

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

September 9, 2010

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

REGARDING: CONSERVATION DISTRICT USE PERMIT APPROVAL FOR THE
LAUPAHOEHOE NUI WATERSHED CONSERVATION PROJECT

APPLICANT: Kohala Watershed Partnership

LANDOWNER: Laupahoehoe Nui LLC

LOCATION: Hamakua District, Island of Hawai'i

TMK: (3) 4-9-015:001

PARCEL AREA: 2,350 acres

AREA OF USE: Approximately 3 miles of Fencing, 6 foot corridor, total 2.2 acres

SUBZONE: Protective

Acceptance Date: June 24, 2010

180-Day Exp. Date: December 21, 2010

SUMMARY:

This submittal requests the Board to approve and grant a conservation district use permit (CDUP) for activities identified in the conservation district use application (CDUA) for the Laupahoehoe Nui Watershed Conservation Project (Exhibit A). This project is part of the Kohala Watershed Partnership, which was formed in 2003 for the long-term protection of Kohala's upper watershed forests to ensure the state's water supply.

DESCRIPTION OF AREA / CURRENT USE:

The proposed project is located in the ahupua'a of Laupahoehoe Nui on the island of Hawai'i on Subject Parcel TMK (3) 4-9-015:001. The project area borders the state lands of Kohala Forest Reserve and Puu O Umi Natural Area Reserve. The project will be part of a larger public-private partnership to protect native Hawaiian montane wet forest and globally-rare ohia-sedge bogs, as well as high rainfall areas that are critical for the infiltration of rainwater to recharge underground aquifers. Currently the land is uninhabited and maintained for conservation purposes.

Historic Sites

There are no known archeological sites in the project area. Over the long-term, the fencing project would help preserve any unknown archaeological resources within the project area, by preventing soil disturbance and trampling of sites by hooved animals.

Archival information indicates that the forested uplands of Laupahoehoe 2 were likely most commonly used by Native Hawaiians for specialized resource procurement activities, such as bird catching/collecting and plant/hardwood harvesting. Many of the sites associated with these activities, such as shelters, were likely temporary in nature and reabsorbed into the landscape. Due to the extreme topography, saturated ground and dense vegetation, the land is unsuitable for habitation, and it is unlikely that any permanent structures would have been constructed in the mauka areas of the ahupua'a.

Contemporary Cultural Resources and Practices

The proposed action is also not expected to significantly impact Native Hawaiian traditional and cultural practices. Based on the remoteness of the project area, the limited access due to its location on private land, the conservation purpose of the fencing, and the incorporation of fence crossovers, it is anticipated that fencing would have little to no impact on Native Hawaiian practices. The fencing is not designed to block access by people, but to limit animal movement. The Environmental Assessment prepared for the Kohala Watershed Management Project (FONSI December 8, 2008) includes an in-depth Cultural Impact Assessment prepared by Kepa and Onaona Maly which found that watershed conservation activities are important to preserving important resources necessary for cultural practices.

Natural Environment

The project area is characterized by several vegetation types including montane wet forests, shrublands, and bogs. Major plant communities found within the project area include:

- 'Ohi'a- 'olapa montane wet forest/cloud forest
- Mixed shrublands with native shrubs, sedges, and/or grasses
- 'Ohi'a mixed montane bog
- Mixed grass and sedge montane bog

At least 100 species of native ferns, shrubs and trees have been observed in the project area. Of these, 13 species are globally rare or endangered, including 5 species of 'ohawai (*Clermontia*), a rare native Loulu palm (*Pritchardia lanigera*), and an Endangered gardenia (*Gardenia remyii*).

Native forest birds observed in the project area include the 'amakihi (*Hemignathus virens*), 'apapane (*Himatione sanguinea*), 'elepaio (*Chasiempis sandwichensis*), and the globally vulnerable 'i'iwi (*Vestiaria coccinea*). Other birds include kolea (*Pluvialis fulva*), koloa maoli (*Anas wyvilliana*) and the 'io (Hawaiian hawk [*Buteo solitarius*]). The project area is within the range of two endangered native sea birds, the 'ua'u (Hawaiian petrel [*Pterodroma sandwichensis*]) and 'a'o (Hawaiian shearwater [*Puffinus newelli*]). These birds were recorded historically on the watershed, and more recently in 2003, they were identified with radar, flying mauka in windward valleys towards the uplands. Nest sites have not been found to date.

PROPOSED USE:

Fencing will enclose approximately 550 acres of private land and 1450 acres of Puu O Umi

Natural Area Reserve between the 3000' and 4400' elevation on the slopes of windward Kohala Mountain. Fence construction will be followed by feral animal control and restoration of the area through control of invasive aliens and outplanting if necessary. Other than the 6' wide corridor used to construct the 48" high fence, no permanent structures, utilities or roads are planned. Gates will be provided at existing trail crossings.

SUMMARY OF COMMENTS:

Agencies, Organizations, Groups, and Individuals Consulted in the EA Process:

- U.S.D.A. Forest Service
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Fish and Wildlife Service, Department of the Interior
- Division of Forestry and Wildlife, Department of Land and Natural Resources
- Department of Hawaiian Home Lands
- County of Hawai'i Department of Water Supply
- North Kohala Community Development Plan Steering Committee
- South Kohala Community Development Plan Steering Committee
- Big Island Invasive Species Committee
- Hilo Bay Watershed Advisory Group
- Kahuā Ranch
- Kamehameha Schools
- Kohala Forest Management Group
- Kohala Preserve Conservation Trust
- Laupāhoehoe Nui LLC
- Mauna Kea Soil and Water Conservation District
- Parker Ranch
- Pelekane Bay Watershed Management Project
- Ponoholo Ranch
- Queen Emma Land Company
- Surety Kohala Corporation
- The Kohala Center
- The Nature Conservancy
- Three Mountain Alliance
- Tutu's House (Friends of the Future)
- University of Hawai'i at Hilo, TCBES graduate seminar
- Waipi'o Community Circle
- Waimea Community Association
- Waiulaula Watershed Management Project
- Attendants at the April 2006 Open Houses in Hāwī, Waimea and Honoka'a
- Kohala Watershed Partnership volunteers
- Local hunters, hikers, and traditional practitioners

Key topics from public response letters to the Draft Environmental Assessment that were addressed in the Final Environmental Assessment included addressing feral pigs as a social/cultural/economic resource, including well-known access trails in description of resources, clarifying how management decisions are made about access and trails, clarifying the scope of consultation with individuals, adding mitigation measures for biological controls, clarifying under-reporting of pig hunting harvests, adding Kepa Maly's entire cultural assessment as an appendix, adding specific references about current cultural practices, removing lists of individuals that attended public Open Houses in April 2006, adding a description of post-fencing monitoring and species-

specific surveys, adding details to descriptions of fence line boundary surveys, clarifying the wording about what management actions may be undertaken without an additional environmental assessment.

