



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

November 15, 2022
Honolulu, Hawai'i

Approval of Stream Channel Alteration Permit Application (SCAP.5909.6)
County of Maui, Repair and Installation of New Revetment Levee 27
Wailuku River, 'Īao Surface Water Management Area, Maui
TMK: (2) 3-4-020:075; 3-4-030:888 Parcel C; 3-4-032:001; and
Imi Kala Street and Eha Street (no TMK)

APPLICANT

County of Maui
Department of Public Works, Eng. Div.
200 South High Street, Room 410
Wailuku, HI 96793

LANDOWNER

Same

SUMMARY OF REQUEST

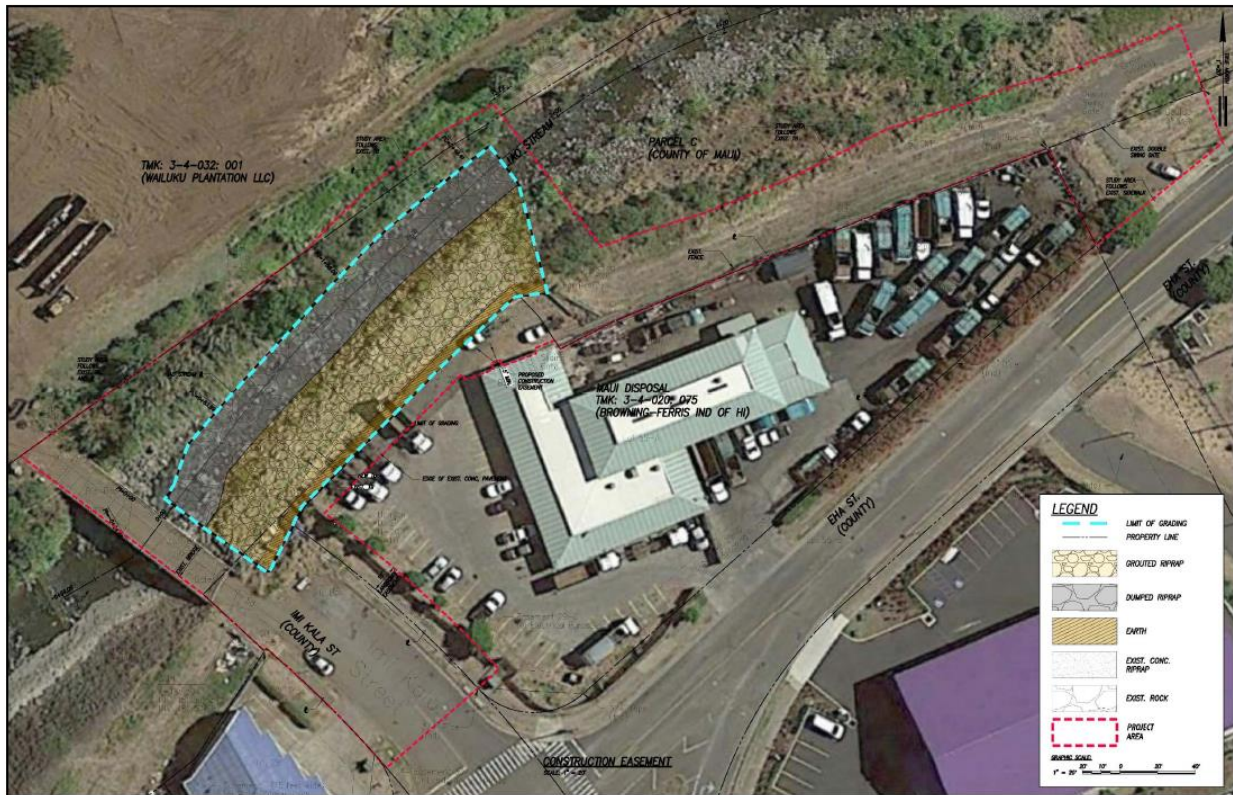
Approve Stream Channel Alteration Permit (SCAP.5909.6) by the County of Maui. The project proposes the maintenance and installation of a new revetment system along the Wailuku River to replace the existing revetment. The repair will include the removal and replacement of grouted riprap on the existing slope, and the placement of dumped riprap at the toe of the slope to protect against scour to replace boulders that washed away. The project is located downstream of the Imi Kala Street bridge crossing of the Wailuku River along the right stream bank (looking downstream).

BACKGROUND

On June 24, 2022, the landowner filed a complete stream channel alteration permit application that can be viewed at https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP_5909_6.pdf.

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

Figure 1: Location, Wailuku River, Wailuku, 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

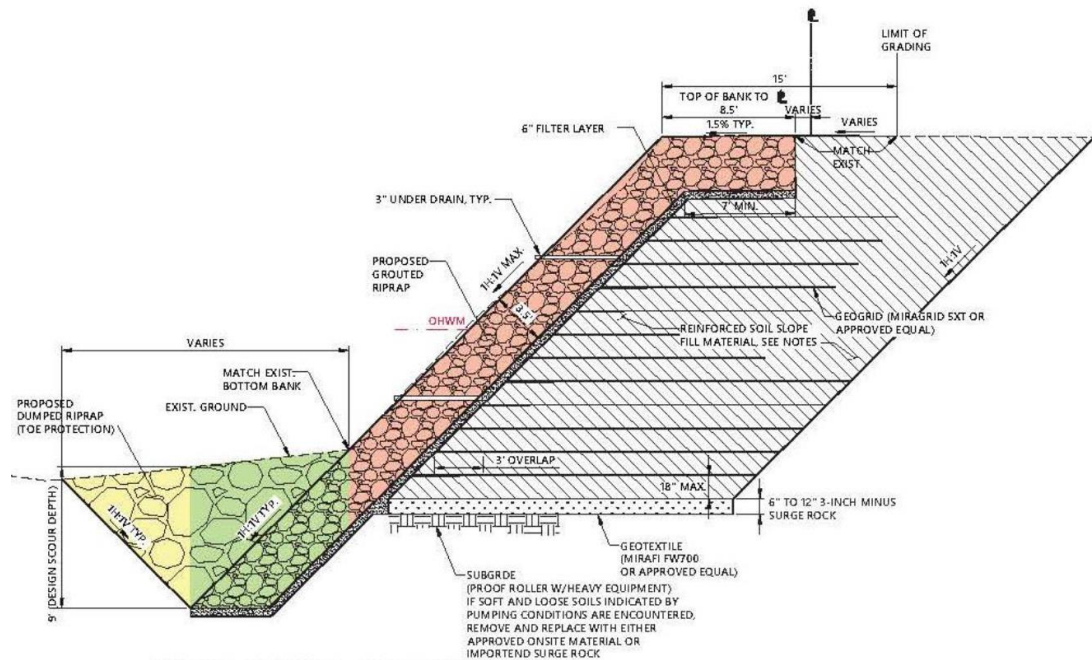
The County of Maui proposes maintenance of the approximately 255 feet long section of the Wailuku River revetment. The project will repair the right stream bank revetment (looking downstream), located downstream of Imi Kala Street bridge and upstream of the ‘Āao Stream Levee 27. The revetment repair will include the removal and replacement of grouted riprap on the existing slope, and the placement of dumped riprap at the toe of the slope to protect against

scour to replace the boulders that washed away. This action will prevent further erosion of the bank, protect the downstream levee, and provide reduced flood risk in Wailuku, Maui. The new revetment system will be placed in the same location and serve the same purpose as the existing deteriorating revetment system while addressing design deficiencies resulting from changes in stream dynamics. See **Figures 2A** and **2B**.

Figure 2A: Project Site.



Figure 2B: Typical Section Stabilized Slope.



The new revetment will have the same slope gradient as the existing, approximately 1H:1V, slope, and armor protection to reduce the potential for scouring. The size and depth of the boulders used for the grouted and dumped riprap will be designed to withstand the stream velocity during the 100-year recurrence interval storm event.

Actions include the following:

- Removal of the existing CBF slope and excavation of the channel bottom consisting of boulders, cobbles, gravel, fine sand, and silt to deepen the toe of the slope to be below the scour depth and maintain proper slopes.
- Grading the slope.
- Construction of a new revetment system consisting of a reinforced soil slope, grouted riprap face slope, under-drain pipes, and placement of dumped riprap at the toe of the slope to protect against scour.

Temporary facilities will include the placement of temporary stream diversion devices (i.e., sandbags) to create a dry work environment, best management practices (BMPs) and erosion controls around the project site, and use of construction staging, storage, and dewatering areas upland from the stream. Construction of the project is expected to begin in Spring 2023 to coincide with the end of the wet season. The duration of construction will be between 6 months to 8.

BMPs will include, but are not limited to, establishing a temporary construction access and staging and stockpiling area on high ground, ideally limiting work in the low-rainfall months of May to October, limiting in river work to one-half of the river cross-section to enable fish migration, use of a diversion berm or sandbag coffer-dam to contain disturbed material on-site and divert streamflow around the active grading area, tarping/covering exposed and stockpiled soils, a silt fence and silt sock around the project area to contain sediment runoff, a dust fence around the project area, and surface revegetation to prevent soil erosion and stormwater runoff from entering the river to maintain water quality and aquatic habitat during construction. Additional BMPs to minimize impacts will include disturbing the smallest area possible, retaining existing ground cover as long as possible, watering graded areas when construction activity for each day has ceased, stabilizing denuded areas as soon as possible, and properly and promptly disposing of all loosened and excavated soil and debris material from drainage structure work.

Pre- and post-construction water quality monitoring will be carried out to ensure no adverse impacts occur to water quality. The water quality of the Wailuku River in the vicinity of the project will be monitored before, during, and after construction to assure water quality standards are not exceeded and that there are no adverse impacts to the aquatic habitat. If a natural hazard or large storm event occurs during construction activities, all site work will cease, equipment will be removed from the river, and the construction site will be secured to prevent adverse impacts from flood waters until work can be safely resumed.

