JOSH GREEN, M.D.



DAWN N. S. CHANG

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

DEAN D. UYENO

STATE OF HAWAI'I | 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

January 30, 2024 Honolulu, Hawaiʻi

Approval of Stream Channel Alteration Permit (SCAP.6039.2) Application and Special Conditions, Hawai'i Department of Land and Natural Resources Lihue-Koloa Forest Reserve Queensland Crossing Wailua River, Kaua'i, Tax Map Key(s): (4) 3-9-001:004; 3-9-002:001; and 4-2-001:002

<u>APPLICANT</u> Department of Land and Natural Resources Engineering Division PO Box 373

LANDOWNER Department of Land and Natural Resources Division of Forestry and Wildlife

SUMMARY OF REQUEST

Honolulu, HI 96809

Approve Stream Channel Alteration Permit (SCAP.6039.2) by Hawai'i Department of Land and Natural Resources (DLNR). The project proposes the repair of the Queensland Low-Water Crossing at Wailua River by removing the damaged crossing and replacing it with a new crossing consisting of reinforced concrete boxes spanning the stream. The crossing will also include concrete aprons and wingwalls.

BACKGROUND

On June 30, 2023, DLNR's Engineering Division filed a complete stream channel alteration permit application that is available online at https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP_6039_2.pdf.

LOCATION: Wailua River, Kaua'i. See Figure 1.





STREAM DESCRIPTION

Both the National Hydrography Dataset and the Division of Aquatic Resources (DAR) classified the Wailua River as perennial. The total drainage area is 52 square miles with a maximum basin

elevation of 5,240 feet. The mean annual precipitation is 138 inches and the longest flow path is over 10 miles. The stream has a constant connection to the ocean.

PROJECT DESCRIPTION

During the historic 2018 and 2020 flood events, the low-water crossing along the Wailua Forest Management Road were severely damaged, limiting public access. Approximately 80% of the 90-year old concrete Queensland Low-Water Crossing (115-120 feet in length) on the Wailua River North Fork was washed away. See **Figure 2** Site Photo.



Figure 2: Site Photo looking south.

The proposed design includes removing the remaining portions of the damaged crossing and replacing it with a new low-water crossing consisting of reinforced concrete boxes (RCB) spanning the stream and structurally tied together through a reinforced concrete slab poured on top of the RCBs. See **Figure 3**: Reinforced Concrete Boxes view. The RCBs will be anchored to mitigate washout/sliding of the low-water crossing when high-velocity flows and/or large debris movement occurs. It is not anticipated that construction excavation will exceed 4 feet in depth. The crossing will include five-foot wide concrete aprons upstream and downstream with a debris catcher on the upstream apron. The crossing will also include wingwalls along both

Staff Submittal SCAP.6039.2 DLNR Wailua River, Kaua'i

banks upstream and downstream to prevent future scour of the crossing and roadway. See **Figure 4**: Queensland Crossing Improvement Plan View.









The project will also include construction of a new retaining wall immediately south of the Crossing, extending 108 feet along the access road's west side to manage flood water from an upstream breach of the river that occurred in 2018. The retaining wall is located outside of the ordinary high water mark and is intended to protect the access road from further damage during future flood events. The project includes improvement to the access road on both the north and south side of the stream, and placement of grouted riprap along the roadsides and around the west side of the retaining wall. A small section of the grouted riprap along the south side road extends into the stream on the downstream side to protect the low-water crossing wingwall, approximately 70 square feet or 12 linear feet along the bank.

Construction methods shall include: Installing a full-length silt curtain, sandbag stream diversion, sandbag berm, and other Best Management Practices (BMPs) for Phase 1 of construction (north side crossing); Demolishing north side portion of remaining damaged low-water crossing; Installing and anchoring precast box culverts within Phase 1 work area; Pouring a 5-foot concrete slab over seventeen 3-foot high x 4-foot wide x 15-foot long box culverts; Installing concrete aprons and wingwalls; Repeating for Phase 2 of construction (south side crossing); Constructing retaining wall, road improvements, and grouted riprap. The temporary BMPs will be removed at completion of the project. Construction is estimated to take 12 months.

AGENCY REVIEW COMMENTS

County of Kauai, Planning Department: No objections.

<u>County of Kauai, Department of Public Works:</u> No objections but had the following comments. See **Exhibit 1.** This project shall comply with all provisions of the County's Sediment and Erosion Control Ordinance (Kaua'i County Code Chapter 22, Article 7). This could include, but not be limited to, a grading and/or grubbing permit in compliance with the Ordinance, which is required if any of the following conditions apply:

- The work area exceeds one (1) acre.
- Grading involving excavation or embankment, or combination thereof exceeds 100 cubic yards.
- Grading exceeds five (5) feet in vertical height or depth at its deepest point.

The ordinance allows for an exemption to the permit requirement for work in a governmentcontrolled area. We request that DLNR either submit a request for a permit exemption or submit the construction plans for a formal review by our office in advance of an application for a grading permit. Submittals can be made to <u>pwengineering@kauai.gov</u>. We need to determine whether this project will affect the Base Flood Elevation of a 1% rain event. Please submit a flood study for this purpose. We have a few minor comments found during a cursory review of the construction plans:

- Drawing T-1: The project site callout does not point to the correct location of Queensland Crossing.
- Check the "TO KAPAKA ST." labels on several of the structural drawings; Kapaka Street is not in the vicinity of this project.
- Check the spelling of the word LIHUE in the title block of the structural drawings.

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

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

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

<u>DLNR, Aquatic Resources:</u> Based on previous DAR surveys, Wailua River provides important habitat for a variety of native gobies (*Awaous hawaiiensis*, *Sicyopterus stimpsoni*) and native shrimp (*Atyoida bisulcata*). These stream species are diadromous, meaning that they rely on both marine and freshwater environments to complete their life cycles. Therefore, it is important that passage through the stream remain unimpeded at all times. To protect aquatic environments at the proposed project 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 demolition and construction activities to minimize the potential impacts to the aquatic environment. See **Exhibit 2**.

- 1) Prevent, minimize and contain to the greatest extent possible all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction activities from getting into the stream;
- 2) Scheduling work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions; and
- 3) Provide box culvert installation in phases to allow continuous stream flow in the stream channel.

