



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'ŌIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
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STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

September 16, 2025
Honolulu, Hawai'i

Approval of Stream Diversion Works Permit Application (SDWP.6389.3)
Applicant Ho'okua'aina, a Hawai'i Nonprofit Corporation, to
Restore Existing Diversion (Po'owai) and Former Dam,
To Install and Bury a 20-inch Pipe ('Auwai),
Instream Riprap, Return Flow (Ho'i); and for Other Offstream Improvements, to
Divert Up to 1.616 mgd for 16.9 Acres of Kalo and Diversified Agriculture, and
Impose Special Conditions; and
Find that a Petition to Amend the Interim Instream Flow Standard is Not Required;
Landowner HRT, LTD.
Maunawili Stream, Maunawili, O'ahu, Tax Map Key(s): (1) 4-2-007:001

APPLICANT

Michele Wilhelm, Executive Director
Ho'okua'aina
P.O. Box 342146
Kailua, HI 96734

LANDOWNER

HRT, LTD
3660 Waialae Avenue, Suite 400
Honolulu, HI 96816

SUMMARY OF REQUEST

Approve Stream Diversion Works Permit (SDWP.6389.3) Application that proposes to restore an existing diversion (po'owai), install and bury a 20-inch pipe ('auwai), instream riprap to create riffles, install a return flow (ho'i), and other offstream improvements to divert up to 1.616 million gallons per day (mgd) for 16.9 acres of kalo and diversified agriculture on the Maunawili Stream, O'ahu. Construction is anticipated to take 2 to 3 weeks.

Find that a petition to amend the Interim Instream Flow Standard (interim IFS) is not required under HRS 174C-71 and HAR 13-169-36. Pursuant to HAR §13-169-49.1, Interim instream flow standard for Windward O'ahu, the interim IFS for the Maunawili Stream is currently defined as "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...” The effective date of the standard is May 4, 1992.

LOCATION: Maunawili Stream, O‘ahu. See **Figure 1** Location.

Figure 1: Location. Maunawili Stream, O‘ahu. Subject parcel (white). Location of proposed restored diversion (green) and existing registered diversions (red).



BACKGROUND

On May 9, 2025, Ho‘okua‘āina filed a complete SDWP.6389.3 application that proposes to restore an existing diversion (po‘owai), install and bury a 20-inch pipe (‘auwai), instream riprap to create riffles, a return flow (ho‘i), and other offstream improvements to divert up to 1.616 mgd for 16.9 acres of kalo and diversified agriculture on the Maunawili Stream. The application can be viewed online at https://files.hawaii.gov/dlnr/cwrmswreview/SDWP_6389_3.pdf.

STREAM DESCRIPTION

Both the National Hydrography Dataset and the Division of Aquatic Resources classify the Maunawili Stream as perennial. The total drainage area is 10 square miles with a maximum basin elevation of 3,141 feet. The longest flow path is 6.3 miles long and the mean annual precipitation is 68 inches. The surface water hydrologic unit code is 3033.

PROJECT DESCRIPTION

Ho‘okua‘āina proposes to repair the existing diversion at the beginning of the po‘owai located in the stream. The original niho stones that held the dam in place, and concrete footings which were likely a result of more recent maintenance on the structure, are still visible in the stream and on its bank. Ho‘okua‘āina will retain the dam’s existing footprint, while rebuilding its vertical sections and shoring up its footing and overall construction using a mix of traditional and imported materials. The former dam will utilize some of the former stones supplemented with native materials found on site and imported boulders as needed. The former niho stones will be restored to their former locations to assist fine tuning of backwater conditions as practiced in the past. Installation will use a small excavator and hand labor.

In the stream at the po‘owai/‘auwai, the applicant intends to bury 20-feet of a 20-inch diameter PVC pipe. There will be a 90-degree elbow at the streambank for inlet control. The 20-in PVC pipe will connect to a 4-ft diameter manhole for pipe direction change and debris cleanout. From the manhole, flow will enter an 18-in HDPE dual wall pipe to a 6-ft by 6-ft concrete vault placed in the former ‘auwai (located offstream). The vault will have a canal gate valve for flow control and closure. This piped configuration will allow flood flows to overtop the floodplain but limit the influences of scour and fill that would otherwise require ‘auwai maintenance. The entire reconstruction would take place in an area about 230-ft long by 10-ft wide.

Instream riprap to create riffles will consist of approximately 85 cubic yards of rip-rap 7 to 11 inches angular, 85 cubic yards of salvaged stream gravel 6 inches or less, and about 12 boulders. The armoring is intended to prevent erosion and loss of the pool level.

The location of the return flow, the ho‘i, is approximately 0.4 miles downstream from the po‘owai/‘auwai. For erosion control at the ho‘i, such as an overhanging pipe or other erosion control measures will be installed as needed. Upon completion of construction, the site will be revegetated with native plants.

Some temporary dewatering may be required during excavation to ease construction and reduce turbidity impacts to stream flow. Construction is anticipated to take 2 to 3 weeks. Follow up revegetation and plantings are anticipated to take 2 to 3 months to become established.

See **Figure 2:** Instream Construction Plan, **Figure 3:** Site Photos, and **Figure 4:** Site Plan.

Figure 2: Instream Construction Plan.

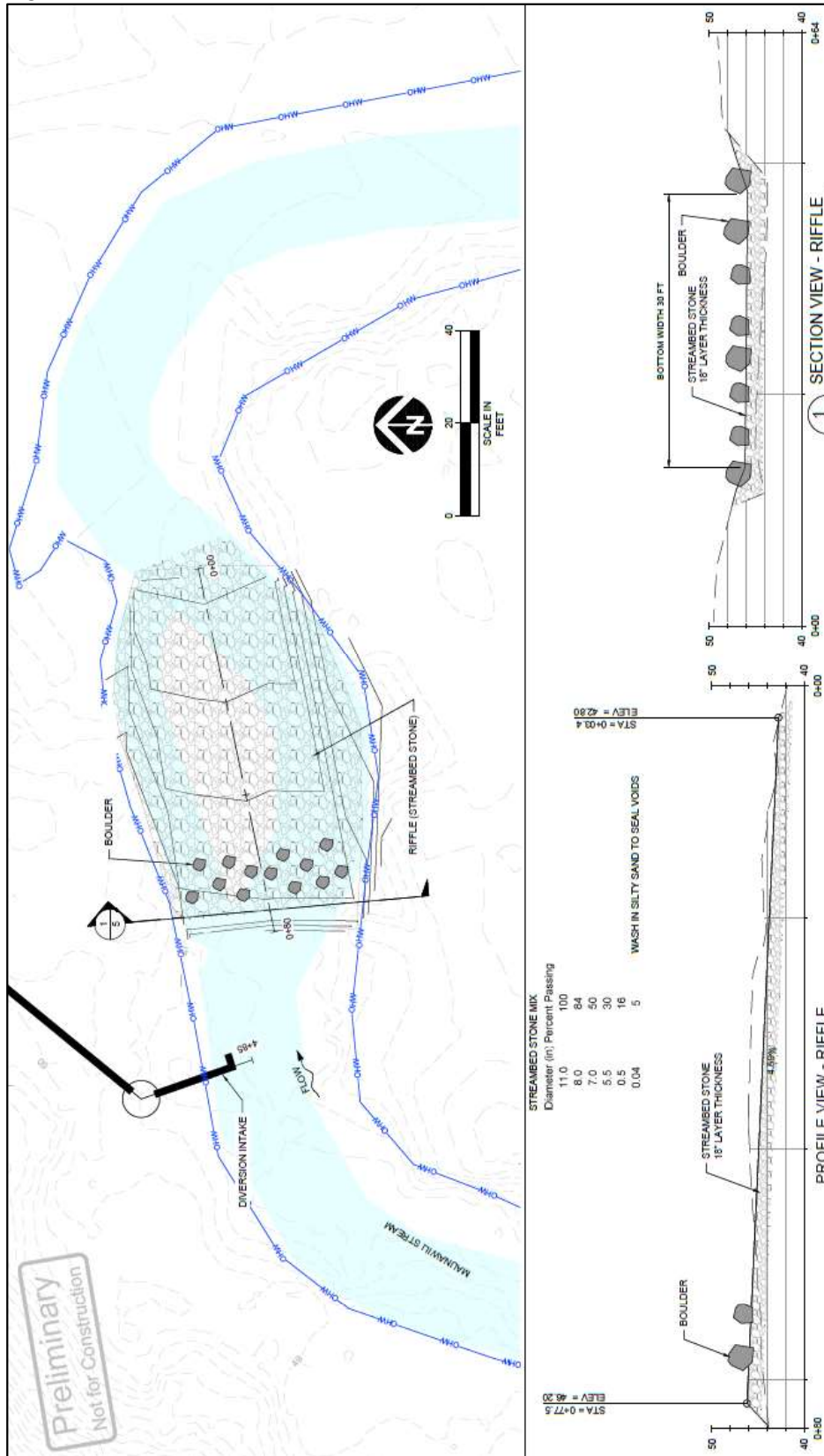


Figure 3: Site Photos.

