
Lahontan Regional Water Quality Control Board

September 30, 2016

TO ALL INTERESTED PERSONS AND PARTIES:

Request for Comments on Proposed Expenditure of Remaining Squaw Valley Ski Corporation Consent Agreement Funds, Olympic Valley, Placer County – WDID NO. 6A310118070

Through the mid- to late-1990's, the Lahontan Regional Water Quality Control Board (Water Board) issued several orders to address various issues of non-compliance with Squaw Valley Ski Corporation (now Squaw Valley Resort). The Water Board referred the matter to the California Attorney General's Office for further enforcement, and complaints were eventually issued by each party against the other. The parties settled their complaints against each by signing and entering the Consent Agreement and Stipulation for Judgment (Consent Agreement) in 2005. The Consent Agreement, in part, required Squaw Valley Resort to remit a \$900,000 settlement payment and to complete specific projects identified within the Consent Agreement. The Consent Agreement was entered in the Superior Court of the State of California in and for the County of Placer (Case No. SCV 12916).

The Water Board and Squaw Valley Resort worked cooperatively to resolve all issues identified in the Consent Agreement, and the jurisdiction of the court terminated the Consent Agreement in 2010. Subsequent to the termination, the Water Board received \$354,187.67 from the Attorney General's Office for money set aside and not spent by the Department of Justice for its legal fees in managing the Consent Agreement. The use of these funds is unrestricted for the Water Board.

Water Board staff reached out to local non-profit watershed groups to solicit potential water quality related projects that can be completed with these funds. Four potential projects were submitted from the Friends of Squaw Creek, the Truckee River Watershed Council, and the Alpine Watershed Group. The project summaries are provided in the enclosure, which also describes primary criteria the Water Board is proposing to evaluate the projects. The information provided in the table is based solely on the information provided by the project sponsors.

Water Board staff will be making a recommendation to the Water Board at its November 9-10, 2016 meeting in South Lake Tahoe regarding which project or portions of projects to fund with the remaining Squaw Valley Consent Agreement funds. Please submit any written comments you may have to Lahontan@waterboards.ca.gov by **October 14, 2016**. Please include "Proposed Expenditure of Squaw Valley Consent Agreement Funds" in the subject line.

AMY L. HORNE, PhD, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER

If you need further information regarding this matter, please contact Eric J. Taxer at (530) 542-5434 or Eric.Taxer@waterboards.ca.gov.

A handwritten signature in blue ink that reads "Lami Kasper". The signature is written in a cursive style with a long, sweeping tail on the letter "p".

for Scott C. Ferguson, P.E.
Supervising Water Resource Control Engineer

Enclosure

Project No. 1
Squaw Creek Meadow Restoration

Project Proponent: Friends of Squaw Creek (FOSC)

Estimated Budget: \$354,187.67

Project Description: The Squaw Creek Meadow Restoration (SCMR) Project improves water quality and aquatic and terrestrial wildlife habitat of a 150-acre montane wet meadow complex and 1.8 miles of Squaw Creek. Allocation of DOJ funds towards the SCMR Project will fund implementation of approximately two acres of wetland and stream restoration and enable the construction area to be monitored for a period of three years. The restoration will increase sheetflow runoff to the North Floodplain, enabling groundwater recharge and sediment detention. The goals of the entire SCMR Project are to thwart head cutting, bank erosion, and failing rip-rap with biotechnical stabilization; enhance Squaw Creek's connection to relict oxbows; increase water storage capacity through wetland ponds; and develop instream aquatic fisheries habitat enhancements. If funded, permitting will take place in 2016/2017 to allow the project to be constructed during the 2017 construction season.

Location: Eastern Placer County, in Olympic Valley, California, six miles (9.6 km) northwest of Lake Tahoe, California between the towns of Tahoe City and Truckee. - 120.1985, 39.2116

Affected Watershed and/or Groundwater Basin: Squaw Creek/Truckee River Watershed 16050102 Olympic Valley Groundwater Basin: 6-108

Expected Benefits or Improvements to Water Quality and/or Beneficial Uses: The SCMR Project purpose is to improve water quality for all beneficial uses, specifically to implement measures to attain the Squaw Creek Sediment TMDL, enhance native fisheries habitat for Lahontan Cutthroat Trout, and improve water supply through groundwater recharge.

