

Decision Notice and Finding of No Significant Impact for the Laupahoehoe Construction Project

**USDA Forest Service
Pacific Southwest Research Station - Hilo**

**Institute of Pacific Islands Forestry
Hawai`i Experimental Tropical Forest
Hawai`i County, Hawai`i**

Introduction

In 1992, the Hawai`i Tropical Forest Recovery Act authorized the establishment of the Hawai`i Experimental Tropical Forest (HETF) to serve as a center for long-term research and a focal point for developing and transferring knowledge and expertise for the management of tropical forests. In 2007, the HETF was formally established as two separate units. The Pu`u Wa`awa`a Dry Forest Unit is located on the western, or leeward, side of the Island of Hawai`i. The Laupahoehoe Wet Forest Unit is located on the eastern, or windward, side of the Island of Hawai`i, and was established in the existing State of Hawai`i Laupahoehoe Natural Area Reserve and a portion of the Hilo Forest Reserve. Objectives for the HETF are to: (1) provide lands for conducting research that serves as a basis for the restoration, conservation, and management of forests in Hawai`i and across tropical areas served by the Pacific Southwest Research Station (PSW); (2) provide education facilities for the general public and University and Forest Service staffs; and (3) contribute to local, regional, and global long-term environmental monitoring data sets. For the balance of this document the term “HETF” refers to Laupahoehoe Wet Forest Unit.

The proposed Laupahoehoe Construction Project will enhance the ability of the HETF to meet its full potential for research, education, and demonstration. The proposed bunkhouse facilities will provide a research and education base camp for visiting scientists, educators, and students close to the HETF. This conveniently located space to meet, study, and teach will bring researchers, educators, students, and others together and encourage the exchange of information and ideas among local residents interested in the HETF. The project will provide facilities to support HETF research, demonstration, and educational functions serving the entire Pacific Basin. Such facilities are not currently available within a practical distance of the HETF. The environmental assessment (EA) documents the analysis of two alternatives to meet these needs and a no action alternative.

Decision and Reasons for the Decision

Based upon my review of all alternatives, I have decided to implement Alternative 3, as proposed in the EA, without modification. Under this alternative, new structures will be built and utilized alongside existing structures on federal lands, including 1 or 2 bunkhouses with accommodations for 10 persons each, a restroom/shower/laundry building, a workshop and garage building, and parking for up to 20 vehicles. This site will serve as the research and education headquarters and is referred to as the Laupahoehoe Administrative Site (LAS) in the EA. New construction occupying 3 acres at a proposed lease site on State of Hawai`i agriculturally zoned lands will include a two-stall vault toilet comfort station, a covered pavilion, and parking area for 10 vehicles. This site will be used primarily as a staging area for research and educational trips into the HETF, and is referred to as the

Laupahoehoe Field Education Site (LFES) in the EA. No electrical utility connections are proposed at either site. Power for the facilities at the LAS will be generated by a photo-voltaic array with battery storage and generator back up. The facilities proposed for the LFES will not use electrical power.

Access to the LAS under Alternative 3 will use Spencer Road, an existing Hawai`i County road. Primary access to the HETF will use approximately 0.2 miles of reconstruction and 0.7 miles of newly constructed roadway in an existing Hawai`i County right-of-way and on private lands of Kamehameha Schools, and existing gravel roads on Kamehameha Schools and State of Hawai`i lands. Manowaiopae Homestead Road (the current primary access to the HETF) will have limited use as a secondary route with minor repairs made on a 1.0 mile section of road from the junction of Spencer Road to the Kamehameha Schools (KS) property line (Figure 1 depicts the project sites and access alternatives). The private segments of the primary and secondary access routes traverse private lands with existing fences and gates, which will remain in place. Public access to the HETF will be accommodated through guided education and research tours staged from the LFES. Public access to and management of the HETF will be separately addressed in a subsequent overall management plan developed by the State in cooperation with the USDA Forest Service that will include a separate public involvement process. That plan will address activities such as hunting and gathering, hiking, and other proposed uses.

