December 21, 2017

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, P.O. Box 100,
Sacramento, CA 95812-0100

Dear Ms. Jeanine Townsend,

This letter is to submit comments to A-2239(a)-(c), for the Draft Eastern San Joaquin Agricultural General WDR.

I understand the importance of water quality protection for public health and agricultural uses. I have a Master's Degree in Environmental Science & Management, am Certified Crop Advisor, am on the CDFA Environmental Farming Act Science Advisory Panel, and participate in other capacities in the Monterey region. As an employee of Rio Farms/Gill Ranch Company, a vegetable grower that grows about 6,000 acres in the Salinas Valley, I also understand the complexities of farming.

Our owners are third generation family farmers and want to see their legacy of growing healthy produce for the nation continue. In addition to tracking fertilizer and water use, we have a number of other sustainability initiatives such as solar production, use of soil moisture monitoring and water meters, waste reduction and compost use. Rio Farms owner David Gill and other growers in the Salinas Valley have already been proactive about replacing drinking water for affected users, and many growers are now backing the state wide fertilizer tax that will directly fund drinking water improvements. Growers are continually trying to adapt to stay in business, and that includes keeping fertilizer input costs down. A market-based strategy to tax fertilizer may drive down consumption and get us to the end goal much more efficiently than any top-down approach that focuses on report writing and data collection.

We are well aware of the difficulty in creating a framework to control non-point sources of pollution that is equitable, accurate and progressive. However there are many parts of the Draft Eastern San Joaquin Agricultural General WDR (ESJR) that simply do not make sense for vegetable growers in our region. Therefore, I feel I must share my perspective, as most of the order is to be precedential statewide.

1. Cost - will the ESJ Order create *the* statewide framework or will it be another layer of compliance on top of regional programs?

The ESJR is extensive and expensive. While the term "precedential" is clearly defined as applying to all parts of the state, it is unclear whether Regional Water Quality Control Boards (RWQCBs) can enforce *additional* compliance.

At first read there appear to be at least 6 major plans required of growers: Farm Evaluations, Management Practice Implementation Reporting, Irrigation & Nutrient Management Plan, Surface

Water Quality Management Plan, Ground Water Quality Management Plan, Sediment & Erosion Control Plan. Outliers will have additional reporting costs. The ESJR clearly states:

> *"Under Water Code 13263 and 13241, "economic considerations" is one of the factors a regional water board must take into account in issuing waste discharge requirements. Additionally, section 13267 requires the regional water board to ensure that "the burden, including costs, of [monitoring] reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports."* (Draft ESJR page 10).

- **Are the potential *cumulative* costs of compliance for this with regional actions being considered as a package?**
- **Are the cost estimates in the ESJR inclusive of grower/CCA time to collect all background data necessary for reports? For example, time to collect soil, irrigation water samples, drive to lab etc.?**
- **Will growers be hit with multiple layers of regulation on top of the ones proposed in the ESJ Order?** For example, will growers on the Central Coast not only have to submit AR data, but also be susceptible to whatever the Regional Board adds, such as continuing to submit Total Nitrogen Applied form? The ESJ Order requires only nitrate sampling for drinking water wells (quoted at a low $40, pg 76), will Regional Boards be allowed to add irrigation well sampling for multiple constituents ($110+) on top of that, or additionally require irrigation well data?
- **Will the SWCB specify what actions Regional Boards shall not take, to narrow the ability to tack on additional programs, monitoring and reports, to ensure that costs bear a reasonable relationship to the value of the information collected?**

2. The Draft ESJ Order acknowledges s that AR data may not be feasible but does not state alternative compliance

> *"We will require Members to determine and report nitrogen applied and crop yield. Based on this data, we will require the Third Party to calculate annual A/R ratio and A-R difference values as well as a three-year running average, **where feasible[107]**, for these values for each Member for each field."*
> Footnote 107 explains: *"We recognize that fields are not always planted with the same crop for three consecutive years and further that the boundaries of a fields may change from year to year."* (Draft ESJ Order pg 43).

It seems that the above statement and footnote was made specifically for vegetable growers: multi-cropped systems that with high rotations.

