

Frequently Asked Questions

Updated July 17, 2015

1. What is California WaterFix?

California WaterFix is a proposal backed by the administrations of Governor Edmund G. Brown Jr. and President Barack Obama to change how we divert water from the Sacramento-San Joaquin Delta. The Delta is a source of water for two-thirds of California's population and one-third of its irrigated farmland. The plan seeks to accomplish three primary goals that have long bedeviled state and federal policymakers:

1. Allow for more natural flows in the Delta to benefit salmon, smelt, and other species.
2. Increase water supply reliability by giving the water projects that divert from the Delta more flexibility to move water without harming fish.
3. Guard the Delta water diversion point from natural disaster disruption, such as earthquake or flood.

The proposal involves construction of three new intakes, each with a maximum diversion capacity of 3,000 cubic feet per second, on the east bank of the Sacramento River between Clarksburg and Courtland in the north Delta. Each intake site would employ state-of-the-art on-bank fish screens and, although the diversions would be located outside of the main range for delta and longfin smelt, the fish screens would be designed to meet delta smelt criteria. Two 40-foot-wide underground pipelines would carry the diverted water by gravity flow approximately 30 miles to the expanded Clifton Court Forebay, where two pumping plants would be constructed to maintain optimal water levels in the forebay for the existing State Water Project (SWP) and Central Valley Project (CVP) pumping facilities. Those existing pumps would lift the water into the canals that flow hundreds of miles to supply San Joaquin Valley farms and cities as far away as San Diego.

The north Delta intakes would be operated with the existing south Delta pumping facilities as a "dual conveyance system," which would be a significant upgrade from the existing system. The existing south Delta pumps pull water from nearby channels in an unnatural direction, called "reverse flows," which can draw fish off their migratory path into predator-rich channels.

Besides the environmental imperative to restore more natural flows to the Delta, there are infrastructure security reasons to modernize the Delta water conveyance system. The Delta's peat soil, composed of thousands of years'

worth of rotted tules and other wetland plants, oxidizes when dried and tilled. Now many of the approximately 60 islands that make up the Delta – most are farmed – are sunken as much as 20 feet below sea level in their centers. Should an earthquake, flood, or some other force knock down those levees, the sunken islands would fill up with water, drawing saltwater from San Francisco Bay eastward toward the SWP and CVP south Delta water intakes. Water supplies could be disrupted for weeks, months, or years, depending upon the extent of the damage.

2. What is California EcoRestore?

California EcoRestore is a state and federal agency initiative committed to the restoration of at least 30,000 acres of Delta habitat over the next four years. The types of habitat targeted include tidal wetlands, floodplain, upland, and riparian, and others. EcoRestore projects are unassociated with the habitat mitigation responsibilities of California WaterFix. The Delta hardly resembles the vibrant estuary of 200 years ago. Starting with the Gold Rush, people drained the Delta's marshes. They also dredged and straightened its meandering channels so that they could farm its rich peat soil. People built levees -- mounds of earth -- along the channels to hold back water, and in many places, lined those channels with big rocks to protect the levees from being scoured by water. In this way, the Delta lost not just its wetlands but also the riverside forest that shaded and harbored native fish.

3. How do California WaterFix and California EcoRestore relate to the Bay Delta Conservation Plan?

Federal and state water and wildlife agencies, in cooperation with the public water districts that depend upon water delivered from the Delta, launched the Bay Delta Conservation Plan (BDCP) in 2007. The effort aimed to find a way to accomplish dual goals:

- Enhance, protect and restore the Delta ecosystem and;
- Improve the reliability of water supplies for California.

After hundreds of public meetings and extensive analysis, a draft BDCP and corresponding environmental analysis was released in December 2013 for public review. The plan was a habitat conservation plan under Section 10 of the U.S. Endangered Species Act and a natural community conservation plan (NCCP) under the state Natural Community Conservation Planning Act. Regional habitat conservation plans and NCCPs cover a wide range of species over a large landscape, and include commitments and assurances for a specific permit term (the BDCP requested a 50-year term). The draft BDCP included a preferred alternative with the same basic water conveyance changes that are now embodied in California WaterFix. The draft plan also included 145,000 acres of protected or restored habitat related to meeting the requirements of the federal

and state laws for contributions to the recovery of the covered species in conjunction with the assurances requested for the 50-year permit.

