

**ROUND 12 CAPITAL PROJECT NOMINATION FORM**  
**LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS**  
**APPENDIX K**

<b>Project Name:</b>	Snow Creek Restoration Project	<b>EIP Number:</b> <i>(Required)</i>	391
<b>Federal Agency Sponsor:</b> <i>(Required)</i>	Bureau of Reclamation 2800 Cottage Way Room E-2606 Sacramento, CA 95825	<b>Contact:</b>	Myrnie Mayville
<b>Threshold:</b>	Water Quality	<b>Phone Number:</b>	775-589-5240
<b>Threshold Standard:</b>	Stormwater and SEZ Restoration	<b>Email:</b>	MMayville@usbr.gov
<b>FUNDING REQUESTED IN THIS ROUND:</b>		\$ 940,000	

**Federal Share EIP Consideration**

Select "yes" or "no" for each question. If you have a "yes" response, briefly describe. *Projects must meet one or more of these 5 items.*

1. Does the project involve federal land? Yes No  
 If yes, is the federal land involved important to successful implementation of the project?

2. Is this project identified in the EIP? If yes, please ensure the EIP number is identified in the above project information box. If no, provide a description of the project's contribution to the EIP program. Yes No

EIP No. 391

3. Does the project involve the conservation of a federal or regional threatened, rare, endangered, or special interest species? If yes, identify. Yes No

4. Does the project involve an identified federal interest such as the detection and eradication of non-native invasive species (aquatic or terrestrial)? If yes, identify. Yes No

5. Does the project develop knowledge and/or information to develop future capital projects in the EIP? (such projects that fulfill this function would include technical assistance, data management, and/or resource inventories) Yes No

**Check all Capital Focus Area(s) that apply (as defined in the Federal Vision):**

- 1. **Watershed and Habitat Improvement**
- 2. **Forest Health**
- 3. **Air Quality and Transportation**
- 4. **Recreation and Scenic**

**Check all that apply (must meet a minimum of one category):**

- 1. **Continued emphasis on forest ecosystem health/fuels reduction projects considering the LTBMU Stewardship Fireshed Assessment and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.**
- 2. **Continued implementation and/or completion of projects approved in Rounds 5 through 11 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 12.**

***List Previously Approved Rounds and funding(provide project titles):***

Placer County began EIP Project No. 212 (Tahoe Estates Erosion Control) in 2004 (funded in SNPLMA Rounds 5, 6 and 8). This project addresses the pollutant source issues and diverted natural tributary that was identified in the upper portion of the Tahoe Vista Watershed, during completion of the Existing Conditions Analysis Memorandum for EIP Project No. 212.
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- 3. **Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel). *NOTE: If “yes”, then please respond to questions in the Accomplishments section of the nomination proposal.***
- 4. **Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.**

## Project Nomination Proposal Outline

### **Project Summary (a brief summary which clearly describes the proposed project –maximum 200 words)**

- Summarize ONLY the Round 12 project (also summarize scaling of funding to be described in more detail in the “Project Description” section below).

Placer County Department of Public works purchased the former cement batch plant (TNT) property in Tahoe Vista on August 14, 2008. The property is a source of pollution upgradient of Snow Creek Wetlands. Stormwater runoff flows through the property and discharges into the wetlands untreated. Previous industrial uses of the property dramatically impacted wetlands with fill material and encroached into riparian area.

The project will remove soil and fill material, engineer wetlands to treat storm water prior to discharging into the Snow Creek tributary, and restore functioning wetlands. Placer County holds title in Fee Simple of the project site. This project will afford a contiguous wetland area with California Tahoe Conservancy and United States Forest Service public parcels adjacent to the subject property. This project will facilitate the conversion of the property from light industrial to open space that will improve water quality, riparian and wildlife habitat in the watershed. Improvements will also increase access to public space recreation.

The Round 12 project component would fund the construction portion of this restoration project. Other funding sources have contributed monies for acquisition, cleanup, monitoring, design, and some recreational (Class I Trail) components.

### **Project Description**

#### **Introduction**

- Provide project background which explains the situation and state the problem and how it will be addressed.

*Note: Focus needs to be the project in Round 12 not a history of an ongoing project or program.*

This request for funding is for the Snow Creek Wetlands Restoration Project. Elements of this project include water quality improvement, pollutant load reduction, erosion control, and restoration of riparian and wetland habitat.

