Attachment 9

Program Preferences

**Santa Ana One Water One Watershed IRWM Prop 84,
Round 2 Implementation Proposals**

Program Preferences

1. Regional Projects or Programs

One of the principles applied during the development of the One Water, One Watershed (OWOW) Plan was the idea that the Santa Ana River Watershed be viewed as a holistic system where activities in one geographic area or undertaken within one functional discipline, such as flood control or water supply, would have a distinct influence elsewhere in the system. In order to solve problems in a cost-effective manner, it was necessary to develop regional projects or programs that addressed the Watershed in a systematic manner. In order to encourage a regional approach, projects considered for funding for this portfolio were scored on the number of partnerships established as one of the selection criteria. The Steering Committee determined that a regional approach could be encouraged in this manner and this resulting project portfolio addresses regional problems based around three general themes.

First, nine projects that address use of recycled water or captured stormwater for groundwater recharge in the watershed were selected. These projects will allow the watershed as a whole to develop more reliable local water supply. Secondly, seven projects were selected that addressed salt removal in the watershed. As more than 60% of the water resources in the Santa Ana Watershed are dependent on groundwater. Planning and developing the infrastructure that restores water from impaired basins is paramount. Finally, three flood control/ habitat projects were selected. These projects support the increased flexibility now demanded of our flood system, a system that provides adequate protection of life and property while providing water quality and habitat benefits. The water quality benefits accrue to all downstream interests and the flood system in the Santa Ana Watershed provides important habitat corridors among all of the major open space areas in the region.

2. Integrate Water Management Programs and Projects within a Hydrologic Region

The planning area for the OWOW program consists of the entire Santa Ana subregion as identified by the Department of Water Resources. These boundaries correspond to the jurisdiction of the Santa Ana Regional Water Quality Control Board.

Projects selected for this portfolio were selected using objective project criteria developed by the OWOW Steering Committee to implement the OWOW plan. The Steering Committee selected a portfolio of projects that would provide a maximum regional benefit with the available funds for the first round of project implementation. Projects were selected to develop water supply in Orange County through increased recycling and groundwater recharge, develop supply from degraded groundwater basins in Orange, Riverside and San Bernardino Counties while improving groundwater quality and to improve surface water quality through the development of improved flood and treatment wetlands in Orange, Riverside and San Bernardino Counties.

The Steering Committee project selection process was contingent upon 1) providing the maximum number of project benefits possible and 2) providing those benefits to the greatest geographic area possible.

3. Resolve Water-Related Conflicts within or between Regions

Seven of the projects listed in this portfolio directly resolve water-related conflicts within or between regions. These projects work towards resolving water related conflicts through groundwater recharge using stormwater and groundwater cleanup methods. With increased local supply, more flows are available to those downstream. In addition, the development of the OWOW plan and the subsequent consideration of projects for implementation identified potential issues related to surface water flows between the upper and lower basins as the result of increased water recycling. As a result, SAWPA completed initial studies looking at the impacts of water recycling projects on surface water flows available for use downstream. These initial studies will form the basis of a detailed analysis that will be part of the next OWOW plan update.

4. Contribute to Attainment of CALFED Bay-Delta Program Objectives

One of the core program goals of the CALFED Bay-Delta Program is the Water Supply Reliability Program. This program seeks to reduce the mismatch between Delta water supplies, and current and projected beneficial uses dependent upon the

Bay-Delta system. The OWOW plan is consistent with this objective as it envisions new term reliability issues with Bay-Delta water deliveries and the possibility of reduced deliveries in the future.

The nine projects that will enhance the use of recycled water and captured stormwater will provide direct groundwater recharge benefits. These projects will directly offset imported water demands in the watershed and thereby reduce the need to import water from the Bay-Delta.

Eight projects allow the use of or facilitate the movement of water derived from lower quality water sources. By improving the quality and allowing the use of groundwater resources that currently do not meet drinking water standards local sources not currently available can directly offset the need for Bay-Delta imports. Specifically, the Perris Desalination Program - Brackish Water Wells 94, 95 and 96, Corona/Home Gardens Well Rehabilitation and Multi-Jurisdictional Water Transmission Line Project in addition to seven others allow clean-up and use of water from degraded groundwater basins. The Wineville Regional Recycled Water Pipeline and Groundwater Recharge System Upgrades project allows for more efficient transfer of desalted water. Water quality and supply development from basins with a legacy of salt contamination is dependent upon disposal of brine produced as a by-product of desalting.

Several of the flood control and habitat projects also provide secondary water supply benefits as they provide recharge to the groundwater basins rather than transferring water to the ocean before it can be used.

5. Address Water Supply or Water Quality Needs of Disadvantaged Communities in the Region

Eleven of the projects within this project portfolio provide some benefits to disadvantaged communities with one (Quail Valley) wholly providing benefit to a disadvantaged community. One of the projects provided a sewer system to replace approximately 150 failing septic systems. Another increases the effectiveness of a waste water treatment plant that directly increases local water quality and the opportunity for recycled water. Benefits are also provided by nine other projects. These projects are all groundwater recharge, ecosystem restoration and water quality improvement projects. These projects remove approximately 15,600 kg of salt from the watershed in addition to capturing 23,500 AF of high quality stormwater available for groundwater recharge. In addition, The Perris Desalination Program is expected to desalinate 2,900 AF of brackish groundwater.