- **How will the Water Board determine the feasibility of calculating A/R ratios and A-R difference values?**
- **What are alternative steps to compliance if AR metrics are not deemed feasible?**
- **If one year AR metrics are not useful for analysis yet it is infeasible to obtain 3 year data, what worth does a 1 year AR dataset have for regulatory agencies?**

3. The A/R ratio is an over-simplification of agronomy and shouldn't be used as a regulatory metric

While I understand the A/R ratio in theory, it is overly simplistic to be relied on as the main regulatory metric. The assumption is that if adequate N is applied, the grower will get a normal/good yield. However, the Water Board is grossly over simplifying agronomy, basing yields on one factor: nitrogen.

- *"A high multi-year A/R ratio thus alerts the Member, the third-party group, and the regional water board to the need to address over-application at the field level."* (Draft ESJR pg 41).
- *"The Third Party must inform such outlier Members that they are potentially over-applying nitrogen to their fields"* (Draft ESJR pg 55).

This ignores all other factors that may improve or reduce yield, such as weather or pest outbreaks. I know this from experience as I have provided similar analysis internally for growers at our own company, providing them metrics on N applied vs. tons harvested product (not N removed in harvest). For each low or high ratio, there was a "story" about the lot.

Most of the time fertilizer decisions are made mid-season when nitrogen uptake is the greatest. Therefore last-minute changes in nitrogen application are unlikely to greatly impact total nitrogen applied.

Any field that has an overall low yield (R value) will have a high (bad) A/R ratio. Here are some specific examples of why a grower may have a High A/R ratios (A refers to applied factor, R to removed):

1. A: Fertilizer over-application*
2. A: Water contribution from N is high due to
    a. Normal water use but high N in water
    b. Climate conditions – requires higher water use (growers in hot areas will have higher water use than cooler areas, even for same crop grown)
    c. Leaching requirement – grower applies agronomic leaching requirement to address salinity issues in water
3. Organic crop
    a. A: no clear direction on how to calculate N applications of compost where only a percentage is plant available (e.g. <20% N)
    b. R: lower yields than conventional
4. R: Lack or imbalance of other nutrients
5. R: Poor soil conditions, infiltration problems, pH etc.
6. R: Crop variety - lower yielding than others
7. R: A late season pest or disease outbreak
8. R: A heat wave or other weather-related crop damage
9. R: Irrigation salinity issues
10. R: Could not irrigate just before harvest
11. R: Cosmetic reasons

12. R: Markets are bad – limited harvest possibility
13. R: Labor shortage
14. R: Food safety reasons – bird/animal feces in field requires harvesting only portion of crop
15. R: Weather - rain made field access impossible to harvest

*The only scenario above that the Water Board is concerned about above is where growers have high fertilizer application with a corresponding normal or low yield.

Contrast the above A/R ratio with a different ratio used in Region 3, the Total Nitrogen Reporting (TNA) Form which requires growers to report applied nitrogen per acre. In this case, the water board will still have reporting of nitrogen applied and can still identify outliers as those with high N applications per acre. However having acres as the denominator means that there is only one factor that changes: nitrogen input. This results in fewer reasons why growers may have explainable high ratios, such as:

1. N-related: high Nitrogen applied per acre
    a. Determine why: is it due to fertilizer, water source, soil sample N etc.
2. Organic crop – grower required to submit all N applied, even though some is "slow" N and not available for plant uptake (e.g. high compost application rates)
3. Grower applied a lot of nitrogen but also had a high yield.

- **Once a grower is labeled as an Outlier due to a high A/R ratio, will there be an appeal process before growers are required to additional INMP training and reporting? For example, will growers be given a chance to supply information if their A/R ratio was high due to unusually low yields due rather than over application of nitrogen?**
- **How will the water board truly incentivize use of high nitrogen groundwater if irrigation water is used as a factor for the applied nitrogen in the AR metrics?**
- **Would the Water Board consider continuing TNA reporting as an alternative for AR datasets?**

4. The complexities of vegetable and other crops grown on the Central Coast warrant extra consideration if A/R ratios are to be applied state-wide.

It is extremely complex for vegetable crop growers to provide accurate harvest results in tonnage for the following reasons:

- Growers on the central coast grow a larger variety than growers in the ESJ area. This is perhaps best illustrated by the Central Coast RWQCB's Total Nitrogen Applied Form, which now has over 180 crop types listed.
- Vegetables are grown in much smaller acreage fields/lots than crops grown in the ESJ such as almonds or citrus. Harvest data is often at an even smaller scale (e.g. multiple harvest types per lot). Each lot has a different associated levels of inputs: soil nitrogen, fertilizer applied, and potentially irrigation water source.

