minute Order No. 18. The subject Revocable Permits are S-7263 (Tax Map Keys (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 Keys (2) 1-1-002:por. 002) to A&B, and S-7266 (Tax Map Keys (2) 1-2-004:005 & 007) to EMI (collectively, the “**RPs**”).

These proceedings were convened pursuant to the order of the Honorable Jeffery P. Crabtree, Circuit Court of the First Circuit, State of Hawai‘i (the “**Environmental Court**” or “**Judge Crabtree**”), in the pending agency appeal designated as Civil No. 20-0001541 (the “**Sierra Club Agency Appeal**”), and pursuant to the delegation of authority from the State of Hawai‘i Board of Land and Natural Resources (“**BLNR**”) dated August 13, 2021 and made in connection with Item #D-4 on its meeting agenda from the same date. The Environmental Court found that even though “Sierra Club was previously ‘involved in a case that went to trial in which the Sierra Club challenged BLNR’s decisions’ to approve the RPs for calendar years 2019 and 2020, Sierra Club “claimed to have new evidence on the permit renewals—information and issues that apparently arose after trial.” Minute Order No. 18 (citing Sierra Club Agency Appeal, Dkt. 400 at 3).

The referenced trial is the August 2020 Trial in the Sierra Club Direct Action held before Judge Crabtree. Following the Trial, Judge Crabtree ruled that the “BLNR did not fail in its duties under either a constitution balancing test or under its public trust duties” in approving the continuation of the subject RPs for calendar years 2019 and 2020. 4/6/2021 Findings, Conclusions, Decision & Order (Civ. No. 19-1-0019-01, Dkt. 881) (“**Trial Order**”) at 1.

The instant contested case hearing is “intended to provide the Parties an opportunity to present new information that was not covered at Trial in accordance with the Circuit Court’s directive.” Minute Order No. 18. Accordingly, the hearing is limited to “evidence and arguments to address whether any *new* evidence that [the parties] *could not* have presented during the [Trial]

supports their argument that the Revocable Permits at issue should, or should not, be continued.” Minute Order No. 8 (emphases in original); *see also* Minute Order No. 7 (stating that each party is “allowed to present *new* information that it could not have offered during the mid-2020 trial that is not irrelevant, immaterial, or unduly repetitious” (emphasis in original)).

The scope of the hearing is consistent with the rationale outlined in *Flores v. Board of Land & Natural Resources*, 143 Hawai‘i 114, 126-127, 424 P.3d 469, 481-482 (2013). In determining whether specific procedures are required to comply with constitutional due process, the reviewing court considers and balances three factors: (1) “the private interest which will be affected,” (2) the risk of an erroneous deprivation of such interest through the procedures actually used, and the probable value, if any, of additional or alternative procedural safeguards,” and (3) “the governmental interest, including the burden, that additional procedural safeguards would entail.” *Flores*, 143 Hawai‘i at 126-127, 424 P.3d at 481-482. The *Flores* court determined that “there is no risk of erroneous deprivation, because [the petitioner had] already been afforded a full opportunity to participate in a contested case hearing and express his views and concerns on the matter,” and he did not persuade the court that “the provision of an additional contested case hearing is necessary to adequately safeguard against erroneous deprivation” in the requested proceeding. *Flores*, 143 Hawai‘i at 127, 424 P.3d at 481-482. The instant contested case hearing should not be a venue for Sierra Club “to express the same concerns, and to vindicate the same interests, that [it] previously raised” in the Trial. *See id.* at 127, 424 P.3d at 482.

Just as this hearing is not a venue for Sierra Club to relitigate old arguments, nor is it a venue to set interim instream flow standards (“**IIFS**”). In particular, Sierra Club has argued that the stream flows for the following streams should be protected and/or restored: Kolea Stream, Punalu‘u Stream, Ka‘aiea stream, ‘O‘opuola Stream (Makanali tributary), Puehu Stream, Nailiilihaele Stream, Kailua Stream, Hanawana Stream (Ohanui tributary), Hoalua Stream, Waipi‘o Stream, Mokupapa Stream, and Ho‘olawa Stream (Ho‘olawa ili and Ho‘olawa nui tributaries) (collectively, the “**12 Streams**”). The Commission on Water Resource Management (“**CWRM**”) is the agency with the expertise and jurisdiction to address streamflow standards. CWRM is currently considering a petition filed by Sierra Club on September 29, 2021 requesting amendment to the IIFS for the 12 Streams. The purpose of this hearing is not to duplicate the

efforts of CWRM nor will BLNR take any action that will interfere with CWRM's ongoing proceedings addressing the 12 Streams.

Record and Record References

“The Hearing Officer will take notice of the docket and transcripts in the 2019 Lawsuit including any filings or hearings that take place in that lawsuit while the contested case is ongoing.” Minute Order No. 18. “The Hearing Officer will also take notice of all exhibits submitted by the parties in that lawsuit, whether the exhibits were accepted into evidence or not.” *Id.* “The parties may cite to the exhibits they submitted in the 2019 Lawsuit, but they should limit their testimony and arguments to whether any *new* evidence that they *could not* have presented during the lawsuit supports their argument that the RPs should or should not be continued.” Minute Order No. 18 (emphases in original).

For purposes of identification of exhibits, the parties were directed to use the following identification letters for the contested case hearing:

- X - A&B's Hearing Exhibits
- Y- Sierra Club's Hearing Exhibits
- Z – County's Hearing Exhibits
- [No letter designation] – Sierra Club Trial Exhibits
- AB – A&B Trial Exhibits
- S – State's Trial Exhibits
- M – County of Maui's Trial Exhibits
- J – Joint Trial Exhibits
- D – Exhibits attached or referred to in the BLNR Staff Submittal for Item #D-8 on the agenda for the November 13, 2021 meeting of the BLNR.

FINDINGS OF FACT

I. RELEVANT BACKGROUND

1. For the past 140 years, EMI, a subsidiary of A&B, has owned and operated a ditch system that collects surface water emanating in part from State lands in east Maui and transports it to central and Upcountry Maui for agricultural, domestic, and other purposes (“**EMI Ditch System**”). Ex. Y-46 ¶43, p. 13; ¶ 53, p. 16; ¶ 130, p. 259.

2. The RPs authorize the use of and diversion of water from State lands designated as Nahiku, Keanae, Huelo and Honomanū (collectively, the “**RP Areas**”) which covers 33,000 of the approximately 50,000 acres of the east Maui watershed. The RPs have a maximum term of one year and are terminable upon 30-days’ notice. Exs. J-1, J-2, J-3, J-4.

3. The water diverted pursuant to the RPs is used by the County to supply its 35,000 Upcountry and Nahiku customers as well as Mahi Pono for its diversified agriculture operations in central Maui that provides jobs, grows the economy, keeps important agricultural lands (“**IAL**”) productive, and promotes food security and sustainability. *See, e.g.*, Howe Decl. ¶ 23; Ex. Y-46 ¶¶ 796-800, pp. 210-11.

4. Historically, the water diverted from the EMI Ditch System was used to irrigate Hawaiian Commercial & Sugar’s (“**HC&S**”) sugar cane crops in central Maui. At the height of sugar cane production, approximately 165 million gallons of water per day (“**mgd**”) on average was diverted from the east Maui watershed. Ex. Y-46 ¶ 519, p. 135.

5. Following the cessation of sugarcane cultivation and the sale of HC&S’s former sugar cane lands to Mahi Pono, the amount of water diverted from the east Maui watershed dropped dramatically. *See, e.g., id.* ¶ 709, p. 186; Ex. X-13.

A. In 2001, A&B/EMI Submitted Its Application for a 30-Year Lease.

6. The RPs are an interim measure to allow the continued diversion of water while a long-term lease is sought. *See* HRS § 171-55; Ex. Y-22 at 4. The long-term lease process began on May 14, 2001 when A&B/EMI submitted an application to the BLNR for a 30-year lease to continue using water sourced in streams in east Maui (the “**Lease Application**”). Nā Moku Aupuni O Ko‘olau Hui (“**Nā Moku**”) requested and was granted a contested case hearing to challenge the legality of the Lease Application’s proposed disposition of public lands and resources. Pending a

decision in that proceeding, the BLNR put the RPs into holdover status, first at its May 25, 2001 meeting and again at its May 24, 2002 meeting. Ex. Y-22 at 1-2.

B. CWRM Sets IIFS For Certain East Maui Streams.

7. Also in May 2001, Nā Moku filed with CWRM 27 petitions to amend the IIFS for certain streams in the east Maui watershed which were the subject of the Lease Application. After some litigation, CWRM convened a contested case hearing on all 27 petitions. Ex. Y-46 ¶ 1, p. 2; ¶ 23, p. 8.

8. On June 20, 2018, CWRM issued its 271-page Findings of Fact, Conclusions of Law, & Decision and Order (“**CWRM June 2018 D&O**”) resolving the 27 IIFS petitions filed by Nā Moku. Exs. J-14; Y-46.

9. CWRM ordered the restoration of a significant amount of streamflow for a majority of the petitioned streams, ordering full restoration of Makapipi, Waiohue, West Wailuaiki, Wailuanui, Waiokamilo, Palauhulu, Pi‘ina‘au, Hanehoi, Huelo (Puolua), and Honopou streams and H₉₀ flow (64% of baseflow) for Kopiliula, East Wailuaiki, Honomanū, Punalau/Kōlea, and Waikamoi streams. Ex. Y-46 Order ¶ h.

10. CWRM explained that the “prioritization of the East Maui Streams is based on the ‘biggest bank for the buck’ concept, where priority is placed on streams with the greatest potential to increase suitable habitat for native species.” *Id.* at 21, ¶ 65. CWRM “recognized that there are streams for which restoration of flow would not result in significant biological or ecological gains and that the water may be better used for noninstream uses.” *Id.* at 259, ¶ 129. DAR endorsed this approach, noting, “The restoration of suitable flows to a single stream is more appropriate than the return of inadequate flow to multiple streams. DAR supports the trade-offs on the restoration of a smaller number of streams with sufficient water over the return of insufficient water (for example H₅₀ or H₇₀ levels) to a larger number of streams.” *Id.* at 21, ¶ 65 (block formatting and citation omitted).

11. CWRM recognized that “[t]he public interest includes not only protecting instream values *but also preserving agricultural lands and assuring adequate water supplies for Maui,*” *id.* at 267, ¶ d (emphasis added), and “*there is significant value in the noninstream uses which include municipal use, which includes domestic use, and agricultural use,*” *id.* at 259, ¶ 130 (emphasis added). The value of the noninstream uses “also ensures the continued presence of

agriculture in central Maui, a value which has been incorporated by the community through its inclusion in the Maui Island Plan/General Plan 2030, the Countywide Policy Plan, and the various Community Plans.” *Id.*

12. CWRM expressly stated that its intent was “to ensure that a sufficient amount of offstream water is available to support the cultivation of diversified agricultural crops on lands designated as [IAL] in central Maui. Our best estimate is that we have provided for about 90% of the irrigation needs for 23,000 acres of IAL,” *id.* at vi, which is a large portion of the 30,000 acres historically served by the EMI Ditch System, Howe Decl. ¶ 1.

13. As to the EMI Ditch System, CWRM found:

[i]t remains a valuable asset that delivers offstream public trust benefits such as drinking water, as well as irrigation water for reasonable and beneficial uses. It is a complex system with 388 separate intakes, 24 miles of ditches, 50 miles of tunnels, as well as numerous small dams, intakes, pipes, and flumes.

Ex. Y-46, Executive Summary, at iii (emphasis added); *see also id.* at 13, ¶¶ 43-44; *id.* at 266, ¶ 151.

14. CWRM found the EMI Ditch System, which spans both public and private land, *id.* at 13, ¶¶ 43-44, “maintained as a single, coordinated system,” *id.* at 140, 232, ¶ 538, 866, and concluded that “[t]he reduction in diversions ***does not by itself compromise the structural integrity of the ditch system so long as it continues to be maintained as a single coordinated system,***” *id.* at 266, ¶ 151 (emphasis added). CWRM explicitly stated that its intent in setting the amended IIFS was “***to allow for the continued use and viability of the EMI Ditch System***” and thus, it would “not require the complete removal of diversions unless necessary to achieve the IIFS.” *Id.* at 269, ¶ k (emphasis added).

15. CWRM stated that it “d[id] not require that every diversion on every tributary be removed or modified, [CWRM was] only looking at modifications to main stem and major diversions to accomplish the amended IIFS[.]” *Id.* at 269, ¶ j. CWRM further noted that how stream diversions were to be modified “will be before [CWRM] in a subsequent process.” *Id.*

16. To address the modifications of stream diversion structures needed to comply with the CWRM June 2018 D&O, A&B/EMI filed applications for stream diversion work permits for different categories of stream diversion works on certain taro streams, *i.e.*, Categories 1, 2, 3, and

4, as requested by CWRM staff. The CWRM proceedings addressing the applications for stream diversion work permits are ongoing. Vaught Decl. ¶¶ 5-8; Ex. X-6; Ex. X-7; Ex. Y-22 at 7 n.7.

C. Sierra Club’s 2019 Lawsuit Unsuccessfully Challenged the BLNR’s Continuation of the RPs for Calendar Years 2019 and 2020.

17. Pursuant to a request by A&B and EMI to continue the RPs for calendar year 2019, the BLNR approved the continuation of the RPs subject to certain conditions at its November 9, 2018 meeting. At its October 11, 2019 meeting, the BLNR considered the continuation of the RPs for calendar year 2020. After receiving the BLNR staff submittal, written and oral testimony and engaging in discussion, the BLNR unanimously voted to continue the RPs for calendar year 2020. Ex. Y-22 at 4-5.

18. On January 7, 2019, Sierra Club filed a Complaint in the Circuit Court of the First Circuit, State of Hawai‘i, captioned *Sierra Club v. Dept. of Land & Nat. Res.*, Civil No. 19-1-0019-01 JPC (the “**Sierra Club Direct Action**”). The lawsuit challenged the BLNR’s November 2018 decision to continue the RPs for calendar year 2019, asserting among other things that the BLNR breached its public trust duties in rendering its decision. On December 6, 2019, Plaintiff filed its First Amended Complaint, adding allegations related to the BLNR’s October 2019 decision to continue the RPs for calendar year 2020. Judge Crabtree presided over the Sierra Club Direct Action. Ex. Y-22 at 4-5.

19. The lawsuit culminated in the Trial before Judge Crabtree between August 3 and 17, 2020. Prior to and throughout the Trial, Sierra Club argued that the continuation of the RPs and diversion of water from the RP Areas did not provide adequate protections to 13 streams,¹ address the harm caused by diversion structures, hold A&B to its burden to justify commercial use, and ensure A&B clean up debris. *See* Appendix B to Applicant’s Opening Brief (Sierra Club’s 7/31/2020 Trial Memo) at 3.

D. Judge Crabtree Ruled that the BLNR Did Not Fail in Its Duties in Approving the Continuation of the RPs for Calendar Years 2019 and 2020, Respectively.

20. On April 6, 2021, Judge Crabtree issued the Court’s findings, conclusions, and decision and order (“**Trial Order**”). The Court ruled for Defendants and held that in deciding to

¹ The 2019 Lawsuit involved 13 “streams” for which Nā Moku did not petition to amend IIFS: Puakea; Kōlea; Punaluu; Ka‘aiea; ‘O‘opuola; Puehu; Nailiilihaele; Kailua; Hanahana; Hoalua; Waipio; Mokupapa; Ho‘olawa Stream (Ho‘olawa ili and Ho‘olawa nui tributaries). Trial Order at 11 ¶ G.

continue the RPs for calendar years 2019 and 2020, “BLNR did not fail in its duties under either a constitution balancing test or under its public trust duties.” Trial Order at 1 ¶ 1.

21. Judge Crabtree ruled: “Given that hold-over RPs are allowed, per the above FOFs, *the court concludes the Board had enough information to reasonably conclude that allowing the continued holdover of the two RPs for one year each would be in the public interest and meet the Board’s constitutional duty to conserve and protect agricultural lands and promote diversified agriculture and other beneficial uses.*” *Id.* at 39 ¶ 42 (emphasis added).

22. Judge Crabtree ordered that judgment shall enter in favor of all Defendants on all claims alleged in Sierra Club’s First Amended Complaint filed December 6, 2019. *Id.* at 46.

E. In November 2020, BLNR Continued the RPs for 2021.

23. Following the Trial, on November 13, 2020, the BLNR voted to continue the RPs for a one-year period through December 31, 2021 (“**November 2020 Approval**”).

24. Pursuant to HAR § 13-1-32.4, “[r]ecords directly relating to the application that are on file with the board, including, but not limited to, the record of the public hearing (if held), shall be a part of the record of the contested case; provided, however, that any party may object, in the manner provided in section 13-1-35, to any part of such record.” Information considered by the BLNR in connection with the RPs prior to and during the November 13, 2020 public meeting is thus part of the record in this contested case hearing.

25. Prior to the November 13, 2020 BLNR meeting at which the BLNR was to decide on the renewal of the RPs for 2021, the BLNR staff prepared a staff submittal that was presented to the BLNR members. Exhibit Y-22 (staff submittal dated November 13, 2020).

26. The staff submittal was prepared by the State of Hawai‘i Department of Land and Natural Resources, Land Division, in collaboration with other divisions in the DLNR, including the Division of Aquatic Resources (“**DAR**”) and Division of Forestry and Wildlife (“**DOFAW**”), as well as CWRM. Ian Hirokawa Live Testimony 12/8/21 audio recording at 5:28:53 – 5:29:18. There was consensus among the various divisions in reaching the recommendations in the staff submittal. *Id.* at 5:29:18 – 5:29:35.

