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GOVERNOR OF HAWAII

NOV 27 2007

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Salmonson,

Please find enclosed the Final Environmental Assessment and Finding of No Significant Impact (FONSI) for Honua'ula Forest Reserve Reforestation Project, TMK (3) 7-4-001:004; (3) 7-4-001:003; (3) 7-4-001:002; (3) 7-5-013:013; (3) 7-5-013:02; Honua'ula Forest Reserve, Hawai'i Island, Hawai'i.

The Department of Land and Natural Resources, Division of Forestry and Wildlife has reviewed the final environmental assessment for the subject project, and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish notice of availability for this project in the next available OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form, four copies of the final EA, and the project summary on disk. Please call Melissa Sprecher at (808) 587-4167 if you have any questions regarding this material.

Sincerely,

Paul J Conry

Paul Conry, Adminstrator
Division of Forestry and Wildlife
Department of Land and Natural Resources
State of Hawai'i

RECEIVED
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OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FINAL ENVIRONMENTAL ASSESSMENT

HONUA‘ULA FOREST RESERVE REFORESTATION PROJECT

North Kona District
Island of Hawai‘i

In accordance with
Chapter 343, Hawai‘i Revised Statutes

Proposed by:

Department of Land and Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl Street, Room 325
Honolulu, Hawai‘i 96813

September 2007

Table of Contents

I. SUMMARY

Project Name	Honua‘ula Forest Reserve Reforestation Project
Project Location	Honua‘ula Forest Reserve North Kona District, Island of Hawai‘i, Honua‘ula & Hienaloli Ahupua‘a: TMK (3) 7-4-001:004 (Honua‘ula Forest Reserve, Tract I) TMK (3) 7-4-001:003 (Honua‘ula Tract II Section) TMK (3) 7-4-001:002 (Honua‘ula Tract III) TMKs (3) 7-5-013:013 & TMK (3) 7-5-013:022 (Hienaloli Section)
Land Use	State Conservation District, Resource & Undesignated Subzone County Agricultural District, Agricultural A-1a (Important Agricultural Land)
Applicant	State of Hawai‘i Department of Land and Natural Resources, Division of Forestry and Wildlife
Landowner	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
Anticipated Determination	Finding of No Significant Impact
Agencies & Organizations Consulted & Responded	U.S. National Park Service Hawai‘i Volcanoes National Park U.S. Forest Service Department of Hawaiian Home Lands Department of Health Department of Transportation Office of Conservation and Coastal Lands Office of Environmental Quality Control Office of Hawaiian Affairs County of Hawai‘i Planning Department County of Hawai‘i Department of Water Supply Kamehameha Schools Land Assets Division Hualālai Farms Association U.S. Fish & Wildlife Service

Summary of Action

The Department of Land and Natural Resources Division of Forestry and Wildlife (DOFAW) proposes to stimulate the regeneration of native koa (*Acacia koa*) in approximately 1,000 acres of heavily degraded native forest areas in the Honua‘ula Forest Reserve through a combination of methods.

The project area is located in the Honua‘ula Forest Reserve Tract I, Tract II, and Tract III and the lands of Hienaloli in the North Kona District of Hawai‘i Island (Appendix A). This area is adjacent to State and private lands historically used for long-term cattle grazing operations. Honua‘ula Tract II and many of the surrounding properties were and are currently under active grazing management; and although the forest reserve boundaries were fenced, these fences were not always maintained and range cattle commonly crossed onto forest reserve lands. As a result of the almost continuous presence of domestic and feral cattle populations, native forest composition and structure have been heavily altered.

This project seeks to increase koa forest recruitment and growth by removing barriers to germination, protecting the area from cattle browsing, and improving access to management sites. Project activities will include installing a new fence line, removing feral cattle, conducting surface soil scarification, out-planting, and building two new access roads in the forest reserve. Over the long-term, this project is anticipated to have a net positive benefit on the environment as degraded forest is converted to a healthy native forest with improved watershed capacity and habitat for native species. In addition, DOFAW management access and public recreational opportunities will also be enhanced by expanding the existing road system to and in the reserve.

The project area is located within the Agricultural (A-1a) and Conservation Districts (Resource and Undesignated subzones) on State land, and will utilize state programmatic funds to accomplish the project. As such, the project requires an Environmental Assessment to be prepared in accordance with Chapter 343 of the Hawai‘i Revised Statutes.

II. PROJECT PURPOSE AND NEED

Forest ecosystems of the Hawaiian Islands are among the world’s most spectacular examples of the ecological and evolutionary processes of speciation and adaptation. Millions of years of isolation from continental landmasses have resulted in outstanding adaptive radiations of native forest birds, plants, and insects from relatively few colonizing events. These biological resources are integral elements of the natural and cultural heritage of the Hawaiian Islands and their people.

Hawaii's forests also play a critical role as watersheds, providing recharge to critical underground aquifers and/or supplying surface water to agricultural, residential, and commercial users each year. Unfortunately, many of the natural forest ecosystems of Hawai'i have been degraded or destroyed through clearing for pasture use or development, by feral animal activity, and by the spread of invasive plant species.

The proposed action is to restore a portion of the Honua'ula Forest Reserve that was degraded or damaged by cattle presence, as well as to improve access to the project area and larger forest reserve. Over the long-term, restoration of native koa forests will help to reverse the decline and disappearance of native ecosystems; increase available habitat for native birds, plants, and invertebrates; and improve watershed capacity.

Establishment of infrastructure that supports the implementation of the project is essential to its success. Construction of new access roads within the forest reserve will enable DOFAW staff to implement project objectives in a more time efficient manner, decrease DOFAW's dependency upon adjacent neighboring landowners for access to the reserve for management purposes, and improve public access to and use of the forest reserve. Installment of a new fence line will protect the reforestation project site from the threats of cattle ingression that have largely led to its current degraded state and will improve the likelihood of overall project success.

III. PROJECT DESCRIPTION

The Division of Forestry and Wildlife (DOFAW) proposes to restore approximately 1,000 acres of degraded koa forest in Honua'ula Tract II through the construction of a new fence along the southern boundary of Tract II, surface soil scarification and outplanting, and construction of two access roads in Honua'ula Tract I and Hienaloli in the Honua'ula Forest Reserve (see Appendix A for maps of the project area).

Table 1. Management Units within the Honua'ula Forest Reserve Reforestation Project.

Unit	Acres	Land Cover Description
Honua'ula Tract I:	1,312	Native dominated forest
Honua'ula Tract II:	1,608	Degraded forest/pasture
Honua'ula Tract III:	2,976	Degraded forest
Hienaloli Section:	81	Degraded forest
Total	**5,977**	

Forest restoration in the designated project area will be pursued through a combination of methods; including feral cattle control, surface soil scarification by bulldozer, and koa and native species outplantings. Additional activities include road construction, fence construction for the exclusion of cattle, existing fence repair, invasive weed control, and related activities. Over the long-term, restoration and related activities will enhance native forest and watershed values.

Acacia koa (koa) is an early successional species that responds vigorously to site disturbance. Koa seeds have great longevity and can remain viable in the environment for decades of time. These seeds typically build up in surface soils under and adjacent to existing mature trees. The Honua‘ula Tract II contains a large number of these mature koa trees, but is limited in koa seedling regeneration. The area is believed to contain a substantial seed bank, however; the natural recruitment of koa in this area is inhibited in part by the presence of a thick carpet of Kikuyu grass (*Pennisetum clandestinum*) and feral cattle browsing that prevents koa seed germination and seedling establishment, respectively. Fortunately, the thick kikuyu grass mat has prevent many of the koa seeds from regenerating and subsequently being grazed by feral livestock, which would ultimately deplete the seed stock.

With the inclusion of a fence around the scarification area to remove the threat of managed and feral cattle ingression and the removal of kikuyu grass, koa seed stock will be able to successfully regenerate. Other feral ungulates are not expected to impact the koa reforestation project; however, should DOFAW find that project success is being affected by such animals, DOFAW will take appropriate action according the Department of Land and Natural Resources’ Best Management Practices (BMPs) for the control of feral animals. Thus DOFAW believes that this area, coupled with favorable elevation and climate regimes, has a good potential koa forest restoration though surface soil scarification. The proposed project involves fencing, cattle control, and surface soil scarification to stimulate koa seedling recruitment from the existing seed bank as well as reduce grass and weed competition.

Fence line

A new fence line within the Honua‘ula Tract II project area will be located on the southern boundary between the forest reserve and Kamehameha Schools Pua‘a lands (Appendix A, Map 1). The new fence is intended to discourage the re-entry of cattle into the forest reserve from adjacent lands that continue to be grazed.

A D-8N bulldozer will be used to clear the land corridor, approximately ten (10) feet wide, where the new cattle proof fence (hog wire fence with top barbwire stand, approximately four feet tall) will be built. The fence will avoid any major geological, rare biological, terrestrial, or archeological/cultural features as determined by the archeological and biological surveys. DOFAW staff will

conduct all fence work activities and monitor fence lines throughout the reforestation project site.

Cattle Control

The forest reserve is adjacent to State and private lands, which have been historically used for long-term cattle grazing operations. In 1906, the Honua‘ula Forest Reserve (Honua‘ula Tract I) boundaries were fenced; however, these fences have not always been maintained and range cattle have crossed into the forest reserve. Cattle negatively impact native forest ecosystems by feeding on mature and immature native plants, compacting soil, and spreading non-native invasive plants. As a result of nearly continuous presence of feral cattle in the forest reserve, native forest composition and structure has been significantly altered. Therefore, in order to reestablish native forest cover in Honua‘ula Tract II, feral cattle must be removed from the project area to prevent damage to naturally recruitment and DOFAW planted seedlings. As of December 31, 2003, the managed cattle herds that grazed the area were removed from Honua‘ula Tract II. The previous land lessee is currently in the process of capturing any remaining feral cattle within the project area. This arrangement will dissolve with the commencement of project activities. The Honua‘ula Tract II project area will be fenced to discourage the re-entry of cattle into the project area, after which controlled hunts for remnant feral cattle will be conducted by DOFAW staff. DOFAW will monitor for and control any feral cattle in the project area.

Restoration & Scarification

Surface soil scarification sites have been selected in areas with the lowest density of native trees in order to reduce impacts to the existing forest. Soil scarification will be conducted by DOFAW staff using a D-8N bulldozer for a period of approximately six weeks per year until project completion. The project site will be scarified incrementally beginning with approximately 150 acres in the first project year. Additional plots of approximately fifty (50) to one hundred (100) acres will be scarified each following year until project completion, per annual appropriations. Bulldozer scarification will occur only in areas open enough to allow passage by the bulldozer to avoid damage to existing healthy native trees and will only be used in areas identified by the DOFAW botanical survey (1999, Appendix B) as suitable sites for koa regeneration.

DOFAW will conduct supplemental planting of koa in portions of the project area where the bulldozer cannot access the site due to thick understory, proximity to healthy trees, or steep terrain. DOFAW will also plant koa and other native species known to have occurred with the reserve in selected areas where scarification resulted in limited forest regeneration. The regeneration of a koa canopy will serves a central restoration role in reestablishing a native ecosystem and suppressing non-native plant competition that is often not shade tolerant. Other native plant species, especially shade-tolerance understory

species, experience inhibited growth or survival without the protection of canopy trees. Furthermore in some cases, native species have shown to eventually move back into a previously degraded environment by their own means or will have an increased outplanting survival rate after koa trees have been established for a number of years. Ultimately, the regeneration of koa will provide the base for more formal restoration of a native ecosystem.

After the initial phase of scarification and koa outplanting, DOFAW will continue to monitor the site and conduct related management activities, such as fence repairs, kikuyu grass and banana poka (*Passiflora mollissima*) control, feral cattle control, and long-term monitoring and maintenance of koa regeneration. DOFAW may also seek assistance in monitoring from the U.S. Forest Service.

Road Construction

To aid in reforestation, management, access, and monitoring activities, DOFAW will connect existing road networks created during previous cattle ranching operations by constructing two road segments in the Honua‘ula Forest Reserve. The first road will be constructed along an old horse trail in Honua‘ula Tract I of forest reserve, hereinafter called Honua‘ula Cabin Road. This roadway will facilitate movement from the Honua‘ula work cabin to the north side of Honua‘ula Tract II. The Honua‘ula Cabin Road will traverse along the 6,040-foot elevation contour of the landscape for approximately 0.6 miles (Appendix A, Map 2) as a graded road. Honua‘ula Cabin Road will allow for easier transit to and from the project area by DOFAW staff for project activities, emergency response, and equipment transport. This road is expected to reduce travel time to the northern potions of the forest reserve by forty-five minutes to one hour, and will improve DOFAW management access to the forest reserve. Access to this road will be restricted for DOFAW management purposes.

The second new access road will be constructed in the Hienaloli section of the Honua‘ula Forest Reserve, which represents a relatively long, narrow strip of land that connects the greater portion of the forest reserve to the Mamalahoa Highway between the towns of Honokohau and Holualoa (Appendix A, Map 3). The Hienaloli section road will consist of a combination of a two lane engineered gravel road with a concrete ford crossing through the Kailua-Kona intermittent stream and a single land graded road totaling an approximately length of 1.75 miles from Mamalahoa Highway into Honua‘ula Tract III. At approximately 1570 feet elevation or approximately 0.10 mile from the Mamalahoa Highway turnoff, the two lane gravel road section will terminate, and the DOFAW will provide a five stall parking lot accessible by two wheel drive vehicles. Beyond this intersection, the road will consist of a single lane graded road and will connect to former ranch roadways within Honua‘ula Tract III. Additional parking facilities will be located at the junction between the Honua‘ula Tract III and Hienaloli parcel. Parking facilities including a ten stall parking area, a clivus composting toilet, picnic tables, and a hunter check in

station will be provided as infrastructure for public use and access to the forest reserve as described in the Honua‘ula Tract III Access Road Alignment Design Plan (1995). The road past this junction will be gated and locked with vehicular access restricted for DOFAW management purposes. All grading work shall conform to Chapter 10 of the Hawaii County Code and will not commence until the appropriate grading permit is obtained. A number of foot trails within Honua‘ula Tract III may be created for gathering, recreational, and hunting purposes in this area. The Hienaloli road will increase DOFAW staff access the forest reserve and project area, as well as provide public access and facilities for recreational opportunities.

The road system will be constructed using D-8N and D-10 bulldozers and a road grader. Both roadways will avoid any major geological, rare biological, terrestrial, or archeological/cultural features as determined by the National Parks Service archeological surveys and DOFAW biological surveys (Appendix B & archeological survey available upon request). Road construction will conform to Chapter 10 of Hawaii County Code and activities will not commence until the appropriate grading permits are obtained. DOFAW staff will conduct and/or supervise all scarification and road work activities in order to control for such features and to minimize overall project impacts.

The restrictions placed on heavy equipment identified above are expected to minimize impacts to the natural and cultural resources surrounding project areas. It is the intent of this project to retain as much existing tree overstory as practicable, maintain wildlife habitat, avoid important archeological features and sensitive biological resources, and promote a more complex forest structure. The project will commence once all necessary approvals and permits have been secured.

Table 2. Proposed Project Timeline

Project	**Approx. Start**	**Approx. Completion**	**Restrictions**
Fence line	January 2008	April 2008	n/a
Cattle Control	November 2007	Continuous	n/a
Honua‘ula Cabin Road	August 2009	December 2009	Availability of equipment
Reforestation (soil scarification & out-planting)	March 2008	July 2023	Subject to Annual Legislative Appropriations
Hienaloli Road	February 2010	August 2010	Subject to Annual Legislative Appropriations

The cost estimates for the project are as follows:

Table 3: Proposed Project Cost Estimates

Item	**Estimated Cost**
Planning (includes surveys and preparation of EA)	$24,270
Soil scarification and koa outplanting by DOFAW staff	$346,800*
Road construction	$1,100,000
Fence construction	$100,000
Project monitoring and maintenance	$50,000**
Total	**$1,621,070**

* Year One $61,230 for 150 acres.

** Project monitoring & maintenance as required by the National Park Service archeological survey for Hienaloli Road.

Funding for this project includes $42,750 from the USDA Forest Service and $42,750 State match (composed of in-kind contributions (use of equipment), seedling acquisition, and salaries). Additional grant request for $100,000 has been submitted for fence construction in the project area. Annual funding, following the first year of project implementation will be allocated from DOFAW operational costs for all reforestation activities.

IV. SUMMARY DESCRIPTION OF AFFECTED ENVIRONMENT

Location and Physical Characteristics of the General Area

The proposed koa reforestation project area encompasses an area of approximately 1,000 acres of State-owned land in the Honua‘ula Forest Reserve. This forest reserve protects forested watershed of the Wai‘aha watershed on the western slopes of Hualālai. The Koa reforestation and fence construction is planned within Honua‘ula Tract II, and the road construction is planned for the Honua‘ula Tract I and Hienaloli section of the Honua‘ula Forest Reserve.

Mauka (mountain-side) of the koa reforestation project area is Honua‘ula Tract I and lands owned by Kamehameha Schools. *Makai* (ocean-side) of this project area is the Honua‘ula Tract III and other State owned lands. Other adjacent landowners are Palani Ranch Company, Inc. to the north and additional lands owned by Kamehameha Schools to the south. The area that now comprises the Honua‘ula Tract I was historically grazed, but managed cattle herds were removed and the area was fenced after 1906 with the creation of the Honua‘ula Forest Reserve.

The proposed Honua’ula Cabin Road construction is within Honua‘ula Tract I. The road will traverse along the existing mauka fence line road of Honua‘ula Tract II and connect to the current Honua‘ula cabin access road. Lands

surrounding this forest reserve section include the Honua‘ula Tract II and Kamehameha Schools properties.

The proposed Hienaloli access road project is within the Hienaloli sections of the Honua‘ula Forest Reserve. Landowners adjacent to the road include Sunra Coffee to the north and numerous properties with acreages ranging from one to five acre lots to the south. This roadway will be accessible from the Mamalahoa Highway and will terminate within Honua‘ula Tract III.

The lands surrounding the forest reserve are of mixed-use including some agricultural farms, grazing ranches, and low-density residential lots. Other surrounding land types and uses include mixed-native forested lands and lands that have been historically or are currently grazed by domestic livestock.

Primary access to the project areas is by four-wheel drive vehicle. Entrance to the koa reforestation project and Honua’ula Cabin Road sites can be reached via the State Hawaii Belt Road and Kaloko Drive. Entrance to the project sites requires prior permission from either Kamehameha Schools (from which the site can be accessed from the mauka side of Honua‘ula Tract II) or from Palani Ranch Company, Inc. (from which the site can be accessed from the Northern side of Honua‘ula Tract II). Both access routes to the forest reserve are gated and locked. The Hienaloli road project area can be accessed from Mamalahoa Highway.

The project areas are situated at elevations between approximately 1,500 and 6,000 feet. Rainfall in the project area ranges from 90 to 150 inches annually with the rainfall regime characterized by fog and mist development focused between the 1,000 to 4,000 feet elevations. The unique climatic conditions in this area are attributed to a lack of tradewinds, which are blocked by the high volcanic mountains of Hualālai, Mauna Loa, and Mauna Kea.

Soils

The project areas include soils from the Kawaihae association, Kūka‘iau-‘Āinakea-Pā‘auhau association, Hanipoe-Maile-Pu‘u ‘Ō‘ō association, Akaka-Honoka‘a-Kaiwiki association, Lava flows association, and Kekake-Ke‘ei-Kīloa association.

Table 4. Soil types within project areas of the Honua‘ula Forest Reserve.

Honua‘ula Forest Reserve Section	**Soil Type**
Hienaloli Road	Honua‘ula Hydrous silt loam with 10 to 20 percent slopes
	Honua‘ula-Kealakekua Complex with 10 to 20 percent slopes
Honua’ula Cabin Road	Nenenui-Pahoehoe complex with 10 to 20 percent slopes
	Pu‘ukala-Hōkūkano complex with 10 to 20 percent slopes
Honua‘ula Tract II	
Northern sections	Kekake-Pahoehoe complex with 10 to 25 percent slopes
	Pu‘ukala-Kealoha complex with 10 to 20 percent slopes
	Māwae Very Cobbly Muck with 10 to 20 percent slopes
	Hokukano-Pahoehoe complex with 10 to 20 percent slopes
	Kekake-Mawae complex with 10 to 20 percent slopes
	Pu‘ukala Medial silt loam with 10 to 20 percent slopes
	Pu‘ukala- Hōkūkano complex with 10 to 20 percent slopes
	Manaha‘a Hydrous Silt loam with 10 to 20 percent slopes
Southern sections	Manaha‘a Hydrous silt loam with 20 to 50 percent slopes
	Hōkūkano-Manaha‘a complex with 10 to 20 percent slopes
	Kealoha very gravelly medial silt loam with 10 to 20 percent slopes
	Kealoha very gravelly medial silt loam with 20 to 50 percent slopes

The Honua‘ula Forest Reserve is located in Volcanic Hazard Zone 4 in the Hualālai Volcanic Hazard Zone. Hazard Zone 4 reflects that eruptions are less frequent than on the younger Kīlauea or Mauna Loa volcanoes. Approximately twenty-five percent of Hualālai volcano is covered by flows less than 1,000 years old with the last eruptions occurring within the last 3,000 years from its summit, along the northwest and south-southeast rift zones, and from vents on its north flank.

The only known stream within the project area is located in the Hienaloli section of the forest reserve. The Kailua-Kona stream is an intermittent (class 1a HAR §11-54) stream with its headwaters in Honua‘ula Tract III. The Hienaloli section of the forest reserve is potentially susceptible to limited flooding during high rainfall events.

Current Land Use and Zoning

The Honua‘ula Tract II (TMK (3) 7-4-001:003), Honua‘ula Tract III (TMK (3) 7-4-001:002), and Hienaloli section (TMK (3) 7-5-013:022) of the Honua‘ula Forest Reserve are located within the Undesignated subzone of the Conservation District. The Hienaloli section (TMKs (3) 7-5-013:013) is located within Agricultural District. The Honua‘ula Tract I (TMK (3) 7-4-001:004) is found

within the Resource subzone of the Conservation District. The land use and zoning is identified as follows:

Table 5: Tax Map Key Land Use and Zoning

TMK	State Land Use (subzones)	County Zoning	General Plan	Area (acres)
(3) 7-4-001:003	Conservation (undesignated)	Agricultural (A-20a)	Conservation	1,608.5
(3) 7-4-001:002	Conservation (undesignated)	Agricultural (A-20a)	Conservation	2,976.1
(3) 7-4-001:004	Conservation (resource)	Forest Reserve	Conservation	1,312
(3) 7-5-013:022	Conservation (undesignated)	Agricultural (A-5a)	Conservation	78.36
(3) 7-5-013:013	Agricultural	Agricultural (A-1a)	Important Agricultural Land	2.85

The project areas are not located in the County of Hawaii's Special Management Area, nor the State of Hawai‘i Restricted Watersheds, Hawaii Administrative Rules (HAR) §13-105-3.

The primary intended use of the project areas include native forest restoration and public recreation. Hunting is allowed in the Honua‘ula Tract I pursuant to the hunting rules of the Department. This section is within State Hunting Unit B, which allows the hunting of wild pigs, sheep, and goats by rifle, muzzleloader, shotgun, handgun, bow and arrow, spear, knife, and dog, daily, year-round, with a bag limit of two pigs, one goat, and one sheep per day. Game bird hunting is allowed Saturdays, Sundays, and holidays from the first Saturday of November through Martin Luther King Day or the third Sunday in January which ever occurs later. Specific bag limits for game bird hunting are found in the HAR §13-122-4. The DOFAW is evaluating the other associated tracts for possible hunting area expansion. The final decision for the hunting limitations or restrictions within the forest reserve will be determined in the forest reserve management plan for this area. Any hunting allowed in the forest reserve shall be subject to appropriate safety measures including safety zones (including 50 yard buffers along perimeter boundaries) for rifle, shotgun, or bow and arrow hunters according to standards that apply to all DOFAW-managed lands.