- Almost all vegetable crops have multiple ways of being harvested or packed, and many of these are not weight-related, such as bins or cartons.
- Each lot/field may have multiple types of carton sizes.
- It can take days to harvest even small acreage of vegetables due to hand labor and buyer capacity. Crops can grow or desiccate in that timeframe, therefore an "average" weight per carton is difficult. In this timeframe a crop may be irrigated and will take up water weight, although it may not contain additional nitrogen.

To illustrate the above points, I would like to provide an example from our records (numbers are rounded for simplicity, but are close to actual numbers). Assume Farmer Bob grew 175 acres of celery on Ranch A in 25 separate lots/fields, an average of 7 acres per lot. (Note: Farmer Bob also grows 15 other crops with similar complexities).

- For Applied data we have:
    - 25 different soil nitrogen values
    - 5 different irrigation sources
    - 25 different fertilizer applied records (note that since split applications are best, each lot would have anywhere from 4-10 fertilizer applications = 100-250 records).
- For Removed/harvest data, for just ONE of the 25 lots that is 7.1 acres in size:
    - Took 7 days to harvest 7.1 acre lot.
    - Celery is packed in cartons of 6, 22, 24, 30, 36, 45, 48.
    - 2 different harvest companies harvested the lot so grower would have to request data
        - How many cartons & what size
        - Average weight/carton
    - Potentially could have a mixture of celery hearts and normal celery harvested
    - Celery and other crops can be packed with or without sleeves or other packing materials that may add additional weight

5. The level of complexity in yield calculations and the multiple players involved will likely lead to highly inaccurate A/R metrics.

Assuming the Water Board requires harvest in total pounds coming off the field, growers would be relying on average weight per carton to calculate. Harvesting operations (and therefore harvest data) is managed by a number of players: the grower, independent harvest companies or the shipper. Obtaining accurate and uniform data will be difficult. Any minor error in weight per carton is then multiplied over thousands of cartons per acre, leading to major inaccuracies. Each harvest company provides records in different ways. Weight can vary dramatically depending on the crop health, variety, irrigation practices (e.g. irrigation just before harvest) and harvest method. Yield can change within the few days a field is being harvested.

Even the Nitrate Expert Panel noted that academics and regulators may not understand the complexities of reporting for farmers:

"The members of the Panel are not aware of readily available, easily usable information regarding harvested nitrogen/acre for a wide range of crops. ***This is especially true of produce crops (broccoli, lettuce, cauliflower) which have widely different pack-out rates, in which yield is expressed as boxes per acre rather than tons/acre, seasons are highly variable in duration, and the percentage of vegetative matter that is left in a field can change drastically depending upon the market.*** *…Reporting or accounting for harvested nitrogen is a completely new concept for farmers. This represents* ***a much higher difficulty*** *than what they are currently doing…* ***The further one moves from the field into research and academia****, testimony indicates that the idea of accounting for harvested nitrogen sounds more and more simple. "* (Expert Report, page 22)

- **Is the Water Board prepared to have inaccurate yield results due to carton to weight conversions? Are they ok with a "junk in, junk out" database?**
- **Will the Water Board or Coalitions have regulatory oversight over harvest companies to ensure data accuracy?**

6. AR datasets have little value to growers as they plan per acre.

As stated in the Expert Panel's quote above, the AR dataset is theoretically interesting, but its practicality ends at the farm field for vegetable growers. However well-intended, the reality is that it will create an unnecessary burden on vegetable growers, especially those in the Central Coast region that have already invested in new tracking systems and databases for the Total Nitrogen Applied reporting.

Although this may not be the main purpose of the Ag Order, it would be appreciated if the Water Board's regulations made agronomic sense to growers. Vegetable growers plan ahead per acre. Most UCCE experts, publications, Certified Crop Advisors and other professionals advise growers on how much fertilizer to apply per acre for vegetables. Field staff require simple directions on how many gallons to apply per acre. Soil test results can be used to calculate how much nitrogen is available in the soil – per acre. Therefore, even though there are issues with the Total Nitrogen Applied form from Region 3, at least a grower can compare annual results per acre and make adjustments accordingly.

The assumption of the A/R ratio seems to be that a grower will have the time to predict they are going to get a low yield, they will reduce their nitrogen input ahead of time. This may not be the case in vegetables, as the nitrogen uptake of plants (and therefore the appropriate time to fertilize) is low at the beginning, high mid-season, and tapers off at the end of season. In addition, some of our crops are only in the ground for 30 days, which makes time to take samples and get results a very quick turn around. Therefore if anything happens to impact yields in mid to late season (as outlined in #1 above) a grower will be too late to adjust their fertilization, which will result in a low yield and a high A/R ratio.