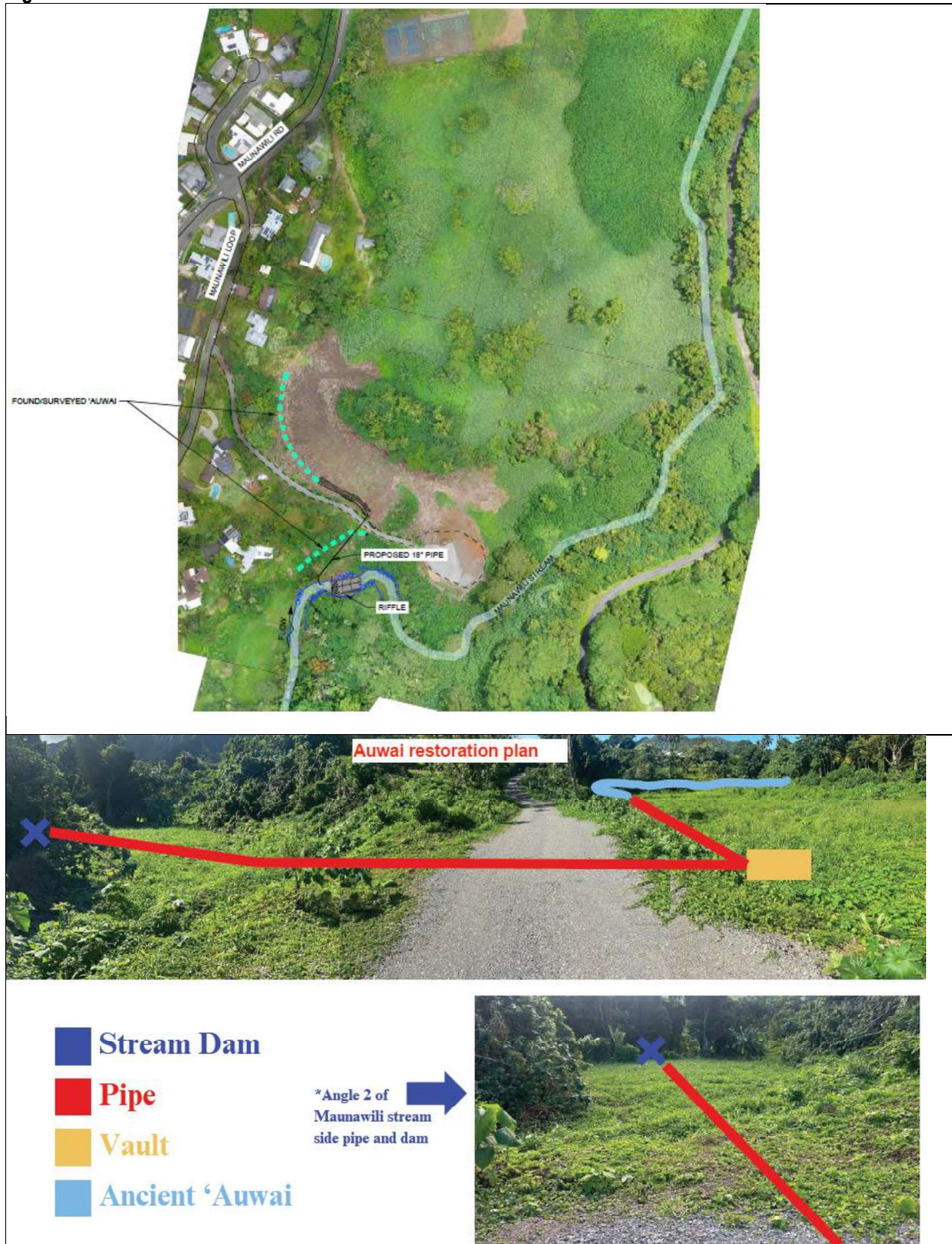
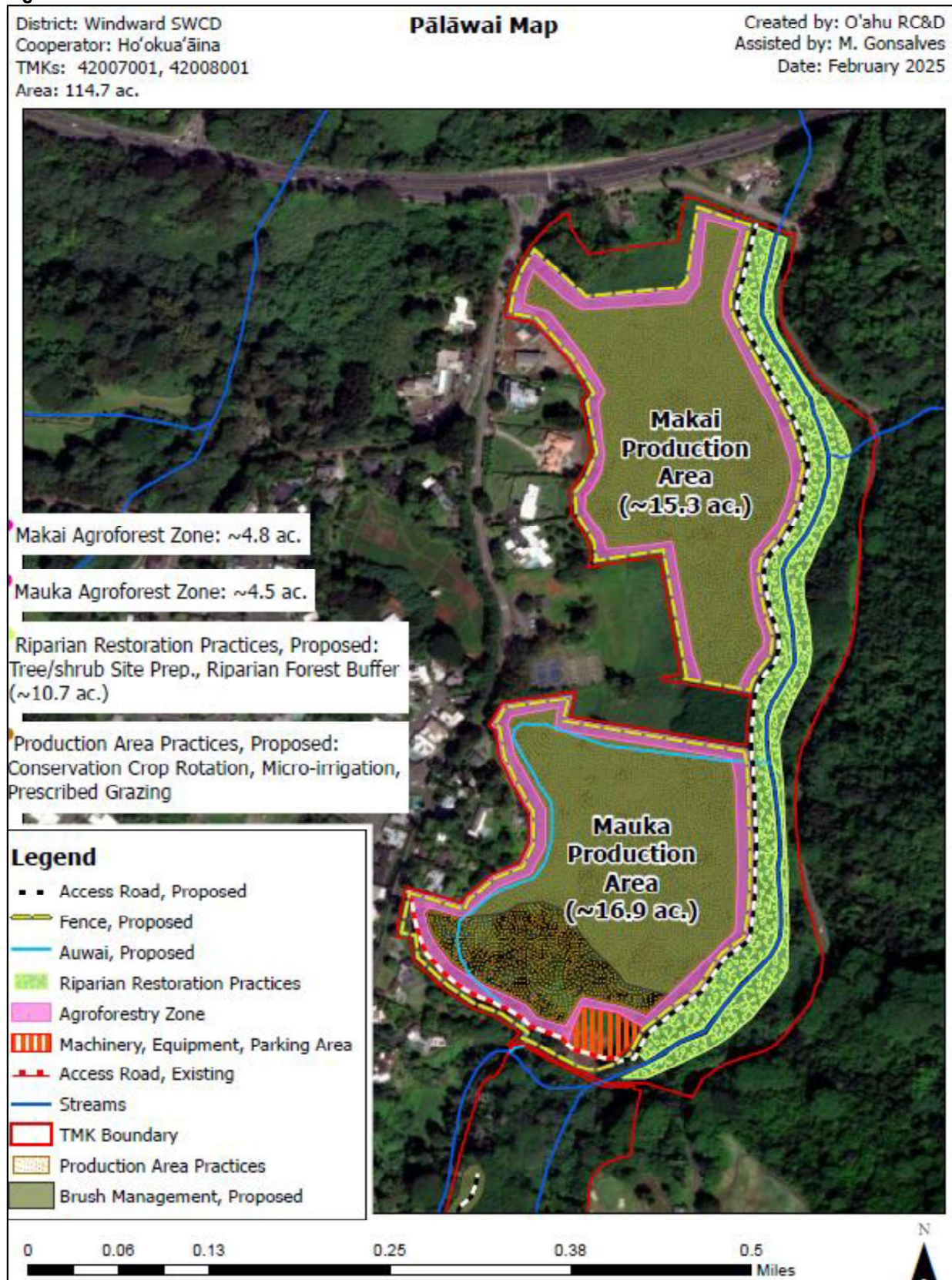


Figure 4: Site Plan.



