

## Attachment 9

# Program Preferences





**Attachment 9 San Diego Integrated Regional Water Management  
Implementation Grant Proposal – Round 2  
Program Preferences**

Attachment 9 consists of the following item:

- ✓ **Program Preferences.** This attachment contains information regarding how this *San Diego IRWM Implementation Grant Proposal* contributes to the Program Preferences set by PRC §75026.(b) and CWC §10544.

**Program Preferences**

The Program Preferences described in Section II.F of the 2012 IRWM Grant Program Guidelines are those set forth in PRC §75026.(b) and CWC §10544. These preferences are summarized in Table 9-1. Note that none of the proposed projects listed are applying for Stormwater Flood Management (SWFM) funding, and as such, none of the projects were evaluated with respect to the SWFM-specific Program Preference.

**Table 9-1: Program Preferences and Statewide Priorities**

| <b>Program Preferences</b>  | <b>Statewide Priorities</b>                      |
|---|--|
| 1. Include regional projects or programs  | 1. Drought Preparedness                          |
| 2. Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; RWQCB region or subdivision; or other region or sub-region specifically identified by DWR | 2. Use and Reuse Water More Efficiently          |
| 3. Effectively resolve significant water-related conflicts within or between regions  | 3. Climate Change Response Actions               |
| 4. Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program  | 4. Expand Environmental Stewardship              |
| 5. Address critical water supply or water quality needs of disadvantaged communities (DACs) within the region   | 5. Practice Integrated Flood Management          |
| 6. Effectively integrate water management with land use planning  | 6. Protect Surface Water and Groundwater Quality |
| 7. For eligible SWFM funding... <i>(not applicable)</i>   | 7. Improve Tribal Water and Natural Resources    |
| 8. Address Statewide priorities <i>(see right)</i>  | 8. Ensure Equitable Distribution of Benefits     |

Each of the projects included within this proposal is ready to proceed, and was identified as a Tier 1 priority project by the Regional Water Management Group (RWMG), Regional Advisory Committee (RAC), and Project Selection Workgroup in accordance with the project prioritization process that was approved and adopted in the 2007 IRWM Plan. As a result of the thorough analysis that was performed on these projects by the Project Selection Workgroup and analysis that was completed 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 will address each 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 the Program Preferences, are defined as follows:

- *Local:* Project benefits are focused locally within the project area.
- *Regional:* Project benefits extend throughout the San Diego IRWM Region (Region).

- *Statewide*: Project benefits are widespread and will benefit not only the Region, but also other areas throughout California.

Table 9-2 identifies the Program Preferences that will be addressed by each of the proposed projects and demonstrates the magnitude and breadth to which each Program Preference will be addressed.

**Table 9-2: Proposed Projects and Program Preferences**

| Proposed Projects   | 1: Regional Projects | 2: Integrate Water Mgmt | 3: Resolve Conflict | 4: Bay-Delta Objectives | 5: Benefits DACs | 6: Land Use Planning | 7: Statewide Priorities |
|---|----------------------|-------------------------|---------------------|-------------------------|------------------|----------------------|-------------------------|
| 1. North San Diego County Regional Recycled Water Project – Phase II                  | ✓                    | ✓                       | ✓                   | ✓                       |                  |                      | ✓                       |
| 2. Turf Replacement and Agricultural Irrigation Efficiency Program                    | ✓                    | ✓                       | ✓                   | ✓                       |                  |                      | ✓                       |
| 3. Rural Disadvantaged Community (DAC) Partnership Program                            |                      | ✓                       | ✓                   |                         | ✓                |                      | ✓                       |
| 4. Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility   | ✓                    | ✓                       | ✓                   | ✓                       |                  |                      | ✓                       |
| 5. Sustaining Healthy Tributaries to the Upper San Diego River                        |                      | ✓                       | ✓                   |                         |                  | ✓                    | ✓                       |
| 6. Chollas Creek Integration Project – Phase II                                       |                      | ✓                       | ✓                   |                         |                  | ✓                    | ✓                       |
| 7. Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II |                      | ✓                       | ✓                   |                         |                  |                      | ✓                       |
| <b>Degree of Certainty Preferences Will Be Addressed</b>                              | <b>HIGH</b>          | <b>HIGH</b>             | <b>HIGH</b>         | <b>HIGH</b>             | <b>HIGH</b>      | <b>HIGH</b>          | <b>HIGH</b>             |
| <b>Magnitude and Breadth to Which Preference will be Addressed</b>                    | Region               | Region                  | Region              | State                   | Local            | Region               | Region                  |

