



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA  
**COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO**  
P.O. BOX 621  
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

May 21, 2024  
Honolulu, Hawai'i

Approval of Stream Channel Alteration Permit (SCAP.6158.3) Application and  
Special Conditions, City and County of Honolulu, Board of Water Supply  
Mākaha Wells II, III, and IV Access Road Repairs  
Mākaha Stream, Mākaha, O'ahu, Tax Map Key(s): (1) 8-4-030:004

APPLICANT

Ernest Y.W. Lau, Manager  
City and County of Honolulu, Board of Water Supply  
630 South Beretania Street  
Honolulu, HI 96843

LANDOWNER

Same

SUMMARY OF REQUEST

Approve Stream Channel Alteration Permit (SCAP.6158.3) by the City and County of Honolulu, Board of Water Supply (BWS). The project proposes the replacement of six (6) existing culverts with a panel truss bridge and remove rock and debris that are blocking the Mākaha Stream.

BACKGROUND

On October 18, 2023, the BWS filed a complete stream channel alteration permit application that is available online at [https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP\\_6158\\_3.pdf](https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP_6158_3.pdf).

LOCATION: Mākaha Stream, O'ahu. See **Figure 1**.

Figure 1: Location, Mākaha Stream O‘ahu..



### STREAM DESCRIPTION

Both the National Hydrography Dataset and the Division of Aquatic Resources classified the Mākaha Stream as perennial. The total drainage area is 5.6 square miles with a maximum basin elevation of 4,020 feet. The mean annual precipitation is 50 inches and the longest flow path is approximately 5.5 miles.

**PROJECT DESCRIPTION**

The project proposes the replacement of six (6) existing culverts with a panel truss bridge and remove rock and debris that are blocking the Mākaha Stream. The project dimensions are width 65-ft, height 15-ft, and length 100-ft across the entire stream channel. The project is estimated to take one (1) year.

The stream will be diverted around the project area and allow for fish passage. The project will remove the existing ford crossing, culvert crossing, 12-inch culverts and the 16-inch water supply main. Stream excavation work will consist of cutting and excavating an 8-foot wide by 4-foot deep through the remainder of stream silt and deposits caused by the failing existing box culvert. The cut will ultimately allow Mākaha Stream to return to natural stream flow.

The diversion ditch, temporary access road and temporary water line will be removed at the end of construction. Accumulated sediment deposited on the upstream side of the access road crossing will be removed. Best management practices will be followed before, during, and after construction to minimize adverse effects on the surrounding environment and maintain a safe work zone.

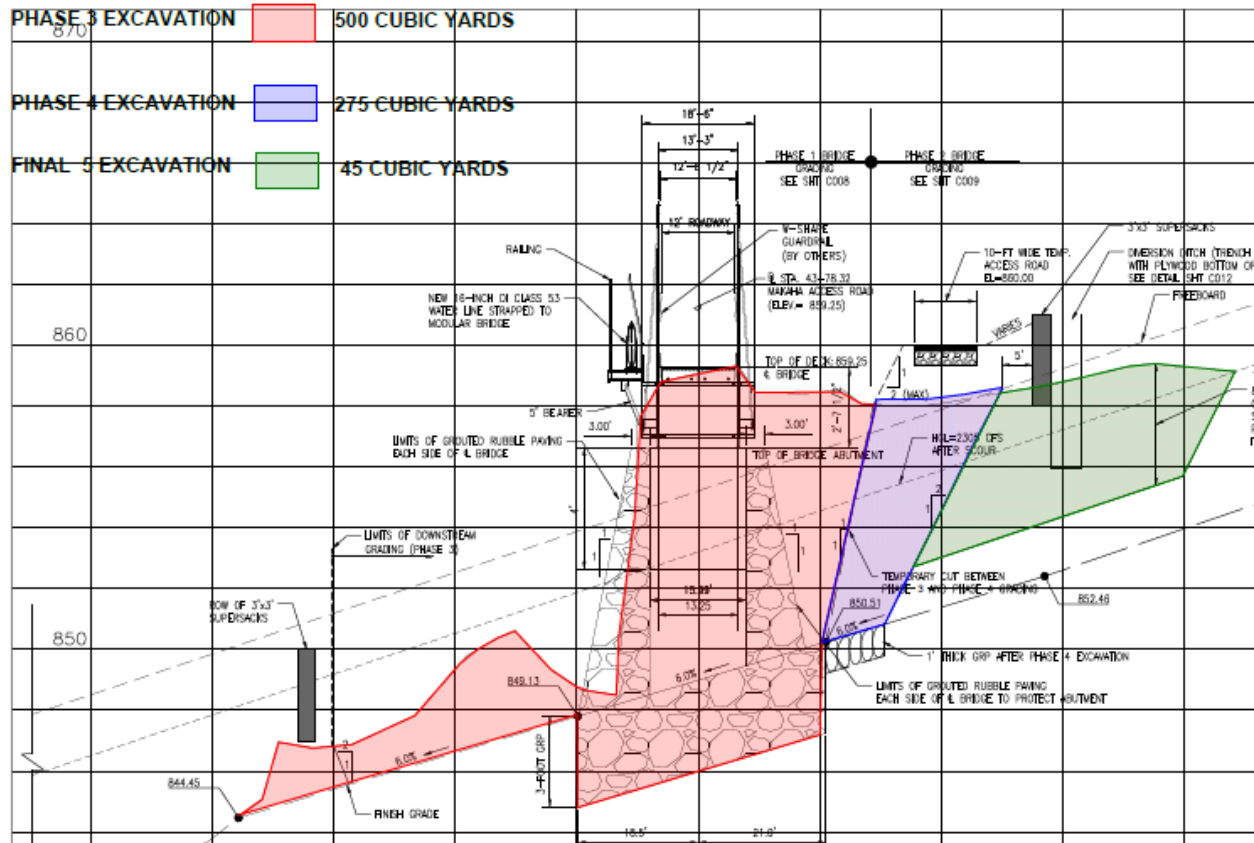
**Figure 2:** Mākaha Stream site photos.