The DOFAW Draft Management Guidelines classify the Honua‘ula Forest Reserve project areas as A2 (Honua‘ula Tract II) and A1 (Honua‘ula Tract III) for game control management. An A2 (mixed game control/managed yield) ranking reflects that game management is an objective integrated with other uses, that habitat may be manipulated for game enhancement, and that game populations are managed to acceptable levels using public hunting. An A1 (game production/sustained yield) ranking reflects that game is a primary objective and hunting seasons and bag limits provide maximum sustained public hunting opportunities and benefits. All of the Honua‘ula Forest Reserve is classified as R2 (medium use) for recreational activities. This classification

reflects that these are areas where outdoor recreation is limited, controlled, or integrated with other uses. In these areas facilities are not highly developed but may include trails, rustic shelters, or unimproved campsites. Lastly, the forest reserve is classified as F2 and F3 for forest products. An F2 (secondary) ranking reflects areas where limited small-scale harvesting or salvage is allowed (<10 acres harvested per year) and permits and/or licenses are required with appropriate restrictions. In areas with an F3 (personal) ranking, small-scale non-commercial harvesting or salvage is allowed (i.e., materials for cultural uses).

Flora

The Honua‘ula Tract II koa regeneration project area is predominantly characterized as an open koa/‘ōhiā (*Acacia koa/Metrosideros polymorpha*) montane mesic forest lacking in other native understory species. Furthermore, the area has low koa regeneration, and banana poka (*Passiflora ssp.*) cover of fifty to seventy-five percent. Vegetation along the southern end of the project area, boardering Kamehameha Schools lands, is dominated by alien grasses such as orchard grass (*Dactylis glomerata*) with occasional native plants. The boundary between Honua‘ula Tracts II and III is characterized as the best quality native forest in the Honua‘ula Tract II with an intact understory of native vegetation. Along the northern, makai section of Honua‘ula Tract II, a well developed ‘ōhiā forest canopy persists; however, due to grazing pressure, it lacks a native understory. The northern, mauka section canopy is comprised of intact koa/’ōhiā forest with some native components in the understory and good koa regeneration. Kikuyu grassland/pasture cover can be found along the southern boarder with Kamehameha School lands.

The vegetation in Honua‘ula Tract I of the forest reserve is dominated by open koa/mamane (*Acacia koa/Sophora chrysophylla*) forest (with mixed grasses and native shrubs), native dominated mamane/naio (*Sophora chrysophylla/Myoporum sandwicense*) forest, uncharacterized open-sparse vegetation, native shrubland with sparse ‘ōhiā, and alien forest and grassland in the mauka sections.

Honua‘ula Tract III section of the forest reserve is largely dominated by open and closed ‘ōhiā forest. To a lesser extent, alien dominated forest can be found along the makai section of the tract. Hienaloli section is dominated by intermixed closed ‘ōhiā forest and alien dominated forest (Figure 1).

No endangered plant species were observed within the project areas during botanical surveys conducted by DOFAW staff in 1999, 2005, or 2007 (see Appendix B for the botanical survey conducted by DOFAW staff). However, critical habitat for *Cyanea hamatiflora* ssp. *carlsonii* and *Solanum incompletum* are identified for the forest reserve (Figure 2) implying that these endangered plant species were or are found in the area.

Figure 1. Honuaula Forest Reserve Vegetation Types

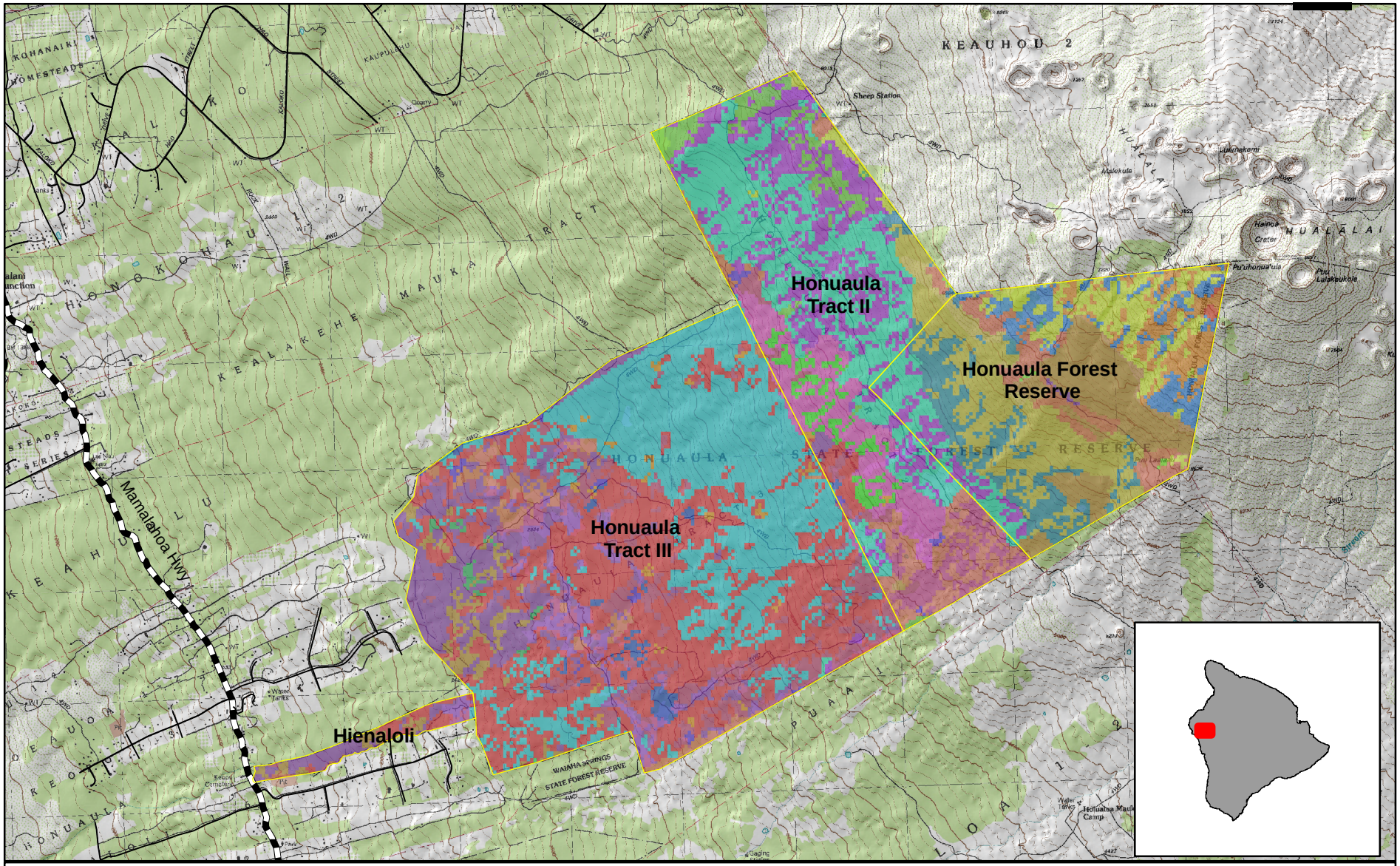
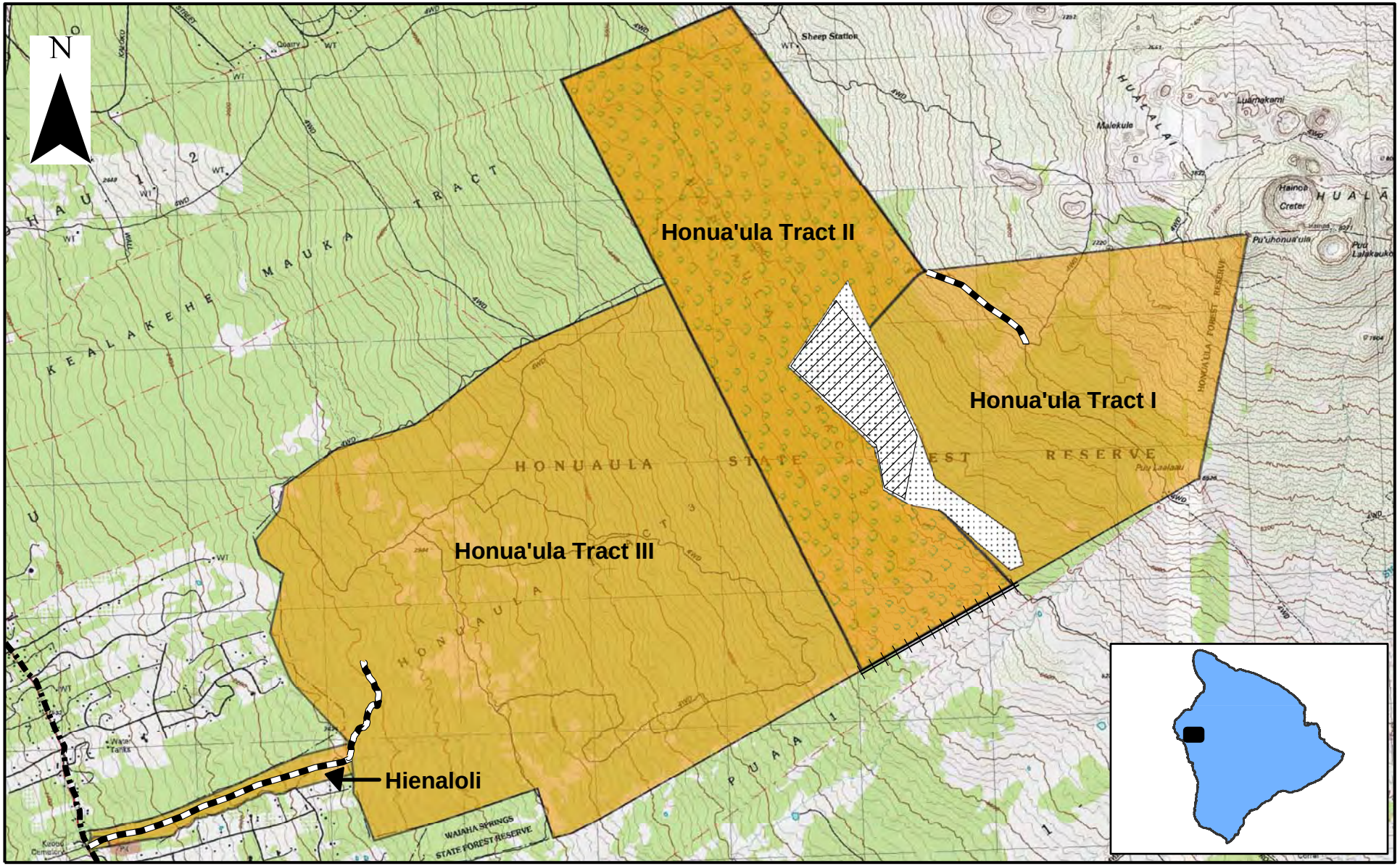


Figure 2. Honua'ula Forest Reserve. Cyanea hamatiflora ssp. carlsonii and Solanum incompletum designated critical habitat.



Legend

- Mamalahoa Hwy
- New Access Roads
- New Fence Line
- EA Project Areas
- Koa Regeneration Project Area
- *Cyanea hamatiflora ssp. carlsonii*
- *Solanum incompletum*

0 0.25 0.5 1 1.5 2 Miles

Map created by
Missy Sprecher Sept 2007
Map No. 091407
honuaulafig2

HAWAII STATEWIDE GIS PROGRAM

The DOFAW Draft Management Guidelines identify the vegetation classes of the Honua‘ula Forest Reserve as V2, V3, and V4. More specifically, Hienaloli and makai area of Honua‘ula Tract III are classified as V4 or characterized as a severely degraded or highly altered area. Honua‘ula Tract II is classified as V3 or a considerably disturbed area where the vegetation does not reflect native species composition. The mauka area of Honua‘ula Tract III and Honua‘ula Tract I are considered V2 vegetation class that reflects a relatively intact community with a predominance of native plants.

Fauna

Several native birds endemic to the Hawaiian Islands have been observed in the Honua‘ula Tract II project area including: ‘amakihi (*Hemignathus virens virens*), ‘apapane (*Himatione sanguinea*), ‘i‘iwi (*Vestiaria coccinea*), the pueo (*Asio flammeus* or Hawaiian short-eared owl) and the endangered ‘io (*Buteo solitarius* or Hawaiian hawk) (see Appendix C for the 2005 DOFAW faunal survey).

‘Ōpe‘ape‘a, or the Hawaiian Hoary Bat (*Lasiurus cinereus semotus*), was not observed in the project area during the surveys. However, there may be some use of the area by bats that was not detected. DOFAW Hawai‘i Branch staff conducted surveys for the bat on two nights in May 2005, one night in October 2005, and one night in December 2005 during dusk and early evening hours, in the area of the proposed koa reforestation. There was no detection of the Hawaiian Hoary bat during the survey visits.

No specific studies of the invertebrate community are known to have been done in the project area. However, observations on Kaho‘olawe and other restoration areas demonstrate that native invertebrates respond quickly to habitat restoration and will re-colonize areas on their own after native plants have been reestablished. In addition, koa provides important habitat for a wide range of native invertebrates, including the koa bug (*Coleotichus blackburni*) and the koa butterfly (*Udara blackburni*). The restoration of a koa forest is anticipated to improve habitat for a diverse array of native invertebrate species.

No specific studies of native aquatic species were conducted for the Kailua-Kona intermittent stream within the Hienaloli project area. This is largely due to the inconsistent flow nature of the stream. However, native species that commonly survive in intermittent streams rely on episode flooding, which can replenish and oxygenated water, remove sediment, and open a canal to the ocean to facilitate movement of the species.

Non-native birds observed in the project area includes: Japanese bush-warbler (*Cettia diphone*), Japanese white-eye (*Zosterops japonica*), House finch (*Carpodacus mexicanus*), Mitered conures (*Lophura leucomelana*), Northern cardinal (*Cardinalis cardinalis*), Red-billed leiothirix (*Leiothrix lutea*), and Yellow-fronted canary (*Serinus mozambicus*). Game birds present within the

forest reserve include Erckel's francolin (*Francolinus erckelii*), Kalij pheasant (*Lophura leucomelana*), and Wild turkey (*Meleagris gallopavo*).

Non-native mammals observed or believed to occur in the project area include feral cattle (*Bos taurus*), goats (*Capra hircus hircus*), sheep (*Ovis aries*), pigs (*Sus scrofa scrofa*), mongoose (*Herpestes auropunctatus*), mice (*Mus* spp.), and rats (*Rattus* spp.).

Significant and Sensitive Habitats

The Honua'ula Tract II section of the project area contains critical habitat for the listed endangered plants, *Cyanea hamatiflora* ssp. *carlsonii* and *Solanum incompletum*.

The project area is not located in or near any of the following types of sensitive areas: flood plains, tsunami zones, beaches, rivers, oceans, estuaries, achialine ponds, fresh or coastal waters, erosion prone areas, or geologically hazardous land. The Hienaloli project area contains one intermittent stream.

Archaeological Sites and Cultural Practices

The following steps were taken to determine the current and historic cultural significance of the project area:

(1) A general literature review was conducted to amass reports or studies with relevant information regarding the Hualālai and Kailua-Kona area;
(2) Pre-consultation letters were sent to a variety of agencies and organizations that might be interested in the project or have relevant information, including: the State Department of Hawaiian Home Lands, the Office of Hawaiian Affairs, and adjacent landowners;
(3) An archaeological survey was completed to determine the presence of any visible archaeological features, such as rock walls, or any features potentially used for cultural reasons, such as lava tubes or caves. The Hienaloli section survey was conducted by a State Parks archaeologist and DOFAW staff as well as the U.S. National Park Service. The survey of the Honua'ula Tract II and Honua'ula Cabin Road project areas were conducted by the U.S. National Park Service;
(4) A review of State archives and agency files regarding the history of the general area surrounding the project area was conducted.

History

During pre-contact period of Hawai'i, approximately 1200s, the coastal habitations of the North Kona district began expanding. These early inhabitants utilized the ocean and inland field resources of this area for their livelihood. Permanent settlements began in the 1400s and extended from Kekaha/Kaloko to Kohala. These settlements included the historical fishponds at Kaloko and Honokahau, dating from 1400s to 1500s. During the next few centuries the population of the area continued to grow and many heiau, luakini, and ahupua'a

heiau were constructed throughout the district. Within Honua‘ula Tract I of the forest reserve, the mauka section is likely to have been used for its non-timber resources, while the lower elevation forests above Kailua-Kona were traditionally the primary sources for housing material and canoes, being closer to the ocean. The area was also likely utilized for its bird resources, which were collected for both meat and feathers.

The town of Kailua-Kona was established as the seat of government until the end of the rule of King Kamehameha I, and eventually served as the Kingdom of Hawaii’s first seat of government. Kailua-Kona was a center for Hawaiian cultural practices focusing on the royal fishponds of Kaloko-Honokōhau, religious and housing sites, and petroglyphs.

The Great Mahele of 1848 awarded lands in Hawai‘i to individuals (konohiki), the government, and the crown. The lands of Hienaloli and Honua‘ula Ahupua‘a were largely placed under government control with the exception of a number individual claims mostly situated along the shoreline.

During the 1800s, wild cattle were introduced in great numbers and found fairly wide ranging throughout the district of North Kona. Much of the land in the Honua‘ula and surrounding areas were either sold or leased for cash crop farming or cattle grazing activities. Hawaiian agriculture consisted of taro, breadfruit, sweet potato, and ti plant cultivation. By the mid-nineteenth century plantation farming was under way with the introduction of sugarcane, bananas, and kona coffee. At this time, the forested lands of Honua‘ula and Hienaloli reached down to about 3,000 feet in elevation. Lands in the region, including the project area, were largely deforested for cattle grazing activities and represented some the islands prime grassland grazing.

On April 4, 1906, the mauka lands of Honua‘ula were added into the Forest Reserve System by Governor’s proclamation. At that time, the lower portion of Honua‘ula Ahupua’a was laid out in homestead lots but were never made available. The low elevation land was dominated by ‘ōhiā forest with a predominance of ‘ie‘ie (*Freycinetia arborea*) vine masses. With the continued use of cattle grazing in the area, the cattle moved up though the homestead lots and opened up the forest in the Hienaloli section, Honua‘ula Tract II and Tract III, and adjacent land areas. The designated Honua‘ula Forest Reserve (Tract I) represented a protected belt of large koa trees and thus was fenced to protect the resources from surrounding grazing activities. A small amount of experimental trees (approximately twenty avocado trees) were planted in the upper portions of the Honua‘ula Forest Reserve during this period.

The Hienaloli, Honua‘ula Tract II, and Honua‘ula Tract III sections were added to the Honua‘ula Forest Reserve in July 2006. Prior to the inclusion of these lands to the Forest Reserve System, they were under license for cattle grazing operations. Three perpetual non-exclusive easements exist on the property for a

waterline, the Holualoa-Puuwaawaa pipeline (five feet wide), and an anchor and overhead transmission line.

Archaeological features

Archaeological surveys of the proposed project areas were conducted on behalf of DOFAW by archaeologists with the U.S. National Park Service (NPS) between February 5 to 9, 2007 (Honua‘ula Tract II survey) and during multiple site visits beginning in April 2007 and continued through May 2007 (Hienaloli survey). The NPS archaeological survey are available upon request.

Honua‘ula Tract II

The NPS survey coverage of the Honua‘ula Tract II project area was conducted along the southwestern boundary oriented southwest/northeast (mauka/makai) and was used to establish transect locations spaced at 500 meter intervals. An existing ranch road that bisects the project area from the north to the south was used both for project area access and as a mid-point for a majority of the transect routes. A total of 120 acres were examined and the selected transect interval allowed for a total of 11 survey transects. Completed site descriptions, features record forms, photos and photo logs and GIS data base information are on file at Hawaii Volcanoes National Park, Cultural Resource Management Division.

A total of three new sites comprised of ten (10) individual features were identified and include a boundary wall, a ranch house complex, and a corral complex. These sites are all situated in the extreme northern portion of the project area, along with two additional features that were identified consisting of a fiberglass water tank and concrete water tough. These two features appear modern; however, their current location may signify where previous water facilities once existed in the area. Additionally, a relatively large reservoir is located in the extreme southern portion of the project area. Photographic and feature records, as well as Global Positioning System (GPS) data, were collected for these features that adequately documents them so that no further work is recommended for analysis planning.

The boundary consists of a stone wall that extends along the northern boundary of the project area. The wall is mostly intact with relatively few collapsed areas and is in good condition. The wall is functionally interpreted as a historic-era boundary/ranch wall based on its characteristics and its location, being situated on the boundary between Honua‘ula Tract II and Honokahau Ahupua‘a.

The ranch house complex consists of a ranch house comprised of two concrete water troughs, a stonewall enclosure surrounding the ranch house, a redwood water tank, and the main ranch house. The ranch house complex is believed to be remnants of ranching efforts of the Palani Ranch Company Inc. that previously leased this area for cattle ranching operations. The ranch complex

dates to at least the mid 1900s. The ranch house and its ancillary features have fallen into disrepair.

The corral complex is comprised of four adjoining enclosures, three small enclosure areas and one larger enclosure area. The complex includes livestock corrals in the typical configuration.

The current reconnaissance survey design allowed for coverage for an optimum, systematic inspection of the entire project area. Ground visibility throughout the survey ranged from areas of thick vegetation that reduced survey effectiveness to areas of open pasture that generally allowed for good visual inspection. The historic remains identified are located in a mixed open pasture-like setting (ranch house) and forested slopes (boundary wall and corral complex). The identified sites, when combined, represent a ranch/homestead complex that is tentatively identified with Palani Ranch Company, Inc. activities, the primary leaseholder of the area during its operation. No other prehistoric or historic properties were observed in the remainder of the project area. Pre-historic usage of the area may have included resource procurement activities and associated trail networks that accessed the area, activities that left few physical remains on the landscape, and were subsequently obscured by forested vegetation and by the dis-use of these resource areas.

Hienaloli Road

National Park Service survey coverage of the Hienaloli project area was based on the U.S. Geological Survey (USGS) quadrangle maps of the proposed roadway, and was aligned by placing points along the route at 100 meter intervals. Survey transects were oriented parallel with the proposed road alignment, and meandering transects were utilized to examine site areas that were identified in previously surveys. The survey area was determined by examining an approximate forty (40) meter-wide survey area that parallels the proposed road location. A total of twenty-nine (29) acres were examined through survey implementation. Complete site descriptions, feature record forms, photo logs, and Geographic Information System (GIS) data base information are on file at Hawaii Volcanoes National Park, Cultural Resource Management Division.

Four previous archaeological investigations have been performed within the Hienaloli project area prior to the NPS survey. The current reconnaissance survey relocated five historical sites with the proposed project area as identified in early surveys. However, a number of sites were not relocated. This is attributed to either “generally poor condition” and further deteriorating of sites since the previous survey; poor ground visibility in areas occupied by strawberry-guava stands; site location outside of the area of potential impact; impact by further land use within the survey area attributed to residential development activity to the south of the project area; removal of portions or all of site features; or results from the adjacent landowners continued use of State owned land.

The five identified historical sites within the project area consist of differing stone walls constructed from stacked basalt cobbles and small boulders. The recorded wall segments range from 20 meters, 98 meters, 163 meters, 175 meters, and 626 meters in length. The majority of the sites are interpreted as a historic-era ranch walls, and are assessed as mostly intact with relatively few collapsed areas in fair to good condition. Additional possible wall/terrace features could potentially be located in or surrounding the project site, but because of the deteriorated conditions positive feature identification could not be made during survey work. The identified sites/features within the project area represent the physical remains of traditional dry land agricultural pursuits and subsequent horse/cattle ranching efforts.

No archaeological sites/features were located along the existing road segments located within Honua‘ula Tract III.

Contemporary cultural practices

Gathering of plant material for lei making, medicinal use, or other Native Hawaiian traditional uses likely occur within the Honua‘ula Forest Reserve. In addition, public hunting also takes place within the forest reserve. There were no cultural practices identified by consulted parties during pre-consultation that may be impacted by the proposed koa reforestation project. The proposed action is anticipated to support public use for cultural practices by providing better access to and facilities at the forest reserve, as well as restoring traditionally used native forest resources.

V. ALTERNATIVES CONSIDERED

Four project alternatives are described:

(1) The proposed action consisting of feral cattle control, bulldozer soil scarification, construction of two new roads, fence repair and construction, and koa planting (preferred alternative);
(2) An alternative utilizing feral cattle control, bulldozer soil scarification, construction of only one new road (Honua’ula Cabin Road), fence repair and construction, and koa planting;
(3) An alternative involving only feral cattle control, bulldozer soil scarification, fence repair and construction, and koa planting;
(4) A no-action alternative.

Alternative #1: Encourage koa reforestation through feral cattle control, bulldozer soil scarification, construction of the road system, fence repair and construction, and koa planting (preferred alternative).

