



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

COMMISSION ON WATER RESOURCE MANAGEMENT

June 20, 2023  
Honolulu, Hawai'i

Approval of Stream Channel Alteration Permit Application (SCAP.5954.6) and  
Special Conditions, County of Maui, Department of Public Works,  
Bank Stabilization and Restoration Project;  
Wailuku River, 'Āao Surface Water Management Area, Maui  
TMK: (2) 3-4-020:045 por.; and 046 por.; and 3-4-030:888 por.

APPLICANT

County of Maui  
Department of Public Works, Engineering  
Division  
200 South High Street, Room 410  
Wailuku, HI 96793

LANDOWNER

Same

SUMMARY OF REQUEST

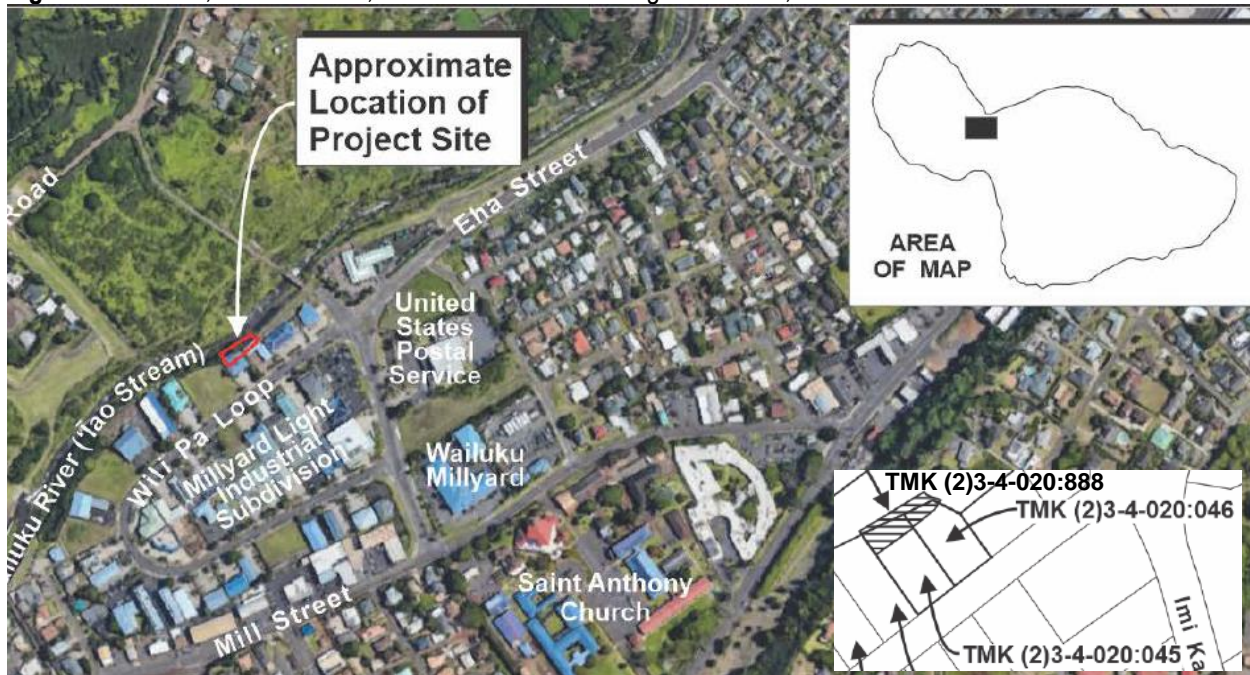
Approve Stream Channel Alteration Permit (SCAP.5954.6) by the County of Maui, Department of Public Works. The project proposes to restore a section of an embankment, covering an area of approximately 5,000 square feet of the Wailuku River for flood protection purposes in the Millyard light industrial subdivision at Wili Pa Loop, Wailuku, Maui.

BACKGROUND

On October 12, 2022, the County of Maui filed a complete stream channel alteration permit application and is available online at [https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP\\_5954\\_6.pdf](https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP_5954_6.pdf).

LOCATION: Wailuku, Maui. See **Figure 1**.

**Figure 1:** Location, Wailuku River, 'Āao Surface Water Management Area, Maui.



### STREAM DESCRIPTION

The Wailuku River begins in the upper elevations of the 'Āao Valley and flows eastward towards and discharges into the Kahului Bay. The 'Āao watershed is subject to intermittent and high-intensity rainfall. The Wailuku River is perennial, about 12,000 feet in length from the sediment basin to the outlet into Kahului Bay, and about 30% is lined with existing concrete channels. The remaining portions of the river are an alluvial channel where the stabilization problems occur. Levees and revetments are situated on the right bank to protect the town of Wailuku. In the project area, the stream channel consists of a boulder, cobble, gravel, fine sand, and silt on the bed with a natural, earthen left bank and a right bank of reinforced concrete boulder fill (CBF). The width of the stream ordinary high water mark (OHWM) ranges from 39 to 82 feet, and the wetted channel was estimated at 90% of the width between delineated OHWM. The most commonly encountered physical indicators of OHWM in this stream segment are changes in vegetation; shelving; water-stains; and exposed roots.

