

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

November 8, 2013

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

Land Board Members:

**SUBJECT: REQUEST APPROVAL OF A FOREST STEWARDSHIP
AGREEMENT WITH SUSAN KAYE LUNDBURG TRUST TO
PARTICIPATE IN THE STATE FOREST STEWARDSHIP
PROGRAM, TMK (3) 4-1-004:045, HAMAKUA DISTRICT, ISLAND
OF HAWAII**

AND

**REQUEST APPROVAL OF DELCARATION OF EXEMPTION FROM
CHAPTER 343, HRS ENVIRONMENTAL COMPLAINECE
REQUIREMENTS FOR THE PROJECT.**

BACKGROUND:

The State of Hawaii Forest Stewardship Program (FSP) provides technical and financial assistance to private landowners and land managers committed to the stewardship, conservation and restoration of important forest resources across the state. These private properties provide a variety of public benefits for the residents of Hawaii, including but not limited to: groundwater production, decreased soil erosion, wildlife habitat, timber production, recreational and educational opportunities, and local jobs. The assistance provided by the FSP enables private landowners to develop and implement long-term multi-resource management plans to conserve, restore and maintain forested areas on their property.

The program was established through Chapter 195 F-6, Hawaii Revised Statutes (HRS). Annual funding is provided by the Conveyance Tax Chapter 247-7, HRS, whereby twenty-five percent of the amount collected from this tax is paid into the Natural Area Reserve Fund. The Department of Land and Natural Resources (DLNR) currently has the authority to use \$500,000 per year to fund approved Forest Stewardship projects in order to provide financial assistance for private landowners to manage, protect, and restore important natural forest resources on forested and formerly forested properties. The Forest Stewardship Program is implemented pursuant to Chapter 195-F, HRS, and

Hawaii Administrative Rules (HAR) Chapter 109. The program provides cost-share reimbursement for the development of long term forest management plans and for the implementation of approved Forest Stewardship management plans.

To participate in FSP, interested landowners and managers follow a sequence of application steps to develop of a long-term Forest Stewardship management plans that are submitted to and reviewed by the Forest Stewardship Advisory Committee (FSAC). Landowners interested in FSP submit an application to the FSAC which recommends the development of a Forest Stewardship Management Plan based on eligibility requirement and to assure the proposed project is in line with the programs' goals of conservation, restoration and/or forest production. Landowners create a forest management plan that is reviewed by Division staff and the FSAC. The committee then recommends the management plan for approval by the Division and Department.

The award of cost-share support for Forest Stewardship management plan implementation follows a similar process to the development of a management plan. Upon approval of a project's Forest Stewardship management plan, the FSAC reviews the implementation schedule and budget summary to ensure that the practice costs are reasonable and follow the program's previously approved cost-share rates. The FSAC recommends cost-share support for project implementation based on the 10-year implementation schedule in the approved Forest Stewardship management plan. After review by the Division, the request is then submitted to the Board of Land and Natural Resources (BLNR) for consideration. Review and approval of the Forest Stewardship project and management plan as well as authorization of cost-share support for the project by the BLNR is required in order for Department of Land and Natural Resources to enter into the Forest Stewardship Agreement with the landowner. The Division has previously worked with the Department of the Attorney General on developing a Forest Stewardship Agreement template (Exhibit A). Following authorization by the BLNR the landowner is required to enter into a Forest Stewardship Agreement that commits them to implementing their approved management plan over the next 10-years and authorizes state cost-share reimbursement for their project.

The Lundburg Forest Stewardship project proposes to restore approximately 41 acres (41.396 acres) from a remnant, degraded native forest to a healthy native forest ecosystem. The larger property, tax map key number (3) 4-1-004:045, 41.396 acres, is designated by Hawaii County as Ag-5a in the Hamakua region of Hawaii County. Historically, the property was part of Land Grant number 6373 to grantee Maria Augusta Bugado in April 1915. Since that time the property has been used for cattle pasture and a single family residence. Since the Susan Kaye Lundburg Trust acquired the property it has been vacant. Ms. Lundburg's goals for the property are to reclaim, restore and steward a native forest for conservation and educational purposes. A component of this plan is to incorporate traditional agroforestry practices that support protection of the native forest and contribute to local food needs in the region. The FSAC approved the Lundburg Forest Stewardship management plan at their meeting on September 24, 2013 and the State Forester/Division Administrator approved the Forest Stewardship Management Plan on October 17, 2013 (Exhibit B).

DISCUSSION:

The Division is requesting approval of a Forest Stewardship Agreement for the implementation of the Lundburg Forest Stewardship management plan and project. Over the course of the 10-year management plan the Susan Kaye Lundburg Trust intends to protect the existing native forest cover and wildlife habitat on the property and increase the number of native species on the property to reflect what was historically found in the natural forest in the area. In addition the Trust plans to increase the native canopy cover on the property, remove alien species, develop a traditional Hawaiian agroforestry system and create opportunities for native forest recreation and education. Management practices associated with these activities include fencing, access improvement, site preparation, invasive species control, tree establishment and ongoing weed control.

Native Forest Restoration: The Susan Kaye Lundburg Trust property is currently vegetated with an open ohia/hapuu/uluhe forest with patches of strawberry guava (*Psidium cattleianum*), ginger (*Hedychium gardnerianum*), and non-native grasses dominating open areas. The property boundaries have encroaching invasive species that threaten the continued forest health on the property. The site has four intermittent streams that cross the property. All of these streams and riparian zones are dominated by invasive species such as strawberry guava, rose apple (*Syzygium jambos*), and guinea grass (*Megathyrsus maximus*). As the first step in the Lundburg Forest Stewardship project the property boundary will be fenced to exclude ungulates from the property. This is necessary to protect future plantings from ungulate damage and to prevent soil erosion and sedimentation in the stream areas.

Following fence installation access to the project areas will be improved through the construction of trails, roads and streams crossing. This access improvement will facilitate the movement of equipment and labor for the rest of the restoration project and will provide the foundation for the increased recreational value and educational opportunities on the property. The Susan Kaye Lundburg Trust plans to create a refuge to restore and protect the native forest and provide for community involvement and environmental education. The plan calls for the property to serve as a demonstration to the community of native forest and wildlife habitat restoration and protection on private land. Currently discussions are ongoing with the Hawaii Forest Institute and the Kohala Center on common objectives and collaboration on program participation. Ms. Lundburg and the Trust plan to allow limited public access for guided hiking on the property.

Joint Forestry Memorandum of Understanding (MOU): The Hawaii Joint Forestry MOU was signed in 2011 between the DLNR, Hawaii Association of Conservation Districts (HACD), Natural Resource Conservation Service (NRCS) and U.S. Forest Service (USFS). One of the objectives of the Joint Forestry MOU is to improve communication between agencies and strengthen cooperation for the delivery of forestry-related conservation assistance to private landowners and land managers. As a part of this MOU the partners (signatory agencies) agreed to use the Forest Stewardship management plans as a way to increase the cooperation and planning for forestry landowners interested in the various assistance programs (including FSP, Hawaii Conservation Reserve Enhancement Program (CREP), Environmental Quality Incentive Program (EQIP), and Wildlife Habitat Incentive Program (WHIP). The template for the Forest Stewardship management plans has

been modified to incorporate resource concerns, threats and needs that are common among forestry assistance programs with the ultimate goal being utilization of Forest Stewardship management plans for various cost-share assistance programs offered by the partners. The Susan Kaye Lundburg Trust Forest Stewardship project is seeking support for implementation of the approved Forest Stewardship management plan from both FSP and Hawaii CREP; a different portion of the management plan will be funded by each program. The FSP portion will include those practices and activities under the management plan that will encompass the entirety of the project or resource concerns that need to be managed at the entire property scale.

Hawaii CREP project: The Susan Kaye Lundburg Trust plans to initially enroll 9.98 acres (Region B and Region C identified the Lundburg Forest Stewardship management plan) in Hawaii CREP. Hawaii CREP is a jointly run private landowner assistance program, with the DLNR, USDA Farm Service Agency and NRCS, focused on restoring degraded or sensitive agriculture lands along streams to native forest. Within the intended CREP project area the Trust will prepare the site for planting by removing invasive species and restoring the site with approximately 150 seedlings per acre. In light gap areas ohia (*Metrosideros polymorpha*) and koa (*Acacia koa*) will be planted to establish a native overstory and in areas with partial shade species such as kopiko (*Psychotria marianiana*), kolea (*Myrsine* spp.), hapuu (*Cybotium splendens*), maile (*Alyxia oliviformis*), pilo (*Coprosma* spp.), hame (*Antidesma platyphyllum*), olapa (*Cheirodendron trigynum*), manono (*Kadua affinis*), mamaki (*Pipturus albidus*), kawau (*Ilex anomala*), and akala (*Rubus hawaiiensis*) will be planted.

The commitment of the private landowner to restore and manage the CREP project for native species and habitat is significant and will work in concert with the Forest Stewardship project to provide a number of public benefits including increased groundwater infiltration, decreased soil erosion, forest health improvements, wildlife habitat and local jobs. As Hawaii CREP requires that all management activities be completed within one to two years of enrolling in the program, the Trust plans enroll Regions D (9.86 acres), Region E (7.34 acres), Region F (2.15 acres), Region G (4.24 acres) and Region H (4.58 acres) into Hawaii CREP over the next ten years, described in the Forest Stewardship management plan.

A total of **\$44,260** in State Forest Stewardship funding is requested to provide cost-share support for the Susan Kaye Lundburg Trust Forest Stewardship Agreement. Ms. Lundburg will be contributing an additional **\$44,260** toward the completion of the project over the ten year period of the management plan. The costs associated with the proposed practices are consistent with the intensity of management required for this type of project. Cost-share funds are provided as reimbursement payments for implementation of approved management practices through the State fiscal year 2024. In addition the Susan Kaye Lundburg Trust has agreed to continue maintenance of the installed Forest Stewardship practices for another 5 years following State contribution, or through State fiscal year 2029

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT

In accordance with Exemption List for the Division of Forestry and Wildlife and the Department of Land and Natural Resources, reviewed and concurred upon by the Environmental Council on June 12, 2008 and July 13, 2011, the proposed activities are exempt from the preparation of an environmental assessment. Specifically, the proposed activities fall under Exemption Class 1. "Operations, repairs or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing"; Exemption Class 3 "Construction and location of single, new, small facilities or structures and the alteration and modification of same and installation of new, small equipment facilities and the alteration and modification of same"; and Exemption Class 4. "Minor alteration in the condition of land, water, or vegetation." This project is anticipated to have minimal or no significant negative impact on the environment.

Refer to attached Exemption Notification labeled Exhibit C.

RECOMMENDATIONS:

That the Board:

1. Approve the Lundburg Forest Stewardship project and Forest Stewardship management plan;
2. Approve cost-share support in the amount of **\$44,260** for the implementation of the Lundburg Forest Stewardship management plan;
3. Authorize the Chairperson to amend, finalize and execute a Forest Stewardship Agreement with the Susan Kaye Lundburg Trust to participate in the State Forest Stewardship Program subject to the following:
 - A. Availability of State Forest Stewardship funds; and
 - B. Review and approval as to form of the Forest Stewardship Agreement by the Department of the Attorney General.
4. Declare that, after considering the potential effects of the proposed dispositions provided by Chapter 343, HRS, and Chapter 11-200, HAR, this project will likely have minimal or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.

Respectfully submitted,



Dr Roger H. Imoto, Administrator
Division of Forestry and Wildlife

Attachment: (Exhibit A, B and C)

APPROVED FOR SUBMITTAL:



William J. Aila, Jr., Chairperson

**STATE OF HAWAII
FOREST STEWARDSHIP AGREEMENT**

This AGREEMENT, made this _____ day of _____, 20____, by and between the BOARD OF LAND AND NATURAL RESOURCES, STATE OF HAWAII (“STATE”), by its Chairperson, whose address is 1151 Punchbowl Street, Honolulu, Hawaii 96813, and _____ (“LANDOWNER”) whose address and federal and state taxpayer identification numbers are as follows: _____

Business address

Federal and state taxpayer identification numbers

RECITALS

WHEREAS, Chapter 195F, Hawaii Revised Statutes (HRS), provides for the establishment of a forest stewardship program to encourage and assist private landowners in managing, protecting, and restoring important watersheds, native vegetation, fish and wildlife habitats, isolated populations of rare and endangered plants, and other forest lands that are not recognized as potential natural area reserves; and

WHEREAS, in accordance with HRS Chapter 195F and Title 13, Subtitle 5, Part 1, Chapter 109 of the Hawaii Administrative Rules (HAR), the LANDOWNER has applied, and qualifies, for participation in the forest stewardship program; and

WHEREAS, the LANDOWNER has submitted a forest stewardship management plan, as set forth in Exhibit A hereto, that the STATE agrees is consistent with the policies, goals, and objectives of the forest stewardship program; and

WHEREAS, the STATE desires to assist the LANDOWNER in implementing the forest stewardship management plan with financial and other assistance; and

WHEREAS, money is available to fund this agreement pursuant to: Act 195, SLH 1993, Hawaii Revised Statutes, Section 247-7.