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

<u>DLNR, Engineering:</u> 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. At its meeting of July 8, 2022, the Board of Land and Natural Resources delegated authority to the Chairperson to declare a construction project exempt from the preparation of an EA. According to the Comprehensive Exemption List for the DLNR, dated November 10, 2020, the DLNR found that this project will probably have minimal or no significant effect on the environment and is exempt from the preparation of an EA per HAR, Section 11-200.1. See **Exhibit 3**.

CWRM staff response: Noted. In addition, the project area is in Zone X, or areas determined to be outside the 0.2% annual chance floodplain.

<u>DLNR, Forestry and Wildlife (DOFAW)</u>: DOFAW concurs with the measures included in the Honolulu District U.S. Army Corps of Engineers Nationwide Permit Pre-Construction Notification (PCN) intended to avoid construction and operational impacts to seabirds. 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/#response . 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. We also appreciate the measures outlined to utilize Best Management Practices during and after construction to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems. DOFAW provides the following additional comments regarding the potential for the proposed work to affect listed species in the vicinity of the project area.

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 for any construction because bats can become ensnared and killed by such fencing material during flight.

The State listed nēnē or Hawaiian Goose (*Branta sandvicensis*) could potentially occur in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any 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 Kaua'i Island Branch DOFAW Office at (808) 274-3433 and establish a buffer zone around the nest.

The endemic pueo or Hawaiian Short-Eared Owl (*Asio flammeus sandwichensis*) could potentially nest in the project area. Before any potential vegetative alteration, especially ground-based disturbance, we recommend that line transect surveys are conducted during crepuscular hours through the project area. If a pueo nest is discovered, a minimum buffer distance of 100 meters from the nest should be established until chicks are capable of flight.

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 <u>www.plantpono.org</u> for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project. 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, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Berry Borer, etc.), or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and ecosystems. We recommend consulting the Kaua'i Invasive Species Committee (KISC) at (808) 821-1490 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. 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: <u>https://cms.ctahr.hawaii.edu/rod</u>.

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.

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 Myrna N. Girald Pérez, Protected Species Habitat Conservation Planning Coordinator, at (808) 265- 3276 or myrna.girald-perez@hawaii.gov. See Exhibit 4.

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

DLNR, Historic Preservation (SHPD): Project Number 2023PR00658 concurrence not received.

CWRM Staff Response: Approval of the application is subject to SHPD Project No. 2023PR00658 concurrence. If SHPD requires conditions, delegation of authority to the Deputy Director will be added as a special condition.

DLNR, Land Division: No comments received.

DLNR, Office on Conservation and Coastal Lands: No comments received.

DLNR, State Parks: No comments received.

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

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

Office of Hawaiian Affairs: No comments received.

US Army Corps of Engineers: No comments received.

<u>US Fish and Wildlife Service (FWS)</u>: Hawaiian seabirds, Hawaiian waterbirds, and nēnē may occur or transit through the vicinity of the project area. Please employ applicable Best Management Practices when working in the area. See **Exhibit 5**.

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 "An archaeological literature review and field investigation (LRFI) was performed for the proposed project site and other sites under consideration for repair. No historic properties or cultural deposits were identified in the vicinity of the Queensland low-water crossing. Several basalt and cobble alignments and stacks were observed in the stream, but the alignments were assessed as modern construction, and the stacks as natural sorting created by hydrology. As the alignments were not present during an earlier visit to the site by a Haley & Aldrich wetland scientist, they were most likely placed by visitors to the forest reserve, and may have been intended as repairs to the damaged crossing."

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, "As noted above, finding of the LRFI indicated that, given the nature, location and scope of work proposed, it is highly unlikely that any historic properties will be identified and/or negatively impacted or disturbed during the proposed work on this property. The only native stream life of importance to traditional and customary Native Hawaiian rights that is documented to occur at or above the project site is the 'ōpae kala'ole or mountain shrimp (*Atyoida bisulcata*). The project will be constructed with box culverts that will provide continued upstream and downstream migration of 'ōpae. The project will restore access to the upper Līhu'e-Kōloa Forest Reserve, allowing traditional and customary Native Hawaiian rights within the extent of the Reserve."

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, "The proposed Queensland low-water crossing repair project will have no adverse effect on Native Hawaiian rights, therefore, no action is required. The project will restore access to this area of the Līhu'e-Kōloa Forest Reserve, providing a benefit to the community."

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) Powergenerating 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. At its meeting of July 8, 2022, the Board of Land and Natural Resources delegated authority to the Chairperson to declare a construction project exempt from the preparation of an EA. According to the Comprehensive Exemption List for the DLNR, dated November 10, 2020, the DLNR found that this project will probably have minimal or no significant effect on the environment and is exempt from the preparation of an EA per HAR, Section 11-200.1. See **Exhibit 3**.

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 7**.

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 8, 1988, pursuant to HAR §13-169-45.

(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) registered diversions located approximately five (5) miles downstream of the project area. Their status is unknown. No adverse impacts are anticipated.

RECOMMENDATION

That the Commission:

1. Approve Stream Channel Alteration Permit (SCAP.6039.2) Application that proposes the repair of the Queensland Low-Water Crossing at Wailua River by removing the damaged crossing and replacing it with a new crossing consisting of reinforced concrete boxes spanning the stream. The crossing will also include concrete aprons and wingwalls subject to the standard conditions in **Exhibit 6** and the special conditions below.

