



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
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

May 16, 2023
Honolulu, Hawai'i

Approval of Stream Diversion Works Permit Application (SDWP.5990.6) and
Special Conditions, East Maui Irrigation Company, LLC,
Modification of Stream Diversion Nos. 215, 185, 308, 196, 194
To Fix Leaks and Provide Habitat Connectivity;
Ho'olawa, Kailua, 'O'opuola, and Ka'aiea Streams, Maui;
Tax Map Key(s): (2) 1-1-001:042; 2-9-014:035; and 2-9-014:007; 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
PO Box 1104
Puunene, HI 96784

LANDOWNER

Same

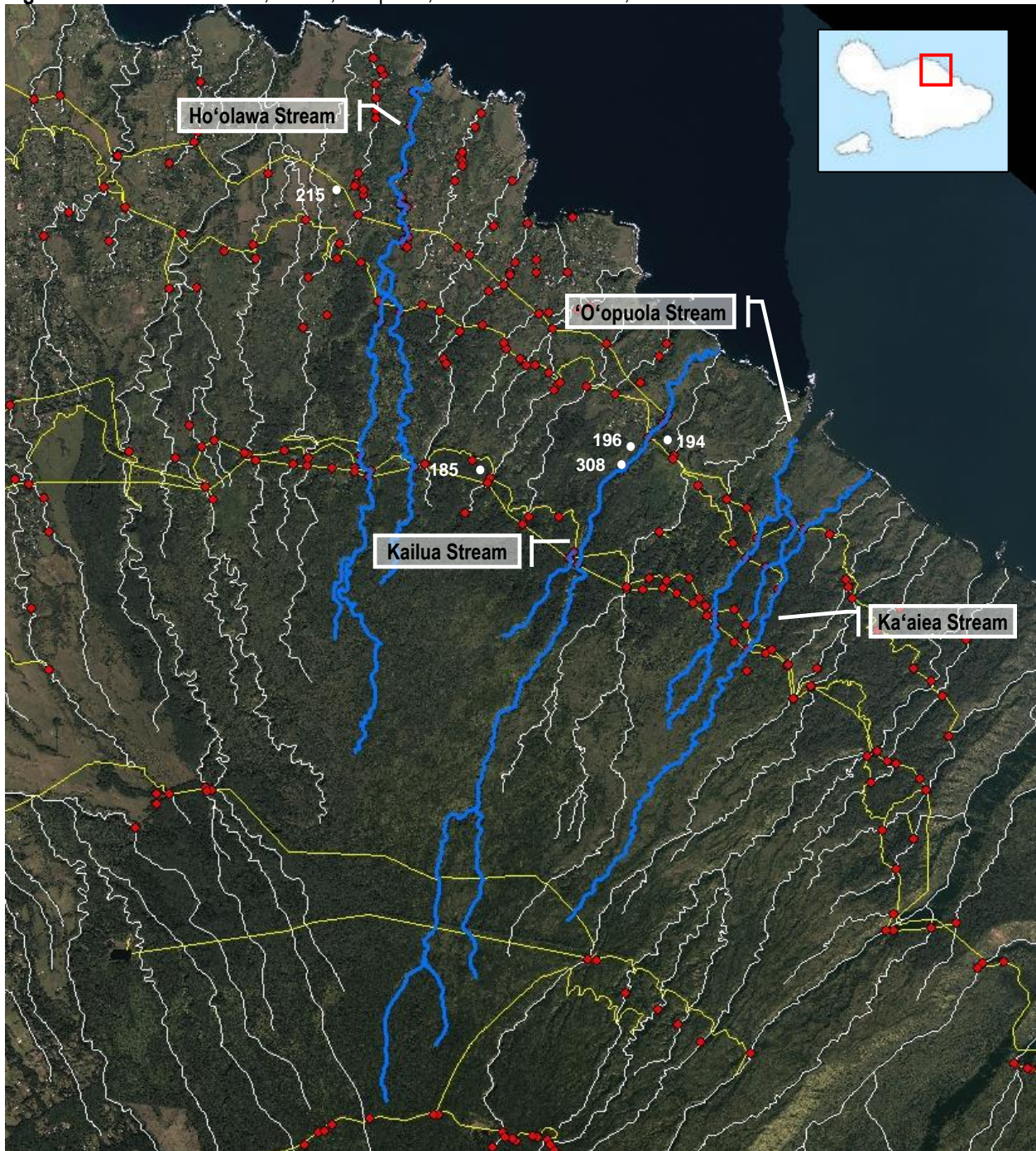
SUMMARY OF REQUEST

Approve Stream Diversion Works Permit Application (SDWP.5990.6) submitted by the East Maui Irrigation Company, LLC (EMI) that proposes to modify Diversion Nos. 215, 185, 308, 196, 194 to fix leaks and provide habitat connectivity on the Ho'olawa, Kailua, 'O'opuola, and Ka'aiea Streams, Maui.

Find that the project, SDWP.5990.6, is exempt 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.

LOCATION: Ho‘olawa, Kailua, ‘O‘opuola, and Ka‘aiea Streams, Maui. See **Figure 1**.