**Program Preference 1: Include Regional Projects or Programs**

As shown in Table 9-2, three projects within this proposal include regional projects or programs. As evident in Figure 3-1 (see Attachment 3), these projects all span throughout the Region, and have a regional emphasis. As such, these programs are considered regional pursuant to CWC §10544, and it is **fully certain** that these projects will adhere to this Program Preference on a regional level.

*North San Diego County Regional Recycled Water Project – Phase II:* This project will construct pipelines, storage facilities, pumping facilities, and interties that implement recycled water consolidation opportunities identified in Phase I for ten partner agencies in the northern portion of San Diego County (defined in the Work Plan in Attachment 3).

*Turf Replacement and Agricultural Irrigation Efficiency Program:* This project will provide guidance and incentives to property owners in the Water Authority’s Service Area and the City of San Diego who convert turf to sustainable landscaping. Additionally, the project provides incentives to agricultural users in the Water Authority’s service area to retrofit irrigation equipment with more efficient technology or to convert potable irrigation systems to non-potable systems. As such, water conservation, water recycling, water quality improvements, and other benefits provided by this project will span throughout the Region as the financial incentives and other components of this program will be available to residents throughout the Water Authority’s service area.

*Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility:* This project is located at the City of San Diego’s Advanced Water Purification Demonstration Facility and will develop and rigorously test failsafe potable reuse treatment trains. Information that will be provided by this project can be used to benefit the entire Region, as well as the state, by providing a robust scientific foundation for evaluating and potentially approving future failsafe potable reuse facilities.

## Program Preference 2: Effectively Integrate Water Management Programs and Projects within the San Diego IRWM Region

All of the projects included within this proposal will address the Program Preference of effectively integrating water management programs and projects within a region specifically identified by DWR. DWR specifically approved the San Diego IRWM Region as part of the Region Acceptance Process that took place in 2009. Each of the seven projects listed within this proposal would be contained within this DWR-identified region, and it is **fully certain** that these projects will adhere to this Program Preference on a regional level. Further, as described in detail in Attachment 3, many of the projects included in this proposal effectively integrate water management efforts as they were developed through a specific integration effort (the Strategic Integration Workshop) that was conducted by the IRWM Program in September of 2012.

*North San Diego County Regional Recycled Water Project – Phase II:* This project is being developed to address the regional need for a diversified water supply portfolio by producing and distributing additional recycled water. The purpose of the project is to integrate recycled water system components from ten neighboring water agencies into a more efficient, interconnected North County regional recycled water system, and to maximize use of the recycled water produced and used in the Region. This project will therefore effectively integrate recycled water management within the North County area of a region specifically identified by DWR (the San Diego IRWM Region).

*Turf Replacement and Agricultural Irrigation Efficiency Program:* This program will provide incentives for urban and agricultural users throughout the Water Authority's service area to convert lawns to water-efficient landscaping, and improve agricultural irrigation efficiency. This program is a partnership between the Water Authority and the City, who are working together to effectively integrate their outdoor water use efficiency (conservation) programs. This program and the integrated partnership between the Water Authority and the City was developed, in part through the IRWM Strategic Integration Workshop. As such, this program will effectively integrate water conservation and efficiency programs throughout the Water Authority's service area, which is located within the San Diego IRWM Region.

