

Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED DIRECT COSTS & KEY MILESTONE DATES

Project Name: Upper Truckee River Golf Course Reach Restoration Agency: Sponsor: BOR
Lead: C DPR
 Prepared by: Cyndie Walck, Myrnie Mayville Phone: 530-581-0925 EIP #: 950
 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.)	\$ <u>13000</u>	<u>1.4</u> %
2. Direct Labor (Payroll) to Perform the Project	\$ <u>28000</u>	<u>3</u> %
3. Project Equipment (tools, software, specialized equipment, etc.)	\$ <u>12000</u>	<u>1.3</u> %
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>5000</u>	<u>.5</u> %
5. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$ <u>9000</u>	<u>1</u> %
6. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ <u>675000</u>	<u>77</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>12000</u>	<u>1.3</u> %
8. Indirect Costs	\$ <u>122000</u>	<u>16</u> %
TOTAL:	\$ <u>876000</u>	<u>100</u> %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Final design contract	12/2006
Permitting contract	1/2007
Final Completion Date: Estimate	5/2009

COMMENTS: This is phase 2 of a multiphase project. Phase 1 was conceptual design and CEQA/NEPA (to be completed spring 2006, other funding). Phase 2 is this grant, for final designs and permits. Future phases will be for construction.

APPENDIX I

LAKE TAHOE CAPITAL PROJECT PROPOSAL

Project Name: Capital Focus Area: Watershed Restoration and Habitat Improvement EIP #: 950

Upper Truckee River Golf Course Reach Restoration Especially WR/HI 6, 7, 10, 11, and 12, also WQ-5

Sponsor Agency: BOR, USFS BOR Contact: Myrnie Mayville
USFS Contact: Mary Morgan

Lead Agency: CA DPR CDPR Contact: Cyndie Walck
Phone Numbers: Myrnie 916-978-5037
Cyndie 530-581-0925

Threshold: Soil Conservation, Water Quality, Fish Habitat, Wildlife Habitat Email Address: cwalck@parks.ca.gov

Threshold Standard: SC-2, W-2, F-2, WQ-4, WQ-5 Total Project Cost: estimate 15 million

Is this a multi-year Project?

YES Funding Request in this Round: \$876,000 (for this phase-Phase 2)

(If "Yes", describe in the Detailed Project Description below number of years or phases and which year the requested funding will cover)

Project Summary (maximum 200 words):

The Upper Truckee River has been impacted by past and present land use activities leading to excessive erosion and consequent delivery of sediment to Lake Tahoe, as well as to habitat degradation. The river in the CDPR reach has been straightened and has downcut, and golf course holes occupy former meadow floodplain. CDPR proposes to complete a restoration project in this reach by restoring natural geomorphic processes which sustain channel and floodplain morphology and in turn restore riparian vegetation, ecological processes, and aquatic habitat. This would entail restoring an approximately 1 ¼ mile of the existing river to a more sinuous pattern which is re-connected to its meadow floodplain and re-locating 8 to 10 golf course holes to higher capability lands. It would result in restoration of 100 acres of floodplain/wetland, reduction of erosion and water quality impacts, and improvement and increase in critical riparian and wetland habitat. The project has received support from various agencies, including CDPR management, the TRPA and WQCB, and the golf course concession. Conceptual Designs and CEQA/NEPA are already underway in a previous phase.

Detailed Project Description:

Background:

The Upper Truckee River is the largest tributary to Lake Tahoe, draining a watershed of over 50 square miles. The river flows through the California Department of Parks and Recreation Lake Valley State Recreation Area (LVSRA) and Washoe Meadows State Park (WMSP), as well as California Tahoe Conservancy (CTC) properties near Meyers,

California (Figure 1). Part of this property was leased to a golf course prior to purchase by CA DPR, and is still currently under lease to American Golf and operated as Lake Tahoe Golf Course. This reach of the river has been impacted by channel straightening, grazing, logging, floodplain filling, and more recent development including golf course construction, roads, bridges, and subdivisions. This has led to a change in the natural processes that originally formed the river channel and sustained the ecosystem in a relatively stable condition. These impacts have led to chronic erosion of the bed and banks of the river, incision of the river to a lower elevation, degradation of instream and riparian habitat, and poor water quality.

The recent study by Andrew Simon of the National Sedimentation Laboratory states: “the Upper Truckee River is the greatest contributor of suspended and fine-grained sediment in the Lake Tahoe Basin” and “sediment delivery from the Upper Truckee River could be significantly reduced by controlling stream bank erosion in the reaches adjacent to the golf course and downstream from the airport”. The golf course reach was also identified as the greatest opportunity for rehabilitation in the “Upper Truckee River Upper Reach Environmental Assessment draft report” by Swanson Hydrology and Geomorphology (SH&G), under contract with the Tahoe Resource Conservation District (TRCD). The environmental assessment report indicated that the segment of the river (reach) through the Lake Tahoe Golf Course is a major pollutant source of sediment and nutrients to Lake Tahoe and the report identified it as a priority for restoration.