AGENCY REVIEW COMMENTS

City and County of Honolulu, Department of Planning and Permitting: SMA permit exemption per Section 25-1.3(2) dated November 6, 2023. See **Exhibit 1**.

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

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

DLNR, Aquatic Resources: DAR supports indigenous stream restoration and agricultural practices that support food security. It will be important to consider the following for this project in relation to Aquatic Resources:

- 1) Ensure natural migration of native stream species is not interrupted with this project. It is recommended that the design discourage native stream species from migrating through the irrigation and lo‘i.
- 2) Ensure that the return of water to the stream system does not bring with it increased turbidity, nutrients, contaminants, or invasive species.
- 3) Ensure that the design does not increase erosion of the stream banks.
- 4) During construction use the appropriate best management practices so that sediment, oil, and/or construction materials do not enter the stream system and negatively impact aquatic life. See **Exhibit 2**.

CWRM Staff Response: Added as a special condition 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 for researching the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified 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) (fbat.hawaii.gov) could also be used to research flood hazard information. See **Exhibit 3**.

CWRM Staff Response: The parcel appears to be in Flood Zone D, an area of undetermined but possible flood hazards.

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

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.

If nighttime construction is required during the seabird fledgling season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW’s recommended response protocol by visiting <https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/>.

State-listed waterbirds such as ae‘o or Hawaiian stilt (*Himantopus mexicanus knudseni*), ‘alae ke‘oke‘o or Hawaiian coot (*Fulica alai*), and ‘alae ‘ula or Hawaiian gallinule (*Gallinula chloropus sandwicensis*), could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the O‘ahu Branch DOFAW Office at (808) 973-9778 and establish a buffer zone around the nest.

The project work on or at Maunawili Stream could affect endangered native Hawaiian damselflies (*Megalagrion* spp.) that may be present. DOFAW therefore recommends a survey be conducted by a qualified entomologist to determine if listed damselflies are present in the project area and to assess any potential impacts to those species.

The State and Federally endangered O‘ahu ‘Elepaio (*Chasiempis ibidis*), a forest bird, is known to occur at or in habitat adjacent to the project site. The species is found in a variety of tall, closed canopy forest types with dense understory, most often in riparian forest in valleys, ranging from 100 to 850 meters (325 to 2,775 feet) in elevation. If a project has potential impacts, the immediate recommendation should be to conduct the work outside the nesting season. If a proposed project occurs in critical habitat or in an area where there is an ‘elepaio population, or on DOFAW lands, contact DOFAW for their specific recommendations. If an individual or pair are found, surveys should continue until the existence and extent of a territory can be reasonably determined. If an ‘elepaio nest is found, a buffer zone of 100 m (330 ft) should be established around it. In both instances, whether territory or nest are determined or found, all disturbance in the vicinity should be ceased and DOFAW staff immediately notified.

The State endangered pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. These birds nest on the ground, and active nests have been found year-round. Before any potentially

disturbing activities—like clearing vegetation, especially ground- based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours. Observation surveys should be done at those times from vantage points where they can see the whole project area for 2-3 nights before construction is to start. If any breeding displays are observed, it is likely there could be a nest. If pueo nests are detected in the area, a buffer zone should be established in which no activity occurs within a minimum buffer distance of 100 meters until the nesting cycle is complete, and the chicks are capable of flight. O‘ahu Branch DOFAW staff should be notified at (808) 973-9778 of any nests or adult displayed breeding behavior.

DOFAW recommends using native plant species for landscaping that are appropriate for the area; e.g., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project. We recommend consulting the O‘ahu Invasive Species Committee (OISC) at (808) 266-7994 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. Soil and plant material may contain detrimental fungal pathogens (like Rapid ‘Ōhi‘a Death), vertebrate and invertebrate pests (e.g. Little Fire Ants, and Coconut Rhinoceros Beetle), or invasive plant propagules (e.g. Albizia, Pampas Grass, Fireweed, etc.) that will harm our native ecosystems, and the unique native found within them. Therefore, DOFAW advances the guidance that all equipment and personal items—to include clothing and foot ware should be cleaned of excess soil and debris to minimize the risk of spreading invasive species. Additionally, DOFAW recommends minimizing the movement of plant or soil material between worksites. Suspect pests should be reported through the statewide pest hotline. Photos, videos, and locations can be shared at www.643pest.org or call: 743-PEST. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

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To prevent the spread of Rapid ‘Ōhi‘a Death (ROD), DOFAW requests that removal, pruning/trimming, and potentially injury to ‘ōhi‘a trees be avoided as much as possible. Wounds serve as entry points for ROD fungus and increase the odds that the tree will be infected and die. Also, clean gear/tools, clothes, footwear, and vehicles before and after use. Make sure to removal

all loose soil from the aforementioned items, spray gear/tools with 70% rubbing alcohol, and wash clothes with hot water and soap. Wash tires and undercarriages of all vehicles/machinery with a high-pressure water source. If ‘ōhi‘a trees must be removed or pruned/trimmed, please conduct these activities on a still day to minimize blown sawdust and use a sharp saw to create chips rather than dust. Seal all wounds to these trees with a stump seal product (e.g. Spectricide, etc.). For more information, please consult <https://cms.ctahr.hawaii.edu/rod>.

The invasive Coconut Rhinoceros Beetle (*Oryctes rhinoceros*) or CRB is widespread on the island of O‘ahu. CRB have been detected on other islands with moderate infestation on Kaua‘i, one incipient site on Hawai‘i Island, and only one positive site on Maui in 2023. Hawaii Department of Agriculture interim rule 24-1 restricts the movement of CRB-host material from the island of O‘ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes 1) entire dead trees; 2) mulch, compost, trimmings, fruit and vegetative scraps, and 3) decaying stumps. CRB host plants include the live palm plants in the following genera: Washingtonia, Livistona, and Pritchardia (all commonly known as fan palms), Cocos (coconut palms), Phoenix (date palms), and Roystonea (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. Inspection and/or treatment approved by HDOA is mandatory before inter-island transport. For more information regarding CRB, please visit <https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/>.

We recommend that Best Management Practices are employed during and after the environmental restoration activities to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems.

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have additional questions, please contact Protected Species Habitat Conservation Planning associate Kinsley McEachern at (808) 587-0593 or Laurinda.k.mceachern.researcher@hawaii.gov. See **Exhibit 4**.

CWRM staff response: Added as a special condition by reference.

DLNR, Historic Preservation: On August 18, 2025, SHPD Project No. 2025PR00583 concurred with Commission’s project effect determination of “No historic properties affected” for the project.

CWRM Staff Response: Staff believes that SHPD review is satisfied. See **Exhibit 5**.

DLNR, Land Division: No comments received.

DLNR, State Parks: No comments received.

Dept. of Health (DOH), Clean Water Branch: The DOH standard comments can be reviewed on their website at: <https://health.hawaii.gov/cwb/files/2023/07/Memorandum-for-CWB-Standard-Project-Comments-07016CMHK.23-part-1-signed.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 OHA: OHA requested copies of current or future correspondence from the State Historic Preservation Division (SHPD). See **Exhibit 6**.

CWRM Staff Response: Added as a special condition by reference. A copy of SHPD’s letter, dated August 18, 2025, was forwarded by Ho‘okua‘āina to OHA upon receipt.

US Army Corps of Engineers: No comments received.

US Fish and Wildlife Service (FWS): Based on the project location, federally listed species may occur within and transit through the area. Endangered ‘ōpe‘ape‘a (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 the following applicable measures be incorporated into the project:

- 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.

