

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawaii 96813

October 25, 2019

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

Land Board Members:

SUBJECT: MEMORANDUM OF UNDERSTANDING WITH PACIFIC RIM
CONSERVATION TO CONSTRUCT A PREDATOR EXCLUSION
FENCE AT THE KUAOKALA GAME MANAGEMENT AREA,
ISLAND OF OAHU, TAX MAP KEY: (1) 6-9-003:002; REQUEST FOR
DELEGATION OF AUTHORITY TO THE CHAIRPERSON

AND

DECLARATION OF EXEMPTION FROM PREPARATION OF
ENVIRONMENTAL ASSESSMENT UNDER HRS CHAPTER 343
AND HAR CHAPTER 11-200.1

SUMMARY

Approval is requested to enter into an MOU for educational outreach and conservation actions between the DLNR and Pacific Rim Conservation (PRC), a 501(c)(3) and Hawaii nonprofit corporation. Pacific Rim Conservation will fund and construct a predator-proof fence to protect Laysan Albatross (*Phoebastria immutabilis*) in the Kuaokala Game Management Area.

LOCATION:

A portion of the Kuaokala Game Management Area, Island of Oahu, TMK: (1) 6-9-003:002. Approximately five (5) acres.

ZONING:

State Land Use District – Agriculture, Conservation
Honolulu County LUO – P-1 Restricted Preservation, P-2 General Preservation District

This action covered under DOFAW's Programmatic Site Plan Approval, accepted by the OCCL, dated December 23, 2016. No permit is required.

TRUST LAND STATUS:

Section 5(b) lands of the Hawaii Admission Act Department of Hawaiian Home Lands entitlement lands pursuant to the Hawaii State Constitution: (1) 6-9-003:002

YES ___ NO X

CURRENT USE STATUS:

Pursuant to Governor's Executive Order No. 1716, to the Board of Commissioners of Agriculture and Forestry for a Public Shooting Ground and Game Reserve, the Department of Land and Natural Resources, Division of Forestry and Wildlife, designated the "Kuaokala Game Management Area" under HAR §13-123-16, Rules Regulating Game Mammal Hunting.

BACKGROUND:

The Kuaokala Game Management Area (GMA) is managed by the Oahu Branch of the Division of Forestry and Wildlife—its primary purpose is to provide recreational hunting opportunities to the public. The Laysan Albatross population that resides at Moli Point, in the GMA, is integral to the overall population health of the species on the island of Oahu. There are only a few areas on the island of Oahu that provide nesting habitat for these long-travelled seabirds. Pacific Rim Conservation has successfully conducted research, implemented management actions, and participated in outreach projects with a myriad of conservation agencies, to protect and recover this key species. PRC possesses a unique and unparalleled Laysan Albatross acumen, making them the most appropriate partner for this venture. PRC has been working with DOFAW to manage this population since the early 2000s. The aim is to protect the species, while having no significant impact on hunting opportunities or the landscape. A draft MOU is attached to this Submittal marked "Exhibit A".

The predator exclusion fence will replace an existing hog wire fence that currently encompasses the five-acre colony. PRC has, pending an official agreement with DOFAW, secured approximately \$250,000 in a privately funded conservation grant which will provide the cash for the project and select an appropriate contractor to construct the fence. The grant is exclusive to PRC, and part of the grant's "terms and conditions" are to deliver a fully functional, predator exclusion fence to protect a key colony on Oahu. DOFAW will provide in-kind services in the form of coordinating and securing volunteer hours, staff time, and logistical support. The grant proposal narrative is attached in this Submittal, marked "Exhibit C".

Laysan Albatross population health across Oahu is a key step in the path to increasing overall seabird species diversity; they have shown the resilience necessary to sustain colonies on the main Hawaiian Islands.

The Division of Forestry and Wildlife will work with local area hunters, the Game Management Advisory Commission and other hunting interest groups to ensure that hunting practices are not impacted in a significant manner.

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

In accordance with "Exemption List for the Department of Land and Natural Resources, reviewed and concurred upon by the Environmental Council on June 5, 2015," and HAR chapter 11-200.1, the proposed activities are exempt from the preparation of an environmental assessment. Refer to attached Exemption Notification labeled "Exhibit B".

RECOMMENDATIONS:

That the Board:

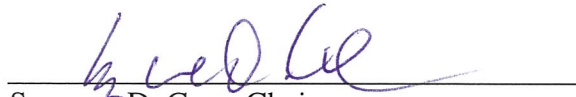
- 1) Approve the Memorandum of Understanding between the State of Hawaii, Department of Land and Natural Resources and Pacific Rim Conservation;
- 2) Authorize the Chairperson to enter and sign the Memorandum of Understanding, upon and after review by the Attorney General, and approve the contents of the Memorandum of Understanding to ensure compliance with all State requirements; and
- 3) Declare this project exempt from the requirements in HRS Chapter 343, Environmental Assessment requirements.

Respectfully submitted,



David G. Smith, Administrator
Division of Forestry and Wildlife

APPROVED FOR SUBMITTAL:


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

Attachments:

Exhibit A: Draft MOU between DOFAW and PRC
Exhibit B: CH. 343 Declaration of Exemption
Exhibit D: DOFAW/OCCL SPA

MEMORANDUM OF UNDERSTANDING
BETWEEN
PACIFIC RIM CONSERVATION
AND THE
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
FOR THE PROTECTION OF LAYSAN ALBATROSS

This Memorandum of Understanding (MOU), is made and entered into on this _____ day of _____, 2019, by and between Pacific Rim Conservation, a Hawaii nonprofit corporation and 501(c)(3) organization for federal taxation purposes (hereinafter referred to as "PRC"), and the State of Hawaii, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW), by its Board of Land and Natural Resources, to enter into a cooperative partnership to engage in habitat restoration, conservation, with a particular goal of protection of the Laysan Albatross.

WITNESSETH

WHEREAS, pursuant to section 183D-2, Hawaii Revised Statutes (HRS), the DLNR is charged with the responsibility of managing and administering the wildlife and wildlife resources of the State; and

WHEREAS, pursuant to section 195D-1, HRS, the State is charged with the responsibility of ensuring "the continued perpetuation of indigenous aquatic life, wildlife, and land plants and their habitats for human enjoyment, for scientific purposes and as members of ecosystems"; and

WHEREAS, the State through DLNR/DOFAW is the landowner charged with the responsibility of managing lands on Kuaokala Game Management Area on the Island of Oahu; and

WHEREAS, the DLNR's mission is to provide recreational opportunities, while protecting the State's natural resources;

WHEREAS, a unique colony of Laysan Albatross resides in a portion of the Kuaokala Game Management Area, that is threatened by non-native predatory mongoose;

WHEREAS, the construction of a predator-proof fence and removal of alien predatory mammals inside the fence will benefit the Kuaokala Game Management Area ecosystem and provide improved opportunities for Laysan Albatross conservation; *and*

WHEREAS, PRC is a 501(c)(3) nonprofit foundation whose mission is to maintain and restore native bird diversity, populations, and habitats in Hawaii and across the Pacific region. The PRC organization is administered by its own elected Board of Directors and Officers.

WHEREAS, PRC has successfully worked with the DLNR to assist with the ongoing management of and research on Kuaokala Game Management Area and other areas across the state since 2006.

