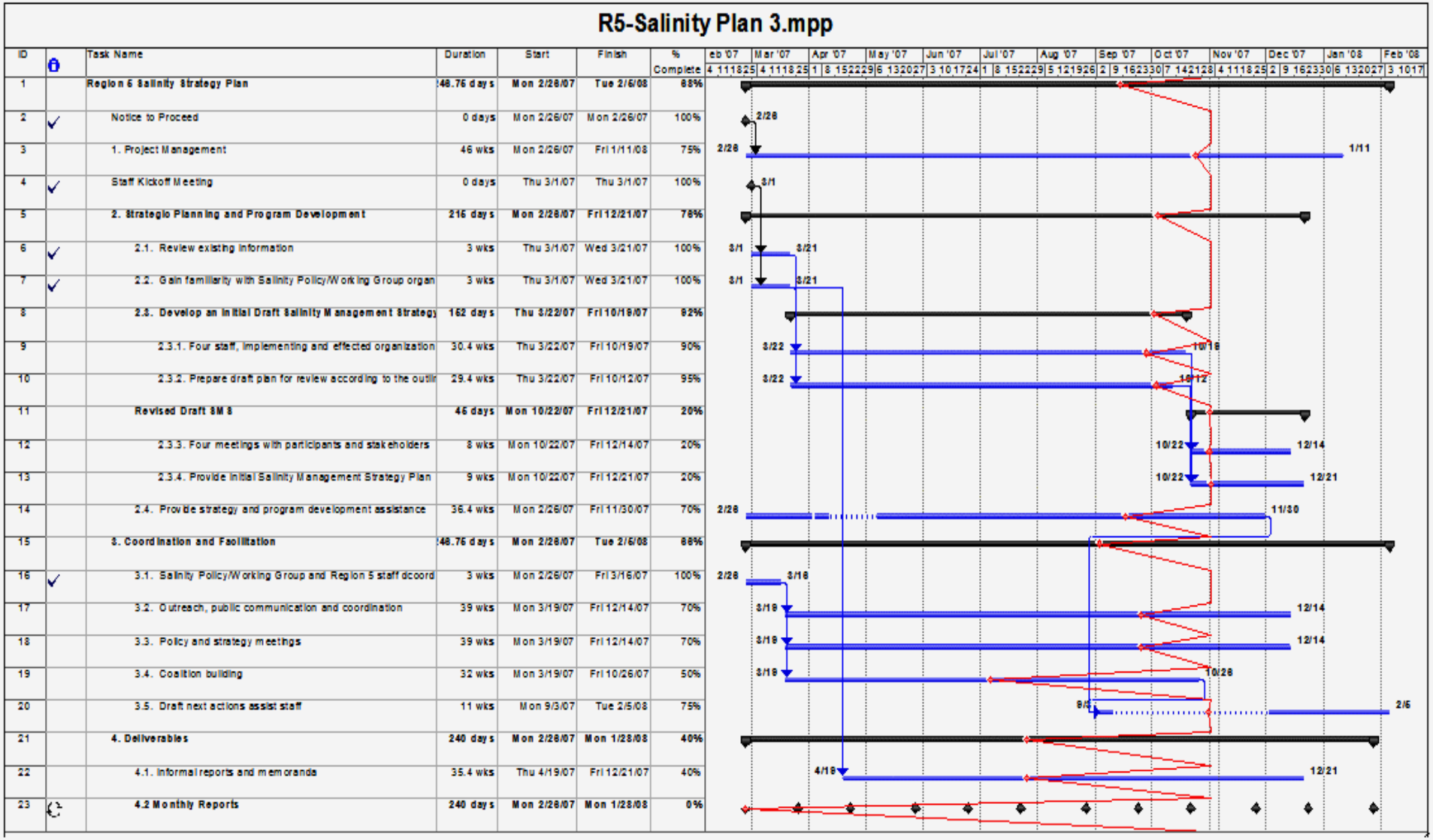
Salinity
Management
Salinity Strategy Plan

Strategy Plan Progress

- Current process organization roadmaps
- Plan development stages/scale
- Existing study results and information
- Early action opportunities
- Priorities and success criteria by stage
- Policy issues and alternatives
- Technical issues, strategies and alternatives
  - Future studies areas
  - Future management options
  - Project and program strategies and alternatives
- Stakeholder and outreach/ communication plan
- Potential funding opportunities