Endangered Hawaiian waterbirds (ae‘o, Hawaiian stilt, *Himantopus mexicanus knudseni*; ‘alae ke‘oke‘o, Hawaiian coot, *Fulica alai*; ‘alae ‘ula, Hawaiian common gallinule, *Gallinula galeata sandvicensis*; koloa maoli, 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. Based on the project details provided, your project may result in the creation of standing water or open water that could attract Hawaiian waterbirds to the project site. In particular, the Hawaiian stilt is known to nest in sub-optimal locations (e.g., any ponding water), if water is present. Hawaiian waterbirds attracted to sub-optimal habitat may suffer adverse impacts, such as predation and reduced reproductive success, and thus the project may create an attractive nuisance. Therefore, we recommend you work with our office during project planning so that we may assist you in developing measures to avoid impacts to listed species (e.g., fencing, vegetation control, predator management). To avoid and minimize potential project impacts to Hawaiian waterbirds, we recommend the following applicable measures be incorporated into the project:

- In areas where waterbirds 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.
- If water resources are located within or adjacent to the project site, incorporate applicable best management practices regarding work in aquatic environments into the project design (see enclosure).
- Have a biological monitor that is familiar with the species' biology conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found:
 - 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.
 - Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

We appreciate the opportunity to provide comments on this project. For all future correspondence about this project, please use project code 2025-0070243. See **Exhibit 7**.

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, “The ‘ili and TMK for which Ho‘okua‘āina is the long-term steward is known as Pālāwai and was a regionally important and well-documented producer of kalo. “*Pālāwai was the place where taro was planted most and that was the taro that supplied the chiefs when they called for ho‘okupu.*” Testimony of Hikaalani (wahine) before the Commissioner of Private Ways and Water Rights for the District of

Ko‘olaupoko, Island of O‘ahu. 1895. The ‘auwai at Pālāwai has been documented and recorded since the late 1800s; from those sources, we infer it has been in-place since prior to Western contact. Attached are images of maps recording the ‘auwai (sometimes referred to as a “ditch”) and related easements that currently remain in-place and on-title.

- (p113 of *Kailua*) “Water from Maunawili Stream, was transported to the Rice fields and mill from a small, rock-dam reservoir by a large water-diversion ditch. In 1895, Kailihauna, resident of Kailua From the 1830s, recalled that the dam and the ‘auwai were watering the taro patches along the edge of Kamakalepo in ancient times.”
- (p110 of *Kailua*) January 1904 Survey map by MD Monsarrat notes a “Reservoir” in the location of the dam and shows the ‘auwai running the length of Pālāwai.
- (p115 of *Kailua*) The area was also surveyed by A.C. Alexander in 1911 and showed “The ancient dam on Maunawili stream that fed the ‘auwai to the rice mill is between Pālāwai and Puanea...”
- An easement for this “ditch” in favor of the subject parcel is recorded in the deeds of the neighboring properties.

Many poi and rice mills surrounded Pālāwai, which are further evidence of the area’s incredibly productive, agricultural wetlands. Though the property, at one point owned by Kaneohe Ranch, went into cattle for a while, And then sat follow while another previous owner tried to upzone it for development, the ‘auwai and dam are easily located and major aspects of it are in-tact. In it’s long-term stewardship and formal ownership of the property, Ho‘okua‘āina will be returning much of this site to traditional and customary Native Hawaiian agricultural practices.”

CWRM Staff Response: Cultural, historical, or natural resources which support traditional and customary native Hawaiian rights are generally protected on undeveloped land (PASH, 1993). According to the Kipuka database, the subject property has 16 Land Commission Awards (LCA 9539:1; LCA 9539:2; LCA 4452:12; LCA 1833; LCA 6809:1; LCA 1833; LCA 6809:2; LCA 9546:1; LCA 54; LCA 4896:1; LCA 4896:2; LCA 6813:1; LCA 10205:1; LCA 6806:1; LCA 4273 B:1; and LCA 4273 B:2). No historical sites are identified. See all historic photos submitted in the application online at https://files.hawaii.gov/dlnr/cwrmswreview/SDWP_6389_3.pdf.

- 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 stream diversion would have a beneficial impact to traditional and customary native Hawaiian rights because it restores water flow to the historic ‘auwai and lo‘i through traditional means. Ho‘okua‘āina is a Native Hawaiian and non-profit organization with 18 years of experience in connecting the most vulnerable students in our community to ‘āina and experiences growing food in traditional Native Hawaiian approach. This year we delivered over 30,000 pounds of kalo and poi to our local communities, grown and harvested on a nearby parcel that we steward, which has 3 acres of spring-fed lo‘i kalo. We intend to return the land on the subject TMK to active food production and traditional lo‘i kalo by repairing the existing ‘auwai that were originally built by pre-contact native Hawaiians and have been documented in many oral histories, legal testimonies, and surveys since the early 1900s.”

CWRM Staff Response: There are no anticipated impacts to traditional and customary practices or upstream/downstream movement of native macrofauna due to the project’s negligible effect on the streambed and flow.

- 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, “By approving this application, the Commission will help protect native Hawaiian rights by restoring and perpetuating the traditional agricultural use of this land. Ho‘okua‘āina is a respected Native Hawaiian Organization and engaged community resource that hosts thousands each year through its School visit program, youth mentorship and workforce development programs, and community workdays. The organization is also a major grower and supplier of traditional Hawaiian foods, namely kalo and poi, but also ‘ulu; About 20% of his harvest are donated to nearby Kupuna feeding programs in Waimānalo and Kalihi where recipients are largely of Native Hawaiian or Pacific Islander descent.”

CWRM Staff Response: No further action as identified. The status of the spring-fed diversion located downstream of the applicant is unknown. The diversions located upstream should not be affected.

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

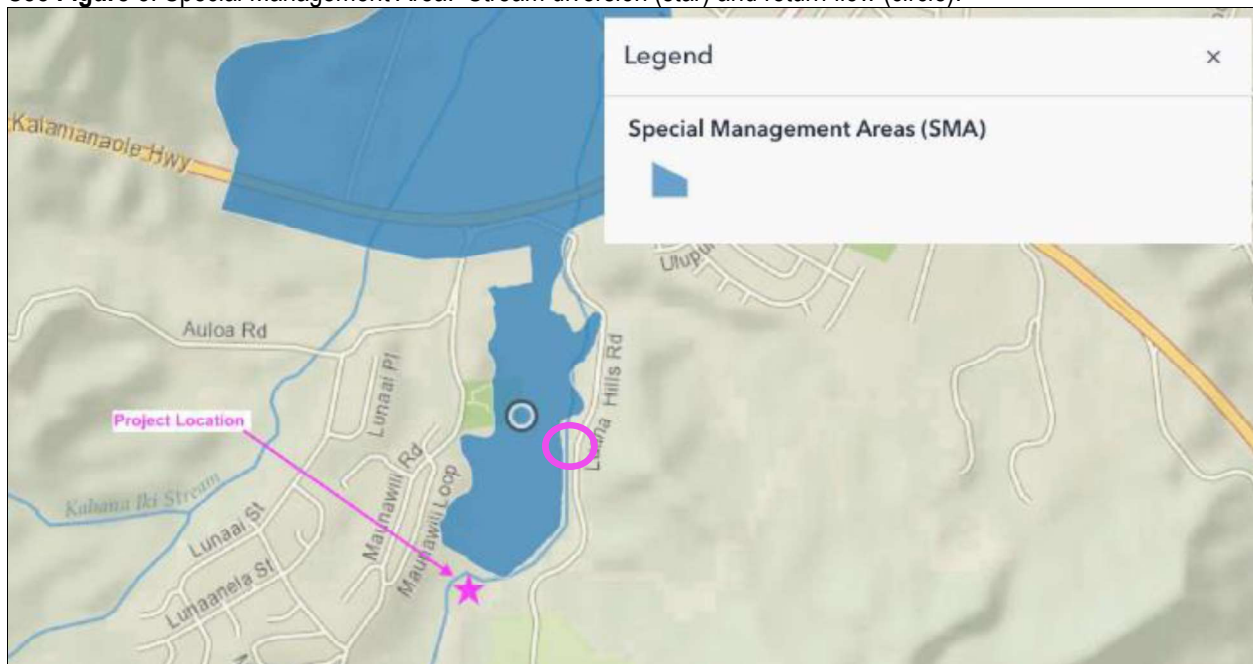
CWRM Staff Response: The proposed action does not trigger an EA.

