

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

Project Name:	Urban Forest Restoration and Fuels Reduction, Phase 6 of 6	EIP Number: <i>(Required)</i>	10183.08
Federal Agency Sponsor: <i>(Required)</i>	USDA-Forest Service LTBMU	Contact:	Brian Garrett
Threshold:	Vegetation	Phone Number:	530-543-2617
Threshold Standard:	Common Veg/Hazardous Fuels	Email:	bdgarrett@fs.fed.us
FUNDING REQUESTED IN THIS ROUND:		\$ 1,100,000	

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 lands.

- 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 10183.08.

- 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's environmental planning process was the objective to protect or improve habitat for Forest Service Management Indicator Species (MIS) as well as threatened, endangered, or sensitive species. Stands being treated under this project that are located near Protected Activity Centers (PACs) for Northern goshawk and California spotted owls have limited operating periods to prevent disturbance during the nesting season.

- 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**

This project includes identification, monitoring and manual control of listed noxious weeds on small urban forest parcels. Monitoring and control visits are conducted on all known populations 2-3 times per growing season. In addition, Parcel Condition Monitoring surveys are being conducted on urban forest stands and include surveys for invasive weeds. When populations are discovered, manual control action is taken.

During the environmental planning process for this project, field surveys were conducted to detect terrestrial invasive species. Based on these surveys, proposed hazardous fuels reduction treatments would be implemented to minimize 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 Round 5 for \$995,000 accomplished 302 acres, project is closed.

Lake Tahoe Round 6 for \$1,445,000 accomplished 489 acres, project is closed.

Lake Tahoe Round 7 (Phase 1) for \$1,650,000 accomplished 607 acres, project is closed.

Lake Tahoe Round 8 (Phase 2) for \$1,500,000 has accomplished 494 acres to date, with an additional 78 acres planned. The project will be completed by 12/2011.

Lake Tahoe & Hazardous Fuels Round 9 (Phase 3) for combined \$2,000,000 has accomplished 336 acres to date, with an additional 191 acres planned. The project closing date is 12/2012.

Lake Tahoe Round 10 (Phase 4) for \$2,000,000 has accomplished 189 acres to date, with an additional 255 acres planned. The project closing date is 12/2013.

Lake Tahoe Round 11 (Phase 5) for \$1,350,000 will begin in 2011 with planned accomplishment of 325 acres. The project closing date is 12/2015.

- 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 project will continue implementation of Integrated Resource Management (IRM) treatments on National Forest System urban parcels and interface lands located within the wildland urban interface (WUI). IRM treatments have multiple objectives including fuels reduction, hazard removal, soil stabilization and erosion control, invasive species control and management of disease and insect outbreaks. Proposed treatments would be accomplished through the use of agency crews and agency administered contracts, which may include agreements with local Fire Protection Districts and Fire Departments. These treatments would reduce the level of hazardous fuels within the WUI through the use of thinning of forest stands, pile burning, slash chipping and biomass removal. Fuels reduction treatments would conduct thinning of trees and brush and clean up of surface fuel loading to enhance and improve defensible space for structures located on adjoining private lands. Treatments will be implemented by hand labor and/or with ground based equipment. In addition to fuels reduction defensible space treatments, erosion control restoration treatments, invasive species control, hazard tree removal and management of active insect or disease outbreaks will be implemented as needed. Included in project implementation is contract administration and project monitoring. An estimated 275 acres of IRM treatments are expected to be accomplished under this 6th and final phase of the Urban Forest Restoration and Fuels Reduction project (225 acres of defensible space fuels treatments and 50 acres of erosion control, invasive species control, hazard removal and insect/disease management).

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.

This Round 12 project continues hazardous fuels reduction and forest restoration (IRM treatments) on National Forest urban forest parcels and interface lands. This phase (6 of 6) of urban forest restoration and fuels reduction will primarily focus on fuels reduction treatments on NFS urban forest located in Incline Village area of Washoe County, the Hwy 50 and Kingsbury areas of Douglas County and the Heavenly area of Eldorado County. The areas targeted for defensible space fuels reduction treatments under this project have a mosaic of condition including overstocked forest stands, existing surface fuels, and areas of dense understory vegetation (shrubs and small trees) that do not meet current standards for defensible space. While these treatments are occurring on undeveloped NFS urban parcels, in most cases, structures on adjoining private lands are located 5-20 feet from the NFS boundary. Current defensible space standards call for treatments at least 100 feet from a structure. The LTBMU Fireshed Analysis and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy (Fuels Strategy) identify a high priority need to treat these portions of the WUI landscape. This project is consistent with the objectives of the Fuels Strategy and continues integrated resource management under the Urban Lot Environmental Assessment.