ANALYSIS:

Following review and acceptance for processing, the applicant was notified by letter, dated June 24, 2010 that:

1. The proposed use is an identified land use under Chapter 13-5: P-7, SANCTUARIES, requiring a board permit and submittal of a management plan;
2. Pursuant to Section 13-5-40(a), HAR, a public hearing will be required; and
3. In conformance with Chapter 343, (HRS), as amended, and Chapter 11-200, HAR, a finding of no significant impact (FONSI) to the environment was published in the Environmental Notice on December 8, 2008.

PUBLIC HEARING:

A Public Hearing was held on August 10, 2010 at the Thelma Parker Public Library in Kamuela, Hawaii regarding the proposed project. Four members of the public attended the meeting. The only testimony was received from the landowner's manager, Mr. David Dow, who supported the project. No written testimony was received.

FINAL ENVIRONMENTAL ASSESSMENT

A Finding of No Significant Impact was issued for the project and published in the OEQC Environmental Notice on December 8, 2008.

13-5-30 CRITERIA

The following discussion evaluates the merits of the proposed land use by applying the criteria established in Section 13-5-30 HAR.

- 1) *The proposed use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare. Staff is of the opinion that the proposed action will deter feral ungulates in the specific areas of the proposed fence project. The area's natural resources will be greatly preserved and potential impacts will be minimized, with mitigation measures.

- 2) *The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur.*

The objective of the Protective subzone is to protect valuable resources in designated areas such as restricted water-sheds, marine, plant, and wildlife sanctuaries, significant historic, archeological, geological, and volcanological features and sites, and other designated unique

areas. Staff notes that proposed project is an identified land use in the Protective subzone, which is the most restrictive regarding land use development(s). In this case, staff notes the proposed project will protect the valuable resources located in the Kohala watershed.

- 3) *The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS entitled "Coastal Zone Management", where applicable.*

The County of Hawaii provided a statement that the proposed project is not located in the Special Management Area (SMA).

- 4) *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.*

Staff notes there will be positive impacts to the environment due to the proposed project. Staff is of the opinion that minor impacts have been adequately mitigated, therefore the proposed project will not have any adverse impact to existing natural resources within the surrounding area, community or region.

- 5) *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

Staff is of the opinion the proposed fences will fit into the locality and surrounding areas, with appropriate mitigation measures and without significant or deleterious effects to the locality, surrounding area and parcels

- 6) *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

The applicant has taken the appropriate steps to mitigate any potential impacts, and to maximize and enhance the natural beauty and open space characteristics of the subject parcel. The proposed project is intended to blend in visually with the surrounding area.

- 7) *Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.*

The proposed project does not involve subdivision of Conservation District land.

- 8) *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

The proposed action will not be materially detrimental to the public health, safety and welfare.

DISCUSSION:

The proposed use is an identified land use in the Protective subzone of the Conservation District, according to Section 13-5-22, Hawaii Administrative Rules (HAR), P-7, SANCTUARIES, D-1,

"Plant and wildlife sanctuaries, natural area reserves (see Chapter 195, Hawaii Revised Statutes (HRS), and wilderness and scenic areas, including habitat improvements under an approved Management Plan;"

Staff notes the proposed project will have a direct positive impact on the native ecosystem and watershed. The proposed project will stop feral ungulate damage, which contributes to the decline of native forest ecosystems.

Due to uncertainties in the Watershed Partnership Program funding, the project term will be extended to allow for adequate time to obtain the funds required to complete the project.

Staff therefore recommends;

RECOMMENDATION:

Based on the proceeding analysis, staff recommends that the Board of Land and Natural Resources (Board) APPROVE this application to implement the Laupahoehoe Nui Watershed Conservation Project, subject to the following terms and conditions:

- 1) The applicant shall comply with all applicable statutes, ordinances, rules, regulations, and conditions of the Federal, State and County governments;
- 2) The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim or demand for property damage, personal injury or death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors and agents under this permit or relating to or connected with the granting of this permit;
- 3) Any work done on the land shall be initiated within one (1) year of the approval of such use (from the date of the Board's action), and unless otherwise authorized, be completed within five (5) years of the approval (from the date of the Board's action). An extension can be requested at the end of five years in the event that funding can not be acquired to complete the project within that time. The applicant shall notify the Department in writing when construction activity is initiated and when it is completed;
- 4) The applicant shall comply with all applicable Department of Health administrative rules.
- 5) In issuing this permit, the Department has relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
- 6) The applicant acknowledges that the approved work shall not hamper, impede or otherwise limit the exercise of traditional, customary or religious practices in the immediate area, to the extent such practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;
- 7) Should historic remains such as artifacts, burials or concentration of charcoal be encountered

during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact HPD (692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.

- 8) Other terms and conditions as may be prescribed by the Chairperson;
- 9) The applicant will coordinate with DOFAW to implement invasive species prevention protocols; and
- 10) Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,



Paul J. Conry
Administrator

Approved for submittal:

By:



LAURA H. THIELEN, Chairperson
Department of Land and Natural Resources

EXHIBIT A Conservation District Use Application
EXHIBIT B Environmental Notice - FONSI

EXHIBIT A

Conservation District Use Application (CDUA)

For DLNR Use	
File #	HA-3560
Reviewed by	Lisa Ferentinos
Date	June 24, 2010
Accepted by	Lisa Ferentinos
Date	June 24, 2010
180-Day Exp.	December 21, 2010
EA/EIS Required	FEA 12/8/2008
PH Required	Yes
Decision	_____
Date	_____

Project Location/ Address: **Laupahoehoe 2 Ahupua'a, windward Kohala**

District: **Hamakua**

Island/County: **Hawai'i**

Subzone: **Protective**

Tax Map Key(s): **TMK 3) 4-9-015:001**

Total Area of Parcels
in sq. ft or acres: **2,350 acres**

Area of Proposed Use in sq. ft. or acres: **approx. 3 miles
of fencing, with a 6 foot width corridor, affecting
just over 2 acres.**

Commencement Date: **August, 2010**

Completion Date: **August, 2013**

Indicate which of the following approvals are being sought, as specified in the Hawaii Administrative Rules (HAR), Chapter 13-5.

