

Franks Tract Delta Cross Channel Through Delta Facility

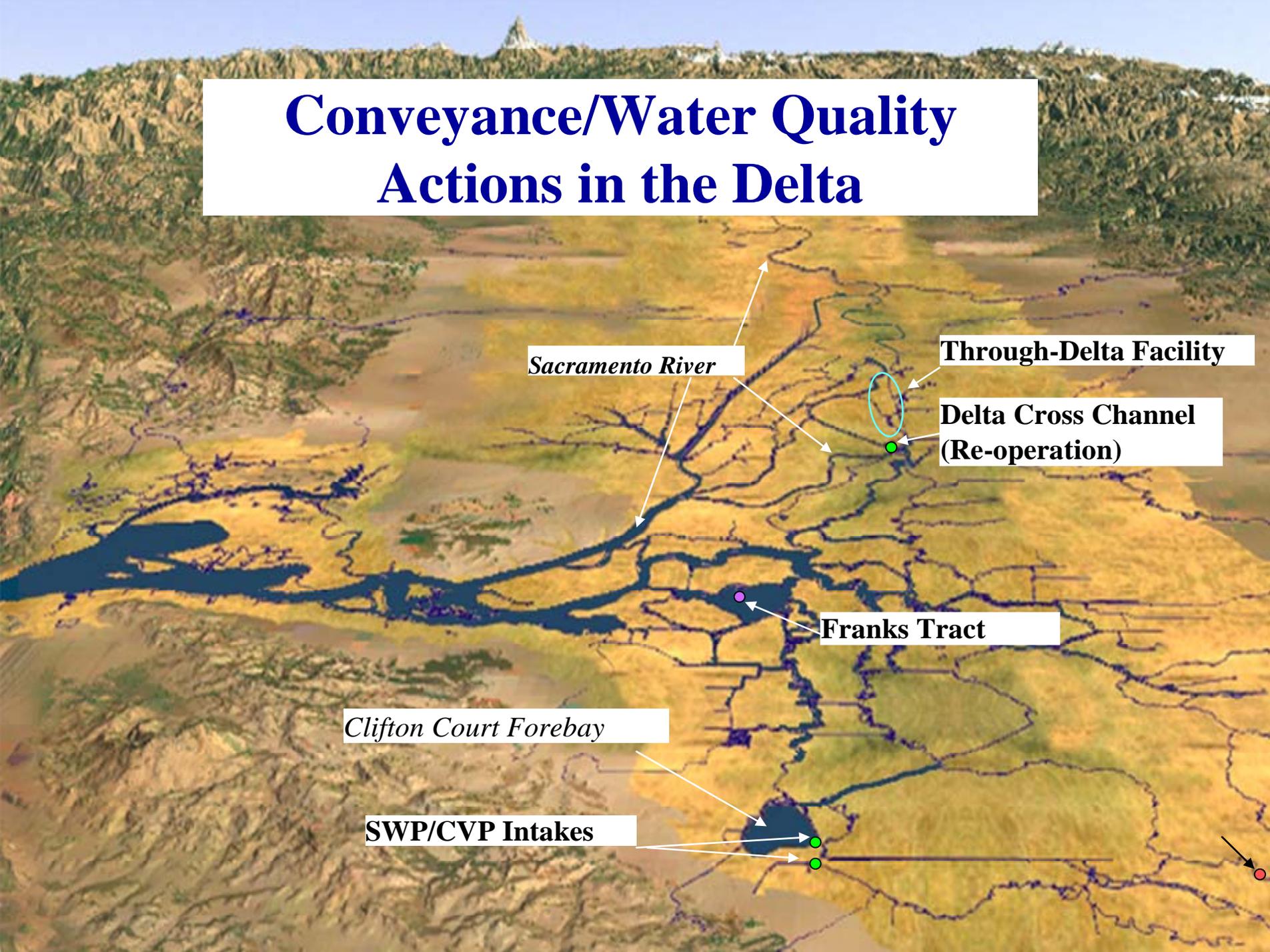
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Conveyance/Water Quality Actions in the Delta