In the future, even if growers were given a well-researched range of "good" A/R ratios, what does the Water Board expect growers to do with these ratios? It would be somewhat nonsensical for growers to back-calculate the amount per acre they need to apply. Consider the following steps a grower would have to go through to calculate how many pounds of fertilizer to apply per acre.

- I (or my buyer) wants X amount of cartons
- Which I think equals approximately Y amount of tons
- Which I think I can grow on 15 acres
- Therefore, for my fertilizer budget, I should solve for applied (A)
    - A/R
    - R= Y tons (yield) * coefficient / 15 acres
    - Then, I will apply A/acre and get exactly the yield (and associated R) I was planning on… unless another factor reduces yields (as in #1 above).

To put it another way, in the future, even if we had the "perfect" coefficients and the "perfect" A/R ratios for our crops, does the Water Board actually think that all growers will have to do is apply the correct fertilizer (A) and they will get exactly the yield (R) they are planning for? If the Water Board could guarantee yields from this formula, we would have more farmers!

- **I suggest allowing regional boards determine whether it is appropriate for growers to report nitrogen applications per acre OR per yield to identify outliers. (Note: to minimize work, it is important that only ONE dataset is required).**
- **If A/R metrics are to stay, I suggest phasing in 5 crops per year for the Central Coast Region rather than requiring growers to report all at once. Regional boards could select them based on crops with typically high N requirements or by number of acres planted with crop.**

7. Nitrogen budgeting is useful for farmers but caution must be taken when regulators interpret soil and irrigation water results as part of budget

Although nitrogen budgets seem somewhat straightforward, there is the potential to misinterpret results when used for regulatory purposes. For example, a soil sample reflects all nitrogen in the soil at a given time. This includes any previously applied fertilizer, compost, N in irrigation water and remaining N from crop residue. Therefore, if you have soil sample N as a separate line item in your budget, you are effectively double-counting the nitrogen that was already reported in another column such as fertilizer, water or compost.

For example, if a grower applies 40 lbs N of fertilizer with 10 lbs N in irrigation water and then checks their soil mid-season and finds there is 25 lbs N/acre remaining, this does not mean she has a total of 75 lbs of N in her budget (it currently appears this way on the TNA template). It means she applied 50 lbs N and now has 25 lbs N left in her soil and should adjust her future fertilizer applications accordingly. Even if it is a pre-plant soil test, it will be reflecting what was previously applied to a different crop.

The value of nitrogen in irrigation water has been studied on the central coast however more research needs to be completed before farmers and regulators can understand how much of the nitrogen they can count on from their water (e.g. 25%? 50%, 75%?). Studies by Michael Cahn have so far focused on 2 crops: broccoli and lettuce. The studies have only examined after drip was installed and although details were not disclosed in the studies, stand establishment water could be 30-60% of total N in irrigation

water that was simply not accounted for. Does this mean that the 80% uptake efficiency is actually 40% for the lifetime of that crop?

In addition, the nitrogen in irrigation water studies compared normal vs. inefficient irrigations (ETc 120 vs 200%) to mimic what would happen if a leaching fraction was applied, but did so with the same water – water that was low in salts (< 2.0 dS/m E.C.). Unless I read the reports incorrectly, they simply applied more "clean" water to plants, and did not show the interplay between how salts may affect nitrogen uptake and resulting yields.

The ESJR states that it doesn't want to disincentive growers from using high nitrogen water, however it doesn't clarify how growers that may apply high nitrogen water will be treated. What about growers that have to apply a leaching requirement due to salts? Although growers in the same region such as the Salinas Valley may both grow lettuce, the applied water along the coast will be significantly lower due to climatic reasons than lettuce grown inland with temperatures that regularly go above 90 degrees F.