### PROJECT DESCRIPTION

The County of Maui Department of Public Works proposes to restore a section of an embankment, covering an area of approximately 5,000 square feet of the Wailuku River for flood protection purposes in the Millyard light industrial subdivision at Wili Pa Loop, Wailuku, Maui. It will include excavation, regrading, and reinforcement of the river bank slope using grouted riprap (GRP). The GRP covering would be approximately 24 inches thick, sloped at a 1.5:1 horizontal to vertical ratio, and consist of cobbles and boulders with concrete infill. To protect the toe from scour, a boulder filled concrete key will be excavated and installed to the design scour depth of 11.1 feet below the toe. To the extent possible, the excavated cobbles and boulders will be reused for the boulder filled key and GRP, provided they are free of vegetation

and deleterious materials. In and around the project area, the river channel consists of a boulder, cobble, and gravel bottom with natural, earthen banks. See **Figures 2-3**. The proposed riverbank protection improvements will provide sufficient freeboard above the 100-year flood water surface elevations. Access and staging would be from the north side of the stream through an existing County drainage easement. See **Figure 3**.

Figure 2: Project Site.



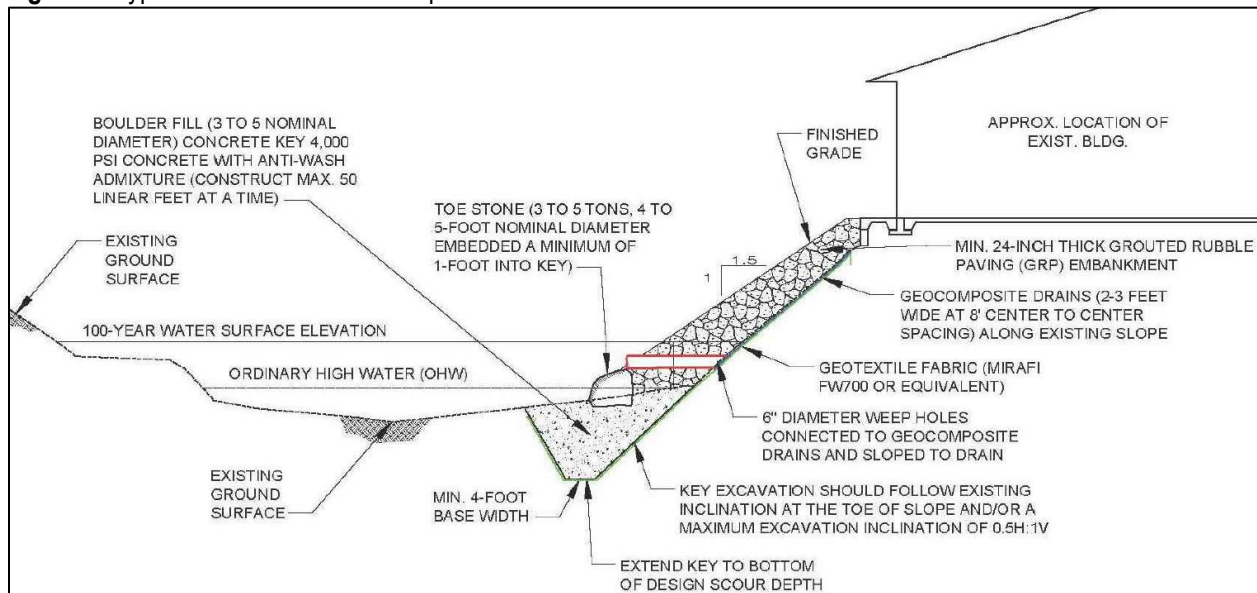
Figure 3: Access and staging area.



1. Access from Piihana Road through existing County Drainage Easement.
2. Contractor would need to temporarily cut back bank to make a drivable access ramp down to the stream. Vegetation grubbing would also be needed.
3. Contractor would need to move around (i.e., grade) existing boulders in the stream to make a route that is traversable by a tracked vehicle, such as an excavator.
4. Contractor would likely not need to grade on this side of stream, but vegetation grubbing would be needed.
5. Potential equipment staging in this area of high ground, above the Ordinary High Water Mark.

See **Figure 4** for typical section stabilized slope drawing.

**Figure 4:** Typical Section Stabilized Slope.



In Phase 2A, 600 cubic yards will be excavated within the OHWM in order to build the toe of the embankment. In Phase 2B, this excavated trench will be re-filled with a matching 600 cubic yards of new/reused boulders along with concrete, within the OHWM. In Phase 3, 50 cubic yards of additional grouted rip-rap will be placed on top of the toe, within the OHWM area.

A temporary diversion berm will be installed to divert stream flow around the active grading area. Work will be limited to no more than half the stream channel in order to prevent interruptions to stream flow. Construction equipment such as excavators, loaders, backhoes, and/or bulldozers will be used to excavate, grade, and construct. All equipment will be stored above the OHWM at the end of each day. Best management practices will be implemented and will include a silt fence and filter socks to prevent movement of eroded materials into the water. The duration of construction is about six (6) months.

#### AGENCY REVIEW COMMENTS

Maui County, Planning Department: No objections. No exception taken. Recommend applicant certify that no increase in base flood water surface elevation will occur.

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

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

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.

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

DLNR, Aquatic Resources: No comments received.

DLNR, Engineering: No comments received.

*CWRM staff response:* TMK parcels 3-4-020:045 and 046 are in Zone X, an area determined to be outside the 0.2% annual chance floodplain and TMK 3-4-030:888 is in Zone AEF, the floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the base flood elevation.

DLNR, Forestry and Wildlife (DOFAW): DOFAW concurs with the measures included in the Final Environmental Assessment of the application intended to avoid construction and operational impacts to State-listed species including the Hawaiian Hoary Bat (*Lasiurus cinereus semotus*), Seabirds, Blackburn's Sphinx Moth (*Manduca blackburni*), and Hawaiian Monk Seal (*Monachus schauinslandi*) and Green Sea Turtle (*Chelonia mydas*). DOFAW provides the following additional comments regarding the potential for the proposed work to affect listed species in the vicinity of the project area. State-listed waterbirds such as the Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian coot (*Fulica alai*), Hawaiian Duck (*Anas wyvilliana*), and Hawaiian Goose (*Branta 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 Maui Branch DOFAW Office.

