

CV-SALTS Executive Committee Meeting

Monday, July 16, 2012 - 10:00 AM to 12:00 PM

TELECONFERENCE ONLY

Teleconference (218) 339-4600 Code: 927571#

Posted 07.06.12 – Revised 07.09.12

Meeting Objectives:

1. Program Development to mirror the policy development meetings
2. Execute business actions for CV-SALTS

AGENDA

- 1) **Welcome/Introductions - Consent Calendar - Chair**
 - a) Review/Approve [June 8, 2012 notes](#)
 - b) Committee Roll Call and [Membership Roster](#)
 - c) 2012/2013 CV-SALTS Progress Milestones Updated – Daniel Cozad - 5 min
- 2) **CV-SALTS Workplan-Funding Status & Budget** – Daniel Cozad – 20 min
Action: Status Report and Program Update/Forecast
- 3) **CV-SALTS Contracting Update and Recommendations** – Daniel Cozad/Pam Buford– 20 min
Action: Review current status consider approval of recommendations from selection committee
- 4) **EC Study Recommendation Letter to NPDES Program Manager** – Daniel Cozad - 10 min
Action: Review and approve as recommended by the Technical Committee
- 5) **CV-SALTS Website Update** – Daniel Cozad – 10 min
Action: Status of website and approach for completion
- 6) **Determining “Active Participation” in CV-SALTS** –David Cory – 20 min
Action: Report from CVSC
- 7) **Set next meeting objectives/date – August 10th Admin Call, July 19th Policy Session**
Review Schedule of Policy Discussions and other meetings - 10 min

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 www.cvsalinity.org

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

CV-SALTS Executive Committee Meeting Notes

Friday, June 8, 2012 – 10:00 AM to 12:00 PM

Teleconference Only

Attendees are listed on the Membership Roster

AGENDA

- 1) Welcome/Introductions – Consent Calendar
 - The meeting was brought to order by Chair, Parry Klassen.
 - a. Dennis Westcot moved to approve, and Jeff Willett seconded, and by general acclamation the May 11, meeting action notes were approved.
 - b. Roll call was completed.
- 2) 2012/12 DRAFT CV-SALTS Progress Milestones
 - Daniel Cozad updated the committee on Progress Milestones:
 - Richard Meyerhoff advised the committee the SSALTS workplan was in the draft stage with anticipated completion in 1-2 weeks. The November completion date for SSALTS is contingent upon being able to obtain information from what is being developed on the Initial Conceptual Model.
 - Dennis Westcot advised the committee he had completed the Drinking Water Quality Criteria write up, and it would be forwarded to Richard Meyerhoff and the Technical Advisory Committee early next week.
- 3) Lower San Joaquin River Committee Manager: SOW/RFQ
 - Jim Martin advised the Executive committee that based on the LSJR meeting of May 31st, it is the recommendation of Lower San Joaquin River Committee that the SOW/RFQ for the long-term committee manager be approved by the Executive Committee in an amount not to exceed \$300,000.
 - Jeanne Chilcott indicated she had reviewed the Cleanup & Abatement contracts and recommended setting the NTE limit at \$288,000. This would ensure the LSJR Committee Manager contract could be funded out of the first contract.
 - Karna Harrigfeld moved, and Jeff Willett seconded, and by general acclamation the committee approved the LSJR Committee Manager SOW/RFQ, in an amount not to exceed \$288,000 to be funded out of the Cleanup and Abatement account.
 - Jim Martin suggested that due to the length of Attachment 1, that it not be included when the RFQ is sent out, but only posted on the website. Daniel Cozad indicated it would be posted under the Procurement Section on the website.
 - The RFQ will be distributed to those who have already expressed interest in CV-SALTS issues. Jeanne Chilcott suggested it be distributed as widely as possible, including salinity laboratories, and general UC procurement. Committee members should forward any other potential applicants to Daniel Cozad, or direct them to the website.
- 4) Tulare Lakebed Archetype Workplan Approval
 - Richard Meyerhoff reviewed the workplan for the committee. After discussion, Jeff Willett moved to approve, and J.P. Cativiela seconded, and by general acclamation the workplan was approved with one abstention (Mike Nordstrom).
 - Jeanne Chilcott reminded the committee that there was no budget attached and that a discussion needed to be held on cost sharing.
 - David Cory agreed that the development of a process on cost sharing was a topic requiring further discussion by the committee, not just for the Tulare Lake project, but other projects as well.

