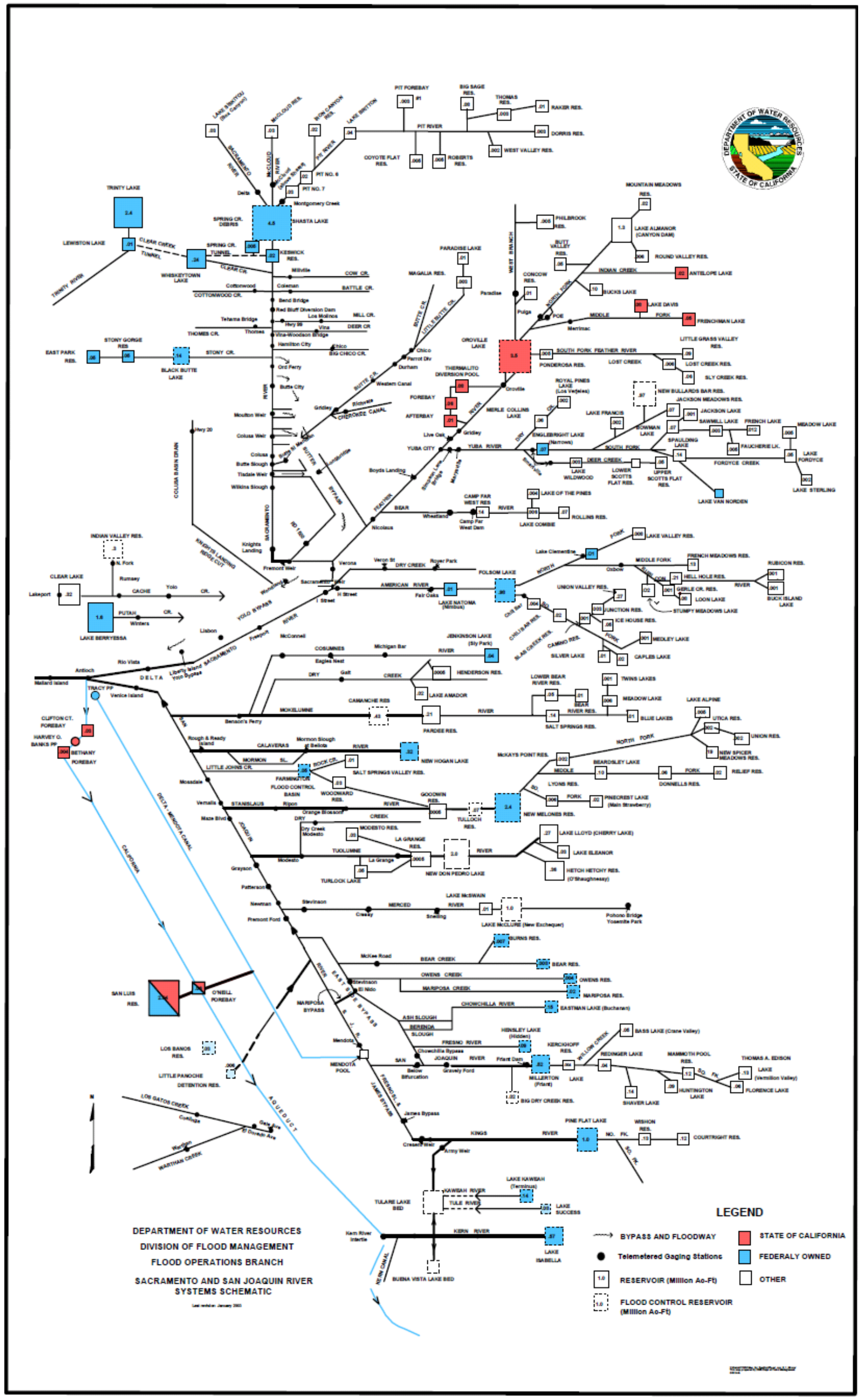
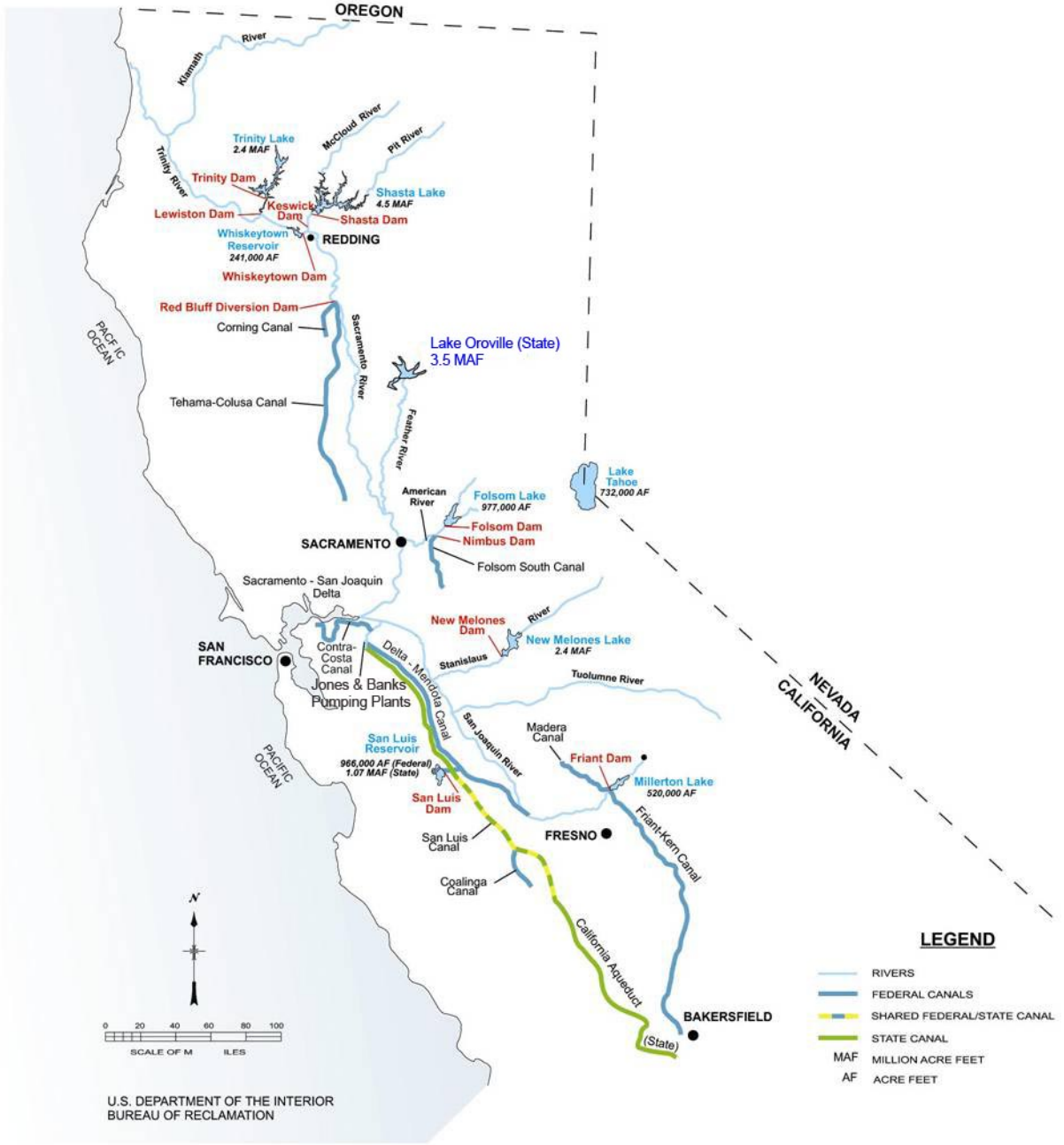