27. The staff submittal noted that in addition to the conditions that were contained in the original RPs, between 2016 and 2019, the BLNR imposed the following additional conditions,

that are still in effect, “in order to ensure that the use of water is properly balanced against the public trust purposes”:

1. Require the holdover of the revocable permits to incorporate the June 20, 2018 CWRM order. There shall be no out of watershed diversions from the streams listed as full restoration streams in the CWRM order, and the timing for stopping the diversions shall be in accordance with the aforesaid CWRM order.
2. There shall be no waste of water. All water diverted shall be put to beneficial agricultural use or municipal use.
3. Any amount of water diverted under the revocable permits shall be for reasonable and beneficial use and always in compliance with the amended interim instream flow standards (IIFS).
4. The holdover shall comply with all conditions required by the CWRM's Amended IIFS decision.
5. Permittee shall provide a specific report on the progress regarding the removal of diversions and fixing of the pipe issues before the end of the holdover period.
6. Permittee shall cleanup trash from revocable permit areas starting with areas that are accessible and close to streams.
7. The revocable permits shall be subject to any existing or future reservations of water for the Department of Hawaiian Home Lands (DHHL).
8. Establish an interim committee to discuss water usage issues in the license area. The committee shall consist of five members, representing Alexander & Baldwin, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation and the County of Maui. The interim committee shall meet once a month for the first quarter, then at least quarterly thereafter, more often as useful.
9. Permittee shall provide quarterly written reports to the Board containing the following information:
 - a. The amount of water used on monthly basis, including the monthly amount of water delivered for: the County of Maui Department of Water Supply (DWS) and the County of Maui Kula Agricultural Park; diversified agriculture; industrial and non-agricultural uses, and reservoir/fire protection/hydroelectric uses. Also, provide an estimate of the system loss for the EMI ditch system and the A&B field system. Diversified agricultural uses shall also provide information as to location, crop, and user of the water. Industrial and non-agricultural uses shall specify the character and purpose of water use and the user of the water.

b. For each stream that is subject to the CWRM order, a status update as to the degree to which the flow of each stream has been restored, and which artificial structures have been removed as required by CWRM.

c. Update on removal of trash, unused man-made structures, equipment and debris that serve no useful purpose, including documenting any reports of such items received from the Department, other public or private entities and members of the general public and action taken by Permittee to remove the reported items.

d. The method and timeline for discontinuing the diversion of water from Waipio and Hanehoi streams into Ho'olawa stream, including status updates on implementation.

10. The Permittee may not divert an amount of water exceeding an average of 45 million gallons per day (mgd), averaged annually, for all permits combined, further subject to all water diverted shall be for reasonable and beneficial uses.

11. For RP S-7266, the area identified as the Hanawā Natural Area Reserve shall be removed from the revocable permit premises. Additionally, A&B/EMI shall continue discussions with DOFAW to identify additional forest reserve lands to be removed from the license areas to be implemented in connection with the issuance of a water lease, if any, or sooner.

12. Require Mahi Pono to advise any third-party lessees that their decisions be based on a month to month revocable permit for water use until a lease is completed.

13. For the streams in the revocable permit area that have not had interim instream flow standards set, Permittee shall continue to clean up and remove debris from the permit areas and staff shall inspect and report every three months on the progress of the cleanup. For the purposes of clean-up, debris shall not include any structures and equipment currently used for the water diversions.

14. Staff is to inspect the streams and report on whether those lands could be developed for agricultural uses, including the viability of agricultural land or water leases.

Exhibit Y-22 at 7-9 (footnotes omitted).

28. The staff submittal recommended that in addition to any pre-existing requirements, the BLNR approve the continuation of the RPs subject to the following requirements:

- Permittee shall cooperate with CWRM and DAR in studies, site inspections and other actions as necessary to address the streams in the license areas not covered by the CWRM order.
- Permittee shall work with CWRM and DOFAW to determine whether there are alternatives to diversion removal that effectively prevent mosquito

breeding and can be feasibly implemented. Permittee shall include the status of alternatives in their quarterly reports.

- If the Board finds that a use of water is not reasonable and beneficial and does not comply with the permitted uses, Permittee shall cease such use within a timeframe as determined by the Department.
- For water used for agricultural crops, Permittee are to estimate how much water is required for each crop per acre per day.
- Permittee shall 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.
- Permittee shall pay the 2021 monthly rent amounts as determined [in the staff submittal].
- "Trash and debris" shall be further defined as "any loose or dislodged diversion material such as concrete, rebar, steel grating, corrugated metals, railroad ties, etc., that can be removed by hand (or by light equipment that can access the stream as is)."
- System losses and evaporation shall not be considered as a waste of water.

Ex. Y-22 at 26-27.

29. Ultimately, the staff submittal recommended that the BLNR: (1) find that the continuation of the RPs is consistent with the public trust doctrine, (2) declare that, after considering the potential effects of the proposed dispositions as provided by HRS Chapter 343, and HAR Chapter 11-200.1, these projects will probably have minimal or no significant effect on the environment and are therefore exempt from the preparation of an environmental assessment, and (3) subject to the terms and conditions noted in the submittal, approve the holdover or continuation of RPs on a month-to-month basis for another one-year period through December 31, 2021. Ex. Y-22 at 27.

30. Prior to the November 13, 2020 BLNR meeting, Sierra Club filed a petition requesting a contested case hearing. Ex. Y-56. At the November 13, 2020 meeting, the BLNR denied the petition following an executive session. Ex. Y-29 at 7.

31. The BLNR also considered a draft Instream Flow Standard Assessment Report ("IFSAR") Summary dated October 2020 for non-petitioned streams within the EMI Ditch System. *See* Ex. Y-22 at 25 ("CWRM staff has developed a draft Instream Flow Standard Assessment Report (IFSAR) Summary, which is included as part of the Appendix for the Board's information."); Ex. D-1.

32. During the November 13 meeting, the BLNR reviewed a PowerPoint presentation by Dr. Ayron Strauch, hydrologist for the instream protection and management branch of CWRM, regarding the IFSAR. Ex. D-2. Dr. Strauch explained CWRM’s conclusion in the draft IFSAR, that “the non-petitioned streams support limited to no recruitment or reproduction and existing diversions have minimal impact on the life-history of native aquatic biota.” Ex. D-1 at 15.

33. Later in the meeting, David Smith from DOFAW testified on behalf of the division, stating that “[w]e don’t necessarily have anything to add.” 11/13/2020 BLNR Meeting audio recording at 6:1:20 - 6:1:33, available at <https://files.hawaii.gov/dlnr/meeting/audio/Audio-LNR-201113.m4a>. Mr. Smith explained that DOFAW “underst[oo]d that the proposal at this point is to leave a lot of the decommissioned structures in place,” and iterated DOFAW’s desire to “work as per the conditions of the permit to assure that . . . there . . . aren’t any environmental degradations based on those structures.” *Id.* at 6:1:33 – 6:1:54. DOFAW “want[ed] to be able to work with CWRM and EMI to address those specific situations” where “water’s ponding or attracting mosquitos or . . . creating erosion[.]” *Id.* at 6:1:54 – 6:02:13.

34. Ryan Okano from DAR testified next, stating that the division would stand on its corrected comments. *Id.* at 6:3:3 – 6:3:18.

35. BLNR member Chris Yuen pointed out the additional information regarding the non-petition streams available to the BLNR, including the IFSAR. 11/13/2020 BLNR Meeting audio recording at 6:23:17 - 6:24:09, available at <https://files.hawaii.gov/dlnr/meeting/audio/Audio-LNR-201113.m4a>. Member Yuen went on to explain that although the draft IFSAR might not be “the last and final word” on the non-petition streams, that current information was sufficient to allow diversions from streams to continue for calendar year 2021. *Id.* at 6:23:17 - 6:24:09.

36. After receiving and considering the above information, as well as extensive written and oral testimony, the BLNR adopted the staff recommendations to approve the RPs through December 31, 2021, with the following additional conditions:

- Old conditions remain in effect to the extent they are consistent with new conditions.
- Include a representative of the Huelo Community Association to the interim discussion group first authorized in 2018.

- Permittee shall look into supplying the Maui Invasive Species Committee with water, and if feasible, and despite it not being an agricultural use, be considered a reasonable and beneficial and permitted use under the RP.
- Regarding staff recommendation #5, in reviewing efficiency upgrades to their system, Permittee is to work with the Maui Fire Department to determine what their exact needs are.
- Statement of intent- the Board intends to deal with the question of the restoration of the non-IIFS streams and efficiency upgrades to the system no later than the time when the Board considers going out to auction with the final lease.

Ex. Y-29 at 8.

F. Sierra Club Appealed to the Circuit Court the BLNR’s Denial of Its Request for a Contested Case Hearing and Decision to Continue the RPs for 2021.

37. On November 17, 2020, Sierra Club filed its notice of appeal to the Circuit Court of the First Circuit, State of Hawai‘i, in the case captioned *Sierra Club v. Board of Land and Natural Resources et al.*, 1CCV-20-0001541 (“**Sierra Club Agency Appeal**”), appealing from the BLNR’s November 13, 2020 decisions denying Sierra Club’s request for a contested case hearing and approving the continuation of the RPs for 2021. Judge Crabtree presided over the Sierra Club Agency Appeal.

38. On August 23, 2021, Judge Crabtree entered his order deciding the Sierra Club Agency Appeal. Findings of Fact, Conclusions of Law and Order, *Sierra Club v. Bd. of Land & Nat. Res.*; Civil No. 1CCV-20-0001541 Haw. 1st Cir.) Dkt. 400 (the “**August 2021 Order**”). Based on Sierra Club’s contention that it “had available to it new evidence on the permit renewals - **information and issues that apparently arose after the trial**”, Judge Crabtree ordered the BLNR to hold a contested case hearing on the RPs (assuming a proper request was made). *Id.* at 3, 9.

39. On August 13, 2021, the BLNR granted Sierra Club’s request for a contested case hearing on the remainder of the 2021 RPs, if applicable, and for their continuation through the end of 2022.

40. On October 29, 2021, Prehearing Conference #1 in the contested case hearing was held, during which deadlines were established. *See* Minute Order No. 8.

41. The Hearing Officer granted the County’s application to be admitted as a party to the contested case hearing. Minute Order No. 10.

42. On or about September 29, 2021, Sierra Club submitted to CWRM its 2021 IIFS Petition seeking to amend the IIFS for the 12 Streams in the Huelo license area. Exs. Y-50; Y-51.

II. EVIDENCE SUBMITTED IN THE CONTESTED CASE HEARING

A. Applicant's Evidence of Water Needs for Proposed Future Uses.

43. Applicant submitted evidence that in 2022, it is anticipated that up to 40 mgd (based on an annual average) will be needed from the RP Areas. This includes 21.79 mgd for Mahi Pono's diversified agriculture operations, 6 mgd for the County of Maui's Department of Water Supply, and 1.5 mgd for the County of Maui's Ag Park. Howe Decl. ¶ 20; Ex. X-14. The remaining amounts are 1.1 mgd for historic/industrial uses, 4 mgd cushion estimated at 20% of the projected diversified agriculture water needs, and 5.7 mgd for reservoir, fire protection, evaporation, dust control and/or hydroelectric uses. Howe Decl. ¶ 20.

44. As detailed below, the Hearing Officer finds that A&B/EMI have satisfied their threshold burden of proving actual water needs for proposed future uses for calendar year 2022. Evidence supporting these findings is discussed below.

i. Findings regarding Mahi Pono's water needs for diversified agriculture.

45. Mahi Pono Holdings, LLC owns 41,000 acres of land in central Maui. 30,000 of those acres have historically been irrigated by the EMI Ditch System with water diverted from east Maui. Howe Decl. ¶ 1. Mahi Pono Holdings formed Mahi Pono, LLC, to farm these agricultural lands on Maui. *Id.* ¶ 2.

46. Mahi Pono, LLC and its affiliates (collectively, "**Mahi Pono**") presently have 300 full time employees. At full build out, Mahi Pono anticipates it will have 793 employees. Howe Decl. ¶ 3.

47. Mahi Pono is presently transforming 30,000 acres of land in central Maui from vacant former sugar cane fields to a diversified portfolio of food crops and, as of October 2021, has planted 4,586 acres of crops. Howe Decl. ¶ 5; Errata to Howe Decl. ¶ 6; Ex. X-9. In November and December of 2021, Mahi Pono planned to plant an additional 499 acres of crops, which would bring the total planted acreage to 5,085 acres by the end of 2021. Howe Decl. ¶ 8; Ex. X-9. The specific crops along with the number of acres planted with those crops are identified in Exhibit X-9.

48. In addition, Mahi Pono has approximately 9,000 acres of pasture land for its Maui

Cattle Company operation. Co-owned by Mahi Pono and a number of member ranches, Maui Cattle Company supplies the local market with natural, grass-fed beef products. Howe Decl. ¶ 7.

49. In 2022, Mahi Pono anticipates planting an additional 4,860 acres of crops. Howe Decl. ¶ 10; Ex. X-9.

50. In 2022, it is anticipated that the amount of water needed for diversified agriculture will increase due to the additional plantings that will occur in 2022. In addition, the existing crops will require more water as they mature. In 2022, approximately 21.79 mgd will be needed for diversified agriculture. Howe Decl. ¶¶ 15-16; Ex. X-14.

51. Mahi Pono estimated its per crop per acre water needs using Hawai'i specific data. Specifically, Mahi Pono used the baseline data from the "Producing Alfalfa in Hawaii" report from the University of Hawai'i College of Tropical Agriculture and Human Resources ("CTAHR"), a copy of which was received in evidence as Exhibit X-23, and the crop coefficients from the "Irrigation Water Requirement Estimation Decision Support System (IWREDSS) to Estimate Crop Irrigation Requirements for Consumptive Use Permitting in Hawaii" report also from CTAHR, a copy of which was received in evidence as Exhibit X-24, to calculate the estimated per crop per acre water needs. Suppl. Nakama Decl. ¶ 1; Exs. X-23, X-24.

52. Ceil Howe, III, Manager of Mahi Pono Holdings, LLC and the Chief Executive Officer of Mahi Pono, LLC, Howe Decl. ¶¶ 1-2, testified that Mahi Pono uses an engineering design firm of certified civil engineers and agricultural engineers who are also certified in irrigation techniques to calculate the estimated water requirements for each of Mahi Pono's current and future crops. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 1:49:47 – 1:50:54.

53. Mr. Howe testified that Mahi Pono used alfalfa and a grass crop as its reference crop. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:20:21 – 2:20:45. Alfalfa was the subject of the "Producing Alfalfa" study from CTAHR and the grass crop is used by the State of Hawai'i. Ex. X-23; Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:20:21 – 2:20:27. Mr. Howe explained that because alfalfa has a deeper root system than the grass crop, and the citrus trees and other permanent-type crops that Mahi Pono has planted have a deeper root system, Mahi Pono chose to use the combination of the two as a reference crop to ensure a more accurate measurement, not just a surface measurement. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:20:27 – 2:20:45.

54. Mr. Howe further explained that the crop coefficient, which is the measurement used to differentiate the base of evapotranspiration rate for each different type of crop, is multiplied by the reference crop's evapotranspiration rate to calculate the estimated water needs of that specific crop. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:19:19 – 2:20:12.

55. Evapotranspiration is the measurement of the amount of water a plant transpires during a certain period of time. Crops are irrigated in order to replace the amount of water that has evapotranspired. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:20:57 – 2:21:10.

56. How much water is needed to replace the amount that has evapotranspired is determined by considering a number of factors such as rainfall, wind, temperature, location, and soil water holding capacity. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:20:57 – 2:21:10; *see also* Suppl. Howe Decl. ¶ 1. For this reason, the amount of applied water needed for a specific crop at any specific time varies depending on its location along with these other factors. Suppl. Howe Decl. ¶ 1. Therefore, the press release regarding a citrus farm in Florida submitted by Sierra Club as Exhibit Y-4 is irrelevant. As Mr. Howe testified, because of the numerous factors that go into calculating crop water needs, the amount of applied water needed for a specific crop in Hawai'i may not be the same as needed for that same crop in Florida. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:21:45 – 2:21:58.

57. Mr. Howe further testified that based on his experience, the methodology utilized by Mahi Pono is a standard method for determining water demand of a crop. Suppl. Howe Decl. ¶ 2.

58. Mr. Howe has an extensive background (both education and work experience) in farming, farm management and water management, *see generally* Howe Decl., and the Hearing Officer finds his testimony credible.

59. Sierra Club's complaint that "Mahi Pono exaggerates as to how much water it needs," RB at 4, is unfounded. As discussed *supra*, the evidence supports Mahi Pono's projected water needs.

60. Based on the evidence submitted, the Hearing Officer finds that the water needs calculated by Mahi Pono are reasonable and within industry standards.

61. Furthermore, it is reasonable for BLNR to rely upon Mahi Pono's estimates to determine the water needs for 2022. As Judge Crabtree recognized at Trial, the possibility that

Mahi Pono's actual use will be less than the amount predicted does not preclude BLNR's reliance upon Mahi Pono's estimates:

The court finds and concludes that the amount of water actually used by Mahi Pono in the first quarter of 2020 for diversified agriculture was less than the amount it predicted, and this fact does not mean it was improper for the BLNR to rely on Mahi Pono's initial estimates in setting the 45MGD limit. Mahi Pono was essentially starting from scratch, during a historic change, in a new market where the actual use of water depends on variables that Mahi Pono has little control over. Realistically, the court concludes that Mahi Pono deserves some time and mileage to gain experience and figure things out.

Trial Order at 19.

62. It is unreasonable to expect any farming operation, let alone a new farming operation that is in a period of transition, to predict down to the last drop what its water needs will be a year into the future. As Mr. Nakama testified, there is uncertainty in farming when it comes to planning for plantings. Mr. Nakama also testified that Mahi Pono always tries to be accurate to the best of its ability when making projections. Grant Nakama Live Testimony, 12/8/21 audio recording at 3:49:52 – 3:50:06.

63. Mr. Nakama's testimony was credible and, as stated *supra*, the evidence supports Mahi Pono's estimate of 21.79 mgd for its diversified agriculture needs.

64. A&B/EMI's request for a 4 mgd cushion, which is estimated at 20% of the projected diversified agriculture water needs, is also reasonable. This cushion will allow Mahi Pono some flexibility as it continues to further develop and refine its diversified agriculture plan. Howe Decl. ¶ 20. As detailed *infra*, Mahi Pono has made significant efforts and progress in increasing the efficiency of its water use.

65. Moreover, allowing a cushion does not *ipso facto* mean that that water will actually be diverted; nor does it mean that that water will be wasted. There are existing conditions imposed on the RPs that provide "all water diverted shall be for reasonable and beneficial uses," and "[t]here shall be no waste of water." Ex. Y-22 at 8-9.

66. Indeed, Judge Crabtree recognized at trial the reasonableness of having a cushion:

The court cannot fault Mahi Pono or BLNR for wanting a "cushion" of available water that might be more than what was actually used was preferable to running short of water needed to support Mahi Pono's developing diversified agriculture plan. That is particularly true where the [June 2018 CWRM] D&O's new requirements had to be met first (restoring all or parts of many streams), when even

at a maximum of 45 MGD, this was still far less than in 2013, and was less than 50% of the estimated 93 MGD available after CWRM's [IIFS] were satisfied.

Trial Order at 20.

67. Without the RPs, there would be insufficient surface water to sustain Mahi Pono's existing crops, let alone the crops scheduled to be planted in 2022. Howe Decl. ¶ 22; *see also* Ex. X-14. This would severely impact Mahi Pono's operations as well as the 300 employees who support these operations. Howe Decl. ¶ 22.

ii. Findings regarding the County's need for at least 7.5 mgd.