Staff Submittal SCAP.6039.2 DLNR Wailua River, Kauaʻi

- a. In conformance with the County of Kauai, Department of Public Works, incorporated by reference as **Exhibit 1**, and in compliance with the County's Sediment and Erosion Control Ordinance (Kaua'i County Code Chapter 22, Article 7), the permittee shall submit a request for a permit exemption or submit the construction plans for a formal review in advance of an application for a permit including, but not limited to, a grading and/or grubbing permit.
- b. In conformance with the Division of Aquatic Resources recommendations, incorporated by reference as **Exhibit 2**, to protect aquatic environments at the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. DAR requests that the following BMPs or mitigative measures should be implemented during the demolition and construction activities to minimize the potential impacts to the aquatic environment: Prevent, minimize and contain to the greatest extent possible all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction activities from getting into the stream; Scheduling work activities during periods of minimal rainfall and instream work during low or no flow stream flow conditions; and Provide box culvert installation in phases to allow continuous stream flow in the stream channel.
- c. In conformance with the Division of Forestry and Wildlife's recommendations, incorporated by reference as **Exhibit 4**, the permittee shall consult with DOFAW staff regarding their guidelines to protect native birds and bats, and the transport of pathogens and invasive plants and animals.
- d. In conformance with the US Fish and Wildlife's recommendations, incorporated by reference as **Exhibit 5**, the permittee shall employ BMPs for Hawaiian seabirds, Hawaiian waterbirds, and nēnē as they may occur or transit through the vicinity of the project area.

Ola i ka wai,

Dan your

DEAN D. UYENO Acting Deputy Director

Exhibits:

- 1. County of Kauai, Department of Public Works letter, dated November 17, 2023.
- 2. DLNR, Division of Aquatic Resources letter, dated November 20, 2023.
- 3. DLNR, Engineering Division letter, dated May 30, 2023.
- 4. DLNR, Division of Forestry and Wildlife letter, dated November 21, 2023.
- 5. US Fish and Wildlife Service letter, dated November 21, 2023.
- 6. Standard Stream Channel Alteration Permit Conditions.
- 7. Legal Authorities.

APPROVED FOR SUBMITTAL:

DAWN N. S. CHANG Chairperson JOSH GREEN, M.D. GOVERNOR INE HAVANA



DAWN N. S. CHANG

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.

M. KALEO MANUEL

STATE OF HAWAI'I | KA MOKU'ĂINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWA/WAI 'AINA COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO P.O. BOX 621 HONOLULU, HAWAII 96809

October 20, 2023

Ref: SCAP.6039.2

2023

DPW- EMGINGERING DIVISION DY OF KAUAI

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Troy Tanigawa, County Engineer County of Kaua'i, Department of Public Works 4444 Rice Street Lihue, HI 96766

Aloha Mr. Tanigawa:

Request for Comments

Stream Channel Alteration Permit (SCAP.6039.2) Application Hawai'i Department of Land and Natural Resources Lihue-Koloa Forest Reserve Queensland Crossing Wailua Stream, Kaua'i, Tax Map Key(s): (4) 3-9-001:004; 3-9-002:001; and 4-2-001:002

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 repair of the Queensland Low-Water Crossing at Wailua Stream by removing the damaged crossing and replacing it with a new crossing consisting of reinforced concrete boxes spanning the stream. The crossing will also include concrete aprons and wingwalls. The application is available for review 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 or call (808) 587-0266.

Ola i ka wai,

HUKKLO

M. KALEO MANUEL Deputy Director

c: Bryan Wienand, P.E., County of Kauai Floodplain Manager Response:

(We have no objections

) Not subject to our regulatory authority and permit () Extended review period requested Comments attached

() Additional information requested

Contact Person:

_ Date: <u>11/7/2023</u> 11/16/23

EXHIBIT 1

ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS TROY K. TANIGAWA, P.E., COUNTY ENGINEER BOYD GAYAGAS, DEPUTY COUNTY ENGINEER



DEREK S.K. KAWAKAMI, MAYOR REIKO MATSUYAMA, MANAGING DIRECTOR

November 17, 2023

State of Hawaii Department of Land and Natural Resources Commission on Water Resource Management P.O. Box 621 Honolulu, HI 96809 Attention: M. Kaleo Manuel

RECEIVED COMMISSION ON WATER RESOURCE MANAGEMEN

Subject: Stream Channel Alteration Permit (SCAP.6039.2) Application Hawai'i Department of Land and Natural Resources Lihu'e-Köloa Forest Reserve Queensland Crossing Wailua Stream, Kaua'i Tax Map Key(s): (4) 3999001:004; 3-9-002:001; and 4-2-001:002

Dear Kaleo Manuel:

Thank you for the opportunity to review and comment on this stream channel alteration permit.

This project shall comply with all provisions of the County's Sediment and Erosion Control Ordinance (Kaua'i County Code Chapter 22, Article 7). This could include, but not be limited to, a grading and/or grubbing permit in compliance with the Ordinance, which is required if any of the following conditions apply:

- The work area exceeds one (1) acre.
- Grading involving excavation or embankment, or combination thereof exceeds 100 cubic yards.
- Grading exceeds five (5) feet in vertical height or depth at its deepest point.

The ordinance allows for an exemption to the permit requirement for work in a government-controlled area. We request that DLNR either submit a request for a permit exemption or submit the construction plans for a formal review by our office in advance of an application for a grading permit. Submittals can be made to <u>pwengineering@kauai.gov</u>.

We need to determine whether this project will affect the Base Flood Elevation of a 1% rain event. Please submit a flood study for this purpose.

We have a few minor comments found during a cursory review of the construction plans:

- Drawing T-1: The project site callout does not point to the correct location of Queensland Crossing.
- Check the "TO KAPAKA ST." labels on several of the structural drawings; Kapaka Street is not in the vicinity of this project.
- Check the spelling of the word LIHUE in the title block of the structural drawings.

We are enclosing our signed request for comments documents for this permit (SCAP.6039.2) as well as two other permits (SCAP.6001.2 and SCAP.6002.2).