The project site consists of nine parcels (eight owned by Placer County and one owned by the California Tahoe Conservancy) formerly used as a cement batch plant. During development of the project site in 1948, fill material was placed into the wetlands to expand the amount of industrial space available. The natural perennial tributary that flowed eastward into Snow Creek was channelized and routed into a culvert through the property, destroying the wetlands. The lack of riparian vegetation reduces wildlife habitat and encourages erosion. Seven of the nine parcels are part of the Wood Vista Subdivision. The Tahoe Regional Planning Agency (TRPA) issued a moratorium on building in this subdivision in 1972 due to the presence of wetlands. The California Tahoe Conservancy (CTC) has pursued the acquisition of parcels in the subdivision and has deed-restricted them to prevent development. This project is consistent with the CTC and TRPA policies for land use, conservation and open public space.

The project will remove the concrete fill material (at places 3-feet thick) and impervious surfaces, and restore approximately 1.9 acres of wetlands. The tributary to Snow Creek will be restored by routing flows into a re-created historic stream channel. Engineered wetlands

will include a fore bay and advanced filtration capabilities so that up gradient pollutants of nitrogen, phosphorus and fine sediment are removed prior to discharging into Snow Creek. Up gradient flows to the project site include the CalTrans snow storage area. Extensive re-vegetation will replace the industrial blight currently on the property.

Placer County has received other funds for design, acquisition and cleanup. Construction funding for implementation is needed. If awarded Round 12 monies, the project will be constructed in 2012, followed with a two-year period of monitoring and re-vegetation.

The larger project at this site, which includes components funded by the EPA and the California Resources Agency, will offer public access to open space owned by Placer County, the CTC and the U.S. Forest Service via a raised boardwalk Class I trail. The trail is a critical link in connecting the Tahoe Vista Recreational Park boat and automobile parking on the Lake Tahoe waterfront to the North Tahoe Regional Park. From the Regional Park, Class I trail connections can be made east to Kings Beach or west to Tahoe City. Additionally, the project restoration will also include a Class I multi-purpose use trail connecting a Class I route from National Avenue into the North Tahoe Regional Park to the north. This Class I trail connection is on the approved TRPA Master Bike and Recreational Trails Plan.

In 2000 and 2001, another project on Snow Creek was implemented above and adjacent to Highway 28. That project involved restoration of approximately 3.5 acres of wetlands, 850 feet of stream channel as well as removal of fill contaminated with petroleum hydrocarbons and installation of a triple box culvert under Highway 28. The project was implemented by Placer County in partnership with the California Tahoe Conservancy (CTC) with funding from the CTC, CalTrans, Lahontan RWQCB, the USFS and TRPA. The project currently proposed for Round 12 SNPLMA funding is half a mile upstream and to the northwest of the 2000/2001 project.

- Describe what Round 12 is specifically funding; list the number of years the requested funding will cover; briefly describe how this project links into previous projects/rounds (identify and describe other round projects and funding received). Show scaling of project (reduced funding request and associated reduction in accomplishments).

***NOTE:** Focus should be on finishing current/phased projects. If project is new in Round 12, clearly identify if the project is for planning or implementation and how it will be completed with Round 12 funds. Identify if other funds will be needed to complete the project. Please identify total non-SNPLMA funds that are being contributed/dedicated to the proposed Round 12 project and the source of those funds.*

Funding from Round 12 will be used to pay contracting costs associated with construction and associated costs such as construction project management and materials testing to permanently eliminate pollutants transported into the Snow Creek wetlands and provide a natural wetland treatment area for storm water runoff to improve water quality and wildlife habitat in the Lake Tahoe basin. Specifically, the following items will be funded with Round 12 SNPLMA funds:

- Removal of 22,565 square feet of impervious surfaces
- Excavation and removal of 6,200 cubic yards of contaminated fill material from the former cement batch plant

- Restoration of 600 feet of the historic channel of a tributary to Snow Creek by excavating and revegetating a new channel
- Restoration of approximately 1.9 acres of wetland meadow by revegetating and providing additional surface and groundwater
- Construction of an engineered pretreatment forebay where an upstream culvert currently enters the property
- Diversion and incidental dewatering of groundwater
- Post-construction irrigation and vegetation monitoring
- Project bid support
- Mobilization
- Construction inspection, project management and materials testing
- Traffic control and parking barriers
- Construction contingency

Due to the complexity of both the project itself as well as the various funding sources, the project cannot be scaled. (Please see the “Partnership” text box below for a description of partnerships and other funding received.)

