

Tahoe Sierra IRWM

Please submit by 17 January 2014 to [AraceliCazarez@KennedyJenks.com](mailto:AraceliCazarez@KennedyJenks.com)

**Project Template**

Please provide information in the tables below:

**I. Project Proponent Information**

<b>Agency/ Organization</b>	South Tahoe Public Utility District
<b>Name of Primary Contact</b>	Lynn Nolan
<b>Name of Secondary Contact</b>	Kim Garon
<b>Mailing Address</b>	1275 Meadow Crest Drive, South Lake Tahoe, CA 96150
<b>E-mail</b>	Inolan@stpod.dst.ca.us
<b>Phone (###)###-####</b>	530-543-6215
<b>Other Cooperating Agencies/Organizations/Stakeholders</b>	Tahoe Regional Planning Agency and California Tahoe Conservancy
<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>	Iroquois Pond SEZ Restorations	
<b>Project Category</b>	<input type="checkbox"/> Restoration <input checked="" type="checkbox"/> Storm Water/Flood Control <input type="checkbox"/> Waste Water/ Water Supply	
<b>Project Description (Briefly describe the project, in 300 words or less)</b>	<p>A preliminary plan was completed by Northwest Hydraulic Consultants. It includes an analysis of existing conditions at the Iroquois Pond site, development and analysis of restoration options, and development of an initial restoration design. The project consists of removal of aging facilities and SEZ restoration of the Iroquois Pond site. This project helps to achieve high priority soil erosion control and water quality improvement needs under the EIP. The preliminary design includes removal of the dam and reconstruction of about 90 feet of stream channel through the pond area. The stream channel is proposed for construction at an average gradient of about 8%, and will include fabric encapsulated soil banks.</p>	
<b>Project Prioritization:</b>	<b>Total number of projects submitted by your Agency:</b>	3
	<b>Agency Prioritization of this project (e.g., 3 of 5)</b>	6
<b>Does this project contribute to a larger Project (e.g., TMDL, EIP, Phase 2 of 3) ? If so provide description.</b>	Yes, the TRPA EIP lists SEZ Restoration at specific sites throughout the Tahoe Basin and this site will contribute to that effort.	
<b>Political Support – List related MOUs, agreements or TACs currently in place.</b>	TRPA and CTC are supportive of the project.	
<b>Project Location:</b>		
<b>Latitude:</b>	38.84833	
<b>Longitude:</b>	-119.99470	

<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>	The project site is located south of Iroquois Circle in the Apache Subdivision in Meyers, California. The site is on land managed by the Lake Tahoe Basin Management Unit of the US Forest Service and is in Section 33 of Township 12 North Range 18 East.
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**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	The Tahoe Regional Planning Agency's Environmental Improvement Program document lists Stream Environment Zone restoration as an important element in implementing the Lake Tahoe TMDL.	90 feet of stream channel restoration and dam removal
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	This project helps reduce pollutant loads by providing high priority soil erosion control and water quality improvements.	--
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 projects design plans include removal of the dam and reconstruction of about 90 ft of stream channel through the pond area. Restoration of most of the pond area (about 7,00 sf) as functional SEZ.	--
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	This project helps to enhance and restore water bodies and riparian areas. It will also help achieve high priority soil erosion control and water quality improvement needs.	--
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 restoration of the site includes maintaining the existing alignment downstream because it maintains the widest band of downstream SEZ and minimizes construction disturbance and ecosystem impacts. The removal of the obsolete water treatment facilities will repair impacts of development.	--
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	--	--

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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)
IWM2 - Ensure collaboration among multiple jurisdictions within the Region for information exchange.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	Both the TRPA and CTC are supportive of the project. Both the TRPA and CTC specifically requested that STPUD include the Iroquois Pond SEZ Restoration Project as a component of the larger STPUD Comprehensive Erosion Control Project.	--
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	This project promotes public education and awareness of SEZ values.	--
IWM4 - Promote activities that reduce flood risk.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	--	--
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	--	--
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.**

