

CV-SALTS Executive Committee Meeting

September 18, 2014 - 9:00 AM to 3:00 PM

Sacramento Regional Sanitation District Offices – Sunset Maple Room
10060 Goethe Rd, Sacramento 95827

Teleconference (712) 432-0360 Code: 927571#

Go-To-Meeting Link: <https://global.gotomeeting.com/meeting/join/990364357>

Meeting ID: 990-364-357

Posted 09.09.14 – Revised 09.16.14

AGENDA

- 1) **Welcome and Introductions** - Chair
 - a) Committee Roll Call and [Membership Roster](#) -5 min.
 - b) Review/Approve Executive Committee [Meeting Notes for August 14, 2014](#) – 5 min.

 - 2) **Discuss and Finalize Key Terms to be Defined in SNMP** - Tim Moore (2 hours)
 - [Maximum Benefit Definitions Handout](#)
 - [BPTC Handout](#)
 - [Triggers for Antideg Analysis](#)
 - [Copy of Resolution No. 68-16](#)
- 11:30 am to 1:00 pm - Lunch on your own
- 3) **Continue Discussion of Item #3 from the morning session** - Tim Moore (60 minutes)

 - 4) **Review Revisions to Summary of Nitrates in Groundwater Discussion** - Tim Moore (60 min.)

 - 5) **Set next meeting objectives/date**
 - October 3rd Admin Meeting
 - SSALTS Webinar (in preparation for discussion at Oct. Executive Committee meeting)
 - October Executive Committee Meeting – **TBD**

CV-SALTS meetings are held in compliance with the Bagley-Keene Open Meeting Act set forth in Government Code sections 11120-11132 (§ 11121(d)). The public is entitled to have access to the records of the body which are posted at <http://www.cvsalinity.org>

One or more Central Valley Regional Water Quality Board members may attend.

CV-SALTS Committee Rosters

Executive Committee Membership			CV-SALTS Executive Committee Meetings During 2014										
Voters	Category/Stakeholder Group	Name	7-Mar	13-Mar	11-Apr	24-Apr	22-May	13-Jun	19-Jun	11-Jul	14-Aug	12-Sep	18-Sep
1	Central Valley Water Board	Pamela Creedon		✓		✓	✓		✓				
Alt	Central Valley Water Board	Jeanne Chilcott	✓			✓	✓	✓	✓		✓		
2	State Water Resources Control Bd.	Darrin Polhemus		✓		✓	✓		✓		✓		
3	Department of Water Resources	Jose Faria											
Alt	Department of Water Resources	Ernie Taylor	✓	✓			✓		✓	✓	✓		
4	US Bureau of Reclamation	Michael Mosley		✓	✓	✓	✓		✓		✓		
5	Environmental Justice	Jennifer Clary		✓		✓	✓		✓				
6	Environmental Water Quality	TBD											
CV Salinity Coalition													
1	So. San Joaquin WQC	Dave Orth		✓		✓							
2	City of Stockton	Robert Grandberg											
3	California Cotton Growers	Casey Creamer			✓	✓	✓	✓	✓	✓	✓		
4	City of Fresno	Steve Hogg											
5	CA League of Food Processors	Trudi Hughes					✓						
Alt	CA League of Food Processors	Rob Neenan		✓					✓		✓		
6	Wine Institute	Tim Schmelzer											
Alt	Wine Institute	Chris Savage											
7	City of Tracy	Erich Delmas		✓			✓		✓		✓		
Alt	City of Tracy	Dale Klever											
8	Sacramento Regional CSD	Lysa Voight	✓	✓	✓		✓		✓	✓	✓		
Alt	Sacramento Regional CSD	Carolyn Geisler-Balazs			✓	✓	✓	✓		✓			
9	San Joaquin Tributaries Authority	Dennis Westcot	✓	✓		✓	✓		✓				
10	City of Modesto	Gary DeJesus					✓						
11	California Rice Commission	Tim Johnson									✓		
12	City of Manteca	Phil Govea											
13	Tulare Lake Drainage/Storage District	Mike Nordstrom		✓	✓	✓	✓	✓			✓		
14	Western Plant Health Assoc.	Renee Pinel	✓	✓	✓	✓	✓	✓	✓	✓	✓		
15	City of Vacaville	Royce Cunningham		✓	✓	✓	✓	✓			✓		
16	Dairy Cares	Paul Sousa											
Alt	Dairy Cares	J.P. Cativiela		✓	✓	✓	✓	✓	✓		✓		
17	Westlands Water District	Jose Guterrez									✓		
Comm. Chairs/Co-chairs													
1	Chair Executive Committee	Parry Klassen, ESJWQC	✓	✓	✓	✓		✓	✓		✓		
2	Vice Chair Executive Committee	Debbie Webster CVCWA	✓	✓	✓	✓	✓		✓	✓	✓		
3	Technical Advisory Committee	Roger Reynolds, S Engr.	✓		✓		✓	✓		✓			
	Technical Advisory Committee	Nigel Quinn, LBL	✓	✓	✓		✓	✓		✓	✓		
4	Public Education and Outreach	Joe DiGiorgio	✓	✓	✓	✓	✓	✓	✓		✓		
5	Economic and Social Cost Committee	David Cory, SJVDA	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6	Lower San Joaquin River Committee	Karna Harrigfeld, SEWD		✓	✓	✓	✓	✓	✓	✓	✓		

