Appendix B-8

LAKE TAHOE RESTORATION PROJECTS
ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name: South Shore Hazardous Fuel Reduction & Healthy Forest Restoration (Phase 4 of 6) Agency: USFS – LTBMU
Prepared by: Scott Parsons Phone: 530-543-2687 EIP #: 10177
SNPLMA Project #:_____

Identify estimated costs of eligible reimbursement expenses:

1. **Planning, Environmental Assessment and Research Costs** (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	$ 0	0	%
2. **FWS Consultation – Endangered Species Act**	$ 0	0	%
3. **Direct Labor (Payroll) to Perform the Project**	$ 269,000	7	%
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	<1	%
6. **Official Vehicle Use** (pro rata cost for use of Official Vehicles when required to carry out project)	$ 15,000	<1	%
7. **Cost of Contracts, Grants and/or Agreements to Perform the Project**	$ 2,925,000	78	%
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 contracts)	$ 75,000	2	%
9. **Other Necessary Expenses** (see Appendix B-9)	$ 450,000	12	%
TOTAL:	$ 3,750,000	100	%

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Prepare and Award Contracts	8/2010
Complete Hand Contract Work Including Contract Administration and Inspections	10/2011
Complete Pile Burning Work	12/2013
Complete Mechanical Contract Work Including Contract Administration and Inspections	12/2013
Final Completion Date:	12/2014

COMMENTS: Estimate 1900 acres of hazardous fuels reduction work to accomplish through agency contracts and Fire Safe Council Work.

ROUND 10 CAPITAL PROJECT NOMINATION FORM
LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS
APPENDIX K

Project Name: South Shore Hazardous Fuels Reduction & Healthy Forest Restoration Phase 4 of 6

Federal Agency Sponsor: USFS - LTBMU **Contact:** Scott Parsons

Threshold: Vegetation **Phone Number:** (530) 543-2687

Threshold Standard: Common Veg/Hazardous Fuels **Email Address:** sparsons@fs.fed.us

Funding Requested in this Round: $3,750,000

Total Project Cost:

LTRA Round 7	$1,800,000 (Phase 1)
LTRA Round 8	$5,800,000 (Phase 2)
White Pine Round 8	$2,695,000 (Phase 2)
TOTAL	**$10,295,000**

LTRA Round 9 $2,245,000 (Phase 3, pending final approval)

Federal Share EIP rationale (select and describe appropriate EIP criteria from 5 items below – projects must meet one or more of these 5 items) :

1. **Does the project involve federal land?** *Yes*
   - **If so, 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. **Does the EIP identify the federal funding for the EIP project (project #)?** This project is listed in the EIP as number 10177.

3. **Does the project involve the conservation of a federal or regional threatened, rare, endangered or special interest species?** Included in the 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 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 (less than 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 noxious aquatic or terrestrial invasive species?** 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 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 otherwise directly support federal implementation of capital projects in the EIP (e.g. technical assistance, data management, resource inventories, etc.)?** This project proposal is for direct federal implementation of hazardous fuels reduction.

List Capital Focus Area(s) (as described in the 2006 Federal Vision): Forest Health

Circle 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 Fuel Reduction and Wildfire Prevention Strategy.

2. Continued implementation of projects approved in Rounds 5 through 9 which implement the EIP. Project proposal should identify the applicable project(s) from Rounds 5 through 9 and clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 10.
   Projects: Lake Tahoe Amendment Rounds 7, 8 & 9, SNPLMA Round 8 – all South Shore Hazardous Fuels Reduction and Ecosystem Restoration Projects

3. Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel). List source category being addressed and integrate into the project nomination the following TMDL considerations (see attached TMDL references – page 6).
   Source Category: Forested Uplands

   a) **Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.** This project proposes to use low impact innovative technology equipment within streamzone 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 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.

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

4. Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.

Provide an overall Project Summary (maximum 200 words): (describe ONLY this Round 10 project): Continue to implement hazardous fuel reduction and forest ecosystem health treatments on approximately 1900 acres for the south shore area of the Lake Tahoe Basin. These fuel reduction treatments would cover the National Forest areas from Emerald Bay east to Stateline and would focus on the Urban Wildland Interface. Proposed treatments would be accomplished through the use of agency administered contracts and through fire safe councils. These treatments would reduce the level of hazardous fuels within the defense and threat zones. This would be accomplished through the use of hand thin, pile and burn as well as mechanical thin and biomass removal contracts on both upland and riparian areas. This proposal would provide funding for the fifth of seven phases of implementation to complete fuel reduction treatments in the south shore area of Lake Tahoe. Included in project implementation is contract administration and project monitoring.

Please provide clear and concise written responses to each of the items below.
Please state "not applicable" if you believe the item or question is not applicable to your project.