Alternative 3 will best serve the project's purpose and need based on the following:

- The project will construct all necessary facilities.
- The access route is the shortest distance of travel between the LAS and the LFES and the HETF with less steep grades than alternatives 1 or 2.
- The USDA Forest Service's cost of constructing this access route is approximately \$250,000 less than the cost of alternative 2, and maintenance costs of this route will be somewhat less due to its shorter length and gentler grades than those of alternatives 1 or 2.
- The access route is strongly endorsed by the State of Hawai`i Department of Land and Natural Resources due to the gentler grades and more direct route from the existing County road (see letter, Appendix C of the EA). The proposed route will greatly improve the ease of moving heavy equipment to and from the Laupahoehoe Natural Area Reserve, thereby aiding in routine maintenance and facilitating timely fire suppression response.
- The access route will resolve a long-standing issue regarding access to currently land-locked, privately-owned parcels along an existing Hawai`i County road right-of-way.

Project specifications requiring the use of best management practices for storm water management during new road construction and the repair of a Manowaiopae Homestead Road crossing of Kapili Stream, will address the issue of potential project impacts to area water quality. Impacts to sensitive wildlife species will be avoided by scheduling construction to occur outside of the breeding and rearing season of the Hawaiian hoary bat and breeding birds, surveying all project areas to identify any nests of the Hawaiian Duck, and limiting removal of native trees to a maximum of 5 percent of the total present. Potential impacts to local scenery will be minimized through the use of a single lane road, small buildings consistent with local architectural style, and use of photo-voltaic arrays with back-up generation to supply facility electrical power, thus avoiding installation of power lines.

