

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources  
Honolulu, Hawaii 96813

April 22, 2022

Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

**REQUEST FOR APPROVAL OF DECLARATION OF EXEMPTION FOR THE  
PROJECT AGREEMENT “HONOULIULI STREAM INVASIVE MANGROVE  
REMOVAL PROJECT – PHASE 2” UNDER HRS CHAPTER 343 AND HAR CHAPTER  
11-200.1.**

Submitted for your consideration and approval is a requested Declaration of Exemption for Actions under the Division of Aquatic Resources project agreement, “Honouliuli Stream Invasive Mangrove Removal Project – Phase 2,” which was awarded to the state for the grant agreement period February 2021 – February 2024 under the US Fish and Wildlife Service National Coastal Wetland Conservation Grant program. This includes the restoration of 21 acres of wetland habitat in West Loch Pearl Harbor through removal of mangrove and other invasive non-native vegetation and replanting the restoration area with erosion controlling native species.

Mangroves in Hawai'i are a highly invasive alien species that contribute to decreased water quality by restricting flow, crowding out native species, and increasing the amounts of organic matter within the water. These added organic inputs have led to detrital accumulations that absorb oxygen from the water causing anoxic conditions resulting in poor fish survival and the production of obnoxious odors. The massive growth of aerial prop roots into the waterway reduces flow rates, thereby increasing the risk of flooding during significant rainfall events. Other negative ecosystem impacts include water stagnation, soil sedimentation, anoxia, hypersalinization, and algal blooms.

Mangroves also exclude native terrestrial coastal vegetation and makes shorelines or stream banks inaccessible because of their vast network of branches and prop roots. They destroy nesting habitats for all four endemic shorebirds, such as the ae' o (Hawaiian stilt) and 'alae 'ula (Hawaiian moorhen) and excludes them from their natural habitat.

DAR and its partners will be removing and disposing of mangrove and other non-native species from the stream mouth where it enters West Loch Pearl Harbor. Cleared areas will be replanted with native vegetation. Engaging the local community through the nonprofit partner Hui O Ho‘ohonua (HOH808) will ensure the long-term maintenance and sustainability of the restoration effort.

The project site will include:

- Six (6) acres of estuarine coastal wetland habitat along West Loch Pearl Harbor shoreline

and adjacent to Pearl Harbor National Wildlife Refuge

- Fifteen (15) acres of freshwater emergent wetland pond habitat along Honouliuli Stream.

### **Chapter 343 - Compliance with Environmental Law:**

After reviewing §11-200.1-15, HAR, including the criteria used to determine significance under §11-200.1-13, HAR, DLNR has concluded that the activities under this agreement would have minimal or no significant effect on the environment and that issuance of the agreement is categorically exempt from the requirement to prepare an environmental assessment. See Agency's Determination of Exemption (attached) from preparation of an environmental assessment.

### **RECOMMENDATION:**

Based on the attached proposed declaration of exemption prepared by the Department after consultation with and advice of those having jurisdiction and expertise for the proposed actions under the grant agreement:

1. That the Board declare that the actions which are anticipated to be undertaken under this agreement will have little or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.
2. Upon consideration of the agreement to be approved by the Board of Land and Natural Resources, that the Board determine the potential effects of the above listed project as provided by Chapter 343, HRS, and Chapter 11-200.1, HAR, to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.

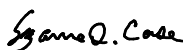
Respectfully submitted,



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Brian J. Neilson, Administrator  
Division of Aquatic Resources

APPROVED FOR SUBMITTAL



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Suzanne D. Case, Chairperson  
Board of Land and Natural Resources

Attachments:

- 1) Appendix A – Grant Agreement & Project Maps and Photos
- 2) Appendix B - Phase 1 EA Exemption Request
- 3) Appendix C – Permits
- 4) Declaration of Exemption (“DE”) from the Preparation of an Environmental Assessment under the Authority of Chapter 343, HRS & Chapter 11-200.1 HAR

## West Loch Pearl Harbor Honouliuli Stream Wetland Restoration NCWCG Proposal

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## Project Statement

Honouliuli Stream empties into the West Loch section of Pearl Harbor, the largest estuary in the state of Hawai'i on the island of O'ahu that contains important estuarine and wetland habitat for endemic and indigenous birds, fish and invertebrates. The stream originates in the Honouliuli watershed, draining an area of about 11.5 square miles of the 'Ewa Plain and Wai'anae Mountains in central O'ahu. The perennial stream's channel and mouth in its lower reaches have been significantly impacted by over 60 years of unimpeded growth from invasive vegetation, especially mangrove, changing the hydrology and ecological function of this important wetland. The negative impacts of invasive mangrove can be lessened by clearing the debris and invasive vegetation, replanting native vegetation, and educating the community to encourage local stewardship. This project is part of a larger vision, already underway, to restore ecological function and habitat for native aquatic and terrestrial wildlife within all of West Loch, Pearl Harbor and Honouliuli watershed that is supported by numerous community, non-profit and government partners.

## Project Need

Historically, all of Pearl Harbor (Pu'uloa) shoreline was a healthy wetland area with extensive open mudflats and areas dominated by low-lying sedges and salt-tolerant plants that supported abundant aquatic and terrestrial wildlife. Invasive mangrove introduced to Hawaii from Florida in 1902 to reduce erosion from agriculture has since displaced most indigenous vegetation and created poor habitat for native fish and wildlife and has exacerbated flood damage during high stream flow events.

In Hawai'i, development and invasive species have degraded many estuarine habitats, including sedge marshes. Sedges form open structures that allow water to flow through and serve as nursery grounds for native juvenile fish. Hawaiian sedge marshes have been losing ground; their habitats altered for coastal development or invaded by introduced species, such as red mangrove (*Rhizophora mangle*) and California grass (*Urochloa mutica*). It is imperative to restore these sedge marshes and wetland habitats to ensure that they are able to provide habitat for aquatic species and endangered Hawaiian birds, mitigate flooding impacts to coastal developments, and improve water quality for all of Pearl Harbor. Worldwide, wetlands have been disappearing three times faster than forests, especially in islands such as Oahu where sea level rise and other long term effects of climate change are predicted to exacerbate the effects of those losses

## Objectives

The overall goal of this project is to restore a total of 21 acres of wetland habitat along West Loch Pearl Harbor.

Objectives and actions for this project are listed below:

1. Restore 6 acres of estuarine coastal wetland habitat along West Loch Pearl Harbor shoreline and adjacent to Pearl Harbor National Wildlife Refuge.
2. Restore 15 acres of freshwater emergent wetland pond habitat along Honouliuli Stream.
3. Collaborate with partners to develop adaptive management plans, including predator control, that will guide the long term management and maintenance for the 21 acres of restored wetland habitat.
4. Develop strategies to engage the community in every phase of restoration, monitoring and long-term, responsible stewardship of restored areas.

*Actions to meet objective 1:*

- Remove 6 acres of invasive mangrove and nonnative vegetation (1.5 acres by hand and 4.5 acres by heavy equipment)
- Treat removal areas to prevent regrowth through nonchemical methods
- Plant 4 acres of wetland native Hawaiian sedges, groundcover, trees
- Collaborate with the USFWS Oahu NWR Team Leader and to obtain native plant seeds and cuttings from the Honouliuli Unit of the complex for propagation (and out-planting) of native wetlands plants in the project area .
- Collaborate with the Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife Wetlands Coordinator to obtain seeds and cuttings from the Pouhala Marsh Wildlife Refuge also located in West Loch, Pearl Harbor.
- Remove regrowth of invasive mangrove and maintain native plantings
- Monitor wildlife, including aquatic species, habitat and waterbirds, to document ecological success of the project
- Monitor water quality and hydrology to assess changes in water flow due to restoration efforts

*Actions to meet objective 2:*

- Remove 15 acres of invasive mangrove and nonnative vegetation (3.75 acres by hand and 11.25 acres by heavy equipment)
- Plant approx. 8 acres of wetland native Hawaiian sedges, groundcover, trees along stream and pond banks and margins.
- Remove regrowth of invasive mangrove and maintenance of native plantings
- Wildlife monitoring (aquatic species/habitat surveys and periodic waterbird surveys)
- Water quality and hydrologic monitoring
- Engage with partnering NGOs and the island-chain wide Hawaiian cultural fishpond managing group to learn best methods and inspire new projects in line with the vision for restoration of West Loch and Pearl Harbor as a whole

*Actions to meet objective 3:*

- Expand the West Loch Strategic Partnership for collaborative restoration, maintenance and community outreach throughout the region by adding 2 additional conservation oriented land managers working with the Pu`uloa region.

*Actions to meet objective 4:*

- Development of a citizen science monitoring program, engaging 30 participants, to add to the datasets describing wildlife in addition to data collected by the project partner non-profit restoration field tech. Monitoring includes periodic surveys of selected waterbird, aquatic biota, and predator species.
- Expand the pilot of the community-engaged adopt-a-plot program already in place in adjacent areas, engaging 20 groups or individuals.
- Engage 3 additional schools in the the native plant propagation, acclimation, out-planting and out-planting survival monitoring programs (already existing to restore adjacent wetlands).
- Increase participation by 50 individuals in on-going place-based outreach and education programs that engage and educate the community in wetland conservation, incorporating the Honouliuli Unit of the FWS NWR via the externally placed Betty Bliss Nagamine Overlook.

## Expected Results

This project will result in:

- 6 acres of restored coastal estuarine wetlands.
- 15 acres of restored wetland pond estuarine habitat for endangered birds and aquatic biota.
- Improved water quality
- Increased community engagement and stewardship
- Increased protection for the adjacent Pearl Harbor National Wildlife Refuge

### *Aquatic Biota*

The restoration of shoreline and estuarine pond wetland habitat will benefit native aquatic biota by increasing habitat and connectivity, reducing anoxic conditions created by invasive mangrove, and increasing water circulation and mixing, an important process in estuary production.

Native juvenile fishes and invertebrates will benefit from the restoration because of two key factors. Increased productivity in estuaries yields food resources that are essential for rapidly growing juveniles. Secondly, the increased habitat and connectivity will increase interactions of seawater, freshwater and land which provides critical refuges for native fish from predation.

### *Terrestrial Wildlife*

Removal of invasive mangrove and restoring project areas with native plants is expected to enhance the habitat for waterbirds and migratory shorebirds. Many of these birds are found only in Hawaii, and on particular islands. The waterbirds known to occasionally utilize the Honouliuli stream estuarine habitat for feeding and loafing include four endangered waterbirds: Hawaiian gallinule (*Gallinula chloropus sandvicensis*), Hawaiian duck (*Anas wyvilliana*), Hawaiian coot (*Fulica alai*), and the Hawaiian stilt (*Himantopus mexicanus knudseni*).

We also expect the restoration of the wetlands will increase invertebrate productivity such as aquatic insects which are important food resources for native waterbirds. As the proposed site is adjacent to the Pearl Harbor National Wildlife Refuge and is part of the same watershed and threatened and endangered species are known to be in the area, we expect the endemic waterbirds, migratory birds, and shorebirds to greatly benefit from the project's habitat expansion.

## Approach

### **a. The organization that will act as a sub recipient and their role in meeting the project objectives**

Sub recipient: Hui o Ho`ohonua (HOH808) 501(c)

Role: Project Management including hiring and oversight of contractors; coordination and oversight of volunteers; and long- term maintenance and monitoring of completed project.

Hui o Ho`ohonua 501(c)3 (Sometimes referred to as HOH808), was formed in 2015 with the primary mission of restoring Pearl Harbor to abundance through the Mālama Pu`uloa Program. this organization has engaged 4500 community members directly in area restoration work in the last 2.5 years. This engagement includes collaboration with multiple area schools, education and non-profit partners (scouts, groups focusing on marine debris, military volunteer groups, Hawaiian hale (home) builders and local residents).

Community volunteers are engaged through a minimum 10-20 community work days per year with introductory activities that emphasize the natural and cultural significance of the area and the ecosystem services that it provides. In 2017 Hui o Ho`ohounua 501(c)3 worked with the Honolulu City and County Department of Parks to officially adopted Kapapahu Point Park and has since utilized it as their primary volunteer and education site. As a part of the agreement with the city and county, the non-profit carries a significant liability insurance policy, has developed COVID-responsive outdoor safety protocols and an extensive safety plan.

Of vital importance to the effectiveness of Hui o Ho`ohounua is both development of, and participation in, conservation, community engagement and education networks focused on the restoration in and around Pearl Harbor. These networks increase the capacity of community-based restoration and maintenance and have enabled the organization to develop best practices in all areas of the Mālama Pu`uloa Program.

**b. What organization will hold title to the real property being acquired or restored;**

The property being restored is owned by the City & County of Honolulu on Oahu. HOH808 currently has a working agreement with the City & County of Honolulu to remove invasive mangrove and vegetation and replant native vegetation within the project area. The City & County of Honolulu is supportive of the work being proposed as documented by the letter of support included in the attachments.

**c. How will long-term management (20 years or longer) of acquired or restored lands be accomplished;**

The legislated annual observance of Mālama Pu`uloa, the community adopt a plot program, the embedded nature of the organization's education programs, and the developing network of cooperating partners will help ensure long-term, effective area management for the long-term.

