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

Project Name:	Incline Hazardous Fuels Reduction & Healthy Forest Restoration	**EIP Number:** (***Required***)	10178
Federal Agency Sponsor: (***Required***)	USFS - LTBMU	**Contact:**	Rita Mustatia
Threshold:	Vegetation	**Phone Number:**	530-543-2677
Threshold Standard:	Common Veg/Hazardous Fuels	**Email:**	rmustatia@fs.fed.us
FUNDING REQUESTED IN THIS ROUND:	**$** 5,000,000		

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? If yes, is the federal land involved important to successful implementation of the project?** — ***Yes*** ☒ ***No*** ☐

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 (North Shore).

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 California spotted owl and 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)? If yes, identify.** — ***Yes*** ☒ ***No*** ☐

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):

SNPLMA Lake Tahoe Capital Projects Round 9 Hazardous Fuels Reduction and Wildfire Prevention Category for $1,000,000 to complete the Planning and NEPA for this project.

SNPLMA Lake Tahoe Capital Projects Round 10 Hazardous Fuels Reduction and Wildfire Prevention Category for $1,000,000 to accomplish 539 acres of treatment.

- ☒ *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 the funding for an additional phase of implementation to complete fuel reduction and forest ecosystem health treatments on approximately 1,818 acres out of a total of approximately 4,000 acres of National Forest System lands in the Incline Village area of the Lake Tahoe Basin.

Focus will be on the Wildland Urban Interface (WUI). 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 within the landscape. This would be accomplished through the use of hand thin, pile, pile burn or biomass removal as well as mechanical thin and biomass removal contracts on both upland and riparian areas.

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.*

Fire exclusion, repeated drought cycles, insect infestations, and tree diseases have combined to produce an area 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. These conditions and the lack of wild or prescribed fire can be characterized by a Fire Regime Condition Class (FRCC) III, which represents a severe departure from historic fire return intervals and stand structure on over 50 percent of the landscape. Effects of this condition class can be seen in 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. Smaller human and lightning caused fires are also frequent in this area (Basin-wide occurrence of wildland fires from 1973 to 2010: 2,612 fires consuming 5,452 acres). Carnelian Bay, Tahoe Vista, Kings Beach, Incline Village and Crystal Bay have been listed in the Federal Register as "Communities within the Vicinity of Federal Land That Are at Risk From Wildfire."

Fuel reduction treatments in this project would cover the National Forest System lands in the WUI on the northeast area of Lake Tahoe from Crystal Bay to Incline Village, Nevada. The treatments identified will improve the FRCC by moving from a severe departure to within historic mean (i.e., Class III towards Class II or I). The Incline Village 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. Implementation would be accomplished through a combination of agency crews and utilization of contractors. Hazardous fuel reduction treatments in this phase of the project would occur on approximately 1,818 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 secondary round of funding would specifically cover hazardous fuels reduction treatments utilizing hand thinning, piling and pile burning or biomass removal on an estimated 1,100 acres. Another estimated 718 acres of hazardous fuels reduction treatments utilizing mechanical equipment to thin trees, remove material including biomass, and masticate slash and brush. These treatments include additional forest health benefits in Stream Environment Zones, aspen stands, and both Spotted Owl and Northern Goshawk habitats.

The requested funding will cover six years to allow for the completion of hand and mechanical contract work, curing of slash piles for burning and the actual burning of slash piles.

This project links to SNPLMA Round 10 Incline Hazardous Fuels Reduction and Wildfire Prevention Project approved for $1,000,000 which funds the first of three phases of project implementation.

This secondary round of funding for $5,000,000 under SNPLMA would be for an additional phase of project implementation. This funding would accomplish approximately 1,818 acres of hand and mechanical treatment and associated prescribed pile burning. SNPLMA Round 9 provided funding for the completion of the planning and NEPA for this project. The environmental analysis identified approximately 4,000 acres of National Forest System land for hazardous fuels reduction and forest health treatments.

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

This project has been identified as a high priority project for the Lake Tahoe Basin Management Unit due to dense forest stands and high fuel loads within proposed treatment areas adjacent to urban core areas. Scoping and planning is currently on-going with NEPA preparation beginning the winter of 2011. A final CE and signed decision memo is currently scheduled for the winter of 2012.

- 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).

