

## DRAFT AGENDA Executive Committee Meeting

**Sacramento Regional County Sanitation District**  
**Valley Oak Room, 10060 Goethe Rd, Sacramento 95827 [MAP](#)**

Teleconference available (218) 339-4600 Participant Code: 927571#

**Thursday, May 13, 2010 1:30 pm to 3:30 pm**

1. Welcome, Introductions, Agenda Review, Approve Consent Calendar 5 min
  - a. Review/Approve [April 21, 2010 Executive Committee Notes](#)
  - b. Circulate the Committee [Membership Roster](#) for sign-in
2. Upper San Joaquin Salt and Boron Basin Planning Study 40 min
  - a. Background and history - Regional Board and State Board
  - b. Area prioritization for surface and groundwater bodies
  - c. Approve Steering Subcommittee [Conditional Recommendation](#)
  - d. Appoint San Joaquin River Upstream Committee - Set kickoff meeting date
3. [Progress Criteria Milestones](#) for 2010 from Regional Board 15 min
  - a. Discuss Executive Committee Items from the list
  - b. [Technical Committee Workplan](#) approval (to be updated by Subcommittee)
4. Policy and Actions discuss [Overall Approach](#) UPDATE 30 min
5. Funding and Fundraising for CV-SALTS workplan 5 min
  - a. [Projects List & Grant Funding](#) subcommittee to meet 5/14/10 9:00 AM
6. Coordination of Programs with Committees for approval/policy 5 min
  - a. From the Technical Committee [BMP Review Template](#)(June)
  - b. Recycled Water Policy Salt & Nutrient Management presentation (June)
  - c. Salt and Nitrate Pilot Study Lessons Learned Next steps (June)
7. Receive Reports and Recommended Actions from Economic and Social Cost, Technical, and Public Education and Outreach Committees (Chairs) 20 min
  - a. Updates from Subcommittees(BMP, Pilot Lessons, BUOS P-1, Funding, USJR)
  - b. Phase 1 BUOS work ongoing
  - c. Leadership Group designation letters and [accomplishments](#)
  - d. Other issues from Co-Chairs
8. Next meeting June 10, 2010, as shown on final [2010 Calendar](#)
9. Executive Committee Adjourns

**Leadership Group Designation Letters arrive in Late May**

### ***Mission of the CVSPG:***

*The mission of the Central Valley Salinity Policy Group is to work closely, in a collaborative manner to create a comprehensive Central Valley Salinity Management Plan.*

### ***Mission of the CVSPG Executive Committee:***

*The mission of the Executive Committee is to provide overall direction and management for the development of a comprehensive Central Valley Salinity Management Plan. This includes strategic planning, development of studies and research, public education and outreach, and establishment of partnerships and collaborative efforts.*

## CV-SALTS Committee Rosters

Executive Committee Membership		Mar	Apr	May
Nomination Category	Name and Organization	No		
<b>Salinity Leadership</b>	1 Pamela Creedon, Regional Water Quality Control Board	Meeting	✓	
	2 Karl Longley, Central Valley Regional Water Quality CB	Held	✓	
	3 Darrin Polhemus, State Water Resources Control Board		✓	
	4 Jose Faria/Ernie Taylor Department of Water Resources			
	5 Lee Mao/Lisa Holm, US Bureau of Reclamation		✓	
	6 TBD - Environmental, Water Quality or EJ rep.			
<b>Comm. Co-chairs</b>	1 Mona Shulman, Chair Executive Committee		✓	
	2 Linda Dorn, Vice Chair Executive Committee			
	3 Dave Melilli, Public Education & Outreach Comm.			
	4 Joe DiGiorgio, Public Education & Outreach Comm.		✓	
	5 Nigel Quinn, Technical Advisory Committee		✓	
	Trudi Hughes, Economic and Social Cost Committee		✓	
<b>CV Salinity Coalition</b>	1 Bobbi Larson, CASA			
	2 Debbie Webster, CVCWA			
	3 Dave Cory, San Joaquin River Drainage Authority		✓	
	4 Steve Hogg, City of Fresno			
	5 Rob Neenan, California League of Food Processors			
	6 Tim Schmelzer/Chris Savage, Wine Institute			
	7 Steve Bailey, City of Tracy		✓	
	8 Jeff Willett, City of Stockton			
	9 Linda Dorn, Sacramento Regional CSD			
	10 Dennis Westcot, San Joaquin River Group			
	11 Nick Pinhey, City of Modesto			
	12 Tim Johnson, California Rice Commission		✓	
	13 Phil Govea, City of Manteca			
	14 Parry Klassen, East San Joaquin Water Quality Coalition		✓	
	15 Mike Nordstrom/Doug Davis Tulare Lake Drainage/Storage		✓	
	16 Karna Harrigfeld, Stockton East Water District			
	17 Renee Pinel,WPHA		✓	
	18			

