

# EAST MAUI IRRIGATION COMPANY, LLC

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## BLNR CONDITIONS FOR HOLDOVER OF EAST MAUI WATER PERMITS STATUS OF COMPLIANCE AS OF MARCH 31, 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 March 31, 2024, the planted acreage in Mahi Pono's East Maui fields totaled 10,378 acres. During Q1 2024, EMI diverted an average of 33.88 MGD. The increase in diverted water relative to Q4 2023 is due to several factors, including (a) more water being available in East Maui due to higher levels of rainfall, (b) a corresponding increase in Mahi Pono's utilization of available surface water, (c) Mahi Pono having all 10,378 acres planted for the full quarter (vs. only in December 2023 in the previous quarter), and (d) the continuing maturation of Mahi Pono's already-planted crops. In Q1 2024, Mahi Pono focused on the maintenance and growth of its existing crops and preparing new fields for scheduled plantings. These scheduled plantings are pending the arrival of young trees which will be arriving on-island in late Q2 thru the end of the year. 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.

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- 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.***

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 may be needed once those two agencies sign off.

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- 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.
- Category 3 Permits – Best Management Practice (BMP) Plans are being developed for submittal to Department of Health. Concurrently, required approvals and reviews by other permitting agencies will be confirmed. Work is pending receipt of all needed approvals. In Q1 2024, heavy rain in East Maui prevented several scheduled site clearings that are necessary to facilitate design work for the BMPs. If there are no further weather interruptions, then the BMPs are estimated to be completed in Q2 2024.
  - 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 in September 2023. 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

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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. In Q1 2024, EMI continued to be vigilant about monitoring and removing unused material. Several pipes were removed from the Kualani area during the most recent quarter. A photo of the removed pipes is included as Exhibit F to this report.

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.

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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, April 25, 2024. Grant Nakama (Mahi Pono) sent an invitation via email to the Committee on Wednesday, April 17, 2024. The meeting was attended by Ashley Obrey (NHLC / Na Moku), John Stufflebean (County of Maui Dept. of Water Supply), Eva Blumenstein (County of Maui), Lucienne De Naie (Huelo Community), Jenna Shibano (Mahi Pono), and Mark Vaught (EMI).

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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. Mahi Pono and EMI also answered follow-up questions from the Committee regarding our planting plans for the rest of the 2024 calendar year, and the preparatory work that is being performed in advance of those plantings. The meeting adjourned approximately 30 minutes after it started. The committee's next meeting is tentatively set for July 25, 2024.

**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.

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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 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)
January	0	6.75	3.19
February	0	6.05	3.47
March	0	4.90	4.83
Average	0	5.90	3.83

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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.



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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 Q1 2024, with the figures being displayed in gallons per day.

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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 were zero fires fought during Q1 2024 using water from reservoirs supplied with water from the A&B/EMI system.

- 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;

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

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

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

Status: No water was used for hydroelectric or firefighting 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.

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Status: In Q1 2024, Wells 2, 12, and 13 were in active use.  
Chloride levels measured during the quarter are provided below:

- Well #2
  - o pH – 7.7
  - o Sodium – 270 mg/L
  - o Water Level – 38.0 Inches
  
- Well #12
  - o pH – 7.6
  - o Sodium – 300 mg/L
  - o Water Level – 13.5 Inches
  
- Well #13
  - o pH – 7.6
  - o Sodium – 210 mg/L
  - o Water Level – 20.0 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 Q1 2024 report is the first report to be submitted under the new 2024 RP that was approved in December 2023. Given the re-numbering of conditions, starting in Q2 2024, changes to the quarterly

report will be tracked. 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 2023, 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 may 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.***

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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.***

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 January 2024 – April 2024 was 3,400 gallons, and the Q1 2024 portion of this use is accounted for in the “Other” column in Exhibit A

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**EXHIBIT A – MONTHLY WATER USAGE**  
All Figures in Millions of Gallons per Day ("MGD")

Month in Calendar Year 2024	East Maui Surface Water @ Honopou	East Maui Surface Water @ Maliko	East Maui Surface Water Gained from Area Between Honopou and Maliko	Ground Water Pumped on-Farm	County of Maui DWS <sup>1</sup>	County of Maui Ag Park <sup>2</sup>	Diversified Agriculture <sup>3</sup>	Historic / Industrial Uses <sup>4</sup>	Reservoir / Seepage / Fire Protection / Evaporation / Dust Control / Hydroelectric <sup>5</sup>	
									Diverted Reserve to meet Contractual Obligation to County DWS & Ag Park <sup>6</sup>	Other <sup>7</sup>
January	29.95	31.70	1.75	1.35	0.32	0.44	22.32	0.04	6.74	3.19
February	32.31	33.62	1.31	7.31	1.03	0.42	29.93	0.04	6.05	3.46
March	39.39	40.34	0.94	3.38	2.19	0.40	31.36	0.03	4.90	4.83
<b>Annual Average</b>	<b>33.88</b>	<b>35.22</b>	<b>1.33</b>	<b>4.01</b>	<b>1.18</b>	<b>0.42</b>	<b>27.87</b>	<b>0.04</b>	<b>5.90</b>	<b>3.83</b>

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. Diversified Agriculture includes the users/uses described in Exhibit B.
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 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

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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.