Figure 1: Location: Ho‘olawa, Kailua, ‘O‘opuola, and Ka‘aiea Streams, Maui.



BACKGROUND

In 1989, EMI registered Diversion Nos. 215, 185, 308, 196, and 194 consisting of concrete and wooden gates. The divertible capacity of all sources averaged 195 gallons per day (mgd). The water was used for municipal, industrial, irrigation and agricultural purposes.

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), Kailua (6040), ‘O‘opuola (6043), and Ka‘aiea (6040), Maui. In order to implement the approved interim IFS for the subject streams, EMI was required to modify Diversions 215, 185, 308, 196, and 194 to fix leaks and provide for habitat connectivity through increased streamflow at the points of diversion. For more information, the staff submittal can be viewed online at <https://files.hawaii.gov/dlnr/cwrmsubmittal/2022/sb20221115B5.pdf>.

On January 13, 2023, East Maui Irrigation Co., LLC filed a complete SDWP.5990.6 application that can be viewed online at: https://files.hawaii.gov/dlnr/cwrmswreview/SDWP_5990_6.pdf.

STREAM DESCRIPTION

Ho‘olawa Stream. The National Hydrography Dataset classified the Ho‘olawa Stream as intermittent 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 with a mean annual precipitation is 148 inches.

Kailua Stream. The National Hydrography Dataset classified the Kailua Stream as perennial and the Division of Aquatic Resources classified it as perennial. The total drainage area is 4.9 square miles with a maximum basin elevation of 6,550 feet. The longest flow path is 8.73 miles long with a mean annual precipitation is 177 inches.

‘O‘opuola Stream. The National Hydrography Dataset classified the ‘O‘opuola Stream as intermittent and the Division of Aquatic Resources classified it as perennial. The total drainage area is one (1) square mile with a maximum basin elevation of 2,030 feet. The longest flow path is four (4) miles long with a mean annual precipitation is 121 inches.

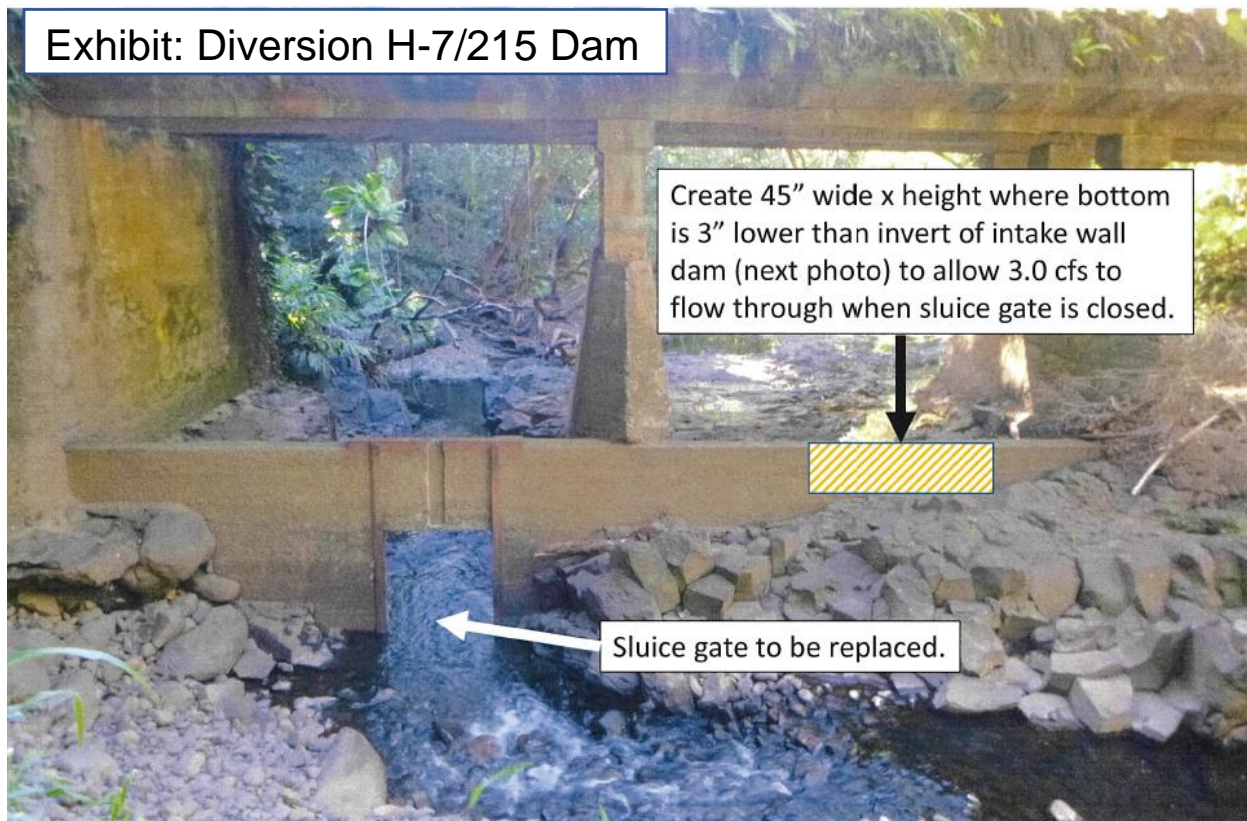
Ka‘aiea Stream. The National Hydrography Dataset classified the Ka‘aiea Stream as intermittent and the Division of Aquatic Resources classified it as perennial. The total drainage area is 1.1 square miles with a maximum basin elevation of 2,720 feet. The longest flow path is 5.61 miles long.