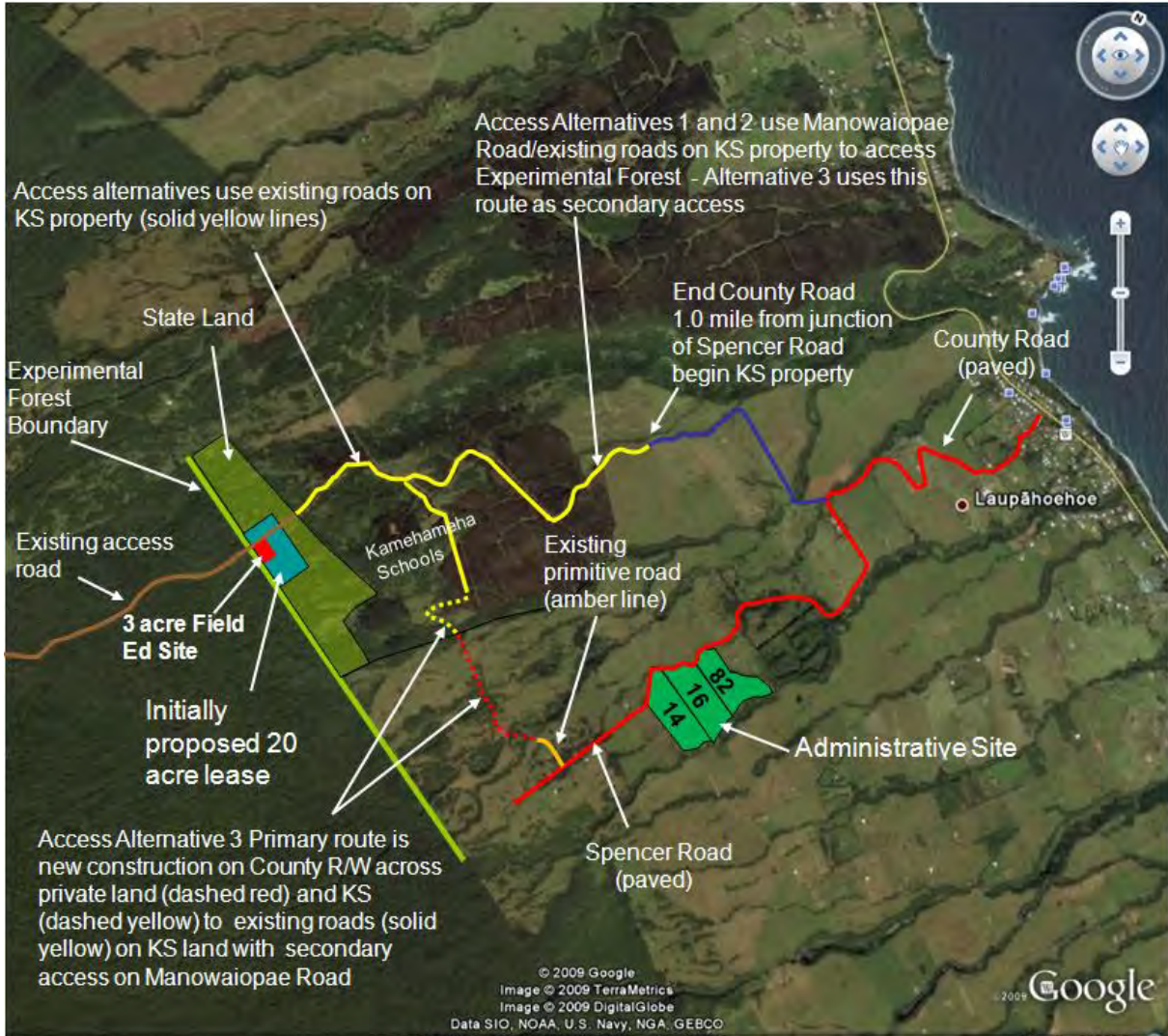


Figure 1: Facility Sites and Access Alternatives (not to scale)

Alternative 3 and the supporting environmental documentation meet requirements under the Federal National Environmental Policy Act of 1969, Chapter 343 of the Hawai`i Revised Statutes, Section 404 of the Federal Clean Water Act, the Federal Endangered Species Act of 1973, the Federal Migratory Bird Treaty Act of 1918, HRS Chapter 344-4; Item 3: Flora and Fauna, the Federal Farmland Protection Act of 1981, Hawai`i Administrative Rules title 11, Dept of Health, chapter 200 (protection of scenic resources), the Federal Clean Air Act, State of Hawai`i Department of Health, Title 11, Chapter 46, HAR (Community Noise Control), the Federal Comprehensive Environmental Response, Compensation, and Liabilities Act of 1980, and the National Historic Preservation Act of 1966.

Other Alternatives Considered

In addition to the selected alternative, I considered two other alternatives. A brief description of the other alternatives is provided here; a detailed comparison of these alternatives can be found in the EA on pages 14-17.

No Action

Under the No Action alternative (Alternative 1), a research and education facility would not be constructed near the HETF. Although some bunkhouse and classroom facilities would be available in pre-existing structures on the LAS, their utility would be limited without the further site development proposed in the two action alternatives. This alternative does not meet the project's identified purpose and need.

Alternative 2

Alternative 2 would develop facilities at the LAS and LFES in the same manner described for Alternative 3, the preferred alternative. Access to the LAS would also be the same as described for Alternative 3. This alternative is distinguished from Alternative 3 by the proposed access to the HETF and LFES. Sole access to the HETF and LFES would be via Manowaiopae Homestead Road, a Hawai'i County road to the point that it enters the Kamehameha Schools lands, and a private road south-southwest, or uphill (mauka), of that point (see Figure 1). Manowaiopae Homestead Road would require some upgrades for regular HETF access, including repairs to an existing bridge crossing the Kilau Stream and to the low water crossing of Kapili Stream. A 1.0-mile segment of the road between its fork with Spencer Road and the boundary of the Kamehameha Schools property is a paved, public road with a "Road in Limbo" status. Hawai'i County and private landowners who live along this segment of the road cooperatively maintain the road. The next 1.55-mile segment of the road proceeding mauka crosses Kamehameha Schools land and is privately-owned. HETF associated traffic would use this private road segment subject to an agreement with Kamehameha Schools. The remaining 0.19-mile segment of the road crosses State of Hawai'i lands between the Kamehameha Schools property and the boundary of the HETF. All existing gates restricting access to the private road segments would remain.

Public Involvement and Scoping

As described in the background, the need for this action arose in 2007 when the HETF was formally established. The project was first proposed in 2008. The proposed action has been revised several times since plans for the project were first initiated. A brief history of the public involvement and agency coordination process resulting from those revisions follows.

In 2008 and 2009 public scoping, including public meetings, agency consultation, and preparation of a draft EA were completed for a proposal to construct all the facilities within the originally proposed 20-acre parcel lease from the State, the area called the LFES in the EA. While that draft EA was pending, the USDA Forest Service purchased parcels of land near the proposed lease site and revised its proposed action to include locating several facilities on these newly acquired properties. The draft EA was withdrawn, and a new proposed action was put forth in support of the original project purpose and need. In May 2010, PSW mailed a public scoping letter describing the new proposed action to individuals, governmental organizations and other organizations. A public notice was also published in the *Hawai'i Tribune-Herald*. Proposed action and contact information was posted to the HETF internet site: http://www.hetf.us/page/projects_plans. Later in 2010, in response to difficulties in acquiring right-of-way easements for facility access, the proposed action was again revised. On April 3, 2011, PSW mailed a public scoping letter describing the current proposed action, and posted notice of this proposed action in the *Hawai'i Tribune-Herald* and on the HETF internet site.