### Participants Identified:

Amanda Montgomery, CVRWQCB  
 Bruce Houdesheldt, NCWA/Sac Valley WQC  
 Dan Odenweller, RWQCB  
 Danny Merkely, California Farm Bureau  
 Emily Alejandrino/Jim Martin, CVRWQCB  
 Emily Robidart Rooney, Ag Council  
 Gail Cismowski, CVRWQCB  
 Jenny Crouse, Ironhouse Sanitary District  
 Joe DiGiorgio, Ecologic Engineers  
 Mark Dorman, Rainsoft Water PWQA  
 Mark Felton, Culligan Water and PWQA  
 Mark Gowdy, SWRCB, Water Rights  
 Rick Staggs, City of Fresno  
 Robert Chrobak and Stuart Childs Kennedy/Jenks  
 Travis Peterson, CVCWA

Andy Malone, Wildermuth Env.  
 Chad Dibble, CDFG  
 David Miller, GEI Consultants  
 Gary Carlton, Kennedy Jenks  
 Jamil Ibrahim, MWH Global  
 Jay Simi, CVRWQCB  
 Jodi Pontureri, SWRCB  
 Joe LeClaire, Wildermuth Env.  
 Ken Landau, RWQCB  
 Larry Rodriguez, Kern County WA  
 Mark Larsen, Kaweah Delta WCD  
 Rita Schmitt-Sudman, WEF  
 Rob Beggs, Brown and Caldwell  
 Roberta Firoved  
 Ron Crites, Brown and Caldwell  
 Rudy Schnagl, CVRWQCB

# San Joaquin River Upstream Salt and Boron Beneficial Use and Objective Study

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## Steering Committee Recommendation

The Upstream San Joaquin River Steering Committee recommends the CV-SALTS Executive Committee conditionally accept the transfer of the Project Studies to develop science and policy required to modify the basin plan, into a program of CV-SALTS under the MOA with the Central Valley Salinity Coalition (CVSC).

The Upstream San Joaquin River Steering Committee recommends the following conditions to the transfer:

1. The Regional Board actively and continuously participates in the studies and policy development
2. The Regional and State Board expedite funding allocated by the State Board to support this work through CVSC
3. The Regional Board will make available all materials and documents to CV-SALTS and with support from staff to document past work as needed
4. The Regional Board will support efforts to acquire data from parties as needed to support the studies.
5. The Regional Board will support CEQA analysis, public scoping, notices and adoption
6. All parties will act in coordination to implement efforts on the schedule developed and approved by the CV-SALTS Executive Committee and CVSC.
7. The Project Studies will include implementation planning to develop the short and long term implementation efforts related to the objectives developed
8. The implementation plan will include cost and funding sources for the implementation efforts.

Upstream San Joaquin River Steering Committee recommends the Executive Committee appoint a standing committee of CV-SALTS as the “Upstream San Joaquin River Committee” (USJRC) from Executive Committee membership with interests in the San Joaquin. USJRC will lead, participate and review all efforts related to the Project Studies. USJRC will make recommendations to the Executive Committee and the Executive Committee shall delegate certain authority to the USJRC as will be detailed in the Standing Rules of the Executive Committee when updated to include the USJRC.

USJRC will develop a work plan containing all required work elements and interim work steps and products for review and approval of the Executive Committee. This workplan will guide the development of the studies, policy, implementation and documentation for the basin plan amendment.

# CV SALTS Initiative 2010 Progress Milestones

Version 5

## Stakeholder (CVSC) Progress Demonstration Status

after 5/10 call

May 2010

To address the Significant Progress Milestones proposed on February 25, 2010 the following is proposed.