The preferred alternative is to restore the koa forest as outlined above. This preferred alternative will enhance watershed capacity, restore native forest,

increase wildlife habitat, contribute to the recovery of several rare and endangered native species, and provide public benefit through increased access to the forest reserve. Furthermore, Alternative #1 will increase infiltration of rainwater into the soil, increasing recharge of the Kailua-Kona Watershed, and decreasing future storm flooding and runoff. Forest restoration contributes to regional conservation efforts and the West Hawaii Regional Plan.

> *Alternative #2: Encourage koa reforestation through feral cattle control, bulldozer soil scarification, construction of only one road (Honua'ula Cabin Road), fence repair and construction, and koa planting.*

Alternative #2 seeks to implement the proposed forest restoration activities with only the construction of Honua‘ula Cabin Road in Honua‘ula Tract I excluding the Hienaloli section access road. This alternative would allow for reforestation activities to be conducted with decreased travel time between the Honua‘ula Ranger Cabin and koa regeneration project site. However, the public benefits associated with increasing access and use of the forest reserve for recreational or other activities would be forgone. Additionally, without the Hienaloli access road, DOFAW's ability to implement management actions in the forest reserve would continue to be restricted contingent on permission from neighboring landowners.

> *Alternative #3. Encourage koa reforestation through feral cattle control, bulldozer soil scarification, fence repair and construction, and koa planting.*

Alternative #3 proposes to restore native forest without the construction of two new roads. While this alternative would allow for reforestation activities to be implemented, management activities and reforestation efforts would be greatly restricted. Without the road system, project workers would be required to drive over privately owned land for an additional forty-five minutes to an hour to reach the project site from the Honua‘ula Ranger Cabin. Thus reforestation activities would require a longer implementation time frame to account for the extra time needed to access the site, resources, and lodging. This in turn could increase potential environmental damages associated with prolonged project duration. Furthermore, the public benefit of increasing access to and use of the forest reserve through Hienaloli for recreational activities would continue to be greatly restricted due to limited access.

> *Alternative #4: No action.*

The no-action alternative fails to take advantage of an opportunities to restore degraded native koa forest. With no-action, the current degraded state of the forest and pasture would remain, and the valuable benefits provided by a restored native koa forest as watershed and habitat would not be realized. The

public benefit of increasing access to and use of the forest reserve for recreational activities would continue to be greatly restricted. Finally, the no-action alternative reduces the potential for success of affirmative conservation measures, such as outplanting, that are necessary for the long-term recovery of many native species.

VI. GENERAL DESCRIPTION OF THE ACTION INCLUDING ENVIRONMENTAL AND SOCIOECONOMIC CHARACTERISTICS

Environmental Impacts & Mitigation Measures

While this project is not expected to have any significant negative impacts on the environment, the following items have been identified as possible areas of concern. Planned actions to mitigate possible negative effects are described below.

Native vegetation

Soil scarification activities are anticipated to disturb mostly non-native vegetation (kikuyu grass). Due to the degraded nature of the area planned for bulldozer work, no significant negative impacts to native plants are anticipated. Any young, healthy koa trees in the project area will be avoided. After soil scarification, the koa seed bank is expected to germinate enhancing the survival of native plants and ecosystems over time. The implementation of road construction activities is anticipated to disturb mostly non-native vegetation but some native vegetation disturbance is expected. The Hienaloli road is located in a largely non-native dominated landscape and native forest vegetation can be avoided to the extent practicable. Due to Honua'ula Cabin Road limited size and length, the impact on the overall native vegetation will be minimal.

Native Vegetation Mitigation Measures

In order to minimize overall damage to the remnant native vegetation in the project area: 1) areas with sensitive biological resources or with standing healthy live trees will be avoided during bulldozer scarification operations; 2) the natural recovery of koa after scarification will compensate for any damage to native plant species incurred during restoration activities; 3) road construction activities will also avoid areas with sensitive biological resources or standing healthy live trees when appropriate; 4) if rare, threatened or endangered species are located during project activity, work will be halted and appropriate staff personal shall be contracted to assess the impacts and mitigation measures for such individuals.

Native fauna

Forests in the bulldozer soil scarification project area (Honua'ula Tract II) are heavily degraded, making it poor habitat for native birds and the Hawaiian bat. Additionally, there are no known nests or roasts of threatened and endangered

species in the project area. The limited nature of the proposed action is anticipated to have a negligible impact on native birds and the bat. Over the long-term, the impact on native animals is expected to be positive as native forest restoration will provide additional habitat for native species. The construction of the roads and new fence will also have a minimal impact on native animals either due to the limited nature of the activities or the limited presence of native species in the project areas.

Native Fauna Mitigation Measures

To avoid harming or harassing native birds, particularly the ‘io and pueo, DOFAW staff will conduct additional surveys prior to commencement of road and fence construction or scarification activities. In addition, no activities will occur within 100 feet from found nests or nest trees during the breeding season to minimize disturbance to nesting native birds. Additionally, if rare, threatened, or endangered species are located during project activities, all work will be halted and appropriate staff personal shall be contacted to access the impacts and mitigation measures appropriate for such individuals.

Alien species

Soil scarification and road and fence construction could increase the risk of accidental introduction or spread of non-native plants and animals within the project site. The transport of equipment and crews, as well as disturbance of ground surface and vegetation involved with scarification and/or road and fence construction operations will create conditions suitable for the establishment of invasive plant species. The improved access and sequential use of the forest reserve by the public for recreational activities, could also increase the spread of alien species.

Alien Species Mitigation Measures

The following practices will be implemented to minimize the introduction and establishment of non-native plants and insects: 1) boots, equipment, and materials will be inspected and cleaned of any mud, seeds, eggs, larvae, etcetera, prior to delivery and/or entry into the project area; 2) bulldozers, trucks, and other heavy equipment used during scarification or road and fence construction operations will be inspected and cleaned, following appropriate invasive species prevention protocol; 3) all workers will be instructed on specific procedures to prevent the spread or introduction of invasive non-native plants in the project area; 4) precautions (herbicide control, inspections of field equipment, and periodic monitoring) will be taken to prevent the spread of invasive plants already found in the project area; and 5) all food, refuse, tools, and gear will be removed upon project completion. The DOFAW will monitor the area for new introductions during and after project completion.

At the entrance to the forest reserve educational signs and boot-cleaning stations will be provided for public users to reduce the spread of invasive

species and educate reserve users on the importance of invasive species management. DOFAW will periodically monitor the forest reserve, in particular the active project areas, for invasive species and apply control measures (mechanical, biological, or chemical measures) when appropriate according to the Department's BMPs.

Archaeological or Culturally Significant Sites

The historical complex sites/features of Honua'ula Tract II identified during the current archaeological survey are situated primarily in areas designated for reforestation and fall within the "area of potential effect." The historical sites, however; will be avoided during project implementation and will not be a selected area for direct ground disturbance activities. Despite the presence of three significant archaeological features in Honua'ula Tract II, the U.S. National Park Service concludes that no adverse effects would result from the proposed action if specific mitigation measures, as determined in the archeological survey, are carried forward (listed below). The historical complexes can be easily avoided and there is little risk of accidental disturbance, as the features are well defined and will be clearly marked.

The historical sites/features of Hienaloli proposed road development are potentially located within the "area of potential effect." However, as the road corridor placement will be routed to avoid these resources, where possible, adverse impacts associated with road construction activities will be reduced. A "no adverse effect" determination can be designated based on the avoidance of the sites/features and implementation of appropriate mitigation measures. The interpretive and cultural value of the sites within the project area is low, however; site/feature preservation within the project area remains a priority.

Transportation of project personnel and equipment may occur within the complex area, but will not alter the properties that qualify sites for inclusion on the National Register; historical sites will retain the characteristics of location, setting, and feeling, and will maintain its integrity of association, design, workmanship, and materials.

Cultural practices that occur within the Honua'ula Forest Reserve, including gathering of plant material for lei making, medicinal use, or other Native Hawaiian traditional use, are not expected to be adversely impacted by the proposed project beyond temporary disruptions while restoration activities are underway. Such practices will likely increase over the long-term with restoration of koa forest improving habitat for native plants. Public hunting is not anticipated to be impacted beyond temporary disruptions in the immediate project area while restoration activities are occurring.

Archaeological or Cultural Mitigation Measures

While there are no archaeological or cultural sites anticipated to be adversely affected by the proposed actions, should any such sites not identified in the NPS archeological survey be encountered during construction or scarification operations, all activities would immediately cease and the appropriate agencies, including the State Division of Historic Preservation, would be consulted immediately.

All NPS identified historical remains with the Honua‘ula Tract II will be avoided and scarification activities will not be implemented in the homestead area. The National Park Service concluded that a “no adverse effect” determination can be designated based on the avoidance of the historic site complex, an area that is well defined and has little risk of being accidentally disturbed. To better safeguard the complex, construction fencing and/or flagging may be used to better delineate the areas to be avoided during project implementation. Archaeological monitoring for Honua‘ula Tract II during project implementation is not required based the negative findings of the remaining survey transects within the project area. Additionally, the areas subject to direct disturbance can be categorized as “low probability” for the presence of surface or subsurface cultural deposits.

All NPS identified historical sites/features within the Hienaloli road development project area will be avoided where possible. Per the NPS determined mitigation measures for Hienaloli, prior to construction activities a brief archaeological survey will be conducted within each site location to better determine the presence or absence of a historical feature. In the event that additional sites locations are revealed or if in-advertent burial remains are uncovered during project implementation, all construction activity will stop and the appropriate agency personnel, including the State Division of Historic Preservation, will be notified. Archaeological monitoring of specific areas will be utilized during construction activities to prevent any accidental or incidental impacts on historical sites/features; and monitoring during specific phases of project implementation will assist in eliminating adverse impacts to site locations and will better ensure site mitigation treatments (identified in the current archaeological survey) are carried out during project implementation. In the event that additional cultural resources are present, a qualified archaeological monitor will be able to identify these resources and perform the necessary site recordation measures and provide tentative site evaluation treatments and recommendations.

To provide additional mitigation measures in the Hienaloli section, a buffer area will be placed on sites that are identified in the “area of potential effect,” and flagging or construction fencing will be placed on the established buffer. If avoidance of historical sites is not possible, the road corridor will breach boundary walls through existing breaks within the wall that allows access to the site or the roadway alignment may be redesigned to avoid the historical feature.

Impacts resulting from road construction activities will be reduced or eliminated if the proposed road corridor utilizes existing roads/paths. Depending on the road width at some locations, additional widening of breach opening may be required. Enlarging the existing opening will minimally affect the site impacted considering the length of the wall features. The localized modifications needed to increase the opening represent only a small percentage of the overall site area, and the widening efforts may afford the opportunity to better stabilize portions of the wall by re-constructing the wall ends. If road alignment cannot be routed through a breach or will be adversely impacted by construction activities, additional mitigation strategies appropriate for each individual site will be developed in consultation with the State Historic Preservation Division.

Additional activities with the project area include transporting personnel and equipment on the existing access roadways that bisect all of the identified site complexes. Efforts to remain on the well defined roads will reduce the likelihood of site impacts to existing features and to any unidentified surface or subsurface features.

Water Impacts

Based on the nature of the terrain and the presence of only one intermittent stream, no adverse changes in the normal runoff or percolation patterns are anticipated as a result of this project. The overall reforestation of the Honua‘ula Tract II project area is anticipated to improve percolation and watershed function in the ahupua’a. In the Hienaloli gravel roadway section, percolation of rainwater will be slightly inhibited and increased water runoff and washout during large rainfall events are possible. The limited nature of the fence line and road construction activities will allow for a minimal impact on soil erosion and all grading work shall conform to the County of Hawaii’s BMPs. There is no anticipated water discharge need from the project areas activities.

Water Pollution Mitigation Measures

To minimize potential impacts to water resources in the region (i.e., soil erosion, water runoff, or rainfall washout), project activities will be conducted during dry weather conditions, to the extent practicable that operations can still be carried out over a relative short duration of time. Additionally, all operations will cease when ground conditions are such that excessive damage to soil condition will result.

The Honua‘ula Tract II reforestation project will be conducted in stages that will involve the scarification of 150 acres within the first year of project implementation, followed by approximately 50 to 100 acres each subsequent year depending on funding availability. This staged activity will allow for the koa seedlings and ground vegetation time to regenerate before scarification

activities are initiated on another section. This staging of soil scarification will reduce the amount of exposed soil that would be susceptible to erosion.

Due to the relative wet climatic conditions of the Hienaloli access road project, construction will utilize a drainage system for runoff associated with the graveled section, as designed in the Honua‘ula Tract III Access Road Alignment conducted by Imata & Associates Inc. (1995). To further prevent washout of large debris during large rainfall events the Hienaloli access road will be designed with a gradual incline toward the intersection with the Mamalahoa Highway, and other preventive measures as appropriate according to the County of Hawaii’s BMPs. All slopes and exposed areas shall be sodded or planted immediately after grading work is complete. All grading operations shall conform with the applicable provisions of the water pollution control and water quality standards contained in the public health regulations, State of Hawai‘i Department of Health, on water pollution control and water quality standards, and to use erosion and sedimentation control standards and guidelines of the Department of public works, County of Hawai‘i. With the implementation of the above preventive and mitigation measure the impact to water quality is expected to be minimal or non-significant.

Air pollution

Limited air pollution from the use of bulldozers and small power tools will be unavoidable. Use of this equipment is temporary and is not anticipated to significantly alter the overall air quality in the region. Additionally, discharge of visible fugitive dust, if any, is not anticipated to travel beyond the property line of the forest reserve. Increased use of the forest reserve by the public may contribute to increased air pollution in the area; however, due to the relative low use of the area and restricted access into the larger forest reserve the impact is expected to be non-significant.

Air Pollution Mitigation Measures

Although there is no significant anticipated effect on the air quality of the project area during reforestation activities, proper mitigation measures will be used during construction on the Hienaloli gravel road and Honua’ula Cabin Road. Mitigation for fugitive dust will include planning for different phases of construction and centralizing on-site vehicular traffic routes. Adequate water sources will be provided to minimize dust from construction operations, road grading, and clearing of land. Any debris hauled out from the project areas will be covered, and dust control measures will be provided during weekends and after hours. Furthermore, roadways will be maintained in a clean manner during project implementation.

Fire Impacts

The rainfall in Honua‘ula Forest Reserve can be highly variable ranging from 90 to 150 inches annually. During times of extreme drought the land area may be subject to wildfires. The fire incident rate will temporary increase during scarification and road construction activities due to the use of heavy grade construction equipment. Additionally, the enhanced access of the forest reserve for public use will result in an increase in fire potential. The restrictions placed on both the public vehicular traffic into the larger forest reserve and on the construction equipment will significantly decrease the overall fire threat to the reserve. The Honua‘ula Cabin Road and Hienaloli new road segments will increase the overall fire response access and serve as two new potential firebreaks.

Fire Mitigation Measures

There is no anticipated significant increase to wildfire threat; however, normal fire prevention of the Honua‘ula Forest Reserve will involve the maintenance of access roads to serve as fire response road and firebreaks. During times of moderate or extreme drought conditions, DOFAW will issue Public Service Announcements to increase public awareness of the high fire risk and may restrict public access to the area. The DOFAW will also provide fire prevention educational material and informational brochures to forest reserve users. Furthermore, all road construction shall adhere to the County of Hawaii’s BMPs for prevention of fire during construction activities. The primary fire response agencies identified for the Honua‘ula Forest Reserve are DOFAW Primary Response and HiCFD Primary Response Area/DOFAW Co-op Response Area.

Environmental benefits

Environmental benefits associated with the project include restoration of an important native ecosystem, creation and improvement of habitat for both common and rare native plants and animals, and improvement of watershed function.

Social Impacts

Overall, social impacts of this project are expected to be positive. The restoration of Hawaii’s native forest will enhance opportunities for stewardship, education, cultural enrichment, and research. Augmentation to the existing road system will improve DOFAW’s ability to manage the forest reserve as well as provide the public with a route to an otherwise inaccessible resource.

Noise Impacts

Periodic noise from heavy equipment, power tools, and other activities associated with the project will be unavoidable during scarification and fence and road construction operations. Noise generated from the Honua‘ula Tract II koa reforestation and Honua’ula Cabin Road projects is anticipated to be minimal due to the short project time-duration. There are no permanent

residences located near these project locations, and work associated with these projects will occur only during daylight hours on weekdays. Noise impacts are anticipated to be negligible to the general public, including visitors to the forest reserve and surrounding cabins on weekends.

The gravel access road in the Hienaloli section is surrounded by a low-density residential development. However, due to project work occurring on weekdays during daytime hours as well as the relatively short duration of the activity, the noise impact to the public is anticipated to be negligible. Additionally, the Hienaloli section is heavy forested, which will act as a natural buffer for vehicular traffic noise associated with recreational forest reserve users. Noise associated with the increase traffic is expected to be minimal due to the relatively light use of the area focused during daylight hours.

Noise Pollution Mitigation Measures

All construction related activities will be conducted during normal business hours. Noise decibels are not expected to exceed the allotted daily limit set by Chapter §11-46, Community Noise Control. The road construction activities on the Hienaloli section will be short-term and can be mitigated by following standard industry practices. The recreational use of the area by All Terrain Vehicles (ATVs), motorcycles, or other off-road vehicles will be prohibited.

Visual Impacts

Negative visual impacts to adjacent communities and the larger public are expected to be minimal and in most cases considered beneficial. The Honua‘ula Tract II reforestation project will provide a large view plane of native plant dominated landscape on Hualālai Mountain that would otherwise remain in a state of degraded pasture. The two road additions and new fence will be approximately four to five feet high and not visible to the public from any major roadway. Visual impacts are expected to be negligible and thus no mitigation measure are required.

Traffic & Infrastructure Impacts

Traffic to the forest reserve will not be impacted by soil scarification activities or the construction of the Honua‘ula Cabin Road as it restricted to DOFAW management purposes and contain entirely with Honua‘ula Tract I. Over the long term, the construction of the Hienaloli access road and associated parking facilities is not expected to significantly impact traffic flow on Mamalahoa Hwy. Construction activities are of a temporary nature and all work involving Mamalahoa Hwy will be appropriately signed and follow safety regulations according to the County of Hawaii’s BMPs.

Traffic & Infrastructure Mitigation Measures

Construction of proposed roadways will not have a significant impact on State facilities in the area because the project does not involve any commercial harvesting or hauling. To mitigate potential pedestrian traffic or access issues onto adjacent property, DOFAW will post the Honua‘ula Tract II and III boundaries and provide signage to delineation the forest reserve boundary in areas where public access or recreational activities are most likely to interface with privately-owned lands. The boundary signs will discourage trespassing from the forest reserve into private lands, and shall be placed at a frequency where they are visible to reserve users. Signage will be use to mark appropriate boundaries throughout the forest reserve. The DOFAW will work closely with neighboring landowners to identify problems and respond appropriately, including involvement of the Department of Land and Natural Resources, Division of Conservation and Resource Enforcement (DOCARE) for enforcement matters.

Economic Impacts

The proposed action involves the expenditures of funds necessary to complete the project. The estimated cost of the proposed action is approximately $1,621,070 (Table 3). Additional funding from DOFAW operational costs will be allocated to continue reforestation work in Honua‘ula Tract II beyond the first year of project implementation. Current support for the project includes funds provided by the U.S. Department of Agriculture Forest Service and the State of Hawai‘i.

The project is not expected to have a significant negative economic impact to public resources. Small positive economic impacts will result from the release of project funds into the State economy through the purchase of goods and services from local vendors. The proposed action may attract additional funding for future restoration activities in other degraded forest or pasture areas after this project is complete. Potential economic impacts on adjacent lands from the increased use of these public lands may occur, but the extent of which is difficult to quantify. However, these impacts are expected to be limited and largely related to increased risk of trespassing and associated liability. The DOFAW will work closely with surrounding landowners to mitigate these situation should they arise, and will involve the DOCARE as appropriate.

Cultural Impacts

The proposed action is not expected to significantly affect archaeological sites or historical features within the project area. Historical features identified in archaeological survey will be avoided. The proposed actions are also not expected to negatively impact Native Hawaiian traditional and cultural practices due to the remoteness of the project area, the current limited access to the forest reserve, the restoration purpose of the proposed action, and the temporary nature of any limitation on access required for public safety during implementation of

the project. Project activities are not expected to require restriction or closure of any of the forest reserve to public users. Additionally, the proposed action is not anticipated to significantly impact contemporary recreational practices, such as hunting. The restoration project is not designed to block public access, but instead enhance traditional and cultural practices within the forest reserve. Therefore, this project is not anticipated to negatively impact any contemporary cultural practices.

VII. ANTICIPATED DETERMINATION

The Division of Forestry and Wildlife anticipates that this project will not have a significant negative impact on the environment, and thus a Finding of No Significant Impact (FONSI) is anticipated.

VIII. FINDINGS AND REASONS SUPPORTING EXPECTED DETERMINATION

The goal of the proposed action is to restore approximately 1,000 acres of degraded koa forest and pasture to native koa forest through a combination of methods including feral cattle control, bulldozer soil scarification, road construction, koa plantings, fence repair and construction, and other related management activities. The scarcity of koa saplings indicates that few individuals are successfully recruited from the soil seed bank in the project area due to the existing non-native dominated vegetation. Soil scarification combined with cattle control is needed to clear the kikuyu grass and disturb the soil to promote koa germination from the existing seed bank. The proposed road system will aid in implementation of these activities and provide access to a public resource that would otherwise be restricted.

The proposed activities are anticipated to facilitate native koa forest restoration, improve watershed capacity, and increase available wildlife habitat. Restoration contributes to the regional conservation efforts, such as watershed protection over the larger Honua‘ula Forest Reserve by increasing the total acreage of native forest.

The anticipated Finding of No Significant Impact is based on the evaluation of the project in relation to the following criteria identified in the Hawai‘i Administrative Rules § 11-200-12:

1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.

The proposed action does not involve an irrevocable commitment to loss or destruction of any natural or cultural resource. Instead, the goal of the proposed

action is to reverse the loss of native koa forest by restoring degraded koa forest and pasture.

2) Curtails the range of beneficial uses of the environment.

The proposed action will not curtail beneficial uses of the environment. Instead, the project will increase beneficial uses by restoring a native koa forest, which will increase the capacity of the Kailua-Kona Watershed, an important ecosystem for many native plants, animals, and invertebrates. This project will increase wildlife habitat and supply the public with a new recreational use area.

3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.

Reforestation in Honua'ula Forest Reserve will aid in the watershed protection as outlined in the West Hawaii Regional Plan (1989). The proposed action is consistent with the environmental policies established in Chapter 344, Hawai'i Revised Statutes (HRS) and contributes to the conservation of threatened and endangered species, as covered by Chapter 195D, HRS, by increasing the acreage of native forest available as habitat for rare species. It is also consistent with Section 4 of the County of Hawai'i General Plan (2005), which sets policies for maintaining environmental quality.

4) Substantially affects the economic or social welfare of the community or state.

The proposed action will not adversely affect the economic or social welfare of the community or state. The ecosystem-related goals of the project will directly benefit the economic, cultural, educational, scientific, and recreational interests of the community and the State.

5) Substantially affects public health.

The proposed action is not anticipated to substantially affect public health. The proposed action may have a positive impact on public health by restoring native forest and enhancing recreational opportunities for the residents of Kailua-Kona and visitors to the area.

6) Involves substantial secondary impacts, such as population changes or effects on public facilities.

The proposed action is not anticipated to result in any substantial secondary impacts, such as population changes or negative effects on public facilities. The project proposes to enhance public facilities by adding a parking lot with associated facilities.

7) Involves a substantial degradation of environmental quality.

The proposed action does not involve a substantial degradation of environmental quality. Instead, environmental quality is anticipated to improve with the implementation of the proposed action. Restoration of native koa forest will enhance environmental quality by improving watershed capacity, as well as increase available habitat for native plants and animals. .

8) Is individually limited but cumulatively has considerable effect upon environment or involves a commitment for larger actions.

The proposed action does not have a negative cumulative considerable effect on the environment nor does it involve a commitment for larger actions. Though it is anticipated that the results of this project will be positive, restoration of this area alone is not sufficient to provide for all watershed and habitat needs. While success in this project could lead to future restoration efforts, the proposed restoration activities, including bulldozer soil scarification and koa planting in the project area alone has value in restoring native forest and promoting forest recovery. Any cumulatively effects that may result from the project are expected to be beneficial to the community and State.

9) Substantially affects a rare, threatened or endangered species, or its habitat.

There are no known rare, threatened or endangered plants within the planned project area according to DOFAW surveys. However, rare native plants and animals are anticipated to benefit from native forest restoration and the additional habitat provided by restored forest. Reforestation in Honua‘ula Forest Reserve would improve critical habitat for the endangered plants *Cyanea hamatiflora* ssp. *carlsonii* and *Solanum incompletum* and implements actions recommended in the Draft Revised Recovery Plan for Hawaiian Forest Birds (2003).

