

# **Attachment 13**

## **IRWM Plan – Reduce Delta Water Dependence**



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### Reduce dependence of the Sacramento- San Joaquin Delta

One of the core visions of the One Water One Watershed (OWOW) plan is to have a sustainable Santa Ana River Watershed. A sustainable watershed is contingent upon living with our water means and adjusting to changing conditions, especially those relative to Delta reliability. Strategies were developed throughout the OWOW plan to make the region less dependent on water sources elsewhere and more dependent on local water sources.

Chapter 5.1, Water Supply Reliability of the OWOW plan discusses a number of planning scenarios and broad-based strategies for reducing dependence on Sacramento- San Joaquin Delta Water supplies. Uncertainties in the Delta were considered in detailed scenarios, among other factors, relative to estimated supply needs in the region. The following table from the One Water One Watershed Water supply reliability chapter summarizes water management strategies to respond to these uncertainties and how they may be implemented to specifically benefit the region

Table 5.1-10 summarizes the estimated benefits of the various management strategies developed in the OWOW process. In those cases where there is not enough information to adequately quantify the benefit; it has been labeled “more investigation”.

**Table 5.1-10 Summary of Water Management Strategies and Estimated Benefits**

No.	Strategy (in no particular order)	Estimated Benefit (AFY)
1	Comply with 20% reduction by 2020	9,700
2	Increase water use efficiency	17,100
3	Reduce Evapotranspiration	More Investigation
4	Base load off imported water	More Investigation
5	Construct delta conveyance facility	More Investigation
6	Capture more storm water	27,200
7	Recycle wastewater flowing to the ocean	19,000
8	Recycle the Inland Empire Brine Line Effluent	More Investigation
9	Import recycled water from outside the watershed	More Investigation
10	Ocean desalination	More Investigation
11	Recover tainted groundwater basins	2,900
12	Increase storage (surface/groundwater)	More Investigation
13	Water banking (outside the watershed) emergency measures	More Investigation
14	Emergency Measures	Preparation for catastrophic event
	<b>TOTAL</b>	<b>75,900</b>

Most of the strategies listed are self-explanatory; however the concept of “Base-Loading” may require additional elaboration. When water supply is available from the Delta and other sources, the idea is that the water be imported

into the region and stored in groundwater basins for use in years when it is not available. This strategy is contrary to that employed by many water agencies that purchase water when supplies are scarce. In this scenario, water is transferred when water supplies are readily available and not purchased when they may be used elsewhere for consumptive or environmental purposes.

### One Water One Watershed Project Portfolio

The portfolio of projects primarily advances the following strategies from the water supply analysis: 6) capture more storm water; 7) recycle wastewater flowing to the ocean, and 11) recover tainted groundwater basins. Nine projects increase our ability to capture and reuse storm water by making improvements or modifications to the flood system. Six projects encourage using the water we already have more wisely, contributing to the 20 by 2020 goal of water use reduction. Nine projects also capture wastewater flows and make the recycled water available for use. And one project recovers water from a tainted groundwater basin while improving the quality of the basin. These projects are discussed in detail in the individual project workplan.

### Project Ranking and Delta Water Imports

The close relationship between projects selected in this portfolio and the water supply strategies is not surprising. The table below summarizes the criteria used in ranking OWOW projects and in selecting projects for this portfolio. This table is from Chapter 7, Project Evaluation and Prioritization. The first of the criteria specifically states “reduction in imported water use.... Of all the criteria used in project ranking by the OWOW Steering Committee this was weighted the highest, or most important of the project criteria.

**Table 7-1 Ranking Criteria and Performance Measures**

Project evaluation criteria	Performance measures	Performance Measure Units
1. Provide water supply benefits	Reduction in imported water use from recycling, desalination, storm water use, water transfers, surface water storage, groundwater storage and/or any other new source of water	AFY
	Percentage of project area implementing water use efficiency or conservation best management practices	%
2. Provide restoration and flood management benefits	New or restored habitat area, and flood plain protected	Acres
3. Provide water quality and salt management benefits	Volume of water treated	mgd
	Salt or contaminants removed	Tons/year
4. Provide recreational benefits	Area of open space and parks created	Acres
5. Provide benefits and avoid adverse impacts to disadvantaged communities and Native American tribes	Percentage of project benefitting disadvantaged communities	%
	Percentage of project benefitting Native American tribes	%
6. Reduce greenhouse gas emissions from water management activities	Numeric estimates of reductions on greenhouse gas, and actions or project features to accomplish those reductions	1 to 5 Qualitative Score
7. Increase resource-efficient land use and reduce impact on natural	Percentage of project using Low Impact Development or other resource-efficient land use	%

hydrology	Impacts or changes to natural hydrology	1 to 5 Qualitative Score
8. Cost match	Percent of project cost funded and secured from non-state funding	%
9. Cost effectiveness	Standardized unit cost indicator measuring cost per unit of benefit	\$/[unit of benefit]; for example, \$/AFY, \$/mgd, \$/acre
10. Project readiness	Phase of project development	1 to 5 Qualitative Score
11. Increase active participation	Number of Partners	1 to 5 Qualitative Score
	Partners Role or level of participation	1 to 5 Qualitative Score

### Continued Reduction of Dependence on the Sacramento- San Joaquin Delta

SAWPA has received a \$1,000,000 grant from DWR to further the OWOW Plan. This grant has helped us adapt from focusing on traditional water supply reliability approaches which rely on continued imported water deliveries to meet growing water demands in the region, new approaches and planning will be implemented that lead first with a water demand reduction strategy, address the need for a fully functional watershed hydrology, meet water quality requirements and assures a reliable water supply that effectively deals with growing crises of climate change, imported water cutbacks and continued drought conditions. We continue to encourage our member agencies to adopt a new water ethic that focuses on living within our means and living in the environment that nature has given us. Further, expanded outreach will be conducted to reach all stakeholders including Disadvantaged, Environmental Justice and Native American Tribal communities to assist their needs for safe and clean water supply. Due to the grant funding, we are able to collaborate at this level which will result in more cost effective, multi-beneficial and multi-jurisdictional projects that address water resource needs and environmental impacts of the SAWPA IRWM region.