

Introduction to Status of East Maui Diversion Modifications Ordered by the Commission



Dean Uyeno
Stream Protection and Management Branch
May 19, 2026 – Item C1



Background

- **June 2001:** Native Hawaiian Legal Corporation (NHLC), on behalf of Na Moku 'Aupuni o Ko'olau Hui (Na Moku) and others, files Petitions to Amend the Interim Instream Flow Standard for 27 streams in East Maui.
- **July 2002:** Commission establishes the Stream Protection and Management Branch.

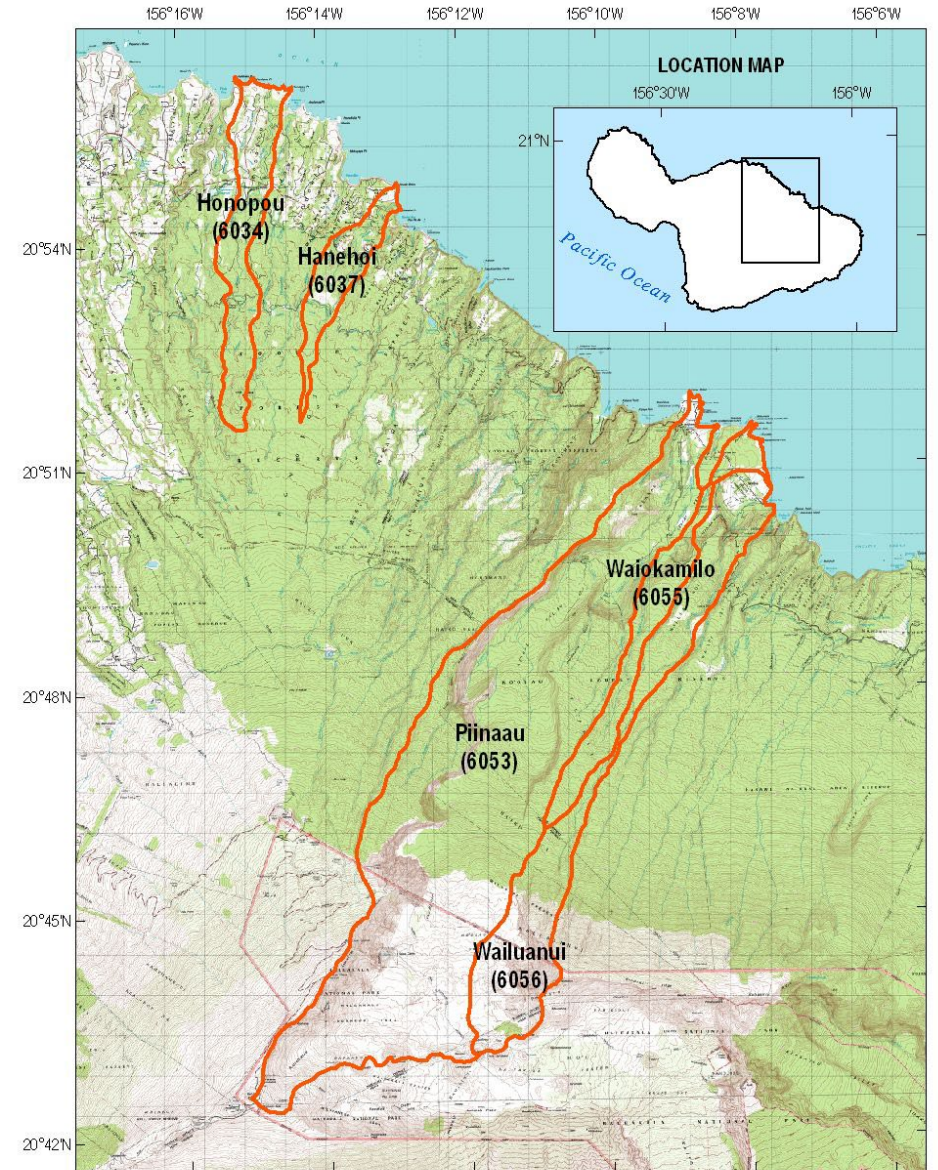


Background

- **September 2008:** “Kalo” stream petitions are heard before the Commission.



Above New Hāmākua Ditch on Hanehoi Stream

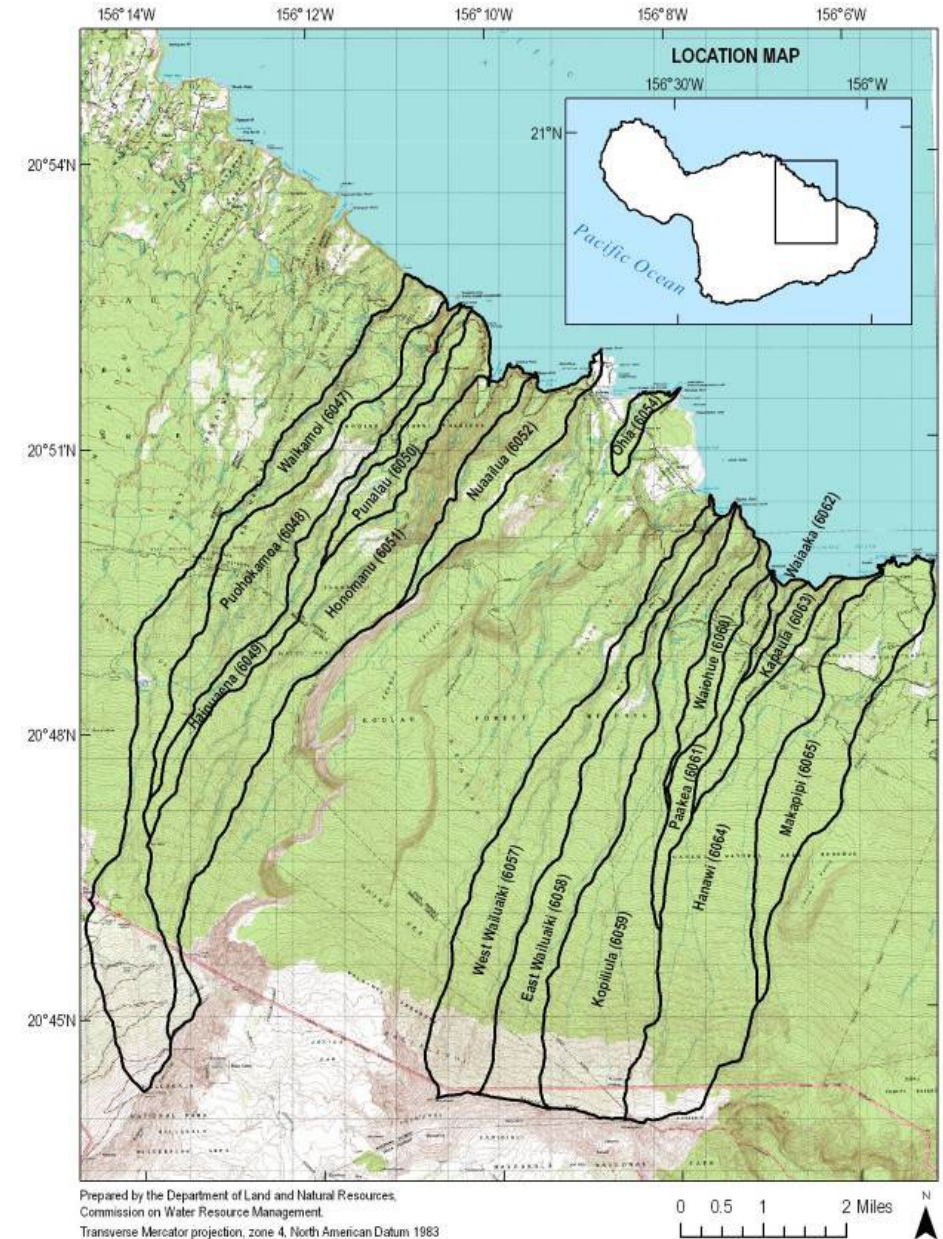


Prepared by the Department of Land and Natural Resources,
Commission on Water Resource Management.
Transverse Mercator projection, zone 4, North American Datum 1983



