

AMENDED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

December 13, 2024

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

MAUI

Issuance of Revocable Permit to Alexander & Baldwin, Inc. and East Maui Irrigation Company, LLC for the Development, Diversion, and Use of Surface Water for Diversified Agriculture, Currently Existing Historical Industrial and Non-Agricultural Uses, Reservoir, Fire Protection, Hydroelectric, and County of Maui Department of Water Supply and Kula Agricultural Park Purposes on the Island of Maui; Tax Map Keys: (2) 1-1-001:044 and 050, 1-1-002:002 (por.), 1-2-004:005 & 007, 2-9-014:001, 005, 011, 012 & 017.

Pursuant to Section 92-5(a) (4), Hawaii Revised Statutes (HRS), the Board may go into Executive Session in order to consult with its attorney on questions and issues pertaining to the Board's powers, duties, privileges, immunities and liabilities.

APPLICANT:

Alexander & Baldwin, Inc., a domestic profit corporation; and East Maui Irrigation Company, LLC, a domestic limited liability company; hereafter collectively referred to as "Applicant".

LEGAL REFERENCE:

Sections 171-13 and -55, Hawaii Revised Statutes (HRS), as amended.

LOCATION:

Portion of government waters from streams located in the Koolau Forest Reserve situated at Hana, Maui, identified by Tax Map Keys: (2) 1-1-001:044 and 050, 1-1-002:002 (por.), 1-2-004:005 & 007, 2-9-014:001, 005, 011, 012 & 017, as shown on the attached maps labeled **Exhibit A**.

TRUST LAND STATUS:

Section 5(b) lands of the Hawaii Admission Act
DHHL 30% entitlement lands pursuant to the Hawaii State Constitution: YES

as amended
APPROVED BY THE BOARD OF
LAND AND NATURAL RESOURCES
AT ITS MEETING HELD ON
December 13, 2024 KH

CURRENT USE STATUS:

Encumbered by revocable permit Alexander & Baldwin, Inc. and East Maui Irrigation Company, Limited, for right, privilege and authority for the development, diversion, and use of water purposes.

CHARACTER OF USE:

Diversified agriculture, currently existing historical industrial and non-agricultural uses, reservoir, fire protection, hydroelectric, and County of Maui Department of Water Supply and Kula Agricultural Park purposes.

COMMENCEMENT DATE:

January 1, 2025.

MONTHLY RENTAL:

\$23,598.00 per month.

COLLATERAL SECURITY DEPOSIT:

Twice the monthly rental.

CHAPTER 343 - ENVIRONMENTAL ASSESSMENT:

A Final Environmental Impact Statement (FEIS) was published in the Environmental Review Program's Environmental Notice on September 8, 2021, and accepted by the Board at its meeting on September 24, 2021 under agenda item D-7. The FEIS discussed in the Board submittal covers the state action contained in the permit. Therefore, under HAR 11-200.1-11(a) the Board is recommended to find that the existing FEIS covers the existing state action, the anticipated cumulative effects are similar or the same as the FEIS, and the FEIS already covers the range of alternatives to the proposed action. For reference, below are links to the FEIS and supporting documents:

https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2021-09-08-MA-FEIS-corrected-East-Maui-Water-Lease-Vol-1.pdf

https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2021-09-08-MA-FEIS-corrected-East-Maui-Water-Lease-Vol-2.pdf

https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2021-09-08-MA-FEIS-corrected-East-Maui-Water-Lease-Vol-3.pdf

https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2021-09-08-MA-FEIS-corrected-East-Maui-Water-Lease-Vol-4.pdf

https://files.hawaii.gov/dbedt/erp/EA_EIS_Library/2021-09-08-MA-FEIS-corrected-East-Maui-Water-Lease-Vol-5.pdf

DCCA VERIFICATION:

Place of business registration confirmed:	YES
Registered business name confirmed:	YES
Applicant in good standing confirmed:	YES

JUSTIFICATION FOR REVOCABLE PERMIT:

The purpose of this revocable permit is to continue existing uses of water currently allowed under revocable permits to the same Applicant entities. The revocable permit is temporary in nature intended to allow continuing existing uses of water until a long-term water license can be issued via public auction. Staff believes that it is in the State's best interest to issue a new single revocable permit to replace the current revocable permits for the reasons discussed further herein.

BACKGROUND:

The four current revocable permits for the diversion and use of East Maui surface waters have been in effect since 2001. Since that time, the revocable permits have been heavily modified by Board action, contested case decision and order, and court decisions. Rather than seek to continue the four revocable permits for 2024, staff believed that it would be in the best interest of the State to allow the four existing revocable permits to sunset as of December 31, 2023, and for the Board to authorize a single new revocable permit effective January 1, 2024 that consolidates all revocable permit requirements into the single revocable permit document. Staff believed that this would result in greater clarity and transparency and allow for the use of the most recent revocable permit standard form.

At its meeting on December 8, 2023, under agenda item D-8, staff presented the new single revocable permit to the Board for approval. The Board approved staff's recommendation as amended. The staff submittal can be accessed at the following link:

<https://files.hawaii.gov/dlnr/meeting/submittals/231207/D-8.pdf>

The draft Board meeting minutes for the item, including the amendments adopted, can be found on pages 15 and 16 of the document accessed at the following link:

<https://dlnr.hawaii.gov/wp-content/uploads/2024/07/Minutes-231207-D.pdf>

At that meeting, Sierra Club of Hawaii (Sierra Club) verbally requested a contested case hearing and submitted a written request on December 18, 2023. Staff will address the contested case request in a separate submittal. After review of the reports submitted by the Applicant (and current permittee) over the course of 2024, staff believes that further

amendments to the revocable permit are appropriate, so staff is recommending that the Board approve a new revocable permit effective January 1, 2025, subject to new and revised conditions discussed further herein. Accordingly, staff now brings this action before the Board.

DISCUSSION:

Staff recommends that the new revocable permit allow for the development, diversion, and use of water only, as authorized by the current revocable permit, resulting in no disposition of additional land areas. Currently, the Applicant pays a monthly rent for the revocable permit of \$23,000.00 (\$276,000.00 annually). Staff recommends that a monthly rent for 2025 revocable permit in the amount of \$23,598.00 (\$283,176.00 annually). This 2.9% increase reflects the unadjusted percent change in the Consumer Price Index from October 2023 to October 2024.

The Applicant also pays an annual amount of \$139,463.00 to contribute, either in funds or in-kind services, for watershed management activities in addition to rent for the year 2024. Staff is recommending that the Board require the same amount be contributed either in funds or in-kind services for watershed management activities in 2025 as a placeholder, pending further development of a watershed management agreement between the Division of Forestry and Wildlife (DOFAW) and the Applicant to apply to either the new revocable permit, a long-term water license, or both.

Staff is also recommending that as part of the new revocable permit, the Board adopt separate water diversion limits for the Applicant and the County of Maui. Staff believes that this will provide greater accountability and transparency for the respective uses, as well as encourage more efficient water use by all parties. For the Applicant, staff is recommending that the Board limit the diversion of water by the Applicant for their use for diversified agriculture, currently existing historical and non-agricultural uses, reservoir, fire protection, dust control, hydroelectric purposes, and other uses¹ to not exceed **3263 gallons per acre per day (gad) multiplied by the total amount of planted acreage used for diversified agriculture averaged monthly**. This amount is based on the median three-month average of the amount of water used daily by the Applicant for diversified agriculture between January and October of 2024, which were February, March and June of 2024.² The average amounts used for currently existing historical and non-agricultural uses, reservoir, fire protection, dust control, hydroelectric purposes, and other uses for those same months were also included. The average amount of water diverted by the Applicant from streams on privately owned land and not subject to the revocable permit for those months were subtracted; then the remainder amount was divided by the average total planted acreage through October 2024. The following table illustrates how the amount was calculated:

¹ “Other uses” includes system losses and other water diverted for use by the Applicant, excluding any water diverted for use of the County of Maui Department of Water Supply and Kula Agricultural Park.

² Staff believes that it is most appropriate to use the median three months due to the variability in water usage that resulted from the annual average.

Median three-month average amount of water used by Applicant for: - diversified agriculture - historical and non-agricultural uses - reservoir - fire protection - dust control - hydroelectric purposes - other uses including system losses	34.92 mgd
Less the median three-month average amount of water diverted by Applicant from streams located on private land.	-0.85 mgd
TOTAL	= 34.07 mgd
Estimated year-to-date planted acreage through October 31, 2024	/10,442 acres
Maximum daily allocation averaged monthly (multiplied by the current total planted acreage as adjusted)	= 3263 gad

Staff recommends that rather than establish a fixed total maximum amount allowed to be diverted under the revocable permit, the Board approve a variable total amount equal to the allocation of 3263 gad multiplied by the current total planted acreage. As more acreage is planted, the maximum amount of water allowed to be diverted would increase accordingly. This would alleviate the need to conjecture how much acreage will be planted in 2025. Staff would be able to ensure compliance by reviewing the monthly water use reports that would indicate the total amount diverted and then dividing by the total planted acreage to determine whether the Applicant is in compliance with the 3263 gad limit. Copies of the most recent quarterly water use report through September 2024, and the most recent monthly water use report from October 2024 are attached as **Exhibits B and C** respectively.

Staff notes that the Applicant uses groundwater pumped from its privately owned wells to supplement its operational water needs. However, Staff is not factoring in any groundwater use in the calculation of the water allocation. After consultation with the Commission of Water Resource Management (CWRM), Staff was informed that the use of groundwater for non-potable uses such as irrigation is not a highest and best use of groundwater consistent with CWRM's Water Resource Protection Plan (WRPP).³ Therefore, although the Applicant's use of groundwater is not regulated by the Board, Staff does not support an allocation of less surface water under the revocable permit that would, either directly or indirectly, result in a greater use (i.e., to make up the shortfall) of groundwater that would be contrary to CWRM's WRPP.

Pursuant to CWRM's analysis, under current Interim Instream Flow Standards (IIFS), approximately 56 mgd is estimated to be available for the East Maui transmission system

³ CWRM noted that it is more appropriate to use surface water for crop irrigation.

at median flows. Staff notes that this should not be construed as a fixed cap on the amount of water that can be diverted under the revocable permit. This estimate is based at median flows, meaning that there may be greater or lower amounts of water available, depending on stream conditions. In the event that stream conditions do not allow for the maximum amount of water allowed under the revocable permit to be diverted, then the Applicant shall be required to reduce its diversions to comply with the IIFS. Staff consulted with CWRM staff and was informed that the Applicant diversion of water was compliant with the IIFS. CWRM staff also noted that the Applicant was working in good faith to obtain numerous regulatory approvals to remove outstanding diversions in the Huelo region to comply with the 2022 IIFS decision.