10) Detrimentally affects air or water quality or ambient noise levels.

The proposed action will have no detrimental effects on air quality, water quality, or noise levels. The area is remote, and construction noise will be localized and temporary.

11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The planned action is not located in the flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal water and so will not affect such environmentally sensitive areas and is not likely to suffer damage from these events. Critical habitat identified for *Cyanea hamatiflora* ssp. *carlsonii* and *Solanum incompletum* will improve with restoration activities.

12) Substantially affects scenic vistas and view planes identified in county or state plans or studies.

The proposed action is not anticipated to affect any vistas or view planes identified in county or State plans or studies. Given the surrounding terrain and proximity to existing forest, restoration of the native forest in the project area is unlikely to substantially affect any scenic vistas or view planes. Furthermore, improved access may enhance opportunities for public to access vista points.

13) Requires substantial energy consumption.

The proposed action does not require substantial energy consumption, but instead will consume small amounts of energy during bulldozer soil scarification and/or road and fence construction activities.

IX. LIST OF PERMITS REQUIRED FOR PROJECT

Construction of the project is anticipated to require the following permits:

Permit	Issuing Agency	Comment
County Building Permits	County of Hawai‘i	
National Pollution Discharge Elimination System (NPDES) General Permit	State Department of Health Clean Water Branch	NPDES general permit coverage required if construction activities involve clearing, grading and excavation that result in the disturbance of one or more acres.

X. ENVIRONMENTAL ASSESSMENT PREPARATION INFORMATION

This Environmental Assessment was prepared by staff of the Department of Land and Natural Resources, Division of Forestry & Wildlife.

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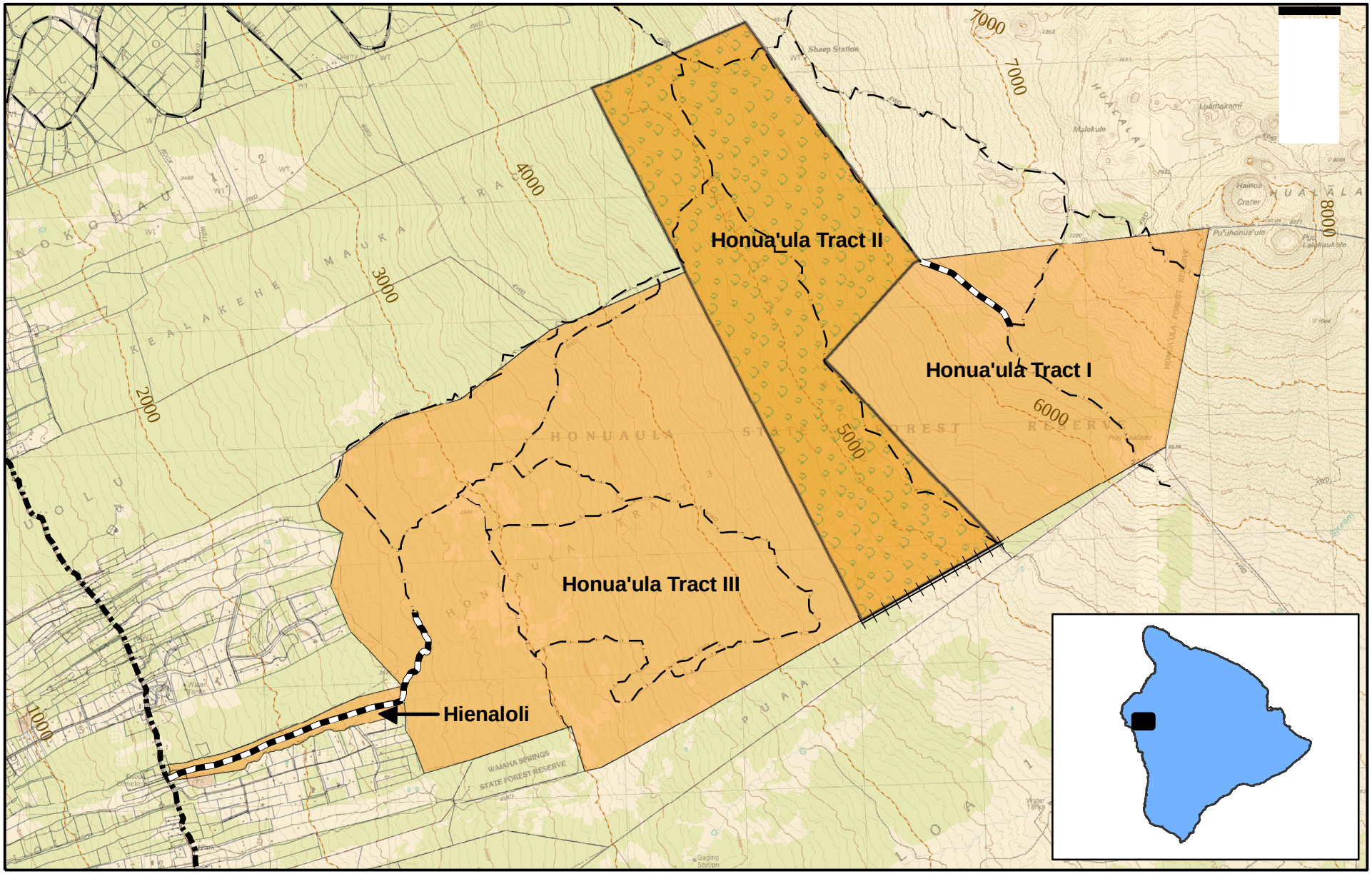
APPENDIX A

Maps of the Project Area

Appendix A, Map 1. Honua'ula Forest Reserve Reforestation Project



Legend

- Mamalahoa Hwy
- Private or Restricted Access Roads
- New Fence Line
- New Access Roads
- Honua'ula Forest Reserve EA Project Area
- Koa Regeneration Project Area
- Adjacent Landowners

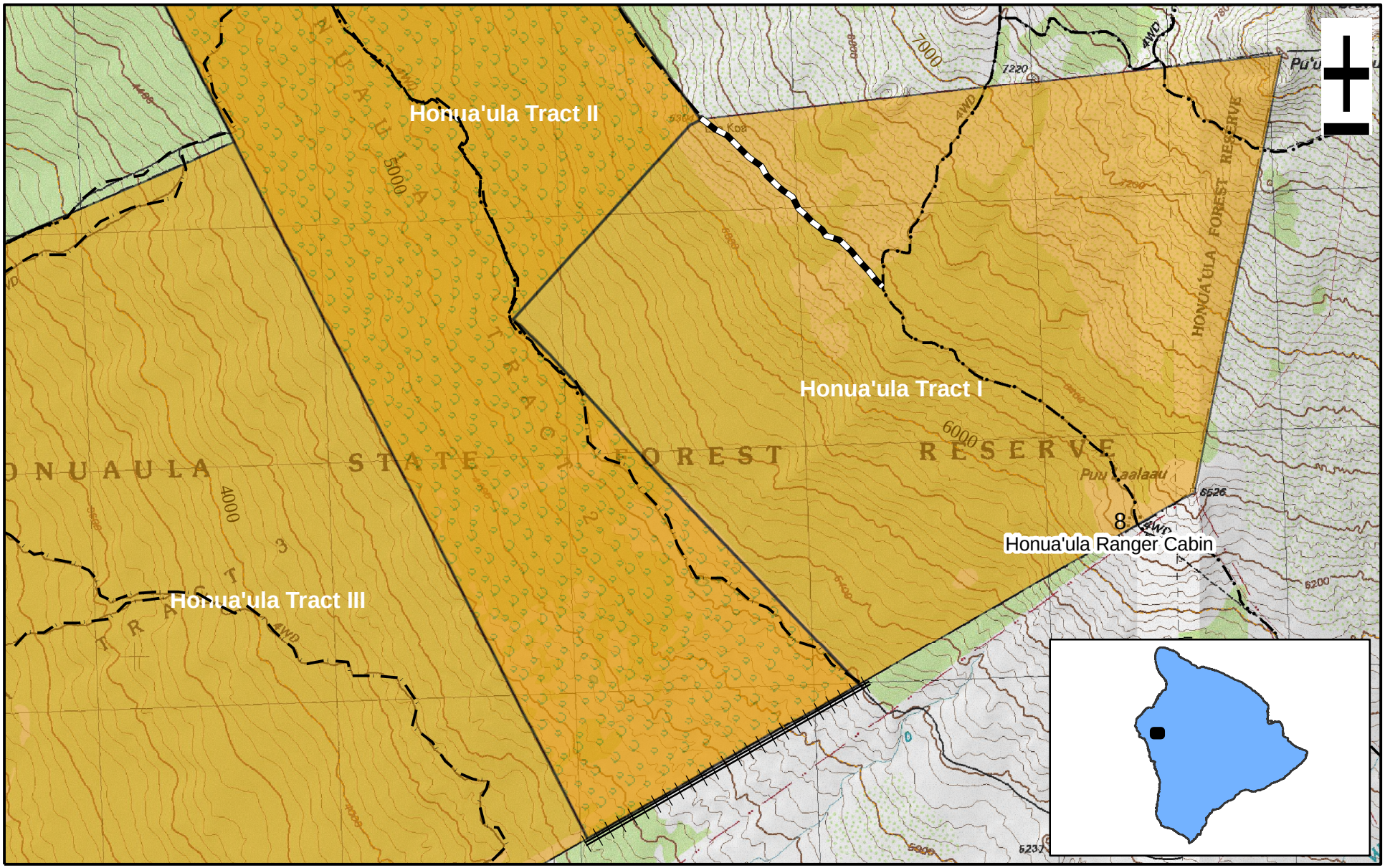
Miles

0 0.25 0.5 1 1.5 2

November 2007
(808) 587-4167
Map No. 091407honuaula1

HAWAII STATEWIDE GIS PROGRAM

Appendix A, Map 2. Honua'ula Cabin Road and New Fence Line



Legend

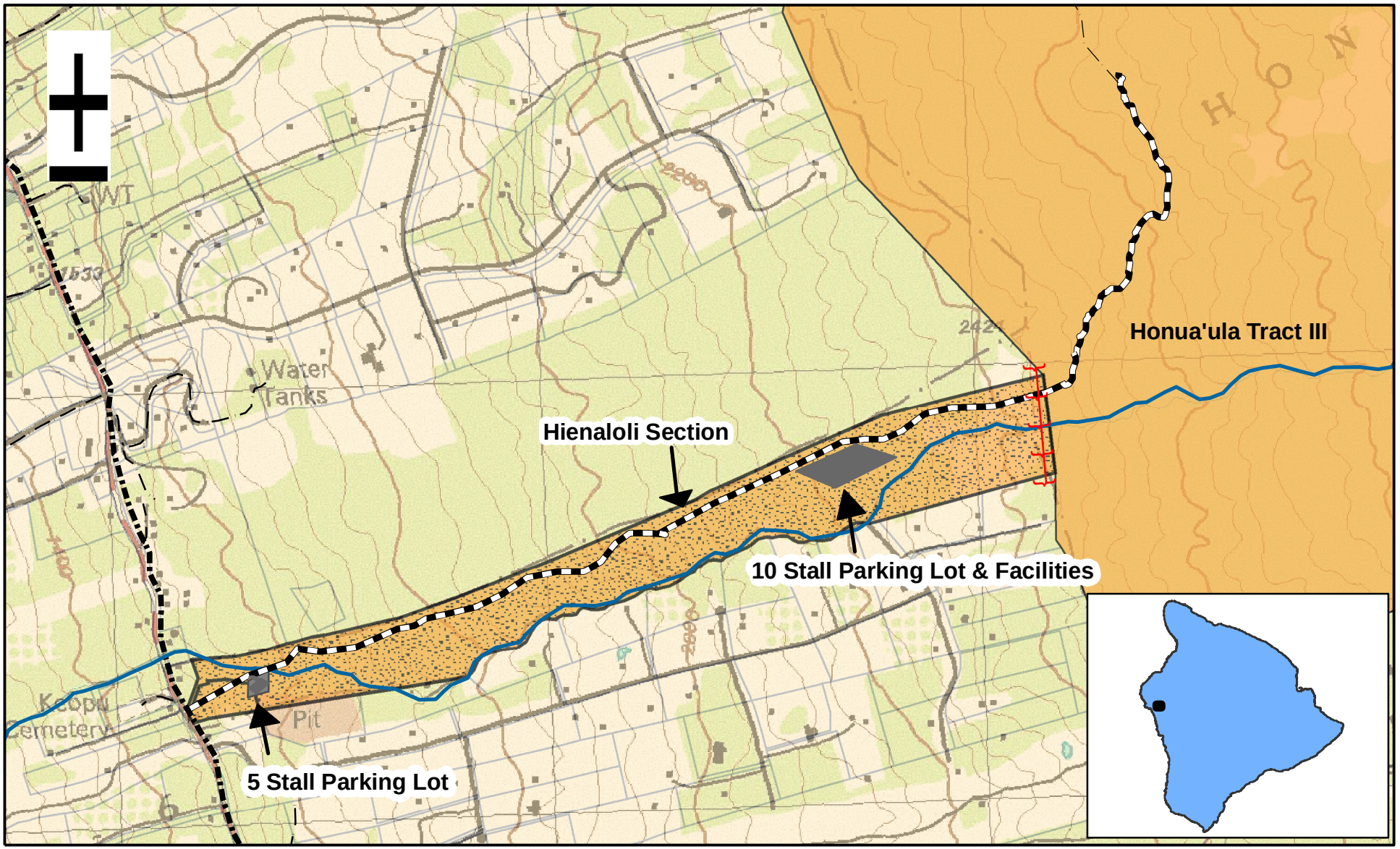
- Honua'ula Forest Reserve
- Koa Regeneration Site
- Approximate Alignment Honua'ula Cabin Road
- Access Roads
- New Fence Line

0 0.15 0.3 0.6 0.9 1.2 Miles

Map created by
Missy Sprecher November 2007
Map No. 0507honuaula2

HAWAII STATEWIDE GIS PROGRAM

Appendix A, Map 3. Hienaloli Access Road



Legend

- Hienaloli section
- Honua'ula Tract III
- Parking Facilities (approximate location)
- Hienaloli approximate road alignment
- Locked Gate
- Mamalahoa Hwy
- Kailua-Kona stream

Miles
0 0.05 0.1 0.2 0.3 0.4

Map created by
Missy Sprecher November 2007
Map No. 0507honuaula3

HAWAII STATEWIDE GIS PROGRAM

APPENDIX B

Botanical Surveys

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
P.O. BOX 4849
HILO, HAWAII 96720
(808) 974-4221
FAX (808) 974-4226

To: Howard Horiuchi

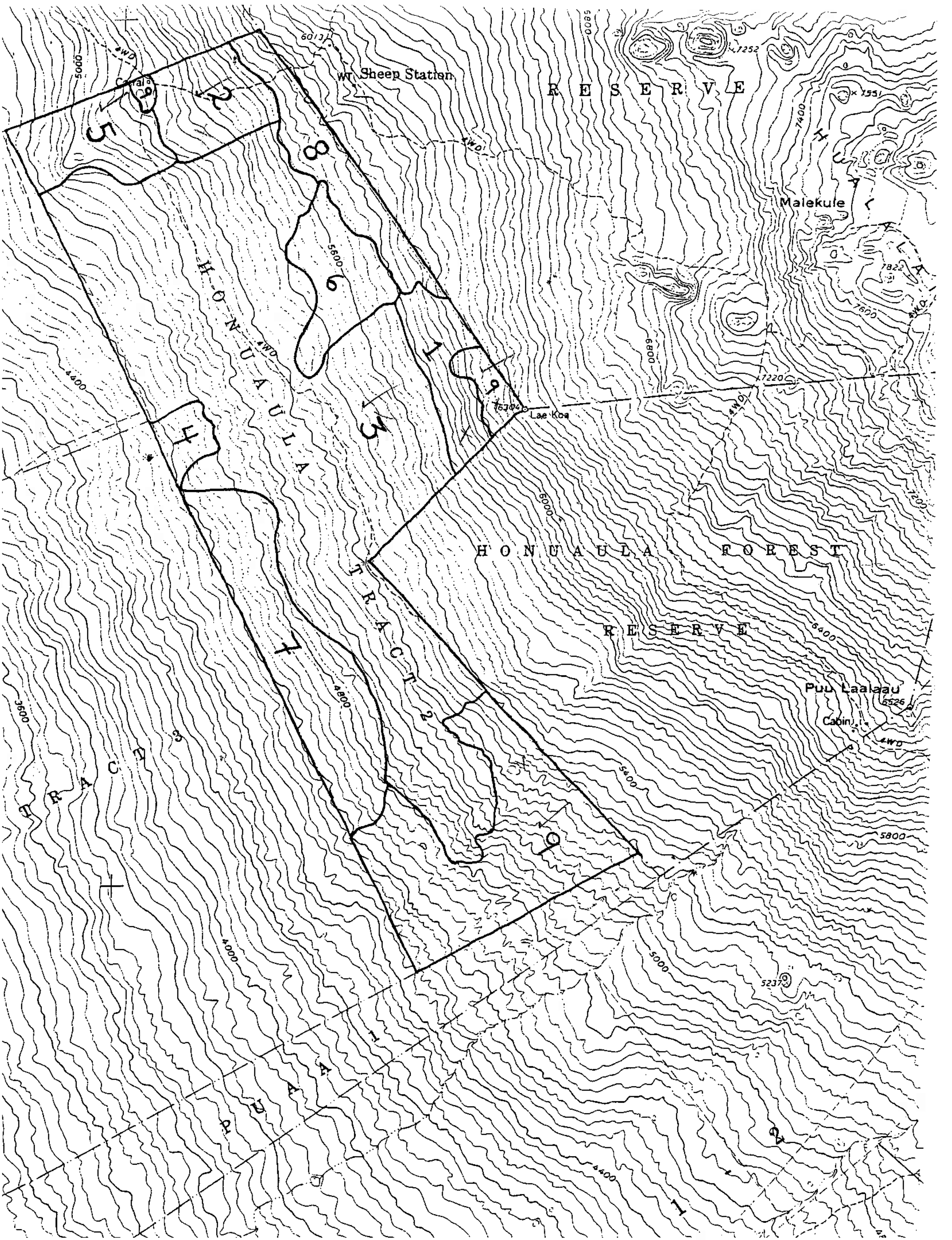
From: Lyman Perry

CC: Jon Giffin

Re: Honuaula Tract 2 Survey

Date: May 30th, 2000

Here is the survey report from the Honuaula Tract 2 survey. This report includes a map of vegetation types, suggestions for areas suitable for koa planting, and a species list of plants observed during a two-day survey in November 1999. Please let me know if you have questions or want additional information.


Sheep Station
RESERVE
HUALALAI
Malekule
HONUAULA TRACT 2
HONUAULA FOREST
RESERVE
Lae Koa
Puu Laalaau
Cabin
TRACT 3
PUAA 1
4WD
5000
5600
4400
6000
6800
7220
7252
7551
7822
7600
7400
7200
6400
5400
5800
4800
3600
4000
5237
6526
6013
6704
4400

HONUAULA TRACT 2 SURVEY November 2-3, 1999

On November 2-3, 1999, Steve Bergfeld and I did a walk-through survey of the Honuaula Tract 2 area on Hualalai. Generally, there are several areas that are prime for replanting koa, though in certain areas, the density of banana poka will make it difficult to maintain such plantings, at least in the first few years. Therefore, plenty of time and money will need to be budgetted for conducting periodic weed control amongst the plantings. This report contains a map of the area divided into vegetation units based on the dominant tree species in the area, a species list of all plants encountered during the two day survey, and suggestions as to which areas might be best for koa reforestation.

Vegetation Units

1. Koa/Naio: Not much regeneration of koa or naio here. Scattered clumps of mature Koa and naio trees, understory dominated by alien grasses, few native constituents in understory. Good site for replanting with koa.

2. Koa/Ohia 1: Good regeneration of koa, Canopy intact, Banana poka at about 20% cover. Understory dominated by alien grasses but there are some native ferns and shrubs present. Good site for replanting with koa.

3. Koa/Ohia 2: Not much regeneration of koa, Banana poka cover at about 50 - 75%, Native understory constituents lacking. Good site for replanting with koa.

4. Dense Ohia: Native canopy intact, Well-developed understory of native ferns and shrubs, Banana poka less than 20% groundcover. No koa planting needed or suggested for this area.

5. Ohia 1: Currently being grazed, Canopy good quality, Understory now lacking native constituent species. No koa planting needed or suggested for this area, just weed control advised as once cattle are moved out, alien grasses and banana poka likely will flourish. Could plant native understory species in this area to restore.

6. Ohia 2: Canopy good quality. Understory dominated by alien grasses. Banana poka cover up to 60% in some places. No koa planting needed or suggested for this area; could plant native understory species in this area to restore.

7. Ohia 3: Best quality forest in Honuaula Tract 2. Well-developed understory of native ferns, shrubs, and saplings. No koa planting needed or suggested for this area.

8. Pukiawe shrubland: Very Scattered to non-existent canopy of Naio, Koa, and Ohia. Well-developed native understory dominated by pukiawe. Banana poka present but less than 15% cover in this community type. This area may be above the naturally occurring treeline, probably not an ideal spot for planting koa trees.

9. Alien Grassland: Areas dominated by alien grasses such as orchard grass (*Dactylis glomerata*) with only the occasional native tree, shrub or fern present. Excellent site for replanting with koa.

