

ATTACHMENT 6: PROGRAM PREFERENCES

Attachment 6 is mandatory and includes a discussion of how the SLO IRWM 2015 Implementation Grant Proposal assists in meeting numerous Program Preferences; however this discussion focuses on the Program Preferences listed in Table 6.1 and documented in the following sections.

TABLE 6.1 SLO IRWM 2015 IMPLEMENTATION GRANT PROGRAM PREFERENCES	
PROGRAM PREFERENCE	PROJECT BENEFITS ADDRESSING PROGRAM PREFERENCE
Human Right to Water Policy	SSCSD WHTP: Project provides the groundwater treatment necessary to ensure a safe and clean water supply for the community.
Critical DAC Water Resource Need	SSCSD WHTP: 100% of the community is a DAC and the project provides the groundwater treatment necessary to ensure a safe and clean water supply for the community. OCSD WRRP: 100% of the community is a DAC and the project will improve groundwater reliability and quality.
Equitable Benefits	SSCSD WHTP and OCSD WRRP: Both of the DACs were given priority consideration and scoring when evaluating projects for inclusion in the grant application.
Use/Reuse Water More Efficiently	TCSD US CUP: Project will allow the use of wastewater that would otherwise be lost to the basin. OCSD WRRP: Project will ultimately augment local supplies through the recharge of recycled water.
Drought Preparedness	TCSD US CUP: Project will use drought tolerant recycled supply to meet seasonal and projected demands. OCSD WRRP: Project results in comprehensive plan addressing water needs in continuing drought conditions. SSCSD WHTP: Project will treat the groundwater during emergency drought conditions to reduce the high chlorides and total dissolved solids.

6.1 HUMAN RIGHT TO WATER POLICY

One of the primary goals of the San Luis Obispo IRWM Region is to address the Human Right to Water (HRW), which entitles every human “the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” The District serves as the lead agency for the region’s IRWM Program and works with the Regional Water Management Group to implement the region’s plan for sustainable water resources management, which includes implementing projects to ensure all people within the County have access to safe, clean, affordable, and accessible water. In addition to the County-wide efforts, within this grant one of the projects directly addresses the Human Right to Water with the ongoing drought.

SSCSD WELL HEAD TREATMENT PROJECT (WHTP)

The San Simeon Community Services District (SSCSD), a disadvantaged community, is currently under a Stage 3 Emergency due to low groundwater and high seawater intrusion in their potable water wells, which are resulting in elevated chlorides and total dissolved solids (TDS) that are above secondary drinking water standards. The community relies entirely on groundwater to meet its potable demands, as there is no available surface water supply. SSCSD, while permitted to pump 140 acre-feet per year (AFY), can only pump 90 AFY, from its two potable water wells located in the Pico Creek Valley. For the past 20 years, SSCSD has experienced seawater intrusion when their groundwater well levels reach 14 feet below sea level, typically during periods of drought conditions. The continued severe drought has placed the SSCSD water supply in jeopardy since total rainfall is less than minimum rainfall needed to replenish its sole potable water supply.

With the installation of the reverse osmosis unit at its well heads, SSCSD will be able to remove chlorides and TDS to levels that are in compliance with secondary drinking water standards, during drought and seasonal conditions. The WHTP will provide SSCSD, a water limited community, with a reliable, drought resistant water supply that can meet current and future demands under seasonal and drought conditions. The SSCSD’s WHTP will preserve the Human Right to Water for the community of San Simeon, as documented below.

The findings of a hydrogeological report completed in September 2014, indicated that San Simeon is at risk of running out of water by fall 2015. As demonstrated through groundwater modeling and monitoring, the extended drought has greatly impacted the potable water supply, due to seawater intrusion into the wells, with a significant increase in chlorides, as high as 3,500 milligrams/liter (mg/L), and TDS, as high as 3,000 mg/L. Per communications with the Department of Drinking Water, if the potable water well chloride levels cannot be reduced to less than 2,500 mg/L (ten times the recommended secondary MCL of 250 mg/L), the potable water wells maybe shut down leaving SSCSD without a water supply source.

If a well head treatment project is not implemented, SSCSD will be unable to provide clean, affordable and accessible water source for human consumption, cooking and sanitary purposes. The proposed Well Head Treatment Project (WHTP) directly addresses this concern by implementing a reverse osmosis system to remove the elevated levels of chlorides and TDS in its groundwater source, thereby providing a reliable potable water source for its service district. No other viable, low-cost

alternative exists, besides the proposed project, to provide this community with water during the current and future drought conditions. SSCSD must implement the well head treatment project to ensure a safe and clean water supply can be delivered to the community of San Simeon.