Estimated Project Duration: Pre-project monitoring, permitting, and construction will occur over the next 12 months. An additional 36 months of post-construction monitoring are proposed.

Project Readiness: The SCMR Project is ranked No.1 in the Tahoe Sierra Integrated Regional Water Management (IRWM) Group and is ready to be implemented. FOSC has established Memorandums of Understandings with stakeholders and is a signatory of the Tahoe Sierra IRWM. Squaw Valley Resort has purchased a 9.4 acre parcel (Placer County APN 096-221-013) for proposed restoration and dedicated it to Placer County. The Resort at Squaw Creek has also transferred the adjacent 0.7 acre parcel proposed for restoration (Placer County APN 096-060-054-000) to Placer County. Placer County as the lead CEQA agency has funded and completed an initial study for all SCMR Project Phases. Final CEQA studies for the total project are underway, including archeological, biological and wetland delineation, and are anticipated to be

completed by the end of 2016 to enable permit applications over winter. Construction will take place during the 2017 season.

Public Health and Safety Benefits: The SCMR Project area has been recently amended in the 2016 FEMA floodplain maps. Agency coordination and hydrologic studies are being incorporated into the SCMR Project to better understand if flood attenuation may be improved through restoration to help adapt to extreme climate change variability including drought conditions and shorter duration, higher frequency events.

Environmental Health and Safety Benefits: The SCMR Project is ranked as the No. 1 restoration project in the Tahoe Sierra IRWM. The SCMR Project contributes to achieving Squaw Creek TMDL targets by reducing bedload transported and deposited in downstream reaches, and contributes to achieving the Truckee River Suspended Sediment Concentration TMDL by reducing fine sediment carried in suspension to the Truckee River. The SCMR Project also enhances aquatic and terrestrial habitat for species such as Lahontan Cutthroat Trout and Willow Flycatcher, migration corridors, groundwater surface water interaction, water supply, carbon sequestration and greenhouse gas reduction, and flood attenuation while protecting meadow systems.

Identify Other Potential Project Benefits or Efficiencies: The SCMR Project supports the goals and objectives identified in the Water Quality Control Plan for the Lahontan Basin, such as gathering current water quality information and implementing projects to achieve TMDL targets. The SCMR Project aligns with the integrated watershed management goals identified by the Tahoe-Sierra IRWM Group by benefitting water quality, water supply, and ecosystem restoration. The SCMR Project serves a regional need of reducing bedload and fines, increasing water supply through groundwater recharge, and prolonging baseflows for aquatic species and downstream users in California and Nevada. The SCMR Project will help meet instream flow requirements for fish, wildlife and recreation. Watershed data efficiencies shall be consolidated between stakeholders to assess restoration through groundwater, surface water and bioassessment sampling. FOSC provides a virtual library and GIS database. The SCMR Project accounts for and will better address or manage effects from extreme climate change variability including drought conditions and shorter duration, higher frequency events.

Identify Other Project Funding Sources, and if Additional Funds Are Needed to Close a Funding Gap: The Lahontan DOJ funds will support implementation of a stand-alone aspect of the SCMR Project to re-wet the North Floodplain and reduce sediment in-stream to improve water quality. Squaw Valley Resort and Resort at Squaw Creek have dedicated the required parcels to Placer County. The Department of Water Resources Proposition 84 funds have contributed \$300,000 to the CEQA final studies and permitting for the entire project. The Tahoe Truckee Community Foundation has allocated \$8,000 towards Friends of Squaw Creek organizational capacity, and the National Forest Foundation has provided \$250,000 funds towards construction and monitoring of upstream reaches. The total SCMR Project implementation costs are estimated to be \$1.5 million.

Identify if Potential SEP Funding may be used to Leverage Matching Funds: The remaining DOJ funds will be used to leverage a \$550,000 grant from the State Water Board 319h grant. Applications are to be submitted October 2016 for construction of additional downstream reaches of the project.