> 4444 Rice Street, Suite 275 • Lihu'e, Hawai'i 96766 • (808) 241-4883 (b) • (808) 241-6609 (f) An Equal Opportunity Employer

Staff Submittal SCAP.6039.2 DLNR Wailua River, Kaua'i

LOSH GREEN, M.D. GOVERNOR I, KE KKAKA SYLVA LUKE EUTENANT GOVERNOR I, KANOPE KKA UTENANT GOVERNOR I, KANOPE KKA MARKANA KANANA KANANANAN	STATE OF HAWAI'I KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES 1151 PUNCHBOWL STREET, ROOM 330 HONOLULU, HAWAII 96813 Date: <u>November 17, 2023</u> DAR # <u>6504</u>	DAWN N.S. CHANG CHARDERSON DARDOCTAND AND NATURAL RESOURCES COMMISSION ON WATTER RESOURCES MANAGEMENT URAN DATURAL RESOURCES MANAGEMENT REST DEPUTY M. MALEO MANUEL DEPUTY DIRECTOR - WATER DOATING AND OCEAN RECREATION BUGATING AND OCEAN RESOURCES MANAGEMENT CONSERVATION AND DESOURCES COMBISSION ON WATTER RESOURCES MANAGEMENT CONSERVATION AND DESOURCES CONSERVATION AND DE	
<u>MEMORAND</u> TO:	<u>UM</u> Brian J. Neilson DAR Administrator		
FROM:	Glenn Higashi III, Aquatic Biologist		
SUBJECT:	SUBJECT: Request for Comments, Stream Channel Alteration Permit (SCAP.6039.2) Application, Hawaii Department of Land and Natural Resources, Lihue-Koloa Forest Reserve Queensland Crossing		
Request Subm Location of Pr	itted by: <u>M. Kaleo Manuel, Deputy Director</u> Wailua Stream, Kauai, Tax Map Key(s): (4) 3-9-001:004; 3-9-002:001; oject:	and 4-2-001:002	

Brief Description of Project:

The Lihu'e Koloa Forest Reserve (Reserve) is managed by the Department of Land and Natural Resources (DLNR). Access to the Wailua section of the Reserve is via the Wailua Forest Management Road. During historic 2018 and 2020 flood events, the Reserve lowwater crossings and other locations along the Wailua Forest Management Road were severely damaged, limiting public access to the Reserve. Approximately 80% of the 90 year-old concrete Queensland Low-Water Crossing (115 to 120 feet in length) on the Wailua River North Fork was washed away.

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:

127A

Brian J. Neilson DAR Administrator

EXHIBIT 2

DAR# 6504

Brief Description of Project

The proposed project involves the repair of the Queensland Low Water Crossing. The proposed design includes removing the remaining portions of the damaged crossing and replacing with a new low-water crossing consisting of reinforced concrete boxes (RCB) spanning the stream and structurally tied together through a reinforced concrete slab poured on top of the RCBs. The RC

will be anchored into a competent substrate to mitigate washout/sliding of the low-water crossng when high velocity flows and/or large debris movement occurs. It is not anticipated that construction excavation will exceed 4 feet in depth. The crossing will include five-foot-wide concrete aprons upstream and downstream with a debris catcher on the upstream apron. The crossing will also include wingwalls along both banks upstream and downstream to prevent future scour of the crossing and roadway.

The project will also include construction of a new retaining wall immediately south of the Crossing, extending 108 feet along the access road's west side to manage flood water from an upstream breach of the river that occurred in 2018. During high stream levels, water breached the channel and flowed through this area, further damaging the crossing and the roadway. The retaining wall is located outside of the OHWM and is intended to protect the access road from further damage during future flood events. The project also includes improvements to the access road on both the north and south side of the stream, and placement of grouted riprap along the the roadsides and around the west side of the retaining wall. A small section of the grouted riprap along the south side road extends into the stream on the downstream side to protect the low-water crossing wingwall, amounting to approximately 70 square feet, or 12 linear feet along the bank.

Construction Methods

Construction of the low-water crossing repair project will likely follow the following steps: 1. Install the full-length silt curtain, sandbag stream diversion, sandbag berm, and other BMPs for Phase 1 of construction (north side crossing).

- 2. Demolish north side portion of remaining damaged low-water crossing.
- 3. Install and anchor precast box culverts within Phase 1 work area.
- 4. Pour 5" concrete slab over box culverts.

Construction of the low-water crossing repair is expected to commence after all necessary regulatory permits and approvals have been secured. Completion of the construction is estimated at 12 months after the start of construction. DAR# 6504

Comments

The proposed project is expected to have short-term impacts on the aquatic environment during the demolition of the damaged low-water crossing and the installation of the box culverts for the new crossing.

Based on previous DAR surveys, Wailua Stream provides important habitat for a variel of native gobies (Awaous hawaiiensis, Sicyopterus stimpsoni) and native shrimp (Atyoida bisulcata). These stream species are diadromous, meaning that they rely on both marine and freshwater environments to complete their life cycles. Therefore, it is important that passage through the stream remain unimpeded at all times.

To protect aquatic environments at the proposed project 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 demolition and construction activities to minimize the potential impacts to the aquatic environment.

 Prevent, minimize and contain to the greatest extent possible all sediment, silt, chemicals,

debris, or any other byproducts of the demolition and construction activities from getting

into the stream;

 Scheduling work activities during periods of minimal rainfall and instream work during low

or no flow stream flow conditions; and

Provide box culvert installation in phases to allow continuous stream flow in the stream channel.

Staff Submittal SCAP.6039.2 DLNR Wailua River, Kaua'i

JOSH GREEN, M.D. GOVERNOR | KE KIA/ANA SYLVIA LUKE





STATE OF HAWAI'I | KA MOKU'ÄINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ÄINA

ENGINEERING DIVISION P.O. BOX 373 HONOLULU, HAWAII 95809 May 30, 2023

- TO: Dawn N.S. Chang, Chairperson
- THROUGH: David Smith, Administrator
- FROM: Carty S. Chang, Chief Engineer
- SUBJECT: Declare the Project Exempt from the Preparation of an Environmental Assessment under Chapter 343, HRS, and Title 11, Chapter 200.1, HAR – Exemption Notice

Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing Lihue, Kauai, Hawaii TMK: (4) 3-9-01:004, (4) 3-9-02:001, & (4) 4-2-01:002

At its meeting of July 8, 2022, under agenda Item L-1, the Board of Land & Natural Resources delegated authority to the Chairperson to declare a construction project exempt from the preparation of an environmental assessment.

The subject project triggers consideration with respect to Chapter 343, Hawaii Revised Statutes (HRS); however, in accordance with Chapter 11-200.1-15(c), Hawaii Administrative Rules (HAR), and the <u>Department of Land and Natural Resources Exemption List as reviewed</u> and concurred by the Environmental Council on November 10, 2020, the subject project is exempt from the preparation of an environmental assessment. Additional information regarding the exemption classes is provided in Exhibit A - Exemption Notification.

