Delta Conveyance Project

Update November 2021

A PROPOSAL TO PROTECT WATER SUPPLIES FOR THE FUTURE

The proposed Delta Conveyance Project is intended to protect and preserve a vital state water supply by guarding against disruptions caused by sea level rise, the hydrologic effects of climate change and seismic threats. The project would develop new infrastructure facilities in the Sacramento-San Joaquin Delta (Delta) necessary to move water as part of the State Water Project (SWP).

KEY OBJECTIVES



Protect SWP water supply reliability



Address anticipated impacts of sea level rise and climate change on SWP water supplies



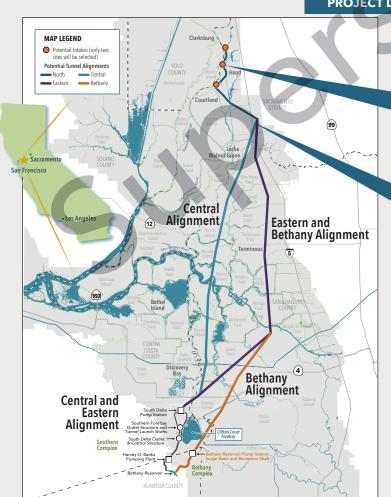
Minimize SWP water supply disruption due to seismic risk

Provide operational flexibility to improve aquatic conditions in the Delta

"Our water supply is becoming less reliable because of climate change. And our population is growing because of a strong economy. That means a lot of demand on an unpredictable supply. The status quo is not an option."

- Governor Newsom, 2019 State of the State Address

PROJECT DETAILS



Proposed Facilities*

Two new intakes in the north Delta, each with 3,000 cubic feet per second (cfs) capacity, for the proposed project. Alternatives could include one, two, or three intakes.

One below ground tunnel, following an eastern, central, or Bethany alignment, designed to protect California's water supplies from sea level rise, earthquakes, subsidence and levee failure.

Operational Flexibility



A new diversion facility would be operated together with existing South Delta pumping



Operations would increase DWR's ability to capture water during high flow events

*All proposed project details are subject to refinement. No final decisions will be made until the conclusion of the environmental review process.





An Important Source of High-Quality Water for California

The Delta is central to the state's main water distribution system, the State Water Project, which supplies essential fresh water to homes, businesses and farmlands throughout California.

SWP FAST FACTS

 $27\ million$ people receive clean, affordable water from the SWP

750,000 acres of farmland are irrigated with SWP water

29 State Water Contractors purchase and distribute water through the SWP

Sustains the world's fifth largest economy

WATER SECURITY ACROSS THE STATE

Water supplied by the SWP through the Delta reaches taps from north to south:

2/3 of California's water originates in the Sierra Nevada Mountains

50% of California's water supply flows through the Delta

Millions of people in disadvantaged communities depend on the SWP as an affordable water supply

3 of 5 Californians depend on water that flows through the Delta

Percentage of Regional Water Supplies Dependent on Reliable Delta Infrastructure:

North Bay 11%

South Bay 33%

San Joaquin Valley 25 - 33%

Santa Barbara County 47%

Inland Empire 28%

Southern California 30%

High Desert Region 30%

Low Desert Region 15%

Water Movement Regulated to Protect Fish and Water Quality

SWP operations (how and when water is allowed to be moved) are guided by state and federal regulations. These regulations protect fish, wildlife and water quality. The Delta Conveyance Project would continue to be governed by these same regulations.

California Water Management Requires A Portfolio Approach

The proposed Delta Conveyance Project is consistent with the State's Water Resilience Portfolio, which describes the framework to address California's water challenges and support long-term water resilience and ecosystem health. Modernizing Delta conveyance is vital to protecting our economy, and public health and safety.

The SWP is an important foundation for an extensive suite of water supply and resiliency programs implemented by local water agencies, including storage, recycling and reclamation, conservation, groundwater recharge and water quality management, often serving to supply water needed to implement these important programs. Continued stability of the SWP helps agencies develop and maintain these important programs and provides a high-quality source for blending with local sources to meet or exceed approved drinking water standards before delivery to their customers.







Unique Hydrological Challenges

Combining a large and geographically diverse population and extreme variability of annual precipitation make water management in California a challenging task. The SWP was constructed to help remedy these challenges by moving and storing water from where it originates to where it is needed.

No other state in the nation faces such extreme variability in precipitation, which will only become more unpredictable and extreme due to climate change. Rain and snow fall in the north, but the major population centers are in the south. Rain and snow fall in the winter and spring, but the greatest demand (and need) is in the summer and fall. About 50% of California's total precipitation falls in about 5 to 15 days each year. The State Water Project helps manage these challenges with infrastructure that can move water where and when it is needed. But this infrastructure is at risk and must be rehabilitated and modernized to protect water supply for future generations.





The Risks are Real and the Time to Act is Now

The status quo in the Delta is unsustainable. The infrastructure that protects, collects and moves water from the Delta to California communities is outdated and at ever-increasing risk of failure due to climate change, sea level rise and seismic events. A major disruption would have catastrophic social and economic effects.

Seismic Activity and Risk of Major Earthquake

According to the United States Geological Survey there is a 72% chance of a 6.7 or greater magnitude earthquake occurring in the Bay Area by 2043¹ that could cause levees in the Delta to fail, crippling the state's ability to deliver clean water.



Major active faults in the nearby Bay Area and minor faults in the Delta

1,000 miles of levees, many not in a condition to withstand significant shaking

Possible 6- to 12-month outage in water supply delivery



Red lines = surface faults

Climate Change and Sea Level Rise - The California Ocean Protection Council Predicts a Significant Sea Level Rise by 2100²

The realities of climate change - sea level rise, extended droughts and reduced snowpack - are best addressed by capturing, moving and storing water when it is available. As sea levels continue to rise and increase pressure on levees, the Delta will be faced with increasing saltwater intrusion into the

inner Delta, which threatens clean water supplies conveyed by the single water diversion point in the south Delta. Significant operations changes will be needed to maintain water quality due to increased salinity intrusion.

Annual Average Temperature



Sea Level Trend



Moving Forward with Delta Conveyance Project Planning

The Department of Water Resources is preparing an Environmental Impact Report in compliance with the California Environmental Quality Act. DWR will also work to obtain all additional required state and federal approvals, including but not limited to Endangered Species Act and National Environmental Policy Act compliance,

adding points of diversion to existing water rights and Delta Plan consistency. There will be several opportunities for public participation throughout the course of the environmental review and planning process.

¹Earthquake Outlook for the San Francisco Bay Region 2014-2043, United States Geological Survey, 2016

²State of California Sea-Level Rise Guidance, California Ocean Protection Council, 2018