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., Coqui Frogs, Little Fire Ants, etc.), or invasive plant parts (e.g., Miconia, Mullein, etc.) that could harm our native species and ecosystems. We recommend consulting the Maui Invasive Species Committee 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.

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.

*CWRM Staff Response:* Comments added as a special condition. See **Exhibit 2**.

DLNR, Historic Preservation (SHPD): No concurrence letter 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, State Parks: No comments received.

Office of Hawaiian Affairs: No comments received.

U.S. Army Corps of Engineers: No comments received.

U.S. Fish and Wildlife Service (FWS):

1. *USFWS recommendation:* Based on our review of the cultural and historical importance of this area (starts pg. 5) we support the Hui o Nā Wai ‘Ehā (Hui) testimony: a) opposition of any work that cements, hardens, covers, channelizes, or modifies the Wailuku River bed, b) opposition of any work that temporarily halts or alters the water flow, c) request that extra protection (best management practices) occur to protect the River, especially knowing that there will be use of heavy machinery, equipment, and materials directly within the riverbed.

*Maui County, Public Works Response:* a) We acknowledge the desire to not cement or harden the streambank. Soft, bio-engineered solutions were analyzed and found to not be feasible. The proposed Millyard streambank protection is required to function for 100-year storm velocities, which in this case are very high, at over 25 feet per second. Bio-engineering techniques are generally rated to be resistant to slow and moderate velocities. Even vegetated rip-rap and turf-reinforcement mats, which can resist relatively high flow velocities, would not be stable at the anticipated velocities. The tolerance for risk of failure of the slope protection is low given the value and proximity of the commercial infrastructure it is protecting. To minimize impacts into stream, a steep 1.5 horizontal to 1 vertical slope is proposed for the hardened bank. The new bank will restore what was previously eroded and will not expand into and channelize the stream beyond its original shape before erosion.

b) We acknowledge the desire to not halt or alter the water flow. The project will limit activities to one-half of the stream cross-section at a time to allow amphidromous animals to use the stream during repair operations as a migratory pathway and to maintain streamflow through the reach. The stream flow alteration will be localized, temporary, and of short duration.

c) We acknowledge the sensitivity of the project location. The following best management practices are proposed:

- Limiting repair activities to one half of the stream cross-section at a time
- Limiting construction work to what can be installed and stabilized by the end of the working day for areas within the Ordinary High-Water Mark (OHWM).
- Use of a plastic-lined sandbag coffer dam around the stream work area
- Use of silt fence above the OHWM around the construction access, operating area, and staging and stockpile areas
- Use of dust fences around the staging and stockpile area.
- Sediment filtering and treatment for dewatering discharge

2. USFWS recommendation: Based on the Services' extensive knowledge and experience with consultations for the short- and long-term adverse effects of hardening riparian areas FWS offers the following recommendations:

a. Hardening riparian and nearby areas exacerbates the risk and severity of flooding. When bank stabilization is necessary we recommend methods that are more environmentally friendly, such as the methods supported by the Federal Emergency Management Act

[https://www.fema.gov/pdf/about/regions/regionx/Engineering\\_With\\_Nature\\_Web.pdf](https://www.fema.gov/pdf/about/regions/regionx/Engineering_With_Nature_Web.pdf)

Maui County, Public Works Response: We respectfully disagree that hardening of riparian areas exacerbates the risk and severity of flooding. Hardened streambank surfaces typically lower the flood flow depth due to the lower coefficient of friction. Providing undeveloped corridor areas for the stream to meander and expand are helpful in mitigating flood flows, but this existing commercial property on the south side of the stream is not a location where further stream migration and scouring is deemed acceptable. We acknowledge the desire to use environmentally friendly methods such as the ones proposed in the FEMA document cited above. As mentioned in the response to Comment 1a, natural or bio-engineered techniques were evaluated but found to be infeasible for this stream reach.

b. USFWS Recommendation: The use of rip rap armor rock, boulders, and cement infill causes more significant issues from creating a uniform, smooth channel, with no complexity, leaving no space for natural vegetation to establish. This hardening and lack of vegetation raises the temperature of the water and changes the ecosystem.

Maui County, Public Works Response: As mentioned in previous responses, the hardening of the streambank was found to be necessary for protection of the bank and the properties above. The project is limited to 145 linear feet of the Wailuku River. To provide some level of irregularity, rock and boulders with concrete infill was chosen over



a smooth concrete surface. AECOS, the water quality consultant for the project, has advised that the high flow rate of water in the stream would provide sufficient water circulation that an increase in water temperature is not anticipated.

- c. USFWS Recommendation: The flooding and bank erosion occurring in the area is likely a direct result of hardening the adjacent upland areas and the loss of the natural flood plain. We understand the U.S. Army Corps of Engineers has covered this project under the Nationwide Permit, and we recommend the Corps work with the local government to develop a sustainable flood management plan to prevent the further need to harden additional riparian areas in the future.

Maui County, Public Works Response: We agree with the proposal to undertake a stream-wide geomorphological study and flood management plan.

CWRM Staff Response: Consultation with the USFWS was undertaken for this project as part of the HRS Chapter 343, environmental review process. In addition, Section 7, Endangered Species Act (ESA) review was completed as part of the Department of Army permitting process, with the USACE Nationwide Permit verification issued on 9/30/22. See **Exhibit 3** for the FWS recommendation and County Public Works response email shown above. Proposed best management practices are added as a special condition of the permit.

