

December 21, 2017

Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
Cal/EPA  
1001 I Street, 24th Floor  
Sacramento, CA 95814-0100



**RE: Comment Letter – Second Draft Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group – SWRCB/OCC Files A-2239(a)-(c)**

Dear Ms. Townsend:

On behalf of the signatories below, we would like to express our appreciation for the opportunity to review and comment on the above mentioned Draft General Order. ***(Direct quotes from the Draft Order are italicized)***

**General comments**

*The water boards must strike a balance that, on the one hand, requires sufficient data collection and reporting to allow for meaningful feedback on the program, but, on the other hand, avoids extensive data requirements that demand excessive and unwarranted time and cost to produce and analyze by the growers, the third party, and water board staff. In striking that balance, the water boards should also take into consideration grower concerns with disclosure of trade secrets and proprietary business information.*

- We appreciate the SWB's concerted efforts to make this order workable for all stakeholders.
- We also agree that setting precedential provisions to bring the state as a whole under a more uniform water quality program provides growers with cost benefits and simplifies reporting for growers who have fields in multiple watersheds/water quality regions.
- That said, significant variation and differences in cultivation practices, environmental and climatic conditions, and growing seasons creates difficulty in enacting a uniform state-wide program at a granular level.
- Those conditions create a challenge for the SWB to develop an Order that is truly workable for all stakeholders. Our members are committed to working with the SWB to refine the Order to establish clear provisions with enough flexibility for regional water boards and third-party groups to work with their members to meet water quality goals.
- In addition, in some cases, our members are looking to the SWB's Order to be prescriptive to a degree that protects them from individual regional water quality control board's overly aggressive approaches to monitoring, reporting, and enforcement that extend beyond the Water Code, Nonpoint Source Policy, and other regulatory policies and programs. Activist boards that have aggressively enacted punitive water quality program requirements without recognizing input from growers has resulted in a less constructive environment and cooperative relationship between those particular boards and the agricultural community. We believe that the overall goals of improving water quality can best be accomplished by working

collaboratively with growers at the outset to listen and understand their concerns about the potential unintended consequences that proposed requirements may have on operations.. Unfortunately, some Regional Boards have created unnecessary resistance and animosity in the growing community by failing to recognize grower concerns and failing to adequately consider how requirements will affect growers' ability to grow crops.

### Third-party Groups

*Because third parties build on relationships already in place with growers, third parties can engender a high level of trust and more effectively reach out to growers to increase understanding of the permit provisions and to facilitate management practice development and deployment, especially in cases where improved management practices are required of particular growers.*

- Our members appreciate that the SWB recognizes the importance of relationships that are built on trust in developing an effective Order. We concur with your assertion that this is key to working with growers - especially those who need to improve their management practices. Contentious relationships only add confusion and obstacles to achieving water quality goals.
- However, we have some concerns that the Order is heavily dependent on the availability of third-party groups to collect, analyze, and report water quality data. The Central Valley has successfully used a third-party groups to manage their water quality program; however, other regions have not had equal success with this approach and have abandoned or significantly abandoned the use of third-party groups for data management in some cases. In some of these regions, growers lost confidence in the third-party group as representatives when their identities were exposed and they were forced to report their data individually instead of in aggregation which was then publicized.

*...there are a number of cost benefits to the growers enrolled in a third-party program. These include centralization of fee collection and the resulting reduction in the growers' annual water board fee, potentially reduced costs in management practice implementation facilitated by access to management practice effectiveness information, significantly reduced monitoring costs due to allowance for regional and trend water quality monitoring by the third party in lieu of individual farm monitoring under an individual permit, and reduced reporting costs when the third party shoulders responsibility for data entry into systems...*

- Our members agree that there are numerous cost benefits to utilizing a third-party program. However, grower confidentiality is vital to the success of third-party groups. None of those cost benefits matter to growers if their data are not handled confidentially and are not reported in aggregate. Most growers are working in good faith toward water quality goals, but occasional circumstances arise beyond their control that result in data that appears unfavorable. Publicizing individual data out of context can have significant negative impact on a grower's business.

