



Watersheds Coalition of Ventura County Proposition 84 IRWMP Implementation Grant Attachment 13 – IRWM Plan - Reduce Delta Water Dependence

Introduction

The Watersheds Coalition of Ventura County (WVCV), as part of the development and implementation of its Integrated Regional Water Management (IRWM) Plan, has clearly demonstrated its commitment to undertake projects that help reduce local dependence on imported water from the Sacramento – San Joaquin Delta (Delta).

The following discussion:

- Provides an introduction and overview to WVCV, describing local and imported water demands within Ventura County.
- Describes water and resource management strategies and specific WVCV projects to reduce imported water demands.
- Describes future IRWM Plan efforts to continue to reduce dependence on imported water.

In addition, this attachment addresses the following requirements from the Proposal Solicitation Package:

- *Identify and include portions of the IRWM Plan that demonstrate it helps reduce dependence on the Sacramento-San Joaquin Delta for water supply.*
- *Provide assurances that any revised or subsequent IRWM Plan will continue to help reduce dependence on the Sacramento-San Joaquin Delta for water supply.*

Overview

The WVCV has built upon more than 35 years of cooperative efforts to manage both local and imported water supplies and maintain and improve water quality within Ventura County.

The WVCV Region

The WVCV Region (Region) generally includes the land within Ventura County and encompasses three major watersheds (Calleguas Creek, Santa Clara River, and

Ventura River), six smaller watersheds, and 26 groundwater basins. The Region includes ten cities, three wholesale water agencies, more than 170 retail water purveyors, two groundwater management agencies, and five sanitary districts. Ventura County has a population of more than 817,000 people and spans an area of 1,199,748 acres. Residential, agricultural, and business uses are located predominantly in the southern portion of the Region, while national forest comprises most of the northern portion. There are 42 miles of coastline (IRWMP p.6).

Agriculture is a \$1.8 billion/year industry within Ventura County. The Calleguas Creek Watershed contains the largest irrigated acreage (about 60,000), followed by the Santa Clara River Watershed (about 50,000) and Ventura River Watershed (about 15,000) (IRWMP p.6).

Water Demand and Imported Water Needs in WVCV

Of the total County water demand of approximately 430,500 acre feet-year (AFY), about 65 percent is supplied from local groundwater sources (IRWMP p.25). Imported water, which is exclusively State Water Project (SWP) water from the Delta (Ventura County receives no Colorado River water), makes up about 25 percent of the water utilized in the County. The balance of the water is from local surface water and recycled water. Conservation efforts and development of alternative water supplies have reduced imported water demand from a high of about 130,000 AFY in 2007 to approximately 104,103 AFY in 2012. However, in many locations, it is necessary to blend imported water with local groundwater supplies to meet water quality standards, and more than 75 percent of the County's population continues to rely on imported water for all or part of its supply (IRWMP p.28).

SWP water used in the Calleguas Creek Watershed and the lower parts of the Santa Clara Watershed is obtained locally by Calleguas Municipal Water District (Calleguas) from the Metropolitan Water District of Southern California (Metropolitan) for delivery to retailers

-serving the southern and eastern portions of the County, including the Cities of Thousand Oaks, Simi Valley, Moorpark, Camarillo, Port Hueneme, Oxnard, and agricultural entities in the Region (IRWMP p.28).

Many retail purveyors in the Calleguas Creek Watershed have no source of potable water other than Calleguas, while others use both imported water and local groundwater. The projects in the IRWM Plan and this Proposal will help the Calleguas Creek Watershed to reduce its dependence on SWP water.

The Santa Clara River Watershed is partially dependent upon imported water from the SWP from Calleguas. The Cities of Oxnard and Port Hueneme receive about 50 percent of their water from Calleguas with local groundwater making up the remainder. Additionally, the United Water Conservation District has been using up to 5,000 AFY of SWP water (obtained directly from the SWP) to recharge groundwater within the Santa Clara River Watershed.

The Ventura River Watershed does not currently receive any SWP water. However, several agencies hold an entitlement for SWP water that they are not currently utilizing. The projects in the IRWM Plan and this Proposal will help prevent agencies in the Ventura River Watershed that are not currently using SWP from calling upon their entitlement.

With the projects in the IRWM Plan and this Proposal, agencies in Ventura County may be able to reduce current SWP usage and decrease future demand for imported water in the Calleguas Creek and Santa Clara Watersheds. By decreasing SWP demand, the water quality, ecosystem quality, and water supply of the Delta can be maintained and improved and adverse impacts prevented.

WCVC IRWM Plan Objectives

The WCVC IRWM Plan includes five objectives that will help address regional water needs and issues. The first objective described in the IRWM Plan specifically aims to reduce dependence on imported water:

“Reduce dependence on imported water and protect, conserve, and augment water supplies.” (IRWM Plan Section 4.1, pg. 66)

This objective is foundational to the WCVC’s IRWM Plan because:

- Local water agencies, especially those served by Calleguas, understand that expanding their water portfolios with local water supply options will increase water supply reliability. Reliable water is a basic need.
- The 2011 SWP Delivery Reliability Report, indicates that environmental water needs and climate change will result in decreases in SWP deliveries from 9 percent to 70 percent of the maximum contract amount over an 82-year simulation period under current conditions. Deliveries are expected to average 61 percent of maximum contract amount under current conditions, but decrease to approximately 35 percent of maximum contract amount over multiple dry years. Anticipated deliveries under future conditions are similar. Therefore, SWP contractors such as Metropolitan cannot rely on the SWP for delivery of maximum contract amounts now or in the future compelling agencies to pursue and expand local water supply projects.
- Metropolitan’s water rates continue to rise. In 2006 the Tier 1 water rate was \$453/AF; in 2013 the Tier 1 water rate is \$847/AF, an increase of 87 percent. Metropolitan is projecting an average rate increase of 5 to 6 percent per year for the next ten years. Development of local water supplies will result in lower costs for ratepayers as compared to Metropolitan’s water rates for imported water.

For the reasons described above, the goal of the IRWM Program to reduce dependence on Delta water is also WCVC’s objective.

WCVC Strategies to Reduce Dependence on Imported Water

When the WCVC IRWM Plan was adopted in 2006, it was subject to the Water Management Strategies (WMS) described in Proposition 50.¹ Within the Region, all of the WMS are being implemented. Since that time, Proposition 84

¹ http://www.water.ca.gov/irwm/docs/Archives/Prop50/Guidelines_PSPs/Round_2_Guidelines_060107_Final.pdf

broadened the water management strategies to resource management strategies (RMS).²

Section 5 of the IRWM Plan describes important WMS implemented in the Region that reduce dependence on, or maintain independence of, imported water, including: water supply reliability, water use efficiency, desalination, water recycling, and conjunctive use. The Updated IRWM Plan will continue to implement these strategies, which are also included in the RMS of the California Water Plan, Update 2009.

Table 13-1 identifies specific IRWM Plan projects that meet specific WMS/RMS relevant to reducing usage of imported water demand.

Water Supply Reliability (Section 5.2.14)

As described in IRWM Plan Section 5.2.14, water agencies are working to diversify the water resources mix to reduce dependence on a single source of supply with the recognition that enhancing local water supplies is essential for a more reliable water portfolio.

“With the variability of surface water and groundwater supplies and potential uncertainty about the availability and cost of imported water, managing the quantity of water in Ventura County is critical. By increasing use of local supplies and reducing dependence on imported water, water supply reliability can be enhanced.” (IRWM Plan section 5.2.1.4, pg. 197)

As a result, most projects included in the IRWMP that contribute to increasing supply reliability, including those listed in Table 13-1, share a common focus on local supply enhancement.

Water Use Efficiency (WUE) (Section 5.2.18)

As recognized in the IRWM Plan:

“Water use efficiency is an important means to improve reliability.” (IRWM Plan section 5.2.18, pg. 198)

Water agencies in Ventura County have a long history of promoting WUE. As discussed in Section 5.2.18 of the IRWM Plan, the Ventura County Regional Urban Landscape Efficiency (VC-RULE) program continues WUE efforts started with the drought of 1976-1977. The first

county-wide WUE program began in 1982 to address both urban and agricultural efficiency. Since then, most of the urban water suppliers in Ventura County have signed the California Urban Water Conservation Council Memorandum of Understanding to implement WUE Best Management Practices. Since these urban water suppliers deliver water to approximately 90 percent of the urbanized users in the County, efficient water use is foundational to reducing the Region’s dependence on imported water use. Efforts across the Region to improve agricultural WUE include the Ventura County Resource Conservation District Mobile Irrigation Efficiency Lab, which provides free irrigation evaluations and recommendations for water and nutrient Best Management Practices.

Desalination (Section 5.2.2 and 5.2.6)

As discussed in Section 5.2.2 of the IRWM Plan, brackish water desalination is considered essential to increasing local supply reliability and reducing dependence on imported water.

“Brackish water desalination solves both reliability and quality goals in the Region. By desalting ground and surface water, salinity is reduced in the watershed for the benefit of all users. At the same time those impaired water resources, once treated, augment local supplies and further insulate the Region from threats to imported water.” (IRWM Plan section 5.2.2, pg. 91)

Much of the local groundwater, especially in the Calleguas Creek and Santa Clara River watersheds, has total dissolved solids levels that limit its use for municipal or agricultural supply without treatment.

² <http://www.water.ca.gov/irwm/guidelines.cfm>

**TABLE 13-1
SELECT WCVI PROJECTS THAT REDUCE DEPENDENCE ON IMPORTED WATER**

Project Type	Project	Applicable WMS/RMS that Reduce Dependence on Imported Water
Water Use Efficiency	City of Port Hueneme – Meter Retrofit Program Ventura County Farm Bureau Agricultural Water Efficiency Surveys – BMP Implementation Ventura County Regional Urban Landscape Efficiency (VC-RULE)	<ul style="list-style-type: none"> • Water conservation/Water use efficiency • Water supply reliability • Reduce water demand
Salinity Management/Desalination	Calleguas Regional Salinity Management Pipeline Camrosa Round Mountain Desalter Lower Santa Clara River Basins Salt and Nutrient Management Plan North Pleasant Valley, South Las Posas, Somis, and West Simi Desalters Renewable Water Resource Management Program for the Southern Reaches of Calleguas Creek Watershed	<ul style="list-style-type: none"> • Desalination • Salt and salinity management • Groundwater management • Conjunctive use • Water supply reliability • Increase water supply
Recycled Water	CamSan/Camrosa Recycled Water Interconnection Camrosa Expansion of Non-Potable Water System Fillmore Integrated Water Recycling Project Piru Treatment Plant Tertiary Upgrade Simi Valley Regional Recycled Water System Waterworks District 1 Recycled Water System	<ul style="list-style-type: none"> • Recycled municipal water • Groundwater management • Conjunctive use • Water supply reliability • Increase water supply
Groundwater Management / Conjunctive Use	El Rio Forebay Groundwater Contaminant Elimination Project, Phase 7 Las Posas Basin Conjunctive Use Study Oxnard Forebay Groundwater Contaminant Elimination Project, College Park Phase	<ul style="list-style-type: none"> • Groundwater management • Conjunctive use • Water supply reliability • Increase water supply

Note: These are only example projects from the IRWM Plan focused on projects recently implemented or with near-term implementation. Space limitations prevent a full listing of the relevant projects.

One of the integrated, long-range, regional solutions developed for the Calleguas Creek Watershed is construction of the approximately 35-mile Regional Salinity Management Pipeline (SMP), which will provide brine disposal from brackish groundwater treatment facilities. This project is essential to expanding use of local groundwater supplies, thereby reducing dependence on imported water. It is estimated that the pipeline will enable development of up to 40,000 AFY of new local water supplies. This proposal includes a brackish groundwater treatment facility that will utilize the SMP and further the IRWM objective to reduce dependence on imported water.

