

Appendix B-8

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

Project Name: SR 28 West Water Agency: FHWA (NDOT)  
Quality Improvement  
 Prepared by: Steve Cooke Phone: (775) 888-7621 EIP #: 1000  
 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>	\$271,200	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>	\$1,446,400	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)	\$90,400	5%
<b>TOTAL*:</b>	<u>\$1,808,000</u>	<u>100%</u>

**Estimated Key Milestone Dates:**

Milestone/Deliverables	Date:
Complete Preliminary Design	August 2006
Complete Final Design (PS&E)	November 2007
Begin Construction	May 2008
End Construction	October 2008
Final Completion Date:	July 2009

**COMMENTS:**

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**Appendix I-1  
TAHOE PROJECT PROPOSAL**

<b>Project Name: SR 28 West Water Quality Improvement</b>	<b>EIP#: 1000</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: \$ 5,200,000</b> <b>Round 7 Funding requested: \$ 1,808,000</b> <b>Is this a multi-year project? Yes/No</b>

**Project Description:**

FHWA, in conjunction with Nevada Department of Transportation, and TRPA is developing a water quality improvement project on SR 28 from the junction with SR 431 west to the Nevada/California Stateline, a distance of approximately 2.9 miles. The proposed improvements include erosion control, water quality enhancement, upgrade of drainage facilities, stabilization of roadway cut and fills slopes, and rock fall mitigation. These improvements are to be constructed within a narrow right of way that functions as a major utility corridor and is flanked by private property.

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 (\$ 1,808,000) will be used for both the preparation of a plan, specification and estimate (PS&E) package and right of way acquisition.

This project is located on Federal lands managed by the United States Forest Service. SR 28, designated as a Fo. Highway and a National Scenic Byway, 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. 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 reach Lake Tahoe with no treatment
2. Adjacent cut/fill slopes are eroding contributing to the Lake's pollution
3. Existing drainage system is limited, dated and lacks permanent BMP's. Due to the close proximity of SR 28 to the Lake at this project location, runoff discharging from the roadway flows directly to the Lake with little or no pollutant attenuation.

**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 generation through implementation of source control
3. Provide a means to mitigate roadway discharge on over steepened slopes located within a narrow right of way
4. Enhance roadway runoff treatment by retrofitting existing drainage system infrastructure with BMP's
5. Develop a systematic approach to treat roadway runoff within the right of way and in close proximity to the Lake

**Describe the anticipated project accomplishments:**

1. Construct facilities within the SR 28 right of way that contribute fewer pollutants to Lake Tahoe and have fewer impacts on the greater physical environment of the Lake Tahoe Basin.
2. Create a project that enhances water quality and mitigates discharge of runoff on over steepened slopes.
3. Substantially reduce the mobilization of potential pollutants from this reach of SR 28.

**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 2006, final design (PS&E) by November 2007 with construction beginning in May of 2008.

**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 (NDW), 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 \$ 592,000 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 funding that is needed to complete the design work. It is anticipated that an additional \$ 1,808,000 will be needed in 2007 to complete the design and address right of way needs and utility issues.

Approximately \$ 2,800,000 of Forest Highway funds are anticipated to fund construction which is anticipated to begin in 2008.

**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.**

**SR 28 West 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	2005-2006	\$ 592,000	\$ 592,000	Nv State Gas Tax	\$ 0
Design	2007	\$ 708,000	\$ 0	Unknown	\$ 708,000
Right of Way	2007	\$ 1,100,000	\$ 0	Unknown	\$ 1,100,000
Construction	2008	\$ 2,800,000	\$ 2,800,000	Forest Highway	\$ 0
Total		\$ 5,200,000	\$ 3,392,000		\$ 1,808,000

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

### SR 28 West Water Quality Improvement Project Limits

