

CV-SALTS Executive Committee Meeting

October 20, 2011 9:00 AM to 2:30 PM

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

Teleconference (218) 339-4600 Code: 927571#

Posted 10-10-11

Meeting Objective:

- Continuation of selection of archetypical examples from nominated waterbodies for the MUN and AGR designations.
- Confirm and approve archetypes for BPA, document approval

AGENDA

- 1) Welcome and Introductions - Chair
 - a) Committee Roll call and [Membership Roster](#)
 - b) Review/Approve [Executive Committee Meeting Notes for September 15, 2011](#) – 2 min
- 2) Review Expected Outcomes for October 15, 2011 Session – Tim Moore – 5 minutes
- 3) Review and Discuss [Scopes for Previously Identified Archetypes](#) – 2 hours
 - a) Waterbodies identified for appropriate beneficial use determinations
 - b) Communities with nitrate in drinking water
- 4) Summarize additional Nominated Waterbodies for MUN and AGR – 25 minutes

11:30 am to 1:00 pm - Lunch on your own

- 5) Discuss and Approve Archetypical Examples for MUN and AGR – 1.5 hours
- 6) Set next meeting dates and objectives (November 17, 2011 and next Conference Call date)
- 7) Future Items
 - a. All administrative items are deferred to the next Administrative Conference Call.
 - b. Review Schedule of Policy Discussions for 2011 – Tim Moore

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>

CV-SALTS Committee Rosters

Executive Committee Membership			CV-SALTS Executive Committee Meetings During 2011																	
Voters	Category/Stakeholder Group	Name	20-Jan	10-Feb	17-Mar	12-Apr	22-Apr	12-May	24-May	16-Jun	23-Jun	21-Jul	9-Aug	13-Sep	15-Sep	19-Oct	20-Oct	17-Nov	15-Dec	
Leadership Partners																				
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	Jobaid Kabir	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓					
5	Environmental Justice	TBD																		
6	Environmental Water Quality	TBD																		
CV Salinity Coalition																				
1	CASA	Bobbi Larson			✓	✓	✓			✓										
2	County of San Joaquin	Mel Lytle										✓								
Alt	County of San Joaquin	Brandon Nakagawa									✓									
3	CVCWA	Debbie Webster	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓					
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	Steve Bailey	✓																	
8	Sacramento Regional CSD	Linda Dorn	✓	✓	✓								✓	✓						
9	San Joaquin River Group	Dennis Westcot	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓						
10	City of Modesto	Nick Pinhey	✓																	
11	California Rice Commission	Tim Johnson				✓	✓	✓		✓		✓			✓					
12	City of Manteca	Phil Govea																		
13	Tulare Lake Drainage/Storage District	Mike Nordstrom	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Alt	Tulare Lake Drainage/Storage District	Doug Davis																		
14	Stockton East Water District	Karna Harrigfeld	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
15	Western Plant Health Association	Renee Pinel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
16	City of Vacaville	Royce Cunningham	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Comm. Chairs/Co-chairs																				
1	Chair Executive Committee	Parry Klassen		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Vice Chair Executive Committee	Jeff Willett	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
*	Technical Advisory Committee	Roberta Tassey																	✓	
3	Technical Advisory Committee	Nigel Quinn, LBL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
4	Public Education and Outreach	Joe DiGiorgio	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
5	Economic and Social Cost Committee	David Cory		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

* = Already votes as Leadership or Coalition member

Participants also identified for 9/13:

- Pam Buford, CVRWQCB
- Karl Longley, CSU Fresno
- Fern Wilson, City of Vacaville
- Claus Suverkropp, LWA
- Michael Steiger, EKI
- Jim Martin, RWQCB
- Andy Safford, EKI
- Tess Dunham, Somach
- Jean-Pierre, J.P., Cativiela, Dairy

Past Participants:

- | | | |
|---------------------------------|--|--|
| Tom Griffith, Envirotech | Stephen McCord, LWA | Cindy Paulson, CUWA |
| Tom Grovhoug, LWA | Erica DeHollan, LA C | Geoff Anderson, DWR |
| John Herrick | Andy Malone, Wildermuth Env. | Dan Odenweller, RWQCB |
| Katy Walsh | Chad Dibble, CDFG | Danny Merkely, California Farm Bureau |
| Paul Martin, W.U.D. | David Miller, GEI Consultants | Emily Alejandrino/Jim Martin, CVRWQCB |
| Betty Yee, RWQCB | Gary Carlton, Kennedy Jenks | Emily Robidart Rooney, Ag Council |
| Claus Suverkropp, LWA | Jamil Ibrahim, MWH Global | Gail Cismowski, CVRWQCB |
| Mark Gowdy, SWRCB, Water Rights | Jay Simi, CVRWQCB | Jenny Skrel, Ironhouse Sanitary District |
| | Jodi Pontureri, SWRCB | Erick Althorp SSIWQC |
| | Mark Larsen, Kaweah Delta WCD | Mark Dorman, Rainsoft Water PWQA |
| | Lou Dambrosio, TWG | Mark Felton, Culligan Water and PWQA |
| | Rick Rasmussen, SWRCB | Tess Dunham, Somach |
| | Stan Dean, SRCS | Rick Staggs, City of Fresno |
| | Melanie Thomson, CUWA | Robert Chrobak and Stuart Childs Kennedy/Jenks |
| | Jennifer Clary, CWA | Ron Crites, Brown and Caldwell |
| | Gene Lee, Reclamation | Lou Regenmorte, CDM |
| | Bruce Houdesheldt, NCWA/Sac Valley WQC | Jean-Pierre, J.P., Cativiela, Dairy |

CV-SALTS Executive Committee Meeting

September 15, 2011 9:00 AM to 2:00 PM

Sacramento Regional Sanitation District Offices – Sunset Maple Room

Attendees are listed on the Membership Roster

AGENDA

1) Welcome and Introductions Chair

- Meeting was brought to order by Chair Parry Klassen, and roll call was completed.
- Executive Committee Meeting Notes for July 21 were approved on August 9th.

2) Review Schedule of Policy Discussions for 2011 & Expected Outcomes for September 15

- Tim Moore reviewed the expected outcomes for the session and the anticipated objectives for the next two policy sessions. In selecting archetypes the goal is to identify waterbodies where the beneficial uses might not be correct, and simultaneously identify waterbodies where the uses are appropriate but the water quality appears to not be meeting objectives.
- The session objective was to identify 6-12 such examples to turn over to the Technical Project Manager for development of a work plan and documentation. Ideally next month the committee would move into the question of what ought to be the proper objectives, particularly where there is no numeric standard in the basin plan and we have to rely on a narrative translator process. All of the October session, and perhaps November, may be spent focused on that.

3) Review Nominated Waterbodies for MUN and AGR

- The committee reviewed waterbody nominations from the Agricultural Communities, the City of Vacaville, Regional Board Staff, and Tulare Lake. The following waterbodies and communities were selected from nominated examples and referred to Michael Steiger, Technical Project Manager for work plan development:
 - Live Oak
 - Biggs
 - Willows
 - Butte Slough
 - Colusa
 - Tulare Lake Bed
 - Communities of: Hillmar, Ripon, and Lemon Cove
- In addition to the above, the Technical Project Manager will also be assisting the Lower San Joaquin River Committee with development of their work plan.
- Due to concerns expressed by committee members regarding the closing of the selection process it was decided that the nomination of waterbodies will be carried over to the October Policy Session and that work on water quality objectives will be deferred until the November session.
- PLEASE NOTE: A detailed transcript of notes for this Session is available upon request.

