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>>> "KORNEGAY, TOM [AG/2402]" <tom.kornegay@monsanto.com> 11/30/10 8:36 AM >>>
Good Morning,

Do you have any examples of the kind of backflow prevention devices that will be required for irrigation wells? Are flapper valves enough or will we be required to chose one from the California list of approved backflow prevention assemblies?

Thanks, Tom

Tom Kornegay

Monsanto/Seminis Vegetable Seeds

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CENTRAL COAST VINEYARD TEAM

Promoting Sustainable Winegrowing

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December 22, 2010

Jeffrey S. Young, Chairman of the Board
Roger Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Via Email
AgOrder@waterboards.ca.gov

Re: Staff Proposal for the Ag Order Draft (November 19)

Dear Mr. Young & Mr. Briggs:

Thank you for the opportunity to comment on the Draft Order No R3-2011-0006 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands.

The Central Coast Vineyard Team is a non-profit grower group dedicated to sustainable winegrowing since 1994. Our members represent 80,000 acres and are actively engaged in our programs: research projects, demonstration sites, grower-to-grower education, self-assessment. Over the years we have studied various practices affecting water quality (cover cropping, filter strips, reduced risk pest management, roads management) and have outreached these results to tens of thousands of growers.

I personally have a Masters Degree in agriculture specializing in soil-plant-water relations, and prior to working with the Vineyard Team, I was a lecturer at Cal Poly, researcher at the Irrigation Training & Research Center, and co-authored a text book. My comments are based both from my technical expertise and 13 year history with the Vineyard Team.

Review Board Direction to Staff from May and July Workshops

We were very pleased with the Board's comments and directions to staff during the May and July workshops. The following represents specific Board comments, questions, and directions and should be used as a framework for assessing the Staff and other proposals:

1. Staff should not try to do everything in 5 years; consider this Order as a "stage". This might justify developing a 10 year program.
2. Staff should consider top two priorities (surface water nitrates & organophosphates); secondary sediment and riparian issues should be addressed later.
3. Staff should prioritize location; the 303d list could be one approach, but it still might still be too broad to effectively narrow the focus.
4. Order should ensure that the costs and efforts (to farmers and state) are justified by the results.
5. Is there enough staff to analyze the information required?

6. Growers should be given credit for good faith efforts that are specified in the Order and should be able to easily prove it.
7. Consider a *minimum* threshold for scale – perhaps growers under X acres should not be in the program.

Sustainability in Practice (SIP) Certification

We are very disappointed that the SIP Certification program was not mentioned in the current draft to qualify for a low tier based on a few comments from people who either misunderstood and/or misrepresented the program.

SIP Certification should absolutely qualify for the lowest tier in the Ag Waiver because of its clear connection to practices that protect water quality and rigorous inspection and audit components. Among other things, SIP Certification *requires* several practices that directly relate to protecting water quality. These practices are then verified by an independent inspector to confirm the growers' meeting the strict eligibility requirements:

- Prohibits the use of chlorpyrifos and diazinon
- Requires the use of soil and plant measurements to determine irrigation scheduling to reduce deep percolation of irrigation water
- Requires the use of a nutrient budget to minimize inputs and maximize nutrient efficiency
- Requires the use of vegetation and additional practices during rainy season to protect the soils, minimize erosion, reduce stormwater runoff, and filter the stormwater
- Complete records and on-site inspection of operations by independent inspector
- Final certification is granted by an independent advisory committee – free from conflict of interest – consisting of industry representatives, university experts and agency staff (Ag Department and RWQCB staff)

Recommendation:

I strongly urge Board and Staff to include SIP as being eligible in the lowest tier and that documentation of SIP Certification serve as any and all compliance documents for this order. SIP Certification is a perfect example of Board Comment #6 directing the program to recognize grower efforts. I encourage Board and Staff to contact me directly with questions or concerns or visit our website to learn more (<http://www.vineyardteam.org/sip/standards-and-rules.php>).

Current Draft Proposal – Appropriateness of Proposed Tier Criteria

For water quality impacts to occur, both the *transport method* and *constituent* need to be present. Several of the staff's proposed tier triggers do not account for either of these mechanisms and do not make sense in terms of prioritizing operations based on risk to water quality.

- 1000 acre threshold
- 1000 feet proximity to 303d waterbody

In addition, the 1,000 acre threshold and 1,000 ft proximity thresholds are not factors that a grower has control over – they can not be changed. As a result in the current proposed staff draft, there are few opportunities for a grower to move to a lower tier based on changing farming practices that protect water quality.

An effective Ag Order program would be structured to incentivize practices that protect water quality, not one that punishes growers (in terms of compliance and administration) based on scale and location without regards to actual water quality risk.

In addition, **the 303d List (specific to Toxicity, Nutrients, Pesticides, Toxicity, and Water Temperature as defined in the Draft Order) represents 122 unique waterbodies and over 36,000 unique miles.** (Source: Analysis from http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/2010_combo303d.xls)

Clearly the proposed definitions in the Draft Order do NOT narrow the focus and create a framework to prioritize efforts. An efficient Ag Order would prioritize based on the most predominant impairments and would be consistent with the Board comments and direction from the May workshop (Comment #2 and #3).

Recommendation:

Reconfigure Tier triggers to reflect both prioritized transport and constituents; define triggers that growers have control over so practices/conditions can be rewarded by moving them to a less burdensome tier. The Ag Proposal prioritizes growers in the coalition based on larger nitrate hazard index or tailwater discharges (Ag Proposal, pg 13).

If using a geographic focus for prioritization to define tiers, narrow the list to include 303d waterbodies specifically listed for chlorpyrifos, diazinon, and nitrate. Using this definition would affect 55 unique waterbodies representing over 700 unique miles. Over half of these 55 listed waterbodies have multiple listings, so it would be an efficient way to prioritize locations. In addition, any geographically based list that is referenced in the order as a trigger should be included in the Order itself to eliminate any possibility of confusion.

Overview of Water Quality Issues as They Relate to Agriculture

Examples of How Growers Could Fall Into a Higher Tier Despite Lack of Risks to Water Quality

To have a productive discussion regarding the framework of a regulatory program that will result in water quality improvements, we should review the overarching operational factors (*method of transport and constituents*) that impact ground and surface water quality.

1. Groundwater

- Transport: Deep percolation of water
- Constituent: Nitrate

Vineyard Specific Conditions Relating to Groundwater

- Transport: Vineyards almost exclusively use drip irrigation, applied periodically throughout the dry, growing season. Most growers irrigate LESS than what the vine needs (deficit irrigation) to minimize over growth of the canopy and leaves (which is undesirable) and to promote the vine's energy for producing high quality fruit. This results in minimal irrigation water flowing past the rootzone.
- Constituent: Based on conversations with Mark Battany, UCCE Farm Advisor, vineyards may apply up to 25 lbs N per acre per year. In fact most growers apply much less than this. How is this possible? 1. Wine grapes have a low N requirement; 2. Commonly used cover crops and crop residue provide a portion, *if not all*, of the crop's nitrogen requirement; and 3. Excess nitrogen can produce overly vigorous canopies, which is undesirable (because growers want the vine's growth focused on quality fruit).

Yet, ALL growers in the proposed order (regardless of Tier and/or nitrate risk index) are required to submit groundwater testing results, collected by a PE or equivalent professional. These requirements are overly burdensome, both for growers and staff, and do not make sense with regards to 'prioritization'.

2. Surface Water

- Transport: Irrigation water runoff, stormwater
- Constituent(s): Nutrients, organophosphate and diazinon, sediment

Vineyard Specific Conditions Relating to Surface Water

- Transport: Vineyards primarily use drip irrigation; there is no irrigation water runoff; many use cover crops in both the cropped and non-cropped areas of the field which reduces stormwater volumes running off the field, protects the soil from being disrupted and moving, and filters the stormwater runoff to capture and hold sediment.
- Constituent:
 - Nutrients: Because small amounts of nutrients are applied during the non-rainy months (see previous discussion), and growers irrigate vineyards with drip irrigation, 1. Nutrients can not be transported on the surface via irrigation because there is no irrigation runoff; 2. They are *not available* for transport via stormwater during the rainy season because of their uptake earlier in the season.
 - Sediment: Vineyards use cover crops and resident vegetation throughout their farms, both in cropped and non-cropped areas. Rainy season cover crops protect water quality by 1. Reducing stormwater runoff volumes because they increase the amount of rain that enters the soil due to improved infiltration rates from improved soil structure; 2. Stabilizing the soil to prevent its movement/transport; and 3. Filtering the stormwater itself.
 - Chlorpyrifos and diazinon: Because of the lack of irrigation tailwater, presence of cover crops during the rainy season, and dry season applications of these materials, likelihood of transport off site is limited.

Nevertheless, based on the proposed tier triggers, there are several situations where vineyards would fall into Tier 2 or 3, even though they do not have either the *transport or constituent* factors that could potentially affect water quality. For example, a 1,000 acre vineyard or a vineyard within 1,000 feet of a 303d listed waterbody would not be in Tier 1 regardless of their not using OP's, not having tailwater, and not being a crop with a high loading potential. **This does not make sense.**

When questioned about these issues, staff responded that growers could apply to the Executive Officer to be in a lower tier (Order, pg 11, #13). But if application to a lower tier is the answer to moving growers to a different tier based on their operational practices as they potentially affect water quality, then the **Tier definitions do not adequately address potential risks to water quality and are not appropriate for this program.**

In addition, many of the monitoring requirements specified in the MRP for Tier 3 dischargers specifically refer to tailwater – yet the presence or absence of tailwater are not defined anywhere as a Tier trigger.

Recommendation:

Reconstruct the tiering priorities consistent with the Ag Proposal Coalition definitions that address both transport (Tailwater) and constituent (Nitrate Hazard Index). Scale the farm plan and reporting requirements for operators with lower transport and constituent risk accordingly. A low risk grower should not have to read 49 pages of an Order and 24 pages of an MRP to know how to comply.

Ag Alternative

The Revised Ag Alternative addresses both surface and groundwater quality with measurable and meaningful milestones and timelines (Ag Proposal, p 19). There are several components of the Ag Alternative that directly address water quality issues and accountability that should be strongly considered:

- Prioritizes based on water quality risk (tailwater, high nitrate hazard index) (Revised Ag Proposal, p 13)
- Addresses both transport and constituent related to potential water quality risk, as defined by the Coalition definitions (Revised Ag Proposal, p 13)
- Incentivizes adopting practices that affect water quality (inherently through coalition membership)

- Specifies unique actions required by operations with a higher potential risk to water quality based on their site specific issues – not all growers are treated equally
- Provides mechanisms for technical support to growers (Revised Ag Proposal, p 17)
- Provides accountability through auditing of 20% of the coalition membership (Revised Ag Proposal, p 14)

Final Recommendations

- Include SIP Certification as qualifying into the lowest Tier designation
- Reconfigure Tier definitions and triggers to identify potential risks to water quality based on transport and constituent, as outlined in the Ag Proposal
- Remove groundwater testing and reporting for growers in lower tiers and/or growers with a low nitrate risk index
- Use the nitrate hazard index as defined by UCCE, not a modified version as presented in the Staff's Proposed Draft Order
- If prioritization based on location is pursued, narrow the 303d list to specify chlorpyrifos, diazinon or nitrate listings; clarify confusing or ambiguous language throughout the document(s) referring to the 303d list; define the list within the Order's body
- Simplify low tier requirements and document organization so that growers don't have to read through the entire Order and MRP to determine how to comply
- Consider a low acreage threshold for the Order; growers with less than 10 acres are not covered under this order

As we move forward in trying to develop a program that will be more than an administrative exercise and actually result in improved water quality, please remember the Board comments and directives from the workshops:

- Prioritize for constituents and regions – address sediment and riparian issues later
- Justify the costs (to growers & state) with results
- Create a program to give growers credit for implementation, incentivize adoption of practices, and make it easier to show that they're doing a good job

Sincerely,



Kris O'Connor, M.S.
Executive Director
Central Coast Vineyard Team

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January 3, 2011

Mr. Jeffrey S. Young
Board Chair
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

Re: Draft Monitoring and Reporting Program, Order No. R3-2011-0006

Dear Chairman Young,

The purpose of this letter is to provide comments on the CCRWQCB Staff Draft Monitoring and Reporting Program, Order No. R3-2011-0006 (“Draft MRP”). These comments are provided from the perspective of my current position as Technical Program Manager of the Cooperative Monitoring Program, where I am responsible for technical and logistical implementation of the cooperative water quality monitoring which fulfills receiving water monitoring requirements for irrigated agricultural dischargers under the current Ag Waiver. The comments are enumerated 1 through 12, as follows:

- 1) Related to receiving water storm event monitoring described on Page 5 and in Table 2 of the Draft MRP, it is unclear if the 2 storm events required to be monitored can also serve as the monthly monitoring events for the months in which they occur, or if these are required over and above the 12 monthly monitoring events (for a total of 14 events per year). The latter case would be a departure from the current protocol, in which all monitoring events are scheduled for the last week of the month, with the first two storm events of each calendar year moved as needed to capture storm conditions. These events also serve to meet the monitoring requirement for the months in which they occur (i.e. if monitoring occurs during the second week in January due to a storm, no additional monitoring is required in January).
 - a. A recommendation is to maintain the current protocol, with the possible exception of adopting the Draft MRP suggestion that one storm monitoring event capture the “first run-off event that results in significant increase in stream flow.” This would improve the CMP’s current approach to storm monitoring, however it would be a departure from the present timing of these events (which typically occur in January, February, or March), potentially interfering with trend detection. The pros and cons of this approach should be discussed in a dialogue between the CCRWQCB’s CCAMP staff and CMP staff and technical contractors.



- 2) Tables 4a and 4b, as well as some text, allow for “EPA approved ‘quick test strip’ methods” and “hand-held water quality meters” to be used in lieu of laboratory analysis in some cases. This language could cause some confusion, as EPA-approved test strips do not exist for most parameters (i.e. those test strips that do exist are not of sufficient accuracy/precision to meet EPA specifications), and some EPA-approved hand-held water quality meters are quite expensive and so would not offer any economic benefits over laboratory analysis. One of the following modifications is recommended:
 - a. Remove specific references to “test strips” and “hand-held water quality meters” and replace with, “In-field water testing instruments/equipment may be substituted for laboratory analysis if the method is approved by EPA, meets RL/PQL specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met.” OR
 - b. Relax QA/QC requirements for individual monitoring such that methods not approved by the EPA can be used when they are sufficient to identify non-compliance with Water Quality Objectives. For example, a nitrate test strip is not approved by the EPA and cannot be used to quantitatively distinguish between nitrates at 8 mg/L (NO₃-N) versus 11 mg/L. However, a nitrate test strip that turns bright pink immediately upon immersion in sample water indicates a clear and severe exceedence, without additional laboratory analysis. Similar techniques/logic apply to turbidity and flow, and would result in cost savings.