68. The Hearing Officer also received evidence that A&B/EMI must provide, through the EMI Ditch System, sufficient water to meet the County's water needs for 2022, which are 6 mgd for the County's Department of Water supply and 1.5 mgd for the County's Kula Agricultural Park.

69. The County uses water from the EMI Ditch System to supply the Kamole water treatment facility and Kula Agricultural Park. Vaught Decl. ¶ 5; *see also* 8/14/20 Trial Tr. at 28:3-7 (Pearson) (testifying that the County uses water from the EMI Ditch System to supply the Kula Agricultural Park).

70. The water used at the Kamole water treatment facility and Kula Agricultural Park is delivered by EMI through its Wailoa Ditch. Ex. Y-46 ¶¶ 804, 805, p. 212; Tony Linder Live Testimony, 12/13/21 audio recording at 2:18:10 – 2:20:17.

71. The County takes the water it needs directly from the Wailoa Ditch. Tony Linder, the Water Treatment Plants Division Chief for the County of Maui Department of Water Supply, Linder Decl. ¶ 1, provided testimony regarding the Kamole forebay. Tony Linder Live Testimony, 12/13/21 audio recording at 2:19:38 – 2:20:17.

72. Mr. Linder explained that Kamole forebay is part of the Wailoa Ditch. Tony Linder Live Testimony, 12/13/21 audio recording at 2:19:38 – 2:20:17; Ex. Z-10. Water from the forebay enters the Kamole treatment facility through a 24-inch opening by operating an inlet valve. Tony Linder Live Testimony, 12/13/2021 audio recording at 2:28:47 – 2:29:15; Ex. Z-10. The County is the first user to divert from the Wailoa Ditch. Vaught Decl. ¶ 6. Water that is not taken by the County passes through Mahi Pono's screen and is then delivered to Mahi Pono's farm and the Kula Agricultural Park. Tony Linder Live Testimony, 12/13/21 audio recording at 2:20:18 – 2:21:39; Ex. Z-10.

73. The County, not EMI, controls the County's inlet valve and thus whether the water travels from the Kamole forebay to the Kamole treatment facility. Tony Linder Live Testimony, 12/13/21 audio recording at 2:28:47 – 2:29:29 (Q: "So it's not as if EMI, you know, segregates or delivers any particular amount of this commingled water to the county, the county actually controls how much it draws from the weir; is that correct?" A: "That's correct.").

74. The water in the Kamole forebay is not separated by use. Tony Linder Live Testimony, 12/13/21 audio recording at 2:28:23 – 2:28:47. In other words, EMI does not segregate water for the County. *Id.*, 12/13/21 audio recording at 2:29:15 – 2:29:29. Water diverted by the County for use at the Kamole treatment plant, water that is eventually used by Mahi Pono on its farm, and water sent to the Kula Agricultural Park, are all commingled in the Kamole forebay. *Id.*, 12/13/21 audio recording at 2:28:23 – 2:28:47.

75. Mr. Linder testified that 7 mgd in the Kamole forebay is needed to ensure enough pressurization to allow water to flow into the valve and to the Kamole water treatment facility and to avoid issues with sediment. Tony Linder Live Testimony, 12/13/21 audio recording at 2:23:31 – 2:24:35 ("the registered flow in the Wailoa ditch gets to 7 million, that becomes – that's what they consider to be a low point operationally. They can still process water at that elevation, but there's other factors that come into play. This fore bay that you see here can become sort of a collection area for sedimentation. So the lower levels that the ditch is at, the higher probability that we might pull some of the sediment from the bottom into the process. So 7 million is pretty much the number that we would hope to not go lower than as operators.").

76. Sierra Club has suggested that, because the County does not always use the entire amount that EMI imports to satisfy its obligation to the County, that EMI should bring in less water and increase its deliveries to Kamole Weir only when given notice that the County anticipates needing more water.

77. Mr. Linder testified that it is not possible for the County to give EMI advance notice on a daily basis of the specific amounts of water that the County may need to draw from the EMI Ditch System. Tony Linder Live Testimony, 12/13/21 audio recording at 2:37:36 – 2:38:14. As Mr. Linder explained,

there's too many factors. You've got a lot of moving equipment that can break down. We have no way to anticipate equipment failure. We have the weather patterns which fluctuate. We've all seen weather people predict rain and there

wasn't any. We've seen them predict good weather and it rained. We've got main breaks that could happen that could cause an unexpected draw in the system that we just can't account for. . . . [T]here's too much fluctuation. There's also maintenance at the treatment plant itself at Kamole. There's eight micro filtration machines inside there. My staff need to take machines out of service while running the plant at different intervals based on maintenance schedules. That, again, goes back to all the moving parts. Every one of these treatment facilities has a lot of equipment in them.

Id., 12/13/21 audio recording at 2:38:14 – 2:39:19.

78. Mr. Linder testified that “to make the kind of call” to EMI to give a “heads-up” that the County will need more water in a few days “would be very difficult.” *Id.*, 12/13/21 audio recording at 2:38:14 – 2:39:33.

79. The range of average domestic use at Kamole water treatment facility underscores the impossibility of providing advance notice that the County may need to draw more water from the EMI Ditch System. *See* Tony Linder Live Testimony, 12/13/21 audio recording 2:37:36 – 2:39:33; *see also* Exs. Z-6 to Z-9.

80. The water delivered at the Kula Agricultural Park is also subject to fluctuation. In 2019, the water delivered at the Kula Agricultural Park averaged 126,707,000 gallons over the course of the year. Ex. M-3 at 124. In 2020, the water delivered at the Kula Agricultural Park averaged 131,155,000 gallons over the course of the year. Ex. Z-1 at 70.

81. In recognition of fluctuations in water demand and delivery, the Environmental Court determined at Trial that the “County’s water use cannot safely be limited based on past averages, because the County needs flexibility in the amount of water it is able to use from the EMI system. At times it will need more than at other times.” Trial Order at 29 (citations omitted).

82. In light of the foregoing, the evidence demonstrates that EMI’s estimate of the amount of water that needs to be made available for the County of Maui’s Department of Water Supply and the Kula Agricultural Park is at least 7.5 mgd for 2022.

iii. Findings regarding expected water needs for historic/industrial uses and reservoir / fire protection / evaporation / dust control / hydroelectric.

83. The Hearing Officer also received evidence of the following two categories of anticipated water uses for 2022:

- i) 1.1 mgd – Historic / Industrial Uses; and

ii) 5.7 mgd – Reservoir / Fire Protection / Evaporation / Dust Control / Hydroelectric

84. The category labelled “Historic / Industrial Uses” on Exhibit X-8 are uses by others that have historically relied on water from the EMI system. Nakama Decl. ¶ 3. These include uses by entities located either adjacent to or within the boundaries of the farm and are further described in Exhibit B to the 3rd quarter status report submitted by A&B/EMI to the BLNR on October 29, 2021 (“**Q3 2021 Report**”). *Id.*; Ex. X-6.

85. The 1.1 mgd anticipated to be needed for 2022 for “Historic / Industrial Uses” is a forecast of continued uses that are not separately metered. Grant Nakama Live Testimony, 12/8/2021 audio recording at 2:46:54 – 2:47:37. The 1.1 mgd estimate is a historic value based upon the amount of water traditionally used for these purposes. Until recently, these uses have remained largely unchanged. Suppl. Nakama Decl. ¶ 2.

86. Exhibit B to the Q3 2021 Report reflects that one of the water users included in the “Historic / Industrial Uses” category is HC&D, LLC (“**HC&D**”) and subtenant Maui Paving (Camp 10 Puunene Quarry) which used the water for restrooms, concrete batching, fire suppression, and dust control. Ex. X-6 at 11. However, within the three months prior to the contested case hearing, HC&D stopped using water diverted from the RP areas for its restrooms or operations because it completed construction of its own well. Ex. X-8; Grant Nakama Live Testimony, 12/8/21 audio recording at 2:33:34 – 2:33:55, 2:46:34 – 2:47:37. HC&D still needs access to water in the ditches for its fire suppression needs. Therefore, a reliable amount of water must remain available for HC&D’s fire suppression needs. Ex. X-8.

87. In EMI’s future reporting, the 1.1 mgd estimate will be reduced once HC&D provides Mahi Pono with the amount of its well usage based on HC&D’s metered well readings. Grant Nakama Live Testimony, 12/8/21 audio recording at 2:34:42 – 2:35:13, 2:38:59 – 2:39:53. The Hearing Office finds reasonable EMI’s plan to adjust the 1.1 mgd estimate once it has received a few months of metered well readings from HC&D.

88. The 5.7 mgd estimated for “Reservoir / Fire Protection / Evaporation / Dust Control / Hydroelectric” in 2022 is similar to the amounts reported for these uses in September and October 2021. *See* Ex. X-13.

89. The 5.7 mgd category for “Reservoir / Fire Protection / Evaporation / Dust Control / Hydroelectric” identified in Exhibit A to the Q3 2021 Report includes water not separately accounted for in the other categories of uses. This category includes water that runs through the hydroelectric plant to generate energy for Mahi Pono’s operations, and water that seeps into the groundwater aquifer, which is later used as pumped groundwater. Mark Vaught Live Testimony, 12/8/21 audio recording at 1:58:01 – 1:59:57.

90. As to dust control, Mr. Vaught testified that in 2021 between three and four tankers, each with capacity between 4,000 – 5,000 gallons, were filled four or five times a day. Mark Vaught Live Testimony, 12/8/21 audio recording at 1:24:42 – 1:25:17.

91. As to fire protection, in response to a request from A&B/EMI, the County of Maui, Department of Fire and Public Safety stated that “[a]n estimate for the [amount of water needed] for the year is not possible due to the unpredictable nature of wildland fire incidents,” but did provide an estimate of the hourly usage for its approximate gallons of water per resource. Ex. Y-12. Scott Fretz from DOFAW testified that DOFAW participates in wildfire management and wildfire control in central Maui and has primary responsibility for responding to fires on DOFAW lands. Additionally, DOFAW assists and responds to fires with other parties such as the Maui Fire Department when requested to do so. Scott Fretz Live Testimony, 12/13/21 audio recording at 0:46:56 – 0:47:29. DOFAW draws water by helicopter to fight fires “from wherever we can get it when we need it.” *Id.*, 12/13/21 audio recording at 0:47:38 – 0:47:43.

92. Sierra Club has argued that there is a lack of evidence to support the “Historic / Industrial Uses” and “Reservoir / Fire Protection / Evaporation / Dust Control / Hydroelectric” categories on Exhibit X-13 and that BLNR should impose stricter reporting requirements. Sierra Club’s arguments were previously addressed at Trial. *See* 8/12/20 AM Trial Tr. at 62 (Mark Vaught testimony re: “what dust control is and how it is conducted”); *id.* at 58-62 (Vaught testimony re: water in reservoirs for fire protection, working with Maui Fire Department to ensure enough water is in the reservoirs, and 2020 fire that burned approximately 5,000 acres); 8/12/20 PM Trial Tr. at 62-63 (Sierra Club counsel’s cross-examination of Vaught regarding his testimony about water uses for dust control and fire fighting). Additional evidence was also submitted during the contested case hearing, as set forth above.

93. As to the reservoirs, Ian Hirokawa, special projects coordinator for the State of Hawai‘i Department of Land and Natural Resources, Land Division, testified that it is “pretty common” to store water in reservoirs for approved purposes like agricultural uses so that it can be drawn upon at a later time when there is less water available. Ian Hirokawa Live Testimony, 12/8/21 audio recording at 5:0:47 – 5:01:27.

94. Mr. Vaught testified that water diverted for the County’s use but not consumed by the County is, to the extent possible used on Mahi Pono’s farm. Mark Vaught Live Testimony, 12/8/21 audio recording at 1:53:16 – 1:53:38. If the water cannot be immediately used on the farm, it is placed into a reservoir to be used at a later date. *Id.*, 12/8/21 audio recording at 1:53:38 – 1:53:58.

95. Mr. Howe testified that at times there are a few fields for which the reservoirs serve as pressurization units, so Mahi Pono does not use any energy. The water enters the reservoir at an elevation that enables it to flow down under enough pressure to serve four or five fields without the need for pumping. Ceil Howe, III Live Testimony, 12/9/2021 audio recording at 2:24:44 – 2:24:58.

96. Mr. Howe testified that, in the future, as the farm reaches a “critical mass” and uses more water, he expects the amount stored in the reservoirs to be reduced and more water to be delivered directly to the fields. Ceil Howe, III Live Testimony, 12/9/2021 audio recording 2:23:51 – 2:24:42. As Mr. Howe explained and as described in more detail *infra*, Mahi Pono made operational changes in June 2021 that increased the efficiency of water use and reduced the amount of water that needed to be placed into reservoirs. Howe Decl. ¶¶ 12-13. Since the overall system was designed and built to handle the extremely large volumes of water needed during sugar cultivation, it will take some time for Mahi Pono to learn how to most efficiently employ the reservoirs in Mahi Pono’s overall irrigation plans as the cultivated acreage grows over the next few years.

97. One of the “new” issues that Sierra Club identified, and the Environmental Court relied upon, as a basis for Sierra Club’s entitlement to a contested case hearing was “the issue of defining ‘waste’ to expressly exclude system losses and evaporation[.]” Findings of Fact, Conclusions of Law and Order, *Sierra Club v. Bd. of Land & Natural Res.*; Civil No. 20-0001541 (JPC) (Haw. 1st Cir.) at 3, ¶ 9.

98. For much of the hearing, Sierra Club sought to characterize seepage loss from unlined ditches and reservoirs and evaporation as “waste” rather than allowable “system loss,” relying heavily upon the fact that the amount of water in EMI’s catch-all water use category that includes seepage and evaporation substantially exceeds the 22.7% system loss rate experienced during sugar cultivation which CWRM found to be within industry standards.

99. If seepage and evaporation are in fact “waste,” as Sierra Club argued, then, as Mr. Hirokawa noted, CWRM would never authorize or account for any seepage or evaporation.

100. Perhaps recognizing the absurdity of the argument, Sierra Club abandoned it during the contested case hearing, stating in its closing argument, “we don’t care if you call it waste or loss, it is too much.” Frankel, 12/15/21 audio recording at 0:52:8 – 0:52:12.

101. Seepage losses from reservoirs are incidental to the provision of water for reasonable and beneficial uses. As such, it is not “waste.” Ayron Strauch Live Testimony, 12/9/21 audio recording at 1:2:9 – 1:2:35.

102. The amount of system losses reported by A&B/EMI is not unexpected given that this is a transition period. Mahi Pono is beginning the process of transforming central Maui lands formerly used for sugar cultivation to diversified agriculture. Howe Decl. ¶ 5. EMI is adapting the EMI Ditch System from the historic plantation system designed to transport large amounts of water to a scaled down version that can better manage the relatively smaller amount of water needed for Mahi Pono’s farming operations. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:27:55 – 2:27:59; Michael Kido Live Testimony, 12/13/21 audio recording at 1:15:34 – 1:15:50.

103. Mr. Howe explained that “as time increases, and [Mahi Pono’s] planting acres increase, and the water demands increase, [Mahi Pono] hope[s] not to put hardly any water in the reservoirs. You know it will all be diverted to the fields and managed that way.” Mr. Howe noted, however, “it takes time to get to a certain critical mass where it allows you to operate that way.” Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:23:47 – 2:24:43.

104. CWRM recognized the 22.7% rate of system losses experienced during sugar cultivation and incorporated it into the “gross irrigation requirement” for diversified agriculture that informed its IIFS determinations. There is no indication that, in doing so, CWRM intended

that percentage to apply to anything other than full buildout of the proposed diversified agriculture operation. Ex. Y-46 ¶ 737, p. 194.

105. Indeed, in its June 2018 D&O, CWRM discussed, without complaint, EMI's then current water usage: "EMI is currently diverting approximately 20 mgd: approximately 6-8 mgd is used by the County of Maui for its Kula Agricultural Park and Kamole Treatment Plant; 1 mgd is used for HC&S's cattle operation; 2 mgd is used for HC&S's bioenergy crops; and 6 mgd is used for maintenance of HC&S's reservoirs for fire protection. Seepage loss accounts for the balance of approximately 4 mgd[.]" Ex. Y-46 ¶ 709, p. 187. Reservoir maintenance and seepage at that time thus accounted for at least 50% of the diverted water, which is similar to the current situation.

106. Seepage also contributes to the recharge of the Central Maui aquifers, which Mahi Pono relies upon to supplement imported surface water when needed. In that sense, seepage is not permanently "lost" but instead contributes to the quality of the water that can be pumped from Mahi Pono's wells. Ex. Y-22 at 14.

107. Here, it is clear that A&B/EMI/Mahi Pono's water usage has become more efficient, particularly from and after June of 2021, and as the irrigation usage scales up, system loss as a percentage of total water deliveries can be expected to decrease as Mahi Pono's farm buildout progresses. *See* Ex. X-13; Howe Decl. ¶¶ 12-13.

108. Mahi Pono explained that in June 2021 it made certain operational changes which increased the amount of water needed for crop irrigation. That, coupled with the over 1,600 acres of additional crops planted during that same time period, reduced the amount of water that needed to be stored in reservoirs. Howe Decl. ¶ 12.

109. Exhibit X-13 shows that in the beginning of 2021 the amount of water attributed to reservoir, seepage, fire protection, evaporation, dust control and hydroelectric was in the 20 mgd range. However, from June 2021 to October 2021, that amount dropped to the 10 mgd range. Ex. X-13.

110. As its plantings increase and the diversified agriculture water demands increase, Mahi Pono hopes to put hardly any water into reservoirs. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:24:22 – 2:24:43.

111. In October 2019, Mr. Nakama stated that Mahi Pono committed to spending \$20 million over the next three years to increase its water efficiency. Mr. Nakama testified that the \$20 million had already been spent as of the early part of 2021. Grant Nakama Live Testimony, 12/8/21 audio recording at 3:32:01 – 3:32:29.

112. That \$20 million was spent on a number of improvements including installing direct flow irrigation emitters on over 90% of its tree crops, installing weed mats on 20 to 30% of its tree crops, and implementing Wiseconn technology to allow for automated control of the irrigation systems. Mahi Pono intends to continue investing in improvements to increase the efficiency of its water use. Howe Decl. ¶¶ 24-32; Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:00:47 – 2:00:58, 2:01:17 – 2:01:43; Ex. X-15. For example, Mr. Howe testified that Mahi Pono has on island the materials to install weed mats on 70 to 80 percent of Mahi Pono’s tree crops and the installation process is ongoing. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 2:01:17 – 2:01:43.