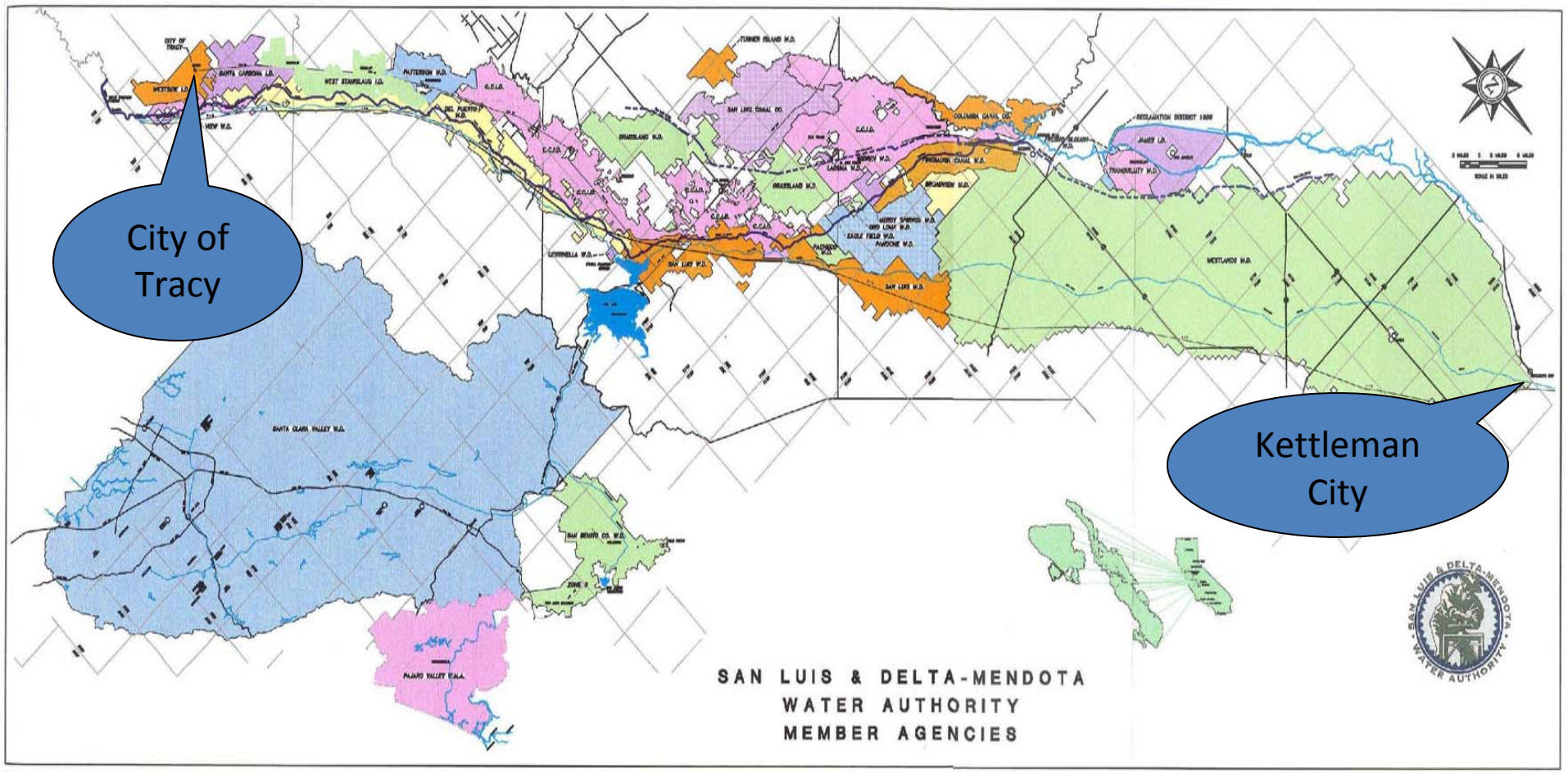