- 5) Technical Advisory Committee Recommendations for ESJR WDR/MRP
- Daniel Cozad updated the committee on the status of the recommendation summary. Daniel is preparing a revision to be presented at the next TAC. The revised recommendations will be on the June 26th TAC agenda. Once approved by the TAC they will be forwarded to the Executive Committee for approval.
- 6) CV-SALTS Program Funding and Contracting Update
- Proposals have been received for two open procurements:
 - GIS Technical Support (BUOS Phase 2)
 - Received one proposal from LWA. The Selection Committee requests that the Executive Committee authorize them to negotiate with Larry Walker Associates and Kennedy/Jenks for completion of Tasks 1-4 in an amount not to exceed \$100,000.
 - David Cory moved, and Mike Nordstrom seconded, and by general acclamation the committee authorized the Selection Committee to negotiate with Larry Walker Associates and Kennedy/Jenks for completion of Tasks 1-4 in an amount not to exceed \$100,000.
 - Initial Conceptual Model
 - The Selection Committee wants to request a presentation from Larry Walker Associates to explain elements of their proposal, prior to recommending an award. It was agreed the Selection Committee should go ahead with the presentation and report back at the next Executive Committee Admin meeting.
 - Daniel reminded the committee that the Technical Project Manager RFQ was distributed earlier that week. It is posted on the website under Procurements. The due date is the end of July.
- 7) Fresno Regional Board Meeting, June 12, and Groundwater Resources Assoc/CV-SALTS Co-Sponsored Conference June 13-14
- The committee reviewed the final preparations and logistics for the June workshop.
- 12) Set next meeting objectives and date – Admin Call, July 19th Policy Session
- The next Admin Call is scheduled for Monday, July 16th from 10:00-12:00.

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July 16, 2012

**CENTRAL VALLEY SALINITY ALTERNATIVES FOR LONG-TERM SUSTAINABILITY (CV-SALTS)
TECHNICAL SUBCOMMITTEE RECOMMENDATIONS REGARDING EC-STUDY TECHNICAL
QUESTIONS**

On 8 March 2012, the CV-SALTS Technical Committee reviewed and discussed several technical issues related to salinity studies to determine appropriate salinity water quality objectives to protect agricultural supply water (EC studies). The committee focused on questions that have been raised during Regional Board staff's recent review of site-specific EC study submittals by the cities of Roseville, Manteca, Colusa, and Vacaville. Discussion points, findings and recommendations for the issues discussed have been documented in Attachment 1 (CV-SALTS Technical Committee EC Study Recommendations, March 2012). Many of the recommendations built on recommendations provided by the committee in a 26 August 2011 letter covering a review of the City of Davis draft EC study workplan (also attached).

In addition to discussing technical issues related to the reviewed documents, the subcommittee also briefly discussed some over-arching policy issues such as utilizing input from local irrigation water users in the process of establishing site-specific EC objectives, defining what level of crop protection is reasonable, and factors that should be taken into consideration in determining the most salt sensitive crop to be protected in a study area. While the subcommittee recognizes that it is more appropriate for the Executive Committee to provide formal recommendations on these issues, some factors they agree need to be addressed include:

- Input from local irrigation water users would be helpful in determining crops that should potentially be protected in a study area and the desired water quality to grow those crops based on the available water sources.
- Establishing different levels of reasonable protection in terms of crop yield, including minimums for different water-year types, in particular during drought conditions.
- Insuring the approach to determining the most sensitive crop to be protected accounts for actual practices, considers economics, and is consistent with the laws, regulations and policies governing the Regional Board.

We appreciate the opportunity to comment on the technical questions and issues presented by Regional Board staff.

Nigel Quinn
Chair, CV-SALTS Technical Advisory Committee

Parry Klassen
Chair, CV-SALTS Executive Committee

cc:

Pamela Creedon, Executive Officer, Central Valley Regional Water Quality Control Board

Attachment 1

CV-SALTS Technical Committee EC Study Recommendations May 2012

1) Is it appropriate to use results from previous EC studies in other areas if the model inputs for the previous study are the same or more limiting than site-specific conditions in the new study area?

Yes: The subcommittee recommended that, at least until local salt and nutrient management plans are developed, the approach of using the modeling results of a previous study is appropriate if it can be demonstrated that the model inputs for the previous study are similar or more limiting than the site-specific conditions in the new study area. The subcommittee also indicated that the approach could be valid even when all the inputs of the previous study are not the same or more limiting, but some inputs are less limiting than conditions in the new study area. However, the committee recommended that in situations where some inputs are less conservative it may be more cost effective to actually run the model since additional checks and/or studies would need to be conducted, such as comparison with the Hoffman model results, to confirm that the approach is valid.

Recommendation: The approach in question is appropriate, but, in situations where all inputs for previous studies are not the same or more limiting, it may be more cost effective to run the model rather than to use additional checks, such as the Hoffman model, as confirmation.

2) What are the key model inputs that need to be similar? If the study you are basing your results on gives a range of objectives, should you always choose the lowest number?

