SALINITY
MANAGEMENT
Salinity Strategies Plan

Salinity Strategy Report Progress

- Current process organization roadmaps
- Plan development strategies
- ~~Existing study results and information~~
- Committee priorities from roadmaps
- Early action opportunities
- Technical issues, strategies and alternatives
  - Future studies areas
  - Future management options
  - Project and program strategies and alternatives
- Stakeholder outreach communications
- Policy issues and alternatives
- Potential funding opportunities

Strategies

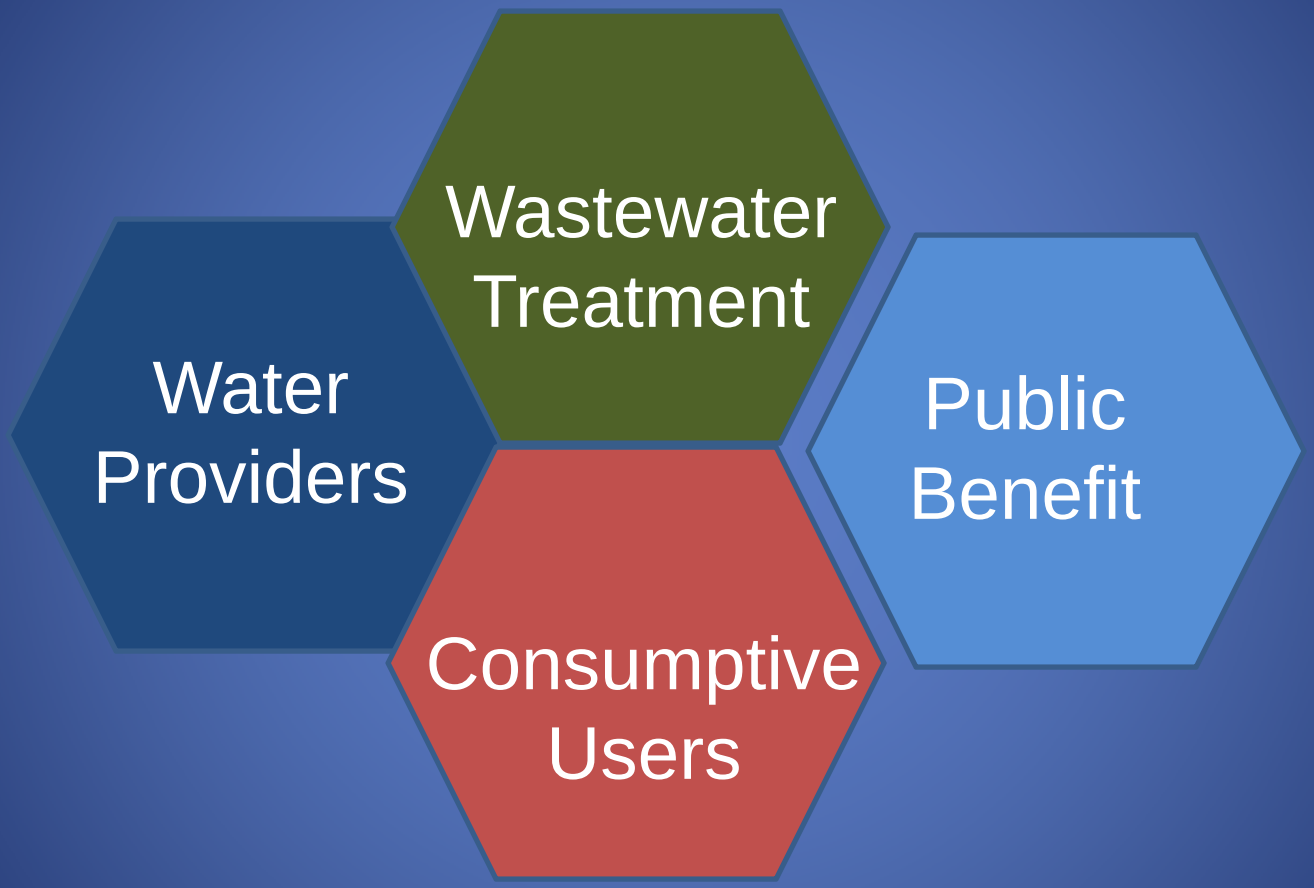
- Expand communication work toward group formation
- Understand salt sources
- Plan for determining salt balance
- Identify regional storage options
- Identify longer term export options and strategies

