August 7, 2014

To: commentletters@waterboards.ca.gov

Re: Draft Conclusions of the Agricultural Expert Panel dated July 2014

Dear Agricultural Expert Panel Members:

The Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties represents over 160 growers, shippers, farm labor contractors, and supporting agribusinesses. Similarly, the Grower-Shipper Association of Central California, representing Monterey, San Benito, Santa Cruz and Santa Clara counties represents over 340 members. Our members grow diverse row crops such as broccoli, strawberries, lettuce, celery, nursery products, field flowers, and wine grapes. Both of our organizations strive to maintain a vibrant agricultural industry by assisting our members to address challenges and capitalize on strengths and opportunities. Water supply and quality was identified by the membership of both organizations as one of our leading priorities in 2014.

Appreciation of Expert Panel

We appreciate the thoughtfulness of the Expert Panel in the public hearing process and developing the draft report. The Panel has been tasked with a very difficult and complex assignment. We appreciate the Panel’s efforts to make recommendations to improve the Irrigated Lands Regulatory Program. We further appreciate the incorporation of our previous oral and written comments in the Draft.

Irrigation and Nutrient Management Plans

A new approach that transitions the Farm Plans currently used in Region 3 to Irrigation and Nutrient Management Plans is referenced in several places, including the text box on page 23 and page 26 item 2. The draft requirements listed in these two sections are inconsistent and should be revised for consistency.

There is a wide range in the level of sophistication of growers: some already collect and analyze information related to irrigation and nitrogen inputs while others do not. We believe the requirements for all growers should focus on basic nitrogen and irrigation applications. If resources allow, some growers will continue to collect additional information for their purposes but this should not be a required component of the plans.

The exact intent of the current draft language is unclear but we oppose requiring a field measurement of distribution uniformity (DU) as a mandatory element of the plans. This could be more appropriate for irrigation systems that are installed for longer periods of time, such as orchards and vineyards, but would present tremendous difficulties for the dynamic irrigation infrastructure cycles in fruit and vegetable row crops. We agree that proper irrigation design, management, maintenance, and actual DU is important for nitrogen management. However, we do not believe that actual measurements of percent DU is the only way to accomplish this goal. We believe that this is a tool that growers may use to inform their decisions but should
not be required to use. Many growers are able to visually assess their fields in terms of wetting patterns and plant health and can use this as an accurate proxy for an in-field irrigation evaluation. Furthermore, growers could generally compare timed irrigation system “catches” as opposed to entering these values in a spreadsheet that would compute the percent DU. Many growers would not have access to the tools or human resources to consistently conduct such evaluations or analyze and act on the information before the end of the crop cycle.

**Given the significant data gaps in crop nitrogen uptake, particularly for the tremendous diversity of crops and varieties grown on the Central Coast, we oppose requiring crop nitrogen uptake as a standard component of the irrigation and nutrient management plan.** There is still a need for research in this area and coalitions, UC Cooperative Extension, and the private sector could play a significant role in continuing to refine our understanding of this information. There are many crops grown on the central coast that don’t have established nitrogen uptake values. Given the information available now and in the near future, nitrogen removal by crop type is better estimated on a coalition level and should not be required as a specific component of an individual irrigation and nutrient management plan.

We are also unclear on what exactly is meant by the **residual nitrogen in the soil.** We have concerns about how this will be interpreted by the regulatory community. Flexibility in methods and timing for collecting this information will be important.

Page 26 item 2e also requests a **table summarizing the expected inputs for the year; this is not widely feasible given difficulty to anticipate weather conditions in advance.** This impacts both rainfall and plant growth rates at different temperatures which can vary significantly from year to year.

Page 26 item 2f requests a **list of improvements to be made in the coming year.** This is more consistent with the practice-oriented Farm Plan in place with the current Ag Order but is inconsistent with the records-oriented irrigation and nutrient management plan being proposed by the Expert Panel.

We ask that the Expert Panel further refine the proposed elements of the Irrigation and Nutrient Management Plans incorporating the suggested revisions to make the requirements clear, consistent, and feasible for the diversity of grower and service provider resources.