DEPARTMENT OF WATER RESOURCES
DIVISION OF FLOOD MANAGEMENT
FLOOD OPERATIONS BRANCH

SACRAMENTO AND SAN JOAQUIN RIVER SYSTEMS SCHEMATIC

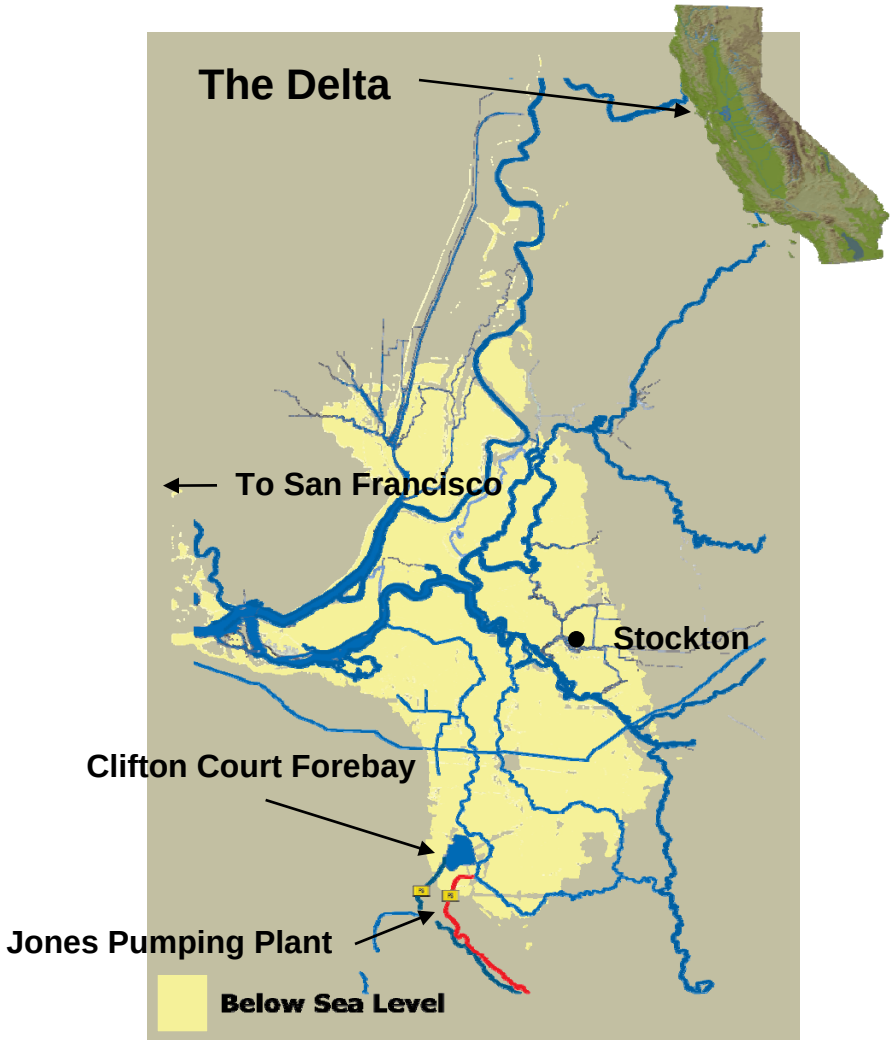

OREGON
Klamath River
Trinity Lake
2.4 MAF
McCloud River
Pit River
Trinity River
Trinity Dam
Keswick Dam
Shasta Lake
4.5 MAF
Lewiston Dam
Shasta Dam
Whiskeytown Reservoir
241,000 AF
REDDING
Whiskeytown Dam
Red Bluff Diversion Dam
Corning Canal
Sacramento River
Lake Oroville (State)
3.5 MAF
PACIFIC OCEAN
Tehama-Colusa Canal
Feather River
Lake Tahoe
732,000 AF
American River
Folsom Lake
977,000 AF
Folsom Dam
Nimbus Dam
SACRAMENTO
Folsom South Canal
Sacramento - San Joaquin Delta
New Melones Dam
New Melones Lake
2.4 MAF
Stanislaus River
SAN FRANCISCO
Contra-Costa Canal
Delta - Mendota Canal
Tuolumne River
Jones & Banks Pumping Plants
NEVADA
CALIFORNIA
Madera Canal
San Joaquin River
San Luis Reservoir
965,000 AF (Federal)
1.07 MAF (State)
Friant Dam
Millerton Lake
520,000 AF
PACIFIC OCEAN
San Luis Dam
San Luis Canal
FRESNO
Friant-Kern Canal
Coalinga Canal
California Aqueduct
BAKERSFIELD
(State)
N
0 20 40 60 80 100
SCALE OF MILES
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
LEGEND
RIVERS
FEDERAL CANALS
SHARED FEDERAL/STATE CANAL
STATE CANAL
MAF MILLION ACRE FEET
AF ACRE FEET



Banta-Carbona Irrigation District, Broadview Water District, Byron Bethany Irrigation District (CVP), Central California Irrigation District, Centinella Water District, City of Tracy, Columbia Canal Company, Del Puerto Water District, Eagle Field Water District, Firebaugh Canal Water District, Fresno Slough Water District, Grasslands Water District, James Irrigation District, Laguna Water District, Mercey Springs Water District, Oro Loma Water District, Pacheco Water District, Pajaro Valley Water Management Agency, Panoche Irrigation District, Patterson Irrigation District, Pleasant Valley Water District, Reclamation District 1606, San Benito County Water District, San Luis Canal Company, San Luis Water District, Santa Clara County Water District, Tranquillity Irrigation District, Turner Island Water District, West Side Irrigation District, West Stanislaus Irrigation District, Westlands Water District, Widren Water District.

Why is the Delta so important?

- **Fresh water from the Delta supports:**
  - **25 million Californians;**
  - **Regional ecologies;**
  - **Agriculture and Industry.**
- **$400 billion of the State's economy**
- **Any loss impacts our economy and environment.**

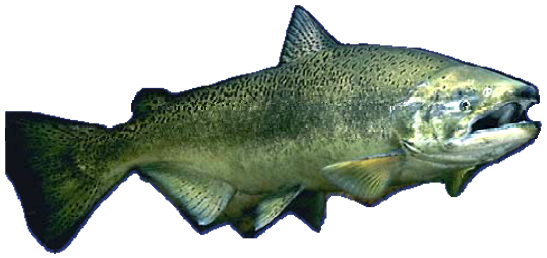


Endangered Species Act

and other Species of Concern

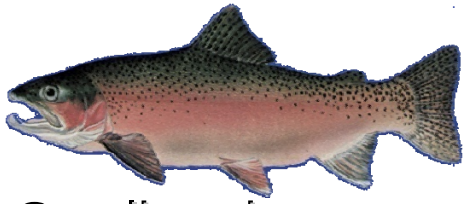
Delta smelt

1993 – Threatened (CESA/FESA)



Chinook Salmon

1989 – Winter-Run: Endangered (CESA)
1990 – Winter-Run: Endangered (FESA)
1999 – Spring-Run: Threatened (CESA/FESA)



Steelhead

1998 – Threatened (FESA)
No CESA listing

Longfin smelt

2007 – Petition under consideration
(FESA & CESA)