Sacramento River

Through-Delta Facility

**Delta Cross Channel
(Re-operation)**

Franks Tract

Clifton Court Forebay

SWP/CVP Intakes



Project Objectives

Franks Tract

To improve the water quality of export water

Delta Cross Channel / Through Delta Facility

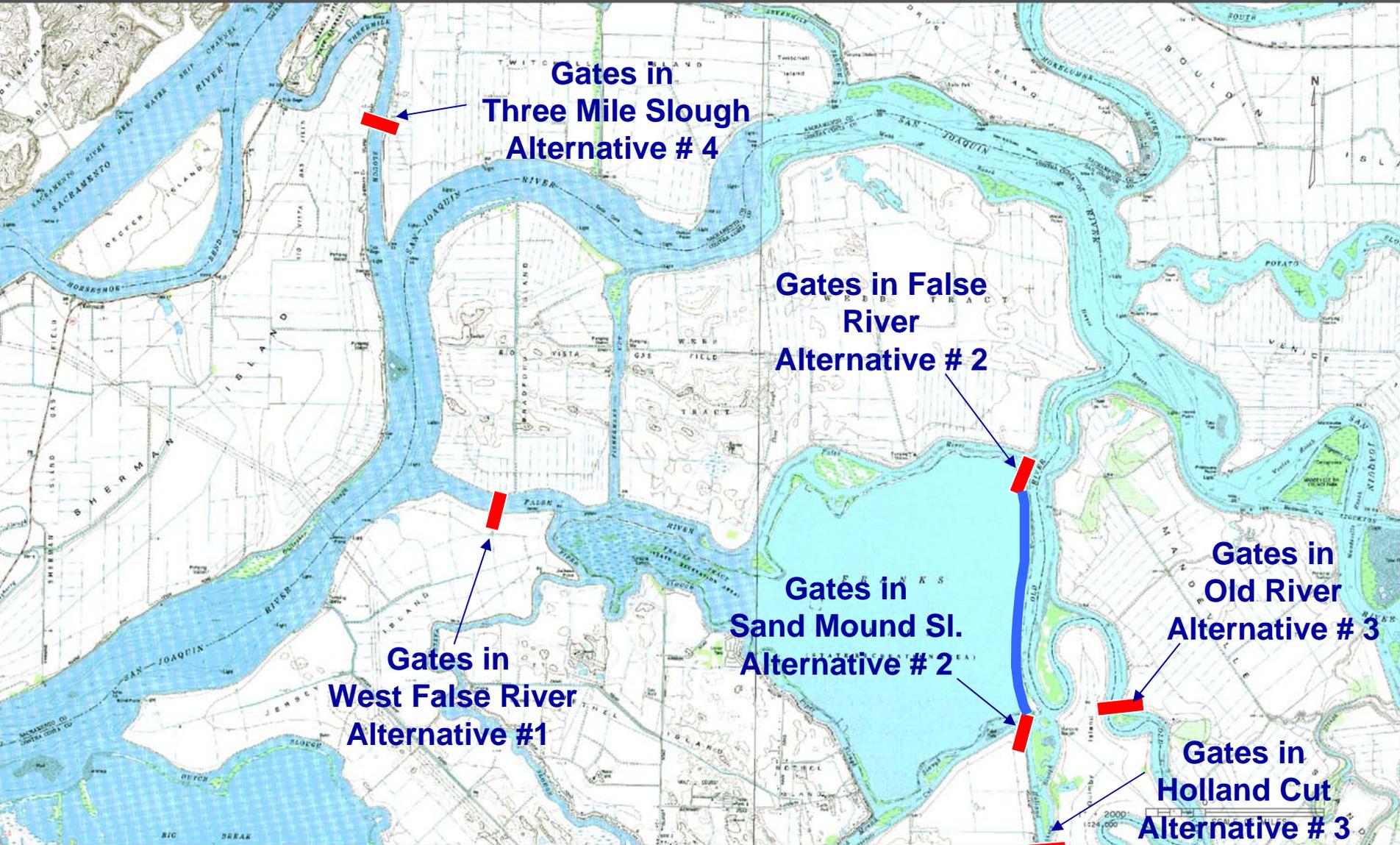
To improve the water quality of export water
and resolve fishery concerns

