STATE OF HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawaiʻi 96813

September 27, 2024

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

Land Board Members:

SUBJECT: ISSUANCE OF A RIGHT-OF-ENTRY PERMIT FOR DESIGN AND CONSTRUCTION TO THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION FOR REPAIR OF THE MAUNA LOA OBSERVATORY ACCESS ROAD TAX MAP KEY (3) 3-8-001: PORTION OF 001, HILO, NORTH HILO, HAWAIʻI; AND

REQUEST APPROVAL OF A DECLARATION OF EXEMPTION FROM REQUIREMENTS OF CHAPTER 343, HAWAIʻI REVISED STATUTES AND TITLE 11, CHAPTER 200.1, HAWAIʻI ADMINISTRATIVE RULES.

APPLICANT:

The National Oceanic and Atmospheric Administration (NOAA), in partnership with the Federal Highway Administration Central Federal Lands Highways Division (CFLHD), will provide preliminary engineering and construction engineering and administer the construction contract for the Mauna Loa Observatory Access Road improvements.

LEGAL REFERENCE:

Section 171-55, Hawaii Revised Statutes (HRS), as amended.

LOCATION:

A portion of Government lands of Hilo, North Hilo, Hawaiʻi, identified as tax map key (3) 3-8-001: portion of 001, as shown in Exhibit A.

AREA:

25.8 acres, more or less

ZONING:

State Land Use District: Conservation Resource Subzone
Hawai‘i Country Zoning: A-40a

TRUST LAND STATUS:

Section 5(b) Lands of the Hawai‘i Admissions Act
DHHL 30% entitlement lands pursuant to the Hawai‘i State Constitution: No

CURRENT USE STATUS:

Governor’s Executive Order 1288 set aside 160,500 acres for the Department of Land and Natural Resources (Department), Division of Forestry and Wildlife (Division), for the Mauna Loa Forest and Game Reserve.

TERM:

Preliminary engineering and construction of improvements are anticipated to be completed by April 2025.

APPLICANT REQUIREMENTS:

The Department must review and approve the final roadway construction design developed by the design-builder before construction can commence.

REMARKS:

The Mauna Loa Observatory (MLO) is located on the north flank of Mauna Loa on the island of Hawai‘i at 11,135 feet above sea level. The observatory is a premier atmospheric research facility that has been monitoring and collecting data related to atmospheric change since the 1950s. MLO has supported hundreds of cooperative research programs with national and international universities and government organizations.

In November 2022, a volcanic eruption occurred along Mauna Loa's Northeast Rift, impacting the MLO access road at multiple locations. Data collection at MLO stopped, and the observatory remains inaccessible by vehicle and without power from the local utility. Observatory staff has since established limited solar power and restored approximately 33 percent of the measurements on-site, including the Global Monitoring Laboratory and Scripps critical CO_2 records.

The National Oceanic and Atmospheric Administration (NOAA), in cooperation with the Federal Highway Administration, Central Federal Lands Highway Division, seeks to design and construct an unpaved road to restore access along the MLO Access Road, the sole access route to the facility. The MLO Access Road is a one-lane roadway originating at Saddle Road and ending at the MLO facility. The existing roadway

consists of a paved section varying in width from 12 feet to 13 feet and graded shoulders varying in width from 0 feet to 3 feet with a maximum vertical grade of approximately 15 percent. Two lava flows have impeded MLO access; the western lava flow has covered approximately 1.0 miles of roadway, and 1.1 miles down the road, the eastern lava flow has covered about 0.2 miles. The lava flows have highly variable depths and are approximately four miles east of the MLO.

The proposed temporary repair will be an unpaved road that will mimic the horizontal alignment of the existing roadway to the maximum extent practicable. The typical cross-section of the proposed unpaved roadway will include a 12-foot-wide road surface with a one-foot shoulder on either side. To align with the existing lava flows, the roadside grading will include cut/fill sections at a maximum 2H (horizontal) to 1V (vertical) slope. The vertical grade of the proposed roadway will not exceed the vertical grade of the existing roadway. The estimated construction limits/impact area is shown in Exhibit B. These project displays illustrate a maximum disturbance scenario that assumes the contractor would excavate the lava flow down to the elevation of the existing roadway and grade it to the top of the lava flow with 2H to 1V grading.

For the eastern lava flow area, the maximum distance between the top of the lava flow and the elevation of the existing roadway is approximately 20 feet. The maximum footprint of the improvements is estimated to be 120 feet wide (60 feet on either side of the road alignment). Along the western lava flow, the maximum distance between the top of the lava flow and the elevation of the existing roadway is approximately 40 feet. The maximum footprint of the improvements is estimated at 175 feet wide (75 feet on the north side of the alignment and 100 feet on the south side of the alignment). It is anticipated that the contractor will be able to achieve the prescribed loading requirements and compaction rates without having to excavate the entirety of the new lava flow, resulting in a smaller impact area than what is shown in Exhibit B.

The federal and state environmental compliance that NOAA and CFLHD have completed or are in the process of acquiring are listed below. The ROE will not be issued until all required environmental compliance approvals are received from the agencies listed below.

