

# Tahoe Sierra IRWM

## Project Template

Please provide information in the tables below:

### I. Project Proponent Information

<b>Agency/ Organization</b>	Town of Truckee
<b>Name of Primary Contact</b>	Jessica Thompson
<b>Name of Secondary Contact</b>	Mike Vaughan
<b>Mailing Address</b>	10183 Truckee Airport Road, Truckee, CA 96161
<b>E-mail</b>	jthompson@townoftruckee.com
<b>Phone (###)###-####</b>	530-582-2938
<b>Other Cooperating Agencies/Organizations/Stakeholders</b>	Truckee River Watershed Council, Teichert
<b>Is your agency/organization committed to the project through completion? If not, please explain</b>	Yes

### II. General Project Information

<b>Project Title</b>	Coldstream Road Open Bottom Culvert and Creek Restoration	
<b>Project Category</b>	<input type="checkbox"/> <b>Water Supply/Wastewater</b> <input checked="" type="checkbox"/> <b>Restoration</b> <input checked="" type="checkbox"/> <b>Storm Water/Flood Control</b>	
<b>Project Description (Briefly describe the project, in 300 words or less)</b>	<p>The Coldstream Road Open Bottom Culvert and Creek Restoration would remove the existing undersized and failing culvert that contains Donner Creek and travels under Coldstream Road. This culvert failed in the spring of 2012 and was temporarily reconstructed until a permanent fix could be implemented. The culvert has rusted out along the bottom and failed due to piping and erosion of soils around the outside of the culvert, causing the roadway to fail. In addition, the culvert is undersized, causing backwater conditions upstream and erosion downstream. The natural stream channel would be restored on the upstream and downstream sides of the open bottom culvert. The new bridge would also be wide enough to accommodate bike lines and a link for the Truckee River Legacy Trail in the future.</p>	
<b>Project Prioritization:</b>	<b>Total number of projects submitted by your Agency:</b>	<b>8</b>
	<b>Agency Prioritization of this project (e.g., 3 of 5)</b>	<b>1</b>
<b>Does this project contribute to a larger Project (e.g., TMDL, EIP, Phase 2 of 3) ? If so provide description.</b>	TMDL implementation	
<b>Political Support – List related MOUs, agreements or TACs currently in place.</b>		
<b>Project Location:</b>		

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<b>Latitude:</b>	39°19'22.43"N
<b>Longitude:</b>	120°13'37.79"W
<b>Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):</b>	Culvert located at Donner Creek and Coldstream Road.

### III. Plan Objectives Addressed

For each of the objectives addressed by the project, provide a one to two sentence description of how the project contributes to attaining the objective and how the project will be quantified. If the project does not address any of the draft IRWM plan objectives, provide a one to two sentence description of how the project relates to a challenge or opportunity of the Region (see the bottom of page 4).

<b>Objectives:</b>	<b>Will the project address the objective?</b>	<b>Brief explanation of project linkage to selected Objective</b>	<b>Quantification</b> (e.g. acres of streams/wetlands restored or enhanced)
WQ1 - Meet approved TMDL standards in accordance with the attainment date, and participate in the development of future TMDLs.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	Will reduce sediment load to Donner Creek and ultimately the Truckee River by reducing existing erosion occurring in the stream.	Sediment load measurement.
WQ2 – Reduce pollutant loads by implementing measures such as stormwater LID retrofits, erosion control/restoration to meet Water Quality Objectives (WQOs) for receiving water bodies established in the Basin Plan within the planning horizon.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	Will reduce sediment load to Donner Creek and ultimately the Truckee River. Bridge will have a natural stream bottom, improving habitat and erosion reduction. Donner Creek on either side of new bridge will be revegetated and restored.	
WQ3 - Implement water quality monitoring programs through planning horizon, and coordinate annually throughout the Region.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
WQ4 - Ensure that drinking water supplied by public water systems continues to meet Federal and State standards.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		