In Hawaii, it has been shown that community volunteers and education programs that are well integrated in schools, can successfully fill this role and play an enormous contribution towards successful long-term restoration, especially in the maintenance of restored shoreline habitat.

Hui o Ho`ohounua has worked with the Hawaii State Legislature to pass a House Concurrent Resolution (HCR214) in 2018 that recognizes a 30-day period each fall as Mālama Pu`uloa (Care for Pearl Harbor) Month. Beginning in the fall of 2020, there is a large community engagement and education event planned to mark the occasion.

In cooperation with key City Council Members, Hui o Ho`ohounua has worked with the Honolulu City and County to formally adopt Kapapahu Point Park in West Loch. The development of a formalized relationship between the project area land manager (Honolulu City and County) has been a key strategy leading to effective collaboration in restoration projects along several estuarine and shoreline sites within the park boundary.

The proposed project is one of several developing plans in West Loch, Pearl Harbor including the acquisition of additional, adjacent lands (notably the West Loch Golf Course) for conservation. The West Loch Strategic Partnership is working to increase the shared capacity for implementing conservation expansion to encompass the entire shoreline of West Loch.

**d. What type of ownership interest is involved, e.g., fee-simple, easement, combination, etc., and the related acres;**

The property is owned by the City & County of Honolulu and is protected from development by County and State through layers of conservation including County zoning designation of Preservation. The shoreline is within a Special Management Area (SMA), which the State of Hawaii is mandated to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawaii.

**e. What organization (or individual) will manage the real property interest;**

**f. What will be involved in the restoration?**

We will be removing non-native mangrove by hand and with heavy machinery, with care taken to protect the environment wherever possible.

An estimated 5.25 acres of the non-native mangrove and vegetation will be removed by hand (hand saws, hand tools, and chainsaws) by HOH808 staff and volunteers. All mangrove branches, stumps, seedlings, propagules, other non-native shrubs and vegetation growing in the identified areas shall be cut, removed and disposed of off-site to approved locations. All cut vegetation trimmings, and debris shall be collected, removed, and disposed of in such a manner as to minimize disturbance to the stream and in accordance with applicable Federal, State and County laws. Extra care will be taken to ensure that no debris will enter the stream or navigable waters. Trimmings and debris that fall into the stream shall be collected daily. All staging areas shall be cleared of debris, rubbish, and branches at the end of each workday. No trimmings and debris shall be left unattended at the work site. All trimmings and debris, including trees and stumps, branches, roots, and leaves and any other excavated and demolished material shall be hauled away from the jobsite as work progresses daily and be legally disposed of to an approved disposal site.

Approximately 15.75 acres of mangroves will be removed by tracked excavators and dump or haul trucks. One excavator will be equipped with a 60 foot long reach boom and a cutter/masticator attachment with a thumb. This allows maximum reach while minimizing the need for an excavator to travel or operate on wet, saturated, or unsteady ground. A second excavator will be equipped with a grabber attachment and extract mangroves during mid to low tides or when ground is not inundated with water. Heavy equipment access will be on an existing dirt access road. Fueling and staging areas for heavy equipment will be located in the parking lot of the Kapapahu Point City Park, which is located above and outside the Mean Higher High Water mark and zone susceptible to flooding.

The predator control methods detailed in this proposal were developed in consultation with the Wetlands Coordinator of the Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW), who manages the nearby, unfenced Pouhala Marsh Wildlife Sanctuary. 10-15 live traps per acre will be set on a weekly basis within the project area as they are cleared. Traps will be checked within 24 hours of their deployment and predators (rats, cats and mongoose) will be transported via truck to an undeveloped, non-wetland area 15 miles away. This work will be conducted by the full time Restoration Field Technician employed by the proposal subrecipient Hui o Ho`ohonua (HOH808).

HOH808 is responsible for training the Restoration Field Technician in effective trap deployment, retrieval and handling with the cooperation of project consultants, Lindsay Young and Dr. Kim Falinski as well as advising members of the West Loch Strategic Partnership that includes HOHO808 as well as conservation professionals from DOFAW and the USFWS.

### **g. Is the project ready to implement?**

The project design, cost estimate, and majority of permitting is completed. Additional permit needs pertain to addition of similar land areas to previously approved permit areas. If funds are procured, work is expected to begin on schedule starting fall/winter 2021.

### **Project Location**

The project is located on land owned by the City & County of Honolulu within portions of TMKs (1) 9-1-017: 014; and (1) 9-1-017:006 (Latitude: 21.36230833 Longitude: 158.02250000). Upstream of the main mangrove stand Honouliuli stream runs through the West Loch Golf Course, a City & County operated and maintained golf course. Non-native vegetation removal in the project is bounded to the stream channel running through Honouliuli Golf Course and mangrove area surrounding the stream confluence with West Loch Pearl Harbor.

### **Timeline**

The table below outlines significant milestones in completing the project, accomplishments to date, and project implementation.

<b>Timeline</b>	<b>Description</b>
<b>Milestones</b>	
2015	Formation of Hui o Ho`ohonua 501c3 (HOH808)
2016	Hui o Ho`ohonua 501c3 develops community engagement in monthly work days in partnership with Hawaii DOFAW to contribute to Pouhala Marsh Wildlife Sanctuary restoration goals
2017	Hui o Ho`ohonua 501c3 develops community engagement in monthly work days in partnership with the Honolulu City and County Adopt-a-Park Program at Kapapahu Point Park
2017-present	Community engaged invasive red mangrove, mangrove propagule and litter removal at Kapapahu Point Park
2018	Hawaii State Resolution passes for an annual observance of Mālama Pu`uloa (Care for Pearl Harbor) Month passes
2019 (January)	Hui o Ho`ohonua 501(c)3 begins school-engaged site-based learning, school-based native plant propagation program and volunteer restoration work programs at Kapapahu Point Park
2019 (May)	Honouliuli stream restoration contract awarded to HOH808 by DLNR-DAR
2019 (August)	Formation of the West Loch Strategic Partnership created by Hui o Ho`ohonua
2019 (Dec)	Hui o Ho`ohonua awarded \$10,000 from the Atherton Family Foundation
2020 (April)	Notice of award for the Fish Habitat Partnership Grant (\$75,000) to HOH8088
2020 (May)	Notice of award for the `Ewa `Āina Education Grant from Kamehameha Schools with non-profit partner Mālama Learning Center (\$70,000) to Hui o Ho`ohonua
<b>Project Implementation</b>	
Month 6-12	Invasive mangrove removal using mechanical equipment
Months 1-24	Invasive mangrove removal using hand-tools

Months 1-24	Plant native estuarine/wetland vegetation
Months 1-24	Monitor site before, during, and after implementation to ensure achievement of targets and decisions are data driven. (pre-monitoring has already been done)
Month 25 - Year 20+	(Post project implementation and not part of this project) Apply and adjust long-term maintenance, monitoring, and management strategies with stakeholders and partners to ensure continued native ecosystem function.

### Regulatory Compliance

Permit/Determination Request	Agency	Timeline and Expected Determination
State Historic Preservation HRS 6E	State of Hawaii DLNR-SHPD	State of Hawaii SHPD 6E permit submitted for prior project in the adjacent areas to this proposed project. Though areas are different than under prior permit, proposed actions are the same.
Determination Request (CWA Sec. 404 and Sec. 10 Rivers and Harbors Act)	Army Corp of Engineers	Received No Permit Required on March 2020 for prior project in the area. Will request determination with additional areas proposed under this project.
SMA Determination Request	County of Honolulu	Expect activities to be exempt based on prior consultation for adjacent areas and similar actions proposed.
Stream Work Permit (SCAP)	State of Hawaii DLNR-CWRM	Consult the Commission staff and submit a Request for Determination. Expect concurrence with proposed project activities within 30 days based on similar prior projects.
Office of Conservation and Coastal Lands – Shoreline Permit	State of Hawaii DLNR-OCCL	Not required but will request review for record.

### Project Management

The project will be administered by DLNR-DAR. Sub-awardees will work collaboratively to coordinate, manage and implement restoration work. The University of Hawaii will provide staff (Restoration Specialists) to train and manage restoration actions. HOH808 will hire a full-time project manager with experience in local wetlands restoration project management experience as well as a trained restoration technician.

### Relationship to Other Projects and/or Other Federal Grants

The proposed project area is adjacent to HOH808's shoreline restoration project at Kapapahu Point Park, the DLNR Division of Aquatic Resources Honouliuli Stream Flood Mitigation project and the FWS Hawaii Fish Habitat Partnership project in the Honouliuli Watershed.

### Public Involvement and Interagency Coordination

HOH808 has engaged approximately 5000 community-school volunteers in the last two years in education and restoration work in West Loch, Pearl Harbor in cooperation with the Honolulu City and County Department of Parks and Recreation. They have developed an extensive network of partners, notably the West Loch Strategic Partnership with participants from the USFWS. Further explanation of interagency coordination is included in the Ranking Criteria, sections 3 and 10.

Figure 1. The proposed project area within the Honouliuli Watershed.





Figure 2. Map below delineates the proposed project area in relationship to other conservation projects in West Loch, Pearl Harbor

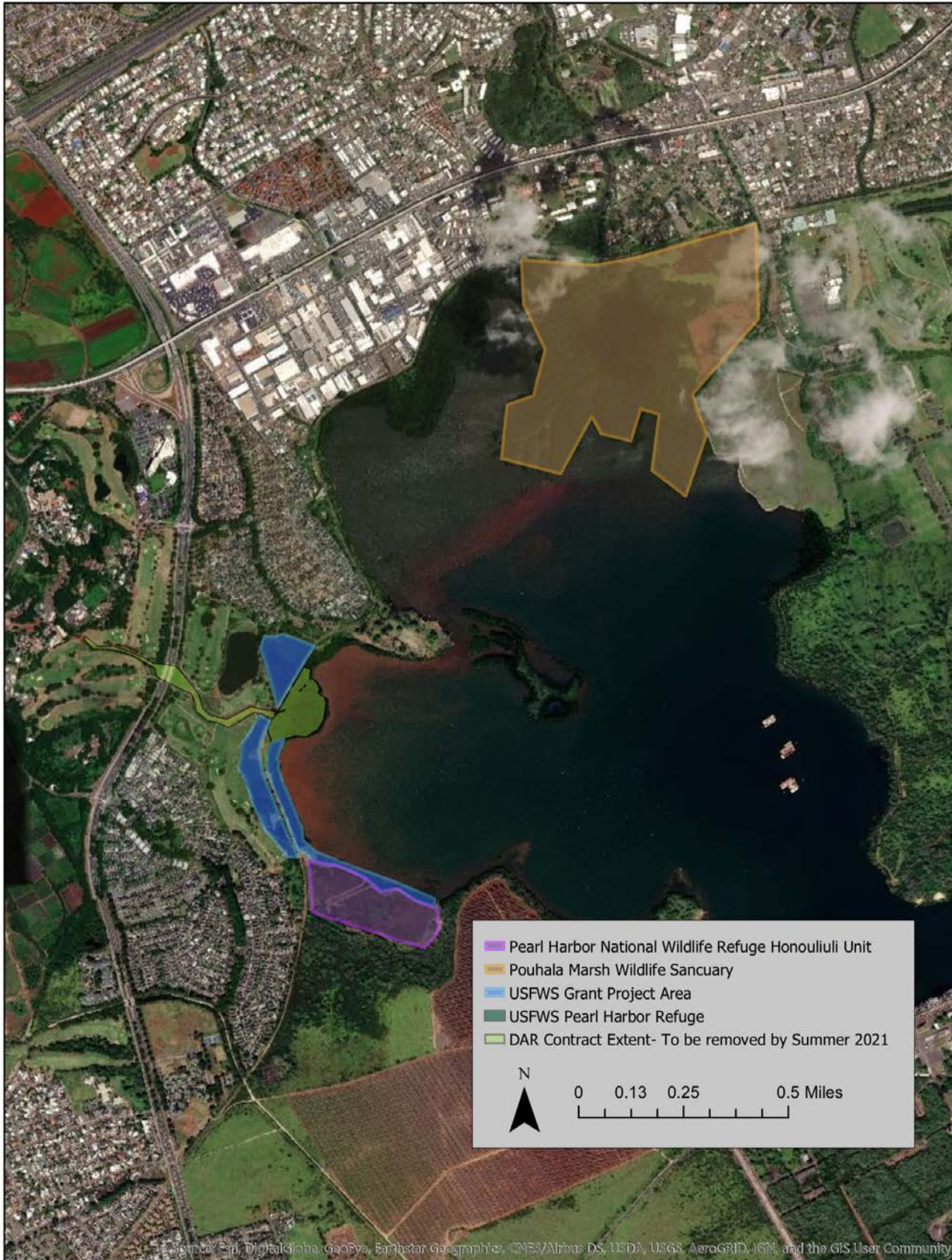
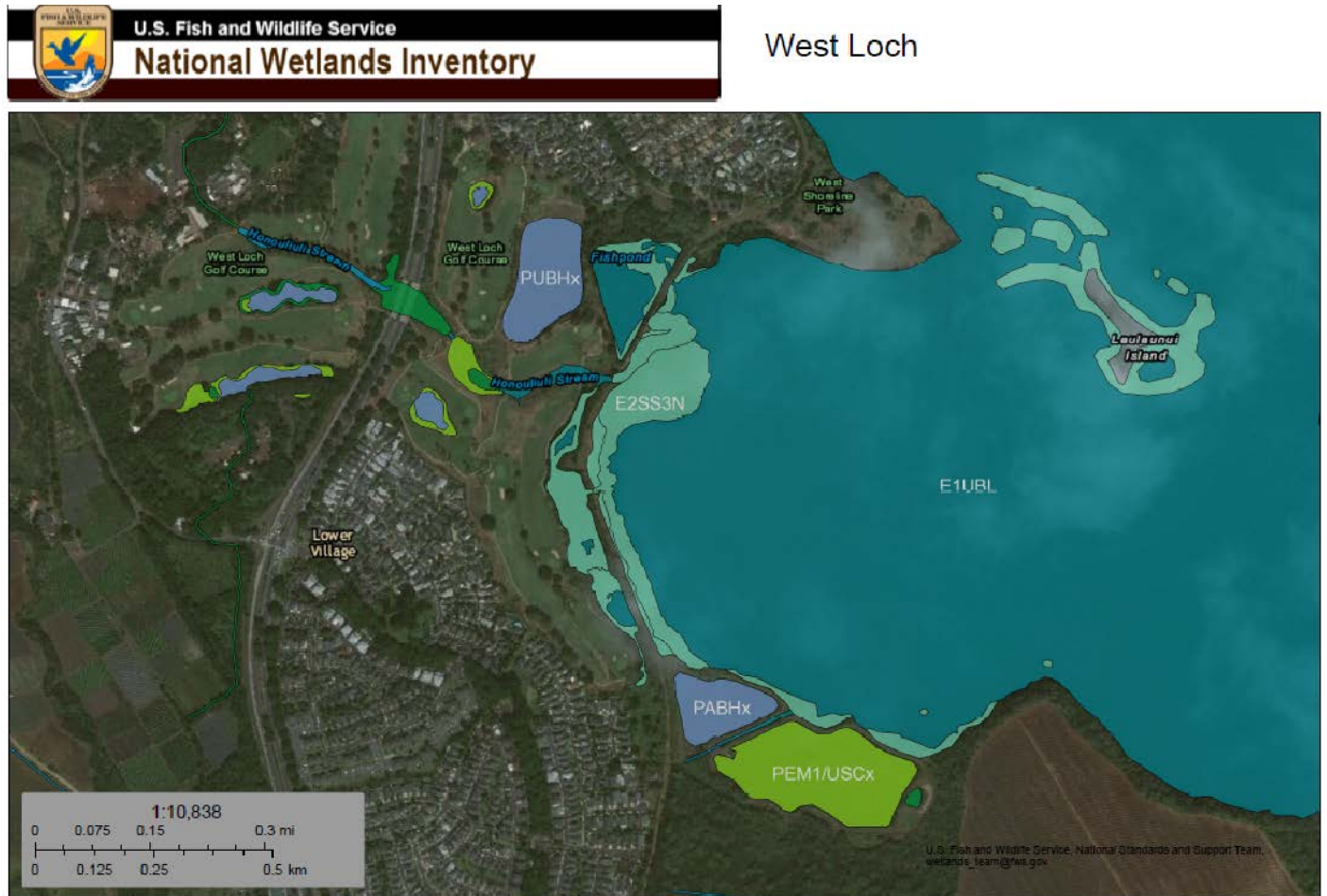