AGENCY REVIEW COMMENTS

County of Maui, Planning Department: “While the Department agrees active management is needed to address identified hazards and flood risks to protect people and property, and is supportive of projects that aim to accomplish these goals, implementation of a comprehensive management plan would facilitate more holistic and long-term management options and be more consistent with planning objectives for this area. Instead, this action continues to segment proposed management efforts and rely on future studies to demonstrate that they will not have adverse impacts to water quality, stream flow, and habitat or frustrate overdue ecosystem-wide restoration initiatives. That being said, the Department has discussed this concern with DPW who indicated that future repairs and management efforts would be further coordinated with Local, State, and Federal planning partners, regulators, and community members. These ongoing coordinated planning and project implantation efforts will ensure enhanced consistency with relevant policies and plans including the Wailuku-Kahului Community Plan which envisions recreational and open space uses that include the subject project area. The Department looks forward to supporting such comprehensive management planning and implementation measures as they move forward. With that, the comments that follow highlight key substantive concerns that may benefit from further consideration as this SCAP is processed.

“It is noted that the current application is supported by an application for nationwide permit (NWP) #3 from the U.S. Army Corps of Engineers (USACE). This permit was issued by USACE on June 14, 2022 but does not appear to reference the federal consistency determination and conditions for concurrence provided by OPSD (Office of Planning and Sustainable Development) in their December 21, 2021 letter. It is also unclear if this proposal should be considered strictly “maintenance” as a complete replacement of the levee revetment appears to be proposed. As detailed in the DEA (Draft Environmental Assessment), DPW proposes to repair an approximately 240-foot long section of the stream bank of the Wailuku River (formerly Iao Stream). This project aims to repair the right stream bank (looking downstream) located downstream of Irni Kala Street bridge and upstream of the ‘Īao Stearn Levee 27. The project includes removal of the existing concrete boulder fill slope and grading the slope; excavation to deepen the protection along the toe of the slope to be below the scour depth; and construction of a new revetment system consisting of a reinforced soil slope, grouted riprap face slope, under-drain pipes, and dumped riprap at the toe of the slope to protect against scour. The size and depth of the boulders for the grouted and dumped riprap will be designed to withstand the stream velocity during the 100-year recurrence interval storm event.

“While it is not disputed these improvements may be warranted, this full replacement and expansion of an existing levee structure seems to go beyond the plain English interpretation of “repairs”. The concern here, as stated previously, that warrants further review perhaps beyond what occurs under a NWP for “maintenance” is that continued segmentation of ongoing hardening of this dynamic and culturally significant stream channel may result in significant alterations to stream processes and circumvents the community engagement and planning process that is envisioned for larger resource management projects and may frustrate efforts to plan for and implement holistic solutions.

“Additionally, the USACE NWP approval appears limited to TMK: (2) 3-4-030:888 Parcel C. As supporting application documents were not provided to reflect the application for the resulting NWP approval included at page 60 of this package, it is unclear whether the full scope of the proposed project at the additional parcels (2)3-4-032:0001 and (2) 3-4-020:075 were included in that USACE application or if these parcels are beyond the ordinary high water mark and not considered wetlands or waters of the United States such that USACE jurisdiction is limited to Parcel 888. It may be helpful to verify that and reflect that determination in this SCAP, and coordinate with USACE and the Applicant to ensure the actionable conditions of OPSD’s conditional concurrence area also reflected in project design and implementation. One relevant condition and point of particular interest in this SCAP is the statement that BMPs would include “ideally limiting work in the low-rainfall months of May to October, limiting in river work to one-half of the river cross-section to enable fish migration, use of a diversion berm or sandbag coffer-dam to contain disturbed material onsite and divert streamflow around the active grading area” (SCAP pg. 15). “Ideally” is not a commitment to implementing specific BMPs. As discussed at length when reviewing consistency with Hawaii Revised Statutes Section 226-12 in the September 8, 2021 comment letter, timing considerations and flow management efforts should be clearly addressed in BMPs to reduce water quality and habitat impacts of this project.

“It is encouraged that to ensure consistency and reflect comments previously received on the Environmental Assessment and Federal consistency determination regarding this project that mitigation commitments be clearly reflected in the application or in conditions of an approval for this project to ensure that potentially significant environmental impacts are avoided, minimized, and mitigated in a manner that supports the FONSI (determination and permit issuance without a revised or supplemental Environmental Impact Statement for the undertaking. For additional analysis and discussion of potential considerations for BMPs that could be included in this SCAP approval, please further reference the enclosed letters.” (See **Exhibit 1**)

CWRM Staff Response: Commission staff supports a more holistic planning approach, including coordination with Local, State, and Federal planning partners, regulators, and community members, be undertaken. The Commission staff also agrees that streamflow connectivity must be maintained at the project site, with no more than 50-percent of the streamflow being diverted around the project area and that work is conducted in the low-rainfall months of May to October. A special condition to the later is added.

Department of Hawaiian Home Lands (DHHL): While DHHL does not have any objections to the application, DHHL has some concerns about excess surface water runoff from construction and the potential of disturbing iwi kūpuna. Thereby, DHHL advises the Applicant to continue to seek guidance and project concurrence with the Department of Land and Natural Resources State Historic Preservation Division prior to commencing work on the proposed improvements.

*CWRM Staff Response: In a letter dated March 31, 2021, SHPD concurred with the County of Maui, Department of Public Works that no historic properties affected. Staff believes that SHPD review is satisfied. See **Exhibit 2**.*

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 objections.

DLNR, Engineering: No comments received.

DLNR, Forestry and Wildlife (DOFAW): No comments received.

DLNR, Historic Preservation (SHPD): In a letter dated March 31, 2021, SHPD concurred with the County of Maui, Department of Public Works that no historic properties affected.

*CWRM Staff Response: Staff believes that SHPD review is satisfied. See **Exhibit 1**.*

DLNR, Land Division: No comments received.

DLNR, State Parks: No comments received.

Office of Hawaiian Affairs: No comments received.

US Army Corps of Engineers: Based upon the information and plans you provided, we hereby verify that the work described above, which will be performed in accordance with the enclosed plan, is authorized by NWP # 3 (Maintenance). You must implement and abide by the conditions of the Blanket Section 401 Water Quality Certification (WQC), Modification for Certain 2021 Department of the Army (DA) Nationwide Permits (NWP) and Activities File No. WQC1092 Blanket WQC 1092 dated April 28, 2022.

CWRM Staff Response: Comments will be incorporated as a special condition.

U.S. Fish and Wildlife Service (FWS): Provided avoidance and minimization measures to avoid take of waterbirds and our Best Management Practices to avoid adverse effects related to in-water work.

*CWRM Staff Response: Comments will be incorporated, by reference, as a special condition (See **Exhibit 3**).*

PUBLIC COMMENTS

No public comments were received.

TRADITIONAL AND CUSTOMARY PRACTICES

- 1) The identity and scope of cultural, historical, or natural resources in which traditional and customary native Hawaiian rights are exercised in the area.

The Applicant stated “The proposed action would not affect cultural, historical, or natural resources in with [sic] traditional & customary native Hawaiian rights are exercised. An archaeological literature review and field inspection (ALRFI) report, and Cultural Impact Assessment (CIA), were prepared by Cultural Surveys Hawai‘i (CSH) for the project (see the FEA – Appendix B and Appendix C at https://files.hawaii.gov/dbedt/erp/Doc_Library/2021-12-08-MA-FEA-Iao-Stream-Levee-27-Repair.pdf). Community consultation conducted as part of the 2021 CSH CIA identified the following cultural, historical, and natural resources where cultural practices (including traditional & customary Native Hawaiian rights) are being exercised in Wailuku Ahupua‘a: (1) Gathering of various stream life such as hīhīwai, ‘o‘opu, and ‘ōpae; and (2) Use of water from Wailuku River for sustainable practices, such as individual/family lo‘i and other types of agricultural farming. Since no change in land use or access is proposed, no disturbance of associated cultural resources can be expected in relation to the proposed action. Imi Kala Street Bridge (SIHP # 50-50-04- 5564) is the only historic property within the project area and would not be impacted by the project. In a letter dated March 31, 2021, SHPD concurred with the DPW’s project effect determination of “No historic properties affected”. Interim protection measures (temporary construction fencing) for SIHP Site 50-50-04-5564 will be installed prior to the start of construction.”

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.” 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. Commission staff offers no further action as can be identified.

- 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, “Traditional and customary Native Hawaiian rights of the area will not be affected by the proposed action as there will be no substantive change in land use that would alter or affect existing access to the area for cultural purposes.”

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, “Since the proposed action is not expected to have an impact on historic properties or customary native Hawaiian rights, the Commission on Water Resource Management will not have to take any action to protect native Hawaiian rights. The proposed action will provide much-needed infrastructure improvements to promote the long-term protection of water resources and public health, safety, and welfare for the region.”

CWRM Staff Response: No further action as identified.

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 December 8, 2021. The FEA and FONSI are available on the Office of Planning and Sustainable Development, website at:

https://files.hawaii.gov/dbedt/erp/Doc_Library/2021-12-08-MA-FEA-Iao-Stream-Levee-27-Repair.pdf.

CONSISTENCY WITH THE HAWAII WATER PLAN

The Water Resource Protection Plan (WRPP), updated in 2019, provides an outline for the conservation, augmentation, and protection of statewide ground and surface water resources, watersheds, and natural stream environments. The legal framework of the Code for the issuance of Stream Channel Alteration Permits, as outlined in this submittal, is covered in more detail and context in the WRPP, Appendix I.

