STATE OF HAWAI'I | 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

April 18, 2023
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

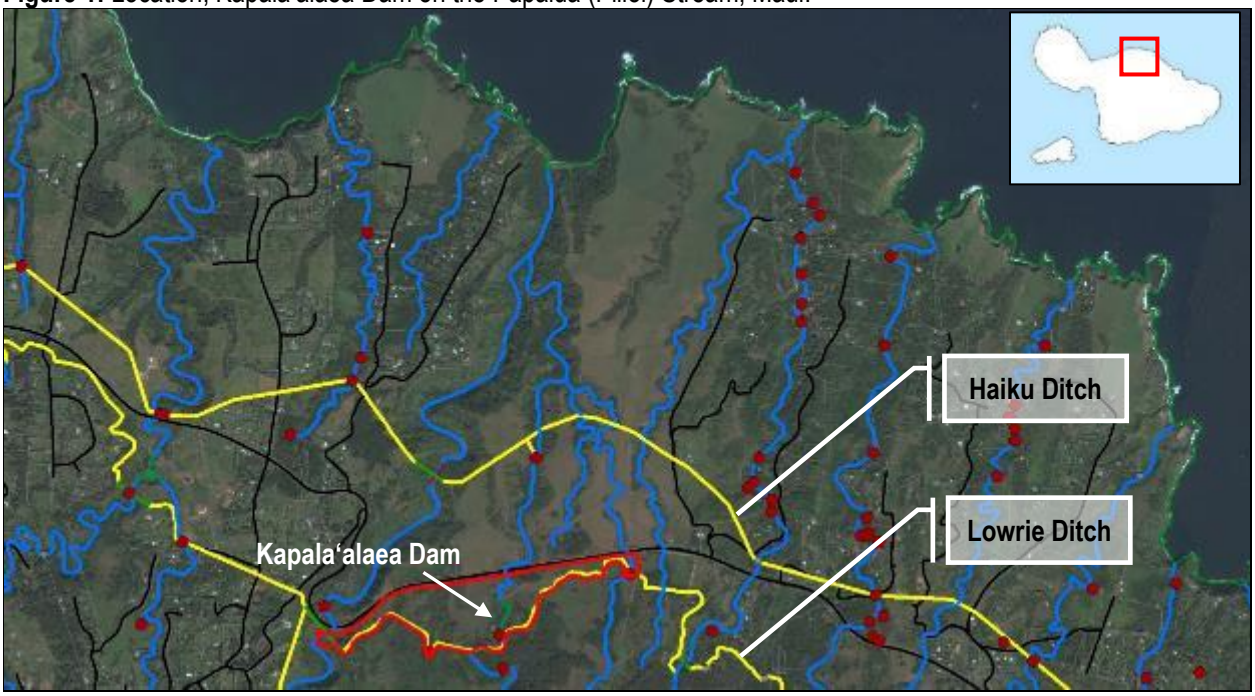
LANDOWNER
Same

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, 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/cwrm/swreview/SDWP_5951_6.pdf.

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 Kapalaʻalaea 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 Haʻikū Ditch.

PROJECT DESCRIPTION

Kapalaʻalaea Dam, located between the towns of Haʻikū and Huelo, Maui, has a "High" hazard classification per the Hawaiʻi 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 Kapalaʻalaea 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 ʻŌpeʻapeʻa (*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 Hawaiʻi 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 ʻŌhiʻa 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 ʻŌhiʻa Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if ʻōhiʻa 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 2**.

DLNR, Historic Preservation (SHPD): SHPD concurrence not received.

CWRM Staff Response: Approval of the application is subject to SHPD concurrence. If SHPD requires conditions, delegation of authority to the Deputy Director will be added as a special condition.

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: No comments received.

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 5**.

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 Kapalaʻalaea Dam, reseed, and add erosion protection measures subject to the standard conditions in **Exhibit 4** 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 2**, 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. Abandonment of the stream diversion works is subject to SHPD concurrence. If SHPD requires conditions, delegate to Deputy Director to attach those as conditions of abandonment.

   e. 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,

M. KALEO MANUEL
Deputy Director

Exhibits:
1. County of Maui Planning Department letter dated January 13, 2023.
2. Division of Forestry and Wildlife letter dated January 23, 2023.
3. Registration of Stream Diversion Works and Declaration of Water Use 184.6 filed in 1989.
4. Standard Stream Diversion Works Permit Conditions.
5. Legal Authorities.

APPROVED FOR SUBMITTAL:

DAWN N. S. CHANG
Chairperson

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
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
(x) Comments attached
( ) Additional information requested
( ) Extended review period requested

Application indicates that HEC-HMS was used to evaluate hydraulic condintion downstream after abanbondemnt of dam. HEC-HMS model outputs were not included in the materials reviewed by the floodplain manager. Please subumit 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

EXHIBIT 1

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

January 23, 2023

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'alaea 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'alae 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'alaea 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://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.

EXHIBIT 2

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 ʻŌhiʻa 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 ʻŌhiʻa Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if ʻōhiʻa 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. Girald Pérez, Protected Species Habitat Conservation Planning Associate at (808) 265-3276 or myrna.girald-perez@hawaii.gov.

Sincerely,

Lainie Berry

LAINIE BERRY
Wildlife Program Manager

Form 5810-2

RECEIVED
99 MAY 26 P2:19
DIV. OF WATER & LAND DEVELOPMENT

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

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 548-3948 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: Kapalaalea Reservoir
DIVERSION SYSTEM NAME: Haiku Ditch

A. DIVERSION WORKS OPERATOR
Firm name: East Maui Irrigation Co. Ltd.
Contact person: Garret Hew
Address: P. O. Box H
Paia, Maui, Hawaii
Zip: 96779 Phone: 579-9516

B. OWNER OF DIVERSION WORKS SITE
Firm name: Same as A
Contact person:
Address:
Zip: Phone:

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

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

E. DIVERSION STRUCTURE DATA
Year constructed: 1914 est. Elevation (Above mean sea level):
Diversion structure is: [ ] Concrete [ ] Wood [ ] Pipe [X] Other (Describe): Dirt embankment
Diverted flow is: [X] Controlled [ ] Uncontrolled By steel & wooden gates
Divertable capacity is: 100 [X] 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.

EXHIBIT 3

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
☐ Municipal (including resorts, hotels, businesses)	
☐ Domestic (systems serving 25 people or less)	Number of service connections:
☒ Irrigation	Approximately 36,000 acres are irrigated from this source and all other HC&S & EMICo. sources. Acres Irrigated: Crop(s): ☒ Sugar ☒ Pineapple ☐ Other (specify): Non-Crop: ☐ Landscape ☐ Golf Course ☐ Other (specify): Method: ☒ Drip ☒ Furrow ☐ Sprinkler
☒ Industrial	☐ Cooling ☒ Manufacturing ☒ Mill ☐ Other (specify):
☐ Military	
☒ Other	Specify (livestock, hydroelectric, aquaculture, etc.): Livestock

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.

EXHIBIT 4

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 of expanded diversions, and under the stream conditions existing on the effective date of the standard.