

Report on Actions and Recommendations of the Central Valley Salinity Committee

Dr. Karl Longley, Member
Central Valley Regional Water Quality Control Board



Participants

Salinity Committee

- Michael Boccadoro
- Celeste Cantu
- Steve Chedester
- Jerry Johns
- Karl Longley
- Steve Macaulay
- Jerry Meral
- Dan Odenweller

Supporting Staff

- Pamela Creedon
- Les Grober
- Tom Howard
- Gordon Innes
- Beth Jines
- Ken Landau
- Barbara Leidigh
- William Rukeyser
- Rudy Schnagl
- Vicky Whitney

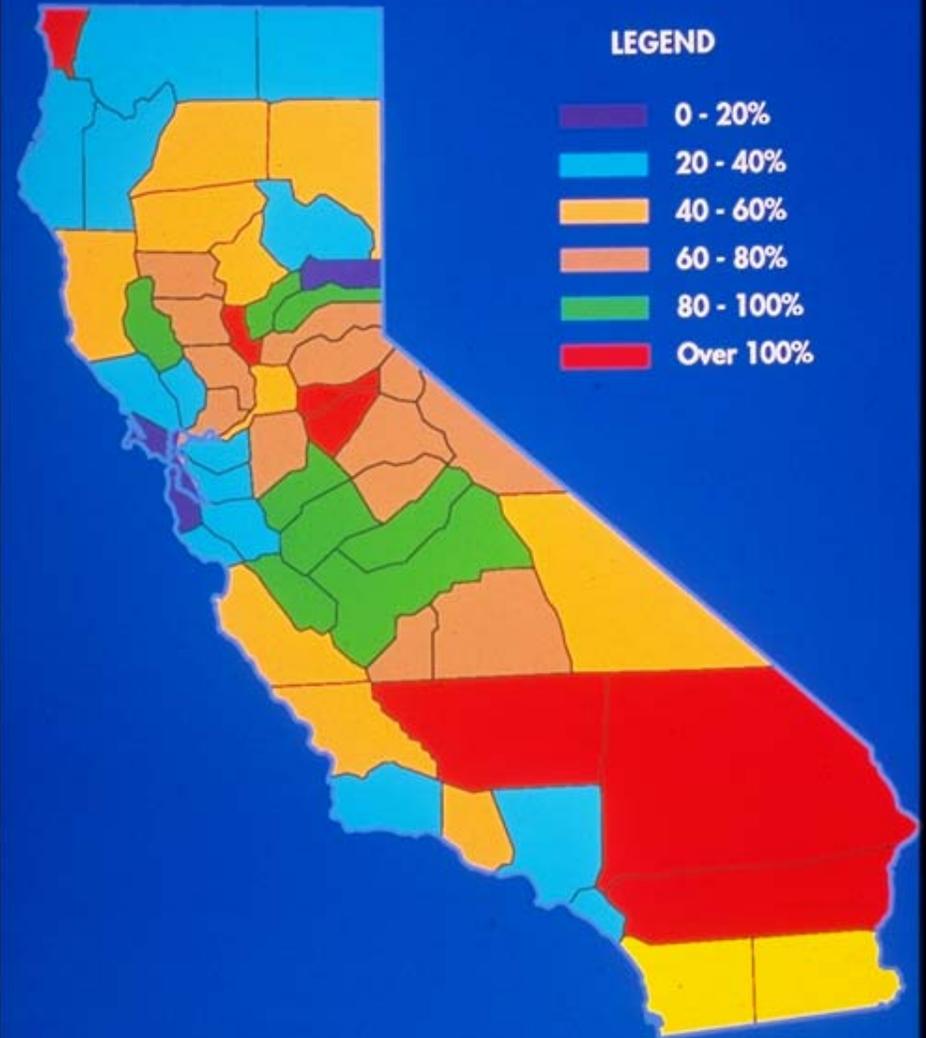
Authors of Report

- Gail Cismowski
- Wayne Cooley
- Les Grober
- Jim Martin
- Matthew McCarthy
- Rudy Schnagl
- Anthony Toto

Population

- Projected Increase
 - 2005-2020 = 39%
- Agriculture
 - Major Industry
 - Related Job Loss
- Income
- Poverty Levels
- Unemployment
- Loss of Farmland