This project is consistent with the Fuels Strategy and partners with the Tahoe Regional Planning Agency (TRPA), North Lake Tahoe Fire Protection District, and the Lake Tahoe Basin Region of the Nevada Fire Safe Council. The partner roles with the TRPA include the implementation of the Environmental Improvement Program for the Lake Tahoe Basin and the roles with the Fire Protection District and the Fire Safe Council include coordinated project treatment locations and implementation of hazardous fuels treatments across boundary lines between work performed by the Forest Service and our partners. 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 protect life and property and restore fire dependent forest ecosystems.

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 1,818 acres of hand thin/pile and burn, mechanical thin, biomass removal, and mastication contracts. Upon completion of these contracts, 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. When completed the Fire Regime Condition Class would be improved from Class III. 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 Incline 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 hand and mechanical hazardous fuels reduction contracts within defense and threat zones to reduce fuel loads and improve forest health over approximately 1,818 acres of National Forest System lands.

The primary benefits of project implementation include the following:

- Reduction in stand densities and fuel loads to modify fire behavior and provide for 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;

Secondary benefits anticipated to result from project implementation include:

- 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;
- 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.

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 proposes to use hand treatments and low impact innovative technology equipment within stream zone areas of the project to treat hazardous fuel loads that are above desired levels and where conifer encroachment is displacing native riparian species such as aspen, alder and willow. Low impact innovative technology equipment will minimize the disturbance to soil hydrologic functions.

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 project would protect soils and stream environment zones (SEZ), which includes riparian and wetland areas, through incorporating proven best management practices and low impact equipment. Best management practices would include road maintenance and reconstruction to provide road surface stabilization, proper road drainage through installation of waterbars or rolling dips, maintenance or upgrading of drainage structures, restoration of temporary roads, limiting operating periods to dry soil conditions, or over the snow, protection of unstable lands, stream course and meadow protection, erosion prevention and control measures. 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. Conifer removal would enhance and restore native riparian vegetation (e.g., aspen restoration) to enhance wildlife habitat. 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: The monitoring to be implemented in this proposal addresses short term implementation and effectiveness (≤ 3 yrs post project). Long term project effectiveness monitoring (>3 yrs post project) for all LTBMU projects and programs will be addressed through either 1) The Forest Above Project level monitoring program funded through the USFS SNPLMA NEPA Resources Surveys project, 2) LTBMU base appropriated funds for Forest Plan Monitoring), or 3) TSC coordinated research projects.

  - 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 the Forest Service Pacific Southwest Station.

