

## Appendix B-8

### LAKE TAHOE RESTORATION PROJECTS ESTIMATED DIRECT COSTS & KEY MILESTONE DATES

Project Name: Burton and Polaris Creek Ecosystem Assessment Agency: NRCS  
 (530)543-1501  
 Prepared by: Jane Schmidt Phone: Ext 101 EIP #: 51, 935, 945, 944, 988  
 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>125,000</u>	<u>25</u> %
<b>2. Direct Labor (Payroll) to Perform the Project</b>	\$ <u>125,000</u>	<u>25</u> %
<b>3. Project Equipment</b> (tools, software, specialized equipment, etc.)	\$ _____	_____ %
<b>4. Travel</b> (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ _____	_____ %
<b>5. Official Vehicle Use</b> (pro rata cost for use of Official Vehicles when required to carry out project)	\$ _____	_____ %
<b>6. Cost of Contracts, Grants and/or Agreements to Perform the Project</b>	\$ <u>125,000</u>	<u>25</u> %
<b>7. Other Direct Costs</b> (direct labor for agency personnel to do project procurements; COR; PI; personnel assigned as NEPA lead; personnel assigned to review contracted surveys, designs/drawings, reports, etc.; project manager and/or project supervisor; and contracted costs for project manager and/or project supervisor if contracted separately)	\$ <u>25,000</u>	<u>5</u> %
<b>8. Indirect Costs</b>	\$ <u>100,000</u>	<u>20</u> %
<b>TOTAL:</b>	\$ <u>500,000</u>	<u>100</u> %

#### Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Initiate Project	Fall 2006
Complete Ecosystem Assessment	Fall 2007
Complete Conceptual Restoration Plans	Summer 2008
Final Completion Date:	Summer 2008

COMMENTS: Milestone dates contingent upon funding timing

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## APPENDIX I

### LAKE TAHOE CAPITAL PROJECT PROPOSAL

**Project Name:** Burton and Polaris Creek Ecosystem Assessment  
**Capital Focus Area:** Burton and Polaris Creek Watersheds  
**EIP #:** 51, 935, 945, 944, 988  
**Lead Agency:** NRCS  
**Contact:** Jane Schmidt  
**Threshold:** WQ, F, SC, SR, V, W  
**Phone Number:** (530)543-1501 Ext.101  
**Threshold Standard:** WQ – 1,2,3,4,5; F – 2,3,4; SC – 2; V – 1,2,3,4; W – 1,2  
**Email Address:** jane.schmidt@ca.usda.gov  
**Is this a multi-year Project?** No  
**Total Project Cost:** \$500,000  
**Funding Request in this Round:** \$500,000  
(If “Yes”, describe in the Detailed Project Description below number of years or phases and which year the requested funding will cover)

#### **Project Summary (maximum 200 words):**

The NRCS in cooperation with a citizens group living in the watershed, Friends of Burton Creek (FOBC), the California Department of Parks and Recreation (CDPR), United States Forest Service – Lake Tahoe Basin Management Unit (USFS), and the California Tahoe Conservancy (CTC) desire to do a comprehensive ecosystem assessment on the Burton and Polaris Creek watersheds. This assessment will investigate all aspects of ecosystem function within the watersheds. The assessment will lead partner agencies to develop restoration plans for their respective lands in order to restore ecosystem function in a collaborative and integrated fashion.