#	Timeline	Activity or Effort	Group	Document/Event	Status
1	Ongoing	Continue work on incomplete activities initiated prior to 2010	CVSC	See below	
1-a	Apr-09	Workplan development elements	TAC	Development	Ongoing
1-e	Jun-09	Public Outreach/Scoping Meeting	PEOC	Outreach Meeting	Complete
1-b	Aug-09	Workplan Elements Contracting	CVSC/DA	BUOS Phase 2	May
1-c	Jun-09	Management Team Development	CVSC	Planning pending budget	May
1-d	Jul-09	Management Implementation	CVSC	Budget Approval	May
2	Ongoing	Conduct regular meetings of working committees	CVSC	Ongoing	Ongoing
3	Ongoing	Continue to update Program Coordination Matrix	TAC/Exec	Ongoing	Ongoing
4	Ongoing	Add detail to the task descriptions in the CV-SALTS work plan Outline to better illustrate the extent of work involved for each item listed	TAC	Ongoing	June
4a		Technical Committee to provide Input on Plan and general updates	TAC	Updated Document	July
4b		Add elements from the Detailed BOUS scope of work	Consultant	BUOS Workplan	September
4c		Detail the rest of the CV-SALTS Workplan Outline with Cooperative Data Collection and analysis and Implementation efforts	Consultant	Program Workplan	2011
5	Ongoing	Link all agenda and action items to work plan tasks	CVSC		May
6	Ongoing	Set (by February) and pursue funding goals	CVSC	March to CVSC	August
6a		Membership Funding for CVSC/CV-SALTS	CVSC	Budget and Membership Guideline	April
6b		Subcommittee for Funding and Fundraising	Exec	First Meeting	May
6c		Projects and Funding Targets (outside membership)	Consultant	Plan	August
7	Mar-10	Identify salinity management options/alternatives to be evaluated for implementation plan	TAC		July
7a		Identify existing and potential salt and nitrate management alternatives and for implementation plan	BMP Subcomm.		July
7b		Describe the management alternatives and compile information on effectiveness, applicability and economics.	BMP Subcomm.		August
7c		Identify screening and analytical evaluation tools for use in evaluation of Management Alternatives/Options	BMP Subcomm.		August
7c		Detailed description of alternatives/options with applicability and achievability	BMP Subcomm.		September
7d		Identify screening approaches and tools for review of 7b and data requirements	BMP Subcomm.		October
7e		Screen 7b items for priority and additional review	Consultant		November
8	Mar-10	Provide an informational report to the Regional Board on the CV-SALTS initiative	CVSC/Exec	State/Regional Board Report	May
15-a		Leadership Group Planning and Letters to Confirm Participants	CVSC	Send Letter	May
10	Jun-10	Prepare semiannual status reports on funding and progress toward completing work plan tasks	CVSC	Expanded Accomplishments report	June
10a		Expanded Accomplishment Report June			June
10b		Expanded Accomplishments Report December			December
11	Jun-10	Develop a process for coordinating with RWMG planning and implementation projects with a nexus with salt or nutrient management, and other ongoing efforts on salinity management	CVSC	Draft plan finalize with Staff support	June
11a		Draft IRWM Coordination Plan (consider CalFed Salt IRWM projects)	TAC	Committee	June
11b		Mailing to IRWM Groups and Briefing at IRWM Roundtable of Regions	CVSC		June/July
11c		Solicit IRWM Projects which impact salt or nutrients, coordinate with those who respond.	CVSC		September
15b		Leadership Group Outreach and Invitations	CVSC	Send Invitation	June
12	Jul-10	Identify administrative and technical program needs that could be met through in-kind services rather than financial contributions	TAC/Exec	Report to Committee	July
12a		Identify administrative tasks	CVSC		June
12b		Identify technical program task likely to use in-kind assistance	TAC		July
12c		Develop system for tracking and evaluating in-kind support and effectiveness	EXEC and CVSC		July
12d		Solicit in-kind support	EXEC and CVSC		August

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May 2010

To address the Significant Progress Milestones proposed on February 25, 2010 the following is proposed.

#	Timeline	Activity or Effort	Group	Document/Event	Status
13	Jul-10	Develop a plan to solicit meaningful stakeholder input on an ongoing basis from groups with limited financial resources (disadvantaged communities, EJ groups, etc)	Exec/PEOC	Expand existing efforts and document in plan	July
13a		Identify DAC representatives	Exec		June
13b		Draft Plan Outline and solicit EJ and DAC feedback	CVSC	Review with PEOC	July
13c		Finalize plan based on feedback	CVSC	Exec Approval	August
14	Jul-10	Assess the value and applicability of the salt and nitrate source pilot implementation study. Review approach and methodology for application of other parts of the region	TAC	Review Pilot - March Draft - April	July
14a		Develop Lessons Learned Committee	TAC		April
14b		Review report and Approach	Sub Comm.		May
14c		Document and present approach/methodology changes for future work	TAC	Exec. Review	July
18	Oct-10	Identify geographic data needed (Review after BUOS P-1)	TAC	BUOS P-1 Plus	August
15	Sep-10	Hold the annual meeting of the Leadership Group	Exec/PEOC	Meeting	September
16	Sep-10	Identify the near-term, intermediate, and long-term modeling and data collection/storage needs.	TAC	Scoping	October
16a		Identify what data is needed by CV-SALTS and by local agencies	EXEC/TAC	Discussion	August
16b		Assess current state programs for data storage and collection	TAC	Scoping	June-July
16c		Building on task 14, and 18 review needs for BUOS	Consultant	Draft	August
16d		Identify future needs based on rest of CV-SALTS Workplan Outline	Consultant	document	2010-2011
17	Sep-10	Begin work on surface and groundwater numerical objectives and modeling sensitivity and limitations	TAC	Scoping	2010-2011
17a		Presentation on groundwater regulation and objectives	Regional Board	Presentation	August
17b		Discuss groundwater approaches and management	TAC/Exec		September
17c		Identify priority groundwater concerns/issues	TAC		October
17d		Groundwater objectives goals	Exec		November
19	Nov-10	Complete classification of salt sources	TAC	Scoping *	2010-2011
19a					
19b					
20	Dec-10	Identify data gaps to be filled and initiate effort to develop data	TAC	Scoping *	2010-2011
20a					
20b					
9	May-10	Complete Data Management Approach	TAC	Scoping *	December
9a		Familiarize participants with existing programs and options	TAC	Presentations	June - September
9b		Review options and alternatives	TAC	Subcommittee review	October
9c		Document and present approach and needs	TAC	Presentation	December
21	Dec-10	Identify beneficial use projects to be conducted and initiate collection	TAC		Ongoing
21a		Phase 1 BUOS Study underway	TAC		April
21b		Scoping BUOS Phase 2+	TAC		July
21c		Contracting/Implementation BUOS Phase 2+	TAC		August
22	Dec-10	Develop recommended process for identifying Best Practical Treatment or Control for salinity and nitrate	BMP Committee	Document process	October
23	As needed	Provide information needed for State Water Board tracking of salinity/nutrient planning being done pursuant to the Recycled Water Policy.	CVSC	December	Ongoing



## DRAFT CV SALTS Technical Advisory and Economic Committees Work Plan 2010 - Version 4

### 1. Background

At the November 19, 2009 meeting, attendees discussed issues they thought should be considered in the workplan for the year. Few items were discussed in detail and others were inferred from the Work Plan Outline and Beneficial Use and Objective Study (BUOS).

With this basis the following Preliminary Draft Work Plan was prepared. The Committee provided several rounds of comments and several items were added or changed by Board Staff in the Progress Milestones document shown as Attachment A. Items from that document are described below as workplan and implementation steps.

### 2. Further Develop Committee Workplan for 2010 and outline implementation steps

The committee should further develop the workplan with the committee chairs and participants along with any direction provided by the Executive Committee and the CV RWQCB.

Several Items listed in the stakeholder progress demonstration list from the Regional Board need to be scoped and added or amend tasks in the Work Plan Outline shown in attachment A.

### 3. Tasks to be accomplished in 2010

- a) Final Review of the Salt and Nitrate Source Pilot Implementation Study and other studies that are originated
- b) Technical Review of West Side Salt and Nitrate Source Study
- c) Beneficial Use and Objective Study, Develop Scope, Evaluate Proposals and Review work product 75% in 2010
- d) Technical Review of Coordination Efforts with SWRCB CVRWQCB efforts (see #4 below)
- e) Work Plan Outline Efforts (See #5 Below)
- f) Technical Review of Other Committee Efforts
- g) Develop Research Projects and Review of Potential Management Alternatives Including Best Management Practices from Industry or others
- h) Stakeholder progress demonstration list Items in Attachment A
- i) Other Recommended Efforts
  1. Implementation Options and Economics – Review of possible management alternatives (g)
  2. Conceptual Model of broad connections of all salts in the region how and where ( may be able to update the Staff Report from the State Water Board)
  3. Brainstorming sessions for identifying management options and alternatives and relative usefulness to CV-SALTS.
  4. Potentially use WARMF or other tools to test salt management alternatives
  5. Review the economics report findings with Dr. Howitt to make sure the data needed is being developed to eventually address economics issues



