

Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name: Griff Creek SEZ Improvement Project Agency: Placer County
 Prepared by: Jon Mitchell Phone: (530) 581-6218 EIP #: 410 (fisheries)
 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. FWS Consultation—Endangered Species Act

\$ _____ %

3. Direct Labor (Payroll) to Perform the Project

\$ _____ %

4. Project Equipment (tools, software, specialized equipment, etc.)

\$ _____ %

5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)

\$ _____ %

6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)

\$ _____ %

7. Cost of Contracts, Grants and/or Agreements to Perform the Project

\$ 1,000,000 100 %

8. Other Direct and Contracted Labor: Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contracts)

\$ _____ %

9. Other Necessary Expenses (See Appendix B-11)

\$ _____

TOTAL: \$ 1,000,000 100 %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Environmental Documents	Spring 2008
Final Design	Summer 2008
Right of Way and Easement acquisitions	Spring 2008 – Fall 2008
Implementation	Spring 2009 – Fall 2009
Final Completion Date:	Fall 2009

COMMENTS:

See attached cost summary (Exhibit B)

**APPENDIX K
LAKE TAHOE CAPITAL PROJECT PROPOSAL
ROUND 9**

Consistency with Lake Tahoe nomination criteria:

Project nominations must qualify as an Environmental Improvement Program (EIP) project and be the responsibility of the federal government (federal share responsibility); and have a willing and ready federal sponsor.

Project nominations must be consistent with one of the focus areas in the June 2006 Federal Vision (pp. 8-9) (<http://www.fs.fed.us/r5/lbmu/documents/lbtec/revised-FV-Final.pdf>) and fit into at least one category.

Capital Focus Area (as described in the 2006 Federal Vision): Watershed and Habitat Improvement

Circle a minimum of one category:

1. Continued emphasis on fuels reduction in coordination with projects funded under the 2006 SNPLMA amendment (the “White Pine” amendment).
2. Continued implementation of projects approved in Rounds 5 through 8 which implement the EIP. Project proposal should clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 9.

List project(s): _____

3. Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel).

List category(ies): **urban & groundwater and stream channel**

4. Control of aquatic invasive species and prevention of new aquatic invasive species.

Project Name: Griff Creek SEZ Improvement Project **EIP #:** 410 under fisheries program

Lead Agency: United States Bureau of Reclamation (USBR) **Contact:** Myrnie Mayville

Threshold: WQ, SC, F **Phone Number:** (775) 589-5240

Threshold Standard: WQ – 2, 4, 5; SC-2; F-1, 2, 3 **Email Address:** MMAYVILLE@mp.usbr.gov

Funding Requested in this Round: \$1,000,000

Total Project Cost: 2.4 million

Is this a multi-year Project? (If “Yes”, describe in the Detailed Project Description below number of years or phases and which year the requested funding will cover)

Yes, currently the project is scheduled for easement acquisition and final design in 2008 and implementation in 2009.

Project Summary (maximum 200 words): (applicable ONLY to this Round 9 project):

Placer County is developing a project in the residential area of Kings Beach to improve water quality, stream environmental zones (SEZ) and fisheries habitat. The project involves rehabilitating Griff Creek by improving stream health and fish habitat and passage. In addition, the greatest opportunity to reduce the amount of nutrients and sediment produced by the Griff Creek watershed and eventually out letting into Lake Tahoe is to prevent further channel degradation and create a better flood plain connection for Griff Creek. Funding for this project will be used for construction of various project components including water quality and stream health. All improvements are considered to benefit the control, conveyance and treatment of urban storm water runoff as well as enhance fish habitat and restore SEZ's in the project area. Construction is anticipated to begin in 2009. The project as a whole is a significant improvement to the Basin and helps meet specific goals in the Kings Beach Community Plan as well as the TRPA Goals and Policies Plan.

Detailed Project Description (focuses on what Round 9 is funding; list the number of years or phases the Round 9 requested funding will cover; if phased, briefly describe how this project links into previously phased projects including what remains for Rounds 10 and beyond).