5) Set next meeting dates and objectives (October 20th and next Conference Call is October 19th)

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14 October 2011

MEMORANDUM

To: CV-SALTS Executive Committee

From: Michael T. Steiger, P.E.
Eler & Kalinowski, Inc.
CV-SALTS Technical Project Manager

Subject: Planning-Level Scopes to Establish Appropriate Beneficial Uses
For Selected Archetype Water Bodies
(EKI B10058.00)

As requested by the CV-SALTS Executive Committee, Eler & Kalinowski, Inc. (“EKI”) has prepared planning-level scopes for establishing appropriate beneficial uses for selected archetype water bodies through Basin Plan amendments. The planning-level scopes are presented in the attached tables:

- Table 1: Systems designed or modified to convey or hold municipal wastewater or agricultural drainage water¹
- Table 2: Groundwater beneath a portion of the Tulare Lake Bed

The tables outline generalized tasks, potential cost ranges, and potential timeframes for achieving Basin Plan amendments for archetype water bodies.

PURPOSE OF PLANNING-LEVEL SCOPES

These planning-level scopes are intended to support decision making by the Executive Committee. We anticipate the Executive Committee will use these planning-level scopes to determine a course of action with regards to completing Basin Plan amendments that

¹ Examples identified by CV-SALTS Executive Committee include Butte Slough, and conveyances receiving publicly owned treatment works (“POTW”) effluent from the cities of Biggs, Live Oak, Willows, and Colusa.



meet stakeholder needs. The Executive Committee may wish to consider modifications or alternatives to the attached planning-level scopes.²

ASSUMPTIONS AND LIMITATIONS OF PLANNING-LEVEL SCOPES

To develop these planning-level scopes, EKI relied upon the following information:

- Guidance documents and reports prepared by such agencies as the Central Valley Regional Water Quality Control Board (“CVRWQCB”), California Department of Health Services, and U.S. Environmental Protection Agency and U.S. Army Corps of Engineers.
- Discussions and meetings with CVRWQCB staff, and stakeholders and their consultants and advisors, i.e., Central Valley Clean Water Agency, Tulare Lake Drainage District, and San Joaquin River Group Authority.

EKI did not conduct a detailed review of data and other potentially relevant information related to archetype water bodies identified by CV-SALTS. Some of the tasks identified in the planning-level scopes may be partially or entirely completed for certain archetypes.³ Thus, detailed review of available data and other relevant information is necessary before proposals with scope, budget, and schedule can be obtained and evaluated for accomplishing the technical studies required for the Basin Plan amendments.

Please call with any questions.

cc: Daniel Cozad (CV-SALTS Program Manager)
Jeanne Chilcott (CVRWQCB)
Andy Safford, Karen Gruebel (EKI)

² Alternatives may include developing appropriate beneficial uses at the “watershed” scale with points of compliance, developing site-specific water quality objectives, or grouping archetypes for environmental and economic analyses, peer review, and approval by CVRWQCB and other agencies.

³ For example, we understand CVRWQCB staff has performed sampling and summarized the resulting data and information pertaining to treated effluent discharged by the City of Colusa to an unnamed tributary and Powell Slough.

TABLE 1
SUMMARY OF GENERALIZED TASKS TO AMEND BASIN PLAN TO ESTABLISH APPROPRIATE BENEFICIAL USES FOR A
SYSTEM DESIGNED OR MODIFIED TO CONVEY OR HOLD MUNICIPAL WASTEWATER OR AGRICULTURAL DRAINAGE WATERS (a)

Task	Purpose	Example of Work That May Need to be Performed	Potential Cost Range (b)	Potential Timeframe (b)
1 Compile existing data on system receiving POTW effluent.	Review available water quality data, and information on system construction, purpose, and management to determine which exception criteria of Resolution No. 88-63 are met (CVRWQCB, 2011a, p. 8; CVRWQCB, 2007, pp. 8-9; CVRWQCB, 2005, pp. 11-12; and DHS, 1997, pp. 1-2). See notes (c), (d), and (e).	Compile available water quality data and describe existing conditions, including construction, purpose, and management of system and background levels of constituents of concern in water.	\$20,000 to \$30,000	2 mos to 4 mos
2 Delineate areas that utilize water and identify crops grown in these areas.	Confirm no water is used directly for municipal or domestic supply (MUN), and water applied to land does not pose a risk to groundwater beneficial uses (CVRWQCB, 2007, p. 8; CVRWQCB, 2005, p. 6; and CVRWQCB, 2011b, pp. A-29 to A-32). See note (f).	Inspect system to confirm no municipal or domestic intakes exist. Review land use records to characterize the types of food and forage crops that are irrigated by water in system. Examine records to verify no potential conduits (e.g., active, inactive, or abandoned wells) to groundwater are present on lands irrigated by water in system.	\$10,000 to \$30,000	1 mos to 2 mos
4 Assess U.S. EPA use attainability factors to establish MUN is not an appropriate designated use of system.	Federal requirement must be met if system is established to be a water of the United States (U.S. EPA and USACE, 2011, p. 7 and CVRWQCB, 2011a, p. 8). See note (g).	Determine if system is a water of the United States. If so, conduct use attainability analysis that demonstrates MUN is not an appropriate designated use of system.	\$20,000 to \$40,000	1 mos to 2 mos

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SYSTEM DESIGNED OR MODIFIED TO CONVEY OR HOLD MUNICIPAL WASTEWATER OR AGRICULTURAL DRAINAGE WATERS (a)

Task	Purpose	Example of Work That May Need to be Performed	Potential Cost Range (b)	Potential Timeframe (b)
5 Establish MUN was not an "existing use" on or after 28 November 1975.	Federal requirement must be met if system is established to be a water of the United States.	Review historical documents to establish past uses of system and chemical concentration trends in water over time.	\$0 to \$20,000	0 mos to 2 mos
6 Measure flow rate of water in system over a hydrologic cycle (i.e., rainy and dry months).	Flow rate data may be needed to assess if ephemeral, intermittent, or low flow conditions naturally exist in system (CVRWQCB, 2011a, p. 12 and CVRWQCB, 2005, p. 10). See note (h).	Measure surface water flow rate in system, if existing data are not adequate.	\$0 (i) to \$80,000 (j)	12 mos to 18 mos
7 Obtain water quality data for POTW effluent and all receiving waters over a hydrologic cycle.	Water quality data are needed to establish the naturally occurring and anthropogenic background concentrations of the constituents of concern. Water quality data will be used to support the finding that MUN is not an appropriate beneficial use of the system under consideration (CVRWQCB, 2011a, p. 12).	Collect surface water samples and conduct laboratory testing, if existing water quality data are not sufficient to support Basin Plan amendments. See note (k).	\$0 (i) to \$80,000	See note (l).
8 Prepare information document and conduct CEQA scoping meeting.	Public participation begins with CEQA scoping to allow the public to provide input on the Basin Plan amendments and suggest alternatives and mitigation measures, if warranted (CVRWQCB, 2011a, Appendix C, p. 4).	Conduct public outreach as required by Section 3777 of Title 23 of the California Code of Regulations ("CCR"). Pursuant to 23 CCR §3777, the Basin Plan amendments must be accompanied by Substitute Environmental Documentation ("SED") and supported by substantial evidence in the administrative record.	\$10,000 to \$20,000	3 mos

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SYSTEM DESIGNED OR MODIFIED TO CONVEY OR HOLD MUNICIPAL WASTEWATER OR AGRICULTURAL DRAINAGE WATERS (a)

Task	Purpose	Example of Work That May Need to be Performed	Potential Cost Range (b)	Potential Timeframe (b)
9 Complete CVRWQCB staff report describing proposed Basin Plan amendments.	The report provides the rationale for the Basin Plan amendments, which includes the SED and antidegradation policy analysis (CVRWQCB, 2011a, Appendix C, p. 5; CVRWQCB, 2007, p. ii; and CVRWQCB, 2005, p. i).	Prepare text, figures, and tables justifying Basin Plan amendments for system under consideration.	\$80,000 to \$100,000	6 mos
10 Perform an economic analysis of proposed Basin Plan amendments.	The economic analysis will quantify and apportion the costs and benefits of the proposed Basin Plan amendments (CVRWQCB, 2011a, Appendix C, p. 5; CVRWQCB, 2007, p. 14; and CVRWQCB, 2005, p. 16).	Prepare report that summarizes economic analysis of Basin Plan amendments.	\$20,000 to \$30,000	See note (m).
11 Conduct peer review of proposed Basin Plan amendments.	Peer review is required of the CVRWQCB staff report and proposed Basin Plan amendments if a scientific justification for the changes exist. CVRWQCB staff report is amended based upon peer review comments (CVRWQCB, 2011a, Appendix C, p. 5).	Retain expert to review CVRWQCB staff report and proposed Basin Plan amendments.	\$30,000 to \$50,000	6 mos
12 Circulate CVRWQCB staff report and proposed Basin Plan amendments.	Upon responding to public comments, and possibly holding public workshops to explain responses, CVRWQCB may adopt Basin Plan amendments at a public hearing (CVRWQCB, 2011a, Appendix C, p. 5).	Provide opportunity for public review and comment of CVRWQCB staff report and proposed Basin Plan amendments.	\$10,000 to \$20,000	3 mos

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SYSTEM DESIGNED OR MODIFIED TO CONVEY OR HOLD MUNICIPAL WASTEWATER OR AGRICULTURAL DRAINAGE WATERS (a)

Task	Purpose	Example of Work That May Need to be Performed	Potential Cost Range (b)	Potential Timeframe (b)
13 Obtain necessary approvals of Basin Plan amendments adopted by CVRWQCB.	Basin Plan amendments must be approved by State Water Resources Control Board, Office of Administrative Law, and U.S. EPA before amendments become effective (CVRWQCB, 2011a, Appendix C, p. 5).	Arrange for required legal review.	See note (n).	6 mos
TOTALS:			\$200,000 to \$500,000	39 mos to 52 mos

Notes:

- (a) Archetypical examples identified by CV-SALTS Executive Committee include Butte Slough, and conveyances receiving publicly owned treatment works ("POTW") effluent from the cities of Biggs, Live Oak, Willows, and Colusa.
- (b) Cost and schedule estimates pertain to work associated with amending the Basin Plan for a single system. Estimates are for planning purposes only. Actual expense and timeframe for completing each task may vary substantially from those presented.
- (c) MUN was determined not to be an appropriate use for Sulphur Creek because of elevated naturally-occurring concentrations of total dissolved solids ("TDS") and mercury that cannot reasonably be treated for municipal or domestic supply.
- (d) MUN was determined not to be an appropriate beneficial use for Old Alamo Creek because the conveyance functions essentially as a system that has been constructed or modified to contain municipal wastewater and agricultural drainage waters.
- (e) The Department of Health Services ("DHS") states "extremely impaired sources," which include effluent dominated surface water and agricultural drainage water, "should not be considered for direct human consumption where alternatives are available."
- (f) To protect groundwater, the Long-term Irrigated Lands Program requires implementation of regional Groundwater Quality Management Plans ("GQMPs") and Individual Farm Water Quality Management Plans ("IFWQMPs"). GQMPs require monitoring to track changes in groundwater quality. Monitoring for the constituents of concern must be performed to determine whether the management plan is improving groundwater quality. At a minimum, FWQMPs must describe those practices needed or currently in use to achieve groundwater quality protection.
- (g) Task is required if the system is determined to be a water of the United States. According to U.S. EPA and USACE draft 2011 guidance, these agencies will assert jurisdiction over waters with a "significant nexus" to navigable waters. U.S. EPA and USACE (2011) indicate a system does not have a significant nexus if it has no more than a "speculative or insubstantial effect on the chemical, physical, or biological integrity of downstream traditional navigable waters or interstate waters."
- (h) Low flow, pursuant to 40 CFR 131.10(g)(2), in Old Alamo Creek was determined to play a role in preventing MUN from being attainable in this system.

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SYSTEMS DESIGNED OR MODIFIED TO CONVEY OR HOLD MUNICIPAL WASTEWATER OR AGRICULTURAL DRAINAGE WATERS (a)

Notes:

- (i) Assume existing data are adequate to support Basin Plan amendments and no additional flow or water quality data are needed.
- (j) Potential cost for task includes the expense of preparing a work plan for CV-SALTS review and approval that describes the flow rate data to be obtained under Task 6 and the water quality data to be obtained under Task 7.
- (k) According to CVRWQCB, water samples should be collected of the effluent, and upstream and downstream of the effluent discharge location on a monthly basis for a year. Collected water samples should be analyzed for TDS, electrical conductivity, and other constituents of concern, including nitrate, arsenic, manganese, iron, aluminum, methylene blue active substances (i.e., MBAS), and trihalomethanes. Subsequent receiving waters should be similarly tested upstream and downstream of the confluence with the system conveying or holding municipal wastewater or agricultural drainage waters.
- (l) Task would be performed concurrently with Task 6.
- (m) Task would be performed concurrently with Task 9.
- (n) Assume costs of obtaining approvals are not significant to CV-SALTS.
- (o) Tasks that are primarily process related are shaded.

References:

- Central Valley Regional Water Quality Control Board ("CVRWQCB"). May 2011a. *Municipal and Domestic Water Supply (MUN) Beneficial Uses in Agricultural Drains* . Staff Report.
- CVRWQCB. March 2011b. Recommended Irrigated Lands Regulatory Program Framework. Staff Report
- CVRWQCB. January 2007. *Amendment to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins to Determine Certain Beneficial Uses Are Not Applicable in and Establish Water Quality Objectives for Sulphur Creek. Public Review* Draft Staff Report.
- CVRWQCB. April 2005. Amendment to the Water Quality Control Plan for the Sacramento River and San Joaquin River to Dedicinate Four Beneficial Uses for Old Alamo Creek. Final Staff Report.
- Department of Health Services. 5 November 1997. *Policy Memo 97-005 Policy Guidance for Direct Domestic Use of Extremely Impaired Sources* .
- United States Environmental Protection Agency ("U.S. EPA") and U.S. Army Corps of Engineers ("USACE"). 25 April 2011. *Draft Guidance on Identifying Waters Protected by the Clean Water Act* .

TABLE 2
SUMMARY OF GENERALIZED TASKS TO AMEND BASIN PLAN TO ESTABLISH APPROPRIATE BENEFICIAL USES FOR TULARE LAKE BED (a)

Task	Purpose	Example of Work That May Need to be Performed	Potential Cost Range (b)	Potential Timeframe (b)
1 Compile existing data on current and former groundwater supply wells in the Tulare Lake Bed.	Evaluate current and historical water quality data and assess water quality of water-bearing units.	Review available well records to assess potential connection of water-bearing units across the Corcoran Clay. Examine report prepared in 1972 for Basin Plan, aerial photographs, and other documents pertaining to natural geologic and hydrologic features that have led to salt accumulation.	\$20,000 to \$30,000	2 mos to 3 mos
2 Compile existing data on geologic and hydrologic conditions of Corcoran Clay.	Assess lateral and vertical continuity of Corcoran Clay (i.e., E-Clay) and other significant clay layers (i.e., A-Clay through D-Clay, and F-Clay).	Create geologic and hydrologic maps that depict stratigraphy and groundwater quality above, within, and below various clay layers.	\$10,000 to \$20,000	1 mos to 2 mos
3 Delineate areas that utilize groundwater and identify water-bearing units and groundwater quality in such units.	Delineate areas where groundwater (first encountered and deeper) is used for municipal or domestic supply (MUN), agricultural supply (AGR), and industrial supply (IND).	Create maps depicting groundwater use outside of the Tulare Lake Bed.	\$10,000 to \$20,000	1 mos to 2 mos
4 Prepare preliminary findings and review with CVRWQCB staff.	Delineate lateral and vertical limits of poor existing groundwater quality within Tulare Lake Bed.	Review available data with CVRWQCB staff and discuss groundwater modeling that may be performed to show increased salt and water loads will not cause lateral and vertical spreading of salts within the portion of the Tulare Lake Bed subject to basin Plan amendments.	\$10,000 to \$20,000	1 mos to 2 mos