As for uses by the County of Maui, the Board is recommended to allow the diversion of water from East Maui state-owned streams that shall not exceed **5.0 mgd, averaged monthly**, for use by the Department of Water Supply and **1.0 mgd, averaged monthly**, for use by the Kula Agricultural Park for total collective limit of **5.0 mgd, averaged monthly**. Staff notes that since January 2024 until October 2024, the County of Maui has an overall average use of 2.01 mgd for the Department of Water Supply and 0.55 mgd for the Kula Agricultural Park. Furthermore, staff notes that during that same period, the monthly average use by the Department of Water Supply never exceeded 4.0 mgd and the monthly average use by the Kula Agricultural Park never exceeded 1.0 mgd. Staff believes that the recommended limits provide enough water to meet the County's needs and also incentivize the County to more efficiently use of the water diverted on its behalf such as expand storage capacity. Also, it will reduce the amount of water currently diverted for the County (total of 7.5 mgd), leaving an additional 2.5 mgd of water in the streams to support stream habitat and instream uses.

Staff recommends that pursuant to the allocation of water to the County of Maui under the revocable permit, the Board require the County of Maui assume responsibility for organizing and scheduling monthly meetings of the interim committee to discuss water usage issues in the areas where the streams that water may be diverted from under this revocable permit are located, consisting of eight members, representing EMI/Mahi Pono, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation, the Huelo Community Association, the Sierra Club, Na Moku Aupuni O Ko'olau Hui and the County of Maui. Given the County of Maui's prior statements regarding their desire to work with interested stakeholders on a disposition of the long-term license, Staff believes it is appropriate for the County to take a lead role in these discussions. Issues to be covered at the meetings shall include but are not limited to: implementing CWRM orders, reducing water losses, water needed by the County of Maui for the Kamaole Treatment Plant and the Kula Agricultural Park, and water reservations for the Department of Hawaiian Home Lands.

For the 2024 revocable permit, the Board approved allocations based on an annual average, rather than a monthly average that had been adopted in past years. Staff recommends that the Board return to a monthly average standard. Staff believes that although this may be more challenging to the Applicant, it is more appropriate to return to using a monthly average to ensure compliance. As of October 2024, the Applicant has diverted a total year

to date average of 32.49 mgd, which currently is lower the Board approved 38.25 mgd total annual average for the Applicant's use in 2024. As the Applicant has two months remaining, staff cannot confirm that the Applicant will be compliance for the entire year prior to the Board making a decision on the new revocable permit for 2025.

In addition to the foregoing, staff recommends that the Board adopt the following additional conditions that were implemented by the Board for the current revocable permits and modified to conform with the requested revocable permit:

- (1) There shall be no waste of water. System losses and evaporation shall not be considered as a waste of water provided that system losses do not exceed 22.7%.⁴ The rate of system losses shall be calculated as the amount of water diverted or extracted into the Mahi Pono field system that is not used for diversified agriculture purposes, excluding the amount of water diverted for the County of Maui; then divided by the total amount of water diverted or extracted into the Mahi Pono field system.
- (2) Any amount of water diverted under the revocable permit shall be for reasonable and beneficial uses consistent with the character of use and always in compliance with the interim instream flow standards (IIFS), as may amended from time to time by CWRM. The Permittee shall also comply with all other conditions required by CWRM regarding the streams that water may be diverted from under this revocable permit, including stream flow restoration and closure of diversions.
- (3) Permittee shall provide a report on the progress regarding the removal of diversions and fixing of the pipe issues before the end of the revocable permit term.
- (4) Permittee shall continue to clean up and remove debris from the areas where the streams that water may be diverted from under this revocable permit are located, and staff shall inspect and report every three months on the progress of the clean-up. For purposes of clean-up, debris shall not include any structure and equipment that is either currently used for the water diversions, or for which CWRM has not required removal; "trash and debris" shall be 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)."
- (5) The revocable permit shall be subject to any existing or future reservations of water for the Department of Hawaiian Home Lands (DHHL).
- (6) Permittee shall coordinate with an interim committee to discuss water usage issues in the areas where the streams that water may be diverted from under this revocable permit are located. The committee shall consist of eight members, representing

⁴ Based on the information provided in the water use reports, Staff calculates the system loss rate based on year-to-date average amounts reported from January 2024 through October 2024 to be approximately 7.6%.

EMI/Mahi Pono, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation, the Huelo Community Association, the Sierra Club, Na Moku Aupuni O Ko'olau Hui and the County of Maui. The interim committee shall meet at least monthly. The County of Maui shall be responsible for organizing and scheduling these meetings.

- (7) It is an essential component to the Board's stewardship of the water resource to understand how much water is being diverted. Permittee shall therefore provide quarterly written reports to the Board of Land and Natural Resources (Board) containing (at a minimum) the following information:
- (a) The amount of water actually used on a monthly basis, including the monthly amount of water delivered for: the County of Maui Department of Water Supply and the County of Maui Kula Agricultural Park; diversified agriculture; industrial and non-agricultural uses; and reservoir/fire protection/ hydroelectric uses. Descriptions of diversified agricultural uses shall also provide information as to acreage, location, crop, and use of the water. Industrial and non-agricultural uses shall specify the character and purpose of water use and the user of the water;
 - (b) The estimated amount of water required for each crop per acre per day for the previous quarter and how much water is projected to be required per acre per day for the forthcoming quarter;
 - (c) The report shall disclose which structures on or next to streams have been removed, which ones have been modified, which ones remain to be modified, what remains to be done before they are modified, what impediments exist to their modification, what agencies need to give their approval before modifications can be made, when the Permittee made requests to the applicable agencies for approval and when the modifications are expected to be completed;
 - (d) Update on removal of trash, unused man-made structures, equipment and debris that serve no useful purpose, including photographs and documenting any reports of such items that Permittee has received from the Department, other public or private entities and members of the general public and the action(s) taken by Permittee, if any, to remove the reported items;
 - (e) A listing of all reservoirs in the A&B/EMI water system serviced by the revocable permit, with the following information provided for each:
 - The capacity of each such reservoir;
 - The surface area of each such reservoir;
 - What fields are irrigated by each such reservoir;

- Which reservoirs are lined, and with what material, and which are not;
 - The estimated amount of evaporation per day from the surface of each such reservoir;
 - An analysis of the cost and time to line at least one such reservoir;
 - Information on any reservoirs planned to be taken out of service;
 - The depth and volume of water in each reservoir (as of the last day of each month);
 - How long it would take on average for each full reservoir to be emptied if no water were to flow into or be deliberately removed from it (i.e. how long until evaporation and seepage drains it); and
 - The amount of water used for hydroelectric purposes, if any.
- (f) The number, location, timing, and approximate acreage of fires fought during the quarter using water from reservoirs supplied with water from the A&B/EMI system;
- (g) The names and locations of the reservoirs from which water was drawn to fight fires during the quarter, and
- (h) A listing of all irrigation wells in the A&B/EMI water system serviced by the RPs, with the water levels and chloride levels in each well that is in active use noted, and

Each quarterly report shall be submitted in a format with tracked changes that clearly show the differences/ updates from the prior quarter.

Such quarterly reports shall be “due” to the DLNR one-month after the last calendar day of the subject quarter. Thus, the reports shall come due as follows:

Q1 Report—April 30, 2025

Q2 Report—July 31, 2025

Q3 Report—October 31, 2025

Q4 Report—January 31, 2026

- (8) In addition to the quarterly report, the Permittee shall provide monthly reports containing at minimum, the Permittee's monthly water use amounts and the total planted acreage.
- (9) Require Permittee to advise any third-party lessees, that any decisions they make are based on these month-to-month revocable permits for water unless or until a license is issued.
- (10) Permittee shall cooperate with CWRM and the Department's Division of Aquatic Resources (DAR) in facilitating studies, site inspections and other actions as necessary to address the streams that water may be diverted from under this revocable permit.
- (11) 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 its quarterly reports.
- (12) 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.
- (13) For water used for agricultural crops, Permittee is to estimate how much water is required for each crop per acre per day.
- (14) Permittee shall look into supplying the Maui Invasive Species Committee with water, and if feasible, and despite it not being an agricultural use, this would be considered a reasonable and beneficial and permitted use under the revocable permit.
- (15) No later than August 1, 2025, Permittee shall provide an updated plan to reduce system losses including planned system upgrades, specific measures to more efficiently use water, proposed implementation timeline, and estimates on the amount that system losses may be reduced.
- (16) Based on the 2018 CWRM Decision and the information presented here, the Board determines that reasonable beneficial use for diversified agriculture to Applicant under a month-to-month revocable permit on 30 days' notice is 3263 gad.
- (17) As a condition of the permit, the Permittee shall provide at least 5.0 mgd to the County of Maui daily, which is the amount the Board finds to be the reasonable and beneficial allocation of water.
- (18) Therefore, the total amount of water allocated under this revocable permit shall be:

- the amount of water equal to 3263 gad multiplied by the total amount of planted acreage to be used by the Permittee for diversified agriculture and other existing uses;
- 5.0 mgd to the County of Maui Department of Water Supply for the Kamaole Treatment Plant;
- 1.0 mgd for the County of Maui Kula Agricultural Park;

All of the above allocations shall be based on a monthly average.

Public Trust Doctrine and Carmichael Analysis

Title to water resources is held in trust by the State for the benefit of its people. Pursuant to *In re Water Use Permits*, 94 Hawaii 97, 9 P.3d 409 (2000) (*Waiāhole I*), and *In re Wai‘ola O Moloka‘i, Inc.*, 103 Hawai‘i 401, 83 P.3d 664 (2004) the Hawai‘i Supreme Court has identified four public trust purposes with respect to water:

1. Maintenance of waters in their natural state;
2. Domestic water use of the general public, particularly drinking water;
3. The exercise of Native Hawaiian and traditional and customary rights, including appurtenant rights; and
4. Reservations for Hawaiian home lands.

In addition, the courts have indicated that the “dual mandate” of the public trust not only calls for the protection of water resources, but also requires the Board 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, 141, 9 P.3d at 451, 453 (“The public has a definite interest in the development and use of water resources for various reasonable and beneficial public and private off-stream purposes, including agriculture.”). In order to satisfy its public trust obligations, the Board must balance the proposed use of water against the foregoing public trust purposes, as well as competing uses.

Of these four purposes, domestic water use is implicated by the use of water by the County of Maui Department of Water Supply. In addition to its public trust duties, the Board also has a constitutional duty to promote diversified agriculture, which is the primary use of water under this revocable permit. With respect to the agricultural use of water, the Hawai‘i Constitution provides:

The State shall conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands.

Hawai‘i Constitution, Article XI, Section 3.

The public lands shall be used for the development of farm and home ownership on as widespread a basis as possible, in accordance with procedures and limitations prescribed by law.

Hawai‘i Constitution, Article XI, Section 10.

