BDCP
BAY DELTA CONSERVATION PLAN

Bay Delta Conservation Plan

Overview of the Plan

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What is the BDCP?

- Co-Equal goals of the Delta Reform Act:

- Habitat Conservation Plan and Natural Community Conservation Plan

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Relationship between BDCP and EIR/EIS

- BDCP is a conservation plan to meet the regulatory standards of the Endangered Species Act and Natural Community Conservation Planning Act
  - Describes 22 conservation measures to benefit 56 species
  - Describes the effects of those conservation measures on the species
  - Focuses on the proposed conservation plan
- EIR/EIS describes the effects of implementing BDCP on the human environment
  - Considers 14 alternatives to BDCP

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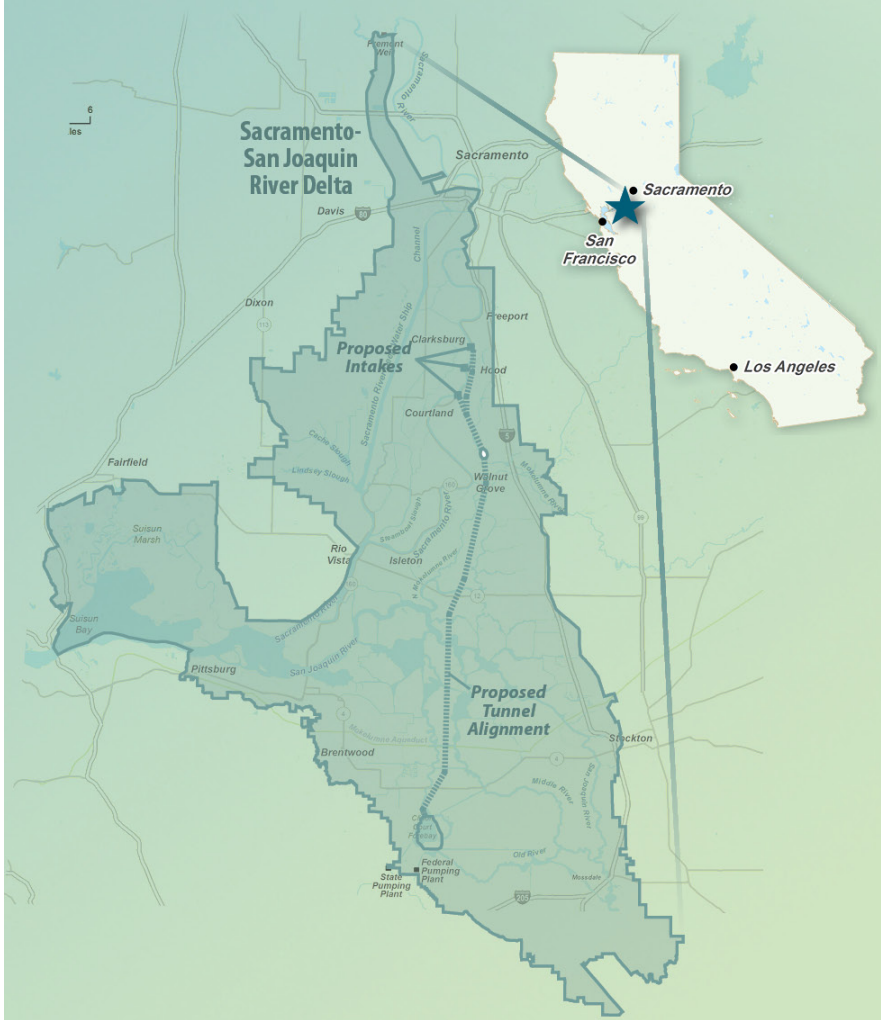
Scope of the BDCP

Time: 50 years

Space: The legal Delta, Suisin Marsh, and the Yolo Bypass

Action: Water resources and habitat conservation



WATER SUPPLY RELIABILITY

- **3** INTAKES
- **2** GRAVITY FLOW TUNNELS
- **30 MILES** IN LENGTH
- **9,000 CFS*** CAPACITY

*Cubic Feet per Second

ECOSYSTEM RESTORATION

- **150,000** ACRES OF RESTORED AND PROTECTED HABITAT
- **56** PROTECTED SPECIES
- IMPROVED FLOW CONDITIONS TO BENEFIT FISH IN THE DELTA