- 3) In-text and table requirements for “flow” monitoring should provide additional specificity in cases where high accuracy/precision is desired. The term “field measure” could imply a variety of techniques, from “bucket and stopwatch” to “orange peel” to the more highly-involved transect and velocimeter protocol currently used by the CMP. Costs of these different techniques vary considerably, so additional specificity in flow monitoring requirements has significant cost implications.

- 4) Additional specificity/rationale for language about “restoring groundwater quality in the upper-most aquifer” (e.g. Page 9, Part III.A.9) would be helpful; it is unclear why these areas are of special interest. For example, many surface water nitrate impairments are derived from wells pumping from areas below and isolated from the “upper-most aquifer.” These cross-sections recharge from up-gradient, unconfined areas of the basin. Continued surface water (and upper-aquifer) impairments could be anticipated if these lower-aquifer areas do not improve, however language in the Draft MRP specifies the “upper-most aquifer” as the area of interest.

- 5) Page 9, Part IV.A.1.d calls for a receiving water MRP to accomplish “Identification of Beneficial Uses and applicable water quality standards” within 3 months of adoption of the Order. This task is recommended as being better accomplished by CCRWQCB staff because it requires interpretation of the Basin Plan. In past monitoring reports, CMP staff have attempted this task in order to provide analysis of water quality exceedences at CMP sites. The task proved quite difficult, as:
 - a. Not all water bodies are listed in the Basin Plan;

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- b. Not all Water Quality Objectives (including some numeric objectives) provide clearly-interpretible water quality standards for all Beneficial Uses;
- c. It is not always clear which Beneficial Use (and thus water quality objective) applies to a water body (for example, COLD versus WARM for water bodies not designated with specific Beneficial Uses but needing to be “fishable”); and
- d. Some water bodies are exempted from Beneficial Use designations (and thus water quality standards), however it is not always clear from the Basin Plan how to apply these exemptions.

It seems more appropriately the role of the regulatory agency to provide these standards to the discharger. Then the CMP or individual dischargers can use the standards with clarity as to what does or does not constitute an exceedence for specific sites/parameters.

- 6) Page 10, part IV.C.1 calls for submittal of water quality monitoring data within the next business day following identification of water quality exceedences, which is to occur within 5 business days after receiving laboratory analytical reports. For several reasons, I am concerned that this short turnaround time (TOT) exceedence report will not be a useful feature of an agricultural water quality regulation, but will result in increased costs and labor nonetheless:
- a. Even with the “5 days after lab reporting” and “next business day” requirements, these reports would likely take 21-30 days from the date of sampling to reach the CCRWQCB, which means that even a rapid response by your staff would be pretty far removed from any incident causing an exceedence;
 - b. Exceedences identified by the CMP occur in ambient waters and are not traceable to a single source, so even a geographically-focused response by your staff would be unlikely to identify a specific cause for an exceedence occurring almost a month prior, and also unlikely to specify a corrective action sure to correct the problem;
 - c. Exceedences identified by the CMP typically follow a regular pattern, which means that monthly reports would rarely provide new information to your staff;
 - d. Exceedences identified by the CMP are generally the result of ongoing conditions/practices rather than “incidents,” so having new results faster usually won’t alert your staff to anything out of the ordinary;
 - e. In contrast to exceedence reporting in other discharge scenarios (for example, temperature exceedences on rivers dammed by hydroelectric facilities), the CMP generates reports of hundreds, maybe thousands of exceedences each year [50(sites)x12(months)xZ(parameters), where Z is 1 or more parameters in exceedence per site]. Your staff already has nearly 6 years worth of this type of data, almost all of it redundant from month to month, year to year... It seems an unwieldy undertaking to now attempt to respond more rapidly to even a subset of the exceedences.

I understand that there is a regulatory precedence for this type of reporting, however I’m not clear on how the CMP fits into this model. If there were some specific sites or parameters that were of special interest during a limited period of time, I think we could coordinate some very rapid TOT’s (i.e. less than 1 week from the time of sampling). But to sustain this type of reporting for downstream locations over



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the entire region, every month, for every parameter does not seem an efficient use of resources given the redundancy and long history of most exceedences, not to mention ambiguity of specific sources.

- 7) On Page 11, part IV.E.1.m, the annual receiving water quality monitoring report is required to include recommendation of candidate sites for Toxicity Identification Evaluations (TIEs). While TIEs offer a rigorous experimental approach to identifying toxicants responsible for effects to laboratory test organisms, existing data (as well as published TIE studies themselves) suggest that these are not always necessary to resolve a large number of questions about aquatic toxicity. A slightly simpler approach is to perform toxicity tests concurrent with laboratory analysis for all potential toxicant classes. Data are then analyzed to determine which toxicants are present at levels that could explain observed toxicity. This type of analysis is an important part of the TIE approach, however TIEs go on (at great expense) to manipulate sample water experimentally to actually test hypothesis(es) about which toxicant(s) is/are responsible for the observed effects to the test organisms. In many cases, sufficient clarity about sources of toxicity can be gained without incorporating the additional layer of experimentation that results in the high cost of the TIE.
 - a. The recommendation in this case would be to modify requirement IV.E.1.m to require evaluation of candidate sites for “concurrent toxicity and chemical analyses,” rather than TIEs. In cases where toxicity remains unresolved even after all potential toxicant classes have been analyzed, or where toxicity continues despite improvements in specific toxicant levels, then the more sophisticated and costly TIE approach is justified.

- 8) On Page 7, part II.A.1 (photo monitoring required within one year of adoption of the Order) and also on Page 16, part VI.F.1 (water quality buffer plan required within four years of adoption of the Order), filter strips are prescribed as a management practice to mitigate impairments related to temperature, turbidity or sediment, in accordance with Basin Plan requirement Ch.5 p. V-13 Section V.G.4. Of particular interest seems to be the width of the strip from the top of the bank, and a main goal of these buffers is listed in the Draft MRP as “to prevent waste discharge.”
 - a. With respect to temperature-related impairments, the expected relationship between filter strip width and benefits to stream temperature is unclear. The measurable parameter that could be anticipated to influence stream temperature is “% Shading,” which depends on a combination of riparian vegetation height, the proximity of this vegetation to the stream bank, and to a minor degree the height and % slope of the area between the wetted stream edge and the start of riparian vegetation. None of these factors is directly related to riparian filter/buffer width from the top of the stream bank, which appears to be the focus of requirements in the Draft MRP.
 - b. With respect to the stated purpose to “prevent waste discharge,” (presumably of turbidity/sediment), I do not believe the prescribed management practice will result in measurable changes to water quality for two reasons:
 - i. Where the sediment “discharge” originates as erosion of a poorly vegetated stream bank (i.e. the region above the wetted stream edge and below the top of the bank or “bank full” level), the prescribed buffers will not prevent erosion because the area of



interest as described in the Draft MRP begins at the top of the bank, not the wetted edge.

- ii. Where the sediment “discharge” originates from agricultural activities beyond (upland of) the top of the bank, the prescribed buffers will not prevent discharges of sediment because such discharges are most typically channelized by design and do not contact riparian areas for appreciable lengths of time, if at all. Some benefit may be expected in isolated cases where “sheet flow” runoff from storm events becomes quantitatively important in relation to channelized flows (which occur by design in storm events as well), however Cooperative Monitoring data from 2005 through 2010 show that sediment/turbidity-related impairments are severe during all 12 months of the year. Since only 2 of the 12 CMP monitoring events each year typically include storm event data, and only a subset of locations would be measurably influenced by the filter strip/buffer management practice, it is unlikely that these requirements will result in detectable trends in sediment/turbidity-related impairments.

I am aware of the large body of literature and research which touts riparian buffers and filter strips as successful management practices. This comment can be summarized that as currently described, I do not believe this feature will result in measurable changes to water quality (i.e. CMP data) because this practice does not address the current root cause of the impairments.

- 9) On Page 19, Table 2 calls for photographs of monitoring locations. This should be revised to specify “upstream and downstream photographs.”
- 10) On Page 19, Table 2 calls for monitoring of a large suite of parameters not currently monitored by the CMP. In general, it is recommended that a specific rationale be provided any time a monitoring parameter is recommended for addition or deletion from the program. The relationship between some of these parameters and agricultural discharges is not clear; a clear relationship is needed if the monitoring is to meet program objectives. It is also general scientific protocol to choose monitoring parameters to meet program objectives, so it should be possible to state how each parameter supports the objectives. In particular:
 - a. In combination with the inorganic forms of nitrogen already monitored, the addition of TKN allows calculation of organic nitrogen. This could also be accomplished with “Total Nitrogen” analysis. Flexibility should be allowed to substitute this parameter if more cost effective.
 - b. Including Total Phosphorus and Total Nitrogen (or TKN) will provide data on organic forms of N and P generally expected to be of minor importance in relation to the elevated inorganic forms which result from agricultural activity. The benefit of adding these parameters, especially to the routine monthly program, is unclear.
 - c. Algae-related parameters should be modified to reflect the importance of attached algae in riverine environments.
 - d. It is unclear why Hardness and TOC are of interest as monthly parameters (i.e. why not just when monitoring for metals is required).

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- e. Rationale/citations should be provided for Pathogens and Metals, as there is question as to whether or not each of the listed parameters is actually related to irrigated agricultural discharges (or pesticide applications). (Rationale is clear for some; not for others.)
 - f. Rationale/citation should be provided for Phenol as a parameter, with special consideration as to the form it would be expected to take in receiving waters (i.e. is "Phenol" the correct analyte name?).
 - g. Is the current annual requirement for "Bioassessment Monitoring," which includes Physical Habitat Assessment and Benthic Invertebrate Assessment being revised to a one-time requirement for Benthic Invertebrate Assessment only? Please clarify.
- 11) On Page 19, Table 2 specifies reporting limits for some pesticides that appear higher than levels of concern currently specified by CCRWQCB staff. To support detection of exceedences, MDL's and RL's should be lower than water quality objectives.
- 12) On Page 19, Table 1 specifies major water bodies for monitoring. There are several inconsistencies with the current suite of CMP sites, including:
- a. No mention of San Juan Creek or Carnadero Creek in the Upper Pajaro; Alisal Slough in the Lower Salinas; the Salinas River above Chualar; Green Valley or Bradley Channel in Santa Maria.
 - b. New water body San Luis Obispo Creek
- A rationale for any changes to the current suite of CMP sites should be provided.

Thank you for considering these comments.

Sincerely,

Sarah Greene Lopez
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SANTA CLARA
COUNTY
FARM BUREAU

Monday, January 3, 2011

Jeffrey S. Young, Chair of the Board
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

RE: Central Coast Agriculture's Alternative Proposal for the Regulation of Discharges from Irrigated Agricultural Lands

Dear Chair Young,

Thank you for taking time to review the Alternative Proposal for the Regulation of Discharges from Irrigated Agricultural Lands that was submitted by agricultural organizations from across the Central Coast. The alternative proposal represents a full regulatory program to educate growers about appropriate farm management practices and provide the accountability necessary to achieve water quality results, while requiring minimal resources from taxpayers and the Regional Board. This alternative is supported by a wide variety of agricultural organizations representing over a hundred commodities, parts of eight counties, large and small operations, drip and furrow irrigation, organic and conventional practices, urban and rural farms and other components of the diverse agriculture industry. We urge you to fully consider the alternative proposed by organizations in the agriculture community. Together we have crafted an alternative designed to actually improve water quality based on our understanding that agricultural non-point discharges are best controlled through the implementation of management practices, which will lead to improvements in water quality and will move the industry towards compliance with water quality objectives.

We are confident that you will agree that our Agriculture Alternative, including the following components, is a rigorous regulatory program that will achieve real and significant on-farm results and receiving water improvements.

- Participate in a region-wide monitoring program
- Develop a confidential, proprietary farm water quality management plan (Farm Plan)
- Complete a Farm Water Quality Survey
- Participate in verification of statistically significant sample of Farm Water Quality Surveys
- Implement the Farm Plan and management practices to improve water quality
- Assess the effectiveness of implemented management practices and, when necessary, upgrade management practices
- Participate in the Ag Water Quality Coalition or conduct individual on-farm monitoring, if applicable

As you can see, all the necessary components of an Agricultural Order are present in our Agriculture Alternative. Like the Draft Agricultural Order, the Agriculture Alternative requires a Farm Plan that identifies actual and potential water quality impacts, describes farm water quality practices, and demonstrates that discharges do not contribute to exceedances. The Farm Plan would contain up to four specific sub-plans to address irrigation, pesticides, fertilizer, and sediment so that growers have flexibility in regulation and implementation rather than a one-size-fits-all approach. The Farm Plans are subject to random verification audits and are available for review with proper notice, providing both accountability and transparency. Our Agriculture Alternative contains timelines and milestones that consider legacy issues and are actually achievable, recognizing that farm operators only have the capacity to deal with their own operational inputs or influences on water.

Thank you for your consideration of the Agriculture Alternative, a proposal that demonstrates the Central Coast agriculture community is stepping up to take responsibility for water quality in our own backyards. We look forward to working with the Regional Board and staff to improve the Draft Order to more effectively address water quality impairments on the Central Coast. Please contact Jennifer Williams on our staff at (408) 776-1684 with further inquiries.

Sincerely,



Tim Chiala,
President

Cc: Russell M. Jeffries, Vice Chair
John H. Hayashi, Board Member
David T. Hodgins, Board Member
Monica S. Hunter, Board Member
Roger Briggs, Executive Officer
Michael Thomas, Assistant Executive Officer
Lisa McCann, Environmental Program Manager
Angela Schroeter, Agricultural Regulatory Program Manager
Howard Kolb, Agricultural Order Project Lead

Central Coast Water Quality Preservation, Inc.

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August 27, 2010

Mr. Jeffrey S. Young
Board Chair
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

Re: Proposed Order regarding Irrigated Agriculture

Dear Chairman Young,

Central Coast Water Quality Preservation, Inc. manages the Cooperative Monitoring Program as part of the existing Ag Waiver. CCWQP has worked with regional farmers and RWQCB staff throughout the Ag Waiver renewal process. While many of the issues regarding the proposed Ag Waiver deal with agricultural, water quality regulatory and operational considerations, a significant portion of the new proposed order and the associated MRP deals with water quality monitoring. The comments provided by CCWQP only address monitoring and technical matters.

CCWQP is grateful for several opportunities to meet and correspond with RWQCB staff subsequent to the release of the new proposed Ag Waiver in November. These opportunities helped us to focus our comments on the proposed order and to recognize areas where our understanding of what was proposed varied from that of RWQCB staff.

