CV SALTS
Central Valley Salinity Alternatives for Long-term Sustainability

Draft

CV-SALTS Joint Economic and Social Cost and Technical Advisory Committees Meeting
Wednesday, February 10, 2010 9:00 AM to 12:00 PM

Attendees: See Roster for attendance.

Technical Committee Chair Nigel Quinn called the meeting shortly after 9:00 am followed by introductions of all present in-house and on teleconference.

1. **Welcome, Introductions, Circulate Roster**

2. **Review/Approve January 21st** Technical Committee Meeting Notes

   Several changes were requested by members of the Committee:
   End of Section 3 – Hoffman report: The report said the EC was sufficient and the beneficial use at protection level dry beans in the Delta. Joe DiGiorgio asked what the State Board was going to do with the report. The reply was they would look for CV-SALTS group for guidance on that issue.

   End of Section 4 – second last paragraph – Joe DiGiorgio's comment on under sampling was related to groundwater.

   Page 5 – "iron manganese is the byproduct of removing the nitrate" – mobilization of those, it's not like it's being created

   Page 6 – In discussing the winery DMTs, Joe DiGiorgio wanted to add the following comments relating to the discussion: Regarding nitrogen the BMP said they would reduce the load via their best management practices, however, they acknowledged in the report that as far as the fixed dissolved solids of salts in general, basically what you put on the ground was going to get into groundwater and that little is taken up by the crop or converted in the soil.

   Item 10 – "Concentration isn't a crucial issue on its own" Joe DiGiorgio wanted to have the minutes reflect that it ***is*** a crucial issue both in that beneficial uses are affected by concentration, and concentration of salt seems to be more prominent than actual additions of salt as far as affecting what goes on. Also, air deposition and mere scouring the Committee would contend is a minor issue.

   On to page 7 – "Water board recycling policy" refers to Item 2 paragraph B in the policy.

   "Comments being included in any sort of salt management plan" **……** it should read a long-term sustainable plan.

   "If the land use is possible that would add salt" then it should say, "that would require a negative offset amount elsewhere in the basin."

   Item 5 - ILP – should be IL (R) Regulatory P

   Motion to approve the notes with changes made by Rob Neenan and seconded by Joe DiGiorgio - approved

3. Final Report Salt/Nitrate Source Pilot Implementation Draft Report

a. Comment Response **Presentation March 11 – revise methodology**

The Committee was presented the first page of the response as a placeholder from the consulting team and Salinity Coalition responses. Changes were made to the document. Daniel Cozad provided comment responses on behalf of the Coalition for some questions that are not appropriate for the consultant. (e.g.: what was in the scope, not in the scope).

Bob Smith presented an overview. Several comments were mentioned by several people which were not able to be incorporated into the report. One was looking at controllable sources and making a determination about what was a controllable source and what wasn't. That was not something within the scope of work of CV-SALTS.

Suggestions that CV-SALTS should work to improve the models and make them better was also not within the current scope but could be considered in the future if needed.

The key comment was that report needed some conclusions regarding several things with one being how the objectives have been achieved. The other was the significance of the results. Direct conclusions will be added based on those comments.

The conclusion on the achieving the objectives includes the belief that the tools that were used and the results that were obtained are applicable throughout the Valley because the key ingredients and data necessary are basically hydrologic data and land cover data. Those are readily available. The output is refined by the input data, particular groundwater quality data, information on pumpage and information on recharge.

The consultants believe the approach will work anywhere in the Central Valley. Where data is lacking or limited it is possible to make reasonable assumptions to plug into the models in order to make it work. Limitations to the data will also be indicated in the report to make the results a little more clear and accurate.

The finalization of the report has been pushed back a week to accommodate comments from other Committee members. Report will include pie charts to include relative importance of different sources. The final report will be finalized next week.

Presentation will be given at March 11 Technical Meeting.

Joe DiGiorgio asked if the report will quantify what some of the reasonable assumptions would be. Bob replied that where estimates were used, the report stated that numbers were calculated based on normally understood standards. There was no separate list of estimated data per se. Where possible critical data used affects results that data will be indentified in the report. Everything is sensitive to the land use classes and the input parameters associated with those. Bob said he would ask John to work on that.