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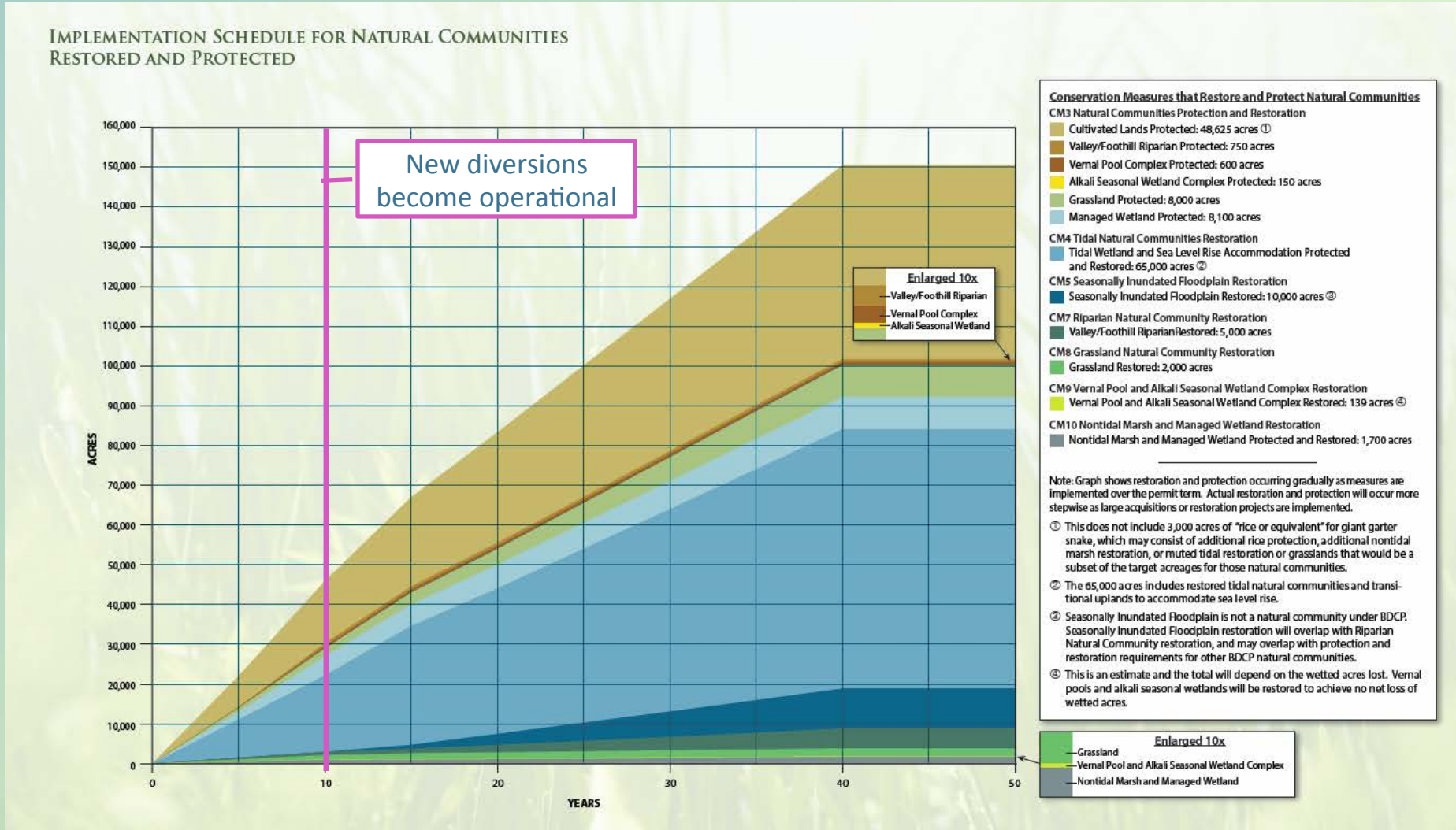
Chapter 6 – Implementation Schedule