**Education and Training**

**Limitations of “Formal” Trainings**

Our Associations have long, successful histories of training our members, particularly in the areas of labor law and Ag Order regulatory compliance. Based on our experience and feedback from our members, **we do not find structured, formal, classroom-setting courses similar to those proposed on page 26 item 3b to be the most effective way to train the target audience.** Many members of the agricultural community are **kinesthetic learners:** they “learn by doing,” being actively engaged, and connecting information directly to their situation. Historically the Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties has been one of only four organizations statewide approved by the California Labor Commissioner to conduct annual eight-hour Farm Labor Contractor continuing education courses required to obtain or maintain a license. We believe that there are much more effective ways to conduct initial and continuing education than the FLC approach, which would be most similar to what is being proposed on page 26 item 3b. Another limitation of this model is that because the curriculum is standardized, time must be expended training on topics that are relevant in other areas of the State but are not applicable to our local community. **We also question the usefulness of distance learning (page 27 item 3c) for similar reasons.** We do not have firsthand experience with the UCCE CCA training mentioned in 3a but anticipate that this would also be considered a more formal
training. The types of courses proposed in 3b and 3c (and possibly 3a) seem most appropriate for someone new to the industry who does not have hands-on experience to relate to or build on.

Another Training Format to Consider

We instead recommend adding another option for training venues/approaches that is more similar to UC Cooperative Extension Field Days. The members of the GSA SB and SLO Water Committee expressed interest in a field training setting or a course that combines a classroom component with a field component. This would best connect with all different learning styles to best absorb and retain key information.

Standard versus Customized Curriculum

Although structured training material can provide consistency, especially for core concepts, training topics need to be customized for a particular region and/or commodity. For example, extensive training on nutrient management for almonds in the Central Valley would not be particularly useful for a Central Coast broccoli grower. As we’ve detailed in previous letters, we believe coalitions, commodity groups, and/or trade associations could play a very important role in connecting growers with the information that is most needed and applicable to their specific situation. A core set of basic educational materials addressing introductory concepts could be helpful but repeat training on basic concepts once mastered would not be helpful.

Instructor Qualifications

The concept of who is “qualified” to instruct is somewhat subjective. Knowledge of local conditions, strong rapport with growers, and the ability to communicate technical information in a way that a diverse audience can understand should be considered important qualification criteria.

Lessons Learned from Grower Trainings

We have found the following to be most effective in conducting outreach to our members:

- In our outreach on Ag Order compliance we have found that an hour and a half is the optimal time duration to introduce new information. Longer durations are feasible when there is less new information being presented.
- The course material must be applicable to the in-field realities of growers. An instructor familiar with these complexities is important to connecting with growers.
- Grower panels sharing experiences can be very effective in stimulating discussion and exchange of ideas.

We have not found the following to be effective in our long history of trainings:

- We do not believe that an hour-based training approach is effective. The quality of the instructor and relevancy of course content have a much greater impact on engagement and information retention.
- Redundancy in training when a concept is already mastered is not useful.
- Standardized training that does not consider complex field conditions or realities is not particularly useful.

Best Management Practices

We appreciate the Expert Panel’s page iii Point 13, regarding management practice effectiveness and data collected on the farm. We believe the education noted above will do much to assist growers as they collect data and trial new management practices, but it’s important to remember that consistency in approach and collection is challenging when, as in our region, you’re working with almost 1,850 separate operators. We agree with the Panel that tools can provide guidance, but none can provide certainty. We believe a coalition on the Central Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties & Grower-Shipper Association of Central California
Coast can be very effective in assisting growers as they learn which practices are most effective based on the many distinct variables each grower/operator must work with.

**Nitrogen Reporting**

We appreciate your recommendation strongly supporting the role of coalitions in reporting. We ask that you further reinforce this paramount recommendation with a text box and bold print so its important message stands out more clearly.

We find the recommendations in the Draft to be a significant improvement over the current reporting requirements for high nitrate loading risk Tier 2 and 3 farms in the Central Coast Region 3. The suggested aggregation by year conducted by the coalition, as well as allowed flexibility for complex crop dynamics is helpful. We also appreciate Key Point T, which details that this information should be reviewed as a multi-year trend analysis instead of a year-to-year comparison. Our members experience widely variable weather events from year-to-year, and therefore must make input decisions that might vary significantly from the previous year or the coming year. These factors outside of their control shouldn’t be compared on an annual basis, but should instead be part of a multi-year analysis of management decisions, in the context of the numerous factors that might influence and change pre-season plans. We also appreciate Key Point X, which notes that there are tremendous differences between input management for perennial and annual crops.

We further appreciate the recognition of the complexities of nitrogen use and reporting. We encourage nitrogen usage trends to be reviewed in the context of other pertinent information in collaboration with coalitions, trade associations, and commodity groups.

**Surface Water Monitoring**

We appreciate Point BB, and agree that a surface water monitoring program that measures multiple points in a watershed, rather than at each discharge point off a field, is most appropriate.

Thank you for your continued consideration of our experience in assisting members with implementing the Ag Order in developing your recommendations. We look forward to the final draft and subsequent improvements to the Irrigated Lands Regulatory Programs.

Sincerely,

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