

**CV-SALTS Lower San Joaquin River Committee
Workshop Notes
Thursday, June 30, 2010 9:30 am to 4:30 pm**

Attendees:

| | | |
|------------------|--------------------|-----------------------|
| Dennis Westcot | Mark Gowdy | Jay Simi |
| David Cory | Joel Miller | Fred Kizito |
| Parry Klassen | Debbie Liebersbach | Gail Cismowski |
| Karna Harrigfeld | Rudy Schnagl | Jim Martin |
| Lisa Holm | Jim Martin | Gene Lee |
| Debbie Webster | Daniel Cozad | Nigel Quinn |
| Tess Dunham | Amanda Montgomery | RWQCB Irrigated Lands |

Handout Materials (Posted at [CVSC LSJC Page](#))

1. San Joaquin Upstream BPA Administrative Record
2. Basin Plan Report Outline
3. Presentations
 - a. Rudy/Regional Board
 - b. USBR MAA etc.
 - c. Upstream SJR Hoffman report comment Matrix
4. Others

Attendees

Agenda Item 1

Daniel Cozad welcomed the group and introduced the workshop purpose as planned before the Committee was active. All on the phone and in the room introduced themselves.

Agenda Item 2 a

Rudy begins presentation on background

Q? Karna – 15 year average charts, do they include New Melones, yes. Can it be subtracted, yes, likely with work it can.

Monitoring data from the Board may be more accurate for chemical components than sources shown. Patterson, Crows Landing, and Patterson are good stations and Mays may be a problem for reliability. Mays station may need to be upgraded to be more reliable to be of use for management. Saline groundwater upwelling into the main stem and (Mud and Salt slough) will be a critical issue for the committee. Discussion - Grasslands has lots of data for salt, green areas, wildlife management issues have special needs as well. Grasslands bypass project has been making change to the salt going to the river, dramatic drop from 150K tons to 50K tons now. Concentrations discharging 4000 TDS, EC has not gone down a lot but flow has decreased. West side regional drainage program (looked at the how it impacted increases in new Melones). Volume reduction should change based on the OCAP opinion would increase flows in spring and grassland discharges in the spring. Concentration and load must be both looked at. 20% comes from the tributaries

but at low concentration. Groundwater or other non-controlled sources from the West side are important sources especially in the summer/fall.

Changes in graphs show August 1987 Regulation of discharges to the San Joaquin River (order 85-1) San Louis Unit drainage program (90's)

Amanda's presentation includes the list posted of materials in the Administrative Record. Also the TMDL Report Salt and Boron, September 2004 Administrative record is on the web. The entire report is on the web but the Technical appendix may be the more useful.

Other issues that will need to be incorporated or coordinated with are

- South Delta Salinity Objectives
- San Joaquin River flow objectives
- San Joaquin River Restoration
- Surface water monitoring
- USBR West side salt and water budget contract projects
- Grasslands bypass
- Irrigated Lands
- SJR Recirculation program
- USBR program to meet standards-RTMP-BMP
- Basin Plan

Patrick indicated that the Landers ave. station has flow is near zero so the load is important because it is not a flow.

AMANDA Montgomery on history of the program

Jay and Frank were staff and historically Dennis and Rudy worked on it and Les Grover and others know a lot.

Administrative record – working record (2005 CEQA Scoping Project is the first entry). If a party comments or if staff relies on it, that brings it into the record.

Jay covers the list and the contents. Chronological list but may be by event or document. Admin record is available and much is on the website. The items that are not could be scanned and PDF the record to prepare and make available to the group and team (request to Rudy).

Hoffman type report for upper San Joaquin Objectives was reviewed and Fred reviewed the Comment Matrix. The report is set up to make minor changes and refers the comments changes to CV-SALTS. Fred reviewed the answers to the comments or the referrals to CV-SALTS

Should the Committee decide to complete the report they may need

- Additional Model Runs
- Dr Grattan (transient model)
- Beneficial Uses (agriculture and municipal water supply)
- Agricultural Beneficial Use is one (achievability is important)
- Range of objectives is important.
- Averaging Period is critical to the end answer
- Update studies of dry beans for new cultivars and field studies and production curves

Today's the last staff day for Amanda's group on the effort.