STAFF REVIEW

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. Applicant states that, "The project will comply with HAR, Chapter 11-54, Water Quality Standards; HAR, Chapter 11-55, Water Pollution Control; HAR 11-60.1-33, Fugitive Dust; and the County of Maui grading and erosion control standards and BMPs. BMPs including site management measures and physical controls (e.g., stream diversion, erosion control methods, and management and vegetative controls) will be implemented to ensure sufficient treatment of storm water runoff prior to entering State waters. Impacts to surface or ground water resources are not expected from the proposed project." Further 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. On page 300, the current interim instream flow standard for the Wailuku River was set in the 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/cwr/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.

- (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. 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.5909.6) Application subject to the standard conditions in **Exhibit 4** and the special conditions below.
 - a. The permittee shall ensure streamflow connectivity around the project site at all times, with no more than 50-percent of the stream channel being diverted around the project area to enable fish passage, and shall limit work to the low-rainfall months of May to October.
 - b. In conformance with the U.S. Army Corps of Engineers recommendations, work performed in accordance with the permittee's plan is authorized by NWP # 3 (Maintenance). Applicant must implement and abide by the conditions of the Blanket Section 401 Water Quality Certification (WQC), Modification for Certain 2021 Department of the Army (DA) Nationwide Permits (NWP) and Activities File No. WQC1092 Blanket WQC 1092 dated April 28, 2022.
 - c. In conformance with the U.S. Fish and Wildlife Service recommendations, the permittee shall avoid and minimize project impacts to Hawaiian waterbirds by observing recommended mitigation measures and standard best management practices (incorporated by reference to **Exhibit 3**).
 - d. 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 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,

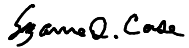


M. KALEO MANUEL
Deputy Director

Exhibits:

1. County of Maui Department of Planning letter, dated October 28, 2022
2. State Historic Preservation Division letter, dated March 31, 2021
3. U.S. Fish and Wildlife Service comments, dated February 2022
4. Standard Stream Channel Alteration Permit Conditions
5. Legal Authorities

APPROVED FOR SUBMITTAL:

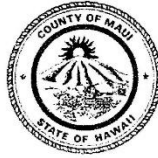
A handwritten signature in black ink that reads "Suzanne D. Case". The signature is written in a cursive, slightly slanted style.

SUZANNE D. CASE
Chairperson

Staff Submittal
SCAP.5909.6 Wailuku River, Maui

November 15, 2022

MICHAEL P. VICTORINO
Mayor
MICHELE CHOUTEAU MCLEAN, AICP
Director
JACKY TAKAKURA
Deputy Director



DEPARTMENT OF PLANNING
COUNTY OF MAUI
ONE MAIN PLAZA
2200 MAIN STREET, SUITE 315
WAILUKU, MAUI, HAWAII 96793



2022 NOV -3 PM 1:21

October 28, 2022

Mr. Kaleo Manuel
Deputy Director
Department of Land and Natural Resources
Commission on Water Resource Management
Post Office Box 621
Honolulu, Hawaii 96809

Dear Mr. Manuel:

SUBJECT: COMMENTS ON STREAM CHANNEL ALTERATION PERMIT APPLICATION (SCAP.59096) COUNTY OF MAUI, REPAIR AND INSTALLATION OF NEW REVETMENT LEVEE 27, WAILUKU RIVER, IAO SURFACE WATER MANAGEMENT AREA, MAUI TMKS: (2) 3-4-020:075; (2) 3-4-030:888 PARCEL C; (2) 3-4-032:001; AND IMI KALA STREET AND EHA STREET (NO TMK) (RFC 2022/00085)

The Department of Planning (Department) is in receipt of your September 22, 2022 request for comments regarding the above referenced stream channel alteration permit application (SCAP) for the proposed modifications at the Wailuku River / Iao Stream Levee 27 Repair. The Department submitted comments on the County of Maui's Department of Public Works (DPW) Draft Environmental Assessment (DEA) and Anticipated Finding of No Significant Impact (FONSI) on September 8, 2021. It is noted only the June 18, 2021 response letter confirming the project is not within the Special Management Area (SMA) or the identified sea level rise exposure area but would require a Conditional Letter of Map Revision and Flood Development Permit was included in Exhibit 11 (Block 16) of the SCAP application, while the detailed analysis provided in the September 8, 2021 response appear to not have been included as a part of this application. The September 8, 2021 transmission and federal consistency comments and conditional concurrence from the Office of Planning and Sustainable Development (OPSD) sent to the U.S. Army Corps of Engineers on December 21, 2021, also relevant to this project, are enclosed for additional context to further support this response and the project record, and are incorporated by reference in this response.

As detailed in the September 8, 2021 letter, the Department encouraged expanded analysis and coordination with this project and other ongoing repair projects that focus on this and nearby project areas that share the goal of reducing risks and enhancing flood management. More robust assessment of alternatives, analysis of impacts, commitments to specific mitigation, and discussion of plan consistency was encouraged. As also highlighted in the December 21, 2021

MAIN LINE (808) 270-7735
CURRENT DIVISION (808) 270-8205 / LONG RANGE DIVISION (808) 270-7214 / ZONING DIVISION (808) 270-7253

EXHIBIT 1

Mr. Kaleo Manuel
October 28, 2022
Page 2

comments from OPSD, finalizing design plans and specifying what Best Management Practices (BMPs) will be implemented to address potentially significant environmental impacts of the project would further reflect consistency with State and Local review requirements and address the substantive concerns these letters raised. These comments remain relevant and the Department encourages DLNR to consider development of conditions that may ensure these recommendations are addressed in this project.

While the Department agrees active management is needed to address identified hazards and flood risks to protect people and property, and is supportive of projects that aim to accomplish these goals, implementation of a comprehensive management plan would facilitate more holistic and long-term management options and be more consistent with planning objectives for this area. Instead, this action continues to segment proposed management efforts and rely on future studies to demonstrate that they will not have adverse impacts to water quality, stream flow, and habitat or frustrate overdue ecosystem-wide restoration initiatives. That being said, the Department has discussed this concern with DPW who indicated that future repairs and management efforts would be further coordinated with Local, State, and Federal planning partners, regulators, and community members. These ongoing coordinated planning and project implantation efforts will ensure enhanced consistency with relevant policies and plans including the Wailuku-Kahului Community Plan which envisions recreational and open space uses that include the subject project area. The Department looks forward to supporting such comprehensive management planning and implementation measures as they move forward. With that, the comments that follow highlight key substantive concerns that may benefit from further consideration as this SCAP is processed.

It is noted that the current application is supported by an application for nationwide permit (NWP) #3 from the U.S. Army Corps of Engineers (USACE). This permit was issued by USACE on June 14, 2022 but does not appear to reference the federal consistency determination and conditions for concurrence provided by OPSD in their December 21, 2021 letter. It is also unclear if this proposal should be considered strictly “maintenance” as a complete replacement of the levee revetment appears to be proposed. As detailed in the DEA, DPW proposes to repair an approximately 240-foot long section of the stream bank of the Wailuku River (formerly Iao Stream). This project aims to repair the right stream bank (looking downstream) located downstream of Imi Kala Street bridge and upstream of the ‘Īao Steam Levee 27. The project includes removal of the existing concrete boulder fill slope and grading the slope; excavation to deepen the protection along the toe of the slope to be below the scour depth; and construction of a new revetment system consisting of a reinforced soil slope, grouted riprap face slope, under-drain pipes, and dumped riprap at the toe of the slope to protect against scour. The size and depth of the boulders for the grouted and dumped riprap will be designed to withstand the stream velocity during the 100-year recurrence interval storm event.

While it is not disputed these improvements may be warranted, this full replacement and expansion of an existing levee structure seems to go beyond the plain English interpretation of “repairs”. The concern here, as stated previously, that warrants further review perhaps beyond what occurs under a NWP for “maintenance” is that continued segmentation of ongoing hardening of this dynamic and culturally significant stream channel may result in significant alterations to

Mr. Kaleo Manuel
October 28, 2022
Page 3

stream processes and circumvents the community engagement and planning process that is envisioned for larger resource management projects and may frustrate efforts to plan for and implement holistic solutions.

Additionally, the USACE NWP approval appears limited to TMK: (2) 3-4-030:888 Parcel C. As supporting application documents were not provided to reflect the application for the resulting NWP approval included at page 60 of this package, it is unclear whether the full scope of the proposed project at the additional parcels (2)3-4-032:0001 and (2) 3-4-020:075 were included in that USACE application or if these parcels are beyond the ordinary high water mark and not considered wetlands or waters of the United States such that USACE jurisdiction is limited to Parcel 888. It may be helpful to verify that and reflect that determination in this SCAP, and coordinate with USACE and the Applicant to ensure the actionable conditions of OPSD's conditional concurrence area also reflected in project design and implementation.

One relevant condition and point of particular interest in this SCAP is the statement that BMPs would include "ideally limiting work in the low-rainfall months of May to October, limiting in river work to one-half of the river cross-section to enable fish migration, use of a diversion berm or sandbag coffer-dam to contain disturbed material onsite and divert streamflow around the active grading area" (SCAP pg. 15). "Ideally" is not a commitment to implementing specific BMPs. As discussed at length when reviewing consistency with Hawaii Revised Statutes Section 226-12 in the September 8, 2021 comment letter, timing considerations and flow management efforts should be clearly addressed in BMPs to reduce water quality and habitat impacts of this project.

It is encouraged that to ensure consistency and reflect comments previously received on the Environmental Assessment and Federal consistency determination regarding this project that mitigation commitments be clearly reflected in the application or in conditions of an approval for this project to ensure that potentially significant environmental impacts are avoided, minimized, and mitigated in a manner that supports the FONSI determination and permit issuance without a revised or supplemental Environmental Impact Statement for the undertaking. For additional analysis and discussion of potential considerations for BMPs that could be included in this SCAP approval, please further reference the enclosed letters.