Communications Planning

- Audiences
- Messages
- Messengers
- Frequency
- Detail Level
- Materials
- Monitoring
- Planning ACWA and CASA Panels & key Meetings

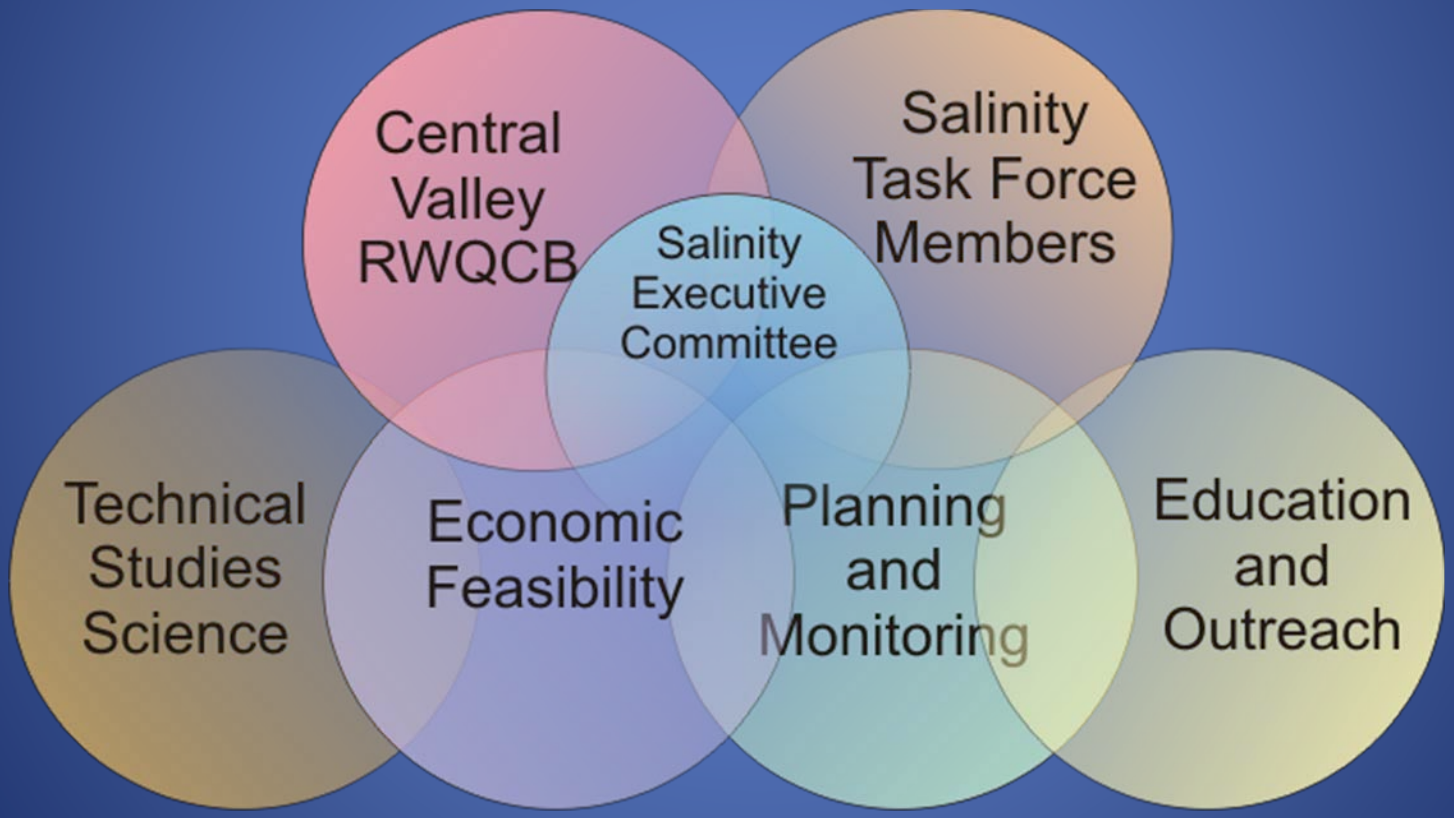
- Brochure and Workshops Schedule Draft February, Final March Workshops Sacramento and Fresno in April