“A priority of the Calleguas Municipal Water District is to minimize capital facilities projects related to importation of State Water in favor of local reliability projects (i.e. brackish

groundwater treatment, recycling, conservation, etc.)” (IRWM Plan section 5.2.6, pg. 136)

Additional desalination projects are also listed in Table 13-1.

Water Recycling (Section 5.2.13)

Recycled water provides a valuable source of supplemental local water to reduce dependence on Delta water supplies and is recognized in the IRWM Plan as an essential element of a balanced water supply portfolio.

“Recycled water in Ventura County holds great potential as an alternative water source and a means to improve water supply reliability.” (IRWM Plan section 5.2.13, pg. 187).

By making recycled water available for non-potable uses, another drought-proof and constant source of water is created for some users. In addition, other potable supplies are

made available for potable purposes. The result is improved use of local supply, increasing water supply reliability and reducing dependence on imported SWP water. (IRWM Plan, section 5.2.14, pg. 199).

As discussed in Section 5.2.13 of the IRWM Plan, many wastewater treatment plants in the County recycle a portion of their effluent. Several others are planning or implementing projects to initiate or expand recycled water, such as the projects proposed as part of the Grant Application. Table 13-1 lists some of these projects, while the IRWM Plan describes other future water recycling projects that will reduce the Region's dependence on imported water.

Conjunctive Use (Section 5.2.1), Groundwater Management (Section 5.2.5)

As described in Section 5.2.1 of the IRWM Plan, Ventura County has extensive conjunctive use facilities, allowing the Region to maximize utility of available water resources. Efforts were initiated in response to the serious concern of seawater intrusion in the 1950's. Currently, conjunctive use is implemented through stormwater recharge, in-lieu deliveries of recycled water, and interbasin transfers.

The Freeman Diversion on the Santa Clara River uses storm flows to recharge the groundwater of the Oxnard Plain. Santa Felicia Dam at Lake Piru, stores surface water for later release into the Santa Clara River, contributing to improved storage and basin management. In addition, the Conejo Creek diversion provides in-lieu surface waters to meet irrigation demands within the areas of severe groundwater overdraft.

Groundwater management is critical for ensuring the long-term sustainability of the County's largest local water resource. Most groundwater basins in the Region either have an existing groundwater management institution or are in the process of developing a groundwater management plan. The Fox Canyon Groundwater Management Agency (FCGMA) and Ojai Basin Groundwater Management Agency (OBGMA) are special act districts with the authority to manage groundwater. The FCGMA manages the coastal basins of the Santa Clara River and Calleguas Watersheds, while the OBGMA manages the Ojai Basin, located in the Ventura River Watershed. Collectively, the FCGMA and OBGMA manage more than half of the groundwater used in the

Region. Outside of the areas managed by the special act districts, local agencies and stakeholders are developing AB 3030 groundwater management plans to ensure sustainable use of the other primary groundwater basins within the Region. Lastly, the Santa Paula Basin, located in the Santa Clara River Watershed, is adjudicated and is managed by a local advisory committee that reports to a judge in accordance with a 1996 judgment.

Future IRWM Plan Efforts to Continue to Reduce Dependence on Imported Water

The WCVI IRWM Plan is currently being updated to conform to the requirements in the 2012 IRWM Guidelines and to reflect recent activities in the Region. The WCVI objective to reduce demand will continue to be central to the IRWM Plan given the Region's ongoing need for imported water, the increasing cost of that water, and its increasingly uncertain reliability.

Water use efficiency, desalination, recycled water, conjunctive use, and groundwater management will continue to be critical strategies in the updated IRWM Plan for increasing local water supply reliability and reducing dependence on imported water. Urban water suppliers in the Region will continue water use efficiency efforts to, in part, meet new per capita demand reduction targets set forth in the water code. The continued progress of the regional Salinity Management Pipeline will allow the Region to greatly expand groundwater desalination and increase use of local resources. The proposed North Pleasant Valley Groundwater Desalter demonstrates the continued implementation of this strategy. Efforts to expand water recycling are ongoing, including implementation of projects such as those in this Proposal.