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<b>Objectives:</b>	<b>Will the project address the objective?</b>	<b>Brief explanation of project linkage to selected Objective</b>	<b>Quantification</b> (e.g. acres of streams/wetlands restored or enhanced)
WQ5 - Restore degraded streams, wetlands, riparian and upland areas to re-establish natural water filtering processes.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The project will restore the ecological function of the creek by replacing an existing culvert with an open bottom culvert, allowing the natural stream channel to be restored, and improving the floodplain.	Acres of restored creek. Acres of restored wetland. Acres of increased floodplain.
WQ6 -Operate and maintain, build, or replace infrastructure for reliable collection, treatment and disposal of wastewater.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
WS1 - Provide water supply to meet projected demands for a 20-year planning horizon.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
WS2 - Operate and maintain, build, or replace infrastructure to reliably supply water.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
WS3 - Implement and promote water conservation measures and practices to meet state goals.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
GWM1 - Maintain and monitor groundwater supply to assure future reliability.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
GWM2 - Promote groundwater protection activities for high quality groundwater, and advocate for improvements to impacted groundwater quality through public education.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
GWM3 - Manage groundwater for multiple uses (e.g. municipal/industrial/agricultural supply and environmental use).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		

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<b>Objectives:</b>	<b>Will the project address the objective?</b>	<b>Brief explanation of project linkage to selected Objective</b>	<b>Quantification</b> (e.g. acres of streams/wetlands restored or enhanced)
ER1 - Enhance and restore water bodies, wetlands, riparian areas and associated uplands to support healthy watersheds, viable native fish, wildlife and plant habitats.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The project will restore the ecological function of the creek by replacing an existing culvert with an open bottom culvert, allowing a natural stream channel to be restored.	Acres of riparian and wetland area created. Acres of restored creek. Acres of restored wetland. Acres of increased floodplain.
ER2 - Develop and implement programs to prevent the spread of existing invasive species and colonization of potential future invasive species.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
ER3 - Implement, in coordination with public and private landowners, activities to manage forest health and wildfire risks.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
ER4 - Minimize ecosystem impacts caused by existing and new development.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The project will restore the ecological function of the creek by replacing an existing culvert with an open bottom culvert, allowing a natural stream channel to be restored. Previous development impacted this area (construction of Hwy 80), and the road will be used more frequently with additional new development in the area.	Acres of restored creek. Acres of restored wetland. Acres of increased floodplain.
IWM1 - Conduct local and regional water-related planning activities within the planning horizon as supported by current and future watershed science.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
IWM2 - Ensure collaboration among multiple jurisdictions within the Region for information exchange.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		

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<b>Objectives:</b>	<b>Will the project address the objective?</b>	<b>Brief explanation of project linkage to selected Objective</b>	<b>Quantification</b> (e.g. acres of streams/wetlands restored or enhanced)
IWM3 - Increase public education and awareness of watershed functions, protection and restoration needs to encourage stewardship by the public.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	There is an opportunity for interpretive signage along the restoration project.	Number of interpretive signs.
IWM4 - Promote activities that reduce flood risk.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The existing culvert is undersized and high water causes back water upstream and erosion downstream. A new open bottom culvert will reduce flood risk.	New bridge sized for high water conditions.
IWM5 - Address climate change (e.g. water quality, water supply, groundwater recharge, flood management) in local and regional planning efforts and support efforts to continue improving the science.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	The existing culvert is undersized and high water causes a back water condition upstream and erosion downstream. A new open bottom culvert will reduce flood risk.	New bridge sized for high water conditions (possibly increased with climate change).
IWM6 - Monitor water storage, release and exchange activities in order to improve coordination with regional planning.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		

If no objectives are addressed; describe how the project relates to a challenge or opportunity of the Region:

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### Project Impacts and Benefits

Please provide a summary of the expected project benefits and impacts in the table below or check N/A if not applicable; **do not leave a blank cell.**

If applicable describe benefits or impacts of the project with respect to:		
<b>a. Native American Tribal Community considerations.</b>	<input type="checkbox"/> N/A	Donner Creek drains to the Truckee River, which terminates in Pyramid Lake, located within the Pyramid Lake Paiute Tribe Reservation. Reductions in sediment loads benefit this as well as the fisheries including Lahontan Cutthroat Trout.
<b>b. Disadvantaged Community considerations<sup>1</sup>.</b>	<input checked="" type="checkbox"/> N/A	
<b>c. Environmental Justice<sup>2</sup> considerations.</b>	<input checked="" type="checkbox"/> N/A	
<b>d. Assist the Region in adapting to effects of climate change<sup>3</sup>.</b>		The existing culvert is undersized and occasionally causes a backwater condition upstream and erosion downstream. The new culvert will be sized to accommodate larger flows.
<b>e. Generation or reduction of greenhouse gas emissions (e.g. green technology).</b>	<input type="checkbox"/> N/A	The project would include the installation of vegetation that would help lower the water temperature to improve the cold water habitat of the creek. In addition, plants remove carbon dioxide from the air through carbon sequestration. Therefore, as the project will install a substantial amount of vegetation as a part of the restoration effort, it will help slow the growth of greenhouse gas concentrations in the atmosphere.
<b>f. Other expected impacts or benefits that are not already mentioned elsewhere.</b>	<input type="checkbox"/> N/A	Provide flood protection and restores ecological function of creek.