6.2 CRITICAL WATER QUALITY NEED OF A DISADVANTAGED COMMUNITY

The Region recognized several local water resources needs, including the need to help address critical water supply and quality needs in San Simeon and Oceano, both of which are local disadvantaged communities (DAC). DACs, by their nature of being low-income areas, have difficulty funding and making resources available to identify and implement solutions to address critical water supply and quality needs. The majority of San Simeon’s and Oceano’s residents are low-income households, meeting the criteria as a DAC of having incomes below the State’s DAC threshold of \$48,706, as documented in Attachment 7. These communities need to implement the projects included in this Proposal in the immediate future or they face the inability to reliably provide water for their residents.

SSCSD WELL HEAD TREATMENT PROJECT (WHTP)

100% of the DAC of San Simeon is solely dependent upon groundwater and it is at risk of running out of its water source, as the groundwater wells have high chloride and TDS levels caused by seawater intrusion and exacerbated by the extended drought conditions. The WHTP will provide for the construction of well head treatment facilities (reverse osmosis) to treat the groundwater to reduce the high chlorides and TDS. Grant assistance would enable the SSCSD to provide a reliable water source, during seasonal and drought conditions, for its community without impacting rates. Without this project, it is likely that the disadvantaged community of San Simeon will run out of water this year.

OCSD WATER RESOURCES RELIABILITY PROGRAM (WRRP)

100% of the OCSD service area is a DAC. OCSD obtains its water supply from three sources: the State Water Project, Lopez Lake, and from an allocation of groundwater from the Santa Maria Valley Groundwater basin. With reduced reliability in the delivery of water from the SWP, and Lopez Lake; and significantly declining groundwater levels and threat of sea water intrusion, there is a great need for OCSD to enhance its groundwater reliability and to improve water quality. With the implementation of the WRRP, OCSD seeks to increase its water reliability by augmenting its local supplies with recharge of recycled water and stormwater, and by better utilizing the water resources through development of a low impact development plan and leak detection and management program. In addition, to improve groundwater quality, the WRRP study specifically addresses non-point source reduction.

6.3 EQUITABLE DISTRIBUTION OF BENEFITS

To ensure an equitable distribution of benefits, the SLO Regional Water Management Group included special consideration and scoring of Disadvantaged Community (DAC) projects and Human Right to Water (HRW) projects when evaluating projects for inclusion in the SLO IRWM 2015 Implementation Grant Proposal. The project evaluation and scoring was consistent with the approved IRWM process. The projects were evaluated and scored against the criteria listed in the table below. Of the 13 points available, four points or 31% were allocated to DAC and HRW projects, demonstrating the region’s commitment to increasing the participation of DACs and including projects that meet the critical water supply and water quality needs of DACs.

Given the preferential scoring and consideration, both the OCSD and SSCSD projects that meet critical water supply and quality needs of a DAC, scored highly and were included in the SLO Grant Proposal.

TABLE 6.1 SAN LUIS OBISPO IRWM 2015 IMPLEMENTATION GRANT PROJECT SCORING CRITERIA	
Evaluation Criteria	Possible Score
Human Right to Water	0-1
Readiness to Proceed	0-3
Long-Term Drought Preparedness	0-3
Direct DAC Benefit	0-3
Quantifiable Benefit	0-3
MAXIMUM SCORE POSSIBLE	13

6.4 USE AND REUSE WATER MORE EFFICIENTLY

TCSD UPPER SALINAS RIVER BASIN CONJUNCTIVE USE PROJECT (US CUP)

The Templeton Community Service District (TCSD) service area is bisected by Highway 101, with two distinct wastewater areas. The west side area flows, approximately 150,000 gallon per day (gpd), are treated at TCSD Meadowbrook WWTP (MWWTP) where it undergoes secondary treatment and is discharged into infiltration ponds where it percolates into the underflow of the Salinas River to be subsequently retrieved by TCSD wells downstream, contributing 165 AFY to the region’s water supplies. However, the east side area flows, approximately 220,000 gpd, are sent to the Paso Robles WWTP for treatment and disposal and are lost to the basin. The US CUP facilities will redirect all of the wastewater generated in the

east side area to the MWWTP, thereby increasing the supply by an additional 242 AFY. This represents roughly 26% of the area's total annual supply and will reduce dependence on the stressed groundwater basin. This project will take advantage of the wastewater flows that are currently lost to the region.

