CV-SALTS Update

CASEY CREAMER, COORDINATOR

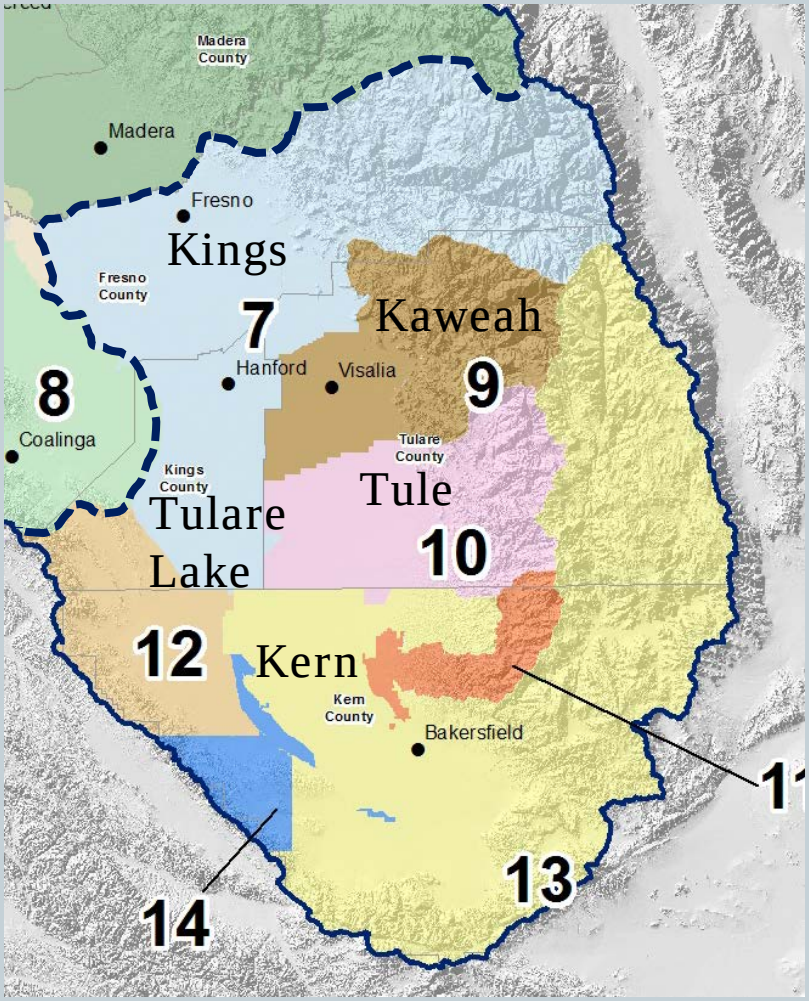
KINGS RIVER WATER QUALITY COALITION

SOUTHERN SAN JOAQUIN VALLEY WATER QUALITY COALITION

Presentation Overview

- General Description of CV-SALTS
- SSALTS Study
- Impacts to Agriculture in the Central Valley and particularly to the Tulare Lake Basin

Tulare Lake Basin



What is CV-SALTS

- Central Valley Salinity Alternatives for Long-Term Sustainability
  - Collaborative stakeholder driven and managed program to develop sustainable salinity and **nitrate** management planning for the Central Valley
  - Initiated in 2006
  - Modeled after Santa Ana region

CV-SALTS Organizational Structure

Leadership Steering Committee

CV Salinity Leadership (formerly policy) Group

CV SALTS Executive Committee
Maximum of 30 Members

Regional Board and State Board Members and Exec. Management

Leadership Group 6

SWRCB, RWQCB
DWR, BOR, EJ, Env WQ

CVSC Board Members

CVSC Chair and up to 18

Regional and State Board Staff

Efforts Approval

Committee Chairs
Up to 6

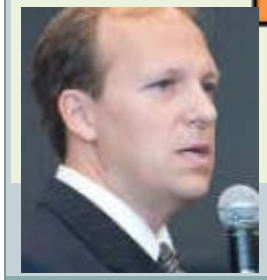
Public Education and Outreach

Economic and Social Cost

Technical

Other (future)

