

## Appendix B-8

### LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

West Shore WUI Hazardous Fuel  
Reduction & Forest Health Planning

Project Name: Project Agency: USFS – LTBMU  
 Prepared by: Duncan Leao Phone: 530-543-2660 EIP #: 10176  
 SNPLMA Project #:

**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.)	\$ <u>255,000</u>	<u>34</u>	%
<b>2. FWS Consultation – Endangered Species Act</b>	\$ <u>5,000</u>	<u>1</u>	%
<b>3. Direct Labor (Payroll) to Perform the Project</b>	\$ <u>245,000</u>	<u>33</u>	%
<b>4. Project Equipment</b> (tools, software, specialized equipment, etc.)	\$ <u>10,000</u>	<u>1</u>	%
<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.)	\$ <u>5,000</u>	<u>1</u>	%
<b>6. Official Vehicle Use</b> (pro rata cost for use of Official Vehicles when required to carry out project)	\$ <u>15,000</u>	<u>2</u>	%
<b>7. Cost of Contracts, Grants and/or Agreements to Perform the Project</b>	\$ <u>50,000</u>	<u>7</u>	%
<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 contracts)	\$ <u>75,000</u>	<u>10</u>	%
<b>9. Other Necessary Expenses</b> (see Appendix B-9)	\$ <u>90,000</u>	<u>12</u>	%
<b>TOTAL:</b>	\$ <u>750,000</u>	<u>100</u>	%

**Estimated Key Milestone Dates:**

Milestone/Deliverable:	Date:
Pre-NEPA planning, forest plan consistency review, & agency collaboration (NFMA)	November 2009
Collect field data, conduct surveys for environmental analysis	November 2010
Start NEPA Analysis-Initiate public scoping including stakeholders	June 2010
Finish specialist reports, environmental effects and modeling analysis	December 2011
Finish NEPA documentation, sign decision	April 2012
<b>Final Completion Date:</b>	<b>December 2012</b>

**COMMENTS:**

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

**Project Name:** West Shore WUI Hazardous Fuel Reduction & Forest Health Planning Project

**Federal Agency Sponsor:** USFS - LTBMU

**Contact:** Duncan Leao

**Threshold:** Vegetation

**Phone Number:** (530) 543-2660

**Threshold Standard:** Common Veg/Hazardous Fuels

**Email Address:** dleao@fs.fed.us

**Funding Requested in this Round:** \$750,000

**Total Project Cost:** \$750,000

**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. The project NEPA analysis will include treatments to occur on National Forest System land.
  
2. **Does the EIP identify the federal funding for the EIP project (project #)?** This project is a newly proposed project. West Shore EIP Number is 10176.
  
3. **Does the project involve the conservation of a federal or regional threatened, rare, endangered or special interest species?** Included in the project's environmental planning process would be the objective to protect or improve habitat for Forest Service Management Indicator Species (MIS) as well as threatened, endangered, or sensitive species. Surveys for wildlife species have not yet occurred.
  
4. **Does the project involve an identified federal interest such as the detection and eradication of noxious aquatic or terrestrial invasive species?** Fields surveys would occur during the environmental planning process for this project. Hazardous fuels reduction treatments identified in the project would incorporate any necessary design features and monitoring to reduce the risk of noxious weed spread.
  
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 NEPA analysis of fuels treatments.

**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.

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.** The project analysis may include prescribed treatments in SEZs to reduce fuel loading and potential fire severity. Low impact innovative technology equipment would be specified as a treatment method to reduce conifer encroachment, fuels and 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).** The project would specify during analysis appropriate BMPs, and design features for protection of water quality. 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. N/A

**Provide an overall Project Summary (maximum 200 words): (describe ONLY this Round 10 project):** Conduct planning using the National Environmental Policy Act (NEPA) process for

project level decision-making to reduce stand density and hazardous forest fuels along the West Shore (See figure 1). Up to 13,400 acres of forest stands will require analysis for appropriate treatments to occur for completion of areas identified in the Lake Tahoe Basin Multi-jurisdictional Fuels Reduction and Wildfire Prevention Plan (Fuels Strategy).