Flooded Island Prefeasibility Study

(Franks Tract)

- Evaluated several alternatives to improve:
 - Water Quality
 - Ecosystem
 - Recreation
- Recommendations:
 - Refine alternatives and project operations
 - Consider a pilot project to confirm benefits

Franks Tract- Pilot Project Alternatives



Franks Tract

Summary of EC Reductions

September 2002 (Dry Year)

	SWP	CVP	CCWD Old River	CCWD Rock Slough
West False River	14.3%	10.6%	19.1%	21.1%
East Levee	9.1%	5.4%	16.0%	21.2%
Old River/ Holland Cut	6.8%	2.4%	15.7%	19.7%
Three Mile Slough	22.6%	18.5%	25.0%	25.1%

Assumes use of operational gates.

Franks Tract

Pilot Project Objectives

- Confirm water quality benefits
- Monitor impacts of the project
- Modify project operations to improve benefits and minimize impacts

Franks Tract – Pilot Project Construction Cost - Summary



Assumes use of Obermeyer operational gates.

Franks Tract Pilot Project

Budget

(2006 dollars)

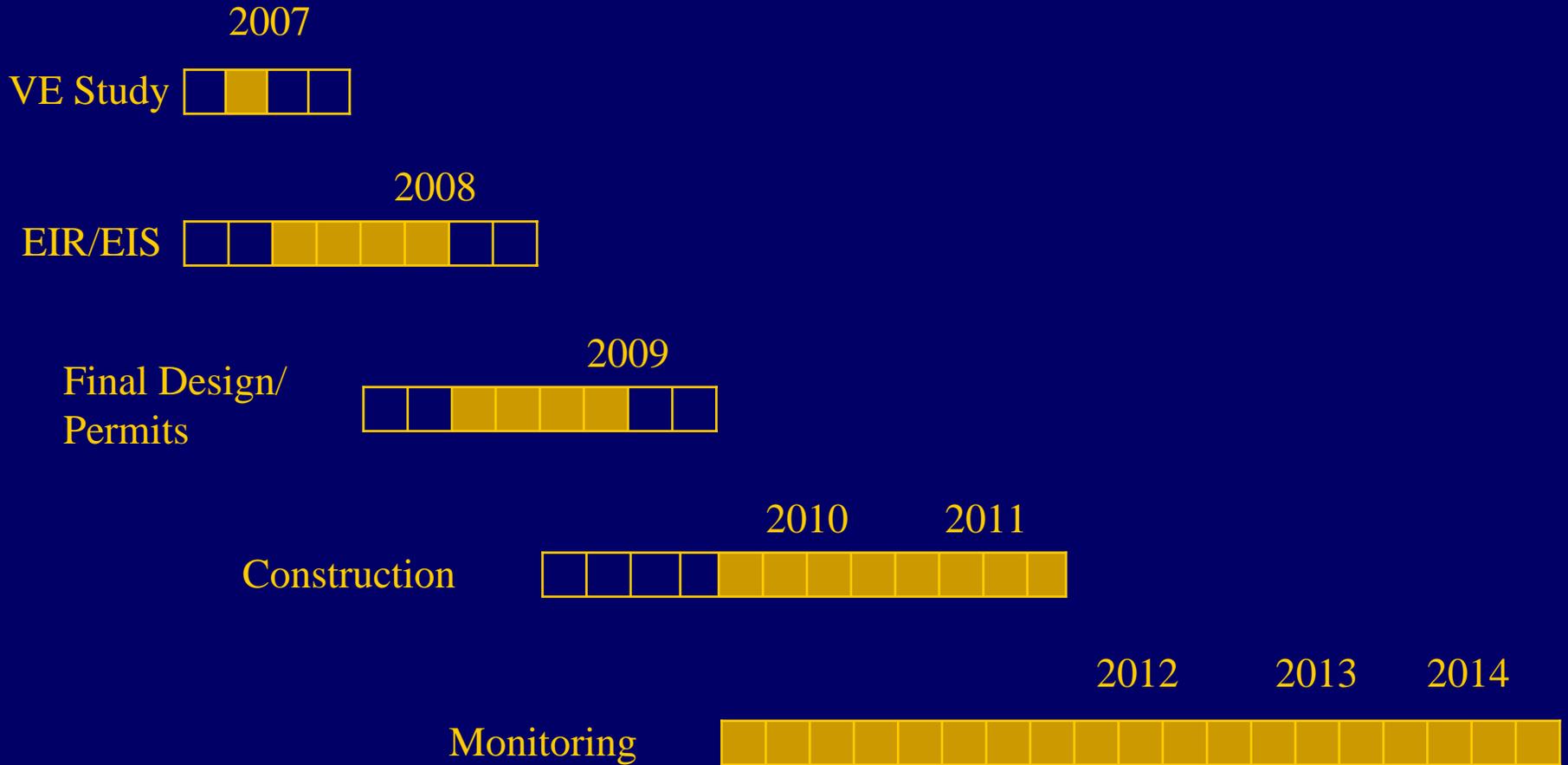
Alternatives Eval. & Value Eng.	\$ 1 M
EIR/EIS and Permits	\$ 2 M
Monitoring Program (5 years)	\$ 5 M
Final Design	\$ 3 M
Construction (Least Expensive Alt.)	\$ 24 M
Construction Management	\$ 3 M
Total	\$ 38 Million