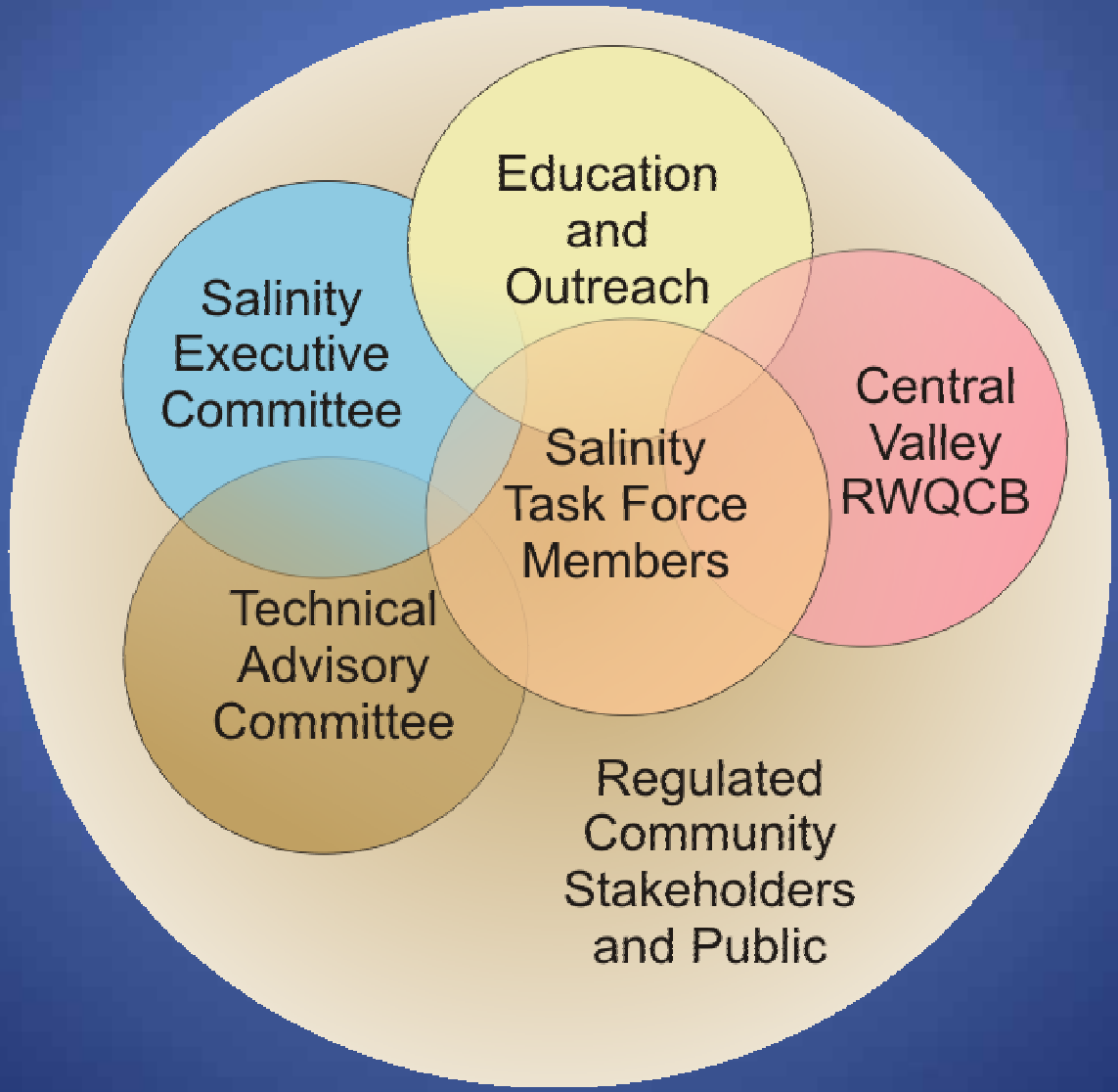
Schedule


R5-Salinity Plan 3.mpp
ID
Task Name
Duration
Start
Finish
% Complete
Feb '07
Mar '07
Apr '07
May '07
Jun '07
Jul '07
Aug '07
Sep '07
Oct '07
Nov '07
Dec '07
Jan '08
Feb '08
1 Region 6 Salinity Strategy Plan 148.75 days Mon 2/26/07 Tue 2/5/08 88%
2 Notice to Proceed 0 days Mon 2/26/07 Mon 2/26/07 100%
3 1. Project Management 46 wks Mon 2/26/07 Fri 1/11/08 75%
4 Staff Kickoff Meeting 0 days Thu 3/1/07 Thu 3/1/07 100%
5 2. Strategic Planning and Program Development 215 days Mon 2/26/07 Fri 12/21/07 78%
6 2.1. Review existing information 3 wks Thu 3/1/07 Wed 3/21/07 100%
7 2.2. Gain familiarity with Salinity Policy/Working Group organ 3 wks Thu 3/1/07 Wed 3/21/07 100%
8 2.3. Develop an Initial Draft Salinity Management Strategy 162 days Thu 3/22/07 Fri 10/19/07 92%
9 2.3.1. Four staff, implementing and effected organization 30.4 wks Thu 3/22/07 Fri 10/19/07 90%
10 2.3.2. Prepare draft plan for review according to the outli 29.4 wks Thu 3/22/07 Fri 10/12/07 95%
11 Revised Draft SMS 46 days Mon 10/22/07 Fri 12/21/07 20%
12 2.3.3. Four meetings with participants and stakeholders 8 wks Mon 10/22/07 Fri 12/14/07 20%
13 2.3.4. Provide Initial Salinity Management Strategy Plan 9 wks Mon 10/22/07 Fri 12/21/07 20%
14 2.4. Provide strategy and program development assistance 36.4 wks Mon 2/26/07 Fri 11/30/07 70%
15 3. Coordination and Facilitation 148.75 days Mon 2/26/07 Tue 2/5/08 88%
16 3.1. Salinity Policy/Working Group and Region 5 staff dcoord 3 wks Mon 2/26/07 Fri 3/16/07 100%
17 3.2. Outreach, public communication and coordination 39 wks Mon 3/19/07 Fri 12/14/07 70%
18 3.3. Policy and strategy meetings 39 wks Mon 3/19/07 Fri 12/14/07 70%
19 3.4. Coalition building 32 wks Mon 3/19/07 Fri 10/26/07 50%
20 3.5. Draft next actions assist staff 11 wks Mon 9/3/07 Tue 2/5/08 75%
21 4. Deliverables 240 days Mon 2/26/07 Mon 1/28/08 40%
22 4.1. Informal reports and memoranda 35.4 wks Thu 4/19/07 Fri 12/21/07 40%
23 4.2 Monthly Reports 240 days Mon 2/26/07 Mon 1/28/08 0%

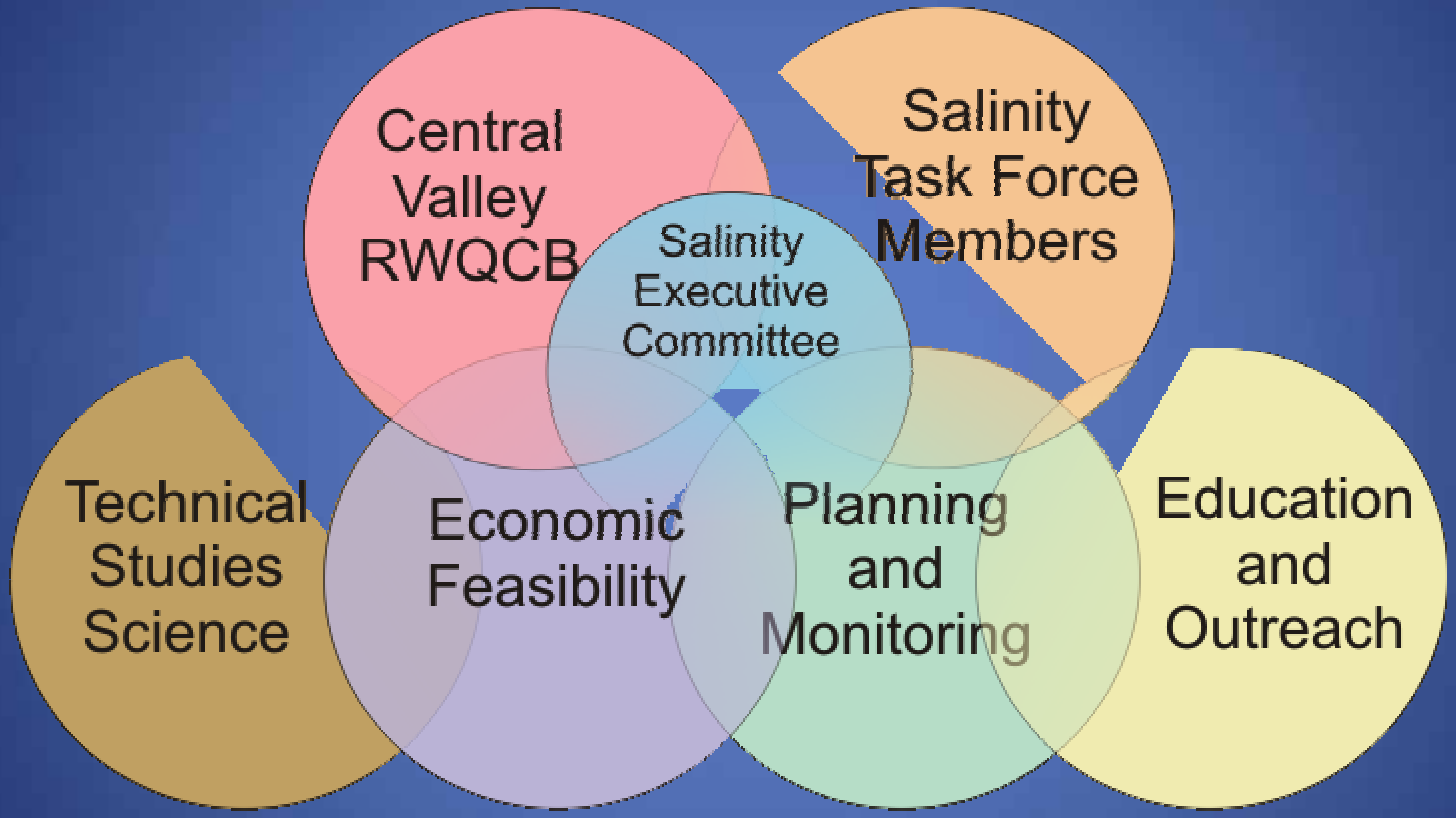
Organization Stage

- Group in the formation and organization stage
- Efforts for formalization
- Direction and scope for work
- Stakeholder group formation