ROH CHAPTER 25 - SPECIAL MANAGEMENT AREA (SMA) COMPLIANCE

Under [Revised Ordinances of Honolulu \(ROH\), Chapter 25, Special Management Area](#), the SMA is under the jurisdiction of the City and County of Honolulu, Department of Planning and Permitting. The proposed stream diversion (po‘owai) and return flow (ho‘i) are located outside of the SMA. See **Figure 5: Special Management Area**. However, the proposed planting area is located within the SMA. Per ROH Section 25-1.3(2) no SMA permit is required. See **Exhibit 1**.

- (I) The use of any land for the purpose of cultivating, planting, growing, and harvesting of plants, crops, trees, and other agricultural, horticultural, or forestry products; animal husbandry; aquaculture or mariculture of plants or animals; or other agricultural purposes, subject to review by the agency in accordance with subdivision (3); provided that this exclusion does not apply to uses associated with agricultural activity dedicated to manufacturing, processing, or packaging;

See **Figure 5. Special Management Area**. Stream diversion (star) and return flow (circle).



STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 9**.

HAR §13-168-32(d) sets out the general criteria for ruling on Stream Diversion Works Permit applications.

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

CWRM Staff Response: The Water Code under HRS 174C-66 states that the DOH oversees the State’s water quality control program. Generally, the estimated return flow thru taro lo‘i is about 80%. Therefore, staff estimates that both the quantity and quality of stream water or stream ecology is not adversely affected.

- (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, 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 current interim instream flow standard for Windward O‘ahu is an unmeasured amount and the status quo of streamflow conditions on the effective date of this standard (1992), and as that flow may naturally vary throughout the year (HAR §13-169-49.1). The identified instream uses include fish habitat, taro lo‘i, and streamflow contribution to the nearshore waters, among others. While the stream is not gaged, Commission staff consider the proposed use of up to 1.616 mgd, with an estimated return flow of 80% or 1.292 mgd approximately 0.4 miles downstream, is within the stream’s natural variability, and considered an insubstantial modification amount.

- (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: There are five (5) registered diversions located upstream of the subject property, from Makawao Stream, ‘Ainoni Stream, one unnamed tributary to ‘Ainoni Stream, and two unnamed tributaries to Maunawili Stream, which serve the Maunawili Ditch and are managed by the Hawai‘i Department of Agriculture. There is one (1) registered diversion located just upstream of the applicant on an unnamed tributary; however, a verification survey conducted in 2011 indicates that the diversion is not currently active. The subject diversion is not anticipated to affect the six (6) diversions located upstream of the applicant. There is also one (1) spring-fed diversion located downstream of the applicant; however, a verification survey conducted in 2011 indicates that the diversion is not currently active. Staff estimates that the proposed

diversion will not interfere substantially and materially with existing instream or non-instream uses or diversion works previously permitted.

RECOMMENDATION

That the Commission:

1. Approve Stream Diversion Works Permit (SDWP.6389.3) to Ho‘okua‘āina to restore an existing diversion (po‘owai), install and bury a 20-inch pipe (‘auwai), instream riprap to create riffles, install a return flow (ho‘i), and other offstream improvements to divert up to 1.616 mgd for 16.9 acres of kalo and diversified agriculture on the Maunawili Stream, O‘ahu subject to the standard conditions in **Exhibit 8** and the special conditions below:
 - a. In conformance with the DLNR, Division of Aquatic Resources recommendations, incorporated by reference as **Exhibit 2**, ensure natural migration of native stream species is not interrupted with this project; that the design discourage native stream species from migrating through the irrigation and lo‘i; ensure that the return of water to the stream system does not bring with it increased turbidity, nutrients, contaminants, or invasive species; Ensure that the design does not increase erosion of the stream banks, and during construction use the appropriate best management practices.
 - b. In conformance with the Division of Forestry and Wildlife recommendations, incorporated by reference as **Exhibit 4**, native birds and bats may traverse thru the area or nest. Artificial lighting can adversely impact birds. Please follow DOFAW’s recommendations regarding a botanical survey, best management practices, the use of native plants for landscaping, and the spread of invasive species.
 - c. In conformance with the Office of Hawaiian Affairs’ request, incorporated by reference as **Exhibit 6**, Ho‘okua‘āina shall provide to OHA copies of any current or future correspondence from the State Historic Preservation Division (SHPD).
 - d. In conformance with the US, Fish and Wildlife recommendations, incorporated by reference as **Exhibit 7**, 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), and do not use barbed wire for fencing. Contact the Service if you have questions regarding Hawaiian waterbirds.
2. Find that a petition to amend the IIFS is not required under HRS 174C-71 and HAR 13-169-36.

Ola i ka wai,



CIARA W.K. KAHANE
Deputy Director

Exhibits:

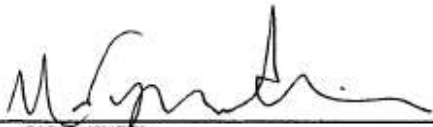
1. City and County of Honolulu, Special Management Area Permit Determination, dated November 6, 2023.
2. DLNR, Division of Aquatic Resources letter dated June 6, 2025.
3. DLNR, Engineering Division comment letter dated May 9, 2025.
4. DLNR, Division of Forestry and Wildlife letter dated July 17, 2025.
5. DNLR, State Historic Preservation Division letter dated August 18, 2025.
6. Office of Hawaiian Affairs email dated June 3, 2025.
7. USFWS email dated June 6, 2025.
8. Standard Stream Diversion Works Permit Conditions.
9. Legal Authorities.

APPROVED FOR SUBMITTAL:



DAWN N.S. CHANG
Chairperson

City & County Honolulu Department of Planning & Permitting 650 S. King Street Honolulu, Hawaii 96813 Phone (808) 768-8000 info@honolulu DPP.org	Special Management Area Permit Determination The purpose of this form is to determine whether the permitting requirements of Chapter 25, Special Management Area, Revised Ordinances of Honolulu applies to your permit. There is a standard fee of \$150 per determination. A final determination will be made prior to issuing permits. All checks shall be payable to the City and County of Honolulu.	2023/ELOG-1823 <small>DPP TRACKING NUMBER</small>
Applicant Information		
Name: Ho'okua'aina Mailing Address: PO BOX 342146, Kailua HI 96734 Phone Number: 808-721-5948 Email address: michele@hookuaaina.org Signature: <i>Michele Wilhelm</i> Date: 10/1/23		
Property Information		
Street Address/ Location of Property: Tax Map Key(s): 4-2-007:001 Describe Existing Site and Use: Parcels have been fallow for several decades. See attached with "Parcel 2"		
Attach if available: <ul style="list-style-type: none">Existing site plansDrawingsPhotographsOther documents that will help to describe the existing condition	Describe Proposed Activity or Development: Ho'okua'aina is in the process of acquiring this parcel from HRT, LLC with approved funds from the Honolulu Clean Water Natural Lands fund. The planned activity is to restore the stream ecology and use of the TMK solely for agricultural production, including wetland lo'i. As the first step in doing so, we plan to address soil erosion on the existing farm "Access Road" and the "Heavy Use Area" on the south end of the parcel to make both these areas usable again so that our crews can access the site to begin our restoration work. Our soil conservation plan identifies the "Access Road" as a 12,000 sq ft area that does not require any fill. This soil conservation plan also identifies the " Heavy Use Area Protection" as a 40,000 sq ft area. We estimate 5000 CY fill (type to be determined by civil or site engineer, adhering to soil conservation plan.) and 740 CY crushed rock will be needed to address the current soil erosion in the area.	