*Rural DAC Partnership Program:* The goal of this program is to provide funding and support to implement projects that address inadequate water supply and water quality issues affecting rural DACs. Projects considered for funding through this partnership program will be evaluated by the Rural DAC Stakeholder Committee, who will evaluate projects based on a pre-determined set of criteria (refer to Attachment 3). This program is an integrated water management program, because it strives to bring together individuals that are familiar with and committed to water management issues in rural DACs, and to provide the funding and support necessary to implement critical DAC projects in rural areas that are not served by municipal water agencies.

*Failsafe Potable Reuse at the Advanced Water Purification Facility:* This project will design and test a failsafe treatment train for potable reuse without an environmental buffer (failsafe potable reuse). The testing conducted for this project will result in information that may be used to evaluate the safety of failsafe potable reuse facilities in the Region and the State, and may potentially lead to a more affordable potable reuse option in the future. As such, this project is an integrated water management effort that will conduct pilot testing necessary to implement future potable reuse projects within the state of California.

*Sustaining Healthy Tributaries to the Upper San Diego River:* This project will involve protection, restoration, and data collection efforts for Boulder Creek, an important tributary to the largest local water supply in San Diego County, El Capitan Reservoir. By collecting data and restoring the creek, this project will reduce or avoid future costs associated with creek degradation, water quality issues, and sedimentation in the reservoir. Data from this project may also be used to evaluate the health of other, similar, creeks by accumulating baseline data. This project is an integrated effort involving multiple partners that will work together to maximize benefits and address regional needs associated with establishing baseline data for a healthy portion of the San Diego River Watershed.

*Chollas Creek Integration Project – Phase II:* This project is an integrated effort of multiple partners, and will expand upon the San Diego Coastkeeper's Citizen Science Monitoring and Pollution/Conservation Education program, include a partnership with Groundwork's Green Team Community Service Project, and contribute additional data to the City of San Diego's Stormwater dataset.

*Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II:* The goal of this project is to establish nutrient water quality objectives for the Santa Margarita River watershed. Due to its watershed-level scale and interregional scope, this project is linked to a large list of other projects (refer to Attachment 3). This project will effectively integrate water management programs and projects throughout the Santa Margarita watershed, because results and conclusions from this project will lead to the consistent implementation of nutrient reduction and water conservation practices throughout the entire watershed.

### **Program Preference 3: Effectively Resolve Significant Water-Related Conflicts**

The IRWM Plan Objectives were established as a result of an open and transparent stakeholder process, where all RWMG, RAC, and other stakeholders were invited to voice their significant issues and conflicts within the region. In accordance with the 2012 IRWM Guidelines, the draft IRWM Plan Update Objectives were developed such that they specifically address the major water-related issues and conflicts of the Region. Together, the seven projects address all of the twelve draft IRWM Plan Update Objectives (see Table 3-2 in Attachment 3), and therefore will effectively resolve water-related conflicts identified by the comprehensive stakeholder group.

In addition, each project resolves local funding issues through their inclusion in this proposal. Each of these projects will help to alleviate regional conflicts associated with a short supply of regional funding. The analysis below provides specific information on how each project will effectively resolve significant water-related conflicts within the Region. Due to the degree of analysis performed on these projects, it is **fully certain** that this proposal will meet the Program Preference of effectively resolving significant water-related conflicts throughout the Region (on a regional level).

*North San Diego County Regional Recycled Water Project – Phase II:* This project is a comprehensive recycled water program that will consolidate individual recycled water components of ten separate agencies to more effectively meet recycled water needs of North County San Diego. The physical scope of this project will eliminate jurisdictional conflicts, and the individual water components will complement and support each other, allowing the Region to move forward with recycled water provisions that will help reduce potential conflicts associated with state-mandated conservation requirements set forth in Senate Bill x7-7. Further, the cooperative inter-agency coordination required for this project will help to reduce potential conflicts that could otherwise arise between the agencies if they were to implement separate, segregated recycled water systems.