1. Proposed Order

- a. Definitions: The proposed order contains several pages of definitions, however some key words and phrases are either not defined or require further definition to avoid confusion after adoption of the order.

“Aquifer”, “upper most aquifer” (see MRP pg 16) and “waterbody” are not defined. Of particular note is the lack of clarity on “Aquifer”. For example in the Salinas Valley the Monterey County Water Resources Agency reports the 180 foot aquifer as the upper aquifer. It is unknown what these words mean as far as the application of the proposed Order and MRP.

- b. Nitrate Hazard Index: At page 44 of the definitions the Nitrate Hazard Index is referenced to the University of California, Center for Water Resources which is based on a formula considering crop, irrigation system and soil type. However,

page 33 of the order, Table 2, cites something called the UC Riverside Nitrate Hazard Index. At page 44 of the definitions, the formula has been changed to use crop, irrigation system and irrigation water nitrate concentration to calculate the rating. This second formula does not seem to be supported by any citations in Appendix J – References, nor could support for substituting irrigation water nitrate concentration be located in an extensive search of published literature. The substitution of water nitrate for soil type does not seem to be justified and biases the formula with inclusion of nitrate concentration. Furthermore, no support could be found for the scoring set forth at page 33. The UC Index uses a scoring of 1 to 80, with 20 and lower to be of “relatively minor concern”.

- c. “1000 feet of a surface waterbody” and “adjacent to ... a waterbody” as used to define the tiers (page 10-12) need further clarification. These phrases were discussed with RWQCB staff as they are confusing when applied to many farms that are next to a levee which separates the farm land from a nearby river. Also some farms have been laser leveled to drain away from the nearest waterbody, into private ditches that do not directly drain into the waterbody. It would be better to modify the two phrases to include the distance water leaving the farm must travel to reach the waterbody. So a farm separated from the Pajaro River by a levee with tailwater draining along a private ditch for a half mile before it can enter the Pajaro would not be either “adjacent” or “within 1000 feet” of the waterbody.

2. Monitoring and Reporting Program

- a. Cooperative Monitoring Program (CMP) is not specifically addressed in the MRP. Discussions with RWQCB staff indicate that the phrase “Receiving Water Quality Monitoring” as used in the MRP at page 3 is similar to the existing CMP and that most growers would elect to have a third party conduct Receiving Water Quality Monitoring similar to the way CCWQP manages the current CMP. However, the MRP is confusing in that Part I is titled “Monitoring Requirements for all Dischargers”. To avoid confusion, as Part II appears to be cumulative to Part I, an explanatory paragraph could explain in more detail that Part I, excluding the section on groundwater sampling, applies to the CMP and only to those growers that do not elect to participate in the CMP. Likewise, Part I, B, dealing with groundwater sampling could be clarified to state that it applies to all dischargers with an irrigation or domestic well.

These comments also apply to Part IV, A – E at pages 9 through 11. Of particular note would be clarification that Part IV, C, Exceedance Report, applies only to the CMP manager and those farmers that do not elect to participate in the CMP, not to all Tier 3 growers who have to conduct individual on farm monitoring. Part IV, F, should have a separate heading to distinguish it from the “Receiving Water Quality Monitoring.”

- b. Parameters and Tests. (MRP pages 19 to 23)
 - i. Stormwater sampling (page 19): CCWQP presently conducts monthly monitoring, which includes 2 stormwater events. The proposed monitoring calls for 12 monthly samples plus 2 stormwater events. This

will increase the cost of this portion of the program without adding any data which is not currently obtained. It is recommended that the monitoring remain at monthly including 2 stormwater events within the winter monthly monitoring.

- ii. Pathogens (page 20): The proposed MRP calls for quarterly and 2 stormwater testing (6 times per year) at CMP sites each year for fecal coliform and E. coli. This monitoring is not warranted as there is no showing that either class of pathogens is present in irrigated agricultural discharges. There is ample evidence that both pathogens are present in runoff from livestock and in urban stormwater. Many existing CMP sites are down stream from either livestock or urban locations and would most likely show the presence of the two pathogens from these sources, not from agriculture. The RWQCB staff report entitled *CEQA Scoping Meeting and Public Workshop for the Pajaro River June 20, 2007, Fecal Coliform TMDL* stated at page 11:

“Irrigated Agricultural Lands Staff reviewed water quality data and other information in an effort to determine whether irrigated agriculture is a source of indicator bacteria. *Data and information suggest that irrigated agriculture is not a source of indicator bacteria causing exceedance of water quality objectives.* (emphasis added) Growers in the project area are highly aware of food safety issues as their livelihood depends on providing a crop that is safe for consumers. As such, growers practice methods that minimize the potential of crop contamination. Staff observed conditions within the watershed and did not document land or field practices that would result in a controllable discharge of indicator bacteria to surface waters. Staff is proposing that discharges from irrigated lands in the project area are not causing exceedance of water quality objectives related to indicator bacteria.”

It is recommended that both pathogens be eliminated from the MRP to be consistent with the staff findings dealing with prior work on Fecal coliform TMDLs.

- iii. Metals (page 21): The requested metals are not used in commercial agricultural operations and should not be included in the monitoring program.
- iv. Phenol (page 21): Review of the references cited in Appendix J did not reveal any support for the premise that phenols are causing toxicity or other impairments to water as a result of agricultural discharge. There are no findings supported by reviewed research that phenol is causing a impairment to water quality in the region. Furthermore, there are no findings that phenols are present in the water as a result of irrigated agriculture. For these reasons, phenol should not be included in the list of parameters and tests.

- c. Individual Monitoring for Tier 3. CCWQP does not endorse individual reported on farm monitoring and does not take a position on the merits of this concept in the proposed Ag Waiver. CCWQP does have some comments on the applicability of some of the Tier 3 monitoring as proposed in the draft order as it applies in the field and for the purposes of obtaining meaningful data through any such monitoring.
- i. Part III at page 8, paragraph 6, is uncertain as worded. It is not clear what is meant by “must select monitoring points to characterize a representative sample of at least 80% of the estimated irrigation run-off discharge volume from each farm/ranch ...” Discussions with RWQCB staff indicate that the objective of this paragraph is to reasonably characterize discharge and that the grower needs to use individual discretion to determine that the samples and monitoring location reasonably characterize discharge. Possibly it would be better to require monitoring at the “principal point of discharge” with a narrative note justifying the timing and location of the monitoring point.
 - ii. Part III, A, 9, dealing with High Nitrate Loading Risk to groundwater, directs that the grower verify the effectiveness of the INMP “in protecting groundwater quality and achieving water quality standards for nitrate.” This is an impossible request given the limited ability of a grower to extrapolate lysimeter and soil monitoring for this goal. The objective of the paragraph would remain the same if the quoted phrase was deleted.
 - iii. The provisions regarding the Water Quality Buffer Plan, Part VI, F (page 16) are internally inconsistent. The first sentence states that a Buffer Plan is “required for subset of Tier 3 Dischargers that have operations that contain or are adjacent to waterbody impaired for temperature or turbidity.” This is the same as the description of the Water Quality Buffer Plan in the proposed Order at page 27, paragraph 92. However, in the MRP, at Part VI, F, subparagraph 1, the definition is changed to “Tier 3 Dischargers located within 1,000 feet of a water body and in the drainage area of a waterbody...” This expands the scope of Tier 3 growers subject to this provision and is contrary to the proposed Order. Again, the buffer requirement is unclear as to its applicability if the farm is separated from the waterbody by a levee or other drainage ditch which does not allow discharge to flow directly from the farm to the waterbody.
 - iv. Individual Monitoring for Toxicity (page 23): The staff report states that the primary source of surface water toxicity in agricultural waterbodies is resulting from Chlorpyrifos and/or Diazinon. The proposed Individual Monitoring includes testing for both OP’s and two additional toxicity tests. The toxicity testing is redundant and very expensive. Therefore, it is recommended that if OP testing is conducted the two species toxicity testing be eliminated from this procedure.

There are many other issues which individual growers or agricultural trade associations may raise as to the technical and monitoring provisions of the proposed Order and MRP. However,

CCWQP believes that these issues are beyond the scope of an organization which may manage the new Receiving Water Quality Monitoring Program proposed by the draft Order and MRP.

Should you, your board members or RWQCB staff have any questions regarding the matters outlined above please contact me.

Thank you for the opportunity to comment on the proposed Ag Waiver Order and supporting documents.

Sincerely
Central Coast Water Quality Preservation, Inc.

A handwritten signature in black ink, appearing to read "Kirk F. Schmidt", with a long horizontal stroke extending to the right.

Kirk F. Schmidt
Executive Director

JY-Waiver renewal 101222.docx

Lindsay Ringer - clarify

From: Jackie Crabb <jackie@slofarmbureau.org>
To: <ASchroeter@waterboards.ca.gov>
Date: 12/20/2010 3:10 PM
Subject: clarify

Hi Angela,

On page 16 of the Monitoring section, F.1, a Water Quality Buffer Plan is required if the impairments are for temperature and turbidity. But on page 27 of the Order, 92, the impairments are for temperature, turbidity or sediment and is backed by Table 1, page 30. I assume it was an oversight in the Monitoring section and sediment should be included?

Jackie

Jackie Crabb, Executive Director
San Luis Obispo County Farm Bureau
651 Tank Farm Road
San Luis Obispo, CA 93401
805-543-3654 (voice)
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jackie@slofarmbureau.org



Santa Barbara County Farm Bureau

Affiliated with the California Farm Bureau Federation and the American Farm Bureau Federation

December 28, 2010

Via First-Class Mail & Email

AgOrder@waterboards.ca.gov

Jeffery S. Young, Chairman of the Board
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, Ca. 93401

Re: CCRWQB Request for Public Comment on Preliminary Draft Agricultural Order
Dated November 19, 2010

Dear Mr. Young:

The Santa Barbara County Farm Bureau represents over 700 diversified agriculturalists in Santa Barbara County. Agriculture continues to be the county's major producing industry, with a gross annual production valued at over \$1.7 billion dollars. It provides a strong base for our economy and through the multiplier effect has a local impact in excess of \$2.2 billion dollars.

Our members supported the initial Conditional Ag Waiver that your Board adopted in 2004, which focused on collaboration in achieving improvement in water quality over time. Compliance with the 2004 Conditional Waiver resulted in significant achievements, including a high percentage of growers enrolling in the program. They participated in numerous education and outreach programs along with the development and implementation of Farm Plans that focused on the management of their distinct operations.

Thank you for the opportunity to comment on the latest draft proposal from Staff dated November 19, 2010, regarding the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated lands.

We are surprised and disappointed in the breadth and scope of Staff's current proposal following comments from the Board during the workshops held in both May and July. We were encouraged by the Board's directives and comments during those workshops. Those comments included, but were not limited to accomplishing water quality improvement over time, not trying to accomplish the impossible within the 5 year span of the waiver and also prioritization of surface water nitrates and toxicity within the next 5 years, while attention to sediment could follow in subsequent waivers.

We understand Staff's use of Tiers in their current proposal to differentiate between the diverse agricultural operations found throughout Region 3 and their potential impacts to water quality. We are extremely concerned with the lack of clarity concerning the requirements of those tiers and their triggers. For impacts to water quality to occur both the transport method and the constituent need to be present. Several of Staff's tier triggers do not account for either of these, making it difficult to prioritize operations based on risk to water quality. The 1,000 acre and 1,000ft proximity to a 303d water body threshold are examples of these requirements. They are problematic because they are based on scale and location, not actual risk to water quality.

We believe the monitoring portion of Staff's proposal needs to be worked on both by staff and growers so a meaningful program can be put together that will address milestones and timelines. Focus on two constituents of concern, Chlorpyrifos and Diazinon in the most impaired areas of the Region. Staff's current proposal regarding monitoring and reporting is confusing. In one section the term "Receiving Water Quality Monitoring" is used, which we believe is similar to the existing Cooperative Monitoring Program. In another section the term "Monitoring Requirements

For all Dischargers” is used. If the latter term is used as part of monitoring groundwater, then Staff assumes all growers contribute to groundwater impairment regardless of irrigation type and method. This is simply not the case and will create a huge amount of unnecessary reporting. A concerted effort is needed to understand the complexities of groundwater and any impairment that may exist in different areas throughout the Region. Additional research is needed to fully understand ongoing monitoring programs and the information they provide related to groundwater before a costly monitoring program is put into place. Stormwater sampling is currently done monthly and includes two stormwater events. Staff’s proposal calls for 12 monthly samples plus 2 storm water events. This will increase the cost of monitoring substantially without adding any meaningful new data.

We understand the concept of individual reported on farm monitoring, but feel there are alternatives that should be explored with growers within the region. The Agricultural Alternative calls for the use of best management practices to improve water quality in highly impaired areas. We believe it would be extremely helpful if Staff and the growers in those areas worked together on developing the accountability of those practices as an alternative to individual on farm monitoring. There are currently no other regions within the State that require individual reported on farm monitoring. It is not cost effective and does nothing to improve water quality.

The Staff proposal also calls for quarterly and 6 storm water tests a year at CMP sites for fecal coliform and E. coli. This testing is not necessary due to ample evidence that either class of pathogen is present in irrigated agricultural discharges. Metals are also not used in agricultural operations and should be removed from any testing or monitoring requirements. Phenols should also be removed from the list of parameters and tests as there is no evidence that they cause toxicity or other impairments as a result of agricultural runoff.

We believe Staff has done their best to follow your Boards directive in writing a new proposal for the irrigated lands regulatory program by November 19, 2010. It is evident that staff needed more time to insure their intent was properly conveyed within the language of their proposed new Conditional Ag Waiver.

The Ag community has only been able to meet with Staff on one occasion since the Board workshops held last May and July to discuss the latest proposal from Staff, along with a comparison of an alternate proposal put forward by members of the agricultural community in Region 3. Members of the agricultural community representing many different commodities and geographic areas from within the boundaries of Region 3 met and spent countless hours writing a proposal based on best management practices as a means to address the water quality issues within the region. The Santa Barbara County Farm Bureau appreciates Staff taking time to meet and discuss the merits of both proposals.

I believe we had the beginnings of a constructive dialogue and we look forward to continuing those discussions to insure a scientifically based, equitable Conditional Ag Waiver is adopted by your Board.

Sincerely,



Kevin Merrill, President
Santa Barbara County Farm Bureau

cc: Russell M. Jefferies, Vice Chair
Monica S. Hunter, Board Member
David T. Hodgins, Board Member
John H. Hayashi, Board Member
Mr. Roger Briggs, Executive Officer
Ms. Angela Schroeter, Agricultural Regulatory Program Manager
Mr. Howard Kolb, Agricultural Order Project Lead Staff



CALIFORNIA WOMEN *for* AGRICULTURE

December 30, 2010

Sent Via U.S. Mail and Email

Jeffrey S. Young, Chairman of the Board
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

RE: CCRWQCB Central Cost Conditional Ag Waiver/Ag Order

Dear Mr. Young,

Thank you for the additional opportunity to comment on the staff's draft Order relating to water discharge from irrigated agricultural lands. The San Luis Obispo County Chapter of the California Women for Agriculture ("CWA")¹ appreciates the time, effort, and consideration the Board has given to those most affected by the Order. CWA hopes the Board will continue to develop an Order that will be scientifically based and include sound policy and achievable objectives.