- Section 7 of the Endangered Species Act: CFLHD has determined a finding of “No Effect.” A memo to file documents these findings (Exhibit C) and no consultation with the Fish and Wildlife Service is required.
- HRS 6E-08 Review Process: CFLHD has initiated the 6E-08 Review Process with the State Historic Preservation Division (SHPD). No historic properties are being affected, and CFLHD anticipates that the project will be reviewed in Step 1.
- Section 106 of the National Historic Preservation Act (NHPA): A determination of “No Potential to Effect” has been made by CFLHD for Section 106 of the NHPA and was provided to SHPD on July 9, 2024.
- Office of Conservation and Coastal Lands (OCCL) Review: On June 24, 2024, a letter providing a project description and requesting information on the review and approval process needed to meet OCCL requirements was emailed to OCCL.

A design-build contracting method has been selected to deliver this project. Instead of developing 100% plans, specifications, and estimates, CFLHD, in coordination with NOAA, will develop performance specifications and identify design criteria to define what the contractor is expected to deliver, including the maximum allowable construction limits for grading. The final configuration of the temporary roadway will be constructed based on the design developed by the design-builder, reviewed/approved by CFLHD, and subject to review and approval by the Department. Should the design proposed by the design-builder exceed the maximum project impact area defined by CFLHD, the design-builder will be responsible for securing approvals for work outside of the project impact area. The applicant will need to ensure that all required environmental compliance is completed, and they will be required to bring the revised proposed action back to the Board for approval.

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

Per the requirements of Chapter 343, HRS, Hawaii Administrative Rule (HAR) Section 11-200-8(6), the Exemption List for the Department of Land and Natural Resources as reviewed and concurred upon by the Environmental Council on November 10, 2020, the subject project is exempt from the preparation of an environmental assessment under the following exemption classes:

> *General Exemption Type 1, Part 1, #25: Repair and maintenance of existing roadways, roadway shoulders, road structures ... (includes grading, resurfacing, infilling, sealing, grooving, cleaning, chipping, painting, and patching).*
>
> *General Exemption Type 2, Part 1, #18: Replacement or reconstruction of existing roads, roadway shoulders, road structures ... .*

The following agencies were consulted on the proposed action with the results indicated as follows:

Consulted Agency	**Comments**
DLNR Land Division	Did not respond
DLNR Office of Conservation and Coastal Lands	No objection – OCCL is working with NOAA to help them secure the proper conservation permits (ref. SPA HA-25-08).
DLNR State Historic Preservation Division	Did not respond
Office of Hawaiian Affairs	Did not respond
County of Hawai‘i Planning Department	No objection

RECOMMENDATIONS:

That the Board of Land and Natural Resources:

1. Declare that, after considering the potential effects of the proposed disposition as provided by Chapter 343, HRS, and Section 11-200.1, HAR, this activity will likely have minimal or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.

2. Authorize the issuance of a right-of-entry permit to the National Oceanic and Atmospheric Administration covering the subject area for the Design and Construction to repair the Mauna Loa Observatory Access Road under the terms and conditions cited above, which are by this reference incorporated herein and further subject to the following:

    a. The standard terms and conditions of the most current right-of-entry form, as may be amended from time to time.

    b. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully submitted,

_____
DAVID G. SMITH, Administrator
Division of Forestry and Wildlife

APPROVED FOR SUBMITTAL:

_____
DAWN N. S. CHANG, Chairperson
Board of Land and Natural Resources

Exhibit A: Map of Project Area
Exhibit B: MLO Access Road Repair Project Displays
Exhibit C: Section 7 and Section 106 Determination Letters