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 (such as sand bags, pipes) and other best management practices will be used to control water pollution. The expected construction time is 3 to 6 months, depending on weather conditions.

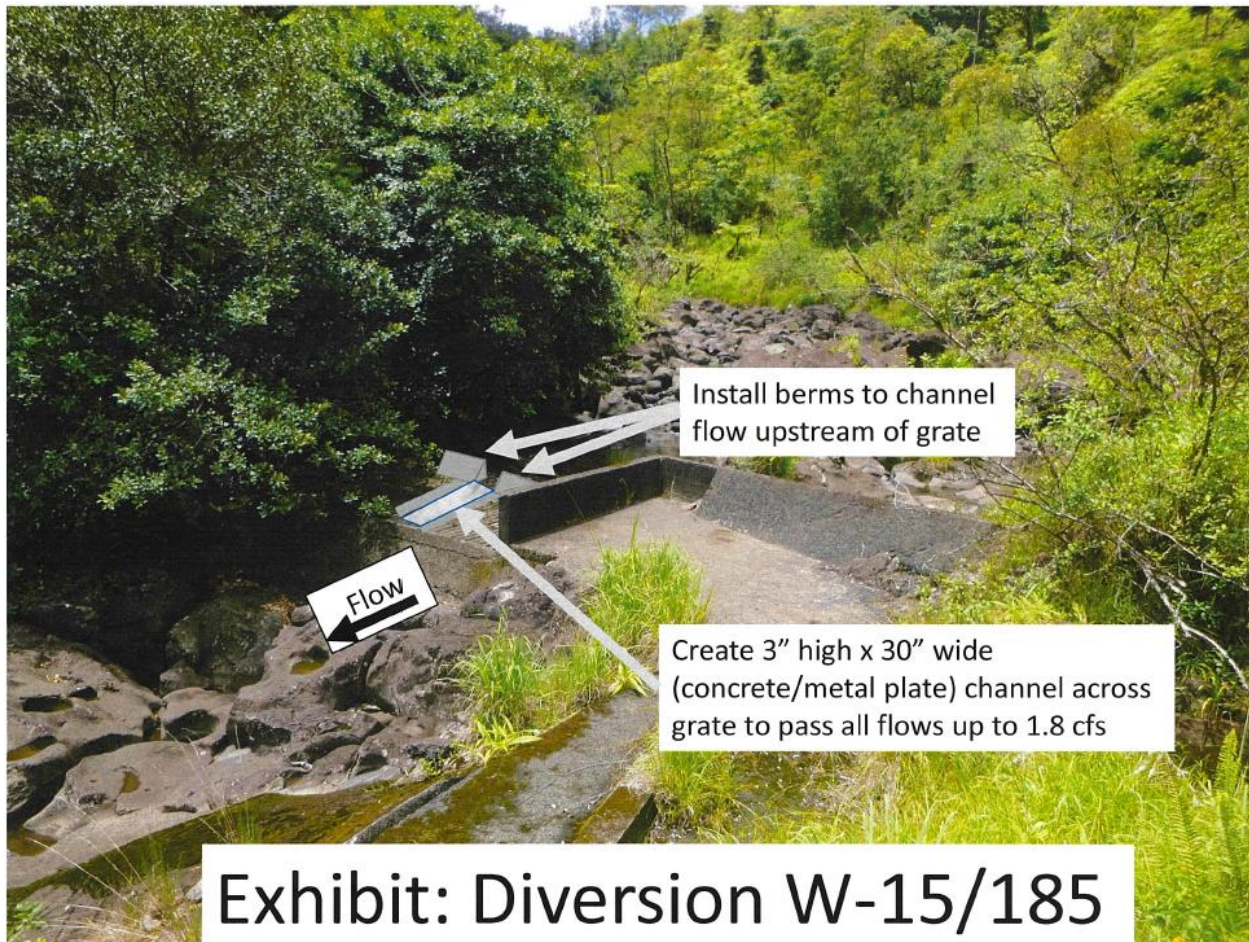
Ho‘olawa Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
H-7	215	2.11 RECOMMENDATION: Continual flow past DIV 215 (H-7): seal holes in intake wall and raise invert of ditch at intake such that all flows up to 3.0 cfs continue downstream.	Construct 45-inch wide x height where bottom is 3-inches lower than invert of intake wall dam to allow 3 cfs to flow through when sluice gate is closed; replace sluice gate