Using the comments from the public and other agencies, the interdisciplinary team identified several issues regarding the effects of the proposed action. Main issues of concern included the potential for facility development and operation to adversely impact: 1) soils and water quality; 2) native fauna, including listed species; 3) native flora, including listed species; 4) local scenic beauty; 5) local air

quality; 6) cultural and archaeological resources; or 7) create adverse noise (see EA, pages 9 and 10). To address these concerns, the USDA Forest Service created the alternatives described above.

Finding of No Significant Impact

The following is a summary of the project analysis to determine significance, as defined by Forest Service Handbook 1909.15_05. "Significant," as used in NEPA, requires consideration of both context and intensity of the expected project effects.

Context means that the significance of an action must be analyzed in several contexts (i.e., local regional, worldwide), and over short and long time frames. For site-specific actions significance usually depends upon the effects in the local area rather than in the world as a whole. This project is limited in scope and duration. The project was designed to minimize environmental effects through limiting the extent of development adjacent to the HETF to a 3-acre site and focusing the larger development to an already disturbed site on former sugar plantation lands more remote from intact native forest habitat. Project construction and operation impacts are minimized through implementing a variety of construction best management practices and scheduling constraints to address the issues cited above. Mitigation measures designed to limit adverse effects of the project are listed on Table 3 of the EA, pages 19 and 20.

Intensity refers to the severity of the expected project impacts and is defined by the 10 points below.

Context

The appropriate context in which to consider the significance of impacts is the general vicinity of the project area, ranging from the HETF to the south of (topographically above) the project site, to the town of Laupahoehoe to the north of (topographically below) the project site. The impact context area is laterally bounded by Laupahoehoe Stream to the northwest and Manowaiopae Stream to the southeast. This limited context is appropriate because the potential environmental, social, and economic effects are not significant and are limited to the project area and the immediately adjacent areas (see EA, Sections 3 and 4, pages 22 – 49).

Intensity

The following factors were considered to evaluate intensity.

1) Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.

Based on the predicted impacts of the alternatives discussed in the EA (Sections 3 and 4), both the beneficial and adverse impacts of the action will not be significant. As discussed earlier in this Decision Notice, seven issues were identified as being important to this decision. The scope and magnitude of effects associated with these issues were limited and acceptable.

2) The degree to which the proposed action affects public health or safety.

Development of research and education facilities as proposed does not include activities that would adversely affect public health or safety. Providing bunkhouse space for visiting scientists, classroom space, and staging areas close to the HETF should reduce overall vehicle use and related impacts associated with research and education programs at the HETF.

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The proposed project will not significantly affect unique characteristics of the geographical area. All areas proposed for disturbance have been screened for cultural or archaeological resources (see EA, pages 43 and 44). No park lands or wild and scenic rivers occur in the project vicinity.

While access to the LFES will involve four stream crossings, the wetlands associated with these intermittent streams are minimal, and all crossings will comply with Federal and State of Hawai`i regulations.

Development of the LAS will include construction within prime farmlands, but the Natural Resources Conservation Service has reviewed the project and determined that it complies with the Federal Farmland Protection Act of 1980 (see EA, page 34).

The LFES is adjacent to the HETF, also designated a State of Hawai`i Natural Area Reserve. The purpose and need for developing the project is to facilitate ecological research benefitting this unique resource, and the construction of minimal facilities at the LFES to serve this purpose and need will not significantly affect this resource.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects on the quality of the human environment are not likely to be highly controversial because there is no known scientific controversy regarding the impacts of the project (See EA, Sections 3 and 4).

The comments received during scoping in 2011 and again during public comment for the EA in 2011 were mostly supportive and do not demonstrate a high degree of controversy.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no known effects to the human environment that are highly uncertain or involve unusual risk. The effects of the action are similar to those of past similar actions. The USDA Forest Service has implemented numerous administrative facility development projects over many years. The effects of these actions are well understood (See EA, Sections 3 and 4).