Special Management Area Permit Determination – Page 2 2023/ELOG-1923	
THIS PAGE TO BE COMPLETED BY THE DEPARTMENT OF PLANNING AND PERMITTING	
Is an SMA permit required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, pursuant to Section 25-1.3(2) (<u> I </u>), ROH (see below) <input type="checkbox"/> Yes, permit required per Section 25-1.3(3) or (4), ROH
Proposal involves:	
<input type="checkbox"/> (A) Construction or reconstruction of a dwelling unit that is less than 7,500 square feet of floor area, is not situated on a shoreline lot or a lot that is impacted by waves, storm surges, high tide, or shoreline erosion, and is not part of a larger development of three or more dwelling units;	
<input type="checkbox"/> (B) Structural and nonstructural improvements:	
<input type="checkbox"/> (i) To existing dwelling units, including the addition of minor accessory structures and floor area additions; provided that such additions are limited to 300 square feet if the dwelling unit is considered development, or	
<input type="checkbox"/> (ii) Directly related to relocating a dwelling unit farther mauka or to an area less susceptible to coastal hazards, on the same zoning lot, and activities related to the relocation of the dwelling unit;	
<input type="checkbox"/> (C) Repair or maintenance of roads and highways within existing rights-of-way;	
<input type="checkbox"/> (D) Routine maintenance dredging of existing streams, channels, or drainageways;	
<input type="checkbox"/> (E) The repair and maintenance of underground utility lines, including but not limited to water, sewer, power, or telephone lines, or minor appurtenant structures, such as pad mounted transformers and sewer pump stations;	
<input type="checkbox"/> (F) Zoning variances, except with respect to height, density, or parking, or shoreline setback variances;	
<input type="checkbox"/> (G) Repair, maintenance, or interior alterations to existing structures;	
<input type="checkbox"/> (H) Demolition or removal of structures, except for structures located on any historic site as designated in national or State registers;	
<input checked="" type="checkbox"/> (I) The use of any land for the purpose of cultivating, planting, growing, and harvesting of plants, crops, trees, and other agricultural, horticultural, or forestry products; animal husbandry; aquaculture or mariculture of plants or animals; or other agricultural purposes, subject to review by the agency in accordance with subdivision (3); provided that this exclusion does not apply to uses associated with agricultural activity dedicated to manufacturing, processing, or packaging;	
<input type="checkbox"/> (J) The transfer of title to land;	
<input type="checkbox"/> (K) The creation or termination of easements, covenants, or other rights in structures or land;	
<input type="checkbox"/> (L) The subdivision of a parcel of land into four or fewer parcels if no associated construction activities are proposed; provided that after the initial subdivision, any subsequent subdivision of the resulting parcels will be considered development for purposes of this chapter;	
<input type="checkbox"/> (M) Installation of underground utility lines and appurtenant aboveground fixtures less than 4 feet in height along existing corridors;	
<input type="checkbox"/> (N) Nonstructural improvements to existing commercial structures; or	
<input type="checkbox"/> (O) Construction, installation, maintenance, repair, or replacement of emergency management warning or signal devices and sirens.	
Preliminary SMA Permit Determination <input type="checkbox"/> Minor <input type="checkbox"/> Major Note: Final determination will be based on review of actual SMA Application submission	Minor Permits: See Sections 25-2.3 and 25-5.2, ROH Major Permits: See Sections 25-2.3 and 25-5.3, ROH
Notes: <i>Enclosed: Receipt No. 143363</i>	
	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> FOR Director </div> <div style="text-align: right;"> 11/6/23 </div> </div>
SIGNATURE	TITLE DATE
<small>Chapter 25 of the Revised Ordinance of Honolulu (ROH) and the Application Instructions for the SMA permits can be found on our website: https://www.honolulu.gov/dpp/permitting/coastal-area-permits.html</small>	

JOSH GREEN, M.D.
GOVERNOR | KE KAHANA
BYLA LUKE
LIEUTENANT GOVERNOR | KAHOKE KAHANA



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

Date: 6/2/2025
DAR # AR6885

DANN H.S. CHUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KAHAKA'OLE
FIRST DEPUTY

CIARA W.K. KAHAHANE
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: Kimberly Fuller, Aquatic Biologist

SUBJECT: Request for Comments, Stream Diversion Works Permit (SDWP.6389.3)

Request Submitted by: Ciara W.K. Kahahane, Deputy Director CWRM

Location of Project: Maunawili Stream, Maunawili, O'ahu, Tax Map Key(s):
(1) 4-2-007.001

Brief Description of Project:

The request for review of Stream Diversion Works Permit Application was routed through CWRM.

Permit contacts listed:

Applicant: Ho'okua'aina, Michele Wilhelm, Exec.Dir

Land Owner: HRT, LLC, Kirk Horiuchi

Consultant: Interfluve, Mike McAllister

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: 06/06/2025
Brian J. Neilson
DAR Administrator

DAR# AR6885

Brief Description of Project

The project proposes to restore an existing diversion (Po'owai) and install and bury an 18-inch Pipe ('Auwai), instream riprap to create riffles, return flow (Ho'i), and other off-stream improvements to divert up to 1.616 million gallons per day (mgd) for 16.9 acres of kalo and diversified agriculture on the Maunawili Stream, Maunawili, O'ahu. This is a new stream diversion works permit application for modification. The diversion structure types include hand-built rock, concrete masonry, dam/ weir, pipe, and direct use. The diversion is planned to be located on the left bank of Maunawili Stream. The dimensions planned are as follows: Riffle- ~43 ft long, ~35 ft wide; Manhole: 4 ft diameter, 5 ft high; Vault: 6 ft x 6 ft x 9ft; Pipe: 227 ft long, 18 inches wide. The water diversion will have an average 2.5 cubic feet per second (cfs) and have an average return of 2 cfs to the stream at the low pool. The primary crop fed by this diversion will be lo'i kalo.

"The Pālāwai property (116 acres) and 'āuwai restoration project is located in Maunawili and is part of an intact traditional hydrological system where the Kawainui watershed (covering 9,400 acres) feeds the Maunawili kahawai (stream) system. Maunawili is the longest stream in the Ko'olaupoko region at 22 miles long with a median flow of 9.6 mgd (USGS gauge 16260500). Maunawili's tributaries originate high in the peaks of the Ko'olau mountains (Kōnāhuanui and Awaawaloa) and flow in a northerly direction until five of the six branches converge on our Pālāwai property to form the main stem of Maunawili Stream. The stream then flows along the base of Olomana, under Kalaniana'ole Highway, and is joined by Kahana Iki Stream just as the two streams flow into Kawainui fishpond and wetland, then out to Kailua Bay.

Ho'okua'aina's overall plan for Pālāwai includes: ● Restore Maunawili Stream and its riparian areas by leading with indigenous knowledge and practices ● Develop a major hub of agriculture and community resilience for Windward, Oahu ● Support access to fresh, healthy, culturally relevant food using innovative and culturally grounded ag practices- primarily lo'i kalo and indigenous agroforestry and community stewardship. ● Train multiple young farmers, hailing from and impacting under served areas ● Strengthen community health and well-being through agriculture, program engagement The critical step to implementing the overall vision for Pālāwai is to rehabilitate the 'āuwai that connects Maunawili Stream with the former lo'i areas of Pālāwai

DAR# AR6885

Brief Description of Project

Maunawili stream has a mean daily streamflow of 11.4 cfs, and a median flow of flow of 9.6 mgd. This project proposes to divert 2.5 cfs, about 22%, but return 2 cfs, resulting in a loss of only .5 cfs, about 4.4% of mean cfs in Maunawili stream.

DAR# AR6885

Comments

DAR supports indigenous stream restoration and agricultural practices that support food security.

It will be important to consider the following for this project in relation to Aquatic Resources:

- 1) Ensure natural migration of native stream species is not interrupted with this project. It is recommended that the design discourage native stream species from migrating through the irrigation and lo‘i.
- 2) Ensure that the return of water to the stream system does not bring with it increased turbidity, nutrients, contaminants, or invasive species.
- 3) Ensure that the design does not increase erosion of the stream banks.
- 4) During construction use the appropriate best management practices so that sediment, oil, and/or construction materials do not enter the stream system and negatively impact aquatic life.

Mahalo for the opportunity to comment.

**DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION**

CWRM/Ciara W.K. Kahane

**Ref: Request for Comments, Stream Diversion Works Permit (SDWP.6389.3)
Application, Ho'okua'āina, Restore Existing Diversion (Po'owai), Install and
Bury a 18-inch Pipe ('Auwai), Instream Riprap, Return Flow (Ho'i), and
Other Offstream Improvements to Divert Up to 1.616 mgd for 16.9 Acres of
Kalo and Diversified Agriculture
Location: Maunawili Stream, Maunawili, O'ahu
TMK(s): (1) 4-2-007:001
Applicant: Ho'okua'āina**

COMMENTS

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 for researching the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified 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) (fhathawaii.gov) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai: County of Maui, Department of Planning (808) 270-7139.
- Kauai: County of Kauai, Department of Public Works (808) 241-4849.