Exhibit A

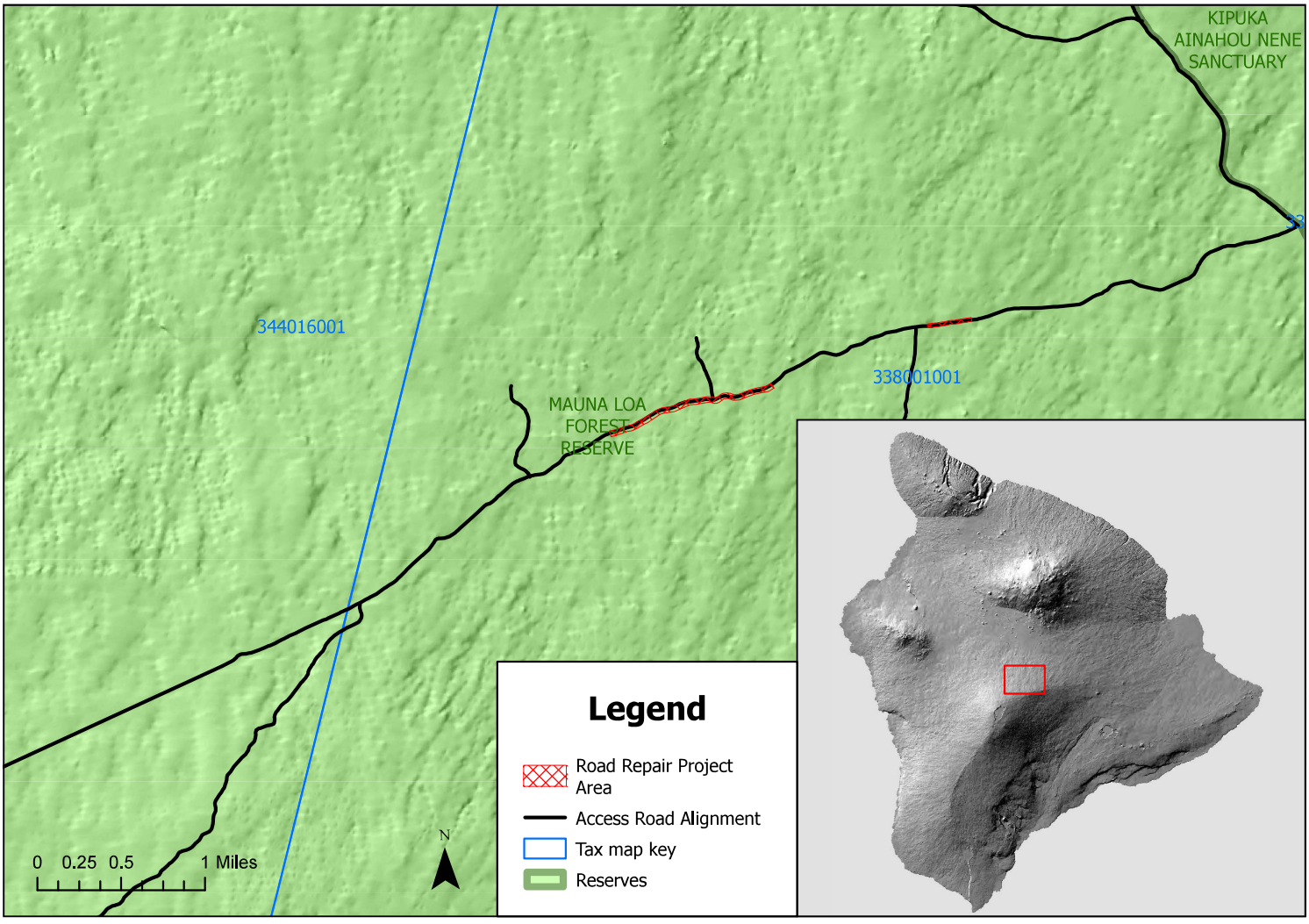
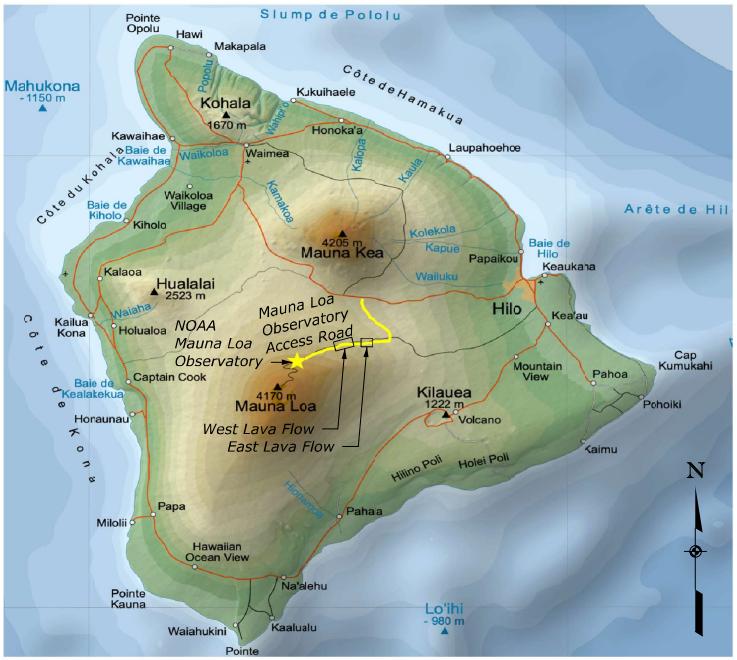
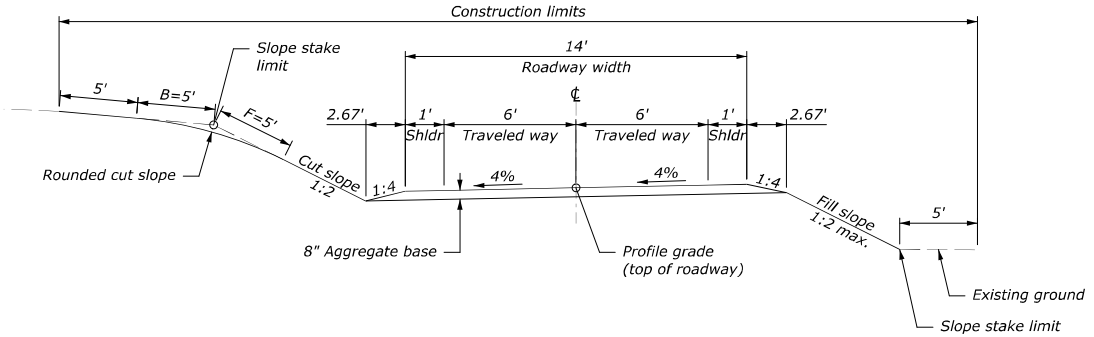

KIPUKA
AINAHOU NENE
SANCTUARY
344016001
338001001
MAUNA LOA
FOREST
RESERVE
Legend
Road Repair Project Area
Access Road Alignment
Tax map key
Reserves
0 0.25 0.5 1 Miles
N