WHEREAS, PRC will assist in raising funds in support of Kuaokala Game Management Area management, and

NOW, THEREFORE, the above parties agree to engage as partners in a cooperative effort to support habitat restoration, natural resource protection, and Laysan Albatross monitoring. Both parties hereto deem it mutually advantageous and desirable to cooperate and agree to the following provisions:

I. DLNR Responsibilities:

The DLNR agrees to undertake the following responsibilities under this MOU:

All DLNR activities and support are as funding permits.

- A. Work directly in the planning and implementation of a predator-proof fence project.
- B. Provide educational and outreach support to engage stakeholders related to this project.

II. PRC Responsibilities:

PRC agrees to undertake the following responsibilities under this MOU:

- A. Provide funding, through grants and other sources, to construct a 2100-foot-long predator exclusion fence at Kuaokala Game Management Area.
- B. Select and manage an experienced fence contractor to construct a 2100-foot-long predator exclusion fence at Kuaokala Game Management Area.
- C. Assist both the contractor and the DOFAW with activities related to fence construction and Laysan Albatross management in relation to this project.
- D. Conduct final fence construction assessments and perform quality control inspections of the contractor.

III. Joint Responsibilities:

The Board and Conservation agree to undertake the following joint responsibilities under this MOU:

- A. Participate in predator removal from within the newly fenced area.
- B. Participate in habitat restoration and invasive plant control (as needed) within the fenced area.
- C. Continue to set annual goals for restoration of the Laysan Albatross colony at Kuaokala and find the means to assure that those goals are met.

IV. Term, Evaluation, and Modification.

- A. *Term.* This agreement for this project under the MOU is executed and effective as of the last date shown below, which shall be the commencement date. This MOU will remain in effect for two (2) years after which it may be renewable at the option of the Parties.
- B. *Evaluation.* The project agreement may be reviewed, evaluated, and updated at any time, but no later than annually. A record of the evaluation will be appended to the agreement.

C. *Modification.* This MOU and any project agreement may be modified at any time by mutual agreement of the Parties. Modifications shall be in writing executed by the authorized officers or representative of Conservation and the Board respectively. For purposes of this modification provision, approval shall require authorization of Pacific Rim Conservation officers, and the delegated authority of the Board of Land and Natural Resources for all substantive changes. The Chairperson of the Board may authorize non-substantive changes on behalf of the DLNR in order to facilitate processing.

V. Termination.

Either party may terminate, in writing, the MOU in whole, or in part, at any time before the termination date. Unless mutually agreed upon otherwise, 90 days advance notice shall be provided prior to termination.

VI. Principal Contacts.

The principal contact information for administering this MOU are:

- A. Pacific Rim Conservation
Executive Director
P.O. Box 61827
Honolulu, HI, 96839
- B. State of Hawaii/ Department of Land and Natural Resources
Division of Forestry and Wildlife – Oahu Branch
Wildlife Program Manager
2135 Makiki Heights Drive
Honolulu, HI 96822

VII. Miscellaneous Provisions.

A. *Disclaimers.* Nothing in this MOU shall be construed as affecting in any way the delegated authority or responsibilities of the Board of Land and Natural Resources. This MOU shall not supersede any agreements currently in effect between the State and Conservation.

B. *Additional Parties.* By Modification of this MOU by the Parties, additional governmental, non-profit organizations, and other entities may be made party thereto on such terms and conditions as the Board and Conservation may agree.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of the last date written below.

PACIFIC RIM CONSERVATION,
a Hawaii nonprofit Corporation

By: _____

Title: _____

Date: _____

*Approved by the Board
of Land and Natural Resources
at its meeting on:

xxx, 2019

STATE OF HAWAII,
DEPARTMENT OF LAND AND
NATURAL RESOURCES

By: _____

Chairperson, Board of Land and Natural Resources

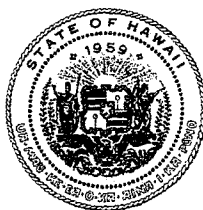
Date: _____

APPROVED AS TO FORM:

Deputy Attorney General

(Date)

DAVID Y. IGE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

JUL 12 2019

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

MEMORANDUM

TO: **State Agencies:**
___ DLNR, Office of the Conservation and Coastal Lands
Federal Agencies:
___ USFWS, Pacific Islands Fish and Wildlife Office
Other:
___ Oahu Game Management Advisory Commissioners

FROM: David G. Smith, Administrator *DGS*

SUBJECT: Request for Approval of Declaration of Exemption from Chapter 343, HRS, Environmental Compliance Requirements for the construction of a Predator Exclusion Fence for a Laysan Albatross colony in the Kuaokala Game Management Area.

LOCATION: Kuaokala Game Management Area, Waianae, Oahu, TMK: (1) 6-9-003:002

The Office of Environmental Quality Control requires that agencies and divisions exempting projects under their respective lists of exemptions from Chapter 343, Hawaii Revised Statutes (HRS), requirements consult with agencies and individuals having expertise before declaring a project exempt.

Attached for your review and comment is a copy of the submittal requesting a declaration of exemption from Chapter 343 to construct a predator exclusion fence to protect a unique, high elevation, Laysan Albatross (*Phoebastria immutabilis*) colony in the Kuaokala Game Management Area (GMA)

Please submit comments by **July 19th, 2019**. If no response is received by this date, we will assume your agency has no comments. For additional information, please contact Jason Misaki at (808) 973-9786 or by email Jason.C.Misaki@Hawaii.Gov.

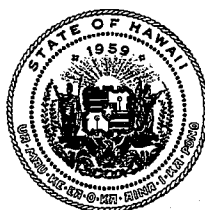
- ☐ We have no objections.
☐ We have no comments.
☐ Comments are attached.

Signed: _____

Print name: _____

Date: _____

DAVID Y. IGE
GOVERNOR OF
HAWAII



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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 1, 2019

DECLARATION OF EXEMPTION

Regarding the preparation of an environmental assessment under the authority of
Chapter 343, HRS and Chapter 11-200-8, HAR

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
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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

Project Title:	Kuaokala Laysan Albatross Predator Exclusion Fence
Project Location:	Kuaokala Game Management Area, Waianae, Oahu TMK: (1) 6-9-003:002
Chapter 343 Trigger(s):	Use of State Lands
Project Description:	<p>The Division of Forestry and Wildlife (DOFAW) and Pacific Rim Conservation are collaborating to construct a predator-exclusion fence to protect a unique nesting area for a population of approximately 55 pairs of Laysan Albatross (LAAL) which are Federally protected by the Migratory Bird Treaty Act and State protected under Hawaii Revised Statutes Chapter 195D and Hawaii Administrative Rules Chapter 13-124. Worldwide, the majority of LAAL nest in coastal areas that are at severe risk from impacts of global climate change. The Kuaokala population represents the highest elevation nesting site for LAAL in the world and is critical for the species long-term survival. This fence will replace an existing hog wire type fence that was installed in the early 2000s to protect the nest site from feral pigs and dogs in the Game Management Area. Over the past three years, almost all nests have failed due to baby birds being eaten by small rodents. The new fence will be approximately 2,100 feet long, enclose approximately 4.87 acres, and utilize smaller mesh material to prevent the incursion of cats, dogs, pigs, mongoose, rats, and mice.</p> <p>The Division of Forestry and Wildlife will work with local area hunters, the Game Management Advisory Commission and other hunting interest groups to reduce any hunting impacts.</p>
Consulted Parties:	<ol style="list-style-type: none">1. DLNR Office of Conservation and Coastal Lands2. U.S. Fish and Wildlife Service, PIFWO3. Oahu Game Management Advisory Commissioners