CV-SALTS Committee Rosters

Participant Names			CV-SALTS Executive Committee Meetings During 2014										
Last	First	Organization	7-Mar	13-Mar	11-Apr	24-Apr	22-May	13-Jun	19-Jun	11-Jul	14-Aug	12-Sep	18-Sep
Archibald	Elaine	CUWA											
Ashby	Karen	LWA	✓	✓	✓	✓	✓		✓	✓			
Ashley	Joe	Oxley Oil	✓										
Barclay	Diane	SWRCB		✓		✓	✓		✓		✓		
Buford	Pam	CVRWQCB	✓	✓	✓			✓	✓	✓	✓		
Carlo	Penny	Carollo Engineers											
Carlton	Gary	Kennedy/Jenks											
Clancy	John								✓				
Clark	Les	Independent Oil Prod.											
Clary	Jennifer	CWA		✓	✓	✓	✓			✓			
D'Adamo	Dee Dee	SWRCB					✓						
Dalgish	Barb	LSCE											
Dickey	John	Plantierra		✓		✓			✓		✓		
Dunham	Tess	Somach Simmons		✓		✓	✓		✓	✓	✓		
Dutton	Maggie	DWR					✓						
Firestone	Laurel	CWC					✓		✓				
Fuller	Dustin	TLDD									✓		
Glotzbach	Ken	City of Roseville											
Gowdy	Mark	SWRCB,Water Rights											
Grovhoug	Tom	LWA	✓	✓		✓	✓		✓		✓		
Gryczko	Stan	City of Davis											
Herr	Joel	Systech											
Houdesheldt	Bruce	NCWA/Sac Valley WQC	✓			✓	✓	✓	✓	✓	✓		
Johnson	Jeff	Chevron											
Johnson	Michael	LSJRC	✓	✓	✓	✓	✓		✓	✓	✓		
Kretsinger Grabert	Vicki	LSCE	✓	✓		✓	✓		✓	✓	✓		
LeClaire	Joe	CDM Smith								✓			
Leach	Joe	City of Dixon						✓					
Lewis	Bill	City of Live Oak											
Liebersbach	Debbie	Turlock Irrig Dist											
Longley	Karl	CVRWQCB		✓		✓	✓				✓		
Meeks	Glenn	CVRWQCB									✓		
Meyerhoff	Richard	CDM Smith			✓	✓	✓	✓	✓	✓	✓		
Moore	Tim	Risk-Sciences		✓		✓	✓		✓		✓		
Olson	Anne	CVRWQCB		✓				✓					
Parsons	Rob	CDM Smith						✓					
Pirondini	Tony	City of Vacaville											
Pitcher	Jenifer	West. States Petroleum									✓		
Quasebarth	Tom	CDM Smith	✓	✓									
Reyes	Tom	City of Vacaville											
Rodgers	Clay	CVRWQCB		✓		✓	✓		✓		✓		
Sawyer	Steve	City of Vacaville											
Seaton	Phoebe	CRLA		✓		✓	✓						
Sesko	Michael	Woolf Farming											
Tapia	Joe	DWR					✓						
Tellers	Josie	City of Davis	✓	✓		✓	✓	✓	✓		✓		
Thomas	Bill										✓		
Thorme	Melissa	Downey Brand(Tracy)											
Tristao	Dennis	J.G. Boswell	✓	✓									
Wackman	Mike										✓		
Wilson	Fern	City of Vacaville		✓									
Witty	James	Stantec			✓								
Yee	Betty	CVRWQCB			✓		✓						

CV-SALTS Executive Committee Meeting - Summary Action Notes
For August 14, 2014 - 9:00 AM to 3:00 PM

Attendees are listed on the Membership Roster

AGENDA

- 1) Welcome and Introductions
 - a) Committee Chair Parry Klassen brought the meeting to order, and roll call was completed.
 - b) Debbie Webster moved to approve, and David Cory seconded, and by general acclamation the June 19th action notes were approved.

- 2) Fertilizer Research and Education Program (FREP)
 - This presentation was deferred until a later date, TBD.

- 3) Discuss and Finalize Key Terms to be Defined in SNMP – MORNING SESSION

- 4) Continue Discussion of Item #3 from the morning session – AFTERNOON SESSION
 - The morning and afternoon discussions focused on the proposed strawman definitions for the following key terms and concepts :
 - Existing Water Quality
 - Beneficial uses are “not unreasonably affected” ...
 - Beneficial uses are “threatening to be exceeded” ...
 - Decision Criteria for Demonstrating “Maximum Benefit to the People of the State” ...
 - Tim Moore will revise the proposed definitions based on discussions during the meeting.
 - Tim outlined the proposed policy discussion schedule for the remainder of 2014:
 - September meeting will address BPTC and Maximum Benefit
 - October will be dedicated to SSALTS
 - Per Richard Meyerhoff the purpose of the SSALTS October item is to present feasibility criteria that will be used to analyze the alternatives in development, and the presentation should not require the full meeting.
 - Committee members proposed using a webinar for the initial SSALTS briefing, and utilize only a portion of the October meeting for SSALTS discussion and debate.
 - Daniel Cozad will speak with Richard regarding this option for the SSALTS update.
 - November meeting will see an annotated outline of the SNMP which will be written during 2015.

- 5) Grassland Bypass Project Waste Discharge Requirements (WDR)
 - After an introduction by Jeanne Chilcott and Glenn Meeks, the committee agreed to defer this item to the September 12th Administrative Meeting, to give members more time to review the item prior to the full discussion.

- 6) Set next meeting objectives/date
 - The next Admin Meeting will be September 12th. The next Policy Session is scheduled for September 18th.

High Priority Phrases to Define

- 1) Best Practicable Treatment or Control (BPTC)
- 2) Best Efforts
- 3) Best Management Practice (BMP)
- 4) Available assimilative capacity
- 5) Existing water quality
- 6) First Encountered Groundwater
- 7) Zone-of-Influence (aka Zone-of-Contribution)
- 8) Cause pollution or nuisance
- 9) Water quality objectives are being or are threatening to be exceeded
- 10) Not unreasonably affect beneficial uses
- 11) Not reasonably feasible or practicable (infeasible, impracticable)
- 12) Substantial and widespread social and economic impact
- 13) Necessary to accommodate important social and economic growth in the region
- 14) Maximum benefit to the people of California

Other Key Phrases

- 15) Average water quality
- 16) Naturally-occurring background concentration
- 17) Receiving water
- 18) Groundwater basin
- 19) Groundwater Sub-basin (Management Zone)
- 20) Vadose zone
- 21) Saturated zone
- 22) Use is attained or “in attainment”
- 23) Use is impaired or “in non-attainment”
- 24) Vulnerable area
- 25) MUN-Limited
- 26) Point-of-Compliance
- 27) Point-of-Use
- 28) Imperceptible improvement in water quality
- 29) Reasonable progress toward attainment
- 30) Salt and nitrate loading on a sustainable basis

3) "Consistent with Maximum Benefit to the People of the State"

Related concepts...

- a) Necessary to accommodate important economic or social development in the area in which the waters are located (*federal; 40CFR131.12-a-2*)
- b) Would result in substantial and widespread economic and social impact (*federal; 40CFR131.10-g-6*)

Factors to be considered...