113. It is reasonable to allow some time and flexibility while Mahi Pono develops its farming operations and works toward reaching the “critical mass” described by Mr. Howe. It is also reasonable to allow some time and flexibility while EMI adapts a system designed to transport large amounts of water to more efficiently transport the relatively smaller amounts of water currently needed by Mahi Pono and the County.

114. In the context of a one year extension of the RPs through the end of 2022, it would not be reasonable to consider reservoir seepage or evaporation as “waste” and to impose conditions requiring EMI to line and cover the reservoirs, particularly in view of the fact that the permitting and construction timeline for such infrastructure improvements would likely exceed the one year maximum term of the RPs. Mark Vaught Live Testimony, 12/08/21 audio recording at 1:57:33 – 1:58:00. Water that seeps from the reservoirs, moreover, is not permanently “lost.” While still being stored in the reservoirs, it serves an important function of being available to combat brush fires. Scott Fretz Live Testimony, 12/13/21 audio recording at 0:47:38 – 0:47:43; Ex. Y-12; 8/12/20 Trial Tr. 59:2-7 (Vaught). Once it seeps into the ground below, it then contributes to the recharge of aquifers beneficially used by Mahi Pono and other well owners in Central Maui. This is the same conclusion reached at the Trial and there were no new or materially different facts adduced by Sierra Club on this issue.

115. The Hearing Officer finds that A&B/EMI have met their burden to prove the anticipated water needs in 2022, with respect to the 1.1 mgd for “Historic / Industrial Uses” and 5.7 mgd for “Reservoir / Fire Protection / Evaporation / Dust Control / Hydroelectric.”

116. The Hearing Officers further finds that the evidence supports the imposition of a 40 mgd cap (based on an annual average) on the total amount of water to be diverted from the RP Areas for calendar year 2022. Arbitrarily imposing a lower cap would unnecessarily constrain the continued rollout of the Mahi Pono farm plan.

B. Findings Regarding the Public Interest in the Continued use of Diverted Water from the RP Areas for Calendar Year 2022.

i. Mahi Pono’s water use for diversified agriculture constitutes a reasonable-beneficial use that weighs in favor of continuing the RPs.

117. Mahi Pono is presently transforming 30,000 acres of land in central Maui from vacant former sugar cane fields to a diversified portfolio of food crops, which will provide a nutritional yield that is sustainable and resilient. Howe Decl. ¶ 5. The RPs are essential to Mahi Pono’s plans. *Id.* ¶ 22.

118. In its Q3 2021 Report, A&B/EMI reported that water collection enabled by the RPs helped increase diversified agricultural activities in Central Maui. Ex. X-6 at 1.

119. As of October 2021, Mahi Pono had planted 4,586 acres of crops. *See* Errata to Howe Decl.; Ex. X-9. Mahi Pono planned to plant an additional 499 acres by the end of 2021, which would bring the total acreage being cultivated to 5,085 acres by the end of 2021. Howe Decl. ¶ 8; Ex. X-9.

120. Mahi Pono also has approximately 9,000 acres of pasture land for its Maui Cattle Company operation. Howe Decl. ¶ 7. Co-owned by Mahi Pono and a number of member ranches, Maui Cattle Company supplies the local market with natural, grass-fed beef products. *Id.*

121. Sierra Club’s witness Mr. Kido testified that he was “quite pleased” at Mahi Pono’s crop selection and was encouraged by Mahi Pono’s description of its operations, Michael Kido Live Testimony, 12/13/21 audio recording 1:12:07 – 1:12:11; 1:47:36 – 1:47:42 (“I personally would like to see Mahi Pono’s ag operations succeed over there[.]”), adding that “Hawaii needs diversified ag models” like Mahi Pono’s model, *id.*, 12/13/21 audio recording at 1:12:52 – 1:12:55, and “one the best examples I’ve ever seen of somebody doing it the right way,” *id.*, 12/13/21 audio recording at 1:49:04 – 1:49:14.

122. The unemployment rate in the County of Maui has been impacted by the COVID-19 pandemic. 8/13/20 Trial Tr. at 74:23-75:9 (Baz). The bulk of unemployment stems from the tourism and visitor-related industry as travel to the State and the County has been significantly reduced since the start of the COVID-19 pandemic. *Id.* at 75:10-22 (Baz).

123. As a result of the pandemic, Mayor Victorino’s administration created an economic recovery task force to, among other things, evaluate priorities for job diversification. 8/13/20 Trial Tr. at 75:25-76:9 (Baz). The County has put millions of dollars into “figuring out the best way to diversify [the County’s] economy, looking at new industries, supporting some industries that could grow here in our community.” *Id.* at 76:10-14 (Baz).

124. One of those industries that has potential growth is diversified agriculture, 8/13/20 Trial Tr. at 76:15-17 (Baz). Diversified agriculture, and agriculture in general, has huge growth potential. *Id.* at 76:21-23 (Baz). With the increase in tourism over the past forty years, the County of Maui saw a huge downturn in the agricultural industry, resulting in a lot of agricultural land that now sits fallow. *Id.* at 76:24-77:2 (Baz).

125. Mahi Pono presently has 300 full time employees. Mahi Pono has not laid off any employees as a result of the COVID-19 pandemic and has no plans to reduce its work force so long as Mahi Pono can continue to viably farm. Mahi Pono anticipates hiring additional employees as its farming operations expand. At full build out, Mahi Pono anticipates it will have 793 employees. Howe Decl. ¶ 3; Ex. X-2 at X-2-01910.

126. Developing diversified agriculture in Maui allows for the State to move towards its goals to increase food and energy self-sufficiency. *See* Trial Ex. S-51 at 000020.

127. Phyllis Shimabukuro-Geiser from the Hawaii Department of Agriculture underscored that “achieving the food self-sufficiency by increasing food production is a top priority for the administration. Continued access to agricultural irrigation water that’s affordable is fundamental to achieving this priority.” 11/13/2020 BLNR Meeting audio recording at 5:59:48 - 6:0:10, available at <https://files.hawaii.gov/dlnr/meeting/> audio/Audio-LNR-201113.m4a.

128. Randy Cabral, president of the Hawaii Farm Bureau, reiterated the importance of the RPs, diversified agriculture, and food sustainability in Maui during the November BLNR meeting. 11/13/2020 BLNR Meeting audio recording at 4:34:52 – 4:35:15, available at <https://files.hawaii.gov/dlnr/meeting/> audio/Audio-LNR-201113.m4a (“The current COVID-19

pandemic has dramatically underscored the immediate needs of our islands to become more self-sufficient, especially with regard to food production. The public strongly supports a robust and productive agricultural community. Without the continued supply of irrigation water via these RPs, Maui’s agricultural lands will not be productive.”).

129. Similarly, Warren Watanabe, executive director to Maui County Farm Bureau, related that “water resources are critical to the viability of our farms and ranches in Upcountry and ... central Maui. As the realities of COVID-19 became apparent, the urgent need for our level of agricultural self-sufficiency suddenly became a priority.” 11/13/2020 BLNR Meeting audio recording at 4:51:32 – 4:51:48, available at <https://files.hawaii.gov/dlnr/meeting/> audio/Audio-LNR-201113.m4a.

130. Mahi Pono’s proposed uses of the water from the RP Areas for diversified agriculture is a reasonable and beneficial use and weighs in favor of continuing the RPs for 2022.

ii. The County’s use of water from the RP Areas is a reasonable and beneficial use that weighs in favor of continuing the RPs.

131. The RPs allow for A&B/EMI to divert water that is used for “domestic uses for the County of Maui[.]” 8/13/20 Trial Tr. at 177:1-4 (Case).

132. There is no dispute that the County’s domestic and agricultural water uses are reasonable and beneficial. As the Environmental Court noted, “[c]learly the County’s needs are a legitimate public trust interest.” Trial Order at 29, ¶ R(3).

133. The County’s water needs weigh in favor of continuing the RPs for calendar year 2022.

iii. There was no new evidence of specific harms that would outweigh the public interest in approving the RPs for calendar year 2022.

134. Sierra Club asserts that the “evidence demonstrates that A&B’s diversions harm the natural resources and recreational uses dependent on flowing east Maui streams.” Sierra Club Response Brief at 2. To support this assertion, Sierra Club alleges that the diversions have an adverse impact on native aquatic species, native birds, and damselflies. Response Brief at 10-11; Ex. Y-56.

135. These are issues that were or could have been raised at the Trial. For example, the Environmental Court concluded that notwithstanding general testimony that the native aquatic species would benefit from more water in the streams, it was reasonable for BLNR to allow the

continued diversion from the 12 Streams given that restoring stream flow was not guaranteed to restore sufficient habitat for the native species and freshets and storm flows would still allow the native aquatic species to migrate, especially when balanced against forcing EMI to reopen diversions further east that were previously closed. Trial Order at 23 (¶ J.6). The Court affirmed this “classic balancing” by the BLNR. *Id.*

136. Similarly, here, the Hearing Officer finds that based on the best available information at this time, there is no credible evidence of specific and imminent harm to any of these species that would outweigh the public interest in continuing the RPs for calendar year 2022.

a. The evidence does not support any finding of specific harm to native aquatic species that would warrant discontinuing or modifying the conditions of RPs for calendar year 2022.

137. Although Sierra Club’s witness Mr. Kido provided a number of generalized comments about how diversion structures can harm native aquatic species, Mr. Kido’s testimony is not based on any new evidence that was not available for the August 2020 Trial. Michael Kido Live Testimony, 12/13/21 audio recording at 1:30:7 – 1:30:12 (stating that he has not conducted any additional site visits since February 2020).

138. More importantly, Mr. Kido gave no testimony establishing that any specific streams in the east Maui watershed will suffer any harm if the RPs are continued for calendar year 2022. *See* 8/3/20 Tr. at 63:15-69:17 (Kido).

139. Mr. Kido admitted that he completed his declaration dated October 30, 2019 (“**2019 Declaration**”) (Ex. Y-50 at PDF 11-16) without visiting the diversions and streams in east Maui and that the statements in the 2019 Declaration were based solely on his belief that diversions, to the extent that they interfered with mauka to makai continuous flow for east Maui streams, were not good for native fish. Michael Kido Live Testimony, 12/13/21 audio recording at 1:6:9 – 1:8:23. Audio; *id.* at 1:20:16 – 1:20:49 (agreeing that 2019 Declaration summarized “the general problem the diversion structures can cause for native fish and the general desirability of having mountain to sea connectivity[.]”).

140. Following his 2019 Declaration, for a few days in February 2020, Mr. Kido visited diversion sites on various streams. Michael Kido Live Testimony, 12/13/21 audio recording at 1:28:6 – 1:28:22. During the site visit he performed “limited visual reconnaissance in shallow water of those diversions when possible.” Ex. Y-50 at 18. Mr. Kido did not collect any underwater

visual census data. Michael Kido Live Testimony, 12/13/21 audio recording at 1:32:26 – 1:32:33. Mr. Kido explained that visual reconnaissance is not a substitute for gathering underwater visual census data. Michael Kido Live Testimony, 12/13/21 audio recording at 1:34:40 – 1:38: 4.

141. Mr. Kido explained that the February 2020 site visit merely confirmed his previous beliefs regarding the “general effect that diversion structures in the streams potentially interrupt the mauka to the sea[.]” Michael Kido Live Testimony, 12/13/21 audio recording at 1:28:43 – 1:28:54.

142. Notwithstanding that testimony, Mr. Kido also testified that he studied Hanawī stream three times between 1998 and 1999 and each time “that stream scored a hundred percent,” and described the stream as a “reference stream” and “one of the best streams that are existing.” Michael Kido Live Testimony, 12/13/21 audio recording at 1:23:37 – 1:24:9. In other words, at the height of sugar cultivation when water diversions were significantly larger than current diversions, the health of Hanawī stream was 100%.

143. Dr. Ayron Strauch, a hydrologist with CWRM, also provided testimony regarding stream flow and native aquatic species. In his draft IFSAR, Dr. Strauch concluded that the 12 Streams “support limited to no recruitment or reproduction and existing diversions have minimal impact on the life-history of native aquatic biota.” Ex. D-1 at 15. During the hearing, Dr. Strauch testified that he “now believe[s] more water should be restored to [the 12] Streams than [he] did back in November 2020.” Ayron Strauch Live Testimony, 12/9/21 audio recording at 0:54:9 – 0:54:19. However, Dr. Strauch did not testify about how much water he believed should be restored or where he believed that restoration should take place. Dr. Strauch explained that he and other CWRM staff are in the process of collecting and analyzing more data regarding the 12 Streams, but that data has not yet been analyzed and, until that analysis is completed, he is unable to reach any final conclusions based on that data. Ayron Strauch Live Testimony, 12/9/21 audio recording at 0:29:49 - 0:30:10.

144. Moreover, although Dr. Strauch testified that the conclusions and recommendation in the draft IFSAR will likely change, Dr. Strauch did not testify that the underlying information was no longer valid. Ayron Strauch Live Testimony, 12/9/21 audio recording at 0:54:55 – 0:55:7.

145. As the draft IFSAR notes, diversion structures are not the only impediment to the recruitment of native aquatic species in these streams. The intermittent nature of some of the

streams, the presence of terminal waterfalls which may restrict recruitment of certain juvenile amphidromous species, the presence of inland waterfalls or other natural barriers to upstream migration of native aquatic species, the presence of invasive riparian vegetation that disrupt the food-web of freshwater ecosystems, and the decline in rainfall and natural baseflow due to climate changes are all challenges to whether native aquatic species can thrive in the 12 Streams. Ex. D-1 at 6, 11.

146. The draft IFSAR also cited to and relied upon Dr. James Parham’s habitat modeling study found in the FEIS. *See* Ex. D-1; Ex. X-2 at X-2-00003 to X-2-00462. The study “focused on assessing and quantifying suitable habitat under different flow scenarios.” Ex. X-2 at X-2-00013. Dr. Parham stated that “the analysis resulting from the combination of field surveys and habitat modeling supports the flow restoration under the CWRM D&O 2018 IIFS in improving instream habitat conditions for native amphidromous stream animals.” *Id.* at X-2-00016. Dr. Parham further stated that “[f]rom a habitat availability perspective, the 2018 IIFS does a good job at improving instream habitat over a wide range of streams within the [RP Areas].” *Id.*

147. In other words, considering the entire east Maui watershed as a region, the significant restorations ordered by the CWRM June 2018 D&O improved the overall health of the entire watershed. *See* Ex. Y-46 ¶ 65, p. 20 (“The prioritization of the East Maui Streams is based upon the ‘biggest bank for the buck’ concept, where priority is placed on streams with the greatest potential to increase suitable habitat for native species.” (block formatting and citation omitted)). CWRM noted that DAR had endorsed this approach, stating, “The restoration of suitable flows to a single stream is more appropriate than the return of inadequate flow to multiple streams. DAR supports the trade-offs on the restoration of a smaller number of streams with sufficient water over the return of insufficient water . . . to a larger number of streams.” *Id.* (block formatting and citation omitted).

148. CWRM may well determine in the future that IIFS amendments for some or all of the 12 Streams are justified at certain locations and in certain amounts as an integral component of CWRM’s overall regional approach to the protection of the streams in the RP Areas. The information to make those specific determinations is not available to BLNR at this time.

149. The Hearing Officer finds that, at best, the evidence shows that more water in each stream would generally benefit native aquatic species, but there is no evidence as to how much

water, in which specific locations, and how this could or should be reconciled with CWRM's regional approach to stream protection and the public interest in maximizing the reasonable and beneficial use of this resource.

150. The Hearing Officer finds that the significant public interest in allowing diversions to continue from the 12 Streams without interruption until such time as CWRM can act upon the pending IIFS petitions outweighs any potential harm to native aquatic species in the interim and would not cause irreparable damage. *See* Trial Order at 23 (¶ J.7) (“The evidence at trial was clear that even when streams have been diverted for years, they will likely recover if and when flows are returned.”).

b. The evidence does not support any finding of specific harm to native bird populations that would warrant discontinuing or modifying the conditions of the RPs for calendar year 2022.

151. Sierra Club alleges that the diversions in the EMI Ditch System have an adverse impact on native forest bird populations because the structures could potentially create ponding that may foster mosquitos that could potentially infect the native forest bird populations with diseases such as avian malaria. Response Brief at 10-11; Reynolds Decl. Sierra Club relies upon the testimony of Dr. Michelle Reynolds to support this allegation.

152. Although Sierra Club relies upon the testimony of Dr. Michelle Reynolds, her testimony is nothing more than a generalized understanding of potential harm to native birds in east Maui and adds nothing new to the body of information that was already in the record before the BLNR prior to Sierra Club's request for a contested case hearing.

153. Dr. Reynolds did not conduct any studies or investigation to prepare for her testimony, and the last time Dr. Reynolds studied the east Maui watershed was, at the latest, 2004. Michelle Reynolds Live Testimony, 12/9/21 audio recording at 2:51:37 – 2:52:6.

154. Accordingly, the Hearing Officer gives little weight to Dr. Reynolds's testimony.

155. Dr. Scott Fretz from DOFAW also testified regarding the threat of mosquitos to native birds. He testified that mosquitos can breed in anything that holds water and “one of the areas that's known to be causing higher breeding sites is when pigs damage hapu'u ferns and it leaves a depression, water collects in that and that can cause mosquito breeding at much higher elevations than would have occurred naturally.” Scott Fretz Live Testimony, 12/13/21 audio recording at 0:41:55 – 0:42:29.

156. Dr. Parham explained that “it is highly likely that some standing water pockets will always be present at the edges of the stream channel. Thus, streamflow alone is unlikely to eliminate[the introduced mosquito *Culex*] *quiquefasiatus*.” Ex. X-2 at X-2-00015.

157. Based on the evidence, the Hearing Officer concludes that the potential ponding in abandoned or unused diversion structures are not the sole cause of mosquito breeding.

158. Moreover, as Dr. Fretz also testified, DOFAW is currently working with CWRM and EMI to address potential ponding in diversion structures. Scott Fretz Live Testimony, 12/13/21 audio recording at 0:38:48 – 0:38:59. To the extent restoring stream flow may or may not be warranted to mitigate such ponding in order to protect native birds, this is squarely within the balancing analysis that CWRM performs in setting IIFS amounts for specific streams at specific locations.

159. Based on the evidence, the Hearing Officer finds that there is no evidence of specific harm to native birds caused by the diversion of water pursuant to the RPs that would outweigh the continuation of the RPs for 2022 or justify the imposition of additional conditions. To the extent that there is general harm, CWRM is currently addressing that issue in connection with DOFAW and EMI and in connection with the analysis of Sierra Club’s pending IIFS petition.

c. The evidence does not support any finding of specific harm to damselflies that would warrant discontinuing or modifying the conditions of the RPs for calendar year 2022.