*Turf Replacement and Agricultural Irrigation Efficiency Program:* This program will help make conversion to water-efficient landscaping and irrigation more affordable for both urban and agricultural water users. This will reduce future conflict over water prices between customer groups, as well as reduce conflict between customers and agencies, by reducing the amount of water used by customers. This program also opens up communication between agencies and customers, which can help build understanding between the two, and reduce future conflicts.

*Rural DAC Partnership Program:* There is a critical need for safe drinking water and wastewater infrastructure in rural DACs in the Region. This program will benefit numerous DACs throughout the Region by implementing projects that will solve critical water supply or water quality needs. These efforts will help reduce jurisdictional conflicts, as well as address potential environmental justice issues and help resolve water-related conflicts between DACs and other communities. DAC projects will be selected by a stakeholder committee, which will allow opportunities for projects to be carefully considered and vetted through interested parties. This comprehensive stakeholder approach will further reduce conflicts by reducing the potential for competing plans and projects.

*Failsafe Potable Reuse at the Advanced Water Purification Facility:* This project brings together experts to develop comprehensive information to support the potential future implementation of failsafe potable reuse. By bringing experts together, competing theories can be tested and conflicting ideas resolved. This project supports water reuse efforts, and will contribute towards future ability to maximize water reuse in the Region and the State. This will reduce water-related conflicts regionally and potentially state-wide.

*Sustaining Healthy Tributaries to the Upper San Diego River:* This project is predicated on the idea that a small investment now will reduce costs associated with continued creek degradation in the future. In so doing, this project will protect the water quality and capacity of an important local water supply. Continued protection of this local water supply will reduce future conflict over a potential for an increase in imported

water (due to reduced reservoir capacity) or potential increase in treatment costs to address water quality concerns.

*Chollas Creek Integration Project – Phase II:* This project will improve water quality, reduce flooding, and preserve open green space and habitat for the neighborhood surrounding Chollas Creek. This project involves a multitude of partners, and will therefore help resolve potentially conflicting interests by bringing interested parties together to implement activities associated with Chollas Creek. In addition, this project will address conflicts relating to water quality by effectively reducing sources of pollutants and environmental stressors.

*Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II:* Phase I of this project is currently evaluating nutrient Water Quality Objectives (WQOs) for the Santa Margarita River Estuary and now Phase II aims to establish nutrient WQOs for the entire watershed. Phase I and Phase II efforts will ultimately lead to the implementation of nutrient reduction and water conservation practices in the watershed. This project will address water quality concerns between San Diego and Riverside Counties and avoid jurisdictional interests by bringing the two counties together to achieve project goals. Due to its watershed-level scale, this project will resolve conflicts by complementing existing plans. This project will also resolve water quality-related conflicts by developing nutrient WQOs that will help reduce sources of pollutants and other environmental stressors associated with runoff.

#### **Program Preference 4: 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:* to invest in projects that improve the State's water quality from source to tap.
- *Water Supply:* comprised of five critical elements: conveyance, storage, environmental water account, water use efficiency and water transfer.
- *Ecosystem Restoration:* aims at restoring habitats, ecosystem functions, and native species.
- *Levee Integrity:* to protect water supplies by reducing the threat of levee failures.

As described below, three projects meet three of the four CALFED Bay-Delta Program objectives: water quality, water supply, and ecosystem restoration. Due to the degree of analysis performed on these projects, it is **fully certain** that this proposal will meet the Program Preference of contributing to attainment of one or more of the objectives of the CALFED Bay-Delta Program (on a statewide level).

#### *North San Diego County Regional Recycled Water Project – Phase II*

- *Water Supply:* By integrating recycled water components of ten different agencies and working cooperatively, this project will allow for additional production and use of recycled water supply in the Region. Increasing recycled water use will help achieve water use efficiency objectives set forth by CALFED and thereby reduce demands for imported Bay-Delta water supply.
- *Ecosystem Restoration:* By reducing dependence on Bay-Delta water supplies, this project will help to protect and improve the Bay-Delta ecosystem.