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 Inspection for the project area was completed by ‘Āina Archaeology in May, 2020. The archaeological literature review provides a summary of previous archaeological studies, through which 30 historic sites have been identified within one-half mile of the project site. Surveys in the vicinity of the project area have primarily identified historic era habitation features and remnants of industrial commercial sugar operations in the immediate vicinity. Traditional lo‘i agriculture sediments have been identified in subsurface contexts below fill and former cane fields, while precontact permanent habitation deposits and burial sites were primarily focused in the Pu‘uone Sand deposits in the Lower Main Street area. In addition to the findings within the half mile review radius, it should also be noted that the ceremonial complex of Pihana-Haleki‘i Heiau is situated less than a mile downstream of the proposed project. Located on the left (northern) bank of Wailuku River, this heiau complex served as the political and religious center of Wailuku. ‘Āina Archaeology determined that based on the findings of previous archaeological studies conducted in the vicinity, the current project area has the potential for yielding intact or previously disturbed cultural materials including human skeletal remains; pre-Contact Traditional-type; and Plantation Era cultural deposits in subsurface context. As such, a program of

archaeological monitoring will be conducted during construction in order to identify, document, and record any historic properties inadvertently identified, and to provide appropriate mitigation methods, as necessary. As the County of Maui, Department of Public Works is a government agency, the proposed project is subject to review by the Hawai‘i Department of Land and Natural Resources’ State Historic Preservation Division (SHPD) under HRS Section 6E-8 and in accordance with HAR Chapter 13-275. SHPD has reviewed the proposed project and agrees with archaeological monitoring for identification purposes in order to adequately identify if any historic properties are present and, if so, to determine potential impacts to them and, if necessary, to ensure that appropriate mitigation is implemented. As such, an Archaeological Monitoring Plan has been prepared for the project and has been reviewed and accepted by SHPD. The Archaeological Monitoring Plan includes having an archaeological monitor present during subsurface earth moving activities within the project area. In addition, should inadvertent archaeological finds be encountered during construction, work will be halted in the immediate vicinity of the find and appropriate mitigation protocols implemented in coordination with SHPD.”

*CWRM Staff Response:* No comments were received by DLNR ‘Aha Moku. No comments were received from the public. As cited in the Findings of Fact of the Commission’s Decision and Order in CCH-MA15-01, “Despite significant challenges, some Native Hawaiian practitioners in Nā Wai ‘Ehā continue to exercise traditional and customary rights and practices, including “gathering stream life such as hīhīwai, ‘o‘opu, and limu for subsistence and medicinal purposes,” as well as “cultivating taro for religious and ceremonial uses, gathering materials for hula, lua (ancient Hawaiian martial arts), and art forms.”

- 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, “A Cultural Impact Assessment (CIA) Report was also completed for the project in April, 2021 by ‘Āina Archaeology. The CIA was prepared in order to identify traditional and current cultural practices and resources associated with the project area. The CIA was prepared through research of archives and documents, as well as communication with organizations and individuals having knowledge of the project area and its associated cultural resources and practices. The project area is located in the ahupua‘a of Wailuku, meaning “Water of Destruction” (Pukui, 1974). Wailuku and the three (3) nearby ahupua‘a of Waikapū, Waiehu, and Waihe‘e, are known collectively as Nā Wai ‘Ehā, meaning “The Four Waters” (Handy, 1991). The Wailuku River runs through the Wailuku ahupua‘a. The project area is located approximately 1.5 miles upstream from the muliwai (river mouth). Traditionally, Wailuku was a center of political and religious importance. Spiritual life of the traditional residents of the ahupua‘a appears to have centered around a network of heiau, which served as the sites for worship and offerings to the primary gods Kanaloa, Kāne, Kū, and Lono as well as lesser deities and ‘aumakua (ancestral gods). The Pihana-Haleki‘i heiau complex is notable both for its cultural significance as a chiefly place, as well as its proximity to the project area. It is reported that Keōpūolani, wife of King Kamehameha I, was born at the Pihana-Haleki‘i heiau, and that ali‘i such as Kahekili and Kekaulike had also lived at the

