CALIFORNIA WATER FIX
RELIABLE. CLEAN. WATER.

PROJECT UPDATE

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OUTLINE

- Changes/Updates
- New alternatives
- Effects on San Francisco Bay

PERMITTING APPROACH

- BDCP
  - Habitat Conservation Plan under Section 10 of the U.S. Endangered Species Act.
  - Natural Community Conservation Plan under the California Natural Community Conservation Planning Act.
  - Covers wide range of species over a large landscape.
  - Commitments and assurances for a specific term.

- California WaterFix
  - Compliance with the U.S. Endangered Species Act through Section 7 consultation (Biological Opinion).
  - Compliance with the California Endangered Species Act through a 2081b incidental take permit.
  - Permits do not include long-term assurances.
  - Ability to change or amend permits and adaptively manage.

WHAT'S CHANGED SINCE THE 2013 DRAFT EIR/EIS

- Design modifications to Alternative 4 (applied to all new sub-alts)
- Introduction of three new sub-alternatives: 4A, 2D, 5A
- Updated environmental analysis:
  - Fish & Aquatic Habitat
  - Water Quality
  - Effects Downstream of the Delta on Fisheries
  - Air Quality, Health Risk Assessment, Traffic and Noise
  - Geotechnical Investigations
  - Inclusion of Additional NEPA Determinations

PROPOSED ALTERNATIVE 4A/CALIFORNIA WATERFIX

- Replaces Alternative 4 (BDCP) as the CEQA and NEPA preferred project.
- Separates conveyance facility and habitat restoration measures into two separate efforts – California WaterFix and California EcoRestore.
- Reflection of public comments.
- Fulfills requirements of 2009 Delta Reform Act to meet co-equal goals.
- Compliance with ESA through Section 7 consultation and CESA through 2081(b) incidental take permit.
- Analyzed in the Partially Recirculated Draft EIR/Supplemental Draft EIS, which was available for public review and comment: July 10th – October 30th.

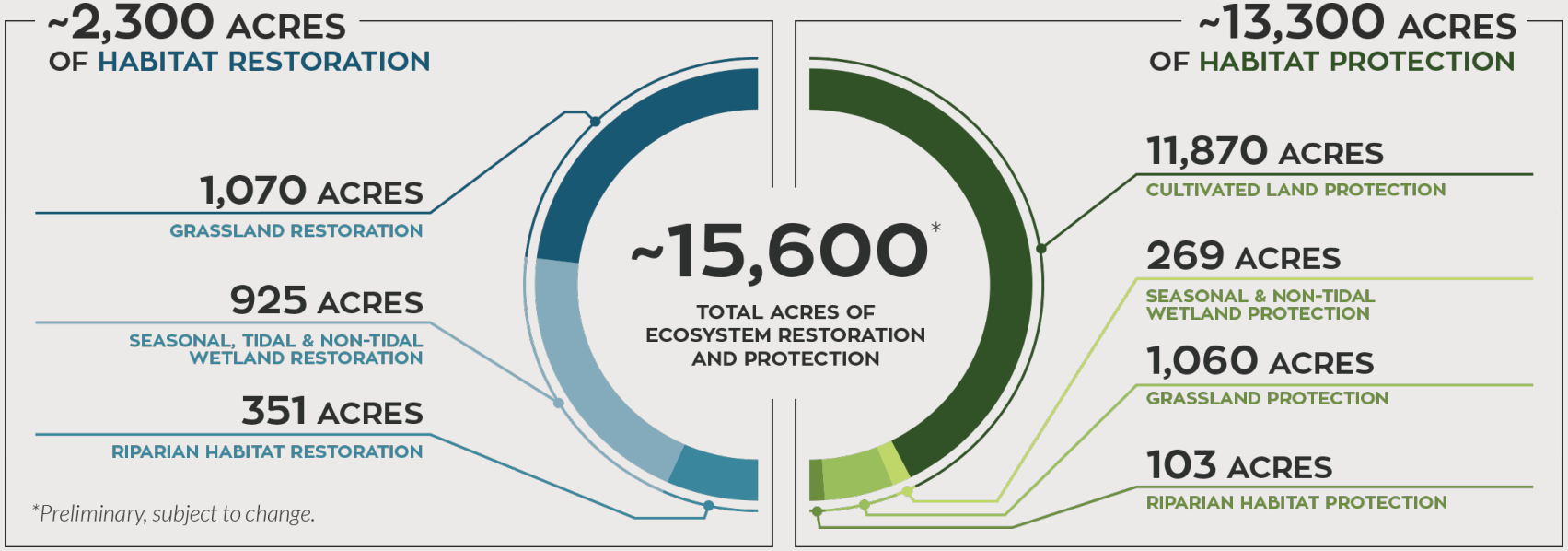
NEW ALTERNATIVES

- RDEIR/SDEIS analyzed three new sub-alternatives (4A, 2D and 5A)
- Compare and evaluate the proposed project and fully explore multiple regulatory approaches