Staff provided the subcommittee a table comparing the model inputs and input sensitivities for both the Hoffman and Grattan models. The subcommittee identified the following as the key inputs for the Hoffman model: the most salt sensitive crop; leaching fraction; moisture extraction pattern; and precipitation. The committee did not comment on the input sensitivities for the Grattan model (as the relative sensitivities were provided by Dr. Grattan), but a question was raised whether one of the inputs listed, leaching fraction (LF), is actually an input into the Grattan model. Staff contacted Dr. Grattan regarding this question and was informed that LF is an input in the model because it determines the applied water at each irrigation. However because it is a transient model accounting for water flows in the root zone, a final LF is calculated which usually varies somewhat from the initial targeted LF. Therefore this initial targeted LF is a key input because it affects the total applied water.

Recommendation: Key model inputs that should be compared for the Hoffman model are most salt sensitive crop, leaching fraction, moisture extraction pattern, and precipitation.

3) Is the use of a transient model acceptable?

The subcommittee confirmed its recommendation made previously for the City of Davis workplan that use of a transient model is acceptable, although peer review of this model is desired. As an alternative to peer review of the Grattan model, in some instances using the Hoffman model as an initial check on transient model results will suffice..

Recommendations: The use of transient models is acceptable, but an initial check of results should be conducted using the Hoffman model unless the transient model has been peer reviewed.

4) What is the appropriate winter bare soil evaporation rate for Vacaville?

In conducting the South Delta study, Dr. Hoffman used a bare soil evaporation rate of 0.7 inches per month, based on a 4-year DWR study (*MacGillivray and Jones, 1989*) conducted in the Central Valley from Red Bluff to Bakersfield. The subcommittee agreed with the use of *MacGillivray and Jones, 1989* to determine default bare soil evaporation rates for Central Valley and that the use of 0.7 inches per month is an appropriate value for the South Delta and Vacaville.

The subcommittee also indicated that site-specific studies of winter bare soil evaporation rates might be beneficial to dischargers in certain situations and recommended they should be considered as another acceptable approach for determining winter bare soil evaporation rates.

Recommendation: The use of *MacGillivray and Jones, 1989* to determine site-specific winter bare soil evaporation rates for various locations in the Central Valley and the use of a rate of 0.7 inches per month for Vacaville is appropriate. But dischargers should, if they choose, be allowed to conduct their own site-specific studies to determine winter bare soil evaporation rates for their study areas.

5) Is the exponential pattern for soil water root uptake the appropriate default for the Hoffman model?

Two soil water uptake patterns can be used in the Hoffman model – the 40-30-20-10 pattern and the exponential pattern - and the model is highly sensitive to which of the two is used. In the South Delta report, Hoffman calculated objectives using both patterns, but recommended using the exponential pattern because it fits field and plot experiment results. The subcommittee concurred with Dr. Hoffman's recommendation.

Recommendation: The subcommittee recommends the use of the exponential soil water uptake pattern for the Hoffman model rather than the 40-30-20-10 pattern.

6) Is the methodology Dr. Hoffman used to determine leaching fractions in the South Delta report appropriate for other areas? In the absence of site-specific data, is 15% appropriate to utilize as a conservative assumed leaching fraction for other Central Valley areas?

For the South Delta study, Dr. Hoffman calculated leaching fractions using tile drainage and applied water data previously collected in the South Delta and checked those calculations with independent soil sensor data from the South Delta. It was the subcommittee's opinion that Dr. Hoffman's approach was appropriate and could be used in other study areas.

For situations where site-specific data for determining leaching fractions is not available, the subcommittee recommended a default value of 15%, citing the fact that anything more conservative than that is seldom seen in the Central Valley

Recommendation: Where data is available, utilize a methodology similar to Hoffman's for the South Delta report, and where data is not available, use a default leaching fraction of 15%.

CV-SALTS Meeting Calendar

2012

1 January

Sun	Mon	Tue	Wed	Thu	Fri	Sat
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				

2 February

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			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			

3 March

Sun	Mon	Tue	Wed	Thu	Fri	Sat
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4 April

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29	30					

5 May

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20	21	22	23	24	25	26
27	28	29	30	31		

6 June

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
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7 July

Sun	Mon	Tue	Wed	Thu	Fri	Sat
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8 August

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			1	2	3	4
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9 September

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10 October

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11 November

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12 December

Sun	Mon	Tue	Wed	Thu	Fri	Sat
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23	24	25	26	27	28	29
30	31					

Notes

2nd or 3rd Thursdays

Dark Green Exec Comm Policy

2nd or 3rd Tuesdays

Lt. Green Hatch Exec Comm Admin

First Monday except conflicts

Yellow Salty 5

Light Red conflicts

✗ Dates Recommended Dark