Objective is develop an implementation project to better protect communities, watersheds, and natural resources from catastrophic wildfire. Treatments would occur in:

1. Areas identified for treatment in the Fuels Strategy that have not been analyzed for treatment by past and current projects.
2. SEZs that were not treated in the past and currently require treatment to reduce fuels and promote aspen and other riparian vegetation dominance.
3. Hand thinned units that were treated more than 5 years ago (~1,500 acres) but require further treatment in order to update the treatment effectiveness to current standards.

Deliverables:

1. Field Surveys (Wildlife, Botany, Watershed, Etc.)
2. NEPA reports and analysis
3. Stakeholder Involvement
4. NEPA documentation and decision covering treatments to occur in the West Shore analysis area to complete the remaining WUI treatments identified in the Fuels Strategy.

**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 requests funding for this round only, to cover NEPA planning, analysis, and decision. The implementation of treatments analyzed in the project would occur from future rounds or other funding.

**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).**

The funding for this proposal will include analyzing vegetation and hazardous fuels treatments to take place on up 13,400 acres. Deliverables are the following:

1. Field Surveys (Heritage Resources, Wildlife & Botany, Watershed, Fuels, and Vegetation Conditions)
2. NEPA reports and analysis (Vegetation and Fire Behavior modeling, Watershed Assessments, Biological Evaluation/Assessment, Management Indicator Species Report, Heritage, etc.)
3. Stakeholder Involvement (community, public, and inter-agency consultation)
4. NEPA documentation and decision covering the remaining West Shore analysis area to complete the remaining WUI treatments identified in the Fuels Strategy.

The project implementation process for NEPA planning and a decision to implement the project by the forest supervisor has five major steps as described below in Table 1. Depending on the scope of analysis and documentation as determined by on the ground field surveys, implementation of this proposal may last **2-3 years**.

**Table 1. Project Steps and Estimated Timing**

Pre-NEPA planning, forest plan consistency review, & agency collaboration (NFMA)	November 2009
Collect field data, conduct surveys for environmental analysis	November 2010

Start NEPA Analysis-Initiate public scoping including stakeholders	June 2010
Finish specialist reports, environmental effects and modeling analysis	December 2011
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<b>Final Completion Date:</b>	<b>December 2012</b>

Due to the geographic setting within the Lake Tahoe Basin, forest stand conditions along the West Shore of Lake Tahoe from Emerald Bay to Watson Lake consist of the most densely overstocked stands and the heaviest surface fuel loading. The overabundance of white fir causes increased ladder fuels and susceptibility to drought related mortality and insects and disease. In addition, several neighborhoods and homes are isolated along steep slopes with few to no evacuation routes. Furthermore, many west shore areas are underserved with water in the fire hydrant systems. Most of the private water purveyors fail to meet minimum fire flow requirements (including the provision of adequate hydrant spacing) and as such challenge firefighting efforts. These conditions pose a grave threat to West Shore communities, infrastructure, forest health, and wildlife, in the event of a catastrophic wildfire. To date, the LTBMU has completed approximately 4,700 acres of thinning and hazardous fuel reduction treatments through the implementation of the Quail Vegetation and Fuels Treatment Environmental Assessment (EA) (2005) and the Ward Fuel Hazard Reduction EA (2002).

In August 2007, the Washoe Fire started in the lower Talmont neighborhood along the West Shore near Tahoe City. The fire consumed a total of 5 homes and 13 acres before burning into a mechanically treated stand in the Ward project area which caused the fire to drop to the surface, allowing firefighters to easily suppress it. Without the previous mechanical fuels treatment, fire suppression efforts would have been less effective, safety to firefighters and the public would have been compromised, and the fire size and severity would have undoubtedly been much larger. This fire along with the Angora fire (2007) have been a wake up call for agencies and the public to expedite the planning and completion of fuels reduction projects. Without further completion of treatments along these neighborhoods a wildfire could escape initial suppression efforts and threaten many more homes.

According to the Emergency California-Nevada Tahoe Basin Fire Commission Report (2008), Category 6, Funding, present levels of funding for planning associated with the Basin Fuels Strategy were found to be inadequate. Finding # 43 states, “Fuel reduction/forest restoration efforts in the Lake Tahoe Basin require consistent funding mechanisms. Land management agencies must be able to plan forest fuel reduction projects on a long-term schedule to reach strategic objectives in the Fuel Strategy to generate a sustainable market that will insure reliable contractors are available to work in the Lake Tahoe Basin.”

The Lake Tahoe Basin Fuels Strategy identifies the need for up to 13,400 acres of additional stand treatment on the West Shore. These areas are highlighted in Figure 2.

If the project fails to be funded, project level analysis for fuels treatments would be delayed and 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.

**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 objective is to conduct NEPA analysis and develop an implementation project to better protect communities, watersheds, and natural resources from catastrophic wildfire. To reach the goals and objective, treatments would be analyzed to occur in:

1. Areas identified for treatment in the Fuels Strategy that have not been analyzed for treatment by past and current projects.
2. SEZs that were not treated in the past and currently require treatment to reduce fuels and promote aspen and other riparian vegetation dominance.
3. Hand thinned units that were treated more than 5 years ago (~1,500 acres) but require further treatment in order to update the treatment effectiveness to current standards.

Without this project analyzing for fuels and vegetation treatments, on the ground implementation of treatments would not be possible. Based on past NEPA projects of similar scope, the implementation of treatments prescribed in this NEPA analysis have potential to benefit the Vegetation, Wildlife, and Water Quality and Soil Conservation Thresholds. This is because treatments would improve Forest Health, thus improving the resistance and resilience of the forest to processes such as wildfire, insect and disease outbreaks, wind storms, drought, and climate change. Improving forest health will in turn maintain a forest structure with healthy vigorous trees, maintain or improve wildlife habitats over the long term, and improve water quality by keeping soil structure and cover due to reduced fire intensity potential.

**Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project):** Project deliverables include analyzing vegetation and hazardous fuels treatments to take place on up 13,400 acres. This requires:

1. Field Surveys (Heritage Resources, Wildlife & Botany, Watershed, Fuels, and Vegetation Conditions)
2. NEPA reports and analysis (Vegetation and Fire Behavior modeling, Watershed Assessments, Biological Evaluation/Assessment, Management Indicator Species Report, Heritage, etc.)
3. Stakeholder Involvement (community, public, and inter-agency consultation)
4. NEPA documentation and decision covering the remaining West Shore analysis area to complete the remaining WUI treatments identified in the Fuels Strategy.

**Describe the “readiness” of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc.):** The LTBMU is fully staffed with resource specialists able carry out the NEPA process. Numerous contactors with NEPA expertise also exist to support project related work. This project has been identified as a high priority project for the LTBMU due to dense forest stands and high fuel loads within proposed treatment areas adjacent to urban core areas. Treatment areas within this project are also identified in the 10-Year Fuels Strategy.

**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 would partner with the Tahoe Regional Planning Agency (TRPA), Lahontan Water Quality Control Board, Lake Tahoe Basin Region of the Nevada Fire Safe Council, Meeks Bay

and North Tahoe Fire Protection Districts, local fire safe chapters, state and municipal governments, environmental advocacy groups, and interested public.

**Describe the estimated environmental risks from unintended consequences of the proposed project:** Environmental risks from unintended consequences of the project likely do not exist. This is because the project proposes to conduct NEPA analysis. The risk of not doing the project would delay reaching goals as described on page 5.

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

Project monitoring or research would be identified through the NEPA process and interdisciplinary team analysis. This would include collaboration with interested researchers and the TSC. Monitoring required by law, policy, or regulation would be included in the project decision.

- 1) **The questions the monitoring program is designed to answer:** N/A
- 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):** N/A
- 3) **Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program:** N/A
- 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:** N/A
- 5) **Describe how the project results will be communicated and made available to the public:** N/A

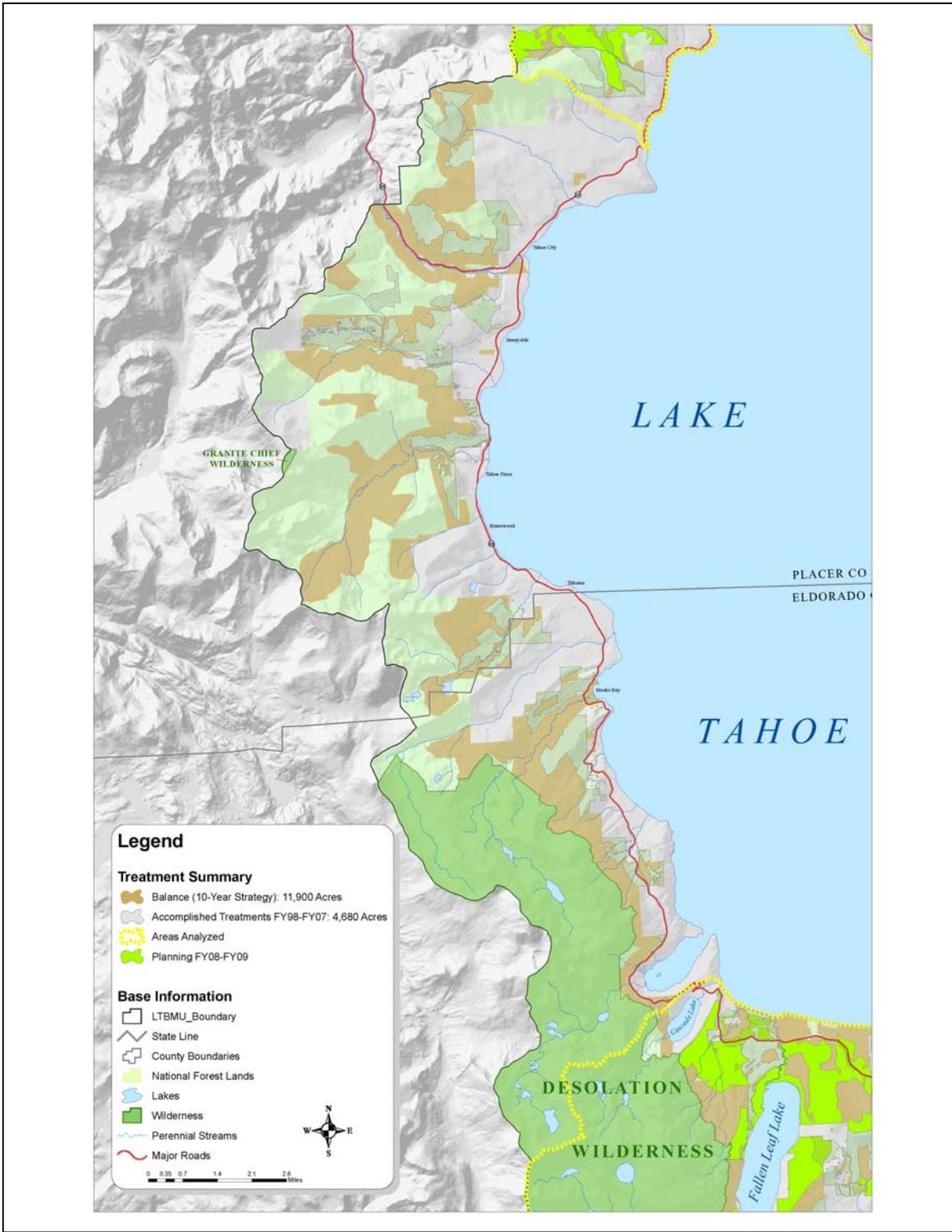


Figure 1. West Shore WUI Planning Project Map. A total of 13,400 acres to be analyzed including a balance of 11,900 acres is shown as the remaining acreage to be treated in order to meet goals in the Fuels Strategy and approximately 1,500 acres of the already accomplished treatments from 1998-2007 may require additional treatment to meet desired tree density and hazardous fuel loading.