Declaration of Exemption – [Kuaokala Laysan Albatross Predator Exclusion Fence]
Page 2

Authorization:	DOFAW is seeking BLNR approval concurrent with this Exemption Declaration
Exemption Class & Description:	<p>Activities and actions associated with this project fall under the following Exemption Classes and Descriptions which are included in the Exemption List for the Department of Land and Natural Resources (approved by the Environmental Council on June 5, 2015) http://oeqc2.doh.hawaii.gov/Agency_Exemption_Lists/State-Department-of-Land-and-Natural-Resources-Exemption-List-2015-06-05.pdf</p> <p>Exemption Class No. 1, Item 7, “Operation, repair and maintenance, of existing Department structures and facilities, including baseyards, offices, cabins, sheds, and fencing.”</p> <p>Exemption Class No. 1, Item 34, “Routine pruning, trimming, thinning, and removal of trees, excluding commercial logging.</p> <p>Exemption Class No. 1, Item 37, “Clearing, grading, and grubbing, for which grading permits are not required.</p> <p>Exemption Class No. 1, Item 41, “Storage of construction equipment and materials for a limited period of time as necessary to support planned or existing construction or repair.</p> <p>Exemption Class No.2, Item 1, “Replacement or reconstruction of existing Department structures and facilities, including baseyards, offices, cabins, sheds, and fencing.”</p> <p>Exemption Class No. 4, Item 6, “Minor vegetation clearing and management, including mowing, pruning, trimming, and application of federal and state approved herbicides in conformance with label instructions.”</p>
Determination:	The Board of Land and Natural Resources declares that this project will likely have minimal or no significant impact on the environment and is therefore exempt from the preparation of an environmental assessment under the above exemption classes.

Attachments:
Project Proposal and Narrative



NFWF

Full Proposal Project Narrative

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed six (6) pages; do not delete the text provided below. Once complete, upload this document into the on-line application as instructed.

Project Description:

The goal of this project is to build a predator-exclusion fence in the Kuaokala State Forest Reserve on Oahu, to protect a colony of Laysan Albatrosses. This colony consists of about 55 breeding pairs, and it has been severely affected by predation from mongooses, with almost every chick killed in each of the last three years. The fence would be approximately 2,100 feet long and would enclose about 4.87 acres. It would exclude feral dogs, pigs, cats, mongooses, rats, and mice. Protecting this important, high-elevation colony with a predator fence should result in the production of about 30 Laysan Albatross chicks each year, not counting any population growth that is likely to occur.

Project Abstract:

Pacific Rim Conservation will construct a predator-exclusion fence in the Kuaokala State Forest Reserve on Oahu, to protect a breeding colony of Laysan Albatrosses in collaboration with the Hawaii Department of Land and Natural Resources. Although Laysan Albatrosses currently are abundant, the species' future is not secure because the vast majority of the global population nests on low-lying atolls that are vulnerable to sea level rise and other effects of global climate change. Protection of existing colonies and creation of new colonies on high islands is one of the most important conservation actions for this species. The Kuaokala State Forest Reserve supports the highest elevation Laysan Albatross colony in the world, at 1,200 feet above sea level, and it consists of about 55 breeding pairs. The colony has been severely affected by predation from non-native mongooses, with almost every chick killed in each of the last three years. An ungulate fence was constructed around the colony to protect it from feral pigs and dogs, but it does not keep out mongooses and feral cats. A predator-exclusion fence would offer the highest degree of protection possible for this important colony, and would result in the production of about 30 Laysan Albatross chicks each year, not counting any population growth that is likely to occur.

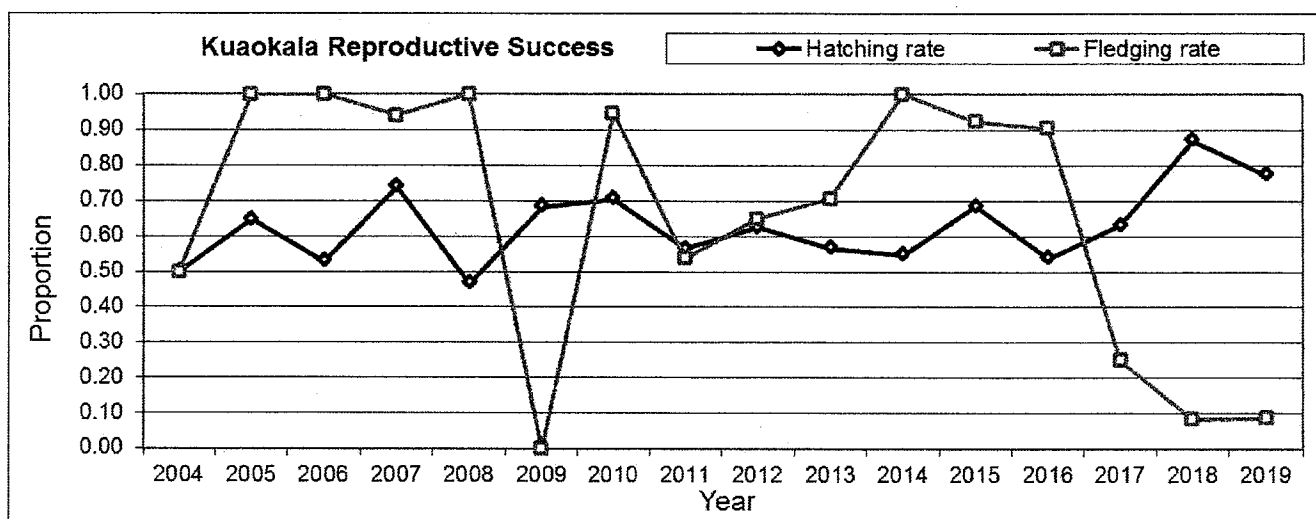
Project Purpose and Background:

Albatrosses are amongst the world's most threatened groups of birds, with 17 of the 22 species considered globally threatened by Birdlife International. The Laysan Albatross (*Phoebastria immutabilis*), though one of the most abundant albatross species with an estimated 802,000 breeding pairs (Pyle and Pyle 2017), is considered Near Threatened because over 99% of the global population nests on low-lying atolls in the Northwestern Hawaiian Islands that are threatened by sea level rise and storm surge associated with global climate change (USFWS 2005, Arata et al. 2009, Young et al. 2012, Reynolds et al. 2015). Protection of colonies and creation of new breeding colonies on the higher main Hawaiian Islands are among the highest priority conservation actions for this species (USFWS 2005, Young et al. 2012, VanderWerf 2013).

