



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

March 19, 2024
Honolulu, Hawai'i

Approval of Stream Diversion Works Permit Application (SDWP.5991.6) and
Special Conditions, East Maui Irrigation Company, LLC,
Abandon Registration of Stream Diversion Nos. 234, 254, 238, 273, 260, 150, 262, and 173;
Remove Pipes and Seal Intakes;
Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary, 'O'opuola,
'O'opuola Tributary, and Makanali Streams, Maui;
Tax Map Key(s): (2) 1-1-001:042; 2-9-014:001-002, 007, and 009; and

Declare that Project is Exempt from Environmental Assessment Requirements under
Hawaii Revised Statutes Chapter 343, and Hawaii Administrative Rules Chapter 11-200.1

APPLICANT
East Maui Irrigation Company, LLC
P.O. Box 1104
Puunene, HI 96784

LANDOWNER
East Maui Irrigation Company, LLC
(2) 1-1-001:042; 2-9-014:002, 007, and 009

State of Hawai'i
(2) 2-9-014:001

SUMMARY OF REQUEST

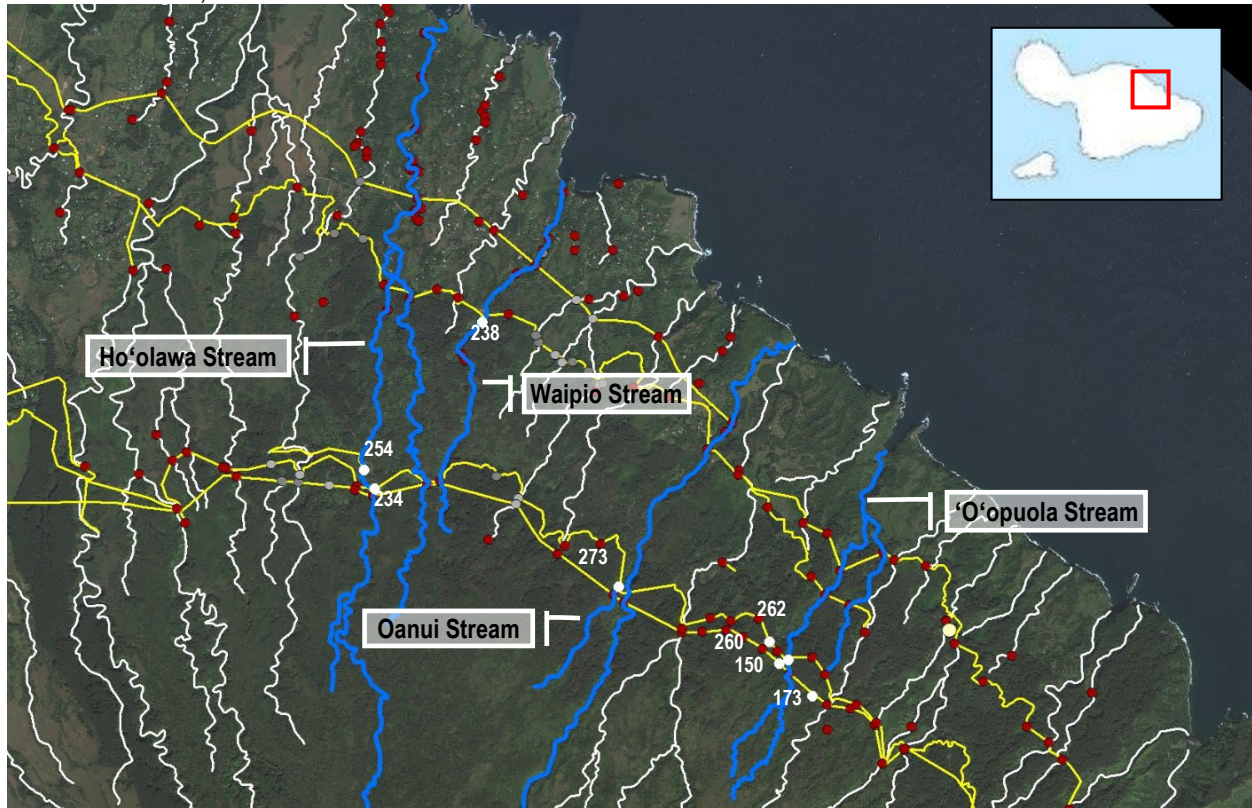
Approve Stream Diversion Works Permit Application (SDWP.5991.6) submitted by East Maui Irrigation Company, LLC (EMI) that proposes to abandon Stream Diversion Works Nos. 234, 254, 238, 273, 260, 150, 262, and 173, and to remove pipes and seal intakes to restore flow on the Makanali, 'O'opuola Tributary, 'O'opuola, West 'O'opuola Tributary, Oanui, Waipi'o, and Ho'olawa Streams, Maui.

Find that the project, SDWP.5991.6, is exempt from Hawaii Revised Statutes, Chapter 343 per the Comprehensive Exemption List for the Commission, reviewed and concurred upon by the Environmental Council on January 5, 2021.

SDWP.5991.6 Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary, ‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui

LOCATION: Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary, ‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui. See **Figure 1**.

Figure 1: Location: Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary, ‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui.



BACKGROUND

In 1989, EMI registered Diversion Nos. 234, 254, 238, 273, 260, 150, 262, and 173 consisting of concrete, wooden gates, and pipes. The divertible capacity of all sources averaged 198 million gallons per day (mgd). The water was used for municipal, industrial, irrigation and agricultural purposes. See **Exhibits 1-8**.

On November 15, 2022, the Commission approved a petition to amend the interim instream flow standards (interim IFS) for the surface water hydrologic units of Ho‘olawa (6035), Waipi‘o (6036) Kailua (6040), ‘O‘opuola (6043), Maui. In order to implement the approved interim IFS for the subject streams, EMI was required to abandon Diversion Nos. 234, 254, 238, 273, 260, 150, 262, and 173. For more information, the staff submittal can be viewed online at <https://files.hawaii.gov/dlnr/cwrm/submittal/2022/sb20221115B5.pdf>.

SDWP.5991.6 Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary, ‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui

On January 13, 2023, East Maui Irrigation Co., LLC (EMI) filed a complete SDWP.5991.6 application that can be viewed online at:

https://files.hawaii.gov/dlnr/cwrmswreview/SDWP_5991_6.pdf.

On May 16, 2023, the Commission was presented this submittal by Commission staff, incorporating additional infrastructure modification actions as recommended by the Department’s Division of Aquatic Resources (DAR). However, due to some differences between what had been proposed by the consultant and what was being recommended by the Commission staff, the Commission voted to defer action on the submittal. The submittal is provided by reference here:

<https://files.hawaii.gov/dlnr/cwrmsubmittal/2023/sb20230516B2.pdf>

Commission staff held subsequent discussions with EMI and an East Maui Quarterly Working Group comprised of various East Maui stakeholders. Through these discussion, EMI agreed to remove additional infrastructure components at diversions NH-19 (Diversion No. 234) at Ho‘olawanui Stream, OH-1/NH-21 (Diversion No. 254) at Ho‘olawanui Stream, and W-7 (Diversion No. 173) at Makanali Stream.

STREAM DESCRIPTION

Ho‘olawa Stream. The National Hydrography Dataset classified the Ho‘olawa Stream as perennial and the Division of Aquatic Resources classified it as perennial. The total drainage area is 3.6 square miles with a maximum basin elevation of 3,510 feet. The longest flow path is nine (9) miles long and the mean annual precipitation is 148 inches.

Waipi‘o Stream. The National Hydrography Dataset classified the Waipi‘o Stream as perennial and the Division of Aquatic Resources classified it as perennial. The total drainage area is 0.58 square miles with a maximum basin elevation of 1,530 feet. The longest flow path is 2.5 miles long and the mean annual precipitation is 105 inches.

Oanui Stream. The National Hydrography Dataset classified the Oanui Stream as perennial and the Division of Aquatic Resources classified it as perennial. The total drainage area is 3.74 square miles with a maximum basin elevation of 4,980 feet. The longest flow path is five (5) miles long and the mean annual precipitation is 197 inches.

Makanali, ‘O‘opuola Tributary, ‘O‘opuola, West ‘O‘opuola Tributary Streams. The National Hydrography Dataset classified the Makanali, ‘O‘opuola Tributary, ‘O‘opuola, West ‘O‘opuola Tributary Streams as intermittent and the Division of Aquatic Resources classified them 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.

PROJECT DESCRIPTION

With the exception of stream rocks, materials removed from diversion structures will be transported off-site for proper disposal. Demolition, concrete forming and pouring will be done primarily by hand. Heavy equipment may be utilized only when necessary. Facilities to temporarily divert flow around work areas (e.g., sandbags, pipes) and other best management practices will be used to control water pollution. The expected construction time is three (3) to six (6) months, depending on weather conditions.

Ho‘olawa Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
NH-19	234	ACTION 2.11.4: Order EMI to seal and abandon Diversion 234 on Ho‘olawanui Stream to provide for downstream habitat and recreational uses.	Remove grate and seal hole into ditch with concrete/rocks to allow 100% of flow to pass



SDWP.5991.6 Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary,
‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui



Photo 1: Downstream view of dam at Diversion NH-19 (No. 234) from left bank.



Photo 2: Upstream view of dam at Diversion NH-19 (No. 234) from left bank.

In consideration of comments provided by DAR, Commission staff recommends the removal of the dam wall at Diversion NH-19 (Diversion No. 234) located just downstream of the intake on the left bank. EMI has agreed to remove the dam from the wingwall on the right bank to the wingwall on the left bank of Ho‘olawanui Stream. The New Hāmākua Ditch tunnel runs under the stream and is protected by the concrete apron at this diversion.