Figure 3. Proposed project area in relation to existing Hui o Ho`ohonua 501(c)3 Kapapahu Park shoreline restoration and the Hawaii Division of Aquatic Resources Honouliuli Stream Flood Mitigation project.











Figure 4. NWI map of wetland types in the project area.



April 30, 2020

**Wetlands**

- |  |   |   |
|--|---|---|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake  |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other |
|  Freshwater Pond                |  Riverine                          |   |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)  
This page was produced by the NWI mapper



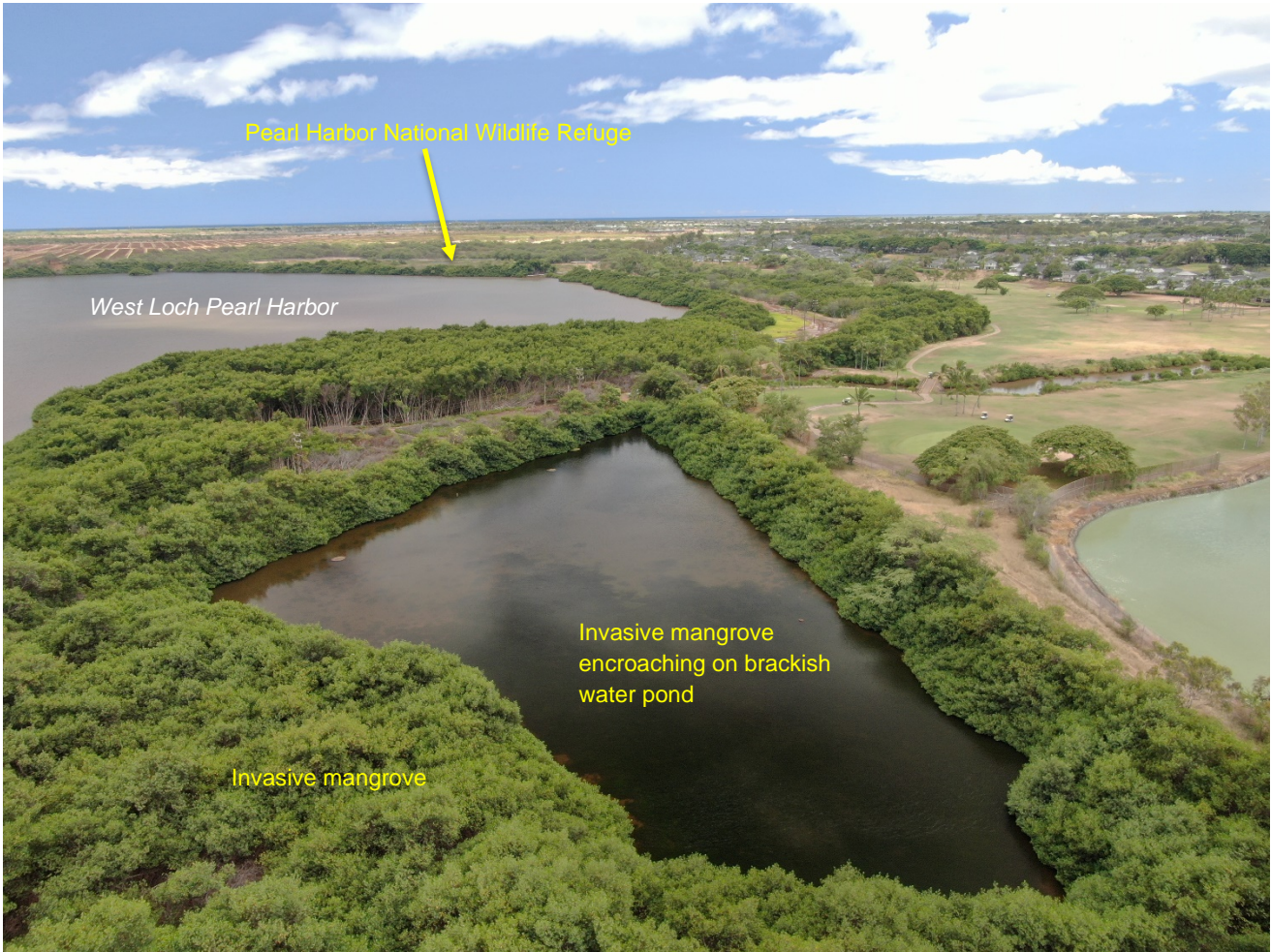
Figure 5. Based on the NOAA Sea Level Rise viewer, the proposed project area of wetland restoration will help mitigate the impacts of a 1-2 feet of projected sea level rise.



URL <https://coast.noaa.gov/slr/#/layer/slr>, April 20,2020



Figure 6. Aerial view of extent of invasive mangrove in project area. photo Bert Weeks 2020





## Community and School Volunteer Workforce Photos

1. Members of the Kapolei High School Ho`ala Leadership Academy with academy lead teacher and KUPU Environmental Education Intern (Hui o Ho`ohonua 501(c)3 Educational Leadership Program example).



2. Volunteers from the Hawaii Tech Academy Charter Public Charter School removing Red Mangrove propagules and preparing native vegetation outplanting areas. (Hui o Ho`ohonua 501(c)3 School involved restoration and maintenance initiative - the first school to formally join the adopt a plot pilot).



3. Typical volunteer group at Hui o Ho`ohonua 501(c)3 monthly community work day focused on removal of invasive Red Mangrove (trained military volunteers, area residents, partnering non-profits and school groups). 3 Images





4. Portion of West Loch shoreline, adjacent to proposed project, from which Hui o Ho`ohonua 501(c)3 has worked with community volunteer work force to remove Red Mangrove, maintain via removal of Red Mangrove propagules and phase one of outplanting of native groundcover species akulikuli *Sesuvium portulacastrum* propagated by local school students. 1 photo and 1 map.





**1. From PH\_Restoration\_Proj\_descr\_detail\_1\_21\_20.docx:**

Figure 1. Red polygon was the planned mangrove removal for 2019 – 2020, representing about 7 acres. This was Phase 1.



**2. From 2019-00197.20210920.email atch add areas for.pdf**

The gray filled polygon is the actual removal completed from the planned red polygon area in Phase 1. Due to the pandemic, the project was able to remove only a fraction of that initial 7-acre area, and is still underway. We expect to complete Phase 1 in 2022.

In Phase 2, which is the new expanded areas outlined in yellow, totaling 21 acres, this represents the addition to the project and this work is not currently underway, but planned for 2022 - 2023.





**3. From Encl 1\_2019-00197 plans.jpg**

This jpeg details the **Red Polygon** from the first image and breaks it down into three sub-polygons: 2.01 acres of stream channel and banks, 1.60 acres of the same, and 6.98 acres of former fish pond. This map also is a planning figure and was generated prior to removal. Note the northern strip in the red polygon is not in this map; that strip was added later and included under the Phase 1 permit.



Figure 1. Site map of Honouliuli stream lower reach and confluence. Initial planning of mangrove removal areas. Map: Anthony Olegario, ArcGIS.

Here are the three maps together, 1 (left, planned), 2 (center, current), and 3 (right, also planned).



April 26, 2019

TO: Division of Aquatic Resources File

THROUGH: Suzanne D. Case, Chairperson

FROM: Brian J. Neilson, Administrator  
Division of Aquatic Resources

SUBJECT: Declaration of Exemption from the Preparation of an Environmental Assessment under the Authority of Chapter 343, HRS, and Chapter 11-200, HAR, for a Request for Approval to Enter into a FY19 General Funded Project Agreement (\$40,500 State Operating Budget) Between the Board of Land and Natural Resources (BLNR) and Mālama Pūpūkea-Waimea for a Project Titled “Honouliuli Stream Invasive Mangrove Removal Project”.

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200, HAR:

Project Title: “Honouliuli Stream Invasive Mangrove Removal Project”

Request for Approval to Enter into a FY19 General Funded Project Agreement (\$40,500 State Operating Budget) Between the Board of Land and Natural Resources (BLNR) and Mālama Pūpūkea-Waimea for a Project Titled “Honouliuli Stream Invasive Mangrove Removal Project”

Project Description:

The Division of Aquatic Resources (DAR) is has selected a qualified bidder to remove and dispose of mangrove and other non-native vegetation from the waterways of Honouliuli Stream, through the West Loch Golf Course and the stream mouth where it enters West Loch Pearl Harbor.

Project site will include two (2) areas. Total length of the project site through the golf course is approximately 0.5 miles. The section makai side of West Loch Golf Course covers an area of

BLNR/ Honouliuli Stream Invasive Mangrove Removal  
FY19 General Funded Project Agreement  
April 26, 2019  
Page 2

approximately 3 acres, predominantly mangrove, covering what was formerly the stream channel and banks. (see Appendix A-Site Maps).

Mangroves and non-native vegetation located in and along the waterway shall be removed. The goal of the project is to completely remove mangrove and other non-native vegetation from the project area and to replant cleared areas with native vegetation.

### Background and Scope of Work

Mangroves in Hawai'i are a highly invasive alien species that contributes to decreased water quality by restricting flow, crowding out native species, and increasing the amounts of organic matter within the water. These added organic inputs have led to detrital accumulations that absorb oxygen from the water causing anoxic conditions resulting in poor fish survival and the production of obnoxious odor. The massive growth of aerial prop roots into the waterway reduces flow rates, thereby increasing the risk of flooding during significant rainfall events. Other negative ecosystem impacts include water stagnation, soil sedimentation, anoxia, hypersalinization, and algal blooms.

Mangroves also exclude native terrestrial coastal vegetation and makes shorelines or stream banks inaccessible because of their vast network of branches and prop roots. They destroy nesting habit for all four endemic shorebirds, such as the ae'o (Hawaiian stilt) and 'alae 'ula (Hawaiian moorhen) and excludes them from their natural habitat.