#### *Turf Replacement and Agricultural Irrigation Efficiency Program*

- *Water Supply:* This project will increase water use efficiency by reducing the amount of water used for irrigation in the Region. Therefore, this project will reduce demands for potable water, approximately 80% of which is imported to the Region. As such, the project will reduce the need for water imported from the Bay-Delta system.
- *Ecosystem Restoration:* By reducing demands on Bay-Delta water supplies, this project will help to protect and improve the Bay-Delta ecosystem.

#### *Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility:*

- *Water Supply:* This project will contribute necessary research and testing that will facilitate future water reuse activities on both a regional and a statewide level. This project will therefore support water reuse activities, which can offset demands on imported water and maximize the use of local water supplies.
- *Water Quality:* Imported water is high in salts and nutrients, so reducing need for imported water will improve water quality in the Region's reservoirs and aquifers.

- *Ecosystem Restoration*: By reducing dependence on Bay-Delta water supplies, this project will help to protect and improve the Bay-Delta ecosystem.

#### **Program Preference 5: Address Critical Water Supply or Water Quality Needs of DACs**

DWR specifies that preference will be given to proposals that include projects that will include safe drinking water and water quality projects that serve DACs. One of the projects included in this proposal directly addresses critical water supply or water quality needs of DACs within the Region. Due to the degree of analysis performed on this project, it is **fully certain** that this proposal will meet the Program Preference of addressing critical water supply or water quality needs of DACs within the Region (on a regional level).

*Rural DAC Partnership Program*: This project will address inadequate water supply and water quality affecting rural DACs, including tribal communities. The project will reduce potential for high public health risks in water and/or wastewater systems specifically for DACs through the implementation of projects that will solve these critical issues.

#### **Projects that Indirectly Address DAC Needs**

Though the *Rural DAC Partnership Program* is the only project that meets DWR's criteria for directly addressing a critical water supply or water quality need of DACs, five of the other six projects will benefit the DACs within their project area in other ways. Refer to Figure 10-1 to see where DACs occur within the project areas. These projects include:

*North San Diego County Regional Recycled Water Project – Phase II*: This project will maximize recycled water use in the North San Diego County Region, which includes DACs. This will reduce dependence on imported water, and potentially prevent significant water cost increases in the future.

*Turf Replacement and Agricultural Irrigation Efficiency Program*: This program will encompass the Water Authority's service area, benefitting DACs throughout the Region by reducing dependence on imported water and reducing costs associated with outdoor water use through conservation and water recycling. Additionally, users living in DACs within the Region are eligible to participate in the program and reap the direct benefits of implementing water conservation measures.

*Failsafe Potable Reuse at the Advanced Water Purification Facility*: This project has regional and statewide benefits, and will therefore indirectly benefit all DACs within the Region and the state. This project will provide the basis for potential failsafe potable reuse, maximize water reuse opportunities in the state, and potentially decrease future water costs to users, including DACs.

*Chollas Creek Integration Project – Phase II*: This project will include creek restoration, pollution prevention, and flood protection activities in and around Chollas Creek, which is adjacent to the Encanto neighborhood of San Diego, an urban DAC. While this project does not address critical water quality or water supply needs of a DAC, it will provide direct benefits to an urban DAC and address priority needs associated with flooding and water quality in Chollas Creek.

*Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II*: A significant portion of the Santa Margarita River Watershed is made up of DACs, in both San Diego and Riverside Counties. By creating science-based water quality standards, this project may potentially reduce the costs of treating and permitting discharges and other activities in the watershed, while protecting beneficial uses of the watershed.

