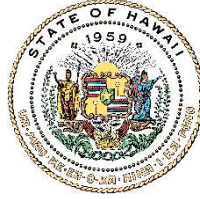


JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

DAWN N.S. CHANG
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BOATING AND OCEAN RECREATION
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ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

August 20, 2024

Mary Alice Evans, Director
Office of Planning and Sustainable Development
235 S. Beretania Street, 6th Floor
Honolulu, HI 96813

Dear Mary Alice Evans,

Subject: Draft Environmental Assessment for Kau Forest Reserve Fenceline Access
Project
Kau Forest Reserve, Kau District, Hawai'i
TMK: (3) 9-7:001:001

The Department of Land and Natural Resources, Division of Forestry and Wildlife is transmitting the subject Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the subject project. The DEA-AFONSI has been prepared pursuant to Chapter 343, Hawaii Revised Statutes, and Chapter 11-200.1, Hawaii Administrative Rules.

We respectfully request that the DEA-AFONSI be published in the next available issue of the Environmental Notice. Materials required for the publication are being provided via the Environmental Review Program's online form.

If you have any questions, please contact Emma.Yuen@hawaii.gov or (808) 587-4170.

Sincerely,

Dawn N. S. Chang
Chairperson

From: webmaster@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Tuesday, August 20, 2024 4:43:22 PM

Action Name

KAU FOREST RESERVE FENCELINE ACCESS PROJECT

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds
- (2) Propose any use within any land classified as a conservation district

Judicial district

Ka'ū, Hawai'i

Tax Map Key(s) (TMK(s))

(3) 9-7:001:001

Action type

Agency

Other required permits and approvals

Conservation District Use Permit

Proposing/determining agency

DLNR

Agency contact name

EMMA YUEN

Agency contact email (for info about the action)

emma.yuen@hawaii.gov

Email address for receiving comments

emma.yuen@hawaii.gov

Agency contact phone

(808) 366-4788

Agency address

1151 Punchbowl St
RM 325
Honolulu, HI 96813
United States
[Map It](#)

Is there a consultant for this action?

No

Action summary

The overall purpose of the road and grubbing project is to facilitate native ecosystem preservation of the Kau Forest Reserve on Hawaii Island. To gain access for the maintenance of a hooved-animal-proof fence, the Division proposes creating a road with a bulldozer. The Division is avoiding impact to sensitive ecosystems by locating the proposed activities on an area primarily composed of lava from the 1950 flow. The proposed road corridor is approximately 1.3 miles long. The road will be installed in a remote area of the Kau Forest Reserve that borders Hawaii Volcanoes National Park. Lengths are approximate and subject to change.

In addition to saving time for conducting natural resource management such as invasive species control and tree planting, this road will reduce the amount of time needed to respond to emergencies like wildfires in this area.

Reasons supporting determination

Significance Criteria

HAR Section 11-200.1-13 requires an agency to determine whether an action may have a significant effect on the environment, by considering every phase of a proposed action, the expected impacts, and the proposed mitigation measures, including:

(1) Irrevocably commit a natural, cultural, or historic resource;

This project avoids significant natural, cultural, or historic resources by siting the project primarily on a lava flow that has less diversity and vegetation.

(2) Curtail the range of beneficial uses of the environment;

This project will not curtail beneficial uses such as watershed values or native habitat because it is a relatively small area and is sited in an area with less biodiversity. Instead, this project is meant to improve beneficial uses of the environment by improving access for natural resource management crews.

(3) Conflict with the State's environmental policies or long-term environmental goals established by law;

This project does not conflict with the State's environmental policies or goals, rather it supports the goal to protect and manage watershed forests.

(4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

This project will not have an adverse effect on the economic welfare, social welfare or cultural practices. Rather, it seeks to improve welfare and cultural practices by protecting watershed forests which provide many economic services and also contain plants and animals important to the perpetuation of cultural practices.

(5) Have a substantial adverse effect on public health;

This project will benefit public health because it will facilitate a project to remove hooved animals from watershed forests. These hooved animals are known to carry and spread various diseases such as Leptospirosis and nontuberculous mycobacterial lung disease.