### Confidentiality

*Because the multi-year A/R ratio will provide a concrete, measurable, and reliable benchmark by which progress in reducing groundwater nitrate impacts can be determined, we find that the data should be reported to the Central Valley Water Board by field (although, as we discuss in more detail later, we allow for the field-level data to be reported with anonymous identifiers, rather than Member name or location)...*

*There are nevertheless compelling reasons for the non-aggregated nitrogen application data to also be reported to the Central Valley Water Board at a field level.*

*An additional reason we direct the Third Party to submit field-level data to the Central Valley Water Board is that it allows for appropriate oversight by the Board. Access to the full field level data set enables the Central Valley Water Board to verify the accuracy and completeness of the Third Party's calculations and analyses. It also allows the Board to exercise reasonable oversight to confirm that the appropriate Members have been identified as outliers for follow up by the Third Party and, if warranted, the Central Valley Water Board.*

- *Can grower identity truly be protected when using field-level data (e.g., APN identifier) or is it discoverable through publicly available government information?*

*Finally, the data set will have uses beyond the short-term needs of the water boards; for example, researchers may use the data to conduct studies advancing the science supporting future developments in the regulatory program, environmental justice groups may use the township-level data to assist in planning for areas that may need drinking water assistance in the future, and local agencies may use the data in groundwater quality management efforts.*

- *Our members are greatly concerned that making data available to researchers and environmental justice groups will increase the possibility of growers' identities being discovered and data misrepresented. We understand the value of independent research, however, not all individuals and groups act in good faith when evaluating and publicizing data. We think it is critical to the economic vitality provided by the agricultural community to the state of California that this information to be analyzed in a fair and unbiased manner.*

*While we direct reporting of field-level data, rather than aggregated data, to the Central Valley Water Board, at this early stage in the development of the multi-year AR data framework, we will not require the individual field data to be routinely identified by name or location. We are satisfied that the goals of the program can be carried out effectively if field-level data is linked to anonymous identifiers, with the Third Party withholding name and location data, at least in the early stages of the program. We heard extensive testimony in these proceedings from third parties and growers stressing that the continuation of a third-party framework in irrigated lands programs depends in part on an expectation of confidentiality for growers who prefer to interface with a third party rather than the regulatory agency. As we described in Section II.A., we believe and emphasize that third parties serve an extensive set of functions for growers beyond the maintenance of confidentiality, and we are not persuaded that the maintenance of confidentiality, in and of itself, is a legitimate goal of a regulatory program that must have transparency and accountability to the public.*

*We will, however, proceed cautiously at this time and not require more information than we find is necessary to effectively manage the irrigated lands regulatory program and provide the public with the essential assurance that we are doing so. We will periodically evaluate whether the framework we set out here is, in fact, sufficient to enable the oversight and transparency necessary to ensure measurable progress toward achieving water quality requirements and may require disclosure of name and location data in the future if we find it is not... For now, however, we expect that the value of a fully- functioning third party will more than offset the additional burdens that are associated with receiving data that is largely anonymous.*

- We agree that confidentiality is not “in and of itself” a legitimate goal of a regulatory program that must be transparent and accountable to the public. However, in reality it is an essential element for safeguarding the trusted relationship between growers and third-party groups and, hence, the full cooperation of the growing community in an irrigated lands regulatory program. As previously stated, we firmly believe that erosion of trusting relationships will undoubtedly undermine the efficiency of achieving water quality goals.
- As currently written, there is an unambiguous threat of confidentiality being revoked in the unspecified future. Does this threat of revoking confidentiality not undermine one of the primary incentives/purposes of having a third-party group (e.g., coalition) approach?
- As mentioned above, our members are uncertain as to what “the additional burdens that are associated with receiving data that is largely anonymous” are. With the exception of the initial establishment of identifiers, anonymous data should be analyzed no differently than other data.

### Irrigation and Nitrogen Management Plan (INMP)

#### Summary of concerns:

- Our members are concerned about the amount of work involved in tracking, reporting, and calculating nitrogen removal.
- Requiring all INMPs to be certified significantly increases the need for Certified Crop Advisors (CCAs). Are there enough CCAs available to certify every Members’ INMP?
- For Members who are not part of a third-party group, are there enough laboratories with the expertise to handle the amount and type of testing required?
- Accurately calculating nitrogen removal rests heavily on the development of appropriate coefficients. How was it determined that three years will produce enough data to develop robust coefficients for the 400 crop varieties grown in California each year?
- Specialty crops grown on the Central Coast are susceptible to changes in growing and market conditions resulting in losses in harvest. This would have a severe impact on the nitrogen removed component of the A/R ratio and mistakenly flag an otherwise exceptional grower as an A/R outlier. Contingencies are needed for A/R ratio and A/R outliers.
- California’s agricultural community carries a significant regulatory burden even while they maintain the largest production in the country for many commodities. Many farmers are adopting sophisticated innovative practices to improve their impact on the environment. We are concerned that regulatory overreach could have the undesirable effect of stifling innovative solutions to environmental problems.

