

# CALIFORNIA SUSTAINABLE WATER PLAN



The California Sustainable Water Plan outlines water projects in California that build regional sustainability and permanent regional jobs.

This evolving document is offered as a counter to the 2014 California Water Action Plan. While that plan includes many projects that are not controversial and should receive full funding, the plan:

- does not prioritize needed flood control projects which can help to restore groundwater basins and make supply
- ignores the multitude of small projects that we need in California to augment regional self-sufficiency
- ignores repairing the 678 dams that need repair to sustain our present water supply
- fails to plan for upgrading water mains to increase by our urban water supply by 15 percent
- does little to address floodplain restoration.

## THE SOLUTION

We can address these problems by not building the \$17B Delta Tunnels and redirecting that money to dozens of local projects that provide good, long-term jobs.

## THE PROBLEM

### 1. Our infrastructure is failing.

The Oroville Dam spillway crisis has shown how far California has fallen behind in essential upkeep of our existing water infrastructure. Recent urban water main breaks, like the one near UCLA, also illustrate California's water infrastructure maintenance deficit.

### 2. Climate scientists tell us that extreme droughts and floods are the new normal in California.

Our climate is changing; it will become increasingly more challenging to provide water to the people, economy, and nature during droughts. It will become necessary to capture water efficiently and safely during wet periods. Presently, 20 percent of California's energy use can be attributed to moving water over long distances, which is not an efficient use of energy or a safe water management strategy.

### 3. The San Francisco Bay-Delta Estuary is collapsing and the West Coast's historic fish species (including salmon) are headed towards extinction due to excessive water exports from the Delta.

The 2009 Delta Reform Act requires us to lessen our dependence on the estuary and to move toward regional water sustainability. We must begin complying with this law.

## A PLAN B FOR THE TUNNELS

When asked about alternatives to the Delta Tunnels in December 2015, Governor Jerry Brown said, “I don’t think there is a Plan B.” This view was reflected in February 2016 by State Building and Construction Trades Council president Robbie Hunter who said the Tunnels are “...the only viable solution to protect the Delta environment and secure water deliveries.”

**“THE MOST RECENT ESTIMATES BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS FOR 2017 PUT NEEDED REPAIRS TO CALIFORNIA WATER INFRASTRUCTURE AT MORE THAN \$50 BILLION.”**

The power-brokers and concrete-pourers claim that California’s water security can only be achieved with the massive Delta Tunnels construction project with a \$17 billion price tag, likely far more when overruns and finance costs are included. (Remember the Bay Bridge?)

State and federal agencies now considering permits for the Delta Tunnels remain unconvinced the proposal can meet clean water standards to protect the San Francisco Bay-Delta, the largest estuary on the west coast of the Americas.

The EPA called the Tunnels’ most recent Environmental Impact Report “inadequate” and issued a failing grade until better science is completed. A majority of the Santa Clara Valley Water District board members have expressed serious reservations about the tunnels project, one citing the potential extinction of salmon and California’s salmon fishing industry, which generates \$1.5 billion in economic activity annually.

## THEN CAME OROVILLE DAM

The Oroville Dam spillway crisis of 2017 displaced 200,000 Californians for two days. The narrowly-averted disaster was a warning signal to every state resident. Our existing water infrastructure has fallen into a dangerous state of disrepair.

The most recent estimates by the American Society of Civil Engineers 2017 put needed repairs to California water infrastructure at more than \$50 billion.

California’s political leaders could provide for water security and protect the San Francisco Bay-Delta by directing investments into projects that improve regional water sustainability and create long-term jobs.

In the report “A Sustainable Water Plan for California” the Environmental Water Caucus outlined some cost-effective solutions to California’s emerging water needs that will protect the San Francisco Bay-Delta estuary in the process. These projects improve urban and agricultural water conservation, reuse and recycled water, and capture and store local rainwater.

Why consider alternatives to the Delta Tunnels?

## JOBS

Developing regional self-reliance is the best way to provide a more reliable water supply. This requires investment in water conservation, maximizing wastewater reuse and groundwater recharge, while capturing storm water and rainwater, gray water, and fixing leaky local pipes. Cleaning up aquifers and providing jobs for local water makes economic sense.

Dr. Jeffrey Michael, Director of the Center for Business and Policy Research at the University of the Pacific has pointed out that the investments in water conservation create 15 to 20 jobs per million dollars of expenditure, as opposed to the five jobs per million dollars of investment that is touted for the Delta Tunnels.

The Los Angeles-based nonprofit Economic Roundtable found that investments in water use efficiency reduce this region’s water consumption and dependence on large, statewide water diversion projects that have adverse environmental impacts and create large numbers of jobs that pay sustaining wages and generate broad expansion in local business activity.

Southern California labor unions have expressed interest in mass deployment of gray water systems. The workers are ready for these investments.

