JOSH GREEN, M.D.

SYLVIA LUKELIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA





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

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

HOʻALA LOKO IʻA: KA 24-01

May 10, 2024

Sara Bowen Mālama Hulēʻia PO Box 662092 Līhu'e, HI, 96766

REF: OCCL: MK

SUBJECT: HO'ĀLA LOKO I'A Permit KA 24-01 for Alakoko Fishpond Improvement

Projects; Niumalu, Puna, Kaua'i; Tax Map Keys (TMKs): (4) 3-2-001:001,

(4) 3-3-001:014, and (4) 3-3-003:016

Dear Sara Bowen:

The Department of Land and Natural Resources (Department), Office of Conservation of Coastal Lands (OCCL) has reviewed your application regarding the proposed improvement projects at the Alakoko Fishpond located on the subject parcel. The pond is in the Resource, Limited, and Protected subzones of the State Land Use Conservation District.

Alakoko fishpond is kuapā style loko i'a on the Hulē'ia River in Kaua'i, approximately 1,000 meters upstream from Nāwiliwili Small Boat Harbor in Līhu'e, Kaua'i. The fishpond sits in a historic geomorphic bend in the Hulē'ia River with an ancient Hawaiian rock wall creating the pond. There is a stone-faced dirt wall of over 2,700 linear feet which cuts off a large bend in the river. The pond is surrounded by estuarine intertidal wetlands; the water level is tidally influenced and brackish. There are two known sluice gates that allow the flow of water in and out of the ponds with the tide (mākāhā): a smaller one at the downstream end of the wall, and a larger one towards the center.

On October 25, 2017, The Board of Land and Natural Resources approved Hoʻāla Loko Iʻa Permit KA-18-01, allowing Mālama Hulēʻia to remove 26 acres of mangroves. Currently under Hoʻāla Loko Iʻa permit KA-22-01 approved on June 17, 2022, the organization is working on repairing the fishpond wall and removing the sedimentation that resulted from years of mangrove invasion and no pond maintenance. Since the mangrove removal, Alakoko is closer to its original size of approximately 40 acres.

PROPOSED PROJECT

The applicant is proposing a coastal wetland restoration project consisting of clearing approximately 15 acres of invasive red mangrove that covers the left bank of the Hulē'ia

Stream, and seven acres of invasive grasses and shrubs. Species include hau tree, umbrella sedge, and California grass. An amphibious excavator will be used as follows:

- 1. Mangrove: A grinder head will be attached to a 60-foot (ft) arm and will grind the trees in place, leaving a mat of mulch to suppress seedling re-growth.
- 2. Grasses and shrubs: Grasses and shrubs have formed a four ft mat of dead vegetative material with new growth on top and in between. A grapple with a thumb will be attached to lift and roll back sections of the vegetative mat and hauled to an upland area to later be used as mulch in upland restoration projects.

After clearing the invasive vegetation, Mālama Hulē'ia will replant the cleared area with native wetland vegetation where suitable, including makaloa, ma'u, 'aki'aki, 'akulikuli, 'ahu'awa, neke, and other native sedges and rushes within the 22-acre NCWCG project area. The invasive species removal will primarily be done with the amphibious excavator with support of staff restoration crew, and planting will be done through hand labor by staff restoration crew and volunteers (as appropriate).

If monitoring one year after treatment indicates regrowth, the above actions will be repeated. Access for the above actions will be primarily via the perimeter road around the fishpond. If access via the Refuge entrance road is necessary, the applicant will coordinate and receive permission from Refuge management. This action will take place as soon as possible through 2025, with exclusion of the hoary bat pup rearing window (June 1- September 15). Work will take place during daylight hours and while tidal fluctuations are not expected to impact the work associated with this project, staff will observe tidal impact and manage adaptively if needed.