### Nitrogen Removal Calculations

Our members have expressed many concerns about the formulas the SWB is proposing be used to calculate nitrogen removal. While the effort to simplify the formulas is appreciated, in reality production practices are more complicated than the formulas allow. Growers are unsure how their cultivation and harvest practices should be interpreted or utilized within the formulas. Some of these issues relate to crop rotation within a field, variation in harvest practices within a growing season,

variation among units used to quantify yields, and climatic conditions that vary within a day. For example:

- How a crop is harvested may change from customer to customer; customers dictate how some crops are harvested.
- Units of measurement used to quantify crop yield are not necessarily consistent from crop to crop grown in a particular field (i.e., count vs. weight measurements).
- In addition, weights of crops with high water content change throughout the day depending on the temperature and humidity level.
- Some crops have small harvest windows and market, labor, and climatic conditions may result in the crop being plowed under. Under the current formula, growers would be penalized for what is considered a positive sustainability practice.

On this particular issue, we believe it is imperative that the Regional Boards have the authority to work with growers to calculate nitrogen removal within the context of how crops are grown within their region (i.e., crop rotations). Many of our members do not grow in the same location or even region from year to year nor do they necessarily grow the same crop from year to year. This presents a challenge for calculating nitrogen removal using three year averages. Some questions that arise due to variations in practices are:

- Is nitrogen removed calculated per crop? If so, does the 3-year average mean three consecutive years?
- Can the 3-year average nitrogen removal calculation be assessed per field?

#### Development of Coefficients

*In determining the appropriate coefficients, the regional water boards must approve the values, but may rely on their own research or on the research of the third party, including a review of the scientific literature, and further may consider for approval coefficients evaluated by other regional water boards.*

- Establishing robust coefficients may take more than three years of data for some crops in a particular growing region. What are third-party groups/Members to use in the interim to calculate nitrogen removal?
- Is the State Water Board aware of the Geisseler Report? This report recommends testing crops grown in the CV under varying conditions over several years to determine the N removed. This is in contradiction to the Board's recommendation to the Central Valley Water Board to consider use of other regional water board data.

*The multi-year A/R ratio, as proposed by the Agricultural Expert Panel and implemented in this order, is distinguished from previous ratios in two ways. First, it utilizes removed nitrogen instead of nitrogen uptake/consumption. This is an important simplification as it is based on a measurement instead of an estimate. The basis of any good performance metric is that it relies on quantitative measurements that can be performed simply and repeatedly with relative accuracy and that it is easy to understand. The uptake/consumption of nitrogen by a crop as it was employed by the previous orders was based on estimation, not a measurement.*

- Geisseler (2016) consistently refers to his calculations of nitrogen removed by the various commodities as "estimates." He states that without data collected over several years from central valley fields, (with a few commodity exceptions) all calculations of N removed by the majority of central valley crops are estimates.

- Geisseler (2016) recommended additional samples be taken over several years for the following commodities:
  - *asparagus*
  - *apples*
  - *apricots*
  - *bell pepper*
  - *broccoli*
  - *carrots*
  - *cantaloupe melons*
  - *cherries*
  - *cucumbers*
  - *figs*
  - *garlic*
  - *grapefruit*
  - *grapes (raisin, wine, & table)*
  - *green beans*
  - *honeydew melons*
  - *lemons*
  - *nectarines*
  - *olives*
  - *onions*
  - *oranges*
  - *peaches*
  - *pears*
  - *pistachios*
  - *plums (fresh & prunes)*
  - *pomegranates*
  - *potatoes*
  - *pumpkins*
  - *squash*
  - *sweet corn*
  - *tangerines*
  - *tomatoes (fresh market)*
  - *walnuts*
  - *watermelon*

### Unintended Consequences

We echo the concerns of numerous regional boards that the SWB's proposed requirements related to the INMP may have unintended negative consequences on other programs and practices – in particular, those focused on environmental and conservation issues. Our members have put considerable time and resources into water reuse efforts. It is uncertain that nitrogen in reclaimed waters is always fully available to the crop.

For example, nitrogen can be controlled by one of two ways: 1) removal by crop, and 2) retention in the soil. How does the current nitrogen removal calculation take into account nitrogen that remains in the soil and does not leach out of the root zone? An unintended consequence of the data captured by the INMP may be stifling the development of innovative methods to retain nitrogen in the soil.