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**EXHIBIT B – WATER USAGE SPECIFICS  
Diversified Agriculture Use**

<b>Entity</b>	<b>Crop</b>	<b>Field</b>	<b>Acreage</b>
Mahi Pono	Macadamia	205	122
Mahi Pono	Citrus	206	200
Mahi Pono	Macadamia	208	73
Mahi Pono	Citrus	300	305
Mahi Pono	Coffee	301	273
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	206
Mahi Pono	Citrus	701	269
Mahi Pono	Citrus	702	232
Mahi Pono	Citrus	7036	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	089X	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
<b>TOTAL</b>			<b>10,378</b>

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

<b>Water Users</b>	<b>Source/Delivery Point</b>	<b>Water User's Location</b>	<b>Relationship to EMI / A&amp;B / Mahi Pono</b>	<b>Use</b>
Imua Energy Maui LLC, dba Maul EKO Systems LLC (Tenant of County Central Maui Landfill)	Pumped from Haiku Ditch	3-8-003-019	Gov't Tenant	General Use for Compost Operation
HC&S Mill Area Fire Suppression	702 Cistern	3-8-006-001 CPR #	A&B - Owned	Fire suppression for ag offices & Puunene Post Office
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
Harriet, Michael & Jordan Santos	Kauhikoa Ditch	2-5-001-018 & 019	Tenant	Pasture & Animal Water
Leonard Pagan	Kauhikoa Ditch	2-5-002-001	Tenant	Pasture & Animal Water
Harry Cambra	Kauhikoa Ditch	2-5-003-026,027,036,037,038	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.

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**EXHIBIT C – CWRM ORDER STATUS UPDATE (Continued)  
IIFS STREAM UPDATE**

Stream Name	Restoration Status	BRQSO 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 Koolau Ditch	Main gate open, water flowing downstream below intake
Waaaka	None	0.77	0.77	Above Hana Highway	Gate open, water flowing downstream below intake
Pa'aka	Connectivity	0.9	0.18	At Hana Highway	Intake gate closed, water flowing downstream over dam
Wa'ohue	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
Kopili'ia	H90	5	3.2	Below Hana Highway	Main gates open, ditch control gates adjusted to provide for IIFS. Water flowing downstream.
East Wai'auki	H90	5.8	3.7	At Hana Highway	Sluice gate open, IIFS flowing downstream below intake
West Wai'auki	Full	6	n/a	Above Hana Highway	Gates open, water flowing downstream below intake
Wai'auki	Full	6.1	n/a	At Hana Highway	All intakes sealed (Category 1) and gates opened, water flowing downstream below intake
Ohi'a/Wai'auki	None	4.7	n/a	None	No diversion
Wa'ohemilo	Full	3.9	n/a	Below diversion at Koolau Ditch	All intakes closed, water flowing downstream
Palauhulu	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'ailua	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
Punahala/Ko'ia	H90	4.5	2.9	Above Hana Highway	Sluice gate open, water flowing downstream below intake
Hai'au'ena	Connectivity	4.9	1.36	Below Hana Highway	Intake gate closed, water flowing downstream, dam will require modification
Pu'ohi'amaoa	Connectivity	8.4	1.1	Below Hana Highway	Intake gate will be used to ensure water flowing downstream, intake dam may require significant modification
Waihi'opee	None	0.9	0.9	Above Hana Highway	No diversion. Water flowing downstream.
Wakamoi	H90	6.7	3.8	Above Hana Highway	Center ditch sluice gate open. Water flowing downstream.
Hanohoi'	Full	2.54	n/a	Upstream of Lowrie Ditch	Intakes sealed. Water flowing downstream.
Hualo (Pu'ohia)	Full	1.47	n/a	Downstream of Haku Ditch	Lowrie intake will require significant modifications (Category 3) & corresponding permit approvals. / Haku 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. Waiale intakes sealed.

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**EXHIBIT D – RESERVOIR INFORMATION**

Reservoir No.	Tax Map Key	Capacity Million Gallons	Surface Area Acres	Fields Feared by Reservoir	Lined	Type Material	Evaporation Rate (Average Gal/Day)****
14	2-5-04:39	9.50	1.50	100: 101	No	Earthen	1,101
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	8,688
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	37,203
40	2-5-02:01	62.80	13.50	410: 400; 401: 413 (County Use)	No	Earthen	33,477
42	2-5-02:01	10.40	3.20	400: 401; 403	No	Earthen	9,353
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	40,096
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	60,757
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	75,814
Haku	(2)2-7-003:055 & 081	57.9	27.30	Haku Ditch	No	Earthen	0
Pauwela	(2)2-7-003:030 & 056/2-7-008:038	32.5	6.80	Haku Ditch	No	Earthen	0
Peahi	(2)2-8-002:018	22	5.80	Haku Ditch	No	Earthen	0
Kapalaalea	(2)2-8-007:001	49.7	8.70	Haku 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

**EXHIBIT D**

Not all reservoirs are currently in use.

\*Reservoir 23 was lined with concrete/rubber. Lining is currently deteriorated.

\*\*Kapakaia decommissioned in 2021/2022.

\*\*\*Kapalaalea decommissioning project begins in 2023.

\*\*\*\*Evaporation rate is the average gallons per day evaporation for the quarter

Unregulated/Used Sparingly = In and out water -- 1 day  
Unregulated/Rarely Used = Passthrough only

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EXHIBIT F – Debris Removed during Quarter