site (Yent, 1983). Due to its abundance of water, Wailuku was traditionally renowned for both its fishing resources and agricultural cultivation. The terrain in the area was conducive to terracing, and it is reported that Wailuku was at one time the largest continually cultivated lo‘i kalo (wetland kalo) growing area in the Hawaiian island chain. Bananas, sugar cane, arrowroot, and ti were commonly cultivated alongside kalo in Wailuku (Handy, 1991). The marine aquatic resources of Wailuku ahupua‘a, fed by the Wailuku River and other streams from the Pu‘u Kukui watershed, are well documented, with 20 named fishing grounds identified as part of the “Wailuku Fishery” (Honolulu Star Bulletin, 1931). Documentation of oral histories also suggests a number of fishponds within the ahupua‘a (Kahā‘ulelio, 2006). In addition to marine resources, it is reported that gathering of o‘opu, or freshwater goby, from the Wailuku River was an important traditional resource as well as a spiritual practice for the native residents. Historically, worship of the o‘opu god, Holu, was conducted in order to increase the o‘opu numbers and size (Fornander, 1919). A number of freshwater o‘opu fishery locations in Wailuku have been recorded from historical testimony (OHA, 2014). Beginning in the late 18th century, the population of westerners in Wailuku began to grow, effecting a number of changes to life in the area. Wailuku became a base for Christian missionary activity, and this led to the emergence of reading, writing, and the establishment of churches and schools. Western economic concepts and commercial farming would bring significant changes to Wailuku. Cultivation of sandalwood for export began to displace traditional subsistence agriculture in the early 19th century, leading to scarcity of these trees (Kuykendall, 1938). Subsequently, sugar cane became the primary commercial crop. During the Māhele (land redistribution) of 1848, the ahupua‘a of Wailuku was retained by Kamehameha III, except for various ‘ili (subdistricts) within Wailuku that were quitclaimed to other ali‘i (Buke Māhele, 1848). The ‘ili of Ka‘ohe, Puhiawawa, Lemuke‘e, Pu‘uohala, and Mānienie went to Queen Kalama; the ‘ili of Kalua went to Kamāmalu; and to Lunalilo, the ‘ili of Pe‘epe‘e. None of these ‘ili were within the project area. As such, the lands within the project area were included in the greater Wailuku ahupua‘a that had been retained by Kamehameha III, and became Crown Lands. During the Plantation Era of the 19th and early 20th centuries, large areas of land in Wailuku which had not been traditionally farmed during the pre-contact period were converted to sugar cane and pineapple cultivation. This led to a population boom, and resulting cultural shifts, as workers immigrated from around the world to provide labor to the plantations. The Wailuku Sugar Company was established in the vicinity of the project area in 1862. The sale of much of the former sugar cane land by Wailuku Agribusiness in January of 2002 marked the end of a 137-year presence of commercial agriculture in Nā Wai Ehā (The Maui News, 2002). The site of the former Wailuku Sugar Company Millyard has since been developed into the Wailuku Millyard light industrial area. The primary source for community consultation was with the Hui o Nā Wai ‘Ehā (Hui), a nonprofit organization whose mission is to protect the natural and cultural resources related to traditional and customary practices of native Hawaiians and to engage the Maui community through water resource management education outreach programs and initiatives. In their testimony Hui o Nā Wai ‘Ehā provided six (6) key points:

1. Hui o Nā Wai ‘Ehā opposes any work that is meant to cement, harden, cover over, channelize, and/or modify the Wailuku River bed.
2. Archaeological Monitor should be on site due to the known historic resources of Wailuku River in the location of the project.
3. The County and project contractors notify DLNR Aquatics Division about this project and to have an aquatics biologist conduct a native biota survey.
4. Hui o Nā Wai ‘Ehā opposes any request by the County and their contractors to request Commission on Water Resource Management to temporarily halt or alter Instream Flow Standards for any length of time that his project is being executed.
5. Hui o Nā Wai ‘Ehā would like to see the BMPs for the project go above and beyond, especially knowing there may likely be heavy machinery, equipment and materials in the riverbed.
6. Hui o Nā Wai ‘Ehā requests to be notified about the progression of the planning and entitlement process and when the project commences.

The CIA concluded, no traditional or cultural practices have been identified within the project area, and the project is not anticipated to impact cultural practices at the project site.”

*CWRM Staff Response:* There are no anticipated impacts to traditional and customary practices or upstream/downstream movement of native macrofauna due to the project’s limited impacts to the stream bed.

- 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, “Based on the Archaeological Literature Review and Cultural Impact Assessment, the CWRM could require Archaeological Monitoring be carried out during all ground altering activities to protect archaeological and cultural resources. In addition, based on interviews with cultural informants, the CWRM could require the applicant to notify the Hui o Nā Wai ‘Ehā when construction of the project commences and if cultural or historic resources are uncovered during ground altering activities. In relation to additional mitigation measures, it is noted that the Cultural Impact Assessment did not identify any cultural practices being carried out in the vicinity of the project area.”

*CWRM Staff Response:* Streamflow connectivity and notification of representatives of Hui o Nā Wai ‘Ehā when the project is scheduled to start and end will be added as a special condition. While there are no direct anticipated impacts to traditional and customary practices or the upstream/downstream migration of native macrofauna due to the project’s limited impacts to the stream bed, the Commission staff recommends a special condition which requires that no more than 50-percent of the channel width is blocked for diversion around the project area.

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. A Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI) were published on February 8, 2022. The FEA and FONSI are available on the Office of Planning and Sustainable Development, website at: [https://files.hawaii.gov/dbedt/erp/Doc\\_Library/2022-02-08-MA-FEA-Wailuku-River-Bank-Stabilization.pdf](https://files.hawaii.gov/dbedt/erp/Doc_Library/2022-02-08-MA-FEA-Wailuku-River-Bank-Stabilization.pdf).

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 5**.

HAR §13-169-52(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. The actions are in compliance with the Army Corps of Engineers’ Nationwide Permit #13 (Bank Stabilization) issued on February 25, 2022. All mitigation measures, including BMPs and water quality monitoring, are included in the SCAP application.

- (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 current interim instream flow standard for the Wailuku River was set in contested case hearing CCH-MA15-01, Surface Water Use Permit Applications, Integration of Appurtenant Rights and Amendments to the Interim Instream Flow Standards, Na Wai Eha Surface Water Management Areas of Waihee, Waiehu, Iao and Waikapu Streams, Maui (The Commission's Decision & Order in CCH-MA15-01 may be viewed online at: <https://files.hawaii.gov/dlnr/cwrm/cch/cchma1501/CCHMA1501-20210630-D&O.pdf>). The identified instream uses include agriculture, fish habitat and streamflow contribution to the nearshore waters, among others. The project is not anticipated to impact the established interim instream flow standard. However, Commission staff agrees that streamflow connectivity must be maintained at the project site, with streamflow being diverted around the project area in no more than 50-percent of the stream channel width and that work is conducted during low-rainfall periods. A special condition to the latter is added.

- (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 and channel alterations. The project area is located just upstream of Levee 27 which received a SCAP from the Commission for repair and installation of a new revetment on November 15, 2022. There are six (6) registered diversions located over 1.5 miles upstream and two (2) spring fed water use permittees located below the subject action. No adverse impact is anticipated.