Pursuant to the Hawai‘i Supreme Court’s ruling in *Carmichael v. Board of Land and Natural Resources*, the Board may issue the revocable permit on a month-to-month basis for up to one year and continue the revocable permit for additional one-year periods.⁵ However, a decision by the Board to approve the subject revocable permit must demonstrate that such a decision is made in consideration of the “best interests of the State,” as required in section 171-55, Hawaii Revised Statutes (HRS), which states:

Notwithstanding any other law to the contrary, the board of land and natural resources may issue permits for the temporary occupancy of state lands or an interest therein on a month-to-month basis by direct negotiation without public auction, under conditions and rent which will **serve the best interests of the State**, subject, however, to those restrictions as may from time to time be expressly imposed by the board. A permit on a month-to-month basis may continue for a period not to exceed one year from the date of its issuance; provided that the board may allow the permit to continue on a month-to-month basis for additional one year periods.

(Emphasis added.)

In staff’s view, making water available for diversified agriculture supports the long-term viability and security of local agricultural operations, and is both in the best interest of the State and critical to the State’s compliance with the constitutional mandates of Article XI. It also allows for the local production of food, supporting the goal of food sustainability and food security for Hawai‘i. It may also translate into lower prices for consumers when produce does not have to be shipped to Hawai‘i from outside of the state. Any tension between identified public trust uses of water and the constitutional mandates above will be resolved in the process of issuing water leases, because Section 171-58, HRS, requires the joint development of a water reservation to support current and future DHHL homestead needs.

Finally, approval of the revocable permit pursuant to staff’s recommendations would be consistent with legal requirements that they be temporary and under such conditions and rent which serve the best interest of the State. The Applicant has taken steps to convert their permits to long term leases, including working with the Department and DHHL regarding DHHL’s water reservations, seeking or obtaining an IIFS determination from

⁵ The Court noted that the Board may continue revocable permits for the temporary use of water pursuant to Section 171-55, HRS.

CWRM, and complying with Chapter 343, HRS, including preparation of a final environmental impact statement for the long-term water license. Additionally, the East Maui Water Authority (EMWA) has requested that it receive the license, which has been supported by the County of Maui through the Mayor. Given the numerous and complex issues regarding the issuance of a long-term disposition, staff recommends that the issuance of a new revocable permit for 2025 is in the best interest of the State to continue the reasonable and beneficial uses for diversified agriculture, specifically food production, and domestic purposes. Furthermore, Staff believes that based on prior statements, there is consensus among the interested stakeholders in this matter that a revocable permit for 2025 be approved to provide the parties time to discuss and resolve these issues.

RECOMMENDATION: That the Board:

1. Find that the existing Final Environmental Impact Statement (FEIS) covers the proposed revocable permit,
2. Based on the testimony and facts presented, find that approving the revocable permit, under the conditions and rent set forth herein, would serve the best interests of the State and is consistent with the public trust doctrine.
3. Authorize the issuance of a revocable permit to Alexander & Baldwin, Inc. and East Maui Irrigation Company, LLC covering the subject waters for diversified agriculture, currently existing historical industrial and non-agricultural uses, reservoir, fire protection, hydroelectric, and County of Maui Department of Water Supply and Kula Agricultural Park purposes under the terms and conditions cited above, which are by this reference incorporated herein and further subject to the following:
 - a. The standard terms and conditions of the most current revocable permit form, as may be amended from time to time;
 - b. Review and approval by the Department of the Attorney General; and
 - c. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State, including but not limited to the following:
 - (1) There shall be no waste of water. System losses and evaporation shall not be considered as a waste of water provided that system losses do not exceed 22.7%. The rate of system losses shall be calculated as the amount of water diverted or extracted into the Mahi Pono field system that is not used for diversified agriculture purposes, excluding the amount of water diverted for the County of Maui; then divided by the total amount of water diverted or extracted into the Mahi Pono filed system.

- (2) Any amount of water diverted under the revocable permit shall be for reasonable and beneficial uses consistent with the character of use and always in compliance with the interim instream flow standards (IIFS), as may amended from time to time by CWRM. The Permittee shall also comply with all other conditions required by CWRM regarding the streams that water may be diverted from under this revocable permit, including stream flow restoration and closure of diversions.
- (3) Permittee shall provide a report on the progress regarding the removal of diversions and fixing of the pipe issues before the end of the revocable permit term.
- (4) Permittee shall continue to clean up and remove debris from the areas where the streams that water may be diverted from under this revocable permit are located, and staff shall inspect and report every three months on the progress of the clean-up. For purposes of clean-up, debris shall not include any structure and equipment that is either currently used for the water diversions, or for which CWRM has not required removal; “trash and debris” shall be 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).”
- (5) The revocable permit shall be subject to any existing or future reservations of water for the Department of Hawaiian Home Lands (DHHL).
- (6) Permittee shall coordinate with an interim committee to discuss water usage issues in the areas where the streams that water may be diverted from under this revocable permit are located. The committee shall consist of eight members, representing EMI/Mahi Pono, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation, the Huelo Community Association, the Sierra Club, Na Moku Aupuni O Koʻolau Hui and the County of Maui. The interim committee shall meet at least monthly. The County of Maui shall be responsible for organizing and scheduling these meetings.
- (7) It is an essential component to the Board’s stewardship of the water resource to understand how much water is being diverted. Permittee shall therefore provide quarterly written reports to the Board of Land and Natural Resources (Board) containing (at a minimum) the following information:

- (a) The amount of water actually used on a monthly basis, including the monthly amount of water delivered for: the County of Maui Department of Water Supply and the County of Maui Kula Agricultural Park; diversified agriculture; industrial and non-agricultural uses; and reservoir/fire protection/ hydroelectric uses. Descriptions of diversified agricultural uses shall also provide information as to acreage, location, crop, and use of the water. Industrial and non-agricultural uses shall specify the character and purpose of water use and the user of the water;
- (b) The estimated amount of water required for each crop per acre per day for the previous quarter and how much water is projected to be required per acre per day for the forthcoming quarter;
- (c) The report shall disclose which structures on or next to streams have been removed, which ones have been modified, which ones remain to be modified, what remains to be done before they are modified, what impediments exist to their modification, what agencies need to give their approval before modifications can be made, when the Permittee made requests to the applicable agencies for approval and when the modifications are expected to be completed;
- (d) Update on removal of trash, unused man-made structures, equipment and debris that serve no useful purpose, including photographs and documenting any reports of such items that Permittee has received from the Department, other public or private entities and members of the general public and the action(s) taken by Permittee, if any, to remove the reported items;
- (e) A listing of all reservoirs in the A&B/EMI water system serviced by the revocable permit, with the following information provided for each:

The capacity of each such reservoir;

The surface area of each such reservoir;

What fields are irrigated by each such reservoir;

Which reservoirs are lined, and with what material, and which are not;

The estimated amount of evaporation per day from the surface of each such reservoir;

An analysis of the cost and time to line at least one such reservoir;

Information on any reservoirs planned to be taken out of service;

The depth and volume of water in each reservoir (as of the last day of each month);

How long it would take on average for each full reservoir to be emptied if no water were to flow into or be deliberately removed from it (i.e. how long until evaporation and seepage drains it); and

The amount of water used for hydroelectric purposes, if any.

- (f) The number, location, timing, and approximate acreage of fires fought during the quarter using water from reservoirs supplied with water from the A&B/EMI system;
- (g) The names and locations of the reservoirs from which water was drawn to fight fires during the quarter, and
- (h) A listing of all irrigation wells in the A&B/EMI water system serviced by the RPs, with the water levels and chloride levels in each well that is in active use noted, and

Each quarterly report shall be submitted in a format with tracked changes that clearly show the differences/ updates from the prior quarter.

Such quarterly reports shall be “due” to the DLNR one-month after the last calendar day of the subject quarter. Thus, the reports shall come due as follows:

Q1 Report—April 30, 2025

Q2 Report—July 31, 2025

Q3 Report—October 31, 2025

Q4 Report—January 31, 2026

- (8) In addition to the quarterly report, the Permittee shall provide monthly reports containing at minimum, the Permittee's monthly water use amounts and the total planted acreage.
- (9) Require Permittee to advise any third-party lessees, that any decisions they make are based on these month-to-month revocable permits for water unless or until a license is issued.
- (10) Permittee shall cooperate with CWRM and the Department's Division of Aquatic Resources (DAR) in facilitating studies, site inspections and other actions as necessary to address the streams that water may be diverted from under this revocable permit.
- (11) 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 its quarterly reports.
- (12) 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.
- (13) For water used for agricultural crops, Permittee is to estimate how much water is required for each crop per acre per day.
- (14) Permittee shall look into supplying the Maui Invasive Species Committee with water, and if feasible, and despite it not being an agricultural use, this would be considered a reasonable and beneficial and permitted use under the revocable permit.
- (15) No later than August 1, 2025, Permittee shall provide an updated plan to reduce system losses including planned system upgrades, specific measures to more efficiently use water, proposed implementation timeline, and estimates on the amount that system losses may be reduced.
- (16) Based on the 2018 CWRM Decision and the information presented here, the Board determines that reasonable beneficial use for diversified agriculture to Applicant under a month-to-month revocable permit on 30 days' notice is 3263 gad.
- (17) As a condition of the permit, the Permittee shall provide at least 5.0 mgd to the County of Maui daily, which is the amount the Board finds to be the reasonable and beneficial allocation of water.

- (18) Therefore, the total amount of water allocated under this revocable permit shall be:

the amount of water equal to 3263 gad multiplied by the total amount of planted acreage to be used by the Permittee for diversified agriculture and other existing uses:

5.0 mgd to the County of Maui Department of Water Supply for the Kamaole Treatment Plant;

1.0 mgd for the County of Maui Kula Agricultural Park;

All of the above allocations shall be based on a monthly average.

Respectfully Submitted,



Ian Hirokawa
Special Projects Coordinator

APPROVED FOR SUBMITTAL:



Dawn N. S. Chang, Chairperson

RT

Land Board Meeting; December 13, 2024; D-9 Approved as amended.

Approved as amended. See attached page.

Land Board Meeting: December 13, 2024; D-9 Approved as amended.