#### **Program Preference 6: Effectively Integrate Water Management with Land Use Planning**

Many of the land use plans and regulations of land use agencies within the Region are consistent with the water management goals, objectives, and strategies included in the San Diego IRWM Plan. Further, two of the projects included in this proposal include land use considerations that will increase overall project benefits by effectively integrating water management with land use planning. Due to the degree of analysis performed on these projects, it is **fully certain** that this proposal will meet the Program Preference of integrating water management with land use planning in the Region (on a regional level).

*Sustaining Healthy Tributaries to the Upper San Diego River*: This project includes restoration activities on Boulder Creek and its associated tributaries, which are hydrologically connected to El Capitan

Reservoir. El Capitan Reservoir is an important component of the Region’s water supply, and is currently impacted by water quality impairments. The project will effectively implement source control components, which will help protect water quality in El Capitan Reservoir by removing hydromodifications and addressing other land use-related concerns that may impact the water quality of El Capitan Reservoir. As such, this project will effectively integrate water management with land use planning by implementing low-cost restoration activities that will benefit the long-term water quality of El Capitan Reservoir.

*Chollas Creek Integration Project – Phase II:* The Phase I portion of this project identified and prioritized location and types of upland and wetland restoration projects in the Pueblo Hydrologic Unit. Phase II of this project will restore native habitat within Chollas Creek by replacing non-native plants with native riparian vegetation, removing debris, and protecting seasonal nesting areas within the creek. Planning for this project considered the growth needs for the DACs in the project area, and the project is designed to help reduce flooding that could damage properties, as well as install plants which will help treat runoff from the community. The activities included in this project effectively integrate water management with land use planning by considering growth needs and land uses adjacent to Chollas Creek that experience direct flood-related impacts.

**Program Preference 7: Address Statewide Priorities**

This proposal will either directly or indirectly address every Statewide Priority established by DWR. Table 9-3 demonstrates which Statewide priorities are addressed by each of the projects included in this proposal. As part of the project prioritization and ranking process, each project submitted to the San Diego IRWM Project Database for consideration in this proposal was evaluated for its consistency with Statewide priorities. As such, based on the level of analysis for each project, it is **fully certain** that each of these projects and the proposal will achieve the Statewide priorities at a regional level (throughout the Region).

**Table 9-3: Proposed Projects and Programs with Statewide Priorities**

| Proposed Projects   | Drought Preparedness | 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 |
|---|----------------------|------------------------------|---------------------------------|----------------------------------|--------------------------------------|--------------------------------------|--|---|
| 1. North San Diego County Regional Recycled Water Project – Phase II                  | ●                    | ●                            | ●                               |                                  |                                      | ○                                    |  | ○   |
| 2. Turf Replacement and Agricultural Irrigation Efficiency Program                    | ●                    | ●                            | ●                               |                                  |                                      |                                      |  | ○   |
| 3. Rural Disadvantaged Community (DAC) Partnership Program                            | ●                    | ●                            |                                 |                                  |                                      | ●                                    | ●                                      | ●   |
| 4. Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility   | ○                    | ●                            |                                 |                                  |                                      | ○                                    |  | ○   |
| 5. Sustaining Healthy Tributaries to the Upper San Diego River                        | ○                    |                              |                                 | ●                                |                                      | ●                                    |  |   |
| 6. Chollas Creek Integration Project – Phase II                                       |                      | ●                            | ●                               | ●                                | ●                                    | ●                                    |  | ●   |
| 7. Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II |                      | ●                            | ○                               | ○                                |                                      | ●                                    |  | ○   |

○ indirectly related; ● directly related

*North San Diego County Regional Recycled Water Project – Phase II*

- *Drought Preparedness:* Maximizing recycled water use through this project will improve landscape and agricultural irrigation efficiencies, promoting water reuse/recycling and water conservation. This project will contribute to long-term drought preparedness by contributing to a more sustainable water supply and increased reliability during water shortages.