Environmental Justice Concerns that may be Addressed by the Project: Water quality and supply are improved to downstream users of the Truckee River watershed including Pyramid Lake, a terminal lake on tribal land with endangered fisheries of cultural significance, primarily the endangered cui-ui fish and the threatened Lahontan Cutthroat Trout.

Disadvantaged Community Concerns that may be Addressed by the Project: Tahoe-Sierra IRWM is addressing DAC through tribal outreach and bilingual translation of written materials to share more broadly information on improvements to beneficial uses from restoration, including the SCR.

Project No. 2
Donner Creek Bank Stabilization Downstream of Railroad Culvert

Project Proponent: Truckee River Watershed Council

Estimated Budget: \$150,000 – Design & CEQA/Permitting, \$150,000 – Construction, \$10,000 – Pre-and-Post-Project Monitoring **Total Project Cost: \$310,000**

Project Description: Re-profile approximately 0.1 miles of stream bank below a railroad culvert which directs high velocity flows into soft soils. The project will stabilize the bank with a combination of large wood, rock, riparian plantings, erosion control fabric, and hydroseeding with native, drought tolerant grasses and sedges. We will anchor site with variety of wood structures and longitudinal peak stone toe protection along the base of the bank.

Phases include: 1) Pre-Project Monitoring, 2) Design, CEQA and Permitting, 3) Construction, 4) Post-Project Monitoring

Location: Donner Creek upstream of West River Street, Truckee, Nevada County, CA (39.3176, -120.2046)

Affected Watershed and/or Groundwater Basin: Donner Creek/Truckee River Watershed Hydrologic Unit Code – 12 (160501020201), Martis Valley Groundwater Basin (6-67).

Expected Benefits or Improvements to Water Quality and/or Beneficial Uses: This project will stabilize a severely eroding stream bank, largely eliminating one of the largest sources of fine sediment to the lowest half mile of Donner Creek. This will result in improved water quality in Donner Creek, as well as the main stem of the Truckee River.

The project will enhance riparian habitat by stabilizing the bank, and improve in-stream habitat by providing cover for aquatic species and reducing the amount of fine sediment along the stream bed.

Estimated Project Duration: 2 to 5 years

Project Readiness: This project, identified as a high priority in the Donner Basin Watershed Assessment (TRWC, 2016, www.truckeeriverwc.org), is currently in concept design and is partially funded for final design. This proposal includes planning, completing final design, obtaining landowner agreement, permitting and construction.

Public Health and Safety Benefits: This project site is located immediately below a trailer home park. Large weather events and ongoing erosion could lead to slope failure and threaten the safety of at least one mobile home site. This project will stabilize the stream bank, thus protecting the mobile home park.

Environmental Health and Safety Benefits: The Truckee River, the main source of drinking water for the Reno/Sparks area of Nevada, is listed as being impaired by

sediment. This project will directly address an area of that contributes sediment to the Truckee River to improve water quality.

Riparian and in-stream habitat, are compromised in the project area. This project will create new habitat with improved diversity, vegetation, and water flow.

Identify Other Potential Project Benefits or Efficiencies: This project supports attainment of the Truckee River TMDL, which establishes a target of 20% annual sediment load reduction or a reduction of 10,000 tons a year over the 20-year life of the TMDL. Using the Universal Soil Loss Equation, it is estimated that implementation of the proposed Donner Creek Bank Stabilization Downstream of the Railroad Culvert Project can yield 1,200 tons. This translates to a reduction of 60 tons per year, or 0.6% of the entire annual reduction called for in the Truckee River TMDL.

This project is located in a reach of Donner Creek which was identified in the *Middle Truckee River Suspended Sediment Monitoring Reports* (WY 2011, 2012, 2013, and 2014) as the reach contributing the highest load of suspended sediment to the Truckee River within the Town of Truckee. Though the reach is short, erosion is severe. This site is a priority sediment source.

The project has a nexus with source of funds (Remaining Squaw Valley Ski Corporation Consent Agreement Funds, Olympic Valley, Placer County – WDID NO. 6A310118070) via (1) water quality improvement project against water quality violations, and (2) watershed/geography since the Truckee River is the receiving water for this project and the receiving water for the area of the violations.

