

**REPORT OF FINDINGS
FOR THE ESTABLISHMENT OF
THE HAWAII EXPERIMENTAL TROPICAL FOREST:
SUGGESTED SITES AND INFRASTRUCTURE NEEDS**



**PRESENTED TO:
THE HONORABLE MICHAEL JOHANNNS
U.S. SECRETARY OF AGRICULTURE**

**FROM:
THE HONORABLE LINDA LINGLE
GOVERNOR OF HAWAII**

March 1, 2006

On April 13, 2005, Hawaii Governor Linda Lingle formally requested Secretary of Agriculture Michael Johanns to take the necessary steps to establish the Hawaii Experimental Tropical Forest as provided by the Hawaii Tropical Forest Recovery Act of 1992 (Public law 102-574, 1992). This report was prepared as per the instructions of Secretary of Agriculture Mike Johanns. In his June 29, 2005, letter of reply to Governor Lingle he stated: "I suggest that a scoping process be conducted and a "Report of Findings" be prepared concerning the establishment of an experimental forest in Hawaii. The scoping process will engage State and Federal officials and a wide range of stakeholders in a discussion of how they envision meeting the goals of the Act, with respect to the areas to be designated and facilities to be established."

This report specifically relates to the 1992 Hawaii Tropical Forest Recovery Act Section 606 (c) (1) Delineation of the Location of the Forest - Identification of Lands - which states, "the Governor and the Secretary shall identify one or more suitable sites for the (*experimental*) forest in lands within the State. The identification of each site shall be based on scientific, ecological, administrative, and such factors as the Governor and Secretary consider to be necessary or desirable to achieve the purposes of this section. Each site identified pursuant to the preceding sentence shall be of sufficient size and located so that the site can be effectively managed for (*experimental*) Forest purposes." This report is intended to assist the Governor and Secretary in fulfilling this section of the Act.

PURPOSE OF THE HAWAII EXPERIMENTAL TROPICAL FOREST

In his statement on signing the Hawaii Tropical Forest Recovery Act of 1992 (Public Law 102-574, 1992), President George H.W. Bush stated, "this Act authorizes the establishment of the Hawaii Experimental Tropical Forest. This experimental forest will 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."

Section 606 of the Hawaii Tropical Forest Recovery Act stated that the Hawaii Experiment Forest shall be managed as a:

- (1) model of quality tropical forest management where harvesting on a sustainable basis can be demonstrated in balance with natural resource conservation;
- (2) site for research on tropical forestry, conservation biology, and natural resource management; and
- (3) center for demonstration, education, training, and outreach on tropical forestry, conservation biology, and natural resources research and management.

Hawaiian forests provide citizens of the United States with many ecosystems services vital to our economy, security, and well-being. Most important is an abundant supply of freshwater, forest products, carbon pools, wildlife habitats, recreational activities, and many other aesthetic and cultural values. These forest values suffer from many of the same threats affecting other forests in the United States--wildfires, exotic species, unmanaged recreation, and climate change. The objectives for establishment of the Hawaii Experimental Tropical Forest will be to conduct

research, demonstration, and education that will provide information and tools so that managers can:

- Restore and sustainably manage tropical forests
- Understand linkages of forests to water resources
- Quantify, restore, and sustainably manage the ecosystem services¹ and forest products that arise from tropical forests
- Control invasive and exotic species that diminish forest productivity, biodiversity, and values.

The vision of the Hawaii Experimental Tropical Forest is a research, demonstration, and educational forest focusing on ecological, economical, and cultural values important to all Hawaiians. The sites selected for the experimental forest will not only provide research opportunities requiring answers from world-class scientists, but also provide learning opportunities for school children of all ages. Demonstration and educational opportunities for future generations of landowners, land managers, and scientists are just as important as providing the public with relevant research results.

CRITERIA FOR SELECTING OPTIMAL UNITS OF THE HAWAII EXPERIMENTAL TROPICAL FOREST

The Act states, “The Governor and the Secretary shall identify one or more suitable sites for the Forest in lands within the State. The identification of each site shall be based on scientific, ecological, administrative, and such other factors as the Governor and Secretary consider to be necessary or desirable...”

What is meant by scientific, ecological, and administrative?

Scientific

The units must be large enough for managerial-sized, landscape-scale studies to occur. A major focus of the Experimental Forest will be to quantify ecosystem or environmental services that arise from Hawaii forests. This will require studies of an ahupua’a or watershed level approach. Large areas are needed for relevant “ridge to reef” and forest watershed/relationships studies.

Land and water managers and researchers agreed that optimally the wet forest unit should include surface stream(s) in order to conduct studies of aquatic organisms, hydrology, water quality, and forest-stream-reef relationships.

Ecological

The sites should encompass as much of the gradient of the diverse Hawaiian landscape as is possible. This includes a broad elevational, climatic, and soils gradients. Hawaii contains some

¹ Ecosystem Services are essential to human existence. They are the wide array of conditions and processes through which ecosystems, and their biodiversity confer benefits on humanity; these include the production of goods, life-support functions, life-fulfilling conditions, and preservation options (*G. Daley and S. Dasgupta. 2001. Encyclopedia of Biodiversity. Vol 2. Academic Press.*)

of the most dramatic climatic gradients on earth. For example, there are 26 life zones on the Island of Hawaii. By comparison there are only 18 life zones in the entire country of Brazil (see Appendix 2). The diverse landscapes justify the establishment of both dry and wet forest units as called for in the Secretary's letter. Hawaii also contains a broad diversity of forests with varied land use histories. Ideally, the experimental forest units will also contain the broad range between the extremes, between intact native forest and degraded sites wholly dominated by exotics.

In our rankings of ecological and scientific criteria for experimental forest establishment, we discussed site locations with a number of scientists, land managers, and community, environmental, and forest industry representatives. Sites for possible consideration had to meet the following criteria:

- **Suitable Size** - The Act states that the experimental forest "shall be of sufficient size and located so that the site can be effectively managed for forest purposes." We interpreted this to include studies of sustainable forestry, water and watershed studies and the linkages of landscapes from forested ridges to coral reefs.
- **Encompass Broad Environmental Gradients** - This includes as broad of a range in elevation, soils, climate, forest types, etc., as is possible. Because of the diversity of Hawaii forests, a wet and dry forest unit was deemed necessary. In the wet forest unit, streams and riparian forests as well as upland forests are critical components.
- **Land Use History Variation** - Intact forests, plantations, sites dominated by invasive species, pastures, etc.
- **Access and Proximity** - Ideally there would be an adequate system of roads or trails to access the areas or at least the potential to develop them; other considerations include access to laboratories and computing facilities, local accommodations, proximity to universities, and airports.
- **Potential to Conduct Long-Term Research Projects** - For this we considered: (1) silviculture (forest restoration, management, and sustainability of wood products, ecological, and cultural values); (2) hydrological (studies of water quantity and quality, aquatic ecosystems, and the capacity to locate paired watersheds for study; and (3) ecological-communities and habitats (the variety of land cover types in a size sufficient to conduct management-scale studies as well as serious issues such as global change and endangered species habitat needs).
- **Contain Sites Suitable to Address Many Pressing Land Management Needs** - Examples are native forest restoration, Koa silviculture, effects and management of large ungulates and pigs, rodents, endangered species conservation and management concerns, invasive plant species, wildfire control, water and watershed issues.

Administrative

The research and research infrastructure will be managed by the Institute of Pacific Islands Forestry [USDA Forest Service, PSW Research Station] (IPIF). The new center headquarters will be the locale of laboratory facilities, administration, and data base/information management. It makes sense to establish the experimental forest units close to the IPIF, which is located on the campus of the University of Hawaii, Hilo.

We cannot predict what pressing resource questions will be facing land managers in 10, 25, or 50 years from now. For this reason, it is quite important to consider all of these criteria when deciding upon the location and size of the experimental forest units.

Social Benefits

The Hawaii Experimental Tropical Forest will provide a number of benefits to the people of the state of Hawaii. Just as we cannot predict future resource needs, we also cannot predict all societal benefits. A few include:

- **Access** - Providing public access for forest research, demonstration, and education is of paramount importance. Increased access and many new opportunities will be created. Access will be made available not only for world-class researchers and graduate students but also for K-12 students to conduct their own studies as well as learn of natural resource sciences and management. Visitor interpretation and outreach opportunities to the public will also be developed.
- **Education** - The experimental forest will be a living, learning laboratory where educational programs will be provided for all, from the youngest students to experienced professionals.
- **Community Pride** - The experimental forest must maintain support from the local communities. We will work for the ideal that the experimental forest will be a source of pride for surrounding communities because they are associated with an area solving local, regional, and global issues of great importance.
- **Fairness to Hawaii** - Hawaiian tropical forests are the only forests in the nation without representative experimental forests. This has excluded researchers in Hawaii from many opportunities and deprived the citizens of important scientific studies to address their needs.
- **Economic and Employment** - The returns from forest research are expected to be many times greater than the investment in science. Studies of the ecosystem services of economic, ecologic, and cultural values are greatly needed in this part of the world. Local communities will also benefit from employment opportunities that will arise from the establishment and maintenance of the experimental forest units.

