

Appendix B-8

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

Project Name: SR 28 East Water Quality Improvement Agency: FHWA (NDOT)

Prepared by: Steve Cooke Phone: (775) 888-7621 EIP #: 310  
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>	\$109,350	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>	\$583,200	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)	\$36,450	5%
<b>TOTAL*:</b>	\$729,000	100%

**Estimated Key Milestone Dates:**

Milestone/Deliverables	Date:
Complete Preliminary Design	August, 2008
Complete Final Design (PS&E)	November 2009
Begin Construction	May 2009
Complete Construction	October 2009
Final Completion Date:	July 2010

**COMMENTS:**

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**Appendix I-1  
TAHOE PROJECT PROPOSAL**

<b>Project Name: SR 28 East Water Quality Improvement</b>	<b>EIP#: 310, remaining project portion</b>
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<b>Lead Agency: Federal Highway Administration</b>	<b>Contact: NV Division</b> <b>Phone Number: (775) 687-1205</b>
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<b>Threshold: Water Quality</b>	<b>Email Address: susan.klekar@fhwa.dot.gov</b>
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<b>Threshold Standard: Stormwater Runoff Quality</b>	<b>Total Project Cost: \$4,842,000</b> <b>Round 7 Funding requested: 729,000</b> <b>Is this a multi-year project? Yes/No</b>
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**Project Description:**

FHWA, in conjunction with Nevada Department of Transportation, and TRPA is developing a water quality improvement project on SR 28 from just south of the Carson City/Washoe County line to Sand Harbor, a distance of approximately 2.6 miles. The project represents the remaining roadway segment from EIP #310 which was constructed in 2002. The proposed improvements include erosion control, water quality enhancement, upgrade of drainage facilities, stabilization of roadway cut and fills slopes, rock fall mitigation. 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 (\$ 729,000) will be used for planning, preparation of a plan, specification and estimate (PS&E) package and right of way acquisition; construction related funding will be pursued at a later point in time.

The SR 28 project is located on Federal lands managed by the United States Forest Service. SR 28, designated as a Forest Highway and 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. 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
  3. Construct water quality treatment facilities
  4. Construct source control treatment facilities

- The need for the project is driven by the following:
1. Existing erosion and source control features are lacking on this portion of SR 28
  2. Adjacent cut and fill slopes continue to erode and require stabilization
  3. Existing drainage systems lack permanent BMP's which 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. Provide cut and fill slope source control and stability
  3. Enhance roadway runoff discharge quality by retrofitting existing drainage system infrastructure with BMP's

**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 from cut and fill 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 has started the planning and environmental documentation process needed for the remainder of the roadway sections in the Tahoe Basin. If this project was funded, this section of SR 28 could have the asset inventory, existing condition fieldwork, hydrologic, cultural and biological assessment completed by August 2008, the final design (PS&E) by November 2009 with construction beginning in May of 2010.

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

Since 1997, NDOT has formed an effective partnership with fourteen 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 the Phase III design effort. 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 has budgeted \$ 550,000 to address preliminary engineering design, utility designation, cultural, biological, water quality studies 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 \$ 729,000 will be needed in 2008 to complete the design and address right of way needs and utility issues in 2009.

Approximately \$ 3,563,000 of funds are 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.**

**SR 28 East 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	2007-2008	\$ 550,000	\$ 550,000	State Gas Tax	\$ 0
Design	2008-2009	\$ 489,000	\$ 0	Unknown	\$ 489,000
Right of Way	2009	\$ 240,000	\$ 0	Unknown	\$ 240,000
Construction	2010	\$ 3,563,000	\$ 0	Unknown	\$ 3,563,000
Total		\$ 4,842,000	\$ 0		\$ 4,292,000

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

# SR 28 East Water Quality Improvement Project Limits