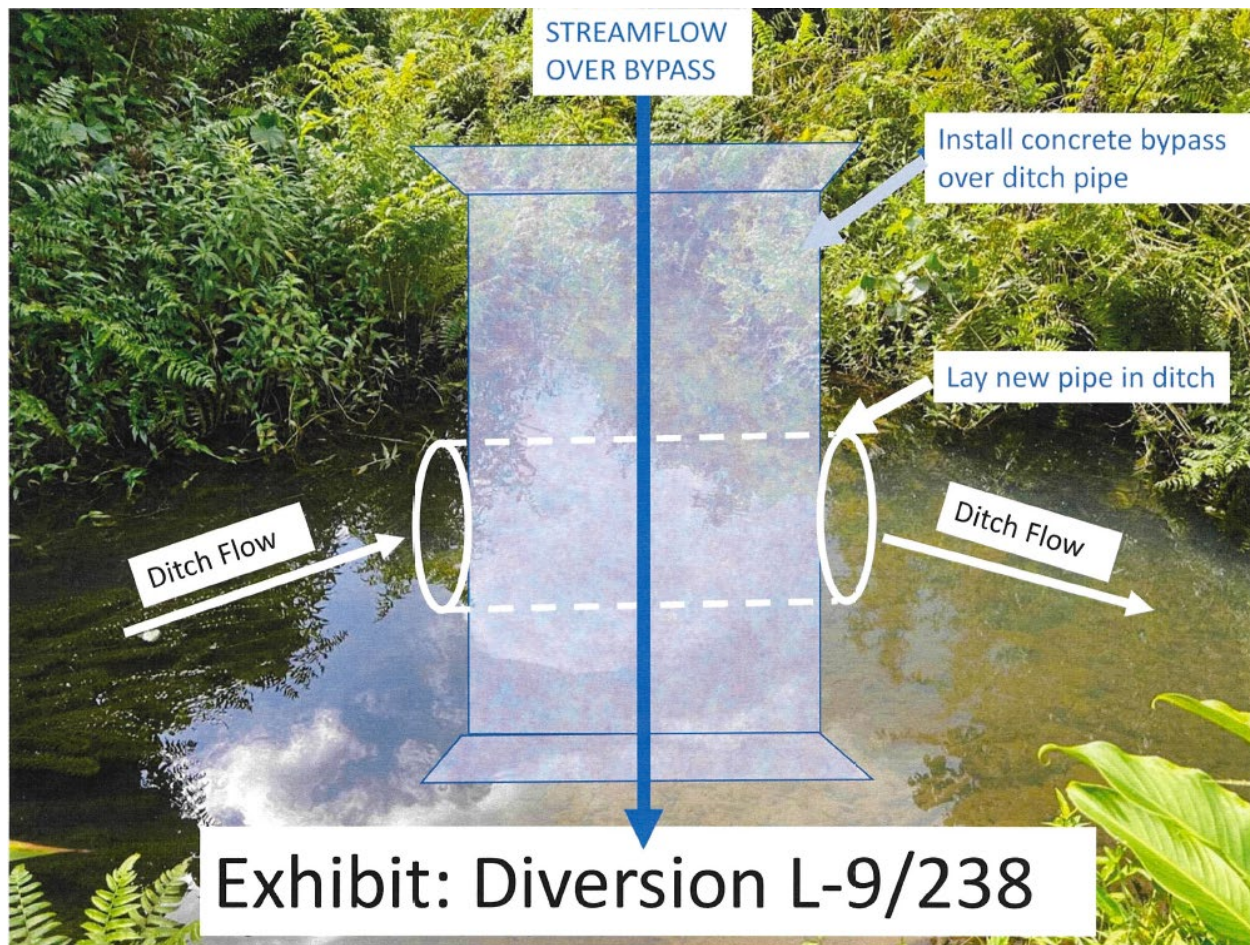
EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION(from Nov. 15, 2022)	PROPOSED ACTION
OH-1 NH-21	254	2.11 RECOMMENDATION: Abandon and seal DIV 254 (OH-1).	Plug and seal hole into intake with concrete/rocks to allow 100% of flow to pass



In consideration of comments provided by DAR, Commission staff recommends a minimum removal of the dam wall at Diversion OH-1 / NH-21 (Diversion No. 254) in the main wetted channel of Ho‘olawanui Stream (approximately 10 feet from the right bank of the stream). EMI has agreed to remove a minimum section of the dam from the right bank. The dam is secured to bedrock comprising the stream channel towards the left bank and EMI may remove additional sections of the dam wall following assessment of the initial dam removal.

Waipi‘o Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
L-9	238	ACTION 2.10.1: Order EMI to seal and abandon Diversion 238 on Waipio Stream to provide for downstream riparian uses.	Lay pipe in ditch, install concrete bypass to allow 100% of flow to pass



In consideration of comments provided by DAR, Commission staff recommends additional actions at Diversion L-9/238 at Waipi‘o Stream, including the construction of wings walls on the overpass channel to contain the flow and keep it from spilling into the ditch, and constructing curbs above the upstream end to concentrate the stream flowing into the overpass channel and from spilling into the ditch. EMI has agreed to this additional work.

Oanui Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
NH-14	273	ACTION 2.7.2: Order EMI to seal and abandon Diversion 273 on Oanui Stream to provide for downstream habitat and recreational uses.	Remove grate, fill with concrete/rocks to allow 100% of flow to pass