SCOPING PROCESS

In his reply to Governor Lingle's request for the establishment of the Hawaii Experimental Tropical Forest, Secretary Johanns tasked the personnel of the USDA Forest Service (USFS) to work with our colleagues in Hawaii State government to:

- (1) Engage in discussions on how they envision meeting the goals of the Act (section 606 b of the 1992 Tropical Forest Recovery Act)
- (2) Engage and consult with a wide range of prospective stakeholders (to include local government, non-governmental organizations, private industry, universities and the community)
- (3) Propose where and how to establish the experimental forest.
- (4) Prepare a Report of Findings.

In response, leaders from the USFS - IPIF and Department of the Hawaii State Land and Natural Resources (DLNR) - Division of Forestry and Wildlife (DOFAW) have held a series of meetings and discussions engaging interested parties throughout the state. The meetings varied in format: meetings that were attended by invitees from organizations with a potential interest in experimental forests, meetings that were advertised to the public, and meetings of advisory commissions. The scoping process meetings included:

- Preliminary scoping meeting at the DOFAW Building, Hilo, Hawaii, on December 14, 2004 (invitees representing private, State and Federal agencies and the general public).
- Presentation and discussion at the Hawaii Natural Areas Reserve Commission meeting in Honolulu, Hawaii, on January 12, 2005.
- Scoping meeting at the DOFAW Building, Hilo, Hawaii, on October 24, 2005 (invitees representing private, State and Federal agencies and the general public).
- Seminar and public discussion on the Hawaii Experimental Tropical Forest (advertised in the local paper) at the University of Hawaii-Hilo on the evening of October 28, 2005.
- Meeting with Hawaii Association of Conservation Districts, USFS, DOFAW, and DLNR, at the IPIF Center on October 31, 2005.
- Briefing and discussion at the annual retreat of the Hawaii Conservation Alliance on December 2, 2005 (leaders from the 12 leading organizations on natural resource issues).
- Discussion and site visit with the Department of Hawaiian Home Lands Forest Manager, and personnel of the US Fish and Wildlife Service at the Hakalau National Wildlife Refuge on December 7-8, 2005.
- Presentation and discussion at a public meeting of the Hawaii Association of Conservation Districts in Aiea, Hawaii, on January 10, 2006.

- Presentation and discussion at a public meeting of the Pu'u Wa'awa'a Advisory Council, held at Pu'u Wa'awa'a, Hawaii, on January 15, 2006.
- Presentation and discussion at the North Hilo Community Council Meeting, a public meeting attended by the citizens of Laupahoehoe, Hawaii, on January 19, 2006.
- Presentation and discussion at the Hawaii Natural Areas Reserve Commission meeting in Honolulu, Hawaii, on February 13, 2006.
- Presentation and discussion at the State Land Board meeting on February 24, 2006, in Honolulu, Hawaii.

In addition to the general public, representatives from the following groups attended the meetings and provided input:

- Hawaii Forest Industry Association
- Kamehameha Schools
- The Nature Conservancy of Hawaii
- US Fish and Wildlife Service
- National Park Service
- The USGS-Biological Resources Division
- University of Hawaii-Hilo
- University of Hawaii-Manoa
- Natural Resources Conservation Service
- Ducks Unlimited
- Hawaii Division of Forestry and Wildlife
- Hawaii Department of Land and Natural Resources
- USDA Agricultural Research Service
- Hawaii Association of Conservation Districts
- Hawaii Department of Agriculture
- Hawaii Conservation Alliance
- Department of Hawaiian Home Lands
- USDA Forest Service Institute of Pacific Islands Forestry
- County of Hawaii
- Parker Ranch
- Office of Hawaii Affairs

RECOMMENDED SITES

The Hawaiian Islands are a uniquely diverse place on earth. Hawaii is the world's most isolated island archipelago and was the last place on earth to be discovered and colonized by humans. The extreme isolation of the islands produced, through evolution and speciation, a remarkable diversity of species that are found nowhere else on the planet. Approximately 1,033 plant species, 10,000 invertebrates, and 140 birds are native to the Hawaiian Islands of which 87% of

the plants, 95% of the invertebrates and 100% of the forest birds are endemic (found nowhere else on earth). These natural treasures are integral elements of the biological and cultural heritage of the Hawaiian Islands and their people. Hawaii has also seen extraordinary rates of extinction and endangerment among its unique species with 317 species federally listed as threatened or endangered. An additional 109 are listed as candidate species and species of concern. Tragically, extinctions continue at a rate of at least one species per year. In the last three decades alone, half of Hawaii's endangered forest bird species have disappeared, in all likelihood lost forever to extinction.

Following the criteria outlined in the 1990 and 1992 Acts, we contacted researchers, land managers, landowners, and many interested citizens to gain their suggestions on the most optimum locations for the citing of the Hawaii Tropical Experimental Forest. In our inquiries we further followed the logic of Secretary Johanns' memo with the assumption of the need to establish a "dry forest" and a "wet forest" unit. The pros and cons of many potential areas on all of the major Hawaiian islands were discussed. Most of the interest and attention turned to the Big Island (Hawaii Island) for the unique, abundant resource opportunities it offers as an experimental forest. Locating the experimental forests on the Big Island is logical because this island encompasses a land area greater than the rest of the Islands and with the representative threats common to all. A remarkable mosaic of plant communities including grasslands, thorn shrub, dry forests, rain forests, and alpine exists on the Big Island. This affords a tremendous opportunity to establish experimental forests that will yield useful information, not only for Hawaii and the Pacific, but for many areas of the continental United States and the world. Additionally, locating the experimental forest units on the Big Island near the new IPIF Research Center in Hilo would provide greater efficiencies and interaction for administrative and technical support. Infrastructure and support personnel for computing, wet laboratories, and greenhouses are already in place and dedicated to research.

A total of nine wet forests locations and nine dry forest locations received serious consideration and discussion. Of these, we have provided a numerical rating for the top six wet forests and the top four dry forests (Table 1). **Following the criteria outlined in the 1990 and 1992 Acts, the Laupahoehoe Forest is the highest ranked site for the wet forest, and the Pu'u Wa'awa'a forest is ranked highest for a dry forest.**

The **Laupahoehoe** Forest area was amongst the highest ranked for all criteria considered. It is located on the windward side of the Big Island on the slopes of the Mauna Kea Volcano. The Laupahoehoe site contains magnificent examples of primary wet and rain forest and is the habitat to numerous endangered plant and animal species. The dominant life zones are subtropical and lower montane wet and rain forests dominated by Ohia (*Metrosideros polymorpha*) and Koa (*Acacia koa*). In addition, there are old plantations dominated by tropical ash, degraded pastures/koa forests, and numerous streams. Streams in the site include two first order tributaries of Ka'awali'i Stream, Laupahoehoe Stream, Kilau Stream, Kiwilahiahi Stream, Ha'ako'a Stream, and Pahale Stream. It has good road access for both scientists and the public. The current land ownership is administered by DOFAW as a Forest Reserve and a Natural Area Reserve. Adjacent private lands have a history of forest extraction and would make excellent sites for restoration demonstration/research. Elevations below this site are privately owned and lands at the upper elevations are administered by the Department of Hawaiian Home Lands and

the DOFAW. Locating an experimental forest in this area would provide researchers with a globally unique opportunity to study environmental gradients from the upper limits of agriculture at lower elevations through eight life zones terminating at alpine at almost 14,000 feet in elevation.

Other advantages of this site include the fact that there is a history of research in this area. It is in close proximity to major populations on the Big Island. It is accessible to both of the Big Island airports in Hilo (45 minutes) and Kona (1.5 hours). There exists an existing road that extends the length of the proposed forest. With improvements this could provide access for all potential users of the forest including researchers, students, and other visitors. The site is close to the IPIF Headquarters and the University of Hawaii-Hilo campus where the administrative, greenhouse, and laboratory support would be located. All of these factors combine to make this site quite suitable for teaching and demonstration as well as research.

The ahupua'a of **Pu'u Wa'awa'a** received the highest ranking of all dry forests considered. The term "ahupua'a" pertains to a traditional Hawaiian land designation similar in concept to a watershed. Tropical dry forests are among the most endangered forest types in the world. In Hawaii, the few remaining are severely threatened by wildfire, invasive species and land cover changes. There are no tropical dry forests represented in forest experiment stations in the nation and very few in the world, even though they are the most widespread of tropical ecosystems. Knowledge on the restoration of dry forests is a high priority for resource managers. This will require overcoming barriers to tree reestablishment, halting wildfires, and controlling invasive species. Other high priorities include the management of wildlife game and endangered species. A 14-member advisory council has been appointed by the State with the objective of guiding the implementation of the State's Pu'u Wa'awa'a management plan. They have given their support for the proposal to identify this 35,540-acre site at Pu'u Wa'awa'a as a portion of the Hawaii Experimental Tropical Forest.