The Griff Creek SEZ Improvement Project area is located in Kings Beach parallel to State Route 267 from Lake Tahoe to Speckled Avenue. Please refer to Exhibit A for project vicinity and location map. The Kings Beach area is one of the largest developed areas on the north shore of Lake Tahoe. Impermeable land coverage in the form of roads, driveways, buildings, and compacted soils generate much more runoff than under natural conditions. Runoff is conveyed down roadsides and eroding shoulders, generating sediment and nutrients which are then conveyed to the lake through streams and drainage systems. Soil disturbance resulting from development in Kings Beach has created new sources of sediment and nutrients, as well as disturbance in the natural drainage pathways and natural stream environmental zones (SEZ's). Water quality improvements are needed to prevent further erosion and reduce the discharge of sediment and nutrients to Lake Tahoe. Placer County is in the process of designing a water quality improvement plan for the entire Kings Beach residential area. The entire project area encompasses approximately 4,000 acres and is divided into six separate watersheds and two SEZ's. The Griff Creek SEZ and Watershed is part of the overall water quality improvement project.

Griff creek has undergone significant changes due to the surrounding development. In many locations the once braided channel system has been forced into a single channel that has resulted in significant bank erosion, incised channels and reduction in fish habitat. The undersized culverts at Highway 28, Speckled Avenue, and Dolly Varden Avenue are fish passage barriers during much of the year. The urbanization has contributed to a large reduction in the natural stream environmental zone areas that once provided for wildlife habitat as well as natural flood control zones. The reduction in flood control zones and elimination in the braided channel system has

lead to stream bank erosion which is contributing to nutrient and sediment deposition into Lake Tahoe.

The \$1 million for construction funding will be the only SNPLMA funding requested for the Griff Creek SEZ Improvement Project. This funding will be designated for stream health improvements (construction of grade control structures, open bottom CMP culverts, “riffle” crests, and secondary channels).

Implementation of this project is the first step to improving the nearly 4,000-acre Kings Beach watershed (broken into six separate sub-watersheds) that has significant urban development and is deemed by Lake Tahoe Basin regulatory authorities such as the Tahoe Regional Planning Agency and State of California Lahontan Region Water Quality Control Board to have impaired runoff with respect to levels of fine sediment and nutrients. The anticipated project improvements resulting from the SNPLMA funding should vastly improve the water quality of storm water runoff currently discharging in Griff Creek and Lake Tahoe. This project will contribute to completing the water quality goals for one of the six sub-watersheds in the entire project area and have a positive future effect on the quality and clarity of Lake Tahoe.

Describe the goals and objectives of the project (those applicable ONLY to this Round 9 project):

The goal of the Griff Creek SEZ Improvement project is to improve water quality, stream health, and fish habitat and passage within the Griff Creek watershed.

In summary, the objectives of this project are to:

- Restore approximately 1.75 acres of SEZ which contributes to the Kings Beach Community Plan SEZ Restoration requirement for Griff Creek of 2 acres. This also contributes towards TRPA’s goal of restoration of 25% of disturbed SEZ in the Tahoe Basin within the twenty year life of the regional plan. According to Volume III of the 208 Plan, urban areas are targeted for 1,153 acres of restoration.
- Increase the stream habitat status of Griff Creek to 80 points, which meets the goals of the The Kings Beach Community Plan currently calling for a stream habitat status of Griff Creek to be increased to excellent (71 points). TRPA and Placer County measure the stream habitat condition on a points system. In general less than 55 points, 55 to 68 points, and greater than 68 points correspond to a stream habitat of marginal, good, and excellent, respectively. The TRPA Threshold also require maintenance of 75 miles of excellent, 105 miles of good and 38 miles of marginal stream habitat. The Griff Creek stream habitat is designated to be improved to a status of excellent (above 68 points). The existing Stream Habitat Quality rating for Griff Creek is marginal (51 points). Therefore, by increasing the status to 80 points the project is expected to increase in status by 57 %.
- Help attain the TRPA Water Quality Threshold Discharge Standards found in Chapter 81 of the TRPA plan.

Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project):

Overall benefits of this project include reduced sediment and nutrient loadings reaching Lake Tahoe, improved aesthetics, enhanced native vegetation growth in revitalized SEZ areas, increased

fish passage, improved overall stream health, and reduced potential of flood damage to public and private property.