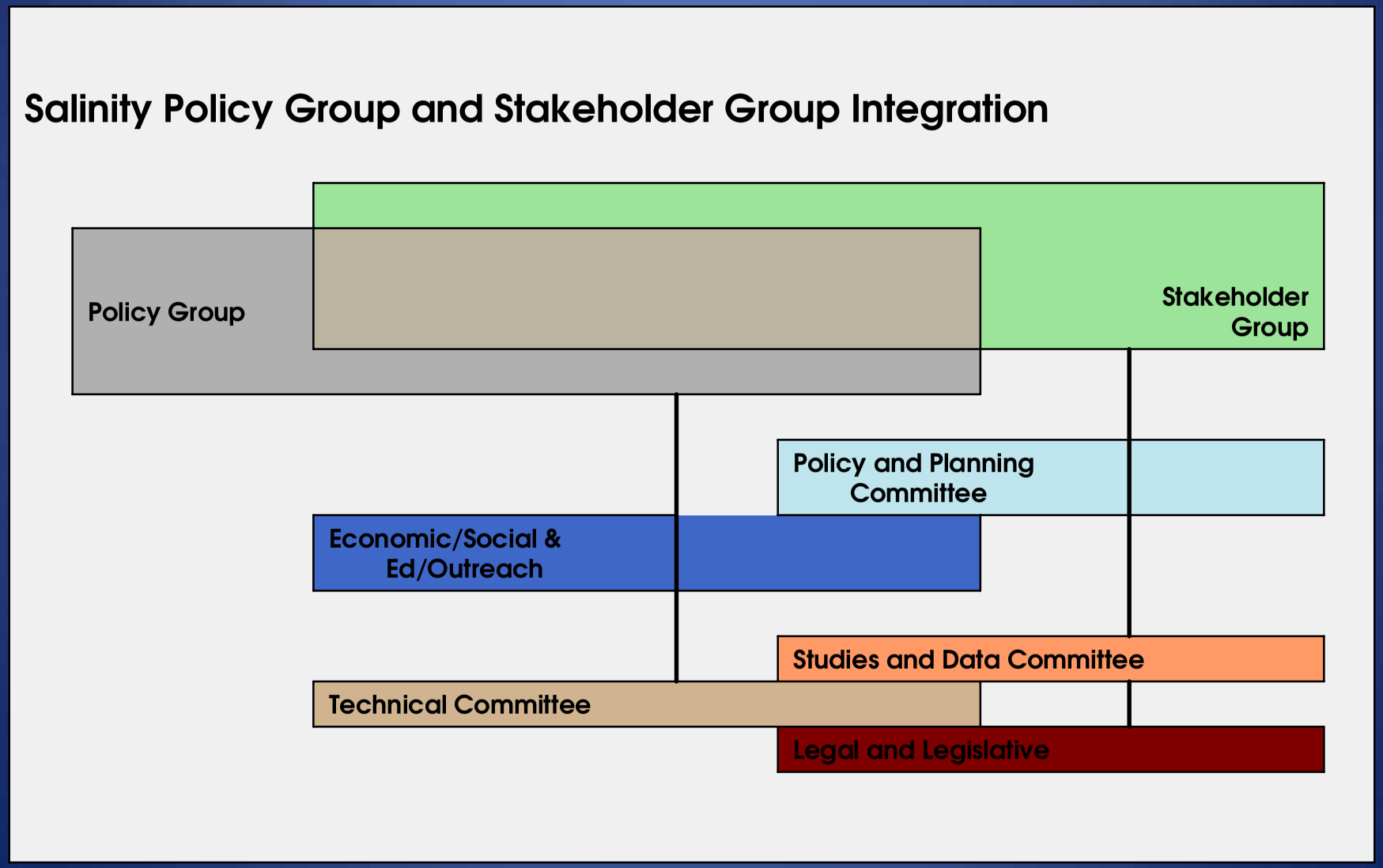
Can New Groups be Organized?