NOW, THEREFORE, in consideration of the promises contained in this AGREEMENT, the STATE and the LANDOWNER agree as follows:

A. SCOPE OF SERVICES

The LANDOWNER hereby agrees to implement the forest stewardship management plan set forth in Exhibit A and the project described in the “Scope of Services” set forth in Attachment S1 in proper and satisfactory manner as determined by the STATE, both of which are hereby made a part of this AGREEMENT. The STATE hereby agrees to assist the LANDOWNER in implementing the forest stewardship management plan, all in accordance with the terms and conditions set forth in Attachments S1, S2, S3, S4, S5, and S6, attached hereto.

B. COMPENSATION

The LANDOWNER shall be compensated for performance of the project under this AGREEMENT according to the “Compensation and Payment Schedule,” set forth in Attachment S2, which is hereby made a part of this Agreement.

C. TIME OF PERFORMANCE

The performance required of the LANDOWNER under this AGREEMENT shall be completed in accordance with the “Time of Performance” set forth in Attachment S3, which is hereby made a part of this AGREEMENT.

D. CERTIFICATE OF EXEMPTION FROM CIVIL SERVICE

The “State of Hawaii Certificate of Exemption from Civil Service,” set forth in Attachment S4, is hereby made a part of the AGREEMENT.

E. OTHER TERMS AND CONDITIONS

The “State of Hawaii Special and General Conditions for Forest Stewardship Program Agreements,” set forth in Attachment S5, and the General Conditions attached hereto, are hereby made a part of this AGREEMENT. For the purposes of this AGREEMENT the term “CONTRACTOR” in the “General Conditions” shall mean the LANDOWNER.

F. STANDARDS OF CONDUCT DECLARATION

The "Standards of Conduct Declaration" by LANDOWNER, set forth in Attachment S6, is hereby made a part of this AGREEMENT. For the purposes of this AGREEMENT the term "CONTRACTOR" in the "Standards of Conduct Declaration" shall mean the LANDOWNER.

Exhibit A

IN WITNESS WHEREOF, the parties execute this AGREEMENT by their signatures to be effective as of the date first above written.

STATE

By _____
Chairperson of the Board of Land and Natural Resources

Print Name

Date _____

LANDOWNER

By _____

Print Name

Date _____

Approved by the Board of
Land and Natural Resources on

_____.

APPROVED AS TO FORM:

Deputy Attorney General

LANDOWNER'S ACKNOWLEDGMENT

STATE OF HAWAII)
) SS.
COUNTY OF _____)

On this _____ day of _____, 20____, before me personally appeared _____, to me personally known, who being by me duly sworn, did say the he/she is the _____, the LANDOWNER named in the foregoing instrument, and the he/she is authorized to sign said instrument on behalf of the LANDOWNER, and acknowledges that he/she executed said instrument as the free act and deed of the LANDOWNER.

Notary Public, State of Hawaii

My Commission Expires: _____

Date of the Notarized Document: _____

Number of Pages: _____

Identification or Description of the Document being Notarized: _____

Printed Name of Notary: _____ Circuit

Notary's Signature and Notary's Official Stamp or Seal Date



STATE OF HAWAII
CONTRACTOR'S
STANDARDS OF CONDUCT DECLARATION

For the purposes of this declaration:

"Agency" means and includes the State, the legislature and its committees, all executive departments, boards, commissions, committees, bureaus, offices; and all independent commissions and other establishments of the state government but excluding the courts.

"Controlling interest" means an interest in a business or other undertaking which is sufficient in fact to control, whether the interest is greater or less than fifty per cent (50%).

"Employee" means any nominated, appointed, or elected officer or employee of the State, including members of boards, commissions, and committees, and employees under contract to the State or of the constitutional convention, but excluding legislators, delegates to the constitutional convention, justices, and judges. (Section 84-3, HRS).

On behalf of _____, CONTRACTOR, the undersigned does declare as follows:

1. CONTRACTOR is* is not a legislator or an employee or a business in which a legislator or an employee has a controlling interest. (Section 84-15(a), HRS).
2. CONTRACTOR has not been represented or assisted personally in the matter by an individual who has been an employee of the agency awarding this Contract within the preceding two years and who participated while so employed in the matter with which the Contract is directly concerned. (Section 84-15(b), HRS).
3. CONTRACTOR has not been assisted or represented by a legislator or employee for a fee or other compensation to obtain this Contract and will not be assisted or represented by a legislator or employee for a fee or other compensation in the performance of this Contract, if the legislator or employee had been involved in the development or award of the Contract. (Section 84-14 (d), HRS).
4. CONTRACTOR has not been represented on matters related to this Contract, for a fee or other consideration by an individual who, within the past twelve (12) months, has been an agency employee, or in the case of the Legislature, a legislator, and participated while an employee or legislator on matters related to this Contract. (Sections 84-18(b) and (c), HRS).

CONTRACTOR understands that the Contract to which this document is attached is voidable on behalf of the STATE if this Contract was entered into in violation of any provision of chapter 84, Hawaii Revised Statutes, commonly referred to as the Code of Ethics, including the provisions which are the source of the declarations above. Additionally, any fee, compensation, gift, or profit received by any person as a result of a violation of the Code of Ethics may be recovered by the STATE.

* **Reminder to Agency:** If the "is" block is checked and if the Contract involves goods or services of a value in excess of \$10,000, the Contract must be awarded by competitive sealed bidding under section 103D-302, HRS, or a competitive sealed proposal under section 103D-303, HRS. Otherwise, the Agency may not award the Contract unless it posts a notice of its intent to award it and files a copy of the notice with the State Ethics Commission. (Section 84-15(a), HRS).

CONTRACTOR

By _____
(Signature)

Print Name _____

Print Title _____

Name of Contractor _____

Date _____



STATE OF HAWAII
SCOPE OF SERVICES

SECTION 1 - SCOPE OF WORK

- 1.1 MANAGEMENT AREA - The project area to be managed is the _____ Forest Stewardship project area; TMK NUMBER(S) _____ as designated on maps found in _____ to this AGREEMENT.
- 1.2 THE PRIMARY OBJECTIVES - The STATE and LANDOWNER shall direct their efforts under this AGREEMENT to do the following: fund the management of and manage the natural resources of the _____ Forest Stewardship project area (“Forest Stewardship project area”) in accordance with the MANAGEMENT PLAN, attached as _____ to this AGREEMENT, and all approved amendments thereto, with the intention of _____ in the _____ community.
- 1.3 SCOPE OF WORK - The LANDOWNER shall perform the following technical and professional services:
- (a) Management plan. The LANDOWNER shall carry out the management activities outlined in the approved MANAGEMENT PLAN, attached as _____ to this AGREEMENT.
 - (b) Consultation. The LANDOWNER shall be available for consultation regarding progress, upon request by the STATE.
- 1.4 AUTHORITY TO CARRY OUT MANAGEMENT PLAN - The LANDOWNER hereby represents that it has authority to carry out the MANAGEMENT PLAN and that it is the landowner of “Forest Stewardship project area” as defined in Section 195F-2, Hawaii Revised Statutes, as amended.
- 1.5 NO INCONSISTENT ACTIVITIES - The LANDOWNER shall not take any action on the “Forest Stewardship project area”, which will undermine or conflict with the approved MANAGEMENT PLAN.

II. SECTION 2 - CONTROL AND PROGRESS OF THE WORK



STATE OF HAWAII
SCOPE OF SERVICES

2.1 **REPORTS** - The LANDOWNER shall submit to the STATE, reports showing work accomplished at the following times:

- (a) **Progress Reports.** A progress report shall be due on December 31 of each year under this AGREEMENT for which funding has been approved. This report shall include a description of the approved MANAGEMENT PLAN accomplishments and activities, areas needing technical advice, an accounting of expenditures with documentation, and proposed modifications to the current year's management activities. This report shall be submitted to the STATE within 30 days following the due date. If the LANDOWNER would like more than 2 reimbursements per year, a progress report shall accompany each reimbursement request and the "Forest Stewardship project area" shall be made available for a site visit by Department of Land and Natural Resources personnel.
- (b) **Annual Report.** An annual report shall be due on or before June 30 of each year under this AGREEMENT for which funding has been approved. In the event the contract is executed less than 6 months prior to June 30, then no annual report is due on June 30 of that year. This report shall include a description of MANAGEMENT PLAN accomplishments and activities, areas needing technical advice, and proposed modifications to the next year's approved management objectives, projects and budget. This report shall also include a detailed accounting of expenditures for the preceding 12-month period to provide the basis for the annual reconciliation of the STATE's and the LANDOWNER's respective shares of funding as determined pursuant to Attachment S2, Section 1.1. This report shall be submitted to the STATE within 60 days of due date. This report may also request, subject to approval by the STATE, changes to the management plan, for either or both the practice implementation schedule and/or the budget/payment schedule in order to best consolidate and rectify the past year's outcomes or lack thereof.



STATE OF HAWAII
SCOPE OF SERVICES

- 2.2 DELEGATION OF AUTHORITY - As used herein and throughout this AGREEMENT, unless the context clearly indicates otherwise, the STATE shall include the State of Hawaii Department of Land and Natural Resources and its authorized employees, agents and representatives.



STATE OF HAWAII

COMPENSATION AND PAYMENT SCHEDULE

SECTION 1 – PAYMENT

1.1 SCOPE OF PAYMENT -

- (a) STATE's Payment. In full satisfaction of the STATE's funding share of the approved MANAGEMENT PLAN, which is contingent upon satisfactory completion by the LANDOWNER of the management activities described in the approved MANAGEMENT PLAN, attached as Exhibit A to this AGREEMENT, the STATE agrees to pay the LANDOWNER a total sum not to exceed ____
____ 00/100 Dollars (\$ _____) according to the schedule outlined below that includes fiscal year 20XX through 20XX for completion of the management activities described in the approved MANAGEMENT PLAN. Payments shall be made by the STATE to the LANDOWNER as partial annual reimbursements for actual expenditures made by the LANDOWNER in completing the management activities described in the approved MANAGEMENT PLAN only after the corresponding progress or annual report has been reviewed by the STATE and all reported management activity accomplishments have been verified following an inspection of the “Forest Stewardship project area” by the STATE. Actual expenditures may include but are not limited to in-kind services such as heavy equipment operation and sources of labor. All funds to be paid by the STATE to the LANDOWNER shall be encumbered on an annual basis for the forthcoming fiscal year provided that the STATE has approved the continuation of management activities outlined in _____ of this AGREEMENT for the forthcoming fiscal year.

If in any fiscal year the allocated annual funds are not exhausted due to the LANDOWNER not completing all management activities described in the MANAGEMENT PLAN for that year, the LANDOWNER may request that these funds be incorporated in the following year's encumbrances to complete the management activities which were not completed. If there are sufficient funds available to accommodate LANDOWNER's request and the STATE approves the



STATE OF HAWAII

COMPENSATION AND PAYMENT SCHEDULE

request, this change will be incorporated by written amendment to the AGREEMENT.

If in any fiscal year the STATE does not appropriate, and/or the STATE does not approve the expenditure of, funds sufficient to meet the STATE's funding share of the approved MANAGEMENT PLAN, this AGREEMENT shall automatically terminate without penalty at the end of the last fiscal year for which any funds have been appropriated and approved, subject to Attachment S5, Section 4.1, regarding partial State funding.

- (b) LANDOWNER's Share. In full satisfaction of the LANDOWNER's funding share of the approved MANAGEMENT PLAN, the LANDOWNER agrees to fully complete the management activities described in the approved MANAGEMENT PLAN, and to initially assume all corresponding actual annual expenditures in expectation of the STATE's partial reimbursement for satisfactory completion of these management activities. Expenditures for implementation of the approved MANAGEMENT PLAN which are less than the amounts allocated in the approved budget may be made by the LANDOWNER in its discretion so long as the quality of materials and work as called for in the approved MANAGEMENT PLAN are not adversely affected.



STATE OF HAWAII
COMPENSATION AND PAYMENT SCHEDULE

PATRICK & SHEILA CONANT FOREST STEWARDSHIP
PROJECT BUDGET/PAYMENT SCHEDULE:

YEAR	Total Budget	Land Owner share	State Share
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Total			

1.2 PAYMENT SCHEDULE –

- (a) Progress Payment. Within 30 days following receipt of the progress report as provided in Attachment S1, Section 2.1(a) for each year for which the STATE has agreed to pay the LANDOWNER as outlined in the schedule above and for which funding has been appropriated, the STATE shall pay to the LANDOWNER a portion of the STATE’s funding share of the approved MANAGEMENT PLAN as a partial reimbursement of actual expenditures made to complete approved management activities. This payment shall be subject to the LANDOWNER’s satisfactory completion of the corresponding approved management activities described in the approved MANAGEMENT PLAN, attached as Exhibit A to this AGREEMENT, and calculated on the basis of actual expenditures made by the LANDOWNER. This payment shall also be subject to the STATE’s approval of such progress report.