1. A Disadvantaged Community is defined as a community with an annual median household (MHI) income that is less than 80 percent of the Statewide annual MHI. A map has been provided with the Project Template Instruction for reference.

2. Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies. An example of environmental justice benefit would be to improve conditions (e.g. water supply, flooding, sanitation) in an area of racial minorities

3. Climate change effects are likely to include increased flooding, extended drought, and associated secondary effects such as increased wildfire risk, erosion, and sedimentation.

#### IV. Resource Management Strategies (RMS)

For each resource management strategy employed by the project, provide a one to two sentence description in the table below of how the project incorporates the strategy. A description of the

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Resource Management Strategies can be found in Volume 2 of the 2009 California Water Plan here:

<http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>

Resource Management Strategy	Will the Project incorporate RMS?	Description, of how RMS to be employed if applicable
<b>Reduce Water Demand</b>		
Agricultural Water Use Efficiency	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Urban Water Use Efficiency	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>Improve Operational Efficiency and Transfers</b>		
Conveyance - Regional / local	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
System Reoperation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Water Transfers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>Increase Water Supply</b>		
Conjunctive Management & Groundwater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Desalination	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Precipitation Enhancement	No	
Recycled Municipal Water	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Surface Storage -- Regional / Local	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>Improve Water Quality</b>		
Drinking Water Treatment and Distribution	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Groundwater and Aquifer Remediation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Matching Water Quality to Use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pollution Prevention	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Project will implement erosion control measures and will reduce sediment load to the Truckee River.
Salt and Salinity Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Urban Runoff Management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Project will include facilities to treat urban runoff.
<b>Practice Resources Stewardship</b>		
Agricultural Lands Stewardship	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Economic Incentives (Loans, Grants, and Water Pricing)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Ecosystem Restoration	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Restores ecological function of the creek.
Forest Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Land Use Planning and Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Recharge Areas Protection	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Water-dependent Recreation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Project will provide visual access to Donner Creek.
Watershed Management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Improves flood plain, wetlands, and creek ecological function.
<b>Improve Flood Management</b>		

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Resource Management Strategy	Will the Project incorporate RMS?	Description, of how RMS to be employed if applicable
Flood Risk Management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Project will provide 100-year flood protection.

Note: The following RMS have been omitted from the list: Conveyance-Delta and Surface Storage – CALFED.

Other RMS addressed and explanation:

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**V. Project Cost and Financing** - Please provide any estimates of project cost, sources of funding, and operation and maintenance costs, as well as, the source of the project cost in the table below.

<b>a. Project Costs</b>	<b>Requested Grant Amount</b>	<b>Cost Share: Non-State Fund Source (Local/Federal Funding Match)</b>	<b>Cost Share: Other State Fund Source</b>	<b>Total Cost</b>
1. Capital (2013 Dollars)	2,000,000	500,000 OR <input type="checkbox"/> DAC	0	2,500,000
2. Annual Operations and Maintenance (O&M)		10,000	0	10,000
<b>b. Can the Project be phased?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>1. If so provide cost breakdown by phase(s)</b>	<b>Project Cost</b>	<b>O&amp;M Cost</b>	<b>Description of Phase</b>	
Phase 1				
Phase 2				
Phase 3				
Phase 4				
<b>c. List secured source(s) of funding for Project cost</b>	<b>Source(s)</b>		<b>Amount</b>	
	None		0	
<b>d. List proposed source(s) of unsecured funding and certainty of the sources for Project cost.</b>	Cost share with Teichert			
<b>e. Explain how operation and maintenance costs will be financed for the 25-year planning period for project implementation (not grant funded).</b>	Will be programmed in Town of Truckee annual operational and Capital Improvement Program budget.			
<b>f. Basis for project cost<sup>1</sup> (e.g. conceptual, planning, bid, etc.)</b>	Conceptual and previous similar projects.			
<b>g. Has a Cost/Benefit analysis been completed?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>h. Please describe what impact there may be if the project is not funded. (300 words or less)</b>	Culvert will be relined instead.			

