

BDCP Statewide Economic Impacts

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The draft Statewide Economic Impact Study evaluated the economic impacts of the Bay Delta Conservation Plan (BDCP) on various interest groups. While other economic studies completed for the BDCP evaluate benefits and costs to water users, this study by The Brattle Group and ICF International looks at whether the project is a worthwhile investment for the state as a whole. The study indicates that **the BDCP would result in a significant net economic benefit to the State of California**. Adding together impacts to which dollar values could be assigned, the BDCP would result in a net improvement in the economic welfare of California residents of \$4.8 billion to \$5.4 billion over the 50-year permit term. BDCP also will generate over \$84 billion in additional business output in California and almost 1.1 million jobs* over the 50-year life of the plan. These figures take into account the induced economic impacts of increased water rates and taxes associated with the cost of BDCP, and the impact of construction activity and targeted land retirement in the Delta.

Among the study's major findings:

Water Supply Reliability

The largest economic impacts of the BDCP are those associated with improved water supply reliability in California. Without the BDCP, state and federal water project deliveries from the Delta, which provides water for 25 million Californians, can be expected to decline by as much as 40 percent as a result of current and future environmental regulations designed to protect listed species.

The BDCP will stabilize project deliveries at close to levels of the recent past. This improvement in water supply reliability alone would increase California business output by over \$73 billion over the permit term and create or preserve up to 1.1 million jobs in the Bay Area, Southern California, the San Joaquin Valley, and the Central Coast. These benefits are evaluated relative to a scenario in which the environmental protections that are part of the BDCP are applied to the existing conveyance and habitat in the Delta.

The BDCP reduces the vulnerability of the state and federal projects to large earthquakes. The new conveyance facilities envisioned as part of the BDCP are capable of delivering up to 80 percent of pre-earthquake water supplies, as compared to roughly 20 percent under the existing infrastructure. This improved level of reliability is valued at nearly half a billion dollars.

Construction of New Conveyance Facilities and Habitat Restoration

The in-Delta construction, restoration and operations carried out under the Plan are expected to create over 177,000 jobs and \$11 billion in employee compensation in California over the 50-year permit term. These projects will increase the revenues of California businesses by \$29 billion. All of these impacts take into account the effects of land retirement in the Delta to conserve listed species.

**A job is defined as a position equivalent to one full-time worker for a year.*

1.1 million

Number of California jobs associated with improved water supply reliability, construction of new conveyance facilities, and habitat restoration over the 50-year life of the permit

\$84 billion

Net increase in statewide economic activity over the 50-year permit term

\$29 billion

Increased state business sales as a result of construction and operations of new conveyance facilities and habitat restoration

\$11 billion

Total employee compensation expected to be created by in-Delta construction, habitat restoration, and operations

110,000

Number of jobs created as a result of construction of the new water conveyance facilities.

Construction of the new water conveyance facilities alone will create more than 110,000 jobs in California over the 10-year construction period. It will generate nearly \$8 billion in employee compensation to California workers. Construction spending for just this portion of the BDCP will increase California business sales by over \$21 billion.

Adding together the costs to water users and taxpayers, the BDCP is expected to cost Californians roughly \$15 billion. These expenditures increase water rates and taxes, redirecting dollars that could have been spent on other goods and services, and decreasing business activity in California by \$19 billion and reducing 102,885 jobs over the 50-year life of the permit.

BDCP Construction Impacts in the Delta

Construction of the new conveyance facilities will cause transportation delays and disruptions on Delta roadways, resulting in additional costs to travelers and local businesses. The total impacts of transportation delays over a 9-year construction period are up to about \$80 million in 2012 dollars, including the impact of planned traffic mitigation measures.

Construction and operation of new conveyance facilities, and the restoration of habitat, will increase emissions of pollutants that have been linked to adverse health outcomes. The total economic costs of these air quality impacts in the Delta are estimated to be less than \$16 million through the purchase of offset credits that reduce pollution in the same air basin. However, the BDCP will reduce the amount of greenhouse gases emitted in the Delta region, providing a net benefit to the state of as much as half a billion dollars.

Changes in the Delta Environment

Overall, the BDCP will enhance recreational activity in the Delta. Those participating in fishing, hunting, boating, birdwatching, and other recreational activities are expected to gain an additional \$200 million to \$400 million over the 50-year life of the plan as a result of habitat restoration and other enhancements. These estimated benefits are a measure of what people are willing to pay for their experiences, minus what they actually do pay.

The impact of BDCP on certain properties in the Delta is expected to be negative for properties located near surface structures of the new conveyance facilities, and positive for properties located near areas being protected or restored by the conservation measures. Impacts from construction will be realized primarily during the 9-year construction period, while the benefits on property values of open space created by conservation measures is expected to be permanent.

The BDCP will affect populations of Chinook salmon (the only major commercial fish species in the Delta) by restoring and enhancing floodplains, tidal wetlands, and channel margin habitat in the Delta and Suisun Marsh. Due to the high degree of uncertainty involved in forecasting salmon populations under scenarios with and without the BDCP, these economic impacts are not quantified in dollars. But because BDCP predicts a net positive effect on Chinook populations, the economic effects of BDCP on this fishery are expected to be positive.

Salinity

The BDCP is expected to minimally alter the levels of salinity in Delta waterways. State and federal water contractors benefit by roughly \$2 billion as a result of reduced salinity of project deliveries.

The BDCP will also affect the salinity of irrigation water used by some Delta farmers. Using a model developed by the Delta Protection Commission, the income losses from increased salinity are projected to be \$34 million over 40 years of new water operations, an average annual impact of \$850,000.

The draft Statewide Economic Impacts Study is available online at www.BayDeltaConservationPlan.com.

Delta Property Values:



Properties located near areas protected and restored by conservation measures



Properties located near the surface structures of the new conveyance facilities

Implementing the BDCP would substantially increase economic welfare, business activity, and employment in California.