

## FOREST LAND ENHANCEMENT PROGRAM

### HAWAII STATE PRIORITY PLAN

#### I. INTRODUCTION

The Forest Lands Enhancement Program is authorized under the Cooperative Forestry Assistance Act of 1978 as amended by the Farm Security and Rural Investment Act of 2002, and is established to provide additional financial assistance to State Foresters to encourage the long-term sustainability of non-industrial private forestlands (NIPF).

Hawaii's Forest Land Enhancement Program (FLEP) will provide technical and financial assistance to owners of nonindustrial private forestland, or formerly forested land, who are committed to the restoration, stewardship, enhancement and/or conservation of their forest resources. The information and assistance provided to landowners through the FLEP will enable them to understand and implement management practices to enhance and sustain the timber, watershed, wildlife habitat, forest health, recreational and/or native resource values of their forest properties, while reducing risks associated with wildfire, disease, and the encroachment invasive non-native plant species.

The Department of Land and Natural Resources (Department), Division of Forestry and Wildlife (DLNR-DOFAW) will administer the FLEP under advisement from the Forest Stewardship Advisory Committee (Committee). The Committee is made up of resource professionals, state and federal agency program managers, and private landowners.

FLEP funds will be used primarily to provide cost-share assistance to NIPF owners for eligible management plan and practice completion and for educational programs aimed at enabling landowners to effectively manage their forest properties.

#### II. HAWAII'S FOREST RESOURCES

##### Forest Cover and Composition

The Hawaiian Islands support a wide variety of forest types, ranging from low elevation tropical rain forests to arid scrub forests to temperate subalpine woodlands to cloud forests. These forests still cover roughly 1.7 of Hawaii's 4.1 million acres, or about 41 percent of the state's total land area. Approximately 60 percent of this area is considered to be productive, relatively healthy forest, covered primarily by ohia (*Metrosideros polymorpha*), ohia-koa mix and relatively pure koa (*Acacia koa*).

About 700,000 acres, or roughly 50 percent of Hawaii's relatively productive forest land are considered to be timberland, capable of producing timber and wood products on a sustainable basis. Only about 60,000 of these acres are currently being used for plantation forestry.

Because of historic watershed protection activities, Hawaii's upland forests remain somewhat intact. However, the encroachment of invasive non-native plant species into native forest areas continues at rather alarming rate. Koa (*Acacia koa*) and ohia (*Metrosideros polymorpha*) dominate native forest areas, while mamane (*Sophora chrysophylla*) and naio (*Myoporum sandwicense*) appear more at higher elevations. Many lowland forest areas have been degraded by frequent wildfires and overgrazing, and non-native plants such as koa haole (*Leucaena leucocephala*) and kiawe (*Prosopis pallida*) have come to dominate the landscape.

In general, there are four native and five introduced forest cover types in Hawaii: 1) Ohia/Hapuu (*Metrosideros polymorpha/Cibotium glaucum*); 2) koa/ohia (*Acacia koa/ Metrosideros polymorpha*); 3) mamane/naio (*Sophora chrysophylla/ Myoporum sandwicense*); 4) a mixture of species comprising the native dry land forest; 5) eucalyptus (*Eucalyptus* spp.); 6) mixed introduced hardwoods; 7) guava (*Psidium cattleianum*); 8) kiawe (*Prosopis pallida/Leucaena*); and 9) mixed conifer plantations.

### **Forest Uses and Values**

Hawaii's forests provide a multitude of important services and benefits. Most notably, they enhance and protect watersheds that are critical to all island inhabitants. They also provide an array of wood and non-wood products, unique habitat for rare and endangered species, and a number of recreational opportunities including public hunting.

Although forests still cover almost half of Hawaii's land area, many are in a state of decline due to land uses which prevent natural regeneration and result in the displacement of native forest species by invasive non-native introductions. This situation has historically been exacerbated by county property tax structures that encouraged forest conversion to agricultural land uses such as pasture. In addition, it has been difficult to control Hawaii's ubiquitous feral ungulate populations in ways that are both effective and acceptable to its large, well organized hunting communities. Feral ungulates browse and knock down young tree seedlings or dig up the forest floor, destroying natural regeneration. Complete removal of these animals is not an acceptable alternative because hunting has become an important part of Hawaii's culture and many people depend on its contribution to their subsistence.