1. For the grant application a detailed project cost estimate will need to be provided with the following cost categories; per the IRWM PSP for Round 2, Implementation Grants: Direct Project Administration, Land Purchase/Easement, Planning/Design/Engineering/Environmental Documentation, Construction/Implementation, Environmental Compliance/Mitigation/Enhancement, Construction Administration, Other Costs, and Construction/Implementation Contingency.

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**VI. Project Status and Schedule** -Please provide a status of the project, level of completion as well as a description of the activities planned for each project stage. If unknown enter **TBD**.

Project Stage	Check the Current Project Stage	Completed?	Description of Activities in Each Project Stage	Planned/Actual Start Date (mm/yr)	Planned/Actual Completion Date (mm/yr)
a. Assessment and Evaluation	<input checked="" type="checkbox"/>	xYes <input type="checkbox"/> No <input type="checkbox"/> N/A			
b. Final Design	<input type="checkbox"/>	<input type="checkbox"/> Yes    xNo <input type="checkbox"/> N/A			
c. Environmental Documentation (CEQA/NEPA)	<input type="checkbox"/>	<input type="checkbox"/> Yes    xNo <input type="checkbox"/> N/A			
d. Permitting	<input type="checkbox"/>	<input type="checkbox"/> Yes    xNo <input type="checkbox"/> N/A			
e. Construction Contracting	<input type="checkbox"/>	<input type="checkbox"/> Yes    xNo <input type="checkbox"/> N/A			
f. Construction Implementation	<input type="checkbox"/>	<input type="checkbox"/> Yes    xNo <input type="checkbox"/> N/A			

Provide explanation if more than one project stage is checked as current status	
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### VIII. Project Technical Feasibility

Please provide any related documents (date, title, author, and page numbers) that describe and confirm the technical feasibility of the project.

<p><b>a. List the adopted planning documents the proposed project is consistent with or supported by (e.g. General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, TMDLs, Basin Plans, etc.)</b></p>	<p>Truckee General Plan, Middle Truckee River TMDL</p>
<p><b>b. List technical reports and studies supporting the feasibility of this project</b></p>	
<p><b>c. Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.</b></p>	
<p><b>d. Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.)</b></p>	<p>xYes    <input type="checkbox"/> No    <input type="checkbox"/> N/A</p>
<p><b>1. If so please describe</b></p>	<p>The project will restore ecological function to the creek and revegetate the area. A new bridge would also allow room for bike paths and pedestrian connections to promote alternative transportation.</p>
<p><b>e. If you are an Urban Water Supplier<sup>1</sup>:</b></p>	
<p><b>1. Have you completed an Urban Water Management Plan and submitted to DWR?</b></p>	<p><input type="checkbox"/> Yes    <input type="checkbox"/> No    xN/A</p>
<p><b>2. Are you in compliance with AB1420?</b></p>	<p><input type="checkbox"/> Yes    <input type="checkbox"/> No    xN/A</p>
<p><b>3. Do you comply with the water meter requirements (CWC §525)</b></p>	<p><input type="checkbox"/> Yes    <input type="checkbox"/> No    xN/A</p>
<p><b>4. If the answer to any of the questions above is “no”, do you intend to comply prior to receiving project funding</b></p>	<p><input type="checkbox"/> Yes    <input type="checkbox"/> No    xN/A</p> <p>Provide Explanation if necessary:</p>
<p><b>f. If you are an Agricultural Water Supplier<sup>2</sup>:</b></p>	
<p><b>1. Have you completed and submitted an AWMP (due 12/31/12)?</b></p>	<p><input type="checkbox"/> Yes    <input type="checkbox"/> No    xN/A</p>
<p><b>2. If not, will you complete and submit an AWMP prior to receiving project funding?</b></p>	<p><input type="checkbox"/> Yes    <input type="checkbox"/> No    xN/A</p> <p>Provide Explanation if necessary:</p>
<p><b>g. If the project is related to groundwater:</b></p>	
<p><b>1. Has a GWMP been completed and submitted for the</b></p>	<p><input type="checkbox"/> Yes    <input type="checkbox"/> No    xN/A</p>

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<b>subject basin?</b>	
<b>2. If not will a GWMP be completed within 1 year of the grant submittal date?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

1. Urban Water Supplier is defined as a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually.

2. Agricultural Water Supplier is defined as a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding the acreage that receives recycled water.