- *Reuse Water More Efficiently:* This recycled water project's main goal is to ensure that all recycled water produced in the North County region is efficiently and effectively distributed to and used by North County customers. The partnerships established by this project ensure that water is reused efficiently throughout the North County region, as it will reduce system redundancies and increase infrastructure-sharing between neighboring agencies.
- *Climate Change Response Action:* This project provides greater connectivity and reliability for a non-potable supply. This will help the Region reduce its dependence on imported water supplies and the climate change impacts associated with long-distance water transfers. Expansion of recycled water systems ensures water supply availability and reliability should imported water supplies be reduced due to changing climates.
- *Protect Surface/Groundwater Quality:* This project will indirectly improve surface/groundwater quality conditions by decreasing wastewater discharges and thus curbing the associated effects of pollution.
- *Ensure Equitable Distribution of Benefits:* This project will indirectly contribute to ensuring equitable distribution of benefits by implementing a wide-scale recycled water project. This project will help meet State policies intended to provide affordable water, which will benefit DAC customers served by the project.

#### Turf Replacement and Agricultural Irrigation Efficiency Program

- *Drought Preparedness:* By increasing irrigation efficiency and promoting water conservation, this program reduces overall water demand. Reduced water demand will improve water security in the event of a drought, by reducing water use and the need for imported water, which may become unreliable or increase in price during a drought.
- *Reuse Water More Efficiently:* This program is designed to promote water use efficiency by providing incentives to replace high water-consuming turf with water-efficient landscaping, and for agricultural users to convert to more efficient irrigation equipment.
- *Climate Change Response Actions:* Reducing the amount of potable water used for urban and agricultural irrigation reduces greenhouse gas emissions related to water treatment and imported water supplies.
- *Ensure Equitable Distribution of Benefits:* This program will indirectly contribute to ensuring equitable distribution of benefits by implementing a wide-scale water conservation program that will reduce outdoor water demands and make more water available for other water users, including DACs and Native American Tribes.

#### Rural DAC Partnership Program

- *Drought Preparedness:* Management practices carried out by selected projects will promote water conservation, reuse, and recycling, which all effectively address long-term drought preparedness. Further, projects implemented through this program will potentially provide water supply infrastructure that will increase water supply reliability in DACs, making these areas less susceptible to water supply shortages that could otherwise occur during a drought.
- *Reuse Water More Efficiently:* Projects that address conservation of groundwater and surface water supplies, water reuse and/or regionalization will be priorities during rural DAC project selection. Efficient use of finite water supplies and energy resources will be incorporated into DAC projects when appropriate and affordable.
- *Protect Surface/Groundwater Quality:* The goal of the program is to provide funding to DACs to address inadequate water supply and water quality issues. As such, this program will likely include activities to protect and restore water quality to safeguard public health.
- *Improve Tribal Water/Natural Resources:* RCAC will manage the grant funds to address inadequate water supply and water quality in rural DACs, including tribal communities. RCAC has also created a 'Green Infrastructure Guide' for DACs (including tribal communities) with the intent of limiting pollution and environmental stressors due to aging infrastructure. Using this and other reputable guidance during project development will help assure that new infrastructure supports environmentally sound and efficient projects that will better sustain water and natural resources.

- *Ensure Equitable Distribution of Benefits:* This project will give rural DACs within the San Diego IRWM Region an opportunity to submit projects, thereby ensuring equitability in the IRWM process. Project selection will select projects depending on how well they address public health risks in water and or wastewater systems; the projects will undoubtedly solve safe drinking water needs, water quality and water supply needs of Tribes and DACs within the Region, thereby ensuring equitable distribution of program-related benefits.