Board Permit

Departmental Permit

Emergency Permit

Temporary Permit

Site Plan Approval

APPLICANT

Legal Name: **The Kohala Center, Inc. for the Kohala Watershed Partnership(KWP)**

Street Address: **65-1291A Kawaihae Rd**

City, State and Zip+4 Code: **Kamuela, HI 96743**

Mailing Address: **P.O. Box 437462**

City, State and Zip+4 Code: **Kamuela, HI 96743**

Contact Person & Title: **Melora Purell, Kohala Watershed Partnership Coordinator**

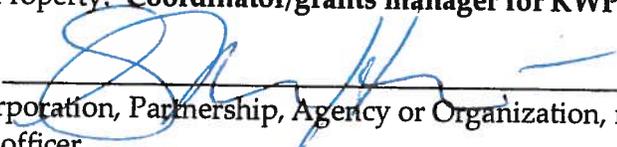
Phone No: **808-333-0976**

Fax No: **808-885-6711**

Email: **coordinator@kohalawatershed.org**

Interest in Property: **Coordinator/grants manager for KWP partnership projects**

*Signature



Date

6/3/10

*If for a Corporation, Partnership, Agency or Organization, must be signed by an authorized officer.

AGENT

n/a

PROPERTY OWNER(S) (If other than the applicant)

Legal Name: **Laupahoehoe Nui LLC**

Street Address: **n/a**

City, State and Zip+4 Code:

Mailing Address: **P.O.Box 497**

City, State and Zip+4 Code: **Honokaa, HI 96727**

Contact Person & Title: **David Dow, Manager**

Phone No: **808-775-9236**

Fax No: **none**

Email: **dave@lalakea.org**

Relationship to applicant: **Partner in Kohala Watershed Partnership**

Signature



Date

5/25/10

PROPERTY OWNER(S) (If other than the applicant)

n/a

CONTRACTOR

n/a

Emergency Contact Information

Company/Organization Name: **Kohala Watershed Partnership**

Contact Person and Title: **Melora Purell, Coordinator**

Phone No: **808-333-0976**

Fax No: **808-885-6707**

PRIOR CONSERVATION DISTRICT USE PERMITS (CDUP)

Please specify all prior CDUP received for the subject parcel.

Received CDUP HA-3523 dated January 4, 2010 for the Pritchardia lanigera Exclosure Project in the makai section.

PROPOSED USE

Total Area of Proposed Use: (indicate in acres or sq. ft):

The watershed management area will be approximately 550 acres on the lands of Laupahoehoe Nui LLC. The fence will affect a 6 foot wide corridor 3 miles long for a total of approximately 2 acres affected by the proposed use.

Describe the proposed use in detail. Include secondary improvements such as grading, septic tank placement, utilities, roads, driveways, fences, landscaping, etc. Illustrate general location of improvements on a TMK map; include preliminary architectural renderings with elevations and building footprints with application. Include existing (before) and proposed (after) graphics. If the parcel is or has been the subject of a violation, please include the violation number:

The Kohala Watershed Partnership, in partnership with The Kohala Center, proposes the construction of up to 3 miles of ungulate-proof fencing, enclosing approximately 550 acres of a total 2000 acre watershed conservation preserve, between 3000 ft and 4400 ft elevation on the slopes of windward Kohala Mountain in the district of Hamakua. The proposed fencing will be part of a larger public-private partnership to protect native Hawaiian montane wet forest and globally-rare ohia-sedge bogs, as well as high rainfall areas that are critical for the infiltration of rainwater to recharge underground aquifers. The construction of animal-proof fencing, followed by feral animal control, are the critical first steps to protect, and then to restore, this area. Besides the 6 foot wide corridor which will be cleared with hand tools for fence construction and the 48" ungulate fence, no permanent structures, utilities, or roads are being proposed.

CONSERVATION DISTRICT REQUIREMENTS

Demonstrate that the proposed use is consistent with the following criteria. Refer to HAR, Section 13-5-30, to review criteria. Attach additional sheets if necessary.

Is the proposed land use consistent with the purpose of the Conservation District?

Yes, the proposed Upper Laupahoehoe Nui Watershed Preserve project is consistent with the purpose of the Conservation District since it will conserve, protect, preserve and restore important natural resources of the state including native plants and animals.

Is the proposed use consistent with the objectives of the subzone of the land in which the use will occur?

Yes. The objective of the Protective (P) subzone, as stated in HAR §13-5-13 is "to protect valuable resources in designated areas such as restricted watersheds, marine, plant, and wildlife sanctuaries, significant historic, archaeological, geological, and volcanological features and sites, and other designated unique areas." The purpose of the fencing and creation of the Upper Laupahoehoe Nui Watershed Preserve is to protect the valuable biological and hydrological features of this unique area.

Does the proposed land use comply with provisions and guidelines contained in Chapter 205A, Hawaii Revised Statutes (HRS), entitled "Coastal Zone Management," where applicable?

The proposed land conservation actions follow the Coastal Zone Management guidelines, and support natural resources protection and restrict development.

Describe how the proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.

The management actions of fencing, feral animal removal, invasive species control, outplanting and restoration, monitoring and surveys, research, and infrastructure support and maintenance are all aimed at conserving and perpetuating Kohala's watershed and its multiple ecosystem functions of providing surface water and aquifer recharge, native habitats and species, culture, recreation, economics, and climatic benefits. The management actions outlined will have impacts that are both short and long-term for the environment and the surrounding community. Since the goal of management actions is to conserve and enhance the existing watershed and its related services for current and future generations, impacts are beneficial for the long-term. (See pages 28-34 of Final Environmental Assessment (FEA).)