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

This project has progressed to the 50% design plan set and specifications. The environmental documents are in DRAFT form and will be ready to circulate in March 2011. Some construction monies have been awarded already (Proposition 84 River Parkways), and there is a very urgent need to secure the remaining amount of construction funds (Round 12 request) to keep the project on track for a 2012 build.

Placer County has completed fifty five (55) similar water quality improvement projects, including engineered wetlands and wet meadow restorations (please refer to the successful Lake Forest Meadow Restoration Project). Placer County has a reputation with funding agencies for delivering completed projects within schedule (on time) and within the budget.

The project is being managed by Placer County. To date all planning and design work has been completed by Placer County civil engineers. A majority of the technical ability and expertise is readily available within Placer County.

The County also maintains a pre-approved list of engineering consultants that can be utilized when a specific expertise, such as wet meadow restoration design, is needed. Placer County will likely require a contract for a restoration specialist to be on-site during construction for assistance with inspection. Also, UC Davis Tahoe Environmental Research Center students will be utilized for their monitoring expertise. Wetland scientists and biology experts may also be hired through a consulting contract.

- Describe partnerships for this project. (if applicable, project should identify and describe committed/secured partner funding and/or other partner contributions and how it is integrated into the project).

Placer County has developed a complex inter-agency partnership on this project. Among the public entities financially committed and honorably supporting the project;

Sierra Nevada Conservancy The SNC awarded Placer County an acquisition grant through Proposition 50 in September 2006, for a total amount of \$1,820,000. The grant was to purchase eight parcels within the project site and perform environmental due diligence. Escrow on the property closed on August 14, 2008. This grant agreement is closed.

Tahoe Regional Planning Agency The TRPA awarded \$13,500 in water quality funds to this project in Fall 2008. These funds will be used for maintenance on the property, cleaning culverts, soil stabilization and paying water connection costs. The TRPA fully endorses the project, and the project is included in the Environmental Improvement Program (EIP) No. 391.

U.S. Bureau of Reclamation The Bureau awarded Placer County a grant in the amount of \$250,000 for CEQA environmental documentation and preliminary design. The grant was awarded in 2008 and is still active. Current work is proceeding, utilizing funds from this grant.

US Environmental Protection Agency EPA awarded \$600,000 in Brownfield monies to the project in 2010. Work covered under this grant includes community outreach, a Cleanup Plan, Sampling and Analysis Plan, NEPA documentation, and design.

California Natural Resources Agency The NRA awarded Placer County a \$1,000,000 grant from the Proposition 84 River Parkways Program in 2010. This grant will be used to fund construction of the recreational (Class I multi-use trail) components of the project.

The following agencies have not granted any monies to the project, but are considered partners: Lahontan – RWQCB, US Forest Service, and the CTC (Recreation and Access).

The NTPUD is an additional partner in the project. The recreational project improvements will be maintained by the North Tahoe Public Utility District (NTPUD) including Class I bike trail maintenance. Placer County Department of Public Works will maintain and operate the water quality improvements that will be constructed, similar to the maintenance performed on other EIP-type projects.

Additionally, Placer County will utilize the Sierra Watershed Educational Partnerships to facilitate school children from the Tahoe-Truckee Unified School District involvement, with a science-based learning program.

*Note: The form requests information about project goals, objectives, accomplishments, and questions the program is designed to answer across several different sections. These issues are closely linked and your individual responses should provide a cohesive description.*

**Goal – Purpose and Need (“larger” statement of future expected outcome – usually not measurable)**

The project is to restore approximately 1.9 acres of wetlands from a previous industrial use site. Contaminated fill will be removed from the wetlands in the area of the former cement batch plant, in the location of the settling pond/washout area. After the polluted soil and fill is removed, wetlands will be engineered and the previous tributary to Snow Creek will be re-established. Revegetated wetlands will naturally filter water flowing through the site, and greatly improve the quality of water discharged into Lake Tahoe.

This project will facilitate the conversion of the property from light industrial to open space and will improve water quality, riparian and wildlife habitat in the watershed. Increased access to open space will provide public access to walking, cross-country skiing and mountain bike trails.

This restoration project will afford a contiguous wetland area with California Tahoe Conservancy and United States Forest Service public parcels adjacent to the subject property to the east, northeast and southeast.

**Objectives (specific measurable statements of action – Round 12 only - which when completed will move towards achieving the goal)**

*Note: Objectives will form the basis for the milestones/deliverables to be identified in Appendix B-8*

- Describe how fulfilling objectives will contribute to the achievement of one or more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). Provide measures if applicable. For example: acres treated, miles of stream restored for each objective.