OCSD WATER RESOURCES RELIABILITY PROGRAM (WRRP)

With the implementation of the WRRP, OCSD seeks to increase its water reliability by augmenting its local supplies with recharge of recycled water, as well as recharge with stormwater through implementation of LID techniques, and by better utilizing the existing water supply through development of a leak detection and management plan. As part of the recycled water injection well plan, OCSD will identify the optimal recycled water injection well locations in Oceano to enhance the reliability of OCSD's groundwater supplies by providing for the recharge of groundwater basin by up to 900 AFY, as well as improving groundwater quality with the injection of recycled water, and the reduction of salt water intrusion into the wells. With the implementation of the LID program, OCSD will be able to capture stormwater and recharge the groundwater basin, as well as reduce non-point source pollution. With the implementation of the leak detection and management program, OCSD anticipates capturing the majority of its current water system loss (estimated to be 83-136 AFY or about 9-15% of its total water). These projects will help meet future demands, recharge a stressed groundwater basin, and reduce stormwater runoff.

6.5 DROUGHT PREPAREDNESS

TCSD UPPER SALINAS RIVER BASIN CONJUNCTIVE USE PROJECT (US CUP)

TCSD serves a population of just under 7,000. At this time, the District is capable of meeting the seasonal average daily water demands through extractions from ten deep groundwater wells and three river wells. However, projections indicate that demand could exceed supplies shortly after 2030. Additionally, the region could experience seasonal shortages as early as 2020. In 2013, roughly 50% of the supply came from deep wells underlying the District, 40% from surface water sources and 8% from the TCSD wastewater retrieval program. In order to work towards meeting the supply demands of the community, TCSD purchased 250 AF of raw water to be imported via a pipeline project. TCSD began receiving its 250 AF of water which was intended to provide a supply buffer, however, when a leak was discovered in the pipeline, this water was not received for nine months until the repairs were completed. The sustainability and quality of the deep aquifer, the seasonal limitations of the river underflow, the reliability of the imported water, and the projected increased demands, all underscore the TCSD need to develop a clean drought tolerant water supply. US CUP will increase the wastewater retrieval quantity from the current 164 AF to 407 AF annually. This will represent roughly 26% of total annual supply. All of the water sources considered together are needed to meet current and projected demands and water quality improvements and contributes to the area's long term drought preparedness. The US CUP facilities will reliably provide the supply buffer and projected needs of the community through utilization of a wastewater supply currently lost to the basin.

OCSD WATER RESOURCES RELIABILITY PROGRAM (WRRP)

OCSD provides water supply to its 2,300 customers in the unincorporated community of Oceano utilizing water from three sources: Santa Maria Groundwater Basin, the State Water Project, and Lopez Lake for a total allocation of 1,953 AFY. However, with the drought each supply source is being reduced - with OCSD being able to only pump 30% of its groundwater supply due to declining groundwater levels and threats of sea water intrusion. The SWP is delivering 20% of its allocations and Lopez Lake withdrawals cutback 10%. Continuing restrictions on the community's water sources and extended drought conditions will create challenges for OCSD to meet its demand, which recently have declined to 885 AFY. The funding of the WRRP will provide OCSD with a comprehensive plan to address a critical water supply need in the face of continued drought conditions and changing water allocations.

SSCSD WELL HEAD TREATMENT PROJECT (WHTP)

The community of San Simeon is solely dependent upon groundwater and is very vulnerable to seawater intrusion, especially during drought. For the past 20 years, SSCSD has experienced seawater intrusion when their groundwater well levels reach 14 feet below sea level, typically during periods of drought. The continued severe drought has placed the SSCSD water supply in jeopardy since the total rainfall is less than the minimum needed to replenish its sole potable water supply. Per communications with Department of Drinking Water, if the potable water well chloride levels cannot be reduced to less than 2,500 mg/L, the potable water wells maybe shutdown leaving SSCSD without a water supply source. The WHTP will provide for the construction of well head treatment facilities (reverse osmosis) to treat the groundwater during emergency drought conditions to reduce the high chlorides and total dissolved solids. SSCSD is currently under a Stage 3 emergency due to the low water levels in the potable wells and without the expedited implementation of the WHTP, SSCSD may be required to shut down the wells due to water quality issues, by the Department of Drinking Water, and would need to truck in water for this DAC. The implementation of the WHTP will provide SSCSD with a safe and sustainable water supply to meet its community's demands in the face of the continued drought conditions.