



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

August 20, 2024
Honolulu, Hawai'i

Approval of Stream Diversion Works Permit Application (SDWP.5951.6) and
Special Conditions to East Maui Irrigation Company, LLC for
Abandonment of Stream Diversion Works No. 184.6, Allowing Applicant to
Breach and Remove the Kapala'alaea Dam, Reseed, and Add Erosion Protection,
Papalua (Piiloi) Stream, Ha'ikū, Maui, Tax Map Key: (2) 2-8-007:001

APPLICANT

East Maui Irrigation, Co.
P.O. Box 1104
Pu'unene, HI 96784

LANDOWNER

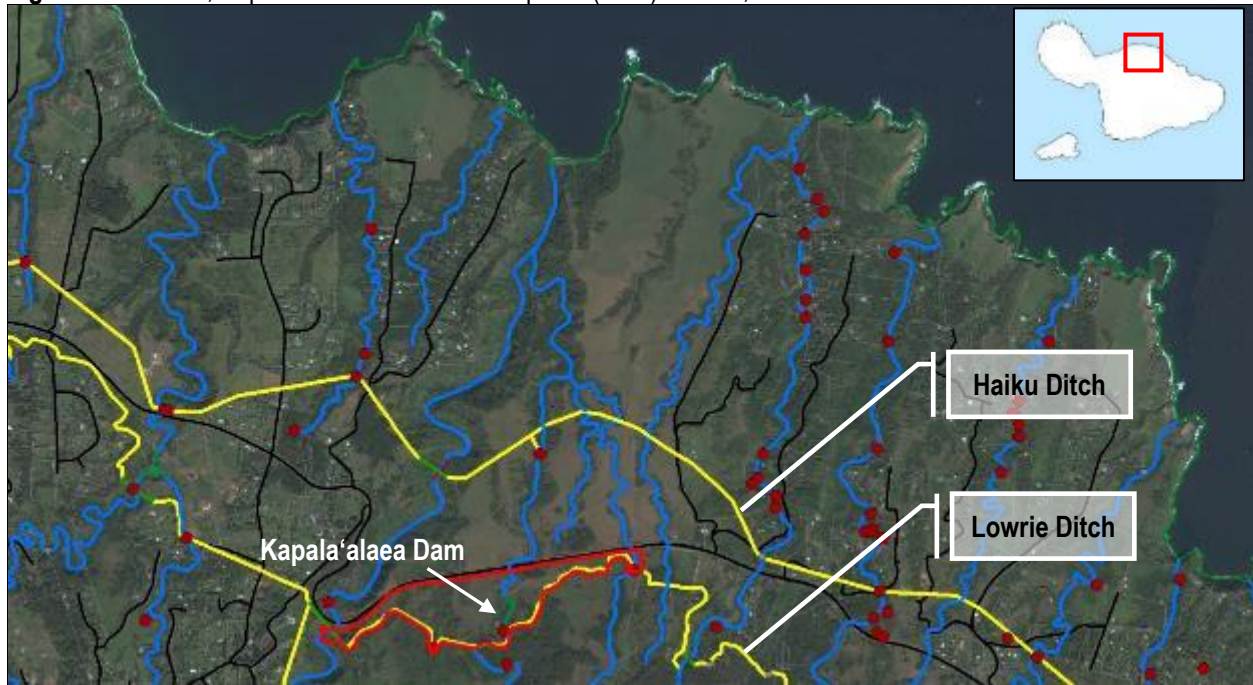
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SUMMARY OF REQUEST

Approve Stream Diversion Works Permit Application (SDWP.5951.6) submitted by the East Maui Irrigation, Co., (EMI) that proposes to abandon Stream Diversion Works No. 184.6, breach and remove the Kapala'alaea Dam, reseed, add erosion protection measures, and return the Papalua (Piiloi) Stream to natural conditions. The Papalua Stream is located downstream of the dam. The Piiloi Stream is located upstream of the dam.

LOCATION: Papalua (Piiloi) Stream. See **Figure 1**.

Figure 1: Location, Kapala‘alaea Dam on the Papalua (Piiloi) Stream, Maui.



BACKGROUND

The Kapala‘alaea Dam was constructed around 1885 for use in plantation agriculture and is an earthen embankment dam. The dam was constructed within the stream channel and has a divertible capacity of 100 mgd that is controlled by steel and wooden gates. According to the Registration of Stream Diversion Works application (Reg.184.6 filed in 1989), **Exhibit 5**, approximately 36,000 acres were irrigated from this source and all other Hawaiian Commercial and Sugar Co. (HC&S) and EMI sources. Water was originally used for irrigation of sugar and pineapple, watering livestock, and industrial uses including manufacturing and milling.

On October 13, 2022, East Maui Irrigation Company filed a complete SDWP.5951.6 application that can be viewed online at: https://files.hawaii.gov/dlnr/cwrmswreview/SDWP_5951_6.pdf.

On April 23, 2023, the Commission deferred the action to allow the applicant to meet with the Aha Moku Council and other affected parties so that the Commission can do a proper Ka Pa‘akai Analysis.

STREAM DESCRIPTION

The Papalua Stream is located downstream of the dam, within the Kakipi surface water hydrologic unit (6033), while the Piiloi Stream is located upstream of the dam. The National Hydrography Dataset classified the Papalua (Piiloi) Stream as intermittent and the Division of Aquatic Resources classified it as perennial. The total drainage area is one (1) square mile with a maximum basin elevation of 2,030 feet. The longest flow path is four (4) miles long and the mean annual precipitation is 121 inches. Per HAR §13-169-44, the interim instream flow standard for the Papalua (Piiloi) Stream, as adopted by the Commission on June 15, 1988, is that

amount of water flowing in each stream on the effective date of the standard. The effective date of the standard is October 8, 1988.

There are a total of 21 diversions located in the hydrologic unit of Kakipi, 20 of which are operated by EMI. The remaining diversion is owned and operated by Maui Land & Pineapple Company, Inc. Of the 20 EMI diversions, only 6 are located on the Papalua / Piiloi Stream tributary. Located upstream of the reservoir, one diversion on Piiloi Stream diverts water into the Wailoa Ditch, two diversions feed the New Hāmākua Ditch, and one feeds the Lowrie Ditch. The Kapala‘alaea Reservoir bisects the Papalua and Piiloi segments of the stream and is treated as a diversion as it was constructed in-line with the stream channel. The remaining diversion is located downstream of the reservoir on the Papalua segment and supplies water to the Ha‘ikū Ditch.

PROJECT DESCRIPTION

Kapala‘alaea Dam, located between the towns of Ha‘ikū and Huelo, Maui, has a “High” hazard classification per the Hawai‘i Department of Land and Natural Resources (DLNR). Dams assigned the high hazard potential classification are those where failure or mis-operation will probably cause loss of human life. The objective of the project is to decommission and breach the dam according to DLNR guidelines.

The Kapala‘alaea Reservoir was built in approximately 1885, and consists of an approximately 230-foot long, 48-foot-tall earthen embankment, with a 12- to 15-foot-wide crest. The dam crest is at an approximate elevation of 600 feet mean sea level.

The overflow spillway is located on the left abutment of the dam and consists of a partially lined, trapezoidal-shaped structure cut into the abutment. The total spillway length is approximately 115 feet. The spillway entrance is lined with concrete. The spillway invert is estimated to be at an elevation of 594.5 feet, approximately 5.5 feet below the dam crest. Downstream of the concrete slab, the spillway transitions into an unlined, two-stage channel. The spillway width reduces from approximately 100 feet at the entrance to approximately 40 feet at the downstream end. The spillway channel is estimated to slope approximately 20H:1V before dropping approximately 55 feet into a plunge pool below.