The objectives of this project are to:

1. Remove 22,565 square feet of impervious surfaces will increase on site infiltration and thereby reduce erosion and improve water quality and soil conservation.
2. Excavate and remove 6,200 cubic yards of contaminated fill material from the former cement batch plant to preclude these contaminants from entering ground and surface waters and from thence Lake Tahoe.
3. Restore 600 feet of the historic channel of a tributary to Snow Creek by excavating and revegetating a new channel will improve fish and wildlife habitat. The reach will consist of step-pool configurations of large rocks, willows and natural imported features. The channel will be wetted with flow from springs and snowmelt.
4. Restore approximately 1.9 acres of wetland meadow by revegetating and providing additional surface and groundwater will improve habitat for wildlife, including waterfowl and neo-tropical migratory birds.

5. Construct an engineered concrete pre-treatment forebay where an upstream culvert currently enters the property to capture the heavy solids. The forebay will be near a road where it can easily be accessed for maintenance.

The project will permanently eliminate pollutants transported into Snow Creek wetlands and provide a natural wetland treatment area for storm water runoff to improve water quality in Lake Tahoe.

- Describe the estimated environmental risks from unintended consequences of the proposed project (if applicable).

While there is always a risk of unintended pollutant release during construction of a project, project design will implement Best Management Practices to eliminate this possibility except in very rare, extreme situations (rain on snow events). Even during an extreme condition, the environmental risk would be minimized. Environmental risks from unintended consequences of the project are normally covered with contingencies by the regulatory agencies within both the TRPA permit for the project and the Lahontan RWQCB construction NPDES permit. For example, the project will be required to prevent any water discharges from the project during construction if a storm event occurs. Should a discharge occur, the water must be sampled and quantified, and the project Implementer (Placer County) would be responsible for any potential fine or any corrective actions.

After completion, the overall project can be assessed for functionality. Because the project has an inherent revegetation component, there is a possibility of adapting the project design post-construction. This is an important point, since the efficiency of the restored wetlands can be assessed the first season and prior to closure of the grant agreements.

Current hydrologic conditions on the project site are emblematic of non-functioning wetlands. The historic perennial tributary to Snow Creek was culverted into a 36-inch diameter pipe under National Avenue and routed across the property. The wetlands within the property were filled in with concrete and gravel material approximately three to four feet thick. Due to the land use change from wetlands to light industrial and artificial constrictions, stream function is non-existent. If the project is not completed, pollutants will continue to emanate from the property into Lake Tahoe.

### **Accomplishments**

- Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project), and how the project results/accomplishments will be communicated and made available to the public.

*Note: Differentiate between direct and/or primary project effects and secondary and/or overall watershed effects.*

The project is to restore approximately two acres of wetlands from a previous industrial use site. Contaminated fill will be removed from the wetlands in the area of the former cement batch plant, in the location of the settling pond/washout area. After the contaminated soil and fill is removed, wetlands will be engineered and the previous tributary to Snow Creek will be re-established. Revegetated wetlands will naturally filter water flowing through the site, and greatly improve the quality of water discharged into Lake Tahoe.

The improvements will include removal of the existing impervious surfaces; removal of soil material impacted with the residuals of industrial use, removal of the fill in the wetlands and restoration of the historic path of the tributary flowing into Snow Creek. These water quality improvements will minimize or eliminate the erosive surface flows, metals/minerals and pH impacts, sediment and nutrient transport to Snow Creek, provide opportunities for infiltration and treatment of water, and ultimately reduce the load of fine sediment, nutrients and other pollutants of concern to Lake Tahoe.

The acquisition of the Marsh Ventures, Inc property by Placer County for purposes of wetland restoration was presented during both public meetings for the Tahoe Estates Erosion Control project (EIP No. 212). Public input received by the Placer County during those meetings regarding a possible restoration project at the old TNT property was very positive, and well-received. A local newspaper article on the acquisition and planned restoration was published by the *Sierra Sun* on September 14, 2007.

It is anticipated that during the CEQA process for the project, the public will have additional opportunities to provide input and comment through required public meetings and/or direct communication with the project manager. The applicant will employ, as previously done, a Spanish language translator for the public meetings. The method of notifying the community of project progress will be via announcement on Internet community discussion groups (such as Yahoo), the Placer County website for project announcements, and the local daily newspaper for the north shore of Lake Tahoe, the *Sierra Sun*.