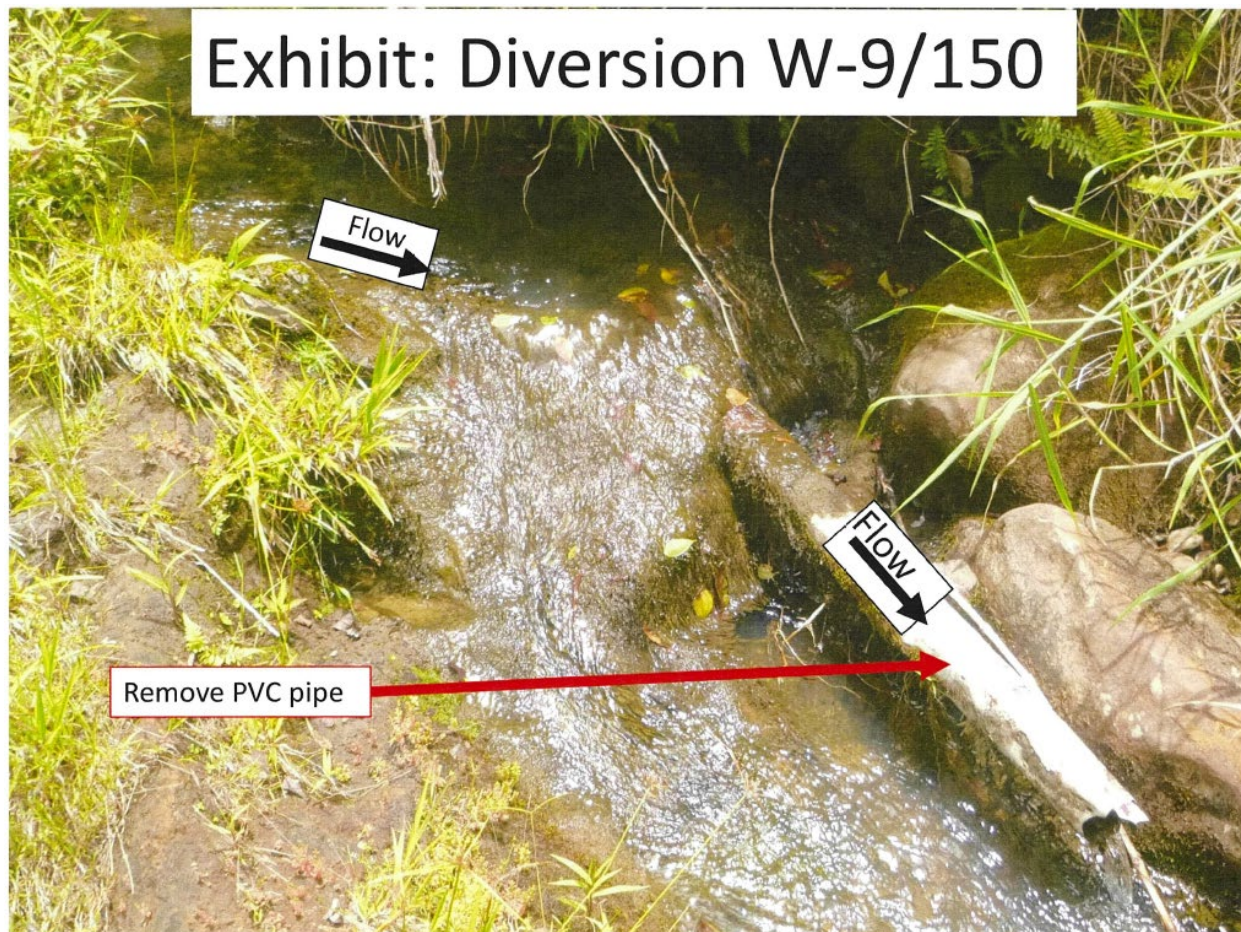
West ‘O‘opuola Tributary

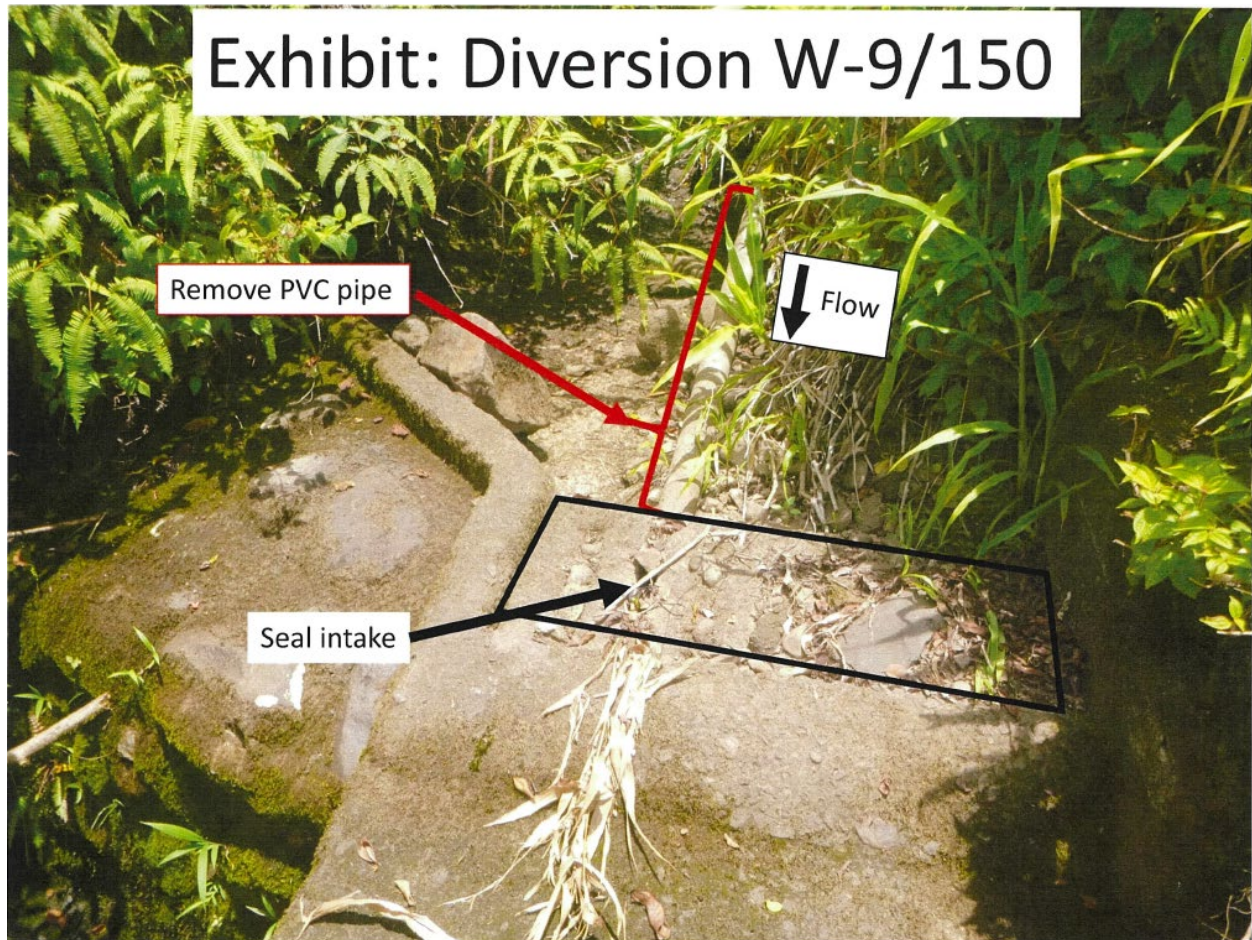
EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
NH-8	260	ACTION 2.4.5: Order EMI to seal and abandon Diversion 260 on West ‘O‘opuola Stream.	Seal intake with concrete slab to allow 100% of flow to pass



‘O‘opuola Tributary

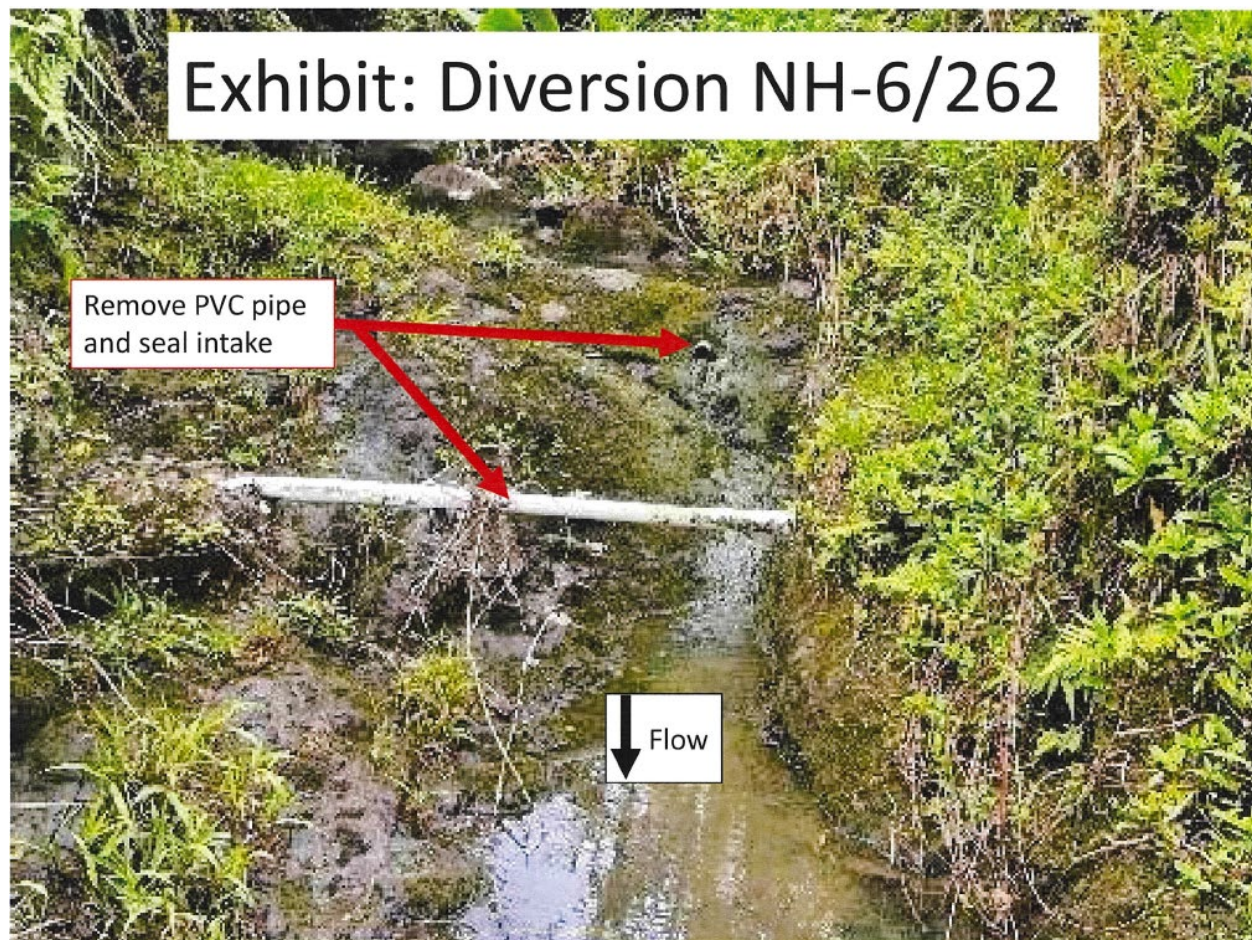
EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
W-9	150	ACTION 2.4.2: Order EMI to seal and abandon Diversion 150 on ‘O‘opuola Tributary Stream.	Remove PVC piping, seal intake to allow 100% of flow to pass





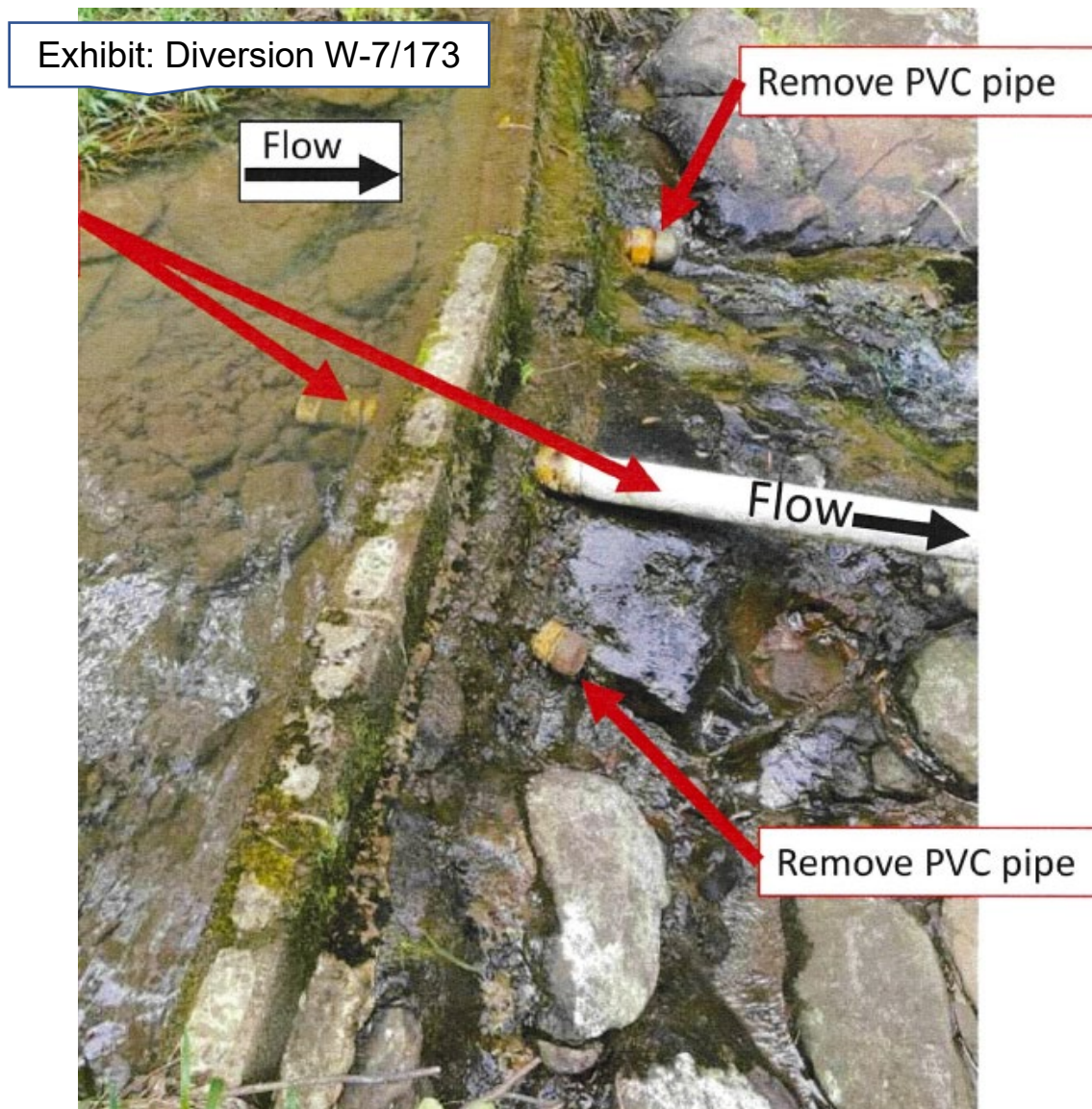
‘O‘opuola Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
NH-6	262	ACTION 2.4.3: Order EMI to seal and abandon Diversion 262 on ‘O‘opuola Tributary Stream.	Remove PVC piping, seal intake to allow 100% of flow to pass