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Content of the BDCP

Exec. Summary & 12 Chapters, including:

Chapter 1: Introduction	Chapter 7: Implementation Structure
Chapter 2: Existing Ecological Conditions	Chapter 8: Implementation Costs and Funding Sources
Chapter 3: Conservation Strategy	Chapter 9: Alternatives to Take
Chapter 4: Covered Activities	Chapter 10: Integration of Independent Science in BDCP Development
Chapter 5: Effects Analysis	Chapter 11: List of Preparers
Chapter 6: Plan Implementation	Chapter 12: Glossary

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Biological Goals and Objectives

- Benchmarks to measure progress
- Biological goals and objectives
  - Ecosystems
  - Natural Communities
  - Many covered species
- Objectives are "SMART" – Specific, Measurable, Achievable, Relevant, and Time-bound

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Conservation Measures

- 22 Conservation Measures (CMs)

  Actions implemented to meet the Biological Goals and Objectives and satisfy state and federal regulatory requirements.

CM 1	**Water Facilities and Operation**
CMs 2-11	**Habitat Protection and Restoration**
CMs 12-22	**Other Stressors Reduction**

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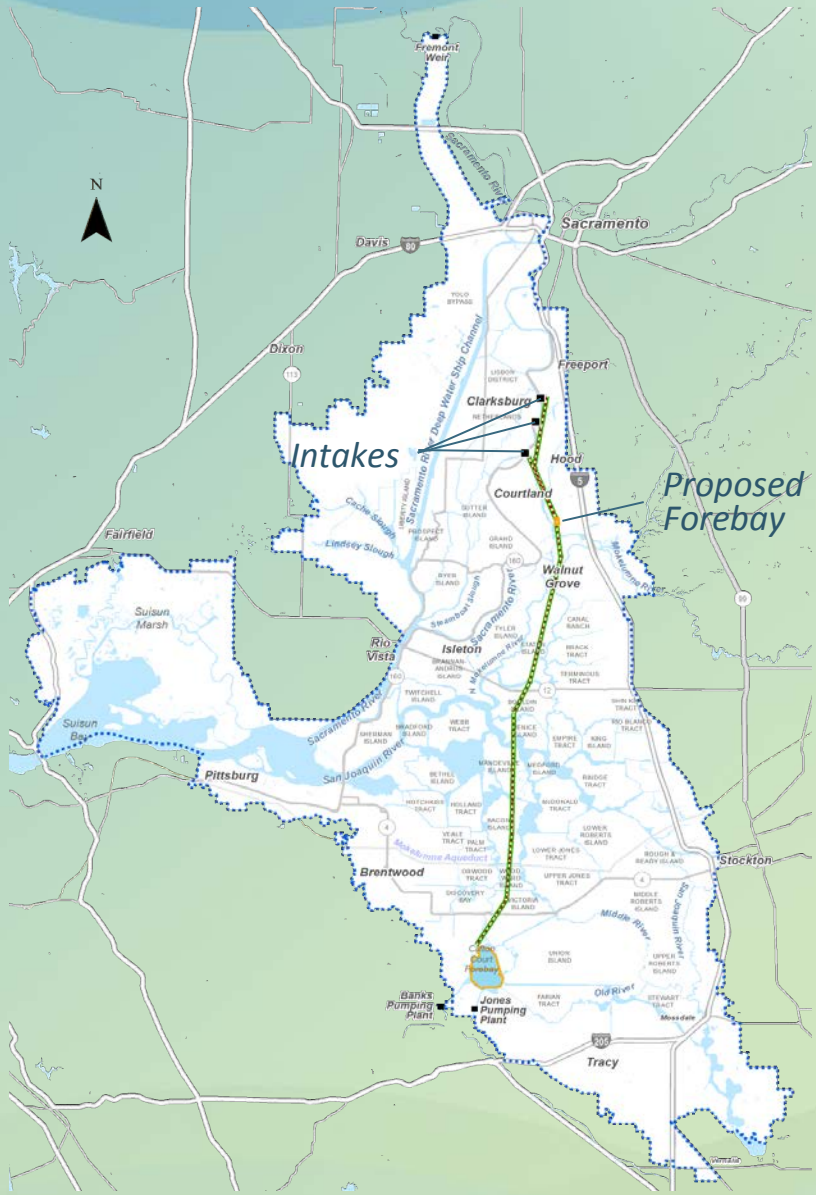
Conservation Measure 1: Water Facilities and Operation