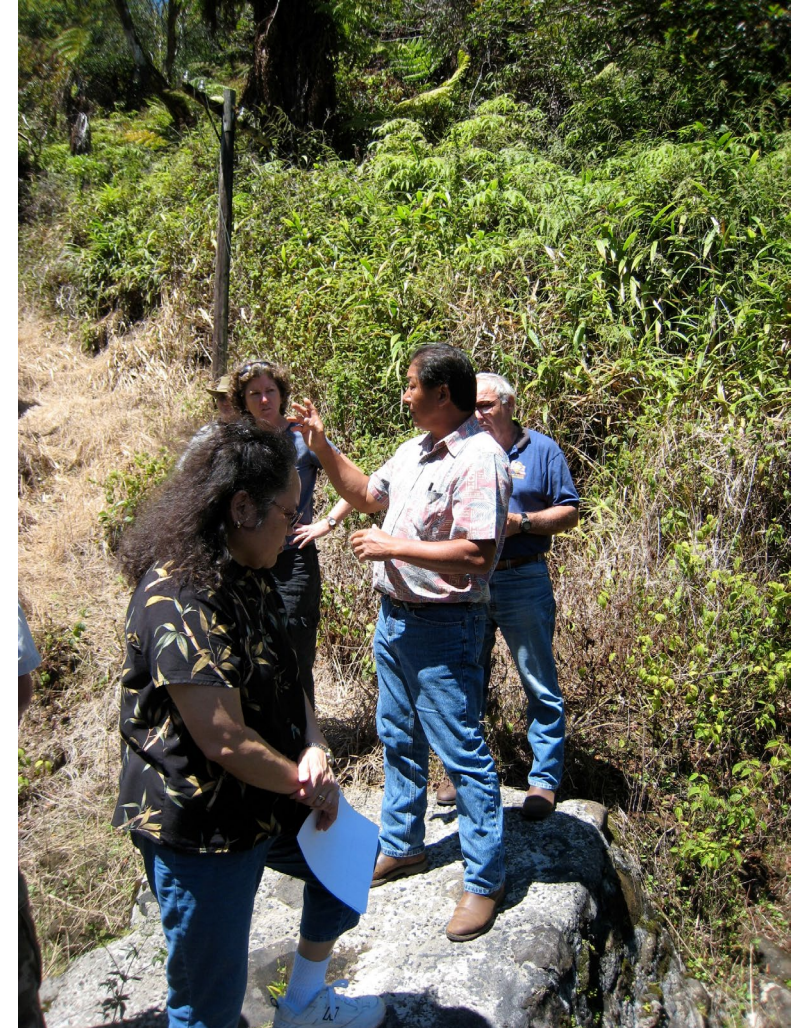
Background

- **May 2010:** Remaining 19 stream petitions are heard by the Commission. Contested case hearing is requested.



Background

- **October 2010:** Contested case hearing is denied, but the decision is appealed, eventually leading to a contested case hearing.
- **December 2014:** Contested case hearing CCH-MA13-01 begins.
- **June 2018:** Commission issues its Findings of Fact, Conclusions of Law, and Decision and Order.



East Maui Contested Case Hearing

- **Decision & Order:**

- None: 3 Streams
- Full: 10 Streams
 - Natural, undiverted base flows
- H90 (Habitat): 5 Streams
 - Estimated 64% of median base flow providing 90% habitat.
- Connectivity: 7 Streams
 - Provide connectivity across diversion structure to provide for passage of stream biota (approximately 20% of median base flow)



New Hamakua Ditch at Honopou Stream

East Maui Contested Case Hearing

Stream Name	Restoration Status	BFQ ₅₀ at IIFS (cfs) ³⁸	IIFS Value (cfs)	IIFS Location
Makapipi	Full	1.3	n/a	Above Hana Highway
Hanawī	Connectivity	4.6	0.92	Below Hana Highway
Kapaula	Connectivity	2.8	0.56	On diversion at Koolau Ditch
Waiaaka	None	0.77	0.77	Above Hana Highway
Pa'akea	Connectivity	0.9	0.18	At Hana Highway
Waiohue	Full	5.0	n/a	At Hana Highway
Pua'aka'a	Connectivity	1.1	0.2	Above Hana Highway
Kopiliula	H ₉₀	5.0	3.2	Below Hana Highway
East Wailuaiki	H ₉₀	5.8	3.7	At Hana Highway
West Wailuaiki	Full	6.0	n/a	Above Hana Highway
Wailuanui	Full	6.1	n/a	At Hana Highway
'Ōhi'a/Waianu	None	4.7	n/a	None.
Waiokamilo	Full	3.9	n/a	Below diversion at Koolau Ditch



East Maui Contested Case Hearing

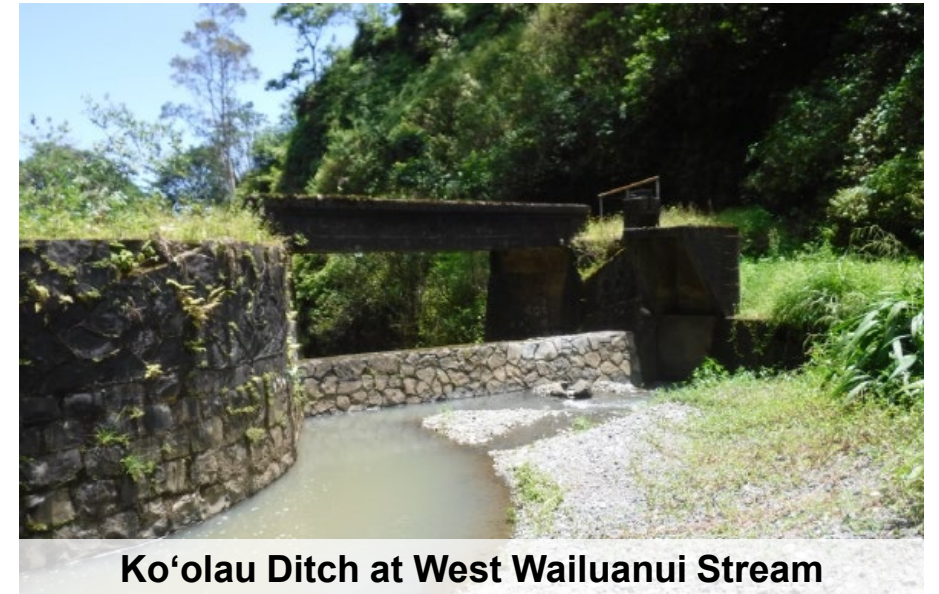
Palauhulu	Full	11	n/a	Above Hana Highway
Pi'ina'au	Full	14	n/a	Above Hana Highway
Nua'ailua	Connectivity	0.28	2.2	To be determined
Honomanū	H ₉₀	4.2	4.2	Above Hana Highway
Punalau/Kōlea	H ₉₀	4.5	2.9	Above Hana Highway
Ha'ipua'ena	Connectivity	4.9	1.36	Below Hana Highway
Puohokamoa	Connectivity	8.4	1.1	Below Hana Highway
Wahinepe'e	None	0.9	0.9	Above Hana Highway
Waikamoi	H ₉₀	6.7	3.8	Above Hana Highway
Hanehoi	Full	2.54	n/a	Upstream of Lowrie Ditch
Huelo (Puolua)	Full	1.47	n/a	Downstream of Haiku Ditch
Honopou	Full	6.5	n/a	Below Hana Highway



Stream Diversion Abandonments / Modifications

Categories defined in coordination with East Maui Irrigation, Co.