Task Force? Leads Some Efforts

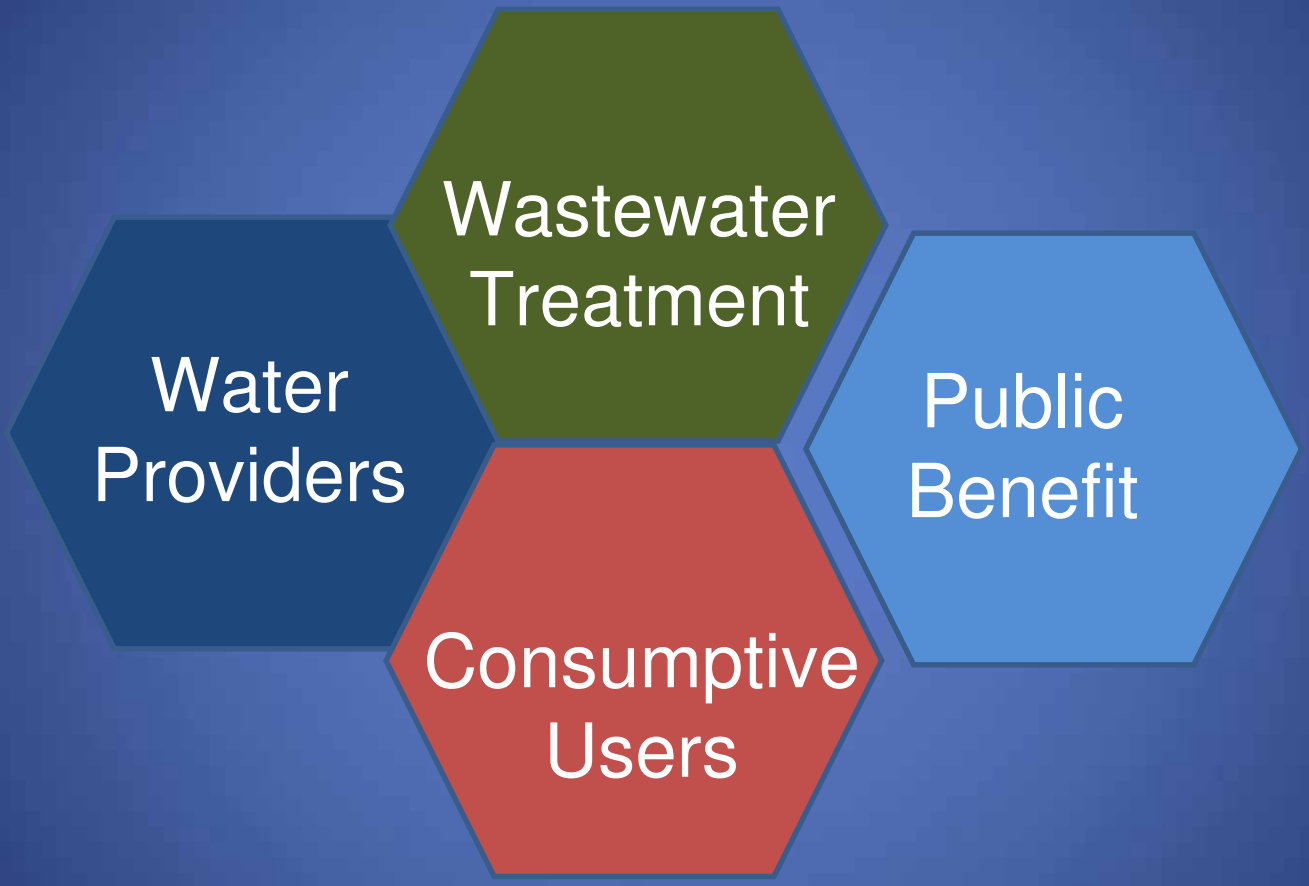


Group Integration



Acts as Coordinator for Regional Groups

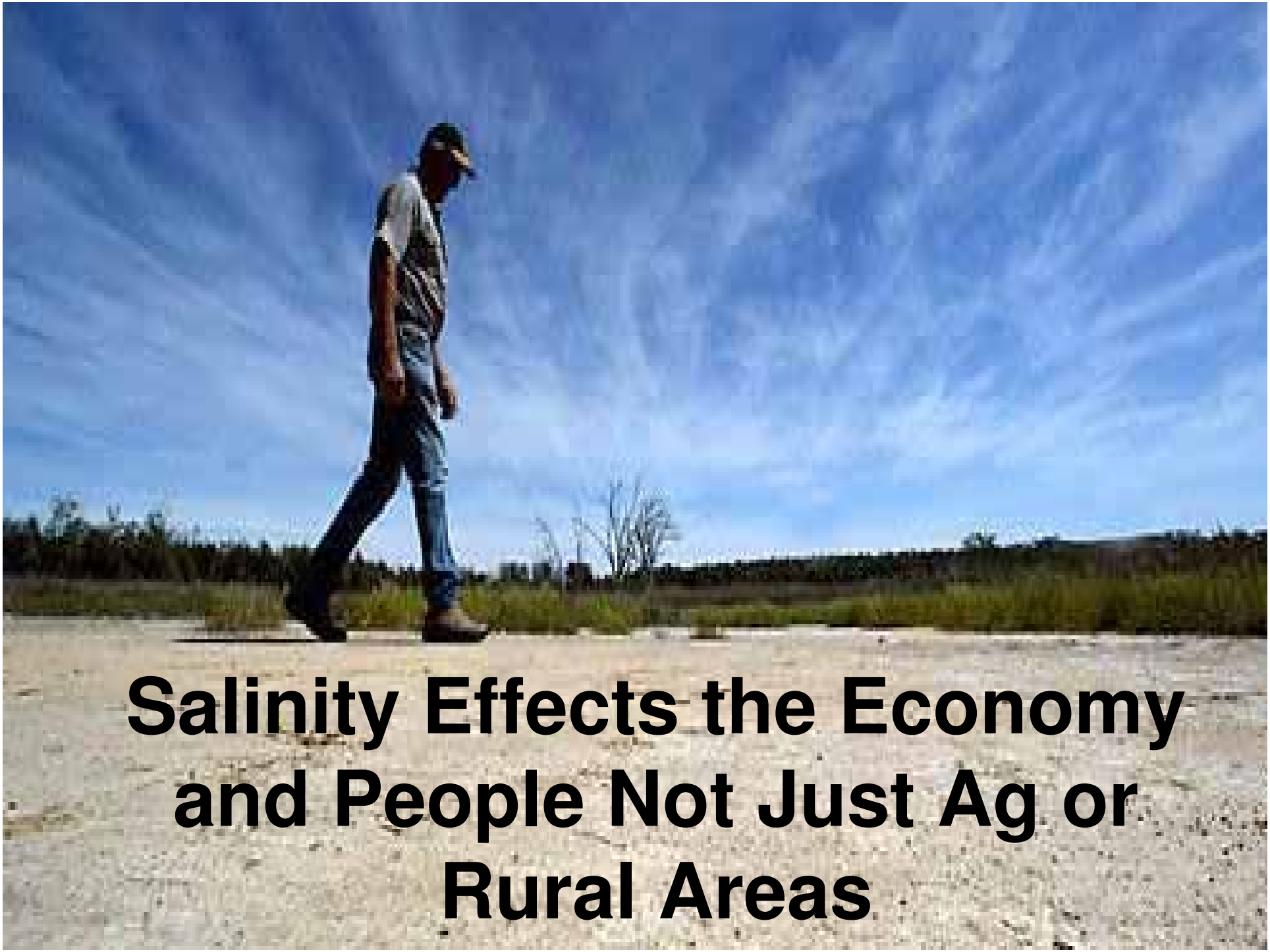
Water/Salinity Players



All must be engaged in the solutions

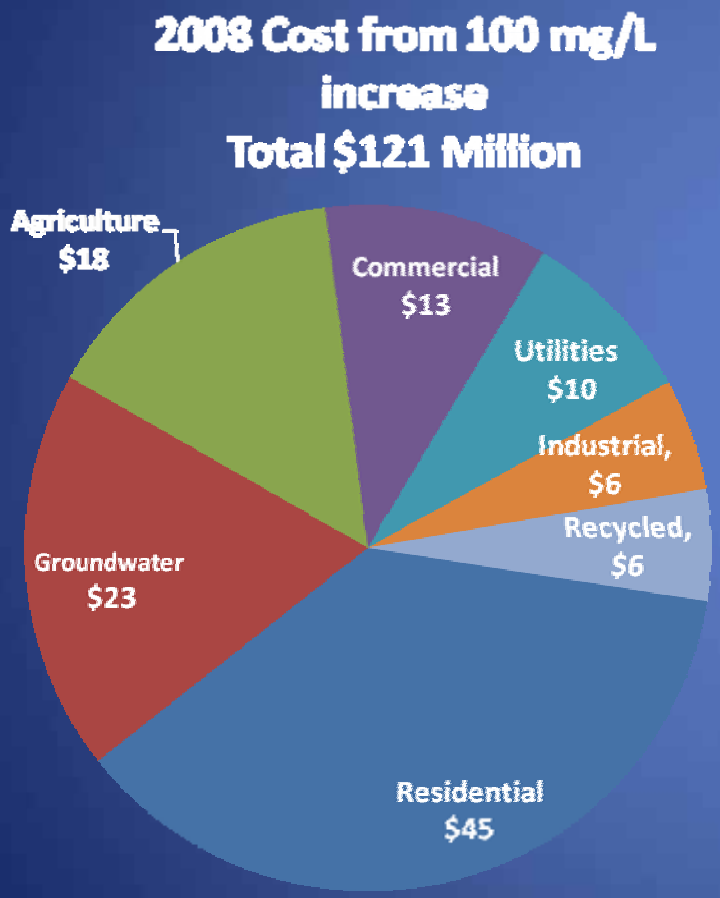
Salt Accumulation Scale

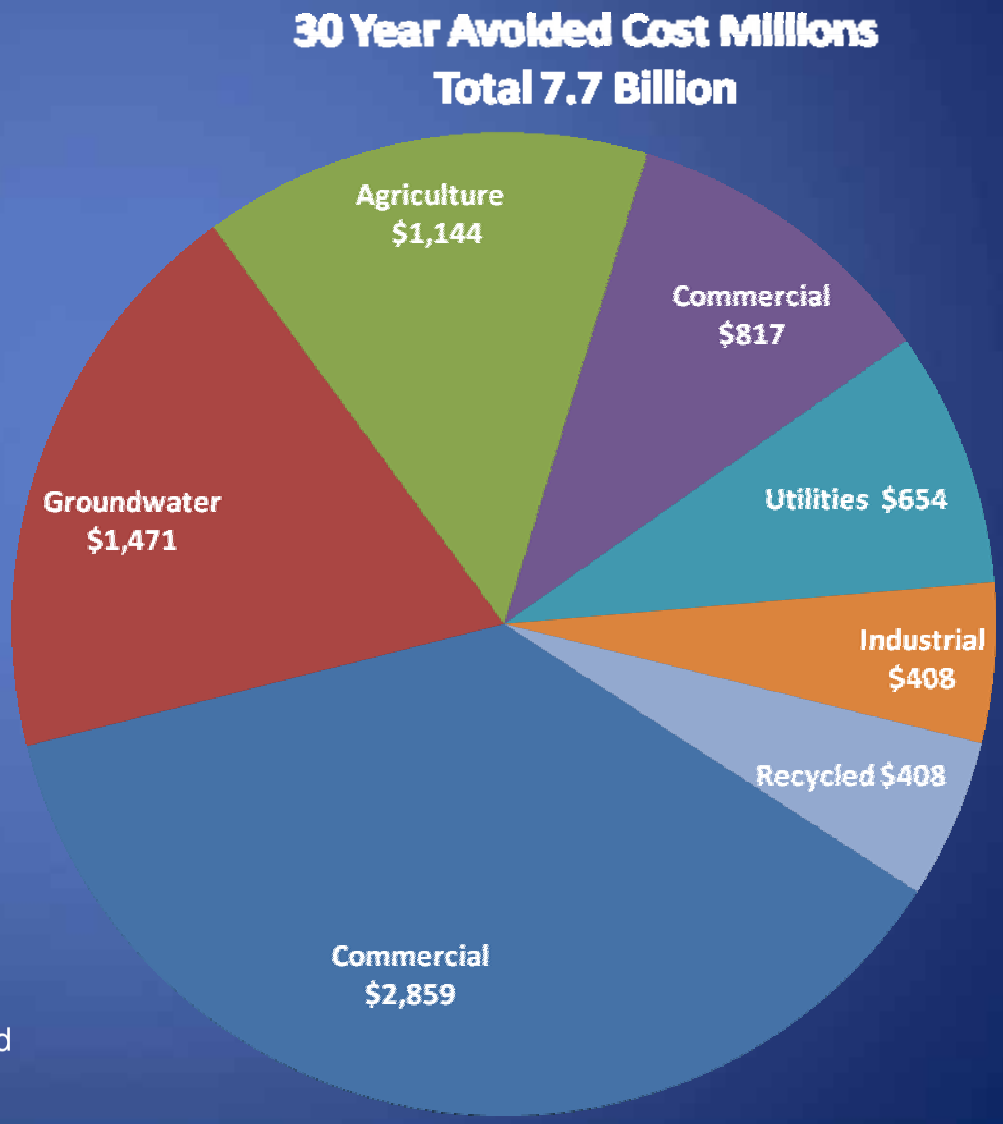
- Recent modeling efforts appear to indicate greater than 7 million tons per year of salt are generated or flow into the diverse valley
- Outflow has not been quantified
- Some believe outflow could be as high as 4-5 million tons per year



Salinity Effects the Economy and People Not Just Ag or Rural Areas

Economics of Salt Control





Cost based on So. Cal Salinity Study; all costs escalated actual inflation to 2008 and forecast at 2.5% per year
Central Valley Information not known

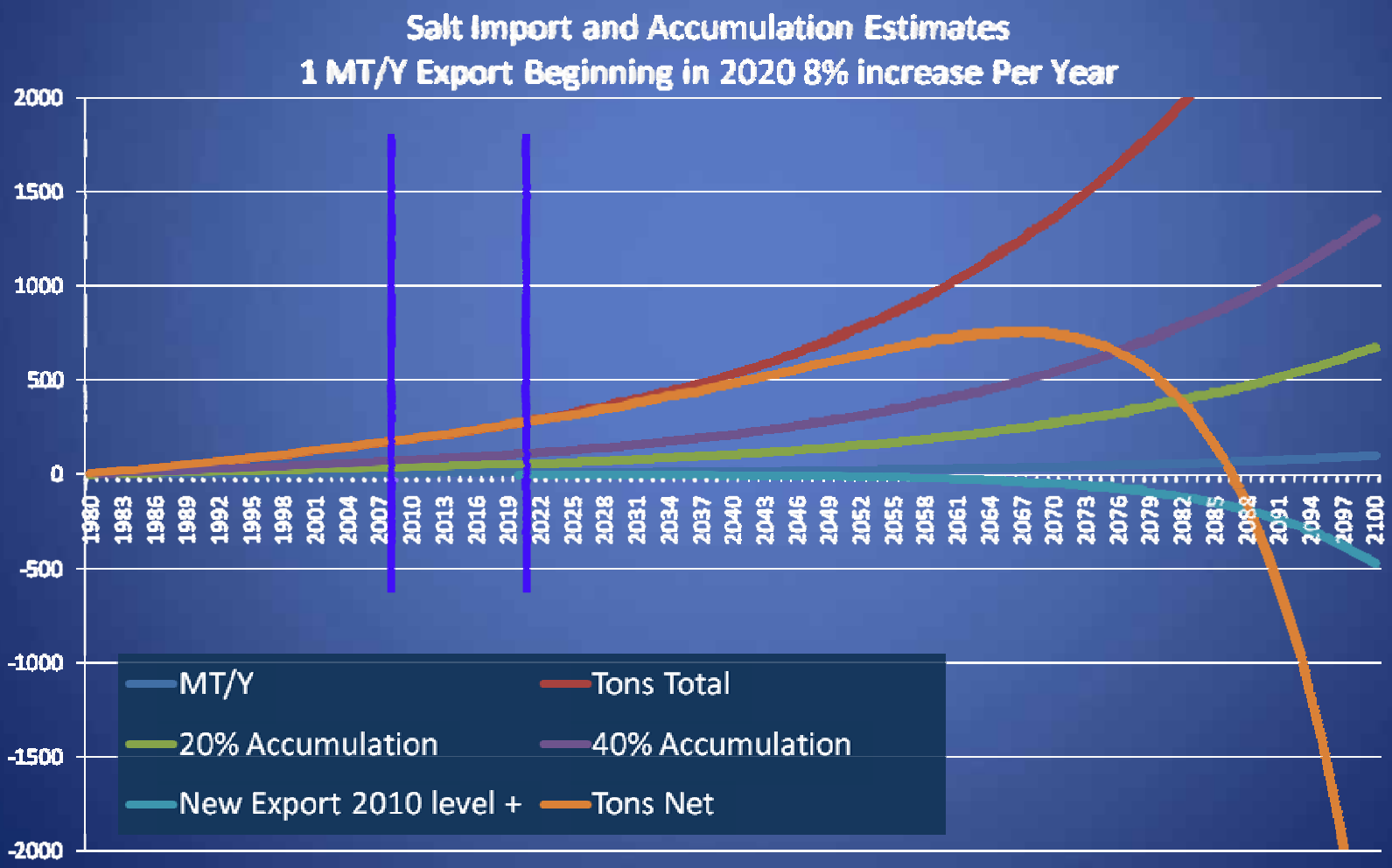
What we need to know better

- Inflow, outflow and net salt increase by year
- Detail on sources of salt
- Benefits of managing salt in Central Valley
- Interim solutions
- Long-term solutions
- Costs for each effort
- Quality and quantity of future water imports
- Regional/local solutions
- Priorities for action
- Policy review
- Control strategies
- Control and exchange opportunities

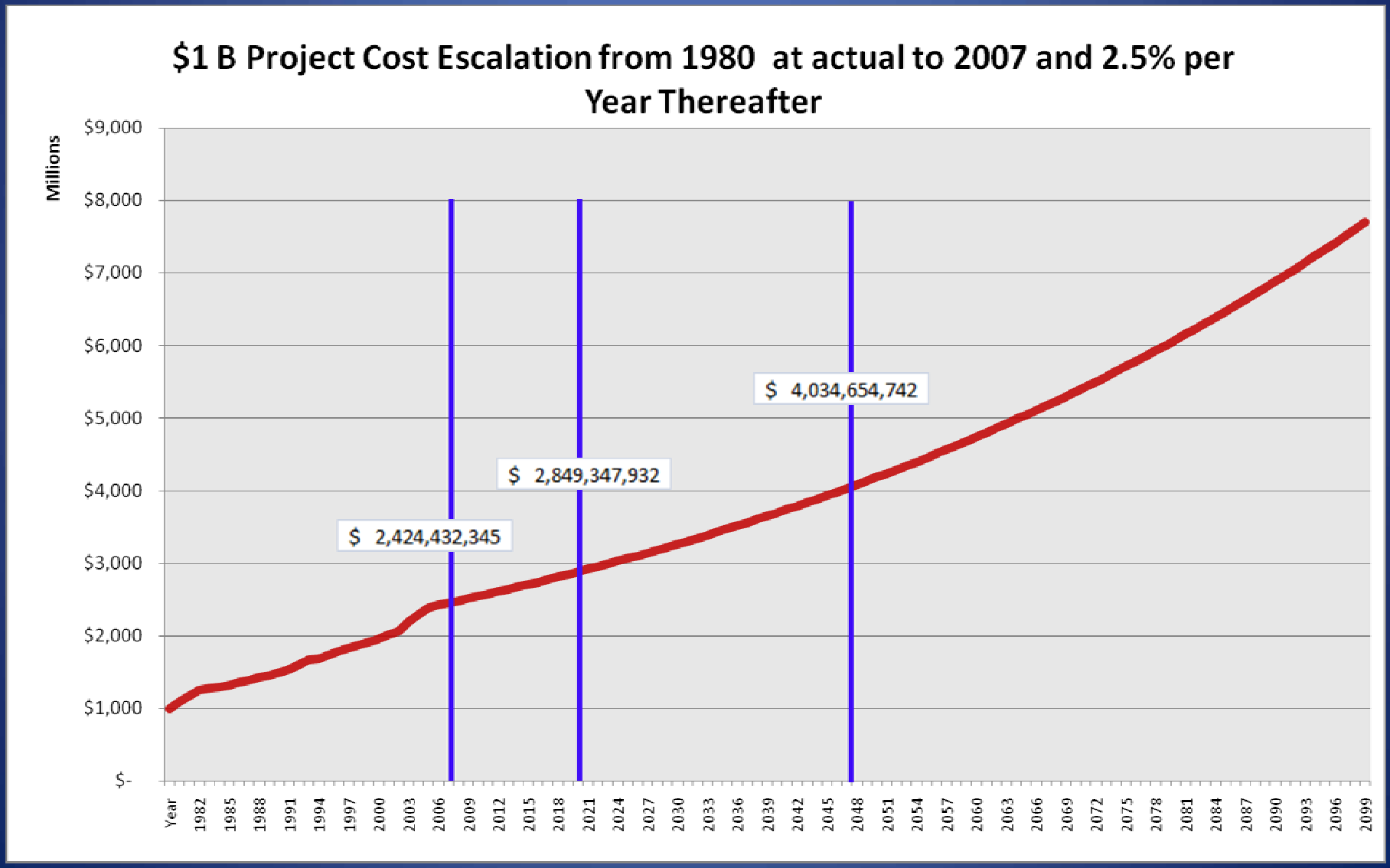
What We Know

- Salt Management will be expensive
- Controlling Salt will require working together
- Imported water is a primary source of imported salt
- We need the water for beneficial uses
- The longer we wait to begin long term management the more it will cost
- Costs are separated from benefits
- Incentives preferred to regulation
- Information is needed and funding is limited

Long Term Salt Import - Export



Capital Cost Salt Control



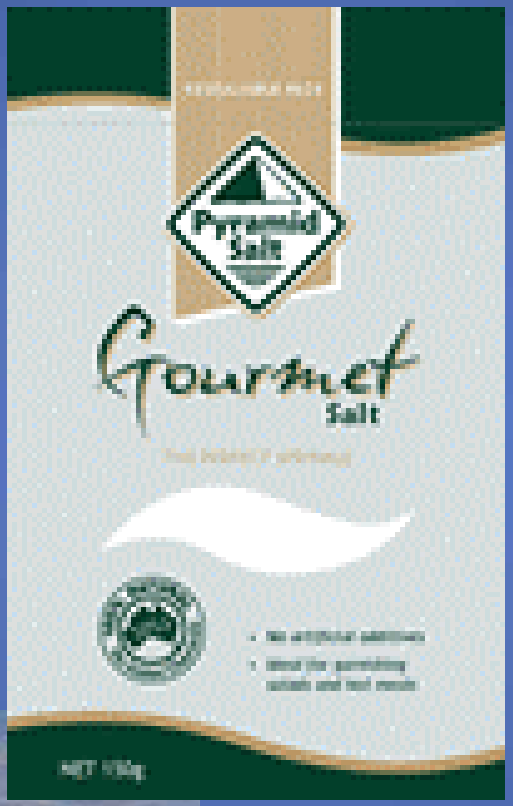
Recommendation Areas

- Imported water source control actions
- Water/wastewater system salinity management actions
- Collaborative actions with other agencies
- Local/regional actions to protect ground and surface water
- Regulatory actions