Working and Review Groups



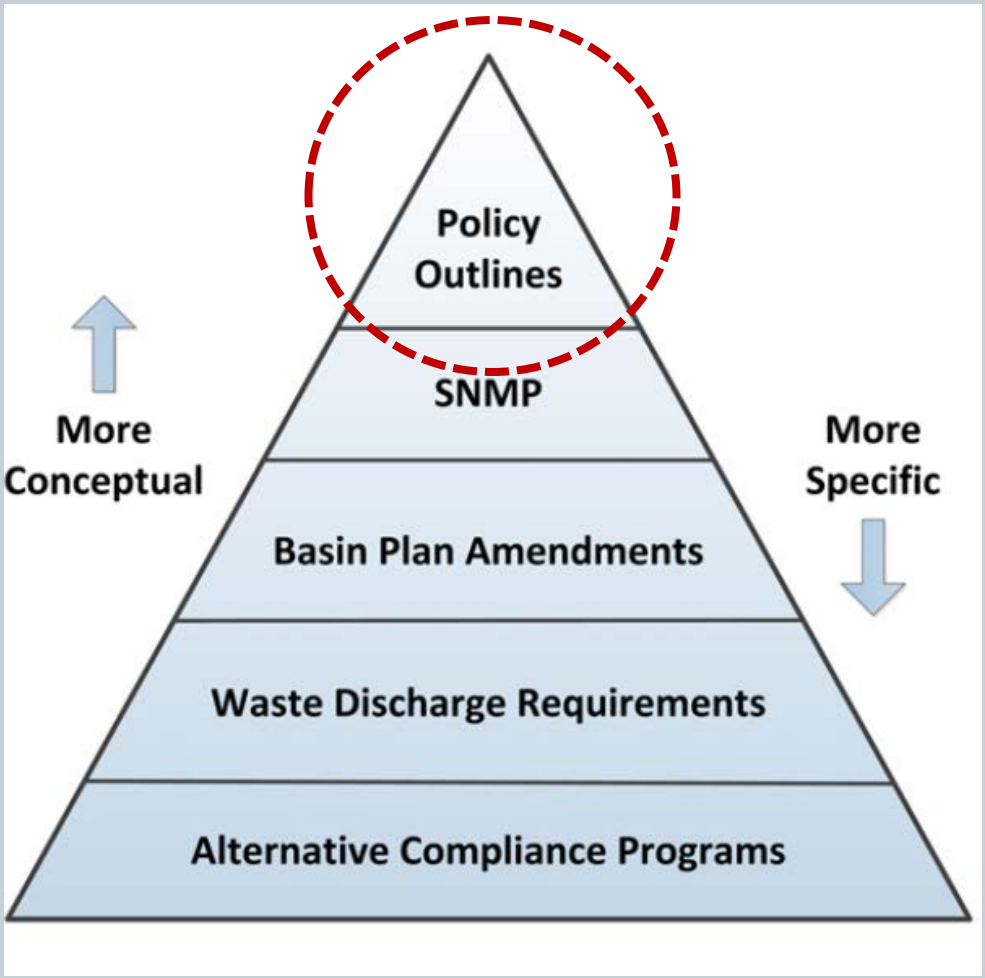
CV Salinity Coalition

Other Groups (Future)

Why CV-SALTS

- Current regulatory options are limited for agricultural areas overlying groundwater high in salt or nitrates
  - Time Schedule Order (TSO)
  - Cease & Desist Order (CDO)
- Permit by permit approach not feasible for Salt management in the Central Valley
- Additional tools are needed
  - Protect at the tap, cleanup strategy
  - Management Zone/Alternative Compliance Program
    - Assimilative Capacity?
    - Conditional Exceedance/Variance

Level of Detail



Regulatory Roadmap

2015	Outline of Policy Principles	Direction to SNMP drafting team
2016	Salt and Nitrate Management Plan (SNMP)	CV-SALTS recommended implementation strategy
2017	Basin Plan Amendments	Significant policy changes needed to support SNMP
2018	Waste Discharge Requirements (WDRs)	Establishes formal compliance obligations
2019	Alternative Compliance Programs	Proposed by permittees; enforced through WDR's

SSALTS

- Strategic Salt Accumulation Land and Transport Study (CDM Smith)
- Salinity Management Options
  - Source Control BMP's
  - Extraction Facilities
  - Regional desalters
  - Post-RO treatment for trace constituents
  - **Central Valley Brine Line (CVBL)**
    - East Bay MUD or alternative outfall
  - CVBL pump stations
  - Treatment/disposal at EBMUD
  - Deep injection wells
  - Real Time Management
  - Salt Accumulation Areas

SSALTS Draft Findings

- 4 Alternatives analyzed
- Cost estimates of $10 billion
  - No Action Alternative equates to 1.5 Billion per year
  - Brine line part of every alternative
  - Needed actions depend on the region of the Central Valley
- Long/difficult permitting process to complete the brine line (30 to 50 years)

(Study on hold as Nitrate Implementation Strategy is finalized)

Salinity Impacts to Agriculture

- Status Quo
  - Yield/quality gradually decline
  - Excess water needed to push salts out of the root zone
  - Cropping options limited to source water quality
  - Difficult/impossible to meet water quality objectives in some areas
  - Eventual loss of viability
- Sustainable Management
  - Maintain crop yield and quality goals along with water quality goals
  - Excess water still needed to flush root zones
  - Cropping options maintained or improved
  - High upfront cost of infrastructure
    - Can we afford it?

Questions?