- a) Maximum Benefit is determined on a case-by-case basis
- b) Past, present and probable future beneficial uses of the water; esp. including use for water supply
- c) Economic and social costs, tangible and intangible, of the proposed discharge compared to the benefits
- d) Ability to pay for the necessary treatment and whether imposing such costs will result in significant adverse impact on the community (several federal tools and templates are available for surface waters)
- d) Environmental aspects of the proposed discharge (esp. net effects on water quality in the region; example: preventing seawater intrusion or preserving critical habitat)
- e) Implementation of feasible alternative treatment or control measures to abate social costs of lower water quality
- f) Must consider "costs" to both the discharger and others affected by the discharge
- g) Cost savings "alone" are not an adequate justification; must also demonstrate how the savings are necessary to accommodate important social and economic development (note reference to federal regulations in interpreting state antideg policy; presumably applies to surface waters only)
- h) Reduction in water quality is spatially localized or limited (e.g. confined to the mixing zone)
- i) Reduction in water quality is temporally limited and will not result in any long-term deleterious effects on water quality
- j) Proposed discharge will produce only minor effects which will not result in a significant reduction of water quality (e.g. a single project uses less than 10% of available assimilative capacity or the cumulative effect of all projects uses less than 20% of available assimilative capacity in a given basin, sub-basin or management zone).
- k) The proposed activity has been approved in the General Plan of a political subdivision and has been subjected to adequate environmental and economic analysis in an EIR prepared as required under CEQA.
- l) EPA's Water Quality Standards Handbook (Chapter 5) provides additional guidance for evaluating socio-economic impacts related to meeting water quality standards in surface waters

Primary reference sources: 1) SWRCB's Guidance on Resolution 68-16, 1995; 2) SWRCB's Administrative Procedures Update 90-004; 3) SWRCB's Recycled Water Policy, 2009; 4) CWC §13241; 5) Asociacion de Gente Unida Por El Agua v. Central Valley Board, 210 Cal. App. 4th 1255

3) "Consistent with Maximum Benefit to the People of the State" (continued)

Proposed Strawman Decision Criteria for Demonstrating "Maximum Benefit to the People of the State"...

- A) Lower water quality is spatially-limited and/or a temporary condition. Example: deep-well injection projects where recycled water is stored for later extraction or providing additional recharge that will ultimately blend with and offset the discharge.
- B) Lowering water quality at one location will result in higher water quality in the same or another location such that there is a net improvement in water quality and beneficial use protection in the receiving water, watershed, region or state as a whole. Example: a groundwater clean-up project removes TCE, but the air stripping process increases the concentration of TDS.
- C) Lowering water quality will result in more effective protection of actual beneficial uses than would occur by imposing more stringent effluent limitations or prohibiting the discharge. Example: the discharge is coupled with a project to provide well-head treatment or alternate drinking water supplies where the MUN use is severely impaired.
- D) Lowering water quality would facilitate increased use of recycled water (particularly by displacing demand for potable water) and thereby increase the overall water supply in the watershed, region or state. Example: using recycled water for landscape or agricultural irrigation.
- E) Lowering water quality would facilitate increased recharge and storage to groundwater basins and particularly where the underlying aquifer is in an overdraft condition.
- F) Lowering water quality is necessary to accommodate important social and economic growth in the region particularly where more stringent effluent limitations or discharge prohibitions would result in widespread and substantial adverse socioeconomic impacts in the area.
- G) Lowering water quality would produce less adverse environmental impact than imposing more stringent effluent limitations or discharge prohibitions. Example: additional treatment results in significant cross-media waste streams (e.g. brines, greenhouse gases, etc.) or requires significant energy consumption without any corresponding reduction in risk to public health or the environment.
- H) Lowering water quality is necessary to preserve beneficial uses that may otherwise be lost if discharge flows are significantly diminished in order to comply with more stringent effluent limitations. Example: preservation of aquatic habitat or recreational resources in an ephemeral/intermittent stream.
- I) Allowing lower water quality in the discharge will reduce the rate at which water quality is already degrading (or is expected to degrade) in the receiving water. Example: creating barriers to groundwater migration or diluting contaminants in the vadose zone.
- J) Allowing lower water quality, in relation to the baseline condition, would actually improve existing water quality.
- K) Allowing lower water quality is necessary to prevent widespread and substantial adverse social or economic impact or to accommodate important social and economic development in the nation, state or region.
- L) Allowing lower water quality is necessary to protect infrastructure or industries deemed vital to national security, public safety, public health, or the environment.