The Donner Basin, in which this project is located, is a high priority basin as identified in the Truckee River Watershed Coordinated Watershed Management Strategy (TRWC, 2014) and is identified as a high priority in the Donner Basin Watershed Assessment (TRWC, 2016, www.truckeeriverwc.org).

The project aligns with the Tahoe-Sierra IRWM by benefitting water quality, water supply, and ecosystem restoration.

Identify Other Project Funding Sources, and if Additional Funds Are Needed to Close a Funding Gap: The Truckee River Fund at the Community Foundation of Western Nevada recently awarded funds in support of completing the final design of this project. The DOJ funds would be used to complete the project, including on-the-ground work. Other potential funding sources include the Sierra Nevada Conservancy, Truckee River Fund, Tahoe Truckee Community Foundation, Martis Fund, and Laird Norton Family Foundation.

Identify if Potential SEP Funding may be used to Leverage Matching Funds: The Truckee River Fund awarded \$90,000 in support of completing the final design of this project. The DOJ funds would leverage this private source of funding to complete the project.

Environmental Justice Concerns that may be Addressed by the Project: This project will stabilize the slope immediately beneath a trailer home park, improving safety

and avoiding property loss. This project will result in 0.6% of the annual reduction called for in the Truckee River TMDL, and improvements to water quality in the Truckee River, the main source of drinking water for Reno and Sparks, NV, which includes water supply for tribal lands.

Disadvantaged Community Concerns that may be Addressed by the Project:

None.

Project No. 3
Donner Creek Bank Stabilization and Channel Enhancement
Adjacent to Highway 89

Project Proponent: Truckee River Watershed Council

Estimated Budget: \$150,000 – Design & CEQA Permitting, \$150,000 – Construction, \$10,000 – Pre-and-Post-Project Monitoring. **Total Project Cost: \$310,000**

Project Description: To address the bank erosion concerns and improve habitat conditions, approximately 0.1 miles of stream bank will be set back, re-profiled, and replanted to enhance aquatic and riparian habitat and reduce erosion pressure on the right bank. The right bank will be extended into the current stream channel alignment and stabilized with plantings, erosion control fabric, and longitudinal peak stone toe protection. This will improve approximately 1/3 acre of riparian habitat.

Phases Include: 1) Pre-Project Monitoring, 2) Design, CEQA, and Permitting, 3) Construction, and 4) Post-Project Monitoring

Location: Donner Creek adjacent to HWY89S, upstream of railroad tracks, Truckee, Nevada County, CA (39.3201, -1202073)

Affected Watershed and/or Groundwater Basin: Donner Creek/Truckee River Watershed Hydrologic Unit Code – 12 (160501020201) Martis Valley Groundwater Basin (6-67)

Expected Benefits or Improvements to Water Quality and/or Beneficial Uses: This project will stabilize severely eroding stream bank, largely eliminating one of the largest sources of fine sediment to the lowest half mile of Donner Creek. This will result in improved water quality in Donner Creek as well as the main stem of the Truckee River.

The project will enhance riparian habitat and improve in-stream habitat and substrate diversity by reducing fine sediment and restoring natural physical processes. The project will also reduce risk to Highway 89 by stabilizing the right bank and adjusting the stream channel to the east.

Estimated Project Duration: 2 to 5 years

Project Readiness: This project, identified as a high priority in the Donner Basin Watershed Assessment (TRWC, 2016, www.truckeeriverwc.org), is partially funded for concept design. This proposal includes planning, completing final design, obtaining landowner agreement, permitting and construction. Based upon the findings and project concept resulting from the Donner Basin Assessment, it is anticipated a Mitigated Negative Declaration will satisfy CEQA requirements.

Public Health and Safety Benefits: The right bank of Donner Creek exhibits severe bank erosion that, if unaddressed, will likely affect the stability of Highway 89 relatively

soon. By stabilizing the right bank and adjusting the stream channel further to the east, the project will reduce the erosion risk to Highway 89.

Environmental Health and Safety Benefits: The Truckee River, the main source of drinking water for the Reno/Sparks area of Nevada, is listed as being impaired by sediment. This project will directly address an area of that contributes sediment to the Truckee River to improve water quality.