HONUAULA TRACT 2

Plant Species List

* = Endemic or Indigenous

Life Form: T = Tree, S = Shrub, H = Herb, TF = Tree Fern, F = Fern, G = Grass or Sedge
Abundance Ratings: D = Dominant, C = Common, O = Occasional, LC = Locally common, U = Uncommon
Status: E = Endangered, T = Threatened, SOC = Species of Concern

**Acacia koa*	koa	T	O,C	
**Cheirodendron trigynum*	olapa	T	O	
**Clermontia clermontioides*	ohawai	T	U	
Cryptomaria japonica	tsugi	T	U	
Grevillea robusta	silk oak	T	U	
**Hedyotis hillebrandii*	manono	T	O	
**Ilex anomala*	kawau	T	O	
**Melicope volcanica*	alani	T	U	
**Metrosideros polymorpha*	`ohia	T	D	
**Myoporum sandwicensis*	naio	T	O	
**Myrsine lessertiana*	kolea	T	O,C	
Pinus patula	jelecote pine	T	LC	
**Perrottetia sandwicensis*	olomea	T	U	
**Pittosporum hosmeri*	hoawa	T	U	
**Sophora chrysophylla*	mamane	T	O	
Buddleia asiatica	dog's tail	S	U	
**Coprosma ernodeoides*	kukaenene	S	U	
**Coprosma rhynchocarpa*	pilo	S	O	
**Dodonaea viscosa*	aalii	S	C	
**Dubautia ciliolata*	naenae, kupaoa	S	O	
**Dubautia plantaginea*	naenae, kupaoa	S	U	
**Geranium cuneatum*	nohoanu	S	U	
Lonicera japonica	Japanese honeysuckle	S	U	
Physalis peruviana	poha	S	U	
**Phytolacca sandwicensis*	popolo ku mai	S	U	SOC
**Pipturus albidus*	mamaki	S	O	
Rubus argutus	prickly Florida blackberry	S	O	
**Rubus hawaiiensis*	akala	S	O	
Rubus rosifolius	thimbleberry	S	O	

**Styphelia tameiamieae*	pukiawe	S	C
**Vaccinium calycinum*	ohelo	S	U
Asclepias physocarpa	balloon plant	H	U
Ageratina riparia	Hamakua pamakani	H	O
Astelia menziesiana	painiu	H	U
Cirsium vulgare	bull thistle	H	O
Conyza bonariensis	hairy horseweed	H	O
Cuphea carthaginensis	tarweed	H	O
Dianthus armeria	deptford pink	H	O
Gnaphalium japonicum	cudweed	H	O
Helichrysum foetidum	stinking everlasting	H	U
Hypochoeris radicata	gosmore	H	O
**Lythrum maritimum*	pukamole	H	O
**Peperomia cookiana*	ala ala wainui	H	O
Polygonum punctatum	water smartweed	H	O
Prunella vulgaris	self-heal	H	O
Ranunculus plebeius	Australian buttercup	H	O
Rubus argutus	Florida blackberry	H	O
Rubus rosifolius	thimbleberry	H	O
Rumex acetosella	dock	H	U
Sonchus oleraceus	pualele	H	O
Verbascum thapsus	mullein	H	O
Veronica plebiea	common speedwell	H	O
Youngia japonica	Oriental hawksbeard	H	O
Delairia odorata	German ivy	V	U
Passiflora mollissima	banana poka	V	C,D
Avena fatua	wild oat	G	LC
**Carex alligata*	no common name	G	LC
Dactylis glomerata	orchard grass	G	C
**Deschampsia nubigena*	no common name	G	O
**Dianella sandwicensis*	uki	G	O
Ehrharta stipoides	meadow rice grass	G	D
Holcus lanatus	velvet grass	G	C
Juncus planifolius	bog rush	G	LC
Pennisetum clandestinum	kikuyu grass	G	C
Sporobolus africanus	African dropseed	G	O
**Asplenium contiguum*	no common name	F	O
**Athyrium microphyllum*	akolea	F	O
**Cibotium glaucum*	hapuu pulu	TF	U
**Cibotium menziesii*	hapuu ii	TF	U
Cyrtomium falcatum	bow fern	F	U

**Diplazium sandwichianum*	hoio	F	C
**Dryopteris wallichiana*	Wallich's oak fern	F	C
**Elaphoglossum hirtum*	ekaha	F	O
**Microlepia strigosa*	palapalai	F	U
**Pneumatopteris sandwicensis*	hoio kula	F	O
**Pteridium aquilinum* ssp. *decompositum*	kilau	F	O
**Pteris cretica*	waimakanui	F	O
**Pteris excelsa*	owalii	F	O

Honuaula Forest Reserve

Roger's Trail Road Alignment Survey
Survey Date: January 11th, 2005

Tree Species

Cryptomeria japonica	X	O
Cupressus macrocarpa	X	O
Sequoia sempervirens	X	O
Pinus sp.	X	O
Acacia koa	N	C
Metrosideros polymorpha	N	O
Myoporum sandwicense	N	C
Myrsine lessertiana	N	U
Sophora chrysophylla	N	C

Shrub species

Coprosma rhynchocarpa	N	C
Dodonaea viscosa	N	O
Lythrum maritimum	N	O
Rubus hawaiiensis	N	C
Styphelia tamieamieae	N	C
Vaccinium calycinum	N	O

Grass, Sedge, and Herb Species

Carex alligata	N	U
Deschampsia nubigena	N	O
**Fragaria chiloensis* ssp. *sandwicensis*	N	U

Fern Species

Dryopteris wallichiana	N	C
Microlepia strigosa	N	U
Pteris cretica	X	U

* = Listed with the U.S. Fish and Wildlife Service as a Species of Concern (SOC)
Location: UTM 0196827 2178995

N = Native, X = Non-native, C = Common, O = Occasional, U = Uncommon, * = Rare (Species of Concern)

Honuaula Tract III and Hienaloli Proposed Road Corridor Botanical Survey
March 20th and March 23rd, 2007

A botanical survey was conducted for a proposed access road within Honuaula Tract III (March 20th, 2007) and Hienaloli 1st Tract (March 23rd, 2007). No threatened or endangered plants were observed within the proposed access road corridor. The lower reaches of Hienaloli 1st Tract are dominated by introduced vegetation such as bamboo (*Bambusa* sp.), guava (*Psidium guajava*), jacaranda (*Jacaranda mimosifolia*), African tulip (*Spathodea campanulata*), and Christmas berry (*Schinus terebinthifolius*), with understory components such as broomsedge (*Andropogon virginicus*), basket grass (*Oplismenus hirtellus*), ti (*Cordyline fruticosa*), Guinea grass (*Panicum maximum*), and air plant (*Kalanchoe pinnata*) common below 2000 feet elevation. Above 2000 feet elevation in the Hienaloli tract, native vegetation is more common with the forest gradually becoming dominated by scattered ohia (*Metrosideros polymorpha*) with guava and Christmas berry over an understory of uluhe (*Dicranopteris linearis*) with occasional patches of neneleau (*Rhus sandwicensis*) present. Cattle damage is evident within the Honuaula Tract III section, with other non-native trees, shrubs and herbs common in disturbed areas.

Plant Species Observed and Frequency

Native trees:
Metrosideros polymorpha, Ohi`a, Common
Rhus sandwicensis, Neneleau, Occasional

Native shrubs:
Pipturus albidus, Mamaki, Uncommon
Vaccinium calycinum, Ohelo, Uncommon

Native ferns:
Cibotium glaucum, Hapu`u, Occasional
Cibotium menziesii, Hapu`u `i`i, Uncommon
Dicranopteris linearis, Uluhe, Common
Diplazium sandwichianum, Ho`i`o, Occasional
Microlepia strigosa, Palapalai, Occasional
Nephrolepis exaltata, Sword fern, Occasional
Lycopodium cernuum, Waiwae`iole, Occasional
Psilotum nudum, moa, Uncommon-Occasional
Sphenomeris chinensis, Pala`a, Uncommon

Native vines:
Cocculus trilobus, Huehue, Uncommon

Introduced Trees:
Bambusa sp., Bamboo, Occasional

Eriobotrya japonica, Loquat, Uncommon
Grevillea robusta, Silk oak, Occasional-Common
Jacaranda mimosifolia, Jacaranda, Occasional
Persea americana, Avocado, Uncommon
Psidium cattleianum, Strawberry guava, Common
Psidium guajava, Guava, Common
Schinus terebinthifolius, Christmas berry, Common
Spathodea campanulata, African tulip, Occasional
Terminalia myriocarpa, Jhalna, Occasional

Introduced Shrubs:
Ardisia crenata, Hilo holly, Uncommon
Arthrostema ciliatum, Uncommon
Buddleia asiatica, Dog tail, Occasional
Caesalpinia decapetala, Cat's claw, Uncommon
Clidemia hirta, Koster's curse, Occasional
Cordyline fruticosa, Ti, Occasional
Crotalaria incanum, Rattlepod, Uncommon
Hyptis pectinata, Comb hyptis, Common
Indigofera suffruticosa, Indigo, Uncommon
Ixora sp., Maltese cross, Uncommon
Pluchea symphitifolia, Sourbush, Occasional
Rubus rosifolius, Thimbleberry, Occasional
Senecio madagascariensis, Fire weed, Occasional
Senna septemtrionalis, kolomona, Occasional
Sida acuta, Uncommon

Introduced Herbs and Vines:
Chamaecrista nictitans, Partridge pea, Uncommon
Cirsium vulgare, Bull thistle, Occasional
Commelina diffusa, honohono, Uncommon
Conyza bonariensis, Hairy horseweed, Occasional
Cuphea carthaginensis, tarweed, Occasional
Desmodium intortum, Beggarweed, Occasional
Hedychium coronarium, White ginger, Occasional
Hedychium gardnerianum, Kahili ginger, Occasional
Hypericum mutilum, St. John's wort, Occasional
Kalanchoe pinnata, Air plant, Uncommon
Malvaviscus arboreus, Turk's cap, Uncommon
Passiflora edulis, Passion fruit, Uncommon
Passiflora mollissima, Banana poka, Uncommon
Phaius tankervilleae, Chinese ground orchid, Uncommon
Sigesbeckia orientalis, Oriental hawksbeard, Occasional
Spathoglottis plicata, Philippine ground orchid, Uncommon
Stachytarpheta dichotoma, Owi, Occasional
Tibouchina herbacea, Cane tibouchina, Occasional

Trifolium repens, White clover, Occasional

Introduced Ferns:
Adiantum hispidulum, Occasional
Blechnum appendiculatum, Occasional
Christella dentate, Downy wood fern, Occasional
Christella parasitica, Woodfern, Occasional
Nephrolepis multiflora, Hairy swordfern, Occasional

Introduced Grasses, Sedges and Rushes:
Andropogon virginicus, broomsedge, Occasional
Melinis minutiflora, Molasses grass, Occasional
Oplismenus hirtellus, Basket grass, Occasional
Panicum maximum, Guinea grass, Occasional
Panicum repens, Wainaku grass, Occasional
Pennisetum clandestinum, Kikuyu grass, Common
Pennisetum purpureum, Elephant grass, Occasional
Pennisetum setaceum, Fountain grass, Occasional
Pycreus polystachyos, Uncommon
Sacciolepis indica, Glenwood grass, Occasional
Schizachyrium condensatum, Beardgrass, Occasional
Setaria gracilis, Yellow foxtail, Occasional
Sporobolus africanus, Smutgrass, Occasional

APPENDIX C

Faunal Survey

FOREST BIRD SURVEY OF HONUAULA TRACT 2
MAY 3-5, 2005

Background

The Honuaula Forest Reserve is comprised of over 1300 acres in North Kona, on the Island of Hawaii. Until recently, Tract II of the reserve was under pasture lease to Palani Ranch Company. The State Division of Forestry and Wildlife (DOFAW) have since reclaimed the parcel to implement the Tract II Reforestation Project. Soil scarification and supplemental out-planting is expected to return several hundred acres of historically grazed grassland habitat to native koa (*Acacia koa*) forest. On May 3-5, 2005, DOFAW personnel from the West Hawaii Wildlife Branch conducted a forest bird survey to establish baseline information for the area prior to reforestation efforts.

Methods

A little used access road bisecting Tract II was utilized as a survey transect. A total of 14 observation stations were established at approximately .25-mile intervals. Each station was surveyed for all bird species detected, both visually and audibly, over an eight-minute observation period. All stations were surveyed between 0700-1000. The survey did not attempt to produce density estimates per the variable circle plot method, and instead establishes relative species abundance along the survey route.

Figure 1 shows the locations of each survey station. Stations 1-12 lie within the proposed scarification and out-planting region described in a report prepared May 2000 by L. Perry. Survey stations were recorded with a GPS to enable follow-up surveys at selected intervals along the reforestation timeline (see Figure 1).

Results

Native forest bird species detected during the survey included 'amakihi (*Hemiganthus virens virens*, AMAK), 'apapane (*Himatione sanguinea*, APAP) and i'iwi (*Vestiaria coccinea*, IIWI). These three species were detected at all 14 survey stations, with varying abundance. The most frequently detected species of the three was 'amakihi (9.29 per station, range=5-17), followed by 'apapane (7.93, range=3-18) and i'iwi (2.79, range=1-5). Figure 2 shows the greatest concentrations of native forest birds at stations 4-7, the most heavily forested stations along the survey route.

Introduced passerine (songbird) species detected during the survey included Northern cardinal (*Cardinalus cardinalus*, NOCA), Japanese white-eye (*Zosterops japonicus*, JAWE), Red-billed leiothirix (*Leiothrix lutea*, RBLE), House finch (*Carpodacus mexicanus*, HOFI), and Yellow-fronted canary (*Serinus mozambicus*, YFCA). Northern cardinal detections were most frequent among the introduced species, with 4.57 per station (range=2-7), and was the only species detected at all 14 stations. Figure 3 shows detections per station for all species except YFCA, which was only detected at one station.

Game bird species detected included Wild turkey (*Meleagris gallopavo*, WITU), Erckel's francolin (*Francolinus erckelii*, ERFR) and Kalij pheasant (*Lophura leucomelana*,

Figure 2. Detections of amakihi, apapane and iiwi in Honuaula Tract 2.

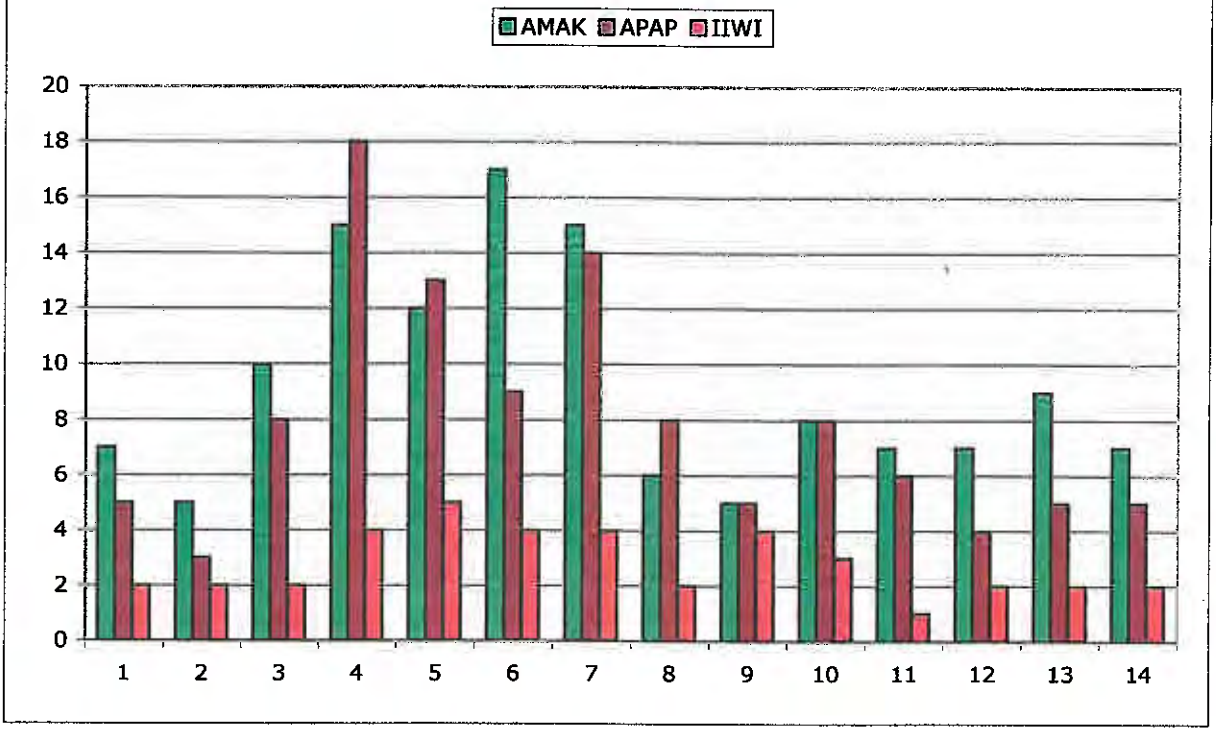
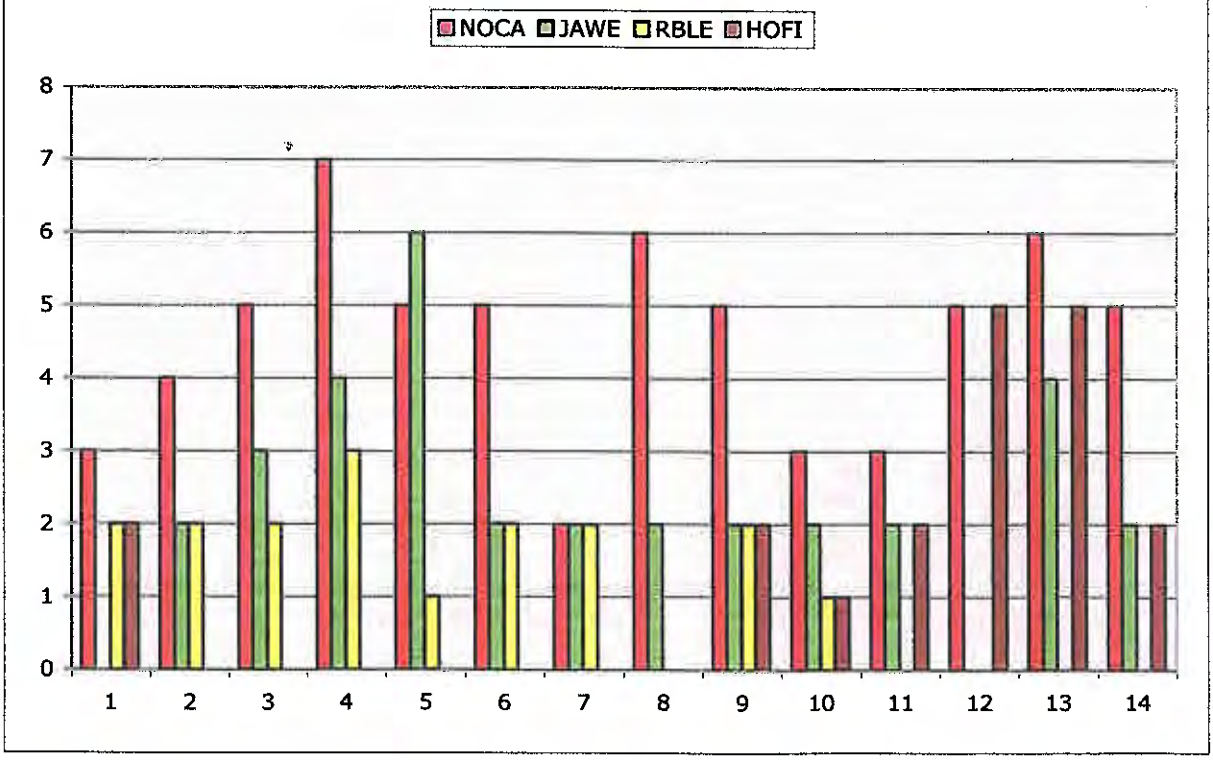


Figure 3. Detections of introduced passerines in Honuaula Tract 2.



Division of Forestry and Wildlife
Oahu District
2135 Makiki Heights Drive • Honolulu, HI 96822 • (808) 973-9789 • Fax: (808) 973-9781

August 30, 2005

MEMORANDUM

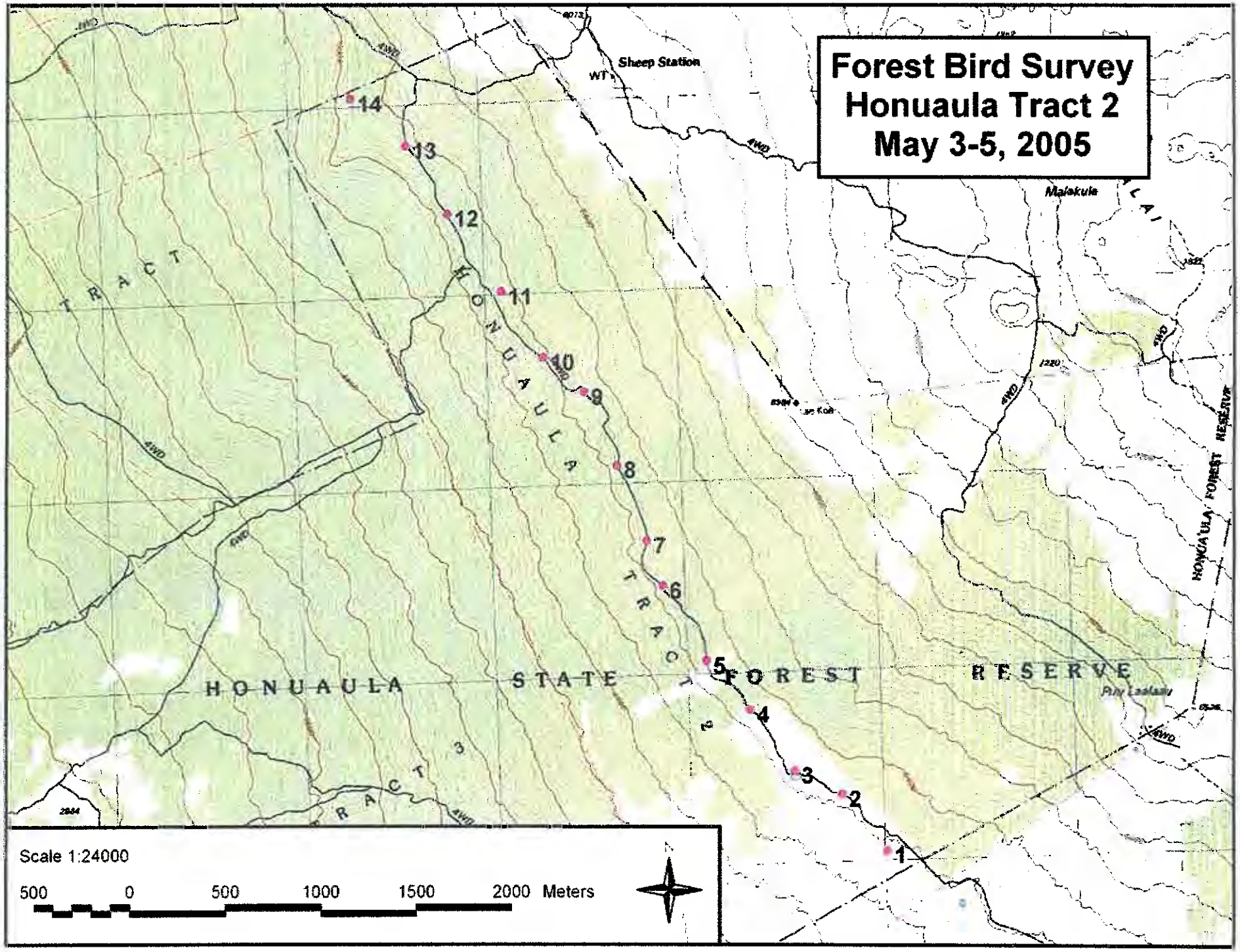
TO: Steve Bergfeld

FR: John Polhemus, Wildlife Biologist

SU: Honuaula

Steve, here's the map for inclusion w/ the Tract 2 forest bird survey.

Aloha!


Forest Bird Survey
Honuaula Tract 2
May 3-5, 2005
Sheep Station
Malakula
TRACT
HONUAULA
TRACT 2
TRACT 3
HONUAULA STATE FOREST RESERVE
HONUAULA FOREST RESERVE
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FOREST BIRD SURVEY OF HONUAULA TRACT 2

Background

The Honuaula State Forest Reserve is comprised of over 1300 acres in North Kona, on the Island of Hawaii. Until recently, Tract II of the reserve was under pasture lease to Palani Ranch Company. The State Division of Forestry and Wildlife (DOFAW) have since reclaimed the parcel to implement the Tract II Reforestation Project. Soil scarification and supplemental out-planting is expected to return several hundred acres of historically grazed grassland habitat to native koa (*Acacia koa*) forest. Forest bird and bat surveys were conducted on May 4-5, October 14 and December 21, 2005, to establish baseline information for the area prior to reforestation efforts.

Methods

A little used access road bisecting Tract II was utilized as a survey transect. In May, a total of 14 observation stations were established at approximately .25-mile intervals. In October, an additional five stations (placed at 250 meter intervals) were surveyed along "Roger's Trail," the proposed route for a new access road. Each station was surveyed for all bird species detected, both visually and audibly, over an eight-minute observation period. All stations were surveyed between 0700-1000. The survey did not attempt to produce density estimates per the variable circle plot method, and instead establishes relative species abundance along the survey route. Bats were surveyed in the dusk and early evening hours, weather permitting, using a Mini-2 Bat Detector (Ultra Sound Advice, 23 Aberdeen Road, London N5 2UG). Established ultrasound frequencies for the Hawaiian Hoary Bat primarily fall within the 27.5-30 kHz range. Surveys were conducted by scanning with the Mini-2 between 20-40 kHz while observing for visual detections.

Figure 1 shows the locations of each survey station. Table 1 shows locations and notes on veg conditions at the each station. Stations 1-12 on the Tract II route lie within the proposed scarification and out-planting region described in a report prepared May 2000 by L. Perry. Stations 1-5 of the Roger's Trail route represent the entire proposed roadway. Survey stations were recorded with a GPS to enable follow-up surveys at selected intervals along the reforestation timeline.

Results

Native forest bird species detected during both May and October surveys included 'amakihi (*Hemiganthus virens virens*, AMAK), 'apapane (*Himatione sanguinea*, APAP) and i'iwi (*Vestiaria coccinea*, IIWI). These three species were detected at all 14 survey stations in Tract II, with varying abundance. AMAK were present at all five stations along Roger's Trail, while APAP and IIWI were detected at four of five. The most frequently detected species of the three was 'amakihi (8.16 per station, range=2-17), followed by 'apapane (6.26, range=1-18) and i'iwi (2.47, range=0-5). Figure 2 shows the greatest concentrations of native forest birds at stations 4-7, the most heavily forested stations along the survey route.

Introduced passerine (songbird) species detected during the survey included Northern cardinal (*Cardinalus cardinalus*, NOCA), Japanese white-eye (*Zosterops japonicus*, JAWE), Red-billed leiothirix (*Leiothrix lutea*, RBLE), House finch

(*Carpodacus mexicanus*, HOFI), and Yellow-fronted canary (*Serinus mozambicus*, YFCA). Northern cardinal detections were most frequent among the introduced species, with 3.84 per station (range=1-7), and was the only species detected at all stations in Tract II and Roger's Trail. Figure 3 shows detections per station for all species except YFCA, which was only detected at one station.

