Project Template

Please provide information in the tables below:

I. Project Proponent Information

Agency/ Organization	South Tahoe Public Utility District
Name of Primary Contact	Lynn Nolan
Name of Secondary Contact	Donielle Morse
Mailing Address	1275 Meadow Crest Dr., South Lake Tahoe, CA 96150
E-mail	lnolan@stpud.dst.ca.us
Phone (###)###-####	530-543-6215
Other Cooperating Agencies/Organizations/Stakeholders	North Tahoe Public Utility District, Tahoe City Public Utility District and any other agencies within the TSIRWMP region that would like to participate in the program. Will also partner with Tahoe Resource Conservation District on their landscape conservation program.
Is your agency/organization committed to the project through completion? If not, please explain	Yes

II. General Project Information

Project Title	Regional Water Conservation Programs	
Project Category	☐ **Restoration** ☐ **Storm Water/Flood Control** ☑ **Waste Water/ Water Supply**	
Project Description (Briefly describe the project, in 300 words or less)	Regional water conservation program for STPUD, NTPUD, and TCPUD that includes implementing water conservation measures such as turf removal; water saving appliance installation (commercial and residential); interior and exterior water audits for efficiency measures; and providing outreach and educational materials.	
Project Prioritization:	**Total number of projects submitted by your Agency:**	10
	Agency Prioritization of this project (e.g., 3 of 5)	1
Does this project contribute to a larger Project (e.g., TMDL, EIP, Phase 2 of 3) ? If so provide description.	Yes, this project contributes to the AB1420 and the SBX7-7 (20 percent water reduction by 2020) as mandated by the State of California.	
Political Support – List related MOUs, agreements or TACs currently in place.	MOU with California Urban Water Conservation Council	
Project Location:		
Latitude:	Various	
Longitude:	Various	

Project Location Description (e.g., along the south bank of stream/river between river miles or miles from Towns/intersection and/or address):	The water conservation implementation measures are located in the water service areas of the TSIRWM region, which encompasses portions of Alpine County, El Dorado County, Placer County, and Sierra County.

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).

Objectives:	**Will the project address the objective?**	**Brief explanation of project linkage to selected Objective**	**Quantification** (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.	☑ Yes ☐ N/A	The Lake Tahoe TMDL addresses urban runoff from irrigation and the use of fertilizers on urban landscaping. This project will reduce both of these pollutants by reducing the amount of irrigation water and fertilizers used on private and commercial landscape sites.	
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.	☑ Yes ☐ N/A	This project promotes the removal of turf as landscaping and promotes native landscaping that not only utilizes less irrigation water but does not need fertilizer use, minimizing the pollutant loads to Lake Tahoe.	126,000 square foot of turf removal is projected depending upon funding. This results in a savings of .15 gallons per sq ft of turf removed per day times 150 days per year (based on the local are irrigation season) is equal to 22

Objectives:	**Will the project address the objective?**	**Brief explanation of project linkage to selected Objective**	**Quantification** (e.g. acres of streams/wetlands restored or enhanced)
			gallons per sq. ft. per year or a total water savings of
			2,772,000 gallons saved annually.
WQ3 - Implement water quality monitoring programs through planning horizon, and coordinate annually throughout the Region.	☐ Yes ☑ N/A	--	--
WQ4 - Ensure that drinking water supplied by public water systems continues to meet Federal and State standards.	☐ Yes ☑ N/A	--	--
WQ5 - Restore degraded streams, wetlands, riparian and upland areas to re-establish natural water filtering processes.	☐ Yes ☑ N/A	--	--
WQ6 -Operate and maintain, build, or replace infrastructure for reliable collection, treatment and disposal of wastewater.	☐ Yes ☑ N/A	--	--
WS1 - Provide water supply to meet projected demands for a 20-year planning horizon.	☑ Yes ☐ N/A	This project reduces the demand on water supply, thereby protecting the water resources for future use.	Estimated 4.8 MG annually will be saved with this project by implementing all proposed Best management practices for water conservation.
WS2 - Operate and maintain, build, or replace infrastructure to reliably supply water.	☐ Yes ☑ N/A	--	--

WS3 - Implement and promote water conservation measures and practices to meet state goals.	☑ Yes ☐ N/A	This project implements the California Urban Water Conservation Council's (CUWCC) Best Management Practices designed to meet state water savings goals	With the turf buyback BMP implementation alone, estimated water savings are 2.7 MG of water saved annually. Additional water conservation BMP's implemented would increase this annual savings by 2,055,812 MG.
GWM1 - Maintain and monitor groundwater supply to assure future reliability.	☐ Yes ☑ N/A	--	--
GWM2 - Promote groundwater protection activities for high quality groundwater, and advocate for improvements to impacted groundwater quality through public education.	☐ Yes ☑ N/A	--	--
GWM3 - Manage groundwater for multiple uses (e.g. municipal/industrial/agricultural supply and environmental use).	☑ Yes ☐ N/A	The majority of the municipal water supply source in Lake Tahoe is groundwater; conservation manages this source for multiple uses	--
ER1 - Enhance and restore water bodies, wetlands, riparian areas and associated uplands to support healthy watersheds, viable native fish, wildlife and plant habitats.	☑ Yes ☐ N/A	The turf removal implementation for this project contributes to the enhancement and restoration of Lake Tahoe and its tributaries by keeping urban runoff and fertilizer from entering the watersheds	--
ER2 - Develop and implement programs to prevent the spread of existing invasive species and	☐ Yes	--	--