Is this project proposed as a multi-round project (previous or future)? (If yes, for previous or future projects describe in the Detailed Project Description below number of years or phases and which year the requested funding will cover). This project is proposed as a multi-round project as described in the "Detailed Project Description" section below.

Detailed Project Description (focuses on what Round 10 is funding; list the number of years the requested funding will cover; briefly describe how this project links into previous and future projects). Thinning and fuel reduction treatments in this project would cover the National Forest areas on the south shore of Lake Tahoe from Emerald Bay east to Stateline, Nevada and focus on the Wildland Urban Interface (WUI). The South Shore 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 for full implementation by the California and Nevada Tahoe Basin Fire Commission and their recommendations to the Governors of California and Nevada. Implementation would consist of either a stewardship or service contract package which would include whole tree removal utilizing ground based equipment such as mechanical harvesters and skidders and cut-to-length harvesters and log forwarders. Additional service work would also include hand thinning of smaller trees, piling and burning of ground fuels and mastication. Contract crews would be used to complete the projects. Hazardous fuel reduction treatments in this phase of the project would occur on approximately 1900 acres.

SNPLMA Lake Tahoe Amendment Rounds 7, 8, and 9 along with SNPLMA Round 8 have provided funding for the first four phases of project implementation. This proposal would provide funding for the fifth of a total of seven phases for implementation of treatments proposed under the South Shore Hazardous Fuels Reduction and Healthy Forest Restoration environmental analysis. The environmental analysis for this project has been funded through SNPLMA Lake Tahoe Amendment Rounds 5, 6 and 7. The environmental analysis identified over 9,600 acres of National Forest system land for hazardous fuels reduction and forest health treatments. The sixth and seventh phases of project implementation are expected to cover the balance of the treatments.

If the project fails to be funded, the risks or environmental consequences would be for those treatment areas to remain at risk to catastrophic wildfire should the area burn as well as remain at risk from increased insect and disease due to the present overstocked stands with very high fuel loads. Proposed stands could be partially treated by using timber sales to remove only the commercial portion of the treatment units, but the desired condition would not be reached and treatment stands would be left with fuel ladders from small live conifers as well as heavy fuel loads from standing dead and down trees. Use of timber sale contracts would be dependent on federally appropriated funding to administer these contracts and at this time current appropriated funding on the Lake Tahoe Basin Management Unit is not adequate to support use of timber sales as an option.

Describe the specific goals and objectives of the project and describe how fulfilling those objectives will contribute to the achievement of one more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). The *goals* of this project are to restore fire dependent healthy forest ecosystems, enhance fire suppression capabilities, and protect life and property; the objectives are to reduce standing and down fuel loads and thin dense forest stands through approximately 1900 acres of hand thin/pile and burn, mechanical thin, biomass remove 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 resistance, species richness, abundance and pattern identified for the Common Vegetation Threshold. Forest stands will be treated so that older and larger trees are maintained so that the time required for these stands to develop into late seral/ old growth ecosystems will be accelerated for 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 contracts are 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 anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project): Complete both hand and mechanical hazardous fuels reduction contracts within defense and threat zones to reduce fuel loads and improve forest health over approximately 1900 acres of National Forest lands.

Describe the "readiness" of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc.): The environmental analysis for this project is scheduled for completion in April 2009. 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. South Shore project implementation is scheduled to begin in summer 2009 through approved SNPLMA Round 7 funds. Implementation of treatment areas from this proposal would begin in 2010 with contract preparation and contract award in 2011.

Describe partnerships for this project. (if applicable, project should identify committed/secured partner funding and/or other partner contributions (describe) and how it is integrated into the project): This project partners with the Tahoe Regional Planning Agency (TRPA), Lake Valley Fire Protection District, South Lake Tahoe Fire Department, Fallen Leaf Fire Department, Lake Tahoe Basin Region of the Nevada Fire Safe Council for the implementation of a portion of the Fuels Strategy, and the Lahontan Regional Water Quality Control Board for project implementation under the portion of this project covered under the California Environmental Quality Act (CEQA).

Describe the estimated environmental risks from unintended consequences of the proposed project: The most likely unintended consequences of this proposed project would be treatment areas that would not receive any treatment. The prevalent environmental risks associated with this would be for growth rates of trees to decrease due to high levels of competition and as stands reach and persist at maximum densities, they would remain at high risk of widespread mortality from insect and disease outbreaks and/or wildfire.

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 (≤ 3yrs 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.

1) **The questions the monitoring program is designed to answer:** To what degree are best management practices implemented and effective in protecting soil and water resources?

2) **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): The monitoring approach will be identified in the completed environmental analysis. An adaptive management monitoring approach will be used to monitor implementation and effectiveness of the project. This monitoring will involve data collection before, during and after the project.