Makanali Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
W-7	173	ACTION 2.4.1: Order EMI to seal and abandon Diversion 173 on Makanali Stream.	Remove PVC piping to allow 100% of flow to pass



In consideration of comments provided by DAR, Commission staff recommends removal of the dam wall at Diversion W-7 (Diversion No. 173) on Makanali Stream. EMI has agreed to remove the concrete tile dam wall and all concrete down to the embedded pipes.

SDWP.5991.6 Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary, ‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui

AGENCY REVIEW COMMENTS

Maui County, Planning Department: All the above referenced TMKs appear to be located in the County of Maui's Interim zoning district. No proposed sites are located in the Special Management Area (SMA). For the State Land Use District designation, all the above referenced TMKs appear to be located in the State Land Use Conservation District. For the proposed stream diversion abandonment in the State Land Use District, a Conservation District Use Application permit may be required. Pursuant to Hawaii Revised Statutes, Chapter 343, an Environmental Assessment is required or an exemption must be prepared because the proposed activities are located within the State Conservation District and (some) are located on state land. You may also wish to consult with the Department of Land and Natural Resources-State Historic Preservation Division to receive an HRS 6E determination. All TMKs appear to be in Flood Zone X, which are areas determined to be outside the 0.2% annual chance floodplain. For any TMK that is State owned, a Right-of-Entry permit may be required prior to conducting any work.

CWRM Staff Response: All diversions are located in the State conservation district and three diversions are located on State land, both are triggers for an environmental review under HRS 343, as further described below. Other agency concerns are noted below.

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

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

DLNR, Aquatic Resources: The Division of Aquatic Resources' policy for the abandonment of diversion structures is the removal of the diversion structure(s) and its associated infrastructure(s) restoring the stream channel as much as possible to its natural condition. The remnant curb and apron structures should be broken up and removed off site to provide a more natural stream flow condition. DAR recommendations on diversions:

For Diversion L-9/238 (Waipio Stream) for the streamflow overpass over the ditch we request adding wing walls on the overpass channel to contain the flow and keep it from spilling into the ditch as well as constructing curbs above the upstream end to concentrate the stream flowing into the overpass channel and from spilling into the ditch.

For Diversion OH-1 (NH-21/254) Hoolawa Stream complete removal of the diversion wall or create a low streamflow channel to improve connectivity at low streamflows.

To protect aquatic environments directly adjacent to the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. Most importantly, that 1) passage through the stream remain unimpeded at all times; 2) all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction are minimized and contained to the greatest extent possible; 3) schedule work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions; and, 4) minimize the disturbance and impacts to stream channel bottom and its substrate (cobble, boulders, etc.) as much as possible as these are essential components of the habitat for the native stream biota (See **Exhibit 9**).

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CWRM Staff Response: Commission staff concurs with DAR’s assessment for modifications to Diversion Nos. L-9/238 on Waipi‘o Stream and OH-1/254 on Ho‘olawa Stream, along with precautionary measures to protect aquatic environments. These items have been added as special conditions by reference.

DLNR, Engineering: The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk Areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards. The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zones are designated on FEMA’s Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA’s Map Service Center (msc.fema.gov). Our Flood Hazard Assessment Tool (FHAT) (<http://gis.hawaiiinfip.org/fhat/>) could also be used to research flood hazard information.

CWRM Staff Response: All TMKs appear to be in Flood Zone X, which are areas determined to be outside the 0.2% annual chance floodplain.

DLNR, Forestry and Wildlife (DOFAW): No comments received.

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 authority to Deputy Director will be added as a special condition.

DLNR, Land Division: No comments received.

CWRM Staff Response: Diversion Nos. 260, 234, and 254 are located on State land. EMI has an existing revocable permit for use of the land and water.

DLNR, Office of Conservation and Coastal Lands (OCCL): No objections. Appears to be maintenance/repair of a nonconforming structure in the resource subzone of the conservation district. HAR, Chapter 13-5-7 shall not prohibit the continuance or repair and maintenance of nonconforming land uses and structures. Identified land use in the conservation district P-8 Structures and Land Uses, existing (A-1). Appears to be exempt from the HEPA process per HAR 11-200.1 DLNR exemption list (See **Exhibit 10**).

CWRM Staff Response: All diversions are located in the Conservation District. Project is exempt from Hawaii Revised Statutes, Chapter 343 per the Comprehensive Exemption List for the Commission reviewed and concurred upon by the Environmental Council on January 5, 2021.

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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 (FWS): Endangered *Ochrosia haleakalae* (small tree) and *Megalagrion nestiotes* (damselfly) near NH-14. *Mucuna persericea* (Endangered plant) near L-9. Endangered *Megalagrion pacifium* (damselfly) a little mauka from W-9, W-7, NH-8 and NH-6. Endangered *Clermontia* species (small to medium herbaceous shrub) in vicinity of L-9, OH-1/NH21 and NH-19. We recommend implementing plant avoidance and minimization measures if any work would occur in the nearby terrestrial areas. Please employ applicable Best Management Practices for any inwater work (See **Exhibit 11**).

CWRM Staff Response: Added as a special condition by reference.

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, “See:

- 1) County of Maui Planning Department, Kalo Kanu O Ka`aina: A Cultural Landscape Study of Ke`anae and Wailuanui, Island of Maui, July 1995,
- 2) Kepa Maly and Onaona Maly, Wai O Ke Ola: He Wahi Mo‘olelo No Maui Hikina, 2001,
- 3) CWRM November 15, 2022 Item B-5,
- 4) IFSAR Oopuola 6043 June 2020 PR-2020-11,
- 5) IFSAR Kailua 6040 June 2020 PR-2020-08,

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- 6) IFSAR Waipio 6036 June 2020 PR-2020-05,
- 7) IFSAR Hoolawa 6035 June 2020 PR-2020-04,
- 8) Proposed Lease (Water Lease) for the Nāhiku, Ke‘anae, Honomanū, and Huelo License Areas Corrected Final Impact Statement vol. 3, September 24, 2021.”

CWRM Staff Response: Cultural, historical, or natural resources which support traditional and customary native Hawaiian rights are generally protected on undeveloped land (PASH, 1993). No comments were received from DLNR ‘Aha Moku. No comments from the public. Commission staff identified no historic sites. The references provided by the Applicant document native traditional and customary practices, historical accounts, 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 actions will have positive impacts on stream restoration due to abandonments establishing continuous flow through streams as determined by the CWRM at its November 15, 2022 action. This in turn will have a positive effect on traditional and customary Native Hawaiian rights downstream of the diversions.”

CWRM Staff Response: Concur.

- 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 CWRM’s expedited approval of this application will advance the actions taken by CWRM on November 15, 200 Item B-5.”

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

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- 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 triggers an EA because Diversion Nos. 234; 254; 238, 273, 260, 150, 262, and 173 are located in the Conservation District, and Diversion Nos. 234, 254, and 260 are located on State land. However, per Hawaii Administrative Rule (HAR) §11-200.1-15(a) some actions, because they will individually and cumulatively probably have minimal or no significant effects, can be declared exempt from the preparation of an EA.

The subject project is exempt from the preparation of an environmental assessment in accordance with HAR §11-200.1-15(c)(1), operations, repairs, or maintenance of existing structures, facilities, equipment, or topographical features, involving minor expansion or minor change of use beyond that previously existing.

The project is exempt from the preparation of an environmental assessment per HAR §11-200.1-15(c)(6) and falls under Exemption Class 6 of the Comprehensive Exemption List for the Commission, reviewed and concurred upon by the Environmental Council on January 5, 2021, providing for the “Demolition of structures, except those structure that are listed on the national register or Hawaii Register of Historic Places.” Specifically, under Part 1, Item 3, “Demolition and removal or existing structures, facilities, utilities, and other improvements, except those structures located on any historic site as designated in the National Register or Hawaii Register as provide for in the National Historic Preservation Act of 1966, 16 U.S.C §§470 et. seq., as amended, or HRS Chapter 6E.”

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 13**.

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.

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CWRM Staff Response: It is anticipated that removing these diversions will improve instream and noninstream uses.