The DLNR-Division of Aquatic Resources (DAR) has selected a qualified bidder to execute a task approach to remove and dispose of mangrove and other non-native vegetation within the waterways of Honouliuli stream through the West Loch Golf Course and at the stream mouth where it enters West Loch Pearl Harbor.

The primary objectives of the project include the following:

### Scope of Work

The Contractor shall 1.) Cut the mangrove and non-native vegetation from the waterways along the banks in accordance with accepted horticultural practices; 2.) Remove the cut debris from the site without damaging native plants; 3.) Herbicides may be used on non-native invasive vegetation in Area 2 (see Site maps) but shall NOT be applied to mangroves (Area 1); and 4.) Dispose of the cut debris to an approved location or chipped and utilized onsite for revegetation medium.

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Contractor shall furnish and pay for all necessary labor, equipment, permits, tools, materials, supplies, appurtenances and/or any traffic permits or special duty police officers if necessary, to perform all operations in connection with the specified services.

A. Task 1: Initial Eradication – Cutting, Herbicide, and Removal

1. Red mangroves, *Rhizophora mangle*, are a highly invasive species that has taken over most of the aforementioned waterways. The total mangrove eradication area consists of approximately 3.0 acres with a removal of approximately 2640 linear feet of non-native vegetation removal along lower Honouliuli stream. An additional 4.0 acres of mangrove will be removed and stockpiled by USDA Forest Service. The eradication of re-growth/new growth and disposal of stockpiled mangrove material, totaling approximately 7.0 acres, will be covered under this contract in TASK 2 and 3 (see map; Exhibit 1).
  - Area 1 – 3.0 acres: Area 1 consists of the Honouliuli stream confluence with West Loch Pearl Harbor, starting from makai of the metal footbridge that crosses Honouliuli stream, extending along the old wall/berm for approximately 680 feet (to end of mangrove stand).
  - Area 2 – 2640 linear feet: Area 2 starts mauka of the metal footbridge, extending upstream along Honouliuli stream approximately 2640 feet ending at West Loch Golf Course property boundary with private property.
2. Contractor shall provide a Summary of Work completed to Division of Aquatic Resources after completion of each TASK. The Summary of Work shall include:
  - The acreage of mangrove/non-native species removed;
  - The distance of cleared vegetation;
  - The total weight (approximate) of vegetation removed;
  - No less than (40) “before and after” photos to demonstrate the improvements.
3. All mangrove branches, stumps, seedlings, propagules, other non-native shrubs and vegetation growing in the identified areas shall be cut, removed and disposed of off-site to approved locations. All cut vegetation trimmings, and debris shall be collected, removed, and disposed of in such a manner as to minimize disturbance to the stream and in accordance with applicable Federal, State and County laws.
4. All mangrove and non-native trees, shrubs and vegetation cuttings shall also include removal of all dead, insect infested, dry branches, and broken stubs. Weedy bushes and small trees shall also be removed upon the direction of the Officer-in-Charge (OIC) or an

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5. authorized representative of the Officer-in-Charge. The OIC shall work with the Contractor to coordinate activities.
6. The Contractor shall follow the usage guidelines on the label of the herbicide of choice and will ensure the chances the herbicide will disrupt the streams water flow is minimized.
7. The Contractor shall take extra care to ensure that no debris will enter navigable waters. Trimmings and debris that fall into the stream shall be collected daily. All staging areas shall be cleared of debris, rubbish, and branches at the end of each workday.
8. At the end of each work day, no trimmings and debris shall be left unattended at the work site unless otherwise authorized by the OIC or an authorized representative of the Officer-in-Charge. All trimmings and debris, including trees and stumps, branches, roots, and leaves and any other excavated and demolished material shall be hauled away from the jobsite as work progresses daily and be legally disposed of by the Contractor to an approved disposal site. Burning of trimmings and debris at the work site is prohibited and hauling of wet, dripping material over public streets will not be permitted.
9. The Contractor shall haul and dispose of cut vegetative matter, including tree stumps, branches, roots, and leaves material from the jobsite. All debris shall become the property of the Contractor and shall be hauled from the jobsite to an approved disposal site. There shall be no deviation from the above requirements pertaining to removal of trimmings and debris unless otherwise authorized by the OIC or an authorized representative of the Officer-in-Charge. All charges for hauling and disposing of debris shall be considered incidental and included in the price bid for the various items of work.
10. Subject to DARs approval, the Contractor shall select an herbicide that has been approved for use in and around aquatic environments and contains the active ingredient Triclopyr. The herbicide shall be mixed with an approved coloring additive to identify application areas. The selected herbicide shall be used in accordance with its label instructions in areas where vegetation cannot be cut below the present water levels on all exposed roots, stumps, and branches no less than 30 minutes after cutting. Herbicide shall NOT be applied to mangroves but only to vegetation as defined in C (3). Extreme care must be taken to ensure that the herbicide is contained within the application area. The Contractor must also place signs informing the public of the herbicide application and restrict access to the site for at least 1 hour after application is completed.
11. The Contractor shall be responsible to obtain tidal information and work done, in tidally influenced areas, by the Contractor shall be conducted in such a manner so as to minimize disturbance to the bottom and control turbidity.

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12. Special Equipment: Contractor may utilize a chipper and/or shredder and trucks to carry out the trimming and removal work.

B. Task 2 – Eradication of Re-growth/New Growths and Trimming of Cut Vegetation

1. Contractor shall provide a Summary of Work completed to DAR after completion of each Task. The Summary of Work shall include:
  - the acreage of mangrove/non-native species removed;
  - the distance of cleared vegetation;
  - the total weight of the vegetation removed;
  - no less than forty (40) "before and after" photos to demonstrate the improvements (minimum 20 'before' photos and 20 'after' photos).
2. The Contractor shall re-visit the areas of the initial eradication a minimum monthly frequency (with a total of at least 12 re-visits) to address mangrove and non-native vegetation re-growth/new growths, seedlings, and propagules and other invasive species, unless otherwise authorized by the OIC or an authorized representative of the Officer-in-Charge.
3. The Contractor shall execute steps C.(1)-C.(12) to cut and dispose mangroves and non-native vegetation re-growth/new growth. Instead of 3 inches as done in TASK 1, any re-growth or new growths should be cut as close to flush with the ground as possible or below the lowest occurring water level at each site. Herbicide shall be applied to cut non-native vegetation only and NOT to cut mangrove.
4. The Contractor shall then trim the mangroves and non-native vegetation initially eradicated in TASK 1 to be cut as close to flush with the ground as possible or below the lowest occurring water level at each site. The Contractor shall remove all propagules by hand and dispose off-site.
5. DAR reserves the right to request for the Contractor to initiate Task 2 at any time during or after TASK 1 should the rate of re-growth and new growth exceed expectations.

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6. The OIC or authorized representative reserves the right to make changes to any aspect of this Task.

C. Task 3 – Revegetation/Replanting, Community Engagement/Education

1. The Contractor will cut or grub the vegetation and thatch layer formed from living and dead vegetation from invasive non-native vegetation removed in TASK 1 and 2.
2. The Contractor may use a tiller or hand tools to break up soil to expose and remove the invasive vegetation seed bank and to aerate the soil.
3. The Contractor shall re-establish native plants appropriate to the ecological zones (wetland, open water areas, mud-flats, stream banks, upland areas). The list below provides a plant list of recommended native plants to be used.

Approved Native Plant and Shrub List

Bacopa	<i>Bacopa monnieri</i>
Nehe	<i>Bidens pilosa</i>
Kaluha	<i>Bolboschoenus maritimus</i>
‘Uki	<i>Cladium jamaicense</i>
‘Ahu’awa	<i>Cyperus javanicus</i>
Makaloa	<i>Cyperus laevigatus</i>
Kohehohe	<i>Eleocharis obtuse</i>
‘Akiohala	<i>Hibiscus furcellatus</i>
‘Ihi’ihi	<i>Marsilea villosa</i>
Pycreus	<i>Pycreus polystachyos</i>
Bulrush	<i>Schoenoplectus spp.</i>
Neki	<i>Schoenoplectus lacustris</i>
‘Aka’akai	<i>Schoenoplectus spp.</i>
‘Akulikuli	<i>Sesuvium portulacastrum</i>
pa`u o Hi`iaka	<i>Jacquemontia sandwicensis</i>
Hala	<i>Pandanus tectorius</i>
‘Lima	<i>Sida fallax</i>
Ahuawa	<i>Mariscus javanicus</i>
Ma’o	<i>Gossypium tomentosum</i>
Pouhinahina	<i>Vitex rotundifolia</i>
A’ali’I	<i>Dodonaea viscosa</i>
Naupaka	<i>Scaevola taccada</i>
‘Āhewahewa	<i>Chenopodium oahuense</i>



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4. Re-established plants will be flagged for identification to prevent accidental application of herbicide and to facilitate monitoring to support re-establishment and minimized reoccurrence of invasive plants.
5. Non-native vegetation removed, grubbed, or mowed will either be left on the site to decompose or temporarily stored in established staging areas.
6. Completion of work under this phase may utilize volunteers through community or school work/educational events.
7. The OIC or authorized representative reserves the right to make changes to any aspect of the planting and revegetation plan.

D. Summary of Work

1. Contractor shall provide a Summary of Work completed to DAR after completion of each TASK. The Summary of Work shall include:
  - the acreage of mangrove/non-native species removed;
  - the distance of cleared vegetation;
  - the total weight of the vegetation removed;
  - no less than forty (40) "before and after" photos to demonstrate the improvements.

E. Community Assistance & Training

1. Concurrent with all TASKS of the project, the Contractor shall coordinate and organize community/volunteer work days. The Contractor shall provide a minimum of 18 community/volunteer work/education events or work days. The frequency shall be as evenly spaced as possible throughout the 1.5-year term of the contract. The Contractor shall provide community members or volunteers with tools and equipment during these work days and will educate participants in the environmental ecology, history, and cultural aspects related to the area. In addition, the Contractor shall identify and train a core group of members or volunteers on a set of protocol/methods for the community to continue maintaining the areas cleared upon completion of the contract.

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2. The Contractor shall attend the Ewa Beach Neighborhood Board and any other community meetings as needed to notify the community of any upcoming work and to field questions. This should be done prior to each Task of the project.

F. Work Priority And Schedule

1. Work shall commence first in areas of high priority (as identified by DAR) and proceed until all areas have been cleared. Based on selected areas, Contractor shall be directed as to which areas are the priorities and shall work in areas in sequence as requested by DAR.
2. Daily Report: The Contractor shall report to the Officer-in-Charge or an authorized representative of the Officer-in-Charge between 7:00 a.m. and 8:00 a.m. to update the progress of the previous day's work, giving the location and approximate area of vegetation removed and also furnish the location of the vegetation removal for that day. The Contractor shall report any general obstructions, problems, or unfinished work that may affect productivity. Adverse conditions which may require major field changes not stated in the contract must be reported to the Officer-in-Charge or an authorized representative of the Officer-in-Charge for determination before proceeding with the work. Work shall be coordinated with the following authorized representative:

Determination of Minimal Impact of Project

The Division has determined that the potential impact from herbicide application and removal of mangroves or non-native vegetation will be minimized through best management practices as outlined in the above requirements of the contract. The main concerns are addressed below:

Minimization of sedimentation: All mangrove branches, stumps, seedlings, propagules, other non-native shrubs and vegetation growing in the identified areas shall be *cut, removed and disposed* of off-site to approved locations. All cut vegetation trimmings, and debris shall be collected, removed, and disposed of in such a manner as to minimize disturbance to the stream and in accordance with applicable Federal, State and County laws.

The release of sediment from mangrove removal may potentially occur in projects when complete removal (including removal of the roots of the trees) is conducted, thereby releasing the sediment that is held by the roots into the waterway. In this project, the mangroves will be cut with tools down to the waterline, but the underwater vegetative portion of the tree will not be disturbed. Select amounts of sedimentation will occur due to the physical nature of the activity of workers traversing along the banks and wetted edges of the stream and in the riparian zone to

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access the trees with the tools. However, large releases of sediment associated with alternate methods of uprooting mangroves are not anticipated due to the fact that the roots will remain in the water and should decompose into the surrounding sediment in place.

The Contractor shall take extra care to ensure that no debris will enter navigable waters. Trimmings and debris that fall into the stream shall be collected daily. All staging areas shall be cleared of debris, rubbish, and branches at the end of each workday.

In addition, the Contractor shall be responsible to obtain tidal information and work done, in tidally influenced areas, by the Contractor shall be conducted in such a manner so as to minimize disturbance to the bottom and control turbidity.

Minimization of exposure of herbicide to the aquatic environment:

Subject to DAR's approval, the Contractor shall select an herbicide that has been approved for use in and around aquatic environments and contains the active ingredient Triclopyr. The herbicide shall be mixed with an approved coloring additive to identify application areas. The selected herbicide shall be used in accordance with its label instructions in areas where vegetation cannot be cut below the present water levels on all exposed roots, stumps, and branches no less than 30 minutes after cutting. Herbicide shall NOT be applied to mangroves but only to vegetation (which is situated out of the water) as defined in C (3) (approximately 2640 linear feet of non-native vegetation in the riparian zone along lower Honouliuli stream). Extreme care must be taken to ensure that the herbicide is contained within the application area. The Contractor must also place signs informing the public of the herbicide application and restrict access to the site for at least 1 hour after application is completed.

The Contractor shall follow the usage guidelines on the label of the herbicide of choice and will ensure the chances the herbicide will disrupt the streams water flow is minimized.

Authorized Representative of the Officer in Charge:

1. Dr. Ryan Okano-Aquatic Biologist  
State of Hawaii Department of Land and Natural Resources-Division of Aquatic Resources  
Telephone Number: (808) 587-0083
2. Mr. Anthony Olegario-Watershed Restoration Specialist  
State of Hawaii Department of Land and Natural Resources-Division of Aquatic Resources  
Telephone Number: (541) 908-5252

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Exemption Determination: After reviewing §11-200-8, HAR, including the criteria used to determine significance under §11-200-12, HAR, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this permit have been evaluated as a single action. Since this permit involves an activity that is precedent to a later planned activity, i.e., the repeated

methodology throughout the permit period, the categorical exemption determination here will treat all planned activities as a single action under §11-200-7, HAR.

2. The Exemption Class #4 Minor Alteration in the Conditions of Vegetation and Exemption Classes #5 Experimental Management Activities Which do Not Result in a Serious or Major Disturbance to an Environmental Resource Appears to Apply. §11-200-8(a)(4) and §11-200-8(a)(5), HAR, exempts the class of actions that involve “minor alteration in the conditions of land, water or vegetation” and “basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.” These exemption classes have been interpreted to include activities related to the removal of introduced vegetation, the reintroduction of native species into their historic range, and experimental management actions designed specifically to enhance native species or native species’ habitat, such as those being proposed.

The proposed activities here appear to fall squarely under the exemption class identified under §11-200-8(a)(4) and §11-200-8(a)(5), HAR, and as described under the following classes and items under the 2015 DLNR exemption list:

Class #4, item #22: Natural resource management actions that the Department declares are designed to monitor, conserve, or enhance the status of native species or native species’ habitat, such as removal of introduced vegetation, reintroduction of native species into their historic range, or construction of fencing. This exemption would not apply to biocontrol of invasive species or commercial logging.

Class #5, item #13: Research or experimental management actions that the Department declares are designed specifically to monitor, conserve, or enhance native species or native species’ habitat.

As discussed below, no significant disturbance to any environmental resource is anticipated. Thus, so long as the below considerations are met, an exemption class should include the action now contemplated.

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3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” §11-200-8(b), HAR. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. §11-200-12, HAR.

Significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected. All activities will be conducted in a manner that does not diminish marine resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects.

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts Will Probably have a Minimal or No Significant Effect on the Environment. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all research activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources, other applicable law and agency policies and standard operating procedures.

Conclusion. Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS, and Chapter 11-200, HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.

# Appendix C – Permits

- 1. Department of the Army Determination ..... 1
- 2. City & County of Honolulu Special Management Area ..... 3
- 3. C&C Honolulu Dept. of Enterprise Services ..... 5
- 4. US Fish and Wildlife Biological Opinion Sect. 7 Endangered Species Act... 6
- 5. Department of Health Sect. 401 Water Quality Certification..... 16
- 6. University of Hawaii Animal Care & Use..... 17
- 7. State Historic Preservation Review..... 18
- 8. Coastal Zone Management Federal Consistency Review ..... 21

SUBJECT: Determination of No Permit Required, Hui o Hoohonua, Honouliuli Flood Control, Pearl Harbor, Oahu, HI, Department of the Army File No. POH-2019-00197

Anthony Olegario  
Watershed Restoration Specialist  
University of Hawaii, Hawaii Coral Reef Initiative  
State of Hawaii Division of Aquatic Resources  
1151 Punchbowl Street, #330  
Honolulu, Hawaii 96813

Dear Mr. Olegario:

The Honolulu District, U.S. Army Corps of Engineers (Corps), Regulatory Branch has received your request for a determination whether a Department of the Army (DA) permit is required for the clearing of an approximate 21-acre area of mangroves in the West Loch of Pearl Harbor using hand tools and heavy machinery and the placement of cut mangroves as a temporary machine access path. The proposed project is located at 21.363553, -157.022478, at 91-2002 A Fort Weaver Road (TMK 910170140000) in Honolulu, Island of Oahu, Hawaii. Your request has been assigned Department of the Army (DA) file number POH-2019-00197. Please reference this number in all future correspondence with our office relating to this action.

We have reviewed your submittal pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344; "Section 404") and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403; "Section 10"). Section 404 requires DA authorization for the discharge (placement) of dredged and/or fill material into waters of the U.S., including wetlands. Section 10 requires DA authorization for the placement of structures in, under or over navigable waters of the U.S. and/or other work affecting the course, location, condition or navigable capacity of such waters. The determination provided in this letter pertains only to whether your proposed project is an activity we regulate; it does not address geographic jurisdiction.

Based on the information you provided, including the enclosed project plans, we have determined that the proposed activities described above do not constitute a discharge of fill material as defined by 33 CFR 322.3 (d)(2)(ii) or the initiation of "work" as defined by 33 CFR 322.2. Accordingly, we have determined that your proposed project would not be a regulated activity and therefore a DA permit is not required.

While a DA permit is not required for your proposed project, you are responsible for obtaining all other applicable Federal, state, or local authorizations required by law. Be advised, a DA permit may be required if you alter the method, scope, or location of your proposed work. You should contact our office if you are considering modifying your project.

Thank you for your cooperation with the Honolulu District Regulatory Program. If you have any questions related to this determination, please contact me at 808-835-4310 or via e-mail at Vera.B.Koskelo@usace.army.mil. You are encouraged to provide comments on your experience with the Honolulu District Regulatory Office by accessing our web-based customer survey form at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,

A handwritten signature in black ink, appearing to read 'Vera B. Koskelo', written in a cursive style.

Vera B. Koskelo  
Project Manager, Regulatory Office

Enclosure



ITEM E-1  
City & County Honolulu  
Department of  
Planning & Permitting  
650 S. King Street  
Honolulu, Hawaii 96813  
Phone (808) 768-8000  
info@honoluluapp.org

# Special Management Area Permit Determination

2021/ELOG-2565

DPP TRACKING NUMBER

The purpose of this form is to determine whether the permitting requirements of [Chapter 25, Special Management Area, Revised Ordinances of Honolulu](#) applies to your permit. There is a standard fee of \$150 per determination. A final determination will be made prior to issuing permits. All checks shall be payable to the City and County of Honolulu.

## Applicant Information

Name: Anthony Olegario, DAR-DLNR

Mailing Address: 1151 Punchbowl St., Honolulu, HI 96813

Phone Number: (541) 908 - 5252

Email address: anthony.o.olegario@hawaii.gov

Signature: \_\_\_\_\_

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

RECEIVED  
21 DEC -9 10:33  
DEPT OF PLANNING  
AND PERMITTING

## Property Information

Street Address/  
Location of  
Property: 91-2002 Fort Weaver Rd., 'Ewa Beach, HI, 96706

Tax Map Key(s): (1) 9-1-017: 014; (1) 9-1-017:006 (golf course)

### Describe Existing Site and Use:

Attach if available:

- Existing site plans
- Drawings
- Photographs
- Other documents that will help to describe the existing condition

Please see attached for photos of existing area.

Previous ground disturbance includes: There has been previous grading and ongoing maintenance of the old OR&L railroad right-of-way now used as access for City park maintenance vehicles, Chevron USA and Hawaiian Electric Company maintenance trucks as Chevron's fuel lines and HECO's 46 KV high tension power lines.

### Describe Proposed Activity or Development:

- Describe the proposed use (i.e., Single Family Dwelling, retail, accessory, etc.)
- Type of structure (residential, commercial, industrial)
- Include floor area calculations, estimated cost or detailed cost valuation
- If available, attach proposed site plans, and other proposed drawings

The primary goal of this project is to reduce detrimental effects of flooding and restore native estuarine and freshwater habitat through the removal of nonnative mangrove and invasive vegetation, replanting of native vegetation, and education and engagement of the local community. The primary objective is to coordinate activities involved with the restoration at Honouliuli Stream's mouth (West Loch) through planning and designing a removal and restoration plan in collaboration with government and nonprofit groups. Hui O Ho'ohonua (HOH), a local 501c3 non-profit organization, has been contracted by the Division of Aquatic Resources (DAR) to perform the removal and disposal of non-native vegetation from the designated areas, as well as spearhead native revegetation planting and community education and engagement efforts. Restoration experts and equipment operators from the USDA Forest Service (USDAFS) have been contracted by DAR to assist in the planning and removal of mangrove by



# Special Management Area Permit Determination - Page 2

THIS PAGE TO BE COMPLETED BY THE DEPARTMENT OF PLANNING AND PERMITTING

2021/ELOG-2565

DPP TRACKING NUMBER

Is the site in the SMA?  Yes  No

Is a SMA permit required?  Yes  No, pursuant to Section 25-1.3(2) (H) (see below)  
 Yes, may be exempt, but permit required per Section 25-1.3 (3) or (4)

**Proposal involves:**

- (A) Single-family residence, less than 7,500 square-feet not situated on a shoreline plot and is not part of a larger development
  - The residence is not situated on a shoreline parcel or a parcel that is impacted by waves, storm surges, high tide, or shoreline based on:
    - Hawaii Sea Level Rise Viewer shows the site is not susceptible to sea level rise at 0.5 feet [www.hawaiisealevelriseviewer.com](http://www.hawaiisealevelriseviewer.com).
    - The property is not in the coastal high hazard area as defined in Chapter 21A, ROH (Flood Zones VE and V)
- (B) Repair or maintenance of roads and highways within existing rights-of-way
- (C) Routine maintenance dredging of existing streams, channels, and drainage ways
- (D) Repair and maintenance of underground utility lines, including but not limited to water, sewer, power, and telephone and minor appurtenant structures such as pad mounted transformers and sewer pump stations
- (E) Zoning variances, except for height, density, parking, and shoreline setback
- (F) Repair, maintenance, or interior alterations to existing structures
- (G) Demolition or removal of structures, except those structures located on any historic site as designated in national or state registers
- (H) Use of any land for the purpose of cultivating, planting, growing, and harvesting plants, crops, trees, and other agricultural, horticultural, or forestry products or animal husbandry, or aquaculture or mariculture of plants or animals, or other agricultural purposes
- (I) Transfer of title to land
- (J) Creation or termination of easements, covenants, or other rights in structures or land
- (K) Final subdivision approval
- (L) Subdivision of land into lots greater than twenty acres in size
- (M) Subdivision of a parcel of land into four or fewer parcels when no associated construction activities are proposed; provided that any land that is so subdivided shall not thereafter qualify for this exception with respect to any subsequent subdivision of any of the resulting parcels
- (N) Installation of underground utility lines and appurtenant aboveground fixtures less than four feet in height along existing corridors
- (O) Structural and nonstructural improvements to existing single family residences including additional dwelling units, where otherwise permissible
- (P) Nonstructural improvements to existing commercial or noncommercial structures
- (Q) Construction, installation, maintenance, repair, and replacement of emergency management warning or signal devices and sirens

**Preliminary SMA Permit Determination**

Minor  Major

Minor permits - Projects valuation less that \$500,000 and "development" will not significantly affect the SMA and/or Special Wetland area

Major Permits - Project valuation exceeds \$500,000, or may significantly affect the SMA and/or Special Wetland area

Note: Final determination will be based on review of actual SMA Application submission

  
SIGNATURE

FOR  
Director  
TITLE

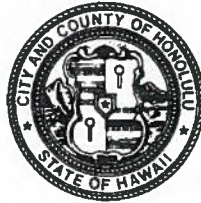
12/15/2021  
DATE

DEPARTMENT OF ENTERPRISE SERVICES  
GOLF COURSE DIVISION \* HONOLULU ZOO \* NEAL S. BLAISDELL CENTER \* WAIKIKI SHELL

**CITY AND COUNTY OF HONOLULU**

777 WARD AVENUE · HONOLULU, HAWAII 96814-2166  
PHONE: (808) 768-5400 \* FAX: (808) 768-5433 \* INTERNET: [www.honolulu.gov/des](http://www.honolulu.gov/des)

KIRK CALDWELL  
MAYOR



TRACY S. KUBOTA  
ACTING DIRECTOR

GARRICK K. IWAMURO  
ACTING DEPUTY DIRECTOR

July 14, 2020

Dear Grant Application Review Committee:

This letter provides expressed support from the City and County of Honolulu (City) Department of Enterprise Services (DES) for Hui o Ho'ohonua 501(c)3 proposed scope of work on lands under our authority.

The project is located on land owned by both the City (West Loch Golf Course and Kapapahu Point Park) and federal governments. DES maintains and operates the West Loch Golf Course, Tax Map Key (TMK) 9-1-181:001. This project is a networked effort (with the Hawai'i Department of Land and Natural Resources Division of Aquatic Resources) to obtain federal funding to support expanded restoration efforts through the National Coastal Wetlands Conservation (NCWC) grant program. This project proposal is aligned with the goals of the Mayor's Kākou for Parks Program, City's O'ahu Resilience Strategy, storm water and environmental management goals, as well as, other flood risk reduction benefits.

DES has a history of successful partnership with Hui o Ho'ohonua managing mangroves and restoring areas along Honouliuli Stream through the golf course. We are glad to again partner on this continued and expanded restoration work. TMKs 9-1-181:004 and 9-1-181:003 are under the City Department of Parks and Recreation (shoreline park) and federal government (i.e., wildlife refuge), respectively.

Should you have any questions about this letter of support, please contact Garrick Iwamuro, DES Acting Deputy Director at 808-768-7201 or email at [giwamuro@honolulu.gov](mailto:giwamuro@honolulu.gov).

Sincerely,

Handwritten signature of Tracy S. Kubota in black ink.

Tracy S. Kubota  
Acting Director



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Pacific Islands Fish and Wildlife Office  
300 Ala Moana Blvd Rm 3-122  
Honolulu, HI 96816



Service Ref. Number:  
01EPIF00-2020-F-0028

Date: January 14, 2022

To: Assistant Regional Director, Ecological Services, Region 1, Portland, Oregon

From: Field Supervisor, Pacific Islands Fish and Wildlife Office Honolulu, Hawai'i

Subject: Supplemental Project Information and Incidental Take Statement (SPIITS) under  
PIFWO Programmatic Recovery Biological Opinion (TAILS number 2020-F-0028)

Project: West Loch Pearl Harbor Wetland Restoration Grant

Applicant or Responsible Party: Service Region 1 WSFR Program & Hawai'i DLNR/DAR

Guiding Program: Service Region 1 WSFR Program

Permit Number: n/a

The U.S. Fish and Wildlife Service (Service) has completed a programmatic Biological Opinion for listed species recovery actions (PRBO) implemented, funded, or permitted by the Pacific Islands Fish and Wildlife Office (PIFWO), in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). The PRBO was finalized on February 23, 2021, pursuant to Service policy on Streamlined Consultation Guidance for Restoration/Recovery Projects and associated documents. The Service reached a conclusion in the PRBO that the recovery actions described therein would not result in jeopardy to any listed species and would not result in the destruction or adverse modification of designated critical habitat. This template references the updated version of the PRBO, dated October 20, 2021.

Due to the uncertainty of whether incidental take would occur in association with many recovery actions or how to quantify such take, PIFWO did not specify in the PRBO Incidental Take Statement the amount and type of take anticipated. Instead, any proposed recovery actions that are compliant with the actions described and analyzed in the PRBO that would result in take of listed animals must develop a step-down project-specific Incidental Take Statement and provide any supplemental project information. Incidental take of listed plants is not prohibited by section 9 of the Act; therefore, they are not included in the Incidental Take Statement. However, any adverse effects to listed plants or adverse effects to animals (no take) should be considered in a

jeopardy analysis and described in the relevant sections below.

This document transmits the Service’s step-down Biological Opinion based on our review of the proposed West Loch Pearl Harbor Wetland Restoration located on Oahu Island, Hawai‘i, and its effects on the listed species shown in Table 1. There is no designated critical habitat within the project area. The project proposal was submitted to our office for review on January 11, 2022.

Table 1. Threatened (T), endangered (E), proposed (P), or candidate (C) species or designated critical habitat affected by the proposed project.

<b>Scientific Name</b>	<b>Local or Common Name</b>	<b>Federal Status</b>	<b>Project effects to designated critical habitat</b>
<i>Himantopus mexicanus knudseni</i>	Hawaiian stilt	E	No
<i>Fulica alai</i>	Hawaiian coot	E	No
<i>Gallinula chloropus sandvicensis</i>	Hawaiian gallinule	E	No
<i>Lasiurus cinereus semotus</i>	Hawaiian hoary bat	E	No

### **Description of the Proposed Action**

The Service’s Wildlife and Sport Fish Restoration Program is funding the proposed project through the National Coastal Wetland Conservation Grant Program, which will provide funding for labor, supplies, equipment, and monitoring to the Hawai‘i Department of Land and Natural Resource’s Division of Aquatic Resources.

The proposed project entails removal of 21-acres of invasive mangroves by both mechanical means (tracked excavator and dump truck) and by hand (hand tools and chain saws). The cleared area will then be re-planted by hand with native wetland plants. Predator control activities will be focused around Niholo Pond and will include use of approximately five A24 traps and four DOC250 traps focused on removing invasive rodents and mongoose around the pond area currently used by waterbirds (see Figure 2). Additional traps may be deployed as needed. The project will take two years to complete. Traps will be used for the two-year grant duration and will be deployed Monday through Thursday and checked every 24 hours. No live cage traps are proposed, although if feral cats are detected in the area they may be used in the future (WSFR will reinitiate this consultation or submit a new consultation request). The full description of the proposed activities is included in the grant proposal documents (attached).

The maximum extent of area affected by the action extends approximately 100 feet around each of the dark green polygons shown in Figure 1. Birds within this buffer area could potentially be impacted by noise, human disturbance and machinery used to clear the mangroves and replanting native wetland plants.

### **Conservation Measures**

- 1) A qualified biological monitor will conduct Hawaiian waterbird and nest surveys at the proposed project site prior to initiation of mangrove removal and management activities, and after any subsequent delay in activities of three or more days.
- 2) Any documented nests or broods within the project vicinity will be reported to the U.S. Fish and Wildlife Service (Service) Honolulu Ecological Services office within 48 hours.



- 3) A 100-foot buffer will be established and maintained around all active nests and/or broods until the chicks have fledged. No disruptive activities or habitat alteration should occur within this buffer.
- 4) If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring, the biological monitor will halt all activities within 100 ft of the individual(s). Work will not resume until the Hawaiian waterbird(s) leave the area on their own accord.
- 5) Mangrove trees 15-ft tall or higher will not be removed or disturbed during bat nesting and pup rearing season from June 1<sup>st</sup> through September 15<sup>th</sup>.
- 6) Planning, permitting, and logistical preparations for a predator control program within the project area must be completed prior to the clearing or restoration of any new waterbird habitat.
- 7) A24 traps will be deployed above ground level at a height where waterbirds walking on the ground cannot put their heads inside the trap opening. Alternatively, excluder devices may be placed at the trap opening if these will prevent birds from putting their heads inside the opening.
- 8) Loose bait will not be placed inside or surrounding any traps to reduce potential trapping of non-target species. Standard protocols and recommended procedures used by Service Wildlife Refuge specialists will be employed, including enclosing the DOC250s in boxes with offset openings placed to discourage entry by waterbirds.
- 9) Predator traps must be checked every 24 hours and if take of a listed species occurs all traps must be immediately de-activated until the Service authorizes further use.
- 10) DOFAW must submit reports every 12 months describing any take of listed species resulting from this project. Reports should be sent to the WSFR grant manager and to the Honolulu Ecological Services office no later than December 31 of each year.
- 11) Biosecurity measures during construction include removal and proper disposal of all invasive vegetation from the site and ensuring no trimmings are left in streams.

### **Status of the Species/Critical Habitat**

The following information is taken from the October 2021 version of the PRBO and, where appropriate, updated with data from 5-year status reviews and Service Federal Register notices.

#### Hawaiian stilt (Ae'o)

Stilts are generally found in wetland habitats below 660-foot (ft) elevations on all the main Hawaiian Islands. Foraging habitat consists of ephemeral freshwater, brackish water, or saltwater habitats, where they opportunistically prey on a variety of animals in shallow water or mudflats. Prey include polychaete worms, small crabs, invertebrates, and small fish. Nesting occurs between March and August, and on freshly exposed mudflats with some low-growing vegetation; individuals also nest on islands in freshwater and brackish water ponds or artificial floating nest structures. Fledged young remain with parents for several months. Birds tend to travel between wetlands on a given island and also move between islands.

The Service published a Federal Register notice in March 2021, proposing to down list stilts from Endangered to Threatened. The Federal Register notice summarized statewide population surveys from 1986-2017 by saying that, "winter and summer surveys for Hawaiian stilts show a

fluctuating population, which generally increased from 1987 to 2004 and since then has been roughly stable at 1,500 to 2,000 individuals.”

#### Hawaiian coot (‘Alae ke‘oke‘o)

Coots are small waterbirds that use freshwater and brackish wetlands, including agricultural (e.g., taro fields) wetlands and aquaculture ponds. They occur in coastal wetlands usually below 1,320-ft elevations on all the main Hawaiian Islands except Kaho‘olawe. Approximately 80% of the population occurs on Kaua‘i, O‘ahu, and Maui. The birds feed on land, from the surface of the water, and underwater, where they graze on grass adjacent to wetlands for seeds, leaves, snails, crustaceans, invertebrates, tadpoles, and small fish. Nesting habitat includes freshwater and brackish ponds, irrigation ditches, and taro fields. Floating nests are constructed of aquatic vegetation and built within open water or anchored to emergent vegetation. Nests in emergent vegetation are typically platforms constructed from buoyant stems of species such as bulrush (*Bolboschoenus maritimus*). Nesting occurs year round, but mostly between March and September, as nesting is tied to rainfall because appropriate water levels are critical for nest success. The Services’ 2021 5-year status review estimated that statewide coot numbers were between 1,248 to 2,577, based on the latest available annual survey data.

#### Hawaiian gallinule (‘Alae ‘ula)

Hawaiian gallinule are small waterbirds that are endemic to Hawai‘i and usually occur in wetland habitat below 410-ft elevations. They are found on Kaua‘i and O‘ahu, with a few observations on Maui and Hawai‘i Island. They use a variety of freshwater habitats, opportunistically feeding on algae, grass seeds, plant materials, invertebrates, and snails. Nesting habitat is restricted to areas of standing freshwater less than 24 inches deep, where the birds build platform nests in dense emergent vegetation. Nesting occurs year round, but mostly between March and August because appropriate water levels and dense vegetation are necessary for nesting. Fledged chicks can swim shortly after hatching; however, they are dependent on parents for several weeks. The Services’ 2021 5-year status review for this species estimated that the most recent statewide, minimum population estimate of the gallinule is a 5-year average of 927 (678–1,235) individuals, based on the most recent available survey data from 2012 to 2016. However, gallinules are highly secretive and difficult to survey, so these estimates are considered to be inadequate.

#### Hawaiian hoary bat (‘Ōpe‘ape‘a)

The Hawaiian hoary bat is an endangered endemic mammal found in the Hawaiian Islands in native, invasive, agricultural, and developed landscapes (i.e., volcano craters, lava fields, cropland, golf courses, residential yards, rural roads, farmsteads, forests, pastures, rangelands, reservoirs, wetlands, river corridors, and coastal waters). Listed as a subspecies of *Lasiurus cinereus*, the bat is distributed across all of the major islands of the Hawaiian Archipelago, including Kaua‘i, O‘ahu, Maui, Moloka‘i, and Hawai‘i and, most recently, has been observed visiting Kaho‘olawe. No historical or current population estimates exist for this subspecies, though recent studies and ongoing research have shown the bats are widely distributed across the Hawaiian Islands.

The bat feeds nocturnally on invertebrates, primarily termites, mosquitoes, moths, leafhoppers, crickets, flies, beetles, and other high-flying invertebrates. The bats forage in flight in open, wooded, and linear habitats in vegetation that varies widely across habitat types and plant communities. On Hawai‘i Island the bats are found foraging from sea level up to 7,500-ft elevation, and have been observed near the island’s summits at 13,000-ft elevation, but on other islands they forage at elevations up to approximately 11,000 ft. These bats forage regularly

below the forest canopy down to within 2 ft of the ground, along forest edges and gaps, and in croplands with structural diversity.

Bats roost alone or with dependent young in native and invasive trees, typically more than 10- to 16-ft tall but do roost below 15-ft in height. Breeding bats have been documented only on Hawai‘i, Kaua‘i, Maui, and O‘ahu. Mating likely occurs between September and December, and females usually give birth to twins during June. An observation in 2015 extended the known pupping season later in the year. Therefore, the Service currently recognizes the pupping season to extend from June 1 through September 15.

### **Environmental Baseline**

There is no designated critical habitat within the project area. The West Loch of Pearl Harbor has experienced significant disturbances, including wetland and shoreline modifications, construction of the adjacent golf course and nearby residential areas, introduction of invasive mangroves in the early 1900s, and introduction of alien predators such as cats, dogs, rodents, and mongoose. The Honouliuli Unit of the Pearl Harbor National Wildlife Refuge is directly adjacent to the southern end of the project area and is managed for the benefit of indigenous Hawaiian waterbirds. Refuge management includes predator control using A24 and DOC 250 traps, the same techniques proposed for use within the project area.

The only location in the project area where listed waterbirds have been documented is Niholo Pond at the north end of the project area (see Figures 1 and 2). According to a November 2021 email from the project manager with the NGO assisting DAR with restoration planning, “Niholo Pond is now visible and (we) confirmed the population of wetland birds within our site which includes 6-8 ‘alae ke‘oke‘o (coots), at least a pair of ‘alae ‘ula (gallinule), and 4-6 ae‘o (stilts) who come and go.” All three waterbird species currently utilize habitat within the adjacent National Wildlife Refuge. Currently, however, invasive vegetation prevents significant waterbird use within the project area, with the exception of Niholo Pond. No waterbird nesting has been observed within the project area, including Niholo Pond, and it is assumed that birds currently only use the pond for foraging.

### **Effects of the Action**

The primary effects of the project will be beneficial to Hawaiian waterbirds by restoring wetland habitat they use for rearing, foraging, and other purposes. Removing invasive mangroves, replanting with native vegetation, and controlling predators will restore habitats where birds can feed, rest, and nest. Birds using the Refuge will benefit from restoration of the adjacent habitat, provided that they are protected from predation when using areas outside the refuge fence.

Predator control proposed within the project area are similar to those currently employed at the Refuge (i.e., only DOC 250 predator traps are proposed). Predator control is necessary if the project is to provide conservation benefits to waterbirds. However, but they also entail a risk that waterbirds could accidentally be killed or injured by the DOC 250 predator traps. According to November 2021 email communications with Service Refuge biologist Ty Spangler, O‘ahu refuge records show that Hawaiian coots are the only listed waterbird species that has entered or been injured on Refuges within DOC 250 traps. The placement of the traps will be modified to prevent any future incidents with Hawaiian coots, or any other Hawaiian waterbird (i.e., placing them higher up on the tree, covering them, or enclosing them to prevent access of Hawaiian waterbirds). We do not expect any exposure of Hawaiian waterbirds to injury or death associated



with the use of the DOC 250 and A 24 predator traps. Therefore, effects to Hawaiian waterbirds from predator trapping are discountable.

The net effect of the project will be beneficial to the three listed waterbird species from expanding available wetland habitat suitable for feeding and resting. However, there is also a minimal risk that waterbirds of any species could be inadvertently disturbed or injured during the vegetation restoration. Nesting may occur in newly cleared areas; however, the adjacent Refuge likely provides more attractive habitat for nesting. The highest risk of exposure will be after mangroves are cleared and habitat is opened up, but clearing and re-planting are still ongoing nearby. Waterbirds attracted into newly cleared areas would be at risk from machinery and other human activities associated with ongoing restoration. Biological monitors will survey work areas before work occurs to ensure no active nests are present. If nests or young are discovered all work within 100 ft will cease until the nestlings have fledged and left the area of their own volition.

Hawaiian hoary bats have not been documented on the project site but could potentially be using taller mangroves during the bat pupping season from June 1 to September 15. If mangrove trees taller than 15-ft tall were removed during birthing and rearing season were removed, take could occur in the form of disturbance, injury, or death to pups or adults. The grant will be conditioned to prohibit removal of mangrove trees over 15-ft tall during pupping season, and vulnerable non-volant pups will not be exposed to project-related effects. Therefore, effects to bats are discountable.

### **Cumulative Effects**

There are no additional cumulative effects associated with the proposed action (i.e., the PRBO captures all expected cumulative effects).

### **Conclusion**

The PRBO reached a conclusion that recovery actions implemented under that programmatic opinion, and in compliance with its proposed actions and effects, are not likely to jeopardize the continued existence of the species listed in Table 1 and is not likely to destroy or adversely modify designated critical habitat.

**The sections below are only required for projects that will result in take of listed species.**

**Check here if there will be no take of listed species and leave the rest of this document blank.**

### **Incidental Take Statement**

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which

include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary and must be undertaken by the Service Region 1 WSFR Program so that they become binding conditions of any grant issued to the Hawaii DLNR's Division of Aquatic Resources, as appropriate, for the exemption in section 7(o)(2) to apply. The Service has a continuing duty to regulate the activity covered by this incidental take statement. If the Service (1) fails to assume and implement the terms and conditions or (2) fails to require anyone funded, permitted, or acting on the Service's behalf to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Service must document the progress of the action and its impact on the species in the projects administrative record, as specified in the incidental take statement. [50 CFR §402.14(i)(3)]

### **Amount or Extent of Take Anticipated**

The Service anticipates describe the take, i.e., sex, life stage, number of individuals or extent of habitat if using a surrogate for individuals to occur from this proposed action. The incidental take is expected to be in the form of harm, harass, kill, etc..

Provide a concise summary of the analysis leading to this determination.

OR

The Service anticipates incidental take of list species or refer to Table 1 will be difficult to detect for the following reason(s): incidental take of actual species numbers may be difficult to detect when the species is wide-ranging; has small body size; finding a dead or impaired specimen is unlikely; losses may be masked by seasonal fluctuations in numbers or other causes (e.g., oxygen depletions for aquatic species); or the species occurs in habitat (e.g., caves) that makes detection difficult.

However, the following level of take of this species can be anticipated by loss of quantify amount of surrogate species, food, cover, other essential habitat element such as water quantity or quality, or symbiont because provide an explanation.

### **Reasonable and Prudent Measures and Terms and Conditions**

In the PRBO, the Service determined that the covered recovery actions are not likely to result in jeopardy to any listed species or result in the destruction or adverse modification of critical habitat. In order to be exempt from the prohibitions of section 9 of the Act, the Service must comply with the following non-discretionary reasonable and prudent measures, terms and conditions, and monitoring/reporting requirements.


The Service believes the following reasonable and prudent measure(s) and terms and conditions are necessary and appropriate to minimize impacts of incidental take of species:

1)

### Reinitiation Notice

This concludes formal consultation on this proposed recovery action. We have determined that it falls within the parameters described and evaluated in the PRBO. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

MICHELLE  
BOGARDUS

 Digitally signed by MICHELLE  
BOGARDUS  
Date: 2022.01.14 13:50:51 -10'00'

January 14, 2022

Signature (Megan, Greg, or Michelle)

Date

## Attachment 1: Figures

### West Loch Project Area Overview



*Figure 1. Service Coastal Wetland Grant West Loch Pearl Harbor project overview map showing 21-acre mangrove removal area (the four dark green polygons outlined in yellow). Niholo Pond is within the 6-acre polygon at the top of the map. The gray area indicates mangrove removed during another project and is not funded by the National Coastal Wetland Conservation grant.*



### Predator Control Trapping Locations



*Figure 2. Service Coastal Wetland Grant West Loch Pearl Harbor project. Locations where predator control traps will be deployed around Niholo Pond (within polygons 1-3). Predator control methods will mirror those used in the Honouliuli Unit of the Pearl Harbor National Wildlife Refuge and have been planned in coordination with Service Refuge staff.*



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## Mangrove Removal and Sect. 401 WQC

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Lum, Darryl C <darryl.lum@doh.hawaii.gov>  
To: HAWAII-Kmoy <kmoy@hawaii.edu>

Wed, Jan 19, 2022 at 11:33 AM

Hi Kirsten,

Since the Department of the Army issued a no permit required determination, a Section 401 WQC from the DOH is not required.

Thanks,

Darryl

Darryl Lum

Clean Water Branch

State of Hawaii Department of Health

Phone: (808) 586-4309

**Notice:** This information and attachments are intended only for the use of the individual(s) or entity to which it is addressed, and may contain information that is privileged and/or confidential. If the reader of this message is not the intended recipient, any dissemination, distribution, or copying of this communication is strictly prohibited and may be punishable under state and federal law. If you have received this communication and/or attachments in error, please notify the sender via e-mail immediately and destroy all electronic and paper copies.

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Office of Research Compliance  
Animal Welfare Program

September 27, 2021

EX 21-002

**Memorandum**

To: Dr. Michael P. Hamnett  
Investigator  
Hawaii Coral Reef Initiative

From: Dr. rer. nat Axel T. Lehrer  
Chairman, Animal Care & Use Committee

Subject: IACUC Exemption - *“West Loch Pearl Harbor Honouliuli Stream Wetland Restoration.”*

The aforementioned activity has been determined to be exempt from the United States Department of Agriculture (USDA), Animal Plant Health Inspection Service (APHIS) regulations and the Public Health Service (PHS) Policy. Specifically, the authority for this exemption are sections 9 CFR 2.31 (c)(2) and (d)(1). This letter is your certificate of exemption and record of IACUC review.

This letter of acknowledgment is in response to your September 10, 2021 written request for IACUC exemption for the above titled project. As explained, the goals for this project are to:

- Restore 6 acres of estuarine coastal wetland habitat along West Loch Pearl Harbor shoreline and adjacent to Pearl Harbor National Wildlife Refuge.
- Restore 15 acres of freshwater emergent wetland pond habitat along Honouliuli Stream.
- Collaborate with partners to develop adaptive management plans, including predator control, that will guide the long-term management and maintenance for the 21 acres of restored wetland habitat.
- Develop strategies to engage the community in every phase of restoration, monitoring and long-term, responsible stewardship of restored areas.

It is understood that Hawai'i Coral Reef Initiative (HCRI) staff will not be involved in the predator control directly. Another contractor, subrecipient, Hui o Ho'ohonua 501(c)3 will be conducting predator control. HCRI will only be involved from the management planning and partnership aspect.

No vertebrate animals will be collected, manipulated, harassed, or harmed by HCRI staff.

If modifications are made which alter your activities on this project, with respect to vertebrate animals, please contact this office for guidance prior to implementing these changes.

Do not hesitate to contact me at 692-1614 or the Animal Welfare and Biosafety Programs Manager at 956-4446 if you have questions or require additional assistance.

Thank you for your cooperation. The IACUC wishes you success in this endeavor.

AL:dy

c: Victoria G. Rivera, Director, ORC, Institutional Official  
Sylvia Kondo, University Veterinarian and Program Manager, AVS  
Diana Talerico Blanco, Program Manager, Animal Welfare and Biosafety Programs, ORC

DAVID Y. IGE  
GOVERNOR OF HAWAII



SUZANNE D. CASE  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA  
FIRST DEPUTY

M. KALEO MANUEL  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
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CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**DIVISION OF AQUATIC RESOURCES**  
1151 PUNCHBOWL STREET, ROOM 330  
HONOLULU, HI 96813

November 9, 2021

RE: State Historic Preservation Review – HRS Chapter 6E-8 Historic Preservation Review  
Honouliuli Invasive Mangrove Removal  
91-2002 Fort Weaver Rd  
'Ewa Beach, HI 96706  
Honouliuli Ahupua'a, 'Ewa District, Island of O'ahu TMK: (1) 9-1-017: 014

The DLNR-Division of Aquatic Resources (DAR) is proposing a project to restore a total of 21 acres of wetland habitat along West Loch Pearl Harbor, located on the island of O'ahu, Hawai'i, that is threatened by invasive mangrove. Pearl Harbor is the largest estuary in the state of Hawai'i, historically containing important wetland habitat for endemic and indigenous birds, fish and invertebrates.

The purpose of this proposal is to restore native estuarine and freshwater habitat through the removal of nonnative mangrove and invasive vegetation, replanting of native vegetation, and education and engagement of the local community.

In accordance with Hawaii Revised Statutes (HRS) Chapter 6E-8 and Hawai'i Administrative Rules (HAR) 13-275-3 and 13-275-5(b)(2), we are requesting historic preservation review for this project. This letter provides a project description and a summary of previous studies and findings in the vicinity of the project area.

**Project Description**

Mangrove and other non-native vegetation have created poor habitat for fish and wildlife and reduced streamflow capacity. Mangrove currently covers over 200 acres along the shoreline and previous wetlands and fishponds of the West Loch of Pearl Harbor. Without direct intervention, mangrove and other invasive vegetation will continue to thrive, increasing the potential for flood damage and continuing to provide poor habitat for native terrestrial aquatic wildlife. These negative impacts can be lessened by clearing the debris and invasive vegetation, replanting native vegetation, and educating and encouraging local community engagement.

The overall goal of this project is to restore over 21 acres of wetland habitat along West Loch Pearl Harbor.

Objectives for this project are listed below:

1. Restore over 6 acres of estuarine coastal wetland habitat along West Loch Pearl Harbor shoreline and adjacent to Pearl Harbor National Wildlife Refuge.
2. Restore 15 acres of freshwater emergent wetland pond habitat along Honouliuli Stream.



3. Collaborate with partners to develop adaptive management plans, including predator control, that will guide the long term management and maintenance for the 21 acres of restored wetland habitat. Develop strategies to engage the community in every phase of restoration, monitoring and long-term, responsible stewardship of restored areas.

### **Project Area**

The project is located on land owned by the City & County of Honolulu with portions of TMKs (1) 9-1-017: 014; and (1) 9-1-017:006. Upstream of the main mangrove stand Honouliuli stream runs through the West Loch Golf Course, a City & County operated and maintained golf course. Non-native vegetation removal in the project is bounded to the stream channel within the Honouliuli Golf Course and mangrove area associated with the shoreline and stream confluence with West Loch Pearl Harbor.

A map, description, and photographs showing the location and existing conditions at the site are provided in the online form submission.

### **Environmental Context**

Historically, much of Pearl Harbor (Pu‘uloa) shoreline was an open, mangrove-free area that supported abundant aquatic and terrestrial wildlife. Invasive mangrove introduced to Hawaii from Florida in 1902 to reduce erosion from agriculture has displace indigenous vegetation and created poor habitat for fish and wildlife and has exacerbated flood damage during high flows.

The Honouliuli watershed drains an area of about 11.5 square miles of the ‘Ewa Plain and Wai‘anae Mountains. Within this region, Honouliuli Stream is a perennial waterway that empties into the West Loch portions of Pearl Harbor. The creek’s channel and mouth in its lower reaches are affected by invasive plants, especially mangrove.