Review of thousands of public comments received on the draft BDCP and its draft environmental impact documents raised considerable doubts as to whether a Section 10/NCCP approach -- with a 50-year term -- is realistic, given the uncertainty about future ecological conditions under climate change, as well as a lack of scientific data about how the Delta's estuary might respond to habitat restoration.

In April 2015, the principal backers of the BDCP -- the California Department of Water Resources and the U.S. Bureau of Reclamation -- announced a pivot in their approach to accomplishing the dual goals of ecosystem restoration and water supply reliability. They have chosen to study additional alternatives to modernize the Delta's water conveyance system and achieve the dual goals through implementation of the North Delta intakes and associated conveyance facilities, including the tunnels. These "sub-alternatives" would achieve compliance with the U.S. Endangered Species Act through the Section 7 consultation process and California Endangered Species Act through obtaining a 2081b incidental take permit and would not include long-term assurances for water project operators. The California Department of Water Resources has identified one of these sub-alternatives, Alternative 4A (California WaterFix), as its proposed project.

The draft BDCP and associated Draft EIR/EIS are still "live" documents; they are referenced in several of the sub-alternatives evaluated in the Partially Recirculated Draft Environmental Impact Report (EIR)/Supplemental Draft Environmental Impact Statement (EIS). Those documents were released for public comment on July 9, 2015. The BDCP website is still available, and all the documents are available there for continued public reference. The website CaliforniaWaterFix.com offers information about Alternative 4A, the new proposed project under the California Environmental Quality Act (CEQA).

At the same time, the state and federal governments will pursue at least 30,000 acres of habitat restoration through the California EcoRestore initiative. This effort is unassociated with the habitat mitigation responsibilities of California WaterFix, and represents a continued commitment to restoring the Delta's ecosystem.

4. What caused federal and state agencies to shift from a habitat conservation plan?

The U.S. Fish and Wildlife Agency, National Marine Fisheries Service, and California Department of Fish and Wildlife face great uncertainty about how climate change will affect the recovery of native fish in the Delta. (The average

early spring snowpack in the Sierra Nevada has decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of snowpack storage, and there has been an observed rise in sea level of seven inches at the Golden Gate over the past century.)

California WaterFix (Alternative 4A) would allow for an alternative implementation strategy for the new Delta water delivery infrastructure under Section 7 of the ESA and Section 2081(b) of CESA, and reflects the lead agencies interest in exploring alternate regulatory approaches that could facilitate expeditious progress on Delta solutions. California WaterFix (Alternative 4A) was developed in response to input from the 2013 BDCP Draft EIR/EIS comment period as well as from agencies' comments regarding the challenges with meeting the standards required to issue long-term assurances associated with compliance with Section 10 of the ESA and the NCCPA. These challenges relate to the difficulties in assessing species status and issuing assurances over a 50-year period, in light of climate change, and accurately factoring in the benefits of long-term conservation in contributing to the recovery of the covered species. There were also questions raised as to the ability to implement large-scale habitat restoration and an interest in early implementation of certain restoration actions, untethered to the water infrastructure approval.

However, California's water supply for 25 million people remains vulnerable, as do the existing risks to sensitive aquatic species without this upgrade. We cannot in good conscience set aside these risks, so we are seeking to implement a proposed project with a reduced long-term objective with more limited authorizations under the federal and state endangered species acts to get this project started.

5. Will the changed permitting process require new environmental analysis?

What is the process and timeline going forward?

The Partially Recirculated Draft EIR/Supplemental EIS that analyzes this change was released for a 45-day public review period on July 9, 2015.. The U.S. Bureau of Reclamation published a Notice of Intent in the Federal Register to announce the availability of the Recirculated Draft EIR/Supplemental Draft EIS. The alternatives in the original Draft EIR/EIS remain the same, and they are still part of the required range of alternatives to be considered in the Recirculated draft. Additional alternatives are presented in the Partially Recirculated Draft EIR/Supplemental Draft EIS, including Alternative 4A, also known as California WaterFix, which is the new CEQA proposed project. Reclamation and the California Department of Water Resources, the lead agencies on the proposed project, will review the public comments after the public comment period ends August 31, 2015.

