

**ROUND 12 CAPITAL PROJECT NOMINATION FORM**  
**LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS**  
**APPENDIX K**

|   |   |   |                     |
|---|---|---|---------------------|
| <b>Project Name:</b>                                | Spoooner Hazardous Fuels Reduction and Ecosystem Restoration Implementation Project, Phase 3 of 3 | <b>EIP Number:</b><br><i>(Required)</i> | 10178               |
| <b>Federal Agency Sponsor:</b><br><i>(Required)</i> | USFS - LTBMU  | <b>Contact:</b>                         | Rita Mustatia       |
| <b>Threshold:</b>                                   | Vegetation  | <b>Phone Number:</b>                    | 530-543-2677        |
| <b>Threshold Standard:</b>                          | Common Veg/Hazardous Fuels  | <b>Email:</b>                           | rmustatia@fs.fed.us |
| <b>FUNDING REQUESTED IN THIS ROUND:</b>             |   | \$ 900,000                              |                     |

**Federal Share EIP Consideration**

Select "yes" or "no" for each question. If you have a "yes" response, briefly describe. **Projects must meet one or more of these 5 items.**

- 1. Does the project involve federal land? Yes  No**   
**If yes, is the federal land involved important to successful implementation of the project?**

This project is located solely on National Forest System lands within the Lake Tahoe Basin. This project can only be implemented on National Forest System land.

- 2. Is this project identified in the EIP? If yes, please ensure the EIP number is identified in the above project information box. If no, provide a description of the project's contribution to the EIP program. Yes  No**

This project is listed in the EIP as number 10178.

- 3. Does the project involve the conservation of a federal or regional threatened, rare, endangered, or special interest species? If yes, identify. Yes  No**

Included in this project is the objective to protect or improve habitat for Forest Service Management Indicator Species (MIS) as well as sensitive species. Stands have been identified for reducing high fuel loads within Northern goshawk Protected Activity Centers (PACs) - areas identified for nesting and foraging habitat. Using an active management approach for treating these PACs, small trees (up to 14" diameter at breast height) would be hand thinned and surface fuel loads treated to a level that would reduce predicted fire behavior so that treated stands would continue to provide optimal nesting and foraging habitat and likely survive a wildfire.

- 4. Does the project involve an identified federal interest such as the detection and eradication of non-native invasive species (aquatic or terrestrial)? Yes  No**   
**If yes, identify.**

Field surveys were conducted to detect terrestrial invasive species. Based on these surveys, proposed hazardous fuels reduction treatments would be implemented to minimize the further spread of invasive species as well as project monitoring to ensure that if new locations are detected, control measures can be taken.

5. Does the project develop knowledge and/or information to develop future capital projects in the EIP? (such projects that fulfill this function would include technical assistance, data management, and/or resource inventories) Yes  
 No

**Check all Capital Focus Area(s) that apply (as defined in the Federal Vision):**

- 1. **Watershed and Habitat Improvement**
- 2. **Forest Health**
- 3. **Air Quality and Transportation**
- 4. **Recreation and Scenic**

**Check all that apply (must meet a minimum of one category):**

- 1. **Continued emphasis on forest ecosystem health/fuels reduction projects considering the LTBMU Stewardship Fireshed Assessment and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.**
- 2. **Continued implementation and/or completion of projects approved in Rounds 5 through 11 which implement the EIP. Project proposal should clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 12.**

*List Previously Approved Rounds and funding(provide project titles):*

SPOONER HAZARDOUS FUELS REDUCTION and ECOSYSTEM RESTORATION IMPLEMENTATION, Phase 1 of 3, Round 10 SNPLMA – Hazardous Fuels; \$1,000,000 to accomplish 555 acres.

SPOONER HAZARDOUS FUELS REDUCTION and ECOSYSTEM RESTORATION IMPLEMENTATION, Phase 2 of 3, Round 11 SNPLMA – Lake Tahoe Restoration; \$3,125,000 to accomplish 1805 acres.