The estimated disturbed/work area is approximately 24 acres and consists of an excavation through the embankment that is 193 feet wide at the bottom of the maximum breach width and 40 feet high, fill and graded areas, and construction access. A riprap-lined approach and discharge channel will be graded into the land upstream and downstream of the breach to help smooth the transition into/out of the breach and reduce erosion within the existing reservoir area and in the discharge channel. This results in a graded area of 10.81 acres, depending on final configurations of fill and quantity of material hauled off site.

With the structure removed, the natural environment will be returned to its pre-dam condition. The stream will be allowed to return to its original drainage configuration and risks of a dam failure to the downstream area will be eliminated. The disturbed ground will be reseeded to allow vegetation to take hold and erosion protection measures will be installed at the dam breach

location to prevent significant erosion of the breached slopes. Erosion protection measures include 6,500 cubic yards (CY) of rip-rap and 23,200 CY of fill place above the ordinary high water mark. The project will take about 10 months to complete.

EMI and all contractors will utilize best practices for erosion and sediment control measures, including all recommendations from the State of Hawai‘i Department of Health’s General Conditions as outlined in the March 2, 2018 letter (which was modified on May 26, 2020) to Maui County with regards to the Major Grading Permit, and the best-management practices (BMPs) outlined below. BMPs will be employed at all times to the maximum extent practicable to prevent damage by sedimentation, erosion, or dust to streams, water courses, natural areas, and private property within the access right of way. No in-water work is proposed. Construction will occur in dewatered areas only. BMPs include the following:

- Excavated material will be stored/stockpiled in a manner which will minimize the possibility of soil/sediment unintentionally entering the environment.
- Silt fences will be established around disturbed areas and soil stockpiles. Clearing and grubbing activities will be limited to the minimum amount necessary to complete the work.
- Fuel shall be stored outside of sensitive habitat areas where practicable.

Best management practices will be implemented to minimize adverse effects of dam removal. State and federal permits and requirements will be followed to minimize impacts. Any adverse effects will likely be short-term and will be compensated by the long-term beneficial effects of stream restoration.

Figure 2: Site Photo, Kapala‘alaea Dam, looking east. Source: Hawaii DLNR Dam Inventory System; image date May 10, 2007.



AGENCY REVIEW COMMENTS

Maui County, Planning Department: Application indicates that HEC-HMS was used to evaluate hydraulic conditions downstream after abandonment of dam. HEC-HMS model outputs were not included in the materials reviewed by the floodplain manager. Please submit HEC-HMS report for review by DLNR. See **Exhibit 1**.

CWRM Staff Response: The HEC-HMS report is under review by DLNR's Engineering Division. As a special condition, the applicant shall provide the results of the HEC-HMS report to the County of Maui, Planning Department Floodplain Manager and the Commission.

Department of Hawaiian Home Lands (DHHL): No comments received.

Department of Land and Natural Resources (DLNR), Aha Moku: No comments received.

DLNR, Aquatic Resources: No comments received.

DLNR, Engineering: We have no comments. Dam Safety is currently working with Mahi Pono on a Dam Safety Permit Application for this dam removal, and is reviewing it for any dam safety concerns.

CWRM Staff Response: The applicant shall forward a copy of the Dam Safety Permit Application to the Commission following submission to the Engineering Division.

DLNR, Forestry and Wildlife (DOFAW): The State listed Hawaiian Hoary Bat or 'Ōpe'ape'a (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided for any construction because bats can become ensnared and killed by such fencing material during flight.

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea. Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

State-listed waterbirds such as the Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian coot (*Fulica alai*), Hawaiian Duck (*Anas wyvilliana*), and Hawaiian Goose (*Branta sandvicensis*)

could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the Maui Branch DOFAW Office at (808) 984-8100.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid ‘Ōhi‘a Death), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, etc.), or invasive plant parts (e.g., Miconia, Mullein, etc.) that could harm our native species and ecosystems. We recommend consulting the Maui Invasive Species Committee (MISC) at (808) 573-6472 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

To prevent the spread of Rapid ‘Ōhi‘a Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if ‘ōhi‘a trees are present at the project site that will be removed, trimmed, or potentially injured:
<https://cms.ctahr.hawaii.edu/rod>.

CWRM Staff Response: Added as a special condition by reference. See **Exhibit 3**.

DLNR, Historic Preservation (SHPD): On August 2, 2024, SHPD Project No. 2024PR01311 stated “**The SHPO concurs** with the project effect determination of *adverse effect* captured by U.S. Army Corps of Engineers (USACE) in the Memorandum of Agreement (MOA) executed July 2024 to establish mitigations sufficient to resolve this adverse effect. The SHPO is a fellow signatory along with USACE to this MOA, with the East Maui Irrigation Company, as landowner-project proponent-permit applicant, an invited signatory. In executing the MOA, the SHPO agrees that SHPD acceptance of an ILS and accompanying SIHP requests constitutes sufficient mitigation of this adverse effect.

The SHPO confirms that these mitigation measures have already been completed. The only outstanding measure of the MOA is Stipulation IV, requiring that East Maui Irrigation Company provide all parties to the MOA a summary report detailing work carried out pursuant to the terms of the MOA each calendar year until the MOA expires or is terminated. This report will include a description of the work as carried out by East Maui Irrigation Company— including scheduling changes, problems encountered, and any disputes and objections received. **The SHPO looks forward to** receiving these annual reports for review and concurrence.

SHPD hereby notify DLNR-Engineering and DLNR-Water Resource Management that the requested MOA has been executed and the permit issuance process may continue. Should additional work be proposed in this location that requires more extensive ground disturbance than is covered by the MOA, NHPA Section 106 consultation with the SHPO must resume. See **Exhibit 4**.

CWRM Staff Response: Staff believes that SHPD review is satisfied.

DLNR, Land Division: No comments received.

DLNR, State Parks: No comments received.

Dept. of Health (DOH), Clean Water Branch: The DOH standard comments can be reviewed on their website at: <https://health.hawaii.gov/cwb/files/2018/05/Memo-CWB-Standard-Comments.pdf>.

CWRM Staff Response: The lead agency for the protection of water quality is the Department of Health, Clean Water Branch, which administers the Federal Clean Water Act (33 U.S.C. §1251 et seq.) and the State Water Pollution Act (HRS Ch. 342D; HAR Ch. 11-54 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control). HAR §11-54-1 through §11-54-8 defines Best Management Practices and water quality criteria applicable to inland and nearshore waters and are based on the Federal Clean Water Act. HAR Ch. 11-55 Appendix C defines discharges of storm water associated with construction activity. HRS 174C-66 states that the DOH oversees the State's water quality control program.

Office of Hawaiian Affairs: No comments received.

US Army Corps of Engineers: No comments received.

US Fish and Wildlife Service (USFWS): Based on the Services' extensive knowledge and experience with consultations for the short- and long-term adverse effects of hardening riparian areas we offer the following recommendations:

- a. Hardening riparian and nearby areas exacerbates the risk and severity of flooding. When bank stabilization is necessary we recommend methods that are more environmentally friendly, such as the methods supported by the Federal Emergency Management Act https://www.fema.gov/pdf/about/regions/regionx/Engineering_With_Nature_Web.pdf.
- b. The use of rip rap armor rock more significant issues from creating a uniform channel with no complexity, leaving no space for natural vegetation to establish. This hardening and lack of vegetation raises the temperature of the water and changes the ecosystem.

CWRM Staff Response: Staff notes that the recommended reference provided by USFWS suggests bank stabilization measures that are more suited to continental U.S. streams and not Hawai'i streams. Staff recommends that the applicant contact and consult with the USFWS to address their concerns and provide evidence to the Commission of that consultation.

Public Comments: Joyclynn Costa.

Mahalo Chair and Commissioners as well as CWRM Chair for allowing time to discern and allow all parties involved to come together for a better Maui. I did take a site visit along with a person I consider an Aha Moku member, Mr. Pat Simmons Jr. We had a better perspective and objective that EMI/Mahi Pono was proposing. I had posed to Mr. Vaught a question which had

to do with the statement within the proposal of the removal of the dam. I am referring to “that the dam would be removed and Pi‘iloi Stream would be returned to its natural course”. You will also find this statement in this email. As I examined the area there was not much water running. It resembled more of a brook. I believe there is a diversion above Pi‘iloi that is taking water. Just the name Pi‘iloi should speak volumes. I would request that the water then be shared to do exactly what the proposal is claiming, which is to “return to its natural course”. Aha Moku looks after the resources of each Moku and would like to see the restoration of such. I will be contacting SHPD to make sure any features, sites and/or burials in direct alignment with this project will not be impacted. Other families were also concerned about the impact of the roads and Mr. Vaught assured that the roads in this area are well equipped to handle water conditions that may occur. See **Exhibit 2**.

CWRM Staff Response: Per the applicant, “At the conclusion of the site visit, Ms. Costa felt that her questions were adequately answered and that the project, as presented, could move forward. She felt that she had a much clearer understanding of this project and the respect and care that would be displayed throughout its operation. Additionally, I have copied Ms. Costa here in case she would like to provide any additional comments regarding the meeting.” Concur.

TRADITIONAL AND CUSTOMARY PRACTICES

- 1) The identity and scope of cultural, historical, or natural resources in which traditional and customary native Hawaiian rights are exercised in the area.

The Applicant stated, “Please refer to Kepa Maly and Onaona Maly, Wai O Ke Ola: He Wahi Mo‘olelo No Maui Hikina, 2001.”

CWRM Staff Response: Cultural, historical, or natural resources in which traditional and customary native Hawaiian rights are generally protected on undeveloped land (PASH, 1993). No comments were received by DLNR ‘Aha Moku. No comments from the public. Commission staff identified no historic sites. The reference provided by the applicant documents native traditions, historical accounts, and oral interviews with families of the East Maui region.

- 2) The extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action.

The Applicant stated, “The proposed action will have a positive impact on stream resources due to the restoration of connectivity of flows from above and below the current structure. This in turn will have a positive effect on traditional and customary Native Hawaiian rights.”

CWRM Staff Response: Staff concurs that the proposed actions should have positive impacts in instream resources and, in turn, traditional and customary practices.

- 3) What feasible action, if any, could be taken by the Commission in regards to this application to reasonably protect native Hawaiian rights.

The Applicant stated, “The Commission's expedited approval of this application will advance the project's work schedule.”

CWRM Staff Response: No further action as identified.

HRS CHAPTER 343 – ENVIRONMENTAL ASSESSMENT (EA) COMPLIANCE

Under Hawaii Revised Statutes (HRS) §343-5(a), an EA shall be required for actions, as summarized in part below, that propose:

- (1) use of state land or county lands, or the use of state or county funds;
- (2) use within any land classified as a conservation district;
- (3) use within a shoreline area;
- (4) use within any historic site as designated in the National Register or Hawaii Register;
- (5) use within the Waikiki area of O‘ahu;
- (6) any amendments to existing county general plans where the amendment would result in designations other than agriculture, conservation, or preservation;
- (7) any reclassification of any land classified as a conservation district;
- (8) construction of new or the expansion or modification of existing helicopter facilities within the State, that may affect: (A) any land classified as a conservation district; (B) a shoreline area; or (C) any historic site as designated in the National Register or Hawaii Register;
- (9) any (A) wastewater treatment unit, except an individual wastewater system or a wastewater treatment unit serving fewer than fifty single-family dwellings or the equivalent; (B) Waste-to-energy facility; (C) Landfill; (D) Oil refinery; or (E) Power-generating facility.

CWRM Staff Response: The proposed action does not trigger an EA.

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 7**.

HAR §13-168-35(b) sets out the general criteria for ruling on abandoning a stream diversion works. Each application for a stream diversion permit to perform abandonment work shall be made on forms furnished by the commission, shall not require a fee, and shall include:

- (1) The name and address of the applicant;
- (2) The location and description of the proposed stream diversion work abandonment;
- (3) An assessment of the impact the abandonment will have on the stream environment;
- (4) Relevant maps, plans, and drawings; and
- (5) Other information as may be necessary for the commission to determine the merits of the proposed stream channel alteration, including any hazards to public health, safety, or welfare, and the desirability of issuing a permit.

CWRM Staff Response: There are three (3) diversions located above and one (1) diversion located below the subject action. Each owned by the applicant. Removing this registration from active management and returning the stream to natural conditions should not interfere with instream or noninstream uses.

RECOMMENDATION

That the Commission:

1. Approve Stream Diversion Works Permit (SDWP.5951.6) to abandon Stream Diversion Works No. 184.6, breach and remove the Kapala‘alaea Dam, reseed, and add erosion protection measures subject to the standard conditions in **Exhibit 6** and the special conditions below:
 - a. The applicant shall provide the results of the HEC-HMS report to the County of Maui, Planning Department Floodplain Manager and the Commission.
 - b. The applicant shall forward a copy of the Dam Safety Permit Application to the Commission following submission to the Engineering Division.
 - c. In conformance with the Division of Forestry and Wildlife recommendations, incorporated by reference to **Exhibit 3**, the permittee shall observe the recommended construction measures regarding the protection and conservation of native species, and prevent the introduction and spread of invasive species.
 - d. The applicant shall contact and consult with the USFWS to address their concerns and provide evidence to the Commission of the consultation.

Ola i ka wai,



DEAN D. UYENO
Acting Deputy Director

Exhibits:

1. County of Maui Planning Department letter dated January 13, 2023.
2. Aha Moku comment letter dated May 16, 2023.
3. Division of Forestry and Wildlife letter dated January 23, 2023.
4. DLNR, Historic Preservation letter dated August 2, 2024
5. Registration of Stream Diversion Works and Declaration of Water Use 184.6 filed in 1989.
6. Standard Stream Diversion Works Permit Conditions.
7. Legal Authorities.

APPROVED FOR SUBMITTAL:



DAWN N. S. CHANG
Chairperson

JOSH GREEN, M.D.
GOVERNOR



SUZANNE D. CASE
CHIEF OF STAFF
MICHAEL G. BUCK
ELIZABETH A. CHAR, M.D.
NEIL J. HANNAHS
AURORA KAGAWA-VIVIANI, PH.D.
WAYNE K. KATAYAMA
PAUL J. MEYER
M. KALEO MANUEL
DEPUTY DIRECTOR

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

December 15, 2022

Ref: SDWP.5951.6

Michele Chouteau McLean, Director
Planning Department
2200 Main Street, Suite 315
Wailuku, HI 96793

Aloha Ms. McLean:

Request for Comments
Stream Diversion Works Permit (SDWP.5951.6) Application to Abandon
East Maui Irrigation, Breach and Removal of the Kapalaalaea Dam
Papalua Stream, Haiku, Maui, Tax Map Key: (2) 2-8-007:001

We would appreciate your review and comment on the subject permit application within 30 days from the date of this letter. The application is to breach and remove the Kapalaalaea Dam and return the stream to natural conditions. The application is available on our website at <http://dlnr.hawaii.gov/cwrm/surfacewater/review/>. If you have any questions, contact Rebecca Alakai at 587-0266, or rebecca.r.alakai@hawaii.gov.