4. **Coordination Programs Items**
   a. **Upstream Standards Update for March meeting?**

The next technical Committee will be a joint meeting with other programs and projects which deal with salinity. This will be a longer meeting. There will not be an Executive Committee meeting following.

Daniel Cozad asked Jay Simi of the Central Valley Water Board, Staff Lead on Upstream Salinity TMDL Project to provide an overview.

At the meeting March, the Jay will present a draft report that is analogous to the report prepared for the State Board by Dr. Hoffman. That report presented a literature review of crop salinity impacts, as well as a steady state soil salinity model application. The group adopted his methodology and developed an outline similar to his report. The data, though, will reflect the lower San Joaquin River. The report will include a GIS representation of the group's defined "use area" - the lands receiving San Joaquin River water for irrigation application. Data from that area will be presented and ultimately presenting results from using Hoffman's steady state salinity modeling, from a range of leach infractions and present modeling for almonds, beans and alfalfa since those three crops cover a range of salinity-sensitive crops.

The draft report is currently undergoing internal review and should be sent out to Committee members for review prior to the meeting in March.

The group will also be issuing a public invitation for members of the community and stakeholders to come to this workshop and hear the presentation, so the meeting will be a public forum, as well.

Daniel Cozad will send out a notice to the Technical Committee members approximately one week before the meeting with the draft report.

It is hoped that by presenting the report to the technical Committee that Committee will respond with a comment letter, which will be combined with other comments and issues addressed in the final report. The Technical Committee will be able to comment through two meetings, but will be limited to 60 days. The public comment period will also be 60 days.

Question about how the findings in this draft report will fit in with the Regional Board staff report and the various objectives in that report and the Basin Plan Amendment. Jay clarified that the draft report will be included as an appendix to the staff report and will comprise only one component of the potential water quality objectives. It is hoped that this report will provide water quality objectives that would be protective of agricultural beneficial uses. Following the report, other beneficial uses defined for the regions in question will be evaluated and thresholds would be identified that would protect those beneficial uses.

   b. **Nutrient Numeric Endpoint Strategy (Steve Camacho, SWRCB)**

Nutrients are naturally occurring and an adequate balance is required to maintain the life of plants and animals that use and live off and in the water ways. The challenge lies in regulating a pollutant that is not a normal toxic contaminant.

In the beginning stages of the national action plan for the development and establishment of numeric nutrient criteria, USCPA required all states to establish nutrient numeric criteria and recommended an eco-region approach. The Water Board followed this approach, but it didn't really work.

The involved parties – the Regional and Technical Advisory Group, The Startac Group, Tetratech, and the Scientific Expert Advisory Board – developed a weight of evidence approach, based on the use of multiple indicators. This approach provided a robust means to assess ecological conditions, and determine impairment.

The NNE Framework includes a beneficial use risk category approach (BURC), which indentifies the water bodies that most need more detailed analysis, and divides all water bodies into three categories. BURC 1 are water bodies that are clearly impaired. BURC 2 are water bodies that need additional monitoring tools and BURC 3 are water bodies that are meeting standards.

The NNE tools are used as a scoping mechanism that evaluates first cut site-specific model target within the BURC. The site-specific model calibrated for nutrients is anticipated to provide more refined answers to the question of what nutrient concentrations would constitute impairment. Proposed nutrient objectives are being developed in a phased approach. Four case studies have been completed using the NNE Framework and tools. The four water bodies studied were: Clements(?) River, Truro Creek, Santa Margarita River, and Melba Creek. All the NGOs, technical teams, State Water Board staff, USCPA are involved in the process.

5. Historical Ecology of Sacramento/San Joaquin (Robin Grossinger, SFEI)

Historical ecology is one more tool to help groups understand the complex challenges of managing natural resources, and defines the long-term context in which groups like CV-SALTS is working.

For example: in Santa Clara, a lot of the streams have been assumed to be perennial rivers, when historically many of them were intermittent and so were actually in better shape than anticipated once reclassified..

Studying the history of the water bodies in the area will also reveal good spots for restoration and mitigation.