#### **Detailed Project Description:**

The Burton and Polaris Creek watersheds are adjacent to each other and are located on the north shore of Lake Tahoe, approximately 2 miles east of Tahoe City. Burton Creek is the larger watershed (5.7 mi<sup>2</sup>) and is the main focus of the project, while Polaris Creek is much smaller (1.1 mi<sup>2</sup>), but is included in the assessment because of its intricate relationship with the mouth and floodplain of Burton Creek. Almost all of the property in the study area is public, with most land CDPR and USFS and some CTC ownership. A small but important amount of land is in private ownership and is mostly located at the connection with Lake Tahoe. The upper watersheds are mostly undeveloped, with a number of roads and a history of intense logging and grazing. Issues in this area involve a dam on Burton Creek that is used to divert water to a golf course and subsequently contributes to dewatering of the channel. This creates fish passage issues and a negative impact on aquatic habitat. The disturbance history (roads, fire suppression, logging, and grazing) in the upland environment on the public land in these watersheds has had significant impacts on water quality, wildlife and fisheries habitat, and forest health. The mouths and floodplains of both creeks form the private ownership of the study area. This area is mostly between Highway 28 and Lake Tahoe. The creeks are disconnected from the floodplain due to incision and the creation of the Pomin Park ball fields. This results in sediment being directly delivered and deposited in the Star Harbor Marina and subsequently the lake. The Star Harbor Marina acts as a sediment trap and requires

frequent dredging. Additionally, due to a constructed waterfall on Burton Creek and high gradients on Polaris Creek there is a fish passage barrier on both watersheds. Despite the small amount of land area in private ownership the disturbances have significant impacts on water quality, floodplain processes, and fish passage.

**Describe the goals and objectives of the project:** The goal of the project is to complete an entire watershed assessment and feasibility study on both the Burton and Polaris Creek watersheds. This would include an assessment on the watersheds' geology, soils, hydrology, water quality, stream channel geomorphology and valley characteristics, landform evolution, fisheries, wildlife, vegetation, and disturbance history. The study would identify prospective restoration opportunities and develop conceptual alternatives.

**Describe the anticipated project accomplishments:**

The project ultimately will provide a comprehensive ecosystem assessment of the Burton and Polaris Creek watersheds. Additionally, the project will identify specific restoration projects and conceptual alternatives within the watersheds that will restore natural stream and ecosystem function, remove fish barriers, improve fish and wildlife habitat and forest health, reduce upland and channel erosion, and improve water quality.

**Describe the “readiness” of this project to move forward (Environmental documentation, etc.):**

The project was initiated by a group of concerned citizens, Friends of Burton Creek, to determine restoration opportunities. The CDPR and USFS have done some restoration work (road removal, fuel reduction, etc.) in the watersheds and CDPR has been working on a Master Plan for Burton Creek State Park. Additionally, Placer County has an Erosion Control, SEZ, and Wildlife project in lower Polaris Creek and the adjacent Lake Forest Creek watershed. This project has an Existing Condition report and has developed conceptual alternatives for restoration. This application would build on this past work in order to create an integrated, collaborative study. Due to the fact this is intended to be a watershed assessment and feasibility study the project would be categorically exempt and not require further environmental documentation. The ultimate goal is to determine specific restoration projects, which would require additional planning and implementation funding in the future, in addition to environmental documentation.

**Describe partnerships for this project. (Include documentation):** The NRCS in conjunction with the Tahoe Resource Conservation District will work closely with the private landowners (FOBC), CDPR, USFS, and CTC to develop a comprehensive assessment and restoration plan for the watersheds. The integrated effort will also include additional stakeholders such as Caltrans, Placer County, TRPA, Lahontan Regional Water Quality Control Board, and CA Department of Fish and Game in order to ensure a cooperative process.

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

- (1) The questions the monitoring program is designed to answer**
- (2) The monitoring approach**
- (3) Whether this project monitoring fits in to a larger monitoring or research program?**

The watershed assessment will develop a comprehensive monitoring plan that will address the needs of the restoration objectives. The monitoring will be used to determine the existing conditions, effects of construction, and post project effectiveness. Key ecological parameters that could be monitored include wildlife, fish and aquatic macroinvertebrates, species of special concern, and water quality. Monitoring plans will be based on basin standards and protocols and will be developed to be included in larger basin wide monitoring programs such as LTIMP (Lake Tahoe Interagency Monitoring Plan) and TIIMS (Tahoe Integrated Information Management System).

**Describe how the project results will be communicated and made-available to the public.**

The project will include a series of public meetings and all documents will be made available to the public. The project team will specifically work with the Friends of Burton Creek and develop individual relationships with affected landowners in order to ensure the most successful project.