Water/Salinity Players



All must be engaged in the solutions

Task Force or Cooperative Stakeholder Group



Technical Committee Roadmap and Studies -- Version 6

Roadmap for Technical Advisory Committee Work

The roadmap was intended to outline effort for discussion and future work for the group. These areas obviously overlap into the other committee areas. The Committee as a process will review and recommend to the Executive Committee for concurrence or information on each existing study area as well as propose areas of future study and research in the following areas:

1. Salt Sources, Interaction, and Distribution Studies and Modeling

    a. Review current data and information available in each basin, including CSU Fresno efforts and propose any further studies to begin the new basin planning process. Phase 2 would collect or gather the data is needed to for the basin planning process and later to propose and evaluate potential short term and long term solutions

    b. Identify historic locations of salt in the valley and identify existing and potential salt sinks, storage and disposal options and the benefits and costs of each as management option including capital and operational costs. Phase 2 would evaluate the likelihood these salts sources and sinks change do to events like climate change or discretionary actions like water management decisions.

    c. Study and prepare a report showing where use attainability analyses are needed, and how these analyses should be performed and funded. Phase 2 of study

Salinity Control Process with Organized Stakeholder Leadership PLAN A

Activity	2008				2009				2010				2011				2012			
Salt Sources	Expanded Source/Discharge								Consolidated Ag-Urban Balance											
Salt Storage	Scope	Initial Storage Options				Phase 2 Options				Feasibility Study and Options										
Salt Export	Scope		Expanded Discharge Export							Feasibility Study and Options							Proposed Plan EIR			
Water/Salt	Scope																			
Source Changes	Scope	Opportunities/Constraints Study																		
Process Changes	Industry/Residential Study					Best Practice Recommendations						Coming Opportunities								
Other Controls	Scope		Industry/Residential Study					Best Practice Recommendations						Coming Opportunities						
Organizing	XXXXX																			
Stakeholders	Scope	Informaiton		Formaiton		Funding		Expansion												
Governance	Scope		Initial drafts		Finalize Initial Group															
Entity	Scope			Create Organization				Expand Group and organization												
Funding	Scope	Initial programs			Combined Efforts				Continous funding											
Technology	Scope																			
Source Control	Scope	Phase 1 Study				Phase 2 study				Feasibility Study and Options										
Separation		Scope	Phase 1 Study			Phase 2 study				Feasibility Study and Options										
Concentration			Scope	Phase 1 Study			Phase 2 study				Feasibility Study and Options									
Treatment			Scope	Phase 1 Study			Phase 2 study				Feasibility Study and Options									
Purification				Scope	Phase 1 Study			Phase 2 study				Feasibility Study and Options								
Product development						Scope	Phase 1 Study			Phase 2 study				Feasibility Study and Options						
Market/Economics		Scope	Phase 1 Study			Phase 2 study				Feasibility Study and Options										
Outreach/Ed	Scope																			
Communication	DRAFT	Year 1			Year 2				Year 3											
Education	Scope	Preliminary			Phase				Phase 2											
Outreach	DRAFT	Year 1			Year				Year 3											
Market Research	Scope				Phase				Phase 2											
Basin Plan Policy	Needs Analysis			Cooperative Data Development									Draft Changes				Approve changes			
TMDL/Permits	Develop changes			Implement Permits				Revise existing permits				XXXX	XXXX	XXXX	XXXX	XXXX	XXXX			
Irrigated Land		Develop changes			Prepare modifications				Implement modifications					XXXX	XXXX	XXXX	XXXX	XXXX		
Conjunctive Use				Scope	Develop Plan			Prepare Draft Program					Implement Program				XXXX	XXXX	XXXX	
Prohibitions/Enforcement								Notice	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Year	2008	2008	2008	2008	2009	2009	2009	2009	2010	2010	2010	2010	2011	2011	2011	2011	2012	2012	2012	2012