There are two main Laysan Albatross nesting colonies on the island of Oahu (Young et al. 2009). The larger of the two colonies, which is relatively well-known and is easily accessible to the public, is located in Kaena Point Natural Area Reserve and consists of about 125 breeding pairs. The other colony, which is less well known and much more difficult to access, is located in the Kuaokala State Forest Reserve, in the mountains about 5 kilometers southeast of Kaena Point, and contains about 55 breeding pairs. The Kaena Point colony has been managed extensively and has been protected by a predator exclusion fence since 2011, which has allowed the colony to grow and flourish (Young et al. 2013, VanderWerf et al. 2014). At the Kuaokala colony, an ungulate fence enclosing about 6.5 acres was built in the early 2000s to exclude feral pigs and dogs, but this fence does

not keep out other predators. The Kuaokala colony has suffered from severe predation by small Indian mongooses (*Herpestes auropunctatus*) in several recent years. In 2009, every chick was killed. In 2017-2019, 94 of 126 chicks were killed by mongoose. Until 2018, the cause of the chick deaths was unknown because there was no trace of the chicks left, they simply disappeared. In 2018, PRC obtained video evidence showing two chicks being killed by mongooses, and that scavenging by mongooses, rats, and mice over the next several days resulted in complete consumption of the entire body; not even a single bone or feather was left as evidence of the predation.

The hatching rate of albatross eggs at the Kuaokala colony is similar to that at Kaena Point, about 60%, but the fledging rate of chicks is much lower, only 10% from 2017-2019, compared to 77% at Kaena Point. The predation by mongooses starts to occur after the chick is left unattended by the parents, during the “post-guard” stage of the nesting cycle, which begins when the chicks are about three weeks old. If predation by mongooses could be prevented, it is reasonable to assume that the fledging rate in the Kuaokala colony would be similar to that at Kaena Point, and thus that the 55 breeding pairs would produce 25 to 30 chicks each year, not counting any population growth due to immigration or local recruitment.



Predator exclusion is being used increasingly on islands to protect populations of native plants and animals that are vulnerable to non-native predators, primarily mammals. Predator fencing technology was first developed in New Zealand (Saunders and Norton 2001, Innes et al. 2012), and it is now being used successfully in Hawaii (Young et al. 2013, Young et al. 2018). Pacific Rim Conservation has managed the construction of four predator fence in Hawaii, at Kaena Point State Natural Area Reserve in 2011, Kilauea Point National Wildlife Refuge in 2014, James Campbell National Wildlife Refuge in 2017, and Honouliuli National Wildlife Refuge in 2018. Improvements have been made to the fence designs with each subsequent fence.

1. **Activities:** Elaborate on the primary activities that will be employed through the grant. Explain how these activities are expected to lead to the outcome(s). Describe how these activities relate to established plans (management, conservation, recovery, etc.) and priority conservation needs in the specific project location.

The primary activity associated with this project would be construction of a predator-exclusion fence to protect a breeding colony of Laysan Albatrosses. The fence would be approximately 2,100 feet long, enclose about 4.87 acres, and would exclude all mammalian predators that occur on Oahu, including feral dogs, pigs, cats, mongooses, rats, and mice. The fence would be similar in design to the predator fences built previously at Kilauea Point, James Campbell, and Honouliuli national wildlife refuges. The fence would consist of the following major components: 6-inch diameter wooden fence posts spaced two meters apart; a single sheet of

metal mesh that is two meters high and extends 30 centimeters underground to prevent animals from digging underneath; a curved stainless steel hood that prevents animals from climbing over; an eight-foot wide gate that allows access to pedestrians and small vehicles for maintenance.

The first step in fence construction would be to remove an existing ungulate fence that keeps out feral pigs and dogs but is not effective against other predators. The fence line then would be cleared of non-native ironwood (*Casuarina equisetifolia*) trees and other non-native vegetation to create a wider corridor to prevent trees from falling on the new fence. The fence line would be graded to create a smooth surface on which to build the new predator fence.

After the predator fence is completed, all non-native predators would be removed from the inside of the fence. Mongooses would be removed with DOC250 spring traps, and rats and mice would be removed with Victor professional snap traps and Goodnature A24 automated pneumatic traps. Any feral pigs or dogs likely would exit the area before the fence is finished. Any feral cats left inside the fence are likely to export themselves by climbing over the fence. Tracking tunnels will be used to monitor the presence of predators inside the fence.

Funding provided under this grant would be used to purchase the fence materials and contract an experienced fencing company to build the fence. An extra 10-15% of fence materials would be purchased at the beginning to allow for variation in length of the fence and for repairs. All of the site preparation and predator removal work would be done with in-kind support. Removal of the existing ungulate fence, clearing of non-native vegetation, and any grading necessary would be done by the Hawaii Division of Forestry and Wildlife. The Hawaii Division of Forestry and Wildlife also would improve the dirt access road to facilitate delivery of fence material to the site by truck and machinery to assist in fence construction. Removal of predators would be done by Pacific Rim Conservation and the Hawaii Division of Forestry and Wildlife. Maintenance of the fence would be the responsibility of the Hawaii Division of Forestry and Wildlife. Pacific Rim Conservation would assist the state in procuring any materials needed to maintain or repair the fence.

Pacific Rim Conservation has been monitoring and banding Laysan Albatross at the Kuaokala colony since 2003, and we would continue the monitoring on monthly visits to the colony as part of a larger, on-going albatross research and monitoring program (Young et al. 2009, VanderWerf and Young 2011, 2016). This monitoring will provide annual information on the number of nests, the number of chicks fledged, and long-term population size and trend, which can be used to measure any changes in demography of the colony after the fence is built.

Timeline:

The fence construction must be done after the only two remaining chicks fledge to avoid disturbing them, and it is desirable to complete the fence and have all predators removed before the start of the next Laysan Albatross nesting season in mid-November 2019. The timeline below would allow that.

June 2019: Order fence materials.

July 2019: Remove existing ungulate fence and clear non-native ironwood trees.

August-September 2019: Construct fence.

October-November 2019: Remove all predators from inside the fence.

2. **Outcome(s):** Elaborate on the outcome(s) summarized previously in the application; discuss what makes this outcome(s) achievable and important.

The primary outcome of this project will be protection of the Kuaokala Laysan Albatross breeding colony and production of 25 to 30 Laysan Albatross chicks per year, not counting any population growth. This colony, though currently small, is important because it is the highest elevation Laysan Albatross colony in the world and is located away from the shoreline, where it is not subject to sea level rise, high waves, or other ocean-related events. Increased reproduction should allow this colony to grow, which will result in an increase in the number of breeding pairs that are safe from sea level rise.

The National Fish and Wildlife Foundation Seabird Business Plan specifically identifies supporting the Laysan Albatross as one of nine focal seabird species. There are other projects currently aimed at creating new breeding colonies of Laysan Albatross on high islands; it is also important to protect the colonies that already exist on high islands. Currently, the Kuaokala colony is not adequately protected and is not contributing what it could to the conservation of the species.

3. **Tracking Metrics:** Indicate how the project will monitor/assess progress on the metrics selected previously in the application. Please note any challenges or limitations anticipated with tracking the metrics.

Several metrics involving demography of the Kuaokala albatross colony will be used to assess success of the project: 1) the hatching rate of albatross eggs each year; 2) the number of albatross chicks that fledge from the Kuaokala colony each year; 3) the number of albatross nests and breeding pairs in the colony. The Kuaokala albatross colony has been monitored every year since 2003, and there is no reason to suspect that monitoring will not be completed in the future. If the hatching rate at Kuaokala is lower than that at Kaena Point, it would be an indication of a problem, such as predators somehow getting inside the fence.

Other milestones that can be used to measure progress of the project are:

- Completion of the site preparation, including road improvements, removal of the existing fence, and clearing of non-native vegetation from the fence line.
- Completion of fence construction.
- Removal of all predators from the fenced area.