View upstream of project area.



View of project area from downstream.



Bridge showing excavation sites and volumes.

**AGENCY REVIEW COMMENTS**

City and County of Honolulu, Department of Planning and Permitting: The project site is situated in the State of Hawai'i's Land Use Conservation District, and is zoned P-1 Restricted Preservation District. Therefore, the proposed project is not subject to the City and County of Honolulu's (City) Zoning or Land Use regulations. However, we note that the project is consistent with the policies of the City's Wai‘anae Sustainable Communities Plan. See **Exhibit 1**.

*CWRM Staff Response:* No comments.

Department of Hawaiian Home Lands (DHHL): It appears that this SCAP will benefit the people in the area by increasing access to the BWS wells that supply water, and by improving road access, reducing impact on stream resources. We note that we did not see community consultation listed or a Ka Pa`akai Analysis completed. We encourage the Board to work with known groups concerned with the health of the stream. This includes Kingdom Pathways, BWS tenants Mohala I Ka Wai, and other groups to identify any practices and potential impacts from the project, as well as to increase community awareness of this SCAP. See **Exhibit 2**.

*CWRM staff response:* Consultation with community groups, as noted above, has been added as a special condition by reference.

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

DLNR, Aquatic Resources: Based on previous DAR surveys, Makaha Stream provides important habitat for the native goby (*Awaous hawaiiensis*) and native shrimp (*Atyoida bisulcata*). These stream species were observed below and above the proposed project site and have an amphidromous life cycle meaning that they regularly migrate between the freshwater and the sea (in both directions). Therefore, it is important that passage through the stream remain unimpeded at all times. To protect aquatic environments at the proposed project site as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. DAR requests that the following Best Management Practices (BMPs) or mitigative measures should be implemented during the excavation, grading, and construction activities to minimize the potential impacts from erosion, siltation, and pollution.

- 1) Minimize stream bank disturbance and areas denuded of vegetation should be planted or covered as quickly as possible to prevent further erosion;
- 2) Scheduling work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions;
- 3) Excavation, grading and construction areas should incorporate any type of barriers (sediment barriers/bags, petroleum absorption diapers, etc.) or other BMPs to prevent construction materials, petroleum products, debris and landscaping products from falling, blowing or leaching into the aquatic environment.

Best Management Practices (BMPs) should help to minimize some of the impacts on the water quality parameters in the aquatic environment. The proposed project is not expected to have adverse long-term impacts on the aquatic environment, however short-term impacts may exist during the excavation, grading, and construction of the temporary access road, temporary Makaha stream diversion ditch, removal of existing ford crossing (including the removal of the existing culvert crossing, the existing 12-inch culverts and the existing 16-inch water supply main), installation of bridge and bridge foundation protected by CRM, and removal of the temporary associated structures to return natural stream flow. The stream, channel and adjacent areas should be restored to its natural condition as much as possible. See **Exhibit 3**.

*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 to research 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](https://msc.fema.gov)). Our Flood Hazard Assessment Tool (FHAT) ([fhat.hawaii.gov](https://fhat.hawaii.gov)) could also be used to research flood hazard information.

*CWRM staff response:* The project site is in Zone D, or areas in which flood hazards are undetermined, but possible.

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

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai‘i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

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 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 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. Pueo nest on the ground and active nests have been found year-round. Before any potentially disturbing activity like clearing vegetation, especially ground-based disturbance, DOFAW

recommends a qualified biologist conduct surveys during crepuscular hours and walk line transects through the area to detect any active pueo nests. If a pueo nest is discovered, notify DOFAW staff, minimize time spent at the nest, and establish a minimum buffer distance of 100 meters from the nest until chicks are capable of flight.

DOFAW is concerned about impacts to vulnerable birds from nonnative predators such as cats, rodents, and mongooses. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles. The project work on or at Mākaha 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.

This project is in the historical range of O‘ahu tree snails, (*Achatinella* spp). If any are spotted during the replacement work, please halt all activity, and consult with Division of Forestry and Wildlife Snail Extinction Prevention Program Coordinator David Sischo at (808) 587-0033.