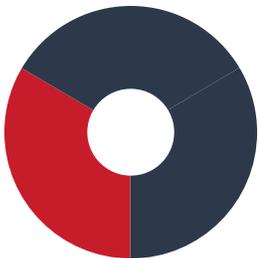
Page three highlights current and proposed projects that could be duplicated in other regions of California. Others await funding but represent smart investments. This “living document” will be continually updated as we become aware of new proposals to build regional water sustainability in California.

# PROMISING PROJECTS & PRACTICES

## REUSE

### Water Recycling

- Implement and invest in widespread treatment and reuse of wastewater, graywater, and stormwater, especially in coastal areas
- Desalt brackish groundwater in basins that are overdrafted when safe
- Investment in the Water Replenishment District of Southern California's Water Purification Plan, which would eliminate need for imported water
- Investment in the recharge and recycle of water for groundwater basins in the Tri-Valley area of Eastern Alameda county
- **Projects in Progress:**
  - Orange County Green Acres Project
  - Orange County's Groundwater Replacement System Expansion
  - Pure Water San Diego
  - Padre Dam Water Recycling Facility
  - North Valley (Modesto/Turlock) Regional Recycled Water Program
  - Tracy Lake Groundwater Recharge Project
  - Silicon Valley Advanced Water Purification Center
  - Salinas Valley Reclamation Project (SVRP)
  - Pajaro Valley Water Management Agency Groundwater and Recycled Water Program



**TWO-THIRDS OF  
THE REUSE  
POTENTIAL IS IN  
COASTAL AREAS  
WHERE  
WASTEWATER IS  
DISCHARGED  
INTO THE OCEAN  
OR INTO  
STREAMS THAT  
DRAIN INTO THE  
OCEAN.**

## CONSERVATION AND EFFICIENCY

**“Make conservation a California way of life”  
– Action Item #1 in  
California Water Action Plan (2014)**

### Urban Water Conservation

- Implement large-scale new water-saving technologies and the adoption or upgrade of water and water-saving appliances like toilets and landscapes/lawns, water meters, etc.

### Agricultural Water Conservation

- Adopt/install key modern irrigation technologies and practices, such as drip irrigation and precise irrigation scheduling

### Floodland Restoration

- Implement floodland restoration along key parts of the San Joaquin River  
Example: Rancho Breisgau Habitat Restoration Project

### Toxic Farmland Retirement

- Retire 300,000 acres of toxic farmland in the Westlands Water District and the three Broadview, Panoche, Pacheco adjacent water districts

## STORMWATER CAPTURE

Stormwater runoff from impervious surfaces in urban and suburban areas when it rains—whether by directing the runoff to open spaces and allowing it to infiltrate into the ground to recharge groundwater supplies or by harvesting the runoff, primarily from rooftops, in rain barrels and cisterns for direct use in nonpotable applications—can be used to increase California's water supplies dramatically.

Projects and Policies in Progress:

- Los Angeles Stormwater Capture Plan
- Tujunga Spreading Grounds
- Laurel Canyon Boulevard Green Street Project
- Trust for Public Land Green Alleys Project
- Orange County Groundwater Replenishment System (the world's largest system for indirect potable reuse)

# ARTICLES AND REPORTS OF INTEREST



**Benefit-Cost Analysis of The California WaterFix August 2016**

**Center for Business and Policy Research, University of the Pacific**

**The Untapped Potential of California's Water Supply: Efficiency, Reuse, and Stormwater**

**Pacific Institute**

**A Sustainable Water Future for California**

**Pacific Institute**

**Parched California Farmers Hope to Tap Wastewater From Cities**

**KQED**

**State Water Efficiency and Enhancement Program**

**California Department of Food and Agriculture**

**Santa Monica has Plans to be Independent of Imported Water**

**City of Santa Monica**

**Developing the Technologies, Policies and Strategies to Make L.A. County Sustainable by 2050**

**University of California, Los Angeles**

**Restore Tulare Lake for Water Storage**

**Revive the San Joaquin**

**Recycled Water**

**San Diego County Water Authority**

**Regional Groundwater Banking and Water Reuse Potential in the San Francisco Bay Area Water Supply System**

**Masters Thesis, Science – Michelle Anne Lent,  
University of California, Berkeley 2002**

## CONCLUSION

With so many needs and opportunities for investment in California's water infrastructure, we believe the Tunnels Project (WaterFix) should neither be approved, financed, built, nor operated. The Tunnels will accelerate deterioration of the Bay-Delta Estuary by starving it of freshwater flow.

The expensive and ecologically suspect Delta Tunnels would starve California cities, counties, and local water agencies of resources that could fund local and regional water projects that deliver a far bigger bang for the buck and deliver long-term jobs for each region of the state.