(6) Involve adverse secondary impacts, such as population changes or effects on public facilities;

This project is in a remote location and will not impact populations or facilities.

(7) Involve a substantial degradation of environmental quality;

This project will help natural resource managers improve environmental quality by responding to wildfires and removing invasive species.

(8) Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions;

This is a small and independent project that does not affect or commit larger actions.

(9) Have a substantial adverse effect on a rare, threatened, or endangered species, or its habitat;

The location of this project seeks to avoid rare, threatened, or endangered species, or their habitat and will include biological surveys to confirm that no rare species will be impacted.

(10) Have a substantial adverse effect on air or water quality or ambient noise levels;

This project does not affect air or water quality or ambient noise levels as it is in a remote location.

(11) Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

This project will not have a substantial adverse effect on or likely to suffer damage by being located in an environmentally sensitive area because it is located in an area that is primarily a low-biodiversity lava flow.

(12) Have a substantial adverse effect on scenic vistas and view planes, during day or night, identified in county or state plans or studies;

This project is very remote and will not be visible from any important view planes.

(13) Require substantial energy consumption or emit substantial greenhouse gases.

This project will use negligible amounts of energy and will emit negligible greenhouse gases where small amounts of vegetation will be cleared.

Expected Determination

No significant negative impact on the environment is expected from this project. A Finding of No Significant Impacts is proposed.

Findings and Reasons Supporting Expected Determination

The intent of this project is to benefit native species in the project area. Staff will carefully survey the road and areas proposed to be cleared to prevent destruction of rare species. Additionally, the area proposed to be cleared is already primarily non-native forest and will be routed to prevent damage to the remaining native trees present in that section.

The short term damage to vegetation as a result of clearing will be offset by the improved management access for natural resource crews. These actions will enable the crews to benefit the native ecosystems.

Attached documents (signed agency letter & EA/EIS)

- [Kau-EA-2024-part-2-signed.pdf](#)

[Kau-EA-2024-part-1-signed.pdf](#)

Action location map

- [renmanuplanning-2.zip](#)

Authorized individual

Emma Yuen

Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

DRAFT ENVIRONMENTAL ASSESSMENT

KAU

FOREST RESERVE

FENCELINE ACCESS PROJECT

In accordance with

CHAPTER 343, HAWAII REVISED STATUTES

Proposed by:

State of Hawaii
Department of Land and Natural Resources
Division of Forestry and Wildlife
Forest Reserves System

Project Name	Kau Forest Reserve Fenceline Access
Project Location	Kau Forest Reserve, Kau District, Hawai'i TMK: (3) 9-7:001:001
Applicant	State of Hawai'i Department of Land and Natural Resources Division of Forestry and Wildlife
Approving Agency	State of Hawai'i Department of Land and Natural Resources
Parties to be Consulted	Federal: U.S. Department of Interior Fish and Wildlife Service National Park Service USGS, Biological Resources Division State: Department of Land and Natural Resources Historic Preservation Division Aha Moku Hawaii Island Councilmember Office of Hawaiian Affairs Senator Dru Kanuha Representative Jeanne Kapela County: Planning Department Private: Bishop Museum Conservation Council for Hawai'i Earthjustice Legal Defense Fund Hawai'i Audubon Society Native Hawaiian Legal Corporation Sierra Club, Moku Loa Group The Nature Conservancy of Hawai'i Three Mountain Alliance Watershed Partnership
Permits Required	Conservation District Use Permit HRS Section 6E Consultation – No Impact to Historic Properties

Project Description

Summary:

The overall purpose of the road and grubbing project is to facilitate native ecosystem preservation of the Kau Forest Reserve on Hawaii Island. To gain access for the maintenance of a hooved-animal-proof fence, the Division proposes creating a road with a bulldozer. The Division is avoiding impact to sensitive ecosystems by locating the proposed activities on an area primarily composed of lava from the 1950 flow. The proposed road corridor is approximately 1.3 miles long. The road will be installed in a remote area of the Kau Forest Reserve that borders Hawaii Volcanoes National Park. Lengths are approximate and subject to change.