TABLE 2
SUMMARY OF GENERALIZED TASKS TO AMEND BASIN PLAN TO ESTABLISH APPROPRIATE BENEFICIAL USES FOR TULARE LAKE BED (a)

Task	Purpose	Example of Work That May Need to be Performed	Potential Cost Range (b)	Potential Timeframe (b)
5 Perform investigations.	Additional geologic, hydrologic, and groundwater quality data may be needed to support proposed Basin Plan amendments.	Investigations may include groundwater sample collection and testing, and geophysical logging or other indirect assessment in existing wells.	\$0 (c) to \$350,000 (d)	0 mos to 4 mos
6 Perform model simulations.	Demonstrate that increased water and salt loads within the Tulare Lake Bed will not adversely impact beneficial uses of groundwater outside of the portion of the lake bed subject to proposed Basin Plan amendments.	Conduct model simulations, if needed.	\$0 (c) to \$40,000	0 mos to 2 mos
7 Prepare information document and conduct CEQA scoping meeting.	Public participation begins with CEQA scoping to allow the public to provide input on the Basin Plan amendments and suggest alternatives and mitigation measures, if warranted.	Conduct public outreach as required by Section 3777 of Title 23 of the California Code of Regulations ("CCR"). Pursuant to 23 CCR §3777, the Basin Plan amendments must be accompanied by Substitute Environmental Documentation ("SED") and supported by substantial evidence in the administrative record.	\$10,000 to \$20,000	3 mos
8 Complete CVRWQCB staff report describing proposed Basin Plan amendments.	The report provides the rationale for the Basin Plan amendments, which includes the SED and antidegradation policy analysis.	Prepare text, figures, and tables, including results of model simulations that justify Basin Plan amendments.	\$80,000 to \$100,000	6 mos
9 Perform an economic analysis of proposed Basin Plan amendments.	The economic analysis will quantify and apportion the costs and benefits of the proposed Basin Plan amendments.	Prepare report that summarizes economic analysis of Basin Plan amendments.	\$20,000 to \$30,000	See note (e).

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Task	Purpose	Example of Work That May Need to be Performed	Potential Cost Range (b)	Potential Timeframe (b)
10 Conduct peer review of proposed Basin Plan amendments.	Peer review is required of the CVRWQCB staff report and proposed Basin Plan amendments if a scientific justification for the changes exist. CVRWQCB staff report is amended based upon peer review comments.	Retain expert to review CVRWQCB staff report and proposed Basin Plan amendments.	\$30,000 to \$50,000	6 mos
11 Circulate CVRWQCB staff report and proposed Basin Plan amendments.	Upon responding to public comments, and possibly holding public workshops to explain responses, CVRWQCB may adopt Basin Plan amendment at a public hearing.	Provide opportunity for public review and comment of CVRWQCB staff report and proposed Basin Plan amendments.	\$10,000 to \$20,000	3 mos
12 Obtain necessary approvals of Basin Plan amendments adopted by CVRWQCB.	Basin Plan amendments must be approved by State Water Resources Control Board, Office of Administrative Law, and U.S. EPA before amendment becomes effective.	Arrange for required legal review.	See note (f).	6 mos
TOTALS:			\$200,000 to \$700,000	29 mos to 39 mos

Notes:

- (a) Tulare Lake Bed is one of the archetypical examples identified by CV-SALTS Executive Committee.
- (b) Cost and schedule estimates are for planning purposes only. Actual expense and timeframe for completing each task may vary substantially from those presented.
- (c) Assume existing data are adequate to support Basin Plan amendments and no additional geologic, hydrologic, or groundwater data are needed.
- (d) Potential cost for task includes the expense of preparing a work plan for CV-SALTS review and approval that describes investigations and modeling to be performed.
- (e) Task would be performed concurrently with Task 8.
- (f) Assume costs of obtaining approvals are not significant to CV-SALTS.
- (g) Tasks that are primarily process related are shaded.