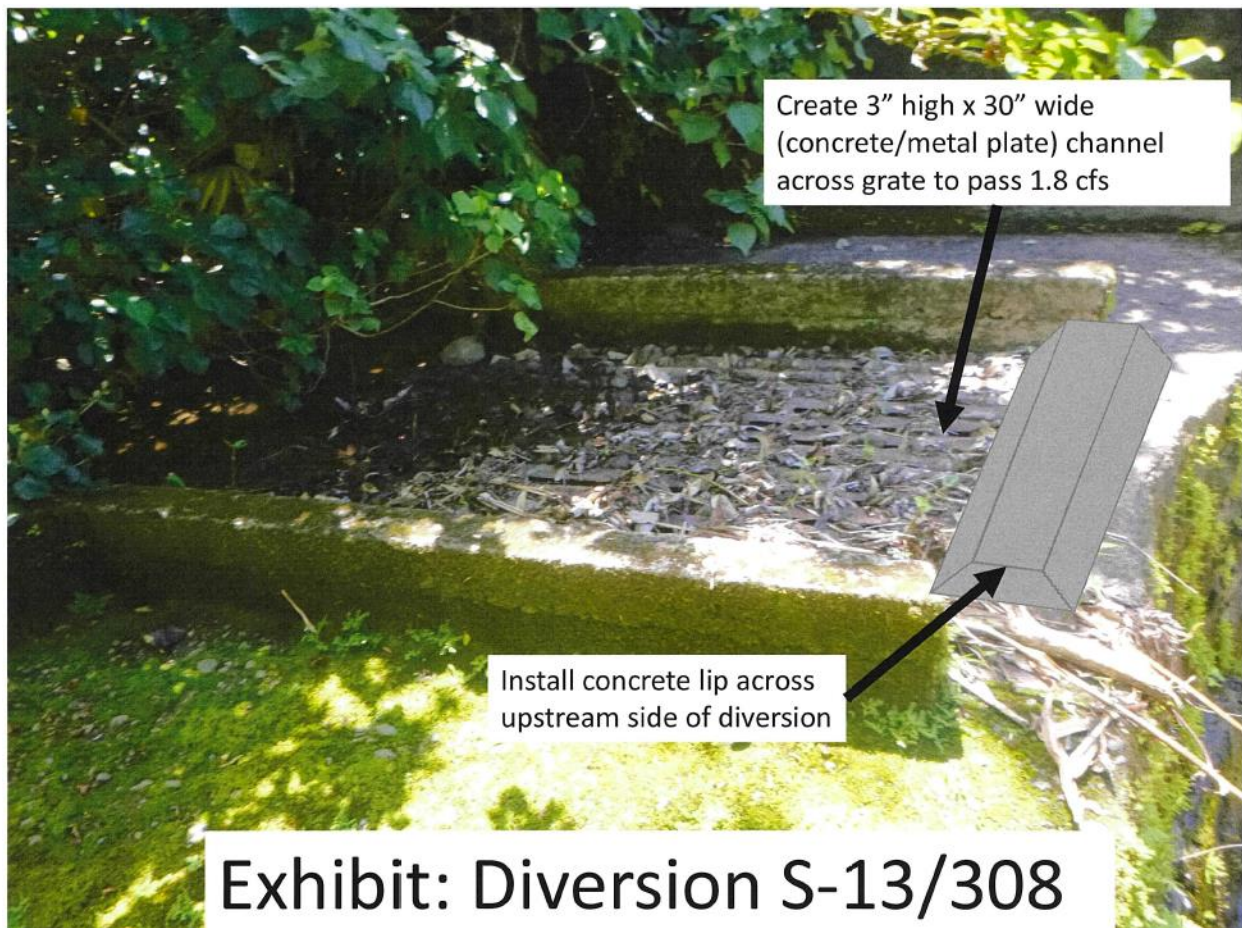
Kailua Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
W-15	185	<p>2.7 RECOMMENDATION: Continued flow past DIV 185 (W-15): 18-inch plate across grate to transport all flow up to 1.8 cfs</p> <p>ACTION 2.7.1: Order EMI to modify the intake such that 20% of all streamflows flow past Diversion 185 on Kailua Stream and provide for habitat connectivity and recreational uses.</p>	<p>Install berms to channel flow upstream of grate; Construct 3-inch high x 30-inch wide (concrete/metal plate) channel across grate to pass up to 1.8 cfs, fix leaks</p>