Signed: 

DINA U. LAU, ACTING CHIEF ENGINEER

Date: Jun 3, 2025

JOSH GREEN, M.D.
GOVERNOR | KE KA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'ŌIHANA KUMUWAIWAI 'ĀINA

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

DAWN N.S. CHANG
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAWAIAE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

July 17, 2017

Log no. 5010/Ref. SDWP 6389.3

MEMORANDUM

TO: CIARA W.K. KAHANE, Deputy Director
Commission on Water Resource Management

FROM: JASON D. OMICK, Wildlife Program Manager
Division of Forestry and Wildlife

SUBJECT: Request for Comments, Stream Diversion Works Permit (SDWP.6389.3)
Application, Ho'okua'āina, Restore Existing Diversion (Po'owai), Install and
Bury a 18-inch Pipe ('Auwai), Instream Riprap, Return Flow (Ho'i), and Other
Offstream Improvements to Divert Up to 1.616 mgd for 16.9 Acres of Kalo and
Diversified Agriculture at Maunawili Stream in Maunawili, O'ahu

The Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) has received the consultation request for comments on the Stream Diversion Works Permit (SDWP.6389.3) application for Ho'okua'āina at the Maunawili Stream in Maunawili on the island of O'ahu. Ho'okua'āina would like to repair the existing 'auwai, including the former dam at the beginning of the 'auwai. The Pālāwai property (116 acres) and 'āuwai restoration project is located in Maunawili and is part of an intact traditional hydrological system where the Kawainui watershed (covering 9,400 acres) feeds the Maunawili kahawai (stream) system. Maunawili is the longest stream in the Ko'olaupoko region at 22 miles long with a median flow of 9.6 mgd. The original niho stones that held the dam in place, and concrete footings which were likely a result of more recent maintenance on the structure, are still visible in the stream and on its bank. Ho'okua'āina will retain the dam's existing footprint, while rebuilding its vertical sections and shoring up its footing and overall construction using a mix of traditional and imported materials. For the former dam, they will utilize some of the former stones supplemented with native materials found on site and imported boulders as needed. Installation will be by small excavator and hand labor for the beginning of the 'auwai, they intend to bury 20 feet of 20-inch diameter (18" ID) PVC pipe with a 90-degree elbow at the streambank for inlet control. This pipe will connect to a 4 ft diameter manhole for pipe direction change and debris cleanout. From the manhole, flow will enter an 18" HDPE dual wall (smooth) pipe to a 6'x6' concrete vault placed in the former 'āuwai (located outside of the floodplain). The vault will have a canal gate valve for flow

control and closure. This piped configuration will allow flood flows to overtop the floodplain but limit the influences of scour and fill that would otherwise require ‘āuwai maintenance. The entire re-construction would take place in an area around 230 feet long by 10 feet wide. For erosion control at the location of the ho‘i, an overhanging pipe or other erosion control measures as needed. Upon completion of the construction efforts, the site will be fully revegetated with native plants.

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

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.

If nighttime construction is required during the seabird fledging season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting <https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/>.

State-listed waterbirds such as ae‘o or Hawaiian stilt (*Himantopus mexicanus knudseni*), ‘ālae ke‘oke‘o or Hawaiian coot (*Fulica alai*), and ‘ālae ‘ula or Hawaiian gallinule (*Gallinula chloropus sandvicensis*), could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the O‘ahu Branch DOFAW Office at (808) 973-9778 and establish a buffer zone around the nest.

The project work on or at Maunawili Stream could affect endangered native Hawaiian damselflies (*Megalagrion* spp.) that may be present. DOFAW therefore recommends a survey be conducted by a qualified entomologist to determine if listed damselflies are present in the project area and to assess any potential impacts to those species.

The State and Federally endangered O‘ahu ‘Elepaio (*Chasiempis ibidis*), a forest bird, is known to occur at or in habitat adjacent to the project site. The species is found in a variety of tall, closed canopy forest types with dense understory, most often in riparian forest in valleys,

ranging from 100 to 850 meters (325 to 2,775 feet) in elevation. If a project has potential impacts, the immediate recommendation should be to conduct the work outside the nesting season. If a proposed project occurs in critical habitat or in an area where there is an ‘elepaio population, or on DOFAW lands, contact DOFAW for their specific recommendations. If an individual or pair are found, surveys should continue until the existence and extent of a territory can be reasonably determined. If an ‘elepaio nest is found, a buffer zone of 100 m (330 ft) should be established around it. In both instances, whether territory or nest are determined or found, all disturbance in the vicinity should be ceased and DOFAW staff immediately notified.

The State endangered pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. These birds nest on the ground, and active nests have been found year-round. Before any potentially disturbing activities—like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours. Observation surveys should be done at those times from vantage points where they can see the whole project area for 2-3 nights before construction is to start. If any breeding displays are observed, it is likely there could be a nest. If pueo nests are detected in the area, a buffer zone should be established in which no activity occurs within a minimum buffer distance of 100 meters until the nesting cycle is complete, and the chicks are capable of flight. O‘ahu Branch DOFAW staff should be notified at (808) 973-9778 of any nests or adult displayed breeding behavior.

DOFAW recommends using native plant species for landscaping that are appropriate for the area; e.g., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

Vanderwerf, E.A., MT. Lohr, A.J. Titmus, P.E. Taylor, and M.D. Burt. 2013. Current distribution and abundance of the O‘ahu ‘Elepaio (*Chasiempis ibidis*). *Wilson Journal of Ornithology* 125: 600-608.

We recommend consulting the O‘ahu Invasive Species Committee (OISC) at (808) 266-7994 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. Soil and plant material may contain detrimental fungal pathogens (like Rapid ‘Ōhi‘a Death), vertebrate and invertebrate pests (e.g. Little Fire Ants, and Coconut Rhinoceros Beetle), or invasive plant propagules (e.g. Albizia, Pampas Grass, Fireweed, etc.) that will harm our native ecosystems, and the unique native found within them. Therefore, DOFAW advances the guidance that all equipment and personal items—to include clothing and foot ware should be cleaned of excess soil and debris to minimize the risk of spreading invasive species. Additionally, DOFAW recommends minimizing the movement of plant or soil material between worksites. Suspect pests should be reported through the statewide pest hotline. Photos, videos, and locations can be shared at www.643pest.org or call: 743-PEST. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

To prevent the spread of Rapid ‘Ōhi‘a Death (ROD), DOFAW requests that removal, pruning/trimming, and potentially injury to ‘ōhi‘a trees be avoided as much as possible. Wounds serve as entry points for ROD fungus and increase the odds that the tree will be infected and die. Also, clean gear/tools, clothes, footwear, and vehicles before and after use. Make sure to removal all loose soil from the aforementioned items, spray gear/tools with 70% rubbing alcohol, and wash clothes with hot water and soap. Wash tires and undercarriages of all vehicles/machinery with a high-pressure water source. If ‘ōhi‘a trees must be removed or pruned/trimmed, please conduct these activities on a still day to minimize blown sawdust and use a sharp saw to create chips rather than dust. Seal all wounds to these trees with a stump seal product (e.g. Spectricide, etc.). For more information, please consult <https://cms.ctahr.hawaii.edu/rod/>.

The invasive Coconut Rhinoceros Beetle (*Oryctes rhinoceros*) or CRB is widespread on the island of O‘ahu. CRB have been detected on other islands with moderate infestation on Kaua‘i, one incipient site on Hawai‘i Island, and only one positive site on Maui in 2023. Hawaii Department of Agriculture interim rule 24-1 restricts the movement of CRB-host material from the island of O‘ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes 1) entire dead trees; 2) mulch, compost, trimmings, fruit and vegetative scraps, and 3) decaying stumps. CRB host plants include the live palm plants in the following genera: Washingtonia, Livistona, and Pritchardia (all commonly known as fan palms), Cocos (coconut palms), Phoenix (date palms), and Roystonea (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. Inspection and/or treatment approved by HDOA is mandatory before inter-island transport. For more information regarding CRB, please visit <https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/>.

We recommend that Best Management Practices are employed during and after the environmental restoration activities to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems. We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to

September 16, 2025

avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have additional questions, please contact Protected Species Habitat Conservation Planning associate Kinsley McEachern at (808) 587-0593 or Laurinda.k.mceachern.researcher@hawaii.gov.

