Comments on 2nd Draft Proposal

Long-Term Irrigated Lands Regulatory Program Alternatives

John Letey Jr.

As in the past, my comments are strictly limited to ground water and not surface water. Pesticides are also excluded from my comments. I am pleased to see a trend toward monitoring management practices rather than chemical composition of water below the root zone as compared to the first draft. I previously tried to make a convincing case that the chemical composition of the soil-water below the root zone is not an accurate indicator of the quality of the management practices.

I do not have any comments on Alternative 1.

Alternatives 2 and 3 seem to be similar except that Alternative 2 specifies a third-party lead entity and Alternative 3 specifies an individual farm quality management plan. This seems to be a difference in administrative structure, an issue on which I have no thoughts. I will comments on specific items listed for the alternatives.

Alternative 2 – I note on p12 that groundwater management plans are to be developed, and on p14 monitoring will entail tracking the level of GQMP management practice implementation. The emphasis is on management and that is good.

Alternative 3 – On p14 it states "…growers would have the option …..in the development of a farm water quality management plan (FWQMP)." The monitoring provisions on p16 state "Required monitoring would include evaluation of management practice effectiveness." Again emphasis is on management and that is good.

The State Water Resources control Board appointed a "Nutrient Technical Advisory Committee (TAC)" in 1994 to develop recommendations for nutrient management in California which meet the varied interests of those who have a stake in the quality of California's waters. The recommendations of that committee most closely match alternative 3 in the 2nd Draft Proposal. The following is a quote from their recommendations.

"The committee recommends a self-assessment for growers to determine what their risks in contributing to nonpoint source pollution and to develop management plan to minimize their contribution to water degradation. All growers will participate in a two-part assessment program, but the extensiveness of the management plan depends on the pollution risk of their operation."

The next two paragraphs in that report give details on the two-part assessment program. Basically it proposed that the grower determine a "hazard index" (HI) for each field based on the soil, crop, and irrigation system. Based on the value of the HI, different procedures were to be followed. This recommendation was never implemented because

material was not available to growers whereby they could determine the HI for their fields. That deficiency was recently removed by the University of California Center for Water Resources when they developed and made available on-line all information that a grower needs to calculate their HI. Furthermore, information is provided to assist the grower develop management to reduce the potential groundwater degradation specific for each field based on the crop and soil.

I strongly recommend that the TAC report be reviewed and the information contained therein used in the present exercise. I now return to the 2nd Draft Proposal.

Attachment C provides information on GQMPs. The 2nd, 3rd, and 5th bulleted items are generally consistent with the TAC report.

Alternative 4 – This alternative proposes a tiered approach. This alternative might be considered to be similar to using the HI proposed by TAC as an approach. However, review of the details contained therein, reveals a vastly different approach. The criteria for selecting the tier are generally complex requiring expensive water sampling. The chemical composition of water below the root zone is emphasized in the monitoring rather than monitoring the management practices. I have previously presented scientific evidence that measuring the chemical composition of the water below the root zone cannot be used to differentiate good from bad management. I will not repeat that here. This alternative establishes a very expensive operation with very low probability of being effective.

Alternative 5 – This alternative seems to emphasize groundwater monitoring rather than management monitoring. This adds expense to obtain data of limited utility.

Summary – Alternative 3 has the potential to achieve the desired goals and fortunately appears to be the least expense to implement and growers to comply.