

SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Avenue, Beaumont, CA
Board of Directors Engineering Workshop
Agenda
August 10, 2015 at 1:30 p.m.

- 1. Call to Order, Flag Salute and Roll Call**
- 2. Public Comment**

Members of the public may address the Board at this time concerning items relating to any matter within the Agency's jurisdiction. To comment on specific agenda items, please complete a speaker's request form and hand it to the board secretary.
- 3. Discussion of Partially Recirculated Draft EIR/EIS for California Water Fix* (Page 2)**
- 4. Review of 2010 Flume Transfer Agreement* (Page 18)**
- 5. Announcements**
 - A. Finance and Budget Workshop, August 24, 2015 at 1:30 p.m.
 - B. San Gorgonio Pass Regional Water Alliance, August 26, 2015
 1. Technical Committee at 4:30 p.m. – Banning City Hall Conference Room
 2. Regular Board Meeting at 6:00 p.m. – Banning City Council
- 6. Adjournment**

***Information included in Agenda Packet**

(1) Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for Public inspection in the Agency's office at 1210 Beaumont Avenue, Beaumont during normal business hours. (2) Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection at the Agency's office, located at 1210 Beaumont Avenue, Beaumont, California 92223, during regular business hours. When practical, these public records will also be made available on the Agency's Internet Web site, accessible at <http://www.sgpwa.com>. (3) Any person with a disability who requires accommodation in order to participate in this meeting should telephone the Agency (951 845-2577) at least 48 hours prior to the meeting in order to make a request for a disability-related modification or accommodation.

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](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.

A STATE-OF-THE-ART SOLUTION

SCIENCE, TECHNOLOGY, AND INNOVATION

This prudent, realistic, science-driven and achievable approach will fix California's aging water delivery system and protect our economy and public safety. This approach responds to an unprecedented level of public interest and comment. The project covers five main areas:



WATER SECURITY



CLIMATE CHANGE ADAPTATION



ENVIRONMENTAL PROTECTION

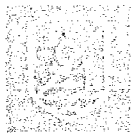


SEISMIC SAFETY

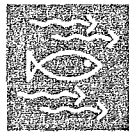


AFFORDABILITY

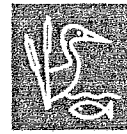
Upgrading our water delivery system could improve the natural direction of river flows, help native fish species migrate to and from the ocean, guard against water supply disruptions, and ensure that local water projects like recycling and groundwater recharge work better.



Protect our state's water supplies from climate change through water system upgrades

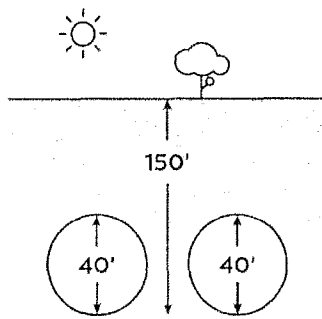


Improve river flows for threatened fish species

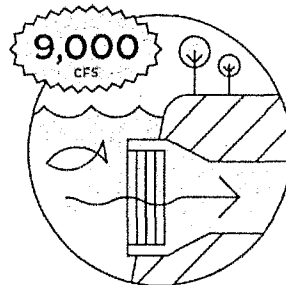


Ecosystem restoration and protection

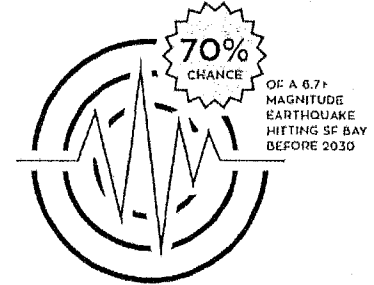
WATER DELIVERY UPGRADE



2 tunnels up to 150' below ground designed to protect California's water supplies

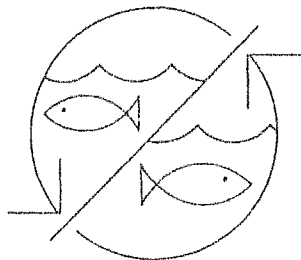


3 new intakes, each with 3,000 cubic-feet per second (cfs) capacity. Average annual yield of 4.9 million acre-feet.