Sincerely,



Jason D. Omick
Wildlife Program Manager

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



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

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 333
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DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
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CONSERVATION AND RESOURCES
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

August 18, 2025

Ciara W. K. Kahahane, Deputy Director
State Commission on Water Resource Management (CWRM)
P.O. Box 621
Honolulu, Hawai‘i 96809
dlnr.cwrmm@hawaii.gov

IN REPLY REFER TO:
Project No. 2025PR00583
Doc. No. 2507JG08
Archaeology

Dear Ciara W. K. Kahahane:

**SUBJECT: Hawaii Revised Statutes (HRS) Chapter 6E-42 Historic Preservation Review – Revised Stream Diversion Works Permit Application (SDWP.6389.3)
Archaeological Field Inspection
Project Proponent: Michele Wilhelm
Kailua Ahupua‘a, Ko‘olaupoko District, Island of O‘ahu
TMK: (1) 4-2-007:001**

This letter provides the State Historic Preservation Division’s (SHPD’s) updated review of the subject Stream Diversion Works Permit Application originally received by our office on May 13, 2025. SHPD previously reviewed the subject project and requested that an archaeological field inspection (FI) be conducted of the proposed project area (Doc. No. 2506JG13). Subsequently, the SHPD received the requested FI report (Watson, July 2025) on July 11, 2025 (Submission No. 2025PR00583.005). The initial submittal included an HRS 6E Submittal Form, construction plans, and photos of the 10-acre project area.

The project proponent proposes the restoration of an existing diversion for agricultural irrigation via the installation of an 18 inch pipe to connect a missing section of the ‘auwai, the addition of instream riprap to create riffles to return flow to the ‘auwai, and off-stream improvements for a return flow to divert up to 1.616 million gallons of water per day from the Maunawili Stream for 16.9 acres of kalo and other diversified agriculture. The project will include the following:

- Excavation of an 18 in. pipe to connect to the existing ‘auwai. A portion of this pipe will run under the existing gravel farm road via a culvert. The pipe will measure 250 ft. long.
- Installation of a 6 ft. long by 6 ft. wide vault catch basin will at the end of the proposed 18 in. pipe.
- Deepening and shoring improvements of a 150 ft. portion of the existing ‘auwai to connect to the portion of the existing ‘auwai that is more intact.

The Watson (July 2025) FI report includes a description of the scope of work and the project area, a summary of previous archaeology that included the project area, and the results of the FI. As a result of the FI, the existing ‘auwai was found to have been realigned multiple times and lacks any materials found in traditional ‘auwai. Moreover the ‘auwai has not been maintained and is currently overgrown. Thus, the ‘auwai does not retain integrity of location, workmanship, design, materials, setting, feeling, or association. No previously unidentified historic properties were identified during the FI.

Based on the information provided, SHPD’s project effect determination is “No historic properties affected” pursuant to HAR §13-284-7(a)(1) for the current project. Additionally, pursuant to HAR §13-284-7(e), when SHPD

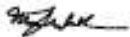
Ciara W. K. Kahahane
August 18, 2025
Page 2

comments that the proposed project shall not affect significant historic properties, the HRS §6E historic preservation review process ends. The permit issuance process may continue.

Although the field inspection does not fulfill the requirements of an archaeological inventory survey as specified in HAR §13-276-5, it serves to facilitate project planning and supports the historic preservation review process. Please submit 2 hard copies of the report, clearly labeled FINAL, along with a text-searchable PDF copy of the report and a copy of this letter to the SHPD Kapolei office, Attn. Library. Also submit a text-searchable PDF copy of the report to HICRIS Project 2025PR00583 using the Project Supplement option, and a text-searchable PDF copy of the report to SHPD_Archaeology_Library@hawaii.gov.

Please contact Joshua Gastilo at joshua.gastilo@hawaii.gov for questions regarding archaeological resources or this letter.

Aloha,



Mary M. L. Kodama
Architecture Branch Chief
Acting Deputy State Historic Preservation Officer

cc: Wei Fang, wei@hookuaaina.org
Michele Wilhelm, michele@hookuaaina.org
Trisha K. Watson, watson@honuaconsulting.com

September 16, 2025

From: [Kaweni Ibarra](#)
To: [Alakai, Rebecca R](#)
Cc: michele@hookuaaina.org; khorichi@hweinberg.org; [Kai Markell](#); [Kamakana Ferreira](#); mikem@interfluve.com
Subject: [EXTERNAL] OHA Comment Re: Hookuaaina, SDWP for Kalo Ag at Maunawili Stream, Oahu
Date: Tuesday, June 3, 2025 7:27:07 AM
Attachments: [Outlook-b5zx4pfd.png](#)

Aloha e Rebecca,

The Office of Hawaiian Affairs (OHA) is in receipt of the application for a Stream Diversion Works Permit (SDWP) by Hookuaaina for stream restoration at Maunawili Stream [TMK (1)4-2-007: 001], Oahu.

At this time, OHA requests to be provided with copies of any current or future correspondence from the State Historic Preservation Division (SHPD)

Mahalo for your time. We look forward to receiving the requested information. Please feel free to contact me should you have any questions.

Mahalo,

Kaweni Ibarra

Kaweni Ibarra
Compliance Advocate
Office of Hawaiian Affairs



From: [Sachs, Elyse M](#)
To: [Alakai, Rebecca R](#)
Subject: [EXTERNAL] Comments on the Surface Water Permit Application Review: SDWP.6389.3 Hookuaaina, Maunawili
Date: Friday, June 6, 2025 9:36:27 AM

Good afternoon,

The U.S. Fish and Wildlife Service (Service) has reviewed the Surface Water Permit Application SDWP.6389.3 for Ho‘okua‘āina, Maunawili. Based on the project location, federally listed species may occur within and transit through the area.

Endangered ‘ope‘ape‘a (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 the following applicable measures be incorporated into the project:

- 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.

Endangered Hawaiian waterbirds (ae‘o, Hawaiian stilt, *Himantopus mexicanus knudseni*; ‘ālae ke‘oke‘o, Hawaiian coot, *Fulica alai*; ‘ālae ‘ula, Hawaiian common gallinule, *Gallinula galeata sandvicensis*; koloa maoli, 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. Based on the project details provided, your project may result in the creation of standing water or open water that could attract Hawaiian waterbirds to the project site. In particular, the Hawaiian stilt is known to nest in sub-optimal locations (e.g., any ponding water), if water is present. Hawaiian waterbirds attracted to sub-optimal habitat may suffer adverse impacts, such as predation and reduced reproductive success, and thus the project may create an attractive nuisance. Therefore, we recommend you work with our office during project planning so that we may assist you in developing measures to avoid impacts to listed species (e.g., fencing, vegetation control, predator management). To avoid and minimize potential project impacts to Hawaiian waterbirds, we recommend the following applicable

measures be incorporated into the project:

- In areas where waterbirds 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.
- If water resources are located within or adjacent to the project site, incorporate applicable best management practices regarding work in aquatic environments into the project design (see enclosure).
- Have a biological monitor that is familiar with the species' biology conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found:
 - o Contact the Service within 48 hours for further guidance.
 - o 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.
 - o Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

We appreciate the opportunity to provide comments on this project. For all future correspondence about this project, please use project code 2025-0070243.

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 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. 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.
9. 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.

“Interim instream flow standard” means a temporary instream flow standard of immediate applicability, adopted by the commission without the necessity of a public hearing, and terminating upon the establishment of an instream flow standard.

“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 §13-168-7 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.
- (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 §13-169-36 Modifying instream flow standards. The modification of an existing instream flow standard by the commission may be initiated by the commission or by a petition to the commission by any interested person. The petition for modifying instream flow standards shall be made on forms provided by the department. The procedure for modifying an existing instream flow standard shall be similar to that for the establishment of an instream flow standard; provided that **insubstantial modification** may be determined and authorized without notice or hearing by the commission and provided, further, that the commission shall hold a hearing upon the written request of any person adversely affected by such order. (emphasis added).

HAR §13-169-49.1 Interim instream flow standard for Windward Oahu. The Interim Instream Flow Standard for all streams on Windward Oahu, as adopted by the commission on water resource management on April 19, 1989, 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. [Eff. MAY 04 1992].