Assumes use of Obermeyer operational gates.

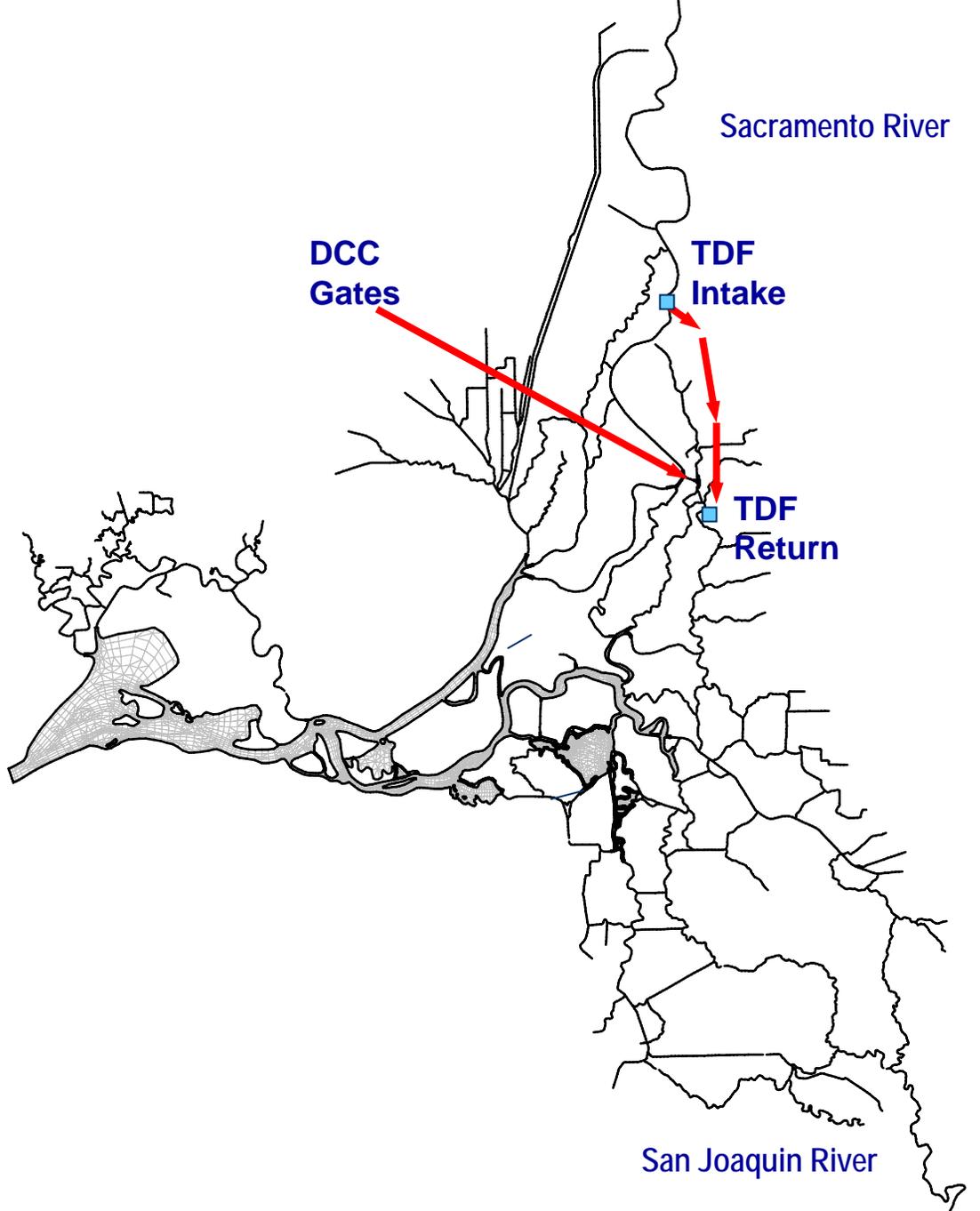
Franks Tract Project Funding Options

- Funding Strategy
 - 1/3rd to 1/2 from State funds (bond)
 - 1/3rd to 1/4th from Federal funds (USBR)
 - 1/3rd to 1/4th from water users (SWP, CVP, CCWD)

Franks Tract Pilot Project Schedule



Delta Cross Channel /Through Delta Facility



- DCC - an existing 3500 cfs diversion from the Sacramento River
- 4,000 cfs Sacramento River diversion near Hood. Returns to South Fork Mokelumne at New Hope Tract