DRAFT
DRAFT

Potential Task Force Efforts

- 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

Potential Task Force Efforts

- 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

Recommendation Areas

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

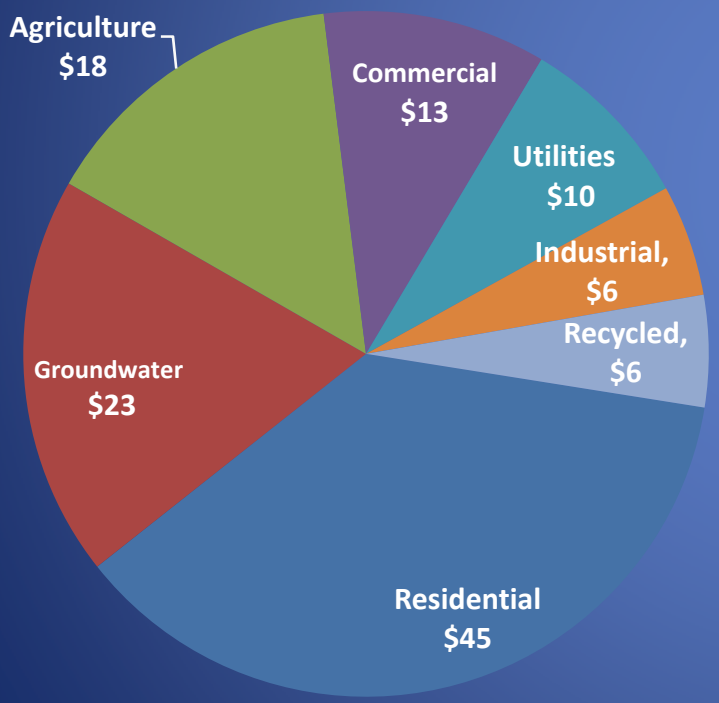
What we need to know better

- Inflow, outflow and net salt increase each year
- Sources of salt distribution
- Benefits of managing salt in Central Valley
- Interim solutions and storage
- Long-term solutions
- Costs for efforts
- Quality and quantity of future water imports