- (b) Annual/Final Payment. Within 30 days of receipt of the annual report as provided in Attachment S1, Section 2.1(b), the STATE shall pay to the LANDOWNER the balance of the STATE’s approved annual funding share. This payment shall be subject to the LANDOWNER’s satisfactory completion of the corresponding



STATE OF HAWAII

COMPENSATION AND PAYMENT SCHEDULE

annual management activities described in the approved MANAGEMENT PLAN, attached as Exhibit A to this AGREEMENT, and calculated on the basis of actual expenditures made by the LANDOWNER.

- (1) Annual or Final Acceptance and Payment - Annual or final acceptance means a written notice from the STATE to the LANDOWNER advising the LANDOWNER of the satisfactory fulfillment of the AGREEMENT's annual or final requirements.

- 1.3 UNAUTHORIZED WORK - The LANDOWNER shall not receive matching STATE funds for management activities not designated in the approved MANAGEMENT PLAN. All work completed by the LANDOWNER prior to receipt of a fully-executed copy of this AGREEMENT, and prior to STATE approval of funding for any subsequent years and prior to STATE approval of any subsequent amendments to the approved MANAGEMENT PLAN, shall be at the LANDOWNER's own volition and risk, including work performed during the period of any deliberations by the STATE in anticipation of approval; provided, however, that if funding and/or amendments applicable to such work are subsequently approved, the LANDOWNER may be paid for such work even if performed prior to such approval.

SECTION 2 - FISCAL RECORDS MAINTENANCE, RETENTION, AND ACCESS

- 2.1 The LANDOWNER shall maintain, in accordance with generally acceptable accounting practices, fiscal records and supporting documents and related files, papers and reports that adequately reflect all direct and indirect expenditures and management and fiscal practices materially related to the LANDOWNER's performance of services paid for by State funds under this AGREEMENT.
 - (a) The STATE, the Comptroller of the State of Hawaii, and any of their authorized representatives, the committees (and their staff) of the Legislature of the State of Hawaii, and the Legislative Auditor of the State of Hawaii shall have the right of access to any book, document, paper, file, or other records of the LANDOWNER



STATE OF HAWAII

COMPENSATION AND PAYMENT SCHEDULE

that is materially related to the performance by the LANDOWNER of services funded by the STATE under this AGREEMENT, in accordance with generally accepted audit procedures, for the purposes of monitoring and evaluating the LANDOWNER's performance of services and the LANDOWNER's management program and fiscal practices to assure the proper and effective expenditure of funds under this AGREEMENT; provided, however, that no party conducting any such audit or examination shall copy, distribute, or retain any of such information or records, with the understanding that it is not the intention that the LANDOWNER's financial and other records and information be made public.

- (b) The right of access shall not be limited to the required retention period but shall last as long as the records are retained. The LANDOWNER shall retain all records related to the LANDOWNER's performance of services funded under this AGREEMENT for at least 3 years after the date of submission of the LANDOWNER's annual reports for any designated period and payment for such expenditures by the STATE in accordance with its matching share, except that if any litigation, claim, negotiation, investigation, audit, or other action involving the records has been started before the expiration of the 3-year period, the LANDOWNER shall retain the records until completion of the action and resolution of all issues that arise from it or until the end of the regular 3-year retention period, whichever occurs later.



STATE OF HAWAII
TIME OF PERFORMANCE

SECTION 1 - EXECUTION OF AGREEMENT

- 1.1 EXECUTION OF AGREEMENT - This AGREEMENT shall be promptly executed by the STATE and the LANDOWNER upon approval by each party.

- 1.2 CERTIFICATION AND APPROVAL OF AGREEMENT - This AGREEMENT shall not be considered binding upon the STATE, unless the availability of the funds therefore has been duly certified as prescribed by Section 103-39, Hawaii Revised Statutes, as amended. Further, this AGREEMENT shall not be considered to be fully executed unless the Office of the Attorney General of the State of Hawaii has approved this AGREEMENT as to form.

SECTION 2 - TERM

- 2.1 INITIAL TERM - The initial term will be for a minimum of Thirteen (13) years following the completion of any and all management practices for which the LANDOWNER has received cost-share assistance. Accordingly, this AGREEMENT shall commence on the date of full execution hereof and shall be in effect until _____; subject, however to earlier termination as provided in this AGREEMENT.

- 2.2 STATE FUNDING CONDITION - This AGREEMENT is subject to continued funding of the STATE's share of the approved management budget as outlined in Attachment S2, Section 1.1. Annual funding is provided by the Conveyance Tax pursuant to Act 195, SLH 1993, Section 247-7, Hawaii Revised Statutes, whereby twenty-five percent of the amount collected from this tax shall be paid into the natural area reserve fund from which funds are dispersed to the natural area partnership and forest stewardship programs, and by way of Act 269, SLH 2000 to projects undertaken in accordance with watershed management plans. Payments are then made through the forest stewardship program to reimburse landowners for implementing approved stewardship management practices. Any balance remaining in this fund at the end of any fiscal year shall be carried forward



STATE OF HAWAII
TIME OF PERFORMANCE

into the fund for the next fiscal year. If in any fiscal year the STATE does not appropriate, and/or the STATE does not approve the expenditure of, funds sufficient to meet its share of the approved management budget, this AGREEMENT shall automatically terminate without penalty at the end of the last fiscal year for which any funds have been appropriated and approved, subject to Attachment S5, Section 4.1, regarding partial State funding.



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**CERTIFICATE OF EXEMPTION
FROM CIVIL SERVICE**

1. By Heads of Departments Delegated by the Director of the Department of Human Resources Development (“DHRD”).*

Pursuant to a delegation of the authority by the Director of DHRD, I certify that the services to be provided under this Contract, and the person(s) providing the services under this Contract are exempt from the civil service, pursuant to § 76-16, Hawaii Revised Statutes (HRS).

(Signature)

(Date)

(Print Name)

(Print Title)

* This part of the form may be used by all department heads and the heads of attached agencies to whom the Director of DHRD expressly has delegated authority to certify § 76-16, HRS, civil service exemptions. The specific paragraph(s) of § 76-16, HRS, upon which an exemption is based should be noted in the contract file. If an exemption is based on § 76-16(b)(15), the contract must meet the following conditions:

- (1) It involves the delivery of completed work or product by or during a specific time;
- (2) There is no employee-employer relationship; and
- (3) The authorized funding for the service is from other than the "A" or personal services cost element.

NOTE: Not all attached agencies have received a delegation under § 76-16(b)(15). If in doubt, attached agencies should check with the Director of DHRD prior to certifying an exemption under § 76-16(b)(15). Authority to certify exemptions under §§76-16(b)(2), and 76-16(b)(12), HRS, has not been delegated; only the Director of DHRD may certify §§ 76-16(b)(2), and 76-16(b)(12) exemptions.

2. By the Director of DHRD, State of Hawaii.

I certify that the services to be provided under this Contract, and the person(s) providing the services under this Contract are exempt from the civil service, pursuant to §76-16, HRS.

(Signature)

(Date)

(Print Name)

(Print Title, if designee of the Director of DHRD)



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SECTION 1 – INSPECTIONS

- 1.1 The STATE shall have the right to make inspections of the “Forest Stewardship project area” after prior notice to the LANDOWNER. In addition, the STATE shall be obligated to inspect the work on the “Forest Stewardship project area” not less frequently than once per year under this AGREEMENT, and more frequently in the case of a LANDOWNER default as provided in Section 4.1(d) below or when the LANDOWNER makes more than 2 reimbursement requests per year as provided in Attachment S1, Section 2.1. The STATE shall notify the LANDOWNER within a reasonable time thereafter of any perceived defaults in the LANDOWNER's implementation of the approved MANAGEMENT PLAN. The LANDOWNER hereby represents that it has authority to allow access to the “Forest Stewardship project area” by the STATE in connection with this AGREEMENT, conditional upon receipt of a liability waiver, acceptable to the LANDOWNER for all state personnel visiting the “Forest Stewardship project area”.

SECTION 2 - AMENDMENTS

- 2.1 The LANDOWNER may propose for approval by the STATE, and the STATE may approve, minor alterations to the approved MANAGEMENT PLAN, which will not have a material adverse impact on the achievement of the overall management objectives of the approved MANAGEMENT PLAN. This includes minor changes to the practice implementation schedule and/or changes in the budget/payments schedule so long as the total management activities do not subtract from or exceed the total scope of the approved MANAGEMENT PLAN and the budget/payments schedule does not exceed the total annual budget allocations up to and including the budget request for that year, and so long as the STATE has sufficient funding available to accommodate such a request.
- 2.1 The LANDOWNER may propose for approval by the STATE, and the STATE may approve, significant changes to the approved MANAGEMENT PLAN or budget to adapt to current conditions. Significant amendments to the approved MANAGEMENT PLAN shall include an amended budget, which will increase the overall STATE's funding share



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above the total amount set forth in the approved budget/payment schedule. The STATE shall make the proposed amendments available for public review prior to final approval.

- 2.3 The proposed amendments may include, without limitation, re-establishment of management priorities, increase or reduction of the specified work, increases to the budget/payments schedule, or time for performance of specified tasks, all as determined considering the natural conditions of the “Forest Stewardship project area,” existing management priorities, threats, potential for decline of the natural resource during any period under consideration, availability of specialized labor or technical expertise, permitting requirements and time needed to obtain permits, and other material factors.
- 2.4 Any proposed expenditures which will increase the overall STATE's funding share above the amount set forth in the approved budget of the approved MANAGEMENT PLAN, which are proposed either as a result of additional costs required to implement the approved MANAGEMENT PLAN or as a result of amendments to the approved MANAGEMENT PLAN, must be mutually agreed upon in advance by and between the STATE and the LANDOWNER. If so agreed upon the approval of these expenditures shall be incorporated in written amendment to this AGREEMENT.
- 2.5 Economic Hardship. Notwithstanding other provisions of this AGREEMENT, in the event that the LANDOWNER determines in good faith that it is financially unable without undue economic hardship to fulfill its funding share as provided in Attachment S2, Section 1.1(b), or to carry out fully the management activities described in the approved MANAGEMENT PLAN, attached as Exhibit A to this AGREEMENT, within the budget and time period established thereby, the LANDOWNER may apply to the STATE to renegotiate the terms thereof.
 - (a) Negotiation of Amendment. In such event, the STATE and the LANDOWNER shall meet and negotiate in good faith an acceptable amendment to the approved MANAGEMENT PLAN that seeks to accomplish the significant objectives of the approved MANAGEMENT PLAN reasonably within the LANDOWNER's



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financial means. The amendment may include, without limitation, re-establishment of management priorities and reduction and/or deferral of the specified work, involving significant costs, and/or extension of time for performance of specified tasks, all as determined considering the natural conditions of the “Forest Stewardship project area,” existing management priorities, threats, potential for decline of the natural resource during any period under consideration, other potential sources of funding, and other material factors.

- (b) Disputes. If the STATE and the LANDOWNER are unable to agree reasonably and in good faith on a suitable amendment to the approved MANAGEMENT PLAN, the parties shall refer any such disputes to arbitration as provided in the General Conditions, Section 11.
- (c) No Termination for Economic Hardship. This provision shall not be construed to allow the LANDOWNER or the STATE to terminate this AGREEMENT for economic hardship; it is rather intended to provide a mechanism for reasonable revisions to the approved MANAGEMENT PLAN for economic hardship.

SECTION 3 - PAYBACK OF STATE FUNDS

- 3.1 In the event that the LANDOWNER sells, conveys, or otherwise transfers LANDOWNER’s right, title, or interest in the “Forest Stewardship project area,” or any portion thereof, during the initial term of this AGREEMENT as defined in Attachment S3, Section 2.1, the LANDOWNER shall within 90 days of the sale, conveyance or transfer of title or interest in the “Forest Stewardship project area,” pay back to the STATE a portion of the amount paid by the STATE to the LANDOWNER pursuant to this AGREEMENT. The amount to be paid back to the STATE shall be that fraction of the total matching funds received by the LANDOWNER under this AGREEMENT that is equal to the fraction of the “Forest Stewardship project area” that is sold, conveyed or otherwise transferred by the LANDOWNER.



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3.2 In the event that the LANDOWNER sells, conveys, or otherwise transfers LANDOWNER's right, title, or interest in the "Forest Stewardship project area," or any portion thereof, during the initial term of this AGREEMENT as defined in Attachment S3, Section 2.1, the LANDOWNER will not be required to reimburse the STATE as set forth in Attachment S5, Section 3.1 for the cost-share assistance received if the person(s) who acquire the property contractually agree to assume full responsibility for this AGREEMENT for the initial term of the AGREEMENT, including but not limited to management and financial responsibilities and penalties contained herein. See Agenda Item _____, as amend, approved at the Board of Land and Natural Resources meeting. Nothing in this provision shall relieve the LANDOWNER of its obligations under this AGREEMENT.

SECTION 4 - TERMINATION; DEFAULT; PENALTY PAYBACK

4.1 TERMINATION OF THE AGREEMENT - It is mutually agreed that this AGREEMENT may be terminated for any one of the following reasons on the following terms:

(a) No State Funding. This AGREEMENT shall be terminated if the STATE does not approve funding for the forthcoming fiscal year of the approved MANAGEMENT PLAN. In such event, this AGREEMENT shall automatically terminate without penalty at the end of the funding period then in effect.