Accomplishments of the project, including project details during construction, can be found on the Placer County website, under Tahoe Projects.

This project is a recipient of a US EPA Brownfield grant. The wetlands restoration component of the project has generated high-interest within Region 9, since environmental restoration is not customarily associated with Brownfields. As such, the project will be scrutinized and Placer County has been asked to the national-level conference to present and facilitate a discussion on the project, once complete. This would offer a great broad exposure of the Lake Tahoe Basin, and the SNPLMA federal funding program.

As part of the Brownfield grant, Placer County proposes to work with elementary school children on the subsequent revegetation efforts at the Project Site. School children will be presented with information regarding the importance of wetlands functions in removing pollutants and the type of wetlands plants indigenous to the Lake Tahoe Basin, and then involved in the actual planting during revegetation. The science-based learning experience encourages school children to take ownership of the public green space, and pride in the restoration. School-aged involvement of revegetation efforts in Placer County projects was used successfully integrated in projects completed in Kings Beach and Lake Forest. The applicant will utilize Ms. Christine McMorrow of the Sierra Watershed Education Partnerships for the effort to engage local school children in the project. The participation of Latino leaders in the community will be encouraged.

- If you checked “yes” for the project being consistent with and contributing to TMDL pollutant reductions, please consider and integrate the following in the project description:

a) Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.

The engineering of wetlands at the alpine elevation will incorporate advanced design concepts. Low-maintenance advanced filtering options will be incorporated at the initial forebay to treat storm water prior to discharge into the wetlands.

b) If project includes project level monitoring, describe ability of proposed monitoring strategy to contribute to the state of TMDL knowledge. Also describe if purpose of the capital project is to conduct data collection and/or analysis related to Lake Tahoe clarity.

Placer County has submitted a monitoring proposal that included pre- and post project monitoring of storm water and surface flow quality. Additionally, the monitoring proposal outlined an idea that would augment the existing Pollutant Load Reduction Model (PLRM) treatment options by including restored or engineered wetlands. Current tools do not allow jurisdictions regulated under the urban storm water stream TMDL reduction requirement to calculate water quality credit from implementing wetland restoration and/or including engineered wetlands as a treatment option in traditional water quality (erosion control) projects.

c) Describe treatment approach for reducing pollutants and/or measures to address connectivity between pollutant sources and Lake Tahoe or its tributaries. Identify target pollutants, and, to the degree feasible, provide quantitative estimates of project effectiveness at reducing pollutant loads (and/or a commitment to provide post-project estimates).

Implementation of this project would be the final step to improving the Snow Creek riparian corridor, and complete the water quality improvements planned in the Tahoe Vista Watershed, an intervening zone into Lake Tahoe. The project will eliminate the connectivity of the existing fill materials and residual contaminants from the former cement batch plant with the Snow Creek riparian corridor. Downstream from the project site, the CTC sponsored a restoration project where Snow Creek crosses under Highway 28 in 2000. This project will address the lingering pollutant source upstream from the CTC project thus eliminating the connectivity between the pollutants and Lake Tahoe.

The project improvements will immensely improve water quality of Snow Creek, which discharges into Lake Tahoe. This project will demonstrate benefits over pre-existing conditions through post-project monitoring. Nutrients (phosphorous and nitrogen) and sediment currently discharging untreated into Snow Creek will be reduced by an estimated amount of at least 50%, based on PLRM modeling of a similar project (Lake Forest Water Quality Improvements). Residuals of cement batch operations (high pH, lead) should be reduced substantially to background levels due to the amount and extent of fill removal. Completion of this project will contribute towards achieving TMDL goals and water quality goals for Lake Tahoe.

d) If appropriate, describe whether, and how, the project can be combined or coordinated with other TMDL implementation projects.

Placer County anticipates some type of monitoring grant award for the project, as it has a wide appeal. A Round 11 SNPLMA science program grant was applied for in the fall 2010 (referring to the proposal in b.) above). The project monitoring proposal would coordinate well with project goals and implementation, so that TMDL credit can be more accurately computed for restoration projects.

This project is a great complement to EIP No. 212, as well as the CTC project downstream that was constructed in 2000.

### Monitoring

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

- List the questions the monitoring program is designed to answer.

Please note that funds specifically earmarked for monitoring purposes have not been awarded to this project. Placer County intends to do minimal pre- and post project monitoring (water quality sampling) unless funding sources are awarded.