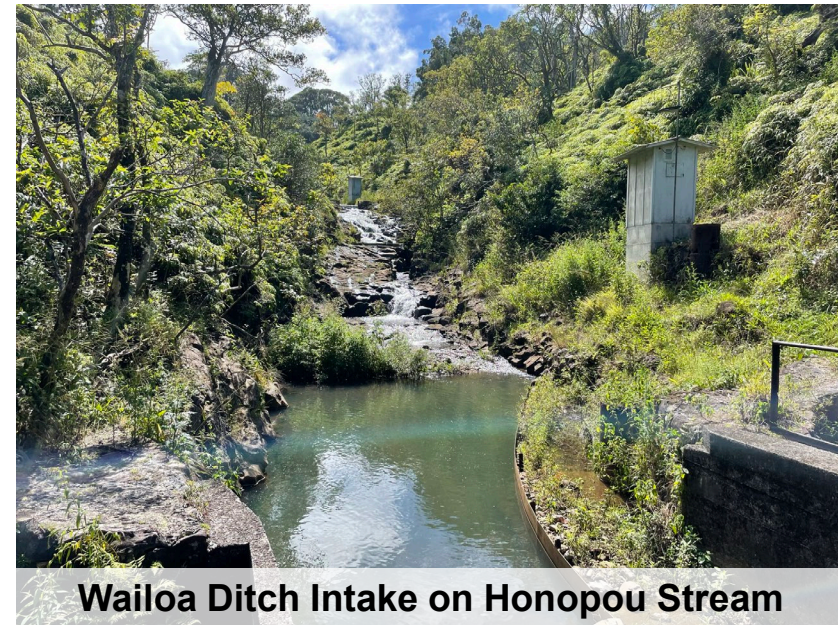
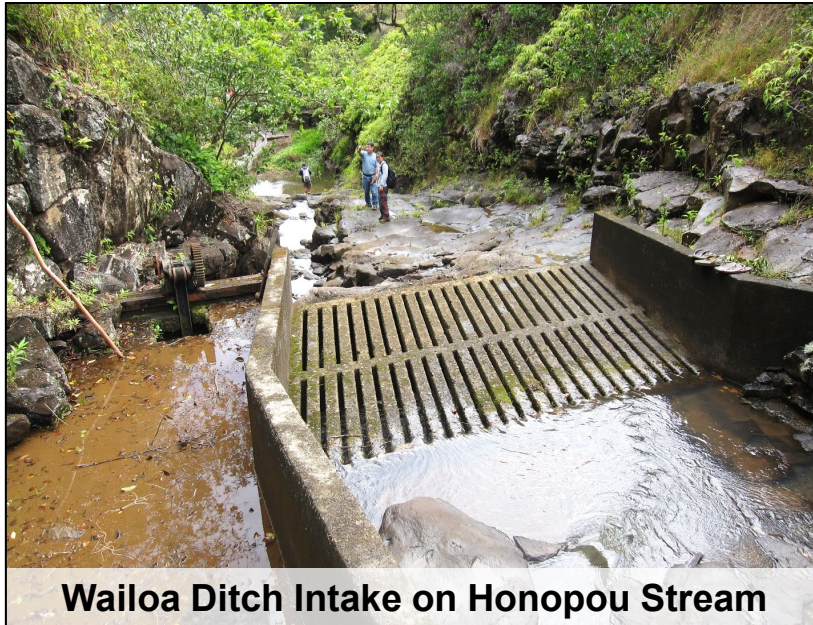
- **Category 1:** Diversions that could be modified with minor maintenance actions to effectuate restoration of streamflow quickly (15 diversions). *Approved January 30, 2024.*



Stream Diversion Abandonments / Modifications

Categories defined in coordination with East Maui Irrigation, Co.

- **Category 2:** Diversions located away from the main stream diversion and require minor alterations to abandon in place (15 diversions). *Approved February 19, 2019.*



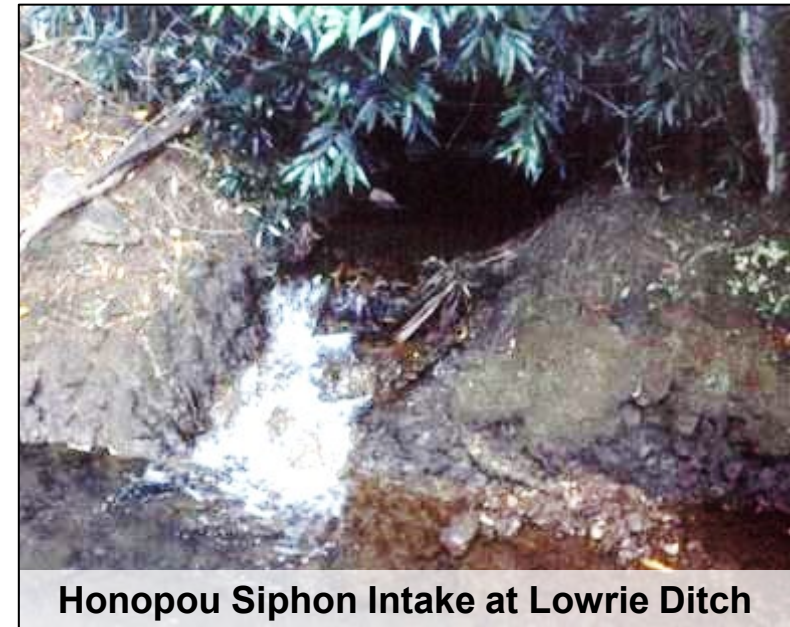
Stream Diversion Abandonments / Modifications

Categories defined in coordination with East Maui Irrigation, Co.

- **Category 3:** Diversions requiring more extensive work to abandon in place (11 diversions). *Approved August 29, 2019.*



Ha'ikū Ditch on Honopou Stream



Honopou Siphon Intake at Lowrie Ditch

Stream Diversion Abandonments / Modifications

Categories defined in coordination with East Maui Irrigation, Co.

- **Category 4:** Waiokamilo Stream diversions that had been inactive since 2007 due to a separate court action (29 diversions).
Approved November 20, 2019.