Approved as amended. The Board amended conditions 6, 17 and 18 as follows: ⁴

- (6) ~~Permittee~~ The County of Maui shall coordinate with an interim committee to discuss water usage issues in the areas where the streams that water may be diverted from under this revocable permit are located. The committee shall consist of ~~eight members, representing~~ EMI/Mahi Pono, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation, the ~~Huelo~~ Haiku Community Association, the Sierra Club, Na Moku Aupuni O Ko'olau Hui ~~and~~ the County of Maui, the Department of Hawaiian Home Lands, the Aha Moku Advisory Council, and interested members of the Huelo community as determined by the County of Maui. The interim committee shall meet at least monthly. The County of Maui shall be responsible for organizing and scheduling these meetings.
- (17) As a condition of the permit, the Permittee shall provide ~~at least~~ no more than 5.250 mgd, averaged monthly, to the County of Maui daily, which is the amount the Board finds to be the reasonable and beneficial allocation of water.
- (18) Therefore, the total amount of water allocated under this revocable permit shall be:

the amount of water equal to 3263 gad multiplied by the total amount of planted acreage to be used by the Permittee for diversified agriculture and other existing uses, averaged annually less 1 mgd, and:

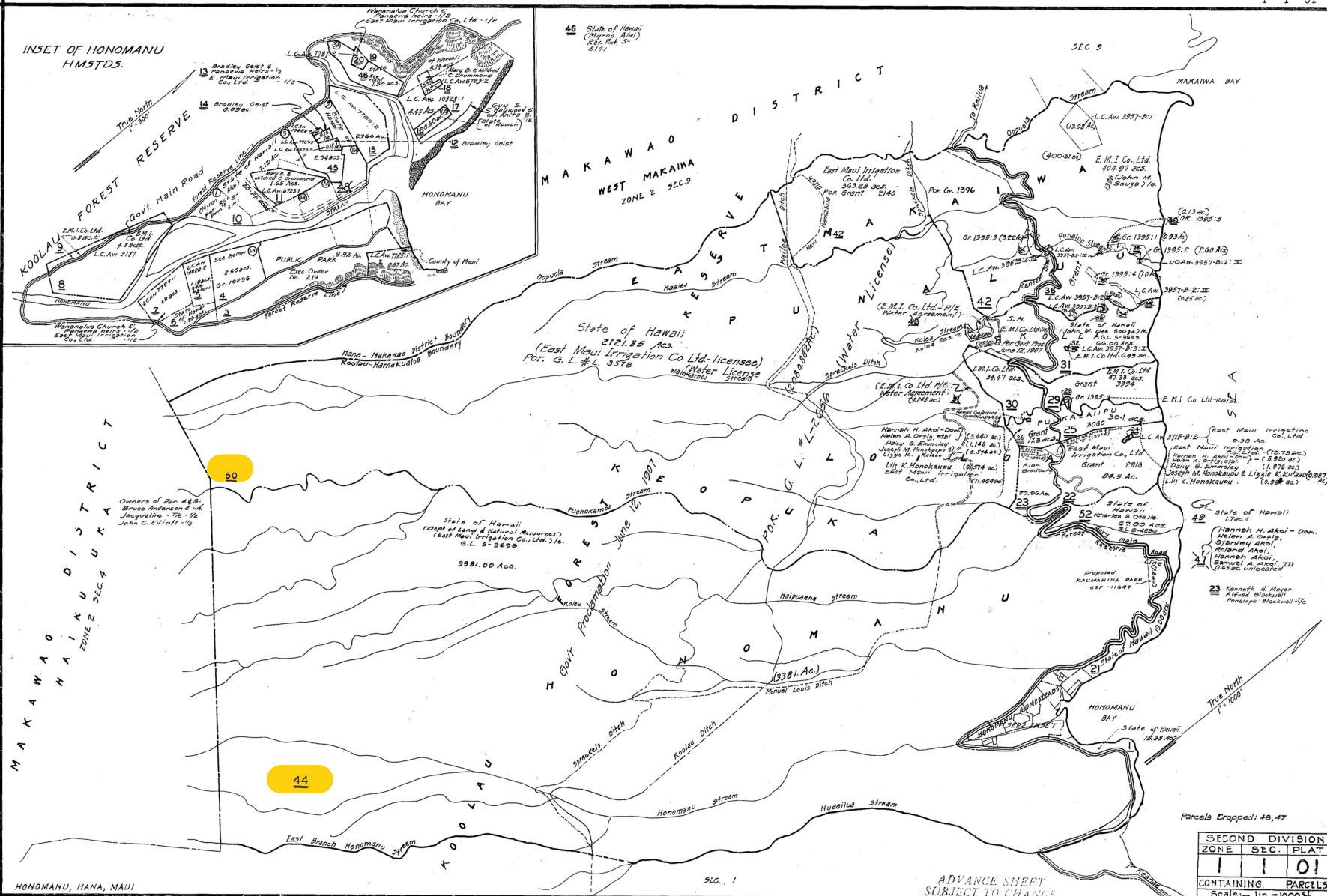
5.250 mgd to the County of Maui Department of Water Supply for the Kamaole Treatment Plant;

~~1.0 mgd for and~~ the County of Maui Kula Agricultural Park;

~~All of the above allocations shall be based on a monthly average.~~

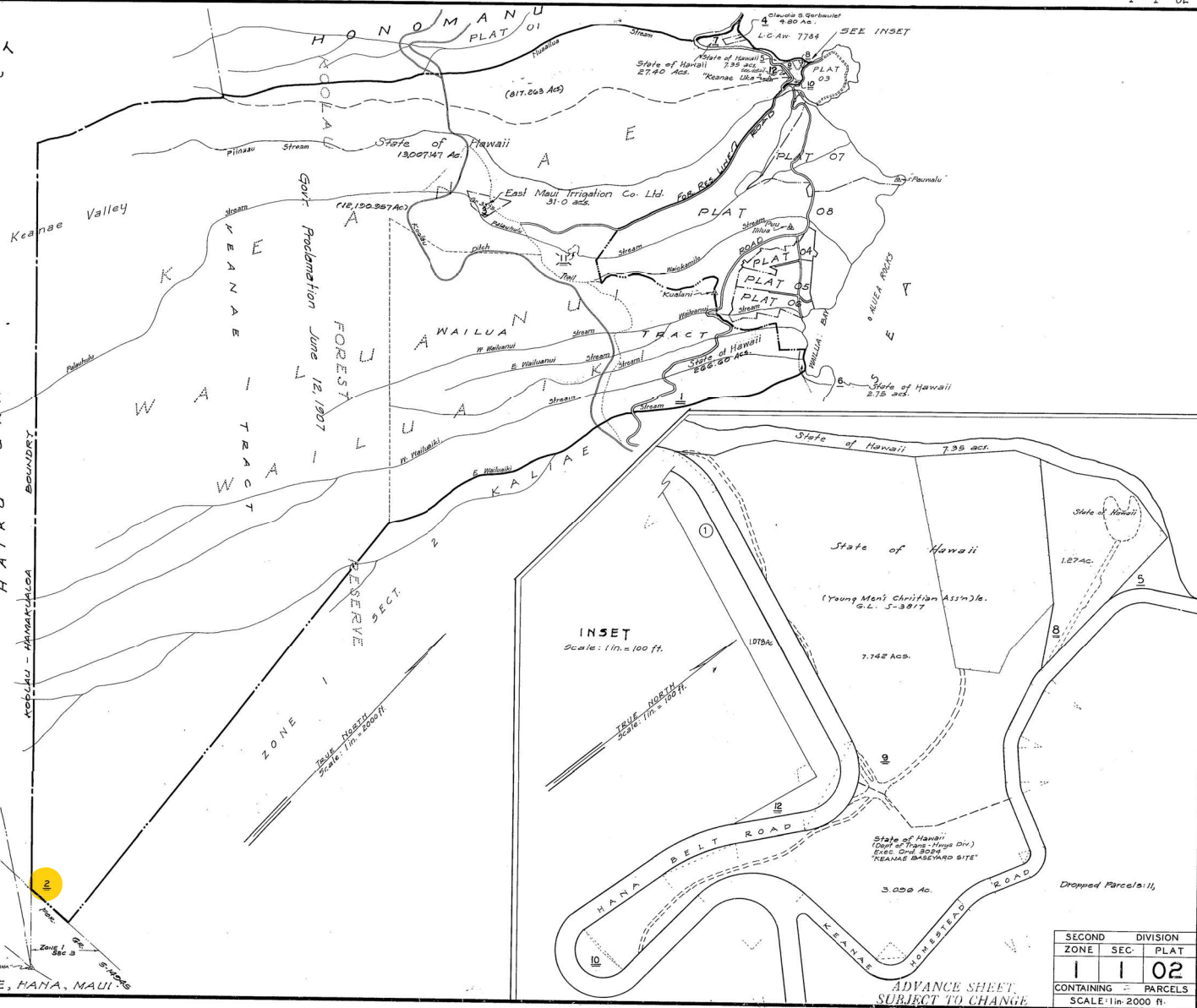
The Board denied a written petition for a contested case from the Sierra Club and an oral request for contested case from the Native Hawaiian Legal Corporation on behalf of Na Moku Aupuni O Ko'olau Hui.

⁴ Deletions indicated by strikethrough and new material by underscoring.



CORRECTIONS
OCT 9 1938
OCT 25 1938
NOV 1 1938
DEC 1 1938
FEB 1 1939
OCT 1 1939
NOV 1 1939
DEC 1 1939
JAN 1 1940
FEB 1 1940
MAR 1 1940
APR 1 1940
MAY 1 1940
JUN 1 1940
JUL 1 1940
AUG 1 1940
SEP 1 1940
OCT 1 1940
NOV 1 1940
DEC 1 1940