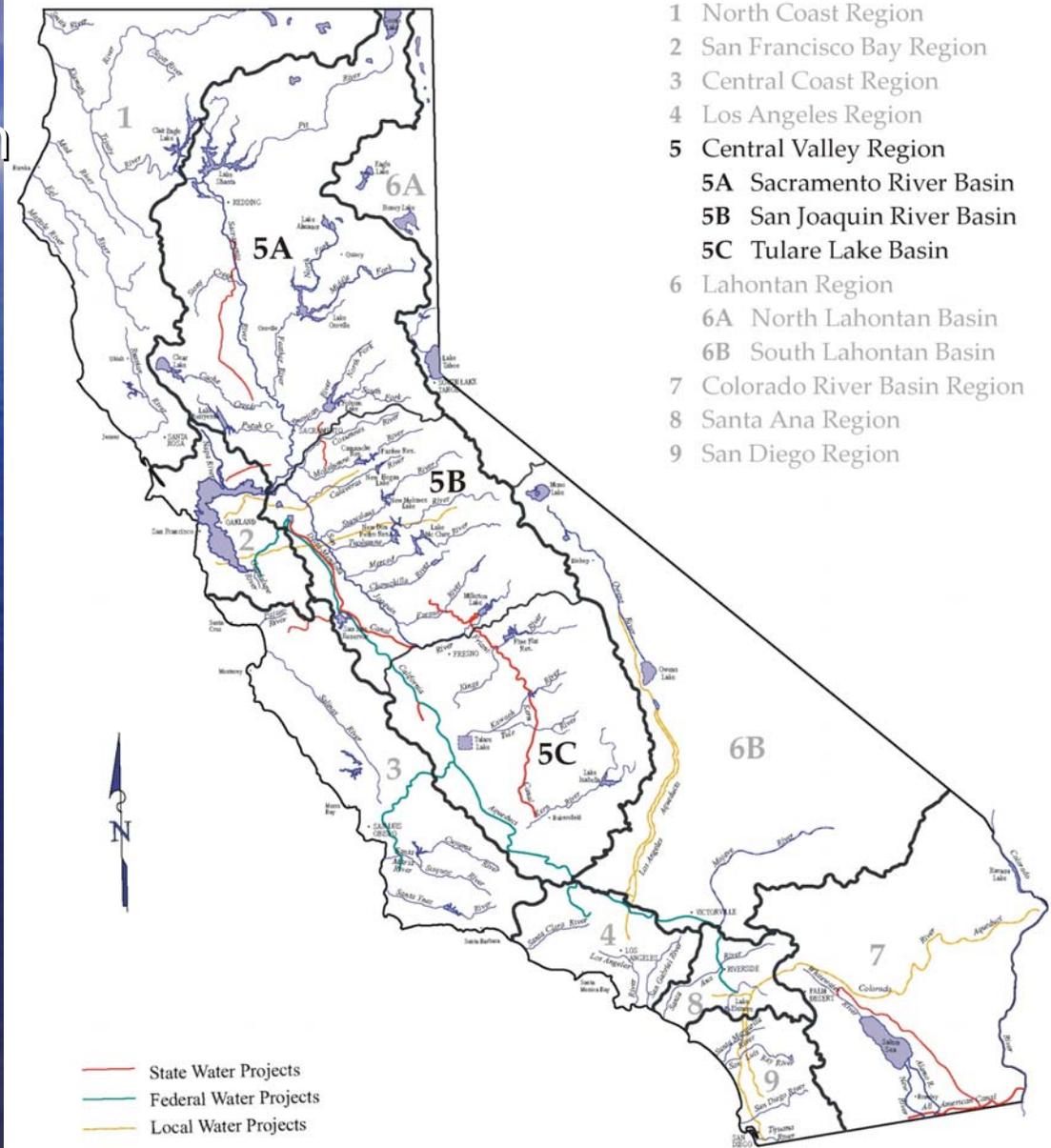
PROJECTED GROWTH RATES BY COUNTY, 1995 TO 2020



Regional Water Quality Control Boards

- Region 5 – Central Valley
 - Sacramento River Basin
 - San Joaquin River Basin
 - Tulare Lake Basin