K-24c Intake at Ko'olau Ditch



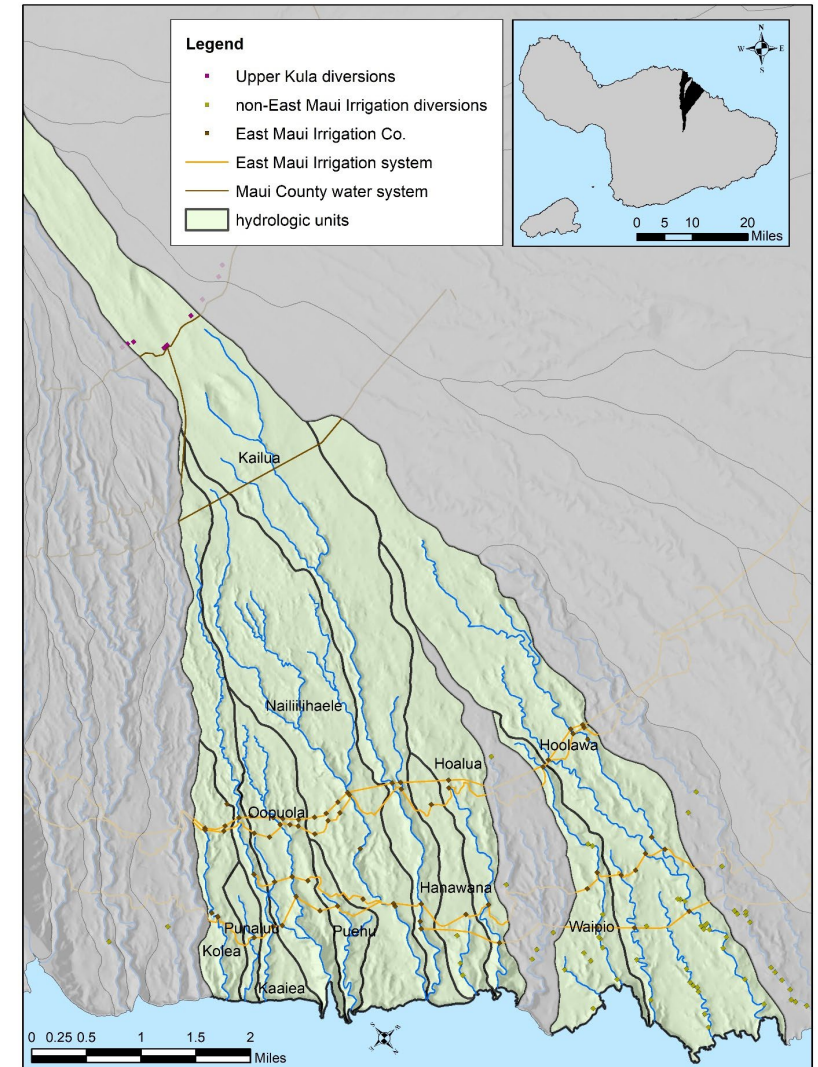
K-24e Intake at Ko'olau Ditch



Kikokiko Small Intake at Ko'olau Ditch

Huelo Region Instream Flow Standards

- **Late 2019:** Commission staff begin assessing Huelo region streams within the East Maui License Area.
- **February 2021:** Draft Instream Flow Standard Assessment Reports are issued for 11 Huelo region hydrologic units.
- **September 2021:** Sierra Club files petition to amend IFS for 12 streams in the Huelo region.



Huelo Region Instream Flow Standards

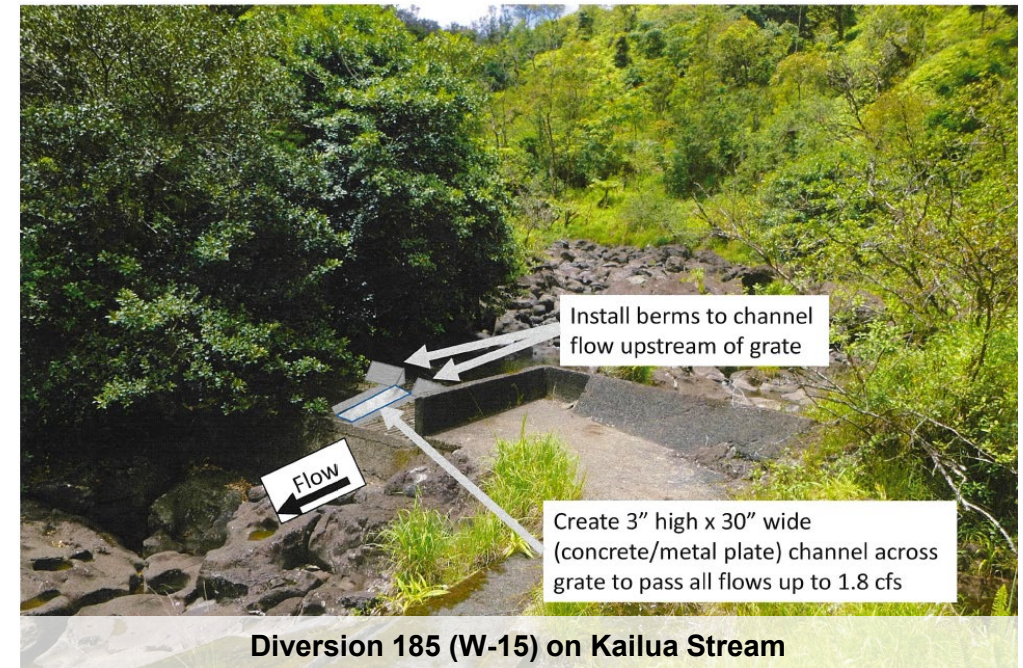
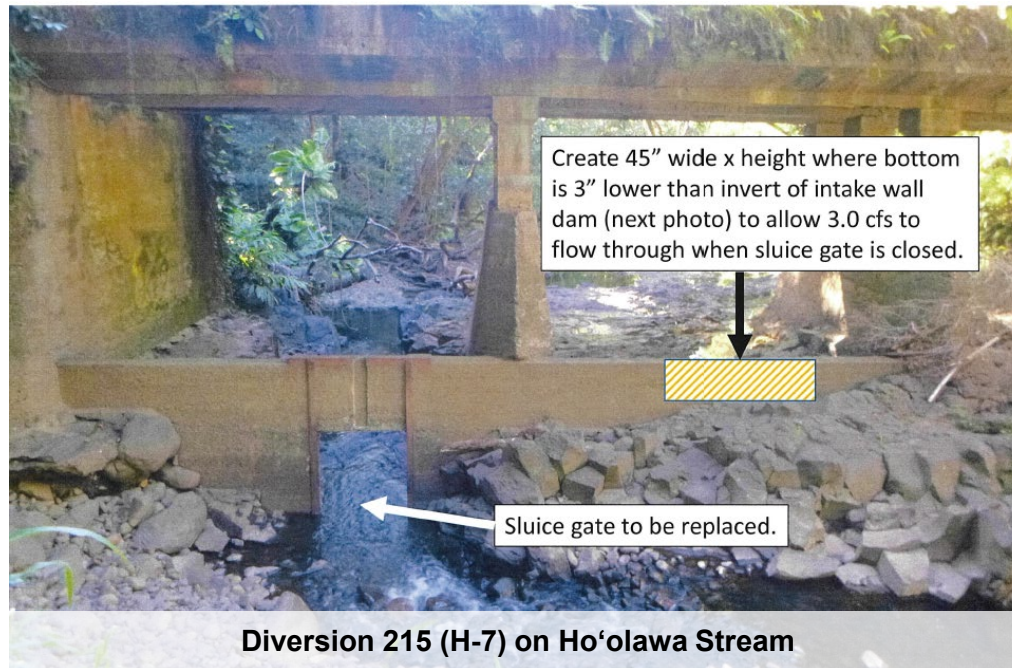
- **November 2022:** Commission approves IIFS for Huelo region streams.