## RECOMMENDATION

That the Commission:

1. Approve Stream Channel Alteration Permit (SCAP.5954.6) Application subject to the standard conditions in **Exhibit 4** and the special conditions below.
  - a. In conformance with the County of Maui, Planning Department recommendations, incorporated by reference in **Exhibit 1**, the permittee shall certify to the Maui Planning Department that no increase in base flood water surface elevation will occur.

- b. In conformance with the Division of Forestry and Wildlife recommendations, incorporate by reference in **Exhibit 2**, the permittee shall avoid construction and operational impacts to State-listed species; Minimize the movement of plant or soil material between worksites as this may contain detrimental fungal pathogens (e.g., Rapid ‘Ōhi‘a Death), vertebrate and invertebrate pests (e.g., Coqui Frogs, Little Fire Ants, etc.), or invasive plant parts (e.g., Miconia, Mullein, etc.) that could harm our native species and ecosystems; and Consult with the Maui Invasive Species Committee to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread.
- c. In accordance with the proposal by the Maui Department of Public Works acknowledging the sensitivity of the project location, the permittee shall implement the following best management practices:
- Limiting repair activities to one half of the stream cross-section at a time;
  - Limiting construction work to what can be installed and stabilized by the end of the working day for areas within the Ordinary High-Water Mark (OHWM);
  - Use of a plastic-lined sandbag coffer dam around the stream work area;
  - Use of silt fence above the OHWM around the construction access, operating area, and staging and stockpile areas;
  - Use of dust fences around the staging and stockpile area; and
  - Sediment filtering and treatment for dewatering discharge.
- d. Issuance of the Permit is subject to SHPD concurrence. If SHPD requires conditions, delegate to Deputy Director to attach those as conditions.
- e. The permittee shall ensure streamflow connectivity around the project site at all times, with no more than 50-percent of the stream channel width being diverted around the project area to enable fish passage.
- f. To ensure coordination throughout the project, the permittee shall notify the Commission on Water Resource Management staff and representatives of Hui o Nā Wai ‘Ehā within one (1) week of when the project is scheduled to start, any issues that may arise during the project work, and when the project is scheduled to be completed.

Ola i ka wai,



M. KALEO MANUEL  
Deputy Director

Exhibits:

1. Maui County, Planning Department comment letter dated December 19, 2022.
2. DLNR, Division of Forestry and Wildlife comment letter dated January 9, 2023.
3. Maui County, Public Works response to USFWS recommendations, email dated April 26, 2023.

4. Standard Stream Channel Alteration Permit Conditions.
5. Legal Authorities.

APPROVED FOR SUBMITTAL:

A handwritten signature in black ink, appearing to be 'Dawn N. S. Chang', with a stylized, looped flourish extending to the right.

DAWN N. S. CHANG  
Chairperson



DAVID Y. IGE  
GOVERNOR OF HAWAII



SUZANNE D. CASE  
CHAIRPERSON  
MICHAEL G. BUCK  
ELIZABETH A. CHAR, M.D.  
NEIL J. HANNAHS  
AURORA KAGAWA-VIVIANI, PI  
WAYNE K. KATAYAMA  
PAUL J. MEYER  
M. KALEO MANUEL  
DEPUTY DIRECTOR

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P.O. BOX 821  
HONOLULU, HAWAII 96809

December 2, 2022

Ref: SCAP.5954.6

Michele Chouteau McLean, Director  
Planning Department  
2200 Main Street, Suite 315  
Wailuku, HI 96793

Aloha Ms. McLean:

Request for Comments  
Stream Channel Alteration Permit (SCAP.5954.6) Application  
County of Maui, Bank Stabilization and Restoration  
Wailuku River, Wailuku, Maui, TMK: (2) 3-4-020:045 por.; 046 por.; 3-4-030:888 por.

We would appreciate your review and comment on the subject permit application within 30 days from the date of this letter. The project proposes bank stabilization and restoration on a 5,000 square foot section of embankment for flood protection in the Millyard light industrial subdivision at Wili Pa Loop. 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 587-0266, or [rebecca.r.alakai@hawaii.gov](mailto:rebecca.r.alakai@hawaii.gov).

Ola i ka wai,

M. KALEO MANUEL  
Deputy Director

Response:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> We have no objections   | <input type="checkbox"/> Additional information requested |
| <input type="checkbox"/> Not subject to our regulatory authority and permit   | <input type="checkbox"/> Extended review period requested |
| <input checked="" type="checkbox"/> Comments: <i>No exception taken. Recommend applicant certify that no increase in base flood water surface elevation will occur.</i> | <input type="checkbox"/> EA / EIS is required             |

Contact Person: \_\_\_\_\_

Date: \_\_\_\_\_

c: Dani Loo, DLNR, Engineering Division  
Gary Estanislaio, County of Maui Floodplain Manager

12/19/22

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



STATE OF HAWAII | KA MOKUAĀINA 'Ō HAWAĪ'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF FORESTRY AND WILDLIFE  
1151 PUNCHBOWL STREET, ROOM 325  
HONOLULU, HAWAII 96813

January 6, 2023

DAWN N.S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
FIRST DEPUTY  
M. KALEO MANUEL  
DEPUTY DIRECTOR - WATER  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND

MEMORANDUM

Log no. 3929

**TO:** M. Kaleo Manuel, Deputy Director  
Commission on Water Resource Management

**FROM:** LAINIE BERRY, Wildlife Program Manager  
Division of Forestry and Wildlife

**SUBJECT:** Division of Forestry and Wildlife Comments for the Stream Channel Alteration Permit (SCAP.5954.6) Application for the Bank Stabilization and Restoration of the Wailuku River on Maui

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comments for the SCAP.5954.6 application regarding the Wailuku River stabilization project located in Wailuku, on the island of Maui; TMKs: (2) 3-4-020:045 (por.), 3-4-020:046 (por.), 3-4-030:888 (por.). The proposed project consists of bank stabilizing and restoring a 5,000-square-foot section of embankment for flood protection in the Millyard light industrial subdivision at Wili Pa Loop.