Thank you for this opportunity to provide additional comments on your review of this SCAP. Should you need clarification on the above comments, please contact Coastal Resources Planner Erin Derrington at erin.derrington@co.maui.hi.us.

Sincerely,



MICHELE MCLEAN, AICP
Planning Director

Mr. Kaleo Manuel
October 28, 2022
Page 4

Attachments:

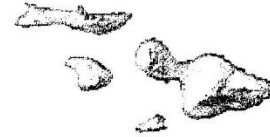
1. Department of Planning, September 8, 2021 - Comments on a Draft Environmental Assessment proposed for Iao Stream Level 27 Repair Project (RFC 2021/0096)
2. Office of Planning and Sustainable Development, December 21, 2021 – Coastal Zone Management Act Federal Consistency Review for Iao (DTS202112210950NA)

xc: Ann Cua, Planning Program Administrator (PDF)
Candace Thackerson, Current Planning Supervisor (PDF)
Erin Derrington, Coastal Resources Planner (PDF)
Gary Estanislao, Zoning Enforcement Development Floodplain Administrator (PDF)
Tara Miller Owens, U.H. Sea Grant Extension Program (PDF)
Wesley Crile, U.H. Sea Grant Extension Program (PDF)
Mary Alice Evans, Hawaii Office of Planning and Sustainable Development (PDF)
Project File

MCM:AC:EMD:rma

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MICHAEL P. VICTORINO
Mayor
MICHELE CHOUTEAU MCLEAN, AICP
Director
JORDAN E. HART
Deputy Director



DEPARTMENT OF PLANNING
COUNTY OF MAUI
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September 8, 2021

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Dear Ms. Ono and Mr. Takeda:

**SUBJECT: COMMENTS ON A DRAFT ENVIRONMENTAL ASSESSMENT
FOR PROPOSED 'IAO STREAM LEVEE 27 REPAIR PROJECT
(RFC 2021/0096)**

The Department of Planning (Department) is in receipt of your July 26, 2021 letter and transmission of the Draft Environmental Assessment (DEA) for the Proposed 'Iao Stream Levee 27 Repair, published in the August 8, 2021 Environmental Notice from the Office of Planning and Sustainable Development (OPSD). The Department appreciates this opportunity to comment on this DEA and Anticipated Finding of No Significant Impact (FONSI).

As detailed in your DEA the County of Maui, Department of Public Works (DPW) proposes to repair an approximately 240 feet long section of the stream bank of the Wailuku River (formerly 'Iao Stream). This project aims to repair the right stream bank (looking downstream) located downstream of Imi Kala Street bridge and upstream of the 'Iao Steam Levee 27. This action seeks to prevent further erosion of the bank, protect the downstream levee, and provide reduced flood risk in Wailuku. The project includes removal of the existing concrete boulder fill slope and grading the slope; excavation to deepen the protection along the toe of the slope to be below the scour depth; and construction of a new revetment system consisting of a reinforced soil slope, grouted riprap face slope, under-drain pipes, and dumped riprap at the toe of the slope to protect against scour. The size and depth of the boulders for the grouted and dumped riprap will be designed to withstand the stream velocity during the 100-year recurrence interval storm event.

Ms. Ono and Mr. Takeda
September 8, 2021
Page 2

The project area is approximately 1.39 acres, including the approximately .4-acre stabilization component, staging, storage, construction access, entry, and grading activities and involves private and public properties in the Wailuku District of the Island of Maui (Tax Map Keys (TMKs): (2) 3-4-032: 001 (por.; Wailuku Plantation LLC); (2) 3-4-030: 888 Parcel C (Por.; County of Maui); (2) 3-4-020: 075 (Por.; Maui Disposal Co, Inc., Browning-Ferris Ind. of HI); and Imi Kala Street and Eha Street (no TMK; County of Maui)). State Land Use designations for these properties are Agricultural and Urban. County of Maui zoning designations are Agricultural (AG), Light Industrial (M-1), and Heavy Industrial (M-2). The DEA notes that numerous Federal, State, and County-level permits may be required, including Coastal Zone Management (CZM) Federal Consistency Review through OPSD and a Flood Development Permit (FDP) through the Department. The project construction cost is estimated to be \$1.8 million and duration would be 6-8 months which would be timed around the dry season (DEA pg. 18).

Based on the foregoing and our review of the DEA, the Department provides these additional comments for further consideration:

1. Consider expanded alternatives analysis.

Alternatives discussed in Section 3 include “No Action”, “Delayed Action”, and the identified “Preferred Alternative”. While there is no requirement to assess all potential alternatives, Hawaii’s Environmental Policy Act (HEPA) reflected in Hawai’i Revised Statutes (HRS) §343-5 outlines that environmental assessment is required when the action proposes “the use of State or County lands or the use of State or County funds” and directs that “the agency shall consider environmental factors and available alternatives in its feasibility or planning studies.” The three alternatives proposed and assessed in this DEA do not appear to reflect and incorporate past feasibility or planning studies relevant to the project area or ongoing comprehensive planning discussions that may yield additional alternatives that could achieve the stated project goal of protecting life and property while also avoiding and minimizing potentially significant impacts to the environmentally sensitive ‘Īao Stream / Wailuku River. If other alternatives may achieve similar outcomes it would seem appropriate to expand the alternatives analysis provided in this DEA, perhaps as a Supplemental DEA or in the FEA, to comprehensively discuss the benefits and costs of a range of potential alternatives.

Additionally, it would be helpful to discuss regulatory implications of the “No Action” or “Deferred Action” alternatives. It is noted that the portion of the stream bank to be repaired is not a part of the ‘Īao Stream Levee System. However, the DEA emphasizes that “certification that levees can withstand a 1-percent chance flood is required by the Federal Emergency Management Agency (FEMA)” and notes that “this project is required for the certification of the ‘Īao Stream Levee 27” (DEA, pg. 9). The alternatives analysis provided in Section 3 states that “the No Action Alternative would not allow for the levee to be certified as viable to protect property or life from the 100-year recurrence interval storm event” (DEA, pg. 10) but does not detail what the implications of a lack of certification would be to provide further context to the importance of

Ms. Ono and Mr. Takeda
September 8, 2021
Page 3

project implementation. While not discussed at length in this DEA for Levee 27, the 2017 Final Environmental Assessment for the 'Āao Stream Flood Control Project (2017 FEA) published by the U.S. Army Corps of Engineers (USACE) explains that “[c]ertification that levees can withstand a 100-year frequency flood is required by FEMA; if not certified, this flood protection infrastructure is not deemed viable to protect property or lives from 100-year flood events”, that a “failure in the deteriorating levees would cause flood waters to inundate the Wailuku River drainage basin and loss of life and extensive property damage would be inevitable” and concludes that the “[i]mplementation of the Proposed Action is needed to restore the reliability of the existing project and to protect the health and well-being of the Wailuku Community” (FEA 1-15-16). If there are other regulatory implications of failing to obtain a certification such as ineligibility for flood insurance or funding for project repairs such details would be helpful to support the basis and need for this and related projects in the alternatives analysis discussion of this DEA.

The USACE’s 2017 FEA also describes numerous alternatives and offered a fairly comprehensive proposed alternative to address management goals of reducing flood risks while also achieving environmental and cultural benefits. The proposed alternative identified there included a component that would construct a site maintenance road, raised berm, and a portion of the proposed floodplain overflow on the privately-owned parcel TMK [2] 3-4-031:001. That parcel appears to be proposed for use only for access in this Levee 27 DEA that is under review. Similarly, the 2017 FEA discusses improvements to County-Owned parcel TMK [2] 3-4-030:888 which contains the entirety of the channelized portion of the Wailuku River flood control system, including the segment proposed for repair in the Levee 27 DEA. As noted in the Department’s comments on DPW’s DEA for the proposed Wailuku Bank Stabilization (EAC 2021/0003), that project further involves parcels that were included in the comprehensive 2017 FEA and identified as the preferred alternative. Including discussion of past alternatives and why they were not selected for additional review in this DEA may be helpful in addressing environmental review requirements and differentiating various project components that appear related if not interconnected further.

Instead of providing analysis of past constructed alternatives, the alternatives analysis here involves implementing this one constructed alternative now or later as a “delayed action”, or a “no action” alternative. It concludes that project construction is the “Preferred Alternative” because it “is the only alternative that (1) addresses the existing and future anticipated erosion issues; (2) protects the downstream 'Āao Stream Levee 27; (3) reduces flood risk to the town of Wailuku; and (4) allows for FEMA to certify the downstream 'Āao Stream Levee 27. Because the Preferred Alternative addresses the purpose and need for the action, and is the least environmentally damaging practicable alternative, it is selected as the proposed action for the project” (DEA, pg. 12). It is suggested that analysis of other proposed improvements that would also further these objectives be

Ms. Ono and Mr. Takeda
September 8, 2021
Page 4

discussed in a Supplemental or Final EA (FEA) in order to provide more robust discussion of considered alternatives and their potential costs, benefits, and environmental impacts in the analysis that follows.

2. Consider revising to discuss and include additional analysis of impacts and supporting documentation of reasonably foreseeable current and future projects.

The Levee 27 Repair project is one of three DEAs relevant to structural modifications of the 'Iao Stream / Wailuku River that are currently pending review, all of which have identified anticipated FONSI. Two of these repairs, this project and the Wailuku River Stabilization, proposal are being undertaken by DPW while the third project, which involves the removal of Revetment X, installation of a constructed scour hole, and possible addition of a stream gage, is being led by the U.S. Army Corps of Engineers with DPW as the local project sponsor. Based on review of these three pending DEAs it appears no comprehensive study of direct or related hydrological or geophysical effects is currently available to support conclusions that this action and the concurrently proposed actions will not significantly alter flow and sediment transport. It would seem that revised models and analysis of how proposed modifications may impact current and future stream processes would be prudent and would further support the anticipated FONSI. Alternatively, perhaps a Supplemental EA could be provided to further discuss potential alternatives and assess the potential significance of impacts of these projects in a comprehensive manner.