Hydro Unit	Amended IIFS
Kōlea	0.05 mgd past diversions 156 & 209
Punalu'u	None
Ka'aiea	1.12 mgd past diversions 232 & 194
'O'opuola	0.23 mgd past diversion 142 1.12 mgd past diversions 208 & 196
Puehu	None
Naililihaele	Connectivity past diversion 168 1.25 mgd past diversion 267 2.32 mgd past diversion 255 3.36 mgd past diversion 187
Kailua	Connectivity past diversion 185
Hanawana	Continual flow past diversion 177
Hoalua	None
Waipi'o	Increased flow past diversion 238
Ho'olawa	Connectivity past diversions 145, 144, and 244 0.45 mgd past diversion 243 0.78 mgd past diversion 236 2.20 mgd past diversion 215



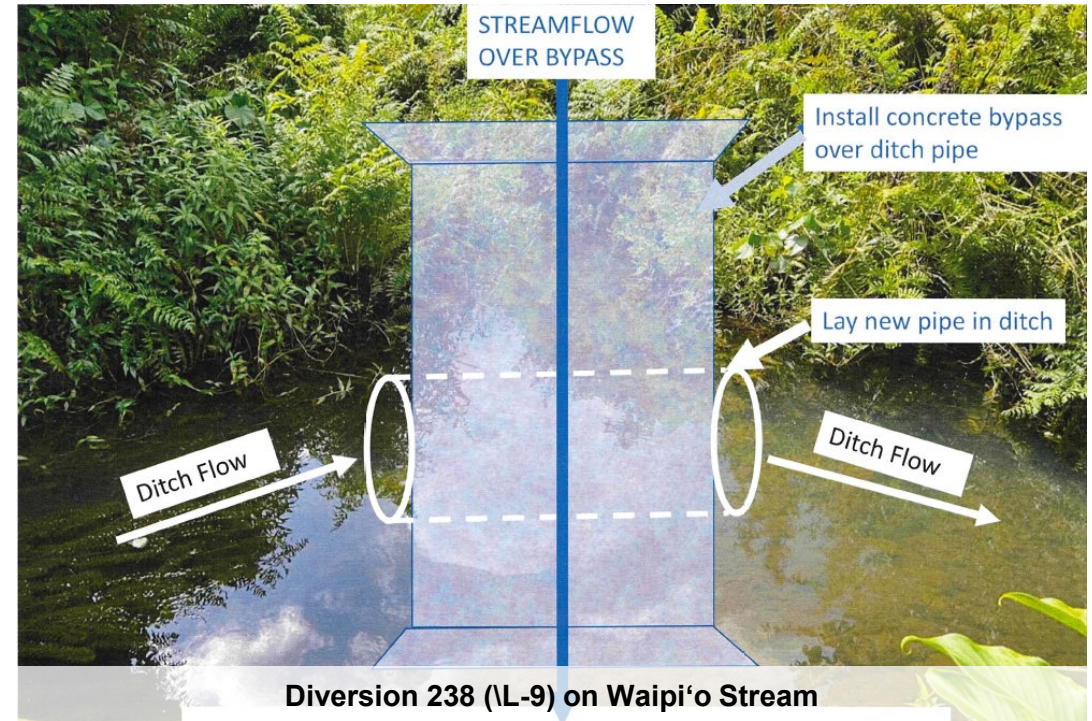
Huelo Region Diversion Abandonments / Modifications

- **SDWP.5990.6:** Modification of stream diversions to fix leaks and provide habitat connectivity (5 diversions). *Approved May 16, 2023.*



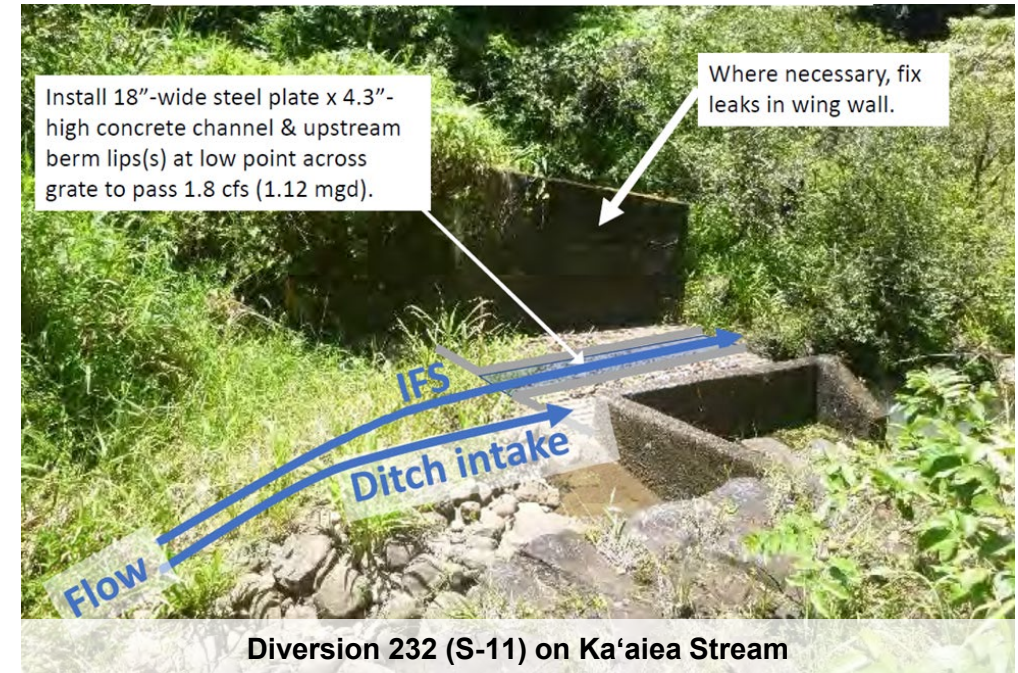
Huelo Region Diversion Abandonments / Modifications

- **SDWP.5991.6:** Abandonment of diversions to remove pipes and seal intakes (8 diversions). *Approved March 19, 2024.*



Huelo Region Diversion Abandonments / Modifications

- **SDWP.6011.6:** Modification of stream diversions to fix leaks, add baseflow, and provide habitat connectivity (14 diversions).
Approved April 16, 2024.