(b) Partial State Funding. This AGREEMENT may be terminated by the LANDOWNER if the STATE approves only a portion of its share of funding for the forthcoming fiscal year as outlined in the budget provided in the approved MANAGEMENT PLAN.

(1) In such event, the LANDOWNER shall elect, by written notice to the STATE, either:

(A) to terminate this AGREEMENT without penalty at the end of the funding period then in effect; or



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- (B) to revise the approved MANAGEMENT PLAN and budget in the LANDOWNER's reasonable discretion to accomplish significant management goals which can reasonably be funded with the amount of STATE funding actually approved.
- (c) Transfer to Government Agency. This AGREEMENT may be terminated without penalty if the “Forest Stewardship project area” is transferred or sold to a government agency committed to forest stewardship and that possesses the technical and professional skills to manage the “Forest Stewardship project area” natural resources.
- (d) LANDOWNER Default. This AGREEMENT may be terminated by the STATE upon substantial evidence that progress being made by the LANDOWNER in carrying out the approved MANAGEMENT PLAN is inadequate, incorrect, or insufficient to substantially complete on a timely basis the work called for in the approved MANAGEMENT PLAN subject to the lack of performance notification provisions set forth below.
- (1) Penalties Apply. In the event of termination for default in accordance with these provisions, the penalty payback provisions set forth below shall apply.
- (2) Lack of Performance Notification. In such event, the STATE may terminate for default, provided the STATE adheres to the following procedures for notice and opportunity to cure prior to termination:
- (A) The STATE shall first notify the LANDOWNER in writing of any perceived inadequacy, incorrectness or insufficient progress. The STATE and the LANDOWNER shall meet within two weeks



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thereafter, and every three months thereafter until one year following the date of the notice, and discuss in good faith the perceived failure and the reasons therefore and any subsequent progress or lack thereof. If the reason for the failure is a good faith inability of the LANDOWNER to carry out the terms of the MANAGEMENT PLAN for reasons beyond the LANDOWNER's reasonable control, including without limitation economic hardship as described in Attachment S5, Section 2.5 above, the STATE and the LANDOWNER shall specifically consider the need to amend the approved MANAGEMENT PLAN, including extending the time to carry out the work called for in the approved MANAGEMENT PLAN and/or revising the budget established in the approved MANAGEMENT PLAN, subject to the provisions of Attachment S1, Section 1.5 and Attachment S5, Section 2 of this AGREEMENT regarding amendments to this AGREEMENT and the approved MANAGEMENT PLAN. Following the date of the notice, the STATE shall be obligated to inspect the "Forest Stewardship project area" once each quarter after notifying the LANDOWNER, to determine the updated status of the perceived default.

- (B) Following the expiration of the one year period following notice of default given by the STATE to the LANDOWNER and failure of the LANDOWNER to remedy the default, or to make significant progress to remedy the default if by its nature the default cannot reasonably be remedied within one year, the STATE may elect to notify the LANDOWNER of its intention to terminate this AGREEMENT for default. Such notice shall be in writing, shall state that the STATE will terminate the AGREEMENT for default on a date not less than 3 months thereafter if the LANDOWNER



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does not remedy the default, or to make significant progress to remedy the default if by its nature the default cannot reasonably be remedied within 3 months, and shall specify that penalties as provided under this AGREEMENT shall apply.

- (C) If the LANDOWNER fails to remedy the default within 3 months thereafter, or to make significant progress to remedy the default if by its nature the default cannot reasonably be remedied within 3 months, the STATE may terminate this AGREEMENT effective immediately for default by written notice thereof to the LANDOWNER.
 - (D) The STATE shall be deemed to have complied with these provisions if it attempts in good faith to meet with the LANDOWNER and to inspect the “Forest Stewardship project area” as provided above, whether or not the LANDOWNER cooperates in such procedures.
- (3) All disputes regarding default and termination under this AGREEMENT, which cannot be resolved by the parties, shall be referred to arbitration as provided in the General Conditions, Section 11.
 - (4) If the LANDOWNER has not fully performed its work under this AGREEMENT on expiration or termination of this AGREEMENT, the STATE may withhold the final payment to the LANDOWNER pending full completion of the LANDOWNER's work. This withheld payment shall be paid by the STATE to the LANDOWNER on final acceptance and tax clearance as provided in Attachment S2, Section 1.2 (b) and the General Conditions, Section 17.



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4.2 PENALTY PAYBACK -

(a) Payback and Penalties. In the event that the LANDOWNER defaults on this AGREEMENT as provided in Attachment S5, Section 4.1(d) above and the STATE has followed the Lack of Performance Notification procedures as outlined in Attachment S5, Section 4.1(d)(2) above, the LANDOWNER shall promptly pay to the STATE the following payback and penalty monies:

(1) Refund of State Funds - 3 Years. All funds paid from the initial date of this AGREEMENT by the STATE to the LANDOWNER in the previous 3 years (or such portion thereof as STATE shall have funded if this AGREEMENT shall have been in effect for less than 3 years) shall be returned to the STATE. In the event that this AGREEMENT shall have been in effect for more than 3 years, the LANDOWNER shall be liable to pay back State funds for the immediately preceding 3 years. In addition, the LANDOWNER shall pay to the STATE a penalty of two percent of the total of funds that are returned to the STATE.

(b) No Other Party Liable. Only the LANDOWNER receiving State funding under the FOREST STEWARDSHIP PROGRAM shall be liable to the STATE under this AGREEMENT for the payback and penalty.

(c) Disputes. The LANDOWNER shall have the right to submit any disputes to the arbitration procedure as outlined in the General Conditions, Section 11 if it feels that the imposition of payback, and/or additional penalties is unwarranted.

4.3 VIOLATIONS OF AGREEMENT - It is expressly understood and agreed that violations which are not caused by the LANDOWNER shall not constitute or give rise to a default by the LANDOWNER under this AGREEMENT and no penalty provisions shall apply to the LANDOWNER.



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4.4 EFFECT OF EMINENT DOMAIN -

- (a) Full Condemnation. If any action in eminent domain for the condemnation of the fee title of the entire “Forest Stewardship project area” described herein is filed, or if the “Forest Stewardship project area” is acquired in lieu of eminent domain for a public improvement by a public agency or person or whenever there is any such action or acquisition by the federal government or the state government or any person, instrumentality or agency acting under authority or power of the federal government or the state government, this AGREEMENT shall be deemed null and void without penalty as to the land actually being condemned or so acquired as of the date the action is filed, and upon the termination of such a proceeding, this AGREEMENT shall be null and void without penalty for all land actually taken or acquired.
- (b) Partial Condemnation. When such an action to condemn or acquire less than all the entire “Forest Stewardship project area” is filed, this AGREEMENT shall be deemed null and void without penalty as to the portion so condemned or acquired.
- (c) Adjustment of approved MANAGEMENT PLAN. The land actually taken by the means set forth above in this Section shall be removed from this AGREEMENT and the approved MANAGEMENT PLAN and budget adjusted accordingly on a reasonable basis by the STATE and the LANDOWNER.

SECTION 5 - INCORPORATION OF CHAPTER 195F, HAWAII REVISED STATUTES

- 5.1 Incorporation. The provisions of chapter 195F, Hawaii Revised Statutes, as amended, are incorporated by reference into this AGREEMENT. In the event that there is any conflict between the provisions of this AGREEMENT and the provisions of chapter 195F, Hawaii Revised Statutes, the latter shall be controlling.



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5.2 Renumbering. In the event that chapter 195F, or any of the sections under chapter 195F, Hawaii Revised Statutes, are renumbered, any references to the chapter or sections in this AGREEMENT shall be deemed renumbered accordingly.

EXHIBIT A

_____ Forest Stewardship Management Plan.

I. Cover Sheet

Forest Stewardship Management Plan July 1, 2013

Name:	Susan Kaye Lundburg
Mailing Address:	PO Box 484, Pa'auilo, Hawai'i 96776
Email:	mikela@hawaiiantel.net
Phone:	808-776-1294
Landowner name:	Susan Kaye Lundburg Trust
Lease/License holder name:	n/a
Address:	Niupea Homestead Road, portion of Lot 27 Hamakua District, Hawai'i Island
Tax Map Key No.:	TMK (3)-4-1-004:045
Zoning:	Ag.-5a
Land Use District:	Agricultural
Property acreage:	41.396 acres
Farm Service Agency Farm No.:	3865
Tract No.:	4132
Stewardship Management Area:	40.396 acres
Approximate Elevation:	2275 feet to 2400 feet above mean sea level
Slope:	HTD Honokaa Series 10-20% slopes – gently sloping to steep.
Intermittent Stream Courses:	Kupapaulua Gulch and several unnamed streams

II. Forest Stewardship Plan Signature Page

Professional Resource Consultant Certification: I have prepared (revised) this Forest Stewardship Plan.

The following professionals have been consulted and/or provided input as appropriate during the preparation of this plan:

Prepared by:

Professional Resource Consultant's Signature/Date: Aileen K. F. Yeh / Oct. 13, 2013

Professional Resource Consultant's Name: Aileen K. F. Yeh

Professional Resource Consultant's Signature/Date: Graham P. Knapp 10/13/13

Professional Resource Consultant's Name: Graham P. Knapp

Applicant Certification: I have reviewed this Forest Stewardship Plan and hereby certify that I concur with the recommendations contained within. I agree that resource management activities implemented on the lands described shall be done so in a manner consistent with the practices recommended herein.

Prepared for:

Applicant's Signature/Date: Susan K. Lundberg 10-13-13

Applicant's Name: Susan Kaye Lundberg

State Forester's Approval: This plan meets the criteria established for the Forest Stewardship Plans by Hawaii's Forest Stewardship Advisory Committee. The practices recommended in the plan are eligible for funding according to the State of Hawaii Forest Stewardship Program guidelines and administrative rules.

Approved by:

Forest Stewardship Advisory Committee: September 24, 2013

State Forester's Signature/Date: [Signature]

State Forester's Name: Roger H. Imoto

III. Introduction

Vision and Goals

The long-term vision for the property is to reclaim, restore and steward a native forest for conservation. Actions that support this vision include: perimeter fencing to exclude all ungulates, eradication of ungulates within the fenced project area, continued eradication of invasive vegetation and planting of native trees, shrubs and vines that will protect and improve the habitat and food source of native wildlife.

We believe that protecting and planting a forest is essential in the water cycle. Healthy diverse forests protect the watershed, prevent erosion and increase the water-retention capacity of the soil. “*Strawberry guava negatively affects our native biodiversity, agricultural productivity, water resources, and the traditional and contemporary uses and values these represent to the people of Hawai‘i (Hawaii Conservation Alliance).*”

A component of this plan is to incorporate traditional agroforestry practices that support protection of the native forest and meet the need for food. Potential crops would include but are not limited to taro, sweet potato, yams, and bananas. Education and community outreach are an important component of our vision. We plan to demonstrate stewardship of native species on private land to school and community groups such as charter schools, halaus, senior citizen groups and men and women returning from incarceration. We plan to explore a collaboration with Three Mountain Alliance. We have initiated meaningful dialogue with Hawaii Forest Institute and the Kohala Center on common objectives and collaboration on program participation. Program participants will experience and learn about the life and challenges of the native forest in guided walks. They will contribute by planting desirable trees, shrubs and vines and removing invasive species. There will be no timber component of this forest stewardship management plan as it does not support the overall goal for the property.

Property Description

The 40.396-acre subject property is located on the northeast slope of Mauna Kea between 2275 feet and 2400 feet above mean sea level on the Island of Hawaii (see Section VIII – Subject Property Location Map). The property’s existing flora/vegetation include old growth ohia (*Metrosideros polymorpha*) and hapuu (*Cibotium splendens*). Young koa (*Acacia koa*) is presenting in some of the light gaps. Identification of other existing native species will be ongoing throughout project. Patches of uluhe ferns (*Dicranopteris linearis*) are frequent in some light gap areas and abundant near the water courses. A row of eucalyptus (*Eucalyptus* spp.) trees mark the north and west boundaries. The most prevalent invasive plant is strawberry guava (*Psidium cattleianum*) that clusters around the ohia, in riparian areas, and beyond. The existing wildlife includes sightings of the io, or the hawaiian hawk (*Buteo solitarius*) and possibly the call of the iiwi (*Vestiaria coccinea*), as well as non-native species described in Section IV. The greatest threat to this forest is feral pigs that are spreading invasive species; evidence of their activity is readily visible. A location map and an aerial photograph of the property are shown in

Section VIII.

Approximately one acre of the total acreage, located near the northwest corner – flat and open, will accommodate a “staging area” for the project. This area will include a bunkhouse/office, equipment shed, water catchment, and photovoltaic system.

