

Coachella Valley Integrated Regional Water Management Implementation Grant Proposal

Program Preferences

Attachment 11 consists of the following item:

✓ **Program Preferences**

This attachment contains information regarding how this *Coachella Valley IRWM Implementation Grant Proposal* assists the Coachella Valley region in meeting the Program Preferences set by PRC §75026.(b) and CWC §10544.

This attachment identifies the specific Program Preferences that the proposal will meet; describes the certainty that the Proposal will meet the Program Preferences; and details the breadth and magnitude to which the Program Preferences will be met.

Program Preferences, Certainty, and Breadth/Magnitude

The Program Preferences described in Section II.F of the Propositions 84 & IE IRWM Guidelines are those set forth in PRC §75026.(b) and CWC §10544. These preferences are:

- Include regional projects or programs;
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR;
- Effectively resolve significant water-related conflicts within or between regions;
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program;
- Address critical water supply or water quality needs of disadvantaged communities within the region;
- Effectively integrate water management with land use planning;
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge; and
- Address Statewide priorities.

Each of the projects included within this Proposal are ready to proceed, and were listed as projects within Appendix B of the Final Coachella Valley IRWM Plan. These projects were selected by the Planning Partners and the CVRWGM in accordance with the project prioritization process described in Chapter 7 of the Coachella Valley Integrated Regional Water Management Plan. As a result of the thorough analysis that was performed on these projects through the selection process and with respect to monitoring, assessment, and performance measures (refer to Attachment 6), it is fully certain that each of the projects included in this Proposal will provide the benefits described below.



The package of projects included in this proposal addresses nearly all of the aforementioned Program Preferences on a local, regional, or statewide scale. These terms, used to define the breadth and magnitude to which each project addresses Program Preferences, are defined as follows:

- *Local*: Project benefits are focused locally within the project area.
- *Regional*: Project benefits extend throughout the Coachella Valley Water Management Region (Region).
- *Statewide*: Project benefits are widespread and will benefit not only the Region but other areas throughout California.

Table 11.1 below shows the Program Preferences that will be addressed by each of the projects within this Proposal, and demonstrates the magnitude and breadth to which each Program Preference will be addressed. Note that none of the projects listed within this Proposal are eligible for Stormwater Flood Management (SWFM) Grant Programs at this time, and as such, none of the projects were evaluated with respect to SWFM-specific Program Preferences.

Table 11.1: Proposed Projects and Program Preferences

Proposed Projects	Program Preferences						
	Include Regional Projects or Programs	Integrate Water Management Programs and Projects	Resolve Significant Water-Related Conflicts	Contribute to Attainment of CALFED Bay-Delta Program Objectives	Address Critical Water Supply or Water Quality Needs of DACs	Integrate Water Management with Land Use Planning	Address Statewide Priorities
Regional Water Conservation Program	✓	✓	✓	✓	✓		✓
Short Term Arsenic Treatment Project		✓	✓		✓		✓
Groundwater Quality Protection Program – Desert Hot Springs		✓	✓		✓		✓
Groundwater Quality Protection Program – Cathedral City		✓	✓		✓		✓
Degree of Certainty Preference will be Addressed	HIGH	HIGH	HIGH	HIGH	HIGH	N/A	HIGH
Magnitude and Breadth to Which Preference will be Addressed	Region	Region	Region	State	Local	N/A	Region

Relation to the Implementation Grant Proposal

The following sections demonstrate how this Implementation Grant Proposal will assist in meeting each of the Program Preferences listed within Section II.F of the Propositions 84 & 1E IRWM Guidelines, as summarized within Table 11.1 above.

Program Preference: Include Regional Projects or Programs

Regional Water Conservation Program

This program consists of a compilation of conservation projects from all five of the water purveyors that constitute the CVRWMG, which will span throughout the entire Coachella IRWM Region. As such, this



program is considered regional pursuant to CWC §10544, and it is fully certain that this project will adhere to this Program Preference on a regional level.