Describe how the proposed land use, including buildings, structures and facilities, will be compatible with the locality and surrounding areas, and to the physical conditions and capabilities of the specific parcel or parcels.

The only proposed construction is the fence which will not negatively alter the condition of the parcel. The local area has no residences and is solely used for conservation of natural resources. Surrounding parcels are Kohala State Forest Reserve and the Puu O Umi Natural Area Reserve. Without fencing, pigs would be expected to continue to damage the forest and bogs, impair important watershed, and degrade rare native ecosystems. The physical component of this project, the fence, is necessary to protect this unique ecosystem and watershed from continuous degradation by feral ungulates and invasive weeds.

Describe how the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon.

The area will remain open-space and natural beauty will be enhanced through protection of native forest. The fence will be much shorter than the surrounding tree canopy and will not be visible to anyone.

If applicable, describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District. n/a

Describe how the proposed land use will not be materially detrimental to the public health, safety and welfare.

Due to the remote nature of the project area there are no anticipated affects on public health, safety or welfare. The project area is inaccessible tropical wilderness. Public health and welfare will be increased through restoration of healthy forests and watershed protection.

ADDITIONAL INFORMATION

Articles IX and XII of the State Constitution, other state laws, and the courts of the State require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. The Department of Health (DOH), Chapter 343, also requires an Environmental Assessment (EA) of cultural resources in determining the significance of a proposed project.

If applicable, please provide the identity and scope of "valued cultural, historical and natural resources" in which traditional and customary native Hawaiian rights are exercised in the area.

The ahupua'a of Laupahoehoe 2 encompasses roughly 2000 acres and extends across the cliffs and gulches of windward Kohala, from Kaimu Stream to Waikalua Stream. The mauka sections between 3000 ft and 4400 ft where fencing is being proposed have no history of human habitation, and due to the extreme topography, wet climate, unstable slopes, and high rainfall have always been isolated and inaccessible. In the past, native Hawaiians that lived along the coast in Waimanu valley and Laupahoehoe Nui (coastal site) used the mauka forests for collecting bird feathers and medicinal plants, but the disappearance of these population centers as well as difficulties with access and lack of trails at present day make these activities extremely rare.

Identify the extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action.

Access to the project site will not be altered by construction of the fence. There are no known archeological sites in the project area. Over the long-term, the fencing project would help preserve any unknown archaeological resources within the project area, by preventing soil disturbance and trampling of sites by hooved animals.

The proposed action is also not expected to significantly impact Native Hawaiian traditional and cultural practices. Based on the remoteness of the project area, the limited access due to its location on private land, the conservation purpose of the fencing, and the incorporation of fence crossovers, it is anticipated that fencing would have little to no impact on Native Hawaiian practices. The fencing is not designed to block access by people, but to limit animal movement.

What feasible action, if any, could be taken by the Board of Land and Natural Resources in regards to your application to reasonably protect native Hawaiian rights?

The project is located within a remote area, the protective fence will not limit human movements, and the private land owner retains control of access to the parcels as it has

historically, prior to this application. The project will not change or require any additional actions or measures to protect native Hawaiian rights.

Does the proposed land use have an effect (positive/negative) on public access to and along the shoreline or along any public trail?

N/A The project site does not provide access to the shoreline, nor are there public trails in the area.

Does the proposed use have an effect (positive/negative) on beach processes?

N/A - The project is located in the mountains.

Will the proposed use cause increased runoff or sedimentation?

The project will not cause increased runoff or sedimentation. Once fencing is completed and feral ungulates are removed, the project is anticipated to reduce runoff and sedimentation.

Will the proposed use cause any visual impact on any individual or community?

No, the project is located in a remote area of windward Kohala, far from public view. Restoration of the forest will improve the visual aesthetics of the site.

Are there existing structures on the parcel? Yes No
If yes, please describe below and include/illustrate on a map entitled *existing structures*.

Will any existing structures be demolished or removed? Yes No
If yes, describe how below. Please indicate/illustrate demolished structure on a map entitled *structures to be demolished/removed*.

Has the parcel been graded or landscaped? Yes No
If yes, describe below. Please describe cubic yards affected and/or area of landscaping on a map entitled *areas previously graded or landscaped*.

Describe existing utilities. Include electricity, water, telephone, drainage, and sewerage. Please illustrate on a map entitled existing utilities.

There are no existing utilities within the project area.

Describe existing access. Illustrate and include roadways and public trails on a map entitled existing access. Give major street names if available.

Access to the project site is via helicopter. There are no roads or managed trails.

Describe Flora and Fauna. Illustrate general location and types of flora and fauna on a map entitled "Resources". Indicate if rare or endangered native plants and/or animals are present.

The project area is characterized by several vegetation types including montane wet forests, shrublands, and bogs. Major plant communities found within the project area include:

- 'Ohi'a- 'olapa montane wet forest/ cloud forest
- Mixed shrublands with native shrubs, sedges, and/or grasses
- 'Ohi'a mixed montane bog
- Mixed grass and sedge montane bog

At least 100 species of native ferns, shrubs and trees have been observed in the project area. Of these, 13 species are globally rare or endangered, including 5 species of 'ohawai (*Clermontia.*), a rare native Loulu palm (*Pritchardia lanigera*), and an Endangered gardenia (*Gardenia remyii*).

The project area also supports several unique plant communities, including the greatest concentration of rare montane bogs in the Hawaiian islands. These ecosystems are extremely sensitive and slow-growing, and do not recover from ungulate disturbance. Former native bogs are now dominated by alien grasses and kahili ginger, with exposed subsoils that easily erode.

The project area is dominated by native vegetation, although some portions have been highly altered by feral pigs and invasive plants. The biggest threats from alien species are strawberry guava (*Psidium cattleinum*), kahili ginger (*Hedychium gardnerianum*), Koster's curse (*Clidemia hurta*) and miconia (*Miconia calvescens*, not yet present). These plants have the capacity to alter the functioning of the rainforest because they are fast-growing and have shallow root systems.

