

ASSEMBLY SELECT COMMITTEE ON REGIONAL APPROACHES TO ADDRESSING THE STATE'S WATER CRISIS

Wednesday, March 14

SUBJECT: 20x2020 Water Conservation: Are Regions on Track to Success?

Comments of John Woodling, Executive Director, Regional Water Authority

Water Efficiency in the Sacramento Region

Regional Water Authority is a joint powers agency that consists of 22 water providers serving roughly two million people in the metropolitan area of Sacramento, Placer, El Dorado and Yolo Counties. Among other things, RWA was formed to implement a water efficiency program on a regional basis.

As a bit of history, in 2009, we were generally opposed to AB 49 and then SBx7 7, the 20x2020 legislation, for a few key reasons. The standard was applied inequitably, with some of the most populous and water short parts of the state being expected to reduce water use only 5%. The legislation did not fully reflect the diversity of California's regions and the realities of appropriate water efficiency measures in each. Finally, there was no consideration of the concept of local cost effectiveness in the discussion. Ironically, we are now one of the few areas of the state that will fully contribute to the statewide 20% goal.

For us, the short answer to the question "Are regions on track to success?" is Yes. RWA agencies committed both individually and collectively to a 20% reduction by 2020 and the measures necessary to get there in our recent urban water management plans. Baseline water use was calculated by each agency separately, with a resulting regional composite of about 275 GPCD. I believe we are well positioned to achieve the goal of a 20% reduction in per capita use. As a region, we decreased per capita water use 17% from 1999 to 2009, and the trend continues downward. As a specific example, the City of Sacramento, which serves just under half a million people in the region, used 207 GPCD in both 2010 and 2011, compared to 290 in the late 1990's. Since we live in a region with hot, dry summers, landscape irrigation represents more than 60% of our regions residential water use. This is where we're targeting our greatest efforts for improvement, through outreach, education, rebates for turf replacement and irrigation system upgrades, and enforcement of watering schedules.

Our GPCD numbers are often erroneously compared to Los Angeles and San Francisco, but in reality we measure up well with parts of southern California that are similar to the Sacramento region in weather and land use, such as the Inland Empire, with a hotter, drier climate, larger lot sizes, and smaller percentage of multi-family residences than coastal southern California. Unfortunately, option 4 in the law, which was intended to reflect some of the realities of climate and land use, didn't really provide a viable alternative, despite the best efforts of DWR and an urban stakeholder committee.

The Sacramento Region relies on a number of local surface water sources, including the Sacramento American, Bear, and Cosumnes Rivers as well as groundwater basins of the Sacramento Valley. Since we reliably meet our water demands solely from local sources, we generally focus on water use efficiency (using the appropriate amount of water for a given purpose) rather than conservation (using less water as an alternative to developing additional supplies or incurring the economic cost of

shortages). This distinction between conservation and efficiency has been largely overlooked in any statewide discussion. The reality is that in many years the north state is in surplus, while the areas using imported water face a chronic water deficit.

As a result of not facing severe and recurring shortages experienced by other parts of the state, our aggressive water efficiency efforts started later than in some areas, and were focused on resolving the local conflict between water supplies and environmental protections over the long term. The region adopted a Water Forum Agreement in 2000, developed by more than 40 water providers, environmental groups, business and public interests over the course of seven years. This agreement was founded on the co-equal objectives of providing for the protection of the lower American River, which is designated under the federal and state Wild & Scenic Rivers Acts, and providing reliable water supplies for the region's economy to the year 2030. Water conservation was one of the seven elements of the agreement, and the aggressive implementation is demonstrated by the declines seen over the last decade.

We view water efficiency as a part of a comprehensive and integrated water management approach. In addition to aggressive implementation of traditional conservation measures, we're taking other actions to improve water supply reliability and maximize efficiency. Several agencies that provide both water and wastewater service are implementing recycled water programs, which is nearing 10% of their total urban supplies. As an example El Dorado Irrigation District was one of the first in the nation to apply recycled water to residential landscape irrigation. We're also pursuing putting remediated groundwater from contamination plumes to appropriate uses. Over the last 15 years we've invested tens of millions of dollars to develop a regional conjunctive use program to recharge groundwater in wet years, providing for a healthy groundwater basin and improved in-stream flows in dry years.

Understanding unique aspects of the Sacramento region and the complexities of water efficiency is essential to maximizing the benefits we can achieve, understanding the limitations presented by current law, and ensuring good public policy that fits for the entire state. For example:

- How we reduce water use makes a difference to the water system of the state. Our indoor water use, roughly 40% of total, returns to the Delta watershed, so reducing indoor use does not result in any net water gain. Only by reducing consumptive uses, do we make water available for other uses. This is in contrast to areas that use imported water, none of which returns to the Delta watershed.
- Recycled water use is another area in which the legislation didn't reflect realities of our region. Because Sacramento's regional wastewater treatment plant is hydraulically at the bottom of the system, it would be prohibitively expensive to pump recycled water back uphill to serve most of the urban area. There are very real opportunities to provide recycled water for agricultural purposes, offsetting their groundwater use, but this trade-off can't be reflected in reduced urban demand under the 20x2020 requirements. There is clearly a tradeoff, with finite resources, between projects that can improve water efficiency and those that simply "comply with the law."

- Water efficiency measures can have ancillary benefits including reductions in energy use and improvements in water quality. The specific mix of benefits will vary depending on the specific measures and the region in which they are applied. The focus in the legislation only on “gallons saved,” may be counterproductive to maximizing overall benefits for an agency, a region, or the state.
- GPCD is a composite measure that includes commercial, industrial, and institutional uses as well as residential uses. Thus, the makeup of a region’s economic base can be a major driver for per capita water use. Regions with high quality, more affordable water use this economic advantage to draw more water intensive industries. GPCD should never be used to compare the performance of diverse water systems.
- Water conservation programs can be costly - outreach, rebates, and enforcement to influence customer behavior costs money. At the same time, reduced water use reduces revenue. There is a delicate balance between water conservation, revenue, and the realities that Proposition 218 represents for rate increases, which can’t be overlooked.

The Sacramento region also faces some unique challenges to implementing water efficiency measures.

- The public perception of having abundant water – we’re also the city at highest flood risk in the U.S. – makes it more difficult for the average user to fully understand the need for conservation measures. It can be difficult to explain to people that they need to invest simultaneously in significant flood-control improvements and significant water conservation programs.
- Pricing – because all of our water is from local sources, rather than transported across the length and breadth of the state, it is relatively affordable to the customers. Even with tiered pricing, the financial incentive for end users to conserve is not as great as in some areas of the state.
- Cost effectiveness – In many areas of the state, the incremental cost of water is on the order of \$1500 - \$2000 per acre-foot. In our region, it’s on the order of \$250 - \$400. Our water managers must balance their fiscal responsibility to ratepayers with the need for more efficient water use.

In summary, the greater Sacramento region has, and will continue to aggressively pursue more efficient water use, and is committed to fully participating in meeting the state’s goal of a 20% reduction in per capita water use in a manner that is most cost effective and provides the greatest benefits to the ratepayers of the region.