160. Sierra Club also alleges that diversions in the EMI Ditch System have an adverse impact on damselflies. Response Brief at 10-11. Sierra Club asserts that both Ho‘olawanui and Ho‘olawaliilii host populations of the endangered damselfly and that “steps need to be taken to restore stream flows to protect an endangered species.” *Id.* at 11. Sierra Club again relies on the testimony of Dr. Reynolds.

161. However, Dr. Reynolds has not authored any publications regarding the damselfly nor has Dr. Reynolds conducted any fieldwork to study the damselfly in east Maui. *See* Reynolds Decl.; Michelle Reynolds Live Testimony, 12/9/21 audio recording at 2:52:6 – 2:53:17. In fact, Dr. Reynolds testified that the statements in her declaration regarding the damselfly were based on the publications she cited. Michelle Reynolds Live Testimony, 12/9/21 audio recording at 2:52:51 – 2:52:58. Accordingly, her testimony adds nothing new to the body of information that was already available to the BLNR before Sierra Club requested a contested case hearing.

162. Sierra Club also relies upon an October 2019 study by the U.S. Fish & Wildlife Office (“**October 2019 Study**”) to support its allegation that “steps need to be taken to restore stream flows to protect an endangered species.” Response Brief at 11 (citing Exhibit Y-41 at 6). The October 2019 Study, however, makes no such conclusion. The study, which was conducted as part of the ongoing CWRM proceeding to address the modification of stream diversions to comply with CWRM’s June 2018 D&O, merely states that “the amount of discharge . . . indicates that this stream reach represents potentially suitable habitat for *Megalagrion* damselfly species,” and notes that little time was spent at that survey location. Ex. Y-41 at 6. In other words, even with diversions there is adequate stream flow to support the damselfly.

163. Moreover, the evidence does not show that the 12 Streams in particular are critical habitats for the endangered damselfly. See Reynolds Decl. ¶ 7 (“Critical habitat has not yet been designated for either of the listed damsel fly species.”). Along those lines, Dr. Parham notes that “[w]hile the restoration of baseflow would increase habitat downstream of diversions, it is not clear how important the main channel habitat is for these species.” Ex. X-2 at X-2-00014.

164. Dr. Parham also observes that “[t]he restoration of baseflow however will likely also improve habitat conditions for a number of introduced predator and competitor species of the native damselflies and thus may not in itself increase damselfly populations.” Ex. X-2 at X-2-00014-15.

165. Sierra Club could have presented its concerns about the damselfly and the October 2019 Study at the Trial but did not. Nonetheless, the Hearing Officer concludes that the evidence does not support a finding that the diversion of water pursuant to the RPs poses a specific or imminent threat to the *Megalagrion* damselfly species that would warrant discontinuing or imposing additional conditions on the RPs for 2022. Moreover, to the extent this issue implicates setting stream flows, this is being addressed by CWRM in connection with the Sierra Club’s pending IIFS Petition.

C. There Is No New Evidence of Realistic Alternatives or Additional Mitigation Measures that Would Warrant the Discontinuation or the Modification of the Conditions to the RPs for 2022.

166. The issue of whether any viable alternative water source to the water diverted from the RP Areas exists, for the proposed water uses, was already litigated and decided at Trial.

167. Groundwater was considered as a potential alternative to diverting water from the RP Areas at Trial. The Environmental Court found no evidence compelling groundwater as an alternative and concluded that Mahi Pono is not required to use groundwater. Trial Order at 25, ¶ 3 (“The court is not aware of any evidence that groundwater could or would realistically change the current essential need for water via the ditch system.”), ¶ 4 (“Per the above, the court finds and concludes it was reasonable for the BLNR not to require Mahi Pono to rely on using groundwater to irrigate its crops in 2019.”).

168. The Environmental Court found that despite the use of groundwater during the time of sugar cultivation, “reduced recharge of the groundwater aquifer due to lower levels of irrigation from diverted east Maui streams, the uncertain tolerance of diversified agricultural crops to brackish water, and the higher costs of pumping groundwater” prevented the use of groundwater as an alternative. Trial Order at 25, ¶ 2.

169. Here, Mr. Howe testified that “during sugar cultivation brackish ground water was relied upon regularly during the summer months when there was insufficient surface water available. This was made possible from the fact that, at the time, EMI was importing approximately 165 mgd to Central Maui. The seepage from the laterals, reservoirs and rejected recharge (water that goes past the root zone of the crop being irrigated) all recharged the ground water aquifer.” Suppl. Howe Decl. ¶ 4.

170. Mr. Howe also testified that “[n]ow that EMI is only importing approximately 25 mgd, there is significantly less recharge of the ground water aquifers. For this reason, it is unclear how much water can be pumped without causing drawdown in the aquifers and/or saline intrusion.” *Id.* at ¶ 5.

171. Mr. Howe further explained that “there is a risk associated with the use of ground water on Mahi Pono’s crops due to uncertainty regarding how they will tolerate chlorides. This was less of a concern with sugar cane which is a relatively salt-tolerant crop.” *Id.* at ¶ 6.

172. Based on the evidence at Trial and the evidence adduced at the hearing, the Hearing Officer finds that groundwater is not a reasonable alternative for Mahi Pono’s water uses and there is no new evidence of any realistic alternatives for the proposed uses.

173. The Hearing Officer further finds that there is no new evidence warranting the imposition of additional mitigation measures or conditions upon the RPs for 2022.

i. Sierra Club’s proposal to terminate RPs for three license areas and limit diversions to Huelo is not reasonable.

174. Sierra Club argues that the RPs for three license areas (Nahiku, Keanae, and Honomanu) should be terminated. For the remaining water diverted from the fourth license area of Huelo, Sierra Club argues that the amount of water diverted should be limited through three alternative scenarios: (i) that no water should be taken from O’opuola, Nailiilihaele, Kailua and Ho’olawa streams; (ii) no more than 64% of the baseflow can be removed from Kolea Stream, Punalu’u Stream, Ka’aiea stream, ‘O’opuola Stream (Makanali tributary), Puehu Stream, Nailiilihaele Stream, Kailua Stream, Hanawana Stream (Ohanui tributary), Hoalua Stream, Waipi’o Stream, Mokupapa Stream, and Ho’olawa Stream (Ho’olawa ili and Ho’olawa nui tributaries); or (iii) water within the Huelo license area will only be taken from streams with/from the Wailoa Ditch. Response Brief at 11.

175. First, the proposal to eliminate three of the four RP license areas fails to recognize the realities of the delivery system. As CWRM has recognized, the EMI Ditch System is a “*single coordinated*” “gravity flow ditch system, driven by the higher elevation diversions in the wetter, eastern portion of the watershed” that covers 50,000 acres, including the RP license areas. CWRM D&O, Executive Summary, at iii, 140, 232, 266 (emphasis added). This is not like an electrical grid with “switching stations” where anyone “could send water from anywhere to anywhere by the click of a mouse.” See Trial Order at 27. The RPs allow EMI to secure the areas surrounding the Ditch System, which is particularly crucial given that this is a source of domestic drinking water. Ian Hirokawa Live Testimony, 12/8/21 audio recording at 4:37:17 – 4:37:33; 11/13/2020 BLNR Meeting audio recording at 4:31:57 – 4:32:25, available at <https://files.hawaii.gov/dlnr/meeting/audio/Audio-LNR-201113.m4a>.

176. Second, it is not clear that there will *not* be a need to divert surface water from outside of the Huelo license area in 2022 in order to meet the needs of Mahi Pono and the County, especially given Mahi Pono’s plans to plant additional acreage in 2022. Suppl. Vaught Decl. ¶ 2. Mr. Vaught testified that in 2020, EMI drew water all four license areas, including from the farthest reaches of the eastern license areas, for a week. Mark Vaught Live Testimony, 12/8/21 audio recording at 1:36:58 – 1:37:38. Whether EMI will need to divert water from outside the Huelo license area in 2022 depends on the weather and how much water is available. Mark Vaught Live Testimony, 12/8/21 audio recording at 1:45:23 – 1:47:14.

177. Access to water from all four license areas is important particularly during the summer months where there is significantly less surface water available, and the importance of maintaining all four license areas will only increase with the additional plantings Mahi Pono has planned for 2022. Suppl. Vaught Decl. ¶ 2.

178. The Hearing Officer finds that Sierra Club’s proposal to terminate the RPs for Nahiku, Keanae, and Honomanū is neither reasonable nor warranted and would result in substantial harm to Mahi Pono’s farming operations and the County’s operations, among other users.

179. As to Sierra Club’s three proposed alternatives to limit the amount of water that may be diverted from streams within the Huelo license area, all three are impracticable because BLNR has no authority to regulate streams or portions of streams not located on State land.

180. All of the 12 Streams lie, in part, on land privately owned by EMI. *See* Ex. Y-66. As such, BLNR lacks the authority to (1) prevent EMI from diverting water that originates on its own land; or (2) set streamflow standards for portions of streams located on EMI’s land.

181. The stream flows of the 12 Streams are being addressed by CWRM in the context of Sierra Club’s 2021 IIFS Petition. Unlike the BLNR, CWRM does have the authority to manage all streams regardless of whether the stream is located on State land or privately owned land. *See* HRS § 174C-71(1)(D). As stated *supra*, the purpose of this hearing is not to duplicate the efforts of CWRM nor will BLNR interfere with CWRM’s ongoing proceedings.

182. The Hearing Officer finds that Sierra Club’s three proposals to limit the diversion of water from streams within the Huelo license area are neither reasonable nor warranted.

ii. Sierra Club’s proposed condition to limit the diversion of water to 2,500 gad is not reasonable or warranted.

183. Sierra Club seeks to limit the amount of water that may be diverted pursuant to the RPs to 2,500 gallons per acre per day (“**gad**”) based on (1) CWRM’s “2021 Nā Wai ‘Ehā decision” (the “**Nā Wai ‘Ehā D&O**”) “limiting the use of stream water for irrigation” to 2,500 gad, (ii) the analysis in *Waiāhole* relating to a designated water management area in Central Oahu, and (iii) the terms of a proposed settlement agreement (which CWRM did not adopt) in the Nā Wai ‘Ehā contested case hearing (“**Nā Wai ‘Ehā CCH**”). Response Brief at 4.

184. Nā Wai ‘Ehā has been a designated Surface Water Management Area since 2008. The Nā Wai ‘Ehā CCH addressed, among other things, Surface Water Use Permit Applications for

existing and/or new uses pursuant to HRS § 174C-48(a). *See* Ex. Y-18 at 1, 257, 344.

185. In the instant case, “it is undisputed that none of the streams are in a designated water management area, and therefore,” limitations imposed by CWRM on surface water use permits in a designated water management area are inapplicable here. *See, e.g.*, Trial Order at 41 (stating that “discussion of what is required for a water use permit is inapposite” to decision on the continuation of the RPs).

186. Even assuming for the sake of argument that CWRM’s 2,500 gad water duty in the Nā Wai ‘Ehā D&O applied here, that duty is applied to total plantable acres. With respect to the water diverted from the east Maui watershed, there are 30,000 plantable acres. Howe Decl. ¶ 5. Applying the 2,500 gad water duty to the 30,000 plantable acres here would result in approximately 75 mgd which exceeds the 40 mgd Mahi Pono anticipates will be needed in 2022. *See* Howe Decl. ¶ 20.

187. The 2,500 gad water duty for diversified agriculture in the Nā Wai ‘Ehā D&O is not a basis to limit the amount of water that may be diverted pursuant to the RPs.

188. Sierra Club seeks to limit the water diverted pursuant to the RPs to 2,500 gad based on the analysis in *Waiāhole* relating to a designated water management area in Central Oahu. Response Brief at 4.

189. As discussed *supra*, as none of the streams at issue here are in a designated water management area, limitations imposed by CWRM on surface water use permits in a designated water management area are inapplicable here.

190. Moreover, there is no evidence to support the conclusion that the farms served by the system in *Waiāhole* and Mahi Pono’s farm plan are factually comparable.

191. For example, Mahi Pono’s crops largely consist of orchard crops, whereas the farming practices at issue in *Waiāhole* involved rotating crops or row crops, which “made it difficult to specify what a particular acreage’s water needs[.]” 105 Hawai‘i at 21, 93 P.3d at 663; *see also* Ex. X-9.

192. Orchard crops require more water than row crops. Ex. X-6 at 9 (stating that orchard crops require 5,089 gad whereas row crops require 3,392 gad).

193. For these reasons, the Hearing Office finds that the 2,500 gad water duty applied in *Waiāhole* does not serve as a basis for limiting the amount of water that may be diverted pursuant

to the RPs.

194. As discussed further in the conclusions, the proposed settlement agreement in the Nā Wai ‘Ehā CCH also does not serve as a basis for limiting the amount of water that may be diverted pursuant to the RPs.

iii. Sierra Club’s proposed condition that A&B/EMI provide 5 mgd to the County “for free” is not reasonable.

195. Sierra Club also argues that the RPs should be conditioned upon requiring A&B to “provide up to 5 million gallons of water per day to the County (for current upcountry Maui domestic uses and the Kula Agricultural Park) ... for free.” Sierra Club’s Response Brief at 17.

196. Setting aside the fact that this issue is not based on any new evidence and could have been raised at Trial, as discussed supra, as a factual matter, the County requires more than 5 mgd to be made available to it at Kamole Weir. The evidence therefore does not support a finding that the County’s need for water at Kamole Weir is less than 5 mgd.

197. It is also undisputed that pursuant to the contract between the County and EMI, the rate charged to the County by EMI has not increased since 1973 and remains six cents per 1,000 gallons of water delivered. Ex. J-25 at 000013.

198. No fact has been adduced by Sierra Club to support its argument that the express written agreement between EMI and the County can or should be overridden by BLNR as a condition of continuing the RPs for 2022.

iv. Sierra Club’s proposed conditions regarding hiking access, DOFAW access and traditional and customary practices are not necessary or reasonable.

199. Sierra Club raises a number of proposed conditions that have not been shown to be warranted by the evidence.

200. First, Sierra Club asserts that “BLNR should require an email-based system by which community groups and organizations can obtain keys and access to hiking trails and streams in the revocable permit area.” Response Brief at 17.

201. It is clear that Sierra Club has never had a problem obtaining access to the RP Areas to lead hikes for its organization. de Naie Decl. ¶¶ 4-5; Tanaka Decl. ¶ 8; Lucienne de Naie Live Testimony, 12/13/21 audio recording at 3:8:1 – 3:8:6 (stating that for 25 years Sierra Club has always been allowed to sign one release form for multiple hikes).

202. Indeed, in 2021, Sierra Club led at least four hikes in the RP Areas and EMI

provided access for all of those hikes. Lucienne de Naie Live Testimony, 12/13/21 audio recording at 3:7:22 – 3:7:54. Sierra Club members were allowed to sign one release form for multiple hikes, as they have been allowed to do for twenty-five years, and were even given the option to electronically sign the release form. *Id.*, 12/13/21 audio recording at 3:7:37 – 3:8:32.

203. Sierra Club is planning on leading more hikes to RP Areas in 2022. *See* de Naie Decl. ¶ 4; *see* Tanaka Decl. ¶ 8; Lucienne de Naie Live Testimony, 12/13/21 audio recording at 3:8:49 – 3:9:2.

204. As Sierra Club and its members have no issue obtaining access to the RP Areas to hike, the Hearing Officer finds no basis for Sierra Club to demand that other unspecified persons be allowed access to the RP Areas to hike. This is even more so given that there is no evidence of members of the community being excluded from hiking in the RP Areas.

205. Second, Sierra Club asserts that BLNR should impose a condition to require EMI to provide DOFAW access to EMI land to get to the RP Areas. However, there is no evidence that EMI has ever denied DOFAW access to EMI land to get to the RP Areas. Ian Hirokawa related that DOFAW had “never raised” “as an issue that somehow their access to the licensed areas were limited in any way.” Ian Hirokawa Live Testimony, 12/8/21 at 4:33:2 – 4:33:28; *see also id.*, 12/8/21 at 4:37:59 – 4:38:29 (Q: “[H]ave you had an opportunity to talk to Na Ala Hele about concerns they may have about restricted access to trails that are within the revocable permit area?” A: “I’ve consulted with DOFAW, which I believe, you know, Na Ala Hele is a part of, and that’s never been an issue brought up. I don’t recall that being an issue brought up, I should say.”).

206. Third, Sierra Club asserts that BLNR should impose a condition to require EMI to provide access for traditional and customary native Hawaiian practices. As Mr. Hirokawa noted, to the extent that such access is required by law, no such condition is necessary. Ian Hirokawa Live Testimony, 12/8/21 audio recording at 4:35:44 – 4:36:3. Additionally, there is no evidence that EMI has ever denied access for traditional and customary native Hawaiian practices as required by law.

207. It is neither reasonable nor practicable for BLNR to impose a condition for every theoretical issue that could potentially arise, no matter how remote that possibility. Ian Hirokawa Live Testimony, 12/8/21 audio recording at 5:30:7 – 5:30:33 (“[W]e can’t foresee everything. And I think what I would note is we’re addressing it, at least what we’re trying to do is address the

issues that we know of. So, you know, if it's brought to us, then, you know, we'll try to address it in the submittal. I don't think I can necessarily foresee things that haven't been raised to us.”).

208. Accordingly, the Hearing Officer finds that there has been no factual showing of any necessity to impose conditions on the RPs for 2022 related to hiking access, DOFAW access to EMI land, and access for traditional and customary native Hawaiian practices.

v. Adding a surcharge to the RPs to fund the control of invasive species is not a reasonable or necessary condition.

209. Sierra Club argued that, as a condition of approving the RPs for calendar year 2022, BLNR should impose a surcharge to fund the management of invasive species in the RP Areas. In very broad terms, Sierra Club argues that because Mahi Pono purportedly pays less than its competitors for water, it would be appropriate to increase Mahi Pono's water delivery costs by up to five times. Response Brief at 18-19. Sierra Club offered no evidentiary support for its arguments about how Mahi Pono's water delivery costs actually compare to other farmers who do not own or operate their own diversion infrastructure. Sierra Club's proposed surcharge was only supported by argument, not by the testimony of any witness or other evidence of facts. It thus appears to be completely arbitrary.

210. There was also no evidence presented that the presence of invasive species above, below and within the RP Areas is solely caused by the EMI Ditch System, or that the imposition of the arbitrary surcharge proposed by Sierra Club is reasonably calculated to mitigate the impacts of such invasive species as may be present.

