California: Preparing for the Next Drought

California has been experiencing record dry and warm conditions with 2013 as the driest on record. During this time, most of California has benefitted from carryover storage in reservoirs to help meet water supply demands. Reservoir levels are now dropping to low levels, which means less water will be available for all future demands and there will be additional pressures on our precious water resources in the Sacramento Valley and throughout California. As California prepares for the dry conditions, we offer the following:

I. California has an Orderly and Flexible System to Allocate Water

“The California water rights system is designed to provide for the orderly allocation of water supplies in the event that there is not enough water to satisfy everyone’s needs. When there is insufficient water for all, water diversions are allocated in order of water right priority.” (State Water Resources Control Board, July 2013.) In the Sacramento Valley, this orderly allocation process includes various contracts with the state and federal government, water rights permits with the SWRCB, other water rights and decrees. Within this orderly process, voluntary water transfers are one way to flexibly manage water resources on short-term basis during critical times. The Governor issued an Executive Order in May 2013 to streamline voluntary water transfers to assist farmers in the San Joaquin Valley.

II. California has a Drought Contingency Plan

In response to dry years in 2008 and 2009, the Governor directed the California Department of Water Resources (Department) to prepare a California Drought Contingency Plan. The Plan describes a coordinated state strategy for preparing, responding to, and recovering from drought. Similarly, the federal Bureau of Reclamation has a water supply process to develop water management strategies for the upcoming dry years. (See: http://www.usbr.gov/mp/Waters_Supply_Meetings/index.html.)

III. The Sacramento Valley Actively Manages Water for Regional Sustainability

Water resources managers in the Sacramento Valley are actively managing the region’s precious water resources to support the rich mosaic of inter-dependent farmlands, refuges and managed wetlands, meandering rivers that support fisheries and wildlife, and the cities and rural communities sprinkled throughout the region. The overarching goal is to continually improve water management to achieve regional sustainability and to advance the state policy “to improve regional self-reliance for water….”

During dry periods, each agency and individual, based on their local circumstances, will implement various local actions to help their area get through these dry periods. This includes pumping...
groundwater, neighbor to neighbor water transfers, internal water management (i.e., recycling) and crop idling. As the Sacramento Valley faces dry conditions in the future, there are four important water management actions that will help the region through dry periods:

**A. The Value of Surface Storage**

The existing carryover water storage from last year has helped much of the state through this intensely dry period. Here, the previous investments in stored water throughout the state have proven a blessing. In the Sacramento Valley, stored water is critical during dry periods and is important for all the beneficial purposes in the region—the cold water in storage necessary for salmon habitat, the water for farms during the growing season, the reliability of municipal water supplies; the birds dependent upon ricelands and wildlife refuges along the Pacific Flyway, and the recreational opportunities offered by these reservoirs. California should be developing strategies to maximize its water storage for all these important purposes, particularly during the inevitable dry periods when the water is at a premium. This includes the possible reoperation of existing facilities and new smart storage, such as the Sites reservoir on the west-side of the Sacramento Valley.

**B. Sustainable Groundwater Management**

Groundwater levels and quality in the Sacramento Valley are generally excellent according to reports by the Department of Water Resources. This is important because groundwater pumping is increased for all uses during dry periods to make up for surface water supplies that are not available. The Sacramento Valley’s groundwater supplies are currently sustainable—the ability to access groundwater supplies in the Sacramento Valley is a result of active conjunctive management of surface and groundwater supplies throughout the region. For example, the use of surface water in non-drought years has helped stabilize many groundwater basins in the region, which, in turn, provides more reliable and sustainable groundwater supplies during drought. Water resources managers actively monitor and manage the groundwater supplies to assure continued sustainability of this important resource.

**C. Coordinate Operations of Projects.**

With the cornerstone facilities in the Sacramento Valley, the operators of the Central Valley Project (CVP) and the State Water Project (SWP) have an opportunity to better plan and coordinate their operations with water resources managers in the Sacramento Valley to help meet the various beneficial water demands within the Sacramento Valley, as well as project deliveries outside the region.

**D. Flexible Water Transfers**

As part of the objective to advance the economic, social and environmental sustainability of the Sacramento Valley, the transfer of water is one flexible way, on a short-term basis, to work within the current water system, while helping to ensure that California’s most precious resource can be put to reasonable and beneficial use to the maximum degree practicable in the Sacramento Valley and other areas of the state.

NCWA has a Water Management Task Force that brings water leaders throughout the region together to think about new and improved water management opportunities. This is described in *Efficient Water Management for Regional Sustainability in the Sacramento Valley*. Earlier this year on January 30 the water leaders in the region convened a strategic session to better prepare for drought in the Sacramento Valley. A copy of the report is available at: [www.norcalwater.org/wp-content/uploads/2013/02/preparing-for-drought-aug2013.pdf](http://www.norcalwater.org/wp-content/uploads/2013/02/preparing-for-drought-aug2013.pdf).