Green Sturgeon

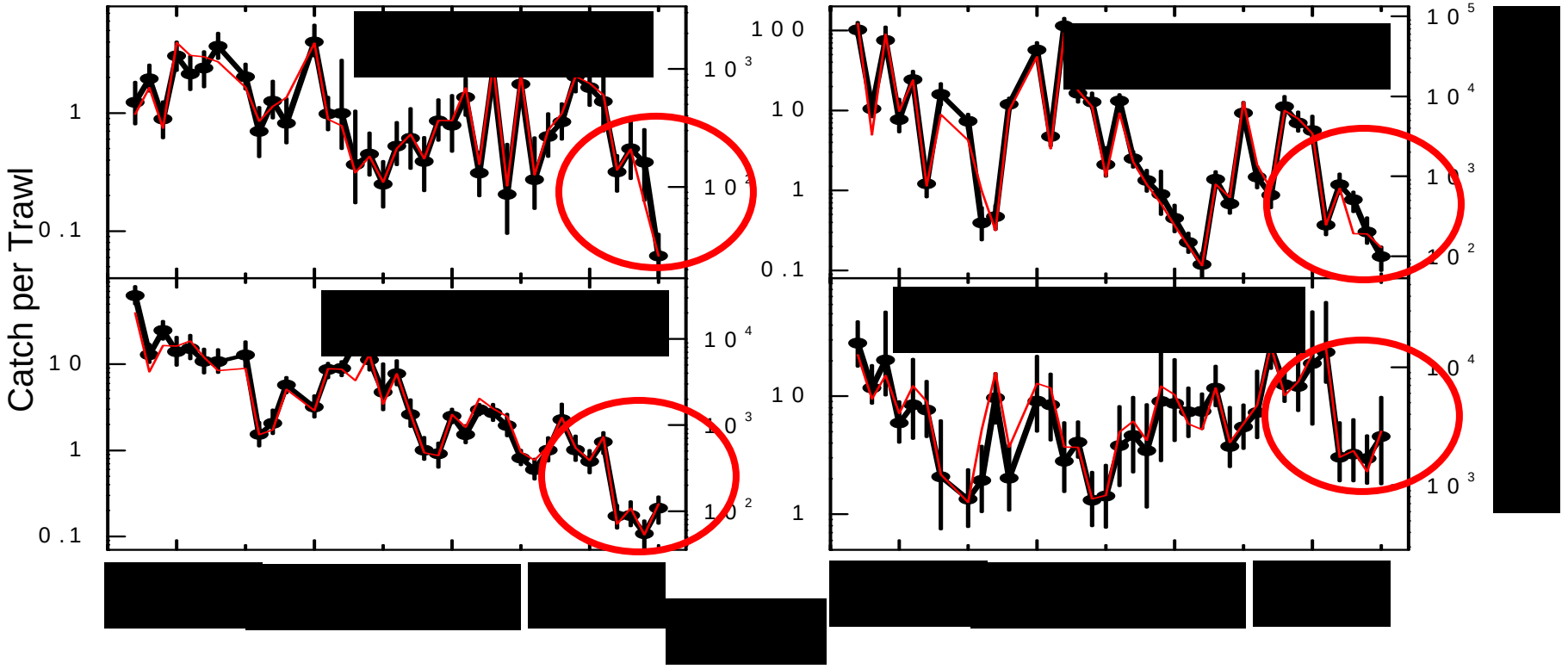
2006 – Threatened (FESA)
No CESA listing

Sacramento Splittail

1999 – Threatened (FESA)
2003 – FESA listing removed
No CESA listing

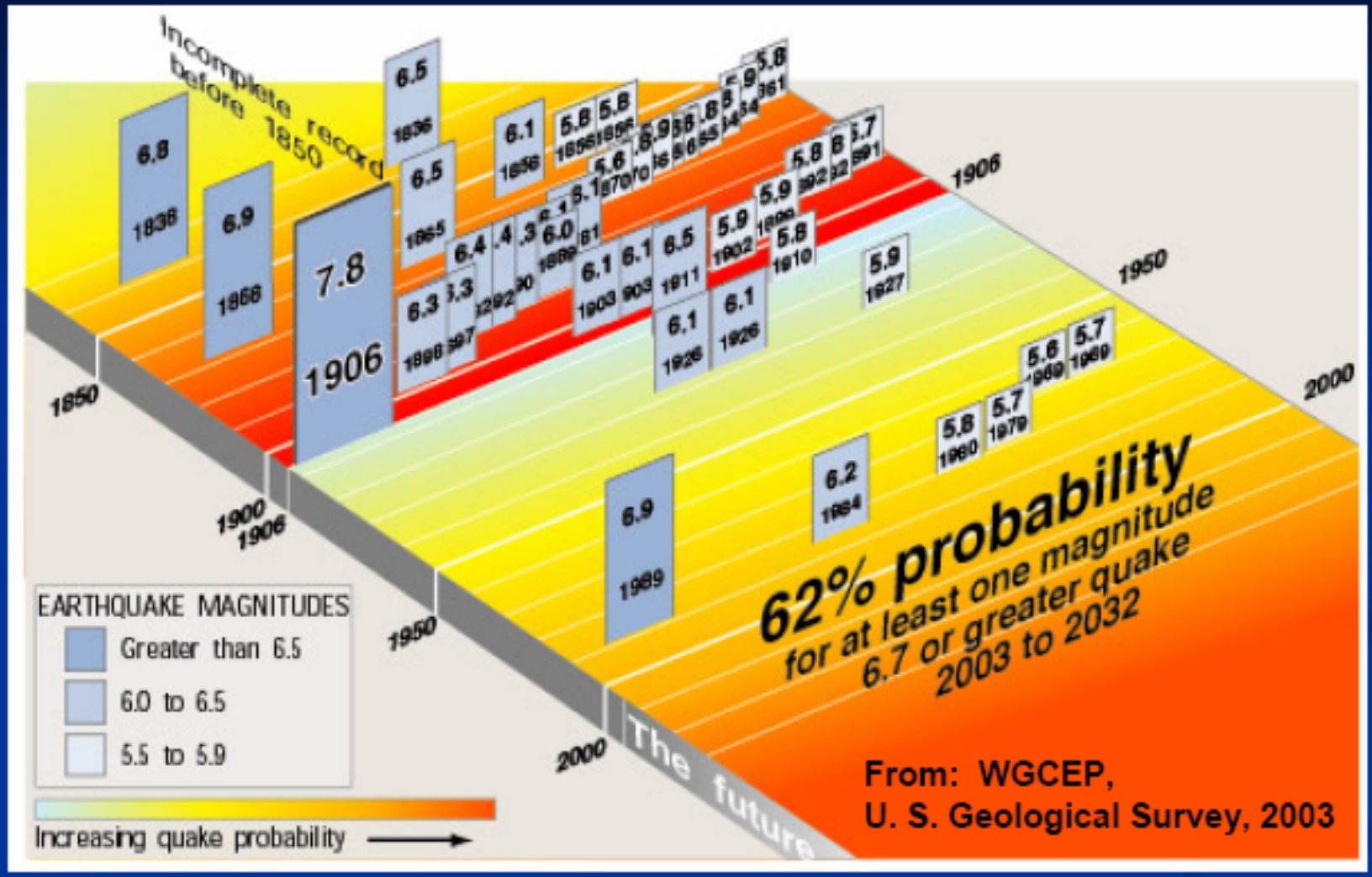
Key Delta Risks

Exhibit D
The Pelagic Organism Decline



Source: Kimmerer and Nobriga (2005); Sommer et al. (In Press, Fisheries 32(6))