New Water Facilities

- Three north Delta intakes, each 3,000 cfs capacity, with state of the art fish screens
- Two 30-mile long gravity-fed main tunnels
- New Head of Old River operable gate
- Improvements and expansion of Clifton Court Forebay

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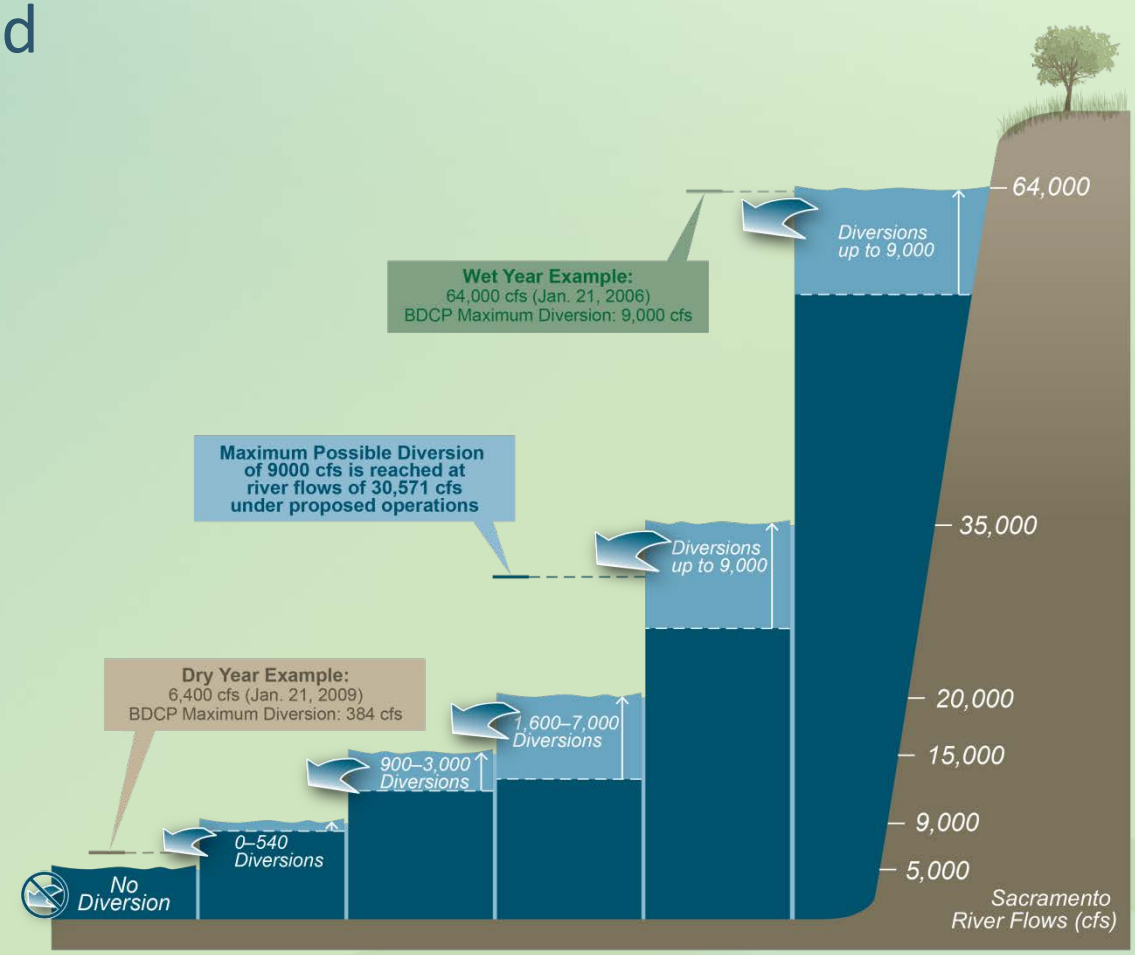
Operational Criteria