This project site overlaps critical habitat on O‘ahu known as Lowland Mesic Unit 1. DOFAW recommends that a qualified botanist survey for rare and endangered plants (e.g., *Abutilon sandwicense*, *Alectryon micrococcus*, *Asplenium dielfalcatum*, *Asplenium unisorum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *Grimesiana*, *Cyanea grimesiana* ssp. *Obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatififormis*, *Cyrtandra dentata*, *Delissea subcordata*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia celastroides* var. *kaenana*, *Euphorbia haeleeeleana*, *Euphorbia herbstii*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendrion laurifolium*, *Isodendrion longifolium*, *Kadua coriacea*, *Kadua degeneri*, *Kadua parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulate*, *Nototrichium humile*, *Phyllostegia hirsute*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago princeps*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovate*, *Silene perlmanii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *Lepidotum*, *Urera kaalae*, *Viola chamissoniana* ssp. *chamissoniana*) in all proposed affected areas prior to commencing work to determine if any rare or endangered plants are present in the project area. We recommend that the survey consists of a complete species list and is conducted during the wettest time of year when plants are more likely to be visible, especially in drier areas. If any listed species are found, please notify DOFAW at (808) 587-0166. For information on avoidance and minimization measures for plants, please refer to the following link: <https://www.fws.gov/media/plant-avoidance-and-minimization-measures-may-2023>.

The invasive Coconut Rhinoceros Beetle (CRB) or *Oryctes rhinoceros* is found on the islands of O‘ahu, Hawai‘i Island, Maui and Kaua‘i. On July 1, 2022, the Hawai‘i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the

movement of CRB-host material within or to and 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 a) entire dead trees, b) mulch, compost, trimmings, fruit and vegetative scraps, and c) 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. For more information regarding CRB, please visit <https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/>.

To prevent the spread of Rapid ‘Ōhi‘a Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if ‘ōhi‘a trees are present at the project site that will be removed, trimmed, or potentially injured:  
<https://cms.ctahr.hawaii.edu/rod>.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid ‘Ōhi‘a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles, etc.), or invasive plant parts (e.g., *Miconia*, Pampas Grass, etc.) that could harm our native species and ecosystems. 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. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

DOFAW recommends using native plant species for landscaping that are appropriate for the area, i.e., 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](http://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 that Best Management Practices are employed during and after construction 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. See **Exhibit 4**.

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

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



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

DLNR, Land Division: No comments received.

DLNR, Office of Conservation and Coastal Lands. No comments received.

DLNR, State Parks: No comments received.

Dept. of Health (DOH), Clean Water Branch: The DOH standard comments can be reviewed on the DOH website at: <https://health.hawaii.gov/cwb/files/2018/05/Memo-CWB-Standard-Comments.pdf>.

*CWRM staff response:* The lead agency for the protection of water quality is the Department of Health, Clean Water Branch, which administers the Federal Clean Water Act (33 U.S.C. §1251 et seq.) and the State Water Pollution Act (HRS Ch. 342D; HAR Ch. 11-54 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control). HAR §11-54-1 through §11-54-8 defines Best Management Practices and water quality criteria applicable to inland and nearshore waters and are based on the Federal Clean Water Act. HAR Ch. 11-55 Appendix C defines discharges of storm water associated with construction activity. HRS 174C-66 states that the DOH oversees the State’s water quality control program.

Office of Hawaiian Affairs: No comments received.

US Army Corps of Engineers: After review of the provided information, it appears that jurisdictional waters may be present within your proposed project boundaries. The Corps’ regulatory authorities are based on Section 10 of the Rivers and Harbors Act (RHA) of 1899 and Section 404 of the Clean Water Act. Section 10 of the RHA of 1899 prohibits the obstruction or alteration of any navigable water of the U.S. (WOTUS) without a Department of the Army (DA) permit. Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into WOTUS without a DA permit. When your project is being developed, we ask that you identify areas that may fall within the Corps jurisdiction as WOTUS such as streams, rivers, and wetlands. Based on your proposed plans, it appears that there would be a discharge of fill in Makaha Stream, which may be a WOTUS regulated under Section 404. If a permit is needed from the Corps, then we would require an application (attached) to be provided. We must also evaluate the project for any impacts to resources such as threatened or endangered species, historic properties, and/or essential fish habitat, and consult if necessary. If applying for a permit, include detailed plans/drawings of the proposed project where streams or wetlands are present. Include a clear line indicating the ordinary high water mark (OHWM) in your plans and also include the amount and type of fill that would be placed below the OHWM. A permit is not required if all work being done is located in uplands. See **Exhibit 5**.

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

US Fish and Wildlife Service (FWS): No objections. See **Exhibit 6**.

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 “A SHPD 6E application was prepared and submitted to the Office of Historic Preservation. While the SHPD 6E primarily does a field investigation and literature review (FILR) the artifacts identified also provide an insight to the cultural and native Hawaiian practices. Every feature identified in the SHPD 6E application refers to a site representing agriculture and even a potential agricultural shrine. It seems logical to conclude the most significant cultural activity was directly related to agricultural practices.”