Regulatory Requirement (common abbreviation)	Reference Citation	Intended Application
1) Best Practicable Treatment or Control (BPTC) "...to assure a nuisance or pollution will not occur ... water quality consistent with maximum benefit to the people of the State"	SWRCB Res. 68-16 (State Antideg. Policy)	Surface & Ground Waters of CA Point & Non-point Sources
2) Best Management Practices (BMP) and measures to control each category and subcategory of non-point sources ... to reduce, to the maximum extent practicable (MEP), the level of pollution from such sources	CWA §319(a)(1)(C)	Surface Waters of the U.S. Non-point Sources
3) Cost Effective and Reasonable Best Management Practices (BMP)	40 CFR 131.12(a)(2)	Surface Waters of the U.S. Non-point Sources
4) Best Practicable Control Technology Currently Available (BPT)	CWA §304(b)(1)	Surface Waters of the U.S. Point Sources
5) Best Conventional Pollutant Control Technology (BCT)	CWA §304(b)(4)	Surface Waters of the U.S. Point Sources other than POTWs Specified Conventional Pollutants
6) Best Available Technology Economically Achievable (BAT)	CWA §304(b)(2)	Surface Waters of the U.S. Point Sources other than POTWs
7) Best Efforts ; "limitations which the discharger be expected to achieve with reasonable control methods"	SWRCB WQO 81-5 (City of Lompoc)	Surface & Ground Waters of CA

Key Factors to be Considered when Assessing Reasonability and Practicability:

- 1) The quality of water supply available to the discharger
- 2) Past effluent quality of the discharger
- 3) Effluent quality achieved by other similarly situated dischargers
- 4) Good faith efforts of the discharger to limit the discharge of the constituent
- 5) The measures necessary to achieve compliance
- 6) Compare proposed method to existing proven technology
- 7) Evaluate performance data (e.g. through treatability studies)
- 8) Compare alternative methods of treatment or control
- 9) Costs of treatment or control (affordability and ability to pay)
- 10) Cost-effectiveness (efficiency)
- 11) Technical feasibility
- 12) Economic and social costs compared to the benefits to the community
- 13) Environmental effects (beneficial and detrimental, intended and unintended)
- 14) Public acceptance



Triggering Antidegradation Analysis

"Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies became effective, such existing high quality will be maintained..." (SWRCB Res. 68-16)

Existing Water Quality (EWQ) = Current Quality (representative of the waterbody accounting for spatial & temporal variability)

Baseline Water Quality (BWQ) = Best Water Quality that has existed since...

(a) The date the relevant Water Quality Objective (WQO) became effective

- i. Nitrate (1972-75?)
- ii. EC (date Table 64449B from Title-22 incorporated by reference?)

(b) 1968 when Resolution 68-16 was considered and adopted [APU-90-004]

(c) Unless, permitted discharges were authorized to lower water quality thereby establishing a "new" baseline threshold for subsequent antidegradation analyses

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- 1) If Discharge Quality (DQ) is better than BWQ, then no antideg analysis is required because discharge is not expected to lower water quality (assumes BWQ is known).
 - 2) If EWQ worse than WQO, then there is no Assimilative Capacity available.
 - 3) EWQ better than WQO = "High Quality Water" and Assimilative Capacity is available.

If BWQ is Unknown; then further Antidegradation Analysis is always required...

Scenario A) If DQ is better than EWQ then a simple antideg analysis is acceptable because discharge is expected to improve EWQ

Scenario B) If DQ is worse than EWQ then a complete antideg analysis is necessary because discharge is expected to reduce EWQ

STATE WATER RESOURCES CONTROL BOARD

RESOLUTION NO. 68-16

STATEMENT OF POLICY WITH RESPECT TO
MAINTAINING HIGH QUALITY OF WATERS IN CALIFORNIA

WHEREAS the California Legislature has declared that it is the policy of the State that the granting of permits and licenses for unappropriated water and the disposal of wastes into the waters of the State shall be so regulated as to achieve highest water quality consistent with maximum benefit to the people of the State and shall be controlled so as to promote the peace, health, safety and welfare of the people of the State; and

WHEREAS water quality control policies have been and are being adopted for waters of the State; and

WHEREAS the quality of some waters of the State is higher than that established by the adopted policies and it is the intent and purpose of this Board that such higher quality shall be maintained to the maximum extent possible consistent with the declaration of the Legislature;

NOW, THEREFORE, BE IT RESOLVED:

1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.
3. In implementing this policy, the Secretary of the Interior will be kept advised and will be provided with such information as he will need to discharge his responsibilities under the Federal Water Pollution Control Act.