6. Salt and Nutrient Management Plans integration and master guideline and integration plan
7. Determine the base cost, what we compare alternatives to and when

#### **4. Coordination Efforts related to Salinity and Nitrates**

##### **Description**

This task requires coordination with related or integrated projects, policies, and other efforts that affect salinity management which are outside this work plan. Such efforts may include Delta changes (BDCP) or conveyance, changes in operation or restoration of the San Joaquin Rivers or the effects of climate change or drought. Those activities may also include other salt management controls or activities, water management or planning processes, major hydrologic or water quality projects proposed. The efforts will be to integrate and manage work overseen by other groups or committees. (Prepare an initial report of those efforts with highest potential to affect existing conditions. Maybe not be completed until 2011.)

##### **Committee Efforts**

- Coordinate closely with the agencies and efforts ongoing and bring information and decisions to the Committee in a timely manner
- Executive Committee to approve upon recommendation of TAC

##### **Funding**

No funding need has been identified except the coordination with the other programs which is provided by CVSC.

##### **Milestones and Deadline**

See Matrix of Coordinated Programs and develop Committee calendar

#### **5. Technical Work Plan Outline Tasks**

##### **Description**

Tasks a) through f) from the Work Plan Outline have efforts that are slated to begin or be underway in 2010. Further development of the details is needed to proceed for the items shown in PURPLE below but the limited information from the outline is provided here. Items e), f) and g) are included in currently ongoing or scoped work. The original workplan text font and numbering is retained for reference.

##### **1) Identify Salt Constituents and Data Requirements**

- a) Determine salt and nutrients constituents, standardize data collection, analysis, & assessment approach, set minimum data quality criteria for screening old data  
Establish a process for including constituents in the Salinity/Nutrient Management Plan beyond EC/TDS and nitrate. The process should include steps similar to the following: 1. Identify all potential constituents of concern to the management of salts and nutrients. 2. Develop screening criteria (i.e. data availability, documented impacts on beneficial use, identified constituents of concern, etc.) to determine and recommend which constituents are ready for what level of objective setting (i.e. numeric vs. narrative vs. review in 10 years). 3.



Establish a schedule for the next review of constituents. Also, a separate but important task is to develop a standard approach to be taken when collecting, analyzing, and assessing data. (The Committee may be able to make use of existing standards and will want to insure compatibility with other water quality monitoring via California Environmental Data Exchange Network (CEDEN) and Water Quality Monitoring Council.

**b) Beneficial uses and requirements**

Identify beneficial uses that have the potential to be impacted by the identified constituents of concern (now or in the future). Identify in which water bodies these beneficial uses currently apply. Document how these beneficial uses are currently protected from these constituents of concern (numeric or narrative objectives, or objectives set in end uses, such as drinking water MCLs). Document areas where beneficial uses do not currently exist in protected areas, or document areas, which are especially challenged by constituents of concern. Identify water bodies that need beneficial uses designated and/or reviewed

**c) Identify surface water quality data requirements**

Define geographic scope. Prepare a metadata report on available historic surface water quality data for constituents of concern. (This first item is finished). Prepare literature search and summarize what is currently known about the constituents of concern in surface water bodies (rank by state of knowledge and by applicable data quality).

For water bodies within the scope of the Plan, collect information on current regulation and 303(d) listings for water quality constituents, and information on current flow standards for fishery protection. Use this material to determine current regulatory overlap with the identified constituents of concern (for conflicts and for leveraging opportunities). Examine any proposed numeric or narrative salinity/nutrient objectives for conflicts with existing programs. Acquiring access to available data to determine the historic and current surface water quality for constituents of concern, flows and characteristics of waterbodies is included in task 3 b) below.

**d) Identify groundwater quality data requirements**

Define geographic scope. Prepare a metadata report on available historic ground water quality data for constituents of concern. (This first item is finished). Prepare literature search and summarize what is currently known about the constituents of concern in ground water basins (rank by state of knowledge, by state of quality).

