

SAVE THE SF BAY-DELTA! STOP THE TUNNELS!

What's the Delta?

The Delta is the largest estuary on the Pacific Coast of the Americas. Its waters support the largest nursery for California fisheries, the largest Pacific Coast fly over stop for migrating waterfowl, over 500,000 acres of California prime farmland, and an urban community that is home to over 4 million people.

What tunnels?

The Brown Administration is planning to build gigantic twin tunnels to export water from the Delta estuary, under the **Bay Delta Conservation Plan (BDCP)**. These tunnels *are so massive* that you can drive a Cessna aircraft through them! Each tunnel will be 40 feet in diameter and constructed 150 feet underneath the Sacramento-San Joaquin Delta. The tunnels would run about 30 miles, from just south of Sacramento to just north of Tracy.

For what?

The tunnels could grab up to 2/3 of the flow of the Sacramento River, which is where the main supply of fresh water in the Delta comes from. Right now, about 30% of water exported from the Delta goes to cities in the Bay Area, the South Coast, and Southern California. In contrast, Big Ag on the west and south side of the San Joaquin Valley, down to Bakersfield, get about 70% of Delta water, which often goes to grow water intensive almonds, cotton, and pistachios on unsustainable 'desert' farmland for lucrative overseas exports. In addition, these agricultural users contribute only 0.3% to California's economy, despite using 70% of Delta water.

What happens when you divert the majority of fresh water away from the Delta? *Water quality and quantity will deteriorate. The SF Bay-Delta estuary ecosystem and environment will collapse.* Fresh water flows are critical to stopping the intrusion of saltwater from the Bay and in flushing out the hundreds of thousands of tons of pollutants and salts that accumulate in the Delta.

What the devastating impacts will be:

- **Hundreds of wildlife & plant species:** Without adequate amounts of water, there will be no habitat. Consequently the population of hundreds of already endangered species such as the Chinook Salmon and the Greater Sandhill Cranes will become decimated or extinct. Wildlife that relies on migrating Delta species, such as the South Pacific Puget Sound Orca Whales, will also face near extinction.
- **Delta & Coastal fisheries:** The commercial and recreational fisheries are dependent on a healthy ecosystem and thriving species. This historic industry is worth billions annually, with the salmon industry worth \$1.5 billion annually alone. Thousands of jobs and livelihoods are tied to these industries. Environmental justice communities who depend on subsistence fishing will also face food and health insecurities as a result of increased contaminants in fish and wildlife populations.
- **Tourism in San Francisco Bay:** No analysis on how the lack of fresh water flows will impact San Francisco's coastal and Pier tourism. These industries depend on Delta fresh water flows for their crab and salmon fisheries, as well as wildlife sighting, boating/sailing, and restaurant economy. This industry is worth billions annually alone.
- **Delta's \$5.2 billion agricultural economy:** Farmers cannot irrigate crops with salt water and they certainly cannot plant crops in contaminated soils, which will happen as a result of salinity intrusion. The Delta Ag economy, which consists of generations of family farms and farm workers, will be out of work.
- **Delta's \$750 million recreation & tourism economy:** The operation and construction of the tunnels will obstruct and disable navigable water ways for boating, marinas and other types of leisure activities, in addition to creating conditions of low water flow that will foster invasive aquatic species, such as water hyacinth. Poor water quality also creates unsafe recreation.
- **Public health of cities & communities in Delta:** Tunnels will cause increased contamination of municipal water, discharge systems and wells for the millions of rural and urban residents living in the five Delta counties. Contra Costa County Water District stated that BDCP failed to model for potential increases of carcinogens and other formation of byproducts that would cause cancer and other serious health effects. Rural towns such as Hood and Byron will have to relocate due to exposure to cancer causing contaminants during construction.

Who will pay? If you live in an area that relies on export water, such as in large metropolitan cities such as Los Angeles and San Jose, your water rates or property taxes will go up, but you will get no new water.

Rates will rise more for urban ratepayers than for Big Ag because Big Ag does not want to pay as much per unit of water, given the amount of water they need. Since 2012, planners still think this project will cost about \$25 billion, but as with big public infrastructure projects such as the San Francisco-Oakland Bay Bridge and Seattle's Bertha project (the largest tunnel-boring machine), initial cost estimates always rise enormously. BDCP tunnel cost estimates doesn't include bond interest or cost over-runs. **A more realistic estimate is over \$54.1 to \$62.1 billion when interest, administration, research, operation, and maintenance fees are taken into account.**

If you are a California taxpayer, you will help pay for this project through water bonds. In order to build the project, the water exporters have to show that they can operate the tunnels without causing any more harm to fish and the environment than they have already caused. But they don't want to pay for the necessary environmental protections. For that, they plan to use general obligation bonds and make urban users pay to mitigate environmental damage.

But doesn't the Delta have problems that need fixing?

The Delta has problems, but the BDCP tunnels are a 20th century idea that won't fix them. It won't produce more water, more reliable supplies, or improved conditions for the environment in the Delta. **Flip this page over to see our better solution.**

What can you do?