Exhibit B

PROJECT	SHEET NUMBER
HI NOAA MALO(1) MAUNA LOA ACCESS RD.	EAST

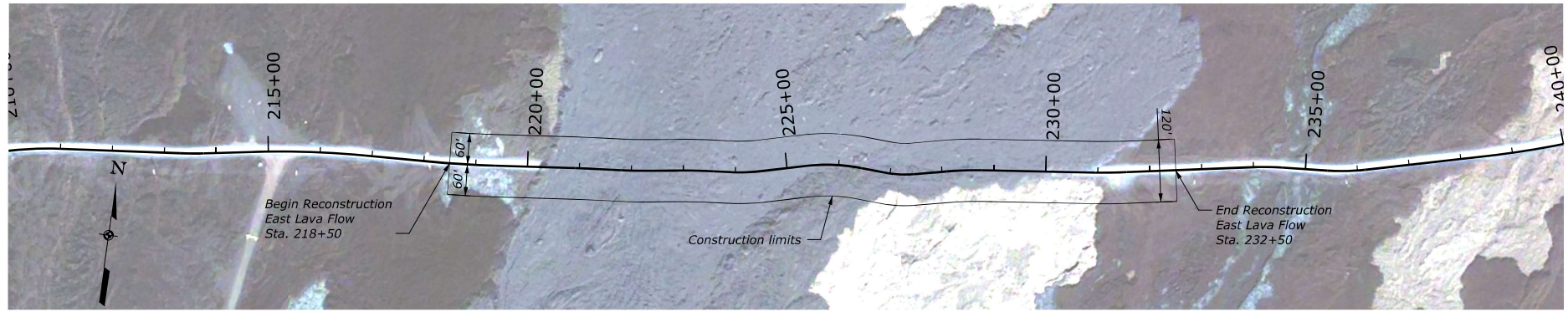


LOCATION MAP NO SCALE



TYPICAL SECTION
TEMPORARY MAUNA LOA OBSERVATORY ACCESS ROAD

NO SCALE



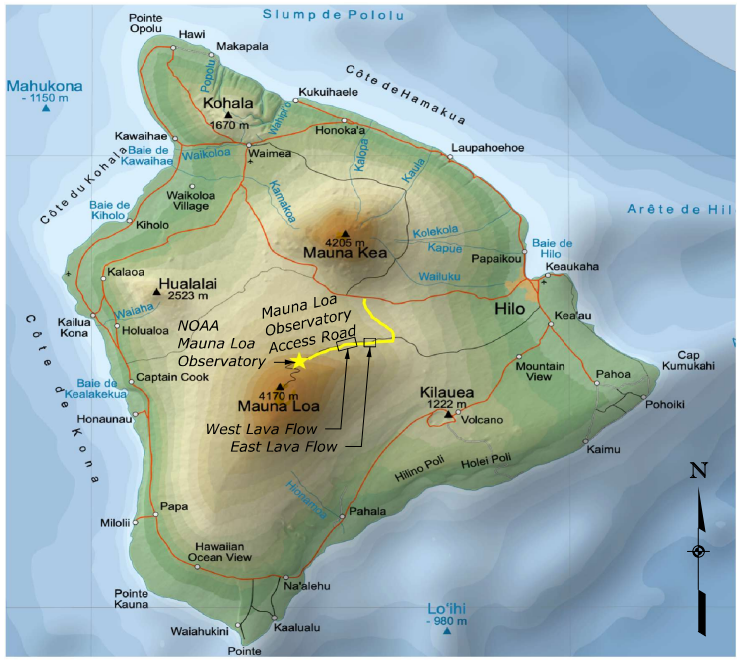
EAST LAVA FLOW PLAN VIEW

TEMPORARY MAUNA LOA OBSERVATORY ACCESS ROAD EAST LAVA FLOW

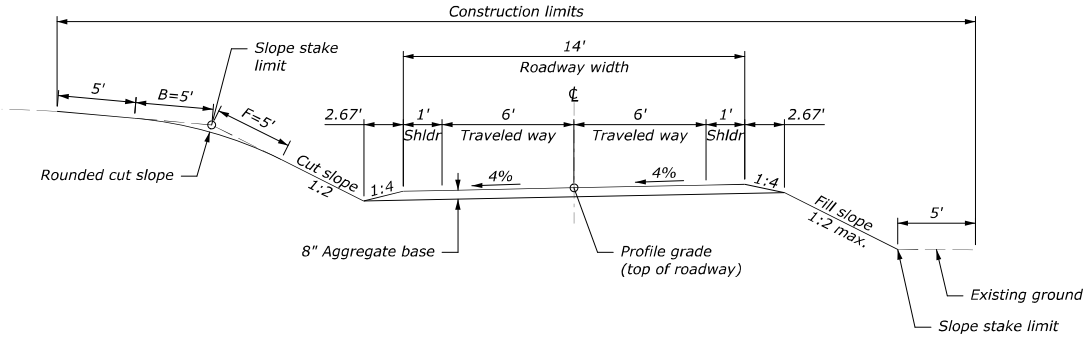
c:\pw_work...\MALO East Lava Flow - Plan 2 [Sheet1]
20 August 2024 4:17 PM