Another component of the restoration project is the control of invasive mammalian species, such as feral cats and rodents, including through lethal methods. This action will take place throughout the project period, within the 22-acre NCWG project area, by Hallux Ecosystem Restoration LLC and Mālama Hulē'ia staff. Monitoring of predator presence will be conducted using camera traps and/or tracking tunnels. Information from monitoring of listed species and predators will determine location and intensity of predator trapping design. This will take place post clearing. The initial frequency of trap sets and visits will be three consecutive nights once per month, then may be increased or decreased based on capture rates.

The applicant proposes conducting fish and wildlife species and habitat data collection and analysis. Quarterly avian surveys will occur at three to five survey locations within the project area, while monthly water quality monitoring will occur at the downstream end of the wetland complex at the southeast corner of the fishpond. These actions will be conducted by Archipelago Research & Conservation staff, and Mālama Hulē'ia staff.

The last component of the coastal wetland restoration project involves archaeological monitoring by Pacific Legacy, who will conduct periodic site visits to document findings of any newly identified historic properties and to ensure that clearing activities do not impact historic properties. Site visits will be conducted monthly during clearing activities and will include pedestrian survey of areas that have been subjected to clearing and photographic documentation of those areas. Scaled plan maps and written descriptions of identified archaeological sites and/or features will be prepared.

The applicant is also proposing a riparian restoration project funded by the Hawai'i Fish Habitat Partnership (FHP) that will enhance the hydrologic connectivity of the freshwater streams, Hulē'ia River (tidally influenced), and the fishpond resulting in amplified positive impacts to the native fish in the systems. The steps involved for riparian restoration are as follows:

- 1. Inventory existing site conditions and identify any existing native vegetation.
- 2. Develop a suitable planting plan including species and sequencing for staged restoration.
- 3. Plant native vegetation prior to removing the invasive canopy to prevent conditions for additional invasive species to take over.
- 4. Remove invasive vegetation, garbage, and sediment/debris from the 5-acre punawai riparian area.
- 5. Continue out planting the 5-acre area with native wetland and riparian vegetation.
- 6. Install temporary electric fencing to reduce damage from feral pigs in the area.
- 7. Collect data to support the project monitoring and evaluation outcomes.
- 8. Quarterly maintenance (removing new growth of invasive species) to the fishpond and auwai restoration project site.

For the above-mentioned projects, five to seven acres are on Mālama Hulē'ia's land of the 27-acre project area. The remaining are on the US Fish and Wildlife Service Refuge land and directly impact Alakoko fishpond. Mālama Hulē'ia is only applying for a permit for the Mālama Hulē'ia owned portion of land of the project area.

The work proposed is part of Mālama Hulē'ia's overall goal of restoring the Alakoko fishpond system. The proposed projects are consistent with the CDUP ST-3703 activities of restoring the hydraulic connectivity and function of the fishpond by restoring the adjacent wetlands and punawai as well as removal of mangrove overgrowth using mechanized equipment.

The proposed work is classified as Tier II, involving "Dredging using mechanized equipment".

Best management practices developed by Mālama Hulē'ia will be followed. An archaeological preservation plan has been developed for Alakoko. The proposed project areas will be amended into that plan with a pre-clearing survey and post project survey and report. Proposed work will be timed for optimum tidal conditions: optimal conditions are when tide is low, and sediment is exposed, to avoid water quality impacts. Silt curtains will be used where necessary to contain any potential sedimentation/woodchips in the water; Turbidity will be monitored. Additionally, the Endangered Species Act, Section 7 guidelines developed for the first two phases of the fishpond restoration (mangrove removal, sediment management, and wall restoration) projects will be followed, including monitoring for waterbirds.

The OCCL requested comments on the proposed project from DLNR's Division of Aquatic Resources, State Historic Preservation Division, Division of Forestry and Wildlife, Land

Division; the Office of Hawaiian Affairs; Kaua'i Planning Department; US Army Corps of Engineers; and the US Fish and Wildlife Services.