- Operation of new and existing facilities will be managed to specific criteria
- Operations depend on hydrologic conditions
- Always include minimum river flow passing intakes before water can be diverted



Example of Sacramento River Flows and North Delta Diversions
December – June Scenario

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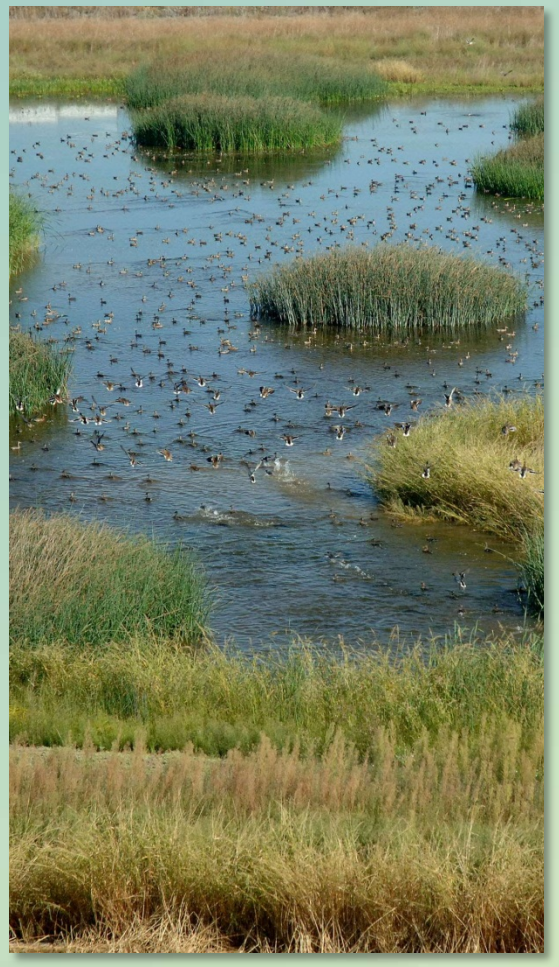
BDCP Conservation Measures



CMs 2-11	Habitat Restoration and Protection Measures
CMs 12-22	Other Stressors Reduction Measures

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Chapter 5 – Effects Analysis

- Describes how BDCP will affect 14 natural communities and 56 covered fish, wildlife, and plant species
- Presents expected outcomes from implementing the Plan
- Provides information the fish and wildlife agencies need to evaluate permit applications

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Methods for Analysis

- Conceptual models
- Environmental models
- Biological models
- Habitat suitability models
- Population and life history models
- GIS Models

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Ecosystem and Landscape Effects in the Plan Area

- Improve south Delta flows
- Restore, enhance, and protect more than 110,000 acres of habitat
- Provide climate change adaptation
- Reduce north → south flows for exports
- Reduce other stressors such as stranding, invasive aquatic species, localized predation, and low dissolved oxygen
- No changes in water temperatures; no biologically meaningful changes in salinity
- Reduced sediment load into Delta, resulting in increased water clarity at localized scale; mixed results due to restoration projects

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Section 5.5 – Effects on Covered Fish Species

SACRAMENTO SPLITTAIL

GREEN AND WHITE STURGEON

CHINOOK SALMON

winter, spring, fall and late fall

CENTRAL VALLEY STEELHEAD

PACIFIC AND RIVER LAMPREY

DELTA SMELT

LONGFIN SMELT

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Effects on Covered Fish Species

- Reduced entrainment of fish in water diversions
- New source of predation at new diversions
- Changes in river flow and Delta outflow
- Increased suitable habitat
- Increased food supply

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Effects on Natural Communities