3) **Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program:** This project monitoring is part of the Project Level LTBMU 5-year Plan, which outlines the strategy for monitoring projects within the various program areas within the LTBMU. The LTBMU project level monitoring strategy is to determine the success of LTBMU projects in meeting design features, project specifications, and design measures (implementation monitoring), and when possible, whether projects were effective in achieving short term environmental goals.

4) **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:** Project level monitoring results will be used in the short term to determine whether maintenance or corrective actions are needed to meet design goals and specifications. Project level monitoring results will be periodically assessed in a comprehensive evaluation of results with the vegetation management program, to evaluate overall success of design approach(s) with the vegetation management program.

Describe how the project results will be communicated and made available to the public: 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. In addition the LTBMU will periodically produce a Comprehensive Five Year Evaluation Report as part of the Forest Plan Monitoring Requirement. 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.
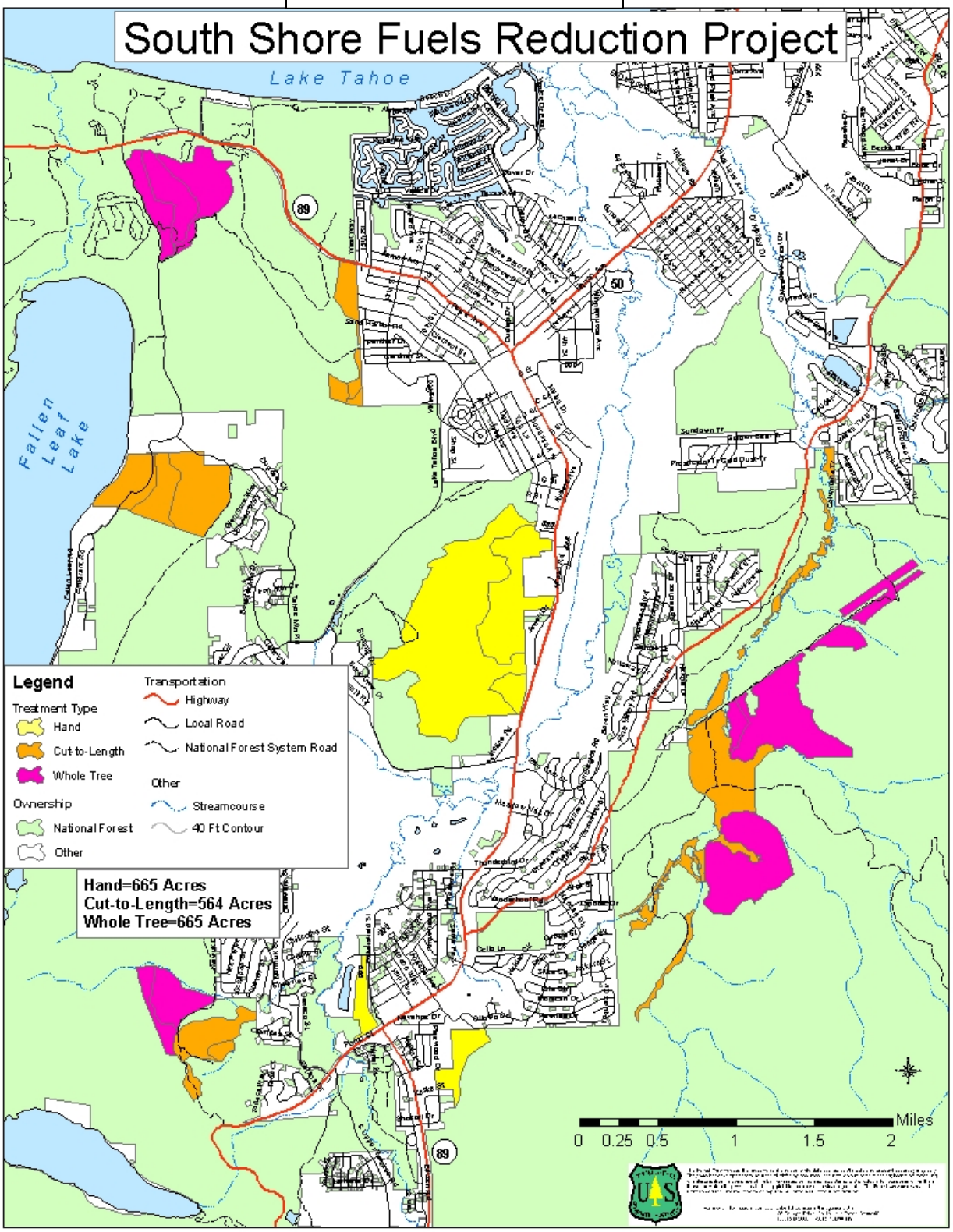
Figure 1, Project Area