The existing Queensland Low Water Crossing was damaged during two flooding events in March 2018 and May 2020. Due to these events, the structure is completely washed out, and crossing the stream has become difficult for most vehicles. The following describes the existing condition before flooding, the damages to the crossing due to the flooding events, and the proposed repairs for the crossing.

Previous (Existing) Structure

The existing crossing structure consisted of (10) 36" diameter corrugated metal pipes (CMP) culverts placed next to each other. A concrete slab was placed on top of the CMP pipes to make a 60 ft long by 14.5 ft wide crossing within the stream. On each side of the crossing, a concrete

DAWN N.S. CHANG CHARPERSON DOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> LAURA H.E. KAAKUA FIRST DEPUTY

M. KALEO MANUEL DEPUTY DIRECTOR - WATER

AQUATIC REPOURCES DOATING AND OCEAN RECREATION BUREAU OF CONVEYANCES COMMISSION ON WATER RESOURCE MANAG BUENT CONSERVATION AND COASTAL LANDS CONSERVATION AND RESOURCES ENTORCEMENTS FORESTRY AND WILDLIFE HISTOL PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS

EXHIBIT 3

Staff Submittal SCAP.6039.2 DLNR Wailua River, Kaua'i

HRS Chapter 343 Exemption Notice Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing May 30, 2023 Page two of eight

approach slab was constructed, and each approach slab was approximately 25 ft long making the entire crossing structure 110 ft long. Beyond the approach slab, the access roads were dirt roads.

Damages

The 2018 and 2020 flooding events destroyed the structure completely and the roadway beyond the approach roadways. The length of the affected area is approximately 150 feet. Due to the force of the rushing water during the flood events, a portion of the stream bed was realigned on the upstream side of the crossing.

Proposed Repair Work

In order to restore the crossing, an 85 ft long x 15 ft wide structure will be placed within the stream. The new structure consists of a 3'-6"H x 4'W precast concrete box culverts spanning the stream and structurally tied together through a reinforced concrete slab poured on top of the box culverts. The length of the crossing is increased to accommodate the stream widening due to flooding. Attached to the reconstructed crossing will include 5 feet wide concrete aprons upstream and downstream of the crossing with a debris catcher on the upstream apron to prevent clogging of the box culverts. Wingwalls, which are needed along both banks upstream and downstream to prevent scour of the crossing and roadway will be built.

In addition, the project will also include construction of a new retaining wall, extending 114 feet south of the crossing along the west side of the access road, to manage flood water from an upstream breach of the river that occurred in 2018. During that flood event, water breached the channel and flowed through this area, further damaging the crossing and the roadway. The retaining wall is intended to protect the access road from further damage during future flood events. The project also includes improvements to the access road north and south of the stream, and placement of grouted riprap along the roadsides and on the west side of the retaining wall. Grading of the roadway will be conducted as necessary to provide transition from the road to the low-water crossing.

Additional information regarding the exemption classes is provided in Exhibit A - Exemption Notification.

RECOMMENDATION

Declare that, after considering the potential effects of the proposed project, as provided by Chapter 343, HRS, and Chapter 11-200.1, HAR, this project will probably have minimal or no significant effect on the environment and is, therefore, exempt from the preparation of an environmental assessment. This includes considering the cumulative impacts of planned successive actions in the same area and over time, and whether this action may be significant in a particularly sensitive environment.

Attachment: Exhibit A

 c: Project Control Branch (<u>DLNR.EN.ProjectControl@hawaii.qov</u>) Division of Forestry and Wildlife (<u>mapuana.r.osullivan@hawaii.qov</u>)

Exhibit A

HRS Chapter 343 Exemption Notice Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing May 30, 2023 Page three of eight

EXEMPTION NOTIFICATION

Regarding the preparation of an environmental assessment pursuant to Chapter 343, HRS, and Chapter 11-200.1, HAR

DLNR Job No.	D00AK67B
DLNR Title:	
DLNR Hue.	Lihue-Koloa Forest Reserve Queensland Loop Road Low
	Water Crossing, Lihue, Kauai, Hawaii
File Number:	ENG. D00AK67B
Island:	Kauai
Location: Street	Loop Road, the public access road to the Lihue-Koloa Forest
Address/ City/ Zipcode:	Reserve
TMK Number:	TMK: (4) 4-2-01:002
Applicant/Agency:	DLNR/DOFAW
Project Description:	The project consists of reconstruction of the existing Queensland Low Water Crossing, including ancillary structures such as the concrete apron and debris catchment, retaining walls, swales, and improvements to the existing access road north and south of the crossing.
Chapter 343 Trigger(s):	Use of State Funds and Lands
Exemption Type 2 & 3 per HAR Chapter 11-200.1- 15(c), Part, Item# per DLNR Exemption List (approved by OEQC on 11/10/2020):	Exemption Type 2 Replacement or reconstruction of existing structures and facilities where the new structure will be located generally on the same site and will have substantially the same purpose, capacity, density, height, and dimensions as the structure replaced." PART 2 11. Replacement or reconstruction of existing bridges and flumes. Exemption Type 3 Construction and location of single, new, small facilities or structures and the alteration and modification of the facilities or structures and installation of new, small equipment or facilities, including, but not limited to:""(D) Water, sewage, electrical, gas, telephone, and other essential public utility services extensions to serve such structures or facilities; accessory or appurtenant structures including garages, carports, patios, swimming pools, and fences; and, acquisition of utility easements."
-	-

HRS Chapter 343 Exemption Notice Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing May 30, 2023

Page four of eight

	 PART 1 4. Construction of drainage swales and structures and other similar surface runoff management techniques with minimal or no effect on the environment. PART 2 2. Construction and location of new, small facilities or structures necessary to support or enhance safe and effective management of lands and waters, such as baseyards, caretaker's residences, work cabins and shelters, sanitation facilities, and other similar structures. 4. Construction of roadways with distances less than 1,000 yards (excluding access roads) and walkways.
Cumulative Impact of Planned Successive Actions in Same Place Significant?	No. There will be no cumulative impact on the project site as there are no planned successive actions in this area.
Action May Have Significant Impact on Particularly Sensitive Environment?	No. The project will not have a significant impact on a particularly sensitive environment.
Analysis:	This project will have no significant adverse primary, secondary, or cumulative impacts to the physical or social environment. All anticipated impacts are expected to be temporary in duration and will not adversely impact the environmental quality of the area.
	 Land Use and Zoning Conformance: The project does not involve any change in land use or zoning.
	 Traffic (Vehicles, Pedestrian): Changes to vehicular traffic patterns during the construction period will be temporary. Loop Road (the Forest Reserve management road) would be blocked at the Queensland Crossing during construction; however, flood damage to the crossing has already restricted most vehicular traffic. Access would be restored following completion of the project.
	 Infrastructure (Roads, Buildings, Utilities): During construction, the low-water crossing and access to the

HRS Chapter 343 Exemption Notice Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing May 30, 2023 Page five of eight

Loop Road in the vicinity of the crossing will be temporarily blocked. However, reconstruction of the low- water crossing will have a long-term positive impact on infrastructure within the Reserve and reinstate access to this area of the reserve. There are no buildings or utilities near the project area.
4. Air Quality Pollutant Emissions: Short-term air quality impacts could occur from construction activities. Standard Best Management Practices (BMPs) will be implemented to mitigate fugitive dust during construction. The contractor will be required to meet air emissions regulations for construction equipment. There will be no long-term impacts on air quality.
5. Noise Emissions: The proposed project could have noise emission impact during construction. However, the project location within the Reserve is remote and there are no residential communities within the vicinity of the project area. Contractors will adhere with State Department of Health community noise regulations. There will be no long-term impacts due to noise.
 Solid, Hazardous, and Liquid Waste Management: Demolition of a portion of the remaining crossing will result in solid waste in the form of concrete and miscellaneous construction and demolition material. The Contractor shall comply with federal, state, and local standard for disposal of all waste generated by the project.
 Social: The project is anticipated to have only a beneficial long-term impact on social factors, due to the improved access to the Reserve.
8. Economic: The short-term purchase of labor and material will benefit construction trades and material suppliers; the State of Hawaii will benefit from excise taxes on material purchases and payroll taxes for labor. The project will not change the use of the Reserve in any way other than reinstating access to this area of the Reserve, which does not require access fees. Adverse economic impacts are not anticipated.

HRS Chapter 343 Exemption Notice Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing May 30, 2023 Page six of eight

9. Health and Safety: The project is in a remote area of the Reserve. Safety barriers and signage will be placed at the entrance and exit of the construction site to mitigate potential public health and safety impacts by completely blocking off access to the construction area. Personal protective equipment will be enforced for workers. The project will have a positive impact on health and safety for those using the park by reinstating safer passage across Wailua River North Fork.
10. Recreation: Construction of the proposed project will have a positive long-term impact to recreational activities by reinstating access to a large segment of the Reserve. During construction, there may be short-term impacts to recreation due to blocking traffic at the crossing. However, the existing damage to the crossing has already restricted most vehicular traffic.
11. Cultural Resources and Practices: Access to the Reserve for hunting, fishing, and access to the forest for other gathering practices would be improved by the proposed project. A literature review and field investigation did not find any indication of archaeological resources that would be affected by the project. The report has been submitted to the State Historic Preservation Division for concurrence and to comply with the State's 6E requirements.
12. Visual/Aesthetic: The proposed project is situated on a remote Reserve roadway that is not part of any scenic vista. The proposed project will provide no impact to visual/aesthetic resources.
13. Environmental Justice: The proposed project is not situated in a location that provides concerns regarding environmental justice. The project provides a positive impact by reinstituting access for all to the Reserve, a resource valued by the community.
14. Rare, Threatened, and/or Endangered Species: A biological survey did not find any indication of threatened or endangered species that would be affected by the proposed project. The project location is not situated within identified essential habitat for threatened or endangered species.

HRS Chapter 343 Exemption Notice Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing May 30, 2023 Page seven of eight

15. Surface and Ground Water Resources: The proposed project will be constructed within the jurisdictional waters of a perennial waterway, the Wailua River North Fork. The project does not change the alignment or restrict the flow of the stream, and no long-term impacts are anticipated. Potential short-term impacts such as sedimentation or contamination of the stream will be mitigated with use of contruction BMPs. The project would have no effect on ground water resources.
16. Wetlands: An evaluation for wetlands determined that there are no wetlands within the proposed project footprint, and none would be affected by the project. The proposed project occurs in FEMA Flood Zone X, which consists of areas with a 0.2% annual chance of flood and areas of 1% annual chance of flood with average depths of less than one foot. The proposed project consists of replacing the existing damaged low-water crossing and installing a culvert under Wailua Forest Management Road adjacent to the crossing in such a way that will minimize future damage to the crossing and road during high level flood events. The project will not have any long-term impacts on the floodplain.
17. Floodplains: The proposed project occurs in FEMA Flood Zone X, which consists of areas with a 0.2% annual chance of flood and areas of 1% annual chance of flood with average depths of less than one foot. The proposed project consists of replacing the existing damaged low- water crossing and in such a way that will minimize future damage to the crossing and road during high level flood events. The project will not have any impacts on the floodplain or the watershed's flood capacity.
18. Riparian/Coastal Resources: The proposed project does not affect coastal resources, but has riparian areas next to the stream. The project involves work along the streambank, i.e., the installation of riprap no more than 12 feet upstream or downstream of the crossing. The riprap is designed to prevent damage to the new crossing from future storms and does not significantly affect riparian resources.

HRS Chapter 343 Exemption Notice Job No. D00AK67B Lihue-Koloa Forest Reserve Queensland Loop Road Low Water Crossing May 30, 2023 Page eight of eight

	MITIGATION BMPs will be implemented to address fugitive dust, storm water impacts, solid/hazardous material handling and disposal and noise control. Workers will wear personal safety devices and will clean the work areas each day. Required safety barriers and protection will be installed and utilized during construction.
Consulted Parties:	DLNR, Division of Engineering DLNR, Office of Conservation and Coastal Lands
Declaration:	The Department finds that this project will probably have minimal or no significant effect on the environment and is presumed to be exempt from the preparation of an environmental assessment.