Exhibit B

PROJECT	SHEET NUMBER
HI NOAA MALO(1) MAUNA LOA ACCESS RD.	WEST

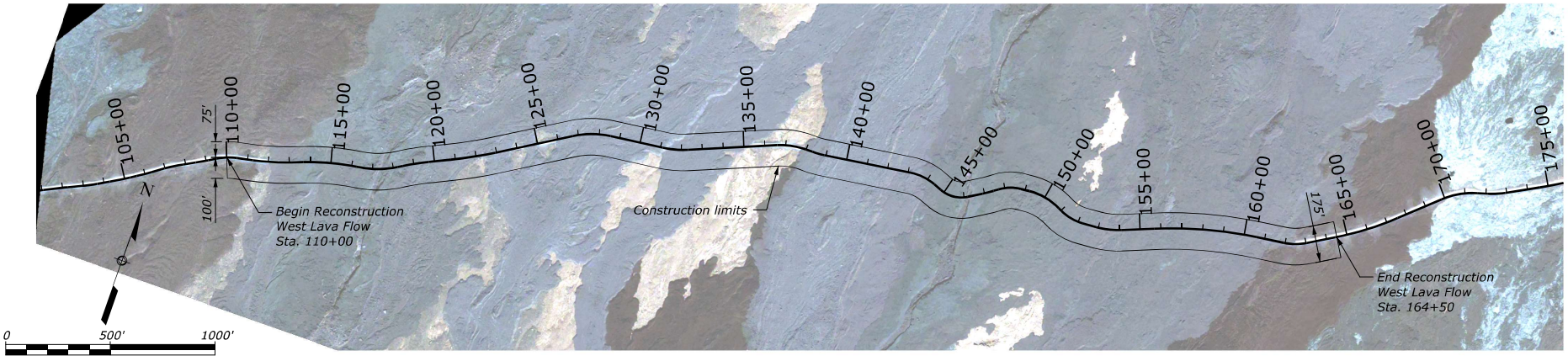


LOCATION MAP NO SCALE



TYPICAL SECTION
TEMPORARY MAUNA LOA OBSERVATORY ACCESS ROAD

NO SCALE



WEST LAVA FLOW PLAN VIEW

TEMPORARY MAUNA LOA OBSERVATORY ACCESS ROAD WEST LAVA FLOW

U.S. Department of Transportation
Federal Highway Administration

Biology Memorandum

12300 West Dakota Avenue
Lakewood, CO 80228

Central Federal Lands Highway Division

Project:	Mauna Loa Access Road Repair Project	Date: August 22, 2024
Location:	Hawai'i County, Hawai'i	
Subject:	Biological Resources Memorandum for the Mauna Loa Access Road Repair Project	
From:	Catherine Henry Environmental Protection Specialist	
To:	CFLHD Central Files – N:\HI\nomalo(1)\Environment\Biology	

Introduction

The Federal Highway Administration, Central Federal Lands Highway Division (CFLHD), in cooperation with the National Oceanic and Atmospheric Administration (NOAA), is proposing to repair approximately 1.2 miles of damaged roadway along the Mauna Loa Observatory (MLO) Access Road, crossing two segments of lava flow in Hilo, North Hilo, Hawai'i. The segments of roadway were covered in lava flow during the November 2022 eruption of Mauna Loa, making the roadway impassible to vehicular traffic and requiring observatory staff to utilize helicopter travel to access the observatory. The western lava flow has covered approximately 1.0 mile of roadway, and 1.1 miles east along the MLO Access Road, the eastern lava flow has covered about 0.2 mile of roadway. The lava flows have highly variable lava depths and are approximately four miles east from the MLO. The project is anticipated to have construction completed by April 2025.

A Design-Build contracting method has been selected to deliver this project. Instead of developing 100% Plans, Specification and Estimate, CFLHD, in coordination with NOAA, will develop performance specifications and identify design criteria to define what the contractor is expected to deliver, including the maximum allowable construction limits for grading. The final configuration of the temporary roadway will be constructed based on the design developed by the design-builder and reviewed/approved by CFLHD and also subject to review and approval by DLNR. Should the design proposed by the design-builder exceed the maximum project impact area defined by CFLHD, the design-builder will be responsible for securing approvals for work outside of project impact area The applicant will need to ensure that all required environmental compliance are

completed and they will be required to bring the revised proposed action back to the Board for approval.

The purpose of this threatened and endangered species and designated critical habitat memorandum is to assess the potential for threatened, endangered, candidate, and proposed (T&E) species to occur in the action area. Under provisions of Section 7(a)(2) of the Endangered Species Act (ESA), a federal agency that carries out, permits, licenses, funds, or otherwise authorizes activities that may affect a listed species must consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that its actions are not likely to jeopardize the continued existence of any listed species from the proposed project or throughout the action area.

Review of the U.S. Fish & Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool identified 15 species with the potential to occur in the project area vicinity (Appendix A). **Table 1** documents the species with the potential to occur.

Project and Action Area

The project action area is defined as all areas where ground-disturbing activities have the possibility to occur (because the project is design-build, the project area defined here will be larger than the actual project area). The proposed temporary repair will be an un-paved road that will mimic the horizontal alignment of the existing roadway to the maximum extent practicable. The typical cross-section of the proposed un-paved roadway will include a 12-foot-wide road surface with a one-foot shoulder on either side. The roadside grading will include cut/fill sections at a maximum of 2H (horizontal) to 1V (vertical) slope to tie in with the existing lava flows. The vertical grade of the proposed roadway will not exceed the vertical grade of the existing roadway.

For the eastern lava flow area, the maximum distance between the top of the lava flow and the elevation of the existing roadway is approximately 20 feet. The maximum footprint of the improvements is estimated to be 120 feet wide (60 feet on either side of the road alignment) totaling 3.9 acres of potentially disturbed area. Along the western lava flow the maximum distance between the top of the lava flow and elevation of the existing roadway is approximately 40 feet. The maximum footprint of the improvements is estimated at 175 feet wide (75 feet on the north side of the alignment and 100 feet on the south side of the alignment), totaling 21.9 acres of potentially disturbed area. It is anticipated that the contractor will be able to achieve the prescribed loading requirements and compaction rates without having to excavate the entirety of the new lava flow, resulting in a smaller impact area than what is described.