State of California Water Quality Control Regions and Basins



Government, Regulators, and Other Policy Makers



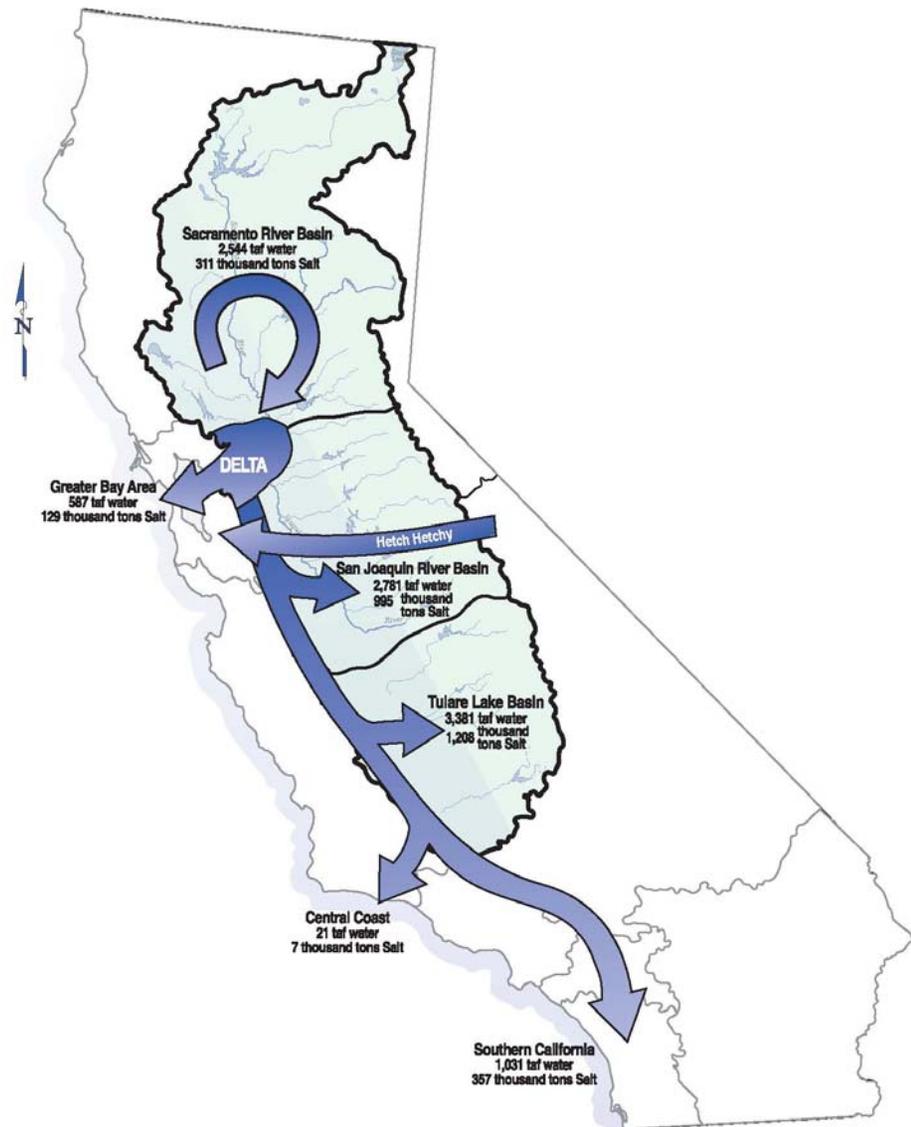
- Federal
 - Environmental Protection Agency
 - Bureau of Reclamation
 - Fish and Wildlife Service



- Local
 - Water Agencies
 - Sanitation Districts
 - County Planning and Building Departments
- State
 - State Water Boards
 - Dept of Water Resources
 - Dept of Fish and Game
 - Bay Delta Authority