Native forest birds observed in the project area include the 'amakihi (*Hemignathus virens*), 'apapane (*Himatione sanguinea*), 'elepaio (*Chasiempis sandwichensis*), and the IUCN globally vulnerable 'i'iwi (*Vestiaria coccinea*). Other birds include kolea (*Pluvialis fulva*), koloa maoli (*Anas wyvilliana*) and the 'io (Hawaiian hawk [*Buteo solitarius*]).

In addition, the project area is within the range of two endangered native sea birds, the 'ua'u (Hawaiian petrel [*Pterodroma sandwichensis*]) and 'a'o (Hawaiian shearwater [*Puffinus newelli*]). These birds were recorded historically on the watershed, and more recently in 2003, they were identified with radar, flying mauka in windward valleys towards the uplands. Little is known of the size and location of present populations on the mountain, but the wet uluhe cliffs of windwards streams are prime nest sites. No barbed wire is planned for the top of the fence, and reflective tape will be used on the top wire to alert birds. Additionally, the proposed fence line will be inspected for nest burrows.

Many species of alien songbirds are found in the project area, including the red-billed leiothrix (*Leiothrix lutea*), Northern cardinal (*Cardinalis cardinalis*), Japanese White-eye (*Zosterops japonica*), mynah (*Acridotheres tristis*), spotted dove (*Streptopelia chinensis*), house finch (*Carpodacus mexicanus*), and Northern mockingbird (*Mimus polyglottos*). Non-native animals observed or thought to occur in the project area include feral pigs (*Sus scrofa*), rats (*Rattus spp.*), mice (*Mus musculus*), feral cats (*Felis silvestris*), feral dogs (*Canis lupus familiaris*), and mongoose (*Herpestes javanicus*).

Describe topography and submit a map entitled topography. Submit detailed contour maps for ocean area and areas where slopes are 20% or more. Contour maps will also be required for uses involving tall structures, gravity flow and other special cases.

The windward slopes of Kohala Mountain are cut with deep, steep-sided stream gulches, with fairly flat intervening ridges. The topographic maps attached show the streams and ridges.

If shoreline area, describe shoreline and surrounding area. Indicate and illustrate if shoreline is sandy, muddy, rocky, cliffs, reefs, or other features (such as access to shoreline) on a map entitled coastal resources. A current shoreline certification is required for uses that may affect shoreline resources.

N/A - The project is located in the mountains.

If shoreline area, describe and illustrate any coastal hazards such as erosion, flooding, tsunami, etc. Attach any relevant maps delineating the hazard zone (FEMA, FIRM maps).

N/A - The project is located in the mountains.

Describe existing covenants, easements, and restrictions. If State owned land, indicate present encumbrances.

There are no existing covenants, easements, nor restrictions.

Identify any historic, archeological or cultural sites within or near the parcel. Please submit or include any current management plan. If applicable, indicate location(s) on a map entitled historical, archaeological, and cultural resources and describe below.

Archival information indicates that the forested uplands of Laupahoehoe 2 were likely most commonly used by Native Hawaiians for specialized resource procurement activities, such as bird catching/collecting and plant/hardwood harvesting. Many of the sites associated with these activities, such as shelters, were likely temporary in nature and reabsorbed into the landscape. Due to the extreme topography, saturated ground and dense vegetation, the land is unsuitable for habitation, and it is unlikely that any permanent structures would have been constructed in the mauka areas of the ahupua'a.

The Kohala Mountain Watershed Management Plan is contained in the Kohala Mountain Watershed Management Project, December 2008, available at http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Hawaii/2000s/2008-12-08-HA-FEA-Kohala-Mtn-Watershed.pdf.

Adjacent Property Owners

Please list all adjacent property owners. If no address is available indicate north, south, east and west or mauka, makai or other common county directionals.

TMKs: 3-4-9-15-2; 3-4-9-13-1; 3-6-3-1-5; 3-4-9-15-9; 3-6-3-1-7

Legal Name: State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife (Kohala FR and Puu O Umi NAR)

Street Address: 19 E. Kawili Street

City, State and Zip code: Hilo, HI 96720

Mailing Address: same

City, State and Zip:

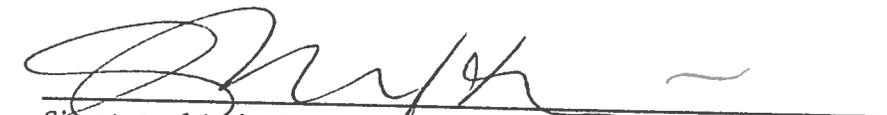
Phone No.: 974-4221

Location to TMK: North, south, west and east of project site

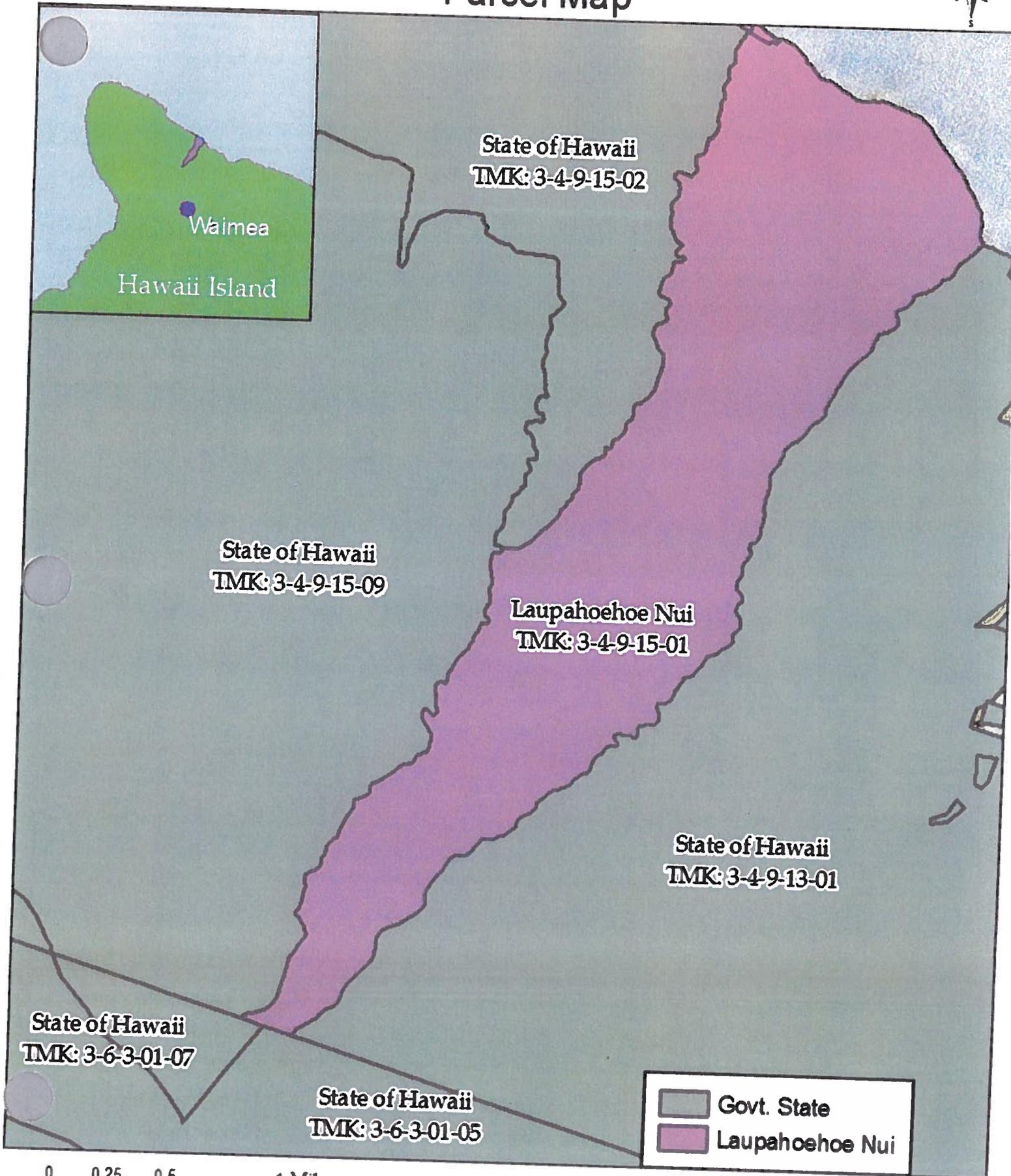
CERTIFICATION

I HEREBY CERTIFY THAT I HAVE READ THIS COMPLETED APPLICATION AND THAT, TO THE BEST OF MY KNOWLEDGE, THE INFORMATION IN THIS APPLICATION AND ALL ATTACHMENTS AND EXHIBITS IS COMPLETE AND CORRECT. I UNDERSTAND THAT THE FAILURE TO PROVIDE ANY REQUESTED INFORMATION OR MISSTATEMENTS SUBMITTED IN SUPPORT OF THE APPLICATION SHALL BE GROUNDS FOR EITHER REFUSING TO ACCEPT THIS APPLICATION, FOR DENYING THE PERMIT, FOR SUSPENDING OR REVOKING A PERMIT ISSUED ON THE BASIS OF SUCH MISREPRESENTATIONS, OR FOR SEEKING OF SUCH FURTHER RELIEF AS MAY SEEM PROPER TO THE LAND BOARD.

I HEREBY AUTHORIZE REPRESENTATIVES OF THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONDUCT SITE INSPECTIONS ON MY OR MY CLIENT'S PROPERTY. UNLESS ARRANGED OTHERWISE, THESE SITE INSPECTIONS SHALL TAKE PLACE BETWEEN THE HOURS OF 8:00 A.M. AND 4:30 P.M.

