

A STATE-OF-THE-ART SOLUTION

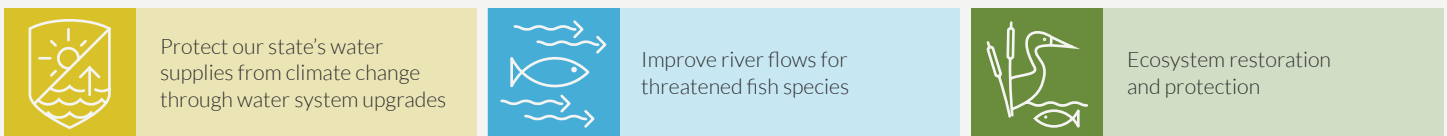
SCIENCE, TECHNOLOGY, AND INNOVATION

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 review and comment.

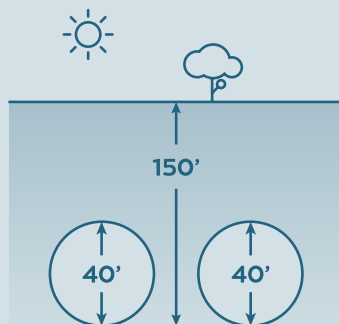
The project covers five main areas:



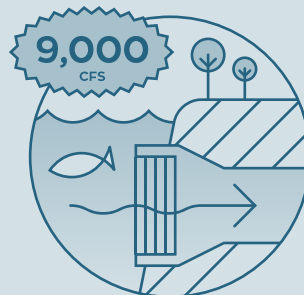
Upgrading our water delivery system would improve the natural direction of river flows, help native fish species migrate to and from the ocean, guard against water supply disruptions, and ensure that local water projects like recycling and groundwater recharge work better.



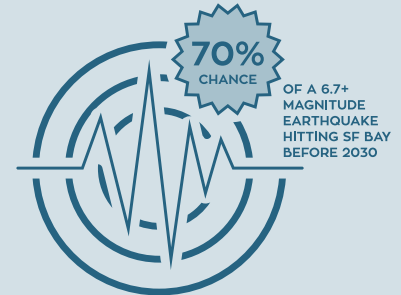
WATER DELIVERY UPGRADE



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

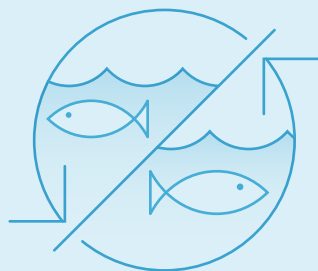


3 new intakes, each with 3,000 cubic-feet per second (cfs) capacity. **Average annual yield of 4.9 million acre-feet.**

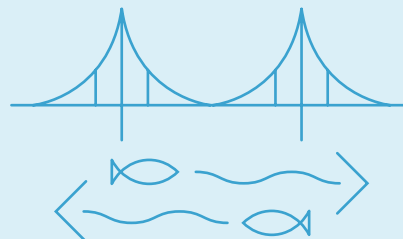


Protection against water supply disruption from failure of aging levees due to sea-level rise, earthquakes and flood events

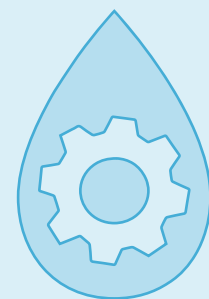
IMPROVED RIVER FLOWS



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



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.



**CALIFORNIA
ECO RESTORE**
A STRONGER DELTA ECOSYSTEM.

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

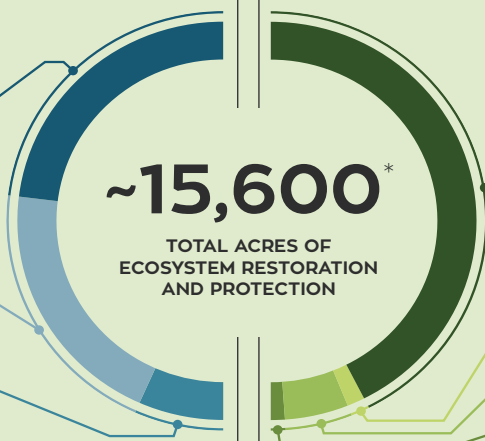
**~2,300 ACRES
OF HABITAT RESTORATION**

1,070 ACRES
GRASSLAND RESTORATION

925 ACRES
SEASONAL, TIDAL & NON-TIDAL
WETLAND RESTORATION

351 ACRES
RIPARIAN HABITAT RESTORATION

*Preliminary, subject to change.



**~13,300 ACRES
OF HABITAT PROTECTION**

11,870 ACRES
CULTIVATED LAND PROTECTION

269 ACRES
SEASONAL & NON-TIDAL
WETLAND PROTECTION

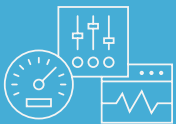
1,060 ACRES
GRASSLAND PROTECTION

103 ACRES
RIPARIAN HABITAT PROTECTION

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.