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

This project does not set a precedent for other projects. In the future, the USDA Forest Service must carefully evaluate each potential facility development proposal or other action on its own merits. Any future action must be evaluated through the National Environmental Policy Act process. Any future action must stand on its own regarding a public interest determination, feasibility, and environmental effects.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The cumulative effects of past, present, and reasonably foreseeable future actions were considered for each of the major issues. Based on these discussions, there will be no significant cumulative impacts (See EA, Section 4).

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because investigation of the project area identified no such resources. The action will not cause loss or destruction of significant scientific, cultural, or historical resources, because no cultural resources are known to occur on any of the lands affected (See EA, pages 43 and 44).

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.

The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, because the Biological Assessment and Biological Evaluation for the project did not identify any such adverse effects (See EA, pages 28-35). In a letter dated May 3, 2011, the US Fish and Wildlife Service provided technical measures for avoiding impacts to listed species that may occur in the project area. Those measures are incorporated into the project.

10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

This action does not threaten a violation of federal, state or local law or requirements imposed for protection of the environment. Applicable laws and regulations were considered in the EA (see EA, Sections 3 and 4, and Section VIII below).

The EA for this project also served as a State of Hawai'i Environmental Assessment subject to Chapter 343 of the Hawaii Revised Statutes. The State of Hawai'i, Department of Land and Natural Resources, has determined that the project will not result in any significant impacts.

Officials of the State of Hawai'i and County of Hawai'i have been consulted throughout the development of this project. No objections were raised.

Conclusion

After considering the environmental effects described in the EA and specialist reports, I have determined that Alternative 3 will not have significant effects on the quality of the human environment, considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared, and I am issuing a finding of no significant impact in association with the final EA.

Findings Required by Other Laws and Regulations

The project complies with the Endangered Species Act of 1973, as amended. A Biological Assessment and Evaluation (July 2011) shows that no proposed or listed Endangered, Threatened or sensitive species or their habitats will be adversely affected.

No lands in the project area are located within Congressionally-designated Wilderness or Inventoried Roadless Areas. The project complies with The Wilderness Act of 1964 and the Roadless Final Rule (36 CFR 294, USDA 2001).

No resources eligible for the National Register of Historic Places were located within any of the lands to be developed, thus no action was necessary for compliance with Section 106 of the National Historic Preservation Act and Executive Order 11593.

This project does not conflict with Executive Order 12898 regarding Environmental Justice in Minority Populations and Low Income Populations. No concerns related to Environmental Justice have been identified.

Best Available Science

I am confident that the analysis of this project was conducted using the best available science. My conclusion is based on a review of the record that shows my staff conducted a thorough review of relevant scientific information, considered responsible opposing views, and acknowledged incomplete or unavailable information, scientific uncertainty, and risk. Please refer to the specialist reports in the project file for specific discussions of the science and methods used for analysis and for literature reviewed and referenced.

Administrative Review and Appeal Rights

This decision is subject to appeal pursuant to 36 CFR 215. Only individuals or organizations that submitted comments during the comment period may appeal. A Notice of Appeal must meet the requirements of 36 CFR 215.14. Appeals can be submitted in several forms, but must be received by the Appeal Deciding Officer within 45 days from the date of publication of this notice in the *Hawai'i Tribune-Herald*. Appeals may be:


- 1) Mailed to: Appeal Deciding Officer, Chief of the USDA Forest Service. Attn: EMC Appeals, Mail Stop 1104, 1400 Independence Avenue, SW, Washington, DC 20250-1104
- 2) E-mailed electronically in a common digital format to *appeals-chief@fs.fed.us*. Please put APPEAL and Laupahoehoe Construction Project Environmental Assessment in the subject line
- 3) Delivered to: Office of the USDA Forest Service, Ecosystem Management Coordination, Attn: Appeals, Yates Bldg., 3CEN, 201 14th Street, SW, Washington, DC 20250. (*Note: If a phone number is needed for carrier delivery, use 202-205-0895*) between the hours of 8 am and 5 pm, M-F; or
- 4) Faxed to: 202-205-1012, ATTN: APPEALS

Implementation

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

For further information concerning the Laupahoehoe Construction Project, contact Pat Manley, 808-854-2601 or *pmanley@fs.fed.us*, during normal business hours.

Approved by:



Deanna J. Stouder
Station Director
Pacific Southwest Research Station
USDA Forest Service

September 19, 2011