Biological Setting

The action area is located at a high-elevation lava field on Mauna Loa, approximately four miles east of the Mauna Loa Observatory on Mauna Loa at an elevation of approximately 11,135 feet above sea level. The action area consists of fresh, cooling lava flow (from the Mauna Loa eruption of 2022). There is no vegetation. The previous roadway is visible in between sections of lava flow.

Table 1. USFWS Federally Listed Species Considered for Potential Effects by the Project

Species Name	Status[1]	General Habitat Requirements	Potential to Occur?	Determination	Rationale
Mammals					
Hawaiian hoary bat *Lasiurus cinereus semotus*	FE	Exotic and native woody vegetation 15 feet or taller.	No	No Effect	The project area is located on a mountainous volcano at an elevation of over 11,000 feet. There is no suitable habitat in the project area (vegetation over 15 feet).
Birds					
Band-rumped storm-petrel (BRSP) *Hydrobates castro*	FE	Remote cliff locations on Kauai and Lehua Island in steep, open to vegetated cliffs, and in little vegetated, high-elevation lava fields on Hawaii Island.	Yes	No Effect	Although potential nesting habitat (high-elevation lava fields) is present within the proposed project area, appropriate conditions for nesting are not present. The BRSP are only known to nest at elevations as high as 7,000 feet and the project is located at 11,000 feet above sea level, which exceeds the elevation at which the BRSP are known to nest. Additionally, the BRSP are found to prefer p¯ahoehoe style lava flow (cooled, smooth, billowy lava) for burrows, which does not occur within our project area. It is possible for individual birds to fly over the project site during construction. Therefore, there will be no night work or night lighting allowed in order to prevent seabird fallout.
Hawaiian Coot *Fulica alai*	FE	Wetland habitats including freshwater marshes and ponds, coastal estuaries and ponds, artificial reservoirs, kalo or taro (Colocasia esculenta) lo`i or patches, irrigation ditches, sewage treatment ponds.	No	No Effect	The project area is located on a mountainous volcano at an elevation of over 11,000 feet. There is no suitable habitat (freshwater aquatic sites) in the project area.
Hawaiian Duck *Anas wyvilliana*	FE	Low wetlands, river valleys, coastal ponds, lakes, swamps, flooded grasslands and streams in mountains.	No	No Effect	The project area is located on a mountainous volcano at an elevation of over 11,000 feet. There is no suitable habitat (low wetlands, river valleys, ponds, etc.) in the project area.
Hawaiian Goose/Nene *Branta (=Nesochen) sandvicensis*	FT	Grasslands, scrub forests, and sparsely vegetated volcanic slopes	No	No Effect	The project area is located on a mountainous volcano at an elevation of over 11,000 feet. Due to the elevation of the project, the project area does not support vegetation; therefore, the habitat type of “sparsely vegetated volcanic slopes” is not present within the project area.

Species Name	Status[1]	General Habitat Requirements	Potential to Occur?	Determination	Rationale
Hawaiian petrel *Pterodroma sandwichensis*	FE	Remote or high elevation areas (8,000 to 9,000 feet) on the islands of Hawaii, Maui, Molokai, Lanai and Kauai. This species nests in burrows, primarily in remote montane locations, along large rock outcrops, under cinder cones, under old lichen-covered lava, or in soil beneath dense vegetation.	No	No Effect	Although potential nesting habitat (high-elevation lava fields) is present within the proposed project area, appropriate conditions for nesting are not present. The Hawaiian petrels are only known to nest as high as 9,000 feet above sea level. The project is located at over 11,000 feet above sea level, which exceeds the elevation which the Hawaiian petrel are known to nest. The petrel burrow in old, cooled lava tubes which take years to develop and have not formed yet in the new, still cooling lava flow in the project area. Additionally, the known colony of Hawaiian petrel on Mauna Loa is not located near the project site and is protected by cat-proof fencing. It is possible for individual birds to fly over the project site during construction. Therefore, there will be no night work or night lighting allowed in order to prevent seabird fallout.
Hawaiian Stilt *Himantopus mexicanus knudseni*	FE	A variety of aquatic habitats, primarily at lower elevations, but are limited by water depth and vegetation cover. Hawaiian stilts require early successional marshlands with water depth less than 24 centimeters (9 inches), and utilize areas of sparse, low-growing perennial vegetation or exposed tidal flats.	No	No Effect	The project area is located on a mountainous volcano at an elevation of over 11,000 feet. There is no suitable habitat (aquatic, low-elevation habitat) in the project area.
Newell's Shearwater *Puffinus newelli*	FT	Slopes and cliffs of Kauai. Small colonies also exist on Molokai, Maui, and the Hawaii Island. This species burrows beneath ferns and tree roots in dense forest and on steep slopes and cliffs.	No	No Effect	The species requires dense vegetation for nesting burrows. The proposed project is located at an elevation of over 11,000 feet with no vegetation. Therefore, there is no suitable habitat within the project area. It is possible for individual birds to fly over the project site. Therefore, there will be no night work or night lighting allowed in order to prevent seabird fallout.
Reptiles					
Hawksbill Sea Turtle	FE	Tropical and subtropical waters	No	No Effect	The project area is located on a mountainous volcano. There is no

