

All –

Reflecting upon the comments we received during the meeting last week in Sacramento, I have the following observations and recommendations:

Observations

1. Two of the speakers (Region 5 and the Coastal Sampling Coalition (wrong name, I know)) spoke to points which just did not exist in the report. For example, I heard statements such as:
 - a. We are recommending immediate results
 - b. Everything we are recommending is mandatory.
 - c. We are giving no guidance.
2. Item (1) indicates to me that just because we wrote something in the report, some of it
 - a. Will not be read, or
 - b. Will be ignored because there is a different agenda.
3. Two of the speakers (Region 5 and the Otter group) were focused on what I would characterize as “we want people to write tickets, and the job of the expert panel is to tell the regional boards how to do that – starting right now.”
4. The Region 5 speaker emphasized that she had enlisted a whole panel of experts that had given her the advice regarding monitoring of the groundwater, and quite frankly, we aren’t qualified to contradict them. I always wonder if the questions that were posed to the other panel were the proper ones. If you ask a vendor of ice cream what to provide to a party, the answer will likely be “ice cream”. If you ask the Air Force how to handle a problem, they will get into the details of how to bomb the place – even though there are other options that have nothing to do with bombing. If you ask a soil scientist what are all the details that are needed to truly understand the nitrogen destinations in the soil, you will get a very detailed answer. And the answer will be different if it was a soil physicist who was asked the question, and so on. I think the advantage that we had as an Expert Panel is that we have a wide range of experiences, so we didn’t just assume we needed to answer every question as asked.
5. In talking with Joe Karkoski – the technical person from Region 5, he mentioned that we aren’t really “that far apart” because their reporting will require data on inputs similar to what we are requiring. But what he evidently completely missed is that the foundation of our recommendations is not just reporting data – it is really the completion of a realistic water/nitrogen management plan. And I just could not get that across to him.
6. We were told this before by Darrin, but I just didn’t realize how serious the issue was. The regulatory people want an answer that fits into the standard point source problem. But to me, a point source problem is extremely simple – it can be easily quantified, you don’t need to understand the whole process to solve the problem, you are usually dealing with a “containable” problem (such as leaky gas tank, a discharge from a pipe, a smokestack, etc.), and the solutions are strictly technical. You follow steps a, b, and c and you get result “x”. No ifs, ands, or buts about it. Plus, there is usually a controlled process. What we have is completely different in all of these aspects. Joe K, for example, has a degree in chemical engineering.

7. I think that the regional board staff have the highest training need priority. They need to understand the PROCESSES involved, and their complexity and uncertainty – both in the SOURCE of the nitrate, the DETECTION AND QUANTIFICATION of it, and how to determine the RELATIONSHIP between what they see and the source.
8. Joe K thinks we need research on how to reduce nitrogen flow to the vadose zone. He was very insistent on that. I told him that our approach was very basic – if there is little extra water and nitrogen, the leaching will be minimal. And every field is different, so he is going to waste a lot of money.
9. Joe K is also very insistent upon the importance of monitoring shallow water tables to develop some correlation between what is seen there and the surface practices. But I really don't know what specific numbers he would get, and how they would be effectively used.

Preliminary ideas.

1. The report will need to start with our specific recommendations for action – at the very front, in the executive summary.
2. I think we will need a “background” section at the beginning of the report that lays out some of the complexities – even though we tried to do it in the text. I will work on a schematic that shows the water and nitrogen processes within the numerous other farming processes.