Game bird species detected included Wild turkey (*Meleagris gallopavo*, WITU), Erckel's francolin (*Francolinus erckelii*, ERFR) and Kalij pheasant (*Lophura leucomelana*, KAPH). WITU were detected at seven stations, ERFR at ten stations, and KAPH at four stations.

Other bird species detected during the survey included two observations of a solitary Hawaiian Hawk (*Buteo solitarius*), three Mitered conures (*Aratinga mitrada*) which were observed at station 14, on the Kaloko (northern) boundary of Tract 2, and one Hawaiian short-eared owl (pueo, *Asio flammeus*).

No detections of the Hawaiian Hoary Bat (*Lasiurus cinerus semotus*) were made on any of the three visits.

Wild cattle were present throughout the Tract II survey route, in small groups of up to 8. Several feral pigs were observed along Roger's Trail, and several wallows were noted along the Tract II route.

Discussion

Common native forest bird species and introduced songbirds made up the majority of birds detected during this series of surveys. No rare or endangered species were detected, save for the 'io and pueo observations. Audio playbacks of 'Elepaio, a common method of detection for this species, did not receive any responses. The tighter canopy present at Stations 4-7, and to some extent Stations 3 and 8, yielded the highest abundance of native forest birds. Of the remaining stations surveyed, the majority were either in or adjacent to open grasslands resulting from years of grazing activity. Peak activity periods for the Hawaiian Hoary Bat occur from August-December (USFWS Hawaiian Hoary Bat Recovery Plan). However, *Eucalyptus sp.*, abundant in other portions of the forest reserve, are a known roost species for the Hawaiian Hoary Bat, and as such there may be some use of the area that was not detected.

John T. Polhemus
Wildlife Biologist
West Hawaii Wildlife Branch

1/12/06
Prepared

Table 1. Survey Stations Locations and Notes:

Stn#	Latitude	Longitude	Comments
			Tract II
1	N19 39.937'	W155 53.369'	Open grassland, scattered ohia, naio and koa
2	N19 40.098'	W155 53.500'	As #1
3	N19 40.166'	W155 53.640'	North berm of reservoir, mauka of exclosure w/ silversword
4	N19 40.340'	W155 53.771'	Moderate canopy, ohia, naio, koa, pilo, banana poka; approx 200m to Cyanea exclosure
5	N19 40.479'	W155 53.898'	Good canopy, ohia, koa, naio, olapa, kawau, hapu'u
6	N19 40.690'	W155 54.024'	As #5
7	N19 40.817'	W155 54.070'	Canopy thinning, koa, ohia, naio, akala, kawau, ohelo, banana poka; double wood gate
8	N19 41.031'	W155 54.156'	No intact canopy, scattered ohia and naio shrub land, koa, akala, banana poka
9	N19 41.238'	W155 54.252'	Open grassland, scattered ohia shrub, koa, *Clermontia*
10	N19 41.337'	W155 54.373'	Open grassland, shrub ohia, olapa, banana poka, pilo
11	N19 41.524'	W155 54.496'	Open grassland, some dense clumps of ohia, koa, kawau
12	N19 41.745'	W155 54.653'	Scattered ohia, koa, akala, *Clermontia*, banana poka
13	N19 41.939'	W155 54.775'	Scattered large koa, shrub ohia
14	N19 42.074'	W155 54.938	Good canopy, koa, ohia, banana poka; corral next to old sheep station cabin just inside Tract 2 north boundary
			Roger's Trail
R1	N19 40.817'	W155 53.198'	Trailhead, mixed conifer, eucalyptus
R2	N19 40.941'	W155 53.336'	Evergreen grove (species?), some koa
R3	N19 41.017'	W155 53.419'	Pukiawe, pilo, open grasslands between two small pine (?) groves
R4	N19 41.095'	W155 53.539'	Pukiawe, pilo, scattered mamane in open grassland
R5	N19 41.201'	W155 53.624'	Lae Koa

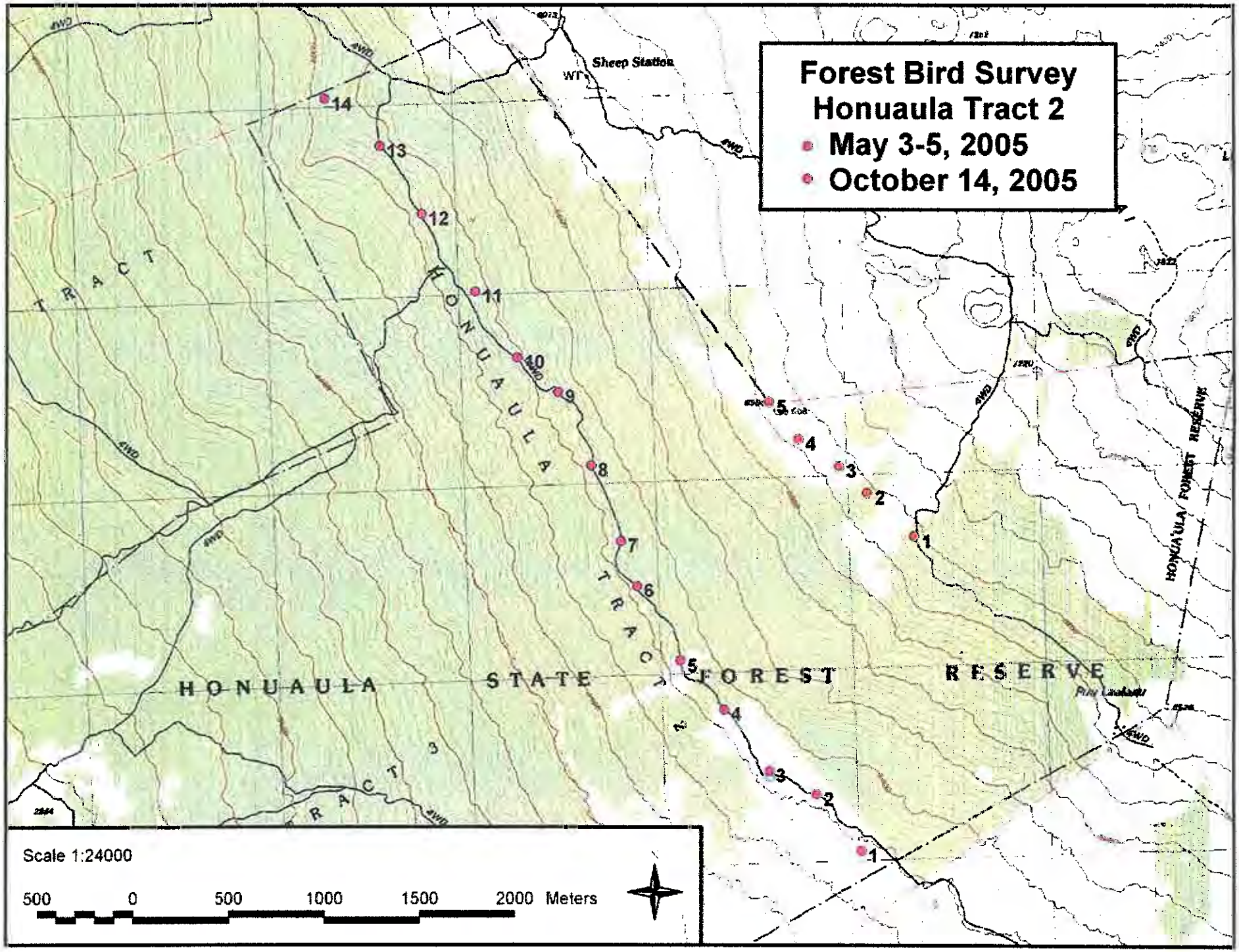
Forest Bird Survey
Honuaula Tract 2
May 3-5, 2005
October 14, 2005
Sheep Station
TRACT
HONUAULA
TRACT
HONUAULA STATE FOREST RESERVE
HONUA'ULA FOREST RESERVE
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Figure 2. AMAK, APAP and IIWI detections by survey station, Honuaula Forest Reserve (Tract II) Kona, Hawaii.

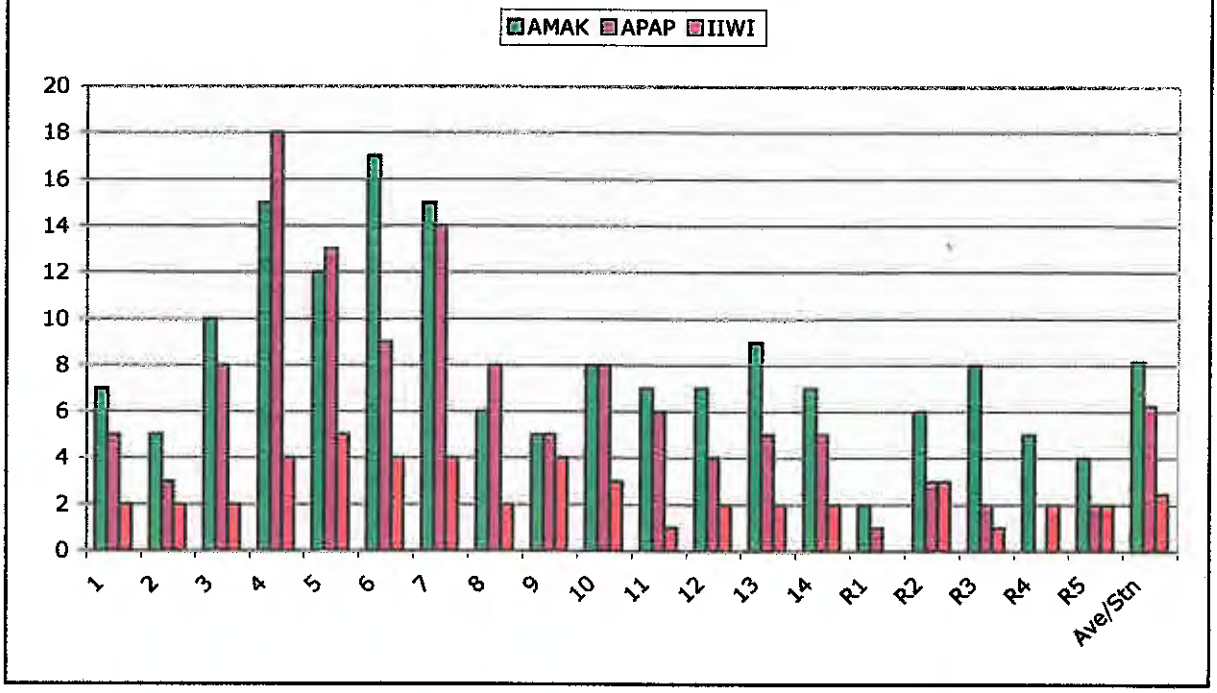
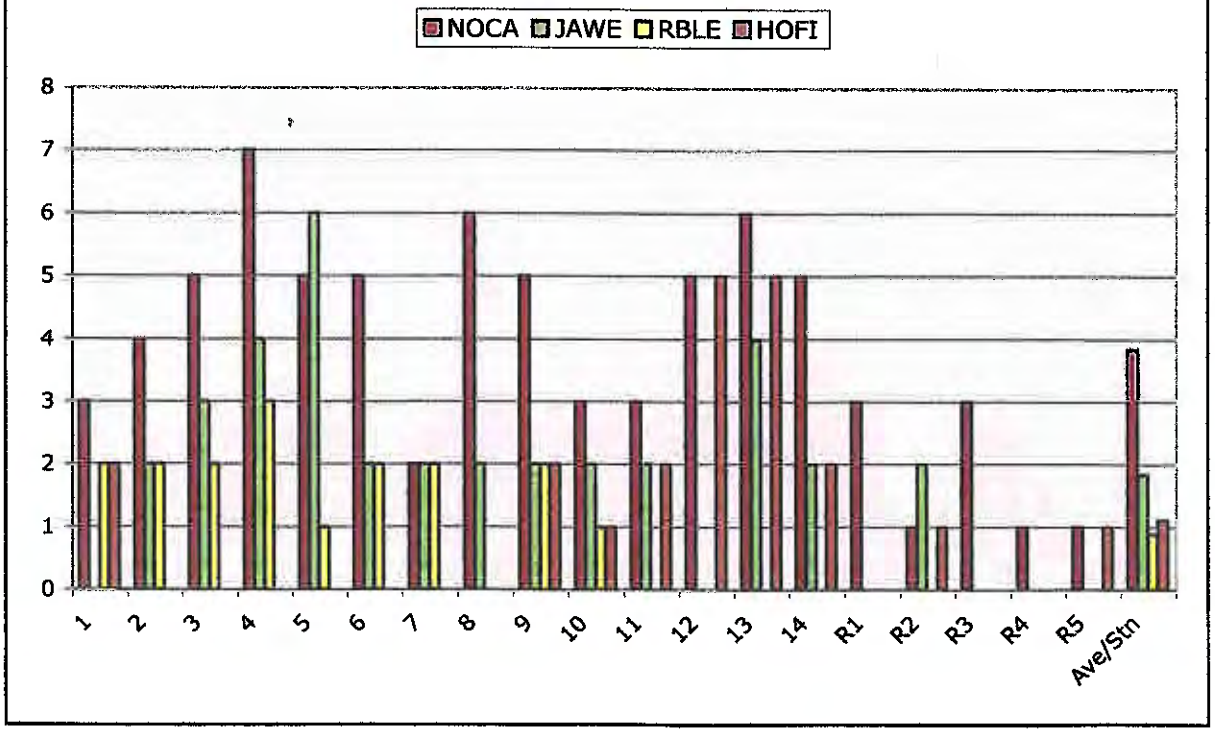


Figure 3. NOCA, JAWE, RBLE and HOFI detections by survey station, Honuaula Forest Reserve (Tract II) Kona, Hawaii.



APPENDIX D

Letters Received During Pre-consultation

PHONE (808) 594-1888 FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD07/2871

January 23, 2007

Melissa Sprecher
Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl Street, Room 325
Honolulu, HI 96813

RE: Pre-consultation on Environmental Assessment for Proposed Koa Reforestation and Road Construction in Honua'ula Forest Reserve, Hawai'i, TMK: 7-4-various plats and parcels, and 7-5-various plats and parcels.

Dear Melissa Sprecher,

The Office of Hawaiian Affairs (OHA) is in receipt of your January 10, 2007 request for comments on the above-referenced project, which would include restoring previously degraded range lands to native forest cover of koa (*Acacia koa*). Physical impacts to the project area, which is located between approximately 4,600–6,300 feet elevation, include mechanical soil scarification of approximately 1,000 acres of land; the construction of two roads; the installation and maintenance of fences; and, hand planting of native tree seedlings in some areas that are inaccessible to mechanical equipment. OHA offers the following comments.

We suggest contacting Ruby McDonald of OHA's Kailua-Kona office (address below), to verify that the proposed undertaking does not conflict with any native Hawaiian cultural practices associated with the nearby Hainoa (Hualalei summit). OHA generally supports the concept of fencing to protect native, rare and endangered plants – further protecting native birds that depend on those plants – from ungulates. We request the applicant's assurances, however, that the project will continue to afford Native Hawaiian gathering and cultural access rights to the area – perhaps through pass-through gates created for such access. This consideration for applicable cultural gathering and access rights must be given both during and after construction activities, except as necessary to ensure safety. If such safety-related restrictions are put in place, alternate public access routes must be provided.

OHA also recommends the Environmental Assessment (EA) include an archaeological inventory survey (AIS), in fulfillment of §6E-8, HRS and §13-276, HAR, and a cultural impact assessment (CIA), in fulfillment of §343, HRS and §11-200, HAR. We also urge that both the AIS and the CIA assess the possibility that the project area comprises one or more traditional cultural properties, which are explicitly included in the State Office of Environmental Quality Control's (OEQC) guidelines on preparing CIA reports (supporting §343, HRS, §11-200, HAR); and, are one possible type of 'historic property' according to the State's administrative rules for assessing historic significance (§13-275-6, HAR, http://www.state.hi.us/dlnr/hpd/hpgreeting.htm).

OHA further requests your assurances that if this project goes forward, should iwi kūpuna or Native Hawaiian cultural or traditional deposits be found during ground disturbance, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Heidi Guth at (808) 594-1962 or by e-mail heidig@oha.org.

Sincerely,

Clyde W. Nāmu'o
Administrator

C: Ruby McDonald
Community Resources Coordinator
OHA – Kona Office
75-5706 Hanama Place, Suite 107
Kailua-Kona, HI 96740

JAN 24 2007

→ MC

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

DEAN NAKANO
ACTING 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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

REF:OCCL:DH

Correspondence: HA-07-152

JAN 24 2007

MEMORANDUM

TO: Paul Connery, Administrator
Division of Forestry and Wildlife

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

THROUGH: Dawn Hegger, Senior Planner

SUBJECT: Pre-consultation on Environmental Assessment for Proposed Koa Reforestation and Road Construction in Honuaula Forest Reserve, Subject Parcels TMK's: (3) 7-4-001:003, (3) 7-4-001:004, and (3) 7-5-013:013 and 022

The Office of Conservation and Coastal Lands (OCCL) is in receipt of your letter, dated January 10, 2007, regarding the proposal to restore previously degraded cattle and sheep range lands to a restored native forest cover. Work consists of: soil scarification of approximately 1,000 acres of degraded forest land to promote the regeneration of koa; construction of two roads, maintenance and assembly of fences; plant native tree seedlings in abandoned open pasture land or sites that are too steep for soil scarification activities or where the soil is unstable.

Departmental records indicate that the following subject parcels are located in the:

- (3) 7-4-001:004 – is located in the Resource subzone of the Conservation District;
- *(3) 7-4-001:003 – has not yet been designated;*
- (3) 7-5-013:013 – is not located in the Conservation District; and
- *(3) 7-5-013:022 – has not yet been designated.*

The OCCL notes any proposed land uses in the Resource subzone should be identified land uses, pursuant to Chapter 13-5, Hawaii Administrative Rules (HAR), and will require a Conservation District Use Application (CDUA). Pursuant to departmental policies, DOFAW may process the CDUA and accompanying Environmental Assessment (EA) document. *The OCCL notes TMK's: (3) 7-4-001:003, and (3) 7-5-013:022 have no subzone designation, and a subzone would need to be designated.* However, the OCCL notes the DOFAW can move forward in the CDUA process, and assign terms and conditions to the CDUA that once the two subject parcels are designated, work can start thereafter. The OCCL is willing to review the process with DOFAW staff and offer assistance. If you have questions and/or concerns feel free to contact Dawn Hegger of our Office of Conservation and Coastal Lands staff at 587-0380.

cc: Chairperson
DOFAW - M. Constantinides

Harry Kim
Mayor

Christopher J. Yuen
Director

Brad Kurokawa, ASLA
LEED® AP
Deputy Director

County of Hawaii
PLANNING DEPARTMENT
101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-3043
(808) 961-8288 • FAX (808) 961-8742

January 29, 2007

Ms. Melissa Sprecher
Department of Land & Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl St., Rm. 325
Honolulu HI 96813

Dear Ms. Sprecher:

Subject: Pre-Consultation on Environmental Assessment
Applicant: DLNR, Division of Forestry & Wildlife
Project: Restoration of Native Forest Cover & Related Improvements
TMK: 7-4-1:3&4 and 7-5-13:13 & 22, Honuaula Mauka and Hienaloli 1st, North Kona, Hawaii

This is in response to your January 17, 2007 letter.

The Division of Forestry & Wildlife proposes to stimulate native tree reforestation in heavily degraded forest areas, construct two roads for management implementation and public recreational opportunities, maintain and assemble fences, and increase water recharge for the Hualalai aquifer.

For your information, we have the following to offer for each parcel that was identified:

	TMK: 7-4-1:3	TMK: 7-4-1:4	TMK: 7-5-13:13	TMK: 7-5-13:22
State Land Use	Conservation	Conservation	Agricultural	Conservation
County Zoning	Agricultural (A-20a)	Forest Reserve	Agricultural (A-1a)	Agricultural (A-5a)
General Plan	Conservation	Conservation	Important Agricultural Land	Conservation
Area	1608.5 acres	1312 acres	2.85 acres	78.36 acres
SMA	No	No	No	No

As a reminder, within the State Land Use Conservation district, there is no County zoning per se. The Department of Land and Natural Resources has jurisdiction over the Conservation area.

Please submit a copy of the Draft Environmental Assessment for our review and file.

Should you have questions, please feel free to contact Esther Imamura of our Department at 961-8288, extension 257.

Sincerely,

CHRISTOPHER J. YUEN
Planning Director

ETI:cd
P:\wpwin60\ETI\EAdraftPre-consul\Sprecher Honuaula FR.rtf

xc: Planning Department, Kona

"Dale Fergerstrom"
<daferger@ksbe.edu>
01/31/2007 03:13 PM

To <Melissa.I.Sprecher@hawaii.gov>

cc "Kamakani Dancil" <kadancil@ksbe.edu>, "Namaka Whitehead" <nawhiteh@ksbe.edu>

bcc

Subject Honuaula Koa area

Ms. Spercher, Thank you for soliciting our input. I am Dale Fergerstrom, Land Operations Manger for Kamehameha Schools Land Assets Division, Hawaii Island. It appears from your map that the Koa planting area at Honuaula will run along the KS- Ka'upulehu boundary which at this time, in many places, is not secured by a fence. It is the concern of KS-LAD Hawaii that vehicle access into this area of Honuaula will facilitate ready, unauthorized, access to KS lands of Ka'upulehu. At present unauthorized access has been held to a minimum because of the lack of the remoteness of this area of Honuaula. KS does have burial and sacred sites on the slops of Honuaula and at Hainoa which have been relatively undisturbed due to restricted access. KS would be very interested in going into a cooperative agreement with the State of Hawaii to fence off the Honuaula-Ka'upulehu Boundary. Presently KS does have an agreement with DOFAW that allows access to the State Honuaula cabin via KS roads for work purposes. KS is not interested in this road agreement being used for large scale State or Public access to Honuaula. Dale Fergerstrom (808) 322-5309.

57978

LINDA LINGLE
GOVERNOR

BARRY FUKUNAGA
INTERIM DIRECTOR

Deputy Directors
FRANCIS PAUL KEENO
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

RECEIVED
'07 FEB 14 A7:58
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

IN REPLY REFER TO:
STP 8.2408

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

February 7, 2007

TO: THE HONORABLE PETER L. YOUNG, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

FROM: BARRY FUKUNAGA
INTERIM DIRECTOR OF TRANSPORTATION

SUBJECT: KOA REFORESTATION AND ROAD CONSTRUCTION
HONUAULA FOREST RESERVE
PRE-CONSULTATION ON ENVIRONMENTAL ASSESSMENT

Thank you for your notification of the subject project being planned by the Department of Land and Natural Resources.

The proposed road will access Mamalahoa Highway on the section of highway under Hawaii County's jurisdiction. As described, we anticipate the proposed reforestation project will not have a significant impact on our State transportation facilities in the area because the project does not involve commercial harvesting or hauling.

Three copies of the Draft Environmental Assessment should be sent directly to our Highways Division, Planning Branch for their distribution to all appropriate highway staff, including the Hawaii District Office, for reference and further comments, if necessary.

We appreciate the opportunity to provide our comments.

LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EPO-7-012

February 12, 2007

Ms. Melissa Sprecher
Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl Street, Room 325
Honolulu, Hawaii 96813

Dear Ms. Sprecher:

SUBJECT: Pre-Consultation on Environmental Assessment for Proposed Koa Reforestation and Road Construction in Honuaula Forest Reserve, North Kona, Island of Hawaii, Hawaii
TMK: (3) 7-4-001: 003 and 004
(3) 7-5-013: 013 and 022

Thank you for allowing us to review and comment on the subject documents. The documents were routed to the various branches of the Environmental Health Administration. We have the following Clean Water Branch comments.

Clean Water Branch

The Department of Health (DOH), Clean Water Branch (CWB) has reviewed the limited information contained in the subject document and offers the following comments:

1. The Army Corps of Engineers should be contacted at (808) 438-9258 for this project. Pursuant to Federal Water Pollution Control Act (commonly known as the "Clean Water Act" (CWA) Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40, Code of Federal Regulations (CFR), Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.