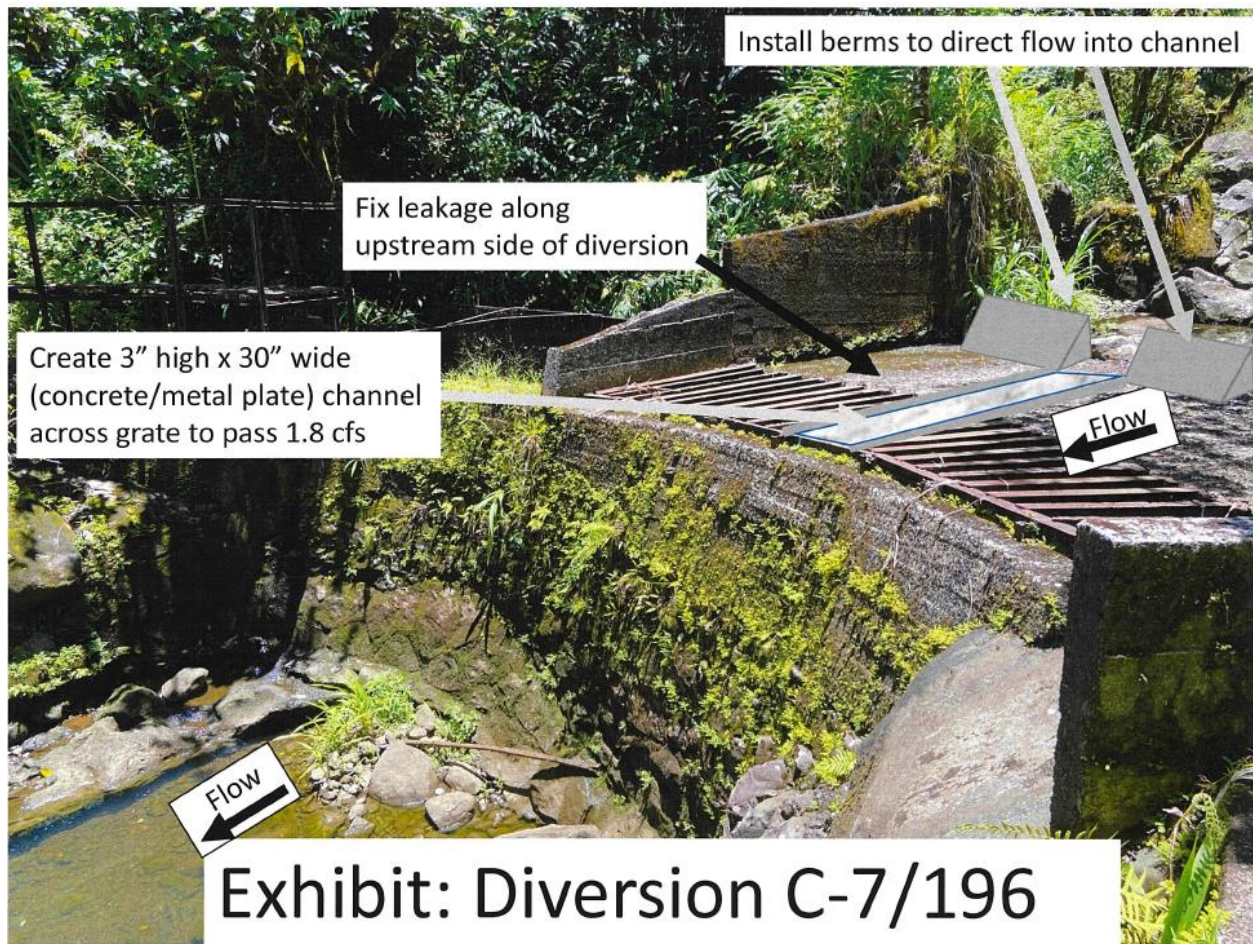


‘O‘opuola Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
S-13	308	<p>2.4 RECOMMENDATION: Continual flow past DIV 308 (S-13): 18-inch plate across grate to transport all baseflow up to 1.8 cfs</p> <p>ACTION 2.4.6: Order EMI to modify the intake such that all flows up to 1.8 cfs (1.12 mgd) flow past Diversion 308 on ‘O‘opuola Stream and provide for habitat connectivity.</p>	Construct 3-inch high x 30-inch wide (concrete/metal plate) channel across grate to pass 1.8 cfs; install concrete lip across upstream side of diversion