It is understood that the Maui Disposal Facility that is adjacent to the Levee 27 project area was significantly flooded in the September 2016 storm event that also caused undercutting that prompted emergency repairs of a downstream section at the Imi Kala Street Bridge, including placement of concrete boulder fill (CBF) at a maximum of 20 feet along approximately 230 feet of the sloped stream bank in 2017 (DEA pg. 6-7, pg. 19). On September 13, 2016, a passing storm dropped nearly 10 inches of rain in Pu'u Kukui and Maui experienced one of the largest recorded flood events in the County's history with some sources referencing the event as a 100-year flood but with data from the U.S. Geological Survey indicating the possibility of a 500-year recurrence event. The DEA notes that "data from the USGS Pacific Islands Water Science Center reported that 'the river moved 10,900 cubic feet per second down the valley or roughly 81,500 gallons per second. It was 200 times as large as the 35-year average for Sept 13 and notes that the "gauge station recording the data was destroyed when the river channel near it burst open and expanded 'from about 40 feet wide up to three times the size'" (DEA, pg. 83). In 2017 an emergency repair project included placement of approximately 230 feet of placement of CBF along the downslope streambank, apparently adjacent to the currently proposed project site. It is noted that significant flooding and undercutting occurred at and surrounding the area that is the focus of this project.

Ms. Ono and Mr. Takeda
September 8, 2021
Page 5

The DEA emphasizes that this project aims to reduce risk to people and properties in the surrounding environment. This is certainly a compelling justification for implementing project improvements. The analysis of site conditions, potential impacts, and proposed mitigation in Section 4 further notes that while the “[s]ubject EA document does not require an assessment of impacts according to NEPA requirements, the definition of impacts, according to NEPA, provides guidance toward understanding potential environmental impacts and applicability to this project” and proceeds to include definitions regarding secondary impacts and cumulative effects (DEA, pg. 19). The DEA then summarizes analysis of secondary impacts and cumulative effects as follows:

In addition, the USACE and County of Maui, DPW, prepared a FEA in July 2017 for Modification to the ‘Iao Stream Flood Control Project. The project consists of features intended to reconnect the main channel with the floodplain to reduce damaging flows along the main channel and right bank levees of Wailuku River. The reconnection would be accomplished by lowering a portion of the left bank, grading the overflow area, and constructing a diversion wall to force flood flows to enter the existing floodplain on the left bank. A portion of the left bank would be raised downstream to contain the overflow within the floodplain. Further downstream, the left bank would be lowered to allow the return of the overflow into the main channel. Implementation of the project would occur within the approximately 0.4-mile stretch of the stream between slightly downstream of Waena Street and upstream of Imi Kala Street, approximately 1.4 miles upstream from the shoreline. The project is currently being reevaluated by the USACE.

Because the direct impacts from the proposed action would be only short-term and other past, present, and reasonably foreseeable future actions are expected to be consistent with the existing development and use of the area, the project would make no persistent contribution to secondary or cumulative impacts. Additionally, it is expected that all construction projects would adhere to Best Management Practices (BMPs) and utilize other protective measures to minimize any impacts to environmental resources. Therefore, cumulatively, all foreseeable projects would be expected to have less than significant impacts. Beneficial cumulative impacts are expected in the form of reduced stream bank erosion and flood risk to the town of Wailuku.

The description provided does not appear to reflect the currently proposed flood control projects, but further discussion may provide additional clarification regarding currently proposed and future projects. Additionally, as it is currently written it is not clear from this analysis what impacts have been identified as potentially significant and what BMPs would be implemented to address these impacts. Further, it does not appear that this analysis reflects the cumulative effects of the reasonably foreseeable implementation of the three currently proposed projects described above.

The analysis that follows in the DEA includes references to studies from the 2017 USACE FEA, however, it appears no modeling was done to assess the

Ms. Ono and Mr. Takeda
September 8, 2021
Page 6

direct or cumulative impacts of the USACE's revised 2021 project scope for that project and these seemingly related DPW construction efforts. The geotechnical survey that was conducted in 2019 by Hirata & Associates, Inc. seems to have been focused solely on existing site conditions and did not appear to discuss how proposed changes to the stream structure may change sediment transport or hydrology. However, that assessment was not included in this DEA to support further analysis here. Please include that survey and all referenced documentation as attachments or hyperlinks in the Supplemental or FEA with direct citations if possible to further support the analysis provided. For example, the analysis of impacts to geology and topography in Section 4.3 notes that minor topographic alterations at the project site would be necessary in order to construct the proposed embankment repairs and concludes there would be no significant short- or long-term impacts from dewatering and grading necessary to install additional geogrid-reinforced soil to repair the existing streambank and grouted riprap toe protection lower bank section at the base of the embankment. It would seem inclusion of additional geotechnical analysis would further support such analysis.

Similarly, while AECOS Inc. conducted various environmental surveys of the project site in a report that was included in Appendix A of this DEA, there is limited analysis of how this action and related projects might impact water resources and hydrology that are outlined but not detailed in terms of impacts in Section 4.5. Discussion of current conditions in the DEA does identify that the segment of the Wailuku River where the proposed action is located is classified as "Class 2 inland waters" by the State of Hawai'i. The objective of Class 2 waters is "to protect their use for recreational purposes, the support and propagation of aquatic life, agricultural and industrial water supplies, shipping, and navigation" (Hawaii Administrative Rules (HAR) §11-54-3(b)(2)) and notes that Kahului Bay is classified as "Class A marine waters" by the State of Hawai'i (DEA pg. 31). It is further noted that it is the objective of Class A waters "that their use for recreational purposes and aesthetic enjoyment be protected" (HAR §11-54-3(c)(2)) and that uses must be compatible with the protection and propagation of fish, shellfish, and wildlife; and strict water quality standards have been set for the protection of these uses in Class A marine waters (Id.). This section describes the Wailuku River as "impaired" due to turbidity and trash and notes the downstream Kahului Bay is "impaired" for nutrient loading. However, the discussion of potential impacts and proposed mitigation concludes no significant impacts will occur to water quality (Section 4.5) or wetlands including the riverine system itself (Section 4.6) and that any significant impacts would be reduced through implementation of mitigation measures required through subsequent permitting efforts.

It is worth noting that HRS §343 envisions that, while environmental assessments do not need to be exhaustive, they should provide sufficient information for the agency to evaluate potential effects of the proposed action as well as reasonably foreseeable related activities cumulative effects (*see Office of Planning HEPA Guidance, 2012*). As such, the documentation provided for this DEA would be

Ms. Ono and Mr. Takeda
September 8, 2021
Page 7

improved if additional discussion of related repair projects and the potential impacts of these projects to stream sediment budgets and hydrology were discussed with support of robust updated models, data, and analysis. Analysis of the proposed project and related projects that includes assessment of what impacts if any these projects are likely to have on the hydrology, geomorphology, and sediment transport of this dynamic stream system should be provided to support a more robust discussion of environmental impacts and further support an anticipated FONSI for this project and related projects to improve flood control and ecological functions of the stream. Consideration of climate driven changes to precipitation that may increase likelihood of high flow and flood events is further encouraged.

3. **Please include additional details regarding how the proposed alternative is consistent with relevant planning goals and objectives.**

The DEA includes analysis of this project's relationship to Federal, State of Hawai'i, and County of Maui policies, plans, and land use controls in Section 6. Discussion of Federal requirements notes that a Department of the Army Permit application will be required for the project and includes areas of jurisdictional coverage under CWA, Section 404, and RHA, Section 10 and that coordination will be undertaken with the USACE to address the potential for adverse effects to Waters of the United States (WOUS) resulting from the implementation of the proposed action (DEA, pg. 103). While the DEA notes that this permit application will be submitted and related Water Quality and Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, and Section 106 coordination will be conducted after the completion of the EA process, additional discussion of BMPs that are being proposed to ensure compliance with these requirements may be helpful in demonstrating consistency with the policies and purposes of these Federal requirements.

At the State level, the DEA provided a concise summary of applicable policies in the Hawaii State Plan in Table 6-1. Although Table 6-1 lists applicable sections, additional summary of responsive measures to improve plan consistency in this action are not similarly outlined. As such, it is suggested that a column or additional table be included to summarize DPW's analysis and responsive planning practices to enhance readability and comprehension of the lengthy discussion that follows. Supporting analysis is thorough but could be improved to address some apparent inconsistencies in the following subsections:

HRS §226-11 Objectives and policies for the physical environment – land-based, shoreline, and marine resources. Analysis provided indicates applicability of Objectives (a) and (b) and Policies (b)(1-6) and (8), but appears to focus on compliance with requirements to avoid impacts to Federal and State listed species that are detailed in Section 4.8. As that section notes, the 2021 AECOS survey conducted in Wailuku River within the project reach identified two of the five native 'o'opu species ('o'opu nākea and 'o'opu nōpili) were observed during the AECOS 2021 survey, and the three remaining species

Ms. Ono and Mr. Takeda
September 8, 2021
Page 8

(*'o'opu alamo'o*, *'o'opu naniha*, *'o'opu 'akupa*) were reported from other locations in Wailuku River. Department of Land and Natural Resources (DLNR) regulates fisheries in the State, including the taking of *'o'opu* under HAR §13-100-2 (HDLNR, 1989). Additional coordination with DLNR to ensure protection and appropriate management of these protected species during project construction and for the life of the project is encouraged. It is further encouraged that community outreach be conducted before and during project implementation to inform resource users and concerned citizens of the construction project as it may impact current cultural uses that include gathering of resources in the vicinity of or within the proposed project area. Commitments to such outreach and engagement measures could be considered a best practice to further demonstrate consistency with policies (b)(1), (b)(6), and (b)(8) that are listed but not discussed in great detail in this section.

