



# SACRAMENTO REGIONAL WATER BANK

*A Sustainable Storage and Recovery Program*

## A Reservoir Under Our Feet

Water providers in the Sacramento region are developing the Sacramento Regional Water Bank (Water Bank). The Water Bank is an innovative groundwater storage program that will improve regional water supply reliability in the near-term and into the future. The Sacramento region's unique setting—at the confluence of the Sacramento and American rivers near Folsom Reservoir and overlying the North American and South American groundwater subbasins—is ideal for the Water Bank's development.

The Water Bank will allow the region to sustainably increase use of groundwater as a local water source during dry periods, allowing reduced surface water diversions to help meet local environmental needs. In addition, the region's location north of the Sacramento-San Joaquin Delta provides potential opportunities to collaborate and develop solutions to benefit the environment and communities downstream after local needs are met.



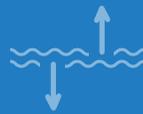
## An Untapped Regional Asset

The Water Bank represents many years of regional planning by diverse local stakeholders. It continues the region's commitment to the principles of the Sacramento Water Forum, established more than two decades ago, to promote and implement sustainable water management practices such as conjunctive use that balance water supply needs and the environmental health of the lower American River. Building on the success of recent conjunctive use projects, the region recently completed a Regional Water Reliability Plan that identified substantial opportunities for expanding conjunctive use.



### Water Forum Agreement

Signed in 2000 by more than 40 water providers, environmentalists, agricultural interests, and other stakeholders, the Agreement serves as a foundation for sustainable planning. It balances co-equal objectives to provide a reliable water supply and to preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.



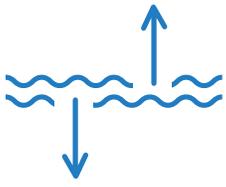
### Conjunctive Use

Conjunctive use is a coordinated water management practice with the preferential use of surface water during wet years and groundwater during dry years. Local water providers have been investing in conjunctive use for more than two decades, improving water supply reliability.