RECOMMENDATION

That the Commission:

1. Approve Stream Diversion Works Permit (SDWP.5991.6) to abandon Diversions 234 and 254 on the Ho‘olawa Stream; Diversion 238 on the Waipi‘o Stream; Diversion 273 on the Oanui Stream; Diversion 260 on the West ‘O‘opuola Tributary; Diversion 262 on the ‘O‘opuola Stream; Diversion 150 on the ‘O‘opuola Tributary; and Diversion 173; on the Makanali Stream and remove pipes, seal intakes, and restore streamflow subject to the standard conditions in **Exhibit 12** and the special conditions below:
 - a. In conformance with the Division of Aquatic Resources (DAR) recommendations, incorporated by reference in **Exhibit 9**, it is DAR’s policy for the abandonment of diversion structures is the removal of the diversion structure(s) and its associated infrastructure(s) restoring the stream channel as much as possible to its natural condition.
 - i. For Diversion L-9/238, Waipi‘o Stream, wings walls shall be added on the overpass channel to contain the flow and keep it from spilling into the ditch as well as constructing curbs above the upstream end to concentrate the stream flowing into the overpass channel and from spilling into the ditch.
 - b. In alignment with DAR’s recommendations, the following additional actions shall be taken by the Permittee:
 - i. For Diversion NH-19 (Diversion No. 234) on Ho‘olawanui Stream, the Permittee shall remove the dam atop the concrete apron, located just downstream of the intake on the left bank, from the wingwall on the right bank to the wingwall on the left bank. The New Hāmākua Ditch tunnel runs under the stream and is protected by the concrete apron at this diversion.
 - ii. For Diversion OH-1 / NH-21 (Diversion No. 254) at Ho‘olawanui Stream, the Permittee shall remove the section of the dam wall in the main wetted channel of Ho‘olawanui Stream (approximately 10 feet from the right bank of the stream). The dam is secured to bedrock comprising the stream channel towards the left bank and the Permittee may remove additional sections of the dam wall following assessment of the initial dam removal.
 - iii. For Diversion W-7 (Diversion No. 173) at Makanali Stream, the Permittee shall remove the concrete tile dam wall and all concrete down to the embedded pipes.
 - c. Abandonment of diversion is subject to SHPD concurrence. If SHPD requires conditions, delegate to Deputy Director to attach those as conditions of abandonment.
 - d. In conformance with the U.S. Fish and Wildlife Service recommendations, incorporated by reference in **Exhibit 11**, the permittee shall: 1) implement plant avoidance and

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minimization measures identified if any work would occur in the nearby terrestrial areas;
and 2) employ applicable Best Management Practices for any inwater work.

2. Declare that the project is exempt from EA requirements under HRS Chapter 343 and HAR Chapter 11-200.1

Ola i ka wai,



DEAN D. UYENO
Acting Deputy Director

Exhibits:

1. Registration of Stream Diversion Works and Declaration of Water Use 173.6 filed in 1989.
2. Registration of Stream Diversion Works and Declaration of Water Use 150.6 filed in 1989.
3. Registration of Stream Diversion Works and Declaration of Water Use 262.6 filed in 1989.
4. Registration of Stream Diversion Works and Declaration of Water Use 260.6 filed in 1989.
5. Registration of Stream Diversion Works and Declaration of Water Use 273.6 filed in 1989.
6. Registration of Stream Diversion Works and Declaration of Water Use 238.6 filed in 1989.
7. Registration of Stream Diversion Works and Declaration of Water Use 234.6 filed in 1989.
8. Registration of Stream Diversion Works and Declaration of Water Use 254.6 filed in 1989.
9. State Division of Aquatic Resources comment letter, dated April 4, 2023.
10. Office of Conservation and Coastal Lands comment letter, dated April 7, 2023.
11. USFWS comment letter, dated March 11, 2023.
12. Standard Stream Diversion Works Permit Conditions.
13. Legal Authorities.

APPROVED FOR SUBMITTAL:



DAWN N. S. CHANG
Chairperson

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 6610-2



RECEIVED

33 MAY 26 P 2: 09

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

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 548-3948 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: MAKANALI (W-7) ISLAND: MAUI
DIVERSION STRUCTURE NAME: WAILOA DITCH INTAKE ON MAKANALI STREAM
DIVERSION SYSTEM NAME: WAILOA DITCH

DIVERSION WORKS OPERATOR

Firm name: East Maui Irrigation Co., Ltd.Contact person: Garret HewAddress: P.O. Box H
Paia, Maui, HawaiiZip: 96779 Phone: 579-9516

B. OWNER OF DIVERSION WORKS SITE

Firm name: Same as A

Contact person: _____

Address: _____

Zip: _____ Phone: _____

STREAM DIVERSION LOCATION

Tax Map Key: 1-1-01 Town, Place, District: MAKANALI

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: 1920 est. Elevation (Above mean sea level): _____Diversion structure is: ☒ Concrete ☐ Wood ☐ Pipe ☐ Other (Describe): _____Diverted flow is: ☒ Controlled ☐ Uncontrolled by 4" pvc pipeDivertable capacity is: .5 ☒ 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 1

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): Wailoa Ditch Gaging Stn. @ Hanopou

Water use data are recorded: ☒ Continuously ☐ Daily ☐ Other: _____ Stream

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

Description: Gaging station utilizes Stevens Digital Water Level Recorder set at 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)

See County of Maui Kanaele Weir Intake registration form.

☐ Domestic (systems serving 25 people or less)

Number of service connections: _____

☒ Irrigation

Acres irrigated: Approximately 36,000 acres are irrigated from
Crop(s): ☒ Sugar ☒ Pineapple this source and all other
☒ Other (specify): Variety FMI & HC&S sources.

Non-Crop: ☐ Landscape ☐ Golf Course

☐ Other (specify): _____

Method: ☒ Drip ☒ Furrow ☐ Sprinkler

☒ Industrial

☒ Cooling ☒ Manufacturing ☒ Mill

☐ Other (specify): _____

☐ Military

☒ Other

Specify (livestock, hydroelectric, aquaculture, etc.): Hydroelectric, 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 - Wailoa 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: 5/17/87

Printed Name: Garret Hew

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, EMCO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 5810-2



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

RECEIVED

99 MAY 26 P 2:10

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: 548-3948 or 548-7543 for assistance.

MULTI-SOURCE SYSTEMS: For a system of two or more diversions 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: OOPUOLA (W-9) ISLAND: MAUI
DIVERSION STRUCTURE NAME: WAILOA DITCH INTAKE ON OOPUOLA STREAM (#2 Oopuola
DIVERSION SYSTEM NAME: WAILOA DITCH Intake)

DIVERSION WORKS OPERATORFirm name: East Maui Irrigation Co., Ltd.Contact person: Garret HewAddress: P.O. Box H
Paia, Maui, HawaiiZip: 96779 Phone: 579-9516**B. OWNER OF DIVERSION WORKS SITE**Firm name: State of Hawaii

Contact person: _____

Address: _____

Zip: _____ Phone: _____

STREAM DIVERSION LOCATIONTax Map Key: 1-1-01 Town, Place, District: OOPUOLA

Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the diversion location.

STREAM DATAStreamflow 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: 1920 est. Elevation (above mean sea level): _____Diversion structure is: ☒ Concrete ☐ Wood ☐ Pipe ☐ Other (Describe): _____Diverted flow is: ☒ Controlled ☐ Uncontrolled by size of openingDivertable capacity is: 2 ☒ 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 2

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): Wailoa Ditch Gaging Stn. @ Hanopou

Water use data are recorded: ☒ Continuously ☐ Daily ☐ Other: _____ Stream

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

Description: Gaging station utilizes Stevens Digital Water Level Recorder set at 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)

See County of Maui Kamaole Weir Intake registration form.

☐ Domestic (systems serving 25 people or less)

Number of service connections: _____

☒ Irrigation

Acres irrigated: Approximately 35,000 acres are irrigated from
Crop(s): ☒ Sugar ☒ Pineapple this source and all other
☒ Other (specify): Variety EMT & RCES sources.

Non-Crop: ☐ Landscape ☐ Golf Course

☐ Other (specify): _____

Method: ☒ Drip ☒ Furrow ☐ Sprinkler

☒ Industrial

☒ Cooling ☒ Manufacturing ☒ Mill

☐ Other (specify): _____

☐ Military

☒ Other

Specify (livestock, hydroelectric, aquaculture, etc.): Hydroelectric; 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 - Wailoa 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 Haw Date: 5/17/89

Printed Name: Garret Haw

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, EMICO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 6810-2



RECEIVED

99 MAY 26 P 2:11

STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT 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: 548-3348 or 548-7543 for assistance.

MULTI-SOURCE SYSTEMS: For a system of two or more diversions 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: OOPUOLA (NH-6) ISLAND: MAUI
DIVERSION STRUCTURE NAME: New Hamakua Ditch intake on Oopuola Stream (Big
DIVERSION SYSTEM NAME: New Hamakua Ditch strainer intake)

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: State of Hawaii
Contact person: _____
Address: _____
Zip: _____ Phone: _____

C. STREAM DIVERSION LOCATION

Tax Map Key: 1-1-01 Town, Place, District: Oopuola
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: ☐ 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

E. DIVERSION STRUCTURE DATA

Year constructed: 1904 est. Elevation (Above mean sea level): _____
Diversion structure is: ☒ Concrete ☐ Wood ☐ Pipe ☐ Other (Describe): _____
Diverted flow is: ☒ Controlled ☐ Uncontrolled by size of opening
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.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): New Hamakua Ditch gaging station @ Honopou stream.
 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 at 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)

☒ Irrigation

Number of service connections: _____

Acres Irrigated: Approximately 36,000 acs. are irrigated from
 Crop(s): ☒ Sugar ☒ Pineapple this source & all other
☒ Other (specify): Variety HC&S & EMI sources.