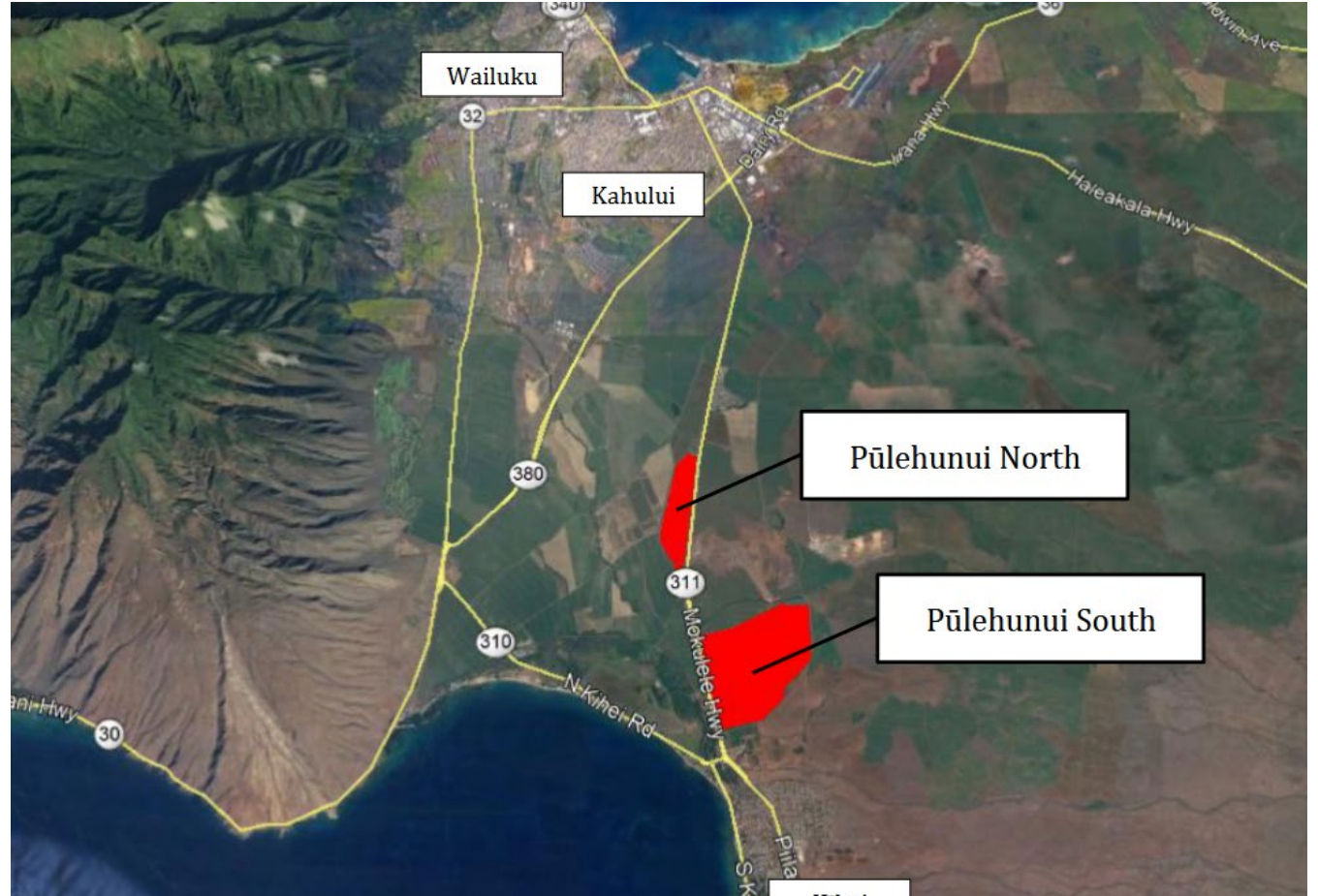


DHHL Reservations

- **December 2020:** Commission receives Dept. of Hawaiian Home Lands petition for reservation of 11,177,500 GPD for water originating from East Maui streams diverted by the East Maui Irrigation system.
 - 1.3275 mgd for Pūlehunui for Agriculture (subsistence, supplemental, and general) and Community Use
 - 9.850 mgd for Kēōkea-Waiohuli for General Agriculture
- **November 2022:** Commission approves DHHL reservation of 1.3275 mgd of water from Huelo region streams.
- **November 2022:** Commission defers DHHL reservation of 9.85 mgd of water from East Maui streams (*Waikamoi, Honomanū, Nua‘ailua, West Wailuaiki, and Waiohue*).



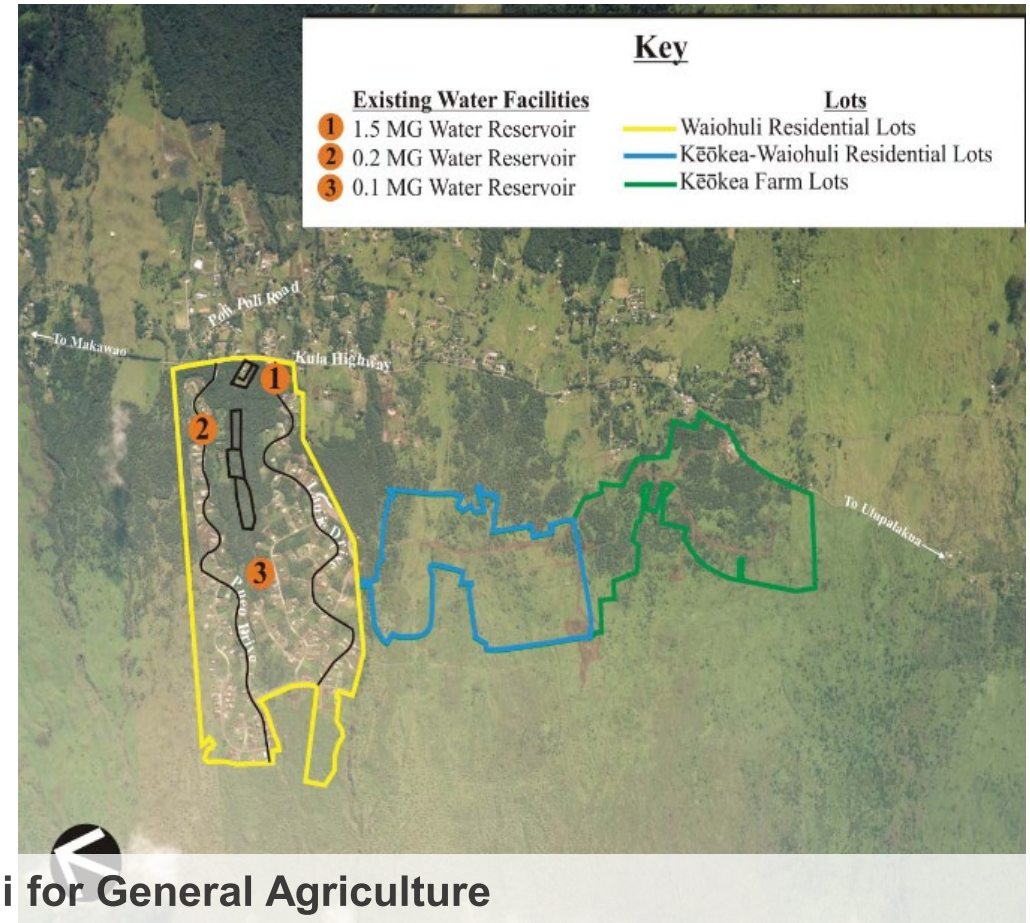
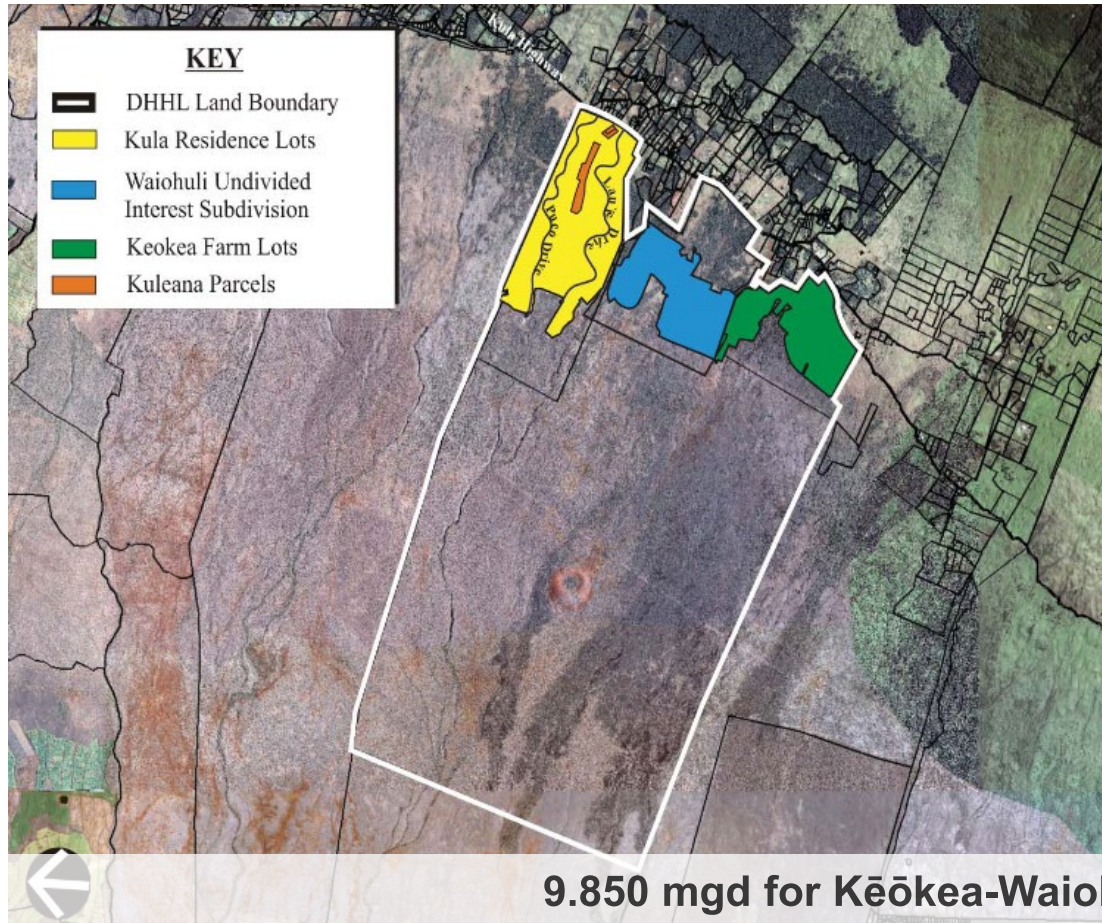
DHHL Reservations – Pūlehunui