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



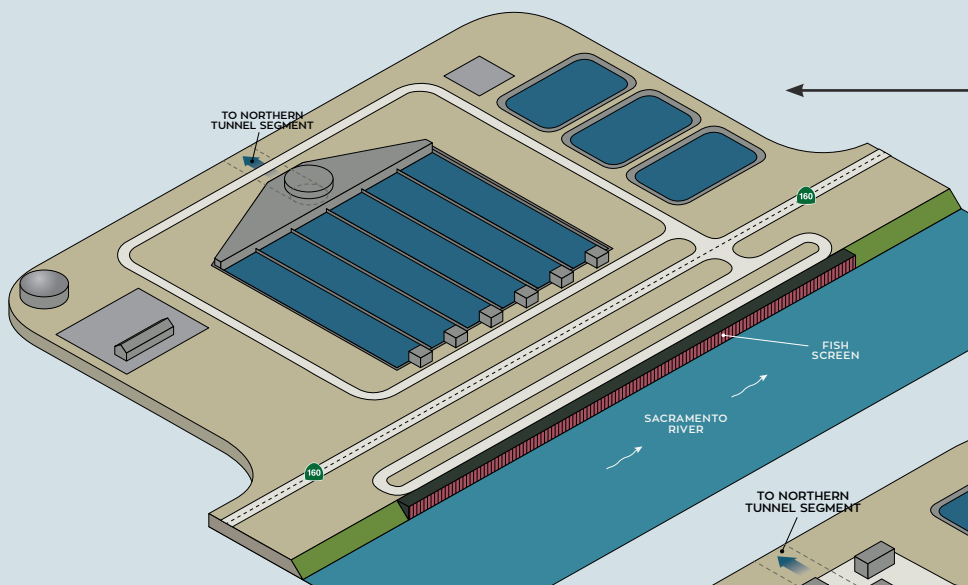
Increase use of state-owned property



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

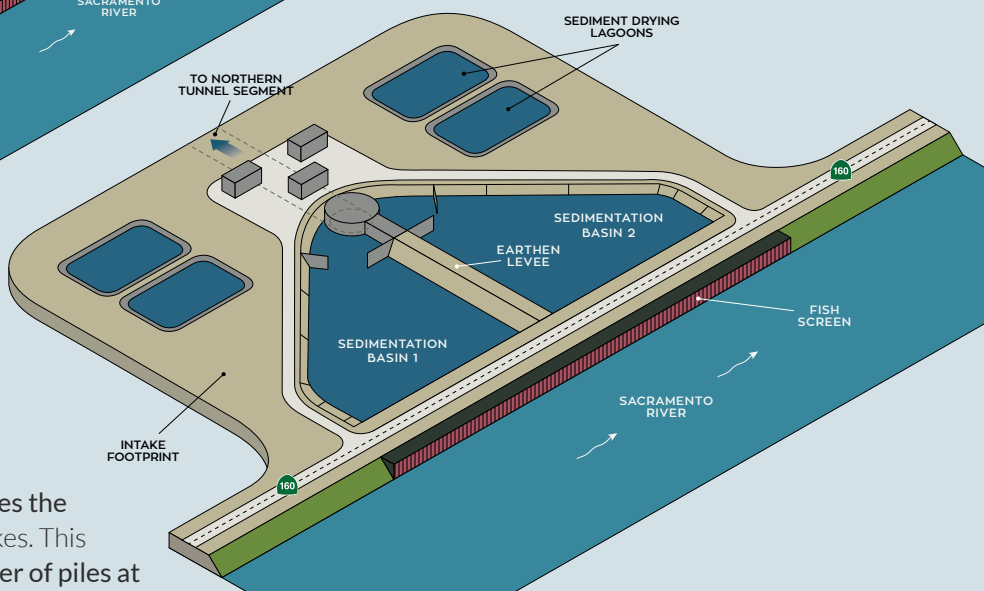


2014 PROPOSED DESIGN

In 2014, the three intakes were modified to **eliminate pumping plants and permanent power lines** from each intake site, which **reduced overall power needs**.

2015 PROPOSED DESIGN

The three intakes have been further refined to convert previously-proposed concrete sedimentation basins into two earthen bays. This change **eliminates the need to drive hundreds of piles (concrete pillars) into the ground, reduces equipment noise and truck trips, and significantly reduces the volume of concrete** needed to build the intakes. This modification is expected to **reduce the number of piles at each intake site by about 75 percent**.



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.
- 3 Reduce visual impacts near the town of Hood.
- 4 Remove permanent transmission lines near Stone Lakes Wildlife Refuge to reduce environmental impacts.
- 5 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.
- 6 Eliminate large access pads at vent structures to reduce the need for earth work
- 7 Eliminate environmental impacts on Italian Slough by removing an underground siphon.



OPERATIONAL BENEFITS

- 2 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.

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