In addition to saving time for conducting natural resource management such as invasive species control and tree planting, this road will reduce the amount of time needed to respond to emergencies like wildfires in this area. Positive social impacts from this project include protection and restoration of a unique Hawaiian forest; and the preservation of a remnant of our rapidly disappearing natural heritage.

The project area is located entirely within the boundaries of the Kau Forest Reserve. All project lands are State owned and within the Conservation District, Protected Subzone.

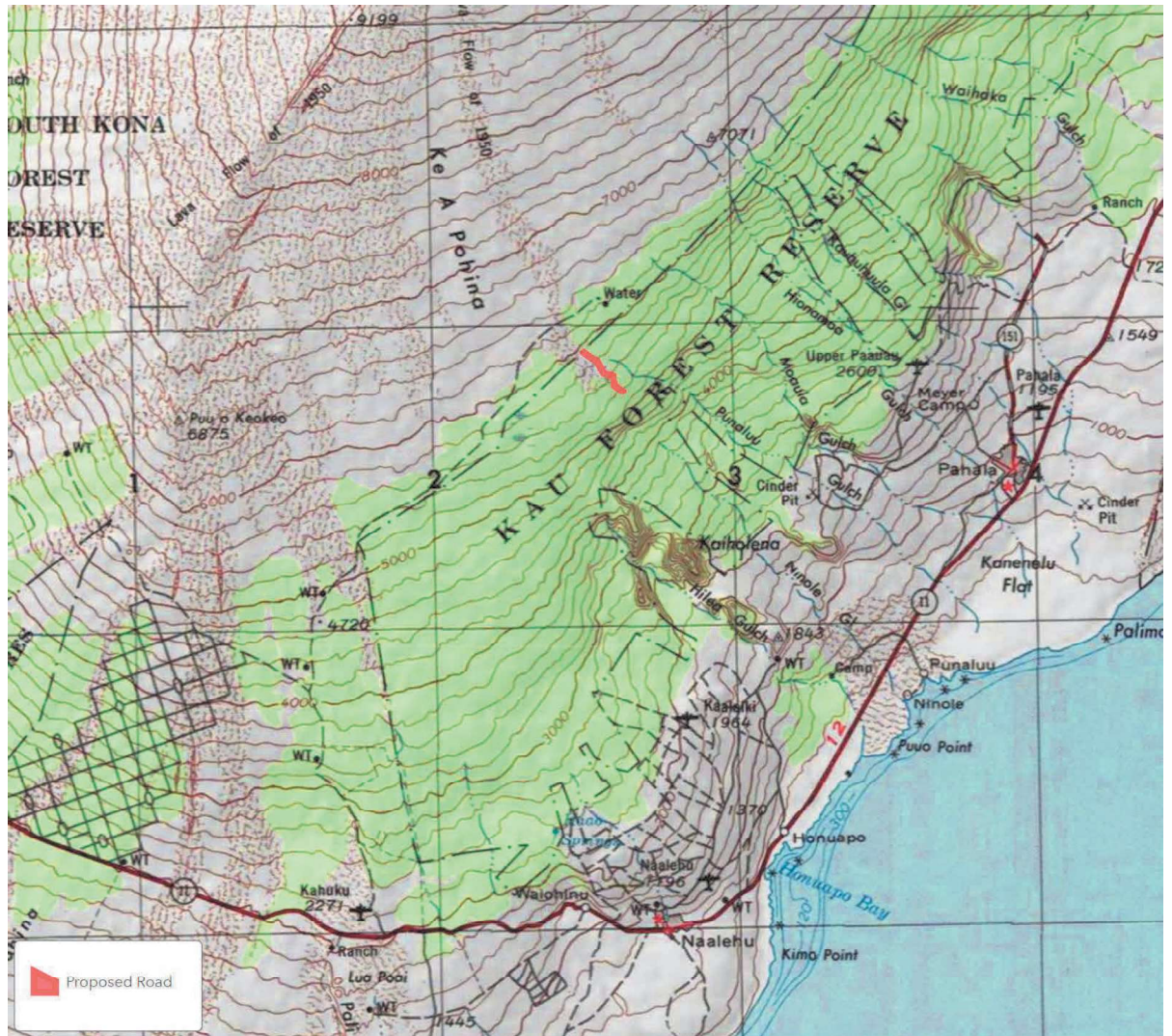


Figure 1. Location of the proposed project in the Kau Forest Reserve

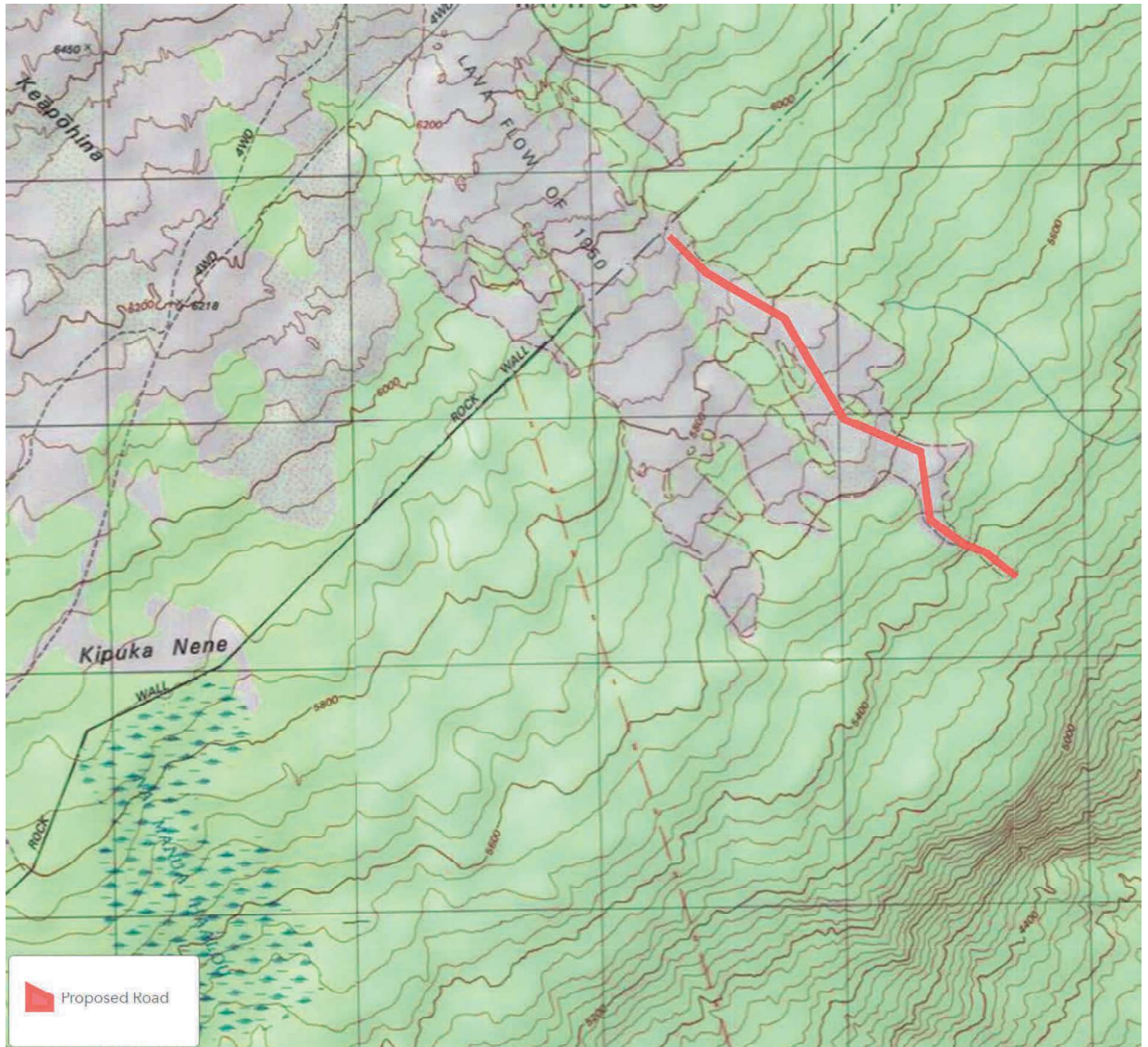


Figure 2. Close up topographical map of the proposed project in the Kau Forest Reserve