- **Because AR metrics and INMP reports will likely involve soil and water as a part of nitrogen budgets, what will the SWCB do to address these issues:**
    - **Soil samples double-count N already applied**
    - **Percent of N in irrigation water can truly be counted?**
    - **N in irrigation water may be high due to a leaching fraction (high salt water) used**
    - **N in irrigation water may be high due to climate conditions**
- **I would suggest keeping irrigation water N as a separate metric apart from N applied as fertilizer, compost or other amendment.**

8. Mapping will not lead to new information and will not improve water quality

The APN ranch mapping and reporting (Draft ESJ Order Figures 1 and 2) will be impossible for vegetable growers to complete due to 2-4 crops/year in the same field, often with changing field lines that may overlap APN boundaries. In the Central Coast region, R3 perhaps predicted this was unnecessary and requires reporting of practices for an entire ranch (AGL number) not per APN on the Total Nitrogen Applied forms. In addition, the Water Board already has APN information submitted on the Notice of Intent form.

- **What new information will the Water Board glean from having maps of crops?**
- **How will this information improve water quality?**
- **Given the complexity and cost to report this data for vegetable growers, how will this meet the standard in Water Code 13263, 13241 and 13267?**

9. Field level reporting unrealistic and unnecessary

Reporting AR data sets by "field" creates significantly more work and does not seem proportional to the value of the results. Rather, I would suggest an average per ranch, at least for R3 where ranches are small in size (whether TNA or AR metrics are used). Currently growers in R3 are reporting Total Nitrogen

Applied at the Ranch level. This seems more appropriate as 2-4 rotations per year create a very high number of "fields" per year.

From the celery example above, assume 125 acres of celery on one ranch is on 19 separate fields. Does it make sense for the coalitions to have this level of reporting? There is significant potential that some of the 19 fields may be outliers (high or low) but averaged out the applications may look normal for yields.

- **At what level will outliers be identified? At the field level, ranch level or grower level?**
- **Will coalitions create averages of all fields or will they report each field average to the water board?**

10. Grower Coalitions have had mixed success on the central coast.

We are generally supportive of 3rd Party Coalitions, however there is no existing coalition on the Central Coast that currently does advanced grower outreach, education and enforcement that is outlined in the Draft ESJR. As a Board Member of Water Quality Preservation Inc. (the Central Coast's Coalition for surface water monitoring), I believe farmers view the organization as effective at coordinating water quality sampling and writing summary reports. They have been largely successful at completing the monitoring on a relatively low budget in comparison to state fees. However, its charge is only to collect samples, not serve as crop advisors, comment on fertility management or enforce outlier farmers as is called by the ESJR.

For the 2012 Ag Order, the Central Coast Groundwater Coalition was formed to handle grower sampling, data and reporting to the Regional Board. CCGC was a more expensive option for many growers, but it promised to deliver relevant reports of the data in a timely fashion with some data anonymity. We also joined to help our region demonstrate the value of farmers working together. Unfortunately, many of the stated benefits of the coalition were degraded by the RWQCB, increased the cost for growers, lost data anonymity, and most of the value of our membership was therefore lost.

- **Therefore, I urge the SWRB to review how each part of the ESJR would function without a grower coalition.**

11. Consider alternative sampling schedules for domestic wells that are already sampled by a different regulatory agency, or if alternative water is already provided

The ESJR requires sampling for drinking water wells, however it allows for a reduced sampling schedule: *"Where existing data or sampling data indicates that the nitrate concentration was below 8 mg/L for three consecutive annual sampling events, the member may thereafter sample every five years instead of annually."* (ESJR, page 63). The theory is that water quality would not change significantly enough to go above the MCL and endanger users of the water. There is still the slight threat of it increasing above the MCL but the State Water Board thought this was a reasonable number of data points.

Using the same logic, but with even less risk, I would ask that the water board also consider a reduced sampling schedule for the opposite situation. If a grower or land owner have already submitted well samples to GAMA in previous Ag Order/Waivers/WDRs with high NO3-N above the MCL AND have already alerted the regional board that replacement water is being provided (reverse osmosis, bottled water etc.) then they have a reduced sample schedule (or no sampling required at all). This would help reduce truly unnecessary sampling for growers.

Additionally, I would suggest language that reduces over-sampling of wells that are already being monitored by a different regulatory agency, such as a county health department. For example, if a county health department samples a domestic well quarterly due to multiple hook ups, the well is being effectively monitored and regulated by that agency and sampling for ILRP does not apply.

- **Will the water board consider reducing testing schedule for high NO3-N wells where land owners or operators have already provided replacement water?**
- **Will the water board consider eliminating testing for drinking water wells where other regulatory agencies are already conducting monitoring?**

12. The number and variety of reports is confusing and the content is largely unknown

Most of the Draft ESJR described the AR data sets, and it is difficult to decipher the content of the numerous types of reports listed, including the: Farm Evaluations, Management Practice Implementation Reporting, Irrigation & Nutrient Management Plan, Surface Water Quality Management Plan, Ground Water Quality Management Plan, Sediment & Erosion Control Plan.