- 3. **Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel). NOTE: If “yes”, then please respond to questions in the Accomplishments section of the nomination proposal.**
- 4. **Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.**

## Project Nomination Proposal Outline

### **Project Summary (a brief summary which clearly describes the proposed project –maximum 200 words)**

- Summarize ONLY the Round 12 project (also summarize scaling of funding to be described in more detail in the “Project Description” section below).

This proposal would provide funding for for the final phase of implementation to complete fuel reduction treatments in the Spooner area of Lake Tahoe. The project would implement hazardous fuel reduction and forest ecosystem health treatments on approximately 470 acres.

These fuel reduction and forest health treatments would focus on the Wildland Urban Interface. These treatments would reduce the level of hazardous fuels within the defense and threat zones, and result in an improvement in the Fire Regime Condition Class on the landscape. This would be accomplished through the use of hand thin, pile, and pile burn treatments. Biomass would be implemented as an alternative to pile burning when feasible (approximately 50 acres).

### **Project Description**

#### **Introduction**

- Provide project background which explains the situation and state the problem and how it will be addressed.

*Note: Focus needs to be the project in Round 12 not a history of an ongoing project or program.*

The need for this project is a result of fire exclusion, repeated drought cycles, and mortality caused by insect and disease that have combined to produce a forest landscape with dense brush understory, significant ladder fuels, over-stocked forest stands, expanding areas infected with dwarf mistletoe, extensive areas of down and standing dead trees and conifer-invaded aspen stands. Previous fires in the Lake Tahoe area have burned with devastating results, including the Angora and Washoe fires in 2007 that burned over 250 homes and over 3,000 acres.

The Spooner Hazardous Fuels Reduction and Ecosystem Restoration project is located in the northeast portion of Lake Tahoe from Glenbrook north to Incline Village, Nevada. The objective of the project is to 1) reduce the wildfire threat to communities, watersheds and natural resources and 2) improve the health and fire resiliency of the forest landscape. The projects focus is on creating conditions in the WUI (urban, defense and threat) zones that would greatly improve conditions for firefighters and citizen safety in the event of a wildfire. This includes the ability to provide a safe environment for firefighters during fire suppression and increase the safety of travel routes for both evacuation of citizens and access for fire suppression resources.

The Spooner project area was derived from priority areas as identified in the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy (Fuels Strategy). The Fuels Strategy is supported by the California and Nevada Tahoe Basin Fire Commission and their recommendations to the Governors of California and Nevada. Hazardous fuel reduction and forest health treatments in this phase of the project would occur on approximately 470 acres.

- Describe what Round 12 is specifically funding; list the number of years the requested funding will cover; briefly describe how this project links into previous projects/rounds

(identify and describe other round projects and funding received). Show scaling of project (reduced funding request and associated reduction in accomplishments).

**NOTE:** Focus should be on finishing current/phased projects. If project is new in Round 12, clearly identify if the project is for planning or implementation and how it will be completed with Round 12 funds. Identify if other funds will be needed to complete the project. Please identify total non-SNPLMA funds that are being contributed/dedicated to the proposed Round 12 project and the source of those funds.

This project is the final phase (3 of 3) of project implementation for the Spooner Hazardous Fuels Reduction and Ecosystem Restoration Project. The planning phase of this project was completed in January of 2010 and implementation of thinning treatments began in September of 2010.

Phase 1 Implementation (\$1,000,000 to treat 555 acres) was approved in Round 10 and Phase 2 Implementation (\$3,125,000 to treat 1805 acres) was approved in Round 11. This project proposal (Phase 3 of 3) covers the remaining identified treatment needs in the Spooner Hazardous Fuels and Ecosystem Restoration Project at a cost of \$900,000. Approval of this proposal would allow for the completion of all remaining treatments (including burning) beginning in 2013 through the end of 2018, a total of 8 years from the beginning of phase 1 to the end of phase 3.

The final portion of the Spooner Hazard Fuels Reduction project has been submitted under SNPLMA White Pine Amendment Round 12 for 490 acres of hazardous fuels reduction treatments. Approval of this round would complete funding for this project.

- Describe the “readiness” of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc).