DOFAW concurs with the measures included in the attached Final Environmental Assessment (*Exhibit 4*) of the application intended to avoid construction and operational impacts to State-listed species including the following:

- Hawaiian Hoary Bat (*Lasiurus cinereus semotis*): Woody plants greater than 15 feet tall will not be removed or trimmed during the Hawaiian hoary bat breeding season (June 1 to September 15). Use of barbed wire fencing is not included in this proposed work.
- Seabirds: Should any night work occur requiring artificial illumination for the project, such work will be avoided during the seabird fledgling season (approximately September 1 through December 15). Outdoor lights will be shielded and directed downwards to avoid upward-directed accent lighting in order to minimize impacts to seabirds.
- Blackburn's Sphinx Moth (*Manduca blackburni*): A biological resources study will be carried out to check for any presence of Blackburn's sphinx moth or its habitat. If moths or the native aiea or tree tobacco over 3 feet tall are found during the survey, the U.S. Fish and Wildlife Service will be contacted for additional guidance.
- Hawaiian Monk Seal (*Monachus schauinslandi*) and Green Sea Turtle (*Chelonia mydas*): Best Management Practices (BMPs) will be carried out during construction to minimize and avoid downstream impacts of sediment and stormwater runoff into the river. As well, water quality monitoring will be carried out during construction to ensure the BMPs are effectively mitigating downstream impacts and maintaining water quality at the mouth of the Wailuku River and nearshore marine environment.

DOFAW provides the following additional comments regarding the potential for the proposed work to affect listed species in the vicinity of the project area.

State-listed waterbirds such as the Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian coot (*Fulica alai*), Hawaiian Duck (*Anas wyvilliana*), and Hawaiian Goose (*Branta 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 Maui Branch DOFAW Office at (808) 984-8100.

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., Coqui Frogs, Little Fire Ants, etc.), or invasive plant parts (e.g., Miconia, Mullein, etc.) that could harm our native species and ecosystems. We recommend consulting the Maui Invasive Species Committee (MISC) at (808) 573-6472 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.

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 Associate at (808) 265-3276 or [myrna.girald-perez@hawaii.gov](mailto:myrna.girald-perez@hawaii.gov).

Sincerely,

*Lainie Berry*

LAINIE BERRY  
Wildlife Program Manager

**From:** [Gwendolyn Rivera](#)  
**To:** [Alakai, Rebecca R](#); [Uyeno, Dean D](#)  
**Cc:** [Mark Roy](#); [Adrienne Wong](#); [Richard Evans](#); ["Kikihi Ono"](#)  
**Subject:** [EXTERNAL] USFWS comments re SCAP.5954.6 Wailuku River Bank Stabilization  
**Date:** Wednesday, April 26, 2023 9:06:27 AM  
**Attachments:** [image001.png](#)  
[Wailuku River Bank - USFWS consultation.pdf](#)

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Rebecca,

Thank you for forwarding the information on the Piiloi Stream SCAP review and USFWS comments. We look forward to discussing the Wailuku River Bank SCAP application with you and Dean.

In the meantime, we'd like to provide some preliminary responses to the USFWS's comments on the proposed Wailuku River project. The project team's responses are provided below in [blue](#).

We'd also like to note that consultation with the USFWS was undertaken for this project as part of the HRS Chapter 343, environmental review process. See attached comment and response letters which were included in the EA. In addition, Section 7 ESA review was completed as part of the Department of Army permitting process, with the USACE Nationwide Permit verification issued on 9/30/22.

Please let me know if you have any questions or require any additional information.

Mahalo,  
Gwen

**Gwendolyn Leialoha Cheney Rivera**, Senior Associate  
Email: [gwendolyn@munekiyohiraga.com](mailto:gwendolyn@munekiyohiraga.com)



**MUNEKIYO  
HIRAGA**

Maui: 305 High Street, Suite 104, Wailuku, Hawaii 96793 T: 808.244.2015 F: 808.244.8729  
Oahu: 735 Bishop Street, Suite 412, Honolulu, Hawaii 96813 T: 808.983.1233  
Planning. Project Management. Sustainable Solutions. [www.munekiyohiraga.com](http://www.munekiyohiraga.com)

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**From:** Alakai, Rebecca R <[Rebecca.R.Alakai@hawaii.gov](mailto:Rebecca.R.Alakai@hawaii.gov)>  
**Sent:** Monday, February 27, 2023 2:57 PM  
**To:** Gwendolyn Rivera <[Gwendolyn@munekiyohiraga.com](mailto:Gwendolyn@munekiyohiraga.com)>  
**Subject:** FW: USFWS comments re: Surface Water Permit Application Review: SCAP.5954.6 County, Bank Stabilization and Restoration, Wailuku, Maui

Per your request, below are FWS comments.