Dennis's comment: Report may not be able to completed quickly due to lack of information and ability to get up to speed.

Agenda 2 B Issues related to the effort

What the State and Regional Board Planned to do

- Crop Tolerance
- Achievability analysis
- Cost analysis
- Environmental review

*Beneficial use review not included

Agenda 2 C Vernalis TMDL

- A. Point and Non-point sources
- B. 8-20 years depending on high to low priority
- C. Divided by Subareas
- D. Northwest side and grasslands are high priority 8 year compliance dates by 2013 67% of salt on Pre 1996 load data, likely and currently mostly pre-grasslands efforts
 - Salt Slough upstream 9%
 - East Valley Floor (Modesto and Turlock) 5%
 - Tuolumne 9%
 - Merced 4%
 - Stanislaus 6%

Point Sources set NPDES level for EC at 700 for effluent in growing season and 1000 in winter. Non-point source (Real Time Management is encouraged) under a waiver. Fixed base loads and WDR for non-real time participants (general WDR) Irrigated lands Program?

The waivers were (regulatory entities should be regional agencies) for entities and loads allocated by acreage. Supply water credits and other factors should be taken into account that makes it more complicated. Dischargers have 2 options, cease discharges or EC is below 315. BOR allocates a load, a MAA is in place to address the program.

Q Dennis: How was 315 EC determined, what is the relative contribution for non-point sources (2014 is the 8 years for implementation) Regional Board is adopting a program and 315 was used.

Agenda Item 2 C continued

Lisa Holm from Reclamation

MAA Agreement History Phase 1

- D1641 provides limits on loads and other requirements
- Compliance Plan and Report Requirement
- Salinity Management Action Plan

Action Plan

- Providing Flows to the Systems
- Salt Load Reductions
- Real Time Management
- Real Time Monitoring
- Model to forecast salinity

Since Vernalis standard is being met all reductions must be made in the month they are discharged
Monitoring Plan and Monitoring Report are going to the July Board Meeting.
10 days before

Dilution flow credits Release Stanislaus Offsets from grasslands bypass, changes in flow and biological criteria. Operate to the D1641 not to the TNDL salt reduction activities will be other than flow. Assimilative capacity is not in the report (load reduction and grasslands credits). Many other factors are important. Fall pulse flow purchases are included. 52 Mg offset every month of each year. 06-07 delta smelt. VAMP flows are part of the base flow. San Joaquin River restoration flows, Friant to Merced, not below Merced.

Next MAA will include restoration flows in that version. Objective and 30 day running average

- Loading performance is not indicative of the compliance at Vernalis
- DMC in 3 parts
- Tracy to check 13
- Check 13 to Mendota pool

Northwest subareas are much smaller than the grasslands. Grasslands has the project for reductions Reclamation goal for 25% performance load. Volume, water year and many other operational issues graph shows the over allocation black and reduction in gray. 39-100% are met. Next graph black and gray grasslands and the New Malones releases. These efforts to show the collaborative basis for the management and dilution of salts. West Side Salt and Nitrate study resonance time issues and better information on sources and current discharges. August will have a salt and water budget and reports will be out near the end of the year.

MAA Phase 2. 4 year program, to coincide with the 2014 deadline for all high priority groups. May want to focus on performance factors not goals to help us to understand.

RTMP Update Gene Lee

MAA included mitigation in the Real Time Program

1. Different groups, what do we know and how do we move forward. What does the infrastructure look like and how will it work. Identify conceptual infrastructure, salt sources and characterization on west side and east side and model for volume of drainage and timing to hold up, where are the infrastructure going to go .
2. Upstream objectives and locations achievability are studied. West side draft due in August report and technical memo. East side draft in August or September and review and submit pilot programs.
3. Governance Group and how will they structure for Real Time Management. Feed the program and give them some ideas explored.

Q: Tess Dunham: Does the MUN use in the TMDL have the same issue?