The planning phase for the project was completed and a decision signed on January 13, 2010 authorizing fuels reduction and forest health treatments on approximately 3700 acres in the Spooner area of the Lake Tahoe Basin. Field reconnaissance and further refining has reduced the number of acres needing treatment to approximately 3510 acres.

- Describe partnerships for this project. (if applicable, project should identify and describe committed/secured partner funding and/or other partner contributions and how it is integrated into the project).

The proposed project shares jurisdictional boundaries with the Tahoe Douglas Fire Protection District, the North Lake Tahoe Fire Protection District, and the Nevada State Parks. The project area is identified in the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy. This Strategy is a coordinated effort among 16 different agencies in the Lake Tahoe Basin. The Lake Tahoe Basin Management Unit coordinated with the Tahoe Douglas (TDFPD) and North Lake Tahoe (NLTFPD) Fire Protection Districts as well as the Nevada Division of Forestry (NDF) to ensure the project complements hazardous fuels reduction projects that have been completed and projects that are being initiated by both the Nevada Fire Safe Council, TDFPD, NLTFPD and NDF on state park lands.

Coordination with partners occurs through the Tahoe Fire and Fuels Team and the Multi-Agency Coordination Team.

**Note:** The form requests information about project goals, objectives, accomplishments, and questions the program is designed to answer across several different sections. These issues are closely linked and your individual responses should provide a cohesive description.

**Goal – Purpose and Need (“larger” statement of future expected outcome – usually not measurable)**

The goals of this project are to restore fire dependent healthy forest ecosystems and protect life and property.

**Objectives (specific measurable statements of action – Round 12 only - which when completed will move towards achieving the goal)**

*Note: Objectives will form the basis for the milestones/deliverables to be identified in Appendix B-8*

- Describe how fulfilling objectives will contribute to the achievement of one or more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). Provide measures if applicable. For example: acres treated, miles of stream restored for each objective.

The objectives are to reduce standing and down fuel loads and thin dense forest stands through approximately 400 acres of hand thin/pile/burn and 70 acres of prescribed understory burning. Upon completion of these treatments, the vegetation condition will be improved through the creation of forest stand structure that has the fire resilience, species richness, abundance and pattern identified for the Common Vegetation Threshold. Forest stands will be treated so that older and larger trees accelerate development into late seral/ old growth ecosystems, addressing the Late Seral/Old Growth Ecosystems Threshold. Forest Stands within the wildland urban interface that support spotted owl and goshawk habitat will be treated to improve the forest structure (amount of down fuels and stand density) needed to sustain needed habitat over time for the Wildlife Threshold. Design criteria would be included when the project is implemented to protect water quality and soil conservation. Project implementation would reduce the risk of water quality and soil degradation should the area be affected by a wildfire. Modeled fire behavior indicates that flame lengths and fire intensity are reduced after stand treatments similar to the ones proposed for this project as supported by the conclusions documented in “An Assessment of Fuel Treatment Effects on Fire Behavior, Suppression Effectiveness, and Structure Ignition on the Angora Fire”, August 2007. This project would help maintain the Water Quality and Soil Conservation Thresholds should a wildfire affect this area.

- Describe the estimated environmental risks from unintended consequences of the proposed project (if applicable).

The Spooner Project Decision Memo identifies design features to reduce environmental risks from unintended consequences to levels determined to be acceptable through inter- and intra-agency review and public comments.

## Accomplishments

- Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project), and how the project results/accomplishments will be communicated and made available to the public.

*Note: Differentiate between direct and/or primary project effects and secondary and/or overall watershed effects.*

Complete both thin/pile and burn treatments on 400 acres and prescribed understory burning on 70 acres within defense and threat zones to reduce fuel loads and improve forest health on National Forest lands.

The primary benefits of project implementation include the following:

- Reduction in stand densities and fuel loads to modify fire behavior and provide defensible space adjacent to private property;
- Reduction in stand densities to reduce stress from drought and competition for nutrients, which subjects them to widespread forest dieback from insects and diseases; and also better prepares stands to survive future climate scenarios.