Landowner assistance programs, including Forest Stewardship and the FLEP, along with innovative new tax codes in Hawaii and Kauai counties, will encourage owners of pasture land and former sugar plantations to pursue forestry as an alternative, potentially more profitable land use. In addition, federal landowner assistance programs such as the Wildlife Habitat Incentive Program, the Environmental Quality Incentives Program, and the Landowner Incentive Program, currently encourage private landowners, through cost-share assistance, to improve and manage their forest resources. As more and more landowners explore forestry as a viable, environmentally sound land use alternative, opportunities and benefits are becoming more apparent, and a new industry is forming.

Convincing hunters of the need to exclude feral ungulates from large tracts of forested land remains a formidable challenge. However, progress is being made in some areas. On Lanai, the hunting community is supporting a Forest Stewardship Management Plan that includes a perimeter fence to enclose 3,500 acres on Lanaihale, which includes the islands only viable watersheds.

Landowners throughout Hawaii are seeking assistance in growing numbers to restore or re-establish forest resources or values on their properties according to their individual land-use objectives. Some landowners want to re-establish forests on degraded pasture areas for the purposes of timber production and/or wildlife habitat enhancement. Others are attempting to reclaim degraded watersheds or simply to restore the health of native forest areas that have been invaded by non-native plant species. Others intend to combine forestry practices with current land uses such as orchard or agricultural crop production in order to achieve more ecological and economic diversity. Although all private landowners are naturally concerned primarily with their own objectives, landowners who receive assistance through either the Forest Stewardship Program, or the FLEP, must produce significant public, as well as private benefits.

### **III. DIVISION OF FORESTRY AND WILDLIFE PROGRAM**

The DLNR-DOFAW has a legal mandate to manage public lands for social, environmental and economic purposes. It has direct responsibility for approximately 800,000 acres of state trust land that it manages through an integrated system of forest and natural area reserves, plant and wildlife sanctuaries, and wilderness and game management areas. The DLNR-DOFAW accomplishes its mission with a comprehensive five point strategy:

1. Watershed Protection
2. Native Resources Protection
3. Outdoor Recreation Resources
4. Forest Products Resources
5. Public Information & Stewardship

*Hawaii State Priority Plan*

A strong emphasis on the conservation of natural resources is evident both in the historic placement of large areas in Forest Reserves and the current availability of resources to private landowners for forest conservation and management activities. Approximately one half of the forested land in Hawaii belongs to private landowners. The DLNR-DOFAW thus recognizes that private lands and landowner actions are indispensable in meeting Hawaii's overall natural resource management objectives and that cooperation with landowners is far more productive than restrictive zoning and regulatory control.

The DLNR-DOFAW administers a number of cooperative programs that support landowners who are committed to the stewardship of their forest resources. The newest programs and policies promote forestry as an alternative, environmentally sound form of agriculture. All programs encourage and support native forest restoration and sustainable timber plantation establishment and management on former pasture, sugar and pineapple lands, while striving to reduce pressure on remaining, relatively intact, native forests.

The USDA Forest Service will provide the DLNR-DOFAW with financial assistance to administer the Forest Land Enhancement Program, to complement its other Cooperative Forestry Assistance Programs including Forest Stewardship, Conservation Education, Rural Development, Urban and Community Forestry, Forest Health Protection, Resource Conservation and Development and Rural Fire Prevention and Control. The DLNR-DOFAW will collaborate closely with a number of local organizations and state agencies to implement the FLEP, including: the Hawaii Forest Industry Association; the Nature Conservancy of Hawaii, the Big Island, Tri-Island and Garden Island Resource Conservation and Development Councils; and the Society of American Foresters. Other cooperative partnerships have been formed with state and federal government agencies including the University of Hawaii Cooperative Extension Service, The Department of Agriculture, The USDA Natural Resource Conservation Service, the USDA Farm Service Agency and the USDI Fish and Wildlife Service.