NEW AND REVISED RDEIR/SDEIS ALTERNATIVES

Alternative	Maximum North Delta Diversions	Intakes	Regulatory Approach
4 Modified Pipeline/Tunnel	9,000 cfs	2, 3 & 5	Section 10 (HCP)/ NCCPA (NCCP)
2D Modified Pipeline/Tunnel	15,000 cfs	1-5	Section 7/ 2081(b) permit
4A Modified Pipeline/Tunnel	9,000 cfs	2, 3 & 5	Section 7/ 2081(b) permit
5A Modified Pipeline/Tunnel	3,000 cfs	2	Section 7/ 2081(b) permit

ENVIRONMENTAL MITIGATION



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

EFFECTS ON THE SAN FRANCISCO BAY

- Additional and/or new analyses in RDEIR/SDEIS:
  - Assessment of water quality constituent effects in the San Francisco Bay was added
  - Additional analysis of sediment loading and other effects on downstream bays related to fish and aquatic resources

WATER QUALITY IMPACTS

- Updated water quality modeling and analyses
- No significant water quality impacts
- Evaluation of Early Long Term effects
- No large-scale habitat restoration
- Project must adhere to many water quality objectives and criteria as described in various federal, statewide and regional plans and regulations

SAN FRANCISCO BAY WATER QUALITY

- Principally qualitative analyses.
- Constituents analyzed (no adverse effect/less than significant): Boron, bromide, chloride, DOC, dissolved oxygen, pathogens, pesticides, trace metals, turbidity/ TSS, *Microcystis*, nutrients (nitrogen and phosphorus loading), mercury/methylmercury, selenium.
- All effects not adverse/less than significant.

SALINITY

- Modeling results indicate that with or without the proposed project, rising sea levels will bring saline tidal water further into the Delta than currently occurs.
- All potential salinity impacts are determined to be “less than significant” and “not adverse” after mitigation measures are applied:
  - WQ-11: Avoid or Minimize Reduced Water Quality Conditions
  - WQ-11a: Adaptively Manage Diversions at the North and South Delta Intakes to Reduce or Eliminate Water Quality Degradation in Western Delta
  - WQ-11b: Adaptively Manage Head of Old River Barrier and Diversions at the North and South Delta Intakes to Reduce or Eliminate Exceedances of the Bay-Delta WQCP Objective at Prisoners Point

SAN FRANCISCO BAY SEDIMENT INPUT

- Potential for removal of sediment at North Delta Diversions (~10% of load from Sacramento River).
- However, smaller tributaries around San Francisco Bay contribute ~60% of load.
- Sediment removed at NDD would be reintroduced, subject to approval by regulatory agencies.
- The effect would be not adverse/less than significant.

WHAT HAPPENS NEXT?

	REGULATORY PROCESSES AND PERMITS	IN PROGRESS?	SEQUENCING	
			IN COORDINATION WITH CEQA/NEPA	AFTER ROD/NOD
1	CALIFORNIA ENVIRONMENTAL QUALITY ACT / NATIONAL ENVIRONMENTAL POLICY ACT (CEQA/NEPA)	✓	●	
2	ENDANGERED SPECIES ACT (ESA) SECTION 7 CONSULTATION	✓	●	
3	NATIONAL HISTORIC PRESERVATION ACT (NHPA) SECTION 106 COMPLIANCE	✓	●	
4	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW) 2081(B) PERMIT	✓		●
5	SECTION 401 OF THE CLEAN WATER ACT - WATER QUALITY CERTIFICATION	✓		●
6	CDFW LAKE AND STREAMBED ALTERATION AGREEMENT, SECTION 1602	✓		●
7	U.S. ARMY CORPS OF ENGINEERS (USACE) SECTION 404 PERMIT	✓		●
8	STATE WATER RESOURCES CONTROL BOARD (SWRCB) CHANGE PETITION	✓		●
9	DELTA STEWARDSHIP COUNCIL	✓		●
10	USACE SECTION 408 PERMIT			●
11	DESIGN & ENGINEERING	10% DESIGN		30% - 95% DESIGN