CWA remains very concerned with the proposed agricultural order and specifically the ambiguous, arbitrary, and undefined requirements, which will undoubtedly result in unintended and detrimental consequences to agriculture and even more importantly, not serve the ultimate purpose of the Order; to improve and protect water quality.

CWA is particularly concerned with the undefined and impractical requirements for agricultural operations identified below:

- The 1,000 acre threshold is arbitrary and generic. The size of the agricultural operation should be of less consequence than soil type, percolation rates, and cultural practices. The inclusion of 1,000 acres in Tier 3 will not serve the Order's objective and does not provide flexibility for situations especially unique to agriculture.

¹ CWA is a non-partisan, non-sectarian, non-profit, all volunteer organization committed to improving the quality and sustainability of the agriculture industry.

- The appeal process for producers, to be removed from Tier 2 and Tier 3, is undefined and does not provide a deadline/time frame for a decision to be rendered. For example, a grower who has no discharge into a 303(d) waterbody and who does not apply chemicals set forth in the Order would still be classified as Tier 3 and would be required to file an appeal if their land is within the 1,000 foot set back from a specified body of water. A distinct time line for appeals is a must.
- Baseline legacy nitrates are not defined, or known. Baseline legacy nitrate loads are required to properly measure potential nitrate loads from farming practices.
- A one-size fits all approach does not work. Differing soil types, percolation rates, water table levels and manner of surface nitrate irrigation application must be considered prior to determining nitrate loads due to particular farming practices.

In addition to the foregoing, CWA is concerned about the punitive nature of the Ag Order. The Ag Order punishes growers and does not provide incentives to participate in additional BMP, monitoring, or load reduction activities. CWA hopes the Board will continue to develop an Order that will be scientifically based and include sound policy and achievable objectives. Accordingly, CWA continues to encourage the Board to carefully examine each provision and revision and its causal relationship to improve water quality.

Very Truly Yours,



Krista Kodl
SLO County CWA, President

CC: Angela Schroeter, Ag. Regulatory Program Manager, by email only
SLO County CWA Executive Board, by email only

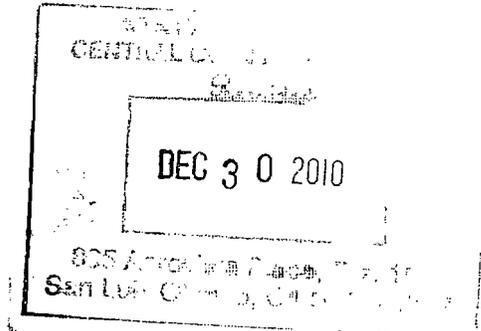


SAN LUIS OBISPO COUNTY FARM BUREAU

651 TANK FARM ROAD ♦ SAN LUIS OBISPO, CA 93401

PHONE (805) 543-3654 ♦ FAX (805) 543-3697 ♦ www.slofarmbureau.org

Chairman Jeffery S. Young
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906



Dear Chairman Young:

Representing the San Luis Obispo County Farm Bureau I would like to thank you for this opportunity to comment on the Draft "Conditional Waiver of Waste Discharge Requirement for Discharges from Irrigated Lands". I urge your serious consideration of Agriculture's Alternative in addition to consideration of the Regional Staff's November Draft Agricultural Order and further like to urge you to request staff to fully cooperate in a collaborative effort with the agricultural community in the development and approval of a functional and achievable Order. San Luis Obispo County agriculture is composed of a wide range of agricultural operations many of which are small and will be seriously impacted by the expanded new waiver if adopted as drafted.

Relating to the Staff Draft Agricultural Order, I would like to make the following observations and comments.

General Comments:

There has been significant changes and expansion in the Draft Order from the current regulations and we believe there has been a positive step with the Staff's introduction of the tiered approach. That being said, we have a number of concerns regarding the unwarranted tone of the Draft Order and the conveyed criticism and distrust of agriculture in the draft. Agriculture worked collaboratively with the Regional Staff to create the current waiver. As farmers, we are committed to producing safe food and fiber, utilizing the best possible management practices while at the same time improving our area's water quality. We ask that the Draft Order be reviewed and amended to create a more effective and practical Order that is achievable for both the farmer and water quality regulators.

Specific Comments:

The Draft Order contains undefined requirements and potentially unachievable and impractical milestones and timelines.

1) The Draft Order sights some critical data which has created the foundation for claims of agricultural pollution, as well as cost analyses, which are outdated. Some references are actually over two decades old and extracted from a report produced prior to the current waiver. In the last 20 years there has been verified water quality improvement

and significant cost increases. Such outdated information as found on page 2 (Draft Order), pages 11 and 13 (Appendix A) and page 51 (Cost Considerations) referencing nitrate pollution from a 1990 report is totally misleading today. Further using a 1999 cost analysis, found on page 52 of Cost Considerations, for the cost of ion exchange is over 10 years old. This is thoroughly irrelevant to today's costs. *The use of such outdated sources to develop the conclusions is not appropriate and must be corrected.*

2) The Tiered proposal concept has merit, although there is confusion because of lack of clarity relating to the tier requirements and the tier triggers. As an example there is a contradiction between the Staff report and the Draft Order where the Staff report (page 16) states Tier 1 irrigated acreage "is not greater than 1000 acres", while the Draft Order (page 10) states that the acreage "must be less than 1000 acres. *In this case 100 acres is a significant difference between the requirements Tier 1 and Tier 2. Such confusion must be corrected and clarified.*

3) There is serious concern over the Draft Order's surface water sampling and reporting. There is no assurance that there will be an entity, such as Preservation Inc, that can meet the required deadlines or the newly expanded requirements and costs which will have to be assumed with the approval of the Draft Order. Without some assurance that a Cooperative Monitoring Program (CMP) will cover "all dischargers" the projects/plans and costs will fall on backs of the farmers. These requirements are not doable, especially by the small farmer. As an example:

a. Relating to Receiving Water Quality Monitoring, beginning on page 9 the Monitoring Draft states that "all dischargers" must submit a Monitoring and Reporting Program (MRP) Plan. Without a Cooperative Monitoring Program or a comparable program this means that every farmer must then complete the 8 technical points of the MRP Plan and submit it within 3 months of adoption of the Order (page 9). Even with a CMP can "an approved third party" meet this requirement in this short timeframe? *This is an example of undefined, unachievable requirements. Many farmers have no idea how to complete such a Plan.*

b. Relating to the Quality Assurance Project Plan (QAPP), on page 9 and 10, all dischargers, within 3 months of adoption of the Order, must address the 4 points (Project Management, Data Generation and Acquisition, Assessment and Oversight and Data Validation and Usability) in the QAPP and submit it to the Regional Board Executive Officer. The QAPP is very detailed and without a CMP would not be achievable for every farmer to complete within the time limits. Even an approved third party would be seriously tested to complete the QAPP within the 3 month limit.

4) The constituents to be tested through the monitoring program is still of a major concern for our growers. There are constituents such as fecal coliform and e. coli or some metals which are not agricultural contributions to the water quality. We believe that the testing should only reflect those constituents used which post a concern in the impacted areas, such as Chlorpyrifos and Diazinon.

5) Individual grower well sampling is a serious concern for our growers. Samples must be collected by a State registered entity, a chain-of-custody followed and then analyzed

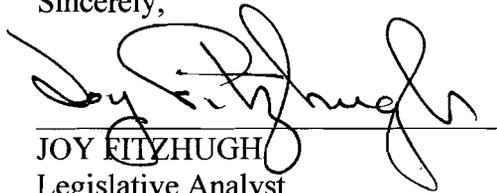
by a State certified laboratory for all domestic and at least one farm well on every ag operation. With 3,000 operations and many operations having multiple wells, it appears that there are insufficient State registered engineers or geologists or State certified labs to fulfill the required sampling and analysis within the timeframe the draft requires. This problem must be further reviewed with agricultural producers included in the discussion.

To compound all of the above, with the admission in the Cost Considerations, Appendix F, page 37 that, "*With the current staffing and budget, staff cannot review information from, nor inspect, most of the operations in the region*" it appears that the MRP, the QAPP, the well monitoring and other requirements in the Draft Order are even beyond handling capability the Regional Board Staff.

In Conclusion:

Our Farm Bureau has met with staff within the last few months and we have had some positive discussions about the issues. We feel that this is a positive beginning. We ask that there be continued discussion between the staff and agricultural representatives with education and understanding on both sides. We are proud of the collaboration that created the 2004 waiver and believe it can happen again. A coalition of agriculture has spent many hours working on an Alternative to the Draft Order and this must be part of the deliberation. We need a positive, incentive driven water quality program that is functional and feasible for both agriculture and the regulatory community.

Sincerely,



JOY FITZHUGH

Legislative Analyst

San Luis Obispo County Farm Bureau

cc: Russell M Jefferies, Vice Chair
Monica S. Hunter, Board Member
David T. Hodgen, Board Member
John H Hayashi, Board Member
Mr. Roger Briggs, Executive Officer
Ms. Angela Schroeter, Agricultural Regulatory Program Manager
Mr. Howard Kolb, Agricultural Order Project Lead Staff



SANTA CLARA
COUNTY
FARM BUREAU

Monday, January 3, 2011

Jeffrey S. Young, Chair of the Board
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

RE: Draft Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands

Dear Chair Young,

Thank you for accepting comments on the Draft Agricultural Order released November 19, 2010. The Santa Clara County Farm Bureau has been collaborating with the Regional Board to improve water quality for over a decade, even before the first mandatory regulatory program was being considered. Santa Clara Valley farmers are committed to doing our part to address impairments when water quality on the Central Coast does not meet state and federal guidelines for beneficial uses. Our members have sought and received technical advice, attended countless workshops, implemented new management practices, and made capital improvements on their farms, all to improve water quality on the Central Coast where we live and work with our families.

In some ways, the November 19, 2010 proposal is decidedly more reasonable and feasible than the February 1, 2010 proposal. However, on the whole, the existing proposal is so onerous and unworkable that board adoption of the proposal would take valuable farmland out of production, drown Regional Board staff with fruitless paperwork, and result in no marked improvements to water quality on the Central Coast. We urge you to direct staff to make significant changes to the Draft Agricultural Order before you consider adoption.

TIERS

We appreciate the Regional Board's sensitivity to comments received regarding prioritization of water quality impacts and the assertion that "one size does not fit all" following the release of the February preliminary draft. While the attempts to address these concerns are appreciated, they miss the mark. The proposed tiering system, particularly the 1,000-acre component, is both completely arbitrary and impossible for staff to manage. The staff proposal provides no basis for the thousand-acre distinction and we are not aware of any research to support it. If anything, large farms may pose a lower risk to water quality because they are often better positioned to address impairments due to larger amounts of available capital. The tier trigger for proximity to impaired waterbodies is also arbitrary. This tiering component does not consider actual risk posed by a farming operation, but rather groups all adjacent lands into Tiers 2 or 3, regardless of

whether or not the adjacent farming operation poses a risk. For example, an operation located within 1,000 feet of Llagas Creek in Santa Clara County that does not use pesticides and does not have irrigated runoff should not be in Tier 2 solely due to its proximity to an impaired waterbody.

GROUNDWATER

Nitrates in groundwater are problematic in areas of the Central Coast and research suggests that agriculture is partially responsible. Rather than imposing illegal and onerous reporting requirements for irrigated agriculture, we recommend that the Regional Board work with the agriculture community and researchers to identify effective and reasonable management practices to address the legacy nitrates in groundwater and to reduce and eliminate any current nitrate loading. We also urge your reconsideration of the Nitrogen Balance Ratio requirements, which are nothing if not “one-size-fits-all” and for which there is no scientific basis provided.

REGULATION

Throughout the proposed waiver, it is clear that irrigated runoff is not considered a non-point source, though it is classified that way in every piece of state and federal legislation. Agricultural runoff requires a different approach from point sources because as a non-point source it is different. One example of how disconnected and ill informed the Draft Agricultural Order is with regards to appropriate regulation of non-point sources is the assertion in the Executive Summary that “the Water Board’s current regulation of irrigated agriculture is very low relative to other programs.” Current regulation of irrigated agriculture is not low compared to other programs. It is different. In fact, the 2004 Conditional Waiver is one of the strictest regulatory programs of its kind in the nation. If given an appropriate amount of time to demonstrate results, the 2004 Conditional Waiver’s focus on improved management practices would dramatically improve water quality on the Central Coast.

The Regional Board lacks the necessary authority for some of the regulatory requirements in the Draft Agricultural Order. The most glaring example is the nitrogen reporting requirements. Information on nitrogen applications is proprietary and represents a competitive advantage distinguishing the most successful farmers from their neighbors. As we noted in a comment letter on the February 1, 2010 proposal, Section 13267 (b) (2) of the state Water Code prohibits the Regional Board from requiring this proprietary information. Furthermore, since these reports contain information on nitrogen applied, rather than nitrogen discharged, the Regional Board has not demonstrated a “reasonable relationship to the need for the report and the benefits to be obtained from the reports” as required in Section 13267 (b) (1) (a). Another area where the Draft Agricultural Order oversteps the Regional Board’s authority is the vegetated buffer requirements, which we do not believe the Regional Board has the authority to require. Not only are the buffer requirements for Tier 3 growers outside the Board’s authority, they would remove significant amounts of land from production without appropriate CEQA consideration, would decrease the supply of fresh, safe, local produce, and could potentially pose a food safety threat.

Thank you for your consideration of our comments. We look forward to working with the Regional Board and staff to improve the Draft Order to more effectively address water quality impairments on the Central Coast. Please contact Jennifer Williams on our staff at (408) 776-1684 with further inquiries.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Chiala". The signature is fluid and cursive, with a large initial "T" and "C".

Tim Chiala,
President

Cc: Russell M. Jeffries, Vice Chair
John H. Hayashi, Board Member
David T. Hodgins, Board Member
Monica S. Hunter, Board Member
Roger Briggs, Executive Officer
Michael Thomas, Assistant Executive Officer
Lisa McCann, Environmental Program Manager
Angela Schroeter, Agricultural Regulatory Program Manager
Howard Kolb, Agricultural Order Project Lead



December 31, 2010

Electronically Submitted to: AgOrder@waterboards.ca.gov
Hard Copy to Follow

Jeffrey S. Young, Chairman of the Board
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Re: California Regional Water Quality Control Board, Central Coast Region Draft Order No. R3-2011-0006 (“Draft Ag Order”), dated November 2010 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands

Dear Chairman Young:

The Paso Robles Wine Country Alliance represents 500 members comprised of wineries, growers, hospitality partners and related businesses. These are all stakeholders and rely upon a viable agricultural economy to sustain the quality of life we all enjoy on the Central Coast.