The ahupua'a has an elevational range from sea level to 6,300 feet. It covers the gradient of the major dry and moist forest types in Hawaii (four life zones). It contains examples of highly degraded as well as intact forests. Much of the moist forests at the upper elevations are dominated by the ecologically and economically important Koa. Rainfall ranges from <10 inches to >50 inches. An infrastructure of roads, houses, and water exists so the development costs of future facilities would be lower. It is located about one hour from the Kona airport and about one and a half hours from Hilo. There are numerous, ongoing research projects occurring there and collaborative opportunities with the University of Hawaii are great. Finally, there are long-term relationships with government, local owners, interested public and community groups. Because the forests extend from 6,000 feet to sea level, the potential to do watershed level studies and links of forests to marine environments are great.

THE 1994 HAWAII TROPICAL FOREST RECOVERY ACTION PLAN: POTENTIAL FUTURE SITES FOR DEMONSTRATION FORESTS

Another product of the 1992 Act was the 1994 Hawaii Tropical Forest Recovery Action Plan. This plan concluded that selection of an experimental forest(s) is critical to the success of the science intended for forest recovery in Hawaii. The plan recommended that the Federal government “create a network of experimental forests with associated facilities to meet scientific and management objectives to restore deficient or degraded forests” (Recommendation 17 of the Hawaii Tropical Forest Recovery Action Plan). The stated Desired Future Condition for an experimental forest was: “adequate experimental forests and associated facilities exist to provide for the necessary science needed to restore and maintain Hawaii’s forests. Facilities have been developed to meet the needs of visiting scientists...The facilities associated with the experimental forest headquarters provide teaching and science laboratories appropriate to a field site” (p. 56 1994 Hawaii Tropical Forest Recovery Action Plan).

Many of the participants as well as the leading State and Federal agencies in the scoping process showed great support for not only the establishment of the experimental forest on the Big Island, but also to begin the planning process for establishment of Demonstration Forests on the other main islands in the state. This is in line with Recommendation 18 of the 1994 Hawaii Tropical Forest Recovery Action Plan: Create a network of demonstration forests in all islands with a diversity of willing landowners to provide an opportunity to use existing and new knowledge on the ground and assist private land owners with currently available technical knowledge and applied research. Participants expressed interest in a demonstration forest at Kokee, Kauai, to test silviculture techniques for Koa. Wildland/Urban interface issues on Oahu, particularly fire issues in the Waianae area, were another example of the needs demonstration forests on other islands could address.

NEXT STEPS

Once the locations are identified by the Governor and Secretary, Section 606 (c) (2) states: “the exterior boundaries of the Forest including the boundaries of all sites identified for (experimental) forest purposes shall be delineated on an official map. The map shall be available for public inspection in the office of the Administrator of the Division of Forestry and Wildlife of the Department of Land and Natural Resources of the State. The Governor and the Secretary may from time to time, by mutual agreement, amend the official map to modify boundaries of the forest.” At the present time the primary choices are the Laupahoehoe Forest Reserve/Natural Area Reserve (wet forest) and the Pu’u Wa’awa’a watershed (dry forest).

This report will be made available to interested persons and will be posted on the DOFAW, DLNR and USFS - IPIF web pages.

Table 1. Results of the Ranking exercise for potential Hawaii Experimental Forest sites. This exercise was the results of field visits and consultation with scientists, land managers and land owners familiar with the areas. The rankings range from 1=lowest (not appropriate or limiting to address land management needs) to 4=highest, ideal conditions exists to address land management needs.

Potential Wet Forest Site	Size (ha)	Land ownership	Environmental gradients – soils, climate (and must have streams)	Land-use Variation	Access and proximity	Potential for long term projects			Total Score
						Forest Management and Silviculture	Hydrological	Ecological – communities and habitats	
Laupahoehoe FR, NAR	>4000	DOFAW, DHHL, private	4	4	3	4	3	4	22
Hilo FR	>4000	DOFAW	4	3	3	2	4	3.5	19.5
Kau FR	>4000	DOFAW	3 (ephemeral stream)	4	2.5	3.5	2	3.5	18.5
Waiakea FR	>4000	DOFAW	3	2.5	4	2	1	3	17.5
Keauhou Ranch	>4000	KS	3	3	2.5	4	2	3	17.5
Kohala FR	>4000	DOFAW	2	2	1	1	4	3	13

Other potential Wet forest sites not ranked = Piha FR, Hakalau NWR, Volcanoes National Park

Potential Dry site	Size (ha)	Land ownership	Environmental gradients --soils and climate	Land-use Variation	Access and proximity	Potential for long term projects			Total Score
						Forest Management and Silviculture	Hydrological **	Ecological – communities and habitats	
Pu'u Wa'awa' a	>4000	DOFAW	4	4	4	3	3	4	22
Manuka-NARS	>4000	NARS	3	3	2	2	2	3	15
South Kona FR	<4000	DOFAW	2	3	1	4	2	2.5	14.5
Puuahanulu FR	>4000	DOFAW	3	2	3	1	2	2	13

Other Dry sites not ranked, Honaunulu FR, Kaupulehu private and FR, Kau ahupuaa – private, Honomalino-TNC, and Hakalau-South Kona-NWR

** - research on processes such as fog drip, precipitation, ground water flow recharge, runoff

Environmental Gradients - There is a great need to encompass the incredibly broad environmental gradients of Hawaii and the Pacific Islands. Gradients include a wide range of elevation, climate (life zones), forest types, and soils (ages, parent materials). Gradients also encompass the diversity of the landscape where it is most desirable to contain upland forests, riparian (stream-side) forests, and freshwater ecosystems (streams).

Land use Variation - The types of research needs include those needed by private forest owners as well as public lands managers. Land use variation includes primary forest, secondary forests, plantations, pastures, sites dominated by invasive species, sites susceptible to incipient invasions.

Access and Proximity - The sites must be readily accessible (or have the potential for such) in order to be efficiently and effectively utilized. They will need a series of road and trails to provide access. Desirable traits also include relatively close proximity to the IPIF headquarters, airports, and Universities.

Potential for Long Term projects - All sites have the potential to collect long term data on climate, forest change, Carbon/global change research, etc. Of importance in Hawaii are sites for the study for **Forest Management and Silviculture** for ecological, economic, and cultural values); **Hydrological** - water quality, quantity, aquatic organisms, and other aquatic resources; and Ecological **Communities and Habitats** (control of invasive species, fire control, forest and wildlife habitat restoration, etc).

INFRASTRUCTURE NEEDS

DRAFT 5-YEAR INFRASTRUCTURE PLAN FOR THE HAWAII EXPERIMENTAL FOREST

Experimental Forest establishment needs (as outlined in the Hawaii Tropical Forest Recovery Act 1992) (\$300,000)

- Survey – Initial inventories
- Establishment/legal needs/GIS and mapping needs
- Building, road, and trail design
- Environmental analyses or similar documents

Human Capital (\$300,000/yr)

- Site managers
- Information/data manager

Structures (\$2 million)

- Dormitory (5-10 rooms, kitchen, common area) at Laupahoehoe wet forest
- Upgrade of existing houses at Pu'u Wa'awa'a dry forest
- Covered instructional area 1400 sq. ft. with storage area, flooring, bathroom wet forest site at Laupahoehoe wet forest
- Research lab/field offices/outbuildings for sorting, sample preparation, and processing (1500 sq. ft.) at both sites
- Water catchment system/electrical systems (generator/solar) at the Laupahoehoe wet forest
- Bring power to the Pu'u Wa'awa'a dry forest

Road, Trail and Fencing Construction /Improvements (\$2.2 million)

- Materials and design for demonstration/education site
- Road improvements to both forests
- Trail design and construction and equipment for maintenance for both sites

TOTAL \$6,000,000

APPENDICES

1. Frequently Asked Questions
2. Life Zone Map of the Big Island of Hawaii
3. Images of Identified Sites
4. Letter of Request from Governor Linda Lingle
5. Letter of Reply from Secretary Michael Johanns
6. Hawaii Tropical Forest Recovery Act of 1992

Appendix 1. Frequently asked questions relating to the establishment of the Hawaii Experimental Tropical Forest

What is the Hawaii Experimental Tropical Forest?

The desire to establish an experimental forest in Hawaii has been in the minds of visionary land managers, researchers, and decision makers for decades. It rose to the forefront with the passage of the International Tropical Forest Recovery Act of 1990 and the Tropical Forest Recovery Act of 1992. In these Acts it is stated: “At the request of the Governor, the Secretary shall establish and administer within the State a Hawaii Experimental Tropical Forest. The Forest shall be managed as –

- (1) a model of quality tropical forest management where harvesting on a sustainable yield basis can be demonstrated in balance with natural resource conservation;
- (2) a site for research on tropical forestry, conservation biology, and natural resource management; and
- (3) a center for demonstration, education, training, and outreach on tropical forestry, conservation biology, and natural resources research and management.”