Secondary benefits anticipated to result from project implementation include:

- Restoration of meadows and aspen stands through the removal of encroaching conifers in order to reduce the potential for catastrophic wildfire to spread through these areas, to promote maintenance of meadows and aspen stands consistent with the TRPA and Pacific Southwest Research Station “Aspen Community Mapping and Condition Assessment Report” (USDA FS, PSW-GTR-185), and to provide wildlife habitat for species that are dependent on meadows and/or aspen.
- The composition, species richness, and function of forested areas and associated wildlife and plant communities will be improved;
- Forests will be in a condition that are fairly open and dominated primarily by larger, fire tolerant trees within the WUI defense zone;
- 

The risk of adverse effects from wildfire to soil productivity and water quality will be reduced;

Monitoring activities and results will be summarized in the LTBMU Forest Monitoring Program Annual Report. Project and program specific monitoring reports will be produced within one to five years after project implementation, depending on the variables being monitored and the questions to be answered. All monitoring reports will be posted on the LTBMU external website. The audiences (public, agencies, and research community) will be informed through appropriate email lists, and public and interagency meetings.

- If you checked “yes” for the project being consistent with and contributing to TMDL pollutant reductions, please consider and integrate the following in the project description:

a) Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.

This project will be primarily implemented through hand treatment and follow up prescribed fire to remove slash piles and understory surface fuels. This project has the potential to host innovative equipment designed to remove biomass off of steep slopes where road access exists. Currently there are plans to host a demonstration project within the Spooner project area that leverages phase 2 implementation funding. The goal of the demonstration project is to remove biomass material from steep slopes using innovative cable yarding equipment. Dependent upon the success of that demonstration project and the economics of the biomass market at the time this project is implemented, the Forest Service may develop biomass removal contracts in lieu of pile burning where feasible.

b) If project includes project level monitoring, describe ability of proposed monitoring strategy to contribute to the state of TMDL knowledge. Also describe if purpose of the capital project is to conduct data collection and/or analysis related to Lake Tahoe clarity.

This project does not propose specific monitoring to contribute to the state of TMDL knowledge.

c) Describe treatment approach for reducing pollutants and/or measures to address connectivity between pollutant sources and Lake Tahoe or its tributaries. Identify target pollutants, and, to the degree feasible, provide quantitative estimates of project effectiveness at reducing pollutant loads (and/or a commitment to provide post-project estimates).

This phase of project implementation is primarily being conducted through hand treatments due to slope constraints and road access to treatment units. Hand treatments have the least impact of all treatment options. Where roads are used for access and biomass removal, soils and stream environment zones (SEZ) would be protected through incorporating proven best management practices as a contract requirement. Where riparian vegetation within SEZs is being displaced by conifer encroachment, treatments would remove conifers using innovative technology, vehicles, and hand treatments to avoid or minimize the impact to soils and native vegetation. These measures would reduce the likelihood of fine sediments from entering waterways, both from overland flow and atmospheric deposition from a wildfire.

d) If appropriate, describe whether, and how, the project can be combined or coordinated with other TMDL implementation projects.

N/A

## Monitoring

- Describe the project monitoring that will be implemented as part of this project including:

- List the questions the monitoring program is designed to answer.

Were soil and water quality protection BMPs implemented as planned/designed and are they effective at protecting soil and water quality? What are the effects of fuels reduction practices on soil and water quality?

- Describe any coordination with, or input from, the science community on monitoring and adaptive management that has occurred on the development of this nomination and what changes (if any) to the project were made as a result of this input.

Monitoring protocols were developed with input from researchers at PSW and TSC.