CV-SALTS Annual Meeting Calendar 2011

JANUARY						
MON	TUE	WED	THU	FRI	SAT	SUN
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Sac Regional

FEBRUARY						
MON	TUE	WED	THU	FRI	SAT	SUN
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

Sac Regional

MARCH						
MON	TUE	WED	THU	FRI	SAT	SUN
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Sac Regional

APRIL						
MON	TUE	WED	THU	FRI	SAT	SUN
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Sac Regional

MAY						
MON	TUE	WED	THU	FRI	SAT	SUN
						1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Sac Regional

JUNE						
MON	TUE	WED	THU	FRI	SAT	SUN
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
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Sac Regional

JULY						
MON	TUE	WED	THU	FRI	SAT	SUN
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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Sac Regional

AUGUST						
MON	TUE	WED	THU	FRI	SAT	SUN
1	2	3	4	5	6	7
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22	23	24	25	26	27	28
29	30	31				

Sac Regional

SEPTEMBER						
MON	TUE	WED	THU	FRI	SAT	SUN
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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26	27	28	29	30		

ACWA Downtown

OCTOBER						
MON	TUE	WED	THU	FRI	SAT	SUN
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Sac Regional

NOVEMBER						
MON	TUE	WED	THU	FRI	SAT	SUN
	1	2	3	4	5	6
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28	29	30				

ACWA Downtown

DECEMBER						
MON	TUE	WED	THU	FRI	SAT	SUN
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Cal EPA?

SALTY 5 Coordination Meetings

1/3/2011	Salty 5 January
2/7/2011	Salty 5 February
3/7/2011	Salty 5
4/4/2011	Salty 5
5/2/2011	Salty 5
6/6/2011	Salty 5
7/11/2011	Salty 5
8/1/2011	Salty 5
9/12/2011	Salty 5
10/3/2011	Salty 5
11/7/2011	Salty 5
12/5/2011	Salty 5

CV-SALTS Committee Meetings

2/24/2011	Salinity Leadership Group
1/20/2011	Committees Meetings
2/10/2011	Committees Meetings
3/17/2011	Committees Meetings
4/12/2011	Committees Meetings
4/22/2011	Committees Meetings
5/12/2011	Committees Meetings
5/24/2011	Committees Meetings
6/16/2011	Committees Meetings
6/23/2011	Committees Meetings
7/21/2011	Committees Meetings
8/9/2011	Committees Meetings
8/18/2011	Committees Meetings
9/13/2011	Committees Meetings
9/15/2011	Committees Meetings
10/19/2011	Committees Meetings
10/20/2011	Committees Meetings
11/17/2011	Committees Meetings
12/15/2011	Committees Meetings
1/11/2011	LSJR Committee
2/17/2011	LSJR Committee
3/24/2011	LSJR Committee

Potential Conflicting Meetings

6/7/2011	State Board Meeting
6/8/2011	Regional Board Meeting
6/8/2011	State Board Meeting
6/9/2011	Regional Board Meeting
6/10/2011	Regional Board Meeting
6/21/2011	State Board Meeting
6/22/2011	State Board Meeting
7/5/2011	State Board Meeting
7/6/2011	State Board Meeting
7/19/2011	State Board Meeting
7/20/2011	State Board Meeting
8/2/2011	State Board Meeting
8/3/2011	Regional Board Meeting
8/3/2011	State Board Meeting
8/4/2011	Regional Board Meeting
8/5/2011	Regional Board Meeting
8/16/2011	State Board Meeting
8/17/2011	State Board Meeting
9/6/2011	State Board Meeting
9/7/2011	State Board Meeting
9/20/2011	State Board Meeting
9/21/2011	State Board Meeting