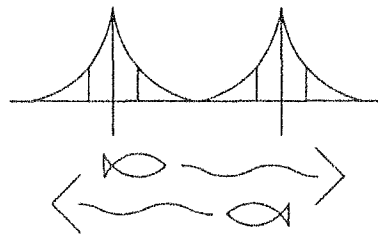


Protection against water supply disruption from failure of aging levees due to sea-level rise, earthquakes and flood events

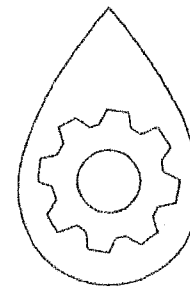
IMPROVED RIVER FLOWS



Reinstate a more natural direction of river flows in the South Delta by 46-160 percent



New criteria to protect spring outflow to San Francisco Bay







Criteria to protect Sacramento River flows and fish

REFINED TUNNEL OPTION AND INTAKE DESIGN

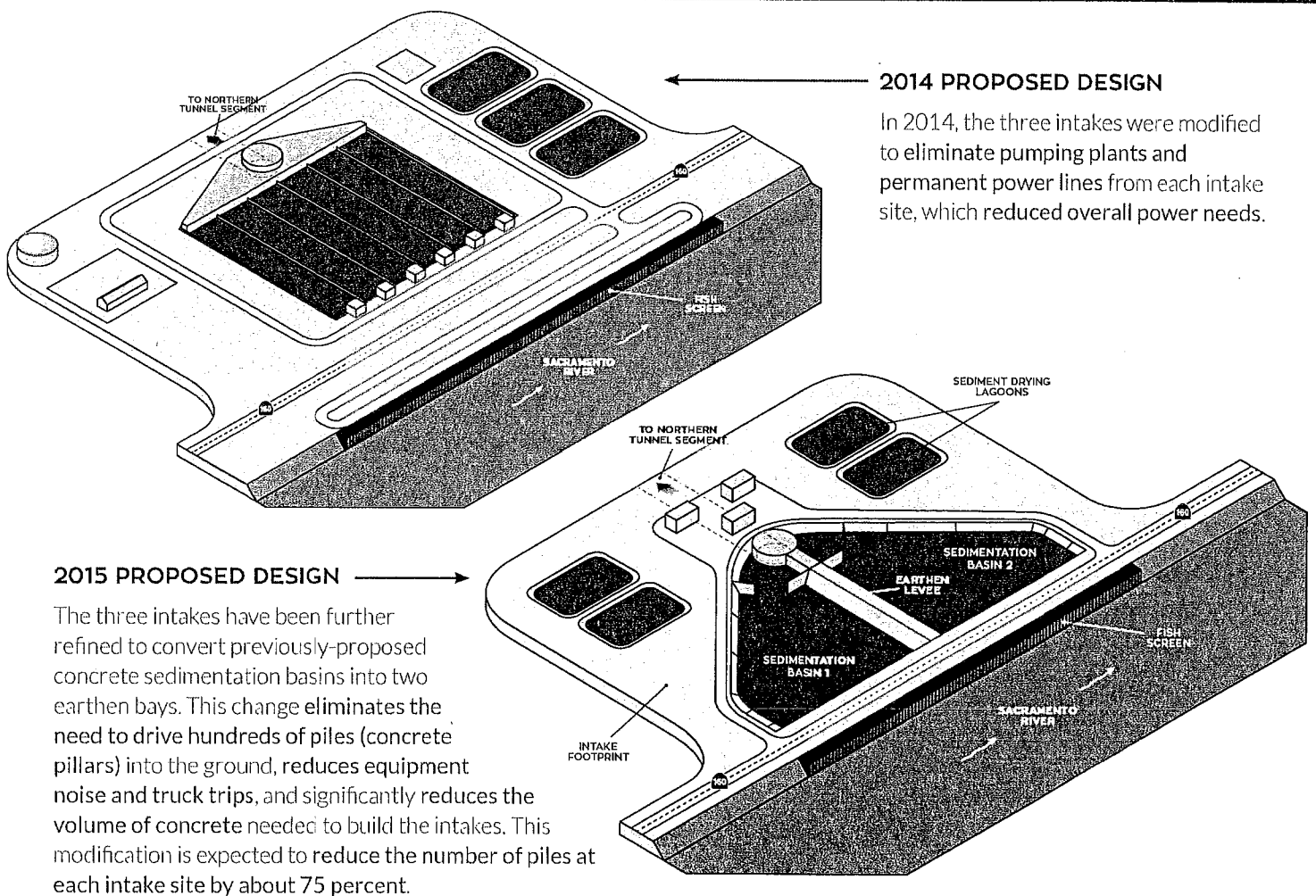
MAPPING A BETTER ROUTE FORWARD

In 2013, significant changes to the proposed water facilities and operations reduced the overall project footprint by one-half of its original size to minimize community impacts. In 2014, the water facilities were further refined to address engineering improvements and feedback received during the public comment period. Since then, additional changes have been made to the proposed facilities. Changes to the project:

-  Reduce construction impacts on Delta communities and the environment
-  Reduce power requirements
-  Increase use of state-owned property
-  Allow for gravity flow at certain river conditions

These changes, along with others, will be available for formal review and comment in the Partially Recirculated Draft Environmental Impact Report (EIR)/Supplemental Environmental Impact Statement (EIS) expected for release in June 2015.

ENGINEERING CHANGES TO INTAKE FACILITIES



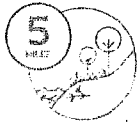
NEW ENVIRONMENTAL MITIGATION

Based on ongoing review of potential construction and operational impacts, mitigation for California WaterFix 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 the habitat and working landscape values in the Delta. DWR and Bureau of Reclamation anticipate these revised acreage targets for 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 will be paid for exclusively by water agencies benefiting from the project.

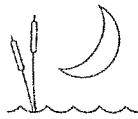


Separate from California WaterFix and over the next 5 years, California will pursue more than 30,000 acres of critical Delta restoration under the California EcoRestore program, pursuant to pre-existing regulatory requirements such as the 2008 and 2009 biological opinions and various enhancements to improve the overall health of the Delta ecosystem.

Proposition 1 funds and other state public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities.



Improve habitat conditions along five miles of important juvenile salmon migration routes



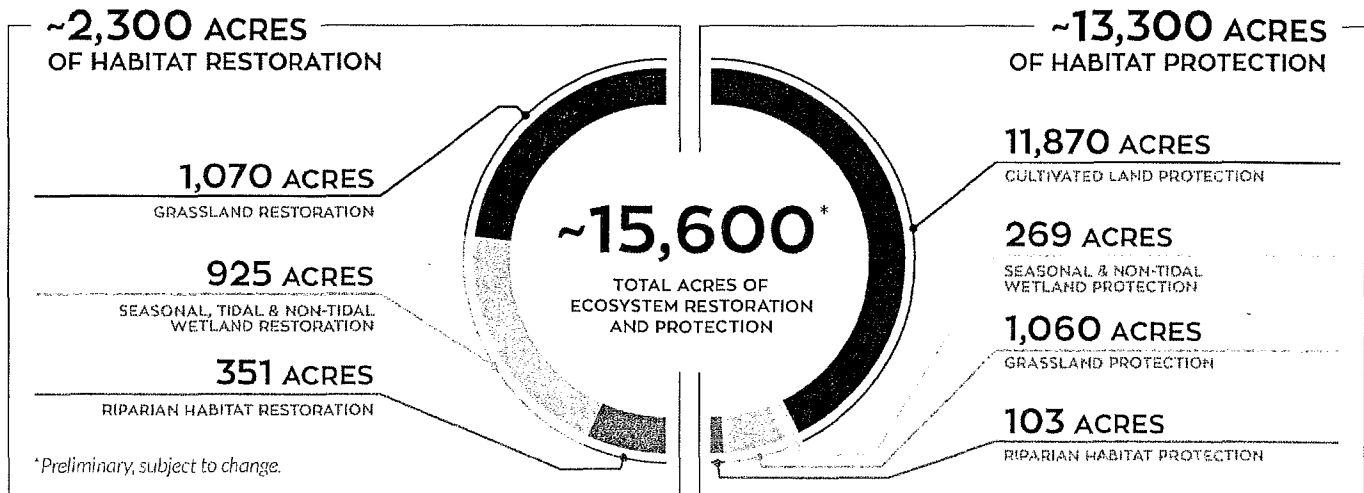
Restore tidal and non-tidal wetland habitat to sustain habitat functions for native wildlife, such as the Giant Garter Snake and salmon



Restore native riparian forest and scrub to support habitat for riverside species and improve linkages for terrestrial and other native species



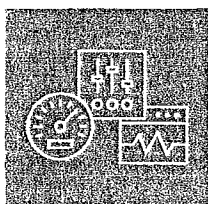
Improve connectivity among existing patches of grassland and other natural habitats