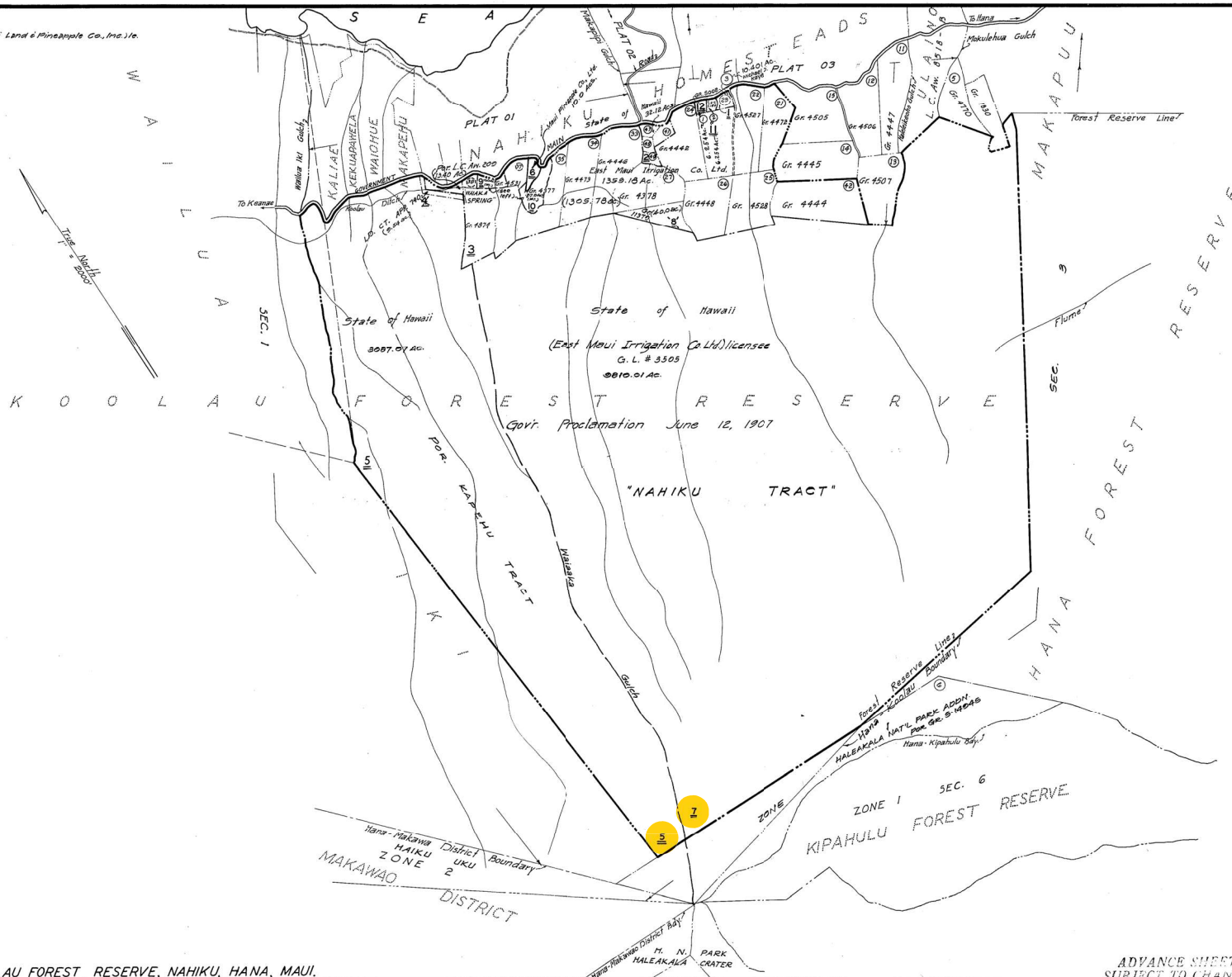
MAKA WAO
ZONE 2
DISTRICT
HAIKU UKA
KOA LU - HANA KALOA
BOUNDARY



CORRECTED
DEC 2 1938
JAN 1 1939
SEP 1 1947

9&10 (Maui Land & Pineapple Co., Inc.)

250 2.0 1947
1 2 1971
10 8 1971
20 8 1971
30 1974



KOOLAU FOREST RESERVE, NAHIKU, HANA, MAUI.

Div. No. 2067

1:100,000 - June 1934

By: The Maps Branch

Source: Survey Department

PARCELS DROPPED: 9

SECOND	DIVISION
ZONE	SEC. PLAT
1	2 04
CONTAINING PARCELS	
SCALE: 1 in. = 2000 ft.	

ADVANCE SHEET
SUBJECT TO CHANGE

PRINTED

EAST MAUI IRRIGATION COMPANY, LLC

P.O. BOX 791628, PAIA, MAUI, HAWAII 96779-1628 • (808) 579-9516

BLNR CONDITIONS FOR HOLDOVER OF EAST MAUI WATER PERMITS STATUS OF COMPLIANCE AS OF SEPTEMBER 30, 2024

CONDITIONS PER THE BLNR'S DECEMBER 7, 2023 DECISION

- 1. There shall be no waste of water. System losses and evaporation shall not be considered as a waste of water provided that system losses do not exceed 22.7%.***

Status: All diverted water is being put to beneficial agriculture use or municipal use, as the diverted water supplies the County of Maui for its Upcountry Maui water systems, the Kula Ag Park, Central Maui fire suppression needs, municipal users who do not currently have access to the County DWS delivery system, and agricultural uses in Central Maui on lands now owned and managed by Mahi Pono. Exhibit A notes system losses and evaporation as water uses, as they are an essential element of transporting water in an agricultural ditch system to the end users.

As of September 30, 2024, the planted acreage in Mahi Pono's East Maui fields totaled 10,587 acres. During Q3 2024, EMI diverted an average of 32.31 MGD. In Q3 2024, Mahi Pono continued focusing on the maintenance and growth of its existing crops and preparing new fields for scheduled plantings. The majority of the more than 250,000 trees ordered for planting this year arrived during Q3, and a supplemental final shipment arrived mid-October. As a result, plantings began at the end of Q3 and will continue through the end of the year as the young trees become field ready. The Permittees – and by extension, Mahi Pono – remain committed to the efficient use of East Maui stream water. Mahi Pono's total amount of water usage, together with that of the County of Maui, will not exceed the limits of the IIFS decisions at any point during its expansion.

- 2. Any amount of water diverted under the revocable permit shall be for reasonable and beneficial uses consistent with the character of use and always in compliance with the interim instream flow standards (IIFS), as may amended from time to time by CWRM. The Permittee shall also comply with all other conditions required by CWRM regarding the streams that***

EXHIBIT B

water may be diverted from under this revocable permit, including stream flow restoration and closure of diversions.

Status: See response to condition #1.

3. Permittee shall provide a report on the progress regarding the removal of diversions and fixing of the pipe issues before the end of the revocable permit term.

Status: All initial approvals of the stream diversion work permits have been received from the CWRM to abandon the diversions on the "taro streams" to fully restore their streamflow permanently, as voluntarily offered by EMI, over and above the requirements of the 2018 IIFS. The following is a summary of the status of those permits:

- Category 1 Permits – Original scope of work complete. Post-completion, CWRM requested small additional changes to the modifications based on community input. A final plan was submitted to CWRM for these modifications, which are intended to restore the streams to as natural a condition as reasonably possible. CWRM has met with East Maui community groups, and CWRM staff presented a final plan for which was approved by the CWRM at its meeting of January 30, 2024. This plan calls for additional removal of stream diversion structures. Permittee is working with consultants to obtain the necessary approvals/sign offs from the State Historic Preservation Division and the County of Maui Planning Department, which are required before work can begin. Other regulatory agency reviews/approvals, including the Army Corps of Engineers and the Office of Conservation and Coastal Lands, will be needed once those two agencies sign off.
- Category 2 Permits – Work completed in August 2023. The completion of this work has been verified by East Maui community groups and CWRM staff during a site visit conducted in Q4 2023.

2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 3 of 23

- Category 3 Permits – Best Management Practice (BMP) Plans have been developed, and our consultants are finalizing plans for submittal to Department of Health. Required approvals and reviews from the State Historic Preservation Division, the County of Maui Planning Department, the Army Corps, and the Office of Conservation and Coastal Lands have been confirmed. Permittee will work with consultants to obtain these necessary approvals/sign offs. Work is pending receipt of all needed approvals. In the first two quarters of 2024, heavy rain in East Maui prevented several scheduled site clearings that are necessary to facilitate design work for the BMPs. The rainy weather from previous quarters cleared in Q3, thus allowing for site clearing and subsequent visits to be completed.
- Category 4 Permits – Original scope of work complete. CWRM conducted a site visit in Q1 2024 to verify the completion of work. The Permittees are pending a formal confirmation by CWRM in the near future.

The Permittees have also initiated discussions with CWRM staff on IIFS compliance for the 'non-taro streams' that were part of the 2018 IIFS decision. A draft work plan was submitted to CWRM for 41 diversions on 17 additional streams that are implicated by the 2018 IIFS decision. Before issuing the needed permits to undertake the work, CWRM will need to conduct site visits to each diversion site. CWRM's process of visiting each site is currently ongoing. While that process is ongoing, the Permittees comply with the IIFS decision regarding instream flow requirements (i.e., by individual streams and the total quantity of flow). This compliance is subject to CWRM staff verification. CWRM most recently verified IIFS compliance during a community site visit in June 2024, and an additional site visit in October 2024. Connectivity requirements of the IIFS decision are being met to the extent possible without the physical modifications that require governmental reviews and approvals. The draft work plan transmitted by the Permittees to the CWRM does address means of achieving full connectivity compliance for these additional non-taro streams.

As to the pipe issue, this permit condition was initially imposed in 2018, and we believe it relates to a pipe at Pualoa (aka Puolua) Stream at the Lowrie Ditch. In

a previous status report, we reported that the pipe had been extended to provide wetted pathways for the movement of stream biota on Pualoa Stream. At the 2018 BLNR hearing on the subject RP's (for 2019), statements were made that the pipe needs to be extended further to go under the road and that two 4" rusted pipes needed to be removed. Accordingly (and as reported in previous quarterly reports), the two 4" pipes have since been removed from the watershed and a new design intended to improve fish migration has been incorporated in the diversion modification plan for compliance with the IIFS and approved by the CWRM in its approval of the Category 3 SDWPA. This specific scope of work was part of the overall work plan referenced earlier.

- 4. Permittee shall continue to clean up and remove debris from the areas where the streams that water may be diverted from under this revocable permit are located, and staff shall inspect and report every three months on the progress of the clean-up. For purposes of clean-up, debris shall not include any structure and equipment that is either currently used for the water diversions, or for which CWRM has not required removal; "trash and debris" shall be 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)."***

Status: The Permittees have established several standard operating procedures to address the cleanup of trash and debris in the license areas. Besides recognizing unnecessary debris in the field during routine maintenance tasks, EMI has conducted specific identification and removal operations of debris that has been observed from previous fieldwork. EMI continued to be vigilant about monitoring unused material. No removals occurred/were necessary in Q3 2024.

EMI will also continue removing any equipment and excess materials it brings into the license area to perform work on the ditch system as soon as the job(s) is completed, which includes diversion modifications required to meet the 2018 IIFS.

EMI understands the term "Trash and Debris" is further defined as noted in the DLNR staff submittal. As mentioned previously, EMI has established several standard operating procedures to address the cleanup of trash and debris in the license areas. Besides recognizing unnecessary debris in the field during routine maintenance tasks, EMI has conducted specific identification and removal operations of debris that has been observed from previous field work. EMI also has a practice of removing any equipment and excess materials it brings into the license area to perform work on the ditch system as soon as the job(s) is completed. These practices continue to apply to the "Trash and Debris" term as more clearly defined by DLNR staff.

5. The revocable permit shall be subject to any existing or future reservations of water for the Department of Hawaiian Home Lands (DHHL);

Status: EMI acknowledges that the RPs shall be subject to any existing or future reservation of water for the DHHL.

6. Permittee shall coordinate with an interim committee to discuss water usage issues in the areas where the streams that water may be diverted from under this revocable permit are located. The committee shall consist of seven members, representing EMI/Mahi Pono, Farm Bureau, Office of Hawaiian Affairs, the Native Hawaiian Legal Corporation, the Huelo Community Association, the Sierra Club, the County of Maui, and Na Moku Aupuni O Ko'olau Hui. The interim committee shall meet as least quarterly, more often as useful.

Status: The quarterly meeting of the RP Committee was held on Thursday, October 24, 2024. Jenna Shibano (Mahi Pono / EMI) sent an invitation via email to the Committee on Friday, October 4, 2024. The meeting was attended by Grant Nakama (Mahi Pono / EMI), Jerome Kekiwi, Jr. (NHLC / Na Moku), Eva Blumenstein (County of Maui), John Stufflebean (County of Maui), Mark Vaught (EMI), and Jenna Shibano (Mahi Pono / EMI).

