A Reservoir Under Our Feet

The Sacramento Regional Water Bank (Water Bank) is a key adaptation measure that builds on proven successful practices for managing the uncertainties of future climate conditions in the American River Basin.

Currently, the region's water resources are managed through a "three reservoir system" — Folsom Reservoir, groundwater, and a large slow-melting snowpack. The snowpack serves as a slow-release surface water reservoir, helping to maintain our environment and reduce flood risks. This system is changing. What worked well in the 20th century when the system was planned and built will not work as well with those changes.

In a future with climate change, temperatures are projected to increase 4 to 7 degrees by 2085, precipitation will fall as rain rather than snow, and snowmelt runoff will peak earlier in season. Left unaddressed, the system will face a Catch 22: the need to release water for flood protection while storing water for the dry months ahead. (More information on specific changes is available in the American River Basin Study fact sheet.)

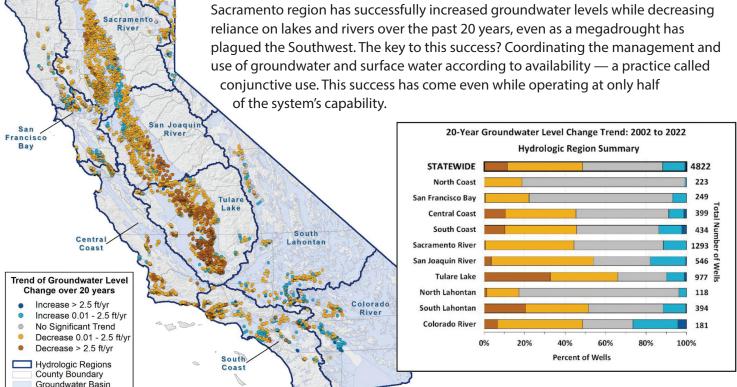
The Water Bank will provide more opportunities to capture and store excess water when it's available. This will be critical in the future as wet years are projected to decrease from two in every three years to only one in every three years.

North



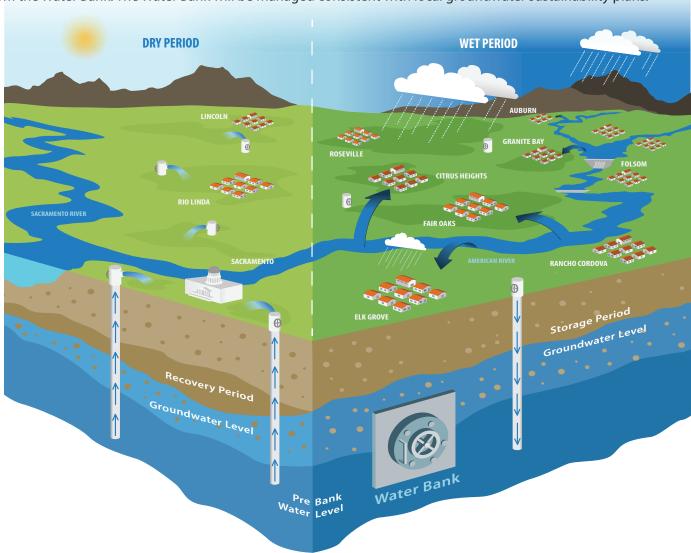
Building on Proven Practices

Data from the California Department of Water Resources demonstrates how the Sacramento region has successfully increased groundwater levels while decreasing reliance on lakes and rivers over the past 20 years, even as a megadrought has use of groundwater and surface water according to availability — a practice called conjunctive use. This success has come even while operating at only half



How the Water Bank Works

The Water Bank will operate by coordinating the use of surface water and groundwater. When surface water supplies are plentiful, water providers in the region will draw more water from Folsom Reservoir or local rivers and use it to offset existing demand for groundwater. This effectively increases groundwater in *storage*, resulting in a deposit in the Water Bank. During dry years, *recovery* of stored groundwater will occur through additional pumping, resulting in a withdrawal from the Water Bank. The Water Bank will be managed consistent with local groundwater sustainability plans.



Storage and Recovery Potential

The groundwater basin of the American River Basin acts as an *underground reservoir with available space to store an estimated*1.8 million acre-feet of water, which is almost twice the volume of Folsom Reservoir. During a wet year, local water providers could store up to about 60,000 acre-feet of water in the Water Bank using existing facilities. That's enough water to serve 120,000 average homes for a year. During a dry year, much of that stored groundwater could be recovered. Potential facility improvements over the next decade could increase the region's storage and recovery capacities by more than 50 percent. As an additional benefit, facility improvements can be accomplished stepwise based on available funding.

Operation of the Water Bank will help relieve flood control pressure on Folsom Reservoir, preserve cold water for the benefit of the environment, and increase supplies available for the environment and downstream communities beyond the region during dry conditions.