- 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 funding implementation of urban forest restoration and hazardous fuels reduction treatments (IRM treatments) on approximately 275 acres. These treatments are currently identified in the LTBMU Fireshed Analysis and the Tahoe Basin Fuels Strategy as high priority areas for treatment. The project funds will cover the costs of field layout and preparation of treatment units (including marking and cruising of trees), preparation of contracts and agreements for treatments, award of contracts and agreements for treatment implementation, administration of projects and contracts, biomass removal and chipping, and pile burning. The field and contract preparation work will begin in 2012, with most of the treatments occurring in 2013 and 2014. Pile burning would occur in 2015 and 2016.

This project is a continuation of previous SNPLMA funded Urban Forest Restoration and Fuels Reduction projects. This project is phase 6 of 6 for the Urban Forest Restoration and Fuels Reduction Project (see list of previous phases on pages 2 & 3).

While there is no specific non-SNPLMA funding currently identified for this Round 12 project, it is anticipated that pile burning treatments implemented under this project will be supported by Forest Service suppression crews funded through appropriated monies. SNPLMA funded crews will be the primary prescribed fire implementers for prescribed fire treatments. Forest Service fire suppression crews are utilized in a support role and availability of those crews are not guaranteed. In addition, when biomass utilization is implemented under this project, it is anticipated that a percentage of the cost associated with the removal will be covered under partnerships currently being developed.

Project Scalability: If this project was scaled to \$825,000, the project deliverables would be reduced to 175 acres of IRM treatments.

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

Integrated Resource Management treatments were analyzed under the Urban Lot Environmental Analysis which was completed in 1995 and updated in 2002. These projects have been identified as priority projects for the Lake Tahoe Basin Management Unit and tier to the LTBMU Stewardship Fireshed Assessment and the Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.

- 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 partners with the Tahoe Regional Planning Agency (TRPA), Lahontan Regional Water Quality Control Board, Lake Valley Fire Protection District, South Lake Tahoe Fire Department, Fallen Leaf Fire Department, Tahoe-Douglas Fire Protection District, North Lake Tahoe Fire Protection District, North Tahoe Fire Protection District, Meeks Bay Fire Protection District, Lake Tahoe Basin Region of the Nevada Fire Safe Council and is consistent with the Fuels Strategy.

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 for this project are to facilitate the protection of life and property, enhance defensible space work occurring on adjacent private lands, enhance fire suppression capabilities, restore fire dependent ecosystems and promote forest health.

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.

Project objectives to reduce standing and down fuel loads to improve defensible space within the WUI will be accomplished on approximately 225 acres of National Forest System urban parcels and interface lands. These treatments will be implemented through a variety of methods that could include hand thin/pile and burn, mechanical thin, chipping and biomass removal. 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 will enhance and improve defensible space for structures located on adjoining private lands. 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 treatments are complete, the Fire Regime Condition Class would be improved from Class III to a lower Class. This project would help maintain the Water Quality and Soil Conservation Thresholds should a wildfire affect this area. This project will also complete other treatments such as erosion control restoration, invasive species control, hazard removal and insect/disease management on approximately 50 acres. These treatments also contribute to water quality, soil conservation, vegetation and recreation thresholds.

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

None estimated.

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.

This project will accomplish approximately 275 acres of Integrated Resource Management (IRM) treatments (225 acres of defensible space fuels reduction treatments and 50 acres of erosion control restoration, invasive species control, hazard tree removal and insect/disease management) on urban forest parcels and interface lands.

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 thinning and low impact innovative technology equipment to treat hazardous fuel loads that are above desired levels. 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 best management practices as a contract requirement. 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, ripping/subsoiling of temporary roads, limiting operating periods to dry soil conditions, protection of unstable lands, streamcourse and meadow protection, control of tractor skidding and log landing location, erosion prevention and control measures, and erosion control on skid trails. 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 provide optimal water quality and enhance wildlife habitat. These measures would reduce the likelihood of fine sediments from entering waterways.

This project also includes implementing forest restoration and erosion control measures on urban forest parcels within existing disturbed areas (compacted soils, roads, etc...). These projects restore disturbed urban forest lands through soil de-compaction, re-contouring disturbed hill slopes, establishment of vegetation and blocking of access points to prevent further damage from unauthorized activities.

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 USFS researchers.

- 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.

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.