Monitoring and data collection and management may be needed. Modeling efforts are currently monitoring looking at alternatives between the SJ RIO and the WARMF to help the management and optimization model. Whiskey software to integrate hydrological system and the model, HEC 5-Q model, DFG has agreed to that model. We want to look forward model that is publically available and processes basis. Data is available and collected by stakeholders.

Agenda Item 2e - Ann Littlejohn - Other studies from the Board

Central Valley Monitoring Directory

Current monitoring programs, interactive map based domain information and SFEI in 2007 and it was expanded into the entire central valley new version schedule in mid July. Helps find data management programs around the valley with links to data on other sites. Workshops July –September November 2010 feasibility study for improvements with stakeholder s for long term sustainability. Funding is included for the next year maintenance and requesting further funding for future maintenance and upgrades. The directory has receiving water monitoring only.

Scope Comments and Discussion:

Vernalis TMDL was covered in brief detail it would require a half day workshop to understand it. It is a multi factor program, is it complicated by comments and changes. The structure and approach with the elements may be simplified.

Tess Dunham: Lower SJR, what is the lower water quality objective? If the TMDL changes the implementation efforts must also change the compliance process for the Vernalis objective. Would the process change, could there be offsets or allowance for the changes.

Vernalis limits are being put into the permits, compliance, Modesto, Turlock, Atwater, Merced, Livingston, (7-8) to 11. Small cities and industrial (fish hatching) set compliance dates after this program is completed. May want to consider a letter to the point dischargers. These are listed in the technical appendix to the final Vernalis TMDL.

Water quality limited segments could be a problem. Listed as a 303d list, Stanislaus to Merced, compared to 900. It still stayed listed for 303 d list. Stanislaus to Tuolumne has improved for Boron, agricultural beneficial use impaired

If we have not looked at the uses, should the 900 be appropriate for the assessment for impairment. Major water bodies have beneficial uses and have been listed, municipal supply secondary 900 (actually 900 recommended 1600 limited) Site specific objectives have been required and CVCWA is considering bringing all the modeling together experts together discuss the models and find the appropriate levels of the ranges that are inputs into the models. Site specific studies are being done by wastewaters. UC Davis provided by the study by Dr. Grattan, new permit was done and remanded to the regional board by December. Discussing with CV-SALTS, may be presented in the July meeting.

Discussion of Areal Extent of the study

Vernalis to Stanislaus - 2 miles review in phase 1 or 2

Stanislaus to Merced primary focus of work

Merced to Mendota – review for inputs in phase 1 and study in phase 2

Merced water transfers will be added the flow operations to make them efficient.

Reasonable protections for Ag Beneficial Use, maybe a panel could be put together such as the CVCWA program: Hoffman, Grattan, John Lightey, Dennis Westcot, Jay Lund, (add cost benefit)

Set questions related what we want to know.

Rudy's presentation on the Generic Outline

San Joaquin River surface water only so some sections can be deleted, ie groundwater etc. Reaches or points (case law focused on reaches) need review the uses and objectives.

Review of the BUOS for the LSJRC

Reviewed and discussed the SJR "beneficial use and objective study handout developed by the ad-hoc committee with changes. Existing Beneficial Uses may need to be set or better set to have defensible Objectives. Boron may not be listed for surface waters in the reaches selected. Nitrate is not believed to be listed for the reach and so does not need to be included.

May have to changes MUN in the area, AGR based on existing work and may need additional work to insure dry bean limits apply and that the models are correct, what is the protection level if other waters are used for dry bean? (Source substitution)?

Items 1 and 2 have been completed. Good discussion on area #4. To be finalized at the next meeting. Reviewed the other tasks. Recommended peer review. Rudy to ensure peer review contract allows for scoping review and continuity so we do not have new reviewers at the final stage.

Next Steps

All will review the materials; Regional Board Staff will provide them and they will be posted on the committee page. The next Committee Meeting will focus on the area of the study and phasing. The scoping, information needs and funding/contracting will be discussed at the next meeting.

Next Meeting

July 26, 2010 in Modesto