4. **Project Team:** List key individuals and describe their qualifications relevant for project implementation.

Eric VanderWerf, Director of Science, Pacific Rim Conservation

Eric earned a B.S. from Cornell University in 1988, a M.S. in Zoology from the University of Florida in 1992, and a Ph.D. in Zoology from the University of Hawaii in 1999. He has worked on a variety of bird conservation projects in Hawaii and the Pacific region during previous stints with the Hawaii Division of Forestry and Wildlife and the U.S. Fish and Wildlife Service. In 2006, Eric founded Pacific Rim Conservation with the goal of increasing the capacity for conservation projects aimed at birds in Hawaii and throughout the Pacific. Eric has helped to monitor Laysan Albatross and other seabirds in Hawaii since 1999. He was the project manager for construction of predator fences at James Campbell National Wildlife Refuge and Honouliuli National Wildlife Refuge.

Lindsay Young, Executive Director, Pacific Rim Conservation

Lindsay earned a B.Sc. from the University of British Columbia and a M.S. from the University of Hawaii. In 2009, she completed her Ph.D. at the University of Hawaii where her dissertation research focused on the population genetics, at sea foraging ecology, and conservation needs of the Laysan Albatross. Since 2003, Lindsay has been heavily involved in seabird conservation projects across the Pacific from on the ground conservation measures, to data analysis and review of techniques. Lindsay was the project manager for construction of the first predator fence in Hawaii at Kaena Point and the second predator fence in Hawaii at Kilauea Point National Wildlife Refuge.

Jason Misaki, Oahu Branch Wildlife Program Manager, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife

Afsheen Siddiqi, Wildlife Biologist, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife

Afsheen earned a B.Sc. from Drexel University and a M.S. from the University of Maryland Baltimore County in 2004. Since 2011, Afsheen has worked for the State of Hawaii Department of Land and Natural Resources/Division of Forestry and Wildlife working on endangered species issues. The last three years, she has worked as the coordinator for seabird and waterbird conservation within the State.

Nick Vargas, Wildlife Biologist, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife

Nick earned a B.S. in Marine Biology from Hawai'i Pacific University (Oahu) in 2014. After his involvement with Kupu/AmeriCorps through the Conservation Leadership Development Program, he was able to develop skills in land, wildlife, and habitat management for Oahu's Native/Endemic species, with emphasis on seabird and wetland bird species. Two years of management work through the host site, Department of Land and Natural Resources/Division of Forestry and Wildlife, lead to a career with the state organization and continued service towards management of Hawaii's natural resources.

Tiana Bolosan, Wildlife Biologist, Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife

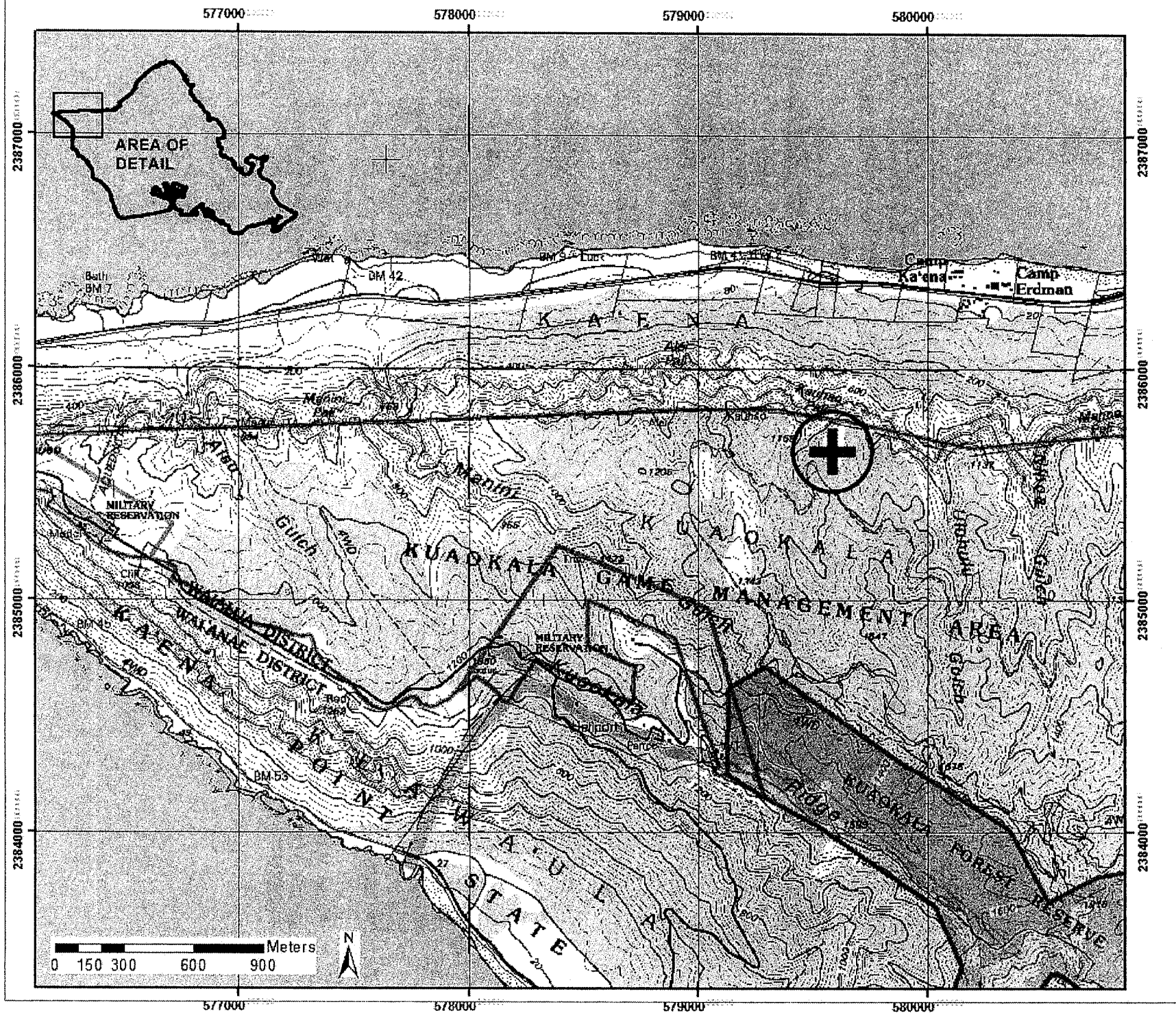
Tiana earned a B.S from Chaminade University of Honolulu in 2012. In 2014 she did a field camp at Kure Atoll through the State of Hawaii Department of Land and Natural Resources/Division of Forestry and Wildlife. She has continued working for the state by managing the O'ahu offshore islands. Her main objective for the program is to enhance seabird productivity through restoration, invasive species control, and outreach.

5. Other (Optional): Provide any further information important for the review of this proposal.

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KUAOKALA ALBATROSS PREDATOR EXCLUSION FENCE

MAP CREATED:
06-25-2019
DOFAW OAHU

LEGEND

-  KUAOKALA GMA
-  KUAOKALA FOREST RESERVE
-  PROJECT AREA

DAVID Y. IGE
GOVERNOR OF HAWAII



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

RECEIVED
OFFICE OF CONSERVATION
AND COASTAL LANDS
ROBERT K. MASUDA
DEPUTY DIRECTOR
M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

2019 JUL 12
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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

JUL 12 2019

MEMORANDUM

TO: State Agencies:
✓ DLNR, Office of the Conservation and Coastal Lands
Federal Agencies:
___ USFWS, Pacific Islands Fish and Wildlife Office
Other:
___ Oahu Game Management Advisory Commissioners

FROM: David G. Smith, Administrator *DGS*

SUBJECT: Request for Approval of Declaration of Exemption from Chapter 343, HRS, Environmental Compliance Requirements for the construction of a Predator Exclusion Fence for a Laysan Albatross colony in the Kuaokala Game Management Area.