EMI provided an update on the work related to the implementation of the IIFS, and Mahi Pono supplied an update on farming operations. The information provided by Mahi Pono and EMI to the Committee generally mirrored the farming and IIFS updates that are included as exhibits to this quarterly report. The meeting adjourned approximately 15 minutes after it started. The committee's next meeting is tentatively set for January 23, 2025.

7. *It is an essential component to the Board's stewardship of the water resource to understand how much water is being diverted. Permittee shall therefore provide quarterly reports to the Board of Land and Natural Resources (Board) containing (at a minimum) the following information:*

- a. *The amount of water actually used on a monthly basis, including the monthly amount of water delivered for: the County of Maui Department of Water Supply and the County of Maui Kula Agricultural Park; diversified agriculture; industrial and non-agricultural uses; and reservoir/fire protection/hydroelectric uses. Descriptions of diversified agricultural uses shall also provide information as to acreage, location, crop, and use of the water. Industrial and non-agricultural uses shall specify the character and purpose of water use and the user of the water.*

Status: The amount of water used on a monthly basis, including the monthly amount of water delivered for the County of Maui DWS and Kula Ag Park, diversified agriculture, industrial and non-agricultural uses, and reservoir/fire protection/hydroelectric uses can be found in the table attached as Exhibit A. The acreage, location, crop, and users of agricultural water, and the specifics on industrial and non-agricultural uses can be found in the table attached as Exhibit B.

As Mahi Pono prepares new fields for planting, they continue to install new irrigation systems that focus on efficient water application measures. In addition to these new systems, we are also installing weed mat throughout the farm, which help the soil

2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 7 of 23

maintain moisture by reducing evaporation. Compared to prior years, the cumulative water efficiency effects of these initiatives can be seen in the proportionate reduction in the amount of water remaining in the final column of the table attached as Exhibit A.

b. An estimate of the system loss for both the EMI ditch system and the A&B field system, also on a monthly basis.

Status: The accepted Final Environmental Impact Statement which considers East Maui water diversions facilitated by a long-term lease contains estimates for system losses for both the EMI ditch system as well as the “A&B field system”.

- EMI Ditch System – As stated in the FEIS, a USGS study “concluded that it was unclear whether net seepage losses even occur in the EMI Aqueduct system, due to the large amount of tunnel in the system, as well as the seepage gains that enter the system.”
- A&B Field System – An estimate of the system losses by month is as shown in the table below:

Month	EMI Ditch System (in MGD)	County's Diverted Reserve (in MGD)	Field System (in MGD)
July	0	3.08	-1.08
August	0	4.12	4.79
September	0	4.17	4.32
Average	0	3.79	2.68

As noted by Condition #1 above, system losses and evaporation shall not be considered as a waste of water provided that system losses do not exceed 22.7%.

- c. For each stream that is subject to the 6/20/2018 CWRM D&O, a status update as to the degree to which the flow of each stream has been restored, and which artificial structures have been modified or removed as required by CWRM.

Status: EMI prioritizes its compliance with the CWRM order and has been working with CWRM staff on implementation plans and permitting. EMI notes that the language of the CWRM order relating to the removal of artificial structures is spelled out on page 269 of the D&O, items i, j, and k which State in part that "*it is intended that diversion structures only need to be modified to the degree necessary to accomplish the amended IIFS and to allow for passage of stream biota, if needed.*" and "The intent of the Commission is to allow for the continued use and viability of the EMI ditch system and will not require the complete removal of diversions unless necessary to achieve the IIFS." A status update is provided in the table attached as Exhibit C. Also included in Exhibit C is a copy of the section of the CWRM order relating to the removal of artificial structures.

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

Status: See above response to #4 above.

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

Status: As the stream levels fluctuate during inclement weather, EMI personnel are dispatched to manually control the intake gates to prevent excess stream water inflow to the ditch. As for Haneho'i, all intakes have been sealed (per the 2018 D&O);

therefore, no water enters the ditch from this stream.
Regarding the Waipi'o stream, EMI personnel manually control the intakes on the ditch to prevent excess flow from entering the ditch. Thus, all flows to the ditch are delivered to and used by Mahi Pono and the County of Maui. The flows are no longer controlled into Ho'olawa stream.

- f. A listing of all reservoirs in the A&B/EMI water system serviced by the RPs, with the following information provided for each:

The capacity of each such reservoir:

The surface area of each such reservoir:

What fields are irrigated by each such reservoir:

Which reservoirs are lined, and with what material, and which are not:

The estimated amount of evaporation per day from the surface of each such reservoir:

An analysis of the cost and time to line at least one such reservoir; and

Information on any reservoirs planned to be taken out of service.

Status: A table containing most of the information requested above is attached as Exhibit D. Evaporation estimates are based on actual reservoir water levels during Q3 2024, with the figures being displayed in gallons per day.

In addition to the information in Exhibit D, we previously determined an estimated unit cost in 2022 of \$7.00 per square foot (sloped) to line a reservoir, plus estimated engineering costs typically being between \$30k - \$60k per reservoir.

Adjusting for CPI, it is assumed that the current estimated unit cost is \$7.60 per square foot. If we apply these costs to a reservoir with a 10-acre surface area and assumed slope adjustment of 25%, then the resulting estimate would be approximately \$4.18M.

g. The number, location, timing, and approximate acreage of fires fought during the quarter using water from reservoirs supplied with water from the A&B/EMI system.

Status: There was one fire fought during Q3 2024 using water from reservoirs supplied with water from the A&B/EMI system. An estimated 20,000 gallons were used from Reservoir 42, and the fire burned an estimated 100 acres in Field 407. Please visit this link for news coverage:

<https://mauinow.com/2024/07/08/firefighters-responding-to-central-maui-fire-near-pulehu-road/>.

h. The names and locations of the reservoirs from which water was drawn to fight fires during the quarter, together with:

(i) Whether those reservoirs are lined or not:

Status: Reservoir 42 in our Central Maui fields was used during the quarter. The reservoir is not lined. For other information on this reservoir, please see Exhibit D.

(ii) The average depth of water in those reservoirs:

Status: 9.6 feet.

(iii) Estimated average monthly inflows and outflows from those reservoirs; and

Status: 2 million gallons inflow and outflow daily, or 60 million gallons inflow and outflow monthly.

2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 11 of 23

(iv) The amount of water used for hydroelectric purposes, if any.

Status: No water was used for hydroelectric purposes during the quarter.

i. A listing of all irrigation wells in the A&B/EMI water system serviced by the RPs, with the water levels and chloride levels in each well that is in active use noted.

Status: In Q3 2024, Wells 2, 3, 9, 12 and 13 were in active use. Chloride levels measured during the quarter are provided below:

- *Well #2*
 - *pH – 7.5*
 - *Sodium – 183 mg/L*
 - *Water Level – 36.5 Inches*

- *Well #3*
 - *pH – 7.6*
 - *Sodium – 139 mg/L*
 - *Water Level – 63.75 Inches*

- *Well #9*
 - *pH – 7.6*
 - *Sodium – 127 mg/L*
 - *Water Level – 26.5 Inches*

- *Well #12*
 - *pH – 7.4*
 - *Sodium – 220 mg/L*
 - *Water Level – 23.75 Inches*

- *Well #13*
 - *pH – 7.3*
 - *Sodium – 143 mg/L*

- Water Level – 22.25 Inches

Each quarterly report shall be submitted in a format with tracked changes that clearly show the differences/updates from the prior quarter.

Such quarterly reports shall be “due” to the DLNR one month after the last calendar day of the subject quarter. Thus, the reports shall come due as follows:

Q1 Report – April 30, 2024

Q2 Report – July 31, 2024

Q3 Report – October 31, 2024

Q4 Report – January 30, 2025

Status: This Q3 2024 report is the second report to be submitted with changes tracked after the re-numbering of conditions. The deadline to submit quarterly reports is noted, and EMI is committed to timely submittals of all future reports.

- 8. Require Permittee to advise any third-party lessees, that any decisions they make are based on these month-to-month revocable permits for water unless or until a license is issued.**

Status: All third-party lessees have been informed through existing language in their lease agreements that the availability of water is subject to change based on various conditions, one of which would be the nature of the water availability from East Maui through an annually renewed revocable permit or an eventual permanent lease.

- 9. Permittee shall cooperate with CWRM and the Department’s Division of Aquatic Resources (DAR) in facilitating studies, site inspections and other actions as necessary to address the streams that water may be diverted from under this revocable permit.**

Status: EMI continues to be in contact with CWRM personnel regarding site visits to evaluate diversions that weren't covered by the 2018 D&O. Such site visits most recently occurred in Q2 2024, related to the amendment of the Huelo Streams IIFS passed by CWRM in 2022. CWRM field staff conducts these site visits on a stream-by-stream basis. EMI has previously contacted DAR and has expressed willingness to cooperate with any DAR activities related to the DAR work on streams outside the license area. Permittees also note that the 2024 RP allows for the development, diversion, and use of water only; there was no disposition of the land area covered by the prior revocable permits. As noted in the December 2023 staff submittal, the agreement between the Territory of Hawaii and EMI ("1938 Agreement") provides EMI a perpetual easement from the Territory to convey all water covered by any water license held by EMI through the portions of the "aqueduct" crossing government lands situated in East Maui extending from Nahiku to Honopou inclusive. Because the existing aqueduct system is already covered by the easement in the 1938 Agreement, there was no need for an additional land disposition. Accordingly, DAR has full access to the area.

10. 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 its quarterly reports.

Status: EMI has worked with CWRM in the context of the earlier discussion with DOFAW regarding diversion structures that can impede free flow of water and create habitat for mosquito breeding. Considerable evaluation and analysis have been conducted by the CWRM and EMI on nine "Category 1" diversions regarding additional work to be done on these diversions to mitigate these and other issues. CWRM has met with stakeholders to discuss this plan, and CWRM staff presented a proposed mitigation plan which was approved at CWRM's January 30, 2024 meeting. This plan calls for additional removal of stream diversion structures. Permittees are working with consultants to obtain the necessary approvals/sign offs from the State Historic Preservation Division and the County of Maui Planning Department, which are required before work can begin. Other regulatory agency reviews/approvals, including the Army Corps of

Engineers and the Office of Conservation and Coastal Lands, will be needed once those two agencies sign off.

11. 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.

Status: EMI remains willing to comply with this requirement and stands ready to assist the Board in any way it can regarding this matter.

12. For water used for agricultural crops, Permittee is to estimate how much water is required for each crop per acre per day.

Status: Water requirements for each crop is highly dependent on several factors, including soil composition, weather, and the maturity of the crop itself. That said, the average water requirements for Mahi Pono's agricultural crops at full maturity are estimated to be as follows:

- Orchard Crops - 5,089 gallons per acre per day
- Row Crops - 3,392 gallons per acre per day
- Tropical Fruits - 4,999 gallons per acre per day
- Energy Crops - 3,392 gallons per acre per day

These estimates are consistent with the estimated water requirements contained in Table 3 of Appendix I (Agricultural and related Economic Impacts) of the EIS. The average water requirements listed above are reflective of the crops' collective water needs (irrigation & rainfall) at full maturity. This differs from the reported irrigation average, which is reflective of the irrigation consumption (excluding rainfall) of immature crops.