Improvements in amount, quality, and condition of natural communities

Natural Community Type	Total Existing Acres in Plan Area	Percent Net Change in Total Extent over Existing	Percent Net Change in Extent of Protected Acres
Tidal brackish emergent wetland	8,501	71%	72%
Tidal freshwater emergent wetland	8,856	271%	487%
Valley/foothill riparian	17,644	24%	95%

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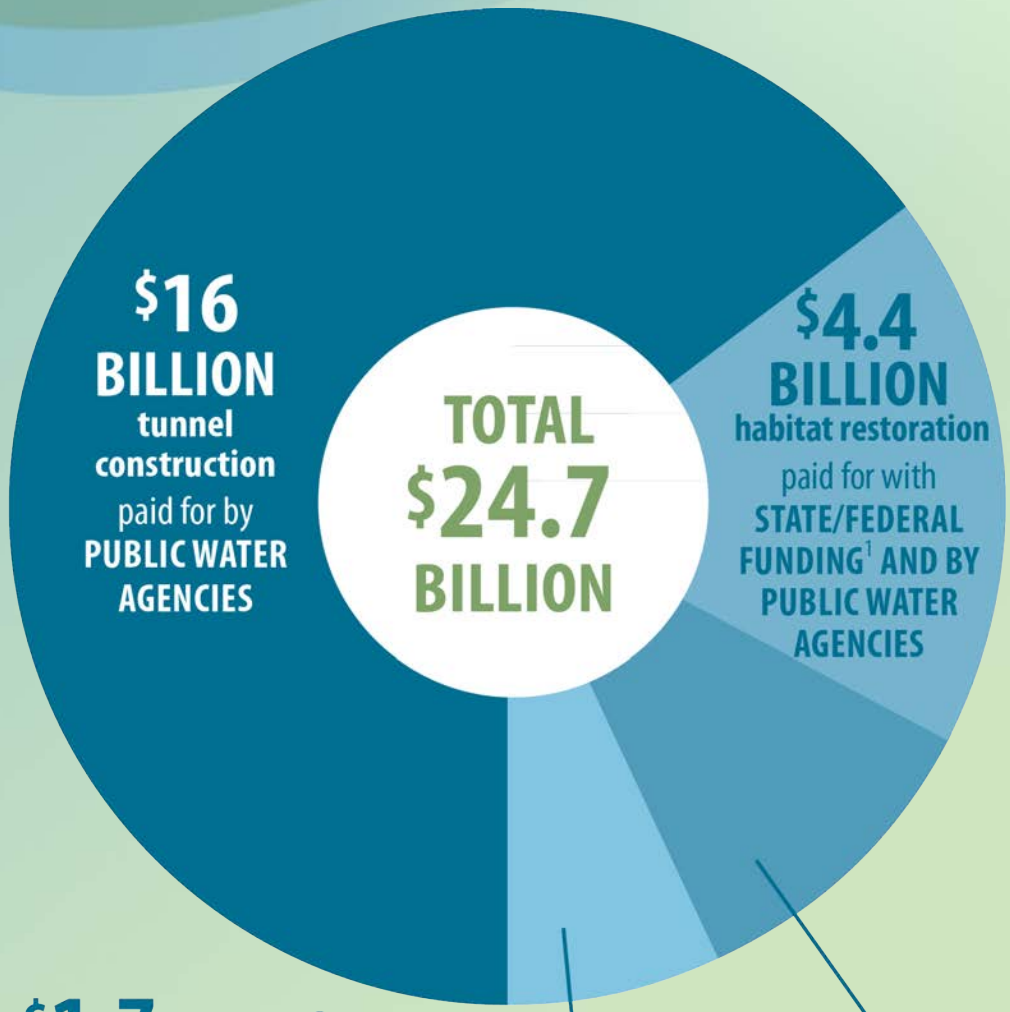
Chapter 8 – Cost Summary



In undiscounted 2012 dollars

$1.7 BILLION
for program oversight[3]
paid for by
PUBLIC WATER AGENCIES AND STATE/FEDERAL FUNDING

$2.6 BILLION
to address other stressors
paid for by
PUBLIC WATER AGENCIES AND STATE/FEDERAL FUNDING