

Appendix B-8

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

Project Name: US 50 North Water Agency: FHWA (NDOT)  
Quality Improvement  
 Prepared by: Steve Cooke Phone: (775) 888-7621 EIP #: 7  
 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.)	\$ _____	_____ %
<b>2. Direct Labor (Payroll) to Perform the Project</b>	\$242,250	15%
<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>	\$1,292,000	80%
<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)	\$80,750	5%
<b>TOTAL*:</b>	<u>\$1,615,000</u>	<u>100%</u>

**Estimated Key Milestone Dates:**

Milestone/Deliverables	Date:
Complete Preliminary Design	August 2007
Complete Final Design (PS&E)	November 2009
Begin Construction	May 2010
Complete Construction	October 2012
Final Completion Date:	July 2013

**COMMENTS:**

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**Appendix I-1  
TAHOE PROJECT PROPOSAL**

<b>Project Name: US 50 North Water Quality Improvement</b>		<b>EIP#: 7</b>
<b>Lead Agency: Federal Highway Administration</b>	<b>Contact: NV Division</b>	
	<b>Phone Number: (775) 687-1205</b>	
<b>Threshold: Water Quality</b>	<b>Email Address: susan.klekar@fhwa.dot.gov</b>	
<b>Threshold Standard: Stormwater Runoff Quality</b>	<b>Total Project Cost: \$19,200,000</b>	
	<b>Round 7 Funding requested: 1,615,000</b>	
	<b>Is this a multi-year project? <u>Yes/No</u></b>	

**Project Description:**

FHWA, in conjunction with Nevada Department of Transportation, and TRPA is developing a water quality improvement project on US 50 from approximately 0.3 miles south of the Highway 50/SR 28 junction to the Glenbrook entrance, a distance of approximately 2.3 miles. The proposed improvements include erosion control, water quality enhancement, upgrade of drainage facilities, stabilization of roadway cut and fills slopes, rock fall mitigation, and construction of new retaining walls which will be designed and constructed to mimic adjacent rock outcrops. Currently these large cut slopes continue to erode producing large volumes of rock and sediment.

This project is part of a comprehensive plan to address the environmental issues associated with NDOT's roadways in the Lake Tahoe Basin. Funding for this request (\$ 1,615,000) will be used for both the preparation of a plan, specification and estimate (PS&E) package and right of way acquisition.

US 50 is one of the main transportation corridors in the basin and is located on Federal lands managed by the United States Forest Service and is designated as a National Scenic Byway. This road provides access to the Toiyabe, Tahoe and Eldorado National Forests.

**Describe the purpose and need for the project:**

The purpose of the project is to:

1. Reduce discharge of sediments and pollutants
2. Construct water quality treatment facilities
3. Construct source control facilities
4. Construct retaining walls to stabilize tall over steepened eroding cut slopes
5. Improve the scenic and aesthetic character of US 50 by incorporating aspects of the US 50 NDOT Landscape Corridor Plan
6. Implement erosion control, drainage, and water quality protection practices within the roadway right of way which is expected to substantially reduce the mobilization of potential pollutants flowing into Lake Tahoe

The need for the project is driven by the following:

1. Storm water runoff and roadway de-icing sand reaches Lake Tahoe with no treatment
2. Adjacent tall cut/fill slopes are eroding contributing to Lake's pollution
3. Existing drainage system lack permanent BMP's that result in the discharge of degraded water quality

**Describe the goals and objective of the project:**

The goals of the project are to:

1. Construct water quality treatment and erosion control facilities that will meet regulatory requirements to the maximum extent possible
2. Reduce sediment yield through implementation of source control
3. Construct retaining walls to curtail the eroding cut slopes and improve the aesthetics in the Glenbrook area
4. Enhance roadway runoff discharge by retrofitting the existing drainage system infrastructure with BMP's

**Describe the anticipated project accomplishments:**

1. Create an aesthetically pleasing highway corridor segment that contributes fewer pollutants to Lake Tahoe and has fewer impacts on the greater physical environment of the Lake Tahoe Basin
2. Construct a project that preserves the biological, water quality, environmental, and aesthetics values of Lake Tahoe
3. Substantially reduce the mobilization of potential pollutants from this reach of US 50

**Describe the "readiness" of this project to move forward (environmental documentation, etc.):**

NDOT, as part of its Phase III Environmental Improvement Program started the planning and environmental documentation process needed for this project in August 2005 upon completing the asset inventory and existing condition fieldwork. Hydrologic, cultural and biological assessment has commenced and will be completed by August 2007, final design (PS&E) by November 2009 with construction beginning in May 2010.

**Describe partnerships for this project. (Include documentation):**

Since 1997, NDOT has formed an effective partnership with fourteen (14) different government agencies to address larger scale issues and concerns of all agencies involved in the Tahoe Basin. These agencies include: Federal Highway Administration (FHWA), U.S. Forest Service (USFS), U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife (USFW), U.S. Environmental Protection Agency (USEPA), Tahoe Regional Planning Agency (TRPA), Nevada Division of Environmental Protection (NDEP), Nevada Division of Wildlife (NDOW), Nevada Division of State Lands (NDSL), Nevada Division of State Parks (NDSP), Nevada Tahoe Conservation District (NTCD), Washoe County, Douglas County and Carson City. These partners have been addressing NDOT's EIP issues including funding, design, environmental, transportation, research and public involvement.

The Technical Advisory Committee (TAC), comprised of members from NTRT, NDOT, NDEP, TRPA, Washoe County, and Douglas County, is guiding this project design. As a group, design alternatives are evaluated and decisions are made to produce the most efficient, best functioning and cost effective design.

For planning and preliminary design, NDOT is providing approximately \$835,000 to address preliminary engineering design, utility designation, cultural, biological, water quality studies, decant water disposal and contingency work. However this represents only a portion of the total that is needed to complete this design work. It is anticipated that an additional \$1,615,000 will be needed to complete final design and address right of way needs and utility issues in 2009.

Approximately \$ 13,875,000 of unknown funds is anticipated to complete the construction, which is anticipated to begin in 2010.

**Describe the anticipated project effectiveness monitoring program for use with adaptive management framework:**

As part of the Phase III effort, a monitoring program is being implemented to characterize roadway runoff quality and to gage the effectiveness of previous source and erosion control projects. Knowledge gained from this monitoring program will be used to guide future design.

**Include an 8-1/2x11 map depicting the project, or research/study area.**

**US 50 North Water Quality Improvement Project\***

<b>Phase</b>	<b>Schedule</b>	<b>Estimated Cost</b>	<b>Current Funding</b>	<b>Current Funding Type</b>	<b>Needed Funding (Approximate)</b>
Planning & Environmental	2005-2007	\$ 835,000	\$ 835,000	State Gas Tax	\$ 0
Design	2008-2009	\$ 1,365,000	\$ 0	Unknown	\$ 1,365,000
Right of Way	2009	\$ 250,000	\$ 0	Unknown	\$ 250,000
Construction	2010-2013	\$ 16,750,000	\$ 2,875,000	Tahoe Bond	\$ 13,875,000
<b>Total</b>		\$ 19,200,000			\$ 15,490,000

\* This project is listed in the 2006-2015 State Transportation Improvement Program

# US 50 North Water Quality Improvement Project Limits