Management Objectives Overview

1. To protect the existing native forest cover and wildlife habitat on the property.
2. To increase the number of existing native species, as well to expand and increase species diversity to reflect what is and was historically found in the natural forest areas surrounding this parcel.
3. To increase the native canopy cover throughout the property to allow future establishment of native understory species.
4. To remove alien species which prevent establishment of desirable native species plantings, which may be invasive, and which contribute to soil erosion and degradation of the property.
5. To develop traditional Hawaiian agroforestry systems to support the health of the forest and to meet the need for food and other forest products in a sustainable fashion. Food plants could include taro, sweet potato, yams, and banana.
6. To create an educational refuge to support native forest recreation and education. This refuge will serve as a demonstration to schools and the community of native forest and wildlife habitat restoration and protection on private land.

History Of Land Uses And Present Condition

The subject property was part of Land Grant number 6373 to grantee Maria Augusta Bugado, April 1915. We believe that the property has only been used for cattle pasturing since the time of this land grant, and its only other use was for a single-family residence. There is evidence of 4 non-functioning reservoirs. Prior to this land grant we believe the property to have been densely forested. The subject property is presently unused.

IV. Land and Resource Description

Existing Vegetation/Forest Cover Types

The subject property is vegetated with an aging ohia/hapuu/uluhe forest decimated by past cattle pasturing with strawberry guava beginning to dominate the landscape and non-native grasses dominating in areas not under canopy. The property contains hundreds of mature and healthy ohia trees, and they remain the dominant canopy species on the site; however, very few ohia saplings have been observed on the property which means that natural regeneration is likely minimal. Several other native species are found on the property including hapuu, amau (*Sadleria cyatheoides*), koa and uluhe fern, which is frequent and extensive in some areas, particularly near stream channels. One individual of hame (*Antidesma platyphyllum*) was observed on the edge of Kupapa'ulua Gulch. Several mature koa trees are on the property, as well as approximately 20 koa saplings. These seedlings may have been planted by the previous landowner but this has not been confirmed.

The property boundaries are largely demarcated by encroaching monocultures of invasive species. The adjacent property of the mauka (i.e., south) side (TMK (3rd) 4-1-004:006) is largely a monoculture of strawberry guava, as is much of the eastern property boundary formed by Kupapaulua Gulch. Rose apple (*Syzygium ambros*) and eucalyptus species also are encroaching from the adjacent property on the mauka side. Open areas are almost completely dominated by non-native grass species. Ginger (*Zingiber* spp.) is well established near the northwest corner (makai/north) of the property. Rose apple is well established in the gulches on the property where it competes primarily with strawberry guava. Other non-native tree species observed include silk oak (*Grevillea robustus*), several species of eucalyptus, formosan koa (*Acacia confusa*, one individual), loquat (*Eriobotrya japonica*), Sugi pine (*Cryptomeria japonica*), and bamboo (*Bambusa* spp.).

The existing ohia, and few remnant native understory species, are surviving from the pre-existing lowland wet forest dominated by ohia (Gagne and Cuddihy 1999). As the property is located a short distance from the Manowaialee Forest Reserve, the subject property was likely to have been ecologically connected to the forests of this Reserve. A view to the north, available only in a few locations on the property, reveals the past forest of this area and is the ecological context for the project. The views of the landscape several miles to the east and south along the flank of Mauna Kea present what remains of an ancient ohia forest. It is possible that this forest was significantly impacted by invasive species following the wild fire of 1901 (Territory of Hawaii 1905).

Existing Forest Health and Function, Including Any Invasive Species, Chronic Disease, Insect, Rodent, and/or Fire Threats

Ohia are reproducing on nurse logs in areas above the weeds, however without implementation of a management program, the property will be soon entirely dominated by strawberry guava and other non-native and undesirable species. Strawberry guava appears to be distributed primarily by birds, mammals, and water flow. Therefore strawberry guava appears to colonize areas around the bases of large trees where birds roost. Water flow carries seeds downstream channels, where they colonize and are carried out of the stream channels by mammal (i.e., wild pig) and bird activity. This has resulted

in the existing distribution of strawberry guava on the project site: concentrated stands around large ohia trees due to seed distribution by birds; dense strawberry guava stands in riparian and adjacent areas due to hydrologic and mammalian seed distribution. More open areas on the property are also becoming rapidly colonized by strawberry guava likely by bird and mammal dispersal. Therefore, in a big picture, this period of time represents a unique opportunity to implement a management plan in order to halt further degradation of native plant species. Additionally, it is conceivable that habitat restoration of this property may result, at some point in the future, in habitat useful to native animal species, including birds, insects and invertebrates.

Soils and Their Condition

Road cuts on the property show that the soil horizon is complex, with a depth to basalt bedrock varying from 4 to 8 feet. Two volcanic ash layers are apparent, topped by a silty loam topsoil of varying depth from zero to about two feet in depth. The property's soils are classified by the NRCS as Honokaa Series highly organic hydrous silty clay loam, of two sub-types depending on slope. These soils are formed from volcanic ash with a depth to groundwater of more than 80 inches and appear to be very clayey in places, impeding drainage. The NRCS further describes this soil as prime farmland with land capability classification of 3e and ecological site type of koa/ohia/hapuu/ieie (*Acacia koa/Metrosideros polymorpha/Cibotium menziesii/Freycinetia arborea*).

Geologic mapping by the USGS (Wolfe and Morris 2001) describe the underlying geology of the site and vicinity as that of the Pleistocene Hamakua volcanics of approximately 65,000 to 250,000 years in age, although this work notes that geologic mapping in the area is "generalized". The site's location, nearly 3.7 miles directly makai of the Puu Loa scoria cone, suggests that this feature may have been the source for the site's ash layers, or from the other cinder cones located higher on the flank of Mauna Kea. Decker et al. (1987) discuss the volcanic ashes of Hawaii, and their work shows that this ash layer from Mauna Kea volcanic activity may be up to 10 feet deep in places. In places some of these clayey soils also appear to have significant organic content, implying that they may be remnant soils from the pre-existing native forest. There do not appear to be any wetland or boggy areas on the property, nor any wetland plants or hydric soils.

General Slope and Aspect

The slope over the site and in the vicinity of the site averages about 18% and is more irregular in the northeastern portion of the site. Apart from the relatively (approximately 50 feet) deep Kupapa'ulua Gulch on the site's eastern boundary, most of the site is a rolling expanse of ridgelines and small, transient stream channels and erosional features. Some of the open areas along ridge lines present impressive view planes. Both the Management Region and Proposed Trails and Site Features Maps (Section VIII) show these intermittent water features and uses the USGS topographic map of the area as a background.

Water Resources and Their Condition

The site is traversed by no less than four transient streams with well-defined stream

channels, two of which are confluent near the western property line, and a number of less well-defined erosional features (i.e., swales). All of these streams are thickly vegetated with strawberry guava, and in some cases, rose apple, melastoma, and guinea grass (in two locations). Two expansive swales that emerge on the makai side of the property develop hydrologically downslope, finally merging 1.3 miles north of the subject property where the USGS mapped Kahalo Stream begins. Kahalo is confluent with Kupapaulua Stream/Gulch makai of the Mamalahoa Highway (SR19) and above the USGS Mapped Hikiau Falls (see Section VIII – Regional Hydrologic Features map).

Mean annual precipitation on the property is approximately 160 inches (Giambelluca, T.W., et al. 2013). This high value is because the property is located on the windward side of Mauna Kea, and is therefore subject to orographic precipitation. Additionally, windward areas in Hawaii generally see somewhat more rainfall, relatively, in winter than during summer.

Timber Resources

As the intent of this work is conservation and habitat restoration the owner has no interest in commercial exploitation of the property. There are potential salvage trees that may be removed during management activities that could be useful as a forest product or timber resource.

Wetland Resources

Although there are a number of boggy areas on the property after periods of heavy rainfall, a product of the poorly draining soil, there do not appear to be any wetland areas on the property, as would be distinguished by the presence of hydric soils and associated wetland plants.

Significant Historic and Cultural Resources

An archaeological survey has not been performed on the property, however, extensive visual surveys of the site, including visual surveys of all stream channels, have not revealed the presence of any features that are suggestive of pre-contact activity, including rock walls, rock mounds, 'auwai, etc. In short, extensive visual surveys of the property have revealed no evidence of pre-contact activity. In the unlikely event that archaeological resources are encountered during subsurface development activities within the current study area, work in the immediate area of the discovery will be halted and DLNR-SHPD contacted as outlined in Hawai'i Administrative Rules §13- 275-12.

Existing wildlife

Evidence of the presence of the feral pig is very common on the site, although none were observed. The Hawaiian hawk is frequently observed. A number of non-native bird species were observed, and include the Chinese thrush (*Turdus mupinensis*), northern cardinal (*Paroaria coronate*), Japanese white-eye (*Zosterops japonicas*), red-billed lethrix (*Leiothrix lutea*), manikin (*Lonchura atricapilla*), and bush warbler (*Cettia diphone*).

Threatened and Endangered Species Existing on Property

The Hawaiian hawk, a listed endangered species, is frequently observed roosting in trees and flying over the site, apparently using the site for hunting. No hawks are thought to nest on the property as no nests have been observed.

Existing Recreational and Aesthetic Values

The property has significant aesthetic value, being populated by many large mature ohia trees, often displayed impressively on the rolling landscape carved by several deep gulches. The owner appreciates the scenic value of these trees, and wishes to preserve the aesthetic value of this property. The property has the potential to have many fine hiking trails that would open the area to volunteers for tree planting, maintenance and environmental education. Most of these trails would require only mowing to construct and maintain.

Infrastructure and Access Conditions

Access to the site is via a County roadway that is heavily eroded and needs improvement. The existing access roadway has inadequate drainage, making access difficult even with a four-wheel drive vehicle during wet weather. Also, the existing access road crosses two streams; one of these streams has inadequate culvert engineering, composed of several small (3-4" diameter) PVC pipes, and neither stream crossing has a reinforced headwall.

V. Management Objectives and Practices

We will protect the existing native forest cover and wildlife habitat on this property by removing alien and invasive species which contribute to soil erosion and degradation of the property, as well as prevent the establishment of native species.

We will increase the number of existing native species, as well to expand and increase species diversity to reflect what is and was historically found in the natural forest areas surrounding this parcel.

We will develop traditional agroforestry systems to support the health of the forest and meet the need for food and other forest products in a sustainable fashion. Traditional food plants will include taro, sweet potato, yams and banana.

We will create a refuge that will restore and protect a native forest and provide for community involvement and environmental education. This refuge will serve as a demonstration to the community of native forest and wildlife habitat restoration and protection on private land. Access through the property will be provided through improved and constructed grass mowed trails and graveled stream crossings.

The Forest Stewardship Management plan developed with professional assistance is a “roadmap” to the goal: to reclaim, restore and steward this native forest for conservation and provides a timeline to meet the stated objectives.

Maps of the project area indicate the locations of the existing vegetation types and native species. Map areas note species to be removed.

To provide a systematic approach to operation and budget, the property has been divided into 8 (eight) management regions (see Management Region Map – Section VIII) and an annual timeline created that considers activities within each region separately. These regions have been designated by natural barriers such as stream channels, as well as roads or vegetation zones. The regions are described in detail in the Management Region Descriptive Table - Section VIII.

Practices Used to Meet the Management Objectives

1. **Fencing:** Prior to planting, an ungulate proof perimeter fence will be installed for protection of planted areas. A 10 foot-wide buffer will be included in the preparation and clearing, prior to the installation of the fence. This fence will be checked regularly to assure its integrity, particularly after strong winds. (Section VIII: Fence Specifications)
2. **Access - Trail Construction and Stream Channel Crossings:** Access to the project areas will be improved with the construction of roads, trails and steam bank crossings to facilitate equipment, labor movement and to enhance recreational value and educational opportunities. Existing and planned roads/trails and stream crossings are shown in Section VII - Proposed Trail Map. The primary access road into the property (Management Region Map, regions G, F and B) will be an improved gravel road.. Trails that will be improved or constructed will be grass

mowed and would not require additional construction. Stream crossings will be gravel passage with appropriated sized culverts.

3. Best Management Practices – Best Management Practices to prevent the release of polluted storm water runoff will follow the recommendations of the Division of Forestry and Wildlife’s manual entitled, “Best Management Practices for Maintaining Water Quality in Hawaii” (Division of Forestry and Wildlife 1996). Best Management Practices to be implemented include the following:
 - a. Soil disturbance during periods of heavy rains will be avoided.
 - b. Areas of soil disturbed during construction will be seeded and re-vegetated as rapidly as possible, with gravel socks emplaced at the toe of slopes.
 - c. Trail construction and maintenance will generally require only periodic mowing, will avoid steep slopes and will follow contours whenever practical.
 - d. Where trails traverse steep slopes, and where appropriate on the main access road, water bars will be constructed.
 - e. The number of stream crossings will be minimized.
 - f. Herbicides will be transported, stored, mixed and loaded, applied, and disposed of following label instructions in order to minimize the potential for polluted storm water runoff.
4. Site Preparation: Pre-plant site preparation will include mowing where possible, and removal of invasive plants. A planting spot will be created by spot spraying a 4 - 5 foot circle for each plant at least one month before planting if grasses or other low growing weeds are actively growing. Tilling will be avoided in order to limit disturbance of the soil. Mulching of the planting spots will also be done if it is effective as a weed control.