The group is currently engaged in a study of the Delta. Some of the emerging findings include: the Delta is really several smaller Deltas converging into one; Delta has large natural levies and they actually divided it into separate hydrologic regimes. The group also anticipates discovering different types of habitats. The channel networks that the group has been looking at is very relevant for fish habitats, but also how salinity and water quality are expressed through the Delta. The group is also looking at how these networks prevent salinity from entering the Delta.

The group recommended Nigel Quinn present a small summary to the executive Committee.

Daniel Cozad asked how would this information and the proposed work in larger areas to examine the salinity history help CV-SALTS? Robin responded that he didn't know, but from a practical standpoint, it would be helpful to know what the salinity situation was and how policy has affected it since then. Is salt in the areas increasing or decreasing. What things worked and what things didn't. What the trends have been. Could CV-SALTS be using money more wisely in addressing different challenges? Because CV-SALTS is looking at developing goals and targets and strategies for a vast area, no one-stop solution is going to apply to the entire region. It would be helpful to know what specifically is affecting each area that CV-SALTS is looking to address

and have strategies that are more appropriate for the climate and geology and topography of different spots and what will be more achievable.

Robin clarified that while they wouldn't be looking for information that's going to be appropriate to a specific area of the San Joaquin that could be expanded in their future look into the archives, they will keep an eye out for any resources that might be relevant. They would be willing leverage the resources that are currently there for the Delta.

Because of the potential for use of different methodologies in examining current levels of salinity or examining ways to address salinity issues in the Delta, SFEI would be willing to work with CV-SALTS on that project to ensure that appropriate measures are used and how they would translate into statistics and readings.

More information will be available on the CV-SALTS website

6. **Best Management Practice** Review Template

Daniel Cozad apologized to the Committee and Wine Institute for bringing a template rather than the recommendation but wanted to clearly identify several issues.

What should be the basis for our recommendations based on the Wine Institute presentation? Daniel Cozad designed the template like a form for both content and process so with all the information captured at the end there would be a list of recommendations for the BMP. The applicability of facilities and processes – is this applicable everywhere or in other places needs to be clearly documented. If the Technical Committee thinks this is a good idea and wants to present it to the Executive Committee, what is this based on? What's the potential impact and what's the effectiveness of this best management practice?

Daniel Cozad asked for the Committee's feedback on if the BMP Manuals would be able to comment on the reduction in EC and Nitrate that would be accomplished in these facilities; how many of the total number of facilities would do that; what's the magnitude of change (how many tons of salt and how much nitrogen); how is this better for the status quo; what is the cost effectiveness of it.

Rob Neenan asked about whether this effort was looking toward developing best management practices or a best management plan. Daniel Cozad replied, best management plan – a collection of practices put forward by an area or industry.

Daniel Cozad asked for the Committee's feedback on the list of questions he developed to try to determine a best management plan. Rob Neenan and Chris Savage from the Wine Industry indicated, the best management template should follow a holistic approach to evaluating a best practice manual. It will be difficult to be very specific in a broader BMP document depending on what the individual facilities' options are. The list of questions is really a laundry list. Karl commented that the laundry list was fine; he was happy with the laundry list that a particular operator would use to see if there is something they've missed or could do to address the situation they're dealing with. Nigel Quinn asked how this information would be put into a form that would be really useful.

Comment that developing a regulatory framework is different than developing a toolbox. The template is only for BMPs that are asked to be reviewed for consistency with the CV-SALTS Goals. This is purpose and to help identify the improvement due to the BMP implementation if it can be determined or based on actual monitoring in retrospect.

Daniel Cozad will get help on a couple of the questions and making them more generalized to a larger group of BMP practices and a plan, and will write up an introductory page to describe what the form is doing to help achieve the goals for CV-SALTS.

7. **Project List for Grant funding** Materials

The Technical Committee was asked to identify projects that might fall under one or more of the projects types that we might be able to find funding. Daniel Cozad asked for the feedback of the Committee on local projects and how CV-SALTS can find money for those projects. What are the salt management issues? Groundwater management issues? Example: studies recommended by the Hoffman Report.