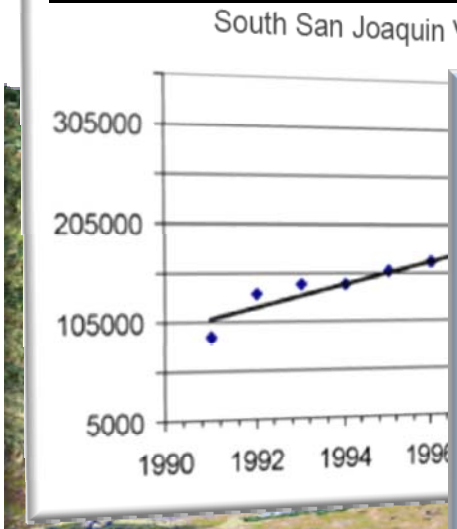
Past and Future Seismic Events in the Bay-Delta Region

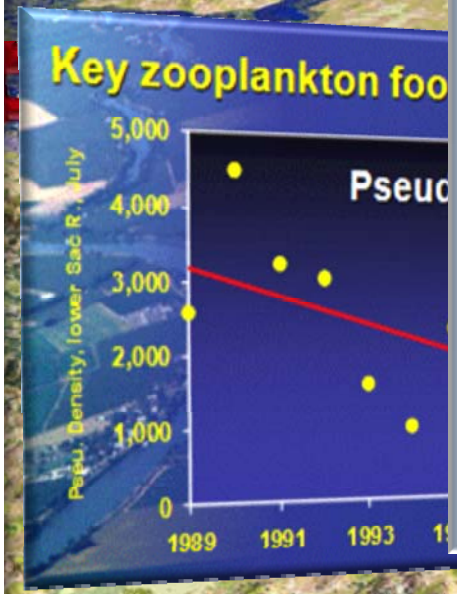


- Reclaimed Delta has generally been in a relatively low seismic period
- Increased probability for future large earthquakes

Near-Term Other Stressors

Toxics, Unscreened diversions, etc.





Other Stressors

- **Toxic pollutants**
- **Upstream diversions**
- **In-Delta diversions**
- **Invasive species**
- **Predation**
- **Climate change**
- **Recreation/commercial activities**
- **Intentional take**
- **Ocean conditions**
- **Water quality**
- **Food supply**
- **Stock recruitment**

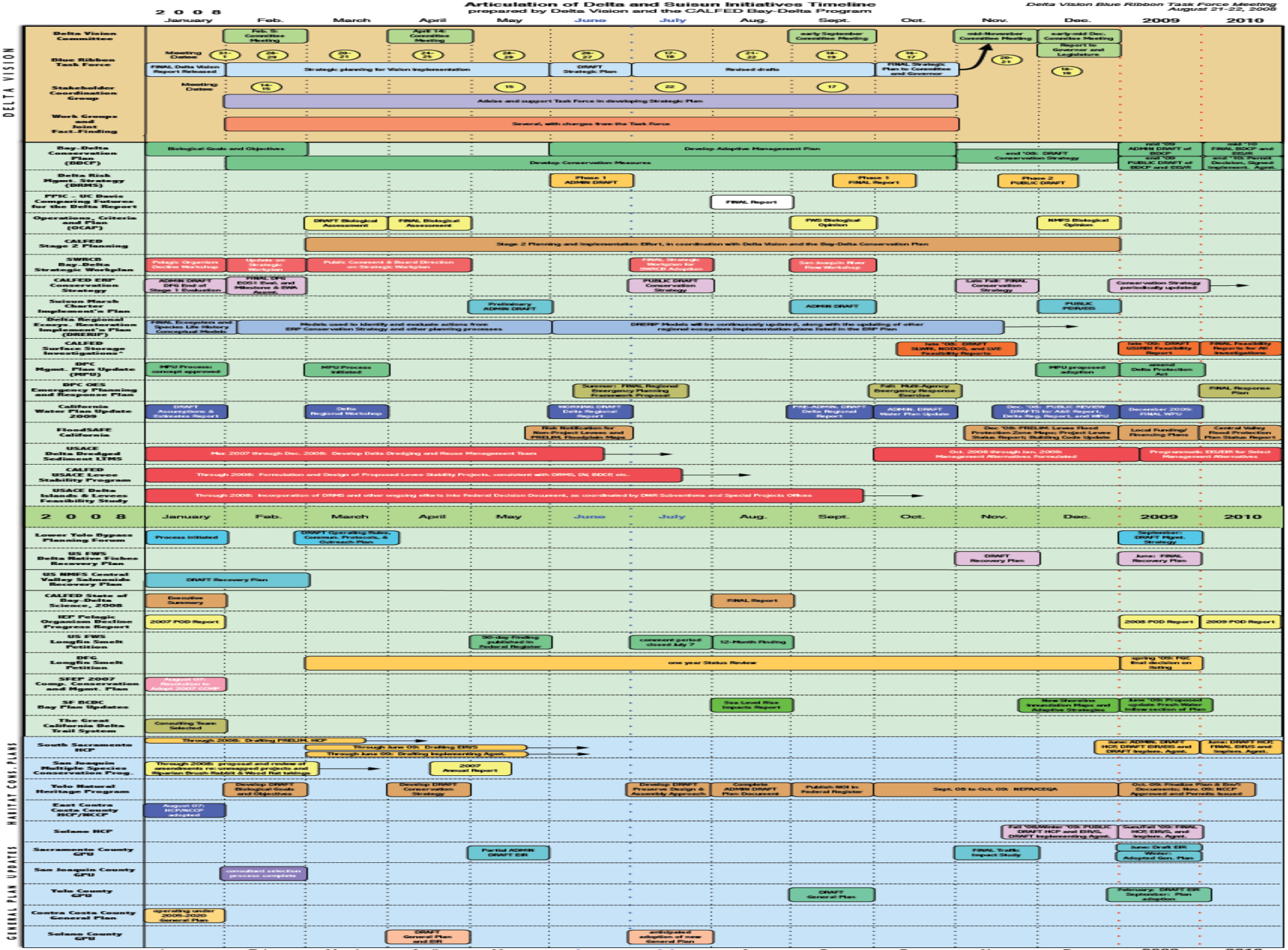
Forums Considering Delta "Solutions"

- Bay Delta Conservation Plan
- CALFED
- Delta Vision
- Governor's Office
- Public Policy Institute of California
- State Water Resources Control Board