Clumps of strawberry guava and other undesirable shrubs will be removed where possible with an excavator with care taken not to disturb the root systems of existing ohia. Strawberry guava growing very close to the ohia trees will be eradicated using chemical means such as cut stump, basal bark, hack and squirt, or frilled application of the appropriate herbicide. The herbicide used will depend on the target weed species, and will be applied following the approved labeled use.

The cut strawberry guava will be chipped and used as mulch for weed suppression around out-planted trees and shrubs. An alternative could be to use a machine with a grinding head on standing trees or brush, followed by spraying the cut stumps. As much as possible large fallen trees and logs will be left in the field to serve as nurse logs, as these fallen and partially decomposed trees and logs are host to ohia seedlings, as well as ferns and other native species. Care will be taken to remove strawberry guava seedlings from these nurse logs. In areas which have strawberry guava with little understory, it will be possible to kill the strawberry guava but leave them standing in order to provide shade. Planting of the native species under those partially shaded areas will enable mid- and understory plants to be planted, as well as aid in holding the soil, and provide ground cover. If existing ferns and native species are present, complete removal of overstory can cause scalding and death of desired understory plants.

5. **Planting:** Seedlings are estimated at 150/acre. The plantings of each region will be determined by the existence of mature ohia or an open, light gap area. In large light gap areas ohia and koa will be planted to prepare for a later planting of the species which need partial shade. In areas of existing mature ohia that already provide partial shade, species such as kopiko (*Psychotria mariniana*), kolea (*Myrsine spp.*), hapuu (*Cybotium splendens*), maile (*Alyxia oliviformis*), pilo (*Coprosma spp.*), hame (*Antidesma platyphyllum*), olapa (*Cheirodendron trigynum*), manono (*Kadua affinis*), mamaki (*Pipturus albidus*), kawau (*Ilex anomala*) and akala (*Rubus hawaiiensis*) will be planted. Mamaki and Pilo can be planted in full sun, while large hapuu could also be planted out to provide shade.

Following planting, sufficient mulch will be applied to the planting sites to provide nutrients and suppress weeds.

Planting will be done by hand, with an auger creating the planting holes where necessary. Care will be taken to make sure that the holes drain well, and are not glazed from the auger.

6. **Nutrient Management and Fertilization:** It appears the soils on the property are relatively fertile. Soil testing will determine the need and proposed type of fertilizer for spot treatment to support early health and vigor of the newly planted seedlings.

An initial treatment of one to two ounces of 10-30-10 plus could be applied at planting if deemed necessary by soil tests. If nutrients are severely depleted or nutrient deficiencies become apparent, an appropriate fertilizer will be applied. Additional fertilization is not planned unless plants show a need for additional supplementation. Over fertilization of native plants encourages insects and disease.

7. **Weed Control after Planting:** This will be on going with mechanical and hand weeding, mulching and herbicide application as needed. The following control methods will be used for specific species:
 - a. Strawberry Guava – frill, cut stump or basal bark application - (Triclopyr)
 - b. Ginger – corm application - (imazaphyr or methyl metsulfuron) or remove by hand
 - c. Alien shrubs/grasses – foliar - applications of Roundup (glyphosate) on shrubs, or Fusilade (Fluazifop-butyl), a gramicide, on grasses. The gramicide will kill only grasses, and should not affect broadleaves or sedges.

An alternative to mulching is to seed a low growing legume or grass to serve as a groundcover and living mulch. Clover, birdsfoot trefoil, or a native groundcover might be used.

8. **Outplantings** will be monitored on a weekly basis until plants are fully established and at least bi-monthly thereafter. A monitoring log will be kept to determine

survival, vigor, weed incursions, and any disease and insect attack. These records will be maintained for future planting and reports, and will be helpful to determine particular species site preferences. Monitoring will include walking the fence line to detect breaches and repair as needed.

VI. Practice Implementation Schedule

Seedlings are estimated at 150/acre @ \$2.50/seedling. Planting is for those seedlings.

Table 2a - Implementation Schedule – Year 1 – Region A 1.52 ac. & B 5.32 ac.

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Management Plan		1 plan	\$5000	\$5000.	\$2500.	\$2500.	
Trail Construction		751 ft.	\$2	\$1502.	\$751.	\$751.	
Stream Crossing				\$1000.	\$500.	\$500.	
Fencing	382	6652 ft.	\$8.00	\$53216.	\$26608.	\$26608.	
Tree and Shrub Site Prep	490	Region B 5.32 ac	\$1540.	\$8193.	\$4097.		\$4097.
Tree and Shrub Site Prep: Woody Residue Treatment	384	Region B 5.32 ac	\$385.	\$2048.	\$1024.		\$1024.
Tree / Shrub Establishment	612	Region B 5.32 ac 150 trees/ac	798 trees @ \$2.50	\$1995.	\$998.		\$998.
Nutrient Management	590	Region B 5.32 ac	\$180.	\$958.	\$479.	.	\$479.
Mulching	484	Region B 798 trees 16 sqft/tree @ .10/sqft	\$1.60/tree	\$1277.	\$639.	.	\$639.
Herbaceous Weed Control	315	Region B 5.32 ac	\$180.	\$958.	\$479.	.	\$479.
TOTAL				\$76147.	\$38075.	\$30359.	\$7716.

Table 2b - Implementation Schedule – Year 2 – Region C – 4.66 ac.

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Trail Construction		883 ft.	\$2.	\$1766.	\$883.	\$883.	
Tree and Site Prep	490	Region C 4.66 ac	\$1540.	\$7176.	\$3588.	.	\$3588.
Tree and Shrub Site Prep: Woody Residue Treatment	384	Region C 4.66ac	\$385.	\$1794.	\$897.		\$897.
Tree / Shrub Establishment	612	Region C 4.66 ac 150 trees/ac	699 trees @ \$2.50	\$1748.	\$874.		\$874.
Nutrient Management	590	Region C 4.66 ac	\$180.	\$839.	\$420.		\$420.
Mulching	484	Region C 699 trees 16 sqft/tree @ .10/sqft	\$1.60/tree	\$1118.	\$559.		\$559.
Herbaceous Weed Control	315	Region C 4.66 ac	\$180.	\$839.	\$420.		\$420.
Herbaceous Weed Control	315	Region B 5.32 ac	\$180.	\$958.	\$479.	.	\$479.
TOTAL				\$16238.	\$8120.	\$883.	\$7237.

Table 2c - Implementation Schedule – Year 3 & Year 4 – Region D 9.86 ac.

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Trail Construction		2831ft.	\$2	\$5662.	\$2831.	\$2831.	
Stream Crossing				\$1000.	\$500.	\$500.	
Tree and Site Prep	490	Region D 9.86 ac	\$1540.	\$15,184.	\$7592.		\$7592.
Tree and Site Prep Woody Residue Treatment	384	Region D 9.86 ac	\$385.	\$3796.	\$1898.		\$1898.
Tree / Shrub Establishment	612	Region D 9.86 ac 150 trees/ac	1479 trees @\$2.50	\$3698.	\$1849.		\$1849.
Nutrient Management	590	Region D 9.86 ac	\$180.	\$1775.	\$888.		\$888.
Mulching	484	Region D 1479 trees 16 sqft/tree @ .10/sqft	\$1.60/tree	\$2366.	\$1183.		\$1183.
Herbaceous Weed Control	315	Region D 9.86 ac	\$180.	\$1775.	\$888.		\$888.
Herbaceous Weed Control	315	Region C 4.66 ac	\$180.	\$839.	\$420.		\$420.
TOTAL				\$36,095.	\$18,049.	\$3331.	\$14,718.

Table 2d - Implementation Schedule – Year 5 – Region E 7.34 ac.

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Trail Construction		1116ft.	\$2.	\$2232.	\$1116.	\$1116.	
Tree and Site Prep	490	Region E 7.34 ac	\$1540.	\$11304.	\$5652.		\$5652.
Tree and Site Prep Woody Residue Treatment	384	Region E 7.34 ac	\$385.	\$2826.	\$1413.		\$1413.
Tree / Shrub Establishment	612	Region E 7.34 ac 150 trees/ac	1101 trees @\$2.50	\$2753.	\$1376.		\$1376.
Nutrient Management	590	Region E 7.34 ac	\$180.	\$1321.	\$661.		\$661.
Mulching	484	Region E 1101 trees 16 sqft/tree @ .10/sqft	\$1.60/tree	\$1762.	\$881.		\$881.
Herbaceous Weed Control	315	Region E 7.34 ac	\$180.	\$1321.	\$661.		\$661.
Herbaceous Weed Control	315	Region D 9.86 ac	\$180.	\$1775.	\$888.		\$888.
TOTAL				\$25294.	\$12648.	\$1116.	\$11532.

Table 2e - Implementation Schedule – Year 6 – Region F 2.15 ac.

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Fencing Maintenance	472	6652 ft.	\$.50	\$3326.	\$1663.	\$1663.	
Trail Construction		200 ft.	\$2	\$400.	\$200.	\$200.	
Tree and Site Prep	490	Region F 2.15 ac	\$1540.	\$3311.	\$1656.	.	\$1656.
Tree and Site Prep Woody Residue Treatment	384	Region F 2.15 ac	\$385.	\$828.	\$414.		\$414.
Tree / Shrub Establishment	612	Region F 2.15 ac 150 trees/ac	323 trees @\$2.50	\$808.	\$404.		\$404.
Nutrient Management	590	Region F 2.15 ac	\$180.	\$387.	\$194.		\$194.
Mulching	484	Region F 323 trees 16 sqft/tree @ .10/sqft	\$1.60/tree	\$517.	\$259.		\$259.
Herbaceous Weed Control	315	Region F 2.15 ac	\$180.	\$387.	\$194.		\$194.
Herbaceous Weed Control	315	Region E 7.34 ac	\$180.	\$1321.	\$661.	.	\$661.
TOTAL				\$11285.	\$5645.	\$1863.	\$3782.

Table 2f - Implementation Schedule – Year 7 – Region G 4.24 ac.

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Trail Construction		1016 ft.	\$2.	\$2032.	\$1016.	\$1016.	
Stream Crossing				\$2000.	\$1000.	\$1000.	
Tree and Site Prep	490	Region G 4.24 ac	\$1540.	\$6530.	\$3265.		\$3265.
Tree and Site Prep Woody Residue Treatment	384	Region G 4.24 ac	\$385.	\$1632.	\$816.		\$816.
Tree / Shrub Establishment	612	Region G 4.24 ac 150 trees/ac.	636 trees @\$2.50	\$1590.	\$795.		\$795.
Nutrient Management	590	Region G 4.24 ac	\$180.	\$763.	\$382.		\$382.
Mulching	484	Region G 636 trees 16 sqft/tree @ .10/sqft	\$1.60 /tree	\$1018.	\$509.		\$509.
Herbaceous Weed Control	315	Region G 4.24 ac	\$180.	\$763.	\$382.		\$382.
Herbaceous Weed Control	315	Region F 2.15 ac	\$180.	\$387.	\$194.		\$194.
TOTAL				\$16715.	\$8359.	\$2016.	\$6343.

Table 2g - Implementation Schedule – Year 8 and Year 9 – Region H 4.52 ac.

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Trail Construction		950ft.	\$2.	\$1900.	\$950.	\$950.	
Tree and Site Prep	490	Region H 4.52 ac	\$1540.	\$6961.	\$3481.		\$3481.
Tree and Site Prep Woody Residue Treatment	384	Region H 4.52 ac	\$385.	\$1740.	\$870.		\$870.
Tree / Shrub Establishment	612	Region H 4.52 ac 150 trees/ac	678 trees \$2.50	\$1695.	\$848.		\$848.
Nutrient Management	590	Region H 4.52 ac	\$180.	\$814.	\$407.		\$407.
Mulching	484	Region H 678 trees 16 sqft/tree @ .10/sqft	\$1.60/tree	\$1085.	\$543.		\$543.
Herbaceous Weed Control	315	Region H 4.52 ac	\$180.	\$814.	\$407.		\$407.
Herbaceous Weed Control	315	Region G 4.24 ac	\$180.	\$763.	\$382.		\$382.
Herbaceous Weed Control	315	Region B 5.32 ac	\$180.	\$958.	\$479.	\$479.	
Herbaceous Weed Control	315	Region C 4.66 ac	\$180.	\$839.	\$420.	\$420.	
TOTAL				\$17569.	\$8787.	\$1849.	\$6938.

Table 2h - Implementation Schedule – Year 10 - Maintenance

Practice Components	NRCS Codes	Units	Cost/Unit	Total Cost	Applicant Share	FSP Share	CREP Share
Trail Maintenance		7747ft.	.50	\$3874.	\$1937.	\$1937.	
Fencing Maintenance	472	6652 ft.	.50	\$3326.	\$1663.	\$1663.	
Herbaceous Weed Control	315	Region H 4.52 ac	\$180.	\$814.	\$407.		\$407.
Herbaceous Weed Control	315	Region D 9.86 ac	\$180.	\$1775.	\$888.	\$888.	
Herbaceous Weed Control	315	Region E 7.34 ac	\$180.	\$1321.	\$661.	\$661.	
Herbaceous Weed Control	315	Region F 2.15 ac	\$180.	\$387.	\$194.	\$194.	
TOTAL				\$11497.	\$5750.	\$5343.	\$407.