The vision for the Hawaii Experimental Tropical Forest is to establish a *research, demonstration and educational forest focusing on ecological, economical and cultural values important to all Hawaiians.*

Where do we stand now?

In April 2005 Governor Linda Lingle formally requested that U.S. Secretary of Agriculture Michael Johanns establish the Hawaii Experimental Tropical Forest as prescribed in the Tropical Forest Recovery Act of 1992. In July 2005, Secretary Johanns replied that he would take the necessary steps for establishment of both dry and wet forest units of an experimental forest. He requested that Federal officials (the USFS - IPIF) work with State of Hawaii resource officials (DOFAW) to lead a scoping process to identify suitable sites for the establishment of an experimental forest. A report to the Secretary is due January 1, 2006.

Why is it important to establish a Hawaii Experimental Tropical Forest?

Currently Hawaiian forests are the only forests in the United States where no experimental forest exists. This has deprived Hawaii and the Pacific Islands of the benefits of research, education and demonstration products that would arise from experimental forests. Establishment of an experimental forest will greatly increase opportunities for Hawaiian students of all ages to conduct projects on lands dedicated for that purpose.

The 1994 Hawaii Tropical Forest Recovery Task Force stated that selection of an experimental forest(s) is critical to the success of the science intended for forest recovery in Hawaii. Recommendations of the Task Force included: “Create a network of experimental forests with associated facilities to meet scientific and management objectives to restore deficient or degraded forests” (Recommendation 17 of the Hawaii Tropical Forest Recovery Action Plan).

Is this another Federal take over of lands in Hawaii?

No, currently the plan is for the USFS - IPIF and the DLNR to develop together some vehicle to establish an experimental forest on public lands administered by the DOFAW. Under this scenario there will be no lands transferred to the Federal government.

Who will manage the Hawaii Experimental Tropical Forest?

This was addressed in the 1990 and 1992 Acts, which states:

The Secretary is authorized –

- (A) to administer the Forest in cooperation with the Governor and affected State agencies;
- (B) to make grants and enter into contracts and cooperative agreements with the Federal Government, the government of the State, local governments, corporations, nonprofit organizations and individuals...

This means that state agencies (DLNR) and the USFS - IPIF both will have responsibilities in the management of the experimental forest. It is likely that the USFS -IPIF would administer research activities and the research/education infrastructure, while land management and protection responsibilities would remain with the State. The primary mission of the experimental forest will be research, education, and demonstration for improved understanding and management of Hawaii's forest resources. This will no doubt influence how lands within the boundary will be managed because this will be a unique mission on these lands.

The 1990 Act states:

“Nothing in this section is intended to affect the jurisdiction of the State, both civil and criminal, over any person within the Forest by reason of the establishment of the Forest under this section, except in the case of a penalty for an offense against the United States.”

Natural Area Reserves (NAR) and Forest Reserves (FR) within the boundaries of an experimental forest will continue to be managed under relevant State laws and regulations. Research on NAR and FR lands would have to be conducted following existing statutes and rules and for the benefit of their management.

Where will the Hawaii Experimental Tropical Forest be located?

This is yet to be decided. Factors in the decision include considerations of appropriate resources, access, proximity to laboratories, computing and managing facilities. The new IPIF complex on the campus of the University of Hawaii-Hilo will provide the headquarters of the experimental forest.

The 1990 Act stated, “The Governor and the Secretary shall identify one or more suitable sites for the Forest in lands within the State. The identification of each site shall be based on scientific, ecological, administrative, and such other factors as the Governor and Secretary consider to be necessary or desirable... Each site identified pursuant to the preceding sentence shall be of sufficient size and located so that the site can be effectively managed for Forest purposes.”

Will the Public be excluded from the Hawaii Experimental Tropical Forest?

No. The experiment will provide unprecedented access for Hawaiians to their forests. Many new opportunities will be provided for people to learn about and appreciate Hawaiian forests. While the public may be excluded around small areas of particularly sensitive research projects or for human safety issues, there are no plans to limit activities such as hunting or gathering within boundaries of the experimental forest. Research programs and activities will be designed and conducted in a manner whereby there will be no impact or minimal impact on existing cultural and public uses of the designated area(s).

What kinds of research will be conducted on the Hawaii Experimental Tropical Forest?

This is an experimental forest that will be established to address the critical natural resource questions that must be answered to properly manage forests for a variety of objectives including restoration, preservation, and utilization. The experimental forest will be a location to conduct relevant natural-resource-related research, both biological and physical in nature. Studies related to management of forests, natural areas, wildlife, streams, watersheds, and fire as well as silviculture, soil ecology, invasive species and global change are appropriate (and mentioned in the Acts). Landscape-scale and long-term studies critical to truly understand tropical forests will be established in the experimental forest. The experimental forest areas must be established with the recognition that we do not know what will be the critical issues in 25, 50 or 100 years from now.

Who will benefit?

The people of the State of Hawaii will be the greatest beneficiaries. This will provide many new public education and research opportunities for the State and will increase our understanding of Hawaiian forests and ways to sustainably manage them. A heightened awareness of Hawaiian forests and their numerous values will arise from the experimental forest.

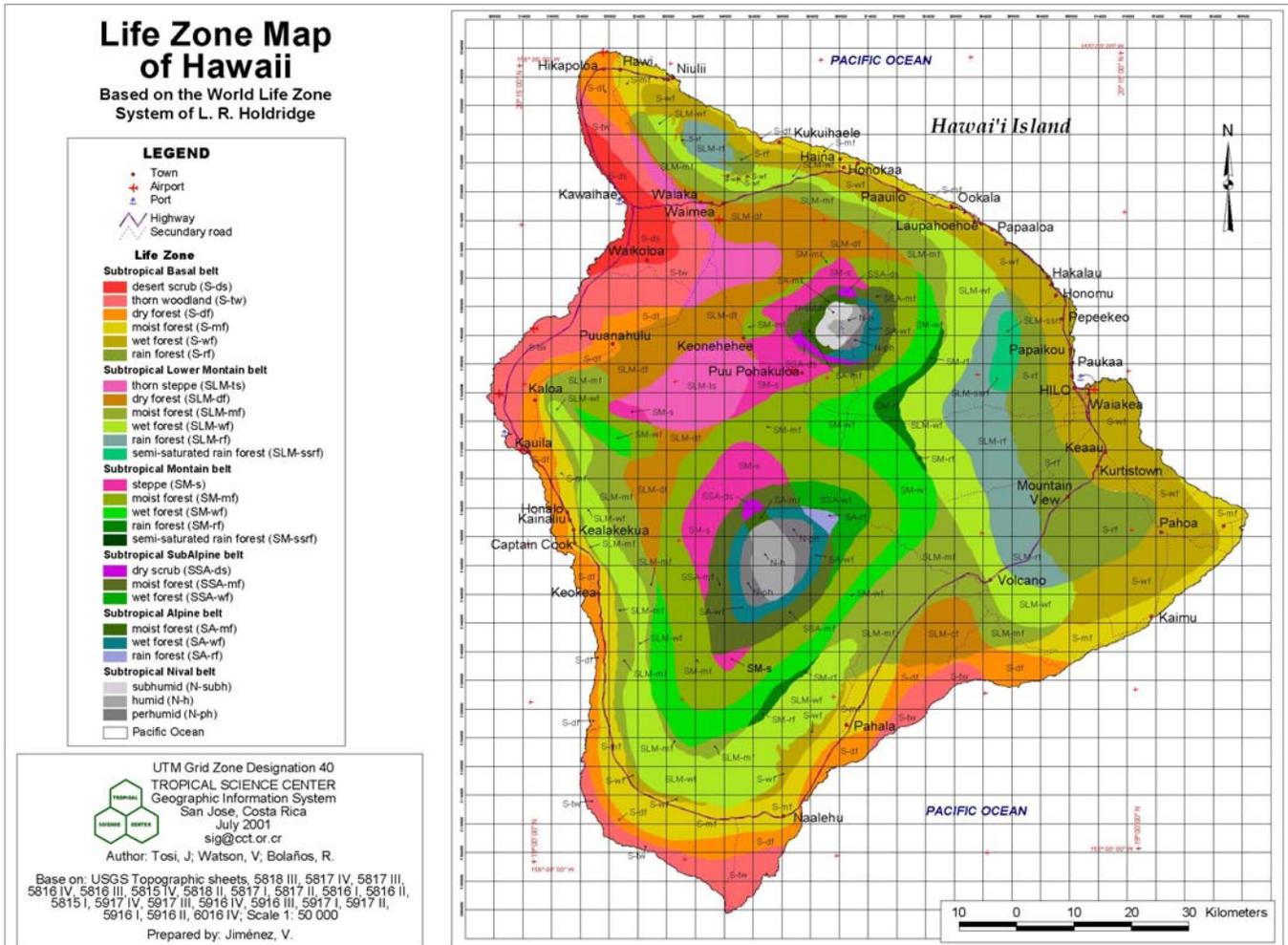
Who will conduct this Research?