Dawn N.S. Chang, Chairperson

May 30, 2023

Date

JOSH GREEN, M.D. GOVERNOR | KE KLA'ÄINA

SYLVIA LUKE LIEUTENANT GOVERNOR | KA HOPE KIA ŠINA



STATE OF HAWAI'I | KA MOKU'ÄINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ÄINA

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

> > November 21, 2023

DAWN N.S. CHANG CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> LAURA H.E. KAAKUA FIRST DEPUTY

M. KALEO MANUEL DEPUTY DIRECTOR - WATER

AGUATIC RESOLUTICES BOATING AND OCEAN RECREATION BUREAU OF COMPETANCES COMMERSION ON WATER RESOLUTION MANAGEMENT CONSERVATION AND RESOLUTICE ENFORCEMENT ENFORCEMENT ENFORCEMENT ENFORCEMENT HISTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE FARKS

Log no. 4310/SCAP.6039.2

MEMORANDUM

- TO: M. Kaleo Manuel, Deputy Director Commission on Water Resource Management
- FROM: JASON D. OMICK, Acting Wildlife Program Manager Division of Forestry and Wildlife
- SUBJECT: Hawai'i Division of Forestry and Wildlife Comments for Stream Channel Alteration Permit (SCAP.6039.2) Application, Lihue-Koloa Forest Reserve Queensland Crossing, Wailua Stream, Kaua'i.

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received the request for comments on the Stream Channel Alteration Permit (SCAP.6039.2) Application, Lihue-Koloa Forest Reserve Queensland Crossing, Wailua Stream, on the island of Kaua'i; TMK: (4) 3-9-001:004; 3-9-002:001; and 4-2-001:002. The proposed project is located at the North Fork of the Wailua River and involves the repair of the Queensland Low-Water Crossing. The proposed design includes removing the remaining portions of the damaged crossing and replacing it with a new low-water crossing consisting of reinforced concrete boxes (RCB) spanning the stream and structurally tied together through a reinforced concrete slab poured on top of the RCBs. The project will also include construction of a new retaining wall immediately south of the Crossing, extending 108 feet along the access road's west side to manage flood water from an upstream breach of the river that occurred in 2018. The project also includes improvements to the access road on both the north and the south side of the stream, and placement of grouted rip rap along the roadsides and around the west side of the retaining wall. A small section of the grouted rip rap along the south side of the road extends into the stream on the downstream side to protect the low-water crossing wingwall.

DOFAW concurs with the measures included in the Honolulu District U.S. Army Corps of Engineers Nationwide Permit Pre-Construction Notification (PCN) intended to avoid construction and operational impacts to seabirds. 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

EXHIBIT 4

should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting <u>https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/#response</u>. 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:

<u>https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf</u>. We also appreciate the measures outlined to utilize Best Management Practices during and after construction to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems. DOFAW provides the following additional comments regarding the potential for the proposed work to affect listed species in the vicinity of the project area.

The State listed 'ope'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 for any construction because bats can become ensnared and killed by such fencing material during flight.

The State listed nēnē or Hawaiian Goose (*Branta sandvicensis*) could potentially occur in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any 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 Kaua'i Island Branch DOFAW Office at (808) 274-3433 and establish a buffer zone around the nest.

The endemic pueo or Hawaiian Short-Eared Owl (Asio flammeus sandwichensis) could potentially nest in the project area. Before any potential vegetative alteration, especially ground-based disturbance, we recommend that line transect surveys are conducted during crepuscular hours through the project area. If a pueo nest is discovered, a minimum buffer distance of 100 meters from the nest should be established until chicks are capable of flight.

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 <u>www.plantpono.org</u> for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

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, Coffee Leaf Rust), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, Coffee Berry Borer, etc.), or invasive plant parts (e.g., Barbados Gooseberry, False Kava, Giant Reed, etc.) that could harm our native species and ecosystems. We recommend consulting the Kaua'i Invasive Species Committee (KISC) at (808) 821-1490 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. 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: <u>https://cms.ctahr.hawaii.edu/rod</u>.

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.

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 Myrna N. Girald Pérez, Protected Species Habitat Conservation Planning Coordinator, at (808) 265-3276 or myrna.girald-perez@hawaii.gov.

Sincerely,

Mar.

JASON D. OMICK Acting Wildlife Program Manager



o Manuel

United States Department of the Interior

FISH AND WILDLIFE SERVICE Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, Hawai'i 96850



January 30, 2024

In Reply Refer To: 2023-0112247-S7-001 November 21, 2023

Mr. M. Kaleo Manuel Attn: Ms. Rebecca Alakai Commission on Water Resource Management State of Hawai'i Honolulu, Hawai'i 96809

Subject: Technical Assistance for the Proposed Wailua Stream Channel Alteration Project, Kaua'i

Dear Mr. Manuel:

Thank you for your October 20, 2023 letter, requesting technical assistance for the proposed Wailua Stream Channel Alteration project (SCAP.6039.2) located in the Līhu'e-Kōloa Forest Reserve, on the island of Kaua'i [TMKs: (4) 3-9-001:004; 3-9-002:001; and 4-2-001:002]. The project involves the repair of the Queensland Low-Water Crossing by removing the damaged crossing and replacing it with a new low-water crossing consisting of reinforced concrete boxes (RCB) spanning the stream and structurally tied together through a reinforced concrete slab poured on top of the RCBs. The RCBs will be anchored into a competent substrate to mitigate washout/sliding of the low-water crossing when high-velocity flows and/or large debris movement occurs. It is not anticipated that construction excavation will exceed four feet in depth. The crossing will include five-foot-wide concrete aprons upstream and downstream with a debris catcher on the upstream apron and wingwalls along both banks upstream and downstream to prevent future scour of the crossing and roadway.

A new retaining wall will be constructed immediately south of the crossing, extending 108 feet along the access road's west side to manage flood water from an upstream breach of the river that occurred in 2018. During high stream levels, water breached the channel and flowed through this area, further damaging the crossing and the roadway. The retaining wall is located outside of the ordinary high-water mark and is intended to protect the access road from further damage during future flood events.

