

Attachment 13-IRWM Plan-Reduce Delta Water Dependence

Background

The Westside Region is principally defined by Cache and Putah Creek, whose watersheds clearly delineate its upper boundaries. While the actual Cache and Putah Creek watersheds only account for a small percentage of the lower land area of the Region, water from the two creeks comprises a significant portion of the water entering the downstream end of the Region and are the key connection between the upper watersheds and the flat valley floor and ultimately the Sacramento River and Sacramento-San Joaquin River Delta.

Direct discharges to the Sacramento River from Cache and Putah Creeks are limited to larger, more significant flood events, which historically had to overtop the broad natural levees adjacent to the River. Cache and Putah Creek water continues to pond but also is managed through a series of facilities that can convey flows to the Sacramento River during high runoff events.

While there are several entities that divert directly from the Sacramento River, the natural constraints of the Cache and Putah Creek's rainfed watersheds sometimes contribute flows to the Sacramento River and Delta under certain high flow conditions. However, Cache and Putah Creeks do not typically flow into the Sacramento River and Delta during dry hydrologic years. The Region is so widespread geographically, that opportunities to reduce dependence on the Delta for Water supply are somewhat limited. Even so, many suppliers conjunctively manage resources to provide increased reliability considering variable hydrologic conditions and source availability. Surface water stored in Lake Berryessa, Indian Valley Reservoir, and Clear Lake, and local groundwater aquifer storage provide means by which the impacts of dry-year diversion curtailments from the Sacramento River can be reduced for certain water users.

Overall, supply and demand are not managed for the Region as a whole, meaning that there is no centralized agency or organization that has water management authority. A number of surface water supply sources (i.e. Solano Project, CVP, SWP, and YCFCWCD) that amount to approximately 70% of water applied in an average year, are diverted directly from watercourses or waterbodies through riparian rights. The remaining 30% of water applied in an average year is extracted from a number of groundwater aquifers according to the choices and behaviors of thousands of independent groundwater pumpers.

Agricultural water use dominates total water use within the Region. Approximately 89% of the Region's water demand (applied water) during an average year is for agricultural uses. Of the agricultural applied water, about 54% or 606,000 AFY is water from the Sacramento Delta. IRWM Plan objectives to improve water use efficiency are included to reduce the Westside Region's dependence on Delta for water supply.

Westside Goals and Objectives to Address Water Use Efficiency

There are several goals and objectives in the IRWMP that discuss water use efficiency, better understanding of watersheds, and improved regional water management-these sections discuss water and natural resources within the Region and how they play a central role in the health and well-being of citizens within the Region. Work towards achieving these goals and objectives will facilitate reducing the Region's dependence on the Sacramento-San Joaquin Delta for water supply.

Goal 3-Improve the collective understanding of watershed characteristics and functions (natural and human induced) within the Region as needed to respond effectively to evolving water resources management challenges and opportunities.

As discussed in the IRWMP, the watersheds within the Region are complex and dynamic. As human activities and water uses have changed. This goal highlights the importance of continuing to learn more about the characteristics and functions of the watersheds in order to respond strategically and skillfully to changes that occur in the future.

Goal 7-Promote reasonable use of water and watershed resources.

Water and natural resources within the Region play a central role in the health and well-being of the citizens within the Region. As populations grow, it becomes increasingly important to use water and natural resources in ways that are sustainable. One way to support sustainability is to avoid wasting water and other natural resources and to continue to implement cost effective conservation and efficiency improvements. Work towards achieving this goal will support reducing the Region's dependence on the Sacramento-San Joaquin Delta for water supply.

Goal 9-Provide reliable water supplies of suitable quality for multiple beneficial uses (e.g. urban, agriculture, environmental, and recreation) within the Region.

As described in the Water Management System Section (3), people within the Region apply water for many different uses to produce a variety of benefits. Providing these water supplies at the desired time, place, quantity, and quality requires (and will continue to require) significant effort and investments in maintaining and improving infrastructure and other systems to conjunctively manage groundwater and surface water which will reduce dry-year dependence on the Sacramento-San Joaquin Delta.

Goal 11-Support improved regional water management through governance throughout the Region that uses science and collaboration to make fair and equitable decisions and investments.

This goal acknowledges the wide array of stakeholders and diverse interests within the Region and commits water managers within the Region to continue to use science and open, fair, and collaborative approaches to managing water resources and making decisions about investments that affect many people.

Objective 11-Meet 20% by 2020 statewide water conservation targets by December 31, 2020.

Water use efficiency is critical to all water agencies, but is particularly important to those agencies that use imported water diverted from the Sacramento River as meeting this objective to be key to reducing the Region’s dependence on the Delta water supply.

Water conservation measured in gallons per capita day as defined by the Water Conservation Act of 2009 and DWR guidance methodologies. Urban Water Management Plans will be used to measure progress. The 2015 interim and 2020 compliance targets for each Urban water suppliers are summarized in the following table:

Urban Water Supplier	Baseline (gpcd)	2015 Interim Target	2020 Compliance Target
City of Vacaville	172	169	166
City of Rio Vista	320		256
City of Davis	203	204	167
City of Dixon	166	168	164
City of West Sacramento	305	275	244
City of Woodland	289	260	231

Note: City of Rio Vista UWMP did not include a 2015 Interim Target.

Water use efficiency is critical to all water agencies but is particularly important to those agencies that use imported water diverted from the Sacramento River, as meeting this objective will be one of the primary means to reducing the Region’s dependence on the Delta for water supply.

Objective 12-Increase adoption of locally cost effective agricultural best management practices (BMPs) throughout the planning period.

This objective will be measured through compliance with Senate Bill SBX7-7, adoption of required efficient water management practices (EWMP) and best management practices. Since agricultural water users can divert up to 600,000 AFY from the Sacramento River, use of EWMPs is critical to reducing the Region’s dependence on the Delta for water supply.

Objective 17-Monitor conditions and improve understanding to support sustainable use of groundwater basins within the Region as an important part of the Region’s water supply throughout the planning period.

This qualitative measurement of this objective will be to understand opportunities to improve the regional water supply portfolio through conjunctive management which support means to potentially reduce dry-year dependence on Delta Water supplies.

In addition, the Westside IRMWP Project Review and Prioritization process (Section 8) includes consideration of Statewide Priorities (PRC Section 75026) of which Use and Reuse of Water More Efficiently is a priority, which results in improving water supply reliability of the Sacramento-San Joaquin Delta. An additional target in our Project Review and Prioritization is meeting the Reasonable Use Focus Area of the Westside IRWM Plan Objectives.

Future project solicitations for the Westside IRWMP Plan will include a specific request to identify the means in which projects will help reduce dependence on the Sacramento-San Joaquin Delta for water supply in accordance with the DWR November 2012 IRWM Guidelines.