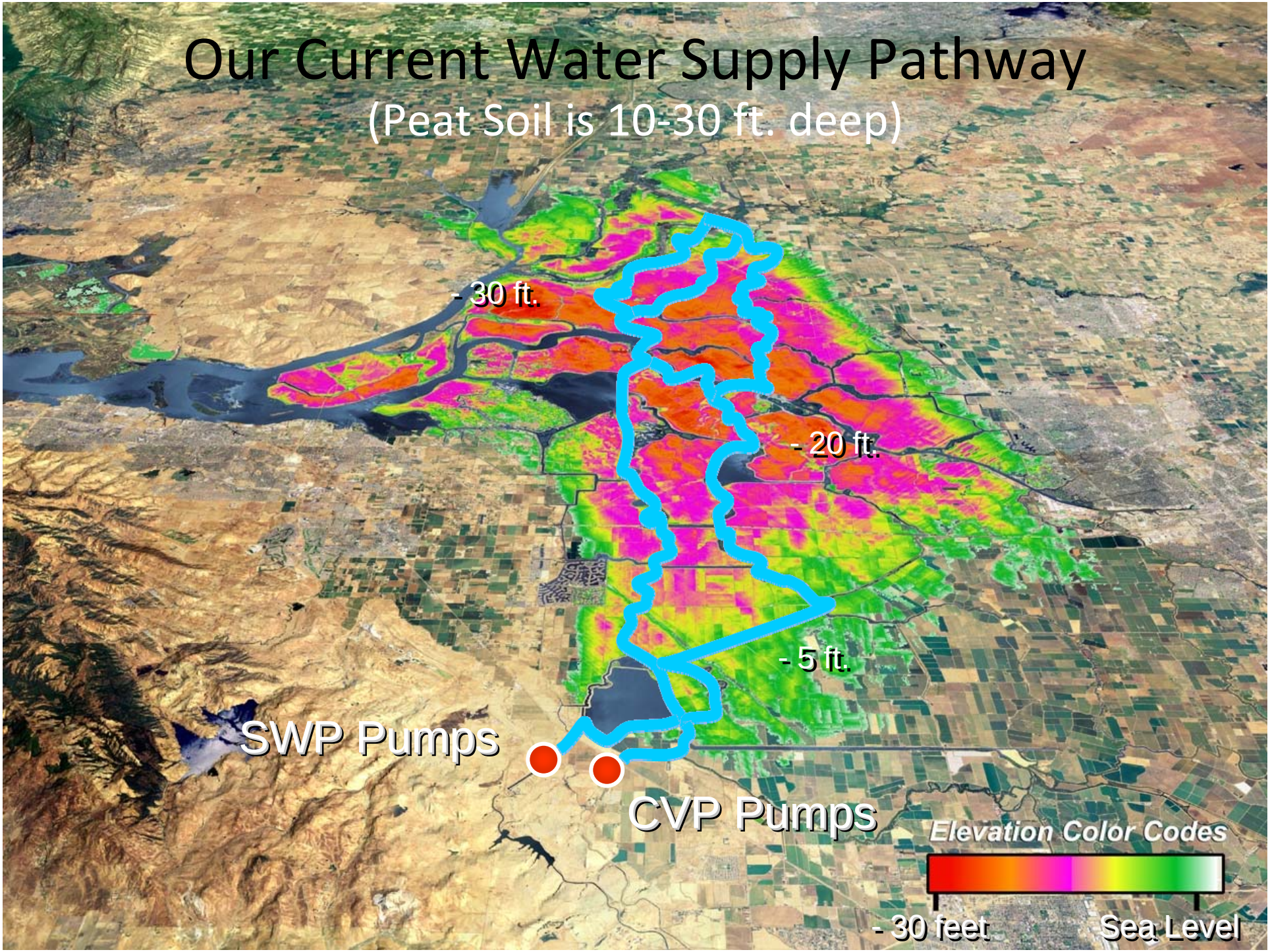
Articulation of Delta and Suisun Initiatives Timeline

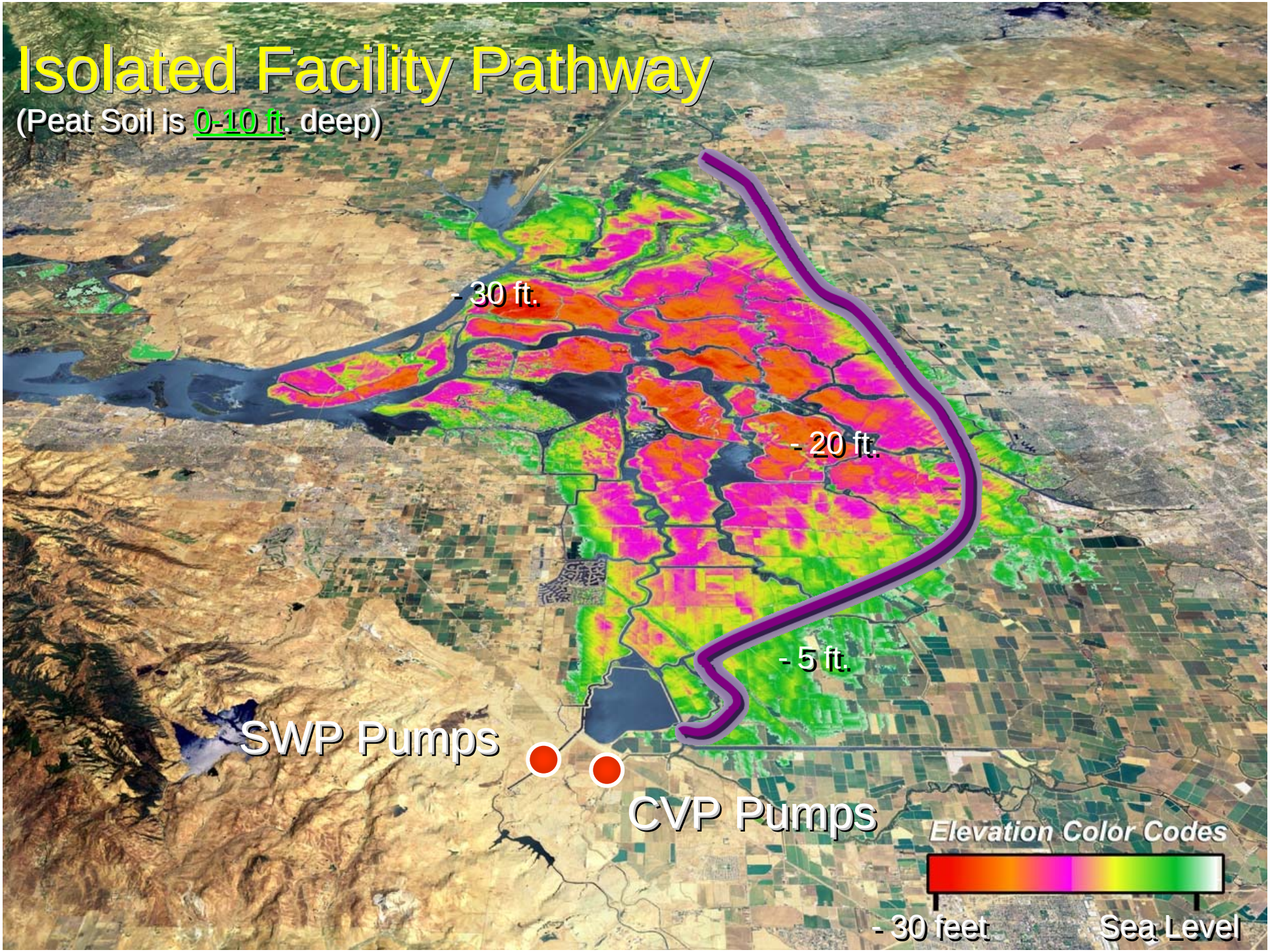
prepared by Delta Vision and the CALFED Bay-Delta Program