The publication of an environmental assessment is triggered by the proposed grubbing activity to bulldoze an area. Only grubbing projects that disturb less than an acre are candidates to be exempt from the preparation of an environmental assessment, per the DLNR exemption list reviewed and concurred by the Environmental Council on November 20, 2020. Funding needed for this project is minimal and comes from existing State general funds allocated to the salaries of the Division’s heavy equipment operators.

Affected Environment

This project is on the southeastern slope of Mauna Loa, from approximately 5,380 feet to 5,980 feet elevation. Most of the Reserve is vegetated by a mosaic of different aged stands of ‘ōhi‘a (*Metrosideros polymorpha*) forest on various substrates. The upper boundary where the new road is proposed is covered by the historic 1950 flow; these are in the early stages of forest development.

Flora:

There is little vegetation in the northern area proposed for the road because it is sited on a recent lava flow.

Fauna:

There are likely very few native animals in the area proposed for the road because it is sited on a recent lava flow and in areas of lower biodiversity. The project will avoid damage to native birds by avoiding destruction of large native trees. Native invertebrates may be impacted during the clearing of the bulldozed section. See Appendix A for a list of bird species recorded from the Kau Forest Reserve.

Although little is known about them, the ‘*opeapea*, or Hawaiian bat (*Lasiurus cinereus semotus*), and may use trees within the Reserve as roosting sites. The proposed bulldozing of the fence line section will occur outside of bat pupping season (April to June) to avoid damaging roosting trees.

Significant & Sensitive Habitats:

The areas proposed for road building and grubbing are carefully designed to avoid significant or sensitive habitats.

Many other locations within the Reserve that this project will benefit can be considered a sensitive habitat, particularly for native forest birds and rare plants.

Archaeological Sites:

No archaeological sites have been observed in the areas where the proposed activity would take place. The road construction proposed will take place on recent lava flows and very remote sections of forest minimizing the likelihood that historic sites will be affected. A review of historical literature does not indicate the area proposed for bulldozing contains any historic features as it is a remote wilderness area. This project proposal has been sent to the State Historical Preservation Division to concur with the Division’s recommendation that no historic properties will be impacted.

Impacts Resulting from Project

Short Term Impacts:

The primary short-term environmental impacts from this project will be those associated with improvement of roads and grubbing. This will include the use of a bulldozer, with a blade of 16 feet wide, to assist with the grubbing. This clearing will cause soil disturbance and include noise disturbance from the bulldozer, however this area is very remote and will not be within hearing range of any community. The crew will be required to follow the contract sanitation protocol which requires dedicated gear to prevent the spread of alien plant species and rapid ‘*ōhi‘a* death *Ceratostyis* fungus.

Long Term Impacts:

Most significant are greater potential for inadvertent introduction of new weed species, and further spread of non-native plants already present in the Reserve.

Constructing new roads and cleared areas may affect the “wilderness” character of this remote area. However, a new road may be beneficial by increasing the ability to manage this area for native ecosystem protection. In addition to saving time for routing natural resource management such as invasive species control and fence maintenance, this road will reduce the amount of time needed to respond to emergencies like wildfires in this area.

Long-term benefits of this project include improved access to manage the fenced area. The fenced area is anticipated to have high levels of regeneration.

Climate change impacts:

The project will result in minimal emissions from the operation of heavy machinery during the course of approximately two-five weeks. However, it is anticipated that the project will overall reduce emissions because it will create a more direct access to the Reserve, and there will be a reduced reliance on helicopters to ferry staff and materials to the region since more of the Reserve will be easily accessed with a vehicle.

Socio-economic impacts:

Minimal costs are associated with this project. They include paying bulldozer operators and vehicle operating expenses. These monies will come from normal operating funds, which have already been obligated.