211. When asked about invasive species that can be spread by the operation of the Ditch System, as opposed to just being prevalent in the RP Areas, Dr. Fretz stated only that “[t]he operation of the ditch system can spread invasive species on – on equipment and people who are in that system. So that would be in the roads and diversions that are associated with the system.” Scott Fretz Live Testimony, 12/13/21 audio recording at 0:43:41 – 0:44:25.

212. Without any evidence that the invasive species in the RP Areas are solely caused by the continued use of the EMI Ditch System, and that Sierra Club's proposed surcharge is fairly and precisely calculated to mitigate just those impacts that the continued use of the system can be expected to cause, there is no basis to impose such a surcharge as a condition to continuing the RPs for 2022.

213. Likewise, there was no evidence offered by the Sierra Club to support its argument that a surcharge should be applied simply because Mahi Pono’s water delivery costs are purportedly lower than its competitors.

214. Even if it were the case that Mahi Pono’s per unit water delivery costs could be shown to be less than some farmers, Mahi Pono incurs significant other costs related to the ownership and maintenance of the EMI system as well as its own intra-farm irrigation systems. Ceil Howe, III Live Testimony, 12/9/21 audio recording at 1:36:26 – 1:37:14 (“[O]n an annualized basis, we have a water budget of seven-to ten million dollars. A portion to that is West Maui, so I would subtract about 20 to 25 percent from that. In addition to that, we have our legal fees, which are quite substantial, that are only occurring because of redoing our water, and challenges to our water, so I’d add that. In addition, we make, last year, just on infield, irrigation improvements. So new irrigation system technology, we have about to seven-to nine-million dollars, depending what we have in inventory that we’ve invested in 2021.”).

vi. Lining ditches and reservoirs is not a reasonable mitigation measure for approval of the RPs.

215. The issue of whether reservoirs should be lined to reduce seepage was already litigated and decided at trial. Trial Order at 44, ¶ 57B (“Another example: the only potentially major improvement shown by the evidence that would significantly and reliably reduce wasted water during the storage phase would be to line all the storage reservoirs.”).

216. The Court stated that lining the reservoirs in the EMI ditch system “is a costly solution that likely would not even be designed and completed before the RP expired.” Trial Order at 44, ¶ 57B.

217. There is no new evidence requiring reconsideration of this issue.

218. Sierra Club tries to distinguish its latest argument by asserting that the issue at Trial was lining *all* the reservoirs whereas here the issue is lining only one reservoir. Frankel, 12/8/2021 audio recording at 0:58:5 – 1:9:18. The fact that Sierra Club has newly modified its demand does not change the underlying facts, which are not new. Sierra Club’s latest argument, in any event, rests upon a distinction without a difference inasmuch as it could still take more than one year to complete the entire process of lining just one reservoir, including permitting. Mark Vaught Live Testimony, 12/08/21 audio recording at 1:57:33 – 1:58:0.

219. Based on the testimony at Trial, even lining one reservoir is unreasonably costly for a one-year revocable permit terminable upon 30-days' notice. 8/11/20 Trial Tr. at 131:20-132:1, 148:22-150:10 (Volner) (“At CWRM’s request, HC&S performed high level estimates for lining reservoirs with different types of materials.”); *see also* Ex. AB-144. A&B/EMI’s financial analysis submitted to CWRM before its May 2010 meeting indicated that it would cost \$43 million to line the roughly 36 unlined reservoirs. 8/11/20 Trial Tr. at 161:24-162:3 (Volner).”). That comes out to \$1.19 million per reservoir – excluding labor and material price escalations that would need to be accounted for between 2010 and 2022.

220. Accordingly, the Hearing Officer finds that it would be unreasonable for BLNR to mandate the lining of even one reservoir in the context of a one-year revocable permit terminable upon 30-days' notice.

221. As to lining ditches, CWRM concluded in its June 2018 D&O that “because both open ditches and tunnels in the EMI diversion system not only incur seepage losses but also gains from groundwater, especially in tunnels, it is not clear whether net seepage losses even occur in the EMI diversion system.” Ex. Y-46 ¶ 723, p. 191. CWRM further concluded that “[a]t low flow, the USGS study results show that losses are greater than gains, but at higher flows, gains are greater than losses[.]” *Id.* The USGS study referenced is Ex. Y-65.

222. Given that the EMI Ditch System has no net losses, the Hearing Officer finds unnecessary a condition to require the lining of ditches, particularly given the limited time period covered by the RPs.

vii. Covering reservoirs is not a reasonable mitigation measure that should be required as a condition of the RPs.

223. The Hearing Officer finds unreasonable Sierra Club’s proposed condition that reservoirs be covered. Setting aside the fact that this issue could have been raised at Trial, the Hearing Officer finds that, among other things, requiring such a condition would have harmful consequences, including impeding the County’s and DOFAW’s ability to fight fires.

224. On the one hand, the Hearing Officer considers that water evaporation from the EMI Ditch System is minimal. Ex. Y-46 ¶ 731, p. 216 (“To account for loss due to evaporation, HC&S estimated the average daily amount of evaporation from the surface of the water contained in the same ditches and reservoirs as those considered in estimating the seepage losses. The average daily evaporation rate of 0.40 acre-inches was multiplied by the average daily surface

area of the water in the system (243.48 acres), which yielded an average daily evaporation loss rate of 2.64 mgd.”).

225. On the other hand, the consequences of covering the reservoirs could be severe.

226. During the contested case hearing, the Hearing Officer asked Sierra Club’s Director, Wayne Tanaka, if he had thoughts on “how you make sure water is available in the chaos of fighting a fire without having to . . . roll back a top or check to see which reservoirs have water in them[.]” Wayne Tanaka Live Testimony, 12/14/21 audio recording at 0:48:30 – 0:48:43.

227. Rather than address the Hearing Officer’s concerns in his response, Mr. Tanaka answered that because they do not know exactly how much water is used for putting out fires, they cannot currently figure out “what reservoirs you might want to designate as fire fighting reservoirs[.]” *Id.*, 12/14/21 audio recording at 0:48:49 – 0:49:20.

228. Having a system where certain reservoirs are covered and others are designated for fighting fires would most likely impede the ability of the County and DOFAW to timely fight brush fires. Dr. Fretz explained that during the chaos of fighting a fire, DOFAW “will draw water from wherever we can get it when we need it.” Scott Fretz Live Testimony, 12/13/21 audio recording at 0:47:38 – 0:47:43.

229. The Hearing Officers finds that it is not reasonable to require reservoirs to be covered as a condition of continuing the RPs for calendar year 2022.

viii. Requiring the removal of diversion structures is not a reasonable condition of the RPs given the ongoing CWRM proceedings addressing this issue.

230. Sierra Club argued that “structures and equipment that are no longer in use are a blight on the landscape, create mosquito breeding ground, and alter stream flow patterns,” and “BLNR must require their removal.” Response Brief at 17.

231. The Environmental Court already addressed the issue of removal or alteration of stream diversion structures in the EMI Ditch System. *See* Trial Order at 26-27. The Court recognized that the CWRM June 2018 D&O stated that CWRM would decide how diversions would be modified in a subsequent process, and that diversions only needed to be modified if necessary to accomplish the IIFS and allow for the passage of stream biota. *Id.* at 26, ¶ O.1.

232. The Court concluded that BLNR was not required to place deadlines on the removal or modification of specific diversion structures:

2. Removal of diversion structures may cause more environmental harm than leaving them in. Ching testimony, 8/04/20 at 17:17-23. ***It was reasonable for the BLNR to allow the CWRM to continue its process of determining what modifications are needed for which diversion structures.***

3. Removal of diversion structures can require permits and permissions from multiple government entities, which makes setting any firm deadlines problematic.

4. Plaintiff failed to show that the balance of harms requires the BLNR to place deadlines on the removal of specific diversion structures.

5. Given the above, the court finds and concludes the ***BLNR was not required to place a deadline on A&B for the modification of diversion structures to comply with the IIFS.***

Trial Order at 26-27 (italicized emphasis added).

233. No new evidence acquired after the August 2020 Trial has been presented on this issue that would require BLNR to order the removal or alteration of diversion structures as a condition of continuing the RPs for calendar year 2022.

234. There are ongoing CWRM proceedings addressing this very issue. *See* Ex. X-7.

235. Although Sierra Club argued that there are unused equipment and structures that are not located in a streambed that require removal, the evidence does not show that there is any such equipment, let alone that CWRM required removal of such equipment. Dr. Fretz testified about unused structures and equipment but made clear that those items were subject to the ongoing CWRM proceedings. Scott Fretz Live Testimony, 12/13/21 audio recording at 0:47:7 – 0:47:29.

236. To the extent that Sierra Club is complaining about trash and debris in the RP Areas, there is an existing condition that requires A&B/EMI to “cleanup trash from revocable permit areas starting with areas that are accessible and close to streams,” and another condition that requires A&B/EMI to submit quarterly updates on, among other things, “removal of trash, unused man-made structures, equipment and debris that serve no useful purpose, including documenting any reports of such items received from the Department, other public or private entities and members of the general public and action taken by Permittee to remove the reported items.” Ex. Y-22 at 8.

237. EMI is making a diligent effort to remove trash and debris from the RP Areas. EMI has a policy about removing trash or debris from the RP area. Mark Vaught Live Testimony, 12/8/21 audio recording at 2:0:27 – 2:1:14. Anything that is not necessary for the current operation of the ditch system should be identified and supervisors should be notified, then it should be

removed. *Id.*, 12/8/21 audio recording at 2:1:1 – 2:1:14. Generally this is done when the staff is out in the field conducting their daily activities. *Id.*, 12/8/2021 audio recording at 2:1:14 – 2:1:43. EMI has also had individual instances in the past in which staff went out to the field for the specific purpose of trying to identify certain things in certain areas to notify a supervisor, so that EMI could look into the issue. *Id.* These individual missions involve twelve people and take about two days to cover the better part of the Ditch System and all the roads that are involved. *Id.* The twelve people go out in tandem and cover different areas of the ditch system. *Id.*, 12/8/2021 audio recording at 2:1:59 – 2:2:21.

238. The Hearing Officer finds that an additional condition regarding the removal of trash and debris is unnecessary and requiring the removal of diversion structures as a condition is also unnecessary and unreasonable under the circumstances.

ix. Requiring the RPs to be capped at 25 mgd pending resolution of Sierra Club’s IIFS Petition is not a reasonable condition of the RPs given its admitted impact on the Mahi Pono farm plan.

239. To mitigate the purported harms to instream values raised by Sierra Club, Sierra Club has demanded that BLNR not increase diversions beyond the 25 mgd cap imposed by the Environmental Court until after CWRM resolves Sierra Club’s 2021 IIFS Petition. In making this argument, Sierra Club candidly admitted its belief that this would likely protract the orderly progression of Mahi Pono’s agricultural operations. *See, e.g.*, Frankel, 12/15/21 audio recording at 00:49:25 – 00:49:47 (“Again, Mahi Pono will be able to expand its agricultural cultivation in 2022 with a cap. It may not be able to expand them as rapidly and as extensively as they would like, but they shouldn’t until they know how much water needs to be left in the streams in Huelo.”).

240. Sierra Club presented no new facts or evidence demonstrating that the potential mitigation of potential harms to instream values by capping diversions from the RP Areas at 25 mgd during the pendency of its 2021 IIFS Petition justifies the harm that Sierra Club admits would be caused by delaying the return of 22,254 acres of Important Agricultural Lands in central Maui to active agricultural use. To the contrary, as already determined at Trial, any short term harm to instream values associated with the continued diversion of water from the 12 Streams would not be permanent and would not impair any future restoration efforts such as might be ordered by CWRM in the future. Trial Order at 24 (¶ J.7).

241. Sierra Club analogizes this argument to the BLNR’s deferral of action on the preparation of an environmental impact statement for A&B/EMI’s long-term lease application during the pendency of Nā Moku’s twenty-seven IIFS petitions filed in 2000 with CWRM. What is at issue here is not a long-term lease but rather one-year revocable permits terminable upon thirty-days’ notice. The RPs are meant to be temporary and simply allow the continuation of ongoing water uses while the long-term lease process proceeds. Ex. Y-22 at 1.

242. The County of Maui relies upon water diverted pursuant to the RPs to supply water to its Nahiku and Upcountry customers. Mahi Pono also relies upon water diverted pursuant to the RPs for its development of diversified agriculture in central Maui, including on lands designated as IAL. *See* Howe Decl. ¶¶ 22-23; Ex. Y-22 at 6.

243. Without the RPs, there would be significant negative impacts to the County of Maui, particularly the Nahiku and Upcountry residents and businesses, and Mahi Pono’s farming operations. Tony Linder Live Testimony, 12/13/21 audio recording at 2:17:6 – 2:18:9; Howe Decl. ¶ 22.

244. Therefore, it is neither reasonable nor practicable to suspend or limit these uses and hold off on making a decision on the continuation of the RPs while CWRM resolves Sierra Club’s 2021 IIFS Petition, particularly where CWRM may not render a decision on the 2021 IIFS Petition until after 2022. *See* Kaleo Manuel Live Testimony, 12/13/21 audio recording at 0:8:16 – 0:8:22.

245. Sierra Club advanced an identical argument at Trial, arguing that the Environmental Court should enjoin the diversion of more than 25.75 mgd from the areas covered by the RPs unless and until, among other things, “the BLNR Defendants provide some level of protection for Kolea Stream, Punaluu Stream, Nailiilihaele Stream, Kailua Stream, Hanahana (Hanawana) Stream (Ohanui tributary), Hoalua Stream, Waipio Stream, Mokuapapa Stream, and Hoolawa Stream (Hoolawa ili and Hoolawa nui tributaries)[.]” Trial Order at 13-14 (¶ F).

246. The Environmental Court concluded that “it was reasonable for the Board to allow A&B to continue to divert water from the ‘13 streams,’ where, on the one hand, returning water to the streams was not guaranteed to result in ‘H90’ flow, and therefore, was not guaranteed to restore sufficient habitat to native species.” Trial Order at 22-23 (¶ J.6). The Court explained that “[b]arring diversions from the 13 streams could mean A&B would be forced to reopen diversions in the Keanae and [N]ahiku areas that were previously closed. On the other hand, continuing to

allow the 13 streams to be diverted did not necessarily mean that native species would not be able to migrate in those streams if there was sufficient flow from freshets and storm events. This is a classic balancing and the court is not persuaded and finds and concludes that applying the applicable law . . . it was not unreasonable for the BLNR to balance these considerations as it did.”

247. The Court further noted that “[t]he evidence at trial was clear that even when streams have been diverted for years, they will likely recover if and when flows are returned.” Trial Order at 23 (¶ J.7).

248. The Court similarly rejected Sierra Club’s request to impose a 25.75 mgd cap (which Sierra Club later amended to 27 mgd) unless and until some level of protection was imposed for the 12 Streams, citing to the “negative effects for Mahi Pono the company, and to the people that Mahi Pono employs, the farmers who lease land from Mahi Pono, and the County.” Trial Order at 44 (¶ A). The Court explained that “[t]he negative effects extend to leaving important agricultural lands fallow, and missing opportunities to significantly increase Hawaii’s food diversification, independence and sustainability.” *Id.* The Court found that “***applying a cap of 27 MGD does not support the broader, comprehensive goals of the public trust.***” Trial Order at 29 (emphasis added).

249. Likewise, here, there is no basis to arbitrarily limit the amount of water that may be diverted pursuant to the RPs to 25 mgd pending resolution of Sierra Club’s September 2021 IIFS Petition.

250. Arbitrarily limiting the diversion of water to 25 mgd would essentially freeze Mahi Pono’s diversified agriculture farming operations in central Maui. In October 2021, Mahi Pono and the County used 25.4 mgd. This includes 0.72 mgd of surface water from west of Honopou and 5.81 mgd of pumped groundwater. Ex. X-13. By the end of 2021, Mahi Pono anticipated its water needs would increase by 0.63 mgd, bringing the total amount of water needed to 26.03 mgd. Exs. X-13; X-14. As it is not clear how much groundwater can be sustainably pumped, with a 25 mgd cap, there would be little to no additional water available for any of the plantings Mahi Pono has currently planned in 2022.

251. Sierra Club attempted to elicit testimony from Mahi Pono witnesses that the 25 mgd cap has, as of the date of the hearing, not been an issue for Mahi Pono, *see, e.g.*, Frankel, 12/8/21 audio recording at 01:49:30 – 01:49:41, in an apparent effort to suggest that continuing the 25 mgd

cap throughout 2022 would not harm Mahi Pono’s operations. As stated *supra*, the evidence shows that limiting the diversion of water to 25 mgd would essentially freeze Mahi Pono’s diversified agriculture farming operations in central Maui.

252. Freezing Mahi Pono’s diversified agriculture farming operations would also halt any corresponding increase in employment and food security for the State that could be expected from the continued development of Mahi Pono’s operations. Howe Decl. ¶¶ 22-23.

253. Balancing this certain harm to the development of diversified agriculture in central Maui against the uncertain threat to the native aquatic species, native birds and damselfly, the balance weighs against limiting the diversion of water pursuant to the RPs to 25 mgd as Sierra Club requests.

254. This is not the last word on the fate of the 12 Streams. CWRM is considering Sierra Club’s 2021 IIFS Petition and may well amend IIFS for some or all of these 12 Streams.

255. Allowing the continued diversion of water from the 12 Streams for the short term covered by the RPs will not irretrievably damage the streams or the native aquatic biota. As the Environmental Court noted, it is “clear that even when streams have been diverted for years, they will likely recover if and when flows are return.” Trial Order at 24 (¶ J.7).

CONCLUSIONS OF LAW

I. SCOPE OF THE HEARING

A. Authority and Jurisdiction of CWRM.

1. “The [Hawai‘i] Constitution designates [CWRM] as the primary guardian of public rights under the public trust” as it relates to water resources. *Waiahole I*, 94 Hawai‘i at 143, 9 P.3d at 455.

2. As such, CWRM has “*exclusive jurisdiction and final authority in all matters* relating to implementation and administration of the state water code, except as specifically provided in this chapter,” HRS § 174C-7(a) (emphases added), which includes the setting of instream flow standards (“IFS”) and IIFS for streams in Hawai‘i, *id.* §174C-71(1)(D); *see also* HRS §§ 174C-7(a); 174C-71(2).

3. Unlike BLNR whose jurisdiction is limited to the management and regulation of State-owned land, CWRM has jurisdiction to set IFS or amend IIFS for an entire stream regardless of whether the streams lies on private land or State-owned land. *See* HRS §§ 174C-71(1)(D); 174C-71(2); 174C-7(a).