Delta Vision Blue Ribbon Task Force Meeting
August 21-22, 2008

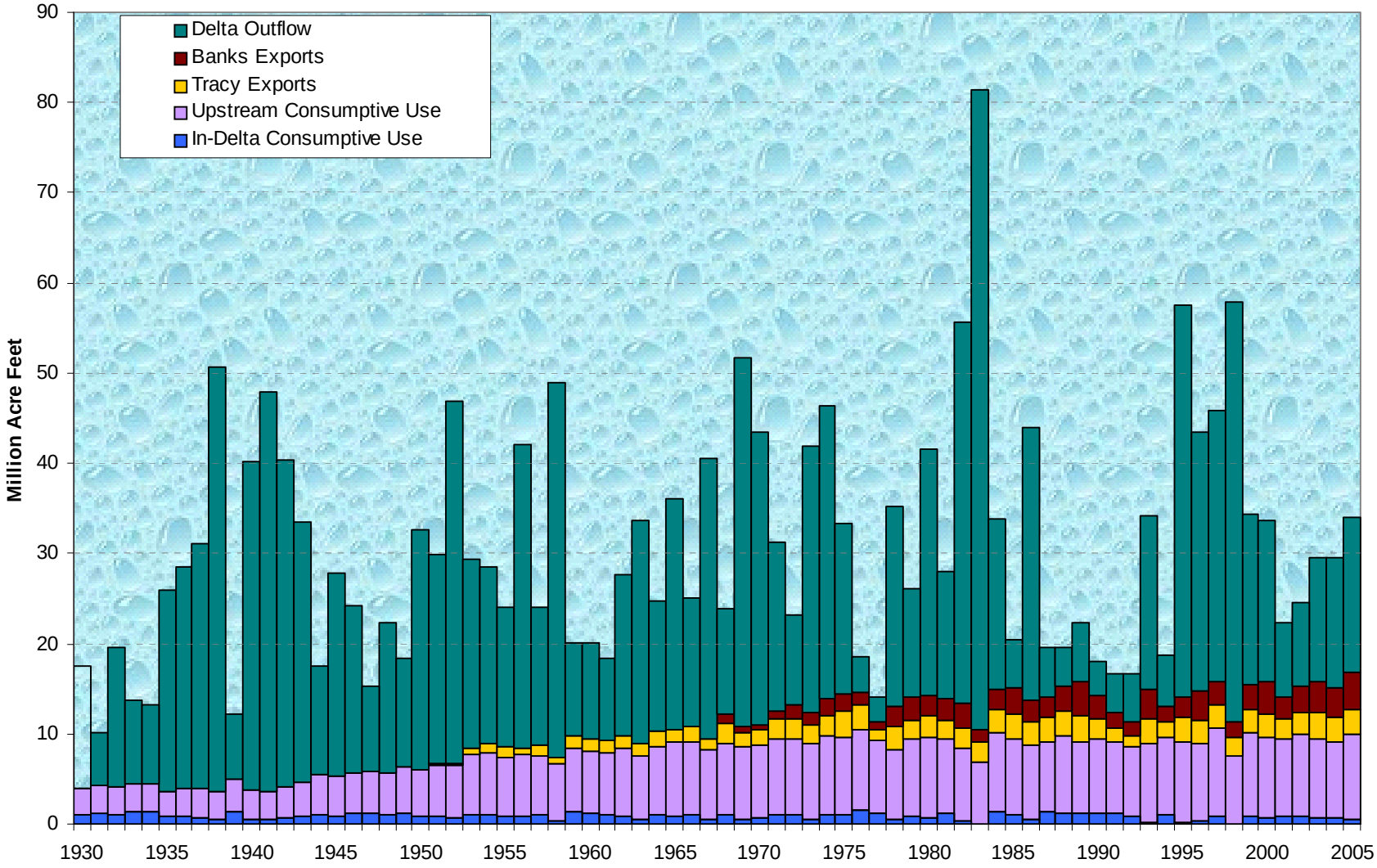


* The Federal Feasibility Process has three phases: the Initial Alternatives Information Report, the Plan Formulation Report, and the Feasibility Study Report, which includes an EIS/R. NODOS = North-of-Delta Offstream Storage Investigation (aka Sites) USJRBI = Upper San Joaquin River Basin Storage Investigation (aka Temperance Flats) SLWRI = Shasta Lake Water Resources Investigation LVE = Los Vaqueros Reservoir Expansion


Our Current Water Supply Pathway
(Peat Soil is 10-30 ft. deep)
- 30 ft.
- 20 ft.
- 5 ft.
SWP Pumps
CVP Pumps
Elevation Color Codes
- 30 feet
Sea Level