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 Kaunihiko 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: 5/17/89

Printed Name: Garret Hew

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, EMICO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 5810-2



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

RECEIVED

33 MAY 26 P 2:12

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 548-3048 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: OOPUOLA (NH-8) ISLAND: MAUI
DIVERSION STRUCTURE NAME: New Hamakua Ditch intake on Oopuola Stream (Oopuola
DIVERSION SYSTEM NAME: New Hamakua Ditch intake #4)

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: State of Hawaii
Contact person: _____
Address: _____
Zip: _____ Phone: _____

C. STREAM DIVERSION LOCATION

Tax Map Key: 1-1-01 Town, Place, District: OOPUOLA
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: ☐ 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

E. DIVERSION STRUCTURE DATA

Year constructed: 1904 est. Elevation (Above mean sea level): _____
Diversion structure is: ☒ Concrete ☐ Wood ☐ Pipe ☐ Other (Describe): _____
Diverted flow is: ☒ Controlled ☐ Uncontrolled by size of opening
Divertable capacity is: 5 ☒ 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.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): New Hamakua Ditch gaging station @
Water use data are recorded: ☒ Continuously ☐ Daily ☐ Other: Honopou stream.

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

Description: Gaging station utilizes Stevens Digital Water Level Recorder set at
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)

☒ Irrigation

Acres irrigated: Approximately 36,000 acs. are irrigated from

Crop(s): ☒ Sugar ☒ Pineapple this source & all other

☒ Other (specify): Variety: MC6S & EMI sources.

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 Kaunihika 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: 5/17/89

Printed Name: Garret Hew

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, EMICO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 8810-2



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

RECEIVED

MAY 26 2:12

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 548-3948 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: OHANUI (NH-14) ISLAND: MAUI
DIVERSION STRUCTURE NAME: New Hamakua Ditch intake on Ohanui Stream
DIVERSION SYSTEM NAME: New Hamakua 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: 2-9-14 Town, Place, District: KAILUA
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: ☐ 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

E. DIVERSION STRUCTURE DATA

Year constructed: 1904 est. Elevation (Above mean sea level): _____
Diversion structure is: ☒ Concrete ☐ Wood ☐ Pipe ☐ Other (describe): _____
Diverted flow is: ☒ Controlled ☐ Uncontrolled by size of opening
Divertable capacity is: 30 ☒ 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.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): New Hanakua Ditch gaging station @
Water use data are recorded: ☒ Continuously ☐ Daily ☐ Other: Honopou stream.

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

Description: Gaging station utilizes Stevens Digital Water Level Recorder set at
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)

☒ Irrigation

Number of service connections: _____

Acres Irrigated: Approximately 36,000 acs. are irrigated from
Crop(s): ☒ Sugar ☒ Pineapple this source & all other
☒ Other (specify): Variety HC&S & EMI sources.

Non-Crop: ☐ Landscape ☐ Golf Course

Method: ☒ Drip ☒ Furrow ☐ Sprinkler

☒ Industrial

☐ Cooling ☒ Manufacturing ☒ Mill

☐ Military

☐ Other (specify): _____

☒ 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 Kauhikoa 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: 5/17/89

Printed Name: Garret Hew

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, BMTCO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 8810-2



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: 14

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 548-3948 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: WEST WAIPIO (L-9) ISLAND: MAUI
DIVERSION STRUCTURE NAME: Lowrie Ditch intake on West Waipio Stream
DIVERSION SYSTEM NAME: LOWRIE DITCH

A. DIVERSION WORKS OPERATOR

Firm name: East Maui Irrigation Co., Ltd.Contact person: Garret HewAddress: P. O. BoxPaia, Maui, HawaiiZip: 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: 2-9-06 Town, Place, District: WAIPIO

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: ☒ 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

E. DIVERSION STRUCTURE DATA

Year constructed: 1901 est. Elevation (above mean sea level): _____Diversion structure is: ☐ Concrete ☐ Wood ☐ Pipe ☒ Other (Describe): NaturalDiverted flow is: ☐ Controlled ☒ UncontrolledDivertable capacity is: _____ ☐ 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 6

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): Lowrie Ditch gaging station @ Honopou
Water use data are recorded: ☒ Continuously ☐ Daily ☐ Other: _____ Stream.

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)

☒ Irrigation

Number of service connections: _____

Approximately 36,000 acs. are irrigated

Acres irrigated: from this source & all other HC&S & BMI

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 - Lowrie 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: 5/17/89

Printed Name: Garret Hew

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, ENICO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 8910-2



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: 12

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: 548-3948 or 548-7543 for assistance.

MULTI-SOURCE SYSTEMS: For a system of two or more diversions 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: HOOLAWA-NUI (NH-19) ISLAND: MAUI
DIVERSION STRUCTURE NAME: New Hamakua Ditch intake on Hoolawa-Nui Stream
DIVERSION SYSTEM NAME: New Hamakua Ditch

A. DIVERSION WORKS OPERATOR

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

B. OWNER OF DIVERSION WORKS SITE

Firm name: State of Hawaii
Contact person: _____
Address: _____
Zip: _____ Phone: _____

C. STREAM DIVERSION LOCATION

Tax Map Key: 2-9-14 Town, Place, District: Lupui
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: ☐ 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

E. DIVERSION STRUCTURE DATA

Year constructed: 1904 est. Elevation (above mean sea level): _____
Diversion structure is: ☒ Concrete ☐ Wood ☐ Pipe ☐ Other (Describe): _____
Diverted flow is: ☒ Controlled ☐ Uncontrolled by size of opening
Divertable capacity is: 20 ☒ 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 7

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): New Hamakua Ditch gaging station @
Water use data are recorded: ☒ Continuously ☐ Daily ☐ Other: Honopou stream.

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

Description: Gaging station utilizes Stevens Digital Water Level Recorder set at
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)

☒ Irrigation

Number of service connections: _____

Acres Irrigated: Approximately 36,000 acs. are irrigated from
Crop(s): ☒ Sugar ☒ Pineapple this source & all other
☒ Other (specify): Variety: KC&S & ENI sources.

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 Kauhikoa 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: 5/17/89

Printed Name: Garret Hew

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, ENICO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Form 8810-2



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

RECEIVED

33 MAY 26 P 2: 12

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 548-3948 or 548-7543 for assistance.

MULTI-SOURCE SYSTEMS: For a system of two or more diversions 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: WEST HOOLAWA-NUI (NH-21) ISLAND: MAUI
DIVERSION STRUCTURE NAME: Old Hanakua Ditch - Hoolawa-Nui Stream Diversion to
DIVERSION SYSTEM NAME: Old Hanakua Ditch Honopou Stream

A. DIVERSION WORKS OPERATOR

Firm name: East Maui Irrigation Co. Ltd.Contact person: Garret HewAddress: P.O. Box HPaia, Maui, HawaiiZip: 96779 Phone: 579-9516

B. OWNER OF DIVERSION WORKS SITE

Firm name: State of Hawaii

Contact person: _____

Address: _____

Zip: _____ Phone: _____

C. STREAM DIVERSION LOCATION

Tax Map Key: 2-9-14Town, Place, District: LUPI

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: ☐ 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

E. DIVERSION STRUCTURE DATA

Year constructed: 1904 est. Elevation (Above mean sea level): _____Diversion structure is: ☒ Concrete ☐ Wood ☐ Pipe ☐ Other (Describe): _____Diverted flow is: ☒ Controlled ☐ Uncontrolled by wooden gateDivertable capacity is: 40 ☒ 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.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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): Lowrie Ditch gaging station @ Honopou Stream.
 Water use data are recorded: ☒ Continuously ☐ Daily ☐ Other: _____
 Method of measurement (Check box and describe below): ☐ Weir ☐ Rating flume ☐ _____
 Description: Gaging station utilizes Stevens Digital Water Level Recorder set at 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)

☒ Irrigation

Acres irrigated: Approximately 36,000 acs. are irrigated from
 Crop(s): ☒ Sugar ☒ Pineapple this source & all other
☒ Other (specify): HC&S & EMI sources.

Non-Crop: ☐ Landscape ☐ Golf Course

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 Lowrie 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: 5/17/24

Printed Name: Garret Hew

Firm or Title (Diversion Operator, etc.): Superintendent-Administration, EMICO.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

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



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL
RESOURCES DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

Date: March 15, 2023
DAR #AR6353

DARWIN H.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
LAURA H.E. KAHAKUA
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
STATE PARKS

MEMORANDUM

TO: Brian J. Neilson
DAR Administrator

FROM: Glenn Higashi *GH*, Aquatic Biologist

SUBJECT: Request for Comments, Stream Diversion Works Permit Application
(SDWP.5991.6); East Maui Irrigation Co., LLC

Request Submitted by: M. Kaleo Manuel, Deputy Director
~~Makanali, 'O'opuola, Oanui, Waipi'o, and Ho'olawanui Streams, Maui; Tax Map Key(s):~~
Location of Project: (2) 1-1-001:042; 2-9-014:001, 002, 007, and 009

Brief Description of Project:

Request for Comments, Stream Diversion Works Permit Application (SDWP.5991.6); East Maui Irrigation Co., LLC; Abandon Stream Diversion Works Nos. 173, 150, 262, 260, 273, 238, 234, and 254; Seal and Abandon Diversions and Restore Streamflow; Makanali, 'O'opuola, Oanui, Waipi'o, and Ho'olawanui Streams, Maui; Tax Map Key(s): (2) 1-1-001:042; 2-9-014:001, 002, 007, and 009.

Comments:

☐ No Comments ☒ Comments Attached

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plan, DAR requests the opportunity to review and comment on those changes.