*CWRM Staff Response:* No comments were received by DLNR Aha Moku. No comments were received from the public. No impacts to traditional and customary native Hawaiian rights which may be exercised in the area are anticipated.

- 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, “According to the SHPD 6E there are three (3) sites of particular interest. One site is in the proposed project staging area (TS-1) may be an agricultural shrine and subject to preservation. Two (2) other sites (TS-2 and TS-6) have not been assigned an integrity designation. Parts of TS-2 are in the area or close enough that the project would cause disturbance. TS-6 is not within the actual work area but is at the top of a slope that will be excavated and the excavation vibration could cause disturbance of TS-6.”

*CWRM Staff Response:* There are no anticipated impacts to traditional and customary practices or upstream/downstream movement of native macrofauna.

- 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, “Due to the critical nature of the staging area, the design Consultant in consultation with the Archaeologist prepared an AIS early in the project planning stages. Site TS-1 was found in the staging area. It can easily be marked off allowing no disturbance. Site TS-2 and TS-6 are proposed for an AIS. It has been proposed the whole project site be subject to Archaeological monitoring during construction.”

*CWRM Staff Response:* The project BMPs are feasible actions that will be employed during the project period to ensure water and stream resources mauka and makai of the

project area are not impacted to the detriment of traditional and customary practices of Native Hawaiians.

HRS CHAPTER 343 – ENVIRONMENTAL ASSESSMENT (EA) COMPLIANCE

Under Hawaii Revised Statutes (HRS) §343-5(a), an EA shall be required for actions, as summarized in part below, that propose:

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

*CWRM Staff Response:* The project triggers an EA because it proposes (1) the use of state or county lands or the use of state or county funds, and (2) use within the conservation district. On April 12, 2024, the BWS considered the direct, cumulative, and potential impacts and declared the actions stated above will have minimal or no significant impact on the environment and exempted it from the preparation of an EA in accordance with HAR, Section 11-200.1 and per its Comprehensive Exemption List for the BWS reviewed and concurred upon by the Environmental Council on April 5, 2022.

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 8**.

HAR §13-169-52(b) Based upon the findings of fact concerning an application for a stream channel alteration permit, the Commission shall either approve in whole, approve in part, approve with modifications, or reject the application for a permit.

- (1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.

*CWRM Staff Response:* Upon approval of the construction plans as proposed, the quantity and quality of stream water should not be adversely affected.

- (2) Where instream flow standards or interim instream flow standards have been established pursuant to subchapters 3 and 4, no permit shall be granted for any channel alteration 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 identified instream uses include fish habitat and streamflow contribution to the nearshore waters, among others. The project is not anticipated to impact the status quo interim instream flow standard which was established on October 19, 1988, pursuant to HAR §13-169-49.

- (3) The proposed channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.

*CWRM Staff Response:* The proposed work plan is limited to the project area and should not interfere with instream or non-instream uses, including existing diversions. Commission records indicate that there are four (4) active diversions located approximately 1.5 to 2.0 miles downstream of the project area. No adverse impacts are anticipated.

## RECOMMENDATION

That the Commission:

1. Approve Stream Channel Alteration Permit (SCAP.6158.3) Application that proposes the replacement of six (6) existing culverts with a panel truss bridge and remove rock and debris that are blocking the Mākaha Stream subject to the standard conditions in **Exhibit 7** and the special conditions below.
  - a. In conformance with the Department of Hawaiian Home Lands’ recommendations, incorporated by reference as **Exhibit 2**, DHHL encourages the Board to consult with known groups concerned with the health of the stream. This includes Kingdom Pathways, BWS tenants Mohala I Ka Wai, and other groups to identify any practices and potential impacts from the project, as well as to increase community awareness of this SCAP.
  - b. In conformance with the Division of Aquatic Resources’ recommendations, incorporated by reference as **Exhibit 3**, to protect aquatic environments at the proposed project site as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. DAR requests that Best Management Practices or mitigative measures should be implemented during the excavation, grading, and construction activities to minimize the potential impacts from erosion, siltation, and

pollution. The stream, channel and adjacent areas should be restored to its natural condition as much as possible.

- c. In conformance with the Division of Forestry and Wildlife’s recommendations, incorporated by reference as **Exhibit 4**, Hawaiian hoary bats, waterbirds, owls, tree snails, native plant may reside in the area. Land based predators and invasive species may also be brought in during construction. DOFAW recommends best management practices by employed to support native species and minimize the introduction of pests to the area.
- d. Actions in the streambed are subject to SHPD concurrence. If SHPD requires conditions, delegate to Deputy Director to attach those as conditions.
- e. In conformance with the US Army Corps of Engineers comments, incorporated by reference as **Exhibit 5** the project may require Army Corps permits. If the Army Corps requires conditions, delegate to Deputy Director to attach those as conditions.

