California Certified Crop Adviser

Comment on *Conclusions of the Agricultural Expert Panel: Recommendations to the State Water Resources Control Board pertaining to the Irrigated Lands Regulatory Program*

The California Certified Crop Adviser (CCA), Board of Directors agrees with the overall conclusions and recommendations of the Panel. Specifically, we agree with their conclusion that there is need for a new paradigm in California to address the potential water quality issues associated with nutrients, and the critical role of planning in minimizing those off-site effects. We also agree that the new approach should primarily focus on three areas: aggressive grower and planner outreach and education related to nutrients and irrigation, nutrient and irrigation water management plan development, and concise reporting that is separate from the planning process. As the Panel acknowledges, we also recognize that there are significant challenges associated with implementing real nitrogen management, as well as limitations with using groundwater monitoring to determine the direct effects of management practices on aquifer water quality. Soil-plant nitrogen dynamics in agricultural systems are subject to numerous environmental variables and a substantial degree of uncertainty. Nonetheless, raising grower awareness and requiring the development and implementation of simple yet agronomically sound nutrient management plans will do much more to address nitrogen losses from agricultural fields than overwhelming growers with complex reporting requirements based on tenuous assumptions.

If the Expert Panel Report recommendations concerning the need for improved nutrient and water management plan development and implementation are adopted, it is likely that Certified Crop Advisers will be called on to write plans and assist growers with understanding and applying them. Depending on the extent of the requirement for nutrient management plans, the task of developing plans in California could be monumental. Because of the potential involvement of CCAs, the California CCA Board of Directors submits the following comments related to nutrient and water management planning.

- For many crops in California, nitrogen requirement and removal data are not available. If the state determines that nitrogen management plans will be required, work on providing meaningful crop nutrient demand information should be undertaken. The SWRCB should enlist the services of other agencies or the University of California to help ensure an unbiased completion of the project. Ideally, when they exist, location-specific data could be used, but often it seems that the best is the enemy of the good when it comes to nutrient management planning. Rather than planners needing to scramble and use whatever sources available to them when developing nutrient management plans, realistic values for crops could be compiled based on expert knowledge. Although it lacks scientific rigor, this information would provide standard, agreed-to, and accessible values until that time when there are field data to replace them.

- The format and content requirements for nutrient management plans should be clearly defined and consistent across the state. Plans should contain components similar to those highlighted in the Report on page 23, and once those are determined the plans will be effective regardless of crop or location. Region-specific requirements unduly complicate the process.
- Standardized nutrient and water management training materials and planning tools would be extremely helpful to growers, planners (CCAs and others), and regulatory entities. Any existing useful material can be employed, or when necessary new curriculum and tools should be developed. Full consideration should be given to the professional responsibilities and time constraints of growers and planners, and on-line training options should be made available whenever practical.
- Ultimately, the responsibility for plan implementation should lie with the grower/manager and not the CCA or other planner.