The US Fish and Wildlife Services recognize that the project is being funded partially through their NCWCG Program, and their office is in the process of conducting an informal consultation for the project. Their comments and recommendations will be provided during this consultation and will be shared with the applicant.

The OCCL notes that the spreading of mulch is inconsistent with the framework of the Conservation District that is designed to preserve the State's fragile natural ecosystems. Mulch is a known breeding site for the invasive Coconut Rhinoceros Beetle (CRB) that is detrimental to palms, bananas, and potentially other crops. CRBs were first discovered in Kaua'i in May 2023, and detections continue in the Līhu'e and Wailua areas.

After reviewing the information, the OCCL finds that:

- 1. The proposed work at the Alakoko Fishpond is consistent with the statewide programmatic general permit for restoration, repair, maintenance, and operation of loko i'a (Conservation District Use Permit ST-3703: Ho'ālā Loko I'a), as approved by the Board of Land and Natural Resources on June 27, 2014;
- The activities described were covered in the Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI) for the Hoʻāla Loko Iʻa program, which was published on October 23, 2013;
- 3. The proposal requires the need for a Tier 2 Hoʻāla Loko Iʻa permit signed by the Chair of the Board of Land and Natural Resources;
- 4. The State Department of Health water quality certifications are waived pursuant to Hawai'i Revised Statutes (HRS) Chapter 342D WATER POLLUTION §6.5 Hawaiian loko i'a (b) The department shall waive the requirement to obtain water quality certification under this chapter for any person that has received notice of authorization to proceed from the Department of Land and Natural Resources Office of Conservation and Coastal Lands under the statewide programmatic general permit for the restoration, repair, maintenance, and operation of loko i'a; and
- 5. That the permit conditions found in Hawai'i Administrative Rules (HAR) §13-5-42 and Ho'āla Loko I'a Permit KA 18-01 continue to apply, and do not need further amendment.

After review of the proposed project, the Department finds that the proposed work will not negatively impact water quality, endangered or threatened species, archaeological and cultural resources, provided that the permittee implement appropriate mitigation measures, and therefore, authorizes a Tier 2 Hoʻāla Loko Iʻa permit for invasive species removal and planting of native species at Alakoko Fishpond, Niumalu, Puna, Kauaʻi, TMKs (4) 3-2-001:001, (4) 3-3-001:014, and (4) 3-3-003:016, subject to the following standard conditions:

- 1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of this chapter;
- 2. The permittee shall implement and sustain throughout the duration of the work all applicable best management practices described in the Hoʻāla Loko Iʻa Permit Application Guidebook as well as those mitigation measures outlined in the permittee's application;
- 3. The permittee, its successors and assigns, shall indemnify and hold the State of Hawai'i harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act of omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;
- 4. All best management practices outlined in the permit application shall be incorporated as conditions of the permit;
- 5. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;
- 6. In issuing the permit, the department and board have relied on the information and data that Mālama Hulē'ia has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;
- 7. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard:
- 8. Cleared areas shall be revegetated, in accordance with landscaping guidelines provided in this chapter, within thirty days unless otherwise provided for in a plan on file with and approved by the department;
- 9. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaiii, and by Hawaii statutory and case law;
- 10. Should historic remains such as artifacts, burials or concentration of charcoal be encountered, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact SHPD (808-692-8015) which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;
- 11. Other terms and conditions as prescribed by the chairperson; and

12. Failure to comply with any of these conditions shall render a permit void under the chapter, as determined by the chairperson or board.

Please acknowledge receipt of this approval, with the above noted conditions, in the space provided below. Please sign two copies. Retain one and return the other within thirty days. Should you have any questions feel free to contact Mari Kurosawa at (808) 587-0381 or mari.i.kurosawa@hawaii.gov.

		Sincerely,
	mc	Dawn S. Chang, Chairperson Board of Land and Natural Resources
Receipt Acknowledged:		
Permitee's Signature	Date	