Project:

The desired project will improve the channel and floodplain configuration to a more geomorphically stable form that will reduce erosion and improve habitat, while reducing the impacts of the golf course on the river. CDPR has received grant funding from the US Bureau of Reclamation and the California Tahoe Conservancy to conduct the first phase of studies and environmental documents (phase 1). We contracted for completion of Conceptual River Restoration Designs, Conceptual Golf Course Layout Options, and Environmental Documents (CEQA/NEPA/TRPA).

The proposed project is full geomorphic restoration of the CDPR golf course reach of the Upper Truckee River. This would include restoring a geomorphically functional channel morphology and grade including construction of a new channel, and would require moving 8 to 10 golf course holes to an upland area of the park. New golf course holes would be constructed in a less sensitive environmental setting, and a portion of the old golf course would be restored to riparian floodplain and terrace habitat. The project would result in restoring an incised and straightened 1 mile reach of the river to a more sinuous channel approximately 1.25 miles long which is at grade with the meadow floodplain (Figure 2). The golf course holes near the river will mostly be relocated to upland or drier outwash surfaces, with only 2 short holes remaining to cross the river. Where the golf course holes are removed, the area will be graded back to natural topography and re-vegetated with riparian and meadow species.

This is a multi year project: Conceptual designs have been completed and a joint NEPA/CEQA/TRPA document is due to be completed in the fall of 2006 under phase 1 (separate funding). This proposal is for the next step, phase 2, which will include final designs and permits for construction.

The construction will be phased over a 3 year period to allow for the golf course to be re-located and the new channel segments to be constructed and re-vegetated prior to introducing flow. Anticipated construction would be in 2007 to 2011, with monitoring continuing for 5 years afterward. Further funding will be requested for the construction phases.

Describe the goals and objectives of the project:

Project Goals:

The over-arching project goal is to restore ecosystem function to the DPR reach of the Upper Truckee River in terms of restoring natural geomorphic processes which sustain channel and floodplain morphology and in turn restore riparian vegetation, ecological processes, and aquatic habitat. Sub-goals include:

- -restore self maintaining function to the river
- -reduce erosion and improve water quality
- -create functional floodplain and enhance over-bank flows and deposition
- -enhance wetland and riparian vegetation, improving habitat
- -reduce the impact of the golf course on the river, water quality, and riparian habitat
- -relocate and reconstruct part of the golf course on higher capability lands in accordance with the highest environmental standards

This funding is for Phase 2; Complete Construction Plans and Specifications and Secure Permits (TRPA, WQCB, CDFG, COE).

Project Objectives: (for phase 2: Complete Construction Plans and Specifications and Secure Permits)

This phase will build upon the conceptual plans and the EIR/EIS completed in phase 1 to produce plans and specifications for restoration project construction and secure permits. It will also include continued pre-project monitoring.

Deliverables will include:

- Final designs and specifications for the Upper Truckee River restoration and SEZ enhancement project of the river through the CDPR reach. These plans will be completed to the final design level for construction contracting and implementation
- Secure permits for restoration project construction from: TRPA, Lahontan Water Quality Control Board, CA Dept. of Fish and Game, U.S. Army Corps of Engineers, and others as required
- Continue pre-project monitoring

Describe the anticipated project accomplishments:

The proposed project would restore a 1 to 1.5 mile reach of the Upper Truckee River to a geomorphically functioning condition with the river re-connected to it's floodplain, improving water quality and habitat. It would relocate approximately 9 golf course holes from the river banks and floodplain (all land capability 1b) to high capability lands more distal from the river.

This phase (phase 2) would result in the completion of final construction plans and specifications and permits.

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

Baseline monitoring and a broad scale watershed study have already been completed. Conceptual designs for the river restoration and golf course relocation were completed in phase 1, and a joint NEPA/CEQA/TRPA document is currently being prepared at the EIR/EIS level, and will be completed in the fall of 2006.

The next step (phase 2) is final designs and permits, which are included in this application.

Describe partnerships for this project. (Include documentation): This project includes lands owned by the California Department of Parks and Recreation, California

Tahoe Conservancy, and a minor parcel owned by the USDA Forest Service. American golf operates the Lake Tahoe Golf Course on a portion of the land. Management authorities from TRPA and Lahontan Water Quality Control Board have been consulted. All parties are in agreement to restore the CDPR reach of the River and relocate the golf course to higher capability lands.