As previously noted regarding documentation that this project and potentially related projects will not result in costly or irreparable environmental damage, and to further demonstrate consistency with policies (b)(4) and (b)(5), a comprehensive stream sediment analysis and updated hydrogeological models would benefit this and future environmental assessments.

HRS §226-12 Objectives and policies for the physical environment—scenic, natural beauty, and historic resources. Analysis here discusses reports that document the historic Ima Kala Street Bridge (SIHP Site 50-50-04-5564) detailed in Appendix A and includes Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) concurrence with DPW's project effect determination of "no historic properties affected" (HRS 6E-8) in Appendix B. While this project may result in additional improvements to the structure at the Ima Kala Street Bridge, discussion of cultural uses and practices in the EA narrative are limited. DLNR-SHPD has requested that interim protective measures be implemented so that orange fencing be installed to protect the Ima Kala Bridge in areas situated near construction activities.

The historical and cultural significance of the lands of Wailuku and the *ahupua'a* are well documented and detailed in the text of the EA and supporting reports included in Appendix A, B, and C. These references include discussion of the historic use of the valley that appears to include lands adjacent to the project area for use of taro *lo'i* farming. As detailed further in Appendix C, community consultation conducted in March 2021 entailed outreach letters that were sent to 57 individuals or groups; 11 responded and three of these kama'āina and/or kūpuna met with CSH for a more in-depth interview. Those respondents emphasized importance of gathering activities of various stream life such as *hīhīwai* (*Endemic snail, Neritina graposa*), *'o'opu* (*Eleotridae, Gobiidae, and Blennidae*), and *'ōpae 'oeha'a* (clawed shrimp, *Macrobrachium grandimanus*) and use of water from Wailuku River for sustainable practices, such as individual/family *lo'i* and other types of agricultural farming, as well as a traditional trail system.

Ms. Ono and Mr. Takeda
September 8, 2021
Page 9

While the report provided in Appendix C concluded that no impacts to ongoing cultural practices were identified within the project area during this consultation, the recommendations found in Appendix C focus on education and best practices for construction workers to ensure if cultural resources (iwi) are discovered appropriate responses will be implemented. It would be helpful to confirm this training will be provided as a mitigating BMPs. Additional discussion regarding how this and complementary projects reflect ongoing coordination with local land owners and cultural practitioners to support traditional farming and harvesting activities may further demonstrate the related comprehensive management efforts underway at this significant cultural and historic area. These could include timing considerations and flow management efforts referenced but not clearly detailed in mitigation discussions in water quality and habitat impact reduction sections.

HRS §226-13 Objectives and policies for the physical environment—land, air, and water. Although discussion of this planning objective and supporting policies states that the “proposed action will promote the management of land and water resources by replacing an approximately 240 feet long section of the revetment system along a segment of the Wailuku River embankment”, this statement is supported by general references regarding community risk reduction, and conclusions that this action will reduce erosion resulting in reductions to sedimentation, improvements to water quality, and resulting in “less sediment to be transported to the stream mouth and into the nearshore marine environment” (DEA, pg. 111). Reference to a supporting study or model that substantiates these statements for this and related projects relevant to stream flow, groundwater flow, and sediment dynamics would provide additional substantiation for these statements. Commitments to conduct pre- and post-construction water quality monitoring and flow analysis and to continue ongoing comprehensive management efforts to achieve risk reduction and ensure maintenance and improvement of this important stream system would further demonstrate alignment with this planning objective and supporting policies to achieve proper management of land and water resources, and to achieve desired quality of surface, groundwater, and coastal waters.

HRS §226-108 Priority Guideline, Sustainability. As noted in the DEA analysis, this guideline emphasizes promotion of sustainable resource management that meets the needs of both the present and future generations. The DEA notes in addition to addressing flood risk reduction this project aims to reduce erosion and allow for less sediment to be directly transported within the stream and to the nearshore marine environment, and states that improved water clarity and reduced sedimentation would have positive impacts on the aquatic environment. While it is understood additional studies are ongoing, supporting documentation and monitoring plans that will likely result from water quality certification requirements would further substantiate this statement. Furthermore, emphasis on how this project will support comprehensive ecosystem level management efforts and ensure cost effective management

Ms. Ono and Mr. Takeda
September 8, 2021
Page 10

interventions are implemented and maintained for the life of the proposed built structure would be relevant to this discussion, and could further be supported by cost benefit analysis including discussion of alternatives assessed in the 2017 USACE FEA as well as related and concurrent project proposals.

HRS §226-109 Priority Guideline, Climate change adaptation. The DEA acknowledges that this guideline includes the goal to encourage the preservation and restoration of natural landscape features, which includes streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change. However, the discussion provided in the DEA states that the “project supports the priority guidelines for climate change. The proposed project will not contribute to adverse impacts relating to existing climate change and sea level rise. The project area is not located in the tsunami evacuation zone or extreme tsunami evacuation and is not expected to be affected by increases in sea levels” (DEA, pg. 114). Additional discussion of how this and related comprehensive management projects are furthering preservation and restoration goals may demonstrate additional consistency with this priority guideline. Furthermore, it is noted that current design specifications aim to address the 100-year flood event. Given that recent climate assessments indicate storm events and flood extents are likely to become more intense as climate impacts increase, some discussion of costs and benefits of planning for a larger flood event such as the 500-year recurrence interval that was observed in 2016 may further support robust analysis of cost-effective alternatives that would result in sustainable management measures to protect people as well as the built and natural environment in the face of a changing climate. Further analysis and discussion of potential impacts of sea level rise to the flood control system may also be prudent.

Hawai‘i State Land Use Law. Section 6.2.3 outlines the State classification of lands and confirms this project involves use of lands within the Agricultural and Urban State Land Use Districts. The analysis that follows notes that no change in land designation would be required and states that this project is consistent with State Land Use laws. While it is understood that this stream section is already hardened and therefore this proposal would not result in a significant change from current conditions, it is unclear how the current condition of Parcel 888 is supporting Agricultural Land Uses. Additional discussion of priority uses of designation of “Agricultural Lands of Importance to the State of Hawaii” explanation regarding use priorities here may be helpful to further support the analysis provided in this section.

Hawai‘i State Environmental Policy. The DEA details relevant policies that aim to conserve natural resources and support sustainable practices and then discusses applicable guidelines. The analysis that follows restates conclusions that there will be no significant impacts of this project. However, this analysis seems to rely upon implementation of BMPs that may be implemented. Specifying minimum BMPs that will be implemented while acknowledging future permits may require additional measures may clarify the basis for the determination that

Ms. Ono and Mr. Takeda
September 8, 2021
Page 11

this project will not result in any significant impacts because potentially significant impacts will be mitigated.

Hawai'i Coastal Management Program (CZM). As noted in Section 6.2.6, this project is not located within the County of Maui's Special Management Area. However, HRS Chapter 205A requires all State and County agencies to enforce CZM objectives and policies as set forth in HRS §205A-2, which aims to protect valuable and vulnerable coastal resources such as coastal ecosystems, special scenic, and cultural values, and recreational opportunities. Additionally, this section notes that the State of Hawai'i Office of Planning will be consulted to identify permitting requirements pertaining to their jurisdiction under the CWA, Section 401, and, if required, the CZM Federal consistency application will be submitted to the State of Hawai'i Office of Planning after completion of the EA process. As such, the Office of Planning and Sustainable Development that administers the CZM program at the State level is copied here for their information and the Department has not provided in-depth comments on this or the Section 401 Water Quality Certification analysis in this DEA.

Although the project area is located outside of the County of Maui's Special Management Area (SMA), modifications to the streambed are proposed. As such, in addition to the Stream Channel Alteration Permit discussed in Section 6.2.7, a FDP, included in Section 6.4 and listed in Section 7.3, will be needed and early and ongoing consultation and coordination with the Department's Floodplain Administrator is encouraged. Additionally, as noted in the pre-assessment consultation comment provided on June 18, 2021, the Department implements Maui County Code (MCC), Section 19.62.100, which states that the "Director shall not issue or recommend issuance of any permit or approval involving modification, construction, lining, or alteration of any drainage facility, river, or stream unless such modification, construction, lining, or alteration *does not reduce the capacity of the drainage facility, river, or stream, or adversely affect any downstream or adjacent property*" (emphasis added). While the DEA makes a compelling case for why the proposed Levee 27 repairs are necessary, as outlined further in the comments in this letter, additional discussion of alternatives, environmental impacts, and proposed mitigation measures to avoid and reduce impacts would support more robust analysis to support the conclusion that this modification will not result in adverse impacts as well as the anticipated Finding of No Significant Impact in your FEA.

County of Maui General Plan and Community Plans. While the analysis lists relevant components of the 2010 Countywide Plan, Maui Island Plan, and Wailuku-Kahului Community Plan, a summary similar to Table 6.1 would be helpful to provide an overview of the planning objectives and policies identified as relevant to this proposal as outlined in Sections 6.3.2 and 6.3.3. As it is currently written it appears that the DEA has determined no significant impacts will occur to habitats of concern or environmentally sensitive areas because BMPs will be implemented. Similarly, it is stated that the project will reduce erosion and improve water quality, but without supporting studies or monitoring

Ms. Ono and Mr. Takeda
September 8, 2021
Page 12

proposed it is unclear how this outcome will be verified and how unintended impacts might be addressed should they occur. Some discussion of ongoing monitoring and ongoing comprehensive planning would further ensure no adverse impacts occur to nearshore habitats or water quality through the implementation of this and other complementary flood risk reduction and habitat restoration projects being implemented at the Wailuku River.