1.3275 mgd for Pūlehunui for Agriculture (subsistence, supplemental, and general) and Community Use

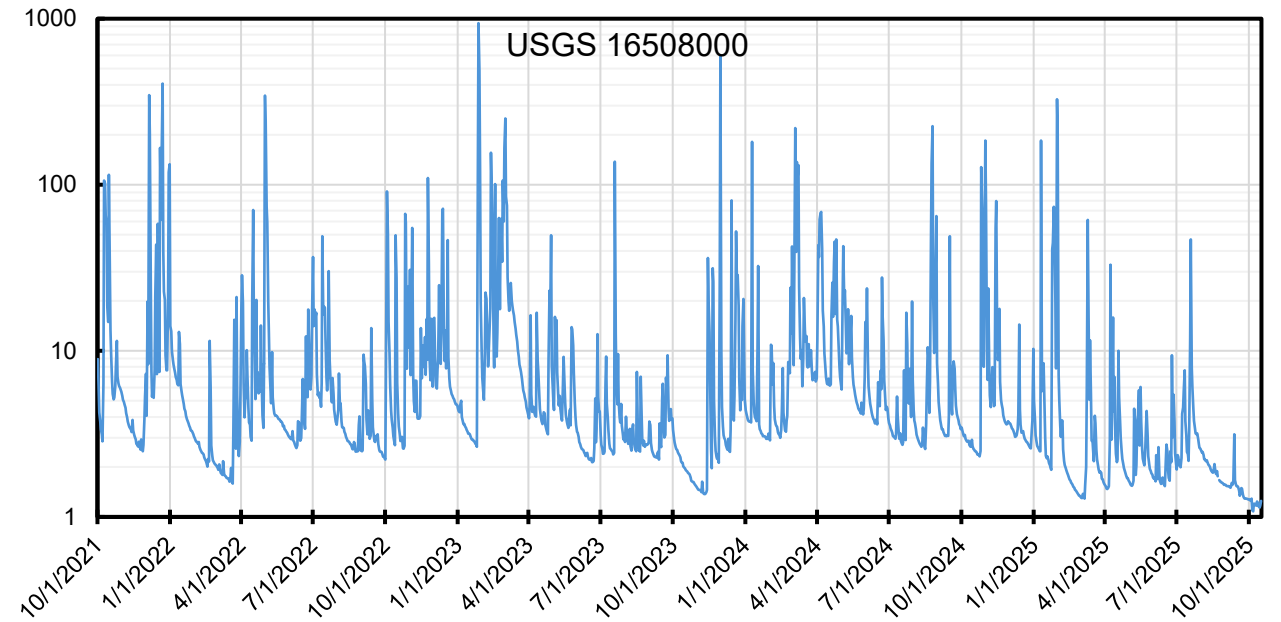


DHHL Reservations – Kēōkea-Waiohuli



Commission Monitoring and Studies

- **U.S. Geological Survey:** USGS cooperatively maintains 8 long-term, continuous gaging stations with 1 additional station to be installed in 2027.



Commission Monitoring and Studies

- **IFS Monitoring:** Commission staff maintain 18 continuous, non-real-time gaging stations to monitor IFS compliance.



Commission Monitoring and Studies

- **Stream Ecology Monitoring:** Commission staff monitor stream ecology at:
 - High-elevation surveys on even years at 11 sites.
 - High elevation surveys every 4 years at 8 sites.
 - Low-elevation surveys every 4 years at 7 sites.
 - Low-elevation surveys every 6 months at 6 sites.



Commission Monitoring and Studies

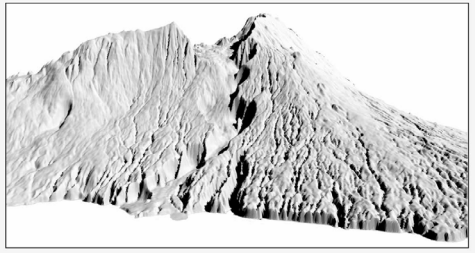
U.S. Department of the Interior
Ground Water and Surface Water in the Haiku Area, East Maui, Hawaii
U.S. GEOLOGICAL SURVEY
Water-Resources Investigations Report 98-4142



U.S. Department of the Interior
Ground-Water Occurrence and Contribution to Streamflow, Northeast Maui, Hawaii
U.S. GEOLOGICAL SURVEY
Water-Resources Investigations Report 99-4090



Prepared in cooperation with the
COUNTY OF MAUI DEPARTMENT
STATE OF HAWAII COMMISSION



Prepared in cooperation with the
COUNTY OF MAUI DEPARTMENT OF WATER SUPPLY
STATE OF HAWAII COMMISSION ON WATER RESOURCE MANAGEMENT



USGS
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Prepared in cooperation with the
State of Hawaii Commission on Water Resource Management

Median and Low-Flow Characteristics for Streams under Natural and Diverted Conditions, Northeast Maui, Hawaii

USGS
science for a changing world

Prepared in cooperation with the State of Hawaii Department of Land and Natural Resources,
Commission on Water Resource Management

Effects of Surface-Water Diversions on Habitat Availability for Native Macrofauna, Northeast Maui, Hawaii

Scientific Investigation

U.S. Department of the Interior
U.S. Geological Survey



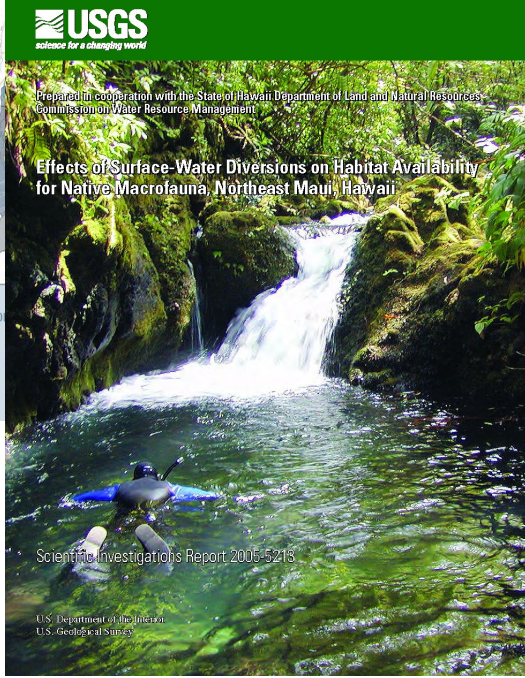
USGS
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Prepared in cooperation with the State of Hawaii Department of Land and Natural Resources,
Commission on Water Resource Management