Ola i ka wai,



DEAN D. UYENO  
Acting Deputy Director

Exhibits:

1. City and County, Department of Planning and Permitting, letter dated April 5, 2024.
2. DHHL, letter dated April 3, 2024.
3. DLNR, Division of Aquatic Resources, letter dated March 12, 2004.
4. DLNR, Division of Forestry and Wildlife letter, dated April 11, 2024.
5. US Army Corps of Engineers, email dated March 19, 2024.
6. US Fish and Wildlife, letter dated March 21, 2024.
7. Standard Stream Channel Alteration Permit Conditions.
8. Legal Authorities.

APPROVED FOR SUBMITTAL:



DAWN N. S. CHANG  
Chairperson

DEPARTMENT OF PLANNING AND PERMITTING  
KA 'OIHANA HO'OLĀLĀ A ME NĀ PALAPALA 'AE  
CITY AND COUNTY OF HONOLULU

850 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 768-8000 • FAX: (808) 768-8041 • WEBSITE: honolulu.gov/dpp

RICK BLANGIARDI  
MAYOR  
MEIA



DAWN TAKEUCHI APUNA  
DIRECTOR  
POD

JIRO A. SUMADA  
DEPUTY DIRECTOR  
HOPE POD

April 5, 2024

2024/ELOG-443 (df)

Mr. Dean D. Uyeno  
Acting Deputy Director  
State of Hawai'i  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawai'i 96809

Dear Mr. Uyeno:

This is in response to your letter dated March 7, 2024, requesting comments to the application for a Stream Channel Alteration Permit for Mākaha Wells II, III, and IV Access Road Repairs, and Mākaha Stream, Tax Map Key 8-4-030: 004.

The project site is situated in the State of Hawai'i's Land Use Conservation District, and is zoned P-1 Restricted Preservation District. Therefore, the proposed project is not subject to the City and County of Honolulu's (City) Zoning or Land Use regulations. However, we note that the project is consistent with the policies of the City's Wai'anae Sustainable Communities Plan.

Should you have any questions, please contact Don Fujii at (808) 768-8107, or Mel Takakura at (808) 768-8104, of our Site Development Division.

Very truly yours,

A handwritten signature in black ink, appearing to read "Dawn Takeuchi Apuna".

Dawn Takeuchi Apuna  
Director

cc: LUPD  
Planning Division

RECEIVED  
COMMISSION ON WATER  
RESOURCE MANAGEMENT  
2024 APR -9 PM 12:29

EXHIBIT 1

JOSH GREEN, M.D.  
GOVERNOR  
STATE OF HAWAII  
*Ka Koa 'Oia o ka Māhala 'Oia o  
Hawaii*

SYLVIA J. LUKE  
LT. GOVERNOR  
STATE OF HAWAII  
*Ka Hoāpala 'Oia o ka Māhala 'Oia  
o Hawaii*



KALI WATSON  
CHAIRMAN, BWC  
*Ka Lani 'Oia 'Oia*

KATIE L. DUCATT  
DEPUTY TO THE CHAIRMAN  
*Ka Hoāpala 'Oia 'Oia*

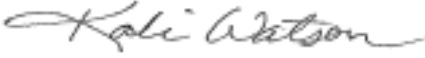
STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
*Ka 'Oihana 'Āina Ho'opulapula Hawaii'i*  
P. O. BOX 1879  
HONOLULU, HAWAII 96805

April 3, 2024

MEMORANDUM

ref: PO-24-043

TO: Dawn Chang, Chairperson  
Commission on Water Resource Management

FROM: Kali Watson, Chairman   
Hawaiian Homes Commission

SUBJECT: Stream Channel Alteration Application (SCAP) No. 6158.3  
City and County of Honolulu, Board of Water Supply, Makaha Stream, Oahu

The Department of Hawaiian Home Lands (DHHL) reviewed SCAP No. 6158.3 for the Makaha Stream. We appreciate the opportunity to review this application and offer the following comments.

It appears that this SCAP will benefit the people in the area by increasing access to the BWS wells that supply water, and by improving road access, reducing impact on stream resources.

We note that we did not see community consultation listed or a Ka Pa`akai Analysis completed. We encourage the Board to work with known groups concerned with the health of the stream. This includes Kingdom Pathways, BWS tenants Mohala I Ka Wai, and other groups to identify any practices and potential impacts from the project, as well as to increase community awareness of this SCAP.

Mahalo for the opportunity to comment. If you have any questions or require additional information please contact Cherie Kaanana, Water Program Specialist by email at: [cherie-noelle.k.kaanana@hawaii.gov](mailto:cherie-noelle.k.kaanana@hawaii.gov).

JOSH GREEN, MD.  
GOVERNOR | HE KULINA  
DELANE LEE  
LIEUTENANT GOVERNOR | KA HOPEKULINA



STATE OF HAWAII | KA MOKU‘ĀINA ‘O HAWAII  
DEPARTMENT OF LAND AND NATURAL  
RE SOURCE S DIVISION OF AQUATIC RE SOURCE S  
1151 PUNCHBOWL STREET, ROOM 330  
HONOLULU, HAWAII 96813

Date: March 12, 2024  
DAR # 6594

DAWN L. OYING  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
BONNIE KAMMO‘OLE  
FIRST DEPUTY  
SCOTT UYENO  
ACTING DEPUTY DIRECTOR - WATER  
AQUATIC RESOURCES  
SOILS AND OCEAN PROTECTION BUREAU  
OF CONSERVATION  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND DEVELOPMENT  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAWAIIAN BIRD RESERVE COMMISSION  
LAND  
STATE FUNDS

**MEMORANDUM**

TO: Brian J. Neilson  
DAR Administrator

FROM: Glenn Higashi <sup>911</sup>, Aquatic Biologist

SUBJECT: Request for Comments, Stream Channel Alteration Permit (SCAP.6158.3) Application, City and County of Honolulu, Board of Water Supply, Makaha Wells II, III, and IV Access Road Repairs.