VII. Budget Summary

Table 3 - Yearly Budget Summary

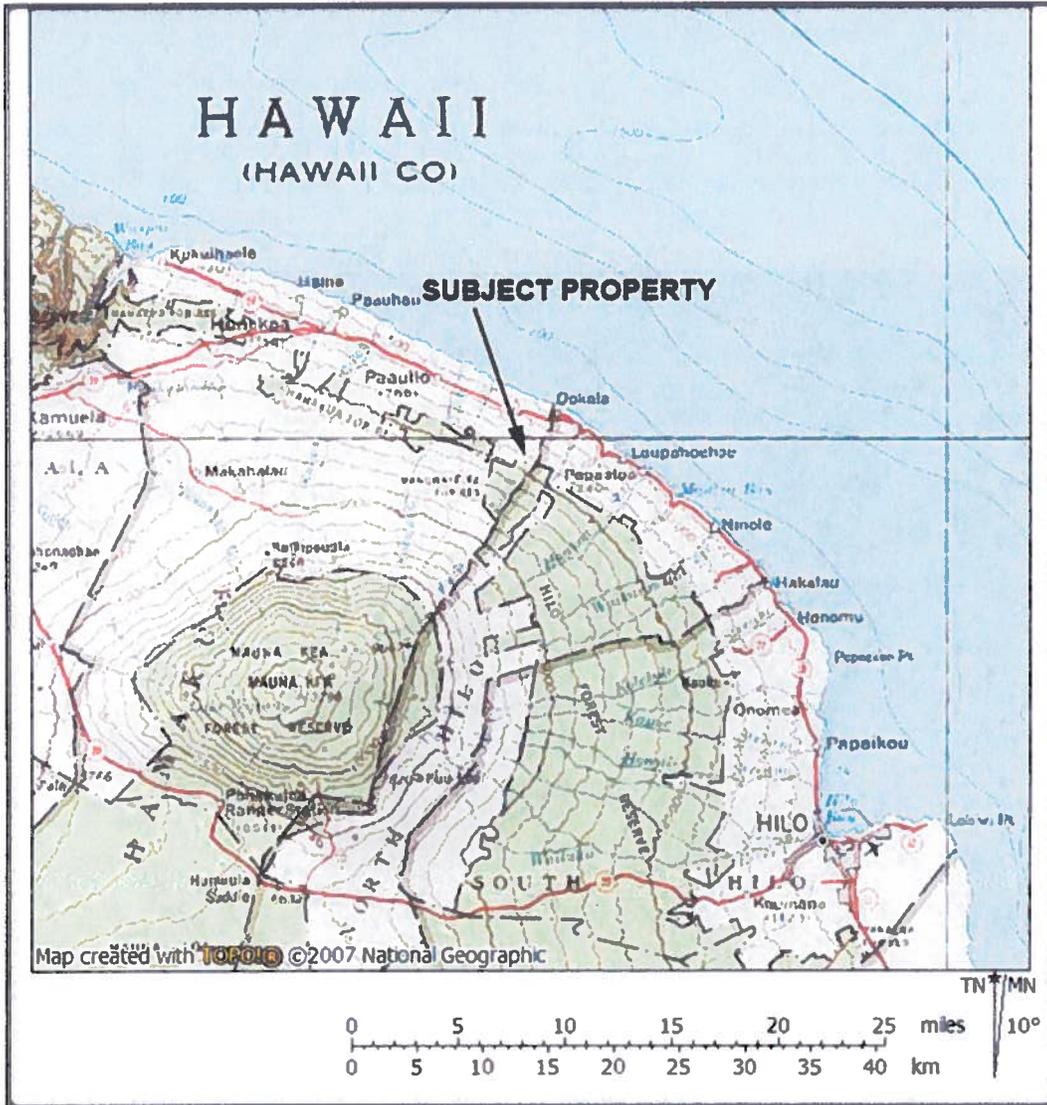
YEAR	Total Budget	Applicant Share	FSP Share	CREP Share
Year 1	\$76,147.	\$38,075.	\$30,359.	\$7716.
Year 2	\$16,238.	\$8120.	\$883.	\$7237.
Year 3 and 4	\$36,095.	\$18,049.	\$3331.	\$14,718.
Year 5	\$25,294.	\$12,648.	\$1116.	\$11,532.
Year 6	\$11,285.	\$5645.	\$1863.	\$3782.
Year 7	\$16,715.	\$8359.	\$2016.	\$6343.
Year 8 and 9	\$17,569.	\$8787.	\$1849.	\$6938.
Year 10	\$11,497.	\$5750.	\$5343.	\$407.
TOTALS	\$222,340.	\$105,433.	\$46,760.	\$58,673.

VIII. Required Maps and Documents

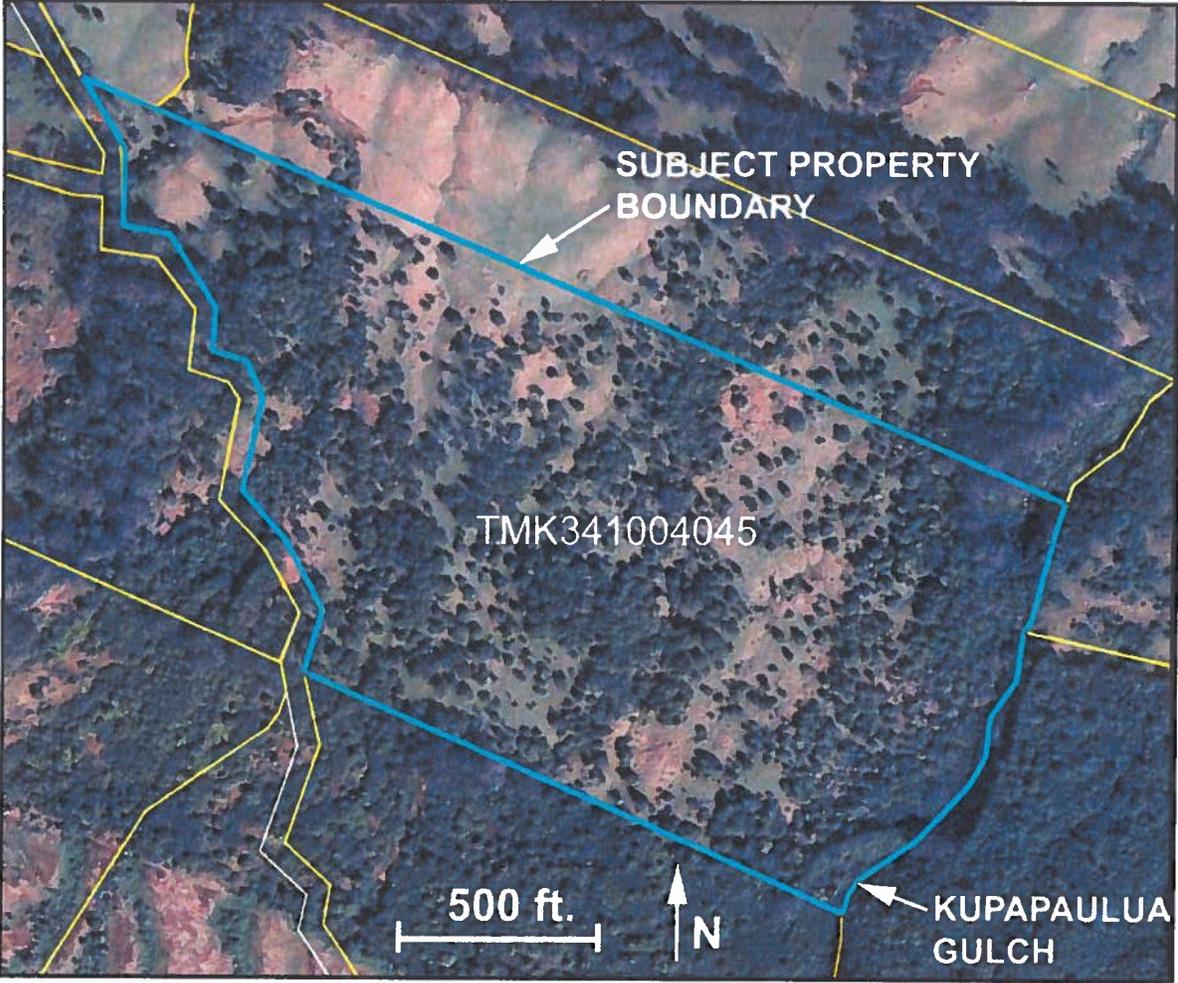
This section contains the following maps and documents:

- Subject Property Location Map
- Subject Property Aerial Photo
- Regional Hydrologic Features Map
- Management Region Map
- Management Region Descriptive Table
- Proposed Trails and Site Features Map
- Fence Specifications

Subject Property Location Map



Subject Property Aerial Photo



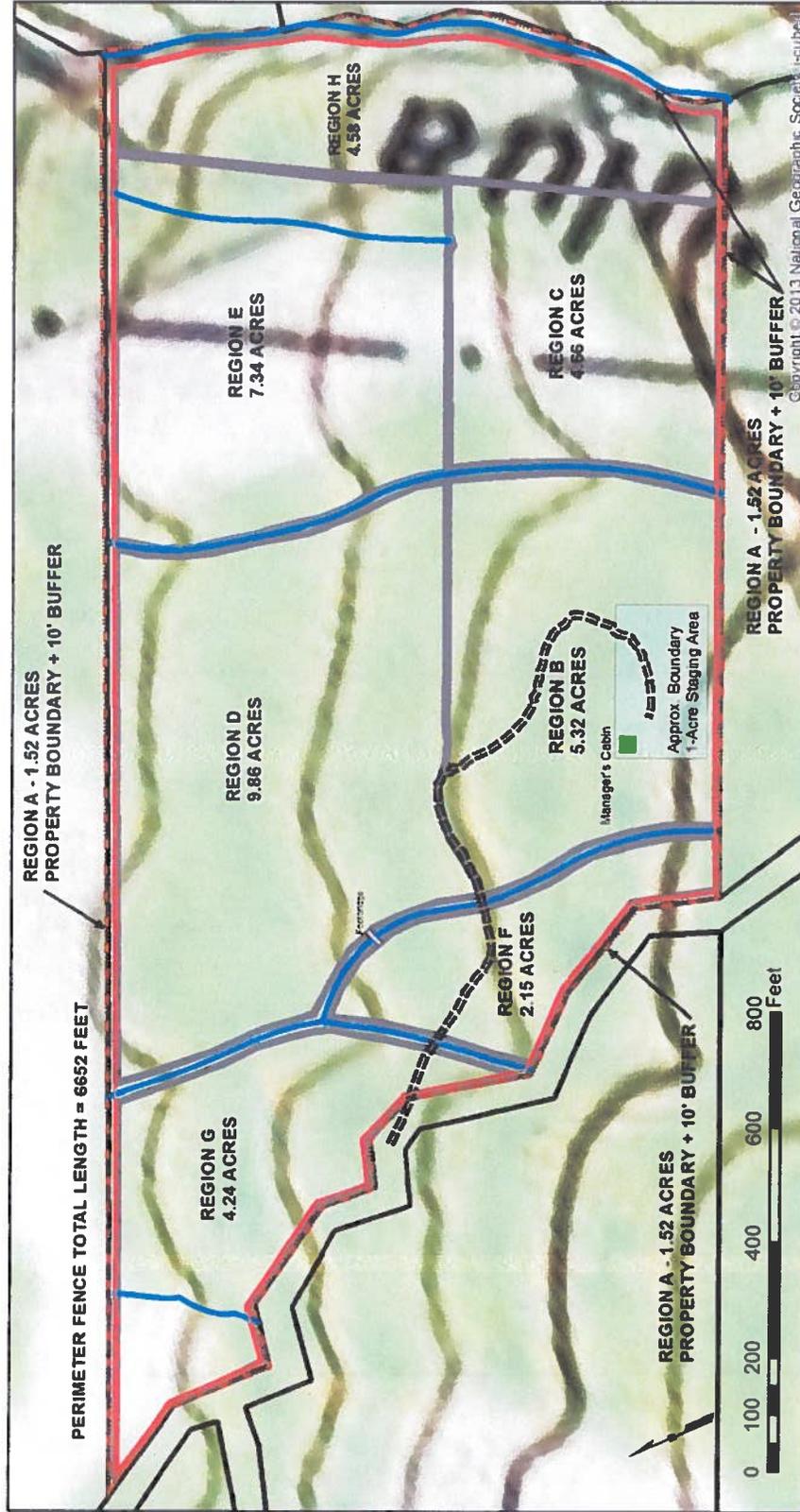
Regional Hydrologic Features Map



MANAGEMENT REGION MAP

Legend

-  Region Boundary
-  Fenced Area
-  Property/Project Boundary
-  Transient Stream Channel
-  Existing Access Road
-  Staging Area