Comments Approved: *Brian J. Neilson* Date: Apr 4, 2023
Brian J. Neilson
DAR Administrator

SDWP.5991.6 Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary,
‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui

DAR# AR6353

Brief Description of Project

Proposed project actions for SDWP.5991.6

Div. No. (EMI No.)	Description	TMK	Stream
173(W-7)	Remove PVC piping to allow 100% streamflow to pass	(2) 1-1-001:042	Makanali
150(W-9)	Remove PVC piping, seal intake to allow 100% streamflow to pass	(2) 2-9-014:002	‘O‘opuola
262(NH-6)	Remove PVC piping, seal intake to allow 100% streamflow to pass	(2) 2-9-014:002	O‘opuola
260(NH-8)	Seal intake with concrete slab to allow 100% streamflow to pass	(2) 2-9-014:001	O‘opuola
273(NH-14)	Seal intake/remove grate then seal with concrete/rocks to allow 100% streamflow to pass	(2) 2-9-014:007	Oanui
238(L-9)	Lay pipe in ditch and create concrete ditch overpass to allow 100% streamflow to pass	(2) 2-9-014:001	Waipi‘o
234(NH-19)	Seal/remove grate & seal hole into ditch with concrete/rocks to allow 100% streamflow to pass	(2) 2-9-014:001	Ho‘olawamui
254(NH-21)	Seal/plug & seal hole into intake diversion with concrete to allow 100 % streamflow to pass	(2) 2-9-014:001	Ho‘olawamui

DAR# AR6353

Comments

The Division of Aquatic Resources' policy for the abandonment of diversion structures is the removal of the diversion structure(s) and its associated infrastructure(s) restoring the stream channel as much as possible to its natural condition. The remnant curb and apron structures should be broken up and removed off site to provide a more natural stream flow condition.

DAR recommendations on diversions:

For Diversion L-9/238 (Waipio Stream) for the streamflow overpass over the ditch we request adding wing walls on the overpass channel to contain the flow and keep it from spilling into the ditch as well as constructing curbs above the upstream end to concentrate the stream flowing into the overpass channel and from spilling into the ditch.

For Diversion OH-1 (NH-21/254) Hoolawa Stream complete removal of the diversion wall or create a low streamflow channel to improve connectivity at low streamflows.

To protect aquatic environments directly adjacent to the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. Most importantly, that 1) passage through the stream remain unimpeded at all times; 2) all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction are minimized and contained to the greatest extent possible; 3) schedule work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions; and, 4) minimize the disturbance and impacts to stream channel bottom and its substrate (cobble, boulders, etc.) as much as possible as these are essential components of the habitat for the native stream biota.

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

Department of Land and Natural Resources
March 3, 2023
Page 2

Div. No.	Description	TMK	Stream
215	Seal holes in intake wall and create weir in sluice gate dam to allow approximately 3.0 cfs to flow over new weir when repaired sluice gate is closed.	(2) 2-9-014:007	Ho'olawanui
308	Construct 3-inch high by 30-inch wide (concrete/metal plate) channel across low-flow intake including downstream notch to pass up to 1.8 cfs, fix leaks.	(2) 1-1-001:042	'O'opuola

The application is online at <http://dlnr.hawaii.gov/cwrm/surfacewater/review/>. If you have any questions, contact Rebecca Alakai at (808) 587-0266, or rebecca.r.alakai@hawaii.gov.

Response:

- ☒ We have no objections
☐ Not subject to our regulatory authority and permit
☐ Comments attached
- ☐ Additional information requested
☐ Extended review period requested
☐ EA / EIS is required

Contact Person

J. E. Mills

Date:

4/7/2023

- * Appears to be maintenance/repair of a nonconforming structure in the Reserve subzone of the Conservation district
- * HAR, Chapter 13-5 shall not prohibit the continuance, or repair and maintenance of nonconforming land uses and structures per HAR, §13-5-7
- * Identified land use in the Conservation District P-8 STRUCTURES AND LAND USES, EXISTING (A-1)
- * Appears to be exempt from the HEPA process
 HAR
 per 11-200.1-16(1) EType #1 DLNR Exempt List #17
 GType #2 DLNR Exempt List #17

SDWP.5991.6 Ho'olawa, Waipi'o, Oanui, West 'O'opuola Tributary,
'O'opuola, 'O'opuola Tributary, and Makanali Streams, Maui

JOSH GREEN, M.D.
GOVERNOR | [hawaii.gov](https://www.hawaii.gov)



DAWN N. S. CHANG
CHAIRPERSON

MICHAEL G. BUCK
KENNETH S. FINK, M.D., MGA, MPH
NEIL J. HANNAHS
AURORA KAGAWA-VIVIANI, PH.D.
WAYNE K. KATAYAMA
PAUL J. MEYER

M. KALED 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

March 3, 2023

Ref: SDWP.5990.6

Dan Polhemus, Program Manager
U. S. Fish and Wildlife Service
Pacific Islands Fish and Wildlife Office
300 Ala Moana Blvd., Room 3-122
Honolulu, HI 96850
Via email: dan_polhemus@fws.gov

Request for Comments
Stream Diversion Works Permit Application (SDWP.5990.6)
East Maui Irrigation Co., LLC, Modification of Diversion Nos. 194; 308; 196; 185; 215
Fix Leaks and Provide Habitat Connectivity Project
Ka'aiea, 'O'opuola, Kailua and Ho'olawanui Streams, Maui
Tax Map Key(s): (2) 1-1-001:042; 2-9-014:035; and 2-9-014:007

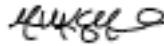
We would appreciate your review and comment on the subject permit application within 30 days from the date of this letter. The project proposes the following stream diversion modifications:

Div. No.	Description	TMK	Stream
185	Construct 3-inch high by 30-inch wide (concrete/metal plate) channel across low-flow intake including downstream notch to pass up to 1.8 cfs, fix leaks.	(2) 2-9-014:035	Kailua
194	Construct 3-inch high by 30-inch wide (concrete/metal plate) channel across low-flow intake including downstream notch to pass up to 1.8 cubic feet per second (cfs), fix leaks.	(2)1-1-001:042	Ka'aiea
196	Construct 3-inch high by 30-inch wide (concrete/metal plate) channel across low-flow intake including downstream notch to pass up to 1.8 cfs, fix leaks.	(2) 1-1-001:042	'O'opuola
215	Seal holes in intake wall and create weir in sluice gate dam to allow approximately 3.0 cfs to flow over new weir when repaired sluice gate is closed.	(2) 2-9-014:007	Ho'olawanui
308	Construct 3-inch high by 30-inch wide (concrete/metal plate) channel across low-flow intake including downstream notch to pass up to 1.8 cfs, fix leaks.	(2)1-1-001:042	'O'opuola

SDWP.5991.6 Ho‘olawa, Waipi‘o, Oanui, West ‘O‘opuola Tributary,
‘O‘opuola, ‘O‘opuola Tributary, and Makanali Streams, Maui

The application is online at <http://dlmr.hawaii.gov/cwrm/surfacewater/review/>. If you have any questions, contact Rebecca Alakai at (808) 587-0266, or rebecca.r.alakai@hawaii.gov.

Ola i ka wai,



M KALEO MANUEL
Deputy Director

Response:

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

Contact Person: DAN POLHEMUS Digitally signed by DAN POLHEMUS
Date: 2023.04.11 07:34:06 -10'00' Date: 11 March 2023

**Ecological Services (Hawai‘i and Maui Nui Geographic Team) Comments on the
Commission on Water Resource Management’s (CWRM) SWDP 5991 and SWDP 5990
(April 2023)**

Prepared by Carrie Harrington, USFWS Hawai‘i and Maui Nui Team biologist

SWDP 5991

Endangered *Ochrosia haleakalae* (small tree) and *Megalagrion nesiotes* (damselfly) near NH-14
Mucuna persericea (Endangered plant) near L-9
Endangered *Megalagrion pacifium* (damselfly) a little mauka from W-9, W-7, NH-8 and NH-6
Endangered *Clermontia* species (small to medium herbaceous shrub) in vicinity of L-9, OH-1/NH21 and NH-19

SWDP 5990

Mucuna persericea (Endangered plant) near H-7
Endangered *Megalagrion nesiotes* (damselfly) in areas near W-15
Endangered *Megalagrion pacifium* (damselfly) mauka to makai just south of S-13, C-7, and C-5
Other species that could enter or transit any of the project sites include the endangered Hawaiian goose, Hawaiian hoary bat, several federally listed Hawaiian seabirds, and federally listed Hawaiian waterbirds.

For the species above, we provide a short description of each species followed by our recommended avoidance and minimization measures to be incorporated into the project description:

Endangered Hawaiian damselflies are found in aquatic habitats across the islands, with high species endemism within islands. Breeding habitat includes anchialine pools, perennial streams, marshes, ponds, and even artificial pools and seeps. Major threats include introduced fish,

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amphibians, and invertebrates in streams, reduced stream flow from drought and water diversion, small isolated populations, reduced habitat quality from ungulates and nonnative plants, and possibly over-collection.

Two species of damselflies occur with a mile or two of several stream sites identified in both SWDP 5990 and 5991:

- *M. nesiotes* is found along one stream on Maui (formerly on Hawaii as well). Naiads may be terrestrial or semi-terrestrial and the species appears to be closely associated with uluhe.
- *M. pacificum* is found in seepage-fed pools cut off from the main stream channel, usually in areas with thick vegetation. Formerly found on all islands, now known from Molokai, Maui, and Hawaii Islands at low elevations.

Avoidance and minimization measures for damselflies:

- Applicable best management practices regarding work in aquatic environments (see Best Management Practices on next page) should be incorporated into the project description to minimize the degradation of water quality and impacts to fish and wildlife resources.
- Permits are required for accurate surveys of this species, so consult with the Service if work will be done in proximity to stream areas or within water bodies.

U.S. Fish and Wildlife Service Recommended Standard Best Management Practices

The U.S. Fish and Wildlife Service (USFWS) recommends the following measures to be incorporated into project planning to avoid or minimize impacts to fish and wildlife resources. Best Management Practices (BMPs) include the incorporation of procedures or materials that may be used to reduce either direct or indirect negative impacts to aquatic habitats that result from project construction-related activities. These BMPs are recommended in addition to, and do not over-ride any terms, conditions, or other recommendations prepared by the USFWS, other federal, state or local agencies. If you have questions concerning these BMPs, please contact the USFWS Aquatic Ecosystems Conservation Program at 808-792-9400.