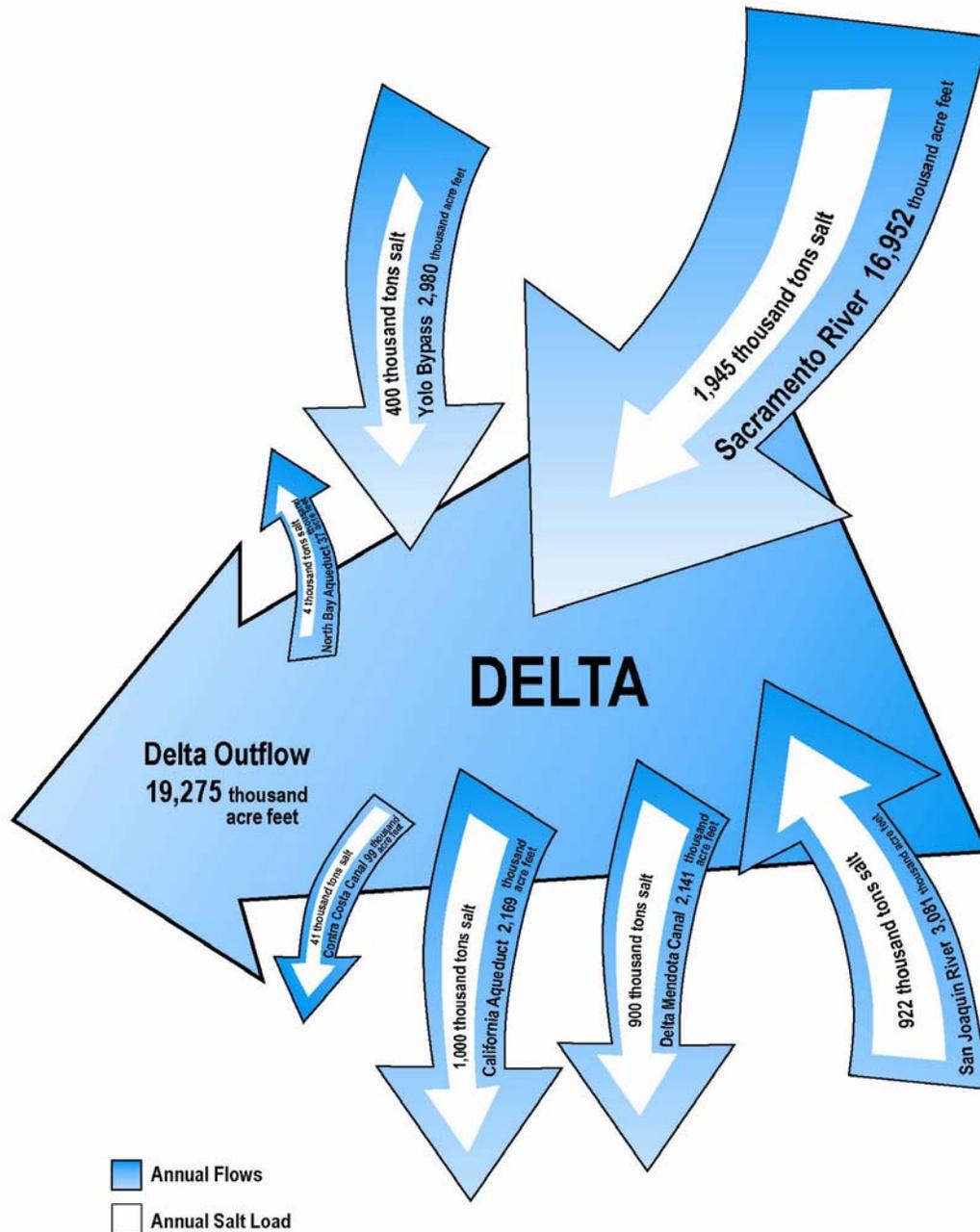
Water Deliveries

- Projects
 - State Water Project
 - Central Valley Project
 - Hetch Hetchy
- In Valley
 - Sacramento River Basin
 - San Joaquin River Basin
 - Tulare Lake Basin
- Out of Valley
 - Greater Bay Area
 - Central Coast
 - Southern California



The Delta

- Inflows
 - Sacramento River
 - San Joaquin River
 - Yolo Bypass
- Outflows
 - California Aqueduct
 - Delta Mendota Canal
 - Contra Costa Canal
 - North Bay Aqueduct
 - Outflow to Bay



Consumptive Use of Water Increases Salinity

- Requires development of a multi-sector salt management policy
 - ✓ Allows continued enjoyment of the beneficial uses of water
 - ✓ Protects beneficial uses for future generations
 - ✓ Promotes economic growth and the development of jobs

Activities Contributing to the Salinity Problem

- Agricultural Water Users
- Urban Water Users
- Rural Water Users
- Environmental Water Uses
- Industrial Users
- Water Providers



Sources of Salt

- Salt Additions
 - Fertilizers and Soil Amendments
 - Food Processing
 - Municipal Wastewater
 - CAFO's including Dairies
- Groundwater Pumping
 - San Joaquin River Basin
 - Tulare Lake Basin
- Salt Dissolution

Salinity Impairments in Surface and Groundwaters

Exacerbated locally from many sources including:

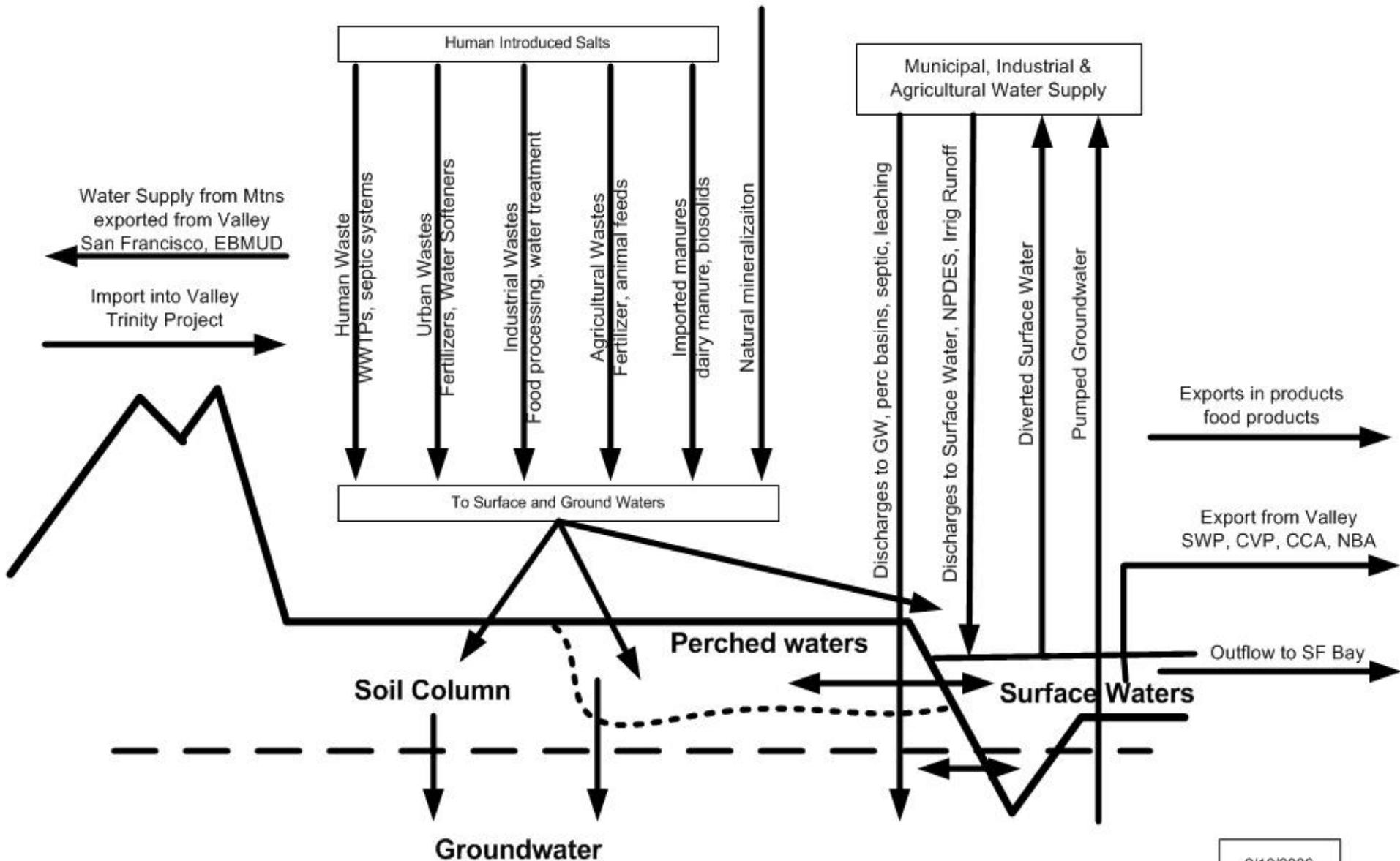
- Discharges to land associated with municipal wastewater disposal
- Septic tanks
- Oil field brines
- Confined animal facilities
- Food processors

Salinity Impairments in Surface and Groundwaters

Locally and regionally complex interactions of surface and groundwater make assessment and mitigation of salinity problems difficult

- Many salinity effects are long-term and occur at exceedingly slow rates, over a number of decades
- Because these salinity concentrations typically occur very slowly, surface and groundwater impairments can be difficult to measure and quantify