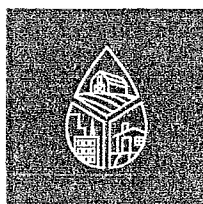
For more details on the full scope of environmental enhancements and government agency responsibilities, please visit: http://resources.ca.gov/california_water_action_plan



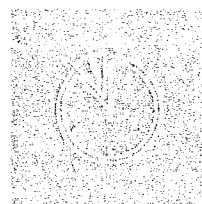
The cost to fix California's primary water delivery system is estimated at \$14.9 billion – or about \$5 a month for urban water users – and will be paid for by public water agencies that rely on the supplies.



An Adaptive Management and Monitoring Program will guide real-time operations of the system.



Our communities – farms, businesses, homes – and economy depend upon reliable, affordable, high-quality water supplies.



The time to act is now. Californians cannot afford a broken and unreliable water delivery system.

PROPOSED PROJECT CHANGES

Reducing environmental impacts and improving operations



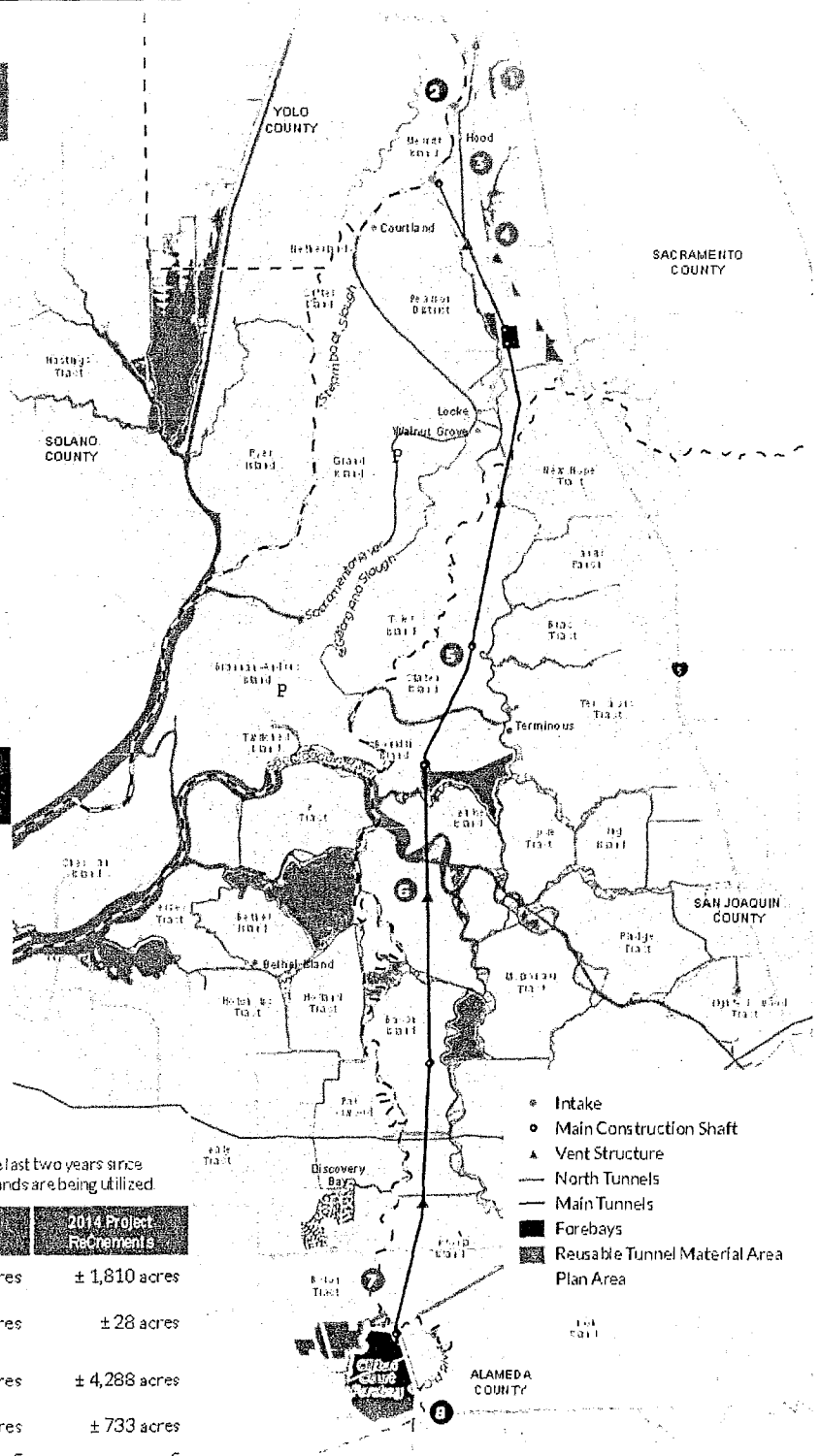
ENVIRONMENTAL BENEFITS

- 1 Eliminate the pumping plants, permanent power lines, and sediment basins at the northern intakes to reduce visual and air quality impacts and energy needs.
- 2 Reduce visual impacts near the town of Hood.
- 3 Remove permanent transmission lines near Stone Lakes Wildlife Refuge to reduce environmental impacts.
- 4 Reduce impacts on Staten Island wildlife habitat by removing the proposed tunnel launch facilities, large reusable tunnel material storage areas, a barge landing site, and high voltage transmission lines. This change also reduces the overall construction time on Staten Island.
- 5 Eliminate large access pads at vent structures to reduce the need for earth work.
- 6 Eliminate environmental impacts on Italian Slough by removing an underground siphon.



OPERATIONAL BENEFITS

- 7 Gravity-fed operation improves tunnel operation and maintenance, reduces power requirements at the northern intakes, and improves long-term tunnel reliability by reducing internal pressure.
- 8 Consolidate pumping plants previously proposed at the three northern intakes to one combined pumping facility located on existing state-owned property at Clifton Court to reduce environmental and construction impacts.



- Intake
- Main Construction Shaft
- ▲ Vent Structure
- North Tunnels
- Main Tunnels
- Forebays
- Reusable Tunnel Material Area
- Plan Area

PROJECT REFINEMENTS

The chart below shows how the California WaterFix project has been refined in the last two years since the initial BDCP Draft. Fewer overall acres are being impacted, while more public lands are being utilized.