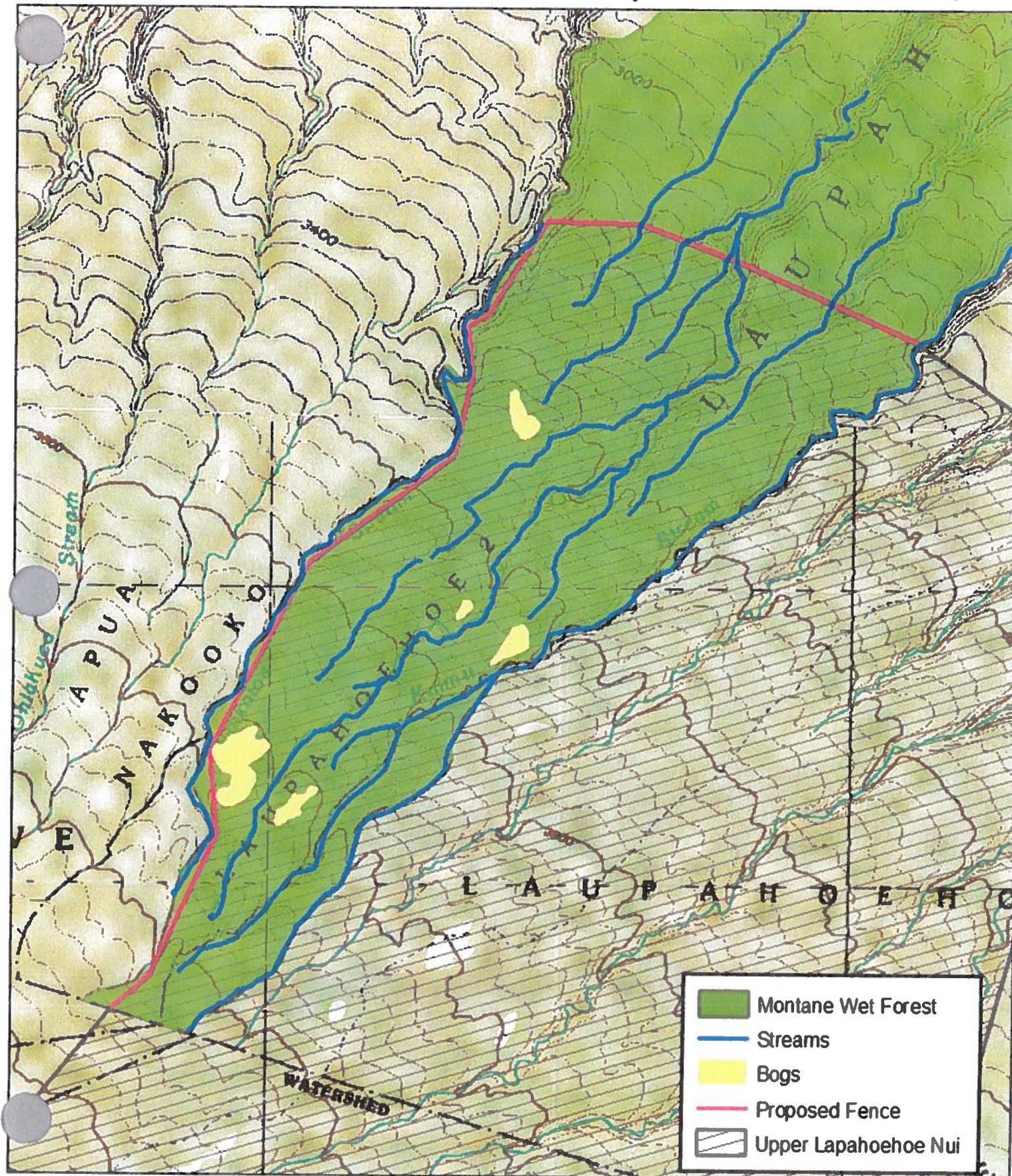

Signature of Authorized Agent(s) or if no agent, signature of Applicant

Upper Laupahoehoe Nui Watershed Preserve Parcel Map



0 0.25 0.5 1 Miles

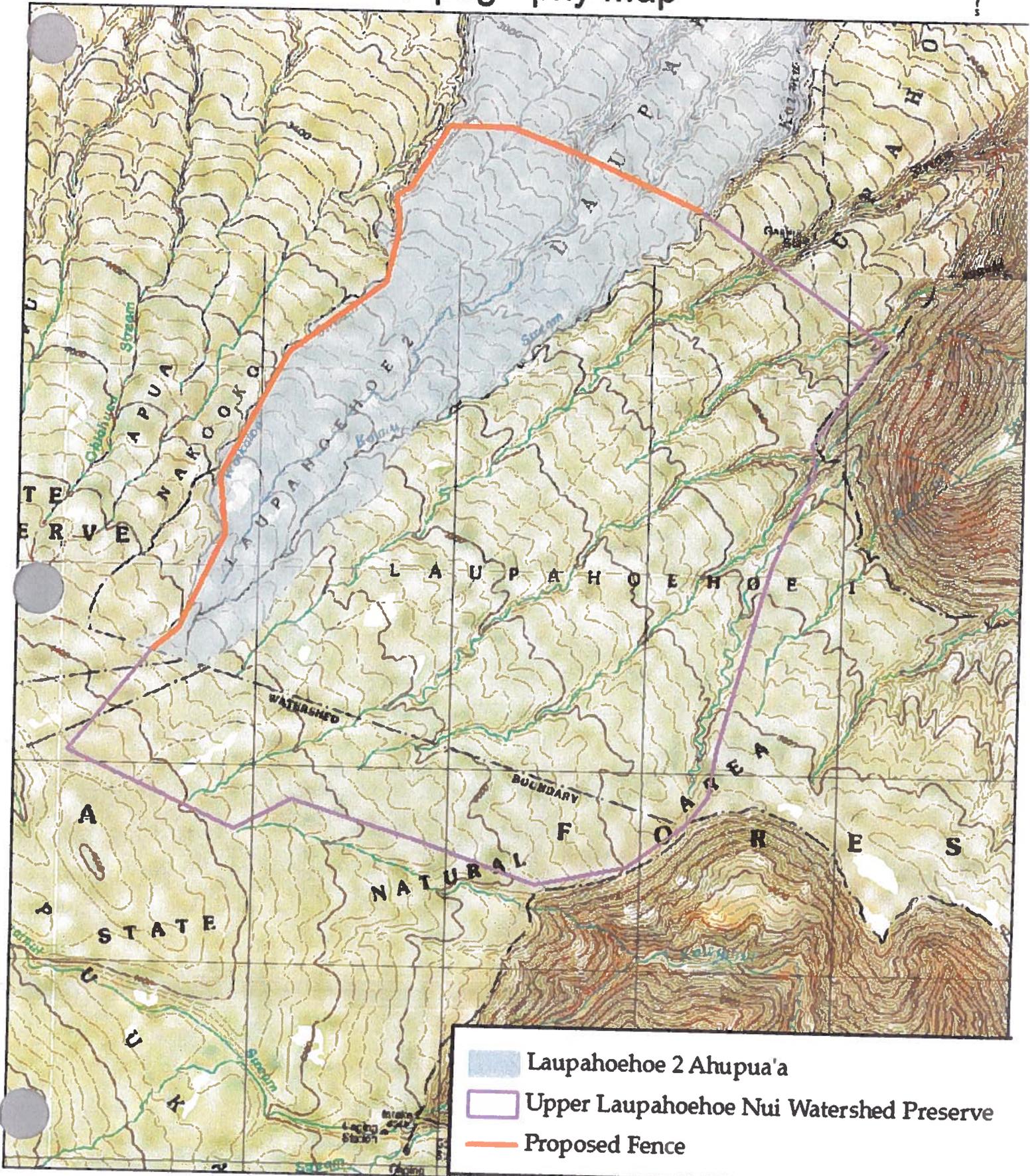
Upper Laupahoehoe Nui Watershed Preserve Resource Map