Program Preference: Effectively Integrate Water Management Programs and Projects within the Coachella Valley IRWM Region

All of the projects included within this proposal would address the Program Preference of effectively integrating water management programs and projects within a hydrologic region specifically identified by DWR (the Coachella Valley Water Management Region). The Coachella Valley Region was specifically identified by DWR as part of a Region Acceptance Process that was submitted in April 2009.

Because this proposal has been found to be consistent with the Coachella Valley IRWM Plan (refer to Attachment 1), this proposal will effectively carry out the goals of the Plan, which includes coordinating and integrating water resource management (IRWM Goal 4) within the Region. In addition, each project included in this Proposal would meet at least one of the regionally-established objective (refer to Attachment 1). Each objective was established upon reviewing the various goals, issues, and needs that currently exist within the Region. The consistency evaluation carried out in Attachment 1 shows that together, the four projects listed within this Proposal will either directly or indirectly address ten of the thirteen IRWM Plan Objectives (Refer to Table 1.3 within Attachment 1).

Because the proposal will be consistent with the Coachella Valley IRWM Plan by fulfilling IRWM Goal 4 and ten of the thirteen Plan Objectives, it is fully certain that all four projects will adhere to this Program Preference throughout the Region (on a regional level). The following sections provide an in-depth explanation of why each of the projects listed within this Proposal will effectively integrate water management programs and projects within the Region.

Regional Water Conservation Program

The *Regional Water Conservation Program* is designed to bring water conservation activities to an accessible level to a wide range of constituents throughout the Coachella Valley Region. The CVRWMG agencies have created an umbrella conservation program that allows the region to address conservation needs through an efficient collaborative and united process, but still allows each agency the flexibility to address the specific needs of the communities they serve. The regional and collaborative aspects of this program ensure that each of the CVRWMG agencies will effectively integrate their conservation programs and projects within the Region.

Short Term Arsenic Treatment Project

This project will address both arsenic-related water quality issues and address water-related needs of DACs by providing cost-effective and reliable ways to remove high levels of arsenic from drinking water supplies for farm worker families in the East Valley. This project was based on a pilot project conducted by the project proponent within a single East Valley mobile home park (San Antonio del Desierto), and was designed to potentially be applied to isolated communities throughout the region that have arsenic-related water quality concerns. As such, the design of this project is connected to another project (San Antonio del Desierto), and has the potential to integrate further with other water management programs and projects that address DACs and/or arsenic-related water quality issues throughout the Coachella Valley Region.

Groundwater Quality Protection Program - Desert Hot Springs

This project would reduce the threat that densely located and/or failing septic systems pose to groundwater quality within the Desert Hot Springs aquifer, which is located within the Desert Hot Springs Sub-Basin. The Desert Hot Springs Sub-Basin is an expansive sub-basin which sustains a local economy of hot water users. Due to its size, groundwater quality within this sub-basin could potentially impact drinking water supplies provided by MSWD. By reducing threats to groundwater quality within



the Desert Hot Springs Sub-basin, this program effectively integrates water management projects within the Coachella Valley.

Groundwater Quality Protection Program - Cathedral City

This project will help to coordinate and integrate water resource management by protecting groundwater quality used by Coachella Valley Water District (CVWD) and providing additional wastewater supplies to CVWD for reclamation, thereby indirectly increasing non-potable water supplies within the region. The project site and the areas that it will benefit are within the Coachella Valley.

Program Preference: Effectively Resolve Significant Water-Related Conflicts within or between Regions

The Coachella Valley IRWM Plan provides an overview of the significant water-related conflicts within the Region. This section states that, “major water-related conflicts have generally revolved around groundwater recharge and pumping activities and associated assessments.” Groundwater issues were likely identified as the major source of water-related conflicts within the Region, because groundwater constitutes the Region’s primary urban water supply source. Due to the importance of groundwater within the Region, groundwater quality and supply availability are critically important to the entire Region, and therefore constitute the primary source of water-related conflicts. Each of the projects listed within this Proposal aims at improving groundwater supply, quality, and groundwater-related drinking water quality within the Region, and therefore each project will aim to help resolve this significant water-related conflict within the Region.