- Describe any coordination with, or input from, the science community on monitoring and adaptive management that has occurred on the development of this nomination and what changes (if any) to the project were made as a result of this input.

None at this time. No money has been awarded.

- 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? (*Note: A detailed monitoring plan and/or research plan is not required, however, enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.*)

The project goals can be achieved without monitoring in the traditional sense.

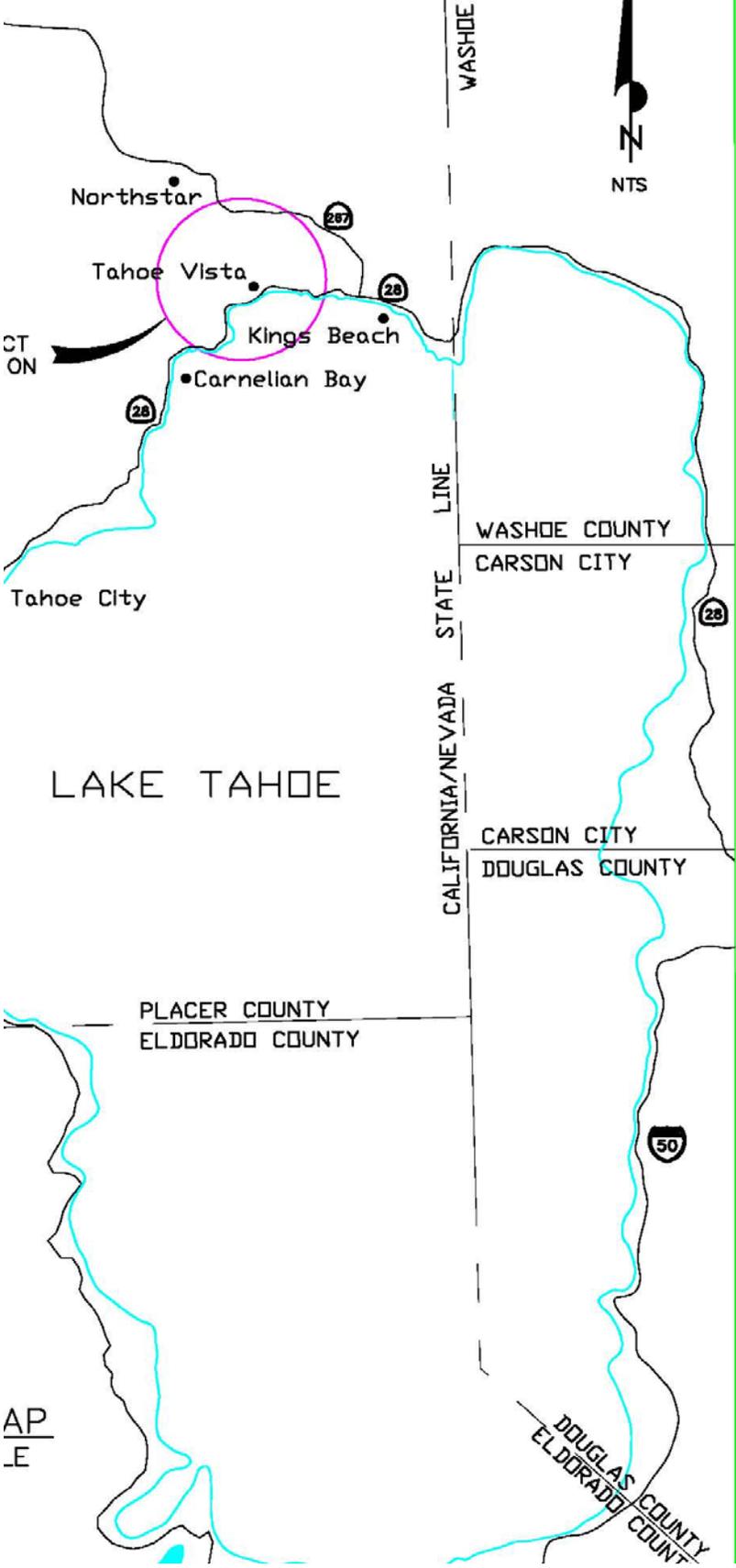
- Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program.

None at this time. No money has been awarded.

- Describe how information from the monitoring and/or research will be used to improve the continued performance of the proposed project or future similar projects.

None at this time. No money has been awarded.

Results can be compared with long-term results of other constructed wetlands in Placer County such as those constructed in Lake Forest and Tahoe City.