Ola i ka wai,

M. KALEO MANUEL
Deputy Director

Response:

- We have no objections
- Not subject to our regulatory authority and permit
- Comments attached
- Additional information requested
- Extended review period requested

Application indicates that HEC-HMS was used to evaluate hydraulic condition downstream after abandonment of dam. HEC-HMS model outputs were not included in the materials reviewed by the floodplain manager. Please submit HEC-HMS report for review by DLNR. 1/13/2023

Contact Person: _____ Date: _____

c: Dani Yoo, DLNR, Engineering Division
Gary Estanislao, County of Maui Floodplain Manager

From: [KC Productions](#)
To: mark.vaught@mahipono.com
Cc: [DNR.CO.Public@DNR](#); Kaleo.L.Manusi@hawaii.gov; [Tiare Lawrence](#)
Subject: Re: Kapalaalaea Dam Decommissioning Meeting
Date: Tuesday, May 16, 2023 5:31:51 PM

Aloha

Mahalo Chair and Commissioners as well as CWRM Chair for allowing time to discern and allow all parties involved to come together for a better Maui. I did take a site visit along with a person I consider an Aha Moku member, Mr. Pat Simmons Jr.. We had a better perspective and objective that EMI/Mahi Pono was proposing. I had posed to Mr. Vaught a question which had to do with the statement within the proposal of the removal of the dam. I am referring to "that the dam would be removed and Pi'iloi Stream would be returned to its natural course". You will also find this statement in this email. As I examined the area there was not much water running. It resembled more of a brook. I believe there is a diversion above Pi'iloi that is taking water. Just the name Pi'iloi should speak volumes. I would request that the water then be shared to do exactly what the proposal is claiming, which is to "return to its natural course". Aha Moku looks after the resources of each Moku and would like to see the restoration of such. I will be contacting SHPD to make sure any features, sites and/or burials in direct alignment with this project will not be impacted. Other families were also concerned about the impact of the roads and Mr. Vaught assured that the roads in this area are well equipped to handle water conditions that may occur.

Sincerely

Joyclynn Costa
Aha Moku
Hamakualoa Rep.

On Mon, May 15, 2023 at 11:16 AM <mark.vaught@mahipono.com> wrote:

Aloha Chairperson Chang,

As per the Commission's request at the Commission meeting of April 18, 2023, for a representative of East Maui Irrigation Company, LLC. to meet with a representative of the Hamakualoa 'Aha Moku Council regarding the above dam removal project, please be advised that the meeting took place on Friday, May 12 beginning at 9 AM. Present were Mark Vaught – EMI, Tiare Lawrence – Mahi Pono, Joyclynn Costa - 'Aha Moku and Pat Simmons, Jr. – Guest of Joyclynn Costa.

The group traveled to the site and the project was discussed at length including the different aspects of how the area would look upon completion. The basic message was that the dam

would be removed and Pi'iloi Stream would be returned to its natural course. This would include implementing recommended project specific stream channel and bank preservation measures.

At the conclusion of the site visit, Ms. Costa felt that her questions were adequately answered and that the project, as presented, could move forward. She felt that she had a much clearer understanding of this project and the respect and care that would be displayed throughout its operation. Additionally, I have copied Ms. Costa here in case she would like to provide any additional comments regarding the meeting.

Mahalo,

Mark K. Vaught

Director, Water Resources

Mahi Pono, LLC

Phone: (808) 579-9516

Site: www.mahipono.com

Email: mark.vaught@mahipono.com

Address: P.O. Box 1104 Puunene, HI 96784

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JOSH GREEN, M.D.
GOVERNOR | KE KAAHANA
SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KAAHANA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

January 23, 2023

DAWN K.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
FIRST DEPUTY
M. KALEO MANUEL
DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND

MEMORANDUM

Log no. 3951

TO: M. Kaleo Manuel, Deputy Director
Commission on Water Resource Management

FROM: LAINIE BERRY, Wildlife Program Manager
Division of Forestry and Wildlife

SUBJECT: Division of Forestry and Wildlife Comments for the Stream Channel Alteration Permit (SCAP.5951.6) Application for the Breach and Removal of the Kapala'alea Dam on Maui

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comments for the SCAP.5951.6 Application to breach and remove the Kapala'alea Dam located between the towns of Haiku and Huelo, on the island of Maui; TMK: (2) 2-8-007:001. The proposed project consists of breaching the embankment to eliminate the risk of a dam breach and resulting flood waters. Kapala'alea Reservoir will be breached according to DLNR Guidelines which will result in a 193-foot-wide (at the bottom of the maximum breach width) and approximately 40-foot-tall breach through the main embankment. The site will be returned to a condition similar to what existed before the dam was constructed.

The State listed Hawaiian Hoary Bat or 'Ōpe'ape'a (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided for any construction because bats can become ensnared and killed by such fencing material during flight.

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea. Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <https://dlmr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

State-listed waterbirds such as the Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian coot (*Fulica alai*), Hawaiian Duck (*Anas wyvilliana*), and Hawaiian Goose (*Branta sandvicensis*) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the Maui Branch DOFAW Office at (808) 984-8100.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid 'Ōhi'a Death), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, etc.), or invasive plant parts (e.g., Miconia, Mullein, etc.) that could harm our native species and ecosystems. We recommend consulting the Maui Invasive Species Committee (MISC) at (808) 573-6472 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

To prevent the spread of Rapid 'Ōhi'a Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if 'ōhi'a trees are present at the project site that will be removed, trimmed, or potentially injured: <https://cms.ctahr.hawaii.edu/rod>.

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Myrna N. Giraldo Pérez, Protected Species Habitat Conservation Planning Associate at (808) 265-3276 or myrna.giraldo-perez@hawaii.gov.

Sincerely,

Lainie Berry

LAINIE BERRY
Wildlife Program Manager

JOSH GREEN, M.D.
GOVERNOR | KE KĀĀINA
SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KĀĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

DAWN H.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
RYAN K.P. KANAKA'OLE
FIRST DEPUTY
DEAN D. UYENO
ACTING DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAW
STATE PARKS

August 2, 2024

Carty S. Chang, Chief Engineer
State of Hawai'i
Department of Land and Natural Resources
Engineering Division
P.O. Box 373
Honolulu, Hawai'i 96809
c/o Jesse Colandrea
Email: jesse.k.colandrea@hawaii.gov

IN REPLY REFER TO:
Project No. 2022PR01311
Doc. No. 2408MA02
Architecture,
Archaeology

Dean D. Uyeno, Acting Deputy Director for Water Resource Management
State of Hawai'i
Department of Land and Natural Resources
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813
Email: dean.d.uyeno@hawaii.gov

Kirsten Lara, Regulatory Specialist
Department of the Army
U.S. Army Corps of Engineers, Honolulu District
Fort Shafter, Hawai'i 96858-5440
Email: kirsten.f.lara@usace.army.mil

Dear Carty S. Chang, Dean D. Uyeno, Kirsten Lara:

SUBJECT: Hawaii Revised Statutes (HRS) Chapter 6E-42 and National Historic Preservation Act (NHPA) Section 106 Historic Preservation Review – Section 106 Determination of Effect and Execution of MOA (DA File No. POH-2022-00023) Dam Safety Permit 88 Stream Diversion Works Permit (Application No. SDWP.5951.6) Kapala'alaea Reservoir (MA-0094) Removal Halehaku Ahupua'a, Hämākualoa District, Island of Maui TMK: (2) 2-8-007:001 por.

This letter continues the State Historic Preservation Division's (SHPD's) review of the subject permits and proposed project titled Kapala'alaea Reservoir (MA-0094) Removal. The current letter supplements three previous SHPD Review Letters concerning the same project/undertaking (Doc. Nos. 2304MA04, 2307MA03, 2403MA06). This project to decommission the earthen dam associated with the privately-owned Kapala'alaea Reservoir—located just mauka of Hana Highway on the North Shore of Maui—will include the breaching of the dam embankment according to DLNR Guidelines, in order to remove the reservoir's ability to impound water and return the site to something approximating its pre-dam condition. A HRS §6E-42 Historic Preservation Review was triggered by DLNR's issuance of Dam Safety Permit 88 and the seeking of Stream Diversion Works Permit approval by the Commission on Water Resource Management (CWRM, Application No. SDWP.5951.6). The project was determined an undertaking, and

Carty S. Chang, Dean D. Uyeno, Kirsten Lara
August 2, 2024
Page 2

thus subject to NHPA Section 106 compliance per 36 CFR 800.16(y), by the United States Army Corps of Engineers (USACE) due to it requiring a Department of Army (DA) permit pursuant to Section 404 of the Clean Water Act.