Describe the “readiness” of this project to move forward (urgency, capacity, capability, environmental documentation etc.):

The 25% design plans for the project have been completed and approved by the project technical advisory committee (TAC). All of the technical environmental studies as required by CEQA and NEPA for the project are in process and scheduled to be completed in the spring of 2008.

The CTC erosion control group has requested a proposal for a pre-acquisition activities planning grant to begin moving forward with the right of way and/or easement acquisition process in the summer of 2008. With appropriate funding secured, the project could be implemented in the summer of 2009.

Describe partnerships for this project. (If applicable, project should identify partner funding [committed/secured] and how it is integrated into the project)

This project has had close collaboration with many area agencies, both funding and regulatory. The project has received funding from the California Tahoe Conservancy (Erosion Control), the United States Forest Service, the Tahoe Regional Planning Agency, and the U.S. Bureau of Reclamation. Through a Technical Advisory Committee process the project has been jointly developed with the above listed agencies, as well as the California Tahoe Conservancy (wildlife, and SEZ programs), CA Department of Transportation, and Lahontan Regional Water Quality Control Board.

The implementation project cost summary and funding synopsis is attached in Exhibit B.

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

1) The questions the monitoring program is designed to answer

A monitoring program for this project has not been developed. A CTC/USFS monitoring program grant proposal was submitted in 2006 and rejected. At that time our funding members and TAC made the decision that a monitoring program was not cost beneficial and not necessary for this project. Due to the engineering design and science behind this project for the SEZ and fisheries improvements this decision is warranted. However, at the very least a photo monitoring program will be developed to monitor the revegetation success in the SEZ areas.

For the water quality improvement aspects of the project, a monitoring program will be developed for the Kings Beach Commercial Core Improvement Project (CCIP) and Kings Beach Water Quality Improvement project (WIP) at the appropriate phase of the projects. The Griff Creek Watershed will be incorporated into these monitoring programs.

2) The monitoring approach (describe the methods and strategies [i.e. monitoring, research, or both] that will be used to verify whether the project goals and objectives have been met. A detailed monitoring/research plan is not required, but enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.)

Ground based photopoints will be established throughout the project area and in conjunction with other surveys. Ground photos will be used to measure the vigor of vegetation in the restored SEZ areas. These photos will be linked to local groundwater elevations to determine the seasonal effects of the project.

For water quality monitoring a project-effectiveness monitoring program will be developed during the design phase of the CCIP and WIP projects to allow adaptive management. The project will be encompassed within an overall watershed improvement planning effort, which will ensure that storm water improvements are consistent with the overall watershed restoration plans for the area. The size of the overall project will allow selective use of pilot strategies to improve water quality. In addition, previous and current monitoring efforts of existing watershed BMPs by UC Davis will be incorporated into future BMP designs resulting in appropriately sized and pollutant-targeted BMPs for the commercial core project.

3) Whether this project monitoring fits into a larger monitoring or research program (including how information from the monitoring and research will be used to improve the continued performance of the proposed project or improve future similar projects)

Kings Beach is the largest urban/commercial developed area along the lakeshore outside of Tahoe City and the City of South Lake Tahoe. It will be critical to better understand the actual magnitude of urban storm water runoff with respect to current predictions by Lahontan's/NDEP's Lake Tahoe Clarity and Watershed Models that urban runoff has such a dramatic impact on water quality and clarity. The results of the CCIP and WIP monitoring will be important data for refining the current TMDL predictions by the aforementioned models, and therefore, the programs should be considered portable as an overall contributor to research for better understanding long-term lake clarity trends.

The fit into a larger or Basin level monitoring and research will occur through integration with the Regional Storm Water Monitoring Program being developed for Lake Tahoe and the efforts of the TRPA led pump and treat pilot study currently being performed.

Describe these two items which will be considered along with the above project monitoring information by the Tahoe Science Consortium related to research and monitoring resource areas and the effectiveness of environmental restoration activities:

1) Describe the specific goals and objectives of the project and describe how fulfilling those objectives will contribute to the achievement of one or more environmental thresholds.

