

**MEETING NOTES**  
**Special Joint Technical/Economic and Social Impact Committee Meeting**

**Draft Salt and Nitrate Sources Pilot Implementation Study**  
**Monday, December 7, 2009; 1:30-4:00 PM**  
**Central Valley Regional Water Quality Control Board Training Room**

1. Welcome, Introductions, Circulation of Roster  
Everyone in the room and on the phone introduced themselves.  
[Roster](#) shows identified attendees
2. Presentation [PowerPoint](#) and [Report/Materials](#) are linked

**Several questions that were asked during the presentation and are briefly summarized below:**

Q: in land use and application of Dairy Waste, is timing of nitrogen availability important as all the nitrogen is not available upon application?

A: Timing would be important, but in long term land application it is assumed that the application reaches a steady state over the years so 100% is eventually utilized. Comment, could timing of application not change that? It is possible but it is not included in the inputs now.

Q: In groundwater discussion: Are you biased toward wells with problems by using the databases that are from sites.

A: That could be a problem with these databases, the team worked to insure they were not overrepresented. Using the average of several wells rather than counting all the wells into the overall Groundwater Quality assessment

**Questions and Answer Session after the presentation, transcribed from recording**

Q: The atmospheric deposition shown in the model, does it matter what's happening on the land use for that? What causes that to change?

A: It is included because you want to know especially in the case of salt and nitrates how important it is to other sources in terms of how much you have control over and how much might be under the control of something upwind. This more important than land use.

Q: You show aerial deposition as a major source. In the report, I don't see too much about that and what that data is and where it comes from. Because it is a relatively large portion of salt, I would suggest that you spend a few more words explaining what that is in the report.

A: We can expand on that. The amount of TIC is centered on pH and the pH ranges is an important part of it. If you measure concurrently all the different ions and measure TDS the difference is because of inorganic carbon and we could expand on that in the report.

Q: Distribution of applied sulfate countywide in the Modesto area and its most likely going to be applied to the western part of the county Gypsum and other minerals are present in the soils is that in the model?

A: Included in the model is mineral weathering and it would generate some salt. This is not very well known. What we see is minor, but between 10% down to 1% in the Yolo area and again they tend to show up in the surface water data. If you run it through the model you get a lot more salt in the surface water than you would expect based on salinity input that's implied before coming from the mineral breweries. It's one of the items that is hardest to measure. This important in the West side of the valley.

Q: When we're talking about calibrating stuff, you mentioned the surface water was used more for calibration rather than input. What kinds of things might be there that you're not picking up? If you're calibrating based on that, what did you change in order to make it match up with the surface water or did you?

A: In terms of how we manage the watershed in the Central Valley, a lot of times it's a matter of finding out there must be a diversion somewhere that we don't know about or a point source that we don't know about. If it was mineral weathering that would be something that would be implied in the surface water that could not be accounted for.

Q: Then, as far as uses for water, etc., there probably isn't a whole lot to keep track of, but where would you put recycled municipal water? Would that be a point source? Or would that be a land-use thing?

A: In here, we apply it as point source, but you could put it under irrigation water or land uses. It could be applied to specific areas if they are known.

Q: Do this report present this information in a way that could develop a toolbox? That would help us figure out what we would expect to be part of the salt budget or the salt water budget. All the elements are in this report, but how do we transfer this into a guide or provide graphics that would help people understand how to bring those tools together. You have the most of the information here are all the sources. Here are all the ways. Here are the things that are most important. Here are the tools we can use. I don't want to lock everyone into this particular set of tools, but I don't want them to spend hours wondering where all the tools are. They will have this report that provides them with the tools. The report is good overall.

A: That is something to think about when preparing the final report. What is the most valuable data to have or to monitor for.

Comment: What was the level of cooperation on the various parts of the elements of data? Those will be good guidelines in terms of how to go about gathering the information. This is a stakeholder type of business, but I would like to see some guidelines in terms of how to get some of the critical data out of your data sources. And if there are difficulties, maybe suggest ways in which they can be overcome.

Comment: There are certain parties you need to involve or develop a plan or assessment to have it be successful.

Q: It's always difficult when you mix units. There are a lot of kilograms and feet. Provide the equivalent measurement – both imperial and metric. Most of the university figures will be presented in metric.

Q: With a lot of your figures, you can't tell when one of those greens apart you can only get partial information. Include the actual numbers in the legend so then we can tell the numbers. As it is, you're only getting partial information in that graphic.

A: There is a table that has all the figures you're talking about, we will look other measures that may make it better.

Comment: If you have the legend and the actual number or label the bars so you actually have the figure itself. It's nice to have the relative number.

Q: I don't think I read anything about septic systems and how they were analyzed.

A: They were treated separately. With a per capita and then overlay of septic occurrence information with boundaries. There were people on septic systems in each catchment and those were pretty much the only sources for salt and nitrates.

Q: With CVHM your budget areas were very large, but with Steve's Modesto model, it was very much more refined model, but you seem to prefer CVHM. Has a lot of the Modesto model been built into CVHM or are those...?

A: The CVHM was used only for Yolo.

**Daniel: Additional suggestions to be sent to Bob by email through the 21st. After the 21<sup>st</sup>, suggestions should go to Daniel by email.**