Nigel Quinn suggested that the Committee get fund/project managers from each of the agencies to help with that. The group should look at those things that the agencies want to spend money on and develop project title or description around some of those things and their various incentive programs. The Committee should look at some of those general areas and pick out the ones that are relevant to what CV-SALTS is trying to do, add a little bit of flesh onto that, rather have a project title laundry list that isn't connected. CV-SALTS has already made that connection between the money available and the things that the group wants to do. CV-SALTS will need to decide what projects we want to do as a group, anyway.

Suggestion that CV-SALTS partner with the universities and find some who want to help develop these things.

Daniel Cozad stressed that the Committee needs to decide on those things that the group would really like to see funded. Funding availability often happens in a cycle. Daniel Cozad emphasized that it would be helpful if there were a list of things that the Committee would like to see funded so that when that funding comes available during the cycle, CV-SALTS can make an application.

Rob Neenan made a motion that a subcommittee be formed to develop a one-page project description, objectives, outcome, benefits and report back to the Committee with recommendations and then the coalition could meet and start going after some of that money.

Karl Longley seconded. Nigel Quinn suggested sending out a circular letter asking people for their ideas. Rob Neenan suggested further that the subcommittee come up very specific ideas.

Vote needed on the formation of a subcommittee to come up with a prioritized list of a minimum of 5 studies that need to be funded.

All in favor – motion carried

8. **Amend with RB needs and Approve Technical Committee Work** Plan

The Technical Committee Work Plan is really close to being complete. Daniel Cozad requested that the action be tabled to the next meeting. Daniel Cozad will work to amending the work plan for the next meeting. The Technical Committee Work Plan is the success criteria that the Committee needs to work with.

Tabled until next meeting.

9. BUOS Phase 1 RFP Review Subcommittee

Phase 1 is GIS-centric. The Committee has approved the draft RFP with everybody's changes. There was a lot of work that was done by the State Board. Daniel Cozad requested the formation of a review Committee because the Coalition wants to release the proposal later in February, as soon as the Drainage Authority's lawyer approves the master contracts that the consultants will have to sign. The subcommittee would need to read the proposal, if necessary interview the consultants and help the Committee select who we would agree to. Members cannot be one of the consultants who would be submitting a proposal for this. Someone from the Regional Board would be necessary and then someone from agricultural and urban and waste water, etc. It should take about 4 to 6 hours of work, depending on if the group wants to interview the proposers.

Nigel Quinn asked about the relevance of the RFP with this new information that has come to light. Daniel Cozad confirmed that the RFP was revised to say the information is actually available instead of "we believed that the information was available." Work will need to be done on the groundwater side. The Tributary Rule will also have to be applied to and work with the Regional Board on indicator permits.

Linda, Nigel, and Rudy, volunteered. Parry and Lisa were nominated.

10. Actions/Recommendations/Report to the Executive Committee

1) Item #5 – Historical Ecology
2) Template on BMPs
3) Final report and presentation summary from the pilot implementation
4) Grant funding opportunities and project list

11. Salt Management Alternatives Development meeting to be scheduled

Dennis Westcott had suggested a brainstorming session to help improve salt and nitrates, whether it's broadly applicable or site specific. Management alternatives. A list – things that we might want to pilot or try in a particular area. Suggested that it be done separately from the Technical Committee meeting to provide the structure needed.

Joe DiGiorgio suggested that some of this information be made available to the meeting in April. Daniel Cozad had anticipated March, but wanted to follow up with Dennis on the most popular date. Rudy Schnagl suggested that salt control lists from other projects (e.g.: Australia or Colorado) and that a university student be engaged to compile that information into a more comprehensive list that of what has been done elsewhere, and that Daniel Cozad's presented ideas be flushed out a little more to give them a little more context.

Consensus on going ahead with the Salt Management Alternatives Development meeting. Daniel Cozad will find two or three alternative dates in late March and early April. It will be a separate meeting from the technical Committee meeting. The objective is to create and expanded list of ideas.

And that a literature review of things that have been done in other places should be done separately from the brainstorming meeting.

12. Discuss Next Meeting March 11 and 2010 Calendar

13. Meeting Adjourned