The project makes substantial progress towards fulfilling goals and/or requirements in the Kings Beach Community Plan – Chapter II Land Use Element (www.placer.ca.gov) as well as the TRPA Goals and Policies Plan (TRPA, 2004) as follows:

- The Kings Beach Community Plan SEZ Restoration requirement for Griff Creek is 2 acres. The current plan is restoring approximately 1.75 acres
- The Kings Beach Community Plan calls for a stream habitat status of Griff Creek to be increased to excellent (71 points). The current plan has achieved approximately 80 points.

- The TRPA SEZ goal is restoration of 25% of disturbed SEZ in the Tahoe Basin within the twenty year life of the regional plan. According to Volume III of the 208 Plan, urban areas are targeted for 1,153 acres of restoration.
- Water Quality TRPA Threshold: TRPA Discharge Standards found in Chapter 81 of the plan must be attained.
- Fisheries TRPA Threshold: Require maintenance of 75 miles of excellent, 105 miles of good and 38 miles of marginal stream habitat. The Griff Creek stream habitat is designated to be improved to a status of excellent (71 points). The existing Stream Habitat Quality rating for Griff Creek is good (51 points).

2) Describe the risk to the environment from failure of the proposed project (i.e. if the project fails what is the environmental consequence).

If the project fails to move forward, the most significant environmental consequence is delaying progress on decreasing pollutant loading to Lake Tahoe.

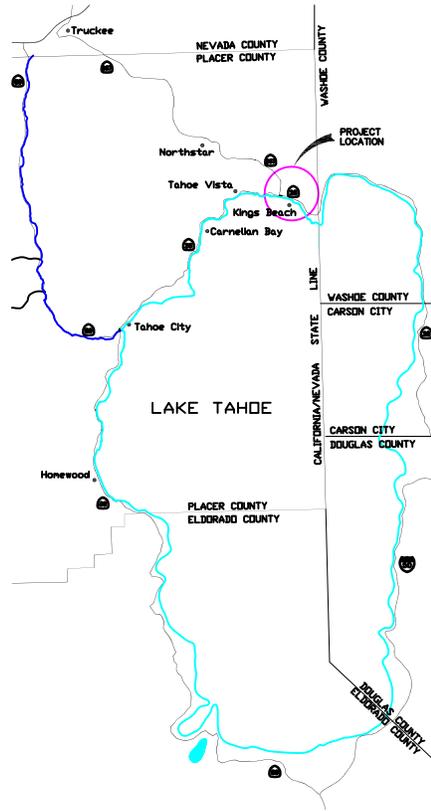
Failure to move forward on the Griff Creek SEZ Project will result in current urban storm water discharges to continue at levels considered detrimental to the quality and clarity of Lake Tahoe. Specific recent studies of urban storm water runoff indicate this input has one of the most significant factors in the continued decrease in lake water clarity. Because this project represents one of the largest urban areas in such close proximity to the lakeshore, implementation of this project and the entire Kings Beach Water Quality Improvement Project in a timely manner is critical to help reduce pollutant loads and meeting key environmental thresholds and future TMDL allocation goals.