13. 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 revocable permit.

2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 15 of 23

Status: EMI/Mahi Pono have successfully provided MISC with water to support their operations starting in Q1 2023. In Q2, EMI successfully installed a meter on the pipeline supplying MISC with water. The total amount of water used by MISC between July 2024 – October 2024 was 14,300 gallons, and the Q3 2024 portion of this use is accounted for in the “*Other*” column in Exhibit A.

2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 16 of 23

EXHIBIT A – MONTHLY WATER USAGE

All Figures in Millions of Gallons per Day ("MGD")

Month	East Maui Surface Water @ Honopou	East Maui Surface Water @ Maliko	East Maui Surface Water Gained from Area Between Honopou and Maliko	Groundwater Pumped on-Farm	County of Maui DWS ¹	County of Maui Ag Park ²	Diversified Agriculture ³	Historic / Industrial Uses ⁴	Reservoir / Seepage / Fire Protection / Evaporation / Dust Control / Hydroelectric ⁵	
									Diverted Reserve to meet Contractual Obligation to County DWS & Ag Park ⁶	Other ⁷
January	29.95	31.70	1.75	1.35	0.32	0.44	22.32	0.04	6.75	3.19
February	32.31	33.62	1.31	7.31	1.03	0.42	29.93	0.04	6.05	3.47
March	39.39	40.34	0.94	3.38	2.19	0.40	31.36	0.03	4.90	4.83
April	33.47	34.53	1.06	4.27	1.38	0.61	28.59	0.04	5.51	2.68
May	30.84	34.77	3.93	4.07	0.69	0.46	27.33	0.04	6.35	3.97
June	36.70	37.01	0.31	5.57	1.74	0.53	31.08	0.04	5.23	3.96
July	34.97	37.47	2.49	5.04	3.49	0.93	36.05	0.04	3.08	-1.08
August	33.25	34.89	1.64	10.62	2.76	0.62	33.19	0.04	4.12	4.79
September	28.72	31.59	2.87	7.38	2.76	0.58	27.09	0.06	4.17	4.32
2024 Average	33.29	35.10	1.81	5.44	1.82	0.55	29.66	0.04	5.13	3.35

1. The numbers in this column are based on reports received from the County of Maui and have not been independently verified by EMI.
2. The numbers in this column are based on reports received from the County of Maui and have not been independently verified by EMI.
3. The numbers in this column are primarily comprised of Mahi Pono's water use for diversified agriculture, as well as the other agricultural uses described in Exhibit B of the quarterly RP reports.
4. Historical/Industrial Uses are non-HC&S uses that have historically relied on water from the EMI Ditch System, even after the closure of HC&S. These include uses by entities located either adjacent to or within the boundaries of the farm and are further described in Exhibit B. HC&D's water usage is no longer accounted for in this column as HC&D is obtaining water from its own well.
5. The numbers in these columns include water not separately accounted for in the columns to the left. The water in on-farm reservoirs is available for use by the County of Maui against brush fires, the risk of which has increased due to the reduction of the irrigated acreage following the cessation of sugar cultivation but is decreasing as Mahi Pono continues to implement its farm plan. Seepage and evaporation inherent to an agricultural ditch system are also included in this column. The water used by the Mahi Pono hydroelectric

2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 17 of 23

system is non-consumptive and is returned to the ditch after being used to generate clean energy. The water is re-used consumptively by one of the other uses, or if there is no reuse, ends up in the reservoirs.

6. Operationally and pursuant to a contractual agreement with the County of Maui, a minimum of approximately 6 MGD must be reliably conveyed to / made available to the County each and every day so that the County has flexibility regarding when to run its plant depending on weather conditions, demand, water available from its Piihola plant, etc. Additionally, a minimum of approximately 1.5 MGD must be reliably conveyed to / made available to the County each and every day so that the County can be flexible regarding how to meet the needs of the Ag Park. The numbers in this sub-column reflect the portion of the 7.5 MGD that is made available to the County every day, that the County does not use (i.e., 7.5 MGD less the sum of the amounts used by the County DWS at Kamole Weir and Ag Park). Water that is not used by the County remains in the Ditch System, is transported to Central Maui and any excess is directed to reservoirs located on the farm.
7. The numbers in these columns reflect the amount of water not separately accounted for in the columns entitled "County of Maui DWS," "County of Maui Ag Park," "Diversified Agriculture," and "Historic/Industrial Uses" less the reserve needed to meet EMI's contractual obligations to the County of Maui. As has been explained in the past, EMI/Mahi Pono cannot rely on receiving any specific amount of the water provided to the County of Maui to meet the contractual obligations to the County DWS and Kula Ag Park that is not actually consumed by the County ("DIVERTED RESERVE") for the purposes of planning to meet the irrigation needs of Mahi Pono's crops. The amount is unpredictable and unreliable; however, EMI/Mahi Pono do make an effort to use the Diverted Reserve for crop irrigation when feasible. The negative number in this column for the month of July reflects EMI/Mahi Pono's use of a portion of the Diverted Reserve in the month of July for irrigation purposes.

EXHIBIT B – WATER USAGE SPECIFICS
Diversified Agriculture Use

**2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 18 of 23**

Entity	Crop	Field	Acreage
Mahi Pono	Macadamia	205	122
Mahi Pono	Citrus	206	200
Mahi Pono	Macadamia	208	73
Mahi Pono	Citrus	209	156
Mahi Pono	Citrus	300	305
Mahi Pono	Coffee	301	273
Mahi Pono	Coffee	302	6
Mahi Pono	Citrus	303	161
Mahi Pono	Citrus	311	150
Maui Best (Tenant)	Sweet Potato	408	281
Maui Best (Tenant)	Sweet Potato	409	180
Mahi Pono	Citrus	500	273
Mahi Pono	Citrus	501	83
Mahi Pono	Citrus	502	290
Mahi Pono	Citrus	503	144
Mahi Pono	Citrus	504	294
Mahi Pono	Citrus	505	240
Mahi Pono	Citrus	506	157
Mahi Pono	Citrus	507	189
Mahi Pono	Citrus	508	183
Mahi Pono	Citrus	508B	213
Mahi Pono	Citrus	509	79
Mahi Pono	Citrus	510	181
Mahi Pono	Citrus	511	161
Mahi Pono	Citrus	512	132
Mahi Pono	Citrus	601	221
Mahi Pono	Citrus	602	196
Mahi Pono	Citrus	603	262
Mahi Pono	Citrus	604	343
Mahi Pono	Citrus	605	394
Mahi Pono	Citrus	606	134
Mahi Pono	Mixed	608	70
Mahi Pono	Citrus	610	40
Mahi Pono	Macadamia	611	253
Mahi Pono	Citrus	701	269
Mahi Pono	Citrus	702	232
Mahi Pono	Citrus	703	150
Mahi Pono	Citrus	704	214
Mahi Pono	Row Crops	706ON	42
Mahi Pono	Row Crops	707W	82
Mahi Pono	Citrus	708	299
Mahi Pono	Citrus	800	122
Mahi Pono	Citrus	801	281
Mahi Pono	Citrus	803A	127
Mahi Pono	Pongamia	803B	32
Mahi Pono	Avocado	803C	6
Mahi Pono	Citrus	805	268
Mahi Pono	Coffee	807	120
Mahi Pono	Mixed	807	39
Mahi Pono	Citrus	808	158
Mahi Pono	Citrus	809	251
Mahi Pono	Citrus	809X	72
Mahi Pono	Citrus	813	448
Mahi Pono	Citrus	814	342
Mahi Pono	Citrus	818	266
Mahi Pono	Citrus	901A	45
Mahi Pono	Citrus	911	82
Mahi Pono	Citrus	911B	201
TOTAL			10,587

2024 EAST MAUI WATER PERMIT
BLNR CONDITIONS: STATUS OF COMPLIANCE
AS OF SEPTEMBER 30, 2024
Page 19 of 23

EXHIBIT B – WATER USAGE SPECIFICS (Continued)
Historic / Industrial Uses

Water Users	Source/Delivery Point	Water User's Location	Relationship to EMI / A&B / Mahi Pono	Use
Tenant of County Central Maui Landfill	Pumped from Haiku Ditch	3-8-003-019	Gov't Tenant	General Use for Compost Operation
New Leaf Ranch (Non-Profit)	702 Cistern	3-8-006-029	Tenant	Irrigation water for non-profit providing ag-related work opportunities and training as mental health & substance use dependency treatment
Costo Maddela	Haiku Ditch	3-8-001-001	Tenant	Pasture & Animal Water

EXHIBIT C – CWRM ORDER STATUS UPDATE
Section i, j, & k from CWRM D&O

i. It is intended that diversion structures only need to be modified to the degree necessary to accomplish the amended IIFS and to allow for passage of stream biota, if needed.

j. This Order does not require that every diversion on every tributary be removed or modified, the Commission is only looking at modifications to main stem and major diversions to accomplish the amended IIFS set forth above. The Commission also recognizes that it is not the purpose of this proceeding to determine how the diversions will be modified. That issue will be before the Commission in a subsequent process.

k. The intent of the Commission is to allow for the continued use and viability of the EMI Ditch system and will not require the complete removal of diversions unless necessary to achieve the IIFS.