The SHPD previously accepted the ILS report titled *Final Intensive Level Survey, Kapala'ala Reservoir, Halehaku Ahupua'a, Hamakualoa District, Maui County TMK [2] 2-8-007:001 (por.)* (MASON 2024) as meeting the minimum requirements of HAR §13-284-5. The SHPD agreed with the significance and integrity evaluations for the Kapala'ala Reservoir (SIHP 50-50-06-09010) and adjacent Lowrie Ditch (SIHP 50-50-10-01508) conveyed in that ILS and made a project effect determination of "Effect, with agreed upon mitigation commitments", per HAR §13-284-7(a)(2). The SHPD further agreed that the finalized ILS and accompanying SIHP requests constitute sufficient mitigation, in the form of architectural recordation of the historic properties to be affected (per HAR §13-284-8(a)(1)(B)). The HRS §6E-42 Historic Preservation Review process is concluded.

The SHPO confirms it has received adequate documentation per 36 CFR 800.11 to understand: the nature of the undertaking, including its scope and Area of Potential Effect (APE); the presence or likely presence of National Register of Historic Places (NRHP)-eligible historic properties within the APE; the potential for the undertaking to adversely affect those historic properties; conditions of project implementation designed to avoid and mitigate possible adverse effects; and consultation with NHOs and other community groups. See previous SHPD Review Letters (Doc. Nos. 2304MA04, 2307MA03, 2403MA06) for SHPO concerns and concurrences on these points.

The SHPO concurs with the project effect determination of *adverse effect* captured by U.S. Army Corps of Engineers (USACE) in the Memorandum of Agreement (MOA) executed July 2024 to establish mitigations sufficient to resolve this adverse effect. The SHPO is a fellow signatory along with USACE to this MOA, with the East Maui Irrigation Company, as landowner-project proponent-permit applicant, an invited signatory. In executing the MOA, the SHPO agrees that SHPD acceptance of an ILS and accompanying SIHP requests constitutes sufficient mitigation of this adverse effect.

The SHPO confirms that these mitigation measures have already been completed. The only outstanding measure of the MOA is Stipulation IV, requiring that East Maui Irrigation Company provide all parties to the MOA a summary report detailing work carried out pursuant to the terms of the MOA each calendar year until the MOA expires or is terminated. This report will include a description of the work as carried out by East Maui Irrigation Company—including scheduling changes, problems encountered, and any disputes and objections received. **The SHPO looks forward to receiving these annual reports for review and concurrence.**

SHPD hereby notify DLNR-Engineering and DLNR-Water Resource Management that the requested MOA has been executed and the permit issuance process may continue. Should additional work be proposed in this location that requires more extensive ground disturbance than is covered by the MOA, NHPA Section 106 consultation with the SHPO must resume.

Note: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during ground-disturbing work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the SHPD, per HAR §13-280-3 and HAR §13-300-40.

USACE is the office of record for this undertaking per NHPA Section 106. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Mary Kodama, Historic Architect, at Mary.Kodama@hawaii.gov, for any concerns regarding architectural resources; or Megan E. Alvarez, Historic Preservation Archaeologist IV, at Megan.Alvarez@hawaii.gov, for any matters regarding this letter.

Aloha,



Dawn N. S. Chang
DLNR Chairperson
State Historic Preservation Officer

Carty S. Chang, Dean D. Uyeno, Kirsten Lara
August 2, 2024
Page 3

cc: DLNR CWRM, dlnr.cwrn@hawaii.gov
Lance Nakamura, County of Maui DSA dsa.engineering@mauicounty.gov
Mark Vaught, Mahi Pono/East Maui Irrigation Company mark.vaught@mahipono.com
Jason Kent, Kleinschmidt jason.kent@kleinschmidtgroup.com
Polly Tice, pt@masonarch.com
Dee Ruzicka, dr@masonarch.com

Attachment: *Memorandum of Agreement among the U.S. Army Corps of Engineers, the Hawaii State Historic Preservation Officer, and the East Maui Irrigation Company Regarding the Kapala 'alaea Reservoir (MA-0094) Removal, Halehaku Ahupua'a, Hāmākualoa District, Island of Maui, Hawai'i (Executed July 2024)*

MEMORANDUM OF AGREEMENT

Among the

**U.S. ARMY CORPS OF ENGINEERS,
THE HAWAII STATE HISTORIC PRESERVATION OFFICER**

And the

EAST MAUI IRRIGATION COMPANY

Regarding the

**THE KAPALA'ALAEA RESERVOIR (MA-0094) REMOVAL
HALEHAKU AHUPUA'A, HĀMĀKUALOA DISTRICT, ISLAND OF MAUI, HAWAII**

WHEREAS, the Honolulu District, U.S. Army Corps of Engineers (USACE), Regulatory Office received a Department of the Army (DA) permit application (designated as Permit Application No. POH-2022-00023) from East Maui Irrigation Company (EMI) associated with the Kapala'alaea Reservoir (State Dam ID No. MA-0094) Removal project located at Latitude 20.9132° N, Longitude -156.2580° W; Tax Map Key (2) 2-8-007:001; within the Papalua Stream, 225 Peahi Road, Haiku, Island of Maui, Hawai'i; and

WHEREAS, the USACE has determined that the project is an Undertaking, as defined in 36 Code of Federal Regulations (CFR) 800.16(y), due to necessity for the USACE's issuance of a permit pursuant to Section 404 of the Clean Water Act and, thus is subject to review and consultation with the Hawai'i State Historic Preservation Officer (SHPO) and other interested parties under Section 106 of the National Historic Preservation Act, 16 U.S.C. (NHPA), and its implementing regulations (36 Code of Federal Register (CFR) § 800; and

WHEREAS, the proposed Undertaking to decommission the earthen dam associated with the privately-owned Kapala'alaea Reservoir would include the breaching of the dam embankment according to the State of Hawaii Department of Land and Natural Resources (DLNR) Guidelines, in order to remove the reservoir's ability to impound water and return the site to something approximating its pre-dam conditions. An excavator and bulldozer would be used to breach the dam creating a 193-foot-wide (at the bottom of the maximum breach width) and 40-foot-tall opening through the main embankment. Up to 23,200 cubic yards (CY) of dam embankment material would be removed, with 2,861 CY of material deposited into 0.24 acre below the ordinary high-water mark (OHWM) inside a "sink hole" depression and the rest would be deposited in upland areas. Up to 6,500 CY of clean riprap would be used to line the breached approach and discharge channel. Of the 6,500 CY of riprap, up to 1,935 CY would be deposited into 0.06 acre below the OHWM. The breached channel would be protected from erosion and scour by riprap, and the disturbed areas would be seeded to allow for vegetation growth after construction is completed. The site would be returned to a condition similar to what existed before the dam was constructed; and

WHEREAS, the USACE has defined the permit area and the Area of Potential Effects (APE) as synonymous and as comprising approximately 24 acres within Tax Map Key (TMK) (2) 2-8-007:001. The APE is described as being within the "limits of disturbance" (LOD) boundary outlined in the *Drawing Sheet – Limit of Disturbance (LOD) Defining Project Area/APE* provided by the USACE.

The SHPO concurred with the Undertaking's APE in a letter dated July 6, 2023 (SHPD HICRIS Project No. 2022PR01311, Doc. No. 2307MA03).