Both stream banks offer limited area for riparian habitat and little riparian canopy for the channel. The project will significantly enhance riparian habitat along the stream corridor, particularly along the left bank, and improve instream habitat quality and substrate diversity by reducing fine sediment loads and restoring natural physical processes.

Identify Other Potential Project Benefits: This project supports attainment of the Truckee River TMDL, which establishes a target of 20% annual sediment load reduction or a reduction of 10,000 tons a year over the 20-year life of the TMDL. Using the Universal Soil Loss Equation, we estimate that implementation of proposed Donner Creek Bank Stabilization Downstream of the Railroad Culvert can yield 1,200 tons. This translates to a reduction of 60 tons per year, or 0.6% of the entire annual reduction called for in the Truckee River TMDL.

This project is located in a reach of Donner Creek which was identified in the *Middle Truckee River Suspended Sediment Monitoring Reports* (WY 2011, 2012, 2013, and 2014) as the reach contributing the highest load of suspended sediment to the Truckee River within the Town of Truckee. Though the reach is short, erosion is severe. This site is a priority sediment source.

The project has nexus with source of funds (Remaining Squaw Valley Ski Corporation Consent Agreement Funds, Olympic Valley, Placer County – WDIID NO. 6A310118070) via (1) water quality improvement project against water quality violations, and (2) watershed/geography since the Truckee River is the receiving water for this project and the receiving water for the area of the violations.

The Donner Basin, in which this project is located, is a high priority basin as identified in the Truckee River Watershed Coordinated Watershed Management Strategy (TRWC, 2014) and is identified as a high priority in the Donner Basin Watershed Assessment (TRWC, 2016, www.truckeeriverwc.org).

The project aligns with the Tahoe-Sierra IRWM by benefitting water quality, water supply, and ecosystem restoration.

Identify Other Project Funding Sources, and if Additional Funds are Needed to Close a Funding Gap: The Truckee River Fund at the Community Foundation of Western Nevada recently awarded funds to further develop the concept design of this project. The DOJ funds would be used to complete the project, including on the ground work. Other potential funding sources include the Sierra Nevada Conservancy, Truckee River Fund, Tahoe Truckee Community Foundation, Martis Fund, and Laird Norton Family Foundation.

Identify if Potential SEP Funding may be Used to Leverage Matching Funds: The Truckee River Fund awarded \$15,000 to further develop the concept design of this project. The DOJ funds would leverage this private source of funding to complete the project.

Environmental Justice Concerns that may be Addressed by the Project: This project will result in improvements to water quality in the Truckee river, the main source of drinking water for Reno and Sparks, NV, which includes water supply for tribal land areas.

Disadvantaged Community Concerns that may be Addressed by the Project: None

Project No. 4
Hope Valley Restoration & Aquatic Habitat Enhancement

Project Proponent: Alpine Watershed Group

Estimated Budget: Phase 1: \$118,550, Phase 2: \$115,530, Phase 3: \$128,340 – Total Project Cost: \$362,420

Project Description: The project will support the stabilization of over 800 feet of eroding banks along the West Fork of the Carson River, and help improve aquatic habitat along nearly 0.50 miles of river at four specific sites.

The proposed 0.5 mile stretch through lower Hope Valley would be contiguous with the 2015 restoration project conducted by American Rivers. The project would fund implementation of one demonstration project at the most heavily used and highly visible sites (Phases 1 and 2, below).

Phasing Options: Phase 1) Design & Permitting – including environmental review and pre-project monitoring. Phase 2) Implementation of restoration Site #1, as demonstration project Phase 3) Implementation of Restoration Sites # 2-4.

Location: West Fork Carson River through lower Hope Valley Project area consists of four meanders from the Highway 88 bridge (38.771890, - 119.934319) about 0.5 river miles downstream, ending just before (but not including) the meander restored in fall of 2015 (38.776818, -119.933301).

Affected Watershed and/or Groundwater Basin: North Lahontan Hydrologic Unit Region, HUC Unit: 16050201 – Upper Carson; Carson Valley Groundwater Basin (6-06), Upper Carson Watershed, Lower Carson Watershed, and Hope Valley Meadow.