Species Name	Status[1]	General Habitat Requirements	Potential to Occur?	Determination	Rationale
					suitable habitat (tropical or subtropical waters) in the project area.
Plants					
Ihi *Portulaca villosa*	FE	Dry, rocky, clay, lava, or coralline reef sites, from sea level to 1,600 m (5,250 ft), in the dry coastal, dry forest, and dry grassland/shrubland	No	No Effect	The proposed project is located at an elevation of over 11,000 feet, which is out of the potential elevation range of the species.
Kuahiwi laukahi *Plantago hawaiensis*	FE	Shrubland habitat on the leeward side of the island of Hawaii, often in cracks in lava, at 1,584 to 2,513 m (5,198 to 8,243 ft). Periodic water-flow channels are evidently required by the species. In addition, P. hawaiensis occurs in bogs and alpine shrubland.	No	No Effect	The proposed project is located at an elevation of over 11,000 feet, which is out of the potential elevation range of the species.
Ma`oli`oli *Schiedea hawaiiensis*	FE	Montane-subalpine dry forest dominated by Metrosideros polymporpha (ohia) in elevations from 1500 to 1600 m (4900 ft to 5250 ft).	No	No Effect	The proposed project is located at an elevation of over 11,000 feet, which is out of the potential elevation range of the species.
Sanicula sandwicensis *Sanicula sandwicensis*	FE	Dry, mesic, and wet forest and shrubland, in subalpine shrubland and grassland, and in riparian and bog areas, on the islands of Hawaii and Maui at elevations from 2,000 to 2,600 m (6,500 to 8,500 ft).	No	No Effect	The proposed project is located at an elevation of over 11,000 feet, which is out of the potential elevation range of the species.
Silene hawaiiensis *Silene hawaiiensis*	FT	Montane or subalpine dry shrublands in decomposed lava and ash, but can be found on all ages of lava and cinder substrates, at elevations between 900 and 1,300 m (3,000 and 4,300 ft) and sometimes up to 2,575 m (8,500 ft).	No	No Effect	The proposed project is located at an elevation of over 11,000 feet, which is out of the potential elevation range of the species.
Ferns and Allies					
Asplenium peruvianum var. insulare *Asplenium peruvianum var. insulare*	FE	On the island of Hawaii, A. peruvianum var. insulare is found in Metrosideros polymorpha dry montane forest, Dodonaea viscosa dry montane shrubland,	No	No Effect	The proposed project is located at an elevation of over 11,000 feet, which is out of the potential elevation range of the species.

Species Name	Status[1]	General Habitat Requirements	Potential to Occur?	Determination	Rationale
		Myoporum sandwicense-Sophora chrysophylla dry montane forest, Metrosideros polymorpha-Acacia koa forest as well as subalpine dry forest and shrubland between elevations of 930 and 2,710 m (3,050 and 8,890 ft).			

[1] Status Designations: FT = Federally Threatened, FE = Federally Endangered

Conclusion

As indicated in **Table 1**, no federally listed species are expected to be present in the action/project area. Individual seabirds may fly over the project area during construction; however, because no nightwork or nighttime lighting will be allowed within the action area, there is no risk of seabird fallout as a result of the project. Therefore, in accordance with Section 7 of the ESA, 16 USC 1536(a)(3), the CFLHD has determined that the proposed project will have "no effect" to listed species. There is no critical habitat identified within the action area; therefore, CFLHD has determined there is "no effect" to critical habitat.

Should the design-builder propose work outside of the cleared action area, additional species evaluation would be required.

References

Daniel, A. (2022, October 2). *Hope for the ʻUaʻu*. BirdNote. https://www.birdnote.org/podcasts/threatened/hope-uau. Last accessed August 2024

Galase, Nicole. (2018, August 28). *First Confirmed Band-Rumped Storm Petrel Colony in the Hawaiian Islands*. Colorado State University, Center for Environmental Management of Military Lands. https://sora.unm.edu/sites/default/files/47_1_25-28.pdf. Last accessed August 2024.

NatureServe. 2024a. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. https://explorer.natureserve.org/. Last accessed August 2024.

2024. Information for Planning and Consultation (IPaC) report. https://ecos.fws.gov/ipac/. Last accessed August 22, 2024.

Appendix A: IPaC Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish And Wildlife Office
300 Ala Moana Boulevard, Box 50088
Honolulu, HI 96850-5000
Phone: (808) 792-9400 Fax: (808) 792-9580

In Reply Refer To: 08/22/2024 18:22:59 UTC
Project Code: 2024-0134124
Project Name: Mauna Loa Access Road Repair Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened and endangered species, as well as designated critical habitat that may occur within the boundary of your proposed project and that may be affected by project related actions. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Please contact the Service's Pacific Islands Fish and Wildlife Office (PIFWO) at 808-792-9400 if you have any questions regarding your IPaC species list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may adversely affect threatened and endangered species and/or designated critical habitat.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a Biological

Evaluation, similar to a Biological Assessment, be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment or Biological Evaluation are described at 50 CFR 402.12.