LOCATION: Kuaokala Game Management Area, Waianae, Oahu, TMK: (1) 6-9-003:002

The Office of Environmental Quality Control requires that agencies and divisions exempting projects under their respective lists of exemptions from Chapter 343, Hawaii Revised Statutes (HRS), requirements consult with agencies and individuals having expertise before declaring a project exempt.

Attached for your review and comment is a copy of the submittal requesting a declaration of exemption from Chapter 343 to construct a predator exclusion fence to protect a unique, high elevation, Laysan Albatross (*Phoebastria immutabilis*) colony in the Kuaokala Game Management Area (GMA)

Please submit comments by **July 19th, 2019**. If no response is received by this date, we will assume your agency has no comments. For additional information, please contact Jason Misaki at (808) 973-9786 or by email Jason.C.Misaki@Hawaii.Gov.

- ☒ We have no objections.
☐ We have no comments.
☐ Comments are attached.

Signed: *[Signature]*

Print name: *Sam Lemmo*

Date: *7.16.19*

From: Nancy Timko
To: Misaki, Jason C
Subject: Re: Kuaokala Predator Fence
Date: Tuesday, July 16, 2019 12:30:05 PM

Aloha Jason,

I have read the information provided and do not have any objections.

Mahalo,

Nancy

On 7/15/2019 12:27 PM, Misaki, Jason C wrote:

Aloha Josiah and Nancy ,

Please see attached comment/consultation letter for a project proposal. It is to upgrade the fence at Moli Point. The comment letter says comments are due by the 19th, but if you need more time let me know. I was supposed to send the letter out last week, but got deployed to a wildland fire.

Jason Misaki
Wildlife Program Manager
Department of Land and Natural Resources
Division of Forestry and Wildlife, Oahu Branch
2135 Makiki Heights Dr., Honolulu, HI 96822
Tel. (808) 973-9786 // Cel. (808) 295-5896 // Fax. (808) 973-9781



Hawaiian hoary bat

The Hawaiian hoary bat roosts in both exotic and native woody vegetation and are known to occur along the north shore of Oahu. They will leave young unattended in trees and shrubs when they forage. If trees or shrubs 15 feet or taller are cleared during the pupping season, there is a risk that young bats could inadvertently be harmed or killed since they are too young to fly or may not move away.

To avoid and minimize impacts to the endangered Hawaiian hoary bat we recommend you consider incorporating the following measure into your project description:

- Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season (June 1 through September 15).

If vegetation greater than 15 feet tall is to be disturbed, removed, or trimmed during the bat birthing and pup rearing season, infrared surveys need to be conducted by trained personnel to determine the presence/absence of roosting bats.

Endangered Plants

Project activities may affect listed plant species by causing physical damage to plant parts (*e.g.*, roots, stems, flowers, fruits, seeds) as well as impacts to other life requisite features of their habitat which may result in reduction of germination, growth and/or reproduction. Cutting and removal of vegetation surrounding listed plants has the potential to alter microsite conditions (*e.g.*, light, moisture, temperature), increase the risk of invasion by nonnative plants which can result in higher incidence or intensity of fire. Activities such as use of construction equipment, vehicles, and increased human traffic (*i.e.*, trails, visitation, monitoring), can cause ground disturbance, erosion, and/or soil compaction which decrease absorption of water and nutrients and damage plant root systems and may result in reduced growth and/or mortality of listed plants. Soil disturbance or removal has the potential to negatively impact the soil seed bank of listed plant species if such species are present or historically occurred in the project area.

When disturbance outside existing developed or modified sites is proposed, conduct a botanical survey for listed plant species within the project area. Surveys should be conducted by a knowledgeable botanist with documented experience in identifying native Hawaiian and Pacific Islands plants, including listed plant species. Botanical surveys should optimally be conducted during the wettest part of the year (typically October to April) when plants and identifying features are more likely to be visible, especially in drier areas. If surveys are conducted outside of the wet season, the Service may assume plant presence. The boundary of the area occupied by listed plants should be marked with flagging by the surveyor.

To avoid or minimize potential adverse effects to listed plants, we recommend adherence to buffer distances for the activities in the **Table below**. However, where project activities will occur within the recommended buffer distances, additional consultation is required. Impacts to listed plants within the buffer area may be reduced by placing temporary fencing or other barriers at the boundary of the disturbance, as far from the affected plants as practicable. Where disturbed areas do not need to be maintained as an open area, restore disturbed areas using native plants as appropriate for the location.

All activities, including site surveys, risk introduction of nonnative species into project areas. Specific attention needs to be made to ensure that all equipment, personnel and supplies are properly checked and are free of contamination (weed seeds, organic matter, or other contaminants) before entering project areas. Quarantines and or management activities occurring on specific priority invasive species proximal to project areas need to be considered or adequately addressed. This information can be acquired by contacting local experts such as those on local invasive species committees (Oahu: <http://www.oahuisc.org/>).

Action	Buffer Distance [feet (meters)] - Keep Project Activity This Far Away from Listed Plant	
	Herb/Shrub and Terrestrial Orchids	Tree and Arboreal Orchids
Walking, hiking, surveys	3 ft (1 m)	3 ft (1 m)
Cutting and Removing Vegetation By Hand or Hand Tools (e.g., weeding)	3 ft (1 m)	3 ft (1 m)
Mechanical Removal of Individual Plants or Woody Vegetation (e.g., chainsaw, weed eater)	3 ft up to height of removed vegetation (whichever greater)	3 ft up to height of removed vegetation (whichever greater)
Removal of Vegetation with Heavy Equipment (e.g., bulldozer, tractor, "bush hog")	2x width equipment + height of vegetation	820 ft (250 m)
Ground/Soil Disturbance/Outplanting/Fencing [hand tools (e.g., shovel), small mechanized tools (e.g., auger)]	10 ft (3 m)	2x crown diameter
Ground/Soil Disturbance (Heavy Equipment)	328 ft (100 m)	820 ft (250 m)

If you have questions, please contact Leila Nagatani, Fish and Wildlife Biologist (phone: 808-792-9400, email: leila_nagatani@fws.gov). When referring to this project in correspondence or emails, please include the following reference number: 01EPIF00-2019-TA-0405.