Project Refinements	Administrative Draft EIR/EIS	2013 Project Refinements	2014 Project Refinements
Water Facility Footprint	± 3,654 acres	± 1,851 acres	± 1,810 acres
Intermediate Forebay Size (Surface Acreage)	± 750 acres	± 40 acres	± 28 acres
Private Property Impacts - Permanent and Temporary	± 5,965 acres	± 5,557 acres	± 4,288 acres
Public Lands Utilized	± 240 acres	± 657 acres	± 733 acres
Number of Tunnel Reaches	6	5	5
Number of Launch and Retrieval Shaft Locations	7 main tunnel shafts	5 main tunnel shafts	5 main tunnel shafts
Agricultural Impacts	± 6,105 acres	± 6,033 acres	± 4,890 acres

[RDEIR/SDEIS Public Review](#) > Public Review RDEIR/SDEIS

Public Review Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS)

The Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) is being made available to the public in accordance with the California Environmental Quality Act (CEQA), and the National Environmental Policy Act (NEPA).

The comment period begins July 10, 2015. Comments must be received electronically or postmarked on or before October 30, 2015. For more information on how to submit comments, [click here](#).

To provide reviewers with additional tools for review, two complete versions of the RDEIR/SDEIS will be available. A version has been prepared which includes [hyperlinks and track changes](#) in some sections. This option is designed to more easily review the changes made from the Draft EIR/EIS. The full RDEIR/SDEIS is also available for review in [Section-508 compliant format](#) (i.e. accessible for the visually impaired). The 508-compliant option does not include track changes or hyperlinks. Both versions of the document contain the same information and either can be used for review and comment.

**RDEIR/SDEIS Documents - with Hyperlinks/Track
Changes**
NOW AVAILABLE

**RDEIR/SDEIS Documents -
508-Compliant Files**
NOW AVAILABLE

All substantive comments received on the RDEIR/SDEIS (and those previously received during the comment period for the 2013 BDCP Draft EIR/EIS) will be responded to in the Final EIR/EIS and considered in the decision-making process. No final decisions have been made regarding going forward with the proposed project or in selecting an alternative; those decisions will only occur after completion of the CEQA and NEPA processes. The comment period ends 45-days after the publication of the Environmental Protection Agency's (EPA) Federal Register notice.



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