With the establishment of an experimental forest in Hawaii, we expect that we will attract some of the best scientists in the world to conduct research on the sites. This will include scientists from federal agencies such as the USFS and USGS, State agencies, and university students and professors. In most cases researchers from local universities are the greatest beneficiaries, but studies will not be limited to Federal, State and university scientists. Students of all ages will be eligible to conduct studies and participate in projects on the experimental forest.

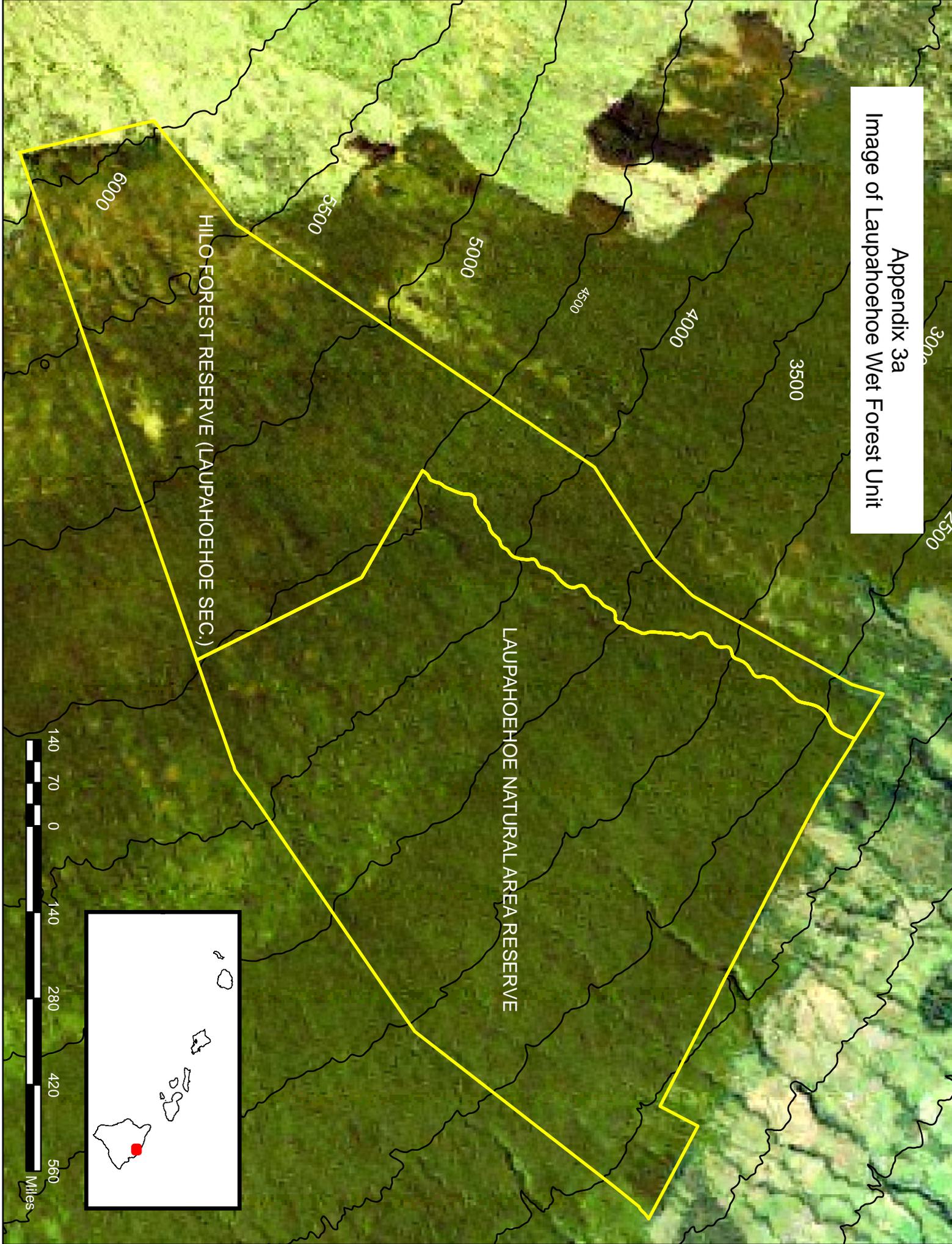
Will the area be limited to Research?

No. The primary reason to establish an experimental forest is to create and disseminate useful information for the citizens and Hawaii and the Pacific. An important function includes education and demonstration. This includes activities for professionals, teachers, students of all ages and the interested public.

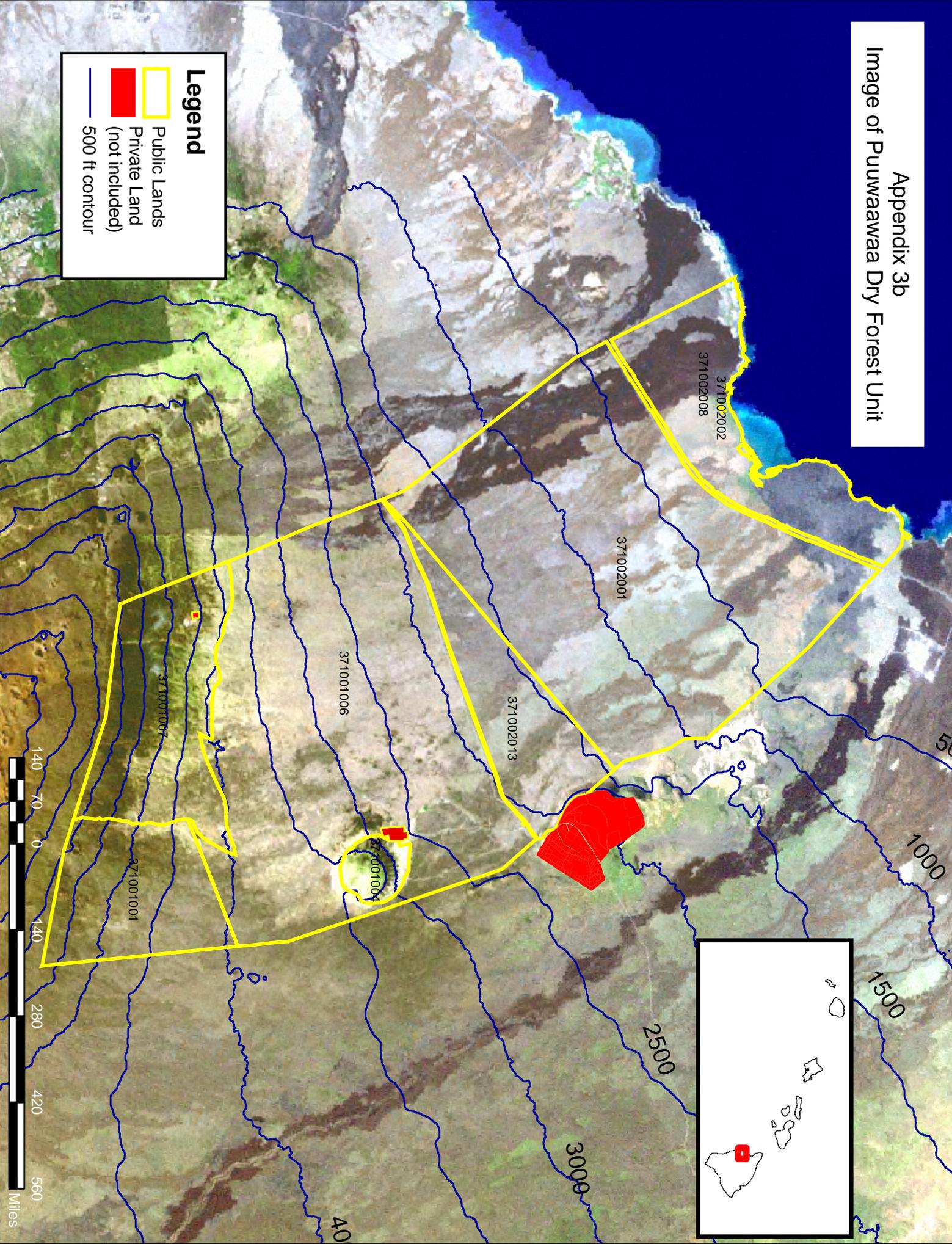
Appendix 2. Life zone map of the Island of Hawaii. This island is among the most diverse places on earth with respect to the number of life zones in such a geographically unique area.