Improvements to the access road on both the north and south side of the stream will also be made, and grouted riprap will be placed along the roadsides and around the west end of the

PACIFIC REGION 1

Idaho, Oregon*, Washington, American Samoa, Guam, Hawai'i, Northern Mariana Islands

*PARTIAL

EXHIBIT 5

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retaining wall. A small section of the grouted riprap along the south side road extends into the stream on the downstream side to protect the low-water crossing wingwall, amounting to approximately 70 square feet, or 12 linear feet, along the bank.

Our letter has been prepared under the authority of and in accordance with provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*), as amended (ESA). We have reviewed the information you provided and pertinent information in our files, as it pertains to federally listed species in accordance with section 7 of the ESA. Our data indicate the following species may occur or transit through the vicinity of the proposed project area: endangered 'ua'u (Hawaiian petrel, *Pterodroma sandwichensis*), endangered Hawai'i distinct population segment (DPS) of the 'akē'akē (band-rumped storm-petrel, *Hydrobates castro*), threatened 'a'o (Newell's shearwater, *Puffinus newelli*) (hereafter collectively referred to as Hawaiian seabirds); endangered 'õpe'ape'a (Hawaiian hoary bat, *Lasiurus cinereus semotus*); endangered koloa maoli (Hawaiian duck, *Anas wyvilliana*), endangered 'alae ke'oke'o (Hawaiian coot, *Fulica alai*), endangered ae'o (Hawaiian stilt, *Himantopus mexicanus knudseni*), endangered 'alae 'ula (Hawaiian gallinule, *Gallinula galeata sandvicensis*) (hereafter collectively referred to as Hawaiian setors). We provide the following comments and recommendations to assist you in your SCAP.6039.2 permit request review.

Hawaiian Seabirds

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

To avoid and minimize potential project impacts to Hawaiian seabirds we recommend the following measures be included:

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

'Öpe'ape'a

⁶Ope ape a 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

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be harmed or killed, since they are too young to fly or move away from disturbance. 'Ōpe'ape'a 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 potential project impacts to the endangered 'ope'ape'a, we recommend the following measures be included:

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

Hawaiian Waterbirds

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 koloa maoli, montane streams and marshlands. Ae'o may also be found wherever ephemeral or persistent standing water may occur. Threats to these species include habitat loss and habitat degradation. Threats also include non-native predators, and human activity adjacent to nesting sites. Waterbirds are expected to flush when human activity occurs nearby. If nesting occurs nearby, birds may be prevented from caring for nests or young or project personnel may inadvertently step on and crush unobserved waterbird nests. If activity includes heavy machinery or the use of vehicles, young birds or nests could be also be run over and crushed.

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

- 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 area, incorporate
 applicable best management practices (BMPs) 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 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 no 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.

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In addition, your project may result in the creation of standing water or open water that could attract Hawaiian waterbirds to the project site. Hawaiian waterbirds attracted to sub-optional habitat may suffer adverse impacts, such as predation and reduced reproductive success, and thus the project may create an attractive nuisance. The ae'o is also known to nest in sub-optimal locations (e.g., any ponding water), if water is present. 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).

Nēnē

Nënë are found on the islands of Hawai'i, Maui, Moloka'i, and Kaua'i. They are observed in a variety of habitats, but prefer open areas, such as pastures, golf courses, wetlands, natural grasslands and shrublands, and lava flows. Threats to the species include introduced mammalian and avian predators, wind facilities, and vehicle strikes.

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

- If nënë are observed loafing or foraging within the project area during the breeding season, September through April, have a biologist familiar with nënë nesting behavior survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- Cease all work immediately and contact the Service for further guidance if a nest is discovered within a radius of 150 feet of the proposed project, or a previously undiscovered nest is found within the 150-foot radius after work begins.
- In areas where n\u00e9n\u00e9 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.

A 4(d) rule (see link: <u>https://www.govinfo.gov/content/pkg/FR-2019-12-19/pdf/2019-26548.pdf</u>) was established at the time the nënë was downlisted to threatened status. Under the 4(d) rule, the following actions are not prohibited under the Act, provided the additional measures described in the downlisting rule are adhered to.

- Take by landowners, or their agents, conducting intentional harassment in the form of hazing or other deterrent measures not likely to cause direct injury or mortality, or nënë surveys.
- Take by authorized law enforcement officers for the purpose of aiding or euthanizing sick, injured, or orphaned n
 ene; disposing of dead specimens; and salvaging a dead specimen that may be used for scientific study.

We appreciate your efforts to conserve protected species. If you have questions regarding this

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response, please contact Charmian Dang, Fish and Wildlife Biologist (phone 808-792-9400, email: <u>Charmian_Dang@fws.gov</u>). When referring to this project please include this reference number: 2023-0112247-S7-001.



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Island Team Manager Oʻahu, Kauaʻi, Northwest Hawaiian Islands and American Samoa

Enclosure: Service Recommended Standard BMP

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

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

 Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats beyond the planned project area.

Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods are variable throughout the Pacific islands, we recommend contacting the relevant local, state, or federal fish and wildlife resource agency for site specific guidance.

3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. BMPs should be maintained for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.

4. All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see http://www.haccp-nrm.org/Wizard/default.asp) can help to prevent attraction and introduction of non-native species.

5. Project construction-related materials (fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (e.g., with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.

6. Fueling of project-related vehicles and equipment should take place away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.

 All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or noninvasive vegetation matting, hydro-seeding, etc.

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.

EXHIBIT 6

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 <u>Protection of instream uses.</u> 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 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;

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 §13-169-45 <u>Interim instream flow standard for Kauai</u>. The Interim Instream Flow Standard for all streams on Kauai, as adopted by the commission on water resource management on June 15, 1988, shall be that amount of water flowing in each stream on the effective date of this standard, and as that flow may naturally vary throughout the year and from year to year without further amounts of water being diverted offstream through new or expanded diversions, and under the stream conditions existing on the effective date of the standard.

EXHIBIT 7

HAR §13-169-50 <u>Permit required</u>. (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 <u>Criteria for ruling on application</u>. (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 <u>Term of permit</u>. (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.