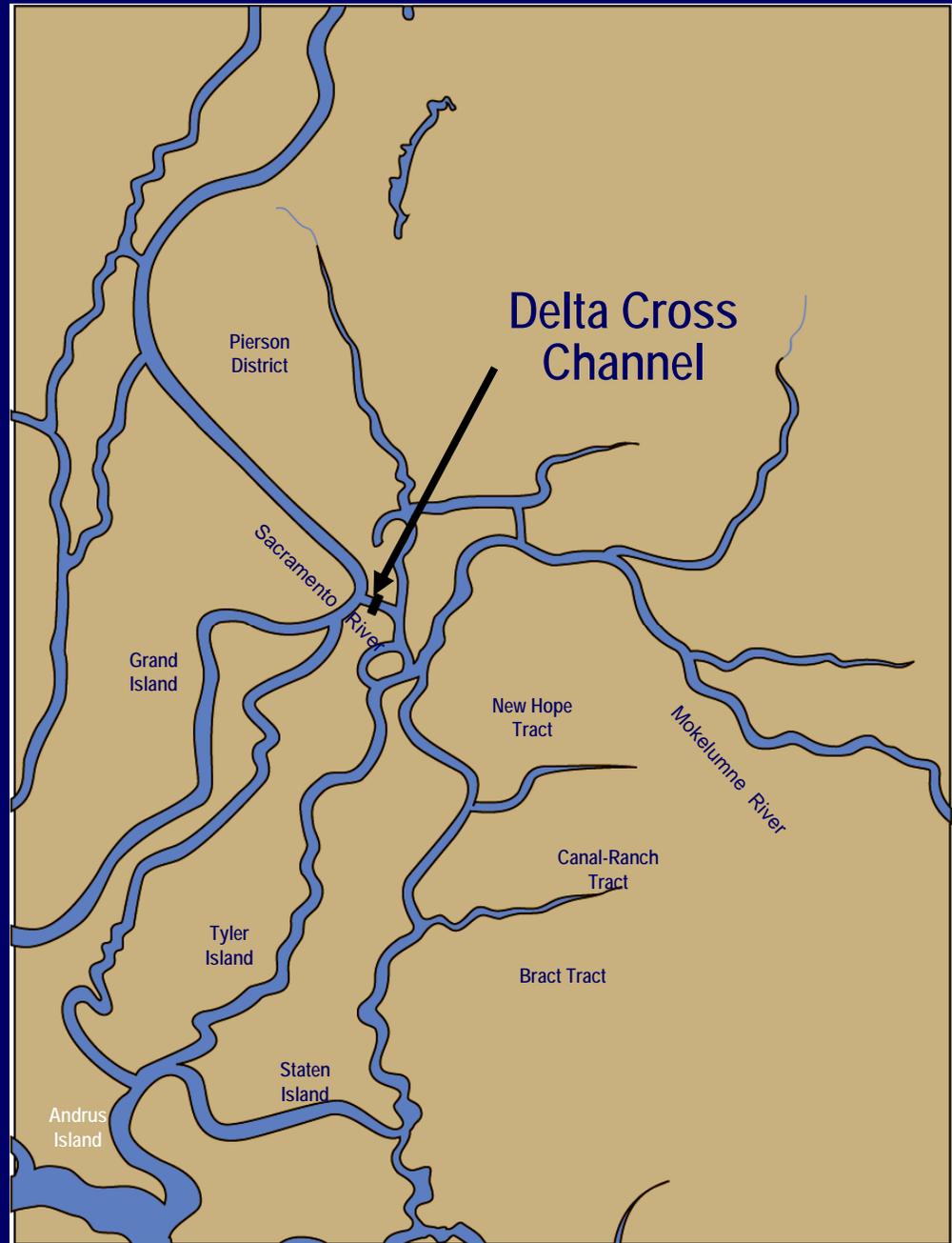
Delta Cross Channel /Through Delta Facility

What we've learned to date

- Two dimensional modeling studies show:
 - Accurately simulate actual water quality data
 - Show potential for significant reduction in salinity for DCC/TDF/FT
 - Salinity reduction can be significantly improved with an operational structure

Delta Cross Channel

- Field studies show:
 - DDC operations have regional affects
 - Circulation patterns at bends in rivers affect fish behavior
 - Fish move in the water column - day and night conditions
 - Reconfiguration of slough entrances may reduce fish entrainment



Delta Cross Channel/ Through Delta Facility

Summary of Salinity (EC) Reduction

	SWP	CVP	CCWD Old River	CCWD Rock Slough
TDF				
Sep 2002 (Dry)	26.2%	22.0%	27.1%	25.0%
TDF/FT				
Sep 2002 (Dry)	32.4%	26.5%	35.9%	35.1%
DCC Tidal				
Dec 1999 (Wet)*	6.9%	4.0%	10.4%	8.5%
DCC Dawn-Dusk				
Dec 1999 (Wet)*	12.5%	7.2%	19.3%	16.4%

* DCC closed thru Dec 14

Delta Cross Channel/ Through Delta Facility –Future Work Plan

- Refine water quality modeling
- Determine fishery impacts/benefits
- Develop project alternatives
 - TDF Construction
 - DCC Re-Operation
 - Both

Delta Cross Channel/Through Delta Facility Project Schedule