- **Environmental Review**
  - Preparing Final EIR/S
  - Expected mid-2016
- **ESA Section 7 Consultation**
  - Working draft biological assessment released
  - Issuance of Biological Opinion expected in late Spring 2016
- **USACE Section 404 Permit**
  - Submitted on August 24, 2015
  - Public comment period: September 9, 2015 – November 9, 2015
- **SWRCB Change Petition**
  - Submitted on August 26, 2015
  - First of two public hearings on April 7, 2016

STAY INVOLVED

www.californiawaterfix.com

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QUESTIONS

CALIFORNIA ECORESTORE

- Program will accelerate and implement a comprehensive suite of habitat restoration actions.
- More than 30,000 acres over the next 5 years.
- Actions include critical Delta restoration and pre-existing regulatory requirements and enhancements to improve overall health of the Delta.
- Projects identified through locally-led processes facilitated by the Delta Conservancy.
- Projects implemented by the Delta Conservancy in collaboration with local governments.
- Funding provided through multiple sources.

ECORESTORE - PROJECT TYPES & ACREAGES

3,500 ACRES

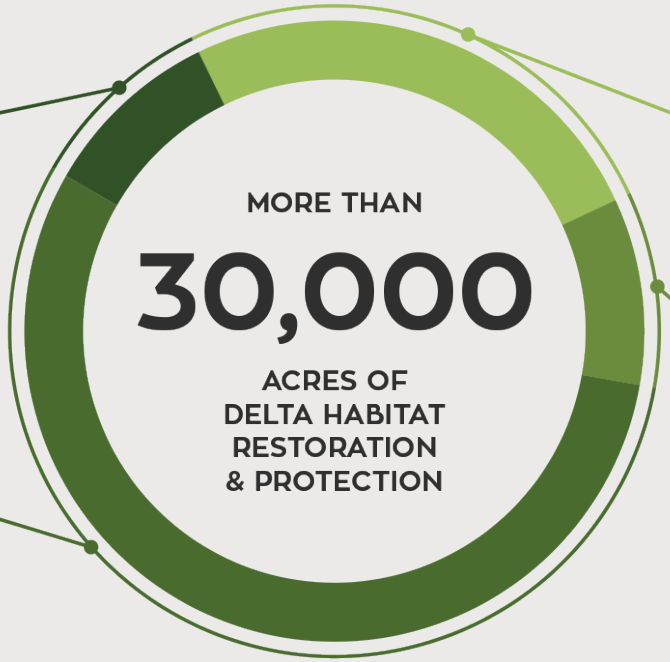
MANAGED WETLANDS CREATED

for subsidence reversal and carbon management

17,500+ ACRES

FLOODPLAIN RESTORATION

500+ acres restored; planning, permitting and financing secured for an additional 17,000 acres