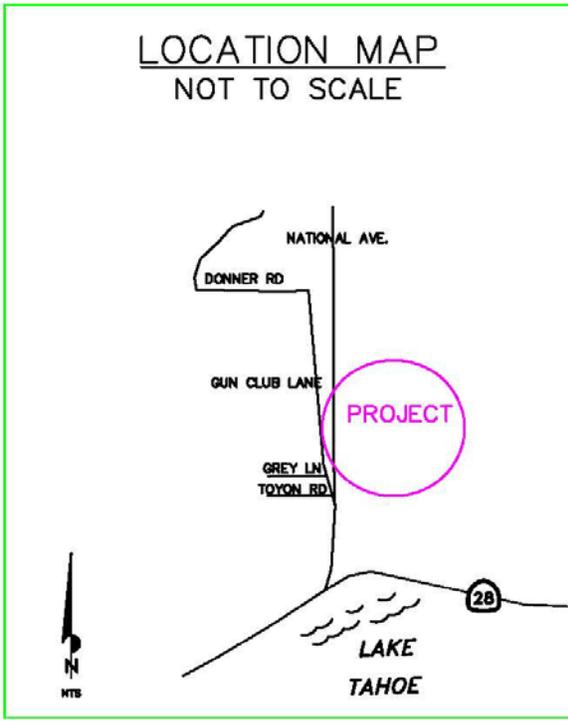


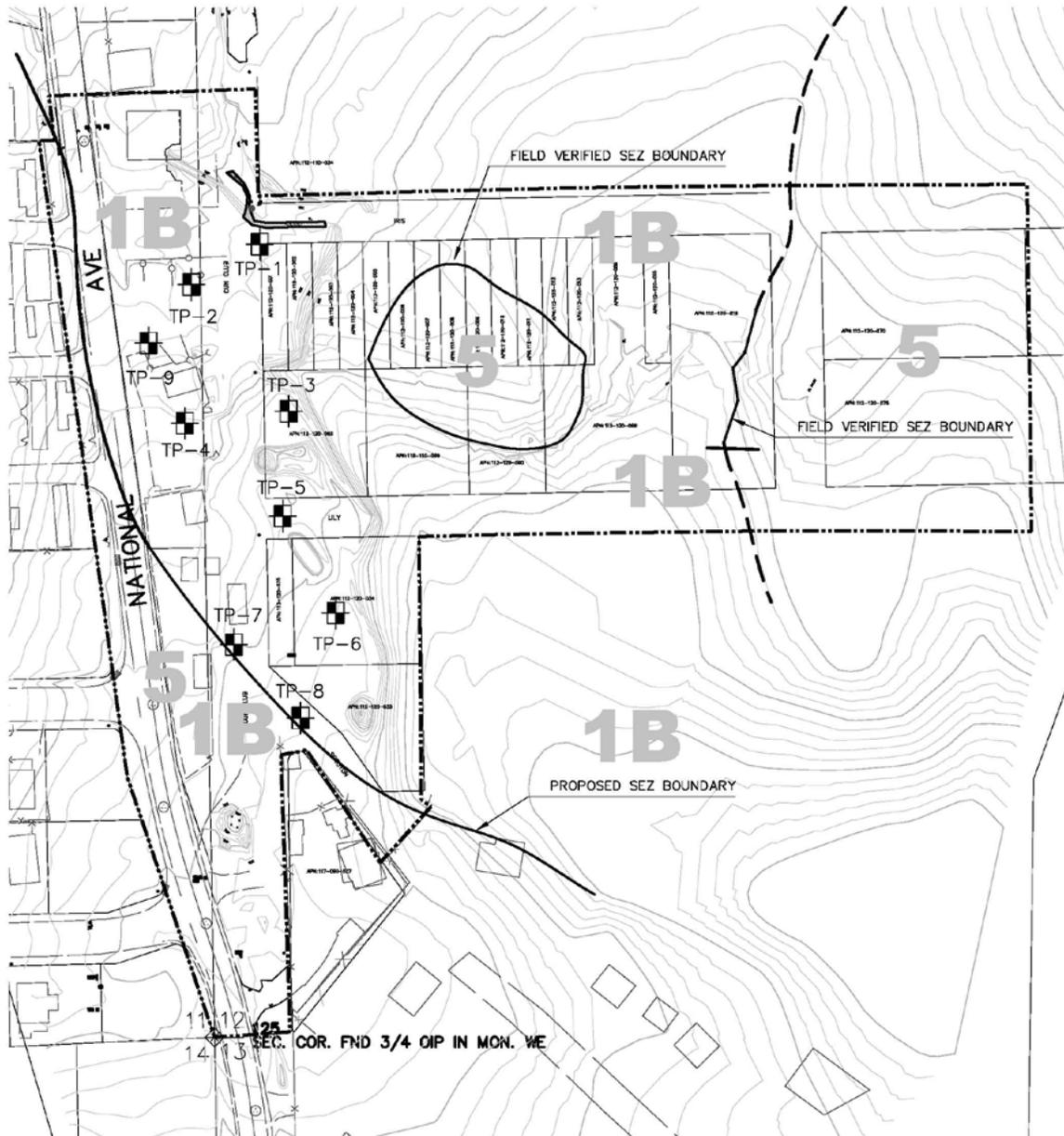
PLACER COUNTY  
DEPARTMENT OF  
PUBLIC WORKS