Expected Benefits or Improvements to Water Quality and/or Beneficial Uses: The project will reduce erosion and sedimentation and provide shading in the West Carson River at the four proposed sites. The results will include improved water quality and aquatic habitat. The project will also benefit water users in the Carson Valley, fishing and other recreation activities for visitors and residents of Alpine County, and the environment through more a connected and functional channel and floodplain.

Meadow restoration projects have been demonstrated to increase water storage capacity. Through restoration, these meadows are reconnected to groundwater, which usually results in reduced water temperatures in Summer. Reconnecting the meadow with its floodplain also reduces erosion and sediment delivery.

Estimated Duration: Two to three years

Project Readiness: The project has undergone initial planning by project partners including American Rivers, Friends of Hope Valley, and the California Department of Fish and Wildlife (the landowner). Final design plans will be developed in order for CEQA to be completed and the project to be implemented.

Public Health and Safety Benefits: None identified

Environmental Health and Safety Benefits: None identified by project applicant.

Identify Other Potential Project Benefits: This project aligns with the California Water Action Plan priorities and the Sierra Nevada Conservancy's Watershed Improvement Program by providing multiple benefits such as enhancing wildlife habitat, improving water filtration ability and augmenting carbon storage capacity.

In 2015 American Rivers completed the first stream bank restoration project along the West Fork Carson within Hope Valley. The site was on California Department of Fish and Wildlife land in the Lower Hope Valley, at the downstream end of this proposed project. In 2016, a second major restoration project is being constructed further upstream. This reach consists of approximately 25 treatments for bank stabilization and riparian restoration along a 1.3 mile section of USFS land in the Upper Hope Valley. The proposed project will address the land between the two project areas completed in 2015 and 2016. The proposed project leverages greater ecological benefit and larger areas of connection of stream to meadow floodplain while completing one of the final needed restorations on the Upper West Carson River.

The proposed project will help to mitigate the potential long-term impacts of climate change. Re-establishing a functional floodplain and meadow system will allow the river corridor to accommodate variable flows in the future. Due to the potential for earlier spring runoff, it will be important for these meadowlands to serve as natural storage areas. Meadows provide an important form of natural water storage, which also improves late season, in-stream flows.

This project will address several of the California Water Plan Update (2013) resource management strategies in the "Ecosystem Restoration" category, including the following: 1) Reconnect rivers to their historic floodplains as part of new flood management approaches, 2) Restore mountain meadows, 3) Maintain and create habitat around stream and river corridors that is compatible with stream and river functions, 4) Restore and preserve stream channel morphology to provide floodwaters access to the floodplain and to encourage stable banks and channel form.

This project is considered an effective strategy according to the California Water Action Plan (2016) priorities: 1) Restore key mountain meadow habitat, 2) Manage headwaters for multiple benefits, and 3) Protect and restore degraded stream and meadow ecosystems to assist in natural water management and improved habitat.

Environmental Justice Concerns that may be Addressed by the Project: The project area represents an important historical and cultural resource of the Washoe Tribe. For over 10 years, the Alpine Watershed Group has been working with the Washoe Tribe's Cultural and Environmental Departments in addressing water quality issues. The Washoe Tribe supports restoration as a tribal resource benefit. Maintaining native vegetation and wildlife habitat is necessary to support many of the Washoe Tribe's cultural heritage activities.

Disadvantaged Community Concerns that may be Addressed by the Project: The Woodfords Community of the Washoe Tribe is considered a disadvantaged community and is located downstream of the proposed project site. As mentioned above, this project helps to protect the cultural and environmental resources of significance to the Washoe Tribe.

Identify if Potential SEP Funding may be Used to Leverage Matching Funds: Once initial project funding is secured (e.g. Phase 1 & 2), additional funds will be sought for the remaining phases. Phase 1 Design of all restoration sites will position the project as fully-shovel-ready (with planning and design complete for whole project, the 3 remaining restoration sites would be shovel-ready). Sources to be pursued include IRWM Implementation Grants and other appropriate Proposition 1 grants and private foundations.