

STATEWIDE WATER PROPOSALS

By Annie Beaman



California has been at the vanguard of environmental law and policy for over a century. The state adapts and expands these policies and laws as new information and technologies become available, and as previously unknown (or nonexistent) environmental issues emerged. The [earliest water projects](#) favored heavy-duty infrastructure like dams and canals to capture, control, and transport water from the wetter areas of the state to more populous and agricultural areas. California's extensive [surface water storage and delivery infrastructure](#) originated with studies conducted in the 1870s, and with construction of dams and canals that began a few decades later. Subsequent water projects and public investments in water tended to build upon and improve existing infrastructure; a trend which continues until today. Public water projects are complicated by a legacy of convoluted private water rights that started during the Gold Rush era and further developed in courtroom battles between private landowners.¹

However, our economic, social, and scientific understandings of water have improved substantially over the years. While dozens of water issues are extremely important, a recent study revealed that [most water experts agree](#) that improved management of the Sacramento-San Joaquin Delta water supply network is paramount. This study also identified the next four priorities to address: dysfunctional institutions at all levels of water governance, an unsustainable water supply, poorly managed [groundwater](#), and the effects of [climate change](#) and flood risk. State government leaders are currently considering several proposals to address some of these concerns.

MAJOR WATER PROPOSALS

● **Restructure water governance and remove regulatory obstacles:** California's water management is fragmented and divided between many authorities including hundreds of state and local agencies. While local involvement is essential to successful water management, the current structure for water management in California is at best complicated, at worst inaccessible and incomprehensible. Of primary concern to policymakers is careful and sustainable management of drinking water. In 2013, the Legislative Analyst's Office [investigated the possible transfer](#) of the state's [Drinking Water Program](#) (DWP) from the Department of Public Health (DPH) to the State Water Resources Control Board (SWRCB). Stakeholders raised several issues with the DPH oversight of the DWP, including a lack of integration with overall water quality management, slow distribution of financial assistance, slow rulemaking process delaying progress in meeting legislative goals, fees too low to generate resources for managing the program, and a lack of transparent decision making.

● **Bay Delta Conservation Plan:** The 700,000 acre [Sacramento-San Joaquin Delta](#) is the largest estuary on the west coast and the only inland delta in the world. The Delta is also the heart the [State Water Project and Federal Central Valley Project](#), which provide water to over two thirds of Californians and thousands of acres of farmland. However, water supplies from the Delta can be unreliable particularly during dry years, ecosystems and water quality are already significantly degraded, and demand for water outweighs supply. Governor Brown has proposed a 50-year [Bay Delta Conservation Plan](#), which among other things would add tunnels to transport water around the periphery of the Delta, and add over 78 miles of canals. If approved, the Delta Conservation Plan would cost the state an estimated \$15 billion and would put into motion the most significant change to the ecological and economic landscape in the Delta in over half a century.² This proposal is highly [controversial](#); with united opposition from environmental and wildlife groups who tend to favor [natural infrastructure](#).

¹ See Edward F. Treadwell, *The Cattle King of California*;

and <http://www.calepa.ca.gov/education/eii/Curriculum/Grade12/1214/1214SE.pdf> at p. 12

² See Atlantic Magazine Online *American Aqueduct: The Great California Water Saga*. Accessed at: <http://www.theatlantic.com/features/archive/2014/02/american-aqueduct-the-great-california-water-saga/284009/>.

²And Bloomberg Sustainability, *California Dries up as Brown Pushes \$15 Billion Tunnel*. Accessed at: <http://www.bloomberg.com/news/2014-02-03/california-drought-raises-stakes-for-water-tunnels.html>

●**State funding for water projects:** State and local authorities have already created several important funding mechanisms to support improvements to water management and quality, but advocates propose investing more money less sporadically in order to protect and restore ecologically sensitive areas like the Delta.

State Water Bond: The [2014 Water Bond](#) is the product of a legislative package [first proposed](#) in 2010, and includes a bond of \$11.14 billion to fund infrastructure updates and projects addressing ecosystem and water supply issues all over the state. Specifically, these funds will be allocated to local resources development, new surface water projects, and expanding groundwater storage. There are [several current proposals](#) to modify the existing water bond before it is placed on the ballot in November 2014. These proposals are in the range of \$6-7 billion.

Drought funding: In February 2014, California lawmakers [introduced and passed legislation](#) to provide funding for communities severely affected by the [drought](#). \$475 million is approved for accelerated grants for water conservation and reuse, \$15 million will support [communities](#) with strained drinking water supplies, and another \$47 million is to supply food and housing to residents of drought stricken areas. [Federal funding](#) comes to the State through the [California Emergency Drought Relief Act of 2014](#).

Water markets: California's existing [cap and trade policy](#) is primarily focused on greenhouse gas reductions, but it pertains directly to the water sector as one of the largest users of electricity. The state recently [allocated funds](#) from the cap and trade program to compensate farmers for practices that [reduce water use](#). California legislatures will reconsider the state's cap and trade program [this year](#). Additionally, academics and advocates propose a more formalized market structure to incentivize conservation and to [assign more appropriate economic values](#) to water.³

Disadvantaged community funding: California's disadvantaged communities, especially those in rural areas, bear the brunt of degraded [water quality](#). Numerous state programs dedicate funds to address issues in these communities, including many mentioned above. However, major disparities remain in access to potable water.

Groundwater banking: Several water agencies including [Kern County](#) have engaged in augmented [aquifer storage](#) for several decades by "banking" excess surface water underground.⁴ Expanding underground storage and percolation facilities especially around the Delta is a [high priority for the state](#). Storing water underground and augmenting aquifer recharge is usually cheaper than surface storage, reduces risk of water contamination, and there is *at least* three times more available storage area underground than above ground. However, existing water banking laws allow private parties to profit by banking public water, leading to [controversy over ownership and management](#) of water.

Water recycling and reuse: [Recycled water](#) facilities treat wastewater from communities which is treated and made suitable for a direct beneficial use or a controlled use that would not otherwise occur. Recycled water can augment freshwater supplies and help reduce water demand. A new [statewide policy](#) for water reuse went into effect in 2013. The state also has a dedicated [funding program](#) to support local water recycling initiatives.

DESALINATION: California's human population continues to grow while its native fish and other species decline. Available freshwater resources simply cannot sustain a continuously growing human population. Desalination processes convert salt water to freshwater by removing brine and salt ions from sea water. The [Carlsbad Plant in San Diego](#) will be the largest desalination plant in the western hemisphere when complete in 2016. While desalination is notoriously expensive and creates its own waste streams, the clear need to find a balance between human water use and ecosystem stewardship has [convinced many that desalination is a good option](#). State programs help to fund desalination pilot programs, and state authorities will have an active role in developing this industry further in the coming years. Major concerns include high costs and a potentially null environmental result because of the enormous amount of energy required for the desalination process.

³ SEE ALSO Public Policy Institute of California, California's Water Market by the Numbers Update 2012, at p.2. Accessed online at: http://www.ppic.org/content/pubs/report/R_1112EHR.pdf

⁴ Pacific Institute Improving Water Management through Groundwater Banking: Kern County and the Rosedale-Rio Bravo Water Storage District. Accessed online at: http://www.pacinst.org/wp-content/uploads/sites/21/2013/02/groundwater_banking3.pdf