### **Historical Context**

Agricultural use of the area spans of 1000 years. Agricultural use of the Honouliuli stream floodplain for pond field cultivation of taro may have begun in the lower valley segment as early as AD 1000. As documented by historic sources, pond field cultivation continued in the early 1900s, by which time rice had largely replaced taro. Cultivation of dryland crops on the floodplain and in the upland areas surrounding the floodplain is documented historically. Also documented historically area fishponds along the shore of West Loch. Although no clear evidence of prehistoric fishponds was encouraged, it is likely that prehistoric fishponds were constructed in the general area; these ponds were probably located inland of historic ponds, and over a period of time, as the shoreline aggraded seaward, were converted to pond fields.

### **Relevant Prior Studies and Identification of Historic Properties**

Background research for the identification of historic properties in the project vicinity included review of the State and National Register of Historic Places, archaeological reports on file at the SHPD Library, the Office of Hawaiian Affairs’ Kipuka database, and archives online at the Bishop Museum, and review of historic maps.

An archeological inventory survey (AIS) was performed in 1987 inside an area of approximately 216 acres within and surrounding the project area. The survey was performed for the City and County of Honolulu during the planning phase for the development of the West Loch Estates, West Loch Golf Course, and Kapapahu Point Park (Rosendahl 1987).

The list below summarized the identified sites to the current project area:

- 50-80-12-3323 is a historic fishpond formed in the 1890's during the construction of the OR & L Railroad, when a section of the roadbed causeway enclosed a section of the existing coastal flats. (Triangular fishpond mauka of access road).
- 50-80-12-3322 Buried fishpond is a buried fishpond in the seaward portion of the project areas that is based on old maps. Subsurface testing from a previous survey revealed deposits indicative of a buried fishpond.
  - The site is now part of the golf course green and fairway and part of an artificially built water feature as a part of a driving range.
- 50-80-12-9417 (Railroad bed) – An old OR&L railroad right-of-way runs through the project area along the West Loch shorelines. It is used as access for City park maintenance vehicles, Chevron USA and Hawaiian Electric Company maintenance trucks as Chevron's fuel lines and HECO's 46 KV high tension power lines.

Prior to Rosendahl's survey, J. Gilbert McAllister's 1930 survey of Oahu sites for B.P. Bishop Museum, recorded a single archaeological site adjacent to the project area. This was a possible fishing shrine apparently was situated on the extreme eastern end of Hoaeae Point. However, despite intensive searching of the supposed site location during Rosendahl's survey, the fishing shrine site could not be relocated. It is surmised that the extensive modern modification of the area (WWII and subsequent) seems to have destroyed whatever McAllister observed in 1930.

#### **Identification and Inventory of Historic Properties**

No historic properties listed on the National or State Register of Historic Places have been identified within the project area. However, it is likely that features associated with Hawaiian fishponds are present in the vicinity of the project area.

#### **Effect Determination and Recommendations**

The project will result in minimal disturbance. The proposed work is limited to removal of invasive mangrove and invasive vegetation, installation of temporary erosion control measures, replanting of native vegetation and maintenance to control regrowth of invasive vegetation. The proposed action has a low potential to affect historic properties. Based on the available information, including the National Register and state records, our compliance analysis has made a finding of "*no adverse effect*" to historic properties for the proposed project actions.

Should you have any questions, please contact Anthony Olegario of our Division of Aquatic Resources, at [anthony.o.olegario@hawaii.gov](mailto:anthony.o.olegario@hawaii.gov).

Sincerely,



Brian Neilson  
 Administrator  
 DLNR-Division of Aquatic Resources  
 1151 Punchbowl Street, Honolulu, HI 96813



Kirsten Moy <kmoy@hawaii.edu>

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## Accepted: Consistency Determination Application for Hono'uli'uli

2 messages

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**Barcina, Keelan MK** <keelan.mk.barcina@hawaii.gov>

Wed, Mar 2, 2022 at 7:38 PM

To: "Okano, Ryan LY" <ryan.ly.okano@hawaii.gov>

Cc: "Mendes, Debra L" <debra.l.mendes@hawaii.gov>, HAWAII-Kmoy <kmoy@hawaii.edu>, "Olegario, Anthony O" <anthony.o.olegario@hawaii.gov>, "Nihipali, Justine W" <justine.w.nihipali@hawaii.gov>

Aloha Ryan,

The application for Hawaii CZM federal consistency review for the *Hono'uli'uli Invasive Mangrove Removal* project was received on March 1, 2022. The application is complete and has been accepted for processing. The start date for the 60-day CZM review period is today, March 2, 2022, the end date is May 2, 2022, and the 15-day extension (only if necessary) is May 17, 2022.

A public notice for the CZM review will be published in the State's Environmental Review Program publication, "The Environmental Notice," on March 23, 2022, with public review and comment period running through April 6, 2022. If any public and/or agency comments are received, they will be referred to you for responses.

Please contact me if you have any questions throughout the CZM review.

Thank you,

**Keelan Barcina** (he/him)

[Coastal Zone Management Program](#)

State of Hawai'i Office of Planning & Sustainable Development

808.587.2803 (o)

[keelan.mk.barcina@hawaii.gov](mailto:keelan.mk.barcina@hawaii.gov)

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**Okano, Ryan LY** <ryan.ly.okano@hawaii.gov>

Wed, Mar 2, 2022 at 7:57 PM

To: "Barcina, Keelan MK" <keelan.mk.barcina@hawaii.gov>

Cc: "Mendes, Debra L" <debra.l.mendes@hawaii.gov>, HAWAII-Kmoy <kmoy@hawaii.edu>, "Olegario, Anthony O" <anthony.o.olegario@hawaii.gov>, "Nihipali, Justine W" <justine.w.nihipali@hawaii.gov>

Dear Keelan

Thank you for the update.

Aloha

Ryan

[Quoted text hidden]

DAVID Y. IGE  
GOVERNOR OF  
HAWAII



**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**SUZANNE D. CASE**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

April 22, 2022

TO: Division of Aquatic Resources File

THROUGH: Suzanne D. Case, Chairperson

FROM: Brian J. Neilson, Administrator  
Division of Aquatic Resources

SUBJECT: Declaration of Exemption from the Preparation of an Environmental Assessment under the Authority of Chapter 343, HRS, and Chapter 11-200.1, HAR, for the Division of Aquatic Resources (DAR) project agreement, "Honouliuli Stream Invasive Mangrove Removal Project – Phase 2", funded by the National Coastal Wetlands Conservation Grant Program (\$622,199.00 Federal Financial Assistance).

The following activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200.1, HAR:

Project Title: "Honouliuli Stream Invasive Mangrove Removal Project – Phase 2"

Project Description:

In 2021, DAR was awarded federal funds through the US Fish and Wildlife Service (USFWS) National Coastal Wetland Conservation Grant Program to restore coastal wetlands of Honouliuli (West Loch, Pearl Harbor).

Project Timeline: February 2021 – February 2024.

Project site will include two (2) areas within Honouliuli (West Loch, Pearl Harbor) (see also Appendix A: Site Map):

- Six (6) acres of estuarine coastal wetland habitat along West Loch Pearl Harbor shoreline and adjacent to Pearl Harbor National Wildlife Refuge.
- Fifteen (15) acres of freshwater emergent wetland pond habitat along Honouliuli Stream.

Project Activities:

- Remove 21 acres of invasive mangroves and non-native vegetation (5.25 acres by hand and 15.75 acres by heavy equipment).
- Maintain and treat removal areas to prevent regrowth through nonchemical methods.
- Plant approximately 8 acres of wetland native Hawaiian sedges, groundcover, and trees within the cleared areas.
- Monitor water quality, hydrology, and wildlife (aquatic species, habitats, and waterbirds) to document ecological success of the project.
- Develop community-based stewardship program for collaborative restoration, maintenance, and community outreach.

Mangroves in Hawai‘i are a highly invasive alien species that contributes to decreased water quality by restricting flow, crowding out native species, and increasing the amounts of organic matter within the water. These added organic inputs have led to detrital accumulations that absorb oxygen from the water causing anoxic conditions resulting in poor fish survival and the production of obnoxious odor. The massive growth of aerial prop roots into the waterway reduces flow rates, thereby increasing the risk of flooding during significant rainfall events. Other negative ecosystem impacts include water stagnation, soil sedimentation, anoxia, hypersalinization, and algal blooms.

Mangroves also exclude native terrestrial coastal vegetation and makes shorelines or stream banks inaccessible because of their vast network of branches and prop roots. They destroy nesting habit for all four endemic shorebirds, such as the ae‘o (Hawaiian stilt) and ‘alaie ‘ula (Hawaiian moorhen) and excludes them from their natural habitat.

Previously, DAR’s Phase 1 (“Honouliuli Stream Invasive Mangrove Removal Project 2019”) agreement activities in wetland restoration at Honouliuli Stream and West Loch Golf Course were determined exempt from the preparation of an EA (Appendix B – Phase 1 EA Exemption). This project (Phase 2) is a continuation of the same activities and BMPs developed under Phase 1 but in an expanded project area. Phase 2 component of the wetland restoration activities in Honouliuli have received no-permit-needed notices from the US Army Corps of Engineers (USACE), and, as a result, were advised by the Department of Health (DOH) – Clean Water Branch (CWB) that no permit was necessary for the Clean Water Act Section 401 Water Quality Certificate Program. DLNR State Historic Preservation Review in accordance with HRS Chapter 6E-8 and HAR 13-275-3 and 13-275-5(b)(2) were similarly completed in 2021 (Appendix C - Permits). The project’s application for the Hawaii Coastal Zone Management (CZM) federal consistency review was accepted on March 1<sup>st</sup>, 2022 and will complete its 60-day review period on May 2, 2022.

DAR is requesting that the Board declare the removal of invasive mangroves from the project area exempt from the requirements of Chapter 343, Hawaii Revised Statutes, and Title 11, Chapter 200.1, Hawaii Administrative Rules, to prepare an Environmental Assessment (“EA”).

Exemption Determination: After reviewing §11-200.1-15, HAR, including the criteria used to determine significance under §11-200.1-13, HAR, DLNR has concluded that the activities under this agreement would have minimal or no significant effect on the environment and that issuance of the agreement is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this agreement have been evaluated as a single action. Since this agreement involves an activity that is precedent to a later planned activity, i.e., the same methodology used throughout the agreement period, the categorical exemption determination here will treat all planned activities as a single action under §11-200.1-10, HAR.

2. The General Exemption Type #4 for Minor Alterations in the Conditions of Land, Water, or Vegetation and The General Exemption Type #5 for Basic Data Collection, Research and Experimental Management with no Serious or Major Environmental Disturbance Appears to Apply. §11-200.1-16 (a) (1) and §11-200.1-16 (a) (2), HAR, exempts the class of actions that involve the “minor alterations in the conditions of land, water, or vegetation” and “basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.” This exemption type has been interpreted to include activities related to the removal of introduced vegetation, the reintroduction of native species into their historic range, and experimental management actions designed specifically to enhance native species or native species’ habitat, such as those being proposed.

The proposed activities here appear to fall squarely under the general exemption type identified under HAR §11-200.1-16 (a) (1) and §11-200.1-16 (a) (2), as described under the revised 2020 DLNR Exemption List (Concurred on by the Environmental Council on November 10, 2020), under the general exemption type #4 (Part 1), items #3, #8 and #16 and under the general exemption type #5 (Part 1), items #13 and #15 and (Part 2), item #4:

Type #4 (Part 1), items #3, #8 and #16, includes, respectively: “Removal of invasive vegetation utilizing cutting, mowing, application of federal and state approved herbicides in conformance with label instructions, distribution of biocontrol agents already approved and permitted by the State of Hawaii, and other approved methods (this exemption would not apply to issuing permits for initial releases of biocontrol of invasive species which are regulated and permitted by the Department of Agriculture or commercial logging)” and “minor alterations in waters, including restoration of native species and control of invasive weeds, algae, invertebrates, fishes or other invasive aquatic organisms” and “the reintroduction or supplementation (e.g., stocking) of native, formerly native, or established species into suitable habitat within their historic or established range, where no or negligible environmental disturbances are anticipated”

Type #5 (Part 1), items #13 and #15 and (Part 2), item #4, includes, respectively: “Research that the Department declares is designed specifically to monitor, conserve, or enhance native species or native species’ habitat”, “game and non-game wildlife surveys, vegetation and rare plant surveys, aquatic life surveys, inventory studies, new transect lines, photographing, recording, sampling, collection, culture, and captive propagation” and “experimental management actions that the Department declares are designed specifically to monitor, conserve, or enhance native species or native species’ habitat.”

As discussed below, no significant disturbance to any environmental resource is anticipated. Thus, so long as the below considerations are met, the general exemption types should include the action now contemplated.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” §11-200.1-15 (d), HAR. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. §11-200.1-13, HAR.

Significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected. All activities will be conducted in a manner that does not diminish marine resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects.

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably have a Minimal or No Significant Effect on the Environment. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the agreement. Specifically, all activities covered by this agreement will be carried out with strict safeguards for the natural, historic, and cultural resources, other applicable law and agency policies and standard operating procedures.

Conclusion. Upon consideration of the agreement to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS, and Chapter 11-200.1, HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.