#### **IV. THE FOREST STEWARDSHIP ADVISORY COMMITTEE**

The Committee will assist the DLNR-DOFAW in administering the Forest Land Enhancement Program to meet the needs of eligible NIPF owners on all major Hawaiian Islands. The Committee will meet quarterly to review FLEP proposal and plan submittals, and to advise the DLNR-DOFAW on program planning, implementation and policy issues. The Committee has also reviewed and approved this Priority Plan. The 14-Member Committee is currently chaired by the Director of the Hawaii Association of Conservation Districts. The membership includes: representatives of local, state and federal government agencies; consulting foresters; representatives of environmental and conservation groups; forest products industry representatives; and private landowners. A list of currently acting Committee members and terms is attached. (**Attachment 1**)

#### **V. HAWAII'S FOREST LAND ENHANCEMENT PROGRAM (2003 - 2007)**

##### **Goals, Objectives and Strategies**

During the next five years, the DLNR-DOFAW will work with its federal and state partners to identify opportunities for forest land enhancement on private lands throughout Hawaii, under the advisement of the Forest Stewardship Advisory Committee to continuously improve overall program effectiveness.

Program activities will target the following specific objectives:

##### **A. Restore, enhance and conserve the values and benefits of Hawaii's forests:**

- (1) Restore, enhance and conserve native forest species and ecosystems by using native species where possible and discouraging the use of potentially invasive non-native tree and herbaceous plant species.
- (2) Restore, enhance and conserve forested watersheds.

*Hawaii State Priority Plan*

- (3) Restore, enhance and conserve the economically productive value of forests for timber production, traditional non-wood products, and recreation.
  - (4) Restore, enhance and conserve native wildlife habitats.
  - (5) Minimize the risk of wildfires, pests and diseases in project areas.
  - (6) Encourage the planting of native and non-invasive introduced high-quality hardwoods for eventual harvest to reduce the demands placed on naturally occurring native timber species and the need for imported wood products.
  - (7) Encourage private nursery/landscape industry production of native and non-invasive tree seedlings and plant materials and develop assistance strategies where appropriate.
  - (8) Encourage the planting of tree species that meet local demands for fuel, fiber, craftswood and sawtimber.
- B. Promote ethnic, geographical and scale diversity among program participants through public awareness campaigns.**
- C. Continuously tailor the program to meet changing landowner constraints, needs and objectives:**
- (1) Periodically assess appropriateness of program guidelines and requirements in light of comments from landowner participants and branch service foresters.
  - (2) Periodically adjust allowable cost-share (hold-down) rates to reflect changing real costs/prices.
- D. Develop and disseminate practical forest management information that is useful to program participants and all private forest owners and industry people throughout the State:**
- (1) Maintain effective project monitoring methods and record keeping system.
  - (2) Promote and facilitate information exchange between program participants.
  - (3) Maintain and distribute detailed project summaries that include useful forest management information.
  - (4) Maintain Forest Steward web-page that includes “demonstration forest” database of all ongoing private landowner forest projects in the state.
- E. Increase landowner ability to assess forest resources and identify forest management strategies to achieve individual forest management objectives:**
- (1) Liaison between program participants, service foresters and the technical staff of various resource management agencies.
  - (2) Provide information and technical assistance to landowners on continuous basis as requested.
  - (3) Publish Forest Stewardship Program web-page that includes “demonstration forest” database of all ongoing private landowner forest projects in the state.
- F. Improve quality of FLEP Management Plans:**
- (1) Identify all resource management professionals who are qualified and willing to write FLEP Management Plans of acceptable professional standard.
  - (2) Develop, distribute, and periodically update roster of resource professionals identified above.
  - (3) Conduct yearly workshops to enhance management plan-writing skills of resource management professionals and landowners and to clarify current program guidelines and requirements.
  - (4) Distribute Hawaii Forest Stewardship Handbook that contains all management plan writing guidelines and program requirements.
  - (5) Encourage landowners to seek accurate economic and income projections based on supported assumptions if timber production is an objective.
  - (6) Enlist assistance of UH-Manoa Cooperative Extension Specialist and DLNR-DOFAW’s branch service foresters to help landowners and consultants to develop their Forest Stewardship management plans.