Request Submitted by: Dean D. Uyeno, Acting Deputy Director

Location of Project: Makaha Stream, Makaha, Oahu Tax Map Key(s): (1) 8-4-030-004

Brief Description of Project:

The project proposes the replacement of six (6) existing culverts with a panel truss bridge and remove rock and debris that are blocking the Mākaha Stream.

The Board of Water Supply maintains the Makaha Wells II, III, and IV. These wells are located deep in Makaha Valley and utilize a 10-foot (+/-) asphaltic and reinforced concrete road to get from the end of Alahahele Street (84-1229 Alahahele Street) up to the well sites. Access to the BWS Access Road has controlled access with gate and lock.

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: Date: Mar 27, 2024  
Brian J. Neilson  
DAR Administrator



DAR# 6594

Comments

Based on previous DAR surveys, Makaha Stream provides important habitat for the native goby (*Awaous hawaiiensis*) and native shrimp (*Atyoida bisulcata*). These stream species were observed below and above the proposed project site and have an amphidromous life cycle meaning that they regularly migrate between the freshwater and the sea (in both directions). Therefore, it is important that passage through the stream remain unimpeded at all times.

To protect aquatic environments at the proposed project site as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. DAR requests that the following Best Management Practices (BMPs) or mitigative measures should be implemented during the excavation, grading, and construction activities to minimize the potential impacts from erosion, siltation, and pollution.

- 1) Minimize stream bank disturbance and areas denuded of vegetation should be planted or covered as quickly as possible to prevent further erosion;
- 2) Scheduling work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions;
- 3) Excavation, grading and construction areas should incorporate any type of barriers (sediment barriers/bags, petroleum absorption diapers, etc.) or other BMPs to prevent construction materials, petroleum products, debris and landscaping products from falling, blowing or leaching into the aquatic environment.

Best Management Practices (BMPs) should help to minimize some of the impacts on the water quality parameters in the aquatic environment.

The proposed project is not expected to have adverse long-term impacts on the aquatic environment, however short-term impacts may exist during the excavation, grading, and construction of the temporary access road, temporary Makaha stream diversion ditch, removal of existing ford crossing (including the removal of the existing culvert crossing, the existing 12-inch culverts and the existing 16-inch water supply main), installation of bridge and bridge foundation protected by CRM, and removal of the temporary associated structures to return natural stream flow. The stream, channel and adjacent areas should be restored to its natural condition as much as possible.

Mahalo for the opportunity to provide comment.

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  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
  
RYAN K.P. KANAKAOLE  
FIRST DEPUTY  
  
DEAN D. UYENO  
ACTING DEPUTY DIRECTOR - WATER  
  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
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CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAKOOLUWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

April 11, 2024

Log no. 4470

MEMORANDUM

SCAP.6158.3

**TO:** DEAN D. UYENO, Acting Deputy Director  
Commission on Water Resource Management

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

**SUBJECT:** Request for Comments, Stream Channel Alteration Permit (SCAP.6158.3) Application, City and County of Honolulu, Board of Water Supply, Mākaha Wells II, III, and IV Access Road Repairs, Mākaha Stream, Mākaha, O‘ahu

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received the consultation request the Stream Channel Alteration Permit (SCAP.6158.3) Application for Mākaha Wells II, III, and IV Access Road Repairs on Mākaha Stream in Mākaha on the island of O‘ahu; TMK: (1) 8-4-030:004. This project proposes the replacement of six (6) existing culverts with a panel truss bridge and also to remove rock and debris that are blocking the Mākaha Stream to help ensure that the stream flow would always have freeboard and flow would never be impeded. The project is within the Conservation District and a Conservation District Use permit will be required. A temporary access road section must be installed to allow vehicle access to the well sites above during construction and a bank must be cut and soil nailed. A Mākaha stream diversion ditch will be constructed next. A temporary water main will be dug under the temporary road alignment to maintain water supply during construction. Temporary power would be strung over the stream on poles. The existing culvert crossing will be removed and two phases of grading will ensue. The panel truss bridge will then be installed and along with electric/ communications conduits, a new 16- inch water line can be strapped to the side of the bridge. The temporary access road and water line will then be removed as well as all the accumulated sediment deposited. An 8-foot wide by 4-foot-deep cut will be made through the remainder of stream silt and deposits and allow Mākaha stream to return to natural stream flow.

The State listed ‘ōpe‘ape‘a or Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site clearing should be timed to avoid disturbance to bats during their birthing and pup rearing

season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided 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/>.