In addition, the IRWM Plan Objectives were established as a result of an open and transparent stakeholder process, where all CVRWGM members, Planning Partners entities, DAC and Tribal Issues Groups entities, and other stakeholders were invited to voice their significant issues and conflicts within the Region. Together, the four projects will address ten of the thirteen IRWM Plan Objectives, and will therefore effectively resolve significant water-related conflicts addressed by a comprehensive stakeholder group within the Region.

Regional Water Conservation Program

This project will address groundwater overdraft by reducing groundwater demand through implementation of conservation programs throughout the Region. Reducing groundwater demand may reduce the need to increase recharge and pumping activities in the future, thereby resolving significant water-related conflicts regarding groundwater recharge and pumping activities. In addition, this conservation program is regionally-based, and promotes collaboration between the five regional water purveyors. This type of collaboration will also potentially reduce conflicts by heightening relationships between regional agencies. Due to the comprehensive and issue-based nature of this program, it is fully certain that this program will address the Program Preference of effectively resolving significant water-related conflicts within or between regions.

Short Term Arsenic Treatment Project

The need for dependable arsenic removal systems was listed within the Coachella Valley IRWM Plan as a key groundwater quality issue in the East Valley. In addition, arsenic contamination and the inability of certain DACs to afford other sources of drinking water (i.e. hauled water) were listed as specific DAC-related issues within the Plan. This project will directly address all of the aforementioned issues by installing point-of-use and point of entry systems in DACs in the East Valley where arsenic is of greatest concern. This program helps resolve conflicts over municipal service in areas not in the path of development that have inadequate water quality for existing residents. Therefore, due to the direct connection between this project and issues identified as key issues within the IRWM Plan, it is fully certain that this program will address the Program Preference of effectively resolving significant water-related conflicts within or between regions.



Groundwater Quality Protection Program - Desert Hot Springs and Cathedral City

Individual domestic septic tanks were identified in the issues sections of the Coachella Valley IRWM Plan. The issues identified with respect to individual domestic septic tanks include potential nitrate percolation from failing systems, and lack of sewer infrastructure to serve DAC communities. The program directly addresses both of the aforementioned issues, by replacing septic tanks with sewer connections in area of Desert Hot Springs and Cathedral City that have known groundwater quality issues and contain neighborhoods that qualify as DACs. As such, it is fully certain that this program will address the Program Preference of effectively resolving significant water-related conflicts within or between regions. In addition, the Cathedral City project would help resolve issues relating to local water supply availability by contributing wastewater to the CVWD wastewater collection system and therefore increasing the amount of wastewater available for reuse.

Program Preference: Contribute to Attainment of One or More of the Objectives of the CALFED Bay-Delta Program

The CALFED Bay-Delta Program has the following four objectives: Water Quality, Water Supply, Ecosystem Restoration, and Levee Integrity (<http://calwater.ca.gov/>).

- *Water Quality*: the objective of this program is to invest in projects that improve the state's water quality from source to tap.
- *Water Supply*: this objective is comprised of five critical elements: conveyance, storage, environmental water account, water use efficiency and water transfer. Together and in partnership with local and regional agencies, this program allows for the increase of water supplies and more efficient and flexible use of water resources.
- *Ecosystem Restoration*: this objective aims at restoring and protecting habitats, ecosystem functions, and native species.
- *Levee Integrity*: the objective of this program is to protect water supplies needed for ecosystems, cities, industry, and farms by reducing the threat of levee failures that would lead to seawater intrusion.

As described below, the four projects contained within this Proposal will meet two of the four objectives: water quality and water supply.

Regional Water Conservation Program

This program will meet the Water Supply objective of the CALFED Bay-Delta Program. This program will increase water use efficiency throughout the Coachella Valley Region, thereby potentially reducing future increased demands for water supplies from the Bay-Delta. In addition, this program will allow for more efficient use of water resources within the Coachella Valley, which is an additional goal of the water supply objective of the CALFED Bay-Delta Program. Due to the conservation-oriented nature of this program, the Region's current reliance on Bay-Delta water, and the degree to which this project was analyzed, it is fully certain that this project will provide water supply benefits as described within the CALFED Bay-Delta Program. Due to the connection between the Coachella Valley and imported water from the Bay-Delta, this program will provide water supply benefits at a statewide level.