### **Program Focus**

The Hawaii Forest Land Enhancement Program will provide financial and technical assistance to owners of non-industrial private forest land throughout the Hawaii. The Program will, however, focus primarily on smaller forest properties and landowners of more limiting financial means. This focus will effectively complement the State Forest Stewardship Program which, due to legal mandates and state procurement requirements, tends to be more suited to owners of larger properties with larger scale management scopes. The Program will always strive to identify and support landowners with specific and achievable objectives that will somehow contribute to Hawaii's economic and resource needs. In all cases, the provision of funding assistance will depend upon the availability of Program funds.

### **Program Administration**

- A. Duties of the Forest Stewardship Advisory Committee.** The forest stewardship advisory committee will:
- (1) Review and recommend for approval to the administrator of DLNR-DOFAW, program proposal and management plans.
  - (2) Establish and periodically review hold-down rates for each program practice.
  - (3) Advise the DLNR-DOFAW on other program policies and guidelines.
  - (4) Identify educational assistance opportunities and activities to further program goals and expand landowner participation. Recommend specific projects for funding.
  - (4) Meet quarterly each year, with each member serving two-year staggered terms.
  - (5) Maintain a record of its activities and actions.
- B. Allocation of program funds.** Depending upon the total allocation to the state, it is anticipated that approximately ten (10) percent of the funds will be used for program administration and twenty (20) percent will be used for educational assistance and technology transfer activities. The remaining funding will be used to provide cost-share assistance to landowners who qualify. Administrative funds will be provided directly to landowners as cost-share reimbursements for management practice completion. Applications from landowners will be taken on a first come first served, continuous basis until all available funds are obligated.
- C. Landowner eligibility.** In order to qualify for FLEP assistance, landowners shall be private individuals, joint owners, private organizations, private associations, or corporations without publicly traded stock.

Landowners are eligible to receive program assistance if private forest is:

- (1) Managed by applying approved practices as defined in this Priority Plan.
- (2) Managed so as not to degrade native vegetation, as defined by chapter 195F-2, Hawaii Revised Statutes, while landowner is implementing approved management plan as described in this Priority Plan.

Landowners are ineligible to receive program assistance, if private property is:

- (1) Leasehold for a period of less than ten years following program approval.
- (2) Managed under existing federal, state, or private financial assistance programs. Private forest lands managed under existing federal, state, or private sector financial and technical assistance programs may be eligible for assistance if the landowner agrees to comply with the requirements of the program and if forest management practices are expanded or enhanced to meet the requirements of this section.

A minimum of five contiguous acres of private property must be dedicated to management.

- D. Eligible Management Practices and Components.** The following management practices shall be eligible for FLEP cost-share assistance. Specific management practice components shall be eligible

according maximum allowable cost-share rates as established and periodically revised by the Forest Stewardship Advisory Committee. All practices shall serve to enhance overall forest health, counter the impact of invasive non-native plant species and reduce the potential for catastrophic wildfire.

- (1) **Forest Stewardship Plan Development** enables landowners to define their forest management objectives and the specific management practices that they will employ to achieve these objectives.
- (2) **Reforestation and afforestation** establishes or reestablishes diverse forest stands through natural regeneration, planting, or direct seeding for conservation purposes and sustained timber production.
- (3) **Forest Stand Improvement** (Forest and Agroforest Improvement) improves forest stand productivity, stand vigor, forest health, and the value and quality of wood products.
- (4) **Agroforestry Implementation** (Windbreak and Hedgerow Establishment, Maintenance and Renovation) establishes, maintains, and renovates windbreaks and hedgerows to reduce soil erosion and conserve soil and water resources.
- (5) **Water Quality Improvement and Watershed Protection** (Soil and Water Protection and Improvement) maintains or improves water quality and soil productivity on forested land and along waterways.
- (6) **Wildlife Habitat Improvement** improves, or establishes permanent upland and/or wetland habitat for specific game, non-game, non-native or native wildlife species.
- (8) **Forest Recreation Enhancement** improves forest areas, including historic sites for recreational or educational uses including hiking, natural resource interpretation, wildlife viewing and hunting.