6. Integrate Water Management with Land Use Planning

The flood projects within this portfolio most closely link water management with land use planning. The flood system, including the Santa Ana River, provides multiple regional benefits and the proposed projects within this portfolio enhance those benefits. In re-purposing the flood system to provide additional benefits, the flood levees have supported a regional trail system, including the Santa Ana River Trail and Parkway. This trail planned and built in conjunction with flood control agencies, provides an important recreation and transportation linkage across the watershed. Portions of the easement and access roads created as part of the Inland Empire Brine Line project will later be used to support this trail system.

Throughout the watershed, protection and enhancement of habitat for threatened and endangered species occurs within the flood system. The recovery of the least Bell's Vireo, an endangered bird species, from less than 50 breeding pairs within the watershed primarily occurred within flood control easements. The flood projects within this portfolio improve upon those successes by incorporating opportunities for habitat into the design and also providing in some cases, educational opportunities for the public. One project, the Wilson III Basin incorporates a recharge area that will also function to preserve the native habitat of the area and function as a passive park for the community with walking trails, boulders, seat walls and educational signage at kiosk locations.

7. Stormwater Flood Management Project Benefits

Nine of the eighteen projects in the OWOW project portfolio specifically address flood management within in the region. The link between flood plain management and the development of additional local water supply is an important concept discussed in the OWOW plan. Initially, the flood control system was developed to quickly move flood waters out of the region to the ocean. A flood system with the single major function of protecting life and property often depends on concrete-lined channels with vertical walls. There is little opportunity to put the stormwater to additional beneficial use in such a system.

Fortunately, much of the flood system of the Santa Ana River Watershed is soft-bottomed and the flood system can provide additional benefits, including water quality, habitat and supply benefits. The mainstream of the Santa Ana River is about

80% soft-bottomed and in some reaches significant groundwater recharge occurs. A flood system that retains water for longer periods, at a minimum, provides significant regional benefit.

All of the flood projects provide multiple regional benefits, including water quality benefits, ecosystem enhancements, reductions in in-stream erosion and sediment transfer, and provide for additional groundwater recharge, either by providing in-basin recharge opportunities or by holding peak flows so that they can be recharged or otherwise put to beneficial use downstream.

Wineville Regional Recycled Water Pipeline and Groundwater Recharge System Upgrades, San Sevaine Ground Water Recharge Basin, Vulcan Pit Flood Control and Aquifer Recharge Project, Wilson III Basins Project and Wilson Basins/Spreading Grounds, Francis Street Storm Drain and Ely Basin Flood Control and Aquifer Recharge Project, Plunge Creek Water Recharge and Habitat Improvement, Prado Basin Sediment Management Demonstration Project, Enhanced Stormwater Capture and Recharge along the Santa Ana River, and the 14th Street Groundwater Recharge and Stormwater Quality Treatment Integration Facility all enhance flood system capacity, improve water quality, and provide additional groundwater recharge opportunities within the region. In addition, the Canyon Lake Hybrid Treatment Project provides increased habitat.

8. Address Statewide Priorities

As part of the project review process, the top rated OWOW projects that were considered ready-to-proceed were reviewed by an independent, expert review panel. One task assigned to the panel was to determine how projects addressed Statewide Priorities. The goal was to select a project portfolio that met Statewide Priorities while meeting other OWOW objectives. This process is discussed in more detail in the workplan. A table summarizing projects and whether they were determined in the review process to meet Statewide Priorities is found below.

Projects Satisfy Statewide Priorities

	Drought Preparedness	Use/Reuse Water more Effectively	Climate Change Response Actions	Expand Environmental Stewardship	Practice Integrated Flood Management	Protects Surface and Groundwater Quality	Improve Tribal Water and Natural Resources	Equitable Distribution of Benefits
Perris Desalination Program - Brackish Water Wells 94, 95 and 96	★	★	★			★		
Quail Valley Subarea 9 Phase 1 Sewer System Project						★		
Forest First - Increase Stormwater Capture and Decrease Sediment Loading through Forest Ecological Restoration								
Wineville Regional Recycled Water Pipeline and Groundwater Recharge System Upgrades	★	★	★	★		★		
Plunge Creek Water Recharge and Habitat Improvement	★	★	★	★		★		
Prado Basin Sediment Management Demonstration Project	★			★	★	★		★
San Sevaine Ground Water Recharge Basin	★	★	★	★		★		
Corona/Home Gardens Well Rehabilitation and Multi-Jurisdictional Water Transmission Line Project	★	★		★				★
Enhanced Stormwater Capture and Recharge along the Santa Ana River	★		★			★		★
Regional Residential Landscape Retrofit Program	★	★	★			★		
Canyon Lake Hybrid Treatment Process								
14th Street Groundwater Recharge and Storm Water Quality Treatment Integration Facility	★	★	★	★	★	★		★
Customer Handbook to Using Water Efficiently in the Landscape	★		★					★
Vulcan Pit Flood Control and Aquifer Recharge Project	★	★	★		★	★		★
Francis Street Storm Drain and Ely Basin Flood Control and Aquifer Recharge Project	★	★	★		★	★		★
Commercial/Industrial/Institutional Performance-Based Water Use Efficiency Program	★	★	★	★				★
Peters Canyon Channel Water Capture and Reuse Pipeline		★				★		
Soboba Band of Luiseño Indians Wastewater Project								
Recycled Water Project Phase I (Arlington-Central Avenue Pipeline)	★	★	★	★				★
Wilson III Basins Project and Wilson Basins/Spreading Grounds	★	★	★		★	★		★