What is the difference between these reports? Wouldn't a Farm Evaluation include information on how you are reducing sediment and erosion, or what management practices are being implemented? How do the management practices listed in R3's Annual Compliance form differ from the MPIR report? How extensive (and expensive) will these reports be? Without providing the many of the specifics of these plans at this time, it seems that they could potentially snowball into a significant cost for growers that may have to hire consultants, CCAs or other professionals to complete.

- **How do these differ from current plans/reports in place, such as the Annual Compliance Form for the Central Coast Region?**
- **It seems there is potential for a lot of overlap, can they be consolidated?**

13. Set a timeline of templates and grower trainings

One issue with somewhat vague language in the ESJR for multiple plans is the roll out of templates. In general, I support templates as it gives growers or their advisors a guideline of what to submit. However, in R3 sometimes these templates are distributed a month or even weeks before the reports are due, rather than at the beginning of a new Ag Order/Waiver. This can create a lot of last minute work, and

some back-tracking as growers have to re-read the language in the Order, compare it to the template to understand whether they were in fact doing the correct data collection, monitoring, practice implementation or other actions during the entire duration of the Order. What is worse is when the templates are provided as final and later edited, and growers that work on projects early have to start over.

We have also experienced the pains of last-minute trainings in Region 3. At times, it seems water board staff feel all written instructions are clear and they don't need to host public trainings to explain compliance steps. Consider copying other agencies such as CARB that host regular educational trainings to help the regulated meet standards. It would be appreciated if the State Water Board could mandate a more thoughtful process to be better public servants for those they regulate. For example: templates have to be created and finalized within a reasonable timeframe (e.g. 6 months) of the beginning of each Ag Order and public workshops to help growers comply must happen at least 1 year before major deadlines.

- **Will templates be made by state or regional water board staff or by coalitions?**
- **How far in advance of deadlines will the boards be required to provide templates?**
- **In absence of a coalition, will the regional staff host trainings? On what time schedule?**

14. Treating crop residue as entirely negative undermines the importance of this healthy soils practice

Maintaining a healthy and productive soil is the basis for sustainable agriculture. Keeping crop residue in place is perhaps the leading agronomic practice that has allowed farmers to continue growing on the same ground for over a century in the Salinas Valley. The AR metrics in the ESJR focuses almost exclusively on the negative aspect of nitrogen left over without regard to the important soil building practice. Whether growers choose to mulch on the surface or incorporate it into the soil, crop residue not only leaves behind nitrogen, it also contributes carbon, lignin, and plant materials to feed soil microbial populations, increase organic matter, build soil structure and improve soil health. NRCS has listed mulching and residue and tillage management among their conservation practices and farmers throughout California were recently awarded funding for these practices through CDFA's Healthy Soils Program Incentives Program to implement these practices.

- **What will the state water board do to ensure growers don't take the AR data set regulation to the extreme and remove crop residue from their ground, thereby reducing soil health**?

In conclusion, the State Water Control Board has the opportunity to bring clarity and stability for growers, who need to know what regulatory impacts may have on their operations in the future. Growers often operate in different parts of the state and some uniformity in regulations may be welcome. However, we challenge the state water board to consider regional differences and examine every aspect of data collection and report writing and consider whether the time and money spent on it

will directly lead to improvements in water quality, or whether some aspects could be eliminated and a market based approach could be further pursued. Although there were many experts consulted in the suggestions contained in the East San Joaquin General WDR, many of the precedential aspects of the WDR were not fully thought out when it comes to the different cropping systems on the Central Coast, especially AR metrics. We hope our comments are received as constructive as they are based in the science of agronomy and the practicalities of farming. We remain committed to learning how to farm more with less and to reduce our impact on water quality.

Sincerely,

Jocelyn Bridson

Jocelyn Bridson
Director of Environmental Science & Resources
Rio Farms / Gill Ranch Company
48405 Lonoak Rd. King City, CA 93940
(831) 385-6225

David Gill

David Gill
Owner
Rio Farms / Gill Ranch Company

Emailed 12/21/17 to: commentletters@waterboards.ca.gov
CC: Karen Ross, Secretary California Department of Food and Agriculture