San Luis Obispo County is now the third largest wine region and has the potential to lead the California Wine Industry alongside the Napa and Sonoma Valleys. Last reported, the San Luis Obispo Wine Community contributes close to \$1.8 billion dollars in economic value and pays more than \$86 million in local and state taxes. San Luis Obispo wineries, vineyards, and allied industries and services account for over 8,000 jobs, generating a payroll of more than \$240 million per year. These jobs represent 7.5% of total county employment, 9.2% of private sector employment and a major share of recent job creation. Winegrapes remain the highest value agricultural crop in San Luis Obispo County.

For this reason, our organization has made a concerted effort to work with our local governments, neighbors and communities to expand education, awareness, and collaboration on matters that affect our industry and in turn the communities we serve. It is our view that incentives and education go much farther in addressing the end goal of resource protection and conservation, including water quality, more than regulation ever could. Although we recognize staff’s progress in developing a Tiered Program as a marked improvement from the proposal issued in February 2010, we offer the following comments and suggest additional revisions to the approach to make for a more practical and targeted program:

1) Tiered-Approach: Basing the tiers on location and size has no practical bearing on potential contribution to poor water quality. The tiers should be based upon whether there is probable cause for pollution to be transported. Farming operations that do not result in tailwater (i.e. drip irrigated vineyard operations) and are closely monitored for input requirements to the specific plant needs, should be exempt from a tiered approach.



2) Incentives: Vineyards utilize deficit irrigation practices, drip tubing, water to root technology, drip irrigation and soil moisture calibrations. These practices should be encouraged and incentives given to maximize such practices that serve to minimize water quality degradation. Incentives and performance-measures to improve water quality should be the focus of requirements. The ability to be exempt from a tiered structure or shift to a lower tier should be an incentive to incorporate best management practices and farming practices that eliminate tailwater and improve water quality.

3) All dischargers, including Tier 1, are subject to: Receiving Water Monitoring and Groundwater Well Reporting:

Receiving Water Monitoring: Dischargers who do not cause tailwater, as is the case for vineyards, should not be subject to receiving water monitoring.

Groundwater Well Reporting: The requirements for well water monitoring go beyond what is necessary to carry out the order to address pesticides, sediment, and nutrients associated with agricultural discharges. How does monitoring depth to groundwater address these issues? It may be impossible to measure depth to groundwater due to clearances in the well without pulling the pump and adding a sounding tube. This could add substantial cost for compliance without any justification for this requirement. Depth to groundwater monitoring should be eliminated from the order.

Any well testing should be associated specifically to the constituents in question. Additionally, this information should not be submitted to the Control Board for public record. Particularly, if you are not contributing to the concerns meant to be addressed through this order. The groundwater reporting requirements are over-burdensome and unnecessary.

If groundwater testing is deemed legal and necessary under this Order, we support the Ag Alternative approach to targeting water well testing to the constituents in question by limiting testing to one primary well; the constituents for testing only nitrates, TDS or EC, and pH; and keeping results on-farm in the Farm Plan to maintain proprietary information.

4) Impaired Water bodies – Much confusion surrounds the threshold trigger of 1,000' from an impaired water body. There are several lists and a number of waterbodies impaired from other sources aside from sediment, turbidity, nutrient, pesticide, toxicity, or temperature. The final order should include the list of impaired waterbodies that would trigger the setback threshold rather than creating ambiguity between what lists, what impaired waterbodies, etc.

The final list of impaired water bodies should correlate to the specific impairments called into question by this Order. For example, an impaired waterbody that is listed under pesticide impairment due to DDT should not be a matter of this order as present farming conditions are not



contributing further to this impairment. A single list needs to be referenced and used for the life (5 years) of the Ag Order. Otherwise, there is too much uncertainty in determining what tier you are in.

5) Public Review Process: Insufficient time has been allowed for the public to respond to staff's recommendations in a meaningful way. The Ag Order and the associated documents represent an enormous amount of material for anyone to review within the available timeframe.

Additionally the condensed schedule for review over the holiday season is an unfair tactic to reduce the amount of public comments received. Limiting written submittals for review by staff or your Board to the January 3rd deadline is counter to typical public review and decision-making and will limit the ability for affected growers, and jurisdictions alike, to provide meaningful comments. Written comments should continue to be allowed and encouraged throughout the Regional Board review and decision-making process.

6) NOI Requirement: The requirement to submit an updated NOI before the updated Ag Order is adopted is problematic in that there is no regulatory mechanism to enforce this. Also, there needs to be a mechanism for data submission in a non-electronic form for those farmers who do not use, or do not have, internet access.

7) Data Accumulation: Data collection should not exceed that which staff can reasonably review and enforce. Admittedly, staff cannot manage and oversee the extent of data to be collected under staff's proposal. Page 37 of Appendix F states that "with the current staffing and budget, staff cannot review information from, nor inspect, most of the operations in the region". An obvious question is why more data is being requested if staff cannot review the information nor inspect the operations.

Your Board quantified the objectives for the next 5 years during the May and July Workshops to focus on surface water nitrates and organophosphates; secondary sediment and riparian issues should be addressed later. Staff's proposal takes on too much without the necessary tools or ability to make a difference in improving water quality.

8) Cost/Benefit: Although we appreciate the attempt to evaluate costs associated with the Order in Appendix F a full cost/benefit analysis is still needed. The Water Board needs to better define their rationale for the proposed requirements to justify the costs imposed on the agricultural community as well as provide a more accurate cost of the Ag Order.

We were encouraged with the comments and directives given to staff during the workshops in May and July and wish to continue to emphasize the following general considerations as the Board evaluates and develops a final Order:

- a. A successful program is performance-based and provides incentives and opportunities to improve water quality. Arbitrary factors such as operational size and location;



unnecessary requirements; burdensome paperwork; and limited resources to manage and enforce does not provide any benefits towards improving water quality.

b. A longer term approach to improve water quality beyond 5 year increments should be sought. Water quality degradation did not occur overnight and cannot be expected to be solved in a short time horizon without creating negative and unintended consequences to the agricultural community which serves us.

c. The first 5 year Ag Waiver Program has been a success in collecting data and getting the farming community and regional board to begin talking about solving water quality issues. The next 5 years should encompass a priority-based approach targeting the most extreme issues to build momentum to continue to work collaboratively on water quality concerns.

d. It is important to maintain a cooperative effort to ensure the long term continuation of solving water quality issues as well as the long term continuation of agricultural production. Preservation of water quality/quantity and a viable food production system are equivalent priorities and should be given equal weight in any program development.

We support the Agricultural Alternative as an improved approach to addressing water quality concerns. Most particularly, we find the Ag Alternative to be more performance-based and focused on research, education, and extension rather than unnecessary and burdensome paperwork that serve no purpose in improving water quality.

Incentives and education go much farther in addressing the end goal of resource protection than regulation ever could; when people are motivated to do good (particularly by their peers), they will do good. We continue to support efforts that are collaborative, performance-based, educational, and well-researched. We respectfully request your Board give your staff very clear direction to work in conjunction with the agricultural community in developing an incentive-based proactive program that will encourage open dialogue and education among stakeholders.

Sincerely,

Lisa M. Bodrogi
Government Affairs Coordinator
Paso Robles Wine Country Alliance

COLAB

December 15, 2010

Comments to: The Central Coast Regional Water Quality Control Board

Concerning the Draft Agricultural Order, November 19, 2010.

Delivered Via Email

Dear Board Members,

The desire to have clean water, viable habitats, and a healthy environment is a goal we all share.

The question is, how do we realize our goal and maintain our economy and the rights of the citizenry at the same time, while respecting the bounds of reason, science and best available control technology?

How do we garner cooperation from the property owners and businesses that must be our partners in the process?

What is the best way to achieve our goals while respecting the demands of other regulatory agencies and market demands placed upon the same affected community?

Well, I can say one thing for sure. Your staff must not have had ANY of these questions in mind when they promulgated the Waste Discharge Preliminary Draft Order.

On behalf of The Coalition of Labor, Agriculture and Business, I am writing to you to request that you at once terminate and rescind the proposed regulations affecting agricultural operations throughout the region and start over!

All of the constituent pollutants in the basin are NOT attributable to agriculture. Your staff wants agriculture to clean up their contribution to water quality degradation without ever having bothered to delineate what pollutants are actually attributable to agriculture!

The draft order issued by your staff is replete with gross exaggeration, hyperbole and rhetoric that should serve as an indicator to your board that something is amiss. The basic gist of the order tries to make the case that millions of people are at risk from the pollutants attributable to agriculture on the Central Coast. However, the bulk of the land in Santa Barbara, San Luis

Obispo and Monterrey Counties is neither cultivated or inhabited! And, the bulk of the population in the northern most region of your district is in urban metropolitan areas that are not affected by agricultural runoff.

Agriculture should NOT be required to test for and clean up chemical traces in the water that are there through NO fault of their own. This desire to search for pollutants and order abatement violates principles of laws that protect the citizenry from searches and takings that are not justified or even rational.

What is in the aquifer is a result of the contributions of many sources over a very long period of time. It can not be cleaned up in a day. And, the burden to clean it up should not fall on the farmers of today.

What should your staff do to proceed in a meaningful and thoughtful way?

Well, the first thing they should do is a historical analysis of the various basins in the region for the last 150 years! Board members, this is YOUR responsibility before you enact regulations. In other words, you should know where the various trace pollutants came from and when, where they are now, and what has happened over time with respect to the same as it affects water quality. There is no way to turn back the clock and this regulatory effort should not be aimed at a futile and expensive attempt to do just do that!

The main point here is that your staff is asking the farmers of the region to monitor for and clean up pollutants that were NEVER used by farmers to begin with and are certainly NOT being used by farmers today.

Furthermore, your staff is asking the farming community to clean waste water to drinking water standards even when reservoirs like Lake Cachuma, whose waters are in part reserved for drinking water, do not meet these same standards. Municipalities do not treat water to drinking water standards UNLESS and UNTIL the water is going to actually be served for human consumption. Your staff has infuriated the public it serves by promulgating this ridiculous standard that would have them clean WASTE water to drinking water standards so that it can flow down a ditch to the ocean. What is the benefit of that?

There is no wildlife or wildlife habitat that needs drinking water standards to be met for the waters to be considered beneficial to wildlife. Moreover, if your staff succeeds in cutting back on the flow of water downstream to habitats by making the farmers retain water on site, then your staff will have created a Class One Impact to the habitat by in effect cutting off it's supply of water in this semi-arid climate we live in. For the only water keeping such habitats alive throughout much of the year is this very same water runoff from fields!

Another Class One Impact that will arise from these rules is the conversion of prime farm ground to other uses as most farming operations will not be able to withstand implementing these arbitrary and capricious standards. They will be forced by regulatory fiat and economic

necessity to convert their lands to other uses.

In view of the requirements of CEQA, your board should have to make overriding determinations to effect these impacts upon agriculture as agriculture itself is considered a significant resource by the State. Ag is worthy of the same protection as the water flea you are ostensibly trying to protect at the expense of our farms and ranches.

It is absolutely ridiculous for your staff to maintain that this order is going to positively affect spawning habitat and migration for salmonids. The fact is, most of these areas are no longer suitable for habitat and migration due to the presence of dams that restrict migration. Another factor to consider is the natural morphology of the rivers themselves. The rivers are too wide to convey a flow that is deep enough to maintain temperatures suitable for the fish. Additionally, there is not enough water to support the life cycle or breach sandbars at the mouth of the rivers. The most suitable habitat is far upstream and there is no agriculture in those areas that would have any impact on the same.

So, please direct your staff to examine, study and publish an analysis that incorporates such information that will allow your board to make meaningful decisions as you seek to improve the water quality in the region:

What background levels exist in the basins?

What impact from industries, land uses, and natural conditions have existed in the basins over the course of history as it pertains to the local historical industrial revolution? What were the impacts to water quality from the various types of use by business and manufacturing, and the evolution of agriculture in the region?

For instance, what effect did Union Sugar have on the Santa Maria basin during the previous century? They pumped millions of gallons of water a day, in and out of the aquifer, as they WASHED sugar beets (over 200 tons of beets per hour) all day and night for 90 years?

Farmers today should not be required to test for and filter out pollutants that may have been imported into the region by this factory!

The chemicals the farmers used then and now are legally registered products. It is patently unfair for your staff to ask these good stewards to clean up the water to drinking water standards when the alleged impairments stem from past approved and customary practices of decades and even a century ago.

There was and is today, a lot of mining in the region, what chemicals were released by these operations?

What about the World War II air combat training field in Santa Maria? Do you think they may have had some fuel spills? What about their use of solvents?

What about missile launch impacts at VAFB? What trace chemicals were left behind?

What spills occurred and what was the resultant impact upon the soil and groundwater in the basin from these and so many other historical uses?

What is the history of other manufacturers and business, including dry cleaners and dairies, BEFORE there was any prohibitions against disposal of waste chemical streams into drains?

What is the contribution to water quality degradation from historic dump sites (private and municipal)?

What about the oil industry? What about dry cleaners? Golf courses?

What is the impact of decades of water softener use and detergents and cleansers by urban residents and business?

What is the impact of past and present storm water runoff?

What is the impact of wastewater effluent discharges?

The City of Santa Maria allows septic system pumpers serving SLO residents to dispose of their waste, what is the impact of that practice?

What is the impact of runoff from urban areas? Urban residents use the same chemicals on their lawns and around their houses to control weeds and pests as do farmers! Your staff should quantify how many chemicals are used by urban dwellers each and every year and the impact of the same to our waters. Some of these chemicals are not available for farm use! Where do you think the runoff from these yards and homes go? Are the farmers responsible to clean up these pollutants simply because they are downstream of the source?

What about the runoff from roads and highways? Is your agency holding Cal Trans responsible for the water washing off their roads into the farmer's ditches?

What are the naturally occurring background levels in the water? Is there ANY groundwater in the State of California that meets drinking water standards? Are you going to issue an order to charge the US Forest Service with the responsibility to clean Sierra snow melt to drinking water standards?

These are just a few of the issues that should be considered BEFORE your Board initiates this order.

There has always been a standard of protection for the citizenry of the United States against unlawful and unwarranted searches and seizures of private property, and from the imposition of regulations that can only be described as arbitrary and capricious.