2. In accordance with HAR, Sections 11-55-04 and 11-55-34.05, the Director of Health may require the submittal of an individual permit application or a Notice of Intent (NOI) for general permit coverage authorized under the National Pollutant Discharge Elimination System (NPDES).

a. An application for an NPDES individual permit is to be submitted at least 180 days before the commencement of the respective activities. The NPDES application forms may also be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

b. An NOI to be covered by an NPDES general permit is to be submitted at least 30 days before the commencement of the respective activity. A separate NOI is needed for coverage under each NPDES general permit. The NOI forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

   i. Storm water associated with industrial activities, as defined in Title 40, CFR, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi). [HAR, Chapter 11-55, Appendix B]

   ii. Construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. **An NPDES permit is required before the commencement of the construction activities.** [HAR, Chapter 11-55, Appendix C]

   iii. Discharges of treated effluent from leaking underground storage tank remedial activities. [HAR, Chapter 11-55, Appendix D]

   iv. Discharges of once through cooling water less than one (1) million gallons per day. [HAR, Chapter 11-55, Appendix E]

   v. Discharges of hydrotesting water. [HAR, Chapter 11-55, Appendix F]

   vi. Discharges of construction dewatering effluent. [HAR, Chapter 11-55, Appendix G]

   vii. Discharges of treated effluent from petroleum bulk stations and terminals. [HAR, Chapter 11-55, Appendix H]

   viii. Discharges of treated effluent from well drilling activities. [HAR, Chapter 11-55, Appendix I]

   ix. Discharges of treated effluent from recycled water distribution systems. [HAR, Chapter 11-55, Appendix J]

   x. Discharges of storm water from a small municipal separate storm sewer system.

[HAR, Chapter 11-55, Appendix K]

xi. Discharges of circulation water from decorative ponds or tanks. [HAR, Chapter 11-55, Appendix L]

3. In accordance with HAR, Section 11-55-38, the applicant for an NPDES permit is required to either submit a copy of the new NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the DOH that the project, activity, or site covered by the NOI or application has been or is being reviewed by SHPD. If applicable, please submit a copy of the request for review by SHPD or SHPD's determination letter for the project.

4. Any discharges related to project construction or operation activities, with or without a Section 401 WQC or NPDES permit coverage, shall comply with the applicable State Water Quality Standards as specified in HAR, Chapter 11-54.

The Hawaii Revised Statutes, Subsection 342D-50(a), requires that "[n]o person, including any public body, shall discharge any water pollutants into state waters, or cause or allow any water pollutant to enter state waters except in compliance with this chapter, rules adopted pursuant to this Chapter, or a permit or variance issued by the director."

If you have any questions, please contact Mr. Alec Wong, Supervisor of the Engineering Section, CWB, at (808) 586-4309.

We strongly recommend that you review all of the Standard Comments on our website: www.state.hi.us/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to.

If there are any questions about these comments please contact Jiacai Liu with the Environmental Planning Office at 586-4346.

Sincerely,

KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO
CWB
EH-Hawaii, Larry Shiro
DDEH

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

February 15, 2007

Ms. Melissa Sprecher
Department of Land and Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl Street, Room 325
Honolulu, HI 96813

PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION
KOA REFORESTATION AND ROAD CONSTRUCTION IN HONUAULA FOREST RESERVE
TAX MAP KEY 7-4-001:003, 7-4-001:004 (ROAD), 7-5-013:013 AND 022 (ROAD)

This is in response to your Pre-Environmental Assessment Consultation letter of January 10, 2007.

Please be informed there is an existing 8-inch waterline within Mamalahoa Highway fronting Tax Map Key 7-5-013:013 and approximately 3,300 feet away from the project site at Tax Map Key 7-4-001:003. Please note that the project site is located at such an elevation that the Department's existing water system facilities cannot provide adequate pressure.

Should the applicant wish to provide water service to the project site, such service would be limited to one 5/8-inch meter at a maximum of 600 gallons per day. Further, due to the elevation at the project site, the applicant would need to execute an Elevation Agreement with the Department and also submit a tank and pump system schematic, prepared by professional engineer licensed in the State of Hawai'i, to show how water would be delivered to the project site at adequate pressure and volume. The applicant would also need to sign a Policy and Conditions for Water Service, or "Out-of- Bounds" Agreement, as the project site does not front on the Department's existing waterline.

Should there be any questions, please contact Mr. Finn McCall of our Water Resources and Planning Branch at 961-8070, extension 255.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

FM:dfg

... Water brings progress...

MOHI
75-5489 HAHAI STREET
HOLUALOA, HI 96725

3/14/2007

Melissa Sprecher
Forester
Department of Land and Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl St. Room 325
Honolulu, HI 98613

Dear Ms. Sprecher,

This letter is written in response to your letter of January 10, 2007 regarding plans for the Honuaula Forest Reserve.

We live to the south of the proposed road which runs for about a mile from Mamalahoa Hwy in an easterly direction. Our property is a 5 acre coffee farm with a home. We live full time in the home, which is the most easterly parcel on the map you furnished, it is bounded on both the east and the north by State land.

The development in which we live is called Hualalai Farms. It is composed of 250 acres which are mostly 5 acre parcels, 43 of those parcels have dwellings and are occupied. There is a gate on Mamalahoa Hwy which can be opened by a remote control device which the residents have. The Farms are very secure and that is one of the reasons many of the people have chosen to live here. Many of the residents feel very secure and do not lock their doors.

There is a great concern among the residents that the proposed access road from Mamalahoa Hwy, which will be about one mile in length and is adjacent to many of the resident's homes, will lessen their security to a great extent. One solution to this problem would be the erect a fence along the State property so that those who use the road will not be tempted to explore the Hualalai Farms property.

Your letter does not make it clear what the road will be used for and who will be using it. At the present time there is a great deal of peace, serenity, and quietness that we residents do enjoy. Where we are, because of the quietness noise does carry a great distance. Many are worried that the character of this refuge would be changed if the proposed access road were opened to motorized vehicles. We would hope that the road would only be used as a maintenance road and have a locked gate and only be used occasionally when necessary by State personnel. We hope it would not be open to those who wish to use this portion of the State Forest for recreational purposes, or to access the proposed reforested property, Cars and ATV's would destroy the character of this neighborhood. At the present time I do not hear the traffic from Mamalahoa Hwy as I live one mile to the east of the highway. Peace and quiet were among the major reasons we chose our home;

Our property is a 5 acre coffee farm and lately wild cattle have been coming upon my land from the State land. They have been knocking down coffee trees. In addition to losing the coffee trees,

the hooves are leaving many holes some of which are 6 inches deep. Also the cattle are leaving large "cow pies" which have to be removed.
When a tree is destroyed a new one will have to be planted and it will take years for the new tree to bear. Thus as you can see there is a great loss of income, and also there is the expense of buying and planting the replacement trees. All these damages are due to the cattle which the State has allowed to graze and live in the State Forest. Since these cattle live on State land and leave that sanctuary to destroy coffee trees, what is the liability of the State?
At your suggestion I have called Jay at 974-4387 and have spoken to him once and he told me that the Ranch that owns the cattle would be calling and that was a month ago, as yet I have not received a call and I have been unable to reach Jay again even though I have left many messages. What should I do?

To sum up the major concerns are security and quiet enjoyment of the land. The immediate residents who are adjacent to the project are the ones who will be most impacted with your proposed development. Noise does travel a great distance, and the development if not properly planned and monitored could very well adversely affect all of the residents of Hualalai Farms.

Hopefully our concerns will be adequately addressed. I should like to be kept informed of your plans so that we can respond if necessary.

Thank you for your courtesy,

I remain,

Gary Mohi

PS- My address-
75-5489 Hahai St
Holualoa, HI 96725

The phone number-
808 322-3124

The fax number-
484 720-4259

The email address-
mohix9@yahoo.com

cc: Hualalai Farms Association

Hualalai Farms Association

P.O. BOX 471, HOLUALOA, HI 96725

April 20, 2006

Melissa Sprecher
Forester, Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl St., Rm 325
Honolulu, HI 96813

Re: Pre-Consultation on Environmental Assessment for Proposed Koa Reforestation and Road Construction in Honuaula Forest Reserve

Dear Ms. Sprecher,

I am writing with regard to the pre-consultation on the Environmental Assessment for the proposed Koa Reforestation and Road Construction in Honuaula Forest Reserve in Holualoa, Hawaii, on behalf of the Hualalai Farms Community Association.

The Hualalai Farms Community Association ("HFCA") is a Homeowner's Association made up of 60 members. Our subdivision is comprised of approximately 50 five-acre parcels, mostly residential and coffee farms. We are located just south of the proposed lower/makai access road, highlighted in yellow on the attached map (Exhibit "A"). While we have no objection or concerns related to the proposed surface soil scarification to promote the regeneration of koa, we have some serious concerns related to the proposed construction of the new lower/makai access road through the Hienaloli portion of Honuaula Forest Reserve, set forth in detail below.

I. Flooding Issues

The area proposed for the new lower/makai access road is located in a known floodplain, and currently is subject to severe flooding during heavy rains. Construction of a new roadway will potentially act as a water channel for heavy run off of water and debris onto the properties of members of the HFCA, as well as onto Mamalahoa Highway. HFCA therefore requests that the State perform a study of the impact of water runoff caused by the new access road construction prior to commencing construction.

II. Noise Concerns

Members of the HFCA have expressed concerns about the increased noise caused by the proposed access road. If the road is made available for public use, HFCA members are concerned about the noise caused by ATVs, trucks, etc. It is therefore suggested that the access be limited to use for maintenance only, and public access be limited. The Association suggests that a locked gate be installed at the bottom of the proposed road to limit access.

III. Security Concerns

Currently, access to the Hualalai Farms subdivision is through a locked gate, to which only members have access. Members of the HFCA have expressed concern that creating a public access road just north of our properties will create security problems for our HFCA members. It is therefore suggested that the access road be gated and locked at all times, with access granted to State personnel only. It is also suggested that a gate be erected to the south of the proposed access road to protect the security of our members.

IV. Trespass

On numerous occasions, grazing cattle on State property have broken down fences located on adjoining properties owned by HFCA members and have trespassed onto these properties, destroying coffee trees and causing other property damage. It is suggested that a fence be erected along state property to prevent this trespass from occurring in the future.

V. Lack of Notice

We have been informed that only one or two of our members who own property adjoining the proposed new access road have been provided notice and an opportunity to comment on the pre-consultation for the environmental assessment. We would request that all adjoining landowners be given notice and an opportunity to comment. We would also request that the HFCA be included in the list of interested parties, and be included in all future notices and mailings regarding this project.

Thank you for your attention to these concerns. Please feel free to contact me at 808-322-3641, or by email at anndatta@aol.com should you have any questions.

Sincerely,

Ann S, Datta
President,
Hualalai Farms Community Association

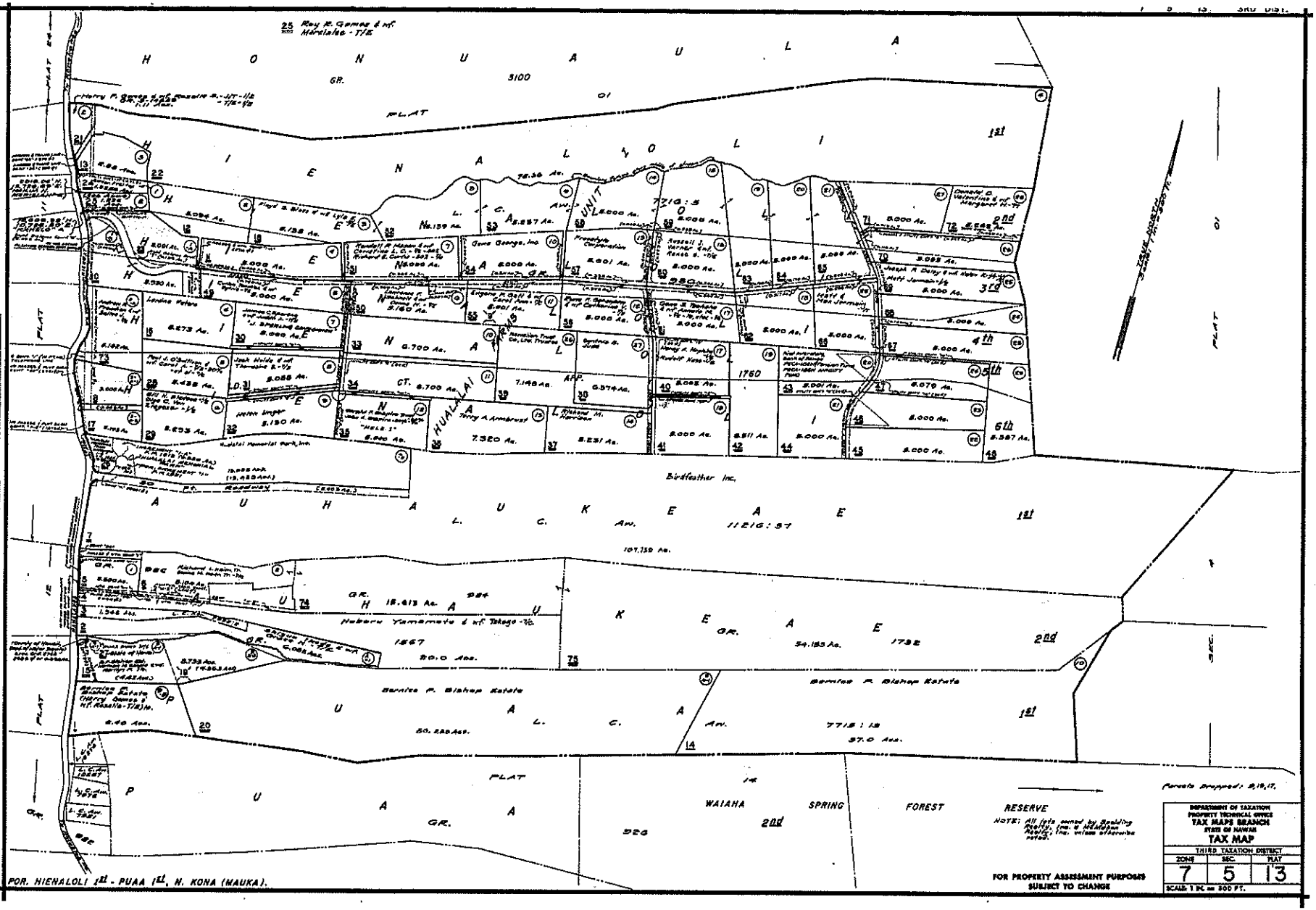

HONUAULA
HIENALOLI 1st
PUAA 1st
HUALALAI RANCH
AUHAAUKEAE 1st
KEAAE 2nd
PUAA 1st
WAIAHA SPRING FOREST RESERVE
Roy R. Gomes & wf
Bernice P. Bishop Estate
Birdfeather Inc.
Nobuo Yamamoto & wf Takeo -½
Terry A. Ambrust
Gene George, Inc.
POR. HIENALOLI 1st - PUAA 1st, N. KONA (MAUKA).
FOR PROPERTY ASSESSMENT PURPOSES SUBJECT TO CHANGE
DEPARTMENT OF TAXATION
PROPERTY TECHNICAL OFFICE
TAX MAPS BRANCH
STATE OF HAWAII
TAX MAP
THIRD TAXATION DISTRICT
ZONE 7 SEC. 5 PLAT 13
SCALE: 1 IN. = 200 FT.

EXHIBIT "A"

APPENDIX E

Letters Received During Public Comment

→ MC

Harry Kim
Mayor

Christopher J. Yuen
Director

Brad Kurokawa, ASLA
LEED® AP
Deputy Director

County of Hawaii
PLANNING DEPARTMENT
101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-4224
(808) 961-8288 • FAX (808) 961-8742

November 13, 2007

Mr. Paul J. Conry
Department of Land & Natural Resources
Division of Forestry & Wildlife
1151 Punchbowl Street, Room 325
Honolulu, HI 96813

Dear Mr. Conry:

Subject: Review of Draft Environmental Assessment (EA)
Project: Honua`ula Forest Reserve Reforestation Project
Tax Map Key: (3) 7-4-001:002, 003, 004 and (3) 7-5-013:013, 022

This is in response to your request for comments on the Draft EA for the Honua`ula Forest Reserve Reforestation Project.

We have reviewed the Draft EA and have no comments to offer at this time.

Should you have questions, please contact Maija Cottle of my staff at 961-8288 extension 253.

Sincerely,

CHRISTOPHER J. YUEN
Planning Director

MJC:cd
P:\wpwin60\Maija\EA-EIS\EA-EIS Review Comments\DLNR Honuaula Forest Reserve.doc

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
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

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813
TEL (808) 587-0166 FAX (808) 587-0160

November 16, 2007

Mr. Christopher J. Yuen
County of Hawaii, Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawaii 96720

Re: Draft Environmental Assessment of the Honua'ula Forest Reserve Reforestation Project

Dear Mr. Yuen,

Thank you and your staff for taking the time to review and respond to the Draft Environmental Assessment for the Honua'ula Forest Reserve Reforestation Project. The Division of Forestry and Wildlife understands that you have no comment at this time.

Should you have any future questions or recommendations, please correspond with Melissa Sprecher at (808) 587-4167 or by email Melissa.I.Sprecher@hawaii.gov. Thank you again for your time and consideration.

Sincerely,

Paul J. Conry
Administrator, Division of Forestry and Wildlife
Department of Land and Natural Resources

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

November 8, 2007

Melissa Sprecher
Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl Street, Room 325
Honolulu, HI 96813

RE: Request for comments on Draft Environmental Assessment for Honua'ula Forest Reserve Reforestation Project, to affect TMK: (3) 7-4-001:002, (3) 7-4-001:003, (3) 7-4-001:004, (3) 7-5-013:013 and (3) 7-5-013:022

Dear Melissa Sprecher,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-referenced project, which would include restoring previously degraded range lands to native forest cover of koa (*Acacia koa*). Physical impacts to the project area, which is located between approximately 4,600–6,300 feet elevation, include mechanical soil scarification of approximately 1,000 acres of land; the construction of two roads; the installation and maintenance of fences; and, hand planting of native tree seedlings in some areas that are inaccessible to mechanical equipment. OHA apologizes for the delayed response and offers the following comments.

OHA appreciates the state's effort to restore the koa rainforest at Honua'ula, and we anticipate that the reforestation will benefit not only the area's natural resources but also any Hawaiian cultural practices that are conducted in the area. However, we request that the state spell out specific measures that will ensure that access for traditional practices to the project area will be protected during the restoration phase of the project, especially during road construction, installation of fences and soil scarification. If safety-related restrictions are put in place, alternate public access routes must be provided.

In addition, we will rely on the applicant's assurances that the project, once completed, will not hinder, and in fact should improve, traditional access to the entire project area. However, we do ask the state to explain exactly how traditional access to the fenced-in area of the project will be protected after the fence is erected.

Furthermore, we will rely on the applicant's assurances that should iwi kūpuna or Native Hawaiian cultural or traditional deposits be found during ground disturbance, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

Thank you for the opportunity to comment. If you have further questions, please contact Sterling Wong (808) 594-0248 or e-mail him at sterlingw@oha.org.

Sincerely,

Clyde W. Nāmu'o
Administrator

C: Ruby McDonald
Community Resources Coordinator
OHA – Kona Office
75-5706 Hanama Place, Suite 107
Kailua-Kona, HI 96740

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

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AQUATIC RESOURCES
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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
TEL (808) 587-0166 FAX (808) 587-0160

November 27, 2007

Mr. Clyde W. Nāmu'o
Office of Hawaiian Affairs
711 Kapiolani Blvd., Suite 500
Honolulu, Hawaii 96813

Re: Draft Environmental Assessment of the Honua'ula Forest Reserve Reforestation Project

Dear Mr. Nāmu'o,

Thank you and your staff for taking the time to review and respond to the Draft Environmental Assessment for the Honua'ula Forest Reserve Reforestation Project. The Division of Forestry and Wildlife (Division) appreciates your confirmation of the benefits associated with the restoration of the Honua'ula Forest Reserve.

The current public access to the Honua'ula Forest Reserve is greatly restricted due to the lack of formal public infrastructure and roadways to the reserve. Through the creation of the Hienaloli Road, the Division hopes to expand the accessibility of this forest reserve to the public. The Division will not be restricting any existing public access to the forest reserve during any planned activities because none currently exist. Furthermore, the Division supports constitutionally protected traditional and customary native Hawaiian access and practices, and the Department of Land and Natural Resource's obligation to provide access to Hawaiians for gathering and cultural practices. Individuals interested in such activities are welcomed to contact the Division to seek an appropriate permit. The Division is also mandated with managing the lands under its purview for the benefit of all of the people of Hawai'i. Requests for permits are carefully considered and weighed against any impacts on the natural resources and other public uses.

The reforestation unit within Honua'ula Forest Reserve will require the construction of a new fence along the Southern boundary of Honua'ula Tract II. The purpose of the fence line is to discourage the entrance of cattle from neighboring lands, and is not intended to exclude the public. Persons wishing to access the reforestation site will continue to be allowed entrance to this section of the reserve provided such access is gained over adjacent reserve lands, otherwise they should seek the appropriate approval from neighboring landowners.

Should you have any future questions or recommendations, please correspond with Melissa Sprecher at (808) 587-4167 or by email Melissa.I.Sprecher@hawaii.gov. Thank you again for your time and consideration.

Sincerely,

Paul J. Conry
Administrator, Division of Forestry and Wildlife
Department of Land and Natural Resources

Palani Ranch Company, Inc.

3465 Waialae Avenue, Suite 260
Honolulu, HI 96816
Ph. 732-2622 Fax: 732-2788

November 6, 2007

Ms. Melissa Sprecher
Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl Street, Room 325
Honolulu, HI 96813

Re: Draft EA for Honuaula Forest Reserve Reforestation Project – September 2007

Thank you for sending us a copy of subject Draft EA. Since we have been working closely and corresponding with your staff with respect to Revocable Permit No. FW-2007-01 involving many of the issues addressed in the Draft EA, we did not offer any comments at the pre-consultation stage. We do feel, however, we need to go on record regarding issues which the EA raises which we feel need to be clarified or corrected in the final EA or at least be included in the record for future reference.

Cattle Corral and Fence Maintenance

There are various references to boundary fences which were not well maintained (page 4 and 7). We believe as the neighboring property we have historically done a very good job of constructing or reconstructing perimeter boundary fences that separated our fee lands from State lands. Until and unless the State accepts the responsibility for at least sharing in the maintenance of these boundary fences, particularly when the damage is caused by trees on State land falling onto boundary fences, the problem of cattle crossing into the forest will persist. Often it occurs through no fault on our part and we believe the EA should at least acknowledge that.

For this reason, it is inaccurate to imply that all cattle in the State land now or in the future are "feral cattle" (ie. without brand or earmark). While we concur that the removal of feral cattle by hunting by State employees may be necessary at some point, we have objected and continue to object to the State's hunting branded or marked cattle which have crossed onto State land through no fault on our part unless cooperative efforts to remove them alive by trapping or otherwise have been reasonably exhausted.

Hunting Risks and State Liability

The EA acknowledges that the State property is being improved with roads in part to improve access for hunting. We are very concerned about the adverse impacts and associated risks and liabilities that increased hunting or even recreational access will bring to our lands. Our fee simple land at Honokohau abuts the State land on the north. On the south, the narrow parcel of Pua'a is leased by Palani Ranch from Kamehameha Schools and to south of that is Holualoa which again is our fee land.

These abutting lands are actively managed with livestock accordingly we have personnel on them regularly. In terms of hunting risk, it is therefore essential that appropriate and substantial non hunting buffer zones be established within the State lands which are adequate to insure that rounds fired within the State land cannot stray outside of State land. For rifle hunting, this buffer should be at least 1500 feet.

On page 31, the EA indicates DOFAW will provide signage to delineate the forest reserve boundary. To be effective, such signage must be spaced close enough to insure that anyone approaching the fence will see the sign. In Tract III and Tract I where the forest is dense, this signage will need to be installed and maintained at lease every 50 feet along the fenceline. It should not be the responsibility of the abutting land owners to control public and hunting access onto our lands or to have to shoulder the responsibility of trespassers when the State is actively encouraging the same through programs such as this.

We therefore strongly disagree with the statement on page 32 (beginning of second paragraph) that this project is not expected to have any major negative economic impacts. Perhaps that is true with respect to the State's lands, however not so as to the abutting lands. We view the significantly heightened probability of trespass onto our lands as raising our liability risk and disturbing our private use rights coupled with the adverse impacts on our cattle operation of trespassers as definitely having an adverse economic impact albeit difficult to quantify at this stage.