Due to the significant number of listed species found on each island within PIFWO's regulatory jurisdiction, and the difficulty in accurately mapping ranges for species that we have limited information about, your species list may include more species than if you obtained the list directly from a Service biologist. We recommend you use the species links in IPaC to view the life history, habitat descriptions, and recommended avoidance and minimization measures to assist with your initial determination of whether the species or its habitat may occur within your project area. If appropriate habitat is present for a listed species, we recommend surveys be conducted to determine whether the species is also present. If no surveys are conducted, we err on the side of the species, by regulation, and assume the habitat is occupied. Updated avoidance and minimization measures for plants and animals, best management practices for work in or near aquatic environments, and invasive species biosecurity protocols can be found on the PIFWO website at: https://www.fws.gov/office/pacific-islands-fish-and-wildlife/library.

If a Federal agency determines, based on the Biological Assessment or Biological Evaluation, that a listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/index.

Non-federal entities can also use the IPaC generated species list to develop Habitat Conservation Plans (HCP) in accordance with section 10(a)(1)(B) of the Act. We recommend HCP applicants coordinate with the Service early during the HCP development process. For additional information on HCPs, the Habitat Conservation Planning handbook can be found at https://www.fws.gov/sites/default/files/documents/habitat-conservation-planning-handbook-entire.pdf.

Please be aware that wind energy projects should follow the Service’s wind energy guidelines (http://www.fws.gov/windenergy) for minimizing impacts to migratory birds. Listed birds and the Hawaiian hoary bat may also be affected by wind energy development and we recommend development of a Habitat Conservation Plan for those species, as described above. Guidance for minimizing impacts to migratory birds for projects including communications towers can be found at:

- http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers
- http://www.towerkill.com
- http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation actions that benefit threatened and endangered species into their project planning to further the purposes of the Act in accordance with section 7(a)(1). Please include the Consultation Tracking Number associated with your IPaC species list in any

request for consultation or correspondence about your project that you submit to our office. Please feel free to contact us at PIFWO_admin@fws.gov or 808-792-9400 if you need more current information or assistance regarding the potential impacts to federally listed species and federally designated critical habitat.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Pacific Islands Fish And Wildlife Office
300 Ala Moana Boulevard, Box 50088
Honolulu, HI 96850-5000
(808) 792-9400

PROJECT SUMMARY

Project Code: 2024-0134124

Project Name: Mauna Loa Access Road Repair Project

Project Type: Road Repair

Project Description: The Federal Highway Administration, Central Federal Lands Highway Division (FHWA-CFLHD), in cooperation with the National Oceanic and Atmospheric Administration (NOAA), is proposing to repair approximately 1.2 miles of damaged roadway along the Mauna Loa Observatory (MLO) Access Road, crossing two segments of lava flow in Hilo, North Hilo, Hawai'i. The segments of roadway were covered in lava flow during the November 2022 eruption of Mauna Loa, making the roadway impassible to vehicular traffic and requiring observatory staff to utilize helicopter travel to access the observatory. The western lava flow has covered approximately 1.0 mile of roadway, and 1.1 miles east along the MLO Access Road, the eastern lava flow has covered about 0.2 mile of roadway.

The proposed temporary repair will be an un-paved road that will mimic the horizontal alignment of the existing roadway to the maximum extent practicable. The typical cross-section of the proposed un-paved roadway will include a 12-foot wide road surface with a one-foot shoulder on either side. The roadside grading will include cut/fill sections at a maximum of 2H (horizontal) to 1V (vertical) slope to tie in with the existing lava flows. The vertical grade of the proposed roadway will not exceed the vertical grade of the existing roadway.

Construction of improvements is anticipated to be completed by April 2025.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@19.571576399999998,-155.5011553599967,14z

Counties: Hawaii County, Hawaii

ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Hawaiian Hoary Bat *Lasiurus cinereus semotus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/770
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6477.pdf

BIRDS

NAME	STATUS
Band-rumped Storm-petrel *Hydrobates castro*	Endangered

Population: USA (HI)
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/1226
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6939.pdf

Hawaiian Coot (alae Ke`oke`o) *Fulica alai* — Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7233
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6934.pdf

Hawaiian Duck *Anas wyvilliana* — Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7712
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6934.pdf

Hawaiian Goose *Branta (=Nesochen) sandvicensis* — Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/1627
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6925.pdf

Hawaiian Petrel *Pterodroma sandwichensis* — Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/6746
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6939.pdf

Hawaiian Stilt *Himantopus mexicanus knudseni* — Endangered

No critical habitat has been designated for this species.

NAME STATUS

Species profile: https://ecos.fws.gov/ecp/species/2082
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6934.pdf

Newell"s Shearwater *Puffinus newelli* — Threatened
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2048
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/7ZFWIWXXYVDVLF6MWFEUJKETN4/documents/generated/6939.pdf

REPTILES

NAME STATUS

Hawksbill Sea Turtle *Eretmochelys imbricata* — Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/3656

FLOWERING PLANTS

NAME STATUS

Ihi *Portulaca villosa* — Endangered
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/4886

Kuahiwi Laukahi *Plantago hawaiensis* — Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/3749

Ma`oli`oli *Schiedea hawaiiensis* — Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2509

Sanicula sandwicensis — Endangered
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/5580

Silene hawaiiensis — Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/4189

FERNS AND ALLIES

NAME STATUS

Asplenium peruvianum var. insulare — Endangered
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/4357

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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1. The Migratory Birds Treaty Act of 1918.

2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Department of Transportation
Name: Catherine Henry
Address: 12300 W. Dakota Ave.
City: Lakewood
State: CO
Zip: 80228
Email cbhenry7@gmail.com
Phone: 7209633704

You have indicated that your project falls under or receives funding through the following special project authorities:

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)