Sincerely,

**Aaron
Nadig**

Island Team Manager
Oahu, Kauai, Northwestern Hawaiian
Islands and American Samoa

Digitally signed
by Aaron Nadig
Date: 2019.08.19
15:12:35 -10'00'

cc: Mr. Jason Misaki, DOFAW

HRS Chapter 343 Exemption Comment Responses

DOFAW has reviewed and will adhere to suggestions by FWS in the consultation response letter:

01EPIF00-2019-TA-0405

‘Ōpe‘ape‘a or Hawaiian Hoary Bat *Lasiurus cinereus semotus*

Mitigation:

Risks to ‘ōpe‘ape‘a from sites during the roosting and pup-rearing season (June 1 through September 15) include tree trimming, removal of woody plants greater than 4.6m, and fence construction. Impacts will be avoided as follows:

- The proposed fence lines will be thoroughly searched for trees which would be suitable for bat roosts (4.6m or above).
- Where trees over 4.6m need to be removed for construction, a Fluke Ti400 thermal imager (or similar) will be used to scan the tree or a contractor will be hired, in conjunction with an acoustic survey using bat detectors and a visual survey to ensure that no bats with pups are present. DOFAW and Pacific Rim Conservation staff will conduct these surveys.
- If there are trees 4.6m or above in the proposed sling load drop zones they will be scanned for bats as above and only removed outside the pupping season.
- Tree trimming and vegetation removal will take place outside the roosting and pup-rearing season (June 1 through September 15). If this is not possible, a Fluke Ti400 thermal imager (or similar) will be used to scan the tree, in conjunction with an acoustic survey using bat detectors and a visual survey to ensure that no bats with pups are present. If bats or pups are found, work will stop and the regulatory agencies will be consulted.

Botanical Surveys/Invasive Species Mitigation

All equipment, machinery, and tools will be properly sanitized and cleaned prior to deployment to the fence site. The clean-up will be handled directly by DOFAW staff.

Kuaokala GMA Moli Point Predator Proof Fence Botanical Survey, 8/22/2019

A botanical survey of the Kuaokala GMA Moli Point Proposed Predator Proof Fence area was conducted by Susan N. Ching Harbin, Oahu Botanist for DLNR DOFAW on August 22, 2019. The proposed fenceline was walked on foot and plants surveyed along a 15’ corridor. All species observed are listed below in Table 1. No listed plant species were observed.

Table 1. Plant species observed along the proposed fenceline for the Kuaokala GMA Moli Point Proposed Predator Proof Fence.

Species	Family	Common Name	Status
<i>Casurina equisetifolia</i>	Casurinaceae	Ironwood	Non-native, common
<i>Leucaena leucocephala</i>	Fabaceae	Haole Koa	Non-native, common
<i>Cocculus orbiculatus</i>	Menispermaceae	Hue	Indigenous, common
<i>Psidium cattleianum</i>	Myrtaceae	Strawberry Guava	Non-native, common
<i>Psidium guajava</i>	Myrtaceae	Common Guava	Non-native, common
<i>Osteomeles anthylidifolia</i>	Rosaceae	Ulei	Indigenous, common
<i>Psydrax odoratum</i>	Rutaceae	Alahe’e	Endemic, Common
<i>Myoporum sandwicense</i>	Scrophulariaceae	Naio	Endemic, common
<i>Santalum ellipticum</i>	Santalaceae	‘Iliahialo’e	Endemic, Common
<i>Dodonea viscosa</i>	Sapindaceae	A’ali’i	Indigenous, common
<i>Passiflora suberosa</i>	Passifloraceae	Corky passion vine	Non-native, common

<i>Megathyrsus maximus</i>	Poaceae	Guinea Grass	Non-native, common
<i>Melinis minutiflora</i>	Poaceae	Molasses Grass	Non-native, common
<i>Grevellia robusta</i>	Proteaceae	Silky Oak	Non-native, common

Six native plants were observed, all of them are considered common and do not have a federal or state status. Eight non-native species were observed, all in high abundance, although none are considered incipient or noteworthy. The proposed fence construction activity and habitat restoration by non-native plant and animal removal should provide a net benefit to native plant and animals both inside and outside of the proposed unit by providing a habitat free of disturbance and herbivores, even though some native shrubs will have to be removed to build the fence and keep the perimeter secure from unwanted predators such as cats, rats, mice, etc. Figures 1 and 2 show the proposed fence corridor and the vegetation and terrain typical to the area surveyed.

Plans for vegetation removal and native forest restoration should include outplanting of common native species. The plan could include more botanical diversity to ensure resilience of the vegetation in the long term both for the target protected animal species and for the plant community within the fence. Suggested species would be any native dry forest species found in the northern end of the Waianae Mountains of Oahu; Including: *Diospyros sandwicensis*, *Polyscias sandwicensis*, *Erythrina sandwicensis*, *Dianella sandwicensis*, *Microlepia strigosa*, *Sphenomeris chinensis*, etc.



Figure 1. Proposed fence route looking North West

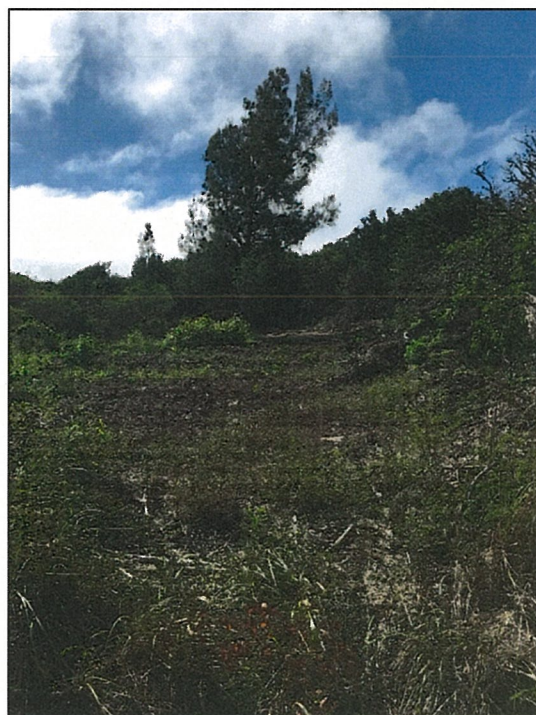


Figure 2. Proposed fence route looking North East.

DAVID Y. IGE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

16214
SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON P.E.
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

REF:OCCL:TM

SPA: ST 17-26

MEMORANDUM

DEC 23 2016

TO: David G. Smith, Administrator
Division of Forestry & Wildlife

FROM: Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

SUBJECT: Programmatic Site Plan Approval for Land Uses Upon Division of Forestry and Wildlife Managed Lands Within the State Land Use Conservation District

This memorandum supersedes our former approval for this matter dated December 20, 2016.

The Office of Conservation and Coastal Lands (OCCL) is in receipt of the Division of Forestry and Wildlife's (DOFAW) request for a programmatic Site Plan Approval (SPA) for land uses within the Conservation District to manage DOFAW lands. According to your information, a programmatic SPA will assist greatly with the efficiency of management of DOFAW lands that would include the Natural Area Reserves, Wildlife Sanctuaries, Wilderness Preserves, Game Management Areas, Plant Sanctuaries and Forest Reserves and other DOFAW encumbered lands for sanctuaries, facilities, nurseries and baseyards.

According to your information, these land uses are guided and regulated by the Board of Land and Natural Resources, management plans, and/or the purposes provided in Chapters 183, 183D, 195, and 195D of the Hawai'i Revised Statutes (HRS). Further the OCCL notes; DOFAW has nonconforming land uses and facilities that Chapter 13-5, Hawai'i Administrative Rules (HAR) allows for repair and maintenance of these land uses and facilities.