- Describe the methods and strategies (i.e. monitoring, research, or both) that will be used to verify whether the project goals and objectives have been met? (*Note: A detailed monitoring plan and/or research plan is not required, however, enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.*)

BMP monitoring will be conducted using Region 5 USFS BMPEP protocols, and a BMP implementation checklist. The BMPEP protocols walk the reviewer through a set of questions to evaluate whether BMPs were implemented as planned/designed and whether they were successful at protecting soil and water quality based on visual observations of erosion and sediment transport processes. The answers to these questions are then scored using a “rule set” imbedded within the database used to store the data, which rates the BMP evaluation as either successful or unsuccessful, for both implementation and effectiveness. The BMPEP data is input into a regional database to provide a statistically robust sample for each suite of BMPs across the region. The data provided is qualitative in nature, relying on visual observations rather than quantitative measurements. BMPEP monitoring is funded through USFS appropriated funds and not through this project.

The implementation checklist identifies all the BMPs identified in the NEPA document for the project, and evaluates whether the BMPs were implemented as described.

The soil quality monitoring program is conducted on a programmatic basis, i.e. not every unit or project is monitored. However, units are selected for monitoring that represent either a unique management practice or soil characteristics, not previously monitored. Soil quality measurements include Ksat, bulk density, and soil cover. These data are then input into the WEPP model to estimate runoff and erosion

- Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program.

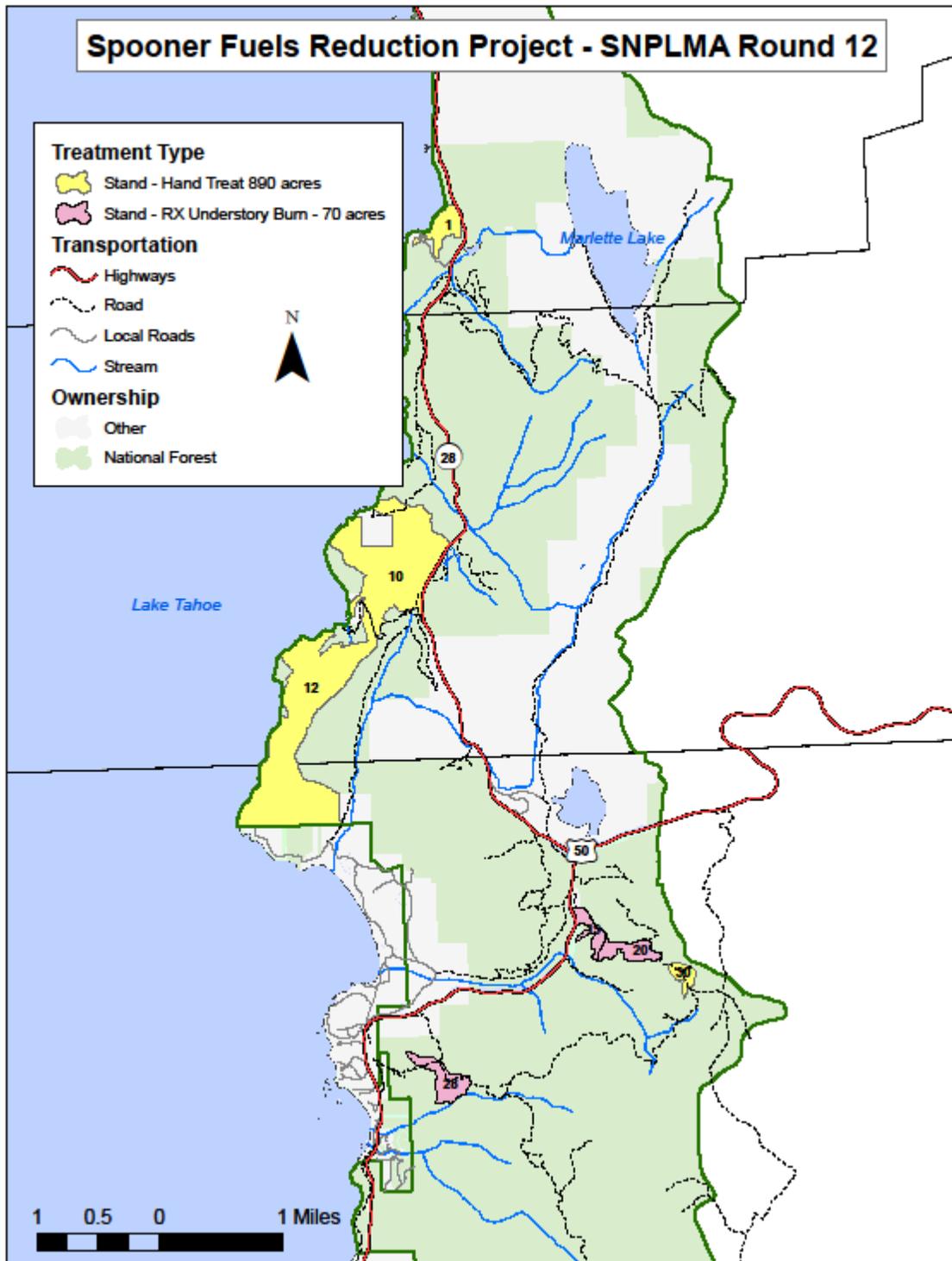
The BMPEP is part of a Regional Monitoring Program within the Forest Service, and may be adopted nationally. All protocols are part of the large Soil and Water Quality Monitoring Program at the LTBMU.