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawai'i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

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 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 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. Pueo nest on the ground and active nests have been found year-round. Before any potentially disturbing activity like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours and walk line transects through the area to detect any active pueo nests. If a pueo nest is discovered, notify DOFAW staff, minimize time spent at the nest, and establish a minimum buffer distance of 100 meters from the nest until chicks are capable of flight.

DOFAW is concerned about impacts to vulnerable birds from nonnative predators such as cats, rodents, and mongooses. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles.

The project work on or at Mākaha 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.

This project is in the historical range of O‘ahu tree snails, (*Achatinella* spp). If any are spotted during the replacement work, please halt all activity, and consult with Division of Forestry and Wildlife Snail Extinction Prevention Program Coordinator David Sischo at (808) 587-0033.

This project site overlaps critical habitat on O‘ahu known as Lowland Mesic Unit 1. DOFAW recommends that a qualified botanist survey for rare and endangered plants (e.g., *Abutilon sandwicense*, *Alectryon micrococcus*, *Asplenium dielfalcatum*, *Asplenium unisorum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *Grimesiana*, *Cyanea grimesiana* ssp. *Obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatifolius*, *Cyrtandra dentata*, *Delissea subcordata*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia celastroides* var. *kaenana*, *Euphorbia haeleleana*, *Euphorbia herbstii*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kadua coriacea*, *Kadua degeneri*, *Kadua parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulate*, *Nototrichium humile*, *Phyllostegia hirsute*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago princeps*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovate*, *Silene perlmanii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *Lepidotum*, *Urera kaalae*, *Viola chamissoniana* ssp. *chamissoniana*) in all proposed affected areas prior to commencing work to determine if any rare or endangered plants are present in the project area. We recommend that the survey consists of a complete species list and is conducted during the wettest time of year when plants are more likely to be visible, especially in drier areas. If any listed species are found, please notify DOFAW at (808) 587-0166. For information on avoidance and minimization measures for plants, please refer to the following link: <https://www.fws.gov/media/plant-avoidance-and-minimization-measures-may-2023>.

The invasive Coconut Rhinoceros Beetle (CRB) or *Oryctes rhinoceros* is found on the islands of O‘ahu, Hawai‘i Island, Maui and Kaua‘i. On July 1, 2022, the Hawai‘i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and 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 a) entire dead trees, b) mulch, compost, trimmings, fruit and vegetative scraps, and c) 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. For more information regarding CRB, please visit <https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/>.

To prevent the spread of Rapid ‘Ōhi‘a Death (ROD), DOFAW requests that the information and guidance at the following website be reviewed and followed if ‘ōhi‘a trees are present at the project site that will be removed, trimmed, or potentially injured:  
<https://cms.ctahr.hawaii.edu/rod>.

DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain detrimental fungal pathogens (e.g., Rapid ‘Ōhi‘a Death), vertebrate and invertebrate pests (e.g., Little Fire Ants, Coconut Rhinoceros Beetles, etc.), or invasive plant parts (e.g., Miconia, Pampas Grass, etc.) that could harm our native species and ecosystems. 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. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

DOFAW recommends using native plant species for landscaping that are appropriate for the area, i.e., 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](http://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 that Best Management Practices are employed during and after construction 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 any questions, please contact Katherine Cullison, Habitat Conservation Planning Coordinator, at [katherine.cullison@hawaii.gov](mailto:katherine.cullison@hawaii.gov).

Sincerely,



JASON D. OMICK  
Acting Wildlife Program Manager

**From:** [Morgan, Jeremy K CIV USARMY CEPOH \(USA\)](#)  
**To:** [Alakai, Rebecca R; David Bills](#)  
**Subject:** [EXTERNAL] USACE Comments for Surface Water Permit Application: SCAP.6158.3 BWS Makaha  
**Date:** Tuesday, March 19, 2024 8:53:11 AM  
**Attachments:** [NWP PCN Eng\\_Form\\_6082.pdf](#)

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Aloha,

The US Army Corps of Engineers (Corps) received your request for comments on the Makaha Stream surface water permit application. After review of the provided information, it appears that jurisdictional waters may be present within your proposed project boundaries.

The Corps' regulatory authorities are based on Section 10 of the Rivers and Harbors Act (RHA) of 1899 and Section 404 of the Clean Water Act. Section 10 of the RHA of 1899 prohibits the obstruction or alteration of any navigable water of the U.S. (WOTUS) without a Department of the Army (DA) permit. Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into WOTUS without a DA permit. When your project is being developed, we ask that you identify areas that may fall within the Corps jurisdiction as WOTUS such as streams, rivers, and wetlands.

Based on your proposed plans, it appears that there would be a discharge of fill in Makaha Stream, which may be a WOTUS regulated under Section 404. If a permit is needed from the Corps, then we would require an application (attached) to be provided. We must also evaluate the project for any impacts to resources such as threatened or endangered species, historic properties, and/or essential fish habitat, and consult if necessary. If applying for a permit, include detailed plans/drawings of the proposed project where streams or wetlands are present. Include a clear line indicating the ordinary high water mark (OHWM) in your plans and also include the amount and type of fill that would be placed below the OHWM.