Cultural impact assessment:

Pre-contact Hawaiian use of upland forests such as those in Kau was likely limited to activities such as gathering plant materials, and bird-catching. A cultural study has been prepared and is included in this Environmental Assessment as Appendix B. Based on the study, this project is not anticipated to have any negative effects on cultural activities. This determination was made by analyzing the ethnographic and oral history interviews, as well as historical cultural source materials listed in the cultural study. The project is anticipated to benefit the native Hawaiian plants and birds traditionally gathered in this region.

Mitigation Measures

Damage to living native plants will be restricted to within the road/clearing corridors, and no living trees greater than 12 inches diameter will be cut. No legally protected plant species have been observed near the proposed road or clearing corridor, but an additional reconnaissance of all corridors will be made before work begins. Significant plants will be marked with flagging, and/or alignments will be shifted to avoid damage.

Weed and rapid 'ōhi'a death introduction will be minimized by ensuring that all heavy equipment, tools, boots, etc. have been cleaned before entering the project area. The long-term management plan for the Reserve includes regular monitoring and control of newly introduced species of non-native plants along fence lines and access roads.

No archaeological sites have been seen within the area to be disturbed by this project. Road and clearing alignments are chosen to utilize previously disturbed or barren areas where ever possible. Should any sites be discovered during construction, work will be halted and the proper authorities notified.

Alternatives to Project

Alternative #1:

Proceed with the project. This would have multiple benefits for natural resource management of the Reserve. In addition to saving time for routine natural resource management such as invasive species control, this road will reduce the amount of time needed to respond to emergencies like wildfires in this area. This road would significantly decrease staff time and cost to access this area, therefore increasing capacity for natural resource management crews to dedicate to protecting this area.

This is the preferred alternative, as it the most feasible.

Alternative #2:

No action. Without the road, there would be significantly higher costs to the management of the Reserve. Staff and contractors may need to rely more heavily on helicopters, increasing use of fuel and

greenhouse gas emissions, noise disturbance, and further exposing staff to safety risks of aviation. Staff would not be able to quickly access this area to respond to wildfires.

Significance Criteria

HAR Section 11-200.1-13 requires an agency to determine whether an action may have a significant effect on the environment, by considering every phase of a proposed action, the expected impacts, and the proposed mitigation measures, including:

(1) Irrevocably commit a natural, cultural, or historic resource;

This project avoids significant natural, cultural, or historic resources by siting the project primarily on a lava flow that has less diversity and vegetation.

(2) Curtail the range of beneficial uses of the environment;

This project will not curtail beneficial uses such as watershed values or native habitat because it is a relatively small area and is sited in an area with less biodiversity. Instead, this project is meant to improve beneficial uses of the environment by improving access for natural resource management crews.

(3) Conflict with the State's environmental policies or long-term environmental goals established by law;

This project does not conflict with the State's environmental policies or goals, rather it supports the goal to protect and manage watershed forests.

(4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

This project will not have an adverse effect on the economic welfare, social welfare or cultural practices. Rather, it seeks to improve welfare and cultural practices by protecting watershed forests which provide many economic services and also contain plants and animals important to the perpetuation of cultural practices.

(5) Have a substantial adverse effect on public health;

This project will benefit public health because it will facilitate a project to remove hooved animals from watershed forests. These hooved animals are known to carry and spread various diseases such as *Leptospirosis* and nontuberculous mycobacterial lung disease.

(6) Involve adverse secondary impacts, such as population changes or effects on public facilities;

This project is in a remote location and will not impact populations or facilities.

(7) Involve a substantial degradation of environmental quality;

This project will help natural resource managers improve environmental quality by responding to wildfires and removing invasive species.

(8) Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions;

This is a small and independent project that does not affect or commit larger actions.

(9) Have a substantial adverse effect on a rare, threatened, or endangered species, or its habitat;

The location of this project seeks to avoid rare, threatened, or endangered species, or their habitat and will include biological surveys to confirm that no rare species will be impacted.

(10) Have a substantial adverse effect on air or water quality or ambient noise levels;

This project does not affect air or water quality or ambient noise levels as it is in a remote location.