- Describe how information from the monitoring and/or research will be used to improve the continued performance of the proposed project or future similar projects.

In the short term BMP information collected is used to fix or redesign individual project BMPs that are rated as unsuccessful. In the long term, BMP information is used at both the local and regional level to develop solutions to chronic problems identified in either implementation or effectiveness of BMPs. Information from the soil quality monitoring program will be used to validate whether and under what conditions different fuels reduction management practices can be utilized with the Tahoe Basin without causing adverse impacts to soil or water quality.

## Attachments

- Under this version of this proposal, only 400 out of the 890 acres of Hand Treatment would be accomplished.



**Appendix B-8**  
**LAKE TAHOE RESTORATION PROJECTS**  
**ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES**

|                   |  |         |                     |
|-------------------|--|---------|---------------------|
| Project Name:     | Spoooner Hazardous Fuels Reduction and Ecosystem Restoration Project, Phase 3 of 3 | Agency: | USDA Forest Service |
| Prepared by:      | Rita Mustatia  | Phone:  | 530-543-2677        |
| SNPLMA Project #: |  | EIP #:  | 10178               |

**Identify estimated costs of eligible reimbursement expenses:**

|  |            |       |
|--|------------|-------|
| <b>1. Planning, Environmental Assessment and Research Costs</b> (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)   | \$ 5,000   | 1 %   |
| <b>2. FWS Consultation – Endangered Species Act</b>  | \$ 0       | 0 %   |
| <b>3. Direct Labor (Payroll) to Perform the Project</b>  | \$ 324,000 | 36 %  |
| <b>4. Project Equipment</b> (tools, software, specialized equipment, etc.)   | \$ 18,000  | 1 %   |
| <b>5. Travel</b> (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)  | \$ 7,000   | 1 %   |
| <b>6. Official Vehicle Use</b> (pro rata cost for use of Official Vehicles when required to carry out project)   | \$ 20,000  | 2 %   |
| <b>7. Cost of Contracts, Grants and/or Agreements to Perform the Project</b>   | \$ 396,000 | 44 %  |
| <b>8. Other Direct and Contracted Labor:</b> Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contract(s) | \$ 27,000  | 3 %   |
| <b>9. Other Necessary Expenses</b> (see Appendix B-11): Indirect costs associated with implementing a project, such as support services, budget tracking etc.  | \$ 108,000 | 12 %  |
| <b>TOTAL:</b>  | \$ 900,000 | 100 % |

**Estimated Key Milestone Dates:**

| Milestones/Deliverables:  | Date:     |
|---|-----------|
| Prepare & Award Contracts   | 6/1/2013  |
| Complete Hand Contract Work Includes Contract Admin & Inspections | 11/1/2014 |
| Complete Prescribed Understory Burning                            | 12/1/2013 |
| Complete Pile Burning Work  | 6/1/2018  |
| Begin Project Close out   | 6/2018    |
| <b>Final Completion Date:</b> 12/31/2018                          |           |

**COMMENTS:** Direct Labor includes cost for agency crews to implement RX fire.