Conceptual Alternatives

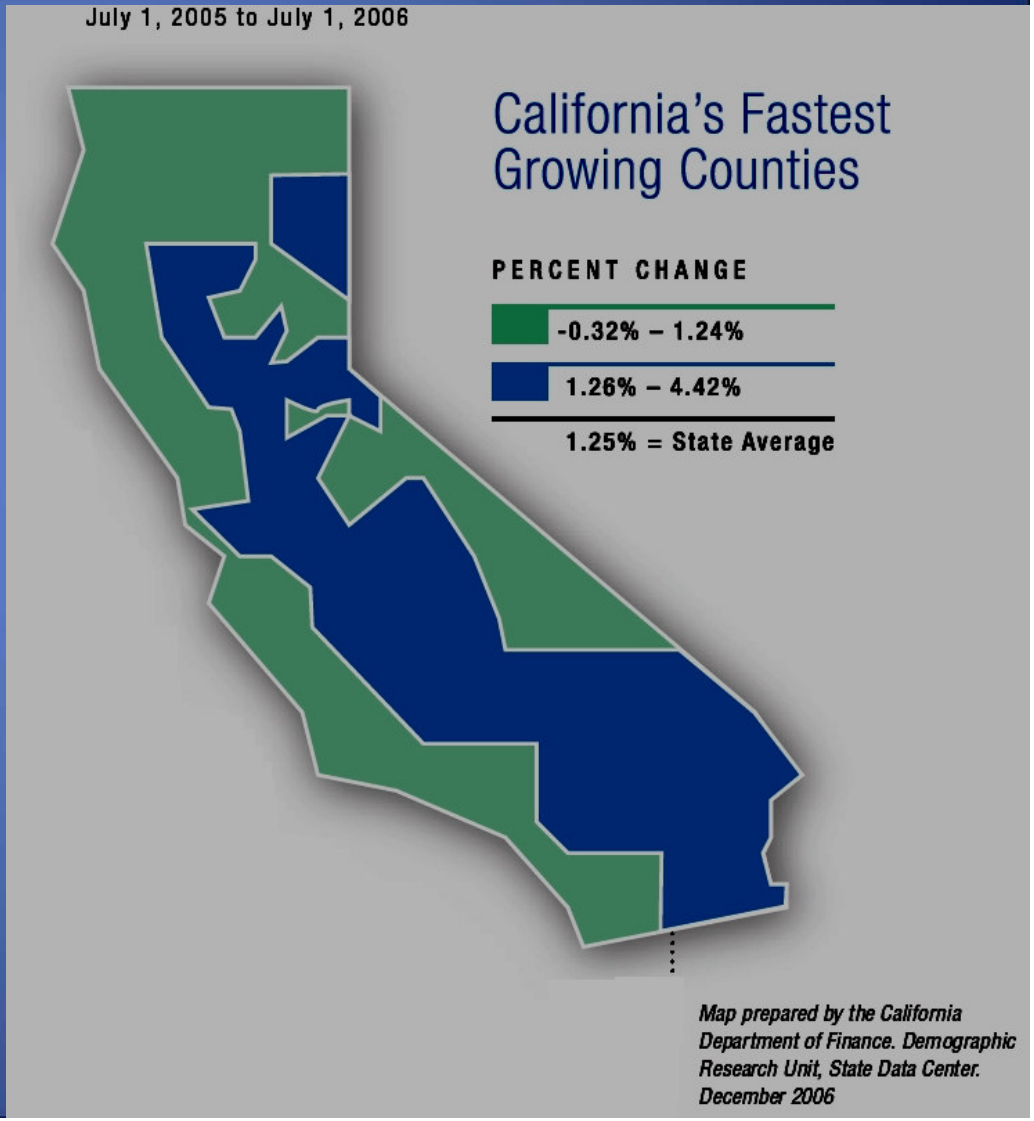
- Salt import reduction
  - Water and other sources
- Salt control solutions
  - Regional storage and disposal
  - Standards and best practices
- Salt export alternatives
  - Existing facility utilization/reuse
  - New facility construction
  - Market opportunities
- Economic review of alternatives

Market Solutions



Questions to Growth as a Solution

- If we are committed and prepared can the same growth that increased salts provide the solutions?
- If growth does not pay will current residents and Businesses be able to fund the costs?



Future Studies and Needs

- Database and research on salt sources/uses load and draft salt balance
- Guideline/example Anti-degradation analysis
- Description and metrics for best practices for salinity reduction
- Reconnaissance and feasibility studies on salt management strategies

Future Studies and Needs

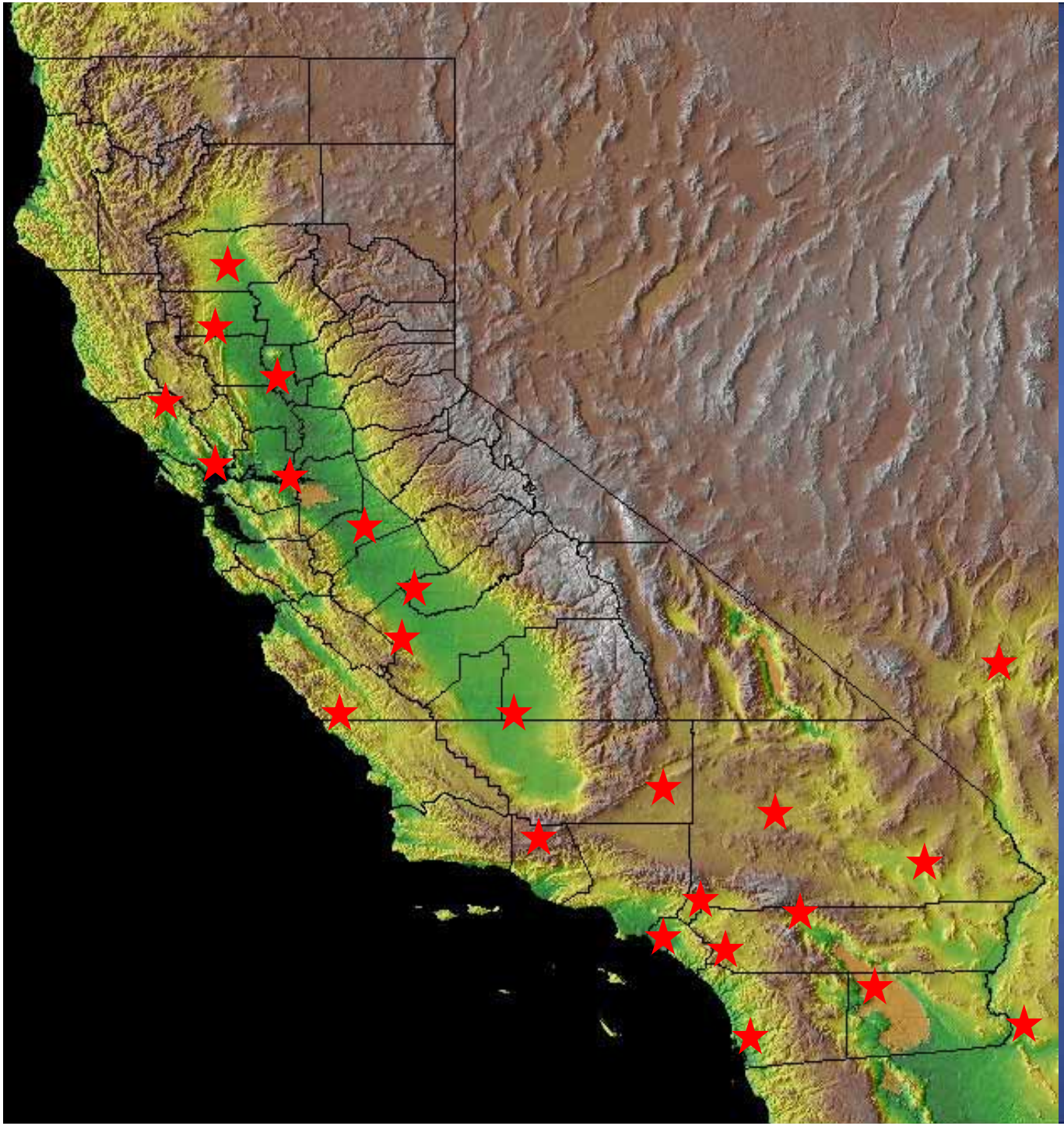
- Pilot and demonstration innovative Salt reduction projects
- Grant applications for next steps
- Early implementation efforts to store/reuse salt in urban/industrial
- Salt management in Ag setting
- Outreach/research and public information and communication