Program Preference: Address Critical Water Supply or Water Quality Needs of Disadvantaged Communities within the Region

Critical water supply or water quality needs of DACs within the Region were addressed through the development of the Coachella Valley IRWM Plan. While developing the Plan, the CVRWMG and Planning Partners formed a DAC Issues Group that was created to address specific water-related needs of DACs within the Region. The IRWM Plan identifies the specific water-related needs of DACs as water affordability, the need for connections to municipal sewer and water systems, poor groundwater quality,



and flooding hazards. This Proposal addresses four of the five topics above (all but flooding). The projects within this Proposal that address critical water supply and/or water quality needs of DACs within the region are discussed below.

Regional Water Conservation Program

There are pockets of disadvantaged communities throughout the entire Coachella Valley. As such, this regional program will reach out conservation efforts to DACs. In addition, water conservation is the most cost-effective means of increasing the local water supply, so it addresses water needs of DACs by maintaining the affordability of water. The program addresses critical water quality of DACs by reducing overdraft which, is known to have a deteriorating effect on groundwater quality. Therefore, this project will protect groundwater quality by reducing a potential threat to groundwater quality.

Short Term Arsenic Treatment Project

This project directly addresses critical water supply and quality issues of DACs by providing point-of-use drinking water systems to DACs within the East Valley that have reported arsenic levels that exceed MCLs within their drinking water supplies. DACs benefitted by this project may also be located within the Torres Martinez Desert Cahuilla Indians reservation (on tribal lands). The project will secure water supply by improving the quality of existing DAC drinking water supplies, and reducing the need for DAC residents to purchase expensive alternative water supplies such as hauled water. This project will address water quality issues of DACs by reducing arsenic levels in drinking water supplies.

Groundwater Quality Protection Program – Desert Hot Springs and Cathedral City

The Groundwater Quality Protection Program directly addresses water quality and sanitation needs of DACs by providing for expansion of the municipal sewer system. This program addresses sanitation needs relative to failing and/or densely located septic tank systems and therefore protects groundwater quality by eliminating the potential for septic tank effluent to reach the groundwater supply. This program also addresses critical water supply needs of DACs by protecting potable groundwater sources from contamination. By eliminating septic tanks, this program will protect and improve groundwater quality in Desert Hot Springs and Cathedral City, which both contain pockets of DACs.

Program Preference: Effectively Integrate Water Management with Land Use Planning

None of the projects listed within this proposal integrate water management with land use planning.

Program Preference: Address Statewide Priorities

This proposal will either directly or indirectly address every Statewide priority with the exception of priority four, practice integrated flood management. Table 11.3 below demonstrates which Statewide priorities are addressed by each of the projects or programs included within this proposal, and to what degree (either directly or indirectly). Each project submitted as part of the Coachella Valley IRWM Plan was evaluated for its consistency with Statewide priorities as part of the plan development process. As such, based on the level of analysis for each project with respect to meeting Statewide priorities, it is fully certain that each of these projects, and therefore the Proposal will achieve the Statewide priorities. Due to the regional emphasis of this proposal, the benefits that will occur from meeting Statewide priorities are expected to occur at a regional level (throughout the Coachella Valley).



Table 11.3: Proposed Projects and Programs with Statewide Priorities

Proposed Projects/Programs	Drought Preparedness	Use and Reuse Water More Efficiently	Climate Change Response Actions	Expand Environmental Stewardship	Practice Integrated Flood Management	Protect Surface/Groundwater Quality	Improve Tribal Water/Natural Resources	Ensure Equitable Distribution of Benefits
Regional Water Conservation Program	○	●	○			○	●	●
Short Term Arsenic Treatment Project			●				●	●
Groundwater Quality Protection Program - Desert Hot Springs		○		○		●		
Groundwater Quality Protection Program - Cathedral City		○		○		●		

○ indirectly related; ● directly related

Regional Water Conservation Program

The statewide priorities achieved by the *Regional Water Conservation Program* are described in detail below.