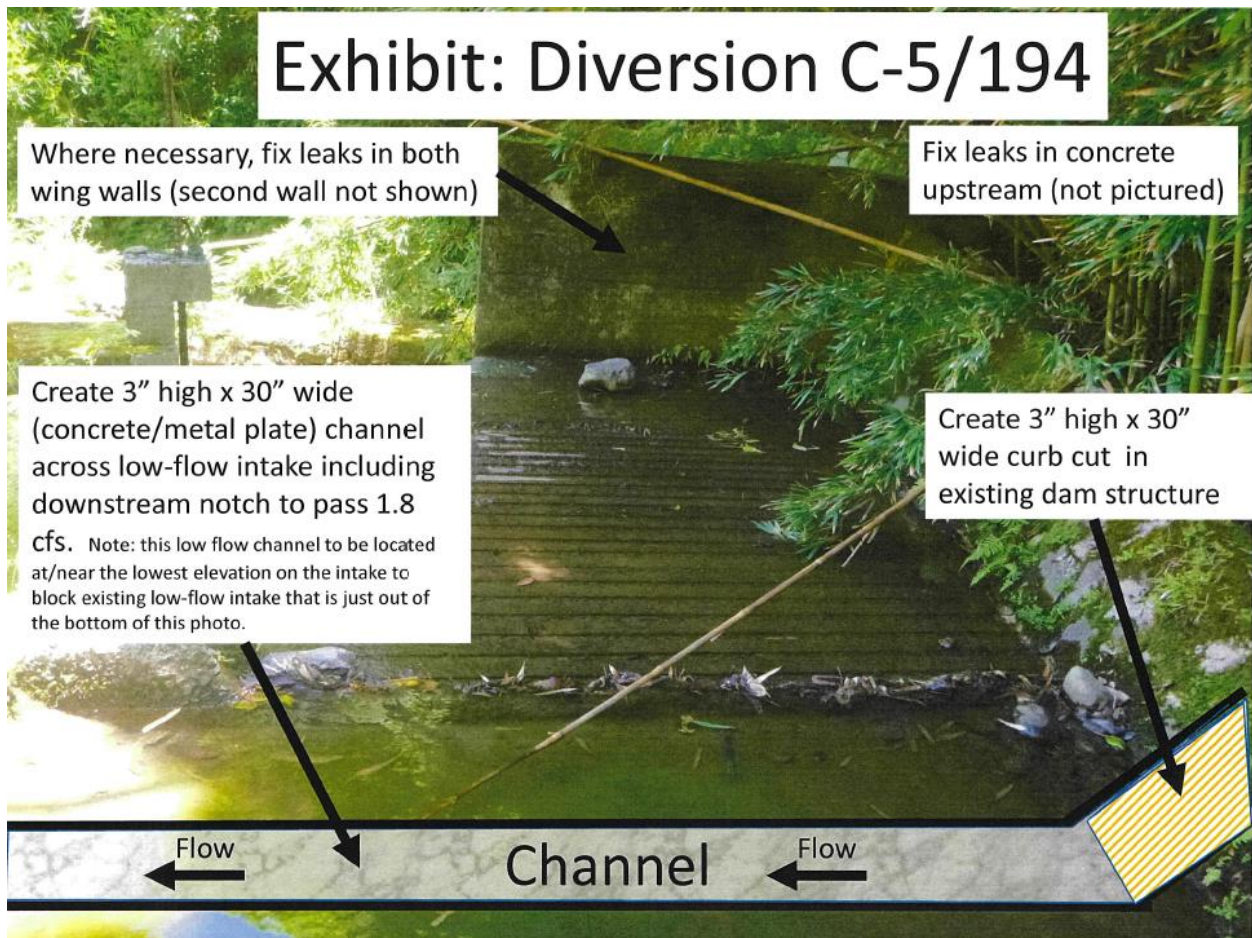


EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
C-7	196	<p>2.4 RECOMMENDATION: Continual flow past DIV 196 (C-7): 18-inch plate across grate, seal leakage along upstream edge to transport all baseflow up to 1.8 cfs</p> <p>ACTION 2.4.7: Order EMI to modify the intake such that all flows up to 1.8 cfs (1.12 mgd) flow past Diversion 196 on ‘O‘opuola Stream and provide for habitat connectivity.</p>	<p>Install berms to direct flow into channel; Fix leakage along upstream side of diversion; Construct 3-inch high x 30-inch wide (concrete/metal plate) channel across grate to pass 1.8 cfs</p>



Ka‘aiea Stream

EMI DIV ID	CWRM DIV ID	CWRM RECOMMENDATION (from Nov. 15, 2022)	PROPOSED ACTION
C-5	194	<p>2.3 RECOMMENDATION: Continual flow past DIV 194 (C-5): 18-inch plate across grate to transport all baseflow up to 1.8 cfs; fix leaks in upstream concrete and wing walls</p> <p>ACTION 2.3.2: Order EMI to modify the intake such that all flows up to 1.8 cfs (1.12 mgd) flow past Diversion 194 on Ka‘aiea Stream and provide for habitat connectivity.</p>	Construct 3-inch high x 30-inch wide curb cut in existing dam structure (concrete/metal plate) channel across low-flow intake including downstream notch to pass 1.8 cfs, fix leaks



AGENCY REVIEW COMMENTS

Maui County, Planning Department: All the above referenced Tax Map Keys (TMK) appear to be located in the County of Maui's Interim zoning district. For Interim zoning, it appears that the proposed stream modifications are a permitted use pursuant to 19.02A.030 Permitted property uses 5. Agricultural uses. TMK: 2-9-014:035 is located in the Special Management Area (SMA); all other TMKs are outside of the SMA. For the TMK located within the SMA, an SMA Assessment will be required to determine level of permitting. For the State Land Use District designation, TMKs: 1-1-001:042 and 2-9-014:007 appear to be located in the Conservation State Land Use District. For the proposed stream modifications in the State Land Use Conservation District, a Conservation District Use Application (CDUA) permit may be required. TMK: 2-9-014:035 appears to be located in the Agriculture State Land Use District. For proposed modifications in the State Land Use Agriculture District, uses permitted in the highest productivity categories (A or B) are governed by statute. Uses in the lower-productivity categories - C, D, E, or U- are established by the Commission and include those allowed on A or B lands as well as those stated under Section 205.4.5, Hawaii Revised Statutes (HRS). Pursuant to HRS 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 on State land. You may also wish to consult with the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) 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.