(11) Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

This project will not have a substantial adverse effect on or likely to suffer damage by being located in an environmentally sensitive area because it is located in an area that is primarily a low-biodiversity lava flow.

(12) Have a substantial adverse effect on scenic vistas and view planes, during day or night, identified in county or state plans or studies;

This project is very remote and will not be visible from any important view planes.

(13) Require substantial energy consumption or emit substantial greenhouse gases.

This project will use negligible amounts of energy and will emit negligible greenhouse gases where small amounts of vegetation will be cleared.

Expected Determination

No significant negative impact on the environment is expected from this project. A Finding of No Significant Impacts is proposed.

Findings and Reasons Supporting Expected Determination

The intent of this project is to benefit native species in the project area. Staff will carefully survey the road and areas proposed to be cleared to prevent destruction of rare species. Additionally, the area proposed to be cleared is already primarily non-native forest and will be routed to prevent damage to the remaining native trees present in that section.

The short term damage to vegetation as a result of clearing will be offset by the improved management access for natural resource crews. These actions will enable the crews to benefit the native ecosystems.

Environmental Assessment Prepared By:

Emma Yuen
Native Ecosystems Program Manager
Division of Forestry and Wildlife
1151 Punchbowl St. Honolulu, HI 96813
E-mail: Emma.Yuen@hawaii.gov
Phone: (808) 587-4170

Sources of Information:

Appendix A

Native birds historically and/or currently found in or near Kau Forest Reserve

Species	Scientific Name	Island Distribution	Federal Status*	State Status*
Nēnē or Hawaiian Goose	<i>Branta sandvicensis</i>	H, K, M, Mo	LE	LE
'Ua'u or Hawaiian Petrel	<i>Pterodroma sandwichensis</i>	H, L, K, M	T	LE
'Akē`akē or Band-rumped Storm Petrel	<i>Oceanodroma castro</i>	H, K	C	LE
Kōlea or Pacific Golden Plover	<i>Pluvialis fulva</i>	Throughout Hawai'i	MBTA	Indigenous
'Io or Hawaiian Hawk	<i>Buteo solitarius</i>	H	LE	LE
Pueo or Hawaiian Short-eared Owl	<i>Asio flammeus sandwichensis</i>	Throughout Hawai'i	MBTA	Endemic
Ālalā or Hawaiian Crow	<i>Corvus hawaiiensis</i>	Captivity	LE	LE
Hawai'i 'Elepaio	<i>Chasiempis sandwichensis</i>	H	-	Endemic
'Ōma'o	<i>Myadestes obscurus</i>	H	MBTA	Endemic
Hawai'i 'Amakihi	<i>Hemignathus virens</i>	H, M, Mo	MBTA	Endemic
'Akiapōlā'au	<i>Hemignathus munroi</i>	H	LE	LE
Hawai'i Creeper	<i>Oreomystis mana</i>	H	LE	LE
Hawai'i 'Ākepa	<i>Loxops coccineus</i>	H	LE	LE
'I'iwi	<i>Vestiaria coccinea</i>	H, K, O, M, Mo	MBTA**	Endemic
'Apapane	<i>Himatione sanguinea</i>	Throughout Hawai'i	MBTA	Endemic

* Key to Federal and State Status:

Listed Endangered (LE) = Taxa listed as endangered.

Threatened (T) - Taxa listed as threatened

Candidate (C) = Taxa for which substantial information on biological vulnerability and threat(s) support proposals to list them as threatened or endangered.

Migratory Bird Treaty Act (MBTA) = It is illegal to harass or kill birds listed under the MBTA

Endemic and Indigenous species are protected under Hawai'i Revised Statutes 183D and 195D

** USFWS is reviewing the status of this species and will decide within a year whether it should be LE.

Appendix B

Cultural Impact Assessment for the Kau Forest Reserve, Kau District, Island of Hawaii – prepared for the Division of Forestry and Wildlife by Kumu Pono Associates, 2004.

Available at: [2012-10-23-HA-FEA-Kau-Forest-Reserve-Management-Plan.pdf \(hawaii.gov\)](#)