

Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name: Lake Tahoe Basin Prescribed Fire Underburn Project Agency: USFS – LTBMU
 Prepared by: Mark Johnson Phone: 530-543-2658 EIP #: _____

Identify estimated costs of eligible reimbursement expenses:

1. Planning and Environmental Assessment Costs (specialist surveys/reports including cultural resources, archaeology, wildlife, biology, environmental documentation, NEPA if required, etc.)	\$ <u>67,450</u>	<u>5</u> %
2. FWS Consultation—Endangered Species Act %%	\$ <u>6,745</u>	<u>0.5</u>
3. Direct Labor (Payroll) to Perform the Project (including one dedicated lead/team member per agency)	\$ <u>539,600</u>	<u>40</u> %
4. Project Equipment (including specialized equipment for resource protection officers)	\$ <u>67,450</u>	<u>5</u> %
5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ <u>13,490</u>	<u>1</u> %
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$ <u>20,235</u>	<u>1.5</u> %
7. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ <u>431,680</u>	<u>32</u> %
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)	\$ <u>67,450</u>	<u>5</u> %
9. Other Necessary Expenses (See Appendix B-11)	<u>\$134,900</u>	<u>10</u> %
10. Balance of Contingency Funds	<u>N/A</u>	<u>0</u>
TOTAL*:	<u>\$ 1,349,000</u>	<u>100</u> %

Milestone/Deliverable:	Date:
Lake Tahoe Underburn Project - 1096 ac (approx. 274 ac/year)	2009-2012
Slaughterhouse Project - 400 ac (approx 100 ac/year)	2009-2012
Big Meadow Project - 400 ac (approx 200 ac/year)	2010-2012
High Meadows Project - 150 ac (approx 200 ac/year)	2009-2010
Washoe Meeks Meadow Restoration - 10 acres	2009

Final Completion Date:

12/31/2012

**APPENDIX K
LAKE TAHOE CAPITAL PROJECT PROPOSAL
ROUND 9**

Consistency with Lake Tahoe nomination criteria:

Project nominations must qualify as an Environmental Improvement Program (EIP) project and be the responsibility of the federal government (federal share responsibility); and have a willing and ready federal sponsor.

Project nominations must be consistent with one of the focus areas in the June 2006 Federal Vision (pp. 8-9) (<http://www.fs.fed.us/r5/ltbmu/documents/ltbec/revised-FV-Final.pdf>) and fit into at least one category.

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

Circle a minimum of one category:

1. Continued emphasis on fuels reduction in coordination with projects funded under the 2006 SNPLMA amendment (the “White Pine” amendment).

2. Continued implementation of projects approved in Rounds 5 through 8 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 9.

List project(s):_ East Shore (Slaughterhouse Canyon) Hazardous Fuels Reduction/Eco Restoration (Project # F035, Round 6), Fireshed Directed Fuels Reduction, Planning and Implementation (Project # F073, Round 6), High Meadows Ecosystem Restoration (Round 6 and 7), Big Meadows Ecosystem Restoration (Round 7), and Prescribed Fire Treatment (Round 8).

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 category(ies):_ Forested Uplands

4. Control of aquatic invasive species and prevention of new aquatic invasive species.

Project Name: Lake Tahoe Basin Prescribed Fire Underburn Project

EIP #:

Lead Agency: USFS - LTBMU

Contact: Mark Johnson

Threshold: Vegetation

Phone Number: (530) 543-2658

Threshold Standard: Common Veg/Hazardous Fuels

Email Address: mgjohnson@fs.fed.us

Funding Requested in this Round: \$1,349,000

Total Project Cost: \$1,349,000

Is this a multi-year Project? (If “Yes”, describe in the Detailed Project Description below number of years or phases and which year the requested funding will cover): Yes.

Project Summary (maximum 200 words): (applicable ONLY to this Round 9 project): Continue the implementation of fuels treatments using maintenance underburning in areas that have been previously treated by either mechanical or hand thinning, or have conifer encroachment in meadows. The project would fund prescribed burning on approximately 2056 acres covering five project areas on national forest land in the Lake Tahoe Basin (see figure 1). The previous treatment of mechanical and hand thinning has made it possible to safely and effectively (without severe fire effects) reintroduce low intensity surface fire into a fire adapted ecosystem with this project. The purpose of the project is to reduce fuel loading to safe and acceptable levels within the wildland urban interface (WUI) and to re-introduce low to moderate intensity fire back into a fire adapted ecosystem for improvement of forest health and wildlife habitat. Proposed treatments would be accomplished using Forest Service hand crews and fire and fuels managers or agency administered contracts. This project has also been submitted for funding under Round 9 of the White Pine Amendment to SNPLMA. If the White Pine Amendment Round 9 proposal for this project is not approved, it is to be considered under the Lake Tahoe Round 9 SNPLMA nomination.

Detailed Project Description (focuses on what Round 9 is funding; list the number of years or phases the Round 9 requested funding will cover; if phased, briefly describe how this project links into previously phased projects including what remains for Rounds 10 and beyond): This project provides funds for a continued implementation of what has been approved under LTRA Amendment SNPLMA Rounds 6 and 7 and - East Shore (Slaughterhouse Canyon) Hazardous Fuels Reduction/Eco Restoration (Project # F035, Round 6), Fireshed Directed Fuels Reduction, Planning and Implementation (Project # F073, Round 6), High Meadows Ecosystem Restoration (Round 6 and 7), Big Meadows Ecosystem Restoration (Round 7), and Prescribed Fire Treatment (Round 7). Starting in 2009 and continuing through 2012 implementation of prescribed underburning would be initiated from approved environmental analysis completed under the earlier rounds of this project. The project would restore a healthy, diverse, fire resilient forest structure by introducing prescribed fire to restore fire regimes that were historically part of the ecosystem. Existing forest vegetation and fuel accumulations in the throughout the Lake Tahoe Basin pose a heightened risk for high intensity wildfire around private property. The US Forest Service is directed to prioritize areas that have significant wildland fire risk to private property, watershed and wildlife habitat for fuel reduction treatments that would restore them to a healthy, diverse, fire resilient forest structure.

Based on past seasons underburning accomplishments and staffing availability, it is expected that implementation of this project would produce 800 acres per year of prescribed underburning that may last up to 4 years for completion. Burning would occur mostly under favorable conditions in the Spring and Fall, however, in season Summer burning may also occur given appropriate fuel and weather conditions. After the project is complete, treatment areas would have desired fuel loading levels for 15-20 years. This allows for prescribed underburning to occur as a maintenance treatment into the long term future beyond 20 years and limits the amount required of mechanical and hand thinning.

Describe the goals and objectives of the project (those applicable ONLY to this Round 9 project):

The *goals* of this project are to restore fire dependent healthy forest ecosystems, enhance fire suppression capabilities, and protect life and property. The *objectives* of this project address the Forest Health Focus Area identified in *A Federal Vision for the Environmental Improvement Program at Lake Tahoe* (June 2006). The Forest Health Focus Areas addresses both Vegetation Management and Fuels Management through completion of defense, threat, and general forest zone treatments identified through the Stewardship and Fireshed Assessment process and Community Wildfire Protection plans - so that health and vigor of residual trees is maintained or increased to favor the development of large tree forest structure; prescribed fire treatment methods help achieve the objectives of returning the forests of the Lake Tahoe Basin to a healthy, fire resistant condition - the existing fuel profile will be modified to reduce fuel ladders, standing and down fuel loads, and vegetation so that treated areas would be able to withstand a wind-driven wildfire event without causing significant damage to residual trees.

Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project): Complete prescribed underburning to reduce fuel loads and improve forest health over approximately 2056 acres of National Forest lands. The primary project achievements would be the reduction of forest fuels through prescribed underburning. Prescribed underburning allows fire and fuels managers to treat fuels under desirable fuel moisture and weather conditions to safely reduce fuels and restore fire as an ecosystem process. A result of the proposed project is reduction in fire risk and the potential for loss of lives and property due to an uncontrolled wildfire. The areas identified in this proposal tie in with past fuels treatments on multiple jurisdictions, and are located in areas of conifer encroachment in meadows. Funding this proposal would result in fulfillment of Community Wildfire Protection Plans (TRPA plan, 2007) and the Stewardship Fireshed Assessment (2007). Both of these items are identified in the draft Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy (10 year plan).

This project implements the following prescribed fire underburn projects:

Lake Tahoe Underburn Project (see Figure 1)

Underburn implementation on approximately 1096 acres of lands previously treated by either mechanical or hand thinning. All required NEPA analysis has been completed. This project is a continuation of the maintenance underburn regime that was initiated in Round 8.

Project acres:	1096
Implementation scheduled:	2009 – 2012
Projected annual accomplishment:	274 acres/year.
Total Cost:	\$714970

This project includes the #1, #2, #3 and #4 Priority for the Lake Valley Protection District as identified in the California Wildfire Protection Plan.

This project includes the #3 Priority for the North Tahoe Fire Protection District as identified in the California Wildfire Protection Plan.

This project includes the #3 Priority for the Fallen Leaf Lake Fire Department as identified in the California Wildfire Protection Plan.

This project includes the #2 and #6 Priority for the North Lake Tahoe Fire Protection District (Incline Village) as identified in the Nevada Wildfire Protection Plan.

This project includes the #14 Priority for the Tahoe Douglas Fire Protection District as identified in the Nevada Wildfire Protection Plan.

Slaughterhouse Project (see Figure 1)

Underburn implementation on approximately 400 acres of the Slaughterhouse Fuels Treatment Project All required NEPA analysis has been completed.

Project acres:	400
Implementation scheduled:	2009 – 2012
Projected annual accomplishment:	100 acres/year.
Total Cost:	\$256310

This project includes the #15 Priority for the Tahoe Douglas Fire Protection District as identified in the Nevada Wildfire Protection Plan.

Big Meadow Project (see Figure 1)

Underburn implementation on approximately 400 acres of the Big Meadow Project . NEPA analysis is expected to be completed in late 2008.

Project acres:	400
Implementation scheduled:	2010 – 2012
Projected annual accomplishment:	200 acres/year.
Total Cost:	\$256310

High Meadows Project (see Figure 1)

Underburn implementation on approximately 400 acres of the High Meadows Restoration Project. NEPA analysis is expected to be completed in mid 2008.

Project acres:	150
Implementation scheduled:	2009 – 2010
Projected annual accomplishment:	200 acres/year.
Total Cost:	\$107920

Meeks Meadows Restoration Project (Washoe Tribe) (see Figure 1)

Underburn implementation on approximately 10 acres of the Meeks Meadow Restoration Project. NEPA analysis is expected to be completed by late 2008. Implementation is scheduled for 2009.

Project acres:	10
Implementation scheduled:	2009
Total Cost:	\$13490

This project includes the #5 Priority for the Meeks Bay Fire Protection District as identified in the California Wildfire Protection Plan.

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

Environmental Documentation Completion Schedule:

Lake Tahoe Underburn Project	Spring 2008
Slaughterhouse Project	Complete
Big Meadow Project	Fall 2008
High Meadows Project	Summer 2008
Meeks Meadows Restoration Project	Fall 2008

Describe partnerships for this project. (if applicable, project should identify partner funding [committed/secured] and how it is integrated into the project): The Lake Tahoe Underburn Project, Slaughterhouse Project, and Meeks Meadows Restoration Project are within and directly adjacent to high priority treatment areas identified in the draft Lake Tahoe Basin Multi-Jurisdiction Fuel Reduction and Wildfire Prevention Strategy and the California and Nevada Community Fire Protection Plans. Partnerships with adjacent jurisdictions during implementation will be considered whenever possible.

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

1) The questions the monitoring program is designed to answer:

- How effective is underburning at reducing short term fire risk and intensity? Are project objectives for fuels reduction and wildlife habitat protection being met?
- To what degree are best management practices implemented and effective in protecting soil and water resources during underburn implementation?
- Are Regional soil quality standards being achieved during underburn implementation?

2). The monitoring approach

Project level monitoring will be identified in the environmental analysis process and the prescribed fire burn plan. The burn plan will include the following elements:

- Post burn physical measurements of soil quality parameters such as soil cover and hydrophobicity to evaluate impacts to soil quality.
- Best Management Practices (BMP) effectiveness monitoring, utilizing Region 5 USFS Best Management Practices Evaluation Program (BMPEP) protocols. These protocols, developed in partnership with the SWRCB, provide a qualitative evaluation of BMP implementation and effectiveness.
- Implementation monitoring of fuels reduction prescriptions. Post burn monitoring will be conducted to determine whether prescriptions implemented on the ground met the objectives identified for the project in the prescribed fire burn plan, in regards to the level of dead and live fuel reduction and effects to wildlife habitat.

Funding obtained in this proposal will be utilized to collect post burn monitoring data, and will be performed by LTBMU staff. Future monitoring to evaluate long term ecosystem response (if determined to be desirable) may be solicited through research funds managed by the TSC, or funded through LTBMU base funding or the SNPLMA funded NEPA Resource Surveys project.

3). Whether this project monitoring fits into a larger monitoring or research program

The monitoring described in this proposal has the potential to contribute to a programmatic analysis regarding impacts from underburning fuels reduction projects. For instance, data collected for the BMPEP program is currently analyzed at the Forest and Regional scale. Soil quality monitoring data is also being collected by the LTBMU, to provide a representative data set that characterizes the variety of site conditions and management practices encountered within the LTBMU. There currently is no programmatic level effort in place on the Basin, regarding fuels reduction project impacts as it relates to reduction in fuels and changes to habitat. But a synthesis of existing research is currently being performed (by PSW Research Station) that will determine to what degree these questions have and are being answered outside the Basin, the relevancy of these existing efforts to the Basin.

Describe these two items which will be considered along with the above project monitoring information by the Tahoe Science Consortium related to research and monitoring resource areas and the effectiveness of environmental restoration activities:

1) Describe the specific goals and objectives of the project and describe how fulfilling those objectives will contribute to the achievement of one or more environmental thresholds:

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 on 2056 acres. Upon completion of underburning, the vegetation condition will be improved through the creation of forest stand structure that has the species richness, abundance and pattern identified for the Common Vegetation Threshold. Forest stands will contain and understory of healthy grasses and forbs and the overstory would contain older and larger trees that would develop into late seral/ old growth ecosystems and 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. This project would help maintain the Water Quality and Soil Conservation Thresholds should a wildfire affect this area.

2) Describe the risk to the environment from failure of the proposed project (i.e. if the project fails what is the environmental consequence):

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. A few proposed stands would be partially treated from past projects, but the desired condition of safe fuel loading would not be

reached and treatment stands would be left with high fuel loading of surface fuels and fuel ladders from small seedlings and saplings.

Describe how the project results will be communicated and made available to the public: Results and accomplishments will be summarized in the Annual Forest Monitoring Program Report, as well as project specific monitoring reports. Project specific monitoring reports will be 1 to 5 years post project implementation, depending on variables being monitored.

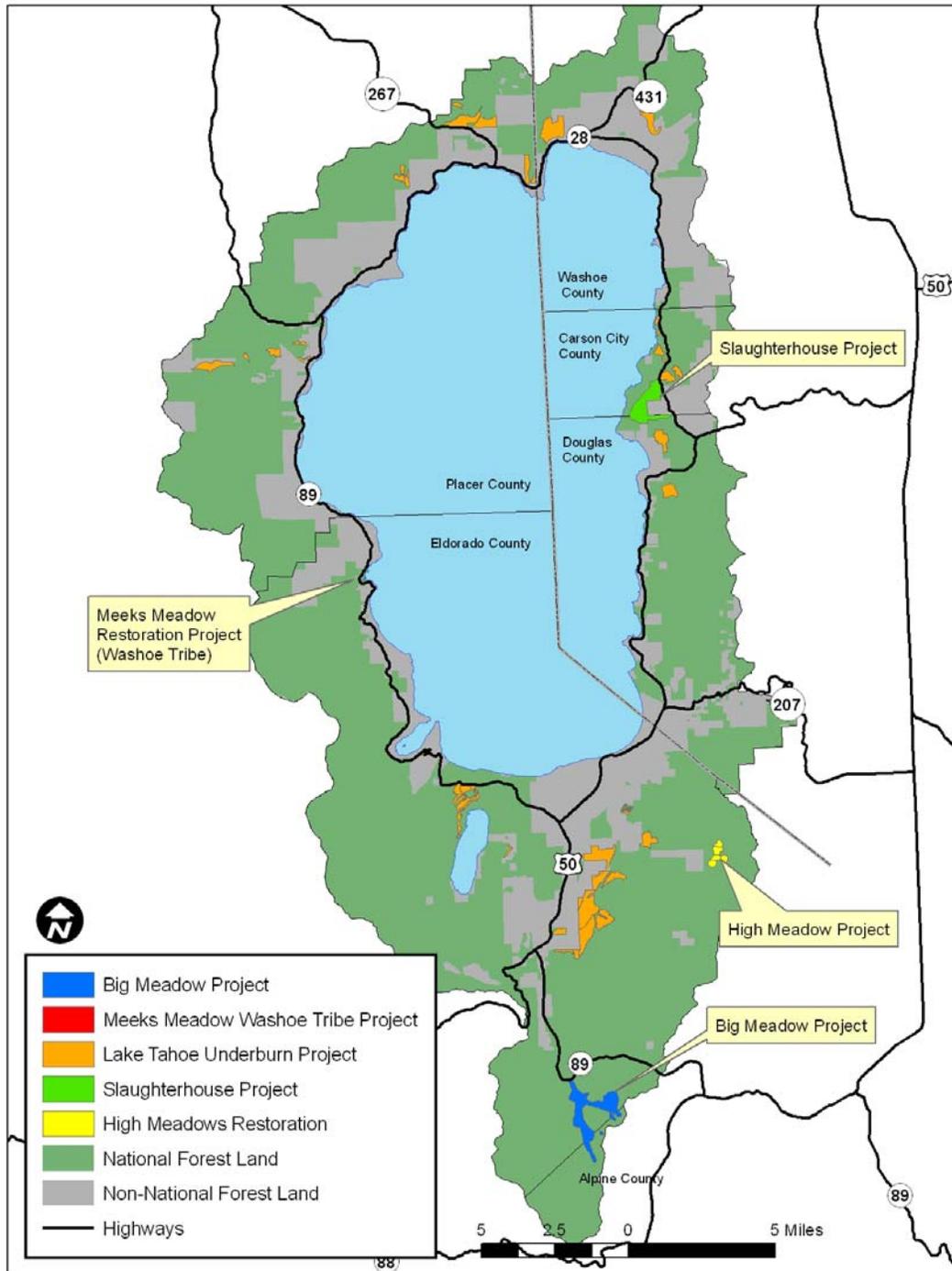


Figure 1. Lake Tahoe Basin Prescribed Fire Underburn Project. This project proposal covers 5 individual projects throughout the Lake Tahoe Basin on National Forest System Lands that are being planned or implemented using SNPLMA funding from previous rounds.