

Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED DIRECT COSTS & KEY MILESTONE DATES

Project Name: Shorezone Sewer Line Replacement/Relocation Agency: U.S. Army Corps of Engineers (USACE)
 Prepared by: Phillip Brozek Phone: 916-557-7630 EIP #: 638
 SNPLMA Project #: _____

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ _____	_____ %
2. Direct Labor (Payroll) to Perform the Project	\$ <u>155,300</u>	<u>5</u> %
3. Project Equipment (tools, software, specialized equipment, etc.)	\$ _____	_____ %
4. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ <u>12,424</u>	<u>0.4</u> %
5. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$ <u>3,106</u>	<u>0.1</u> %
6. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ <u>2,624,570</u>	<u>84.5</u> %
7. Other Direct Costs (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>310,600</u>	<u>10</u> %
8. Indirect Costs	\$ _____	_____ %
TOTAL:	\$ <u>3,106,000</u>	<u>100</u> %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Approval of SNPLMA Round 7 Funds	1 Nov 2006
Complete BLM Task Order Process	30 Jan 2007
E1: Creation of scope for GIS/mapping work	30 Mar 2007
E1: Award of contract for GIS/mapping work	30 Apr 2007
E1: Completion of GIS/mapping work	30 Apr 2008
E2: Creation of scope for sewer line technology	30 Mar 2007
E2: Award of contract for sewer line technology	30 Apr 2007
E2: Completion of sewer line technology	30 Apr 2008
E3: Completion of EA for pump station relocation	30 Apr 2007
E3: Award of contract for pump station relocation	30 Jun 2007
E3: Completion of construction and restoration	30 Nov 2007

APPENDIX I

LAKE TAHOE CAPITAL PROJECT PROPOSAL

Project Name: Shorezone Sewer Line Replacement/Relocation	Capital Focus Area: 1) Water Quality Improvements/BMPs WQ-2 2) Watershed Restoration and Habitat Improvement WR/HI-10	EIP #: 638
Lead Agency: U.S. Army Corps of Engineers (USACE)		Contact: Phillip Brozek
Threshold: Water Quality	Phone Number: 916-557-7630	
Threshold Standard: WQ-2A & E Clarity	Email Address: Phillip.F.Brozek@usace.army.mil	
Is this a multi-year Project? Yes	Total Project Cost: \$61,000,000 Funding Request in this Round: \$3,106,000	

Project Summary (maximum 200 words):

This years proposal includes three separate elements that will support the goal of replacement or relocation of priority sewer lines located in the shorezone and stream environment zones (SEZs) of the Lake Tahoe Basin.

Detailed Project Description:

EIP #638 is a multi million dollar project that is being implemented programmatically and project by project over several years. In Round 5 USACE requested \$300,000 of SNPLMA funds for EIP 638 work and received \$0. In Round 6 USACE requested \$500,000 for EIP# 638 and received \$400,000.

Element 1 (E1) of this Round 7 proposal will complete the task of determining GIS locations of all at-risk shorezone and SEZ sewer infrastructure in the Tahoe Basin. The project will make use of local district contribution of in-kind effort. (E1 estimated cost = \$500,000)

Element 2 (E2) of this proposal will build on work performed and funded by USACE in 2003-2005. This increment of work will research the different methods and technologies available to decrease the risk associated with shorezone infrastructure. (E2 estimated cost = \$500,000)

Element 3 (E3) of this proposal will provide for the relocation and retrofit of an existing pump station in the Lake Tahoe shorezone. The new pump station location is outside of the shorezone and will provide for an increase in number of hours of storage time and increased access during storm events. The old location within the shorezone will be restored. Design of the new station is being paid for by TCPUD and is being currently completed. If approved the SNPLMA funds will provide money for construction/implementation of the project, as well as an EA document. (E3 estimated cost = \$2,106,000)

Describe the goals and objectives of the project:

The primary objective of EIP 638 is to provide technical assistance and/or resources to local public utility districts to implement sewer line relocation/rehabilitation projects (WQ-2). Sanitary sewers in the shorezone and SEZs are at risk to contribute nutrients and sediment to the lake from raw sewage spills. Raw sewage spills can occur from several sources based on

proximity to the lake including breaks caused by physical damage to exposed pipelines, overflow from pump stations lacking adequate redundancies, lack of adequate maintenance access, and incidental sewer line exfiltration. As a result, a correlating objective of EIP 638 is WR/HI-10: to protect the chemical and biological integrity of streams under federal management, and minimize or eliminate the impacts from development and management infrastructure.

Describe the anticipated project accomplishments:

E1: GIS mapping of shorezone and SEZ sewer infrastructure for Tahoe Basin

E2: Peer Reviewed report of Best Available Technologies for shorezone and SEZ sewer infrastructure relocation/rehabilitation

E3: Relocation of redesigned pump station out of shorezone and restoration of current shorezone location

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

For E1 and E2, no environmental documentation is required to initiate work, and USACE will be prepared to proceed immediately on them when SNPLMA funds are approved. E3 would require a NEPA EA document to be completed in order to proceed, and the USACE would utilize TRPAs environmental document required for TRPA permit. The design for the new pump station and restoration will be completed by TCPUD and will be ready to be competitively bid for construction in Spring of 2007.

Describe partnerships for this project. (Include documentation):

In 2005 Public Utility Districts (PUDs) and general improvement districts (GIDs) have formed the Infrastructure Work Group (IWG) to insure coherent approach to infrastructure rehabilitation and replacement. The USACE is the primary non PUD/GID support for the IWG. A memorandum of understanding (MOU) for the IWG is in process.

Describe the project monitoring that will be 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?

Due to the nature of their scope, these early project elements do not lend themselves to monitoring programs. Monitoring of sewer line infiltration and exfiltration could be included into EIP 638 as an additional element. It is estimated that this type of monitoring would cost ~\$100,000 per 40 miles of pipe.

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

The GIS locations determined in E1 will be made available to regulatory agencies and on the Tahoe Integrated Information Management System (TIIMS). Reports from project E2 will be peer reviewed and posted on a yet to be determined site. TCPUD will be responsible for a public interface for E3 pump station replacement.

Include an 8 1/2 X 11 map depicting the project.