colonization of potential future invasive species.	☑ N/A		
ER3 - Implement, in coordination with public and private landowners, activities to manage forest health and wildfire risks.	☐ Yes ☑ N/A	--	--
ER4 - Minimize ecosystem impacts caused by existing and new development.	☑ Yes ☐ N/A	The implementation of landscaping best management practices in the Water Conservation program helps to minimize impacts of new and existing developments by encouraging waterwise landscaping resulting in a reduction in irrigation runoff and fertilizer use.	126,000 square feet of turf is proposed to be removed annually provided funding is available.
IWM1 - Conduct local and regional water-related planning activities within the planning horizon as supported by current and future watershed science.	☐ Yes ☑ N/A	--	--
IWM2 - Ensure collaboration among multiple jurisdictions within the Region for information exchange.	☑ Yes ☐ N/A	This program is a regional program and utilizes collaboration and information among implementing water agencies	--
IWM3 - Increase public education and awareness of watershed functions, protection and restoration needs to encourage stewardship by the public.	☑ Yes ☐ N/A	This program contains an educational/outreach component designed to make the public aware of urban landscaping and its effect on the watershed.	--
IWM4 - Promote activities that reduce flood risk.	☐ Yes ☑	--	--

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.	☑ Yes ☐ N/A	Water conservation contributes to maintaining an adequate supply of stored water resources to meet anticipated impacts of climate change on water sources. In addition, water conservation results in a reduction of greenhouse gases and a reduction in energy usage by reducing the need to treat and transport drinking water.	With all proposed water conservation BMP's implemented, 19,069 kWh of electricity saved per year; 13.5 Metric Tons of Carbon Dioxide reduced annually
IWM6 - Monitor water storage, release and exchange activities in order to improve coordination with regional planning.	☐ Yes ☑	--	--

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

--

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:		
a. Native American Tribal Community considerations.	N/A	STPUD partners with the Washoe Tribe to provide water conservation materials and educational outreach.
b. Disadvantaged Community considerations[1].	☐ N/A	South Lake Tahoe, Kings Beach and Sierra County are all designated disadvantaged communities
c. Environmental Justice [2] considerations.	☑ N/A	--
d. Assist the Region in adapting to effects of climate change[3].	☐ N/A	Water source storage and availability will be affected by climate change, this program helps to increase available water supply for that eventuality

e. Generation or reduction of greenhouse gas emissions (e.g. green technology).	☐ N/A	Water production and distribution are one of the highest consumers of energy. With water conservation efforts, less water production leads to

		a reduction in energy usage, which leads to a reduction in ghg. For this project alone, there is an estimated 19,069 kWh of annual electricity saved and a resulting 13.5 Metric Tons of Carbon Dioxide saved annually.
f. Other expected impacts or benefits that are not already mentioned elsewhere.	☑ 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

Resource Management Strategy	**Will the Project incorporate RMS?**	**Description, of how RMS to be employed if applicable**
Reduce Water Demand		
Agricultural Water Use Efficiency	☐ Yes ☑ No	--
Urban Water Use Efficiency	☑ Yes ☐ No	Water conservation programs help to increase urban water use efficiency
Improve Operational Efficiency and Transfers		
Conveyance - Regional / local	☐ Yes ☑ No	--
System Reoperation	☐ Yes ☑ No	--
Water Transfers	☐ Yes ☑ No	--
Increase Water Supply		
Conjunctive Management & Groundwater	☐ Yes ☑ No	--
Desalination	☐ Yes ☑ No	--
Precipitation Enhancement	☐ Yes ☑ No	--
Recycled Municipal Water	☐ Yes ☑ No	--
Surface Storage -- Regional / Local	☐ Yes ☑ No	--
Improve Water Quality		
Drinking Water Treatment and Distribution	☐ Yes ☑ No	--
Groundwater and Aquifer Remediation	☐ Yes ☑ No	--

Resource Management Strategy	Will the Project incorporate RMS?	Description, of how RMS to be employed if applicable
Matching Water Quality to Use	☐ Yes ☑ No	--
Pollution Prevention	☑ Yes ☐ No	Landscaping replacement with native plants as proposed in this program help to minimize irrigation runoff and fertilizer usage
Salt and Salinity Management	☐ Yes ☑ No	--
Urban Runoff Management	☑ Yes ☐ No	Landscaping replacement with native plants helps to control urban runoff
Practice Resources Stewardship		
Agricultural Lands Stewardship	☐ Yes ☑ No	--
Economic Incentives (Loans, Grants, and Water Pricing)	☑ Yes ☐ No	The program provides economic incentives to participants
Ecosystem Restoration	☐ Yes ☑ No	--
Forest Management	☐ Yes ☑ No	--
Land Use Planning and Management	☑ Yes ☐ No	--
Recharge Areas Protection	☐ Yes ☑ No	--
Water-dependent Recreation	☑ Yes ☐ No	--
Watershed Management	☑ Yes ☐ No	--
Improve Flood Management		
Flood Risk Management	☐ Yes ☑ 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.