COLAB represents thousands of residents on the Central Coast and we are asking your board to reign in your staff! Your staff is violating these basic tenets of protection and unless you step in and stop them, you will be wreaking extreme havoc on our economy and our community. This will have a most unfortunate impact upon the ability of your board to function in the best interests of the citizenry as it will absolutely obliterate any incentive to voluntarily cooperate with your efforts.

In a nutshell, your staff has created impossible standards, violated the rights of property owners, and virtually destroyed any semblance of trust and respect for your agency. It is most unfortunate that some of your key staff members may need to be terminated to salvage the opportunity to work with the citizens whose cooperation is essential for success.

Please do the right thing and start over. Begin the historical analysis. Order your staff to work cooperatively with the regulated community and the citizenry. Respect the fact that current practices are sound and that food safety issues must be respected in any rule making effort.

Specifically, we request that the Board specifically direct your Executive Officer to dismantle the agricultural regulatory program and re-assign those responsible for this debacle to other non-agricultural related programs or other regional boards.

These are necessary steps to healing the breach that has been created and restoring confidence and trust for the agency.

Sincerely,

J. Andrew Caldwell
Executive Director
COLAB of San Luis Obispo and Santa Barbra Counties

COLAB
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Santa Maria CA 93456
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FARM BUREAU MONTEREY

Monterey County Farm Bureau

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December 23, 2010

Central Coast Regional Water Quality Control Board
Att: Jeffrey Young, Chairman of the Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

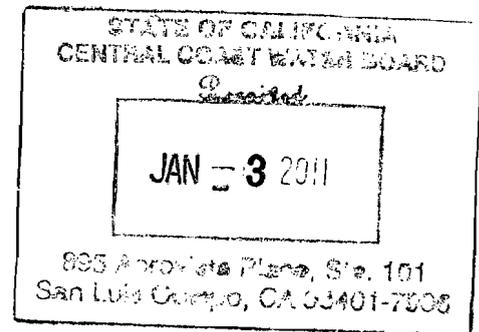
RE: Comments on Ag Waiver Order

Dear Chairman Young:

Monterey County Farm Bureau members are committed to a clean and safe water supply, recognizing that areas of improvement can be attained amongst the Agricultural Community in the Salinas Valley. Monterey Country Farm Bureau has signed on as one of the many Agricultural organizations that submitted the Ag Alternative Waiver Proposal; many hours of our members' time have been spent developing this alternative and we feel this is a fair and achievable Waiver for the entire Region 3 area. We urge adoption of the Ag Alternative Waiver as a positive step towards water quality improvement in throughout Region 3.

The Staff Ag Waiver draft proposal, released November 19th, fails to address the concerns previously expressed by the agricultural community in Monterey County. There are serious implications that threaten the very existence of small farmers and ranchers and their ability to remain viable by increasing levels of regulation and mitigation actions. Many of the proposals put forth in the Staff Ag Waiver draft are not based on science or economics, which hurts not only our businesses but the integrity of the Ag Waiver.

We are concerned with the economics that the Staff Ag Waiver draft proposal presents in terms of lost jobs, fallowed farm land, and further deterioration of the overall economy in Monterey County. With agriculture being the largest industry in Monterey County, the impact of depressed farm revenues causes a ripple effect throughout the local economy. Any new regulation that is a detriment to our economic base, either direct or indirect, causes more hardship on the way to economic recovery and a healthy environment. The economics of the Staff Ag Waiver draft proposal have yet to be detailed in the short time frame since the public posting; the expected loss of productive agriculture lands due to mitigation measures will have a direct impact on employment, tax revenues, and continuity of land use in our County. The clear fact drawn from the Staff Ag Waiver draft proposal is that farm land will be taken out of production for mitigation and buffers, and that affects all sectors of our local economy, both on local and global levels.



One area where science is being ignored is in regards to irrigation practices. The positive effects and improvements in agricultural irrigation practices are not mentioned in the Staff Ag Waiver draft proposal. Scientific results have been published on the benefits of irrigation relating to climate change; irrigation by agriculture has contributed to the moderation of summertime temperatures and the reduction of fugitive dust events. By controlling the irrigation rates and flow of tailwater, the overall effect on the climate could lead to more damaging effects in the future. While we are considerate that irrigation run-off water quality must be improved, the reduction of any traditional irrigation patterns could trigger other harmful results in our ecology.

There are a number of concerns within the Staff Ag Waiver draft proposal that Monterey County Farm Bureau members take issue with:

- The threshold of 1000 acres for inclusion in the Tier 3 level is too generic and does not provide enough flexibility for situations unique to agricultural tenant practices. For example, a landowner who leases 200 acres to a tenant farmer, who also operates 800 acres of other farmland, would qualify the landowner into a Tier 3 classification when their owned acreage farmed is less than the threshold. Another landowner who owns 1000+ acres, located in different areas of the Salinas Valley, would be classified under Tier 3 requirements; the 1000 acre designation fails to take into account the types of farming done, whether it is row crops, grapes, or irrigated hay.
- The appeal process to be removed from Tier 3 is undefined and has no clear time frame for decision. For example, a farmer who has no discharge into any 303D water body and does not apply the chemicals listed in the Staff Ag Waiver draft proposal would be classified as Tier 3 if their land is within the 1000 feet setback specified from that water body. The expectation is that many farmers who qualify for Tier 3 will file appeals to be removed from that designation.
- There is no science developed to support the assertion that nitrate levels relating to tile drains can be reduced to a compliance level within a 4 year timeframe. Most tile drains were installed decades ago and many current landowners and tenants may not be aware of their exact location and flow rates; until specific science is developed to confirm that nitrate loads can be reduced through a best management practice, this time frame is arbitrary.
- The Staff Ag Waiver draft fails to take into account any geology or soil types related to well nitrate loads or groundwater percolation. Water tables are generally fluid in nature and water that percolates from one farm is not directly attributed to the underlying water table nitrate load. Legacy nitrates are not given any standing as a baseline when measuring nitrate loads due to farming practices; different soil types will change the amount of nitrates that eventually percolate to the water table, and if any percolation can be directly tied to a surface nitrate irrigation application.
- Multiple references are made to riparian buffers, yet CCRWQCB has no jurisdiction over the creation or maintenance of these buffers; these areas are already regulated by CA Fish & Game and US Fish & Wildlife. Growers also follow buffer requirements that are specified in the Leafy Greens Marketing agreement, which creates potential conflicts between the proposed riparian

buffers in the Staff Ag Waiver draft proposal and the Leafy Greens Marketing agreement.

- Incentives for growers to participate in clean water best management practices are missing from the Staff Ag Waiver draft proposal; the language seems punitive towards growers and does not provide incentives to participate in monitoring or load reductions.
- The Staff Ag Waiver draft proposal sets forth numerous new regulations levels on growers, yet fails to mention how Staff will be managing the new processes and the database required to run the programs. Growers will be asked to pay significant fees to CCRWQCB under these new regulations while there is no evidence that Staff will be able to manage these new regulations or database.
- Concern is growing regarding the amount of information that will be placed in the public domain. Without adequate protections to the information contained in the Farm Plans and other documents, proprietary information regarding competitive growing practices will become public knowledge, allowing the competitive advantages to be lost between growers.

We feel strongly that water quality improvements can be realized by using the Ag Alternative Waiver of coalition monitoring and reporting, with accountability for water quality improvements. Monterey County Farm Bureau members hope you take the time to adequately review the Ag Alternative Waiver and consider the points made above that address the faults of the Staff Ag Waiver draft proposal. We strongly feel that within the Ag Alternative Waiver there are viable, economic, and accountable solutions for Region 3 and its growers.

We urge your adoption of the Ag Alternative Waiver proposal as the baseline for the new Ag Waiver for the coming 5 years in Region 3.

Sincerely,

A handwritten signature in cursive script that reads "Dirk Giannini".

Dirk Giannini
President

RE: Proposed Ag Waiver MRP

From: Kirk Schmidt <kschmidt@ccwqp.org>
To: 'Lisa McCann' <Lmccann@waterboards.ca.gov>, 'Angela Schroeter' <ASchroeter@waterboards.ca.gov>, 'Michael Thomas' <Mthomas@waterboards.ca.gov>
Date: 12/16/2010 11:48 AM
Subject: RE: Proposed Ag Waiver MRP
CC: 'Roger Briggs' <Rbriggs@waterboards.ca.gov>, 'Fisher Kari' <kfisher@CFBF.com>, 'William Thomas' <William.Thomas@BBKLAW.COM>, 'BobMartin' <chilibob@RIOFARMS.COM>, 'Rick Tomlinson' <rtomlinson@calstrawberry.org>, <jim@growershipper.com>, <darlenedin@earthlink.net>, 'Dirk Giannini' <dgiannini@christensenandgiannini.com>, 'Merkley Danny' <dmerkley@CFBF.com>, 'Gail Delihant' <GDelihant@WGA.com>, <hgiclas@wga.com>, 'Kasey Cronquist' <kcronquist@ccfc.org>, 'Kevin Merrill' <kmerrill@mesavineyard.com>, <klmercer@charter.net>, <kris@vineyardteam.org>, 'Richard Quandt' <richard@growershipper.com>, <tdunham@somachlaw.com>, <abby@growershipper.com>

Lisa, Michael and Angela

Thank you for taking time to meet with the Ag Workgroup yesterday morning. During that conversation I raised the issue of tile drains.

The draft Order provides at page 29:

“100. **Within four years** from the adoption of this Order, Tier 3 Dischargers must demonstrate that they are not causing or contributing to exceedances of water quality standards for nutrients and salts in surface waters of the state or of the United States. Dischargers may have to implement best management practices, treatment or control measures, or change farming practices to achieve compliance with this Order.”

The time schedule at page 3 provides in relevant part:

“Demonstrate that discharge (not including subsurface drainage to tiledrains) is not causing or contributing to exceedances of nutrient water quality standards in the waters of the State or Unite States. ... Within four years...”

Correspondence with your office going back to discussion of the first draft in April shows that it has not been the intent to include tile drains in the timeline for elimination of nutrient discharges. We also discussed this yesterday and you were in agreement. Therefore it would be best if paragraph 100 was rewritten to include the phrase “not including subsurface drainage to tiledrains” following “Dischargers” in the first line of the paragraph.

It would be most helpful if there was confirmation of this change prior to the end of the comment period so that interested parties need not address the tiledrains issue at great length in the comments only to find out later that the paragraph was amended.

Please contact me if you have any questions regarding this issue. Thank you.

Kirk Schmidt
 CCWQP, Inc.
 (831) 750-5449
 kschmidt@ccwqp.org



January 3, 2011

Mr. Jeffrey S Young, Chairman of the Board
Mr. Roger Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
Via email: AgOrder@waterboards.ca.gov

Dear Mr. Young and Mr. Briggs:

In response to the comment period as provided for in Draft Order NO. R-3-2011-0006 Conditional Waiver of Waste Discharge Requirements for Irrigated Lands, the nursery, greenhouse growers and cut flower growers within the agricultural coalition would like to bring our concerns to the attention of the board.

Represented by the California Association of Nurseries and Garden Centers (CANGC) and the California Cut Flower Commission (CCFC), this particular segment of the coalition has particular crops and growing infrastructure that is unlike traditional agriculture.

Major distinctions include:

- [Implemented runoff water recapture and recycling technologies](#)
- [Highly efficient irrigation systems](#)
- [Ongoing implementation of new methodologies/best management practices](#)
- [High percentage of containerized growers](#)

In general, we feel the tiered discharger format as defined in the draft order is a workable program, however we offer the following comments for your consideration to mitigate our specific concerns.. CANGC and the CCFC are committed to working with the board staff to make this program work. We want to assist the board to help us facilitate this work and it is in that spirit that we highlight the following concerns.

One concern that has come up repeatedly is the issue of staff's ability to manage a program of this magnitude. In that context, will the staff be able to process appeals for operations requesting a change in tier level in a timely manner (Draft Order item 13)? For example, we anticipate that many of our farms are qualified as Teir 1, however as it stands, according to the draft order many farms face an immediate Tier 2 qualification due to a portion of their operation or property within proximity to an impaired water body. The farm may not discharge any constituents of concern or may not

discharge at all but would automatically be placed in a higher tier until an appeal to the Executive Officer is heard. What does staff anticipate the timeline will be for this appeal process? Is the staff prepared to quickly qualify these farms into Tier 1 based on known practices for nursery and greenhouses? Is there any data that our growers could/should have prepare in advance for submittal of a streamlined appeal process?

The tier level criteria of 1000 acres is referenced as an aggregate of proximal/adjacent land with similar characteristics in DO item 15. It states that the Executive Officer may ask that this condition be enrolled as a single operation. This could be problematic as to crops and operational requirements that are quite different. Grower input suggests that this may be a bigger issue than originally thought since many growers also rent and lease out portions of their parcels and these parcels may have several different operators and crops (including organic growers). Since this is a "may" statement we are under the assumption that any situation that may arise in this area of concern will be addressed on an individual farm by farm basis in a timely manner since it also may impact tier level.

In the DO Part B Prohibitions that apply to all Dischargers item 28 and Part F items 67a-c,68, 69,70 all may require permitting from one or more other agencies. This process(s) can take an extraordinary amount of time. Will the staff be able to expedite this process with other agencies such as DFG, ACOE and various county agencies?

There are many references to proper use of pesticides and the specific prohibition of two materials in reference to tier level criteria. The nursery, greenhouse growers and cut flower industries are governed under state laws that mandate certain levels of cleanliness for weeds, insects and disease pests. In many cases, that requires the use of certain pesticides. In some cases such as California interior quarantine protocol mandatory use specifies the pesticide, rate and frequency of use required to meet the compliance requirements (LBAM, GWSS). The board and staff need to be aware of this issue since it has caused a conflict in compliance with other agencies in the past. The safe and proper use of pesticides is a requirement not only in regard to water quality but is regulated by CDFA and DPR. The continued advancement of analytical equipment and detection levels of pesticides is now down to parts per trillion. A rational and practical application of sampling data will be needed to determine any actual impairments. This is an area of debate and will probably be one point that we as a team will have to work on.

Other issues of concern include the determination of any particular entity's contribution of contaminants (COC) in ground water aquifers. In some cases the water in an unrestricted aquifer may have contributors outside the boards jurisdiction. We also have concerns that septic systems and live stock operations may not be accounted for in the determinations of levels of contribution. This also brings up the documentation of wells on and around particular sites. Well ordinances in the various counties range from quite strict to non existent. The staff will need to clarify any proposed requirements and their specific relevance in this regard.

Another concern is storm water migration onto an individual property from above gradient. How will this situation be viewed by the staff?