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats beyond the planned project area.
2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods are variable throughout the Pacific islands, we recommend contacting the relevant local, state, or federal fish and wildlife resource agency for site specific guidance.
3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. BMPs should be maintained for the life of the

construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.

4. All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see <https://www.fws.gov/policy/A1750fw1.html>) can help to prevent attraction and introduction of non-native species.
5. Project construction-related materials (fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (e.g., with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.
6. Fueling of project-related vehicles and equipment should take place away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.
7. All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or non-invasive vegetation matting, hydro-seeding, etc.

Threatened nene (Hawaiian goose, *Branta (Nesochen) sandvicensis*): Nene are found on the islands of Hawaii, Maui, Molokai, and Kauai. They are observed in a variety of habitats, but prefer open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Threats to the species include introduced mammalian and avian predators, wind facilities, and vehicle strikes.

To avoid and minimize potential project impacts to nene we recommend you incorporate the following measures into your project description:

- Do not approach, feed, or disturb nene.
- If nene are observed loafing or foraging within the project area during the breeding season (September through April), have a biologist familiar with nene nesting behavior survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).

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- Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150 feet of proposed project, or a previously undiscovered nest is found within the 150-foot radius after work begins.
 - In areas where nene are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.

Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*): The Hawaiian hoary bat roosts in woody vegetation across all islands and will leave their young unattended in trees and shrubs when they forage. If trees or shrubs 15 feet or taller are cleared during the pupping season, June 1 through September 15, there is a risk that young bats could inadvertently be harmed or killed, since they are too young to fly or move away from disturbance. Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing.

To avoid and minimize impacts to the endangered Hawaiian hoary bat we recommend you incorporate the following applicable measures into your project description:

- Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season (June 1 through September 15).
- Do not use barbed wire for fencing.

Federally listed Hawaiian seabirds: Endangered Hawaiian petrel (*Pterodroma sandwichensis*), Threatened Newell’s shearwater (*Puffinus auricularis newelli*), and Endangered Hawaii Distinct Population Segment of the band-rumped storm-petrel (*Oceanodroma castro*):

Hawaiian seabirds may traverse the project area at night during the breeding, nesting and fledging seasons (March 1 to December 15). Outdoor lighting could result in seabird disorientation, fallout, and injury or mortality. Seabirds are attracted to lights and after circling the lights they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable to light attraction.

To avoid and minimize potential project impacts to seabirds we recommend you incorporate the following measures into your project description:

- Fully shield all outdoor lights so the bulb can only be seen from below.
- Install automatic motion sensor switches and controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

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Endangered Hawaiian waterbirds (Hawaiian stilt, *Himantopus mexicanus knudseni*; Hawaiian coot, *Fulica alai*; Hawaiian common gallinule, *Gallinula galeata sandvicensis*; Hawaiian duck, *Anas wyvilliana*): Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, kalo or taro (*Colocasia esculenta*) lo‘i or patches, irrigation ditches, sewage treatment ponds, and in the case of the Hawaiian duck, montane streams and marshlands. Hawaiian stilts may also be found wherever ephemeral or persistent standing water may occur. Threats to these species include non-native predators, habitat loss, and habitat degradation. Hawaiian ducks are also subject to threats from hybridization with introduced mallards.

To avoid and minimize potential project impacts to Hawaiian waterbirds we recommend you incorporate the following measures into your project description:

- In areas where waterbirds are known to be present, reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.
- If a listed waterbirds nest is found in the project area, contact the Service within 48 hours for further guidance.
- Establish and maintain a 100-foot buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.

Avoidance, Minimization, and Conservation Measures for listed plants in the Pacific Islands

Project activities may affect listed plant species by causing physical damage to plant parts (roots, stems, flowers, fruits, seeds, etc.) as well as impacts to other life requisite features of their habitat which may result in reduction of germination, growth and/or reproduction. Cutting and removal of vegetation surrounding listed plants has the potential to alter microsite conditions (e.g., light, moisture, temperature), damaging or destroying the listed plants and also increasing the risk of invasion by nonnative plants which can result in higher incidence or intensity of fire. Activities such as grazing, use of construction equipment and vehicles, and increased human traffic (i.e. trails, visitation, monitoring), can cause ground disturbance, erosion, and/or soil compaction which decrease absorption of water and nutrients and damage plant root systems and may result in reduced growth and/or mortality of listed plants. Soil disturbance or removal has the potential to negatively impact the soil seed bank of listed plant species if such species are present or historically occurred in the project area.

In order to avoid or minimize potential adverse effects to listed plants that may occur on the proposed project site, we recommend minimizing disturbance outside of existing developed or otherwise modified areas. When disturbance outside existing developed or modified sites is proposed, conduct a botanical survey for listed plant species within the project action area, defined as the area where direct and indirect effects are likely to occur. Surveys should be conducted by a knowledgeable botanist with documented experience in identifying native Hawaiian and Pacific Islands plants, including listed plant species. Botanical surveys should optimally be conducted during the wettest part of the year (typically October to April) when plants and identifying features are more likely to be visible, especially in drier areas. If surveys are conducted outside of the wet season, the Service may assume plant presence.

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The boundary of the area occupied by listed plants should be marked with flagging by the surveyor. To avoid or minimize potential adverse effects to listed plants, we recommend adherence to buffer distances for the activities in the **Table below**. Where disturbed areas do not need to be maintained as an open area, restore disturbed areas using native plants as appropriate for the location. Whenever possible we recommend using native plants for landscaping purposes. The following websites are good resources to use when choosing landscaping plants: Landscape Industry Council of Hawai‘i Native Plant Poster

(<http://hawaiiscape.wpengine.com/publications/>), Native Hawaiian Plants for Landscaping, Conservation, and Reforestation (<https://www.ctahr.hawaii.edu/oc/freepubs/pdf/of-30.pdf>), and Best Native Plants for Landscapes (<https://www.ctahr.hawaii.edu/oc/freepubs/pdf/OF-40.pdf>).

If listed plants occur in a project area, the avoidance buffers are recommended to reduce direct and indirect impacts to listed plants from project activities. However, where project activities will occur within the recommended buffer distances, additional consultation is required. The impacts to the plants of concern within the buffer area may be reduced by placing temporary fencing or other barriers at the boundary of the disturbance, as far from the affected plants as practicable.

The above guidelines apply to areas outside of designated critical habitat. If project activities occur within designated critical habitat unit boundaries, additional consultation is required. All activities, including site surveys, risk introducing nonnative species into project areas. Specific attention needs to be made to ensure that all equipment, personnel and supplies are properly checked and are free of contamination (weed seeds, organic matter, or other contaminants) before entering project areas. Quarantines and or management activities occurring on specific priority invasive species proximal to project areas need to be considered or adequately addressed. This information can be acquired by contacting local experts such as those on local invasive species committees (Kauai: <https://www.kauaiisc.org/>; Oahu: <https://www.oahuisc.org/>; Maui Nui: <https://mauiinvasive.org/>; and Hawaii: <https://www.biisc.org/>

Table 1. Recommended buffer distances to minimize and avoid potential adverse impacts to listed plants from activities listed below. **The yellow highlighted actions are the most relevant to these two SWDPs.**

Action	Buffer Distance (feet (meters)) - Keep Project Activity This Far Away from Listed Plant	
	Grasses/Herbs/Shrubs and Terrestrial Orchids	Trees and Arboreal Orchids
Walking, hiking, surveys	3 ft (1 m)	3 ft (1 m)
Cutting and Removing Vegetation By Hand or Hand Tools (e.g., weeding)	3 ft (1 m)	3 ft (1 m)
Mechanical Removal of Individual Plants or Woody Vegetation (e.g., chainsaw, weed eater)	3 ft up to height of removed vegetation (whichever greater)	3 ft up to height of removed vegetation (whichever greater)
Removal of Vegetation with Heavy Equipment (e.g., bulldozer, tractor, "bush hog")	2x width equipment + height of vegetation	820 ft (250 m)

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Action		Buffer Distance (feet (meters)) - Keep Project Activity This Far Away from Listed Plant	
		Grasses/Herbs/Shrubs and Terrestrial Orchids	Trees and Arboreal Orchids
Use of Approved Herbicides (following label)	Ground-based Spray Application; hand application (no wand applicator; spot treatment)	10 ft (3 m)	Crown diameter
	Ground-based Spray Application; manual pump with wand, backpack	50 ft (15 m)	Crown diameter
	Ground-based Spray Application; vehicle-mounted tank sprayer	50 ft (15 m)	Crown diameter
	Aerial Spray (ball applicator)	250 ft (76 m)	250 ft (76 m)
	Aerial Application – herbicide ballistic technology (individual plant treatment)	100 ft (30 m)	Crown diameter
	Aerial Spray (boom)	Further consultation required	Further consultation required
Use of Insecticides (pollinators, seed dispersers)		Further consultation required	Further consultation required
Ground/Soil Disturbance/Outplanting/Fencing (Hand tools, e.g. shovel, `ō`ō; Small mechanized tools, e.g., auger)		20 ft (6 m)	2x crown diameter
Ground/Soil Disturbance (Heavy Equipment)		328 ft (100 m)	820 ft (250 m)
Surface Hardening/Soil compaction	Trails (e.g., human, ungulates)	20 ft (6 m)	2x crown diameter
	Roads/Utility Corridors, Buildings/Structures	328 ft (100 m)	820 ft (250 m)
Prescribed Burns		Further consultation required	Further consultation required
Farming/Ranching/Silviculture		820 ft (250 m)	820 ft (250 m)

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Definitions (Wagner *et al.* 1999)

Crown: The leafy top of a tree.

Herb: A plant, either annual, biennial, or perennial, with the non-woody stems dying back to the ground at the end of the growing season.

Shrub: A perennial woody plant with usually several to numerous primary stems arising from or relatively near the ground.

Tree: A woody perennial that usually has a single trunk

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 12

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

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- 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

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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.