4. CWRM also has exclusive jurisdiction over the regulation and management of stream diversion works, regardless of whether the stream diversion work is located on private land or State-owned land. *See* HRS §§ 174C-92, -93, -95; HAR §§ 13-168-32(a), -35(a)

5. Recognizing the jurisdiction and expertise of CWRM and the limited jurisdiction and expertise of BLNR, the Hearing Officer concludes that the determination of whether and to what extent stream flow needs to be restored and/or protected will be left to CWRM.

6. This is particularly appropriate where CWRM is currently considering Sierra Club's recently filed 2021 IIFS Petition which addresses IIFS for the 12 Streams. BLNR will not duplicate CWRM's efforts nor interfere with CWRM's proceedings.

II. STANDARDS FOR BLNR'S DUTIES

A. The Public Trust Doctrine's Dual Mandate Obligates BLNR to Balance Resource Protection and Maximum Reasonable and Beneficial Use.

7. Continuation of the RPs is governed by standards imposed by the public trust doctrine incorporated into article XI, sections 1 and 7 of the Hawai'i Constitution, and HRS §§ 171-55 and 171-58. With respect to the applicable statutes, "[t]he Board's powers include the right to dispose of water rights by permit for temporary use on a month-to-month basis under those conditions *which will best serve the interests of the State*², HRS § 171-58(c), and may allow the permit to continue on a month-to-month basis for additional one year periods. HRS § 171-55." Trial Order at 34, ¶ 34 (emphasis added).

8. "Haw. Const. art. XI, § 7 specifically relates to water resources, stating that: 'The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.'" Trial Order at 31, ¶ 4. "[A]rticle XI, section 1 of the Hawai'i Constitution requires the state both to 'protect' natural resources and to promote their 'use and development.'" *Waiāhole I*, 94 Hawai'i at 138-39, 9 P.3d at 450-51. "The state water resources trust thus embodies a dual mandate of 1) protection and 2) maximum reasonable and beneficial use." *Id.* at 139, 9 P.3d at 451. "This 'dual mandate' means that the State must not always choose maximum protection," Trial Order at 31, ¶ 6, because the public trust doctrine "also encompasses a duty to promote the reasonable and beneficial use of water resources in order to maximize their social and economic benefits to the people of this state," *Waiāhole I*, 94 Hawai'i at 139, 9 P.3d at 451.

² Generally, actions that satisfy the requirements of the public trust doctrine are in the "public's best interests." *Waiāhole I*, 94 Hawai'i at 196, 9 P.3d at 508 (Ramil, J., dissenting).

9. “[A]rticle XI, section 1 does not preclude offstream use, but merely requires that all uses, offstream or instream, public or private, promote the best economic and social interests of the people of this state.” *Id.* at 141, 9 P.3d at 453. Indeed, as the Hawai‘i Supreme Court has recognized, “[t]he public has a definite interest in the development and use of water resources for various reasonable and beneficial public and private offstream purposes, including agriculture.” *Id.* (citing Haw. Const. art. XI, § 3). Accordingly, “reason and necessity dictate that the public trust may have to accommodate offstream diversions inconsistent with the mandate of protection, to the unavoidable impairment of public instream uses and values.” *Id.*

10. “[T]here are no ‘absolute priorities’ between uses under the public trust, so the state and its subdivisions must ‘weigh competing public and private water uses on a case-by-case basis,’ according to any standards applicable by law.” *Kauai Springs, Inc.*, 133 Hawai‘i at 172, 324 P.3d at 982 (quoting *Waiāhole I*, 94 Hawai‘i at 142, 9 P.3d at 454). A “higher level of scrutiny” is applied to proposals for private commercial use. *Id.*

B. The Hawai‘i Constitution Obligates BLNR to Promote and Protect Diversified Agriculture.

11. In addition to the duties imposed by the public trust doctrine, article XI, section 3 of the Hawai‘i Constitution imposes an affirmative duty on the State to “conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands.”

12. The importance of agricultural promotion and protection is further codified in HRS § 205-41, which recognizes that “[t]here is a compelling state interest in conserving the State’s agricultural land resource base and assuring the long-term availability of agricultural lands for agricultural use to achieve the purposes of: (1) Conserving and protecting agricultural lands; (2) Promoting diversified agriculture; (3) Increasing agricultural self-sufficiency; and (4) Assuring the availability of agriculturally suitable lands, pursuant to article XI, section 3 of the Hawaii State Constitution.”

13. With respect to land designated as Important Agricultural Land (“IAL”):
the State shall

- ...
- (2) Establish incentives that promote:
 - (A) Agricultural viability;
 - (B) Sustained growth of the agriculture industry; and

(C) The long-term agricultural use and protection of these productive agricultural lands.

HRS § 205-42(b)(2).

14. In implementing policies and rules, the State and counties “shall promote the long-term viability of agricultural use of important agricultural lands and shall be consistent with and implement the following policies: . . . (8) Promote the maintenance of essential agricultural infrastructure systems, including irrigation systems.” HRS § 205-43(8).

15. The mandatory protection and promotion of diversified agriculture and IAL must be accounted for when balancing competing interests.

C. BLNR Has the Duty of Reasonable Prudence.

16. “The duties imposed upon the state [under the public trust] are the duties of a trustee and not simply the duties of a good business manager.” Trial Court Order at 33, ¶ 12 (citing *Matter of Conservation Dist. Use Application HA-3568*, 143 Hawai‘i 379, 402, 431 P.3d 752, 793 (2018)).

A trustee’s duties include:

(a) the duty to preserve trust property using the care and skill of a person of ordinary prudence. *Ching v. Case*, 145 Hawai‘i 148, 177, [449 P.3d 1146, 1175] (2019); *Matter of Estate of Dwight*, 67 Haw. 139, 146, [681 P.2d 563, 568] (1984).

(b) the duty to administer the trust solely in the interest of the beneficiary. *Ahuna v. DHHL*, 64 Haw. 327, 340, [640 P.2d 1161, 1169] (1982). In administering the trust, the trustee must exercise ordinary prudence, (or exercise any greater skill if the trustee holds itself out to possess such skill). Restatement (Second) of Trusts §174 (1959).

(c) the duty to “use reasonable skill and care to make trust property productive, or simply ... act as an ordinary and prudent person would in dealing with his own property.” *Id.* (citation omitted).

(d) the duty to comply with the terms of the trust. *Awakuni v. Awana*, 115 Hawai‘i 126, 135, [n.8, 165 P.3d 1027, 1036, n.8] (2007) (agreeing that “the extent of the duties of a trustee depends primarily upon the terms of the trust.”)

Trial Order at 33, ¶ 12

17. “The standard of ‘reasonable prudence’ does not require perfect judgment.” Trial Order at 33, ¶ 13. “We understand that a trustee is not expected to be infallible in his judgments or decisions.” *Id.* at 33, ¶ 12 (citations omitted).

D. BLNR Must Make Decisions Based on Best Available Information, Not Best Possible Information.

18. An administrative agency’s determination of what would protect instream values of the stream must be made on the best available information. *Waiāhole I*, 94 Hawai‘i at 156, 9 P.3d at 469 (directing CWRM to set interim streamflow standards “based on the best information presently available”); *id.* at 158-59, 9 P.3d at 470-71 (CWRM’s “inability to designate more definitive flow standards neither allows the prolonged deferral of the question of instream use protection nor necessarily precludes present and future allocations for offstream purposes”; rather, CWRM must apply a “methodology that recognizes the preliminary and incomplete nature of existence evidence” and “incorporate[] elements of uncertainty and risk as part of its analysis”); *In re Water Use Permit Applications*, 105 Hawai‘i 1, 23, 93 P.3d 643, 665 (2004) (“*Waiāhole II*”) (reminding CWRM that it “must continue making decisions based on the best information available”).

19. There is no legal requirement for an agency to hold off on decision making until the best possible information is obtained.

20. Especially here where the RPs are needed to provide an uninterrupted source of water for domestic and agricultural purposes, it would be unreasonable and impracticable to delay decision making until the best possible information is obtained.

III. APPLYING BLNR’S DUTIES TO THE EVIDENCE SUPPORTS CONTINUING THE RPS FOR CALENDAR YEAR 2022.

A. Continuing the RPs for Calendar Year 2022 Is in the Best Interest of the State.

21. The Hearing Officer must determine whether continuing the RPs for calendar year 2022, and under what conditions, “will best serve the interests of the State[.]” HRS § 171-58(c). In making that determination, the Hearing Officer must balance the public trust doctrine’s dual mandates of (1) resource protection; and (2) maximum reasonable and beneficial use. *Waiāhole I*, 94 Hawai‘i at 139, 9 P.3d at 451.

22. In its 2018 D&O, CWRM recognized that “[t]he public interest includes not only protecting instream values but also preserving agricultural lands and assuring adequate water supplies for Maui.” Ex. J-14 at 000290 (¶ d).

23. CWRM “also recognized that there is significant value in the noninstream uses which include municipal use, which includes domestic use, and agricultural use.” Ex. J-14 at

000282 (¶ 129). The value of the noninstream uses “also ensures the continued presence of agriculture in central Maui, a value which has been incorporated by the community through its inclusion in the Maui Island Plan/General Plan 2030, the Countywide Policy Plan, and the various Community Plans.” *Id.*

24. CWRM expressly stated that its intent was “to ensure that a sufficient amount of offstream water is available to support the cultivation of diversified agricultural crops on lands designated as [IAL] in central Maui. Our best estimate is that we have provided for about 90% of the irrigation needs for 23,000 acres of IAL.” *Id.* at p. vi.

25. CWRM recognized that use of east Maui stream water for diversified agriculture is a reasonable and beneficial use and that a total of approximately 115 mgd of water is needed to support diversified agriculture in central Maui. *See* Ex. J-14 at 000022 (“Yet, we believe it to be reasonable and beneficial to use a portion of East Maui stream water for the development of diversified agriculture on Maui’s central plains.”).

26. Likewise, the Environmental Court recognized that the water diverted pursuant to the RPs is used for diversified agriculture on land zoned for agriculture, and that approximately 22,254 acres of the former HC&S lands are designated Important Agricultural Lands, meaning they (1) are capable of producing sustained high agricultural yields when treated and managed according to accepted farming methods and technology, (2) contribute to the State’s economic base and produce agricultural commodities for export or local consumption, or (3) are needed to promote the expansion of agricultural activities and income for the future, even if currently not in production. Trial Order at 38-39, ¶ 39.

27. The Environmental Court concluded that “[g]iven that hold-over RPs are allowed, per the above FOFs, the *court concludes the Board had enough information to reasonably conclude that allowing the continued holdover of the two RPs for one year each would be in the public interest and meet the Board’s constitutional duty to conserve and protect agricultural lands and promote diversified agriculture and other beneficial uses.*” Trial Order 39, ¶ 42 (emphasis added).

28. As discussed *supra*, there are a number of reasonable and beneficial uses that rely upon the water diverted pursuant to the RPs. The County uses the water to supply its Nahiku and Upcountry customers, including residents and businesses, as well as the County’s Kula

Agricultural Park. Mahi Pono relies upon the water diverted pursuant to the RPs for its diversified agriculture farming operations which seeks to transform 30,000 acres in central Maui—22,254 of which are IAL—from vacant former sugar cane fields to a diversified portfolio of food crops, which will provide a nutritional yield that is sustainable and resilient.

29. Through its farming operations, Mahi Pono has contributed to the diversification and security of Maui's economy by creating 300 full-time jobs that are not tied to the hospitality industry and thus are not affected by the swings in tourism, as evidenced by the fact that Mahi Pono did not need to lay off a single employee as a result of the Covid-19 pandemic. Mahi Pono intends to continue its hiring so long as its farming operations remain viable and, at full buildout, Mahi Pono anticipates employing 793 people.

30. Mahi Pono's farming operations also contribute to Hawaii's food security by locally growing produce for consumption by Hawai'i residents. As the Covid-19 pandemic demonstrated, there is an urgent need to reduce Hawaii's dependence on imported foods and, as a result, increasing Hawaii's level of agricultural self-sufficiency has become a priority. Mahi Pono's current and future farming operations will contribute significantly towards reaching the goal of self-sufficiency.

31. Based on the evidence, the Hearing Officer concludes that continuing the RPs for calendar year 2022 would best serve the interests of the State.

B. The Balance of Reasonable-Beneficial Uses and Harm Weighs in Favor of Continuing the RPs with a 40 mgd Cap.

32. The question now is what conditions, if any, must be imposed on the continuation of the RPs to (1) best serve the interests of the State; and (2) balance the public trust's dual mandate of resource protection and maximum reasonable and beneficial use.

33. The evidence of the amount of water needed for Mahi Pono's currently planted crops shows that capping diversions at 25 mgd, as Sierra Club requests, would essentially freeze Mahi Pono's farming operations indefinitely. At that level of diversions there would be insufficient water to support the additional acreages that Mahi Pono intends to plant in 2022. This also means that the concomitant increase in employment and food security would also be stopped.

34. This certain harm to Mahi Pono's farming operations must be weighed against the harm to instream values.

35. Considering the best available information, there is nothing that identifies a specific threat caused by the continuation of the RPs that BLNR must immediately mitigate.

36. Dr. Fretz testified that mosquitos may breed in abandoned diversion structures and mosquitos generally pose a threat to native birds. However, Dr. Fretz also testified that the diversion structures are not the sole breeding grounds for mosquitos and that CWRM is currently working with DOFAW and EMI to address these diversion structures.

37. As to invasive species, Dr. Fretz testified regarding invasive species that are generally found in the RP Areas, but when asked about invasive species that are spread by the EMI Ditch System, Dr. Fretz only noted that unidentified invasive species could be spread by personnel and equipment. Dr. Fretz also noted that EMI is an active member of the East Maui Watershed Partnership which participates in management of the east Maui watershed.

38. Dr. Reynolds testified regarding the endangered damselfly that had been spotted in the east Maui watershed, but there was no testimony as to what additional stream flows, if any, would be needed to support the damselfly and from which streams.

39. The burden of determining what amount of stream flow needs to remain in the stream to protect instream values does not fall on A&B/EMI as the applicant. “[T]he burden in setting IIFS is on [the agency]” as it has the duty to “protect instream values to the extent practicable.” *In re ‘Iao Ground Water Mgmt. Area High-Level Source Water Use Permit Applications*, 128 Hawai‘i 228, 257, 287 P.3d 129, 158 (2012) (quotation marks and citation omitted).

40. As to the 12 Streams, Dr. Strauch testified that he no longer believes that the 12 Streams “support limited to no recruitment.” However, Dr. Strauch also testified that the additional data being collected by CWRM staff on the 12 Streams is not complete, has not yet been analyzed and the timeline for completing that analysis is not clear. Dr. Strauch did not provide any testimony as to which of the 12 Streams, if any, would require additional stream flow or what stream flow would be “necessary to protect the public interest in the particular stream.” HRS § 174C-71(1)(C). That is something that will be decided by CWRM in resolving Sierra Club’s 2021 IIFS Petition.

41. In the meantime, water is needed for the County’s domestic and agricultural water use and Mahi Pono’s diversified agriculture farming operations. The question is whether the

amount of water that may be diverted pursuant to the RPs should be limited to some amount less than the 40 mgd requested by A&B/EMI to protect the instream values.

42. Where, as here, “the matter before the agency ‘involves an allegation of harm that is not readily ascertainable, the [agency] may nevertheless permit existing and proposed diversions of water if [the applicant] can demonstrate that such diversions are reasonable-beneficial notwithstanding [the potential harm].’” Trial Order at 38 (¶ 36) (quoting *In re Contested Case Hearing on Water Use Permit Application Filed by Kukui (Molokai), Inc.*, 116 Hawai‘i 481, 499, 174 P.3d 320, 338 (2007)).

43. As discussed *supra*, A&B/EMI have demonstrated that the proposed diversion of water is reasonable-beneficial notwithstanding the generalized harm alleged here.

44. Moreover, there is nothing to indicate that allowing water to be diverted from the 12 Streams in the short-term (*i.e.*, for the remainder of 2022) would cause any irreversible damage. As the Environmental Court noted, it is “clear that even when streams have been diverted for years, they will likely recover if and when flows are returned.” Trial Order at 24 (¶ J.7).

45. In fact, the restoration of water to streams in the east Maui watershed is on an upward trajectory. Diversion of up to 40 mgd, as proposed by A&B/EMI, is significantly less than the 165 mgd that was being diverted during sugar cultivation and is less than half the amount that CWRM had anticipated would be available to support diversified agriculture in central Maui.

46. Balancing the need for resource protection and maximization of reasonable and beneficial use and based on the best available information, the Hearing Officer concludes that the balance weighs in favor of allowing the diversion of up to 40 mgd in 2022.

C. Water Use Limits of 2,500 gad in Designated Water Management Areas Implemented in Nā Wai ‘Ehā and Waiāhole Will Not Be Imported and Applied to the RPs.

47. Sierra Club argues that the 2,500 gad water duty from the Nā Wai ‘Ehā D&O and *Waiāhole I* should be imported and applied to the RPs.

48. As discussed *supra*, unlike in the Nā Wai ‘Ehā CCH and *Waiāhole I*, none of the streams at issue here are in a designated water management area. Therefore, limitations imposed by CWRM on surface water use permits in a designated water management area are inapplicable here.

49. Moreover, the Hawai‘i Supreme Court made clear that its affirmance of the 2,500 gad water duty in *Waiāhole I* “does not condone a blanket application of 2,500 gad to all future allotments of water for diversified agriculture.” *Waiāhole II*, 105 Hawai‘i at 23, 93 P.3d at 665. “Instead, the [agency] must continue making decisions based on the best information available.” *Id.* The best information available shows that Mahi Pono needs more than the 2,500 gad for its diversified farming operations.

50. Even assuming for the sake of argument that CWRM’s 2,500 gad water duty applied here, that duty is applied to total plantable acres, which is 30,000 acres here. Applying the 2,500 gad water duty to the 30,000 plantable acres would result in 75 mgd, which exceeds the 40 mgd Mahi Pono anticipates will be needed in 2022.

51. Sierra Club also seeks to limit the amount of water diverted to 2,500 gad per day based on the terms of a proposed settlement agreement (which CWRM did not adopt) in the Nā Wai ‘Ehā CCH. RB at 4.

52. The public policy reasons for deeming settlements inadmissible as evidence of a party’s obligations or liabilities are well-established. *See State v. Gano*, 92 Hawai‘i 161, 167, 988 P.2d 1153, 1159 (1999) (“To allow admissions or evidence of settlement negotiations into evidence would hamper the negotiation and settlement process of our legal system and is therefore against the public policy of this jurisdiction.”) (internal citations omitted); *Han v. Yang*, 84 Hawai‘i 162, 167, 931 P.2d 604, 609 (Ct. App. 1997) (public policy “favors the resolution of controversies through compromise or settlement rather than by litigation”) (citations omitted).