Many of the growers in our group have irrigation runoff recapture and recycling systems. These systems can be up to 99.9% effective in reducing runoff from a property. They are, by nature, more concentrated with certain nutrients and thus have a greater salinity over time. There can be a

random discharge usually due to a power or pump/equipment failure. There may also be a need to discharge in order to dilute the salinity build up. How will the board view this sort of issue?

It is assumed at this time that any enrolled private party/company will be solely governed by the RWQCB and the wavier agreement. How will outside litigation (civil/criminal) of an enrollee by a third party be treated? This is allied to the question of individual reporting to the board being public record. Many of our growers have no issue with reporting but are distrustful of overly zealous "environmental organizations" attempting to subvert the wavier program and doing their own litigation based on their interpretation of reported data. [We would expect protection through an aggregate method of reporting due to the potential of proprietary or individual farm operating information being made public, which increases unnecessary risk of unwanted litigation.]

In the findings of the draft order, there is reference to water quality impacts from agriculture. We would like to have from the board a breakdown of the contributions of impairment by "type" of agriculture so as to establish a baseline starting point on which to measure any improvement or lack of improvement going forward.

We would like to bring to the board's attention certain technical details of concern that were previously submitted by Central Coast Water Quality Preservation Inc in a letter to Board Chairman Young dated August 12 , 2010 (find attached). CANGC and CCFC constituent growers strongly agree with the points presented in that document.

We would also like to bring to the board's attention that many growers with whom we represent are expressing that they feel the process by which the staff formulated the new draft order was not reflective of agricultural stakeholders' input. Specifically, a coalition of agriculture stakeholders has spent countless hours developing an alternative proposal that in many ways complements the Water Board's effort and offers practical alternative methods to improve water quality that deserves due attention.

Again, thank you for your consideration of our concerns. We look forward to working with the board and staff to come up with a workable resolution to continue water quality improvements within the Central Coast Regional watershed.

Sincerely,



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January 3, 2011

Jeffrey S. Young, Chairman of the Board
Roger Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

RE: Regional Water Quality Control Board Central Coast Region
Recommendations for Water Code Waiver for Agricultural Discharges

Dear Mr. Young and Mr. Briggs,

On behalf of the Western Plant Health Association (WPHA), I am submitting the following comments to the Central Coast Regional Water Quality Control Board's (CCRWQCB) "Recommendations for Water Code Waiver for Agricultural Discharges," specifically, the Board's Preliminary "Recommendations for an Agricultural Order." WPHA represents the interests of fertilizer and crop protection manufacturers, distributors, agricultural biotechnology providers, and agricultural retailers in California, Arizona, and Hawaii.

The Department of Pesticide Regulation (DPR) has maintained for more than 20 years a monitoring program identifying vulnerable agricultural production areas that are classified as potential pesticide runoff or leaching areas. These areas are referred to as *Pesticide Management Zones (PMZs)* and now encompass approximately 1 million acres of Region 3.* Additionally, DPR has, and is planning to intensify ongoing surface water monitoring. DPR staff scientists meticulously review physical and chemical properties of all licensed pesticide chemistries for indications that the labeled use of these products may have the potential for soil surface run-off and or soil column leaching. WPHA recommends that the CCRWQCB utilize DPR's monitoring program for pesticide exceedances in the Central Coast region. Additionally, the list of chemistries identified on page 17, Part A, 67, of the CCRWQCB Draft Order Number R3-2011-0006, "Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigation Lands," includes some chemistries that are no longer licensed by DPR or classified as "Restricted Use Pesticides" and are monitored under the auspices of the existing Groundwater Protection Program. WPHA recommends that the CCRWQCB staff consult with DPR, and where appropriate remove those listed chemistries from the draft order that are no longer applicable. WPHA believes such consultation and use of already existing monitoring programs will avoid unnecessary duplication of costly monitoring and reporting efforts.

The intrinsic characteristics of the Central Coast Region are many: There are approximately 2,360 miles of streams; 99 lakes; 53 groundwater basins with an additional

100+ sub-basins; 378 miles of Pacific coastline; 59 wetlands and estuaries; and nine areas of special biological concern. Based on the complexity of the region's geography and historical surface and groundwater systems, growers will need to be able to utilize flexible options within their farm management programs. Initially, growers should be able to submit to the CCRWQCB for review a Farm Water Quality Survey. Once reviewed and the necessity for inclusion in the Ag waiver program is established the grower can then be given the choice to report monitoring results within a region-wide monitoring program, such as a coalition.

WPHA agrees that results of farm monitoring should be submitted in a timely fashion; however, the scope of monitoring to be undertaken by the grower community is not only financially burdensome, but the compliance deadlines are unrealistic. We are concerned that the availability of laboratories accredited by the EPA or the State of California for quality assurance / quality control (QAQC) that are capable of both quantitative analysis for one part per billion or less and very species specific bioassays are quite limited, which could result in unpreventable delays in monitoring.

It is WPHA's recommendation that once the laboratory availability and capability to perform the required analyses have been established, growers should be able to participate in region-wide coalition monitoring programs. Coalitions could conduct the required monitoring, and annually report the results to the CCRWQCB. The grower, in symphony with the coalition or a board approved third-party consultant or adviser will then assess the effectiveness of implemented agricultural management practices in attaining water quality benchmarks or, when necessary, alter the farm water quality management plan in order to attain water quality benchmarks and identify, implement, or upgrade management practices. The monitoring results should remain in the control of the grower coalitions and would be submitted to the CCRWQCB by those coalitions. The individual farm management plans should remain onsite, but available to the CCRWQCB staff for review.

WPHA recognizes that the CCRWQCB is concerned about water quality and the related impacts from agricultural practices. We appreciate the Board's desire to improve water quality, while maintaining a strong agricultural economy on the Central Coast. We urge the CCRWQCB to develop an order that minimizes the economic impact and enhances compliance for the agricultural community and improves overall water quality through a cooperative process that engages the grower community. WPHA thanks you for your consideration of our comments, and looks forward to continuing to work with the Board staff. If you have any questions, please feel free to call upon me.

* DPR publication EH00-07, appendix 2

Sincerely,



Henry Buckwalter
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Western Plant Health Association
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CALIFORNIA FARM BUREAU FEDERATION

NATURAL RESOURCES AND ENVIRONMENTAL DIVISION

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January 3, 2011

Jeffrey S. Young, Chairman of the Board
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Via US Mail and Email

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Re: *Comments in Response to Draft Order, Monitoring and Reporting Program, Staff Report, and Subsequent Environmental Impact Report for the Regulation of Waste Discharges from Irrigated Lands*

Dear Mr. Young:

The California Farm Bureau Federation is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home, and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing approximately 76,500 members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

On behalf of the Santa Barbara County Farm Bureau, the San Luis Obispo County Farm Bureau, the Monterey County Farm Bureau, the San Benito County Farm Bureau, the Santa Cruz County Farm Bureau, the Santa Clara County Farm Bureau, and the San Mateo County Farm Bureau, the California Farm Bureau Federation ("Farm Bureau") respectfully presents the following concerns regarding the Draft Order, Monitoring and Reporting Program, Staff Report, and Subsequent Environmental Impact Report for the Regulation of Waste Discharges from Irrigated Lands (hereinafter "Staff Draft Order" of "2011 Draft Order") released on November 19, 2010. Farm Bureau has many concerns with Staff's Draft Order, Staff Report, and accompanying documents.¹

¹ The Staff Draft Order and Staff Report consist of many different parts, all of which are objectionable. The actual "waiver" is set forth in the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated

Agriculture is one of the most important industries in the Central Coast Region because of the ability to produce large quantities of readily available food and fiber, the substantial economic benefits it provides to the Region and the State, and the number of workers it employs which leads to significant positive impacts to both the Region's and State's labor force. Farm Bureau members of the Central Coast agricultural community recognizes agriculture's importance and necessary role in the State and Region. Additionally, they value recognize that the quality of agricultural water discharges can and will improve through implementation of on-farm practices.

The true goal of the Conditional Ag Waiver program is to improve water quality over time. The State Water Code and the Regional Board Basin Plan provide authority for the Regional Board to impose regulations on dischargers to improve water quality. Farmers are equally concerned about water quality and the environment. However, there is no need for the Regional Board to impose arbitrary restrictions on commercial agriculture so long as farmers take necessary steps to demonstrate water quality improvement over a scientifically feasible timeline with intermediate milestones.² In order to reach this goal, the primary focus of maintaining and improving water quality over time should remain. To aid in reaching this goal, the Regional Board should evaluate water quality data collected and use such data to implement and adjust management practice implementation. The process of designing and adopting a new ag discharge program will not be simple or quick. Further collaboration between the Regional Board and agriculture will be necessary to develop a workable long term solution.

Staff's Draft Order contains stringent new conditions that will subject growers in the Region to the most rigorous regulatory program in the state. The 2011 Order contains duplicative regulations concerning existing perennial, intermittent, and ephemeral streams along with riparian and wetland area habitat. It includes strict controls for the use of pesticides which is already regulated by the Department of Pesticide Regulation and the California Department of Food and Agriculture. Riparian and wetland area habitat is already being regulated by a variety of different regulatory agencies including, but not limited to, the U.S. Fish and Wildlife Service, the Department of Fish and Game, the Army Corp of Engineers, and local land use regulations already in place. The Draft Order also contains numerous provisions that are improper, illegal, and exceed the Regional Board's statutory authority. Additionally, Farm Bureau is concerned that the Regional Board may fail to recognize that agricultural lands are a part of the physical environment, thus consideration of impacts to agricultural resources must be included as part of a proper California Environmental Quality Act environmental review.

Lands, Order No. R3-2011-0006 and consists of 87 pages and 293 findings and definitions. The inaccuracy and unlawfulness of the findings are too many to identify here. Farm Bureau reserves the right to provide additional comments and concerns in the future. Farm Bureau also incorporates by reference those comments submitted by Tess Dunham (Somach, Simmons and Dunn) and William Thomas (Best Best & Krieger).

² The agricultural community has been taking necessary steps to demonstrate water quality improvements.

I. THE 2011 STAFF ORDER FAILS TO COMPLY WITH CEQA REQUIREMENTS

The Regional Board has failed to comply with the provisions of the California Environmental Quality Act (“CEQA”), Pub. Resources Code §§ 21000 et seq. CEQA was enacted to address concerns about environmental quality in the State of California. CEQA establishes processes and procedures to ensure that California agencies complete an environmental analysis and consider and disclose to the public the environmental impacts of a proposed project. (Pub. Resources Code, §§ 21000 et seq; Cal. Code Regs., tit. 14, § 15000 et seq.) CEQA’s statutory framework clearly sets forth a series of analytical steps intended to promote the fundamental goals and purposes of environmental review—information, public participation, mitigation, and governmental agency accountability. (Cal. Code Regs., tit. 14, § 15002; see also Pub. Resources Code, §§ 21001, 21001.1, 21002, 21003, 21006, 21064.) CEQA’s intent and purpose foster informed public participation and decision-making. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 404.)

To date, the process and the development of the Staff’s Draft Order has not been an open, collaborative, or transparent process. The lack of detail, supporting evidence, proper environmental analysis, and proper evaluation of alternatives effectively bars the public from providing meaningful and necessary information on the development of future agricultural discharge programs. Such action and inaction has not satisfied the intent of CEQA.

A. Reliance on the 2004 Negative Declaration is Improper

An attempt to review the environmental impacts of the 2011 Draft Order is included within the Draft Subsequent Environmental Impact Report (“SEIR”). Unfortunately, a full CEQA review and environmental analysis has been avoided due to the SEIR’s improper reliance on the Negative Declaration prepared for the 2004 Conditional Waiver. Specifically, the SEIR states that possible impacts to agricultural lands “were previously evaluated in the Negative Declaration for the 2004 Agricultural Order and were found at that time not to be significant.” (SEIR, p. 6.) The SEIR relies upon this analysis to conclude that the 2011 Draft Order will also not have any significant impacts to agriculture. For numerous reasons, such conclusions are improper. The 2004 Agricultural Order is a separate project from the 2011 Draft Order. In addition, the conditions, restrictions, and regulations within the 2011 Draft Order are different from, more extensive than, and entirely brand new from those contained in the 2004 Agricultural Order. Mere reference to and reliance upon an environmental analysis conducted at least six years previous is not only inappropriate, it is also flawed and violates CEQA.

Staff’s 2011 Draft Order deviates significantly from the 2004 Conditional Waiver. Although both waivers are conditional waivers of waste discharge limited to 5 year periods of time and regulate discharges from irrigated lands, the two waivers are extremely different in scope, regulatory focus, requirements, breadth, enforcement, intent, types and contents of monitoring, types of discharges to be regulated, reporting requirements, as well as other differences. Thus, reliance on the 2004 Negative Declaration to fully determine and analyze the new environmental impacts of Staff’s 2011 Draft Order is inappropriate and improper.

In addition to significantly altering the scope of the waiver, significant new information has been gathered and is now available since the completion of the 2004 Conditional Waiver. Given this significant information and substantial changes to the current Conditional Waiver, which should constitute a new project under CEQA, the Regional Board cannot rely upon the environmental analysis that was completed in 2004. Notwithstanding the fact that reliance on a previous project that is distinct from the project at hand is improper, any changes to the “project” after environmental analysis constitute “significant new information” that requires additional environmental analysis. (Cal. Code Regs., tit. 14, 15088.5(a).)³

B. The 2011 Draft Order is a Separate Project from the 2004 Conditional Waiver under CEQA

As defined in CEQA, a “project means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” (Cal. Code Regs., tit. 14, § 15378(a).) “The term ‘project’ refers to the activity which is being approved.” (Cal. Code Regs., tit. 14, § 15378(c).)

Within the 2011 Staff Draft Order, the “description of the project” is defined as:

The proposed draft 2011 Agricultural Order groups farm operations, or dischargers, into three tiers, each tier distinguished by four criteria that indicate threat to water quality: size of farm operation, proximity to an impaired watercourse, use of chemicals of concern, and type of crops grown. Dischargers with the highest threat have the greatest amount of discharge control requirements, monitoring and reporting. Conversely, dischargers with the lowest threat have the least amount of discharger control requirements, individual monitoring and reporting. For example, the proposed draft 2011 Agricultural Order proposes the following implementation and reporting requirements:

- Implement pesticide management practices to reduce toxicity in discharges so receiving waterbodies meet water quality standards;
- Implement nutrient management practices to eliminate or minimize nutrient and salt in discharges to surface water so receiving waterbodies meet water quality standards;

³ CEQA Guidelines section 15088.5(a) states that “significant new information” includes:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

- Implement nutrient management practices to minimize fertilizer and nitrate loading to groundwater to meet nitrate loading targets ;
- Install and properly maintain back flow prevention devices for wells or pumps that apply fertilizers, pesticides, fumigants or other chemicals through an irrigation system;
- Implement erosion control and sediment management practices to reduce sediment in discharges so receiving water bodies meet water quality standards;
- Protect and manage existing aquatic habitat to prevent discharge of waste to waters of the State and protect the beneficial uses of these waters;
- Implement stormwater runoff and quality management practices.
- Develop, implement, and annually-update Farm Water Quality Management Plans.
- Submit an Annual Compliance Document (for higher threat dischargers) that includes individual discharge monitoring results, nitrate loading risk evaluation and, if nitrate loading risk is high, irrigation and nutrient management plan, verification of irrigation and nutrient management plan effectiveness.
- Submit a water quality buffer plan (for higher threat dischargers), if operations contain or are adjacent to a waterbody identified on the Clean Water Act Section 303(d) List of Impaired Waterbodies as impaired for temperature or turbidity.