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

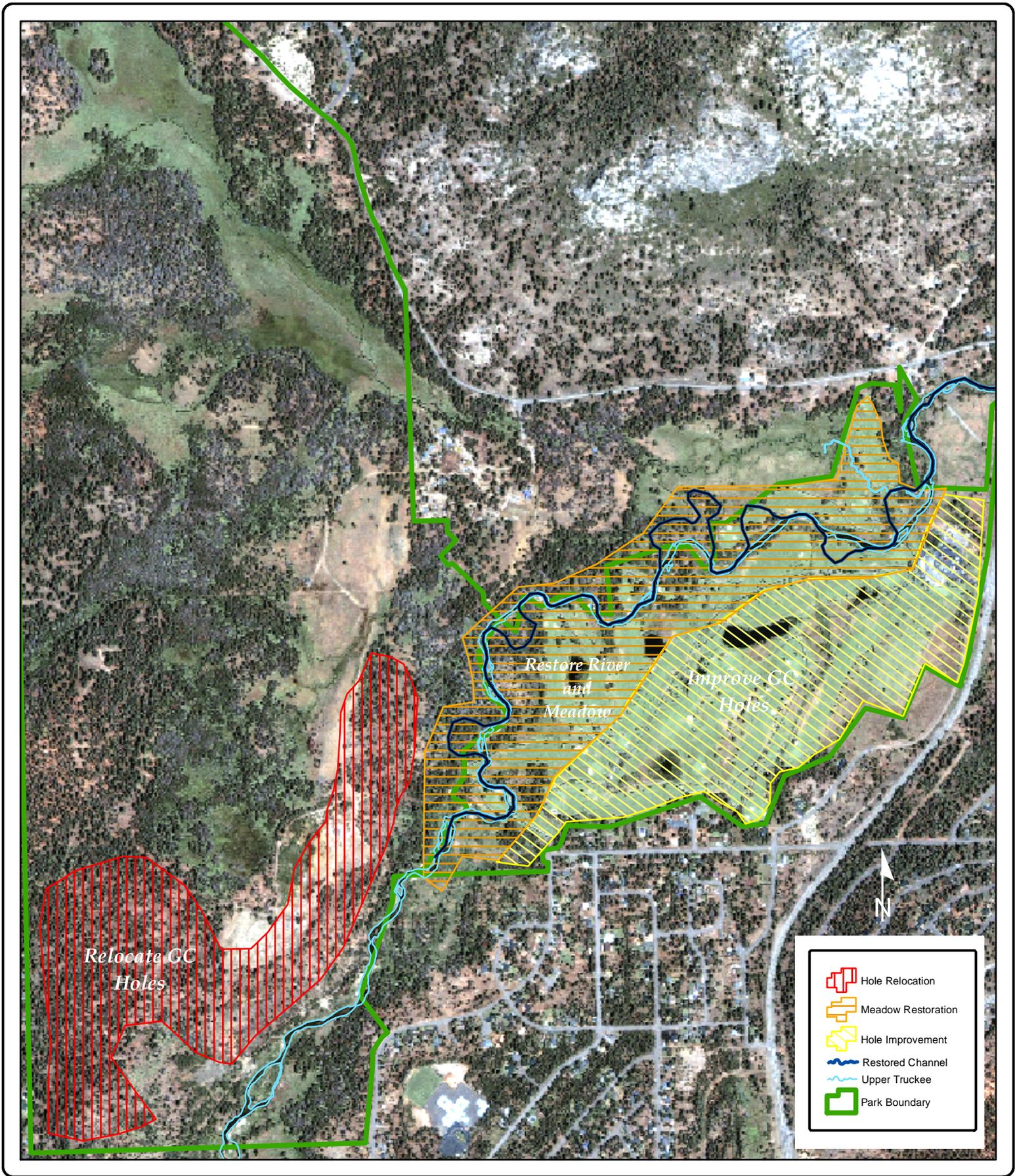
- (1) The questions the monitoring program is designed to answer**
- (2) The monitoring approach**
- (3) Whether this project monitoring fits in to a larger monitoring or research program?**

A monitoring plan will be prepared to indicate the effects of the project compared to pre-project conditions on erosion and sediment production and deposition, stream morphology, and improvements to riparian and wetland habitat.

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

The project will include public meetings, newsletters and press releases.

Include an 8 ½ X 11 map depicting the project.



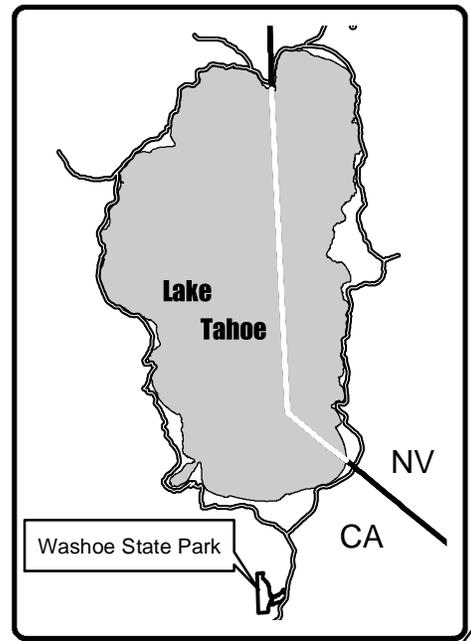


Upper Truckee

Full River Retoration Alternative



California State Parks Washoe Meadows Lake Valley Recreation Area



Angora Creek

Sawmill Rd

Private

Private

USFS

CTC

CTC

Lake Tahoe
Golf Course

Washoe Meadows
State Park

Lake Valley State
Recreation Area

Country Club Dr

Upper Truckee River

50

0 0.25 0.5 Miles

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