- Will other programs and practices, many of which benefit water quality, be unintentionally negatively affected by the Order?
  - Sustainability programs
  - Water reuse and recycling programs
  - Conservation tillage practices
  - Cover cropping
  - On-farm composting

### Support, Rather than Undermine Pump and Fertilize

The current treatment of “Nitrogen applied in irrigation water” in the Irrigation and Nutrient Management Plan (INMP) Summary Report and subsequent A/R Ratio and A/R outlier identification creates a strong disincentive to “pump and fertilize.” Although the availability of nitrate in groundwater for crop cultivation is still a topic of active research, the proposed approach decreases the likelihood of long-term improvements in groundwater quality. This is particularly true where legacy nitrogen loading likely contributed to nitrogen levels far exceeding drinking water standards. Instead, the focus should be on minimizing current and

future loading from fertilizers and amendments. We should encourage farmers to utilize nitrogen in irrigation water to the maximum extent possible, rather than penalize them with additional regulatory requirements. Such incentives could take the form of a positive credit for utilizing high-nitrate irrigation water in INMP reporting or at least be neutral or nominal in the A/R ratio calculation and A/R outlier identification. Pump and fertilize incentives must also provide flexibility for effectively managing the higher levels of salts that often correlate with high nitrogen levels.

### Costs

During the SWB workshop on December 6, 2017, SWB staff reported they estimated a 10% cost increase for the currently proposed Ag Order requirements. Numerous growers and regional water board members attending the workshop voiced concern that this cost increase estimate is inaccurate for reasons such as the extent of educational efforts, development of supplemental programs, and database development and analysis. Our members share those concerns especially in growing regions where crop rotations and variation in harvesting practices complicates data capturing efforts. Multiple harvest cycles for many specialty crops means they will be required to gather data on multiple occasions in a growing season.

- Due to the variations in cultivation and harvesting practices, growers' data collection costs are substantially underestimated.
- Who is going to pay for the research needed to develop coefficients - especially in regions without an established coalition?

### Electronic data submission

*This order makes it clear that all field-level data will be submitted to the Central Valley Water Board in an electronic format.*

*Data sets include:*

- *a data set with management practice implementation reported by Members on the Farm Evaluation, INMP Summary Report, and MPIR*
- *three data sets with AR data reported by Members on the INMP Summary Report: one associated with Anonymous Member IDs, one associated with Anonymous APN IDs, and one associated with townships*
  - The revisions to the Central Valley General Order do *not* make it clear that all field-level data is to be submitted to the CVRWQCB in an electronic format. Order R5-2012-0116, Revision 4 allows for submission by mail and uses the phrase "to the extent feasible" when discussing filing of data and reports electronically.
  - Does each water quality region have a database to compile this data? If not, who's going to develop (and pay for) each region's database to collect all this data members will be submitting in electronic format?

### Exemptions from the Order

According to the Order, the only exemption is for:

*..any category of Members (such as growers of a particular crop or growers in a particular area) that can make a demonstration, for approval by the relevant regional water board, that nitrogen applied to the fields does not percolate below the root zone*

*in any significant amount and does not migrate to surface water through discharges, including drainage, runoff, or sediment erosion.*

Not all production areas within the state have a nitrogen contamination problem. We do not believe it is appropriate for regional water boards to be the sole arbiters of whether or not nitrogen reporting is necessary.

- Does the SWB have the authority to require areas without a nitrogen problem to develop a sampling program?

The local movement has fostered many small growers in our agricultural communities. According to the ESJ Ag General WDRs Order (ORDER R5-2012-0116-R4), 61% of growers meet the small farming operations criteria of < 60 acres of irrigated land, but account for only 6% of total irrigated land within the Eastern San Joaquin River Watershed. Many of these growers are first-generation immigrants who are attempting to utilize their agricultural skills and entrepreneurial spirit to establish family businesses in our state. Our memberships also consist of small growers and has committed numerous resources to helping each and every farmer be successful in our state. We believe it is vital to the overall economy for these small growers to be successful and are concerned that the Order places undue burden on small growing operations.

- Do small growing operations have the resources to meet the requirements of the Order?
- What about exemptions for small growers such as the organic grower who plants a single row of 20 crops each week to sell at the local farmers' market?
- If they cannot be exempt, can there be a longer phase-in for small growers?

Thank you for your time and attention to these concerns.

Best regards,



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Agricultural Council of California



Richard Matoian, Executive Director  
American Pistachio Growers



Joel Nelsen, President  
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