WHEREAS, a Secretary of the Interior (SOI)-qualified historical architect has identified and evaluated the Kapala'alea Reservoir (State Inventory of Historic Places [SIHP] 50-50-06-09010) to be a historic property eligible for listing in the National Register of Historic Places (NRHP) as meeting the requirements of age, significance, and integrity under 36 CFR § 60.4; and

WHEREAS, the USACE identified two historic properties within the APE, the Kapala'alea Reservoir (SIHP 50-50-06-09010) and the Lowrie Ditch (SIHP 50-50-10-01508), and it has been determined that the Undertaking will have an *adverse effect* on the NRHP-eligible Kapala'alea Reservoir (SIHP 50-50-06-09010), per 36 CFR § 800.5(a)(1), to which the SHPO has concurred; and

WHEREAS, per 36 CFR § 800.4(d)(2) the USACE has consulted with the Office of Hawaiian Affairs (OHA), and other Native Hawaiian Organizations (NHOs) and interested parties regarding the effects of the Undertaking on historic properties; and

WHEREAS, pursuant to 36 CFR § 800.6(c)(2), and because of their role as the applicant for the DA permit, the USACE invited the EMI to sign this Memorandum of Agreement (MOA) as an Invited Signatory; and

WHEREAS, the USACE consulted with the SHPO and the EMI in accordance with Section 106 of the NHPA and 16 USC § 470, to resolve the effects of the Undertaking on historic properties; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), the USACE has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination and provided the specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

NOW, THEREFORE, the USACE, the SHPO, and the EMI agree that should the Undertaking move forward to construction, the following USACE-enforced stipulations aim to resolve adverse effects to historic properties associated with the Undertaking, and that these stipulations shall govern the Undertaking and all of its parts unless this MOA expires or is amended or is terminated.

STIPULATIONS

I. MITIGATION COMMITMENTS

The USACE shall ensure that the following commitments are carried out to avoid, minimize, or mitigate the adverse effects on historic properties:

- A. EMI was responsible for ensuring that an Architectural Intensive-Level Survey (ILS) Report was completed that provided documentation of the Kapala'alea Reservoir (SIHP 50-50-06-09010) and the Lowrie Ditch (SIHP 50-50-10-01508), within the APE, and submittal of the draft ILS Report to SHPD HICRIS Project No. 2022PR01311 for SHPD's review and approval. The ILS Report was completed by a SOI-qualified architectural historian. The ILS Report provides the full history of the Kapala'alea Reservoir and the Lowrie Ditch and includes an assessment of the seven aspects of integrity and site significance for both historic properties on their own and as contributing elements of the East Maui Irrigation Company ditches, and for eligibility to be listed

in the National Register of Historic Places in accordance with Criteria A–D per 36 CFR 60. The ILS Report also assessed the potential impacts of the Undertaking on the character defining features of the Kapala‘alaea Reservoir and the Lowrie Ditch and recommended appropriate mitigation measures.

B. In fulfillment of this stipulation, Dee Ruzicka, an SOI-qualified architectural historian with Mason Architects, completed the ILS report on behalf of East Maui Irrigation Company. The ILS Report, titled *Final Intensive Level Survey, Kapala‘alaea Reservoir, Halehaku Ahupua‘a, Hamakualoa District, Maui County TMK [2] 2-8-007: 001 (por.)* (MASON, February 2024) documented Kapala‘alaea Reservoir and the Lowrie Ditch sections adjacent to Kapala‘alaea Reservoir. The report examined the reservoir and ditch for historical significance and found they met significance criteria. The report recommends Architectural Recordation as mitigation for the historic property affected, Kapala‘alaea Reservoir, and further recommends the ILS Report as sufficient recordation to serve as mitigation as it documents the historic properties' historical development and context, design and physical alterations, and architectural characteristics, including character-defining features, and contains excellent views of the reservoir basin, upstream and downstream slopes, and the crest of the dam.

C. The SHPD reviewed the draft ILS Report and agreed with MASON's significance and integrity evaluations for the Kapala‘alaea Reservoir (SIHP 50-50-06-09010) and adjacent Lowrie Ditch (SIHP 50-50-10-01508). Additionally, the SHPD agreed that the Final ILS report and the accompanying SIHP requests constitute sufficient mitigation, in the form of architectural recordation of the historic properties to be affected (per Hawaii Administrative [HAR] 13-284-8(a)(1)(B) as stated in SHPD's letter dated March 28, 2024 (Doc. No. 2403MA06).

. DURATION

This MOA will expire if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the USACE may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation VI below.

. POST-REVIEW DISCOVERIES

If potential historic properties or human burials are discovered or unanticipated effects on historic properties occur, the EMI shall ensure all project work ceases in the vicinity of the find (minimum 10 ft-wide buffer around find) and comply with the following:

A. If previously unidentified non-burial historic properties, or unanticipated effects are discovered, the EMI shall follow Hawaii Administrative Rules (HAR) Chapter 13-280 "Rules Governing General Procedures for Inadvertent Discoveries of Historic Properties During a Project Covered by the Historic Preservation Review Process" and the USACE shall follow the 36 CFR 800.13 *Post-review discoveries*.

B. If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. The SHPO will be notified and consulted in writing per III.A. of this Memorandum of Agreement.

C. If human remains are discovered, the remains shall be covered and protected in place in such a way that minimizes further exposure or damage. Further disturbances and activities shall cease in any area or nearby area suspected to contain human remains. The SHPD and Police Department shall be contacted immediately. The EMI shall follow HAR 13-300-40 "Inadvertent Discovery of Human Remains" and SHPD's written directives.

D. No work shall proceed in the vicinity of an inadvertent find without written concurrence from the SHPO.

IV. MONITORING AND REPORTING

Each calendar year following the execution of this MOA until it expires or is terminated, the EMI shall provide all parties to this MOA a summary report detailing work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in USACE's efforts to carry out the terms of this MOA.

- A. All parties to this MOA will have thirty (30) calendar days to review the summary report and provide comments and identify any additional or unforeseen adverse effects to historic properties.
- B. If, after review of the summary report, any party to this MOA identifies that the Undertaking resulted in additional, previously unforeseen, effects to historic properties, they shall notify the SHPO and the USACE.
- C. If no parties to this MOA respond within thirty (30) calendar days, the USACE may assume concurrence with the summary report.

V. DISPUTE RESOLUTION

Should any Signatory or Invited Signatory to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the USACE shall consult with the objecting party(ies) to resolve the objection. If the USACE determines, within thirty (30) calendar days, that such objection(s) cannot be resolved, the USACE will:

- A. Forward all documentation relevant to the dispute, including the USACE's proposed resolution, to the ACHP in accordance with 36 CFR § 800.2(b)(2). The ACHP shall provide the USACE with its advice on the resolution of the objection within thirty (30) calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the USACE shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, Signatories, and Invited Signatories, and provide them with a copy of this written response.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day-time period, the USACE may make a final decision and proceed accordingly. Prior to reaching such a final decision, the USACE shall prepare a written response that takes into account any timely comments regarding the dispute from the Signatories and Invited Signatories to the MOA and provide them and the ACHP with a copy of such response.
- C. The USACE's responsibility to carry out all other actions subject to the terms of this

MOA that are not the subject of the dispute remain unchanged.

VI. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all Signatories. The amendment will be effective on the date a copy signed by all of the Signatories is filed with the ACHP.

VII. TERMINATION

If any Signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VI, above. If within thirty (30) calendar days (or another time period agreed to by all Signatories) an amendment cannot be reached, any Signatory may terminate the MOA upon written notification to the other Signatories.

Once the MOA is terminated, and prior to work continuing on the Undertaking, the USACE must either (a) execute an MOA pursuant to 36 CFR § 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. The USACE shall notify the Signatories as to the course of action it will pursue.