6. What habitat restoration efforts will be included as part of the mitigation for California WaterFix?

Based on ongoing review of potential construction and operation impacts, mitigation for California WaterFix (Alternative 4A) construction and operation will include about 2,300 acres of habitat restoration and up to 13,300 acres of habitat protection (e.g. conservation easements). This additional acreage will focus primarily on preserving existing cultivated lands that also provide wildlife habitat in the Delta. DWR and Reclamation anticipate that a total of 15,600 acres of habitat restoration and protection will be the maximum amount required for mitigation. Final determinations will be based on actual project impacts and consultation with fish and wildlife agencies. All habitat restoration and protection costs for California WaterFix (Alternative 4A) will be paid for exclusively by water agencies benefiting from the project.

7. How will California EcoRestore be funded?

Separate from California WaterFix and in part pursuant to existing regulatory responsibilities, California EcoRestore aims to break ground on – and in some cases complete – at least 30,000 acres of habitat restoration in the next four years. Over this time period, we expect costs to reach at least \$300 million. Much of that will be borne by the public water agencies that buy water from the SWP, operated by the California Department of Water Resources, and the CVP, operated by the U.S. Bureau of Reclamation. The public agencies that take delivery of water from those two Delta-based projects are responsible for creation of 25,000 acres of various kinds of habitat deemed beneficial to threatened and endangered native fish.

Roughly \$130 million from the state and federal water project contractors will be needed to get moving on restoration in the next three or four years. Completion of all these projects may add significantly to the estimated cost. The total obligation of state and federal water project contractors will be what is needed to finish these projects and meet their regulatory obligations.

Other funds to accomplish the California EcoRestore goals may be available through Proposition 1, a \$7.5 billion water bond approved by state voters in November 2014, and the AB 32 Greenhouse Gas Reduction Fund. Local and federal partners may contribute, too.

8. How will this change affect the overall cost of the preferred water conveyance project?

The estimated \$15 billion cost of the new intakes, pipelines, operation, maintenance and mitigation will not change. All of those costs will be borne by the public water agencies that depend upon the SWP and CVP.

9. Why can't California just reduce the amount of water it diverts from the Delta?

California must continue its substantial investments in local and regional projects that involve conservation, recycling, stormwater capture, new connections among suppliers, and other ways to improve the efficiency with which we use water and build drought resilience. All of these actions have gained us at least two million acre-feet in additional supply in the last 20 years, and that effort will continue under the Governor's comprehensive California Water Action Plan: http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf.

Keeping pace with rising demand and creating a buffer of supply to cope with the vagaries of climate change will require steady progress on using water more efficiently, shoring up the reliability of existing supplies, and using new techniques to expand supplies. To also replace water supply lost as Delta deliveries decline would significantly increase costs and leave local water districts vulnerable to shortages. Desalination and water recycling projects, for example, are more expensive per acre-foot than California WaterFix and take considerable time for planning, permitting, and implementation.

10. How was the capacity of California WaterFix chosen?

A facility capable of diverting up to 9,000 cubic feet per second of water from the Sacramento River provides the greatest complement to local water supply projects because it is the only project that can take full advantage of water that is available in wet and above-normal years

A 9,000-cfs facility includes the following benefits:

- Reduce south Delta reverse river flows and minimize entrainment of fish that spawn in or migrate through the Delta;
- Enhance ability to store surplus outflows and reduce diversions during periods when fish are vulnerable;
- Improve drinking water quality and ability of local water districts to meet public health standards;
- Support efforts to expand groundwater recharge and recycling to help meet California's new mandate to bring groundwater basins into sustainable patterns of pumping and recharge; and
- Enhance seismic protection with ability to provide a base supply while Delta levees are repaired.

Furthermore, operational redundancy through two pipelines is important during outage scenarios, such as periodic maintenance or a catastrophic event like an earthquake. In addition, a single bore tunnel would require a tunnel size of 60 feet or more. A tunnel this large would set an engineering precedent. It would also increase overall project risk due to increased equipment needs (more tunnel boring machines, etc.), potential leaks, added ground pressure, and engineering uncertainties that would need to be tested.