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

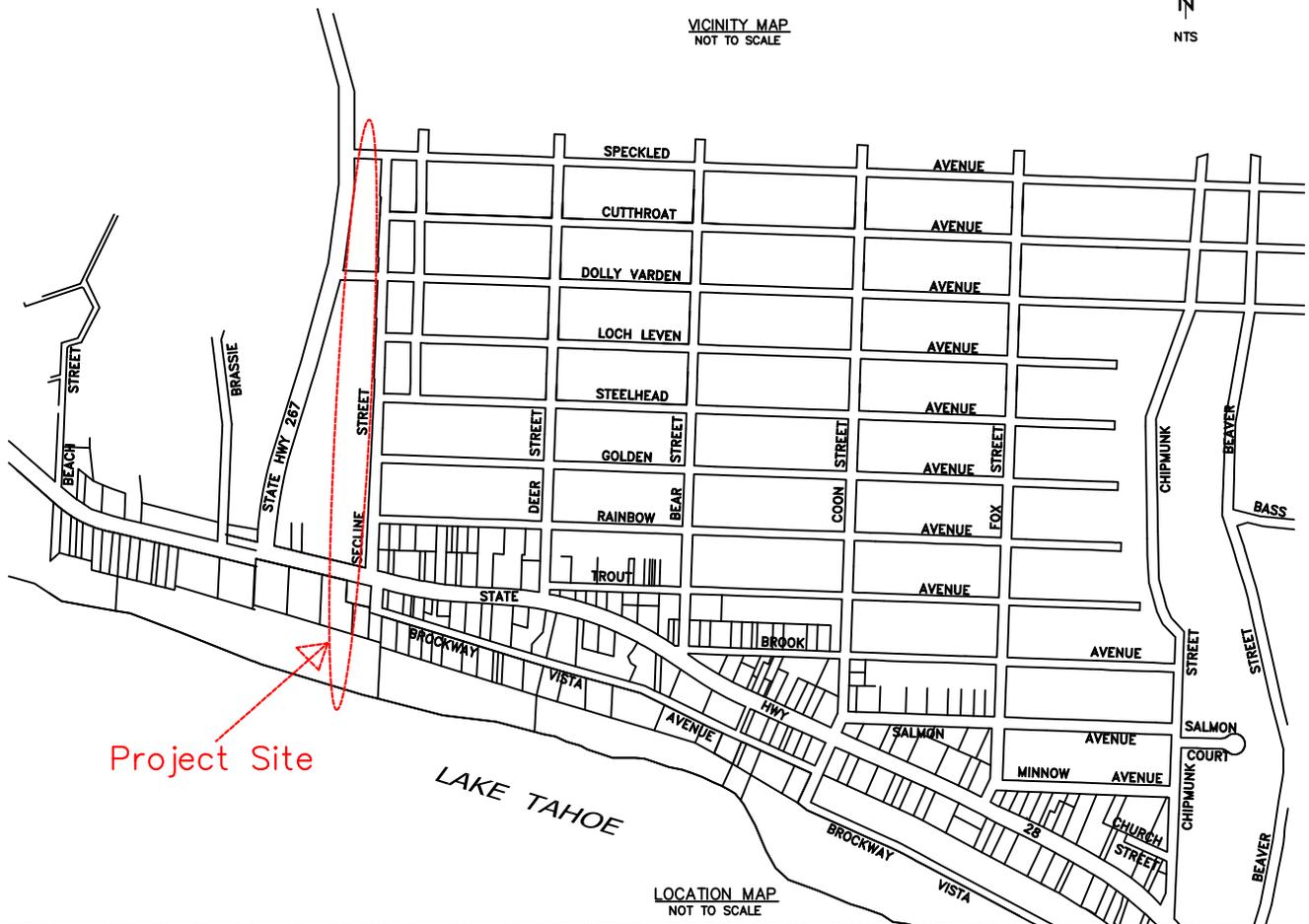
A community outreach public meeting regarding the Griff Creek SEZ existing conditions and concept alternatives was held on Thursday, December 1, 2005. Following the preferred alternatives analysis study a public meeting discussing the Kings Beach Watershed Improvement Project and Griff Creek SEZ Improvement Plans was held on Tuesday, March 21, 2006.

Following release of the administrative draft environmental document, public outreach meetings will be held to further explain the project described in the environmental document. The environmental document will be made available at County offices, North Shore community libraries, and our County web site.

Include an 8 ½ X 11 map depicting the project.



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

Griff Creek SEZ Cost Summary & Funding Synopsis

Project Cost Summary	
Project Detail	Estimate
Total Construction Cost Estimate:	\$1,323,839
Final Design Cost Estimate:	\$305,000
Acquisition Cost Estimate:	\$599,100
Administration Cost Estimate (Placer County 25% of design):	\$76,250
Construction Management and Inspection Cost Estimate (14 week period):	\$98,140
Total Implementation Cost: \$2,402,329	

Secured Funding for Implementation			
Source	Grant Amount	Planning	Remaining
U.S. Bureau of Reclamation	\$500,000	\$300,000	\$200,000
Total	\$500,000	\$300,000	\$200,000
		Funding Needed	\$2,202,329

Potential Funding For Implementation	
Source	Amount
U.S. Bureau of Reclamation	\$600,000
SNPLMA	\$1,000,000
CTC Acquisition	\$200,000
TRPA Mitigation Funds	500,000
Urban Stream Restoration Program	100,000