Mahalo, Rebecca

---

**From:** Asman, Lindsay <[Lindsay\\_Asman@fws.gov](mailto:Lindsay_Asman@fws.gov)>  
**Sent:** Friday, February 3, 2023 8:42 AM  
**To:** Alakai, Rebecca R <[Rebecca.R.Alakai@hawaii.gov](mailto:Rebecca.R.Alakai@hawaii.gov)>

Cc: Polhemus, Dan <dan\_polhemus@fws.gov>; Harrington, Carrie <carrie\_harrington@fws.gov>; Yrigoyen, Jaime <jaime\_yrigoyen@fws.gov>; Enomoto, Stanton K <stanton\_enomoto@ios.doi.gov>; Pang, Benton <Benton\_Pang@fws.gov>; frank.j.winter@usace.army.mil  
Subject: [EXTERNAL] USFWS comments re: Surface Water Permit Application Review: SCAP.5954.6 County, Bank Stabilization and Restoration, Wailuku, Maui

Good morning Rebecca,

I apologize for our late response. We would like to offer the following comments for this proposed permit to excavate, regrade, and reinforce an eroded riverbank slope of the Wailuku River (formerly 'Iao Stream) using a 24-inch thick layer of cobbles and boulders with concrete infill:

1. Based on our review of the cultural and historical importance of this area (starts pg. 5) we support the Hui o Na Wai 'Ehu (Hui) testimony: a) opposition of any work that cements, hardens, covers, channelizes, or modifies the Wailuku River bed, b) opposition of any work that temporarily halts or alters the water flow, c) request that extra protection (best management practices) occur to protect the River, especially knowing that there will be use of heavy machinery, equipment, and materials directly within the riverbed.

a) We acknowledge the desire to not cement or harden the streambank. Soft, bio-engineered solutions were analyzed and found to not be feasible. The proposed Millyard streambank protection is required to function for 100-year storm velocities, which in this case are very high, at over 25 feet per second. Bio-engineering techniques are generally rated to be resistant to slow and moderate velocities. Even vegetated rip-rap and turf-reinforcement mats, which can resist relatively high flow velocities, would not be stable at the anticipated velocities. The tolerance for risk of failure of the slope protection is low given the value and proximity of the commercial infrastructure it is protecting. To minimize impacts into stream, a steep 1.5 horizontal to 1 vertical slope is proposed for the hardened bank. The new bank will restore what was previously eroded and will not expand into and channelize the stream beyond its original shape before erosion.

b) We acknowledge the desire to not halt or alter the water flow. The project will limit activities to one-half of the stream cross-section at a time to allow amphidromous animals to use the stream during repair operations as a migratory pathway and to maintain streamflow through the reach. The stream flow alteration will be localized, temporary, and of short duration.

c) We acknowledge the sensitivity of the project location. The following best management practices are proposed:

- Limiting repair activities to one half of the stream cross-section at a time
- Limiting construction work to what can be installed and stabilized by the end of the working day for areas within the Ordinary High-Water Mark (OHWM).
- Use of a plastic-lined sandbag coffer dam around the stream work area
- Use of silt fence above the OHWM around the construction access, operating area, and staging and stockpile areas
- Use of dust fences around the staging and stockpile area.
- Sediment filtering and treatment for dewatering discharge

2. Based on the Services' extensive knowledge and experience with consultations for the short- and long-term adverse effects of hardening riparian areas we offer the following recommendations:

a. Hardening riparian and nearby areas exacerbates the risk and severity of flooding. When bank stabilization is necessary we recommend methods that are more

environmentally friendly, such as the methods supported by the Federal Emergency Management Act [https://www.fema.gov/pdf/about/regions/regionx/Engineering\\_With\\_Nature\\_Web.pdf](https://www.fema.gov/pdf/about/regions/regionx/Engineering_With_Nature_Web.pdf)

We respectfully disagree that hardening of riparian areas exacerbates the risk and severity of flooding. Hardened streambank surfaces typically lower the flood flow depth due to the lower coefficient of friction. Providing undeveloped corridor areas for the stream to meander and expand are helpful in mitigating flood flows, but this existing commercial property on the south side of the stream is not a location where further stream migration and scouring is deemed acceptable.

We acknowledge the desire to use environmentally friendly methods such as the ones proposed in the FEMA document cited above. As mentioned in the response to Comment 1a, natural or bio-engineered techniques were evaluated but found to be infeasible for this stream reach.

b. The use of rip rap armor rock, boulders, and cement infill causes more significant issues from creating a uniform, smooth channel, with no complexity, leaving no space for natural vegetation to establish. This hardening and lack of vegetation raises the temperature of the water and changes the ecosystem.

As mentioned in previous responses, the hardening of the streambank was found to be necessary for protection of the bank and the properties above. The project is limited to 145 linear feet of the Wailuku River. To provide some level of irregularity, rock and boulders with concrete infill was chosen over a smooth concrete surface. AECOS, the water quality consultant for the project, has advised that the high flow rate of water in the stream would provide sufficient water circulation that an increase in water temperature is not anticipated.

c. The flooding and bank erosion occurring in the area is likely a direct result of hardening the adjacent upland areas and the loss of the natural flood plain. We understand the U.S. Army Corps of Engineers has covered this project under the Nationwide Permit, and we recommend the Corps work with the local government to develop a sustainable flood management plan to prevent the further need to harden additional riparian areas in the future.

We agree with the proposal to undertake a stream-wide geomorphological study and flood management plan.

Please reach out to me with any questions or if we can be of any further assistance.

Lindsay Asman (she/her) [Why are pronouns important?](#)  
Island Team Manager for Hawai'i Island and Maui Nui  
Pacific Islands Fish and Wildlife Office  
U.S. Fish and Wildlife Service  
300 Ala Moana Blvd., Room 3-122, Honolulu, HI 96850  
Work Phone: 808-792-9490  
<https://www.fws.gov/pacificislands/>

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 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 §13-169-50 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.