Effects of Surface-Water Diversions on Habitat Availability for Native Macrofauna, Northeast Maui, Hawaii

Scientific Investigations Report 2005-5213

U.S. Department of the Interior
U.S. Geological Survey



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Prepared in cooperation with the
State of Hawaii Commission on Water Resource Management

Measurements of Seepage Losses and Gains, East Maui Irrigation Diversion System, Maui, Hawaii

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Prepared in cooperation with the State of Hawaii Commission on Water Resource Management,
State of Hawaii Department of Hawaiian Home Lands, and Office of Hawaiian Affairs

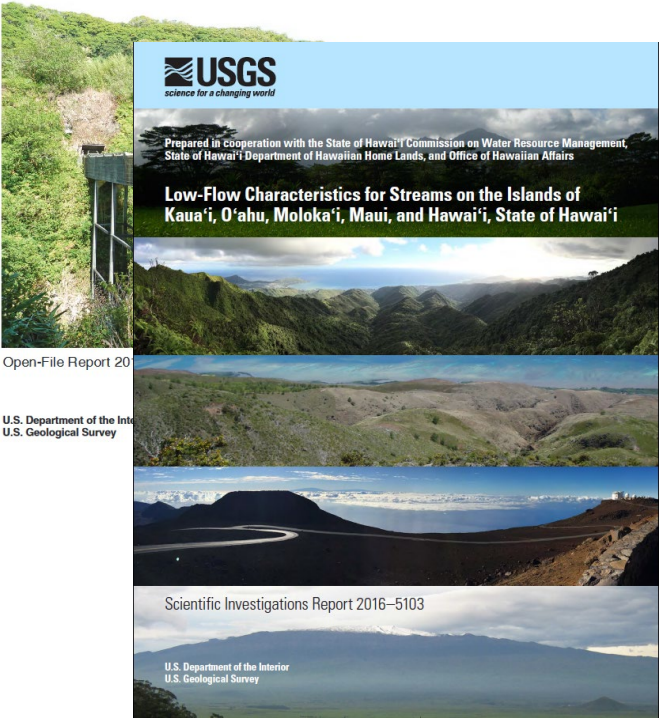
Low-Flow Characteristics for Streams on the Islands of Kaua'i, O'ahu, Moloka'i, Maui, and Hawaii'i, State of Hawaii'i

Open-File Report 2016-101

U.S. Department of the Interior
U.S. Geological Survey

Scientific Investigations Report 2016-5103

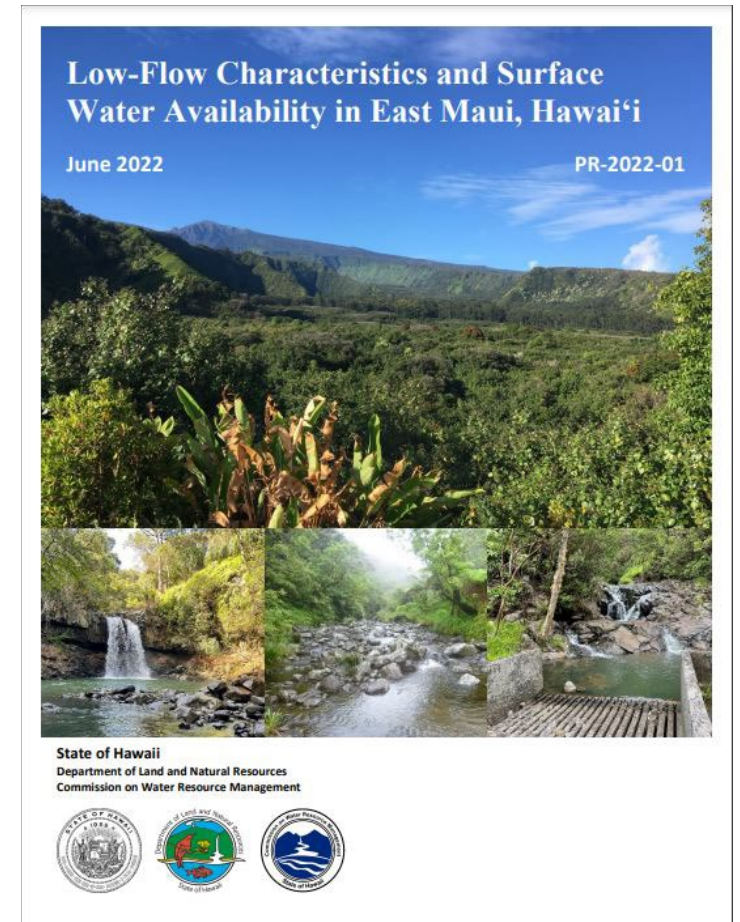
U.S. Department of the Interior
U.S. Geological Survey



Commission Monitoring and Studies

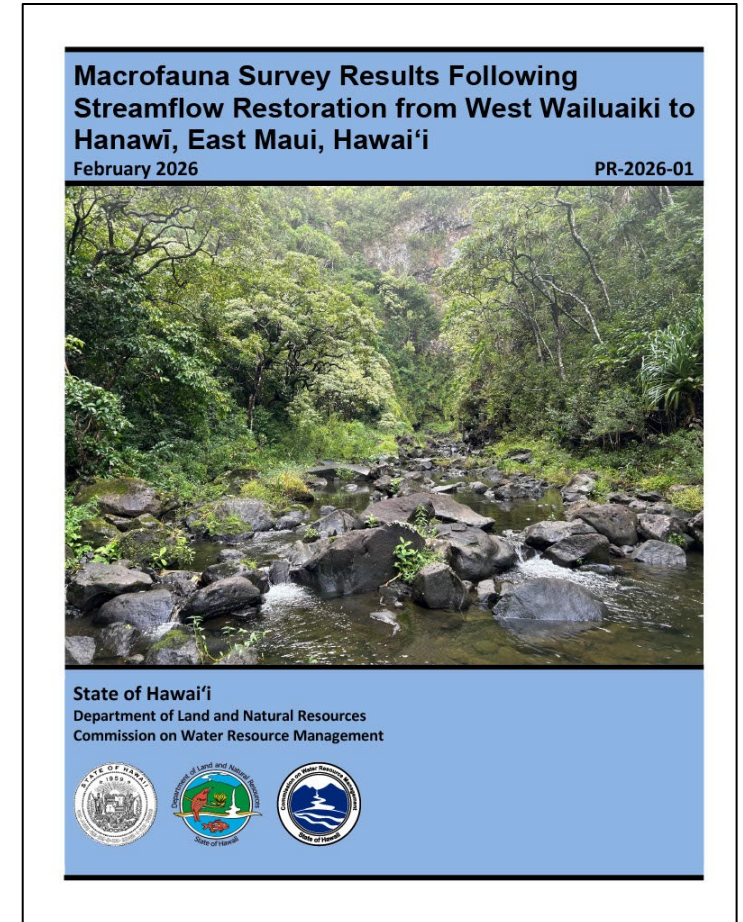
- **June 2022:** Commission releases report on low-flow characteristics and surface water availability in East Maui

 1. Streamflow characteristics at inactive continuous and partial-record gaging stations maintained by the USGS in East Maui;
 2. Streamflow characteristics in the Huelo region;
 3. The impact of the Upper and Lower Kula water systems on streamflow in the Honomanū, Haipuaena, Puohokamoā, and Waikamoi hydrologic units; and
 4. The availability of water from other stream sources between Honopou and Māliko gulches.



Commission Monitoring and Studies

- **February 2026:** Commission releases report on macrofauna survey results following streamflow restoration for Hanawī, Waiohue, Kopiliula, East Wailuaiki, and West Wailuaiki.



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