SNOW CREEK RESTORATION  
WATER QUALITY  
IMPROVEMENT PROJECT

VICINITY AND LOCATION MAP

LOCATION MAP  
NOT TO SCALE





SUMMARY OF TEST PIT DATA

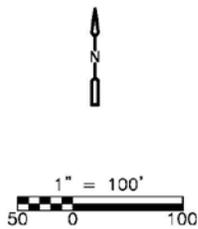
TEST PIT No.	TOTAL DEPTH (FT)	DEPTH OF FILL (FT)	DEPTH TO GROUNDWATER (FT)	ΔZ (FT)
TP-1	1.8	1.8	N/A	N/A
TP-2	4.5	3.5	2.8	+0.7
TP-3	7.5	5.5	6.5	-1.0
TP-4	7.0	6.0	6.5	-0.5
TP-5	7.0	4.5	5.2	-0.7
TP-8	9.0	6.5	7.0	-0.5
TP-9	1.0	1.0	N/A	N/A

LEGEND

TEST PIT NUMBER AND APPROXIMATE LOCATION  
TP-1

NOTES

1. ΔZ = DIFFERENCE BETWEEN DEPTH OF FILL AND DEPTH TO GROUNDWATER. PLUS/MINUS SYMBOLS INDICATE WHETHER GROUNDWATER IS ABOVE (+) OR BELOW (-) ORIGINAL GROUND SURFACE ELEVATION.
2. NATURAL GRADE IS ASSUMED TO BE APPROXIMATELY EQUAL TO EXISTING GROUND SURFACE ELEVATION AT EACH TEST PIT LOCATION MINUS DEPTH OF FILL.



**CDM**

FIGURE 1

SNOW CREEK SEZ RESTORATION PROJECT  
PLACER COUNTY DPW  
LAND CAPABILITY VERIFICATION MAP



## Appendix B-8

### LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name:	Snow Creek Restoration Project	Agency:	Placer County DPW Tahoe Engineering Division
Prepared by:	Kansas McGahan, P.E.	Phone:	530-581-6217
SNPLMA Project #:		EIP #:	391

**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. FWS Consultation – Endangered Species Act</b>	\$ _____		_____ %
<b>3. Direct Labor (Payroll) to Perform the Project</b>	\$ 20,000		2.1 %
<b>4. Project Equipment</b> (tools, software, specialized equipment, etc.)	\$ _____		_____ %
<b>5. 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>6. Official Vehicle Use</b> (pro rata cost for use of Official Vehicles when required to carry out project)	\$ _____		_____ %
<b>7. Cost of Contracts, Grants and/or Agreements to Perform the Project</b>	\$ 900,000		95.8 %
<b>8. Other Direct and Contracted Labor:</b> 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 contract(s)	\$ _____		_____ %
<b>9. Other Necessary Expenses</b> (see Appendix B-11): Indirect costs associated with implementing a project, such as support services, budget tracking etc.	\$ 20,000		2.1 %
<b>TOTAL:</b>	\$ 940,000		100 %

**Estimated Key Milestone Dates:**

Milestones/Deliverables:	Date:
Remove impervious surfaces and excavate contaminated fill	11/30/2012
Restore wetland and historic channel	11/30/2012
Revegetate disturbed areas	11/30/2012
Construct forebay	11/30/2012
Irrigate and Monitor Vegetation	10/15/2014
Close project	4/30/2015
<b>Final Completion Date: April 30, 2015</b>	

**COMMENTS:**