- E. Landowner enrollment/Preproposal and Management Plan requirements.** Landowners must first submit a project pre-proposal to the Committee for consideration. The proposal shall describe the landowner's forest management objectives, including proposed practices, and the nature of the forest resources to be managed. The Committee will recommend for approval to the administrator, eligible proposals that adequately address current program priorities. Program priorities include, but are not limited to: enhancement and protection of key watershed areas in the public interest; development or adaptation of new forestry and conservation techniques for Hawaii; provision for economic diversification and rural employment; and preservation or restoration of especially valuable natural resources, including native plants, animals and ecosystems.

Landowners whose proposals are recommended by the Committee, will then prepare and submit a multi-resource long-term management plan as described below for consideration to the Committee. The forest stewardship management plan shall include:

- (1) **Cover sheet.** This page lists the landowner's name and address; location of private property described in the plan; the name, address, title, and phone number of the person completing the plan; and the date the plan is completed.
- (2) **Signature page.** This page shall be signed by the landowner, person preparing the plan, and by the administrator certifying that the plan meets the criteria established for the program..
- (3) **Introduction.** This portion of the plan briefly describes private property being dedicated to the program, current and historic land uses, including any commercial uses, and a concise summary of the landowner's specific forest management objectives.
- (4) **Land and resource description.** This portion describes the physical and ecological characteristics of the property being dedicated to the program including existing vegetation, slope, elevation, aspect, access, soil and watershed conditions, fish and wildlife habitats, recreational and aesthetic values, historic or cultural resources, and threatened and endangered species pursuant to chapter 195D, Hawaii Revised Statutes.
- (5) **Recommended practices.** This portion describes, in detail the eligible management practices that will be applied to meet the applicant's management objectives.
- (6) **Practice implementation schedule.** This portion summarizes the annual practices and costs for the duration of the approved project implementation period in a table format. It shall outline the program practices, the program's reimbursable costs, and the landowner's costs on a fifty per cent

cost-share basis.

- (7) **Budget summary.** This portion estimates the annual total costs contributed by the program and landowner for the duration of the approved project implementation period.
- (8) **Project map.** This map must locate all activities on the project property to clearly illustrate what is being done where, in relation to the topography, watercourses and other significant natural features of the site. The map must also illustrate the layout and orientation of any proposed tree plantings such as windbreaks, woodlots or plantations. All maps must be of at least a 1:24000 scale.

**F. Cost-Share Grant Agreement.** Upon approval of the multi-resource management plan, the landowner will enter into a cost-share grant agreement with the DLNR-DOFAW for completion of management practices included in the first year of the landowner's management plan. Subsequent cost-share funding of practices included in the management plan for future years will be awarded under similar agreements at the discretion of the DLNR-DOFAW and depending upon the availability of funding. All FLEP cost-share grant agreements shall include the following:

- (1) The scope of work and time of performance to implement approved practices;
- (2) Respective cost-share obligations the DLNR-DOFAW and the landowner;
- (3) Management plan amendment procedures;
- (4) Project inspection procedures;
- (5) Landowner's approved management plan;
- (6) Stated agreement by landowner to maintain all completed management practices for a minimum of ten years; and
- (6) Other terms and conditions as determined necessary to fulfill program requirements.

**G. Performance Period.** The landowner will have twelve full months to complete the practices included in the approved management plan for the year into which he or she has entered into a cost-share grant agreement with the DLNR-DOFAW as described above. If factors beyond the control of the landowner delay the practice completion, a six month extension will be granted at the discretion of the DLNR-DOFAW. Practices not completed by the end of the term of the grant agreement will be canceled, but may be included in a subsequent year's grant agreement, subject to DLNR-DOFAW approval.