Access Issues

It is very important that any public document which depicts access roads accurately reflects whether they are private or public. We take the position that unless a road is in fact a public access road, it should not be shown on a public document such as an EA. Accordingly we feel the final EA should not reflect any private (ranch) roads (such as are shown on Figure 1) except for the one short section of "access road" which connects Kaloko Drive directly to Honuaula Tract II. All other roads on Palani Ranch should be taken off of the maps as they could easily be construed to imply public access rights over our lands that do not exist. With respect to the one short section of road referred above, the legend on the Figure 1 Exhibit should clearly describe that "Access Road" as being

private and available to the State only by specific permission from the fee owner and then only for official use (which excludes recreational or hunting use).

We also believe the EA as drafted is misleading as it implies that once the two proposed roads are built, the State lands will be much less dependant upon adjacent landowners for access. In fact the proposed mauka road within Honuaula I will only improve the interconnectivity of roads within the State lands and the makai Hienaloli road improvementto better access Honuaula III will do nothing to eliminate the States long term dependence on access over private lands to get to the areas requiring the greatest management attention which are in Tract II.

Comments in Conclusion

We continue to support DOFAW's efforts to restore the native forest in Honuaula and are anxious to continue to cooperate and assist with that effort. We do, however, have very serious concerns with respect to future access, trespass, liability, and fire concerns which will come with increased public access. The degree to which those concerns can be effectively managed by DOFAW will significantly determine the future relationship between the State and its neighboring landowners.

Thank you for this opportunity to offer our comments.

Sincerely,
Palani Ranch Company Inc.

James S Greenwell
President

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
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November 27, 2007

Mr. James S. Greenwell
Palani Ranch Company, Inc.
3465 Waialae Avenue, Suite 260
Honolulu, Hawaii 96816

Re: Draft Environmental Assessment of the Honua'ula Forest Reserve Reforestation Project

Dear Mr. Greenwell,

Thank you for your review and response to the Draft Environmental Assessment (DEA) for the Honua'ula Forest Reserve Reforestation Project. The Division of Forestry and Wildlife (Division) values your time spent in review of this document, and the opinions and recommendations proposed in your letter dated November 6, 2007. Please find responses to issues raised in your letter provided below.

Cattle corral and fence maintenance

The Division is aware of and appreciates the efforts made by the Palani Ranch Company, Inc. (Palani Ranch) to maintain fence lines at boundaries surrounding the forest reserve. We believe that Palani Ranch should continue to maintain fences associated with active grazing on its fee, leased or permitted lands, while the Division should do its part in maintaining the same fences should they be damaged by trees falling from within the reserve.

The Division is committed to the complete removal of both feral and domestic cattle from the forest reserve, and as such has dedicated future management capacity to the monitoring and maintenance of fencing surrounding the reserve. Furthermore, in cooperation with Palani Ranch, the Division is currently repairing existing fence lines surrounding the reforestation project area. We continue to look forward to cooperation on this effort with Palani Ranch.

The Division is providing Palani Ranch the opportunity to remove any cattle from the forest reserve before control hunts are implemented to removal feral cattle. It is the best interest of the Division to see cattle removed from the reserve without the waste of the animals. The Division

agrees that reasonable efforts to remove cattle from the reserve should be made prior to staff control efforts for such animals.

Hunting Risks and State Liability

The presence and type of hunting allowed within Honua'ula Forest Reserve has yet to be determined. The final decision for the hunting limitations or restrictions within the forest reserve will be finalized in a forest management plan. The Division will seek to allow hunting with the use of dogs within Honua'ula Tracts II and III. This type of hunting tends to involve rifle shots within close proximity to the animal, limiting the number of stray bullets. Any hunting allowed in the forest reserve shall be subject to appropriate safety measures including safety zones of 50 yard buffers along any paved road or building for rifle, shotgun, or bow and arrow hunters according to standards that apply to all Division-managed hunting lands. Furthermore, all hunters permitted to hunt within the Forest Reserve System are required to attend public hunting safety classes and are versed on public hunting interfaces.

The Division will post and mark boundaries of the forest reserve in areas where public access or recreational activities are most likely to interface with privately-owned lands. The Division shall place all boundary signs at a frequency where they will be visible to reserve users. Signage will be used to mark appropriate boundaries throughout the forest reserve. The Division encourages neighboring landowners to post their property lines to further discourage trespassing onto private land.

As you indicated, some potential economic impacts on adjacent private lands caused by public use of the forest reserve may occur, but the extent is difficult to quantify. However, the Division will work closely with neighboring landowners to identify problems and respond appropriately, including involvement of the Department's Division of Conservation and Resource Enforcement for enforcement matters.

Access Issues

Please find a newly revised map of the Honua'ula Forest Reserve Reforestation Project excluding the private access roads enclosed. If additional roads should be removed from the existing maps, please correspond with Melissa Sprecher to correct this issue (contact information provide below).

The Division believes that the creation of the proposed roadways will reduce its reliance on access across private lands for management activities and will increase public recreational opportunities. The Division appreciates management access granted by Palani Ranch through its current grazing permit, and looks forward to continued cooperation.

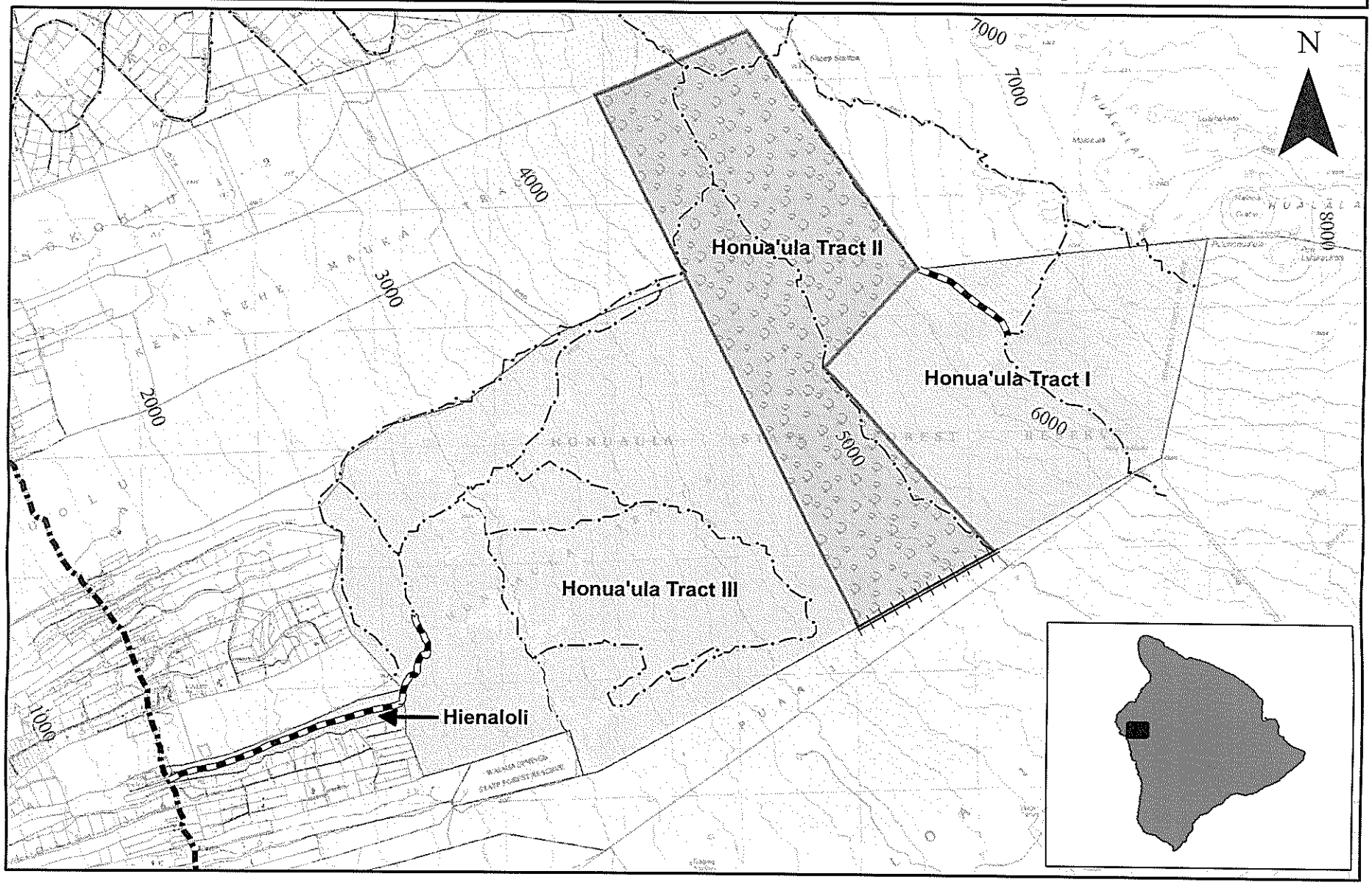
The Division recognizes your concerns regarding the increase public access to the Honua'ula Forest Reserve, and as detailed in the DEA, will provide education and outreach to forest reserve users on the threat of wildfires, spread of invasive species, and trespassing from the reserve. The Division remains committed to working with Palani Ranch and other neighboring landowners to address potential impacts that may arise due to increased use of these public lands.

Should you have any future questions or recommendations, please correspond with Melissa Sprecher at (808) 587-4167 or by email Melissa.I.Sprecher@hawaii.gov. Thank you again for your time and consideration.

Sincerely,

Paul J. Conry
Administrator, Division of Forestry and Wildlife
Department of Land and Natural Resources

Appendix A, Map 1. Honua'ula Forest Reserve Reforestation Project



Legend

- Mamalahoa Hwy
- Private or Restricted Access Roads
- New Fence Line
- New Access Roads
- Honua'ula Forest Reserve EA Project Area
- Koa Regeneration Project Area
- Adjacent Landowners

Miles
0 0.25 0.5 1 1.5 2

November 2007
(808) 587-4167
Map No. 091407honuaula1

HAWAII STATEWIDE GIS PROGRAM

MOHI
75-5489 HAHAI STREET
HOLUALOA, HI 96725

November 1, 2007

Melissa Sprecher
Forester
Department of Land and Natural Resources
Division of Forestry and Wild Life
1151 Punchbowl Street Room 325
Honolulu, HI 98613

Comment of the Draft Environmental Assessment of the Honua'ula Reforestation Project-

Dear Ms. Sprecher,

I have several concerns and questions regarding the environmental assessment. I live adjacent to the Hienaloli section and am bounded by the state forest on the south and east. The home is about 1 mile east of Mamalahoa Hwy. The proposed road will only run about a quarter mile past the house. The draft says that the noise will only be during the day that is when I and many other residents of this area are at home. At the present time we do not hear any traffic noise from Mamalahoa Hwy whatsoever. Which is the way we like it.
The assessment in the last paragraph at page 8 says that "Hienaloli section road will consist of approximately 1.25 miles of a two lane engineered gravel road with a concrete ford crossing through the Kailua-Kona intermittent stream from Mamalahoa Highway to Honua'ula Tract III. At approximately 1570 feet of elevation, the two lane gravel road will terminate, and DOFAW will provide a ten stall parking area, a clivus compositing toilet, picnic tables, and a hunter check in station for public use and access to the forest reserve as described in the Honua'ula Tract III Access Road Alignment Design Plan (1995). Beyond this intersection, the road will consist of a gated, single lane graded road with vehicular access restricted to DOFAW management purposes, ..."
I have several questions about the preceding paragraph.-
In comparing the aforementioned quoted paragraph from page 8 with the map which is attached to the assessment which is entitled Appendix A, Map 3. Hienaloli Access Road there are certain conflicts. I would hope that they could be clarified as the afore quoted statement is in conflict with the attached map.

According to the scale on the map the locked gate is a little over 0.2 tenths of a mile from Mamalahoa Highway and not 1.25 miles. Also the length appears to be 1. 8 miles and not 1.25.
The aforementioned discrepancies should be clarified.
The question arises as to where the locked gate will, be located and when will it be locked and what is the purpose of the picnic tables.
Another question I have is will ATV be allowed in the forest. I would object to their use as they degrade the terrain, are noisy and could be a source of injury to drivers which may expose the State of liability. I would hope that the previous concern would be answered.

Another concern that I have is that of fire, I did not see that addressed in the assessment. At the present time there is a great deal of grass at least 3 feet tall in the State Forest adjacent to the north side of my property. As the season becomes drier the risk of fire is increased. With the proposed increased public access the risk of fire is increased. Animals don't carry matches, people do. At the present time there are fires on this island which are of great concern. There is no firefighting equipment near this State Forest.
Should this risk to the nearby inhabitants be increased for the benefit of a few hunter?

With the proposed access road on land which is adjacent to land mainly 5 acre plots upon which reside full time residents, this development is called Hualalai Farms and I and the president of the Homeowners Association addressed our concerns previously in writing which are attached to the Assessment. The resident have moved here for the peaceful and quiet enjoyment of their land. The development does have a gate which is operated by a remote control and there is also a call box by which residents can be contacted by visitors.
By opening up the forest to hunters and others will there be any protection afforded to the adjacent residents by way of fencing to keep potential intruders out?

If hunting is allowed there will necessarily be shooting, has the safety of hikers and others been considered and also the safety of those who live adjacent to the forest. How are they to be kept safe from stray bullets?

It appears as though the benefits to be gained from the Hienaloli road are outweighed by the increased risks to be borne by the adjacent homeowners.

The increased fire risk is substantial and this is naturally a major concern of the immediate neighbors but ot the entire island.

It is my opinion that entering the reforestation area from Kaloko Drive is more advisable than building the proposed road from Mamalahoa Highway.
The money that would be saved would be substantial and might be used for better and more beneficial purpose.

Thank you for your consideration and I hope to hear your response soon.

Gary Mohi

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
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November 27, 2007

Mr. Gary Mohi
75-5489 Hahai St.
Holualoa, Hawaii 96725

Re: Draft Environmental Assessment of the Honua'ula Forest Reserve Reforestation Project

Dear Mr. Mohi,

Thank you for your review and response to the Draft Environmental Assessment (DEA) for the Honua'ula Forest Reserve Reforestation Project. The Division of Forestry and Wildlife (Division) values your time spent in review of this document, and the opinions and recommendations proposed in your letter dated November 1, 2007. Please find responses to issues raised in your letter provided below.

The Division wishes to utilize daylight hours for all reforestation and construction activities as a safety precaution and to adhere to the Hawaii County Code. The construction activities involved in the Hienaloli road are estimated to be within the Department of Health's allowable noise disturbance for daylight construction activities. The preliminary alignment design plan places the new road near the northern edge of the State's Hienaloli parcel – an alignment that would be relatively far from your land from other options. The Division appreciates your concerns regarding the potential noise disturbance and hopes that you find solace in the temporary nature of the construction activities.

Thank you for pointing out discrepancies in the maps and corresponding text. The discrepancy in the Appendix A, Map 3 in the Draft Environment Assessment concerning the length of the Hienaloli roadway has been corrected. The total Hienaloli road length that connects to existing roadways in Honua'ula Tract III is approximately 1.75 miles. The portion of the road section within Hienaloli is approximately 1.25 miles. The parking facilities will be located at the junction between the Honua'ula Tract III and Hienaloli parcel. The road beyond this point will be gated and locked, and restricted to Division management activities. The facilities including the parking lot, picnic tables, hunter check-in station, and composting toilet will be provided for infrastructure and recreational needs in support of increased public access to the forest reserve. Upon further consideration, a new parking lot will be provided approximately 0.10 mile from the

Mamalahoa Highway turnoff and will consist of a five stall parking lot. The revised map information will be updated in the Final Environment Assessment to be issued for this project. At present, the Division does not intend to open the Honua'ula Forest Reserve to all terrain vehicles use.

The DEA of the Honua'ula Forest Reserve Reforestation Project includes provisions for the potential fire risk and associated management on page 29 of the document. The Division believes that construction of both the Honua'ula Cabin Road and Hienaloli Road will increase the overall fire response access to the area and serve as two new potential firebreaks. Further fire prevention during times of moderate or extreme drought conditions will involve the issuance of Public Service Announcements and Division may restrict public access to the forest reserve. The Division also provides fire prevention educational material and informational brochures to forest reserve users. The primary responder for the forest reserve is the Division.

The Division will post or mark boundaries of the forest reserve in areas where public access or recreational activities are most likely to interface with privately-owned lands. The boundary signs will discourage trespassing from the forest reserve into private lands. Fencing will not be provided at this time for the Hienaloli section of the forest reserve. However, the Division plans to initially designate the lands of Hienaloli as a no-hunting (safety) zone. The Division also encourages neighboring landowners to post their property lines to further discourage trespassing onto private land.

The Division will seek to allow hunting with the use of dogs within Honua'ula Tracts II and III. This type of hunting tends to involve rifle shots within close proximity to the animal, limiting the number of stray bullets. Any hunting allowed in the forest reserve shall be subject to appropriate safety measures including safety zones of 50 yard buffers any paved road or building for rifle, shotgun, or bow and arrow hunters according to standards that apply to all Division-managed hunting lands. Furthermore, all hunters permitted to hunt within the Forest Reserve System are required to attend public hunting safety classes and are versed on public hunting interfaces.

The Division understands your concern regarding the construction of the Hienaloli road section, and hopes that you find the increased access to the adjacent forest reserve beneficial. The Division did consider the utilization of the Kaloko Drive entrance to the Honua'ula Forest Reserve as a possibility for Division management activities. However, the Kaloko Drive entrance is located on privately-owned land that cannot be utilized by the larger public for access to the reserve.

Should you have any future questions or recommendations, please correspond with Melissa Sprecher at (808) 587-4167 or by email Melissa.I.Sprecher@hawaii.gov. Thank you again for your time and consideration.

Sincerely,

Paul J. Conry
Administrator, Division of Forestry and Wildlife
Department of Land and Natural Resources

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
P.O. Box 50004 Rm. 4-118
Honolulu, HI 96850
808-541-2600

October 29, 2007

Melissa Sprecher
Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl Street, Room 325
Honolulu, Hawaii 96813

Subject: Comments on Draft Environmental Assessment for Proposed Forest Reforestation in Honua`ula Forest Reserve, North Kona, Island of Hawaii, Hawaii

Dear Ms. Sprecher,

Thank you for allowing me to review and comment on this Environmental Assessment. I understand that the Division of Forestry and Wildlife proposes to regenerate native forest, remove cattle, install fences, and construct access roads in the Honua`ula Forest Reserve, Tracts I, II, and III.

As Director Pacific Islands Area for USDA-NRCS, I concur with the statement of Project Purpose and Need, which is to restore and preserve unique biological resources, improve watershed characteristics of the landscape, and provide for recreational opportunities in the rapidly growing North Kona District.

The Environmental Assessment is thorough and based on recent, complete field information. I concur with the proposed reforestation methods. They are suitable for the climate, vegetation, and soils of the project area and should be sufficient for weed control and feral ungulate removal. Future maintenance and monitoring concerns have been addressed adequately.

Sincerely,

LAWRENCE T. YAMAMOTO
Director
Pacific Islands Area

Helping People Help the Land

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

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November 27, 2007

Mr. Lawerence T Yamamoto
Natural Resource Conservation Service
P.O. Box 50004 Room 4-118
Honolulu, Hawaii 96850

Re: Draft Environmental Assessment of the Honua'ula Forest Reserve Reforestation Project

Dear Mr. Yamamoto,

Thank you and your staff for taking the time to review and respond to the Draft Environmental Assessment for the Honua'ula Forest Reserve Reforestation Project. The Division of Forestry and Wildlife appreciates your confirmation of the Project Purpose and Need, purposed reforestation methods, and future maintenance and monitoring protocol.

Should you have any future questions or recommendations, please correspond with Melissa Sprecher at (808) 587-4167 or by email Melissa.I.Sprecher@hawaii.gov. Thank you again for your time and consideration.

Sincerely,

Paul J. Conry
Administrator, Division of Forestry and Wildlife
Department of Land and Natural Resources

OCT 2 9 2007

The Nature Conservancy
SAVING THE LAST GREAT PLACES ON EARTH

The Nature Conservancy of Hawai'i
P.O. Box 6600
Kamuela, HI 96743

tel (808) 885-1786
fax (808) 885-4219

www.nature.org/hawaii

October 23, 2007

Mr. Paul Conry
Department of Land and Natural Resources
Divison of Forestry and Wildlife
1151 Punchbowl Street, Room 325
Honolulu, Hawaii 96813

Re: Comments on Draft Environmental Assessment, Honua'ula Forest Reserve, September 2007.

Dear Mr. Conry:

Thank you for the opportunity to comment on DOFAW's Draft Environmental Assessment (DEA). Our staff has reviewed the DEA and understand that it was prepared to help evaluate the impacts of proposed management actions on the regeneration of koa in degraded native forest at Honua'ula Forest Reserve, Island of Hawaii. We offer the following comments:

The Nature Conservancy, Hawaii Island Program, agrees with Preferred Alternative #1. The project is a positive step in recovering degraded koa forests in North Kona and providing improved public access to the forest reserve. However, we advocate removal of all feral pigs and cattle from the project area to speed forest recovery, prevent soil erosion, and protect watershed quality. If feral pigs are retained, efforts should be made to monitor koa regeneration and overall forest recovery in fenced plots where cattle are excluded, but pigs are allowed access and where both pigs and cattle are excluded. A comparison of results over time would provide useful information on the extent of forest recovery when one or both species are removed from the restoration area.

We look forward to cooperating with DOFAW in your forest recovery efforts and offer our assistance in monitoring the effects of ungulate removal on koa regeneration. Please let me know how we can help.

Sincerely yours,

Rob Shallenberger, Ph.D.
Director, Hawai`i Island Program
The Nature Conservancy of Hawai`i

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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November 27, 2007

Mr. Rob Shallenberger, Ph.D.
The Nature Conservancy of Hawaii
P.O. Box 6600
Kamuela, Hawaii 96743

Re: Draft Environmental Assessment of the Honua'ula Forest Reserve Reforestation Project

Dear Mr. Shallenberger,

Thank you for taking the time to review and respond to the Draft Environmental Assessment for the Honua'ula Forest Reserve Reforestation Project. The Division of Forestry and Wildlife (Division) appreciates your confirmation of the Preferred Alternative #1 and agrees with the removal of feral cattle from the reforestation project site.

The Division's intent is to maintain pressure on the already limited feral pig population in the reforestation area through encouragement of public hunting. Furthermore, the Division will continually monitor the area during and after reforestation efforts. Should feral pigs be found to have a significant negative impact on reforestation efforts in Honua'ula Tract II, the Division will implement additional management activities to decrease feral pig populations in the affected project area. The Division appreciates your offer of assistance with monitoring in the reforestation project area.

Should you have any future questions or recommendations, please correspond with Melissa Sprecher at (808) 587-4167 or by email Melissa.I.Sprecher@hawaii.gov. Thank you again for your time and consideration.

Sincerely,

Paul J. Conry
Administrator, Division of Forestry and Wildlife
Department of Land and Natural Resources

OCT 16 2007

→ MC

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

October 11, 2007

Mr. Paul J. Conry, Administrator
State of Hawai'i
Department of Land and Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl Street, Room 325
Honolulu, HI 96813

DRAFT ENVIRONMENTAL ASSESSMENT CONSULTATION
KOA REFORESTATION AND ROAD CONSTRUCTION IN HONUAULA FOREST RESERVE
TAX MAP KEY 7-4-001:002, 003, AND 004, 7-5-013:013 AND 022 (ROAD)

We have reviewed the subject Draft Environmental Assessment for the subject project and our comments from our Pre-Environmental Assessment consultation letter remain the same. We have no further comments at this time.

Should there be any questions, please contact Mr. Finn McCall of our Water Resources and Planning Branch at 961-8070, extension 255.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

FM:dfg

... Water brings progress...

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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November 27, 2007

Mr. Milton D. Pavao
County of Hawai'i, Department of Water Supply
345 Kekūanaō'a Street, Suite 20
Hilo, Hawaii 96720

Re: Draft Environmental Assessment of the Honua'ula Forest Reserve Reforestation Project

Dear Mr. Pavao,

Thank you and your staff for taking the time to review and respond to the Draft Environmental Assessment for the Honua'ula Forest Reserve Reforestation Project. The Division of Forestry and Wildlife (Division) has duly noted your comments regarding the location of existing waterlines and availability of water system facilities. Should the Division need to supply permanent water service to the project sites the appropriate county procedures will be followed.

Should you have any future questions or recommendations concerning the reforestation project, please correspond with Melissa Sprecher at (808) 587-4167 or by email Melissa.I.Sprecher@hawaii.gov. Thank you again for your time and consideration.

Sincerely,

Paul J. Conry
Administrator, Division of Forestry and Wildlife
Department of Land and Natural Resources