Appendix 3a
Image of Laupahoehoe Wet Forest Unit

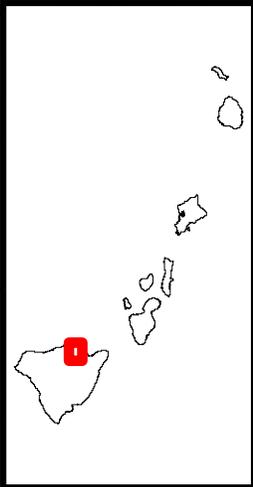


Appendix 3b
Image of Puuwaawa Dry Forest Unit



Legend

- Public Lands
- Private Land (not included)
- 500 ft contour



This report was prepared by personnel of:

**State of Hawaii
Department of Land and Natural Resources
Division of Forestry and Wildlife**

**The Institute of Pacific Islands Forestry
U.S. Department of Agriculture Forest Service
Pacific South West Research Station**



Principal authors include: J. Boone Kauffman, Paul Conry, and Roger Imoto



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EXECUTIVE CHAMBERS
HONOLULU

'05 APR 15 10:34

LINDA LINGLE
GOVERNOR

April 13, 2005

DEPT.
& NATURAL RESOURCES
STATE

The Honorable Michael Johanns
Secretary of Agriculture
U.S. Department of Agriculture
1400 Independence Avenue, S.W.
Washington, DC 20250

Dear Mr. Johanns:

It is my pleasure, as Governor of the State of Hawaii, to formally request that you take the steps necessary to establish a Hawaii Experimental Tropical Forest as provided by the Hawaii Tropical Forest Recovery Act of 1992 (Public Law 102-574, 1992).

Last year, the State of Hawaii celebrated the 100th anniversary of the establishment of the forest reserve system in Hawaii. Over the years the system has expanded to include over 850,000 acres and is the 11th largest in the nation. This year marks the beginning of a new century for management of the forest reserve system. It is fitting that we begin this new era with a significant investment in the future - the establishment of a Hawaii Experimental Tropical Forest.

Section 606(b) of the Hawaii Tropical Forest Recovery Act provides that: "At the request of the Governor (of Hawaii), the Secretary (of Agriculture) shall establish and administer within the State, a Hawaii Experimental Tropical Forest. The Forest shall be managed as--

- (1) a model of quality tropical forest management where harvesting on a sustainable basis can be demonstrated in balance with natural resource conservation.
- (2) a site for research on tropical forestry, conservation biology, and natural resource management; and
- (3) a center for demonstration, education, training, and outreach on tropical forestry, conservation biology, and natural resources research and management."

In his statement on signing the Hawaii Tropical Forest Recovery Act of 1992 (Public Law 102-574, 1992), President George H. W. Bush stated that "this Act authorizes the establishment of the Hawaii Experimental Tropical Forest. This experimental forest will 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." That vision remains.

The Honorable Mike Johanns
April 13, 2005
Page 2

This is an important step to provide Hawaii with the infrastructure and resources to advance the knowledge and practical management of tropical forest ecosystems. Notably, Hawaiian forests are the only forests in the United States not served by an experimental forest, and no experimental forest exists in any other U. S. territory in the Tropical Pacific. Given the unique resources in this, the largest tropical forests in the U. S., establishment of an experimental forest in Hawaii is timely and important and will surely become a research, teaching, and demonstration forest of value to all Americans.

We look forward to working with you in accomplishing this important task. Mr. Peter Young, Director of the Department of Land and Natural Resources (DLNR), and Paul Conry, Administrator of the DLNR's Division of Forestry and Wildlife, are prepared and ready to work with you and your staff on the next step in this process, to evaluate and select an appropriate site.

Thank you for taking action on this important issue.

Sincerely,


LINDA LINGLE

Aloha Mike,

*I hope all is well with you
and that you might come out and
visit sometime.*

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FORESTRY & WILDLIFE
STATE OF HAWAII



United States Department of Agriculture

Office of the Secretary
Washington, D.C. 20250

JUN 29 2005

The Honorable Linda Lingle
Governor
State of Hawaii
State Capitol
Executive Chambers
Honolulu, Hawaii 96813

Dear Governor Lingle:

Thank you for your letter of April 13, 2005, in which you requested that the Department of Agriculture (USDA) establish the Hawaii Experimental Tropical Forest as provided by the Hawaii Tropical Forest Recovery Act of 1992 (the Act), (Public Law 102-574, 1992). I am working closely with personnel of USDA's Forest Service (FS) and our colleagues in Hawaiian State Government, non-governmental organizations and private industry, to establish the forest.

Hawaiian forestry and natural resource leaders in the 1994 Hawaii Tropical Forest Action Plan recommended that we "should create a network of experimental forests with associated facilities to meet scientific and management objectives to restore deficient or degraded forests."

As a first step, I suggest that a scoping process be conducted, and a "Report of Findings" be prepared concerning the establishment of an experimental forest in Hawaii. The scoping process will engage State and Federal officials and a wide range of stakeholders in a discussion of how they envision meeting the goals of the Act, with respect to the areas to be designated and facilities to be established. The stakeholders would include, but not be limited to, surrounding communities, universities, local and State governments, and non-governmental organizations. The target date for completion of this report is January 1, 2006. Based on this report, I will identify, in collaboration with you and your staff, land suitable for designation as the experimental forest.

The experimental forest would be managed in accordance with the objectives in section 606 (b) of the Act. Because of the great diversity of Hawaiian forests, ranging from dry forests to rain forests, I anticipate that both a dry forest and wet forest experimental unit will be needed. The experimental forest will be administered by USDA's FS, Pacific Southwest Research Station, and Institute of Pacific Islands Forestry (IPIF). The new state-of-the-art IPIF research complex located on the University of Hawaii Hilo campus will function as the headquarters and provide laboratory and computing support for the experiment station.

The Honorable Linda Lingle
Page 2

Again, I am pleased to fulfill my role as Secretary in the establishment of this important research forest that will benefit not only the people of Hawaii and the Pacific, but all citizens of the United States.

Thank you for your interest in establishing the Hawaii Experimental Tropical Forest.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Johanns". The signature is written in a cursive, flowing style.

Mike Johanns
Secretary

PL 102-574, October 29, 1992, 106 Stat 4593

UNITED STATES PUBLIC LAWS
102nd Congress - Second Session
Convening January 3, 1992
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Additions and Deletions are not identified in this document.

PL 102-574 (S 2679)
October 29, 1992
HAWAII TROPICAL FOREST RECOVERY ACT

An Act to promote the recovery of Hawaii tropical forests, and for other purposes.

Be It enacted by the Senate and House of Representatives of the United States
of America in Congress assembled,

<< 16 USCA § 4501 NOTE >>

SECTION 1. SHORT TITLE.

This Act may be cited as the "Hawaii Tropical Forest Recovery Act".

SEC. 2. HAWAII TROPICAL FOREST RECOVERY.

(a) IN GENERAL.--The International Forestry Cooperation Act of 1990 (16 U.S.C. 4501 et seq.) is amended--

- (1) by redesignating sections 605, 606, and 607 as sections 609, 610, and 611, respectively; and
- (2) by inserting after section 604 the following new sections:

<< 16 USCA § 4503a >>

"SEC. 605. INSTITUTE OF PACIFIC ISLANDS FORESTRY.

(a) EXPANSION.--The Secretary shall expand the capabilities of and construct additional facilities, as funds are appropriated for the expansion and construction, at--

- "(1) the Institute of Pacific Islands Forestry; and
- "(2) tropical forests in the State of Hawaii.

(b) TROPICAL FORESTRY PLAN.--

(1) IN GENERAL.--Not later than 1 year after the date of receipt by the Secretary of the action plan required by section 5(b) of the Hawaii Tropical Forest Recovery Act, the Secretary shall prepare and submit to the Committee on Agriculture and the Committee on Interior and Insular Affairs of the House of Representatives, the Committee on Agriculture, Nutrition, and Forestry of the Senate, and to the Committees on Appropriations of the House of Representatives and Senate, a tropical forestry plan to expand the capabilities of and construct additional facilities under subsection (a).

(2) ELEMENTS.--The plan shall provide for--

- "(A) the establishment of a model center for research, demonstration, education, training, and outreach activities suitable for transferring scientific, technical, managerial, and administrative assistance to governmental and non-governmental organizations seeking to address problems associated with tropical forests within and outside the United States;
- "(B) the acquisition or construction of facilities for research, classroom instruction, and housing near an experimental tropical forest in the State of Hawaii;
- "(C) the acquisition or construction of facilities for the study and recovery of endangered tropical wildlife, fish, and plant species and the restoration of their habitats;
- "(D) the study of biological control of non-native species that degrade or destroy native forest

ecosystems;

<<PUB#PG=1000457,4594>>"(E) achieving a better understanding of global climate change and the significance of achieving a reduction of greenhouse gases through research associated with the unique atmospheric conditions found in Hawaii and the Pacific Ocean;

"(F) a review of the extent to which existing Federal forestry programs can be utilized to achieve the purposes of the plan; and

"(G) the establishment of experimental tropical forests in the State of Hawaii as authorized by section 606.

"(3) CAPABILITY.--In preparing elements of the plan that address paragraph (2)(F), the Secretary shall identify the capability of the plan--

"(A) to promote a greater understanding of tropical forest ecosystem processes, conservation biology, and biodiversity management;

"(B) to demonstrate the various benefits of maintaining a tropical forest reserve system;

"(C) to promote sound watershed and forest management;

"(D) to develop compatible land uses adjacent to protected natural areas; and

"(E) to develop new methods of reclaiming and restoring degraded lands.