Communications Planning

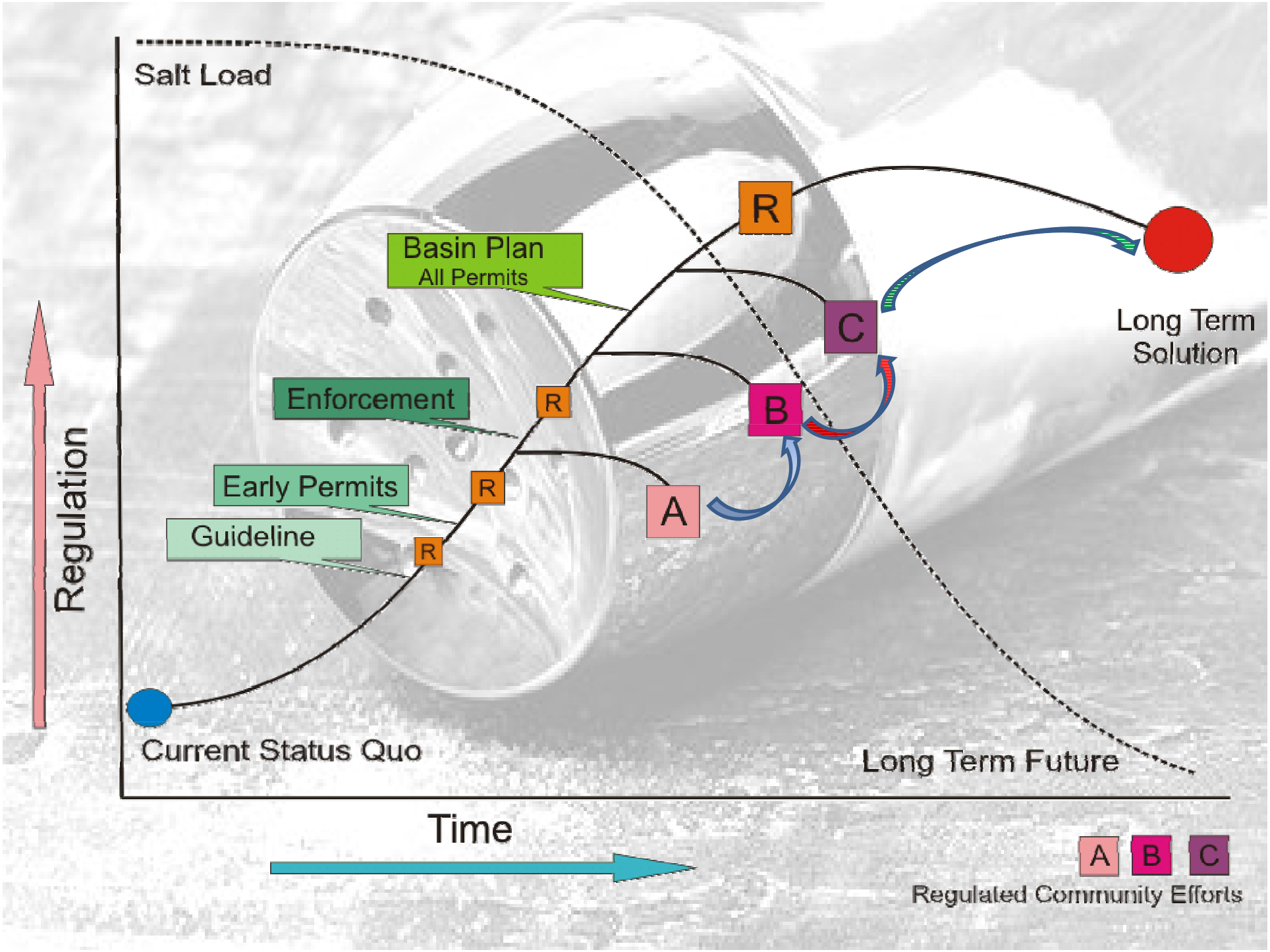
- Audiences
- Messages
- Messengers
- Frequency
- Detail Level
- Materials
- Monitoring

Next Steps

- Complete report sections
- Circulate draft
- Incorporate comments
- Workshop priorities April/May
- Finalize report



Statewide SALT Issues


Salt Load
Regulation
Basin Plan
All Permits
Enforcement
Early Permits
Guideline
R
R
R
R
A
B
C
Long Term
Solution
Current Status Quo
Long Term Future
Time
A
B
C
Regulated Community Efforts

Salinity Communication Planning

Development Draft

Communications Planning

- Audiences
- Messages
- Messengers
- Frequency
- Detail Level
- Materials
- Monitoring

Audiences and Messages

Audiences

Basic Audience Members include:

- CVRWQCB to an among Board Members
- CVRWQCB Management and Staff
- State Board Members and Staff
- Stakeholders, participants and potential participants
  - Dischargers/industry/districts/cities
  - Suppliers/irrigators/users
  - Environmental/EJ/DAC/Farm labor
  - Broader business/economic development
  - Land use planners and developers
  - Associations of above i.e. ACWA, CASA, BIA, etc
- Legislators/local political and community leaders
  - Policy oriented
  - Funding oriented
  - Constituent oriented
  - Federal Officials
- The Public
  - Regulated
  - As payers of the bill
  - As the owners of the Future of their communities

Messages

- **Importance/Purpose**
  - Salinity is an important statewide water quality and supply issue.
  - The economy and growth in the Central Valley will become limited by salt in the future, 5 million tons of salt accumulate in the Central Valley each year.
  - If the regulatory community does not act to reduce the loads they are at risk of lawsuit
- **Efforts**
  - A Salinity Policy Group has formed and meets to help determine how to solve the problem.
- **Needs**
  - Water supply agencies need to be involved in the Stakeholder group
  - The plan/solutions will take 20 years to implement.
  - Stakeholder and regulated community can lead the development of these efforts and inform the Regional and State Boards
  - The alternative of independent development by the board could be more costly and difficult to comply
  - The group needs State Funding to continue the current efforts and studies until the Stakeholders
  - Funding from the Interregional Unallocated $100M should be available

Frequency Detail and Messengers

Frequency of Information

- **High frequency** – monthly or more often
- **Frequent** – monthly to quarterly
- **Moderate** – quarterly
- **Event** – based on event or action
- **On-Demand** – Information is available, mostly web based

Detail Level

- Public – written at a low level of detail for news outlets, general, non-technical audiences
- Summary - high level for policy makers, elected/appointed officials, leaders and legislators
- Detailed – Executive summary with full details on fundamental issues
- Technical – Primarily for technical of scientific audiences appropriate for full reports, background or peer review

Messengers

- State Board Members
- Regional Board Members
- Regional Board Executive Director
- Regional Board Staff
- Technical/Process Consultants
- Regulated Community Leaders and staff
- Local/Regional Community or Business Leaders
- Stakeholders and Community group members
- The Public

Salinity Communication Matrix

Audiences	Frequency	Detail Range	Importance 1	Messages Efforts 2	Needs 3
CVRWQCB Board Members	High	Summary/Detailed			
CVRWQCB Management	High	Summary/Detailed			
CVRWQCB Staff	High	Detail/Technical			
State Board Members	High	Summary			
State Board Staff	High	Summary/Detailed			
Other State Agency and Groups	High	Summary/Detailed			
Stakeholders, participants	Frequent	Summary			
o Dischargers/industry/districts/cities	High	Summary to Technical			
o Suppliers/irrigators/users (area of focus)	High	Summary to Technical			
o Environmental/EJ/DAC/Farm labor	Frequent	Summary to Technical			
o Broader business/economic development	Moderate	Summary/Detailed			
o Land use planners and developers	Moderate	Summary/Detailed			
o Associations CASA/CSDA	High	Summary to Technical			
o ACWA and water policy	High	Summary to Technical			
o BIA and Business	Frequent	Summary to Technical			
Future or Likely participants	High	Public to Detail			
Legislators/local political & community leaders	Moderate	Public			
o Policy oriented	Moderate	Public/Summary			
o Funding oriented	Event	Public/Summary			
o Constituent oriented	Moderate	Public			
o Federal Officials	Moderate	Public to Detail			
The Public	Event/Demand	Public			