For groundwater basins within the scope of the Plan, collect information on current regulation and drinking water quality monitoring for all water quality constituents, on current water quality studies or improvement/maintenance programs, and currently implemented regulations. Use this data to determine current regulatory/program overlap with the identified constituents of concern (for conflicts and for leveraging opportunities). Examine any proposed numeric or narrative salinity/nutrient objectives for conflicts with existing programs.

Acquiring access to available data to determine the historic and current groundwater quality for constituents of concern, subsurface hydrologic and aquifer characteristics is included in task 3 b).

**e) Salt/nutrient sources and sinks – pilot implementation studies**

Pilot studies to characterize salt/nutrient sources and sinks on a regional scale at locations representative of the Central Valley's variability. Summarize pilot study methodology and applicability for subtasks c and d above in the plan. Use pilot studies results to direct future implementation and to revise other work where needed to protect water quality.





**f) Geographic Data**

Geographic and location data should be captured in compatible geographic information systems (GIS) formats to allow management, analysis, presentation and public access to the information at various levels of summarization.

**6 a) Classify salt sources**

Use available information (such as IRWMPs and other water quality programs), conceptual models, and regional pilot studies to classify types of salt and nutrient source activities, or other factors that are exacerbating salt and nutrient problems. This information will be used to ensure management strategies are fully investigated in Task 6b. The TAC may determine that this task is best completed by division into relevant regional or sub-regional areas or hydrologic basins.

**6 b) Identify salt and nutrient management actions**

Develop a list of all known and potential physical salinity and nutrient management control actions – ranging from large regional solutions to best management practices. Develop information on how well suited the alternative management control actions are to the types of sources and situations identified in Task 6a.

**6 c) Identify regulatory tools for salt and nutrient management**

Develop a white paper exploring the regulatory tools of the Waterboards that can be applied to salinity and nutrient management, and discussing the pros and cons of each. Develop information on how well suited the regulatory tools are to the types of sources and situations identified in Task 6a

### **Committee Efforts**

- Further Develop Tasks, scope and budgets to accomplish the work needed and complete the BUOS study and other tasks
- Develop scope for work elements and recommend approval
- Executive Committee to approve upon recommendation of TAC

### **Funding**

Funding has been identified in the BUOS contract and other funds raised by CVSC. The Tasks identified have a cost range in the Work Plan Outline from \$1,200,000 to \$3,500,000. This in addition to coordination of the efforts is also provided by CVSC.

### **Milestones and Deadline**

Milestones and Deadlines are shown in Attachment A.

## **6. Plan Implementation**

The plan should be approved for content/appropriateness by the Executive Committee and for funding availability by the CV Salinity Coalition and Funding Source. Upon finalization of the plan, the PEOC will submit to the Executive Committee and CVSC.

## **7. Budget**

The budget for this effort would be approximately \$1,500,000 not including the committee support provided by CVSC. Many of the efforts listed in the effort are part of the Beneficial Use and Objective Study, currently funded by the State Water Resources Control Board under a grant administered by the SJ Valley Drainage Authority. Approximately \$900,000

could be funded from this source. Other contributions would be needed for the remaining efforts. The budget below is based on the original work plan outline and funding available.

Table of Major Potential Revenue

BUOS	\$900,000
Grants	\$300,000
Other	<u>\$300,000</u>
TOTAL	\$1,500,000

# CV-SALTS

## Draft Potential Approach to Salinity Management

### Version 2 (5/11/10)

#### GENERAL OVERALL OBJECTIVES

1. Mitigate adverse salinity effects on downstream and downgradient water users. Recognize that there are “gradations” of effect that can be offset. Recognize and address difference in groundwater and surface water.
2. Achieve sustainability – no long term increasing trends in total salinity and in most harmful ions except to acceptable salt sinks.
3. How far does CVSalts go in contributing to other salinity management efforts outside of the Basin Plan Amendment?
  - a. BMPs
  - b. SJR TMDLs
  - c. Volunteer efforts vs. staff/Funding source
  - d. Overall purpose/goals