a. Project Costs	**Requested Grant Amount**	**Cost Share: Non-State Fund Source (Local/Federal Funding Match)**	**Cost Share: Other State Fund Source**	**Total Cost**
1. Capital (2013 Dollars)	**500,000**	**$100,000 OR ☐ DAC**	**0**	**600,000**
2. Annual Operations and Maintenance (O&M)		**$-**	**0**	**0**
b. Can the Project be phased?	**☑ Yes**	**☐ No**		
1. If so provide cost breakdown by phase(s)	**Project Cost**	**O&M Cost**	**Description of Phase**	
Phase 1	**200000**	**0**	**Water conservation BMP implementation, education, outreach**	
Phase 2	**200000**	**0**	**Water conservation BMP implementation, education, outreach**	
Phase 3	**200000**	**0**	**Water conservation BMP implementation, education, outreach**	
Phase 4	**0**	**0**	**--**	
		Source(s)	**Amount**	
c. List secured source(s) of funding for Project cost		**Water Utility General Funds**	**$100,000**	
d. List proposed source(s) of unsecured funding and certainty of the sources for Project cost.		**--**	**$-**	
e. Explain how operation and maintenance costs will be financed for the 25-year planning period for project implementation (not grant funded).		**Operation and maintenance costs will be provided by the landowner/homeowner**		
f. Basis for project cost[1] (e.g. conceptual, planning, bid, etc.)		**Historical usage**		
g. Has a Cost/Benefit analysis been completed?		**☑ Yes ☐ No**		
h. Please describe what impact there may be if the project is not funded. (300 words or less)		**Water conservation/water use efficiency has been identified as an important aspect in dealing with future water supply and source needs. Without a program to implement water efficiency use by all, water sources will be impacted negatively.**		

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	☐	☑ Yes ☐ No ☐ N/A	--	--	--
b. Final Design	☐	☑ Yes ☐ No ☐ N/A	--	--	--
c. Environmental Documentation (CEQA/NEPA)	☐	☑ Yes ☐ No ☐ N/A	--	--	--
d. Permitting	☐	☑ Yes ☐ No ☐ N/A	--	--	--
e. Construction Contracting	☐	☐ Yes ☐ No ☑ N/A	--	--	--
f. Construction Implementation	☑	☐ Yes ☑ No ☐ N/A	Program implementation including outreach, application materials, best management practices and rebates and incentives to landowners	1/1/2017	12/1/2020

Provide explanation if more than one project stage is checked as current status	

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.

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.)	California Urban Water Conservation Council Best Management Practices Implementation Memorandum of Understanding; California Department of Water Resources Urban Water Management Plan; Lake Tahoe TMDL and Lahontan Basin Management Plan
b. List technical reports and studies supporting the feasibility of this project	US EPA Water Conservation guidelines; The Handbook of Water Use and Conservation: Homes, Landscapes, Business, Industry, Farms; Amy Vickers May 2013
c. Concisely describe the scientific basis (e.g. how much research has been conducted) of the proposed project in 300 words or less.	A variety of research exists regarding Best Management Practices for water conservation, but the most concise are included on the CUWCC's website: www.cuwcc.org where a breakdown for each BMP shows evaluations for calculating water savings.
d. Does the project implement green technology (e.g. alternate forms of energy, recycled materials, LID techniques, etc.)	x☐ Yes ☐ No N/A
1.If so please describe	**Ghg reductions from reductions in power useage for water production**
e. If you are an Urban Water Supplier[1]:	
1.Have you completed an Urban Water Management Plan and submitted to DWR?	☑ Yes ☐ No ☐ N/A
2.Are you in compliance with AB1420?	☑ Yes ☐ No ☐ N/A
3.Do you comply with the water meter requirements (CWC §525)	☑ Yes ☐ No ☐ N/A
4.If the answer to any of the questions above is "no", do you intend to comply prior to receiving project funding	☐ Yes ☐ No ☑ N/A Provide Explanation if necessary:--
f. If you are an Agricultural Water Supplier[2]:	

1. Have you completed and submitted an AWMP (due 12/31/12)?	☐ Yes ☐ No ☑ N/A
2. If not, will you complete and submit an AWMP prior to receiving project funding?	☐ Yes ☐ No ☑ N/A Provide Explanation if necessary:--
g. If the project is related to groundwater:	
1. Has a GWMP been completed and submitted for the subject basin?	☑ Yes ☐ No ☐ N/A
2. If not will a GWMP be completed within 1 year of the grant submittal date?	☐ Yes ☐ No ☑ 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.