

Attachment
13

Implementation Grant Proposal
BCSD Arsenic Management Feasibility Study and Well Design
IRWM Plan – Reduce Delta Water Dependence

Attachment 13 consists of the following items:

- ✓ **IRWM Plan – Reduce Delta Water Dependence.** Attachment 13 summarizes the portion of the Antelope Valley Integrated Regional Water Management Plan that addresses how implementation of the Plan will help reduce dependence on the Sacramento-San Joaquin Delta for water supply.

Adopted 2007 IRWM Plan

The adopted 2007 Antelope Valley (AV) Integrated Regional Water Management (IRWM) Plan acknowledges the Region’s reliance on imported water, from the Sacramento-San Joaquin Delta; the need to reduce this reliance and how implementation of the AV IRWM Plan will help meet this need. The following are examples from the adopted 2007 AV IRWM Plan that documents this statement.

Reliance on Imported Supply

(From Section 1.1 Background: p. 1-2): “Water supply for the Antelope Valley Region comes from three primary sources: the State Water Project (SWP), local surface water runoff that is stored in Little Rock Reservoir, and the Antelope Valley Groundwater Basin. The Antelope Valley Region’s SWP contractual Table A Amount is approximately 160,000 acre-feet per year (AFY). With proper treatment, SWP water is generally high quality water well-suited for municipal and industrial (M&I) uses; however, the reliability of the SWP water supply is variable.”

(From Section 1.2.1 Regional Water Management Group: p. 1-5): “AVEK is a wholesale supplier of SWP to the Antelope Valley Region. AVEK’s service area encompasses nearly 2,400 square miles in northern Los Angeles and eastern Kern Counties as well as a small portion of Ventura County. AVEK was granted charter by the State in 1959 and became a SWP contractor in 1962. AVEK is the third largest SWP contracting agency with a current contractual Table A Amount of 141,400 AFY.”

Need to Reduce Reliance on Imported Supply

(From Section 2.4.2: Groundwater p. 2-15): “Reliance on imported water is variable and uncertain. A diversified mix of water resources is needed to increase viability.”

(From Section 3.1.9 Regional Water supply Issues, Needs, Challenges, and Priorities: p. 3-30): “The key issues, needs, challenges, and priorities for the Antelope Valley Region with respect to water supplies include the following, which are discussed in greater detail below:

- Regional reliance on imported water”

(From Section 3.1.9 Regional Water Supply Issues, Needs, Challenges, and Priorities: p. 3-30 – 3-36): “The Antelope Valley Region depends on SWP for approximately 65 percent of its total supply in an average year, approximately 35 percent of its total supply in a multi-dry year, and less than 10 percent of its total supply in a single dry-year. The availability of SWP supply is known to be variable. It fluctuates from year to year depending on precipitation, regulatory restrictions, legislative restrictions, and operational conditions, and is particularly unreliable during dry years. The DWR Reliability Report (2005b) anticipates a minimum delivery of 4 percent of full Table A Amounts for 2005 demand conditions and 5 percent of full Table A Amounts for 2025 demand conditions. The Antelope Valley Region likely cannot meet expected demands without imported water, and the variable nature of the supply presents management challenges to ensure flexibility.”

(From Section 3.1.9.6 Effects of Global Warming: p. 3-41): “Potential impacts of climate change are presented for the SWP and for the Sacramento-San Joaquin Delta, both of which are related to the Antelope Valley Region’s imported water supplies. Since the Antelope Valley Region is reliant on imported SWP supplies as part of its overall supply mix, any reduction or change in the timing of availability of those supplies could have negative impacts on the water supply of the Antelope Valley Region.”

How Plan Will Help Reduce Reliance on Imported Supply

(From Section 3.1.9.3 Limitations of Existing Supply: p. 3-36): “The Antelope Valley Region water agencies have typically relied on imported water and/or groundwater for their water supply needs. Currently, these water supplies are limited by SWP supply fluctuations, groundwater basin overdraft and the need for facility improvements. The water agencies and municipalities are pursuing various alternatives, such as recycled water and recharge programs, to decrease their reliance on imported water and groundwater sources.”

(From Section 4.2 Water Supply Management Objectives and Targets: p. 4-4):

“Objective: Provide reliable water supply to meet the Antelope Valley Region’s expected demand between now and 2035

Given the Antelope Valley Region’s dependence on State Water Project (SWP) water, as discussed in Section 3, all elements of its reliability should be considered. Fluctuations in SWP deliveries due to climatic changes have already been incorporated in the supply and demand comparisons for average, single-dry, and multi-dry year conditions as provided in Section 3. However, impacts to the Antelope Valley Region in the event of an outage or disruption of SWP water due to emergency situations (e.g., a flood, earthquake, power outage, or other disaster) also need to be considered and a response planned. In the event of a temporary loss of SWP for 6 months over the summer, the Antelope Valley Region would be short approximately 371,150 AFY from the normal supply (assumes lost of half of average year 2035 expected SWP supply). The Antelope Valley Region needs to address and identify necessary actions to accommodate for such a loss and to ensure imported water supply; therefore, the following target has been identified.

Target: Demonstrate ability to meet regional water demands without receiving SWP water for 6 months over the summer, by June 2010.”

Implementation of projects included in the Plan and consistent with the objectives and planning targets provided above, would substantially reduce demand for imported and therefore Sacramento-San Joaquin Delta supplies, even with potential population increases in the Region. Several projects that were identified in the 2007 AV IRWM Plan that could help accomplish this are listed below:

Plans and Studies

- Antelope Valley Integrated Urban Water Management Plan
- Antelope Valley Water Resource Study
- Final Facilities Planning Study, Antelope Valley Recycled Water Project

Groundwater Recharge/Banking

- LACWWD 40 Aquifer Storage and Recover (ASR) Project
- Antelope Valley Water Agencies’ Water Bank
- Upper Amargosa Creek Recharge and Channelization Project

Recycled Water

- Groundwater Recharge-Recycled Water Project
- North Los Angeles/Kern County Regional Recycled Water Project

Subsequent (2013) IRWM Plan

Since the adoption of the 2007 AV IRWM Plan, there has been a commitment to implement projects in the Region that will reduce the dependence on imported delta supply. In 2012, the AV IRWM Region committed to updating its 2007 AV IRWM Plan by providing local funding to increase regional self sufficiency. In the recent proposal to update its IRWM Plan, the AV IRWM Region committed \$334,772 in local contributions and in-kind services for that purpose.

As part of the development of the 2013 AV IRWM Plan Update, the goals, objectives and target language were recently reviewed and modified. Although not yet adopted, the RWMG and Regional Stakeholders have already agreed on measurable objectives (with performance measures to track progress) that will further emphasize the region's commitment to reducing its reliance on Delta supplies. The main goal that states this intent is: Protect, enhance, and manage water resources and the other environmental resources for human and natural benefit within the Antelope Valley Region. The associated objective and performance measure that will help to reduce the Region's reliance on Delta water supplies:

- Water Supply Management – Establish a contingency plan to meet water supply needs of the Antelope Valley Region during a plausible disruption of SWP water deliveries.
 - Urban Water Management Plan reporting and water plan documents

Proposition 84 Round 2 Grant Application

In this application for Proposition 84 Implementation Grant, Round 2 funding, the AV IRWM Region is supporting a project that could help reduce reliance on Delta supplies. By applying for grant funding for the *BCSD Arsenic Management Feasibility Study and Well Design* under Round 2 Proposition 84 Implementation Grant Program, the AV IRWM Region is committed to encouraging and increasing regional self-sufficiency.