#### PRIMARY QUESTIONS TO BE RESOLVED IN MANAGEMENT PLAN DEVELOPMENT

1. What framework should be utilized for addressing potential alternatives?
  - a. **Policy Issue No. 1** – Regional basis, with sub basins and IRWM plans as necessary
  - b. **Policy Issue No. 2** – BUs identified and overlain with actual water quality to formulate regional and sub-basin plans.
2. What are the best alternatives to achieve the objectives?
  - a. **Policy Issue 4, 5 and 6.** Identify areas for aggregation and management/harvest (incorporating existing projects); identify transport corridors, determine whether and where it would be appropriate within sub basins to encourage market based offsets/credits and trading.
3. What is the most equitable method to allocate costs and/or mitigation measures to implement the best alternatives?
  - a. **Policy Issue 11.** All stakeholders should participate? Is a “tax” appropriate? Who should bear the cost of expensive treatment or transport identified in item 2?
4. How should the preferred alternatives be implemented and monitored?
  - a. **Policy Issues 3, 7, 12, 16.** Are the Regional and State Boards already implementing interim goals? Does this Committee need to address them if they already are? What is the best point of compliance? Planning solutions will affect land use, how do we compensate owners for uses not allowed. Can affect be “scaled” so that if uses are limited, not eliminated, then less.

## PROPOSED ACTIONS

1. Identify users adversely affected by salinity. Develop yield functions for salinity versus cost and/or water needs impacts to those users.
2. Identify salinity status and trends for all major water sources. Overlay this information on the beneficial uses identified. This is the Salt study and BU study incorporated together. Where can we gather existing information to fill in the blanks?
3. Identify acceptable salt sinks and their capacities for accepting and storing salt by Region.
4. Calculate the salt assimilative capacity of the basins.
5. Identify alternatives for mitigation of salinity impacts.
  - a. Construct drain to ocean
  - b. Reoperation, real time trading
  - c. Additional dilution/leaching water to impacted water users
  - d. Direct payments to impacted users to offset cost impacts of excessive salinity
  - e. Retire irrigation on salty soils
  - f. Treatment and separation/product recovery
  - g. Advanced technologies and R&D opportunities
  - h. Evaporative ponds
  - i. Tile drains
  - j. Others
6. Screen alternatives, calculate cost/benefit for best apparent alternatives.
7. Determine equitable allocation of costs to implement best apparent alternatives for salinity mitigation.
  - a. Costs may include imputed costs of extra water, BMPs, etc.
8. Develop implementation plan for management program
9. Develop Basin Plan Amendment concurrent with actions 3 through 8.
10. Compliance and Monitoring.

Overarching the entire effort is:

Funding. Committee to resolve funding/find grants, etc. is paramount. Both short term for the BPA and long term for implementation assistance for stakeholders. Bond/Tax proposals?

Law. Consider whether seeking legal changes at the state and federal level will be necessary for this management plan. Are we able to redesignate BUs? What are the criteria?

Land Use and Water Rights. A salinity management plan will impact land use. Water rights may be impacted also. How do zoning or other land use rights get wrapped up in the effort? Is partial compensation appropriate? If so how would that be accomplished?

Environmental Stakeholders. They must be brought to the table. Legal challenges at a later date will be detrimental to the effort. Who would bear the cost of challenges?

# CV-SALTS

## Draft Potential Allocation of Costs

### Version 2 (5/11/10)

#### PROPOSED PRINCIPLES TO GUIDE ALLOCATION OF COSTS OF IMPLEMENTATION AND COMPLIANCE

Establish the priority of rights to the basin assimilative capacity.

##### General Principles

1. In-basin salt sources should have priority to the assimilative capacity of the basin over out of basin salt sources.
2. Because salinity generated by irrigation is incidental to beneficial use of the water, irrigation should have priority over direct discharges of salts.
3. Salt added to deep groundwater is spread out over time, while artificial drainage systems contribute salts at roughly the same time as when downstream users are being impacted. Therefore salinity in drainage to deep groundwater should have a lower effect factor on downstream legal users than salinity from artificial drainage systems.

##### Potential Priority System for Allocation of Assimilative Capacity

1. In-basin legal surface water irrigators
2. In-basin groundwater irrigators
3. Out of basin salt sources
  - a. Irrigators using imported water
  - b. Direct salt users and dischargers

##### Potential Methodology for Allocation of Costs

Calculate how much salinity is discharged in excess of the basin assimilative capacity. Allocate required mitigation loading factors in inverse group priority order. Divide the cost for each group by the salt loadings for each member of the group. Apply impact factors to individual members as appropriate. Allow the application of in-kind mitigation measures where they can be implemented by individual members.