<< 16 USCA § 4503b >>

"SEC. 606. HAWAII EXPERIMENTAL TROPICAL FOREST.

"(a) DEFINITIONS.--As used in this section:

"(1) FOREST.--The term 'Forest' means the Hawaii Experimental Tropical Forest.

"(2) GOVERNOR.--The term 'Governor' means the Governor of Hawaii.

"(3) LANDS.--The term 'lands' means lands, waters, and interests in lands and waters.

"(4) STATE.--The term 'State' means the State of Hawaii.

"(b) ESTABLISHMENT AND MANAGEMENT.--At the request of the Governor, the Secretary shall establish and administer within the State a Hawaii Experimental Tropical Forest. The Forest shall be managed as--

"(1) a model of quality tropical forest management where harvesting on a sustainable yield basis can be demonstrated in balance with natural resource conservation;

"(2) a site for research on tropical forestry, conservation biology, and natural resource management; and

"(3) a center for demonstration, education, training, and outreach on tropical forestry, conservation biology, and natural resources research and management.

"(c) DELINEATION OF THE LOCATION OF THE FOREST.--

"(1) IDENTIFICATION OF LANDS.--The Governor and the Secretary shall identify one or more suitable sites for the Forest in lands within the State. The identification of each site shall be based on scientific, ecological, administrative, and such other factors as the Governor and Secretary consider to be necessary or desirable to achieve the purposes of this section. Each site identified pursuant to the preceding sentence shall be of sufficient size and located so that the site can be effectively managed for Forest purposes.

<<PUB#PG=1000457,4595>>"(2) EXTERIOR BOUNDARIES.--The exterior boundaries of the Forest, including the boundaries of all sites identified for Forest purposes, shall be delineated on an official map. The map shall be available for public inspection in the office of the Administrator of the Division of Forestry and Wildlife of the Department of Land and Natural Resources of the State. The Governor and the Secretary may from time to time, by mutual agreement, amend the official-map to modify the boundaries of the Forest.

"(d) AUTHORITIES OF THE SECRETARY.--

"(1) IN GENERAL.--To carry out the purposes of this section, the Secretary is authorized--

"(A) to administer the Forest in cooperation with the Governor and affected State agencies;

"(B) to make grants and enter into contracts and cooperative agreements with the Federal Government, the government of the State, local governments, corporations, nonprofit organizations and individuals;

"(C) to exercise existing authority with respect to cooperative forestry and research for Forest purposes; and

"(D) to issue necessary rules and regulations or apply existing rules and regulations applicable to areas administered by the Forest Service that are necessary or desirable to administer the Forest--

- "(i) for the purposes described in subsection (b);
- "(ii) to protect persons within the Forest; and
- "(iii) to preserve and protect the resources in the Forest.
- "(2) LAND ACQUISITION.--The authority in section 4 of the Forest and Rangeland Renewable Resources Research Act of 1978 (16 U.S.C. 1643) shall be available to the Secretary to carry out this section.
- "(3) STATUTORY CONSTRUCTION.--Nothing in this section is intended to affect the jurisdiction of the State, both civil and criminal, over any person within the Forest by reason of the establishment of the Forest under this section, except in the case of a penalty for an offense against the United States.

<< 16 USCA § 4503c >>

"SEC. 607. ANNUAL REPORT ON INSTITUTES OF TROPICAL FORESTRY.

"The Secretary shall make annual reports to Congress on the progress, needs, and long-range plans of the Institutes of Tropical Forestry in meeting the requirements of section 2407 of the Global Climate Change Prevention Act of 1990 (7 U.S.C. 6706). Such reports shall be submitted by the Secretary pursuant to section 8(c) of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1606(c)).

<< 16 USCA § 4503d >>

"SEC. 608. DEFINITIONS.

"As used in this title (unless the context otherwise requires):

- "(1) INSTITUTES OF TROPICAL FORESTRY.--The term 'Institutes of Tropical Forestry' means the Institute of Tropical Forestry in Puerto Rico and the Institute of Pacific Islands Forestry established under section 2407 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C. 6706).
- "(2) SECRETARY.--The term 'Secretary' means the Secretary of Agriculture.
- <<PUB#PG=1000457,4596>>"(3) STATE.--The term 'State' means each of the 50 States, Guam, American Samoa, the Republic of Palau (until the Compact of Free Association enters into effect), Puerto Rico, the Virgin Islands, and the Commonwealth of the Northern Mariana Islands."
- (b) CONFORMING AMENDMENTS.--

<< 16 USCA § 4501 >>

(1) Section 602(b) of the International Forestry Cooperation Act of 1990 (16 U.S.C. 4501(b)) is amended by striking "(hereinafter referred to in this title as the Secretary)".

<< 16 USCA § 4503 >>

(2) The heading of section 604 of such Act (16 U.S.C. 4503) is amended to read as follows:

"SEC. 604. INSTITUTE OF TROPICAL FORESTRY IN PUERTO RICO."

<< 16 USCA § 4502a >>

SEC. 3. TROPICAL FORESTRY RESEARCH AND ASSISTANCE.

(a) ASSISTANCE.--To promote sound management and conservation of tropical forests of the United States and to promote the development and transfer of technical, managerial, educational, and administrative skills to managers of tropical forests within or outside the United States, the Secretary of Agriculture is authorized to provide assistance through the Forest Service to eligible entities in States with tropical forests to--

- (1) develop, promote, and demonstrate sustainable harvesting of native woods and other forest products on a sustainable yield basis in balance with natural resource conservation;
- (2) promote habitat preservation and species protection or recovery;

- (3) protect indigenous plant and animal species and essential watersheds from non-native animals, plants, and pathogens;
 - (4) establish biological control agents for non-native species that threaten natural ecosystems;
 - (5) establish a monitoring system in tropical forests to identify baseline conditions and determine detrimental changes or improvements over time;
 - (6) detect and appraise stresses affecting tropical forests caused by insect infestations, diseases, pollution, fire, and non-native animal and plant species, and by the influence of people;
 - (7) determine the causes of changes that are detected through experimentation, intensive monitoring, and data collection at affected tropical forest sites; and
 - (8) engage in research, demonstration, education, training, and outreach that furthers the objectives of this subsection.
- (b) **FORM OF ASSISTANCE.**--Assistance provided to eligible entities under this section may be in the form of grants, contracts, or cooperative agreements.
- (c) **DEFINITIONS.**--As used in this section:
- (1) **ELIGIBLE ENTITY.**--The term "eligible entity" means a State forester or equivalent State official, State, political subdivision of a State, Federal agency, private organization, corporation, or other private person.
 - (2) **STATE.**--The term "State" means each of the 50 States, Guam, American Samoa, the Republic of Palau (until the Compact of Free Association enters into effect), Puerto Rico, the Virgin Islands, and the Commonwealth of the Northern Mariana Islands.

<< 16 USCA § 4503a NOTE >>

<<PUB#PG=1000457,4597>>SEC. 4. HAWAII TROPICAL FOREST RECOVERY TASK FORCE.

- (a) **ESTABLISHMENT.**--There is established the Hawaii Tropical Forest Recovery Task Force (hereafter in this section referred to as the "Task Force") to advise the Secretary of Agriculture with respect to tropical forests and related ecosystems in the State of Hawaii.
- (b) **ACTION PLAN.**--Not later than 1 year after the date of the first meeting of the Task Force, the Task Force shall submit to the Committees, Secretaries, and Governor referred to in subsection (k) an action plan that contains findings and recommendations for rejuvenating Hawaii's tropical forests, including findings and recommendations on--
- (1) methods of restoring the health of declining or degraded tropical forest land;
 - (2) compatible uses within tropical forests, particularly agroforestry and the cultivation of scarce or valuable hardwoods and other forest products in Hawaii's tropical forests;
 - (3) actions to encourage and accelerate the identification and classification of unidentified plant, animal, and microbe species;
 - (4) actions to--
 - (A) promote public awareness of tropical forest preservation;
 - (B) protect threatened and endangered species;
 - (C) improve forest management and planning; and
 - (D) promote public awareness of the harm caused by introduced species;
 - (5) the benefits of fencing or other management activities for the protection of Hawaii's native plants and animals from non-native species, including the identification and priorities for the areas where these activities are appropriate;
 - (6) traditional practices, uses, and needs of native Hawaiians in tropical forests;
 - (7) means of improving the health of tropical forests and related ecosystems in the State of Hawaii through programs administered by the Secretary of Agriculture and the Secretary of the Interior;
 - (8) the capability of existing Federal, State, and private forestry programs for rejuvenating Hawaii's tropical forests; and
 - (9) such other issues relating to tropical forests in Hawaii as the Task Force considers appropriate.
- (c) **COMPOSITION.**--The Task Force shall be composed of 12 members, of whom--
- (1) three members shall be appointed by the Secretary of Agriculture, two of whom shall be representatives of the Forest Service and the Soil Conservation Service, respectively;
 - (2) two members shall be appointed by the Secretary of the Interior as representatives of the United States Fish and Wildlife Service and the National Park Service, respectively;
 - (3) six members shall be appointed by the Governor of Hawaii, of whom--
 - (A) two members shall be private owners of tropical forest lands;