If any Signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VI, above. If within thirty (30) calendar days (or another time period agreed to by all Signatories) an amendment cannot be reached, any Signatory may terminate the MOA upon written notification to the other Signatories. Once the MOA is terminated, and prior to work continuing on the Undertaking, the USACE must either (a) execute an MOA pursuant to 36 CFR § 800.6, or (b) request to take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. The USACE shall notify the Signatories as to the course of action it will pursue.

VIII. EXECUTION

EXECUTION of this MOA by the USACE, SHPO, and EMI has taken into account the effects of this Undertaking on historic properties and afforded the ACHP an opportunity to comment. The USACE must submit a copy of the executed MOA, along with the documentation that is specified in 36 CFR § 800.11(f) to the ACHP prior to approving the Undertaking in order to meet the requirements of Section 106 and 36 CFR § 800.6(b)(1)(iv).

Note: Signatures start on next page.

SIGNATORIES

HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS

By Jen Martin Date: July 17, 2024

Title:

Jen Martin
Chief, Regulatory Office
U.S. Army Corps of Engineers
Honolulu District

ON BEHALF OF:

Adrian Biggerstaff, Ph.D., P.E., PMP
Lieutenant Colonel, U.S. Army
District Engineer

Contact Information:

Kirsten Lara
Regulatory Specialist
U.S. Army Corps of Engineers
Honolulu District Office, Building 252
Fort Shafter, Hawaii 96858
Phone: 808-835-4307
Email: Kirsten.F.Lara@usace.army.mil

Note: Signatures continue on next page.

HAWAII STATE HISTORIC PRESERVATION OFFICER

By  Date: Jul 24, 2024

Title:

Dawn N. S. Chang, Esq.
State Historic Preservation Officer

Contact Information:

Dawn N. S. Chang, Esq.
State Historic Preservation Officer
DLNR Chairperson
DLNR Main Office
Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawaii 96813
Phone: (808) 587-0400
Email: Dawn.Chang@hawaii.gov

INVITED SIGNATORIES

EAST MAUI IRRIGATION COMPANY

By  Date: 7/18/2024


Title:

Mark K. Vaught
Director, Water Resources

Contact Information:

Mark K. Vaught
Director, Water Resources East
Maui Irrigation Company
P.O. Box 1104
Pu'unene, Hawaii 96784
Phone: 808-579-9516
Email: Mark.Vaught@mahipono.com

Form 2810-2



STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

RECEIVED
99 MAY 26 P 2: 19
DIV. OF WATER & LAND DEVELOPMENT

REGISTRATION OF STREAM DIVERSION WORKS AND DECLARATION OF WATER USE

INSTRUCTIONS: Please type or print. If information is not available or not applicable, indicate as N/A. Fill out as completely as possible, sign, and mail form to the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. Phone 548-5948 or 548-7543 for assistance.

MULTI-SOURCE SYSTEMS: For a system of two or more diversion structures, submit a single package to describe the complete system. Include a single location map (or a set of maps if required) showing all diversion structures and measurement points, and a separate copy of this form for each structure and measurement point. On forms describing diversion structures, complete parts A, B, D, and E. On forms describing measurement points, complete parts A, B, and F.

STREAM NAME: KAPALAALEA ISLAND: MAUI
DIVERSION STRUCTURE NAME: Kapalaaalea Reservoir
DIVERSION SYSTEM NAME: Haiku Ditch

A. DIVERSION WORKS OPERATOR **B. OWNER OF DIVERSION WORKS SITE**
Firm name: East Maui Irrigation Co. Ltd. Firm name: Same as A
Contact person: Garret Hew Contact person: _____
Address: P. O. Box H Address: _____
Paia, Maui, Hawaii
Zip: 96779 Phone: 579-9516 Zip: _____ Phone: _____

STREAM DIVERSION LOCATION
Tax Map Key: 2-8-07 Town, Place, District: KAPALAALEA
Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the diversion location.

STREAM DATA
Streamflow at diversion site is: Perennial (Water is always flowing) Intermittent (Channel is sometimes dry)
Is streamflow gaged? Yes No
If yes, provide gage name, and show location on map. Name: _____
Average flow before diversion: _____ mgd gpm cfs

DIVERSION STRUCTURE DATA
Year constructed: 1914 est. Elevation (above mean sea level): _____
Diversion structure is: Concrete Wood Pipe Other (Describe): Dirt embankment
Diverted flow is: Controlled Uncontrolled By steel & wooden gates
Divertable capacity is: 100 mgd gpm cfs

Submit an "as-built" drawing and dated photograph of the diversion works, if available.

... (continued over)

For Official Use Only:
Date received: _____ Date accepted: _____
Field checked by: _____ Date: _____ Latitude: _____ Hydrologic Unit: _____
Comments: _____ Longitude: _____ State Diversion No.: _____

References: Hawaii Revised Statutes, Chapter 174C.
Hawaii Administrative Rules, Chapters 13-167 to 13-171.

F. DECLARATION OF WATER USE

NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Location and name of measurement point (show on location map): Haiku Ditch gaging station @ Maliko

Water use data are recorded: Continuously Daily Other: _____

Method of measurement (Check box and describe below): Weir Rating flume Other

Description: Gaging station utilizes Stevens Digital Water Level Recorder set @ 30 minute punch intervals.

Quantity of Use (Report gaged or estimated monthly water use from the diversion described on the reverse side of this form, for the calendar years 1983 through 1987):

WATER USE, IN _____ (unit of measurement)

	1983	1984	1985	1986	1987
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
ANNUAL					

Typical times of usage: 24 hours

Type of Use (Check all category boxes that apply and provide additional information as indicated.):

Category	Additional Information
<input type="checkbox"/> Municipal (including resorts, hotels, businesses)	_____
<input type="checkbox"/> Domestic (systems serving 25 people or less)	Number of service connections: _____
<input checked="" type="checkbox"/> Irrigation	Approximately 36,000 acres are irrigated Acres Irrigated: <u>from this source and all other HC&S & Crop(s):</u> <input checked="" type="checkbox"/> Sugar <input checked="" type="checkbox"/> Pineapple <u>EMICO. sources.</u> <input type="checkbox"/> Other (specify): _____
	Non-Crop: <input type="checkbox"/> Landscape <input type="checkbox"/> Golf Course <input type="checkbox"/> Other (specify): _____
	Method: <input checked="" type="checkbox"/> Drip <input checked="" type="checkbox"/> Furrow <input type="checkbox"/> Sprinkler
<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Cooling <input checked="" type="checkbox"/> Manufacturing <input checked="" type="checkbox"/> Mill <input type="checkbox"/> Other (specify): _____
<input type="checkbox"/> Military	_____
<input checked="" type="checkbox"/> Other	Specify (livestock, hydroelectric, aquaculture, etc.): <u>Livestock</u>

Location of Use (Describe the location of water use, relative to the diversion, and indicate on location map. If water is used by others, submit a list of their names and addresses.):

See enclosed list - Haiku Ditch - water users

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: Garret Hew Date: 5/16/89
 Printed Name: Garret Hew
 Firm or Title (Diversion Operator, etc.): Superintendent-Administration, EMICO.