**H. Payment.** Upon confirmation by a DLNR-DOFAW staff forester that one or more of the landowner's management practices have been completed in accordance with the approved management plan, a cost-share payment will be calculated and dispersed to the landowner. The following cost-share payment conditions will also apply:

- (1) Cost-share payments made to landowner shall normally not exceed fifty percent of the cost of approved management practice completion as documented and confirmed by DLNR-DOFAW staff review. In consideration of extraordinary landowner applicant circumstances, the Committee reserves the right to approve a 75% cost-share rate in certain cases.
- (2) Total payments to any one landowner will not exceed \$10,000 for any one year period.
- (3) More than one cost-share payment may be made to the landowner during any one year, depending upon the number and nature of management practices included in the approved management plan.
- (4) The landowner may not use other federal, state, or county government financial program funds for the landowner's fifty percent match contribution.
- (5) Reimbursement payments to the landowner shall be within the hold-down rates established for each management practice component by the DLNR-DOFAW.
- (6) Payments shall not be made for any management practice that is funded through another government financial assistance program.
- (7) Payments shall not be made for any work not identified in approved management plan.
- (8) Payments shall not be made for program practices implemented prior to full execution of corresponding year's cost-share grant agreement.
- (9) Where management practice accomplishments do not meet the terms of the cost-share grant agreement due to factors beyond the landowner's control, the DLNR-DOFAW may approve cost-

share payment under one of the following conditions:

- a. The landowner repeats applications of components previously implemented or establishes additional eligible components under such terms and conditions as the DLNR-DOFAW may require.
- b. The landowner establishes to the satisfaction of the DLNR-DOFAW that a reasonable effort was made to meet the minimum management practice requirements; and the practice, as completed partially meets the objectives of the landowner as described in the forest management plan.

**I. Accomplishment Reporting and Project Monitoring.** Participating landowners shall submit semiannual progress reports every six months to the DLNR-DOFAW for each year in which they enter into a cost-share grant agreement to receive program funding. Reports shall include cost documentation and detail program accomplishments, areas requiring technical advice, and any proposed modifications to the program management plan. Upon the landowner's submittal of progress reports and program practice invoices, the DLNR-DOFAW shall inspect and approve the work completed on the project property after prior notice has been given to the landowner. Upon approval, the DLNR-DOFAW shall reimburse the landowner for no more than fifty percent of the actual cost of the management practices completed according to the landowner's approved Forest Stewardship management plan and current year's cost-share grant agreement.

**J. Recapture of Funds.**

- (1) If any owner or successor takes any action or fails to take action, which results in the destruction or impairment of a prescribed practice for the duration of the practice, or the agreed to term of maintenance of the practice, financial assistance funds shall be withheld or a recapture of all or part of any program payments otherwise due or paid shall be secured based on the extent and effect of destruction and impairment.
- (2) If an landowner sells, conveys, or otherwise loses control of lands, upon which there is a continuing obligation to maintain a management practice, and the new owner does not agree to assume the responsibility for maintaining the practice, the owner who was originally obligated to maintain the practice shall be liable to reimburse the state for all cost-share received for the practice.
- (3) In case of death or incompetency of any landowner, the DLNR-DOFAW shall excuse any management practice maintenance commitment remaining according to any previously approved cost-share grant agreements signed into by the deceased.
- (4) Nothing in this section requiring the withholding or refunding of financial assistance funds shall preclude any penalty or liability otherwise imposed by law.
- (5) Where the owner has received cost-share for any practice that has been unsuccessful, due to factors beyond the owner's control, the DLNR-DOFAW may require that the practice be re-established and shall approve cost-share for such activity.

**K. Reconsideration**

Any landowner who is dissatisfied with any determination made under the program may request reconsideration by the DLNR-DOFAW and, if the matter is still not resolved, by the Regional forester. All requests for reconsideration shall be in writing and shall contain factual information explaining the basis for requesting reconsideration. All decisions upon reconsideration shall be issued in writing.