Management Region Descriptive Table

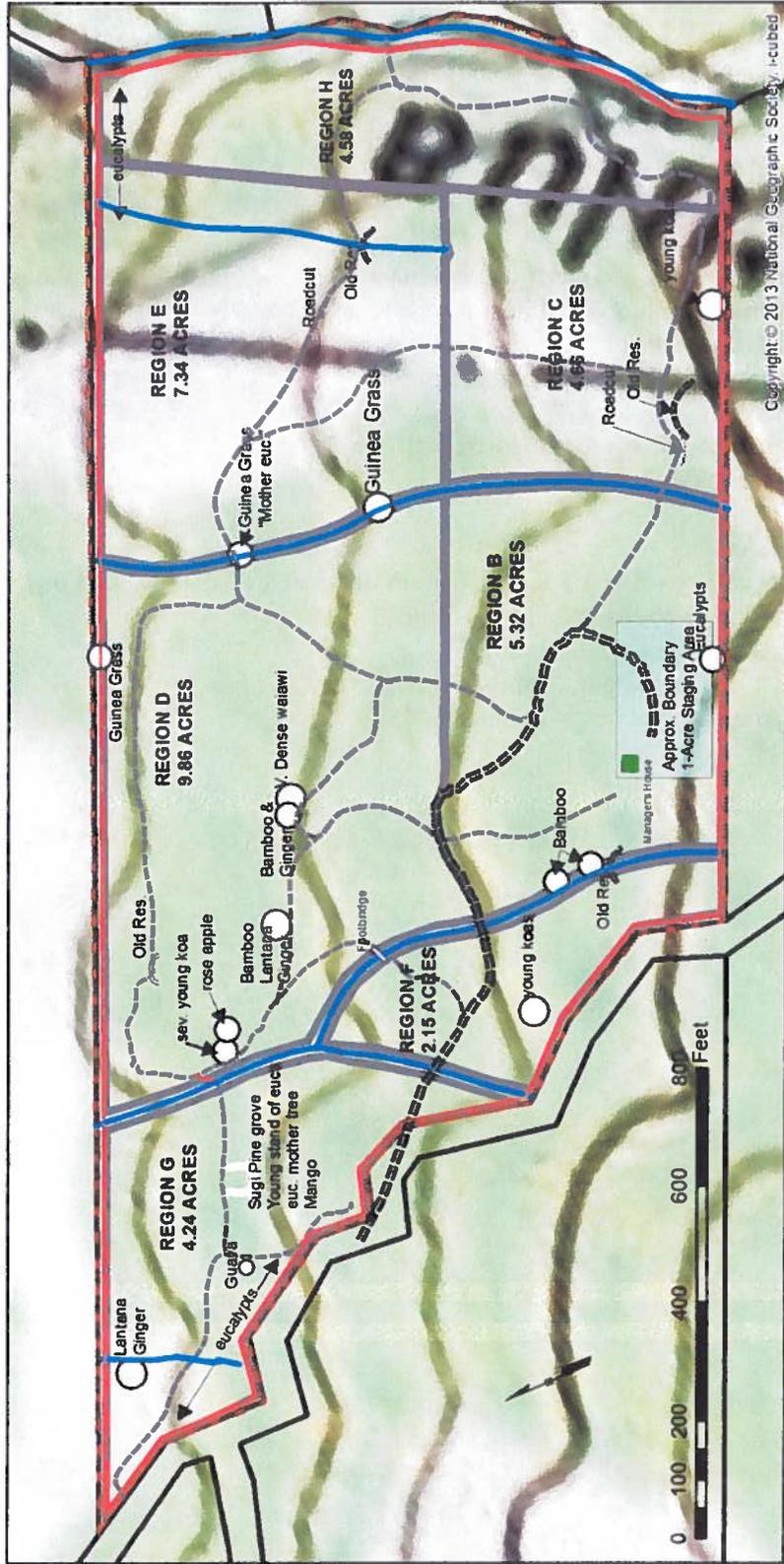
Region	Description	Primary Invasive	Area (acres)
A	10' buffer along property boundary and from top-of-slope of Kupapaulua Gulch.	Strawberry guava often forms a wall on the mauka property and along Kupapa'ulua Gulch, generally speaking. Along the eastern and makai property boundaries, the mix of invasive species is more diverse, and includes guava, ginger, eucalyptus trees, and lantana, among others.	1.520
B	Region surrounding site manager's residence. But excluding this one-acre area. This region includes grassy areas and some dense stands of strawberry guava, as well as attractive groves of healthy, mature ohia Stream channels contain dense stands of strawberry guava and rose apple. Borders Region A on mauka side. Eucalypts on adjacent property near new house site are a safety hazard. Also contains bamboo near site manager's residence.	Strawberry guava, bamboo	5.320
C	Area north and east of Region A containing many scattered mature ohia surrounded by strawberry guava. This area contains special scenic value including a prominent ridge line with scenic ohia groves and deep swales. Region C includes a road cut useful as staging area, access to which will require bridge repair. This area contains the largest stand of koa saplings on the property, near the mauka property boundary. This region generally varies from dense stands of strawberry guava to open grassy areas and groves of health, mature, ohia.	Strawberry guava, eucalyptus	4.660
D	Region makai of region B varying from open, grassy areas to stands of mature ohia, as well as dense stands of strawberry guava, particularly along the gulch on the north perimeter. Strawberry guava is colonizing many open areas in this Region. A small area of ginger, bamboo, and guava is located along the in this Region.	Strawberry guava, lantana, bamboo, formosan koa, ginger, macadamia nut, rose apple, silk oak.	9.860
E	Ridgeline area makai of region C containing many mature ohia. This Region is accessed by a trail from the main access road and a stable stream crossing. This Region has relatively less canopy than other regions on the site. Strawberry guava is colonizing many open areas in this Region.	Strawberry guava, guinea grass, eucalyptus, silk oak	7.340

Region	Description	Primary Invasive	Area (acres)
F	Region F contains many steeply sloping and riparian areas, including some dense uluhe stands and relatively high ohia canopy coverage. Strawberry guava is colonizing many open areas in this Region.	Strawberry guava, melastoma, eucalyptus, ginger, silk oak	2.150
G	Region contains many steeply sloping and riparian areas, including some dense uluhe stands and some areas of relatively high ohia canopy coverage. A stand of sugi pines is in this area, as are a number of very large eucalypts along the NW property boundary, which also contains one area of ginger on the property. Some slopes near existing shared roadway are actively eroding. Strawberry guava is colonizing many open areas in this Region.	Strawberry guava	4.240
H	Region bordering Kapapa'ulua Gulch and portion of Region A extending 10' from top-of-slope. Undulating area contains many very dense areas of strawberry guava and a region of eucalypts on the makai side near the northeast property corner. As Kupapa'ulua is a virtual monoculture of strawberry guava, this Region has been colonized by this plant relatively more than other regions.	Strawberry guava	4.580
Stream Channels	As invasive management within stream channels is neither cost-effective nor permitted, eradication, primarily of strawberry guava, should be aimed for and maintained to the top-of-slope. Invasives should be removed from colonized areas outside of stream channels.	Strawberry guava, melastoma, guinea grass, rose apple	0.726
Staging Area			1.000
Total Area			41.396 acres

Proposed Trails and Site Features Map

Legend

- Plant Feature
- - - Proposed Trail
- ▬ Existing Access Road
- ▬ Region Boundary
- ▬ Fenced Area
- ▬ Property/Project Boundary
- ▬ Transient Stream Channel



Fence Specifications

K I I K SERVICES, INC.
P.O. BOX 166
KEAAU, HI 96749

JOB NAME: Kaye Lundburg

JOB SPECIFICATIONS:

MATERIALS:

All Materials are ASTM Certified and meet State and Federal Regulations

- Pressure treated Pine Wood Post
- 6'6" USA Galvanized T Post with Bezinal Clips
- 12.5 Gauge Barbed Wire strand at bottom
- 1348 x 6 Bezinal coated X Fence Fabric
- 48" High Bezinal coated 13 Horizontal Line Wire
- 6" Bezinal coated Vertical Spacing

INSTALLATION:

- All posts will be set at 2.5 feet minimum depth and tamped back in 6" lifts
- All termination points and gates will be "H" braced
- All T Post will be set 10 feet apart
- Line Post will be installed approximately every 100 feet
- T Post Anchors will be set as needed

IX. Project Site Photographs

This section contains site photographs that are intended to show the characteristics of each management region. Region A contains the properties of all bordering regions and is not depicted.



Region B – Typical view, with scattered ohia and often dense stands of strawberry guava (as shown in background). Region includes open areas around site manager’s residence.



Region B – This region includes a portion of the access road. Most ohia are surrounded by a belt of strawberry guava. The ohia near the center is unusual in that it stands alone.



Region C – Often steeply sloping this region is more open and grassy than most others, with dense stands of strawberry guava surrounding scattered and mature ohia.



Region C – The adjacent property on the mauka side (here south-southwest) is a virtual monoculture of strawberry guava, here seen as a wall of green in the background. Also in this region, in an area near this mauka property boundary, there is a stand of young koa. Also shown is a portion of Region A, the 10-foot buffer following the property boundary.



Region D – This region varies from open grassy areas with relatively little canopy and scattered mature ohia with denser stands in in some areas.



Region D – This region also contains a sugi pine grove, some rapidly colonizing eucalyptus, silk oaks, and a few isolated loquat.



Region E – This region has perhaps less ohia canopy than other regions, as well as less strawberry guava.



Region E – This region contains a particularly scenic Ohia grove.



Region F – This steeply sloping and undulating region above the meeting point of two stream varies from open grassland being colonized by strawberry guava in mauka areas, with some dense stands, to thick uluhe in makai areas. This region also has a number of young koa in the mauka portion near the northern property boundary.



Region F – Taken from Region D, this photograph show the expansive uluhe stand just above the confluence of two streams. Note the hummocky and steeply sloping ground surface.



Region G – In this area, an old road descends from the access road, ending just above a broad grassy swale in which several weeds new to the property are found, including, ginger, loquat, lantana and rose apple, among others.



Region G – this region also contains a relatively higher fraction of ohia canopy, with dense stands of strawberry guava at their bases, as well as both young and old eucalyptus in some areas.



Region H – This region is dominated by strawberry guava, having colonized the area from the Kupapa‘ulua Gulch and the adjacent property on the mauka side. A trail descends from near the south/mauka corner of the property, eventually leading down into the gulch.



Region H – This undulating region contains scattered stands of uluhe fern among the dense stands of strawberry guava and scattered ohia.

X. Monitoring activities

Labels and flags will be placed with out-planted trees indicating date planted and names. The sites will be monitored regularly on a weekly basis until plants are fully established to determine survival, vigor, weed incursions, as well as disease and insect attack. Species which do not do well may be replanted in other locations or not planted at all. Monitoring will consist of walking through the planted areas to determine if there are weeds emerging which will need to be pulled, mulched, or sprayed. This is done for early detection and eradication of weed invasion, and to contain neighboring weed infestations. Insect and disease inspections will also be done on a regular basis to monitor plant health. This will require checking plant foliage for pests and disease symptoms. If a plant dies, it will be pulled up and the roots examined for cause. If a pest population increases to some level that can no longer be tolerated, then it may be necessary to implement some control practices.

Fence monitoring will include walking the fence line monthly to detect breaches and repair as needed.

A record of the monitoring notes will be kept for future planting and reports.

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NEIL ABERCROMBIE
GOVERNOR OF HAWAII



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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

EXEMPTION NOTIFICATION

Regarding the preparation of an environmental assessment pursuant to Chapter 343, Hawaii Revised Statutes.

Project Title:	Lundberg Forest Stewardship project, Hamakua District, Hawaii County, Tax Map Key: (3) 4-1-004:045: portion.
Project Number:	N/A
Project Description:	Implementation of Forest Stewardship management plan
Chapter 343 Trigger:	Use of State Land and Funds
Exemption Class & Description:	<p>Exemption Class No. 1 Item 8, "Weed, brush and noxious tree control using hand tools, small motorized equipment (chainsaws and weed eaters), and approved herbicides on DOFAW program areas, campsites, picnic grounds, viewpoints, baseyards, wildlife water units, trails, captive propagation facilities, arboreta, plant nurseries, checking stations, and public use facilities."</p> <p>Exemption Class No. 3 Item 1, "Fences around or to manage rare, threatened or endangered plants, covered and open areas for endangered species, game birds and mammals; auxiliary buildings for food storage, equipment storage, incubators and brooders; open-top breeding and release pens, field aviaries, hacking boxes, and for watershed and native forest management and restoration. Fences shall contain step-over or other features that permit pedestrian access for cultural and recreational uses."</p> <p>Exemption Class No. 4 Item 7, "Establish temporary or permanent vegetative cover including trees, shrubs and grasses for landscaping, reforestation, soil stabilization, and wildlife habitat provided, however, that this exemption shall not apply to tree plantings for which harvesting is planned or is reasonably foreseeable."</p>
Recommendation:	It is anticipated that this project will have minimal or no significant effect on the environment and is presumed to be exempt from the preparation of an environmental assessment.

William J. Aila, Jr., Chairperson

Date