#### *Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility*

- *Drought Preparedness:* By providing robust scientific data on failsafe potable reuse, this project will play an important role in the potential approval process by the State for future potable reuse facilities that will maximize the reuse of water across the State. Maximizing water reuse will reduce dependence on imported water, and increase local water supplies, therefore increasing the drought tolerance.
- *Reuse Water More Efficiently:* This project will provide data for potential future failsafe potable reuse projects throughout the State. Failsafe potable reuse is an important future technology in water recycling, which will ensure that water is reused as efficiently as possible and reduce water that is essentially wasted through ocean discharges.
- *Protect Surface/Groundwater Quality:* Treated water produced at the Advanced Water Purification Demonstration Facility is of higher quality than imported water. Using this water instead of imported water for recharge and in local reservoirs will improve the water quality of the Region's reservoirs and aquifers.
- *Ensure Equitable Distribution of Benefits:* This project will indirectly contribute to ensuring equitable distribution of benefits by implementing a wide-scale recycled water project. This project will help meet State policies intended to provide affordable water, which will benefit DAC customers served by the project.

#### *Sustaining Healthy Tributaries to the Upper San Diego River*

- *Drought Preparedness:* Restoration of Boulder Creek will reduce sedimentation in El Capitan Reservoir. By reducing sedimentation, this project will maintain the capacity of the reservoir, providing for more water storage in the event of a drought.
- *Expand Environmental Stewardship:* This project relies heavily on volunteer participation in restoration activities, which will serve as a way to expand environmental stewardship in the community. This project also includes important research and data collection efforts that will help establish baseline conditions against which the health of the entire San Diego River Watershed can be assessed.
- *Protect Surface/Groundwater Quality:* Restoration activities in this project will serve to protect water quality in Boulder Creek and the El Capitan Reservoir. It will also collect data important to assessing water quality issues and needs in other tributaries within the San Diego River Watershed.

#### *Chollas Creek Integration Project – Phase II*

- *Reuse Water More Efficiently:* This project will implement water improvement strategies that will help solve issues regarding the capture and treatment of stormwater runoff. These strategies may contribute to long term water supply conservation and reliability coming from Chollas Creek.
- *Climate Change Response Action:* Modifications made to the creek will help stabilize banks and reduce flooding. This will serve to protect the creek and surrounding communities from potential extreme weather events due to climate change.
- *Expand Environmental Stewardship:* The project utilizes a stakeholder-driven process to implement a conceptual watershed management work plan, prioritize restoration and maintenance needs, develop funding strategies, and institutionalize community-based water and habitat conservation and stewardship. It will train and utilize local students to monitoring, testing, and restoration activities, in the process educating them about watershed management and environmental stewardship.
- *Practice Integrated Flood Management:* Through structural modifications and habitat restoration, this project will reduce flooding caused by channelization, soil erosion/sedimentation, and dumping of trash and construction debris into Chollas Creek.

- *Protect Surface/Groundwater Quality:* This project will restore native vegetation, make structural modifications, and clean up sections of Chollas Creek through removal of homeless encampments and debris. These activities will reduce sedimentation and pollution in the creek, helping to improve and protect water quality.
- *Ensure Equitable Distribution of Benefits:* This project will implement measures for water quality, flood control, habitat restoration and open space. The distribution of the program's benefits will be equally beneficial to the citizens of the Chollas Creek and Encanto areas, which are largely economically disadvantaged.

*Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II*

- *Reuse Water More Efficiently:* Through implementation of irrigation optimization and best management practices to reduce nutrient runoff from wet and dry weather sources, this project will eventually improve water conservation and recycling allowing for efficient use of a diverse mix of water resources.
- *Climate Change Response Action:* The project will result in the reduction of stressors to native stream and estuarine flora and fauna, which decreases their susceptibility to stressors associated with long-term climate change.
- *Protect Surface/Groundwater Quality:* This project will develop nutrient WQOs that will help reduce sources of pollutants, specifically nutrients, and other environmental stressors associated with point and non-point source runoff that discharge into surface waters.
- *Ensure Equitable Distribution of Benefits:* This project will indirectly contribute to ensuring equitable distribution of benefits by implementing a wide-scale project to improve the quality and management of the Santa Margarita River Watershed. This project will benefit all residents within the Santa Margarita River Watershed, which includes many DACs.