

5.2 California Water Plan Resource Management Strategies



With the development of integrated watershed planning, multi-benefit, multi-purpose projects have moved to the forefront and have become one of the primary goals of the One Water One Watershed (OWOW) progression. The idea of meeting a number of community necessities with a single project is not new; however, specialization within agencies that deal with water has often moved these project types to the backburner. Efforts in the past primarily focused on single purpose projects; the additional effort required to develop multi-objective solutions have made true multi-benefit projects relatively uncommon. The best way to create multi-beneficial projects and to encourage diversification of water management approaches to mitigate uncertain future circumstances is the application of Resource Management Strategies (RMS).

RMS are set standards that encourage the diversification of water management approach as a way to mitigate for uncertain future circumstances. Integrated regional strategies were encouraged for the management of water resources and to provide funding, through competitive grants, for projects that protect communities from drought, protect and improve water quality, and improve local water security by reducing dependence on imported water. These standards are met through the application of the OWOW 2.0 Plan with the creation and implementation of the Pillars. Listed below are the RMSs defined by the California Water Plan Update 2009.

Table 5.2-1 CA Water Plan Update 2009 Resource Management Strategies

CA Water Plan Update 2009 Resource Management Strategies	
<ul style="list-style-type: none"> • Agricultural Water Use Efficiency • Urban Water Use Efficiency • Crop Idling for Water Transfers • Irrigated Land Retirement • Conveyance – Delta • Conveyance – Regional/Local • System Reoperation • Water Transfers • Flood Risk Management • Agricultural Lands Stewardship • Economic Incentives (Loans, Grants and Water Pricing) • Ecosystem Restoration • Forest Management • Recharge Area Protection • Watershed Management 	<ul style="list-style-type: none"> • Conjunctive Management & Groundwater Storage • Desalination • Precipitation Enhancement • Recycled Municipal Water • Surface Storage – CALFED • Surface Storage – Regional/Local • Drinking Water Treatment and Distribution • Groundwater Remediation/Aquifer Remediation • Land Use Planning and Management • Matching Quality to Use • Pollution Prevention • Salt and Salinity Management • Urban Runoff Management • Water-Dependent Recreation

Consideration when Implementing RMS

For the development of the OWOW 2.0 Plan, multiple RMS were considered relative to the new IRWM Plan 2013 objectives and the RMS listed in the California Water Plan Update 2009 (DWR, 2009). The purpose of reviewing these management strategies was to identify which ones will help achieve the OWOW 2.0 Plan objectives through project or program implementation within the Santa Ana River Watershed. When choosing specific RMS that are met by the OWOW 2.0 Plan, it is important to remain cognitive of contributing factors that may be problematic. As defined by the California Water Plan 2013 updates, climate change tends to be a reoccurring problematic factor. Climate change is expected to impact water use, as rising temperatures will result in higher evapotranspiration and higher water use requirements. The effects of climate change must be evaluated when implementing specific RMSs (Listed on **Table 5.2-1**); with particular note of the following:

- Concerns over groundwater impacts, overdraft, and loss of recharge
- Increase in the vulnerability of trees and vegetation and burn area susceptibility
- Unpredictability of changing climate

All of these issues were taken into consideration when developing the OWOW 2.0 and yet the Integrated Regional Water Management (IRWM) is still capable of implementing RMS defined by the guidelines.

Implementation of RMS

Implementation of RMS is an important objective met and influenced by the OWOW Plan. Within the OWOW 2.0 Plan, these RMS, as defined by the guidelines of Proposition 84 and 1E, meet the standard of a project, program, or policy that help local and government agencies involved in water management. The OWOW 2.0 Plan was developed for the implementation of multi-beneficial projects, programs, and policies throughout the watershed.

This implementation of the CWP 2009 Update RMS has encouraged water agencies within the watershed to adopt new strategies for a sustainable watershed. To assure that these RMS for the OWOW Plan are comprehensive and fully reflect as many of the resource management strategies as possible, as defined in the California Water Plan Update 2009 and guidelines, the OWOW Plan Pillars are largely aligned with the resource management strategies identified in the Proposition 84 Guidelines.

The following California Water Plan Update 2009 Resource Management Strategies are met in the OWOW Plan and can be seen in [Table 5.2-2](#).

Table 5.2-2 RMS and Pillar Group Relationship

Pillar	Resource Management Strategy	Management Goal
Natural Stewardship	Agricultural Lands Stewardship	Practice Resource Stewardship
	Ecosystem Restoration	
	Recharge Area Protection	
	Water-Dependent Recreation	
Water Use Efficiency	Forest Management	Reduce Water Demand
	Agricultural Water Use Efficiency	
Water Resource Optimization	Urban Water Use Efficiency	Increase Water Supply
	Conjunctive Management and Groundwater Storage	
	Recycled Municipal Water Conveyance – Regional/Local System Reoperation	
	Water Transfers	
Beneficial Use Assurance	Desalination	Increase Water Supply
	Groundwater Remediation/Aquifer Remediation	
	Matching Water Quality to Use	Improve Water Quality
	Pollution Prevention	
	Salt and Salinity Management	
Urban Runoff Management	Improve Flood Management	
Stormwater: Resource and Risk Management		
Stormwater: Resource and Risk Management	Flood Risk Management	Practice Resource
	Recharge Area Protection	

		Stewardship
Government Partnership	Economic Incentives	Fund Procurement
Energy and Environmental Impact	Ecosystem Restoration Pollution Prevention	Reduce Pollutants
Land Use and Water Planning	Agricultural Water Use Efficiency Pollution Prevention Recharge Area Protection Land Use Planning and Management	Increase Water Supply Improve Water Quality Practice Resource Stewardship

The following RMSs were not applicable to the Santa Ana River Watershed or were not considered as effective practices within our watershed:

CA Water Plan Update 2009 Resource Management Strategies	
<ul style="list-style-type: none"> • Crop Idling for Water Transfers • Irrigated Land Retirement • Conveyance – Delta 	<ul style="list-style-type: none"> • Precipitation Enhancement • Surface Storage – CALFED • Surface Storage – Regional/Local • Drinking Water Treatment and Distribution

Integration of RMS

As shown in the table above, it is apparent that the relationship between the Pillars described in OWOW 2.0 and the RMS in the guidelines, correlate with each other to accomplish set OWOW 2.0 objectives. These objectives benefit both local and government agencies located within the watershed. Integration is a key aspect of this relationship; obtaining strategies and putting them together produce multi-beneficial results throughout the watershed.

It is the intent of OWOW 2.0 to facilitate the formation of multi-agency partnerships of local and governmental agencies; this is described in more detail within **Chapter 5.12 Government Alliance**.

The development of multi-benefit projects, through the implementation of resource management strategies, will remain challenging and require sustained effort by agencies that manage water. There are approximately 100 agencies that manage water in some way, and OWOW 2.0 endeavors to bring them all together to create and achieve regional and inter-regional goals. Agencies and non-profits organizations in the watershed through the OWOW will need to eventually prioritize collaborative projects and provide the staff resources to ensure that such projects are implemented in order to achieve the implementation of resource management strategies.