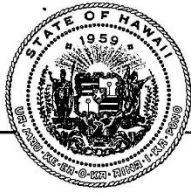
Thank you for this opportunity to provide additional comments on this DEA. Should you need clarification on the above comments, please contact Coastal Resources Planner Erin Derrington at erin.derrington@co.maui.hi.us.

Sincerely,



MICHELE MCLEAN, AICP
Planning Director

xc: Clayton I. Yoshida, Planning Program Administrator (PDF)
Jeffrey P. Dack, Current Planning Supervisor (PDF)
Erin M. Derrington, Coastal Resources Planner (PDF)
Diego Sanchez-Gomez, ZEAD Floodplain Administrator (PDF)
Tara Miller Owens, U.H. Sea Grant Extension Program (PDF)
Wesley Crile, U.H. Sea Grant Extension Program (PDF)
John D. Nakagawa, Hawaii Office of Planning and Sustainable Development (PDF)
Project File
MCM:CIY:JPD:EMD:lp
K:\WP_DOCS\Planning\RFC\2021\0096_WailukuRiverLevee27_0909



**STATE OF HAWAII
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT**

DAVID Y. IGE
GOVERNOR

MARY ALICE EVANS
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DTS202112210950NA

Coastal Zone
Management
Program

December 21, 2021

Environmental
Review Program

Land Use
Commission

Land Use Division

Special Plans
Branch

State Transit-
Oriented
Development

Statewide
Geographic
Information System

Statewide
Sustainability
Program

Mr. Jeffrey A. Herzog
Deputy Chief
Civil and Public Works Division
U.S. Army Corps of Engineers, Honolulu District
Building 230
Fort Shafter, Hawaii 96858

Dear Mr. Herzog:

Subject: Coastal Zone Management Act Federal Consistency Review for Iao
Stream Flood Control Project Modifications and Repairs, Wailuku,
Maui

The Hawaii Coastal Zone Management (CZM) Program is issuing this supplemental federal consistency decision letter for the Iao Stream Flood Control Project (FCP) modifications and repairs, Wailuku, Maui (proposed activity), which supersedes the federal consistency decision that was previously issued on September 28, 2021, removing the former condition no. 5, because we determined that the condition was not applicable to the U.S. Army Corps of Engineers, Honolulu District, nor was it applicable to the consistency concurrence. The County of the Maui, Department of Public Works (DPW), has confirmed by letter dated December 15, 2021 (received by the Hawaii CZM Program by email on December 21, 2021) that the County of Maui DPW is the non-federal sponsor for the proposed activity and will obtain, if applicable, the Stream Channel Alteration Permit (SCAP) from the Commission on Water Resource Management (CWRM).

The Hawaii CZM Program has reviewed the U.S. Army Corps of Engineers, Honolulu District, Coastal Zone Management Act (CZMA) consistency determination for the proposed activity, that was received on July 27, 2021. This federal consistency review covers the Corps of Engineers Alternative 12: Combination Plan (a combination of Alternative 2, Alternative 6, and Alternative 11), which is identified as the "Preferred Alternative" in the Draft Supplemental Environmental Assessment (DSEA), July 2021, and includes the following:

Mr. Jeffrey A. Herzog
December 21, 2021
Page 2

- Alternative 2 - Remove Revetment X. Remove approximately 200 feet of the remaining portion of Revetment X along the left bank, widening the channel, allowing flows to dissipate across a wider area, and reducing velocity. Further stabilization of the left bank revetment is not proposed. No action is proposed along the right bank.
- Alternative 6 - Install Pre-Formed Scour Hole. Excavate the eroded channel invert and construct a “pre-formed scour hole,” i.e., engineered stabilization of the scoured invert consisting of a boulder-concrete sloped toe with buried key and backfilled with natural material consistent with the existing channel bottom (concept drawing shown as Figure 2-6, DSEA, p. 16). This alternative would repair existing erosion and prevent future, imminent erosion, thereby reducing downstream erosion and risk to community safety.
- Alternative 11 - Non-Structural Plan (Flood Warning System). Install a stream gage or other climate gage as part of a public flood warning system at either Iao Valley Road Bridge or at the existing USGS gage between the Iao Stream FCP debris basin and the Market Street Bridge. Installation of a stream gage would improve community safety by increasing community and regional understanding of the potential for flooding as well as increased communication of imminent flood events. USACE will coordinate directly with the County of Maui Emergency Management Agency to establish a central base station or field station with necessary communications equipment (siren / beacon lights), and software at the County Emergency Management Offices.

The Hawaii CZM Program published a public notice in the State Environmental Review Program publication, “The Environmental Notice,” on August 8, 2021, with the public review and comment period concluding on August 23, 2021. A revised supplemental public notice that included the federal consistency supplemental coordination for Revetment X, was published on August 23, 2021, with the public review and comment period concluding on September 7, 2021. Revetment X was previously reviewed for federal consistency as part of the former Alternative F, that was issued conditional concurrence on June 2, 2017, and was reviewed currently for supplemental coordination because it is the only feature of Alternative F that is being moved forward. During the CZM public notice period no public comments or inquiries were received. Consultation requests were sent to the Division of Aquatic Resources (DAR) and the County of Maui Planning Department (Maui Planning) on July 27, 2021. No comments were received from DAR. Comments from Maui Planning, dated September 13, 2021, were received on September 14, 2021. The Hawaii CZM Program identified Maui Planning comments that were deemed necessary for the CZMA federal consistency review, and along with questions from the CZM Program were referred to the Corps of Engineers on September 14, 2021 for responses. Responses to the comments and questions were received from the Corps of Engineers on September 27, 2021.

We conditionally concur with the U.S. Army Corps of Engineers’ determination that the proposed activity is consistent to the maximum extent practicable with the enforceable policies of the Hawaii CZM Program based on the following conditions.

Mr. Jeffrey A. Herzog
December 21, 2021
Page 3

1. The proposed activity shall be carried out as represented in the CZMA federal consistency determination and all supporting materials and information provided to the Hawaii CZM Program. Any changes to the proposed activity shall be submitted to the Hawaii CZM Program for review and approval. Changes to the proposed activity may require a full CZM federal consistency review, including publication of a public notice and provision for public review and comment. This condition is necessary to ensure that the proposed activity is implemented as reviewed for consistency with the enforceable policies of the Hawaii CZM Program. Hawaii Revised Statutes (HRS) Chapter 205A Coastal Zone Management, is the federally approved enforceable policy of the Hawaii CZM Program that applies to this condition.
2. To mitigate potential adverse effects to water quality, to ensure continuous in-stream flow, and to allow for passage of native aquatic biota, e.g., fish (oopu), shrimp (opae), and snails (hihiwai), best management practices (BMP) shall be designed and implemented as represented in the consistency determination, CZM assessment form, and supporting information - DSEA July 2021; Final EA July 2017; Engineering Documentation Report Amendment August 2021; and Corps of Engineers responses to questions and comments, received on September 20 and 27, 2021. When the BMP plan(s) has/have been finalized by the Corps of Engineers, the County of Maui Department of Public Works, and/or their contractor(s), the BMP plan(s) shall be submitted to the Hawaii CZM Program. Because the BMP plan(s) has/have not yet been fully developed, supplemental coordination and review of the BMP plan(s) by the Hawaii CZM Program may be required in accordance with 15 CFR § 930.46. This condition is necessary to ensure consistency with Hawaii CZM Program federally approved enforceable policy HRS Chapter 205A Coastal Zone Management, Section 205A-2 Coastal Ecosystems.
3. The proposed activity shall be conducted in compliance with State of Hawaii water quality standards and requirements as specified in Hawaii Administrative Rules (HAR) Chapter 11-54 Water Quality Standards, including obtaining a Section 401 Water Quality Certification (WQC) from the State Department of Health (DOH). The commitment to obtain a WQC was represented in the U.S. Army Corps of Engineers letter to DOH on September 7, 2021 and confirmed by DOH that a WQC is required (letter September 9, 2021). This condition is necessary to ensure consistency with Hawaii CZM Program federally approved enforceable policies HRS Chapter 342D Water Pollution, and HAR Chapter 11-54.
4. The proposed activity shall be conducted in compliance with the State Historic Preservation Division (SHPD) requirements resulting from the consultation under HRS Chapter 6E Historic Preservation / Section 106 National Historic Preservation Act that was initiated by the Corps of Engineers on August 27, 2021. This condition is necessary to ensure consistency with Hawaii CZM Program federally approved enforceable policy HRS Chapter 6E.

Mr. Jeffrey A. Herzog
December 21, 2021
Page 4

5. In response to the Maui Planning comments that “documentation that describes how hydrogeomorphic impacts of the revised project have been assessed, avoided, minimized, and mitigated if necessary should be clearly summarized and provided in appendices” and “revised sediment studies and hydrological models that reflect current conditions and assess the impacts of proposed improvements would provide enhanced support for this critical management consideration,” (County of Maui Planning Department letter September 13, 2021, page 12, paragraph 1), the Corps of Engineers stated (response to CZM Program received September 27, 2021):

“As the study moves into the design phase, the proposed design would be further refined and more detail regarding the design plan and specification would be developed. The Corps, in partnership with the County of Maui, will continue to engage the local sponsor and local stakeholders to ensure consideration and incorporation of local requirements and planning considerations. In the absence of this information at this planning stage, the Corps acknowledges that concurrence may be conditional, pending receipt of this requested information.”

As represented by the Corps of Engineers response above, when the proposed design is refined and details of the design plan are available, along with information on the hydrogeomorphic impacts, sediment studies, and hydrological models that reflect current conditions and assess the impacts of proposed improvements, the information shall be provided to the Hawaii CZM Program for review. If the final design is deemed by the CZM Program as significantly and/or substantially different from the proposed activity that was reviewed by this consistency review at the planning stage, then additional federal consistency review may be required in accordance with condition no. 1, above.