- *Drought Preparedness*: This program will result in education, outreach, and management that will promote water use efficiency, and reduce regional water demand. Reducing water demand will indirectly prevent future droughts from occurring by making the Region better prepared for situations in which water supply availability is lower than average.
- *Use and Reuse Water More Efficiently*: This program will educate community members on water efficiency and opportunities for reuse in order to achieve statewide priorities.
- *Climate Change Response Actions*: This project may indirectly address key climate change issues by managing groundwater levels to reduce overdraft and therefore reduce groundwater in the Coachella Valley. Reduced demand could cut energy consumption related to water systems and water use, thereby decreasing greenhouse gas (GHG) emissions. This program will certainly contain projects that will adapt to climate change effects through water use efficiency. Projects will address issues of overdraft in groundwater basins and will work toward sustainable use and supply.
- *Protect Surface/Groundwater Quality*: This program will also reduce overdraft, which is known to have a deteriorating effect on groundwater quality therefore protecting groundwater quality and supplies.
- *Improve Tribal Water/Natural Resources*: This program will promote water use efficiency and reduce water demand on a regional level. Reducing water demand will potentially reduce future groundwater overdraft, which will directly improve tribal water and natural resources.
- *Ensure Equitable Distribution of Benefits*: Water conservation is the most cost-effective means of increasing the local water supply and maintaining the affordability of water for all citizens in the region. Therefore, this statewide priority will be achieved through reasonable price benefits for all citizens.



Short Term Arsenic Treatment Project

The statewide priorities achieved by the *Short Term Arsenic Treatment Project* are described in detail below.

- *Climate Change Response Actions:* The project will directly address climate change issues by utilizing low energy demand devices for the local treatment of groundwater. These low energy demand devices will use significantly less energy than conventional pumping water devices, effectively reducing GHG emissions by offsetting the need to implement more energy consumptive conventional pumping devices.
- *Ensure Equitable Distribution of Benefits:* By increasing drinking water quality within DACs in the East Valley, this project will reduce the need for residents to rely on other, more expensive water supplies such as hauled water; making water distribution benefits more equitable.
- *Improve Tribal Water/Natural Resources:* The project is located within DACs and potentially tribal lands, and will therefore address water and sanitation needs of tribal waters and natural resources.

Groundwater Quality Protection Project – Desert Hot Springs

The statewide priorities achieved by the *Groundwater Quality Protection Program-Desert Hot Springs* are described in detail below.

- *Use and Reuse Water More Efficiently:* By converting septic tanks to sewer systems, this program will potentially increase the amount of wastewater supplies available for future reuse. Therefore, this project will potentially increase water reuse by diverting wastewater from septic tanks to water reclamation facilities.
- *Expand Environmental Stewardship:* This project will abate potential water quality threats associated with septic systems, thereby indirectly enhancing the watershed ecosystems by preventing potential contamination.
- *Protect Surface/Groundwater Quality:* By eliminating failing or densely located septic systems in an area with known groundwater quality issues, this project will protect and potentially improve groundwater quality by removing a known contamination source.

Groundwater Quality Protection Project – Cathedral City

The statewide priorities achieved by the *Groundwater Quality Protection Program-Cathedral City* are described in detail below.

- *Use and Reuse Water More Efficiently:* By converting septic tanks to sewer systems and connecting the project area to a CVWD wastewater collection system, this program will potentially increase the amount of wastewater supplies available for reuse. Therefore, this project will increase water reuse by diverting wastewater from septic tanks to water reclamation facilities.
- *Expand Environmental Stewardship:* This project will indirectly expand environmental stewardship by removing failing or densely located septic tanks that pose a threat to watershed ecosystems. This project will help improve water and flood management ecosystems by reducing water quality threats.
- *Protect Surface/Groundwater Quality:* By eliminating failing septic systems in an area with known groundwater quality issues, this project will protect and improve groundwater quality by removing a contamination source.