  - 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

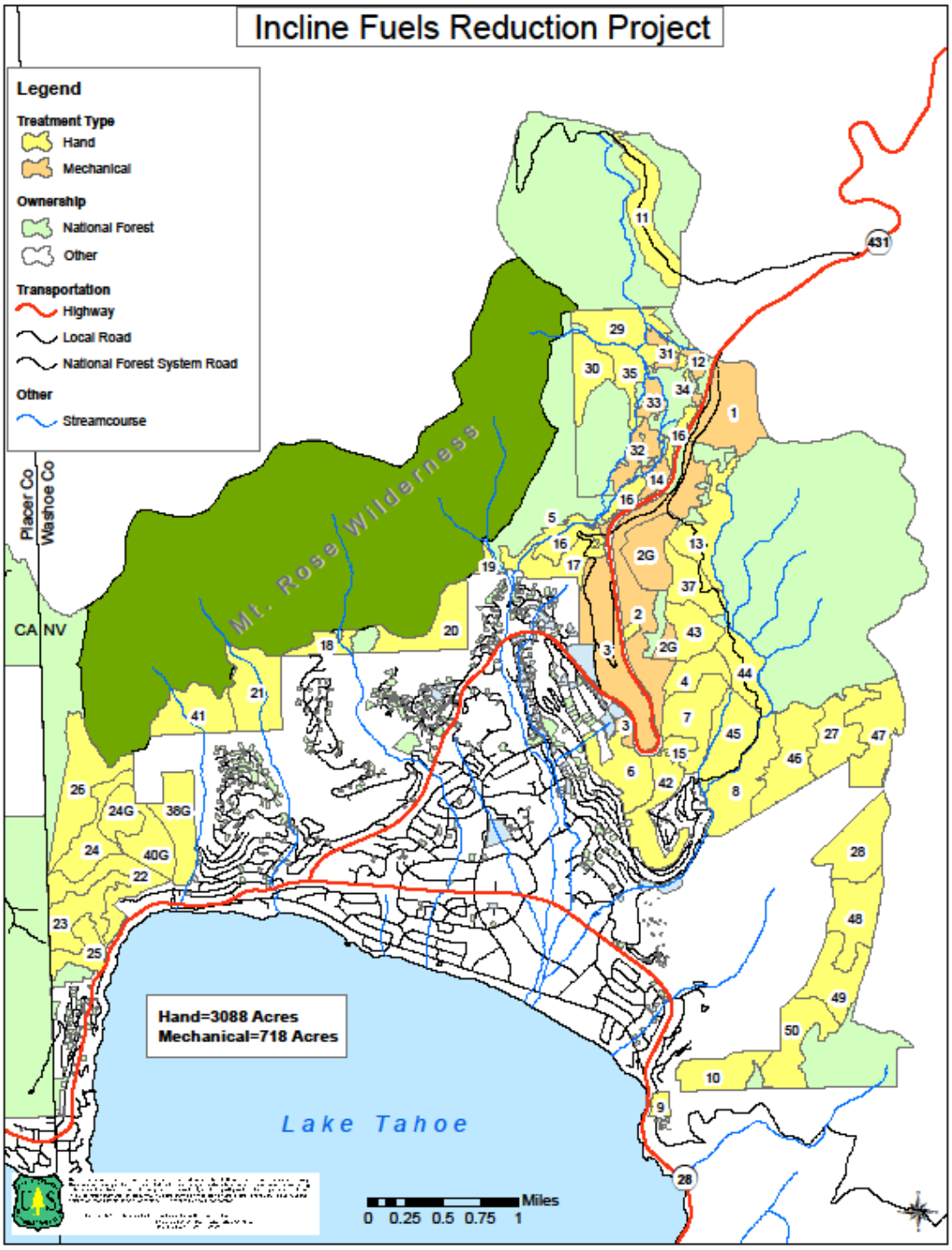
monitored. Soil quality measurements include Ksat, bulk density, and soil cover. These data are then input into the WEPP model to estimate runoff and erosion response from the management practice on that unit (see previous analysis utilizing these protocols on the LTBMU website for the Ward and Heavenly SEZ projects). It has not been determined at this time whether specific units from this project will be selected for this more in depth soil quality monitoring.

- 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.


Incline Fuels Reduction Project
Legend
Treatment Type
Hand
Mechanical
Ownership
National Forest
Other
Transportation
Highway
Local Road
National Forest System Road
Other
Streamcourse
Placer Co
Washoe Co
CA
NV
Mt. Rose Wilderness
Lake Tahoe
Hand=3088 Acres
Mechanical=718 Acres
Miles
0 0.25 0.5 0.75 1

Appendix B-8

LAKE TAHOE RESTORATION PROJECTS
ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name:	Incline Hazardous Fuel Reduction & Forest Health	Agency:	USDA Forest Service
Prepared by:	Rita Mustatia	Phone:	530-543-2677
SNPLMA Project #:		EIP #:	10178

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	$ 5,000	<1 %
2. FWS Consultation – Endangered Species Act	$ 0	0 %
3. Direct Labor (Payroll) to Perform the Project	$ 1,000,000	20 %
4. Project Equipment (tools, software, specialized equipment, etc.)	$ 8,000	<1 %
5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	$ 5,000	<1 %
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	$ 10,000	<1 %
7. Cost of Contracts, Grants and/or Agreements to Perform the Project	$ 3,000,000	60 %
8. Other Direct and Contracted Labor: 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)	$ 372,000	7 %
9. Other Necessary Expenses (see Appendix B-11): Indirect costs associated with implementing a project, such as support services, budget tracking etc.	$ 600,000	12 %
TOTAL:	$ 5,000,000	100 %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Prepare Field Work, Advertise and Award Contracts	4/30/2014
Complete Hand & Mech Contracts Including Admin & Inspections	11/1/2016
Complete Pile Burning and Prescribed Underburning	7/1/2019
Begin Project Close-Out	12/31/2019
Final Completion Date: 7/1/2020	