6. Future activities occurring within the Iao Stream (Wailuku River) FCP, whether new, modifications, or repairs, conducted by the Corps of Engineers and/or the County of Maui that are subject to CZMA federal consistency review, may be required by the Hawaii CZM Program to provide an analysis of the cumulative and/or additive effects to coastal resources and uses as information necessary to evaluate consistency with CZM enforceable policies. This condition is necessary to ensure consistency with Hawaii CZM Program federally approved enforceable policy HRS Chapter 205A Coastal Zone Management.

If the requirements for conditional concurrences specified in 15 CFR § 930.4(a), (1) through (3), are not met, then all parties shall treat this conditional concurrence letter as an objection pursuant to 15 CFR Part 930, subpart C. The U.S. Army Corps of Engineers, Honolulu District shall notify the Hawaii CZM Program if the conditions are not acceptable in accordance with 15 CFR § 930.4(a)(2).

This CZM consistency conditional concurrence does not represent an endorsement of the proposed activity, nor does it convey approval with any regulations administered by any state or county agency. Thank you for your cooperation in complying with the Hawaii CZM Program.

Mr. Jeffrey A. Herzog
December 21, 2021
Page 5

If you have any questions, please contact John Nakagawa of our CZM Program at john.d.nakagawa@hawaii.gov or (808) 587-2878.

Sincerely,



Mary Alice Evans
Director

cc: Darryl Lum, DOH Clean Water Branch (by email)
State Historic Preservation Division (by email)
DLNR, Division of Aquatic Resources (by email)
Commission on Water Resource Management (by email)
Erin Derrington, County of Maui Planning Department (by email)
County of Maui, Department of Public Works (by email)



DAVID Y. IGE
GOVERNOR OF
HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
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SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND CRAFT REGISTRATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCES MANAGEMENT
CONSERVATION AND COASTAL ZONES
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KARUKAWA ISLAND RESERVE COMMISSION
LAND
STATE PARKS

March 31, 2021

Rowena Dagdag-Andaya, Director
County of Maui
Department of Public Works (DPW)
200 S. High St.
Kalana O Maui Bldg., 4th Fl
Wailuku, HI 96793
c/o Kristi Ono
Kristi.Ono@co.maui.hi.us

IN REPLY REFER TO:
Project No.: 2021PR00247
Submission No: 2021PR00247.002
Doc. No.: 2103IK10
Archaeology

Dear Rowena Dagdag-Andaya:

SUBJECT: Chapter 6E-8 Historic Preservation Review –
County of Maui DPW Job No. 18-36
‘Īao Stream Levee 27 Repair Project
Literature Review and Field Inspection Report
Wailuku Ahupua‘a, Pū‘ali Komohana District, Island of Maui
TMK: (2) 3-4-020-048, 075 por., 888 por.; and (2) 3-4-032-001 por.

This letter provides the State Historic Preservation Division’s (SHPD’s) review of the County of Maui Department of Public Works (DPW) ‘Īao Stream Levee 27 Repair Project, DPW Job No. 18-36. SHPD received the submittal on March 1, 2021, including a County of Maui DPW cover letter, construction plans, and project location maps. Additionally, SHPD reviewed an archaeological literature review and field inspection report titled *Archaeological Literature Review and Field Inspection Report for the Iao Stream Levee 27 Repair Project, Wailuku Ahupua‘a, Wailuku District, Maui Island* TMKs: [2] 3-4-020-048, 075, 888 por. & [2] 3-4-032-001 por. (Rapoza et al., February 2021). Subsequently, SHPD requested a letter from the County of Maui requesting concurrence with an HRS 6E-8 project effect determination and additional information on March 11, 2021. SHPD received the County’s letter requesting SHPD’s with a determination of “No historic properties affected” for the proposed project on March 31, 2021 (Submission No. 2021PR00247.002).

The DPW proposes to repair a portion of the southeast bank of Wailuku River (‘Īao Stream). The project area comprises 1.39 acres situated along the Wailuku River and downstream of the Imi Kala Bridge (SIHP Site 50-50-04-5564). The proposed repairs will include removing and replacing grouted riprap on the existing slope with dumped riprap placed at the slope’s base to protect against scour. Ground disturbances will extend 250 ft along the streambank to a maximum depth of 9 ft. According to the submittal, previous ground disturbances include repairs to the former stream bank due to the September 2016 Wailuku River flood event and consisted of boulder fill and concrete.

Cultural Surveys Hawaii, Inc. (CSH) produced an archaeological literature review and field inspection report (Rapoza et al., February 2021) for the subject project. The report provides a project background, description of the environmental setting, field and research methods, a detailed history of the area, previous archaeological studies, fieldwork results, and recommendations. CSH conducted a 100 percent pedestrian survey of the project area with transects spaced at 5-meter intervals. One previously documented historic property was briefly updated during the survey. The report indicates the Imi Kala Bridge (SIHP Site 50-50-04-5564) was initially recorded during an

Rowena Dagdag-Andaya
3/31/21
Page 2

archaeological inventory survey for the proposed Imi Kala Street and Neki Place extension routes (Tome and Dega 2004). The bridge was assessed significant under Criterion "d" (have yielded, or is likely to yield, information important for research on prehistory or history), and no further work was recommended. Additionally, the survey identified two corrugated metal culverts, and two poured concrete walls to mitigate flooding and stream bank erosion along the southern bank of the Wailuku River. These features are located outside of the project area and interpreted as modern (less than 50 years old). According to the report, the Imi Kala Bridge will not be impacted by the proposed project. CSH recommended consultation with the SHPD to determine historic preservation requirements for the proposed project and consultation with the SHPD Architecture Branch if impacts are anticipated to the Imi Kala Bridge.

In a letter dated September 21, 2004 (Log No. 2004.2798, Doc. No. 0409MK08), SHPD concurred with the significance assessment for the Imi Kala Bridge. Additionally, SHPD indicated the bridge was adequately documented. However, please note that should a future project involve impacts to the Imi Kala Bridge, SHPD may request re-assessment of the integrity and site significance of the bridge by a SOI qualified architectural historian, historian, or historical architect.

In a letter dated March 24, 2021 (Submission No. 2021PR00247.002), DPW indicated the proposed project would not impact the Imi Kala Bridge (SIHP Site 50-50-04-5564). The DPW made an HRS 6E-8 project effect determination of "No historic properties affected" for the 'Īao Stream Levee 27 Repair Project.

Based on the information above, SHPD concurs with the DPW's project effect determination of "No historic properties affected" for the current County of Maui project. Pursuant to HAR §13-284-7(e), when the SHPD agrees that the action will not affect any significant historic properties. This is the SHPD's written concurrence and notification that the HRS 6E historic preservation review process is complete. The permit issuance process may proceed.

Additionally, SHPD requests interim protection measures be implemented prior the start of construction. Please install temporary orange construction fencing around portions of the Imi Kala Bridge that will be situated near construction activities.

Although LRFI report does not fulfill the requirements of an archaeological inventory survey as specified in HAR §13-276-5, it serves to facilitate project planning and supports the historic preservation review process. Please provide two hardcopies and one text-searchable pdf copy of the LRFI report, clearly marked Final, along with a copy of this letter, to the SHPD Kapolei office, attention Library. Additionally, provide a text-searchable pdf copy, clearly marked Final, to HICRIS Project 2021PR00247 using the project supplement option, and a pdf copy to Lehua.K.Souares@hawaii.gov.

Please attach to the permit: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, native sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 652-1510.

Please contact 'Iolani Kauhane, Maui Archaeologist III, at iolani.kauhane@hawaii.gov for any matters regarding archaeological resources or this letter.

Aloha,
Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

FINAL Avoidance and Minimization Measures (AMMs)
Final revised Feb 2022

ESA Listed Species

Endangered Hawaiian waterbirds (Hawaiian stilt, *Himantopus mexicanus knudseni*; Hawaiian coot, *Fulica alai*; Hawaiian duck, *Anas wyvilliana*): Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, kalo or taro (*Colocasia esculenta*) lo'i or patches, irrigation ditches, sewage treatment ponds, and in the case of the Hawaiian duck, montane streams and marshlands. Hawaiian stilts may also be found wherever ephemeral or persistent standing water may occur. Threats to these species include non-native predators, habitat loss, and habitat degradation. Hawaiian ducks are also subject to threats from hybridization with introduced mallards.

Based on the project details provided, your project may result in the creation of standing water or open water that could attract Hawaiian waterbirds to the project site. In particular, the Hawaiian stilt is known to nest in sub-optimal locations (e.g., any ponding water), if water is present. Hawaiian waterbirds attracted to sub-optimal habitat may suffer adverse impacts, such as predation and reduced reproductive success, and thus the project may create an attractive nuisance. Therefore, we recommend you work with our office during project planning so that we may assist you in developing measures to avoid impacts to listed species (e.g., fencing, vegetation control, predator management).

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

- In areas where waterbirds are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.
- If water resources are located within or adjacent to the project site, incorporate applicable best management practices regarding work in aquatic environments into the project design (see enclosure).
- Have a biological monitor that is familiar with the species' biology conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. Repeat surveys again within 3 days of project initiation and after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest). If a nest or active brood is found:
 - Contact the Service within 48 hours for further guidance.
 - Establish and maintain a 100-foot buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.
 - Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

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

The U.S. Fish and Wildlife Service (USFWS) 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 USFWS, other federal, state or local agencies. If you have questions concerning these BMPs, please contact the USFWS Aquatic Ecosystems Conservation Program at 808-792-9400.

1. 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.
2. 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 <https://www.fws.gov/policy/A1750fw1.html>) 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.
7. 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 non-invasive 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.

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.