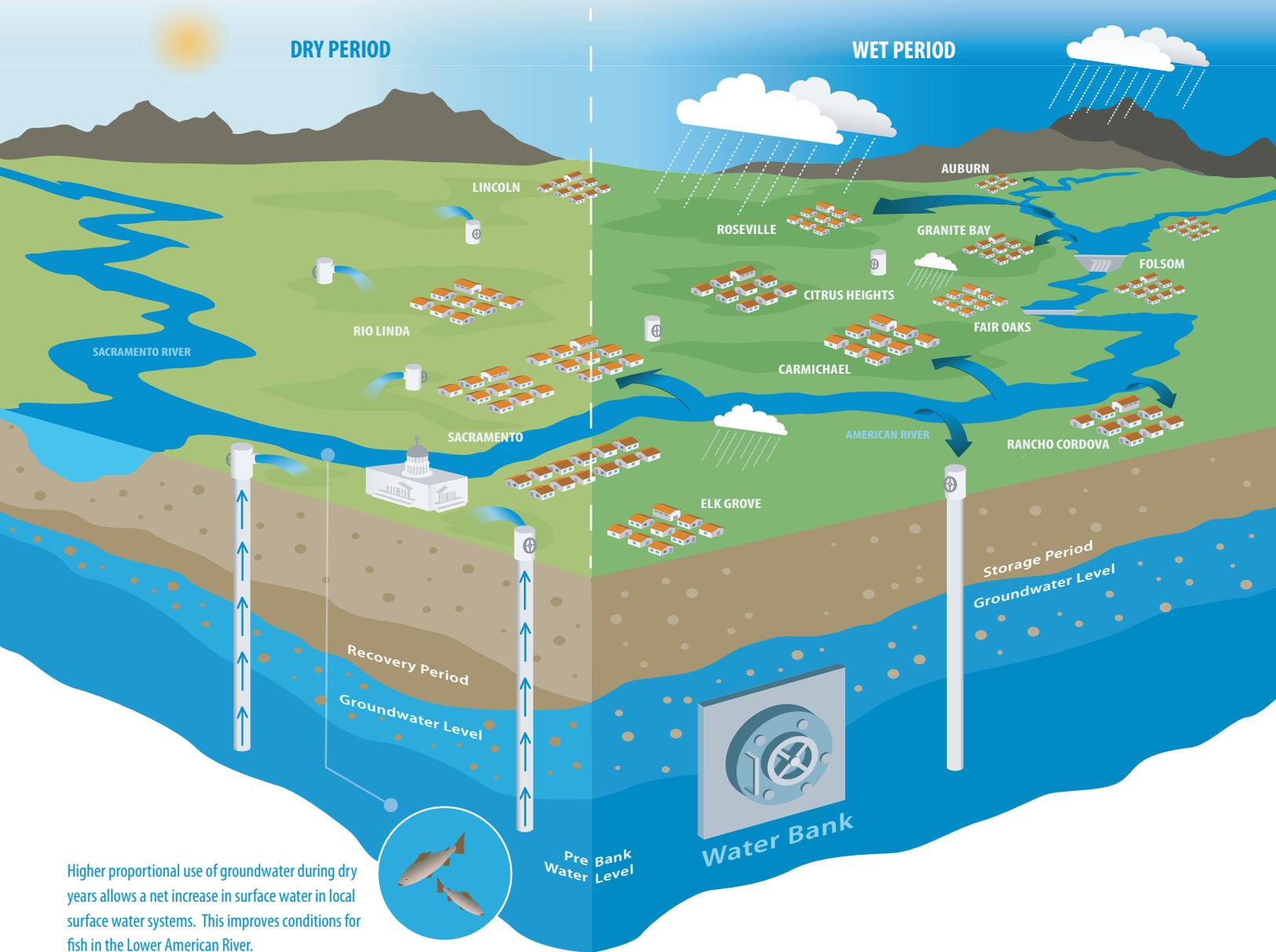
### Water Reliability Planning

In 2016, local water providers began a Regional Water Reliability Plan to evaluate supply vulnerabilities, assess conjunctive use potential, and identify opportunities to improve long-term reliability. Completed in 2019, the plan identified a Water Bank as a key strategy for increasing reliability and adapting to climate change.



# 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 Lake 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.



Higher proportional use of groundwater during dry years allows a net increase in surface water in local surface water systems. This improves conditions for fish in the Lower American River.

## Storage and Recovery Potential

*An acre-foot is equal to about 326,000 gallons, or enough to serve nearly three local families for a year.*

The groundwater basin below is an **underground reservoir with available space to store an estimated 1.8 million acre-feet of water. That's almost twice the volume of Folsom Lake!** 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. During a dry year, much of that stored groundwater could be recovered. The additional recovered groundwater could serve more than 150,000 households in the region for a year. Potential facility improvements over the next decade could increase the region's storage and recovery capacities by more than 50 percent.

# Benefiting People, the Economy, and the Environment Today and Tomorrow

Over the past several decades, local water providers have improved water supply reliability through conjunctive use efforts, increasing water use efficiency, and expanding recycled water use. However, California's highly variable water supplies and climate change present ongoing challenges and uncertainty. The Water Bank will allow the region to further enhance reliability by storing more surface water when it is plentiful in wet times and recovering more groundwater in dry times. This climate adaptation strategy will increase our region's resiliency and benefit our local water supply reliability, economy, and environment.



## Climate Adaptation

- Helps adapt to the effects of climate change, including variability in the timing and amount of runoff and snowpack, as well as prolonged droughts.
- Strengthens regional resiliency and operational flexibility by encouraging investments in facilities needed for the Water Bank's future expansion.



## Water Supply

- Ensures more reliable water supplies for local communities during dry periods or emergencies.
- Potentially provides long-term storage options for federal and/or state contract water.
- May integrate flood water and/or storm water capture with conjunctive use operations as part of the Water Bank's future expansion.
- Provides potential opportunities for water transfers to other communities after meeting local water supply needs and groundwater sustainability goals.



## Economy

- Ensures more reliable water supplies to support local businesses.
- Supports agricultural community by maintaining groundwater basins.
- Helps protect civic amenities for people living, visiting, or looking to relocate by helping keep river and lake levels higher.
- Increases water storage in a more cost-effective way than other options.



## Environment

- Supports additional flows during dry periods for fish and other sensitive species in the lower American River and the Sacramento-San Joaquin Delta.
- Increases regional water storage in an environmentally-friendly manner.

# Looking Ahead

*The Water Bank could be operational with existing facilities as early as 2022.*

Additional planning, technical analyses, environmental review, and broad stakeholder engagement are needed to make the Water Bank a reality. Timing for the Water Bank's full implementation is focused on ensuring that its development is compatible with and supports Groundwater Sustainability Plans currently under development in the North and South American subbasins to comply with California's Sustainable Groundwater Management Act of 2014.

More than a dozen water providers are expected to actively store and/or recover water from the Water Bank at the outset of operations. Participation in the Water Bank will be voluntary. The groundwater subbasins will be monitored, and mitigation measures will be in place, to avoid impacts to groundwater users in the region that are not participating in the Water Bank.

Local water providers have also identified opportunities to expand the Water Bank well beyond its initial capacity. This will require new investments to expand the region's capacity to divert surface water; construct more water system interties;

build additional aquifer storage and recovery wells; and add additional booster pumps, pipelines, and groundwater wells to recover stored groundwater. These improvements would substantially increase the region's ability to store and recover water from the underlying subbasins. Other potential future expansion opportunities include incorporating direct recharge through spreading basins and applying storm water or flood water on dormant agricultural crops.

The Water Bank is an ambitious effort requiring involvement from a diversity of stakeholders, including those in the environmental community, urban and agricultural groundwater users, recycled water producers, and the public. To learn more and to stay up to date on Water Bank activities, [visit \*\*rwah2o.org\*\*](http://visit.rwah2o.org).



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