9,000 ACRES

TIDAL & SUB-TIDAL HABITAT RESTORATION

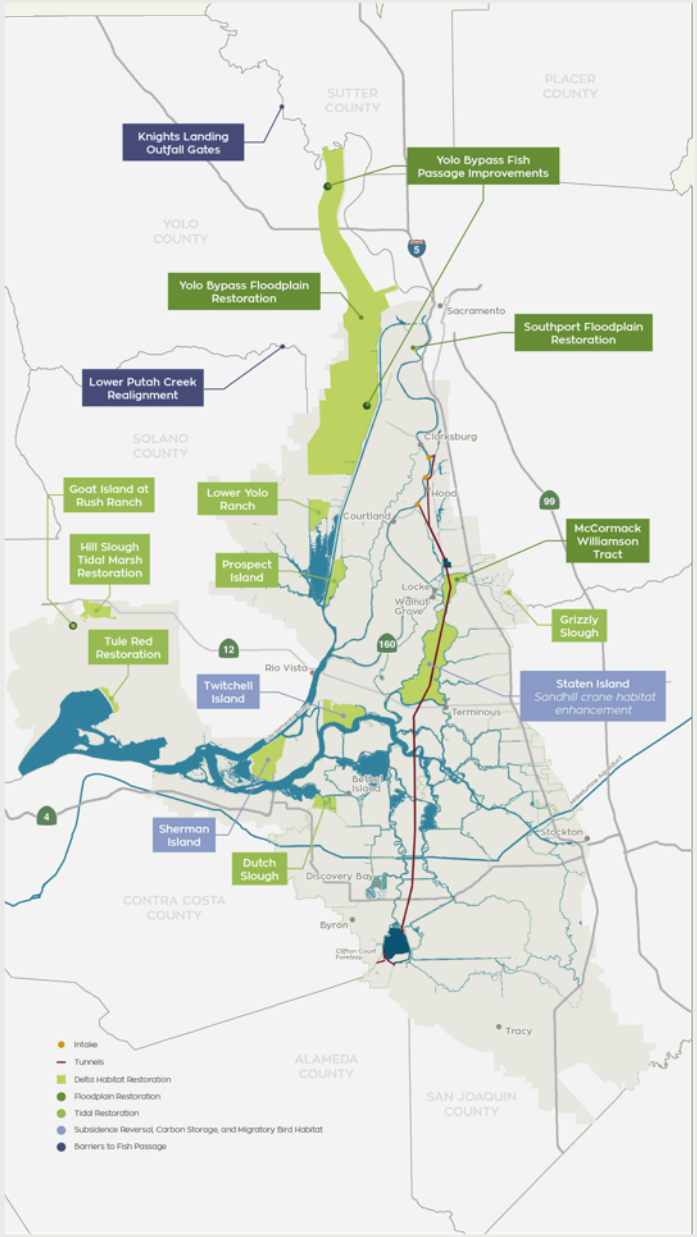
1,000+ ACRES

PROPOSITION 1 & 1E FUNDED RESTORATION PROJECTS

Aquatic, riparian and upland habitat projects; multi-benefit flood management projects

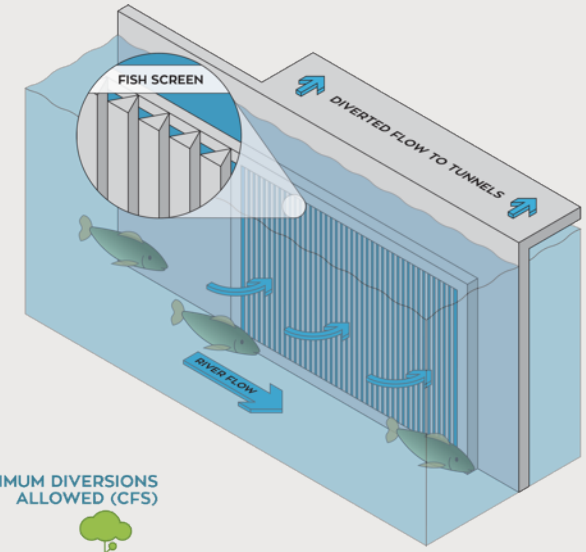
RESTORATION OBJECTIVES BREAKING GROUND IN 2015/2016

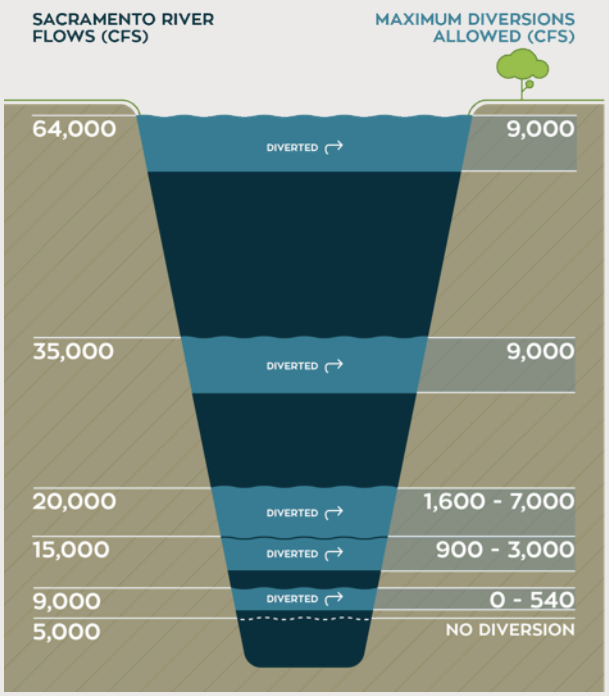
- 2015:
  - Dutch Slough
  - Knights Landing Outfall Gates
- 2016:
  - Southport
  - McCormack-Williamson Tract
  - Hill Slough
  - Goat Island at Rush Ranch
  - Tule Red Restoration



PROTECTING FISH

- A new water conveyance system can improve environmental flows over and above current conditions:
  - New criteria to protect spring outflow to San Francisco Bay
  - Improve flexibility to avoid water diversions at locations that harm fish
  - More natural direction of South Delta flows
  - Protect fish with state-of-the-art fish screens
  - Protect Sacramento River flows