EXHIBIT C – CWRM ORDER STATUS UPDATE (Continued)

IIFS STREAM UPDATE

Stream Name	Restoration Status	BFQ50 at IIFS (cfs)	IIFS Value (cfs)	IIFS Location	Current Status
Makapipi	Full	1.3	n/a	Above Hana Highway	Gate removed, water flowing downstream below intake
Hanawi	Connectivity	4.6	0.92	Below Hana Highway	Gate slightly open, water flowing downstream below intake
Kapaula	Connectivity	2.8	0.56	On diversion at Kooiau Ditch	Main gate open, water flowing downstream below intake
Walaaka	None	0.77	0.77	Above Hana Highway	Gate open, water flowing downstream below intake
Pa'akea	Connectivity	0.9	0.18	At Hana Highway	Intake gate closed, water flowing downstream over dam
Waiohue	Full	5	n/a	At Hana Highway	Intake gate closed, sluice gate removed. All water flowing downstream.
Pua'aka'a	Connectivity	1.1	0.2	Above Hana Highway	Gate open, water flowing downstream below intake
Kopillula	H90	5	3.2	Below Hana Highway	Main gates open, ditch control gates adjusted to provide for IIFS. Water flowing downstream.
East Wailuaiki	H90	5.8	3.7	At Hana Highway	Sluice gate open, IIFS flowing downstream below intake
West Wailuaiki	Full	6	n/a	Above Hana Highway	Gates open, water flowing downstream below intake
Wailuanui	Full	6.1	n/a	At Hana Highway	All intakes sealed (Category 1) and gates opened, water flowing downstream below intake
Ohia/Waianu	None	4.7	n/a	None	No diversion
Waiokamilo	Full	3.9	n/a	Below diversion at Koolau Ditch	All intakes closed, water flowing downstream
Palauihulu	Full	11	n/a	Above Hana Highway	All intakes sealed (Category 2). Water flowing downstream.
Pi'ina'au	Full	14	n/a	Above Hana Highway	Intake sealed, water flowing downstream.
Nua'a'ilia	Connectivity	0.28	2.2	To Be Determined	Intake gate closed, water flowing downstream over dam
Honomanu	H90	4.2	4.2	Above Hana Highway	All 4 diversion sluice gates are open, water flowing downstream
Punalau/Kolea	H90	4.5	2.9	Above Hana Highway	Sluice gate open, water flowing downstream below intake
Haipua'ena	Connectivity	4.9	1.36	Below Hana Highway	Intake gate closed, water flowing downstream, dam will require modification
Puohokamoa	Connectivity	8.4	1.1	Below Hana Highway	Intake gate will be used to ensure water flowing downstream, intake dam may require significant modification
Wahinepee	None	0.9	0.9	Above Hana Highway	No diversion. Water flowing downstream.
Waikamoi	H90	6.7	3.8	Above Hana Highway	Center ditch sluice gate open. Water flowing downstream.
Haneho'i	Full	2.54	n/a	Upstream of Lowrie Ditch	Intakes sealed. Water flowing downstream.
Huelo (Puolua)	Full	1.47	n/a	Downstream of Haku Ditch	Lowrie intake will require significant modifications (Category 3) & corresponding permit approvals / Haiku intake sealed
Honopou	Full	6.5	n/a	Below Hana Highway	Three of the four intakes are sealed. The final has the ditch gate shut. No water enters the ditch. Wailole intakes sealed.

EXHIBIT D – RESERVOIR INFORMATION

Reservoir No.	Tax Map Key	Capacity Million Gallons	Surface Area Acres	Fields Feed by Reservoir	Lined	Type Material	Evaporation Rate (Average Gal/Day)****
14	2-5-04:39	9.50	1.50	100; 101	No	Earthen	0
15	2-5-04:39	8.30	1.10	101	No	Earthen	0
20	2-5-03:10	48.80	10.20	312; 314	No	Earthen	0
21	2-5-04:39	18.60	6.90	111; 113; 200	No	Earthen	0
22	2-5-03:10	43.80	10.60	201; 202	No	Earthen	0
24	2-5-03:10	15.00	3.60	201	Yes	Concrete	0
25	2-5-03:09	40.20	9.70	205	No	Earthen	0
30	2-5-03:01	21.00	9.00	300; 312	No	Earthen	0
33	2-5-02:02	46.50	8.00	304; 304; 313	No	Earthen	61,493
40	2-5-02:01	62.80	13.50	410; 400; 401; 413 (County Use)	No	Earthen	0
42	2-5-02:01	10.40	3.20	400; 401; 403	No	Earthen	14,385
52	3-8-03:04	74.00	20.00	504; 511	No	Earthen	0
60	3-8-01:06	80.50	20.80	600; 611	No	Earthen	0
61	3-8-01:01	53.10	9.00	604	No	Earthen	65,381
70	3-8-01:01	19.30	5.00	Mud Pile 710	No	Earthen	0
80	3-8-03:02	41.10	12.00	800; 801	No	Earthen	0
81	3-8-04:22	36.70	13.80	803 805 808 809	No	Earthen	93,903
82	3-8-04:22	17.90	7.40	810; 811; (812; 815; 816; 818; 819; 822; 823; Res. Ditch)	No	Earthen	0
84	3-8-03:02	35.10	8.00	701; 702; 703; (807; 813; 814; Res. Ditch)	No	Earthen	0
90	3-8-08:05	45.00	15.80	737; 761; 915; 917	No	Earthen	137,835
Haiku	(2)2-7-003:055 & 081	57.9	27.30	Haiku Ditch	No	Earthen	0
Pauwela	(2)2-7-003:030 & 056/2-7-008:038	32.5	6.80	Haiku Ditch	No	Earthen	0
Peahi	(2)2-8-002:018	22	5.80	Haiku Ditch	No	Earthen	0
Kapalaalaea	(2)2-8-007:001	49.7	8.70	Haiku Ditch	No	Earthen	0
Papaaea	(2)2-9-014:004	42.5	9.00	Center Ditch to Lowrie Ditch	No	Earthen	0
9	2-5-004:039	1.00	NA	110	No	Earthen	Unregulated/Rarely Used
10	2-5-004:039	9.50	NA	116	No	Earthen	Unregulated/Rarely Used
12	2-5-004:039	9.00	6.70	109	No	Earthen	Unregulated/Rarely Used
23	2-5-005:019	13.70	NA	200	Yes*	Concrete/rubber	Unregulated/Rarely Used
26	2-5-005:019	10.10	NA	208	No	Earthen	Unregulated/Rarely Used
29	2-5-005:019	9.90	NA	213	No	Earthen	Unregulated/Rarely Used
31	2-5-003:031	5.10	NA	303	No	Earthen	Unregulated/Rarely Used
32	2-5-002:002	9.80	NA	304	No	Earthen	Unregulated/Rarely Used
34	2-5-003:010	8.10	NA	306	No	Earthen	Unregulated/Rarely Used
35	2-5-002:002	15.00	5.40	310; 311; 505	No	Earthen	Unregulated/Used Sparingly
41	2-5-002:001	8.90	NA	402; 404	No	Earthen	Unregulated/Rarely Used
43	2-5-001:001	13.50	4.00	409; 404	No	Earthen	Unregulated/Rarely Used
44	2-5-001:008	3.60	NA	Above 417;	No	Earthen	Unregulated/Rarely Used
45	2-5-001:008	4.20	NA	415; 414; 418	Yes	Concrete	Unregulated/Rarely Used
50	3-8-003:005	8.40	NA	209; 500; 507; 508	No	Earthen	Unregulated/Used Sparingly
51	3-8-003:004	15.20	NA	502; 505	No	Earthen	Unregulated/Rarely Used
83	3-8-004:002	6.40	4.70	817; 821	No	Earthen	Unregulated/Rarely Used

Monthly & Annual Average Water Use Report

A&B / EMI 2024 Revocable Water Permit – October 2024

Month	East Maui Surface Water @ Honopou	East Maui Surface Water @ Maliko	East Maui Surface Water Gained from Area Between Honopou and Maliko	Groundwater Pumped on-Farm	County of Maui DWS ¹	County of Maui Ag Park ²	Diversified Agriculture ³	Historic / Industrial Uses ⁴	Reservoir / Seepage / Fire Protection / Evaporation / Dust Control / Hydroelectric ⁵	
									Diverted Reserve to meet Contractual Obligation to County DWS & Ag Park ⁶	Other ⁷
January	29.95	31.70	1.75	1.35	0.32	0.44	22.32	0.04	6.75	3.19
February	32.31	33.62	1.31	7.31	1.03	0.42	29.93	0.04	6.05	3.47
March	39.39	40.34	0.94	3.38	2.19	0.40	31.36	0.03	4.90	4.83
April	33.47	34.53	1.06	4.27	1.38	0.61	28.59	0.04	5.51	2.68
May	30.84	34.77	3.93	4.07	0.69	0.46	27.33	0.04	6.35	3.97
June	36.70	37.01	0.31	5.57	1.74	0.53	31.08	0.04	5.23	3.96
July	34.97	37.47	2.49	5.04	3.49	0.93	36.05	0.04	3.08	-1.08
August	33.25	34.89	1.64	10.62	2.76	0.62	33.19	0.04	4.12	4.79
September	28.72	31.59	2.87	7.38	2.76	0.58	27.09	0.06	4.17	4.32
October	25.33	26.62	1.30	16.87	3.74	0.52	35.57	0.05	3.23	0.37
November										
December										
2024 Average	32.49	34.25	1.76	6.59	2.01	0.55	30.25	0.04	4.94	3.05

1. The numbers in this column are based on reports received from the County of Maui and have not been independently verified by EMI.
2. The numbers in this column are based on reports received from the County of Maui and have not been independently verified by EMI.
3. The numbers in this column are primarily comprised of Mahi Pono's water use for diversified agriculture, as well as the other agricultural uses described in Exhibit B of the quarterly RP reports.
4. Historical/Industrial Uses are non-HC&S uses that have historically relied on water from the EMI Ditch System, even after the closure of HC&S. These include uses by entities located either adjacent to or within the boundaries of the farm and are further described in Exhibit B. Mahi Pono installed meters in March 2022 thus, starting with the Q2 2022 report, the figures reported in this column will reflect actual usage based on those meters. As previously mentioned, HC&D's water usage is no longer accounted for in this column as HC&D is obtaining water from its own well.
5. The numbers in these columns include water not separately accounted for in the columns to the left. The water in on-farm reservoirs is available for use by the County of Maui against brush fires, the risk of which has increased due to the reduction of the irrigated acreage following the cessation of sugar cultivation but is decreasing as Mahi Pono continues to implement its farm plan. Seepage and evaporation inherent to an agricultural ditch system are also included in this column. The water used by the Mahi Pono hydroelectric

EXHIBIT C

Monthly & Annual Average Water Use Report

A&B / EMI 2024 Revocable Water Permit – October 2024

system is non-consumptive and is returned to the ditch after being used to generate clean energy. The water is re-used consumptively by one of the other uses, or if there is no reuse, ends up in the reservoirs.

6. Operationally and pursuant to a contractual agreement with the County of Maui, a minimum of approximately 6 MGD must be reliably conveyed to / made available to the County each and every day so that the County has flexibility regarding when to run its plant depending on weather conditions, demand, water available from its Piiholo plant, etc. Additionally, a minimum of approximately 1.5 MGD must be reliably conveyed to / made available to the County each and every day so that the County can be flexible regarding how to meet the needs of the Ag Park. The numbers in this sub-column reflect the portion of the 7.5 MGD that is made available to the County every day, that the County does not use (i.e., 7.5 MGD less the sum of the amounts used by the County DWS at Kamole Weir and Ag Park). Water that is not used by the County remains in the Ditch System, is transported to Central Maui and any excess is directed to reservoirs located on the former plantation.
7. The numbers in these columns reflect the amount of water not separately accounted for in the columns entitled "County of Maui DWS," "County of Maui Ag Park," "Diversified Agriculture," and "Historic/Industrial Uses" less the reserve needed to meet EMI's contractual obligations to the County of Maui. As has been explained in the past, EMI/Mahi Pono cannot rely on receiving any specific amount of the water provided to the County of Maui to meet the contractual obligations to the County DWS and Kula Ag Park that is not actually consumed by the County ("DIVERTED RESERVE") for the purposes of planning to meet the irrigation needs of Mahi Pono's crops. The amount is unpredictable and unreliable; however, EMI and Mahi Pono do make an effort to use the Diverted Reserve for crop irrigation when feasible.