53. As noted by the Hearings Officer during the contested case hearing, the settlement agreement “is a discussion among the parties; it was not any official decision” and “has all kinds of other things that factor into that decision.” Case, 12/9/2021 audio recording at 1:56:13 – 1:56:35.

54. The terms of the proposed settlement agreement do not serve as a basis for limiting the amount of water that may be diverted pursuant to the RPs.

D. A&B/EMI Satisfied the Burden to Prove Water Needs for 2022.

55. The requirement that an applicant must demonstrate its “actual needs and, within the constraints of available knowledge, the propriety of draining water from public streams to satisfy those needs” comes from *Waiāhole I*, 94 Hawai‘i at 162, 9 P.3d at 474. As discussed in

the findings, *Waiāhole I* addressed the standard for a water use permit in a designated water management area. As it is undisputed that none of the streams at issue are located in a designated water management area, the standard set forth in *Waiāhole I* is not directly applicable here.

56. The Hearing Officer will nonetheless consider whether A&B/EMI's evidence is sufficient to establish their "actual needs and, within the constraints of available knowledge, the propriety of draining water from public streams to satisfy those needs".

57. A&B/EMI presented evidence of Mahi Pono's water needs for diversified agriculture in Central Maui.

58. As discussed in the findings, the evidence supports Mahi Pono's estimate of 21.79 mgd for its diversified agriculture operations in 2022.

59. In line with the rationale outlined by the Environmental Court, the Hearing Officer concludes that is not improper to rely on Mahi Pono's estimates even though there is a possibility that Mahi Pono's actual use will be less than the amount predicted. *See* Trial Order at 19 ("The court finds and concludes that the amount of water actually used by Mahi Pono in the first quarter of 2020 for diversified agriculture was less than the amount it predicted, and this fact does not mean it was improper for the BLNR to rely on Mahi Pono's initial estimates in setting the 45MGD limit. Mahi Pono was essentially starting from scratch, during a historic change, in a new market where the actual use of water depends on variables that Mahi Pono has little control over. Realistically, the court concludes that Mahi Pono deserves some time and mileage to gain experience and figure things out."). The public trust doctrine does not require the agency to demand perfect information; rather decisions must be made on the best available information. *See, e.g., Waiāhole II*, 105 Hawai'i at 23, 93 P.3d at 665.

60. Also as discussed in the findings, it is reasonable to provide a cushion to allow Mahi Pono some flexibility as it continues to further develop and refine its diversified agriculture plan. *See, e.g.,* Trial Order at 20. Here, a 4 mgd cushion, which is 10% of the total anticipated water needs and 20% of the projected diversified agriculture water needs is reasonable and warranted.

61. Sierra Club argued that the Hawai'i Supreme Court has held that cushions are categorically violative of the public trust doctrine. That is an incorrect interpretation of Hawai'i Supreme Court precedent.

62. In *Waiāhole I*, the Hawai‘i Supreme Court vacated CWRM’s decision to allocate water in a designated water management area to a “nonpermitted groundwater buffer” prior to completing the process of setting IFS for the subject streams. 94 Hawai‘i at 156, 9 P.3d at 468. The Court explained that “[i]f the Commission determines the minimum instream flows *first*, as contemplated by the [State Water] Code, it need not designate formal ‘buffer’ flows for the sake of precaution.” *Id.* The Court further explained 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.*

63. As discussed in the findings, none of the streams at issue are in a designated water management area and, therefore, the requirements for a surface water use permit are inapplicable here. *See, e.g.*, Trial Order at 41 (stating that “discussion of what is required for a water use permit is inapposite” to decision on the continuation of the RPs).

64. Moreover, also as discussed in the findings, providing for a 4 mgd cushion does not *ipso facto* mean that that water will be unnecessarily diverted or even diverted at all. There are existing conditions that require water be diverted for reasonable and beneficial uses only and that no water shall be wasted. By continuing the RPs and allowing a certain amount of water to be diverted, BLNR is not writing A&B/EMI a “blank check.” BLNR maintains supervisory authority to oversee the diversion of water pursuant to the RPs and requires A&B/EMI to submit quarterly reports that include, among other things, the amount of water that has been diverted.

65. For these reasons, the Hearing Officer concludes that considering 4 mgd as a cushion only in relation to setting the cap does not violate BLNR’s public trust obligations and is reasonable and warranted under the circumstances.

66. The evidence demonstrates that at least 7.5 mgd must be made available to the County in 2022. The “County’s water use cannot safely be limited based on past averages, because the County needs flexibility in the amount of water it is able to use from the EMI system. At times it will need more than at other times.” Trial Order at 29 (citations omitted).

67. The evidence supports the estimates of 1.1 mgd for Historic / Industrial Uses and 5.7 mgd for Reservoir / Fire Protection / Evaporation / Dust Control / Hydroelectric.

68. As discussed in the findings, Mahi Pono must be given some time and flexibility to develop its farming operations and work towards reaching the “critical mass” described by Mr.

Howe. In addition, EMI must be given some time and flexibility to adapt a system designed to transport extremely large volumes of water to a system that can more efficiently transport the relatively smaller volumes of water currently needed by Mahi Pono and the County.

69. In sum, the Hearing Officer concludes that A&B/EMI have satisfied their burden and presented credible evidence that 40 mgd (based on an annual average) is a reasonable cap to impose on water to be diverted from the RP Areas in 2022.

E. There Is No New Evidence of Realistic Alternatives or Mitigation Measures to Require as a Condition of the Continuation of the RPs.

70. The requirement that “permit applicants must also demonstrate the absence of practicable mitigating measures” also derives from *Waiāhole I*, 94 Hawai‘i at 161, 9 P.3d at 985. As stated *supra*, *Waiāhole I* applies to applications for water use permits for a designated water management area but here, “it is undisputed that none of the streams are in a designated water management area, and therefore, discussion of what is required for a water use permit is inapposite.” Trial Order at 41, ¶ 49. As noted in Chief Justice Recktenwald’s concurring and dissenting opinion in *Kauai Springs*, “the need to consider practicable alternative water sources . . . have their genesis in the State Water Code and thereby fall under the duties of the Water Commission.” 133 Hawai‘i at 184 n.3, 324 P.3d at 994 n.3 (Recktenwald, C.J., concurring and dissenting)

71. Nevertheless, the Environmental Court considered this standard and found that it was satisfied by the record presented to the BLNR in deciding to continue the RPs for calendar years 2019 and 2020. *See id.* at 37-38. Likewise, the Hearing Officer also considers this standard and finds it satisfied by the record.

72. The Environmental Court determined that “[b]esides advocating the social and economic utility of their proposed uses, permit applicants must also demonstrate the absence of practicable mitigating measures, including the use of alternative water sources.” Trial Order at 37, ¶ 34 (quoting *Waiāhole I*, 94 Hawai‘i at 161, 9 P.3d at 473). “Considering whether alternative water resources are practicable innately requires prioritizing among public trust resources.” Trial Order at 37, ¶ 35 (quoting *Waiāhole II*, 105 Hawai‘i at 20, 93 P.3d at 662).

73. While a public trustee should “protect public trust uses whenever feasible,” “feasible” does not merely mean “capable of achievement.” It still requires the balancing of

benefits and costs. Trial Order at 40, ¶ 45; see *Waiāhole I*, 94 Hawai‘i at 141 n.39, 9 P.3d at 453 n.39.

74. The inquiry regarding practicable mitigating measures and alternative water sources and the balancing of instream and offstream uses is necessarily undertaken within “the *constraints of available knowledge*” and consideration of the “best *available* information,” *Waiāhole I*, 94 Hawai‘i at 158, 161-62, 9 P.3d at 470, 473-74 (emphasis added), as opposed to all *possible* information. See Trial Order at 37, ¶ 33 (“The lack of complete information, even potentially useful information, does not prohibit the Board from allowing offstream use.”); *Waiāhole I*, 94 Hawai‘i at 158-59, 9 P.3d at 470-71 (CWRM’s “inability to designate more definitive flow standards neither allows the prolonged deferral of the question of instream use protection nor necessarily precludes present and future allocations for offstream purposes”; rather, CWRM must apply a “methodology that recognizes the preliminary and incomplete nature of existence evidence” and “incorporate[] elements of uncertainty and risk as part of its analysis”).

75. At Trial, the Environmental Court determined that it was “not aware of any evidence from any source that there is any present realistic alternative to the EMI ditch system providing the necessary water for upcountry residents and Mahi Pono’s farmers on Maui’s central plain.” Trial Order at 24, ¶ 1. The Hearing Officer reaches the same conclusion. For the diversion of up to 40 mgd in 2022 for the demonstrated water needs, there is no present realistic alternative source of water to the water diverted from the RP Areas and delivered through the EMI Ditch System.

76. Currently, Mahi Pono uses ground water only when there is insufficient surface water to meet Mahi Pono’s irrigation demand. Decl. of Howe ¶ 19. As discussed in the findings, requiring more ground water be used is not a practicable alternative to the RPs in light of the uncertainty as to how much water can be pumped without causing a drawdown in the aquifers and/or saline intrusion and the attendant risk to Mahi Pono’s crops. As the Environmental Court determined, it is reasonable for the Board to prioritize amongst trust resources by allocating the water from the EMI Ditch System for the proposed beneficial uses and “allowing the finite groundwater resource to be preserved for future uses.” Trial Order at 37-38, ¶ 35.

77. The Hearing Officer further concludes that A&B/EMI have demonstrated the absence of other practicable mitigating measures for the RPs. The BLNR has already imposed

many conditions upon the RPs in the interest of protecting public trust uses “whenever feasible” and balancing the benefits and costs of the diversions. Ex. Y-22 at 7-9 (listing conditions imposed between 2016 and 2019). Mahi Pono has made, and continues to make, significant efforts and progress in increasing its water efficiency, spending over \$20 million on improvements. EMI is working with DOFAW and CWRM to address potential ponding in diversion structures that may foster mosquitos. CWRM proceedings are ongoing to address the removal of diversion structures, and CWRM is also considering Sierra Club’s 2021 IIFS Petition for the 12 Streams. The existing RP conditions and those recommended by BLNR staff in the November 2020 submittal, *see* Ex. Y-22, are reasonable and constitute practicable mitigating measures to balance the dual mandates of protection and maximum reasonable and beneficial uses.

78. Sierra Club’s contentions to the contrary are unsupported. First, its proposal to terminate the RPs for the Nahiku, Keanae, and Honomanu license areas and limit diversions from the streams within the Huelo license area is not practicable given that the EMI Ditch System operates as a single coordinated system that covers 50,000 acres, including all four license areas. All four license areas must be maintained to avoid substantial harm to Mahi Pono’s farming operations and the County’s operations, among other users. Furthermore, the 12 Streams lie, in part, on land privately owned by EMI and BLNR lacks authority to prevent EMI from diverting water that originates on its own land or to set streamflow standards for those portions of the streams on EMI’s land.

79. It bears repeating that the stream flows of the 12 Streams are being addressed by CWRM in the context of Sierra Club’s 2021 IIFS Petition. Unlike the BLNR, CWRM does have the authority to manage all streams regardless of whether the stream is located on State land or privately owned land. *See* HRS § 174C-71(1)(D). As stated *supra*, the purpose of this hearing is not to duplicate the efforts of CWRM nor will BLNR interfere with CWRM’s ongoing proceedings.

80. Second, Sierra Club’s proposed conditions regarding providing water to the County “for free,” hiking access, DOFAW access, and traditional and customary practices are not practicable, reasonable, and/or necessary.

81. Third, imposing a surcharge on the RPs to manage invasive species in the RP Areas is not practicable or necessary where there is no evidence that the problem is caused solely by the

EMI Ditch System. Mahi Pono's per unit water delivery costs cannot be compared on a one-to-one basis with that of other farmers, given that Mahi Pono incurs the substantial costs of owning and maintaining the complex water delivery system.

82. Fourth, the issue of lining reservoirs and ditches was covered, or could have been covered, at Trial, and is thus outside the permissible scope of this hearing. There was no new evidence requiring reconsideration of this issue and the Hearing Officer concludes that lining one or more reservoirs and ditches is not a practicable mitigation measure. Likewise, covering one or more reservoirs is not a practicable mitigation measure given the balancing of benefits and costs.

83. Finally, requiring the removal of diversion structures as a condition of the RPs was covered at Trial. The same conclusion is reached here; there are ongoing CWRM proceedings addressing this issue and it is neither necessary nor reasonable to require removal as a condition of the RPs.

84. In sum, the Hearing Officer concludes that A&B/EMI have demonstrated the absence of practicable mitigating measures, including the use of alternative water sources. *Waiāhole I*, 94 Hawai'i at 161, 9 P.3d at 473. The Hearing Officer will not recommend the imposition of any additional conditions upon the RPs, other than those recommended by BLNR staff in Exhibit Y-22.

DECISION AND ORDER

In consideration of the foregoing Findings of Fact and Conclusions of Law, the Hearing Officer hereby orders:

256. The RPs shall be continued for calendar year 2022. In addition to the conditions that were contained in the original permits, the continuation of the RPs shall be subject to the following conditions that were imposed by BLNR between 2016 and 2020:

- i. Require the holdover of the revocable permits to incorporate the June 20, 2018 CWRM order. There shall be no out of watershed diversions from the streams listed as full restoration streams in the CWRM order, and the timing for stopping the diversions shall be in accordance with the aforesaid CWRM order.
- ii. There shall be no waste of water. All water diverted shall be put to beneficial agricultural or municipal use.
- iii. Any amount of water diverted under the revocable permits shall be for reasonable and beneficial use and always in compliance with the amended interim instream flow standards (IIFS).

- iv. The holdover shall comply with all conditions required by the CWRM's Amended IIFS decision.
- v. Permittee shall provide a specific report on the progress regarding the removal of diversions and fixing of the pipe issues before the end of the holdover period.
- vi. Permittee shall cleanup trash from revocable permit areas starting with areas that are accessible and close to streams.
- vii. The revocable permits shall be subject to any existing or future reservations of water for the Department of Hawaiian Home Lands (DHHL).
- viii. Establish an interim committee to discuss water usage issues in the license area. The committee shall consist of five members, representing Alexander & Baldwin, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation and the County of Maui. The interim committee shall meet once a month for the first quarter, then at least quarterly thereafter, more often as useful.
- ix. Permittee shall provide quarterly written reports to the Board containing the following information:
 - a. The amount of water used on monthly basis, including the monthly amount of water delivered for: the County of Maui Department of Water Supply (DWS) and the County of Maui Kula Agricultural Park; diversified agriculture; industrial and non-agricultural uses, and resvoir/fireprotection/hydroelectric uses. Also, provide an estimate of the system loss for the EMI ditch system and the A&B field system. Diversified agricultural uses shall also provide information as to location, crop, and user of the water. Industrial and non-agricultural uses shall specify the character and purpose of water use and the user of the water.
 - b. For each stream that is subject to the CWRM order, a status update as to the degree to which the flow of each stream has been restored, and which artificial structures have been removed as required by CWRM.
 - c. Update on removal of trash, unused man-made structures, equipment and debris that serve no useful purpose, including documenting any reports of such items from the Department, other public or private entities and members of the general public and action taken by Permittee to remove the reported items.
 - d. The method and timeline for discontinuing the diversion of water from Waipio and Hanehoi streams into Ho'olawa stream, including status updates on implementation.
- x. The Permittee may not divert an amount of water exceeding an average of 45 million gallons per day (mgd), averaged annually, for all permits

combined, further subject to all water diverted shall be for reasonable and beneficial uses.

- xi. For RP S-7266, the area identified as the Hanawī Natural Area Reserve shall be removed from the revocable permit premises. Additionally, A&B/EMI shall continue discussions with DOFAW to identify additional forest reserve lands to be removed from the license areas to be implemented in connection with the issuance of a water lease, if any, or sooner.
- xii. Require Mahi Pono to advise any third-party lessees that their decisions be based on month to month revocable permit for water use until a lease is completed.
- xiii. For the streams in the revocable permit area that have not had interim instream flow standards set, Permittee shall continue to clean up and remove debris from the permit areas and staff shall inspect and report every three months on the progress of the clean-up. For the purposes of clean-up, debris shall not include any structures and equipment currently used for water diversions.
- xiv. Staff is to inspect the streams and report on whether those lands could be developed for agricultural uses, including the viability of agricultural land or water leases.
- xv. Permittee shall cooperate with CWRM and DAR in studies, site inspections and other actions as necessary to address the streams in the license areas not covered by the CWRM order.
- xvi. Permittee shall work with CWRM and DOFAW to determine whether there are alternatives to diversion removal that effectively prevent mosquito breeding and can be feasibly implemented. Permittee shall include the status of alternatives in their quarterly reports.
- xvii. If the Board finds that a use of water is not reasonable and beneficial and does not comply with the permitted uses, Permittee shall cease such use within a timeframe as determined by the Department.
- xviii. For water used for agricultural crops, Permittee are to estimate how much water is required for each crop per acre per day.
- xix. Permittee shall 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.
- xx. Permittee shall pay the 2021 monthly rent amounts as determined [in the staff submittal].
- xxi. "Trash and debris" shall be further defined as "any loose or dislodged diversion material such as concrete, rebar, steel grating, corrugated metals, railroad ties, etc., that can be removed by hand (or by light equipment that can access the stream as is)."

- xxii. System losses and evaporation shall not be considered as a waste of water.
- xxiii. A representative of the Huelo Community Association shall be added to the interim discussion group first authorized in 2018.
- xxiv. Permittee shall look into supplying the Maui Invasive Species Committee with water, and if feasible, and despite not being an agricultural use, be considered a reasonable and beneficial use and permitted use under the RPs.
- xxv. Permittee is to work with the Maui Fire Department to determine what their exact fire needs are.

Ex. Y-22 at 26-27.

DATED: Honolulu, Hawai'i, _____.

SUZANNE CASE
Hearing Officer

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

In the Matter of a Contested Case
Regarding the Continuation of Revocable
Permits (RPs) for Tax Map Key Nos.
(2) 1-1-001 :044 & 050; (2) 2-9-014:001,
005, 011, 012 & 017; (2) 1-1-002:002 (por.)
and (2) 1-2-004:005 & 007 for Water Use on
the Island of Maui to Alexander & Baldwin,
Inc. (A&B) and East Maui Irrigation
Company, LLC (EMI) for the remainder of
the 2021 RPs, if applicable, and for their
continuation through the end of 2022

DLNR File No. CCH-LD-21-01

CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to Minute Order No. 3, a copy of the foregoing document
will be served via email on this date to the following parties as noted below:

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