- (B) two members shall be experts in the field of tropical forestry; and
<<PUB#PG=1000457,4598>>(C) two members shall be representatives of Hawaii conservation organizations that have demonstrated expertise in the areas of tropical forest management, habitat preservation, and alien species control or have demonstrated effective advocacy in the areas; and
(4) one member shall be the Administrator of the Department of Land and Natural Resources, State of Hawaii, or the designated representative of the Administrator.
(d) INITIAL APPOINTMENTS.--Appointments under this section to the Task Force shall be made not later than 90 days after the date of enactment of this Act.
(e) CHAIRPERSON.--The Task Force shall select a Chairperson from among its members.
(f) VACANCIES.--A vacancy on the Task Force shall not affect its powers and shall be filled in the same manner as the original appointment.
(g) COMPENSATION.--
(1) IN GENERAL.--A member of the Task Force shall not receive compensation as a result of the performance of services for the Task Force.
(2) TRAVEL EXPENSES.--The members of the Task Force shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performance of services for the Task Force.
(h) MEETINGS.--The Task Force shall meet not later than 180 days after the date of enactment of this Act and shall meet at the call of the Chairperson.
(i) VOTING.--The Task Force shall act and advise by majority vote.
(j) ASSISTANCE.--The Secretary of Agriculture and the Secretary of the Interior shall provide such assistance and support as are necessary to meet the objectives of the Task Force. The assistance shall include making Federal facilities, equipment, tools, and technical assistance available on such terms and conditions as the appropriate Secretary considers necessary.
(k) REPORT.--The action plan required under subsection (b) shall be submitted to--
(1) the Committees on Agriculture and Interior of the House of Representatives;
(2) the Committees on Agriculture, Nutrition, and Forestry and Energy and Natural Resources of the Senate;
(3) the Secretary of Agriculture;
(4) the Secretary of the Interior; and
(5) the Governor of Hawaii.
(l) NONAPPLICABILITY OF CERTAIN PROVISIONS OF LAW.--Sections 7(d), 10(f), and 14 of the Federal Advisory Committee Act (5 U.S.C.App. 2) shall not apply to the Task Force.
<<PUB#PG=1000457,4599>>(m) TERMINATION.--The Task Force and authority to carry out this section shall terminate 180 days after submitting the report required by subsection (b).

<< 16 USCA § 4502a NOTE >>

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as are necessary to carry out sections 3 and 4.

Approved October 29, 1992.

PL 102-574, 1992 S 2679

END OF DOCUMENT

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16 U.S.C.A. § 1643

United States Code Annotated Currentness

Title 16. Conservation

^■ Chapter 36. Forest and Rangeland Renewable Resources Planning (Refs & Annos)^■ Subchapter II. Research

→§ 1643. Implementation of provisions

(a) Establishment and maintenance of research facilities; acquisition, expenditures, etc., for property

In implementing this subchapter, the Secretary is authorized to establish and maintain a system of experiment stations, research laboratories, experimental areas, and other forest and rangeland research facilities. The Secretary is authorized, with donated or appropriated funds, to acquire by lease, donation, purchase, exchange, or otherwise, land or interests in land within the United States needed to implement this subchapter, to make necessary expenditures to examine, appraise, and survey such property, and to do all things incident to perfecting title thereto in the United States.

(b) Acceptance, holding, and administration of gifts, donations, and bequests; use and investment of gifts, proceeds, etc.; funding requirements

In implementing this subchapter, the Secretary is authorized to accept, hold, and administer gifts, donations, and bequests of money, real property, or personal property from any source not otherwise prohibited by law and to use such gifts, donations, and bequests to (1) establish or operate any forest and rangeland research facility within the United States, or (2) perform any forest and rangeland renewable resource research activity authorized by this subchapter. Such gifts, donations, and bequests, or the proceeds thereof, and money appropriated for these purposes shall be deposited in the Treasury in a special fund. At the request of the Secretary, the Secretary of the Treasury may invest or reinvest any money in the fund that in the opinion of the Secretary is not needed for current operations. Such investments shall be in public debt securities with maturities suitable for the needs of the fund and bearing interest at prevailing market rates. There are hereby authorized to be expended from such fund such amounts as may be specified in annual appropriation Acts, which shall remain available until expended.

(c) Cooperation with international, Federal, State, and other governmental agencies, public and private agencies, etc.; funding requirements for contributions from cooperators

In implementing this subchapter, the Secretary may cooperate with international, Federal, State, and other governmental agencies, with public or private agencies, institutions, universities, and organizations, and with businesses and individuals in the United States and in other countries. The Secretary may receive money and other contributions from cooperators under such conditions as the Secretary may prescribe. Any money contributions received under this subsection shall be credited to the applicable appropriation or fund to be used for the same purposes and shall remain available until expended as the Secretary may direct for use in conducting research activities authorized by this subchapter and in making refunds to contributors.

CREDIT(S)

(Pub.L. 95-307, § 4(a)-(c), June 30, 1978, 92 Stat. 354; Pub.L. 101-513, Title VI, § 611(a)(2), formerly § 607(a)(2), Nov. 5, 1990, 104 Stat. 2072, renumbered § 611(a)(2), Pub.L. 102-574, § 2(a)(1), Oct. 29, 1992, 106 Stat. 4593.)

HISTORICAL AND STATUTORY NOTES

Revision Notes and Legislative Reports

1978 Acts. Senate Report No. 95-880, see 1978 U.S. Code Cong. and Adm. News, p. 951.

References in Text

This subchapter, referred to in text, in the original read "this Act", meaning the Forest and Rangeland Renewable Resources Research Act of 1978, which enacted this subchapter, repealed sections 581 to 581i of this title, and enacted provisions set out as a note under section 1641 of this title. For complete classification, see Short Title note set out under section 1600 of this title and Tables.

Amendments

1990 Amendments. Subsec. (c). Pub.L. 101-513 inserted provisions relating to international agencies.

LIBRARY REFERENCES

American Digest System

United States ⇐55.

Key Number System Topic No. 393.

Woods and Forests ⇐5, 8.

Key Number System Topic No. 411.

16 U.S.C.A. § 1643, 16 USCA § 1643

Current through P.L. 108-421 (excluding P.L. 108-357, 108-375, 108-419) approved 11-30-04.

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EXECUTIVE CHAMBERS
HONOLULU

LINDA LINGLE
GOVERNOR

March 6, 2006

The Honorable Mike Johanns
Secretary of Agriculture
U.S. Department of Agriculture
1400 Independence Avenue, S.W.
Washington, DC 20250

Dear Secretary Johanns:

Mike,

As requested in your June 29, 2005, letter, I am pleased to provide you with the attached Report of Findings for site selection for the Hawaii Experimental Tropical Forest.

We conducted an exhaustive series of public meetings engaging State, Federal and County officials, non-governmental organizations and groups and community members in discussions with respect to meeting the goals of Section 606 b of the 1992 Hawaii Tropical Forest Recovery Act. The Report of Findings is quite comprehensive on the approaches taken in the selection process and in determining infrastructure needs.

I support the two sites that have been selected for establishment as the Hawaii Experimental Tropical Forest. Both are on State-managed lands in the Laupahoehoe Natural Area Reserve and the Laupahoehoe Unit of Hilo Forest Reserve and in the ahupua'a (a traditional Hawaiian land designation similar in concept to a watershed) of Pu'u Wa'awa'a.

- a) The Laupahoehoe site was ranked the highest among the wet forest sites and contains magnificent examples of wet and rain forests, streams and riparian areas, and is a habitat to numerous endangered plant and animal species.
- b) The Pu'u Wa'awa'a watershed was ranked the highest among the dry forest sites as it is representative of most major dry and moist forest types in Hawaii, containing examples of intact and highly degraded forests. The tropical dry forest is one of the most endangered forest types in Hawaii and the world.

The Honorable Mike Johanns

Page 2

March 6, 2006

I am confident that these sites will be extremely valuable additions to the nation's experimental forest system. The new discoveries from these sites will be great contributions to science. Until now, Hawaiian tropical forests were the only forests in the United States that was not represented. This has excluded researchers in Hawaii from many opportunities and deprived the citizens of important scientific studies to address their needs.

The State of Hawaii seeks your concurrence on the identification of these two important sites for the Hawaii Experimental Tropical Forest. Should you have any questions, please contact Peter Young, Chairperson of the Department of Land and Natural Resources at (808) 587-0401. I look forward to your reply.

Sincerely,



LINDA LINGLE

Attachment

*It was good seeing you
recently in D.C.*