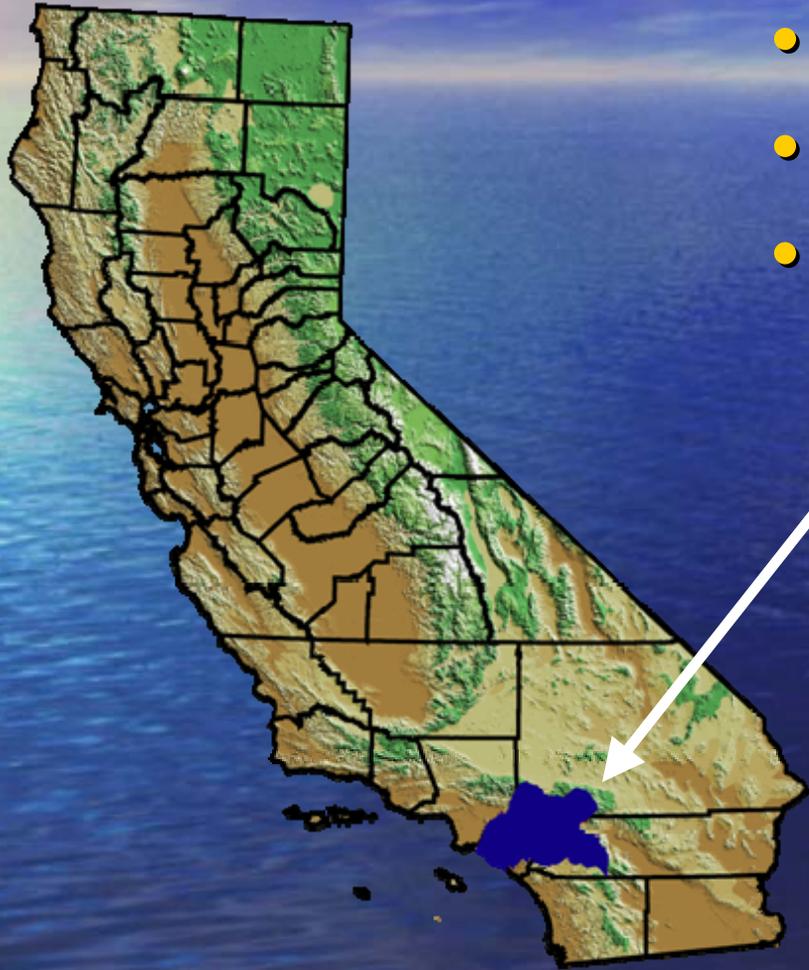
Movement of Salt in the Central Valley



Central Valley Salt Budget

- The Delta
- Water Deliveries
- Sources of Salt
- Movement of Salt
- Salinity Impairments

The Santa Ana River Watershed



- Over 2,650 Square Miles
- Over 5 Million Residents
- Portions of 4 Counties
 - Orange County
 - Riverside County
 - San Bernardino County
 - Los Angeles County

Recommendations

1. Establish during May 2006 a Salinity Study Task Force to obtain funding for and provide oversight, supervision, and approval of a study to evaluate the impact of salinity on water resources and to develop a viable Salinity Management Plan.

Elements of the Salinity Management Plan will include:

- ✿ Potential measures that can be implemented to better manage salinity, and then
- ✿ Interim and long-range salinity management plans will be developed and fully evaluated

Elements of the Salinity Management Plan will include:

- ✿ The development of a management organization (e.g., a Joint Powers Authority or a Special Commission),
- ✿ Physical infrastructure, and
- ✿ Changes to the current basin plan and other regulatory programs

Recommendations

2. Sponsor in June 2006 a follow-up joint State Board/Regional Board Salinity Workshop
 - ✓ To receive comments on the report and potential information/data gaps,
 - ✓ To discuss recommendations, and
 - ✓ To receive input and directions for future steps

Recommendations

- 3. Conduct facilitated meetings to gather more public input and information for the process beginning August 2006**

Recommendations

4. Contract for the preparation of economic study of

- ✓ The salinity impacts in the Central Valley, and
- ✓ The social and economic consequence of not implementing a viable salinity management program
- ✓ Contracting efforts are proposed to start during the period of October-December 2006

Recommendations

- 5. Sponsor a full-day salinity conference that would highlight the major salinity-related issues in the Central Valley**