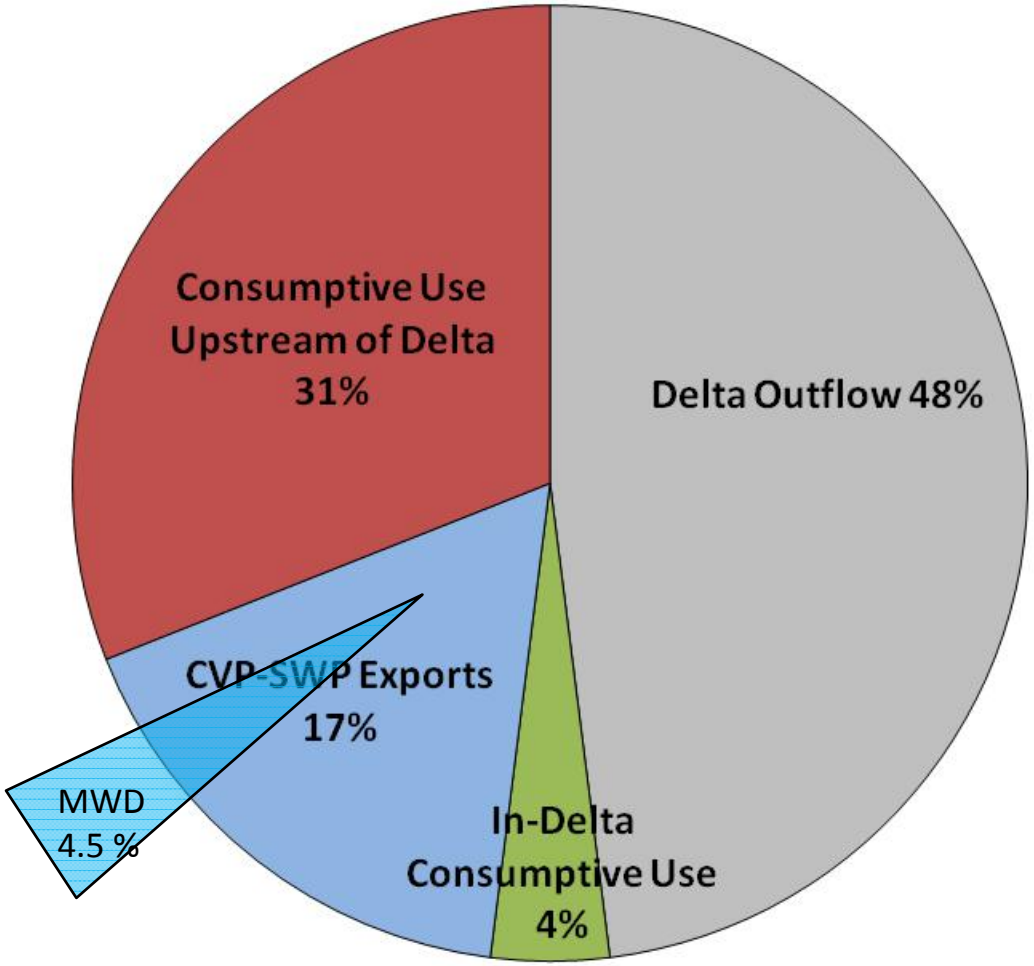

Isolated Facility Pathway
(Peat Soil is 0-10 ft. deep)
- 30 ft.
- 20 ft.
- 5 ft.
SWP Pumps
CVP Pumps
Elevation Color Codes
- 30 feet
Sea Level

DRAFT: Delta Outflow, Upstream Consumptive Use, In-Delta Consumptive Use, and Exports



Historical Diversions Within the Delta Watershed

1970-89



Reference: Delta Vision Task Force

- **<u>Impacts of Water Supply to San Joaquin Valley Agriculture</u>**
-
-
- **<u>Water Loss since CVPIA 1992</u>**
- **1992 – Enactment of CVPIA**
- **Section 3406(d) – Reallocated water from south-of-Delta CVP Ag service contractors to Level 2 Refuge Supplies: 156,000 acre-feet**

- **1994 – Bay-Delta Accord**
- **South-of-Delta CVP and SWP contractors agreed to dedicate, on a temporary basis, water to Delta fisheries restoration: 1,000,000 acre-feet from CVP and SWP contractors in a dry year. The Accord provided that management of CVP water under the Accord to be counted toward section 3406(b)(2) obligation. (Reduced south-of-Delta CVP and SWP contract reliability by approximately 25%)**

- **1997 – Decision on Implementation of CVPIA section 3506(b)(2)**
- **November 1997 and subsequent decisions prescribed management of section 3406(b)(2): 183,000 – 275,000 acre-feet. (Reduced south-of- Delta CVP contract reliability by an additional 10 – 15%.)**

- **2000 – Trinity River Record of Decision**
- **Prescribed new flow criteria for Trinity River: 100,000 – 600,000 acre-feet depending on year type (Average supply reduction for south-of-Delta CVP contractors approximate 5% (91,500 acre-feet).)**

- **2007 – Wanger Decision**
- **Prescribed additional actions to protect Delta smelt: Water cost 650,000 acre-feet**
- **<u>On Farm Job Loss</u>**
- 2006 - 100% water supply 140,000 acres not farmed
- 2007 - 50% water supply 25% full time decrease of on farm jobs 225,000 acres not farmed
- 2008 - 40% water supply 65% full time decrease of on farm jobs 235,000 acres not farmed
- **2009 - 0% water supply 60,000 Employment Loss ****
- **$1.4 Billion Income Loss ****
- **$1.2 Billion Farm Revenue Loss ****
- ** The Economic Impacts on Agriculture of the Biological Opinion & Drought in 2009; Richard Howitt, Duncan MacEwan & Josue Medellin; UC Davis Dept of Agricultural & Resource Economics , & UC Davis Center for Watershed Sciences

- **California is facing a water supply crisis.**
  - **2009 Central Valley Project allocation for SOD water service contractors – 10%**
    - **UC Davis projections based on 0% allocation 60,000 – 80,000 jobs and $2.2 billion in lost income**
  - **2009 State Water Project allocation for all contractors – 30%**
- **Since 1992 water supplies for ag and urban water agencies that depend on the CVP and SWP have been reduced not by hydrology, but by regulations that have reallocated water to environmental uses and that prevent the movement of water from storage facilities to areas where the demand for water exists.**
- **The narrow-minded focus on the export pumps while ignoring OTHER FACTORS has, by all measures, not been of benefit to the ESA listed fish.**
- **Solutions**
  - **Bay-Delta Conservation Plan – A comprehensive program to address multiple factors that affect the abundance of species in the Delta**
  - **New Delta conveyance facilities – An isolated conveyance facility would:**
    - **Eliminate conflict between efforts to recover at-risk species and to supply water;**
    - **Restore water supplies for ag and urban agencies that depend on CVP and SWP;**
    - **Improve water quality; and,**
    - **Eliminate risk to water supply resulting from seismic risk and sea level rise.**
  - **Water Agencies that would benefit from facility willing to pay costs of design, environmental review, and construction.**
  - **New Surface Storage – Five feasibility studies nearing completion.**
  - **Federal agencies must play an active role. Implementation of these solutions will require participation of Bureau of Reclamation, Fish and Wildlife Service, NOAA Fisheries, and Army Corp of Engineers.**

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