



Delta Water Tunnels: Build It Once, Build It Right

State and federal agencies are crafting a plan to restore the environmental health of the troubled Sacramento-San Joaquin Delta and modernize its two primary water supply systems that help to sustain 25 million Californians, 3 million acres of agriculture and California's statewide economy. The effort is known as the Bay Delta Conservation Plan (BDCP) and is being developed to meet the state's toughest environmental standards and in compliance with the federal Endangered Species Act. A consensus is emerging that in order to restore the Delta environment and secure reliable water supplies, new diversions must be constructed in the northern Delta and the supply transported via new water tunnels to the existing aqueducts in the southern Delta. The tunnels would protect water supplies from the destruction and saltwater invasion that an earthquake could cause, and they would separate the delicate ecosystem from the state's water operations.

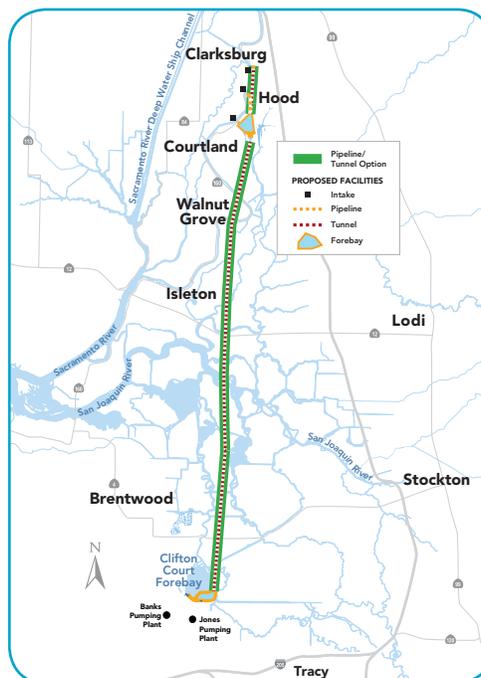
There are questions about key details: One tunnel or two? How big? State and federal agencies have been studying various sizes and locations for the tunnels to determine the best approach. Recently, some organizations have come forward with an alternative plan that would significantly limit the flexibility and benefits of having a new tunnel system. The State Water Contractors, who provide water to 25 million Californians and 750,000 acres of farmland, believe that proposals to constrict the future statewide water system are not solutions.

BDCP: Meeting Long-Term Needs of Environment, Economy

BDCP is a long-term solution. The habitat conservation efforts will span 50 years and the tunnels will improve California's water supply reliability for at least that long. Conditions are expected to change based on sea level rise, seismic events and climate predictions of more rain and less snow. California needs infrastructure that can provide water supply reliability throughout these events. Building the tunnels too small would have costly consequences. The State Water Contractors are seeking a cost-effective tunnel design that ensures reliability and protects the state's water supply. It is fiscally responsible to build it once and build it right.

Bay Delta Conservation Plan Preliminary Proposal

- ✓ Two twin tunnels
- ✓ 4,500 cubic feet per second capacity per tunnel
- ✓ 40 feet in diameter*
- ✓ Delivers between 4.8 to 5.8 million acre-feet in an average year**
- ✓ 113,000 acres of habitat restoration
- ✓ Estimated \$14 billion*
- * Preliminary BDCP estimate
- ** Future scientific studies will identify project yield



Proposed Alternative Plan

- ✓ Single tunnel
- ✓ 3,000 cubic feet per second capacity
- ✓ 32 feet in diameter*
- ✓ Requires a 30 percent reduction in traditional water supply levels: 4 million acre-feet of water in an average year
- ✓ 40,000 acres of habitat restoration
- ✓ Estimated \$8.9 billion*
- * Preliminary BDCP estimate



STATE WATER CONTRACTORS

Proposed BDCP: Dual Tunnel System

Proposed Alternative Plan Single Tunnel

Does the water tunnel capture enough supplies in wet years?

YES. The twin tunnels can capture almost 4 billion gallons more than the alternate proposal every day that the Sacramento River is carrying high flows during wet periods, so that diversions can be reduced in dry periods, and providing more natural flow patterns for fish. This approach to water management is known as the "Big Gulp, Little Sip."

NO. The smaller, single tunnel captures as little as 3 percent of flood flows on the Sacramento River. Water agencies will lose the opportunity to capture supplies in wet years, increasing pressure on the Delta in dry years, and allowing for less improvement to flow patterns for fish. This approach to water management is akin to a "Little Gulp, Littler Sip."

Does it solve the reliability problem?

YES. In addition to separating water supplies from the current, unreliable system, building two tunnels creates another layer of reliability and protects against outages. If one tunnel experiences an outage or is closed for routine maintenance, the system can keep running.

NO. Building only one tunnel eliminates an important aspect of the project – a back-up plan. Repairs could take months, causing lost supplies and continued conflict over pumping operations at the existing facilities in the southern Delta. Routine maintenance would shut down this system.

Does it provide for adequate, reliable Delta supplies?

YES. The BDCP seeks to restore water supplies to traditional levels (levels prior to federal regulatory water cutbacks). The \$14 billion tunnel investment would assist in restoring the Delta environment, while allowing public water agencies to continue getting the water they need.

NO. The proposal is asking public water agencies to fund an approximate \$8.9 billion project that would ultimately reduce water supplies by about a third from traditional levels, to 4 million acre-feet in an average year. There is no business case for spending billions of ratepayer dollars for reduced water reliability.

Does it preserve San Joaquin Valley agriculture?

YES. BDCP can maintain the farming communities that grow half of the nation's fruits and vegetables. The solution works for the environment, urban communities and agriculture.

NO. Farming communities throughout the San Joaquin Valley could face a reduction of supplies by as much as 75 percent in an average year due to additional restrictions in Delta supplies, putting more than 700,000 acres of farmland at risk.

Does it have realistic expectations for local water supply expansion?

YES. Local water supply expansion is already under way and will continue. The BDCP recognizes, however, that these efforts cannot substitute for reliable and sufficient imported water, especially for San Joaquin Valley farms which have limited local options.

NO. While urban areas are substantially expanding local water supplies, the farms in the San Joaquin Valley cannot do the same. Ultimately, neither urban nor agricultural areas have enough cost-effective local water supply options to make up for the imported supply reductions called for by this alternative.

Is the Habitat Restoration Plan based on sound science?

YES. The BDCP environmental process and documents include a comprehensive and systematic review. The plan calls for restoration of tidal wetlands, seasonal floodplains and channel margin habitat to help recover the Delta ecosystem.

NO. The alternative claims to provide for greater habitat benefit with a fraction of the restoration acreage, but provides no scientific basis for this claim.