<b>If applicable describe benefits or impacts of the project with respect to:</b>		
<b>a. Native American Tribal Community considerations.</b>	<input checked="" type="checkbox"/> N/A	--
<b>b. Disadvantaged Community considerations<sup>1</sup>.</b>	<input type="checkbox"/> N/A	Yes, South Lake Tahoe is a designated disadvantaged community and the project is located in this community.
<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>	<input checked="" type="checkbox"/> N/A	--
<b>e. Generation or reduction of greenhouse gas emissions (e.g. green technology).</b>	<input checked="" type="checkbox"/> N/A	--
<b>f. Other expected impacts or benefits that are not already mentioned elsewhere.</b>	<input checked="" type="checkbox"/> N/A	--

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 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>

<b>Resource Management Strategy</b>	<b>Will the Project incorporate RMS?</b>	<b>Description, of how RMS to be employed if applicable</b>
<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	--

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Resource Management Strategy	Will the Project incorporate RMS?	Description, of how RMS to be employed if applicable
<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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	The project would reduce the nutrient load into the stream by restoring natural habitat.
Salt and Salinity Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	--
Urban Runoff Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	--
<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	The project includes 90 feet of stream restoration, as well as the removal of obsolete water treatment facilities from the stream environment zone.
Forest Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	--
Land Use Planning and Management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	--
Recharge Areas Protection	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	--
Water-dependent Recreation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	--
Watershed Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	--
<b>Improve Flood Management</b>		
Flood Risk Management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	--

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

Other RMS addressed and explanation:

**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>
<b>1. Capital (2013 Dollars)</b>	200,000	\$\$- OR <input type="checkbox"/> DAC	0	200,000
<b>2. Annual Operations and Maintenance (O&amp;M)</b>		\$17,040	0	0
<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	0	0	--	
Phase 2	0	0	--	
Phase 3	0	0	--	
Phase 4	0	0	--	
<b>c. List secured source(s) of funding for Project cost</b>	<b>Source(s)</b>		<b>Amount</b>	
	--		\$-	
<b>d. List proposed source(s) of unsecured funding and certainty of the sources for Project cost.</b>	--		\$-	
<b>e. Explain how operation and maintenance costs will be financed for the 25-year planning period for project implementation (not grant funded).</b>	STPUD General Funds			
<b>f. Basis for project cost<sup>1</sup> (e.g. conceptual, planning, bid, etc.)</b>	Planning documents			
<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>	The restoration of Iroquois Pond through the removal of the water treatment facility and subsequent restoration of the site would not occur without funding. Therefore, the resultant benefits of lessening pollutant loads and contributing to the implementation of the Lake Tahoe TMDL would not occur.			

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.



**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 type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	--	7/1/2009	6/1/2010
b. Final Design	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	--	7/1/2009	6/1/2010
c. Environmental Documentation (CEQA/NEPA)	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	--	7/1/2009	2/1/2010
d. Permitting	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Permitting will occur when project is ready to be implemented.	5/1/2015	10/1/2015
e. Construction Contracting	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Construction will need to be bid and awarded.	5/1/2015	10/1/2015
f. Construction Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Full implementation of the project will occur when funding is secured. The project cannot be phased.	5/1/2015	10/1/2015

<b>Provide explanation if more than one project stage is checked as current status</b>	This project has been evaluated and designed, but will still need permitting, construction contracting and implementation when a funding source has been identified.
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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>TRPA EIP; Lahontan Basin Plan, Lake Tahoe TMDL</p>
<p><b>b. List technical reports and studies supporting the feasibility of this project</b></p>	<p>TRPA Environmental Improvement Program (EIP) lists several significant studies regarding the importance of restoration within stream environment zones. They are available at the TRPA website: <a href="http://www.trpa.org">www.trpa.org</a></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>--</p>
<p><b>d. Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.)</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p><b>1. If so please describe</b></p>	<p>--</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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p><b>2. Are you in compliance with AB1420?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
<p><b>3. Do you comply with the water meter requirements (CWC §525)</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/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 <input checked="" type="checkbox"/> N/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 <input checked="" type="checkbox"/> N/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 <input checked="" type="checkbox"/> N/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 subject basin?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>

<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
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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.