Pursuant to Chapter 13-5, HAR, identified land uses classified as beginning with letter (A) require no permit from the department or board and are allowable land uses without further authorization. The following proposed identified land uses as described in Chapter 13-5, HAR that may fall within the guidelines of this programmatic SPA authorization are:

P-1 DATA COLLECTION

- (B-1) Basic data collection, research, education, and resource evaluation that results in a minor disturbance to natural resources or land (e.g., corings, excavations, etc.);

P-4 REMOVAL OF INVASIVE SPECIES

- (B-1) Removal of invasive species including chemical and mechanical control methods, in an area greater than one acre, in accordance with state and federal laws and regulations, for the purpose of protecting, preserving, or enhancing native species, native habitat, or native ecosystem functions that results in no, or only minor ground disturbance. The department or board reserves the right to require departmental or board approval if it is determined that the proposed action may cause significant negative secondary impacts on natural and cultural resources, or the surrounding community. Any replanting shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to the State. For existing developed lots, compliance with section 13-5-23(L-2) satisfies the requirements of this section;

P-6 PUBLIC PURPOSE USES

- (B-1) Installation of emergency warning devices (e.g., tsunami warning sirens) and lifeguard towers;

P-7 SIGNS

- (B-1) Signs, including safety signs, danger signs, no trespassing signs, and other informational signs. No signs shall exceed twelve square feet in area and shall be non-illuminated. All signs shall be erected to be self-supporting and be less than or equal to eight feet above finished grade;

P-8 STRUCTURES AND LAND USES, EXISTING

- (B-1) Demolition, removal, or minor alteration of existing structures, facilities, land, and equipment. Any historic property shall be evaluated by the department for historical significance;
- (B-2) Replacement or reconstruction of existing structures and facilities under a previously approved conservation district use permit where the new structure will be located approximately on the same site and will have substantially the same purpose, capacity, density, height, and dimensions as the structure replaced. Reconstruction or replacement of structures and facilities shall be subject to development standards set forth in this chapter, and other requirements as applicable, including but not limited to a county building permit, shoreline setback, and shoreline certification. No enlargement of the structures and facilities is permitted under this section. The provisions of this section will not be applicable upon failure to file an application to replace or reconstruct structures and facilities within two years of the demolition or destruction of structures and facilities;
- (B-3) Replacement or reconstruction of an existing nonconforming single family residence, where the new single family residence will be located approximately

on the same site and will have substantially the same purpose, capacity, density, height, and dimensions as the single family residence replaced. Reconstruction or replacement of any single family residence shall be subject to development standards set forth in this chapter, and other requirements as applicable, including but not limited to a county building permit, shoreline setback, and shoreline certification. No enlargement of the single family residence is permitted under this section. The provisions of this section will not be applicable upon failure to file an application to replace or reconstruct a single family residence within two years of the demolition or destruction of the single family residence;

P-9 STRUCTURES, ACCESSORY

- (B-1) Construction or placement of structures accessory to existing facilities or uses.

P-11 TREE REMOVAL

- (B-1) Selective removal of individual trees (except that a permit is not required for tree removal allowed under P-4 (A-1) and P-11 (A-1), (A-2)) for non-commercial purposes provided that each tree is replaced on a one-to-one-basis with trees that are appropriate to the site location with preference to trees that are endemic or indigenous to Hawaii;

P-13 LAND AND RESOURCE MANAGEMENT

- (B-1) Basic land management, including routine weed control, clearing of understory, and tree pruning, utilizing chemical and mechanical control methods, which involves no grubbing or grading, in accordance with state and federal laws and regulations, in an area greater than one acre. The department or board reserves the right to require departmental or board approval if it is determined that the proposed action may cause significant negative secondary impacts on natural or cultural resources, or the surrounding community;
- (B-2) Planting of native and endemic plants and fence maintenance. New fence enclosures for native plants or small native wildlife communities, in an area greater than one acre. The department or board reserves the right to require departmental or board approval if it is determined that the proposed action may cause significant negative secondary impacts on natural or cultural resources;
- (B-3) Clearing land for fire pre-suppression and prevention, under a fire buffer plan approved by the department;

P-14 TELECOMMUNICATIONS

- (B-1) Installation of new antenna(s) on an existing telecommunications tower, including support equipment;

L-2 LANDSCAPING

- (B-1) Landscaping, defined as alteration (including clearing and tree removal) of plant cover, including chemical and mechanical control methods, in accordance with state and federal laws and regulations that results in no, or only minor ground disturbance, in an area less than 2,000 square feet. Any replanting shall give preference to plant materials that are endemic or indigenous to Hawai'i. The introduction of invasive plant species is prohibited.

Please note LANDSCAPING is not an identified land use within the Protective subzone. This use is applicable in the Limited, Resource and General subzones.

Authorization is granted to the Division of Forestry and Wildlife to conduct the following identified land uses noted as P-1 DATA COLLECTION; P-4 REMOVAL OF INVASIVE SPECIES; P-6 PUBLIC PURPOSE USE; P-7 SIGNS; P-8 STRUCTURES AND LAND USES, EXISTING; P-9 STRUCTURES, ACCESSORY; P-11 TREE REMOVAL; P-13 LAND AND RESOURCE MANAGEMENT; P-14 TELECOMMUNICATIONS; and L-2 LANDSCAPING upon **State encumbered DOFAW land** that lies within the Conservation District within the State of Hawai'i subject to the following standard conditions:

1. The Division of Forestry and Wildlife (DOFAW) shall be responsible for environmental review and compliance with Chapter 343, HRS;
2. DOFAW shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of chapter 13-5, HAR;
3. DOFAW shall comply with all applicable department of health administrative rules;
4. Single family residence shall not be used for rental or any other commercial purposes unless approved by the board. Transient rentals are prohibited, with the exception of wilderness camps approved by the board;
5. All representations relative to mitigation set forth in the accepted environmental assessment or impact statement for the proposed use are incorporated as conditions of the permit;
6. In issuing the permit, the department and board have relied on the information and data that the permittee 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. When provided or required, potable water supply and sanitation facilities shall have the approval of the department of health and the county department of water supply;
8. Provisions for access, parking, drainage, fire protection, safety, signs, lighting, and changes on the landscape shall be provided;

9. 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;
10. Obstruction of public roads, trails, lateral shoreline access, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, lateral beach access, or pathways acceptable to the department;
11. Except in case of public highways, access roads shall be limited to a maximum of two lanes;
12. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;
13. 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;
14. Use of the area shall conform with the program of appropriate soil and water conservation district or plan approved by and on file with the department, where applicable;
15. Animal husbandry activities shall be limited to sustainable levels in accordance with good soil conservation and vegetation management practices;
16. Artificial light from exterior lighting fixtures, including but not limited to floodlights, uplights, or spotlights used for decorative or aesthetic purposes, shall be prohibited if the light directly illuminates or is directed to project across property boundaries toward the shoreline and ocean waters, except as may be permitted pursuant to section 205A-71, HRS. All exterior lighting shall be shielded to protect the night sky;
17. Where applicable, provisions for protection of beaches and the primary coastal dune shall be established by the permittee, to the satisfaction of the department, including but not limited to avoidance, relocation, or other best management practices;
18. 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 Hawaii, and by Hawaii statutory and case law; and
19. Other terms and conditions as prescribed by the chairperson.

If there are any questions as to whether a land use qualifies under this programmatic SPA, DOFAW should consult with the OCCL for assistance with the disposition. Should you have any questions regarding this site plan approval, contact Tiger Mills of our Office at 587-0382.

C: Chairperson