STANDARD STREAM DIVERSION WORKS PERMIT CONDITIONS
(Revised December 15, 2020)

1. The permit application and staff submittal approved by the Commission at its meeting on the above date shall be incorporated herein by reference.
2. The permittee, owner and/or operator of the stream diversion works shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage on a monthly (calendar or work schedule) basis to the Commission per HAR §13-168-7 Report of Water Use.
2. The project may require other agency approvals regarding wetlands, water quality, grading, stockpiling, endangered species, and floodways. The permittee shall comply with all other applicable statutes, ordinances, and regulations of the Federal, State and county governments, including, but not limited to, instream flow standards.
3. The permittee, his successors, assigns, officers, employees, contractors, agents, and representatives, shall indemnify, defend, and hold the State of Hawaii harmless from and against any claim or demand for loss, liability, or damage including claims for property damage, personal injury, or death arising out of any act or omission of the permittee or his successors, assigns, officers, employees, contractors, and agents under this permit or related to the granting of this permit.
4. The permittee shall notify the Commission, by letter, of the actual dates of project initiation and completion. The permittee shall submit a set of as-built plans and photos in pdf format of the completed work to the Commission upon completion of this project. This permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The proposed work under this stream channel alteration permit shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.
5. Before proceeding with any work authorized by the Commission, the permittee shall submit one set of construction plans and specifications in PDF format to determine consistency with the conditions of the permit and the declarations set forth in the permit application.
6. The permittee shall implement site-specific, construction Best Management Practices in consultation with the DOH Clean Water Branch and other agencies as applicable, that are designed, implemented, operated, and maintained by the permittee and its contractor to properly isolate and confine activities and to contain and prevent any potential pollutant(s) discharges from adversely impacting State waters per HRS Ch. 342D Water Pollution; HAR §11-54-1 through §11-54-8 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control, Appendix C.
7. The permittee shall protect and preserve the natural character of the stream bank and stream bed to the greatest extent possible. The permittee shall plant or cover lands denuded of vegetation as quickly as possible to prevent erosion and use native plant species common to riparian environments to improve the habitat quality of the stream environment.
8. In the event that subsurface cultural remains such as artifacts, burials or deposits of shells or charcoal are encountered during excavation work, the permittee shall stop work in the area of the find and contact the Department's Historic Preservation Division immediately. Work may commence only after written concurrence by the State Historic Preservation Division.

LEGAL AUTHORITIES

Water as a Public Trust. The four public trust purposes are:

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. *Waiahole*, 94 Hawaii 97; 9 P.3d 409 (2000).
4. Reservations of water for use on Hawaiian home lands. *Waiola O Molokai, Inc.*, 103 Hawaii 401; 83 P.3d 664 (2004).

Activities on undeveloped lands. *Public Access Shoreline Hawaii v. Hawaii County Planning Commission (PASH I)*. 79 Hawaii 246 (1993).

HRS §174C-26 Filing of declaration. (a) Any person making a use of water in any area of the State shall file a declaration of the person's use with the commission within one year from the effective date of rules adopted to implement this chapter.

(b) When the commission requires filing of declarations by rules, it shall cause public notice of the rule to be given statewide for filings in the city and county of Honolulu and areawide or countywide statewide for filings in counties other than the city and county of Honolulu. The commission shall also cause notice of the rules to be given by mail to any person required to file of whom the commission has or could readily obtain knowledge or who has requested mailed notice to be given when the commission adopts rules requiring the filing of declarations.

(c) The declarations shall be in such form and contain such information as the commission by rule prescribes, including the quantity of water used, the purpose or manner of the use, the time of taking the water, and the point of withdrawal or diversion of the water. Each declaration shall contain a statement, signed and sworn to by the person required to file the declaration, or by some other person duly authorized in the person's behalf, to the effect that the contents thereof are true to the best of the person's knowledge and belief.

HRS §174C-71 Protection of instream uses. The commission shall establish and administer a statewide instream use protection program. In carrying out this part, the commission shall cooperate with the United States government or any of its agencies, other state agencies, and the county governments and any of their agencies. In the performance of its duties the commission shall:

- (2) Establish interim instream flow standards;
 - (D) In considering a petition to adopt an interim instream flow standard, the commission shall weigh the importance of the present or potential instream values with the importance of the present or potential uses of water for noninstream purposes, including the economic impact of restricting such uses;
- (3) Protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses;
 - (A) The commission shall require persons to obtain a permit from the commission prior to undertaking a stream channel alteration; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit;

- (C) The commission shall establish guidelines for processing and considering applications for stream channel alterations consistent with section 174C-93;

HRS §174C-92 Registration of existing stream diversion works. Any person owning or operating a stream diversion works within or outside of a water management area shall register such work with the commission. Registration shall be on the forms provided by the commission. Reporting requirements on the registration forms shall be reasonable.

HRS §174C-95 Abandonment. Any owner of any stream diversion work wishing to abandon or remove such work shall first obtain a permit to do so from the commission.

HAR §13-168-2 Definitions.

“Instream flow standard” means a quantity or flow of water or depth of water which is required to be present at a specific location in a stream system at certain specified times of the year to protect aquatic life, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses.

“Instream use” means beneficial uses of stream water for significant purposes which are located in the stream and which are achieved by leaving the water in the stream. Instream uses include, but are not limited to:

- (1) Maintenance of aquatic life and wildlife habitats;
- (2) Outdoor recreational activities;
- (3) Maintenance of ecosystems such as estuaries, wetlands, and stream vegetation;
- (4) Aesthetic values such as waterfalls and scenic waterways;
- (5) Navigation;
- (6) Instream hydropower generation;
- (7) Maintenance of water quality;
- (8) The conveyance of irrigation and domestic water supplies to downstream points of diversion; and
- (9) The protection of traditional and customary Hawaiian rights.

“Stream diversion” means the act of diverting, pumping or otherwise removing water from a stream into a channel, ditch, pipeline, or other conduit.

“Stream diversion works” means any artificial structure, excavation, pipeline, or other conduit constructed singly or in combination, for the purpose of diverting or otherwise removing water from a stream into a channel, ditch, tunnel, pipeline, etc.

HAR §13-168-5 Declaration of water use. (a) Any person making a use of water from a well or stream diversion works in existence on the effective date of these rules in any area of the state shall file a declaration of the person’s use with the commission within one year from the effective date of these rules.

(c) Declarations by the user shall be made on forms provided by the commission and shall contain information including, but not limited to, the location of the water sources and all usage-related facts, or information within his knowledge or possession. The user shall include a declaration of the manner, purposes, and time in which the water source is being used and operated, the rate and volume of water being withdrawn or diverted therefrom, and the method or means of measuring and controlling the water taken or used. Each declaration shall contain a statement, signed and sworn to by the person required to file the declaration, or by some other

person duly authorized in the person's behalf, to the effect that the contents thereof are true to the best of the person's knowledge and belief.

HAR §13-168-31 Registration of existing stream diversion works. Within one year from the effective date of these rules, the owner or operator of any stream diversion works in any area of the state shall register such facility with the commission. Registration shall be on the forms provided by the commission and shall include information such as location, dimensions, elevations, divertible capacity, construction plans, method of measuring flows, and all other facts or information reasonably required.

HAR §13-168-35 Abandoned stream diversion works. (a) The owner of any stream diversion works wishing to abandon or remove such works shall first obtain a stream diversion permit issued or caused to be issued by the commission. No abandonment work shall be undertaken by the applicant until such a permit is issued by the commission.

(b) Each application for a stream diversion permit to perform abandonment work shall be made on forms furnished by the commission, shall not require a fee, and shall include:

- (1) The name and address of the applicant;
- (2) The location and description of the proposed stream diversion work abandonment;
- (3) An assessment of the impact the abandonment will have on the stream environment;
- (4) Relevant maps, plans, and drawings; and
- (5) Other information as may be necessary for the commission to determine the merits of the proposed stream channel alteration, including any hazards to public health, safety, or welfare, and the desirability of issuing a permit.

HAR §13-169-44 Interim instream flow standard for East Maui. The Interim Instream Flow Standard for all streams on East Maui, as adopted by the commission on water resource management on June 15, 1988, shall be that amount of water flowing in each stream on the effective date of this standard, and as that flow may naturally vary throughout the year and from year to year without further amounts of water being diverted offstream through new or expanded diversions, and under the stream conditions existing on the effective date of the standard.