0 0.25 0.5 1 Miles

Kohala Watershed Partnership. May 3, 2010

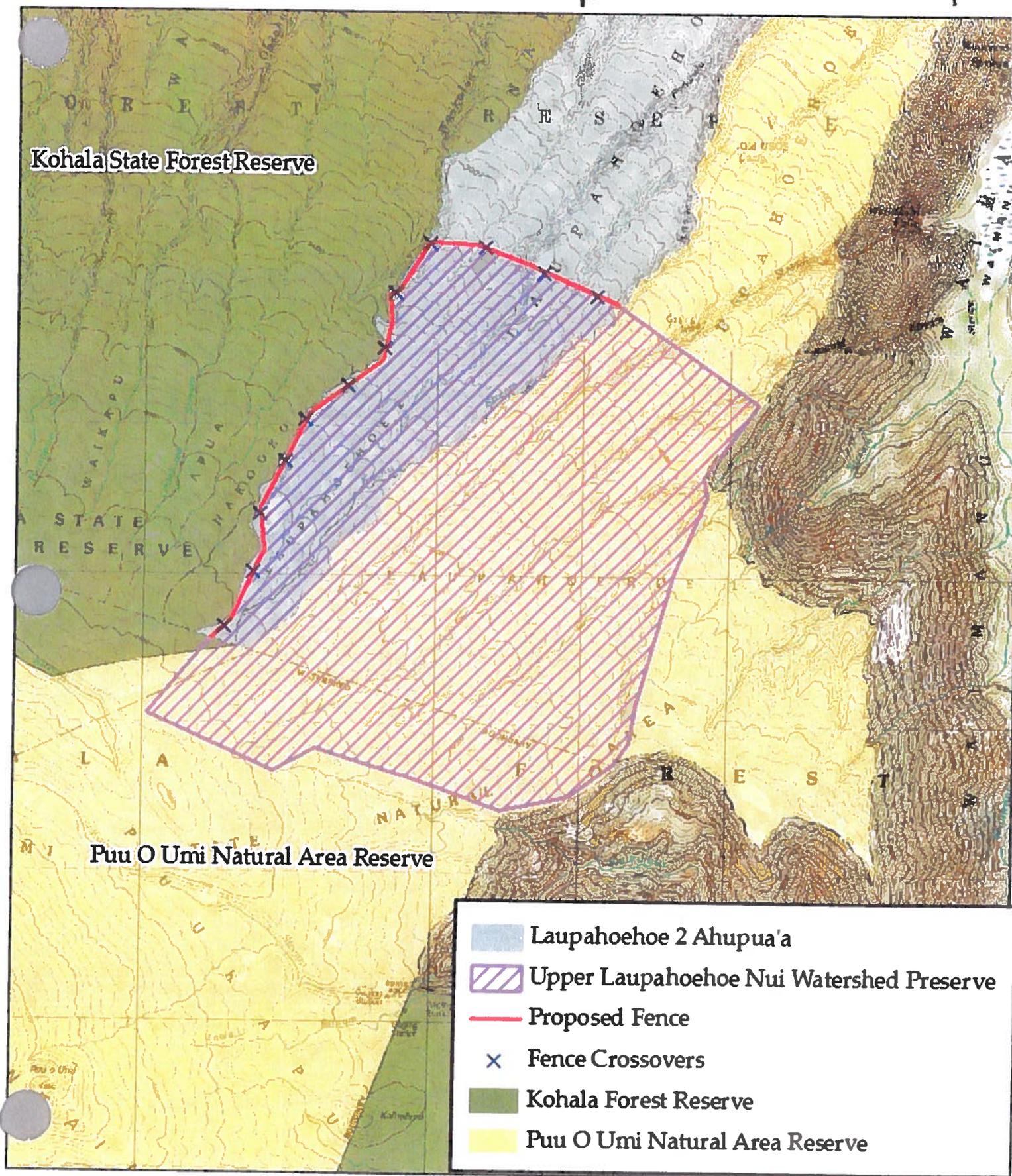
Upper Laupahoehoe Nui Watershed Preserve Topography Map



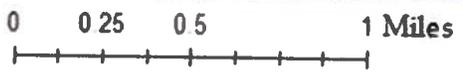
- Laupahoehoe 2 Ahupua'a
- Upper Laupahoehoe Nui Watershed Preserve
- Proposed Fence

0 0.25 0.5 1 Miles

Upper Laupahoehoe Nui Watershed Preserve Site Map



- Laupahoehoe 2 Ahupua'a
- Upper Laupahoehoe Nui Watershed Preserve
- Proposed Fence
- Fence Crossovers
- Kohala Forest Reserve
- Puu O Umi Natural Area Reserve





The Environmental Notice

December 08, 2008

STATEWIDE (HRS 343)

- 1. Field Release of *Fopius cerativorius* (Wharton) (Hymenoptera: Braconidae), for the Biocontrol of medfly, *Ceratitis capitata* (DEA) 2
- 2. Field Release of *Binodoxys communis* (Gahan) (Hymenoptera: Braconidae) for Biocontrol of the melon aphid, *Aphis gossypii* (DEA) 2

OAHU (HRS 343)

- 3. Mokuleia Zone Change – F-1 to AG-2 (DEA) 3
- 4. Intersection Improvements, Dillingham Ranch Agricultural Subdivision (FEA) 3
- 5. Campus Center Renovation and Expansion (DEA) 4

MAUI (HRS 343)

- 6. Lahaina Bypass Modified Alignment, Kahoma Stream to Future Keawe Street Extension (DEA) 4
- 7. Hawaiian Cement Puunene Production Well (DEA) 5

HAWAII (HRS 343)

- 8. Kona Sea Crest Development (DEA) 5
- 9. Kohala Mountain Watershed Management Project (FEA) 6
- 10. Hilo Baseyard, Highway Administration Building Office Annex and New Vehicle Storage Shed (FEA) 6

COASTAL ZONE NOTICES (HRS 205A)

- Federal Consistency Reviews** 7
- Special Management Area Minor Permits** 7
- Shoreline Notices**
- Shoreline Certification Applications 8
- Shoreline Certifications and Rejections 8

FEDERAL NOTICES

- Papahānaumokuākea Marine National Monument Proclamation Provisions 9
- Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for 12 Species of Picture-Wing Flies from the Hawaiian Islands 10

GLOSSARY 11

<p>Katherine Puana Kealoha, Director Office of Environmental Quality Control 235 South Beretania Street, Suite 702 Honolulu, HI 96813 Tel: (808) 586-4185 Fax: (808) 586-4186 Email: oeqc@doh.hawaii.gov</p>	<p>Website: http://hawaii.gov/health/environmental/oeqc/index.html/ Kauai: 274-3141 ext. 64185 Maui: 984-2400 ext. 64185 Molokai/Lanai: 1-800-468-4644 ext. 64185 Hawaii: 974-4000 ext. 64185</p>
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The Environmental Notice is available for public review on the 8th and 23rd of each month on OEQC's website, pursuant to Chapter 343-3, HRS