A permit is not required if all work being done is located in uplands.

Please visit <https://www.poh.usace.army.mil/Missions/Regulatory/Permits/Nationwide-Permits/> to find more information about our program and to apply for a permit. Email permit applications to [CEPOH-RO@usace.army.mil](mailto:CEPOH-RO@usace.army.mil), as we have gone paperless. Feel free to contact me with any further questions.

Mahalo,

Jeremy Morgan  
Biologist  
Regulatory Office  
U.S. Army Corps of Engineers  
Honolulu District  
Building 252 Fort Shafter, HI 96858-5440  
Phone: (808) 835-4308

JOSH GREEN, M.D.  
GOVERNOR



DAWN N. S. CHANG  
COMMISSIONER

KENNETH S. FINK, M.D., MGA, MPH  
NEIL J. HANNAHS  
AURORA KAGAWA-VIVIANI, PH.D.  
WAYNE K. KATAYAMA  
PAUL J. MEYER  
LAWRENCE H. MIKE, M.D., J.D.

STATE OF HAWAII | KA MOKU‘ĀINA ‘O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA ‘ŌHANA KUMUWĀWĀI ‘ĀINA  
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO  
P.O. BOX 521  
HONOLULU, HAWAII 96809

DEAN D. UYENO  
ACTING DEPUTY DIRECTOR

March 7, 2024

Ref: SCAP.6158.3

Earl Campbell, Field Supervisor  
U. S. Fish and Wildlife Service  
Pacific Islands Fish and Wildlife Office  
300 Ala Moana Blvd., Room 3-122  
Honolulu, HI 96850  
Via email: [pifwo\\_admin@fws.gov](mailto:pifwo_admin@fws.gov)  
Via email: [dan\\_polhemus@fws.gov](mailto:dan_polhemus@fws.gov)  
Via email: [aaron\\_nadig@fws.gov](mailto:aaron_nadig@fws.gov)

Aloha Mr. Campbell:

Request for Comments  
Stream Channel Alteration Permit (SCAP.6158.3) Application  
City and County of Honolulu, Board of Water Supply  
Mākaha Wells II, III, and IV Access Road Repairs  
Mākaha Stream, Mākaha, O‘ahu, Tax Map Key(s): (1) 8-4-030:004

We would appreciate your review and comment on the subject permit application within 30 days from the date of this letter. The project proposes the replacement of six (6) existing culverts with a panel truss bridge and remove rock and debris that are blocking the Mākaha Stream. The application is available on our website at <https://dlnr.hawaii.gov/cwrm/surfacewater/review/>. If you have any questions, contact Rebecca Alakai at [rebecca.r.alakai@hawaii.gov](mailto:rebecca.r.alakai@hawaii.gov) or call (808) 587-0266.

Ola i ka wai,

DEAN D. UYENO  
Acting Deputy Director

Response:

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

Contact Person: DAN POLHEMUS

Date: 21 March 2024

Enclosure

DAN POLHEMUS

Digitally signed by DAN  
POLHEMUS  
Date: 2024.03.21 13:15:50 -10'00'

STREAM CHANNEL ALTERATION PERMIT STANDARD 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. 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 I*, 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 non-instream 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 drainage way 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;

HAR §13-169-2 Definitions.

“Channel alteration” means to obstruct, diminish, destroy, modify, or relocate a stream channel; to change the direction of flow of water in a stream channel; to place any material or structures in a stream channel; or to remove any material or structures from a stream channel.

“Stream channel” means a natural or artificial watercourse with a definite bed and banks which periodically or continuously contains flowing water.

HAR §13-169-49 Interim instream flow standard for Leeward Oahu. The Interim Instream Flow Standard for all streams on Leeward Oahu, as adopted by the commission on water resource management on October 19, 1988, shall be that amount of water flowing in each stream on the effective date of this standard, and as that flow may naturally vary throughout the year and from year to year without further amounts of water being diverted offstream through new or expanded diversions, and under the stream conditions existing on the effective date of the standard.

HAR §13-169-50 Permit required. (a) Stream channels shall be protected from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses. No stream channel shall be altered until an application for a permit to undertake the work has been filed and a permit is issued by the commission; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit.

HAR §13-169-52 Criteria for ruling on application. (a) The commission shall act upon an application within ninety calendar days after acceptance of the application.

(b) Based upon the findings of fact concerning an application for a stream channel alteration permit, the commission shall either approve in whole, approve in part, approve with modifications, or reject the application for a permit.

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

- (1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.
- (2) Where instream flow standards or interim instream flow standards have been established pursuant to subchapters 3 and 4, no permit shall be granted for any channel alteration 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 channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.

(c) Notwithstanding subparagraph (b) above, the commission may approve a permit pursuant to subparagraph (a) above in those situations where it is clear that the best interest of the public will be served, as determined by the commission.

HAR §13-169-53 Term of permit. (a) Every permit approved and issued by the commission shall be for a specified period, not to exceed two years, unless otherwise specified in the permit.