Get involved with our campaign. Sign up for e-mail alerts from our website at RestoretheDelta.org, "Like" us on Facebook, and/or "Follow us" on Twitter to stay updated and to get action alerts. You could also make a donation to help our grassroots campaign from our website, by calling our office (209) 475-9550, or by sending a check to 10100 Trinity Parkway, Suite 120, Stockton, CA 95219.



Restore the Delta is a 501(c)3 organization that works in the areas of public education and outreach so that all Californians recognize the Sacramento-San Joaquin Bay Delta as part of California's natural heritage, deserving of restoration.

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THERE'S A BETTER SOLUTION

The SF Bay-Delta estuary is durable and sustainable. It is a jewel in the rough that needs some polishing. **What the Delta needs is restored water flows and levee upgrades.** With these improvements, the Delta can become a place where sustainable agriculture and a sustainable environment can thrive together.

1. Strengthen the existing Delta levees

Strengthening existing Delta levees is a far more efficient and cost effective way to ensure water reliability for the state and preserve environmental and economic stability to the greater Delta, as levees protect water supply and quality. Upgrade costs for robust levees are \$2-4 billion according to the Delta Protection Commission. In stark contrast, a State-sponsored 2013 Report on Affordability and Financing for the Bay Delta Conservation Plan (BDCP) showed that the tunnels project is likely to exceed construction cost estimates by 34 percent and cost over \$54.1 to \$62.1 billion when interest, administration, research, operation, and maintenance fees are taken into account.

The levees will need rehabilitation even if the BDCP tunnels were built, as there is \$20 billion in infrastructure (railroads, gas lines, power facilities, public highways), and 4 million people in the Delta who need protection. Recent studies by the Delta Protection Commission indicate that if a hypothetical catastrophe were to occur, 80% of the cost and 100% of the loss of life would occur within the Delta.

2. Follow advice of state experts: Reduce the amount of water taken from the Delta, & Retire toxic farmland

- **California needs to acknowledge the over subscription of the water system, and start a true accounting that determines how much water is really available.**
- **Water exports of safe yields should only happen during wet periods, not dry periods.**
- **Investments need to be made to retire drainage-impaired agricultural lands in the Central Valley.**

Instead of destroying the Delta to feed the water demands of billionaires' mega-farms and desert developments, let's end the myth of "surplus" water.

Let's retire toxic lands that do not drain properly and that are unsuitable for farming. Much of Delta water goes to dry, polluted land that drains into rivers. Retiring these lands would save hundreds of thousands of acre-feet per year in water. We could do this by buying out these farms and helping their owners convert the land to profitable solar or wind energy production. Rather than planting water dependent permanent crops, let's return to the requirement that field crops dependent on Delta "surplus" water are left uncultivated during dry periods. **It makes no sense to jeopardize farming on prime Delta farmland and surrounding areas to subsidize irrigation of impaired lands on the west side of the San Joaquin Valley that by the nature of being irrigated pollute vast quantities of ground and surface water.**

3. Increase natural flows of fresh water through the Delta

Water that flows to the ocean is not wasted. It is what gives life to fisheries that support the ocean food chain. Fresh water flows are critical to the survival of this state's salmon fishery, as salmon migrate from the estuary's watersheds, through the bay to the sea, and also help to flush out pollutants.

The State Water Board and State and Federal fishery agencies have repeatedly stated that Delta outflows must be significantly increased if the estuary's historic fisheries are going to survive.

Extra water can be exported through the existing pumps if state-of-art fish screens are installed by the water takers as promised. Further studies could be conducted to see if reconfiguring the existing pumps at their current location, or another location that allows fresh water to flow through the Delta, would provide benefits to fisheries.

4. Increase reliance on local water supply and improve water capture & storage

California needs to fix and upgrade its local water and wastewater systems. We need to remove old plumbing and replace it with low-flow options and implement new devices that tell users how much water they're using. In addition, 10-20% of municipal water supplies are lost through water main breaks; we should invest in the installation of wireless underground systems that track these breaks for fast repair. Most importantly, we should prioritize funds to repair and upgrade aging underground water delivery systems, which would gain over 500,000 acre feet of water annually.

We need to invest in new infrastructure that capture, recycle, and store water locally. Installing cisterns can result in the capture and storage of sudden or intense rains on public business and residential properties across our communities.

We need to provide incentives to homeowners and industry users to switch to drought-resistant landscaping, crops, or technology. Incentives to help farmers save water by installing drip irrigation everywhere can reduce agricultural water use from 80% to 60%.

These investments are crucial to making our water systems more reliable and must be prioritized. The development and installation of more efficient and innovative technologies can also create more reliable jobs. Cities across California are planning to diversify their water supply sources because **local sources are the most cost effective and reliable.** Besides submerging cities in debt, the BDCP tunnels would threaten to undermine these important local investments because it would increase dependence on outside water exports from the Delta estuary, which is already oversubscribed. Furthermore, the tunnels would fail to make more water for the system.

Watch our video on YouTube "There's a Better Solution for California and the Delta" for more solutions or visit RestoretheDelta.org