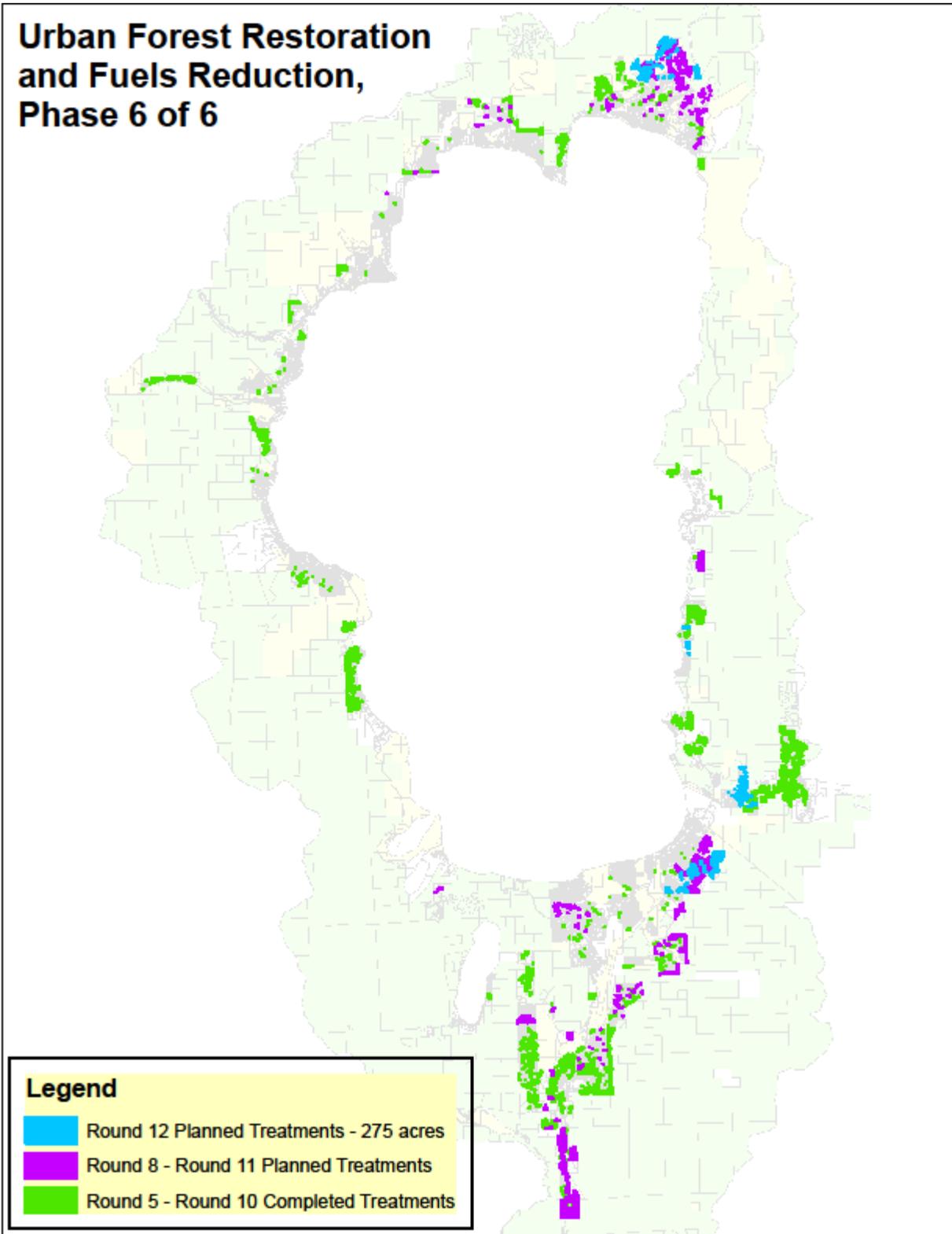
The BMPEP is part of a Regional Monitoring Program within the Forest Service, and may be adopted nationally. All protocols are part of the large Soil and Water Quality Monitoring Program at the LTBMU.

- 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 within the Tahoe Basin without causing adverse impacts to soil or water quality.

Attachments

- If applicable, include 8 ½ X 11 map depicting the project



Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name:	Urban Forest Restoration and Fuels Reduction	Agency:	USDA-Forest Service, LTBMU
Prepared by:	Brian Garrett	Phone:	530-543-2617
SNPLMA Project #:		EIP #:	10183.08

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ 2,000	0.5 %
2. FWS Consultation – Endangered Species Act	\$ 0	0 %
3. Direct Labor (Payroll) to Perform the Project	\$ 350,000	32 %
4. Project Equipment (tools, software, specialized equipment, etc.)	\$ 10,000	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.)	\$ 6,000	0.5 %
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$ 25,000	2 %
7. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ 500,000	45 %
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)	\$ 75,000	7 %
9. Other Necessary Expenses (see Appendix B-11): Indirect costs associated with implementing a project, such as support services, budget tracking etc.	\$ 132,000	12 %
TOTAL:	\$ 1,100,000	100 %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Complete Field Layout, Prep, Marking	5/30/2013
Award Contracts and Agreements	7/30/2013
Complete WUI and IRM Fuels Treatments	12/30/2014
Complete biomass removal and pile burning	12/1/2016
Begin Project Close-Out	12/1/2016
Final Completion Date: 6/30/2017	

COMMENTS: