BDCP
BAY DELTA CONSERVATION PLAN

Bay Delta Conservation Plan

Overview

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Presented by

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California Department of Water Resources

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BDCP IN CONTEXT

Delta Stewardship Council (DSC)
- *Delta Plan*

Delta Conservancy
- *Strategic Plan **

State Water Resources Control Board (SWRCB)
- *Delta Flow Criteria **

Bay Delta Conservation Plan (BDCP)
- *Conservation Plan * (HCP / NCCP)*

Delta Protection Commission (DPC)
- *Economic Sustainability Plan **

**Document will inform the Delta Stewardship Council's Delta Plan due January 1, 2012*

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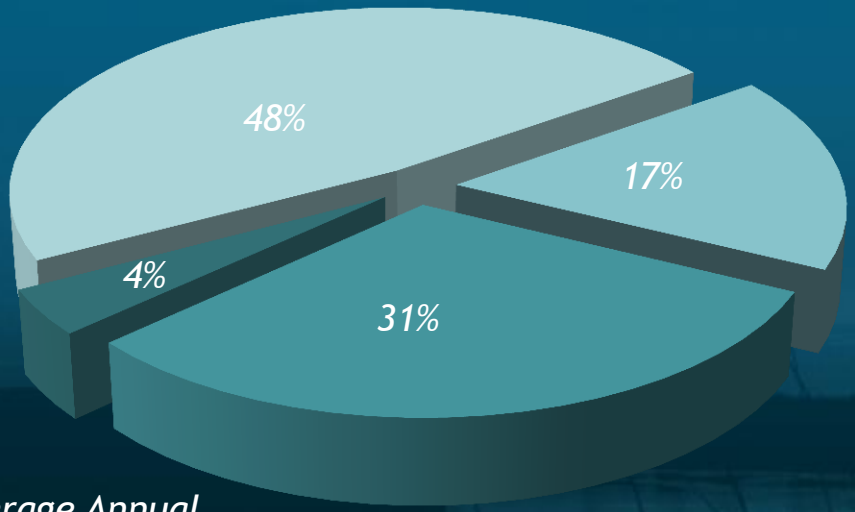
DELTA WATER ALLOCATION

- Outflow to San Francisco Bay (48%)
- Exports (17%)
- Delta Watershed (31%)
- In Delta Consumptive Use (4%)



Average Annual

The Legal Delta:

738,000 acres

~ 60 islands/tracts

1,115 miles of levees

- 3 State Highways
- Major Rail Lines
- Major Water and Natural Gas Pipelines
- 1 Critical Natural Gas Reservoir
- 2 Deep Water Ports
- Major Power Transmission Lines

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Importance of the Delta to California

Water Supply

- 25 million Californians
- 3 million acres of agriculture
- $400 billion of annual economic activity

In-Delta Land Use

- 558,000 acres in agricultural production
- 64,000 acres of urban and commercial development

Environment

- Confluence of California's two largest watersheds (Sacramento River and San Joaquin River)
- More than 750 plant and animal species
- More than 40 threatened or endangered species

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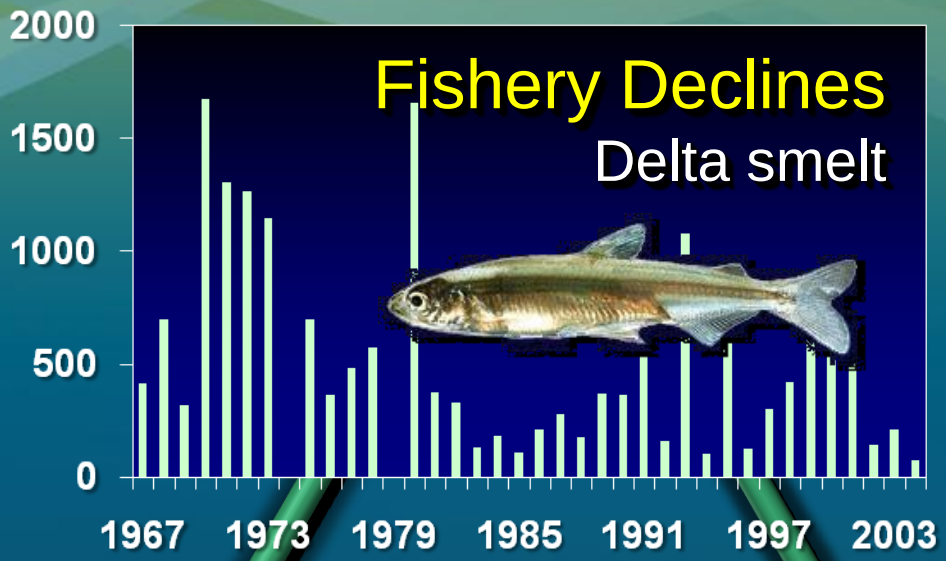
Key Delta Risks



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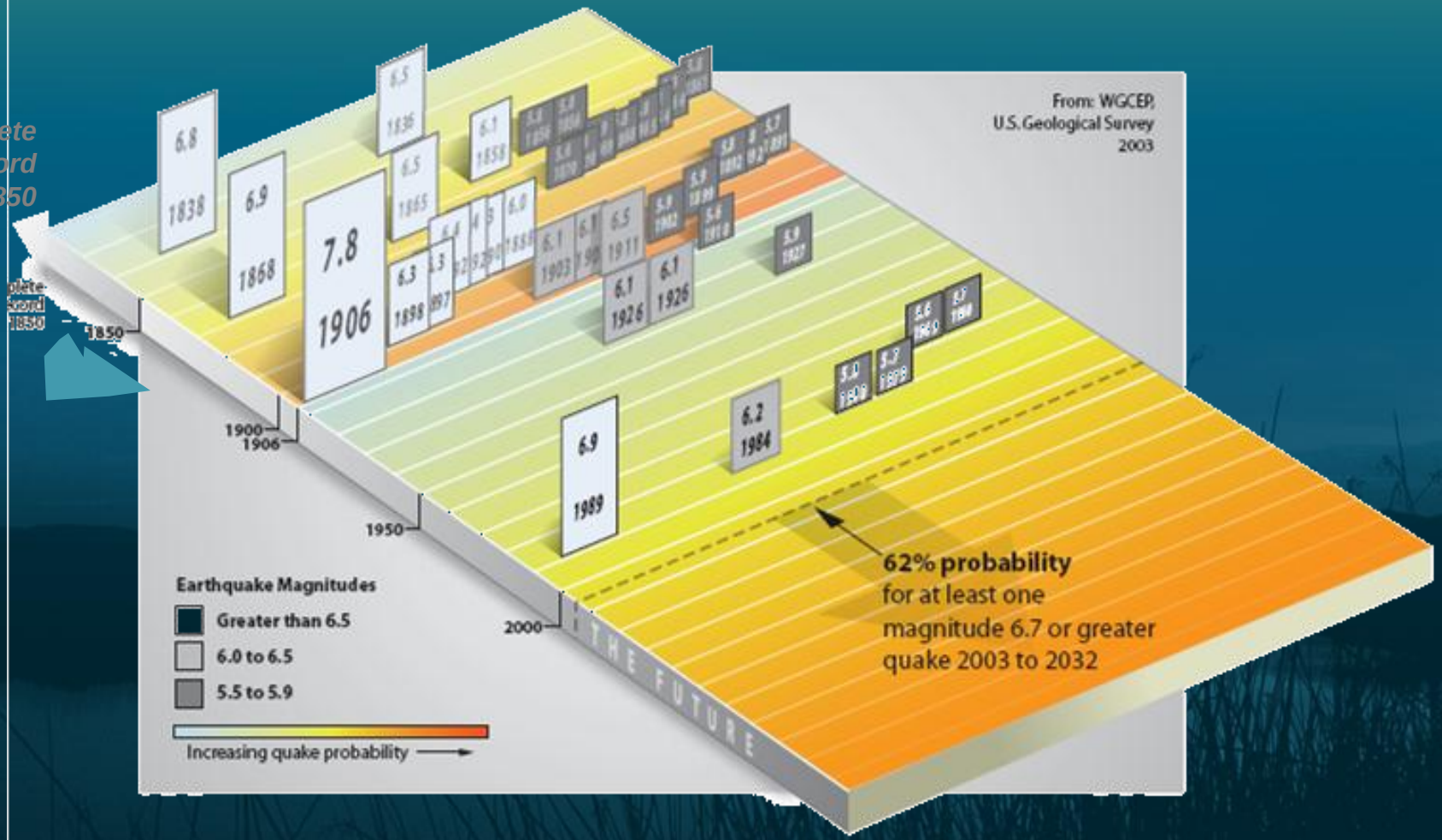
Seismic Challenges

Past and Future Seismic Events in the Bay-Delta Region



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Potential for Flooding

Jones Tract
Levee Breach - 2004

In 1997 there were 11 levee failures in the Delta

View of Levee Repair

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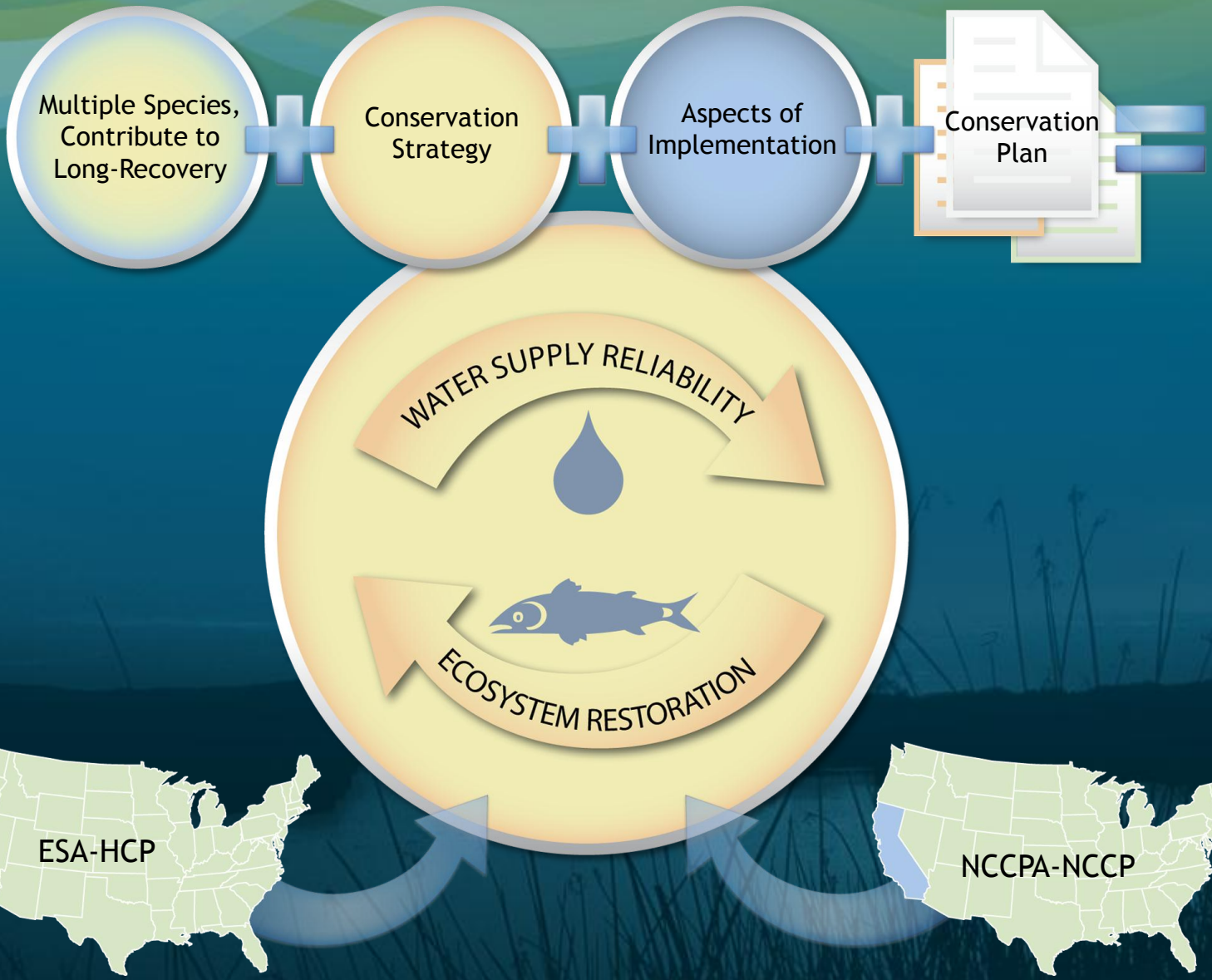
WHAT IS BDCP?



Importance to Long-term Solution

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Comprehensive ecosystem approach provides best opportunities to recover fisheries and assure water supplies

Restores tens of thousands of acres of tidal marsh and flood plain habitat

Improves Delta flows through greater operational flexibility

Considers the many other stressors impacting fish populations – predation, invasive species, pesticides, toxins

Provides a framework to implement the plan over time

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Who's Involved?

- Santa Clara Valley Water District
- Kern County Water Agency
- Metropolitan Water District of Southern California
- San Luis & Delta-Mendota Water Authority
- Mirant Energy
- Westlands Water District
- Zone 7 Water Agency

- American Rivers
- Defenders of Wildlife
- Environmental Defense Fund
- Natural Heritage Institute
- The Bay Institute
- The Nature Conservancy
- Natural Resources Defense Council

- Ca. Natural Resources Agenc
- Department of Water Resourc
- US Bureau of Reclamation
- US Army Corps of Engineers
- US Fish and Wildlife Service
- CA Department of Fish and Game
- National Marine Fisheries Service
- State Water Resources Control Board

- Delta Stewardship Council
- North Delta Water Agency
- California Farm Bureau Federation
- Contra Costa Water District
- Friant Water Authority

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COVERED SPECIES

DELTA SMELT

LONGFIN SMELT

CHINOOK SALMON

winter, spring, fall and late fall

GREEN AND WHITE STURGEON

CENTRAL VALLEY STEELHEAD

SACRAMENTO SPLITTAIL

APPROXIMATELY 50 TERRESTRIAL SPECIES

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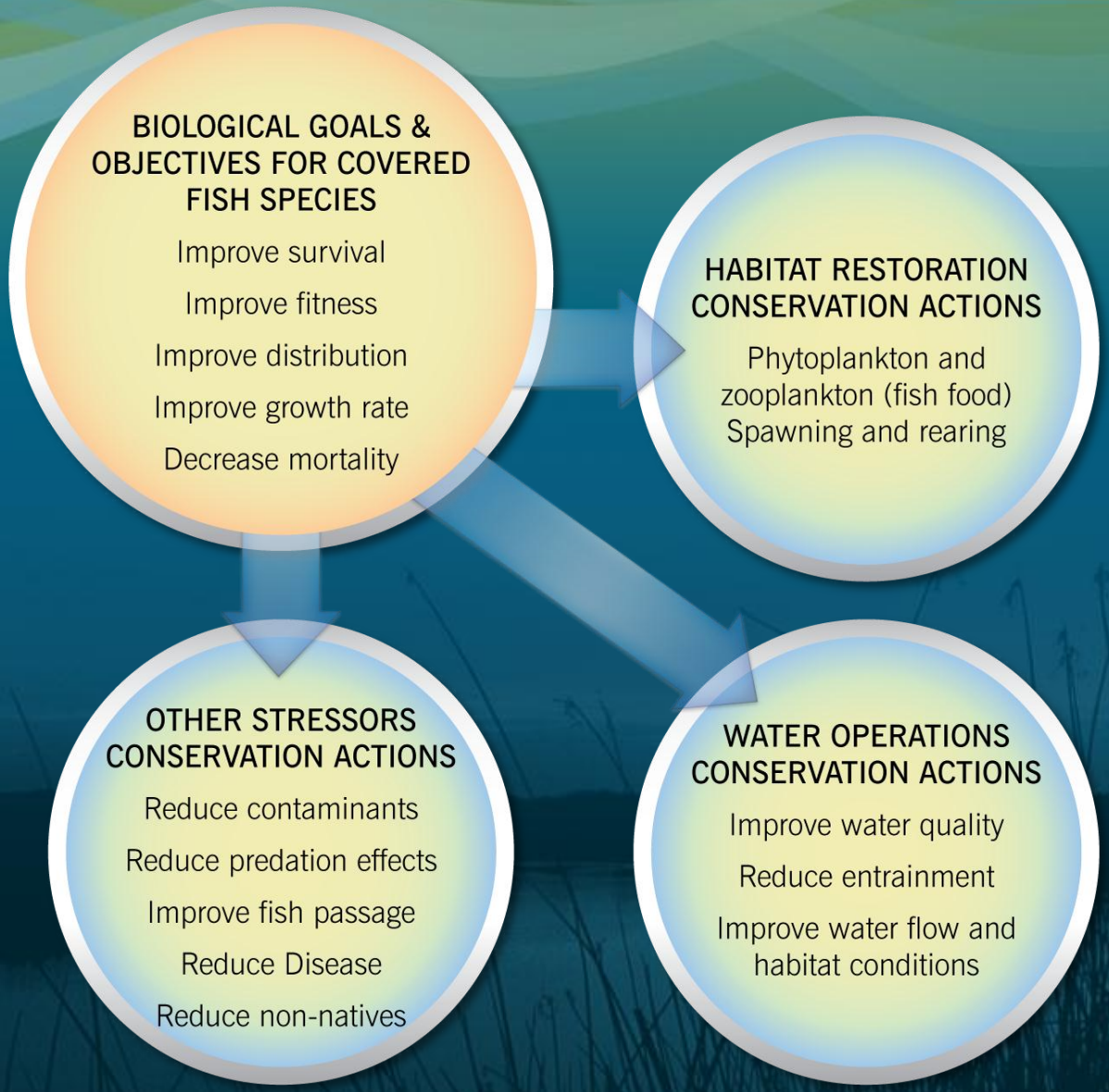
AQUATIC CONSERVATION MEASURES



Draft Conservation Strategy – Major Elements

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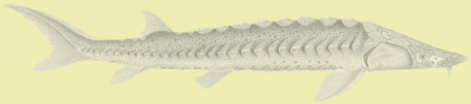
HABITAT RESTORATION

- Up to 80,000 acres tidal marsh, riparian, and floodplain
- Enhanced floodplain in the Yolo Bypass-temporary inundation
- 20-40 linear miles channel restoration
- Up to 45,000 acres of terrestrial habitat



WATER FACILITIES & OPERATIONS

- North Delta diversion
  - Up to 5 intakes
  - Up to 15,000 cfs design capacity
  - Pipeline/tunnel subject of focused study in BDCP
  - Establish minimum flows to ensure healthy habitat and water quality
  - Minimize reverse flows
  - Provide freshwater outflow
  - Maintain water quality standards
  - Manage operating rules for flows at Delta Cross Channel
- Manage operating rules for flows at Rio Vista

OTHER STRESSORS

- Minimize methyl mercury
- Control non-native aquatic plants
- Reduce illegal harvest
- Establish hatchery and genetic management plans
- Support Delta and longfin smelt propagation programs
- Reduce predators
- Construct non-physical barriers to re-direct juvenile salmonids
- Improve dissolved oxygen levels in the Stockton Deep Water Ship Channel

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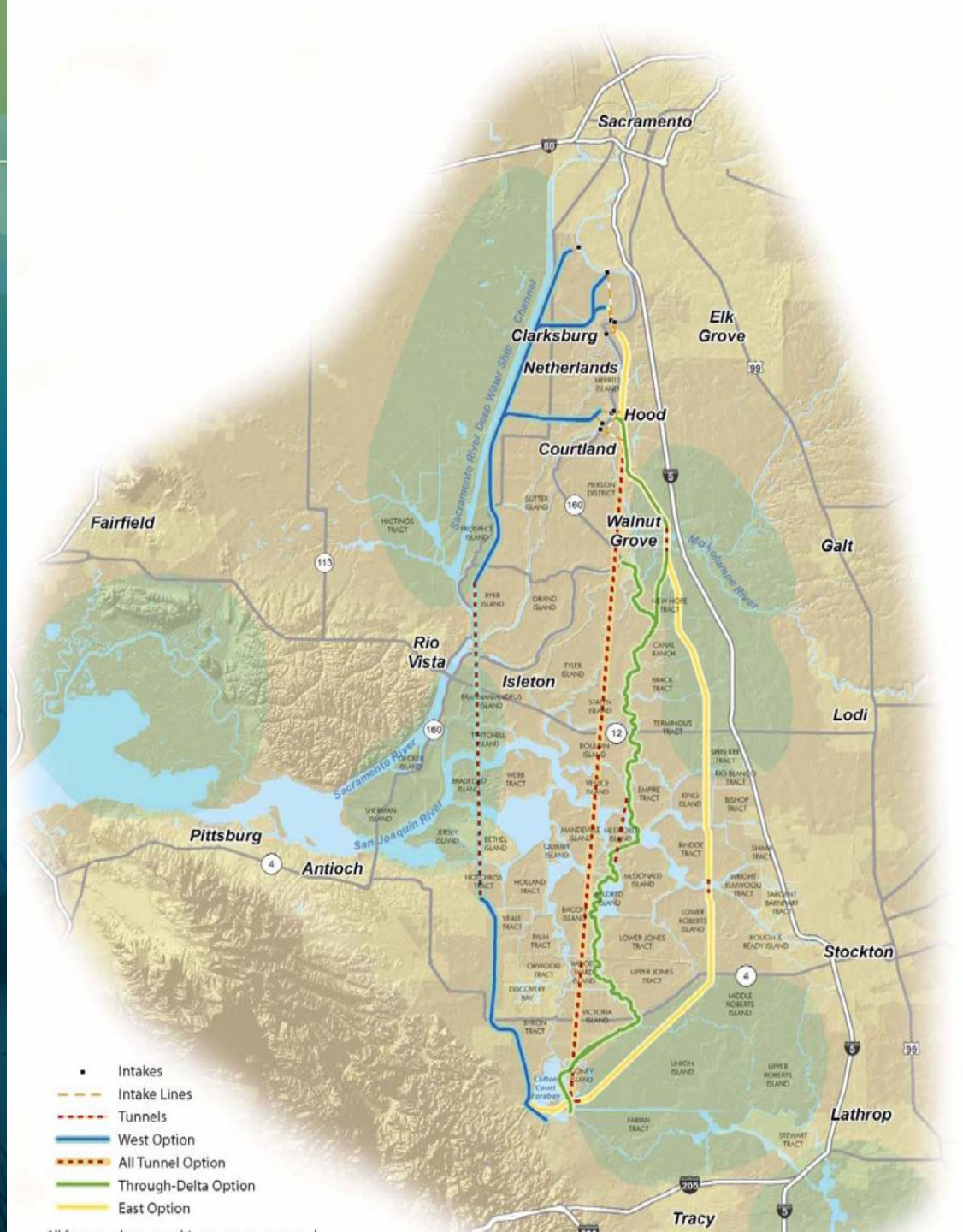
- Water Conveyance Alternatives
- Habitat Restoration Areas



BDCP Outline

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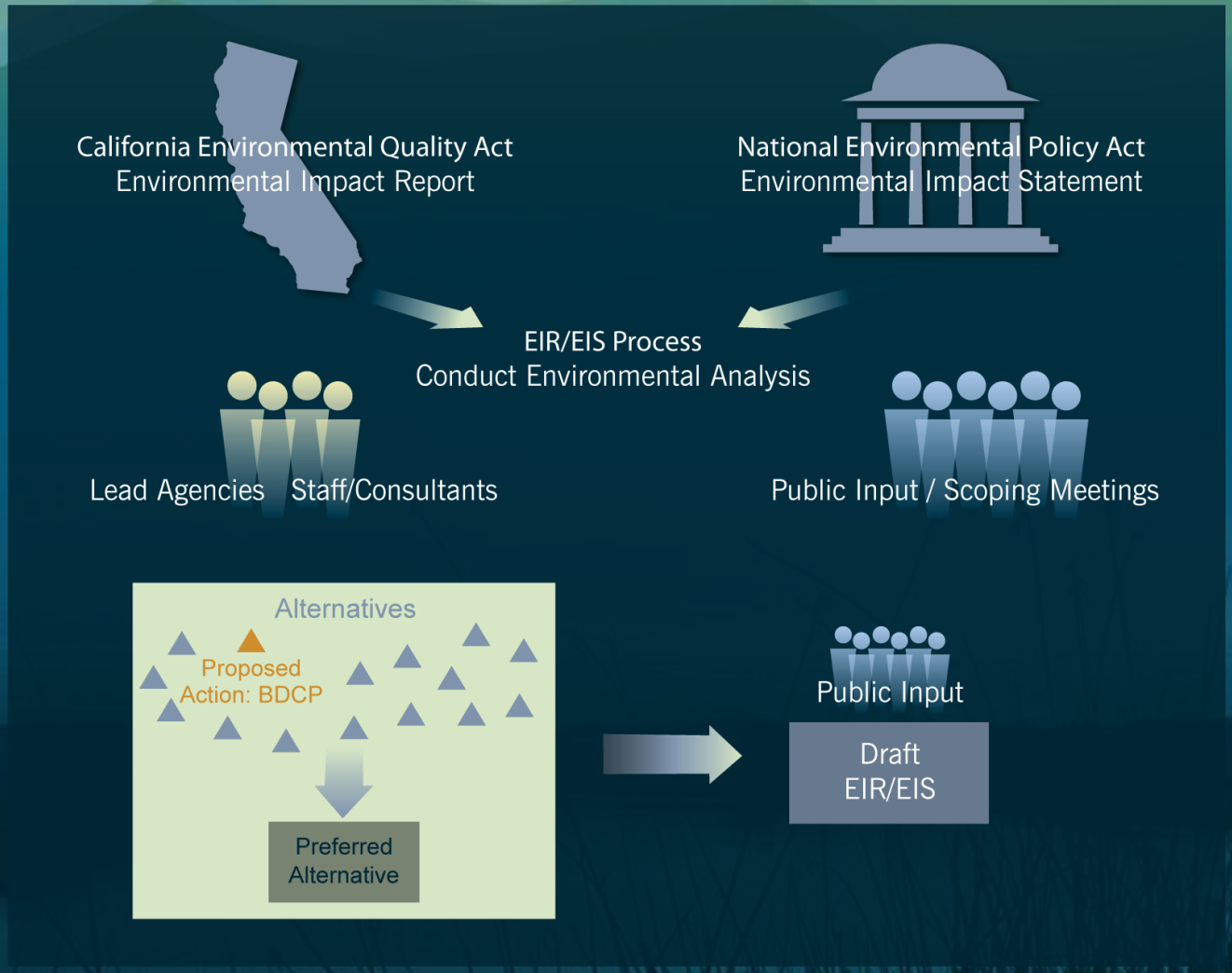
ENVIRONMENTAL REVIEW PROCESS

Proposed Action: Bay Delta Conservation Plan



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Environmental Review Process

The EIR/EIS will evaluate the effects of the conservation plan on both the natural (biological) and the human environment. This will include addressing impacts to:

- Cultural Resources
- Archaeological Resources
- Recreation
- Tourism
- Air Quality
- Water Quality
- Climate Change
- Economics
- Hazardous materials
- Utilities
- Local Communities
- Environmental Justice
- And more…

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ALTERNATIVES FOR ANALYSIS

Alternative	Habitat Restoration*	Conveyance†	North Delta Diversion Capacity (cfs)	Potential Intakes	Water Operations
No Project Alternative (Same as No Action Alternative)	8,000 acres of restored aquatic habitat**	Through Delta	Current Operations	-	Per D-1641 as modified by Biological Opinions issued by USFWS and NMFS
Alternative 1	Up to 113,000 acres of restored and protected habitat	Dual	15,000 cfs		Per 2/11/10 BDCP Steering Committee Handout
Alternative 1A	Up to 113,000 acres of restored and protected habitat	Dual	15,000 cfs		Scenario 6 per Points of Agreement with Fall X2
Alternative 2	Up to 113,000 acres of restored and protected habitat	Dual	6,000 cfs		Per 2/11/10 BDCP Steering Committee Handout
Alternative 2A	Up to 113,000 acres of restored and protected habitat	Dual	9,000 cfs		Scenario 6 per Points of Agreement with Fall X2
Alternative 2B: - One Intake at 3,000 cfs - Two Intakes at 1,500 cfs each	Up to 25,000 acres of restored and protected habitat	Dual	3,000 cfs 3,000 cfs		North of Delta per 2/11/10 BDCP SC Handout and South of Delta per existing Biological Opinions – with Fall X2, Old and Middle River Flows, and San Joaquin E/I ratios

* *The BDCP planning process is currently working with various stakeholders to define more specifically habitat restoration contemplated by the Plan. These individual restoration projects will be the subject of separate, site specific environmental review processes as the plan is approved and implemented.*

** *Per several federal and state requirements and Biological Opinions issued by USFWS and NMFS.*

† *Conveyance options may include a combination of isolated and/or pipeline/tunnel features that are lined, unlined, and located east, west, through, or under the Delta.*

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ALTERNATIVES FOR ANALYSIS

Alternative	Habitat Restoration*	Conveyance†	North Delta Diversion Capacity (cfs)	Potential Intakes	Water Operations
Alternative 3	Up to 113,000 acres of restored and protected habitat	Isolated	15,000 cfs	■■■■■	Similar to 2/11/10 BDCP Steering Committee Handout – modified to eliminate South Delta Intakes plus addition of Fall X2
Alternative 4: - Enhance Aquatic Conservation	Up to 113,000 acres of restored and protected habitat, additional 20 miles of Channel Margin Habitat and 10,000 acres of Seasonally Inundated Floodplain	Dual	9,000 cfs	■■ ■	Modified from 2/11/10 BDCP Steering Committee Handout
Alternative 4A:§ - Increased Delta Outflow	Up to 113,000 acres of restored and protected habitat	Dual	9,000 cfs	■■■	Developing operations that could include up to 1.5 MAF Increased Delta Outflow
Alternative 5: - Separate Corridors with Screens at Delta Cross Channel and Georgiana Slough	Up to 113,000 acres of restored and protected habitat with changes in South Delta	Through Delta	N/A	N/A	Similar to 2/11/10 BDCP Steering Committee Handout

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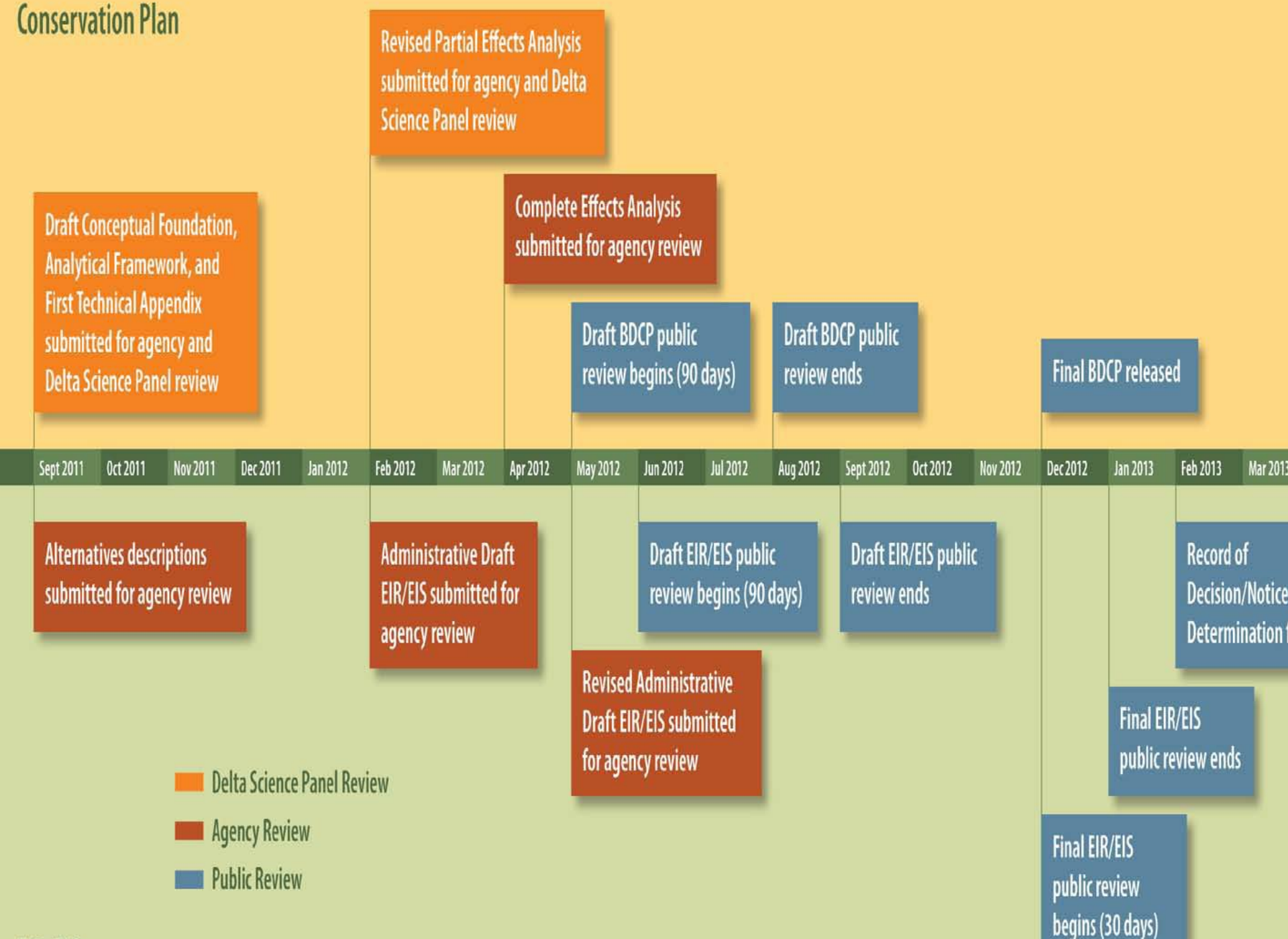
† *Conveyance options may include a combination of isolated and/or pipeline/tunnel features that are lined, unlined, and located east, west, through, or under the Delta.*

§ ***This alternative will seek to increase outflow up to 1.5 MAFA. This option will not result in: • Drawing on Sacramento Valley groundwater • Drawing on Non SWP/CVP storage • Failure to deliver SJR water (exchange water rights) • Failure to deliver refuge water • Drawing down SWP/CVP storage to make it impossible or highly unlikely to meet temperature requirements***

Conservation Plan



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PUBLIC INPUT

How Can You Get Involved?

Attend a BDCP Public Meeting

Participate in Working Groups of interest

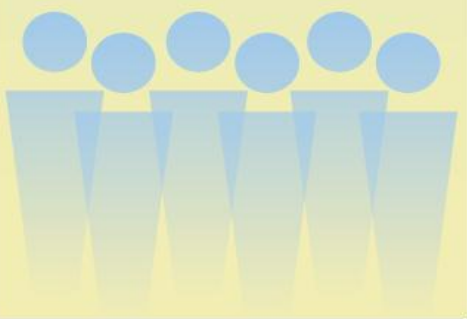
Visit BDCP web-site

www.bdcpweb.com

Comment on the Public Draft BDCP and/or the Public Draft EIR/EIS

Engage with the Delta Stewardship Council

www.deltacouncil.ca.gov



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Question & Answer

Question & Answer Session

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BACK UP SLIDE

BDCP Conveyance Options

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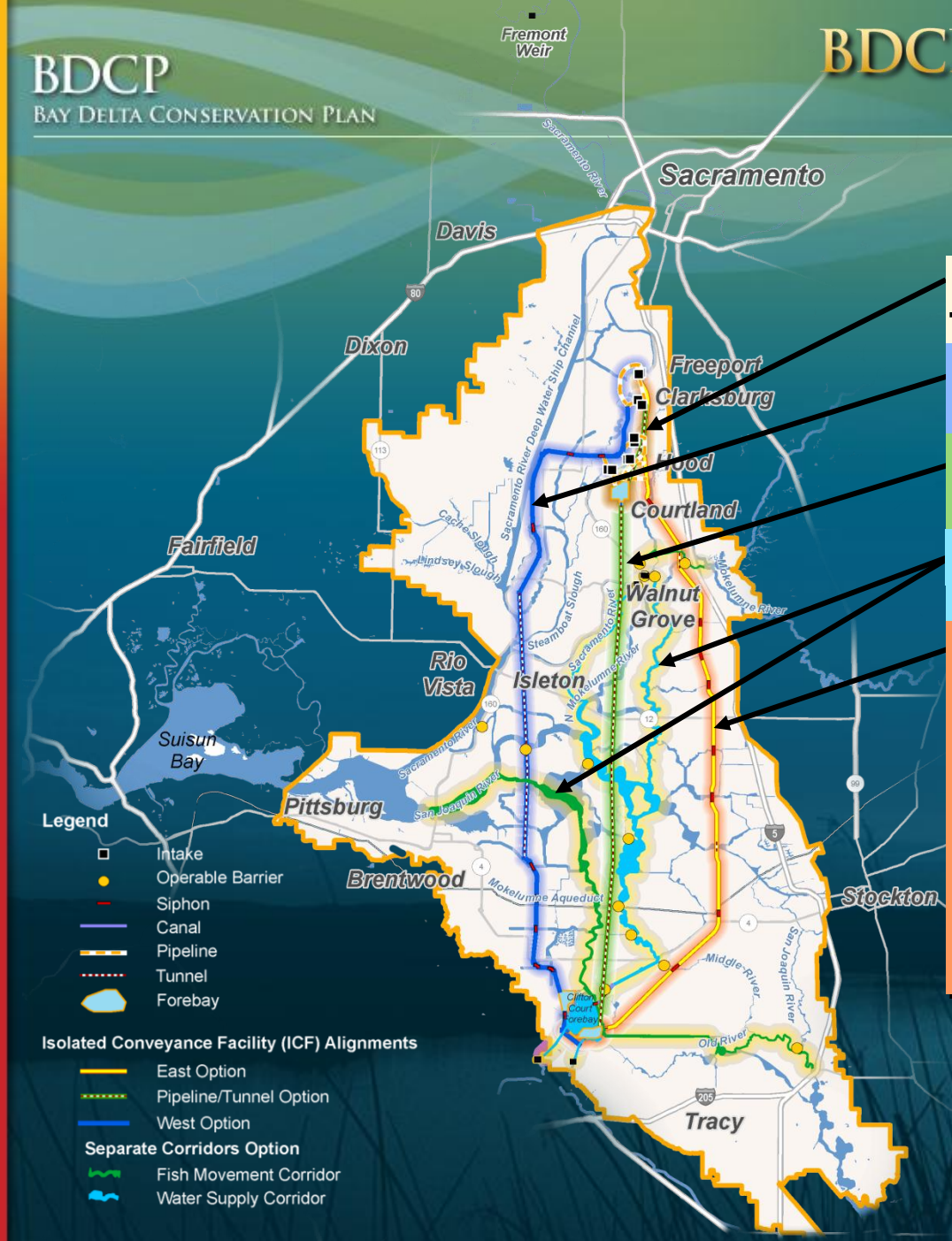

Intakes

locations are under consideration in the

West Option
- Up to 5 intake facilities with fish screens

Pipeline/Tunnel Option
- Up to 5 intake facilities with fish screens

Separate Corridors Option
- Fish corridors

East Option
- 5 intake facilities with fish screen along the Sacramento River
- 6 pump stations
- 42 miles of canals
- 3 tunnels (2 miles combined length)
- 8 siphons
- 620-acre forebay near existing Clifton Court Forebay