CWRM Staff Response: Diversion 215 on the Ho‘olawa Stream is located in the Special Management Area and subject to Maui County approval. EMI consultation with the County of Maui Planning Department and issuance of an SMA permit, if required, shall be added as a special condition.

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 requests that all necessary precautionary measures be taken throughout the project to protect aquatic environments directly adjacent to the proposed project as well as those up and downstream. Most importantly, Best Management Practices (BMPs) should be implemented in the SDWP that help to minimize the impacts on the water quality parameters in the aquatic environment and maintain stream flow at all times. These BMPs include: 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.

CWRM Staff Response: Comments will be added as a special condition. **Exhibit 1.**

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.

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.

CWRM Staff Response: Diversions 194, 308, 196, and 185 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. See **Exhibit 2**.

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): *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. 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.

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

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) Kapa 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,
- 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 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. 194, 308, 196, and 185 are located in the Conservation District. 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 5**.

HAR §13-168-32(d) sets out the general criteria for ruling on SDWP applications.

- (1) The quantity and quality of the stream water or the stream ecology shall not be adversely affected.

CWRM Staff Response: The project proposes to fix leaks, add baseflow back into the streams, and provide habitat connectivity. 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 and are subject to staff’s recommended special conditions. Facilities to temporarily divert flow around work areas (such as sandbags, pipes) and other best management practices will be used to control water pollution.

- (2) Where instream flow standards or interim instream flow standards have been established pursuant to HAR Chapter 13-169, no permit should be granted for any diversion works which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.

CWRM Staff Response: HRS §174C-71 and HAR §13-169-36, requires the Commission to protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses. The interim

instream flow standards for the subject streams were amended by Commission action on November 15, 2022, and these actions were required to restore streamflow in support of the amended standards.

- (3) The proposed diversion works shall not interfere substantially and materially with existing instream or non-instream uses or with diversion works previously permitted.

CWRM Staff Response: The project proposes to fix leaks, add baseflow back into the streams, and provide habitat connectivity and will not interfere with existing instream or non-instream uses or with diversion works previously permitted.

RECOMMENDATION

That the Commission:

1. Approve Stream Diversion Works Permit Application (SDWP.5990.6) submitted by the East Maui Irrigation, Co., LLC (EMI) that proposes to modify Diversion 215 on the Ho‘olawa Stream; Diversion 185 on the Kailua Stream; Diversions 308 and 196 on the ‘O‘opuola Stream; and Diversion 194 Ka‘aiea Stream to fix leaks and provide habitat connectivity subject to the standard conditions in **Exhibit 4** and the special conditions below.
 - a. Diversion 215 on the Ho‘olawa Stream is in the Special Management Area (SMA) and subject to regulation by the County of Maui, Planning Department. Issuance of the SDWP shall be subject to a determination whether an SMA Permit is required. If not required, the Applicant shall provide evidence of consultation with the Maui Planning Department. If an SMA Permit is required, the Applicant shall provide a copy of the SMA Permit prior to issuance of the SDWP.
 - b. In conformance with the Division of Aquatic Resources recommendations, incorporated by reference in **Exhibit 1**, Best Management Practices (BMPs) should be implemented in the SDWP that help to minimize the impacts on the water quality parameters in the aquatic environment and maintain stream flow at all times. These BMPs include: 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.
 - c. Modification of diversions are 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 3**, the permittee shall: 1) implement plant avoidance and

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

- e. When the use of heavy machinery may be required in-stream, the Permittee shall employ the appropriate BMPs and conduct work only during low-flow conditions to minimize impacts to water quality.
2. Declare that the project is exempt from EA requirements under HRS Chapter 343 and HAR Chapter 11-200.1

Ola i ka wai,



M. KALEO MANUEL
Deputy Director

Exhibits:

1. State Division of Aquatic Resources comment letter, dated April 4, 2023.
2. Office of Conservation and Coastal Lands comment letter, dated April 7, 2023.
3. USFWS comment letter, dated March 11, 2023.
4. Standard Stream Diversion Works Permit Conditions.
5. Legal Authorities.

APPROVED FOR SUBMITTAL:



DAWN N. S. CHANG
Chairperson

JOSH GREEN, M.D.
GOVERNOR | KE KA‘A‘ĀNA
SHYLA LUKI
LIEUTENANT GOVERNOR | KA HOPE KA‘A‘ĀNA



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 # AR6352

DIRWIN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
LAURA H.E. YANAGI
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
NAHOOLAHE 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.5990.6); East Maui Irrigation Co., LLC

Request Submitted by: M. Kaleo Manuel, Deputy Director
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.

Location of Project: _____

Brief Description of Project:

Request for Comments, Stream Diversion Works Permit Application (SDWP.5990.6); East Maui Irrigation Co., LLC; Modification of Diversion Nos. 194, 308, 196, 185, and 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.