**Depending on water year type and fish presence*
***9,000 cfs is the maximum diversion allowed, starting when the river is at 35,000 cfs.*

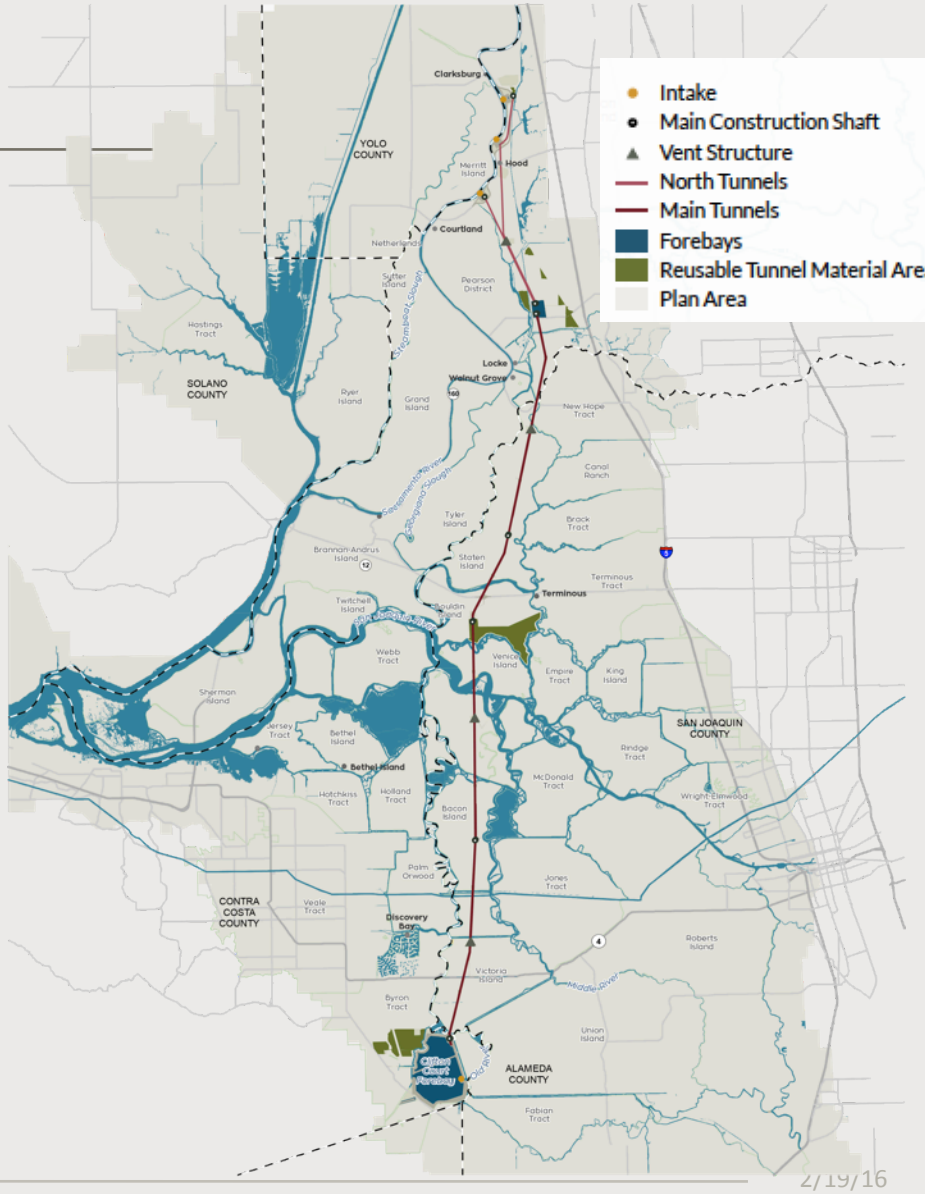
PROJECT IMPROVEMENTS

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

PROPOSED REFINED TUNNEL OPTION AND INTAKE DESIGN

Environmental Benefits:

- Eliminate several features at northern intakes
- Reduce visual impacts near Hood
- Remove permanent transmission lines near Stone Lakes National Wildlife Refuge
- Reduce impacts and overall construction on Staten Island
- Eliminate large access pads at vent structures
- Eliminate environmental impacts on Italian Slough

Operational Benefits:

- Gravity-fed operation – improves tunnel operation, reduces power requirements and improves long-term reliability
- Combined pumping facility on existing state-owned property at Clifton Court – reduces environmental and construction impacts