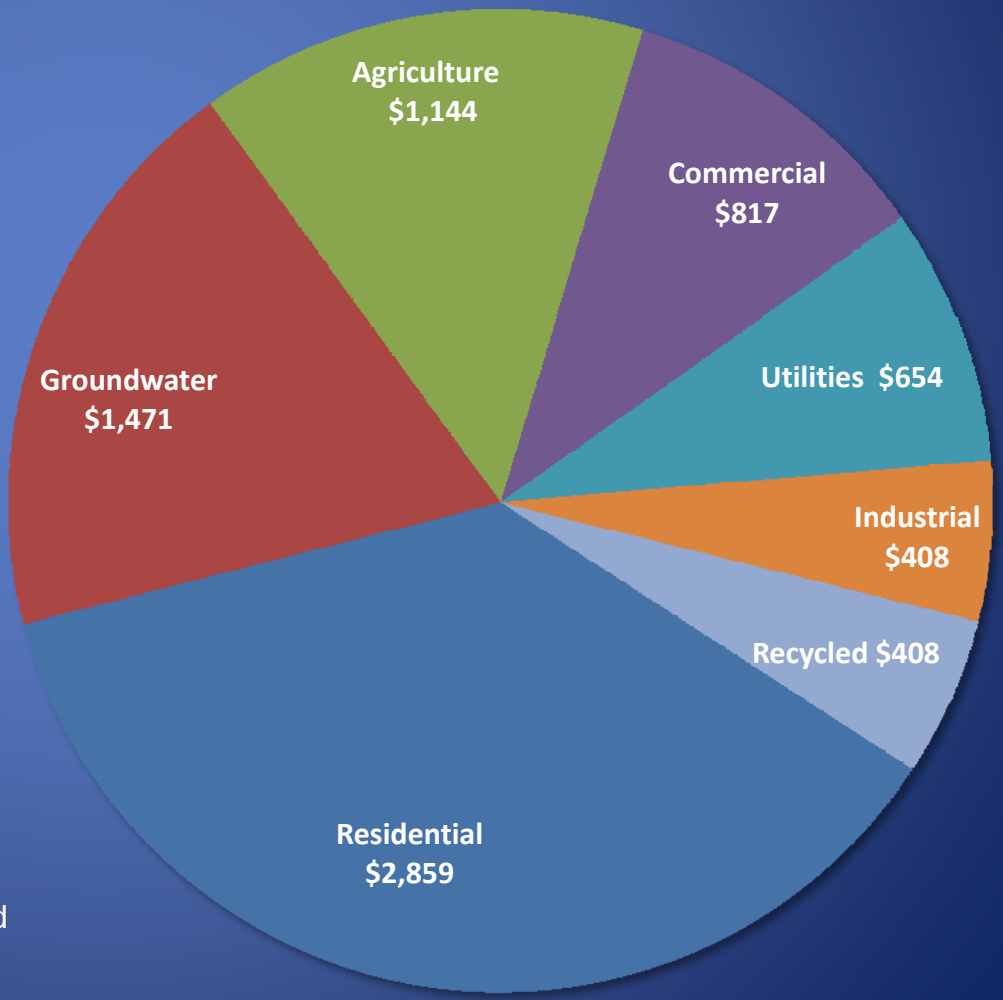
Technical and Economic Studies

Avoided Cost, If We Control Salt

2008 Cost from 100 mg/L increase
Total $121 Million

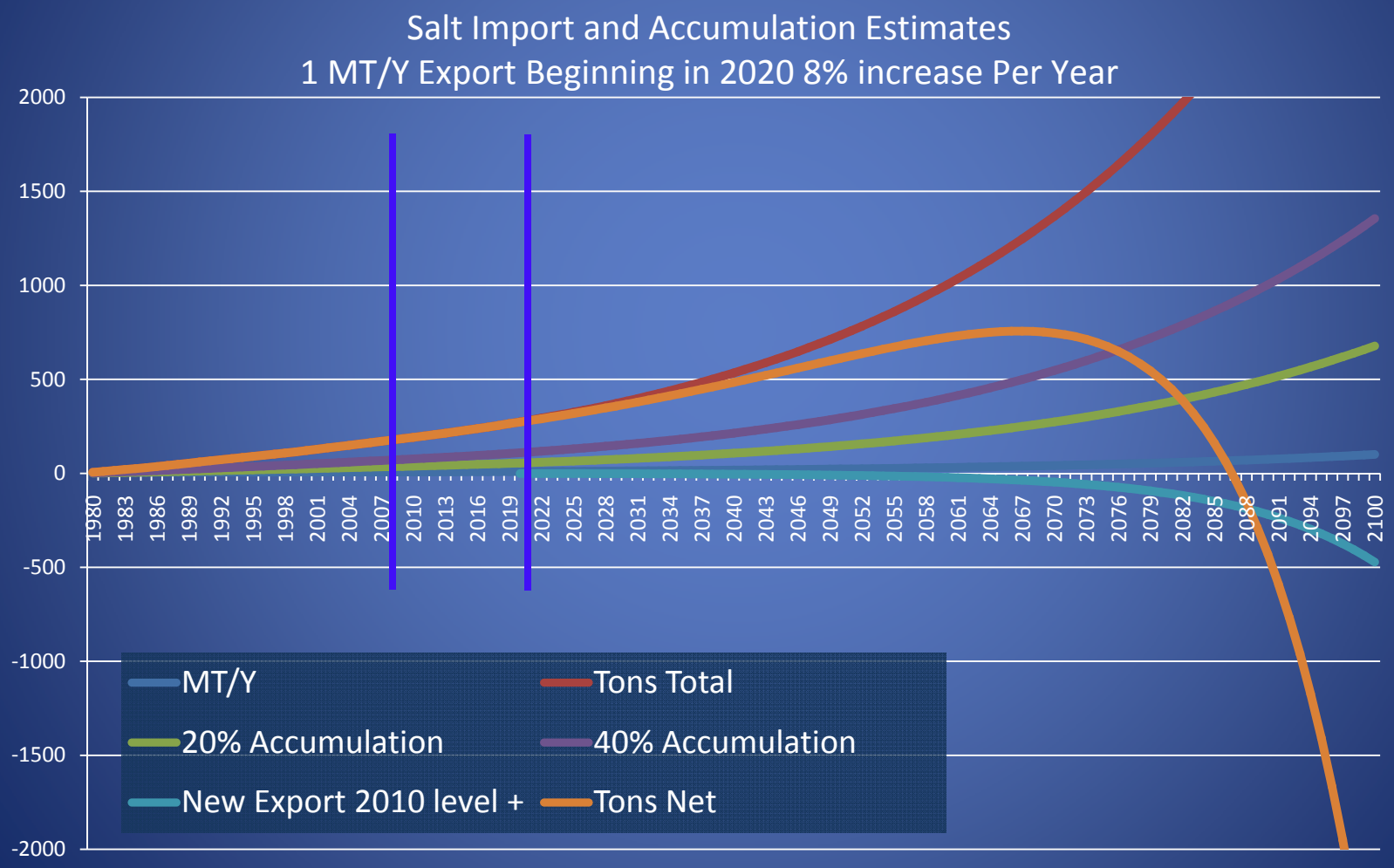


30 Year Avoided Cost Millions
Total 7.7 Billion

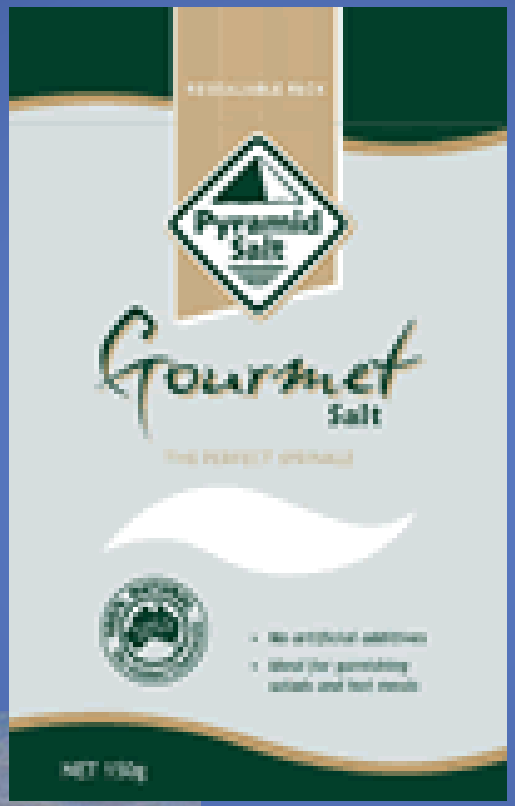


Cost based on So. Cal Salinity Study; all costs escalated actual inflation to 2008 and forecast at 2.5% per year
Central Valley Information not known

Long Term Salt Import and Export



Market Solutions



Report Schedule

- Delayed now draft in February
- Much of the report has been seen in parts and sections
- Staff review in February
- Committee presentations in March
- Final by April
- Electronic Availability

Central Valley Salinity 2 0 0 7 - 2 0 0 8

	Economic/Social & Ed/Outreach	Executive/Technical	Stakeholder Group
Meeting 1	✪	✪	
Meeting 2	✪		
Meeting 3	✪	✪ Tec Only	✪
Meeting 4	✪		
Meeting 5	✪	✪	✪
Meeting 6	✪		
Meeting 7	✪	✪ Tec Only	✪
Meeting 8	✪		
Meeting 9	✪	✪	✪

SEPTEMBER 2007

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DECEMBER

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JANUARY 2008

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CASA Panel

Fresno Workshop

MAY

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ACWA Panel

JUNE

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