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

DAR# AR6352

Brief Description of Project

Proposed Project Actions for SDWP.5990.6

Div. No. (EMI No.)	Description	TMK	Stream
194(C-5)	Continual flow through 30" width x 3" curb height concrete/metal plate across grate and fix leaks in wing walls to transport all flows up to 1.8 cfs; fix leaks in upstream concrete and wing walls	1-1-001:042	Ka‘alea
308(S-13)	30" width x 3" curb height concrete/metal plate across grate and installation of a concrete lip across the upstream side of the diversion, which is necessary to ensure flow is directed into low flow channel to transport all flows up to 1.8 cfs.	1-1-001:042	‘O‘opuola
196(C-7)	Continual flow through 30" width x 3" curb height concrete/metal plate across grate with concrete berm that needs to be installed in order to direct flow into low flow channel. Seal leakage along upstream edge to transport all flows up to 1.8 cfs.	1-1-001:042	O‘opuola
185(W-15)	Continual flow through 30" width x 3" curb height concrete/metal plate across grate and install concrete berm upstream of grate to transport all flows up to 1.8 cfs.	2-9-014:007	Kailua
215(H-7)	Seal holes in intake wall and create weir in sluice gate dam that is 45" wide x height 3" lower than lower than intake wall to allow 3.0 cfs to flow over new weir when repaired sluice gate closed	2-9-004:035	Ho‘olawai

DAR# AR6352

Comments

The Division of Aquatic Resources requests that all necessary precautionary measures be taken throughout the project to protect aquatic environments directly adjacent to the proposed project as well as those up and downstream. Most importantly, Best Management Practices (BMPs) should be implemented in the SDWP that help to minimize the impacts on the water quality parameters in the aquatic environment and maintain stream flow at all times. These BMPs include: 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.

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

[Signature]

Date:

4/7/2023

- * Appears to be maintenance/repair of a nonconforming structure in the Resume 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 HETA process per HAR 11-250.1-16(b)1 E1EType #1 DLNR Exempt List #17
 G1EType #2 DLNR Exempt List #17

JOSH GREEN, M.D.
 GOVERNOR | 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. KALEO MANUEL
 DEPUTY DIRECTOR

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

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

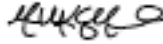
Request for Comments
 Stream Diversion Works Permit Application (SDWP.5990.6)
 East Maui Irrigation Co., LLC, Modification of Diversion Nos. 194; 308; 196; 185; 215
 Fix Leaks and Provide Habitat Connectivity Project
 Ka‘aiea, ‘O‘opuola, Kailua and Ho‘olawanui Streams, Maui
Tax Map Key(s): (2) 1-1-001:042;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

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.

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, 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).

- 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.

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.

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)

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)

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.

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

- (2) Establish interim instream flow standards;
 - (D) In considering a petition to adopt an interim instream flow standard, the commission shall weigh the importance of the present or potential instream values with the importance of the present or potential uses of water for noninstream purposes, including the economic impact of restricting such uses;
- (3) Protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses;
 - (A) The commission shall require persons to obtain a permit from the commission prior to undertaking a stream channel alteration; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit;
 - (C) The commission shall establish guidelines for processing and considering applications for stream channel alterations consistent with section 174C-93;

HRS §174C-93 Permits for construction or alteration. No person shall construct or alter a stream diversion works, other than in the course of normal maintenance, without first obtaining a permit 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;

SDWP.5990.6 Ho‘olawa, Kailua, ‘O‘opuola, and Ka‘aiea Streams, Maui

- (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 §13-168-7 Report of water use. (a) The owner or operator of any well or stream diversion works from which water is being used 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.

HAR §13-168-32 Stream diversion permits. (a) No person shall construct or alter a stream diversion works, other than in the course of normal maintenance, without first obtaining a stream diversion permit from the commission...

(b) Each application for a stream diversion permit shall be made on forms provided by the commission and shall contain the following:

- (1) Name and address of the applicant;
- (2) Name and address of the owner or owners of the land upon which the works are to be constructed and a legal description of such land;
- (3) Location of the works;
- (4) Engineering drawings showing the detailed plans of construction;
- (5) Detailed specifications of construction;
- (6) Name and address of the person who prepared the plans and specifications for construction;
- (7) Name and address of the person who will construct the proposed work;
- (8) General purpose of the proposed works; and
- (9) Such other information as the commission may require.

(c) The commission may issue or cause to be issued a stream diversion permit if the proposed construction complies with all applicable laws, rules, and standards. The commission shall approve or disapprove an acceptably completed application within ninety calendar days of receipt by the commission. The commission may approve in whole, approve in part, approve with modifications, or disapprove an application for a stream diversion permit.

(d) In reviewing an application for a permit, the commission shall cooperate with persons having direct interest in the stream diversion works and be guided by the following general considerations:

- (1) The quantity and quality of the stream water or the stream ecology shall not be adversely affected.

SDWP.5990.6 Ho‘olawa, Kailua, ‘O‘opuola, and Ka‘aiea Streams, Maui

- (2) Where instream flow standards or interim instream flow standards have been established pursuant to chapter 13-169, no permit should be granted for any diversion works which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.
- (3) The proposed diversion works shall not interfere substantially and materially with existing instream or non-instream uses or with diversion works previously permitted.

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.