Water Board staff developed this order to address the documented severe and widespread water quality problems in the Central Coast Region, predominately unsafe levels of nitrate in ground water used for drinking water and toxicity impairing communities of aquatic organisms. (SEIR, pp. 3-4.)

The “description of the project” for the 2004 Conditional Waiver is defined in the 2004 Initial Study and Negative Declaration as:

The Regional Board proposes to adopt a conditional waiver of WDRs for discharges from irrigated lands, including tailwater, subsurface drainage, and stormwater runoff, and to waive the requirement to submit reports of waste discharge. Irrigated lands include nurseries and soil-floored greenhouses as well as lands planted to row crops, vineyards, tree crops, and field crops. This waiver would be in effect for five years beginning July 8, 2004.

The conditions of the proposed waiver would require all owners and operators of irrigated lands in the Central Coast Region to: 1) enroll with the Regional Board by submitting a Notice of Intent, 2) complete fifteen hours of water quality education, 3) develop a farm water quality management plan that addresses, at a minimum, erosion control, irrigation management, nutrient management and pesticide management, 4) implement management practices in accordance with

the farm plan, and 5) conduct individual monitoring or participate in a cooperative monitoring program. (SEIR Attachment, 2004 Initial Study and Negative Declaration, p. 4.)

A quick read of the two project descriptions above illustrate two separate and wholly distinct projects. Although each project describes a conditional waiver of waste discharges for irrigated lands, the similarities end there. The 2011 Draft Order includes new regulatory concepts, increases the scope of regulatory coverage, has been expanded to cover all irrigated lands growing commercial crops, requires new monitoring and reporting requirements, and encompasses regulation of all discharges to surface waters and groundwater, including tile drains and storm water. Given the distinct nature of each conditional waiver, the 2004 Order and the 2011 Draft Order are separate projects under CEQA and require independent environmental review. Thus, reliance on the 2004 Negative Declaration is improper and the SEIR contravenes the requirements of CEQA.

C. The SEIR's Analysis of Impacts is Improper⁴

The SEIR fails to properly analyze the potential impacts associated with the project. Specifically, the SEIR lacks proper review of impacts such as the loss of agricultural lands taken out of production due to proposed requirements and the cost of compliance, loss of agricultural lands through regulatory takings for the installation of riparian buffers, and the impacts from restrictions on the use of tile drains rendering farm land virtually unproductive and thus unusable.

Rather than conducting a thorough analysis of all potential impacts to agricultural lands, agricultural vitality, agricultural production, and agricultural resources, the SEIR briefly concludes, "the Water Board can only speculate with respect to the extent there could be adverse environmental effects because it is not known with specificity what actions dischargers may take to comply. There is not sufficient information to determine the scope of any changes in environmental effects and any potential impacts are very speculative." (SEIR, p. 8.) Based on these statements, the SEIR surmises, "the adverse environmental impacts may be less than significant." (*Ibid.*)

CEQA's informational purposes are not satisfied by an EIR that simply ignores or assumes a solution to potential discharges to waters of the state from agricultural lands. (*Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 167.) Rather, decision makers and the public must be presented with sufficient facts to evaluate the pros and cons of a conditional waiver of waste discharge. (Cal. Code Regs., tit. 14, §§ 15002(a), 15121; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, overruled on other grounds; *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 160 Cal.App.4th 715.)

⁴ Assuming, for arguendo, a new EIR is not required, the SEIR contains numerous fatal flaws as described in the following subsections below.

“Mere conclusions simply provide no vehicle for judicial view.” (*Citizens Assn. for Sensible Development of Bishop Area, supra*, at p. 171.) By failing to disclose all data and evidence relied upon, the Regional Board is abusing its discretion and failing to comply with CEQA. (*Ibid.*, [“Section 1094.5, subdivision (b), states that ‘[abuse] of discretion is established if the respondent has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence.’ The Supreme Court has elaborated that ‘. . . implicit in section 1094.5 is a requirement that the agency which renders the challenged decision must set forth findings to bridge the analytic gap between the raw evidence and ultimate decision or order.” (*Topanga Assn. for a Scenic Community v. County of Los Angeles, supra*, 11 Cal.3d at p. 515; see *Myers v. Board of Supervisors* (1976) 58 Cal.App.3d 413, 429-431 [129 Cal.Rptr. 902].)”

Conclusory comments in support of environmental conclusions are generally inappropriate. (*Laurel Heights Improvement Assn., supra*, at p. 404.) The SEIR is fundamentally and basically inadequate and conclusory in nature, precluding meaningful public review and comment. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043, 1051; *Laurel Heights Improvement Assn., supra*, at p. 404; Cal. Code Regs., tit. 14, § 15063(c); see Cal. Code Regs., tit. 14, § 15088.5, [regulations apply substantially to initial studies and negative declaration thresholds for recirculation as well].)

These conclusory statements within the SEIR provide “no basis for a comparison of the problems involved with the proposed project and the difficulties involved in the alternatives.” (*People v. County of Kern* (1974) 39 Cal.App.3d 830, 841-842, quoting *Silva v. Lynn* (1973) 482 F.2d 1282, 128; see also *Laurel Heights Improvement Assn., supra*, at p. 404, [“but neither can we countenance a result that would require blind trust by the public, especially in light of CEQA’s fundamental goal that the public be fully informed as to the environmental consequences of action by their public officials” (emphasis added)]; *City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 415, [“The County’s conclusory evaluation of the amendments fail to support its decision to adopt a negative declaration.”].)

Even if a full discussion leaves some uncertainty regarding actual impacts of the anticipated project, CEQA requires some discussion of probable impacts, project alternatives, and the environmental consequences of those contingencies. (See SEIR, p. 2; *Vineyard Area Citizens for Responsible Growth, Inc. supra*, 412.) Such discussion must also be supported by substantial evidence and allow for public participation and review.⁵ (Pub. Resources Code, § 21091(d)(2); Cal. Code Regs., tit. 14, §§ 15088, 15121, 15384.) By failing to analyze probable impacts and merely concluding that impacts are speculative, the SEIR is improper and the error is prejudicial.

⁵ By relying on conclusory language, lack of evidence, unidentified and unsubstantiated claims, and unlike comparisons to support its findings that no significant environmental affects will occur, the public’s ability to provide input, to collaborate with, and to aid in finding solutions to maintain and/or improve water quality is largely restricted and makes it impossible for the public, many of whom have actively asserted a keen and sophisticated interest in the development of revised/new discharge requirements, to fully participate in the assessment of project impacts and alternatives associated with the project. (See *Mountain Lion Coalition v. Fish & Game Comm.* (1989) 214 Cal. App. 3d 1043, 1051.)

D. The SEIR Contains an Inadequate Assessment of Significant Impacts and Effects on the Environment

The CEQA Guidelines define a “significant effect” as: “... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.” (Cal. Code Regs., tit. 14 § 15382; see also Pub. Resources Code, § 21068.)

The CEQA Guidelines further state that, “An ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.” (Cal. Code Regs., tit. 14 § 15064.) Appendix G of the CEQA Guidelines describes impacts that the California Resources Agency has determined are *normally considered significant*. These guidelines require that physical changes in the environment be evaluated based on factual evidence, reasonable assumptions supported by facts, and expert opinion based on fact. Given that many factors have to be analyzed and significant effects and impacts should be determined on a case-by-case basis, the Regional Board cannot rely on previous antiquated environmental analysis to conclude possible potential impacts to Staff’s 2011 Draft Order. Rather, the Regional Board must review all scientific data and facts, especially information collected since the initiation of the 2004 Conditional Waiver, prior to determining the 2011 Draft Order’s potential to significantly effect or impact the environment.⁶

E. The SEIR’s Analysis of Project Alternatives is Improper

An environmental impact report must describe a range of reasonable alternatives to a project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. (Cal. Code Regs., tit. 14, § 15126(d); *Laurel Heights Improvement Assn., supra*, at p. 400; [“The foregoing CEQA provisions and Guidelines make clear that ‘One of its [an EIR’s] major functions . . . is to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official.’ (*Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 197 [132 Cal.Rptr. 377, 553 P.2d 537].)”) It must contain sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. The statutory requirements for consideration of alternatives must be

⁶ Water quality regulations that aim to improve environmental quality can have unintended consequences that harm the environment and natural resources. The reallocation of water from one location to another, to meet water quality regulations, may reduce the well-being of fish and wildlife dependent on the water in the source region. Reduction of use of chemical pesticides that reduce farm productivity may lead to an increase in utilized land use and expansion of the utilized land base to wilderness areas. Diversion of water resources to meet environmental quality objectives may reduce the capacity to utilize this water in provision of environmental amenities. Thus, proper environmental analysis is needed.

judged against a rule of reason. A public entity may decide that a proposed alternative which reduces significant impacts is infeasible provided it gives a rational explanation supported by substantial evidence. (Cal. Code Regs., tit. 14, §§ 15151, 15384; *Vineyard Area Citizens for Responsible Growth, Inc., supra*, at p. 412.)

Given CEQA's clear requirements, the Regional Board *shall* identify and rigorously examine all reasonable alternatives for the project. (Cal. Code Regs., tit. 14, § 15126.6.) The range of alternatives must be feasible and must avoid or substantially lessen the project's significant environmental effects "*even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.*" (*Id.* at § 15126.6(b), emphasis added; Pub. Resources Code, §§ 21002, 21001.1(a), 21100(b)(4), 21150.) A feasible alternative is one that is "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Cal. Code Regs., tit. 14, § 15364; Pub. Resources Code, § 21061.1.)

The SEIR's analysis of project alternatives is inadequate and improper and does not fulfill CEQA's mandates. Such "brief" treatment of so called alternatives is legally deficient, as no project alternatives are fully analyzed, described, evaluated, or provided in detail to allow the public to provide meaningful comments. (*Laurel Heights Improvement Assn., supra*, at p. 404; ["The key issue is whether the selection and discussion of alternatives fosters informed decisionmaking and informed public participation."]; Cal. Code Regs., tit. 14, § 15126(d)(5).) This failure to properly consider project alternatives cannot be upheld under CEQA and the "rule of reason" for considering alternative project components and regulatory requirements. Additionally, no reasonable range of alternatives to the 2011 Draft Order are discussed or analyzed. Instead of analyzing actual alternatives to the 2011 Draft Order, the SEIR cursorily reviews the three preliminary alternatives submitted in April 2010. These preliminary alternatives were alternatives to the Preliminary Staff Draft Order dated February 1, 2010. Review of these documents as "alternatives" to the 2011 Draft Order do not meet the requirements of CEQA as these documents are not alternatives to the current proposed project, the 2011 Draft Order, currently under review.

Analysis of the April 1, 2010 Ag Alternative as an alternative to the 2011 Draft Order is improper as it was merely a preliminary draft alternative submitted in response to staff's conceptual ideas included in Staff's February 1, 2010 Preliminary Staff Draft Order. Staff's February 1, 2010 Preliminary Order has since been abandoned and replaced with a new alternative, the 2011 Draft Order. As such, the February version and corresponding comments and alternatives are inapplicable for alternative analysis under CEQA. Rather, new reasonable alternatives to the 2011 Draft Order *must* be developed and properly reviewed within the SEIR, including the Agricultural Alternative Conditional Waiver. As such, a new environmental analysis should be prepared to assess the potential environmental benefits and impacts, if any, feasibility, economic costs, etc associated with the new alternatives. Thus, the SEIR must be revised and recirculated prior to any Board action on this project.

F. The SEIR Fails to Consider Significance of Social and Economic Impacts and Cumulative Effects

Although impacts that are solely economic in nature do not constitute “significant effects on the environment,” economic or social impacts that will or have the potential to cause a physical change should be considered. (Cal. Code Regs., tit. 14, §§ 15064(e), 15131.) The term “significant effect on the environment” is defined in Section 21068 of CEQA as meaning “a substantial or potentially substantial adverse change in the environment.” (Pub. Resources Code, § 21068.) This focus on physical changes is further reinforced by Sections 21100 and 21151. (See discussion following Cal. Code Regs., tit. 14, § 15131.) Despite the implication of these sections, CEQA does not focus exclusively on physical changes, and it is not exclusively physical in concern. (*Ibid.*) Thus, in certain situations such as the adoption of an expansive regulatory irrigated lands discharge program, economic and social effects of the project *must* be used to determine the significant effects on the environment. (*Citizens Assn. for Sensible Development of Bishop Area, supra*, at p. 170, [“The lead agency shall consider the secondary or indirect environmental consequences of economic and social changes.”].) Since such effects were not considered in the SEIR, the document is incomplete and flawed.

In *Citizens Association for Sensible Development of Bishop Area v. Inyo*, the court held that “economic or social change may be used to determine that a physical change shall be regarded as a significant effect of the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment.” (*Ibid.*)

The 2011 Draft Order proposes dramatic and severe impacts on the agricultural industry, which will have a significant effect on the economic and social environment of the Region. Such impacts include negative economic consequences, the possibility of eliminating agricultural crops produced in the area, loss of jobs, loss of food supply, loss of prime agricultural lands, economic collapse of local communities, changes the landscape and land uses, loss of wildlife habitat, loss of groundwater recharge areas, as well as other social and economic impacts. In addition to direct impacts, indirect impacts and consequences, these cumulative⁷ social and economic consequences are reasonably foreseeable and must be analyzed.

G. Agricultural Resources Must Be Considered During Environmental Review

Agricultural resources are an important feature of the existing environment of the State, and are protected under federal policies, such as the Farmland Protection Policy Act and National Environmental Policy Act (“NEPA”), State policies, and CEQA. Agriculture is the number one industry in California, which is the leading agricultural state in the nation. (Food & Agr. Code, § 802(a).) Agriculture is one of the foundations of this State's prosperity, providing employment

⁷ “Cumulative impacts” are “two or more individual effects which, when considered together, are considerable or....compound to increase other environmental impacts. (Cal. Code Regs., tit. 14, § 15355.)

for one in 10 Californians and a variety and quantity of food products that both feed the nation and provide a significant source of exports. (CALFED Final Programmatic EIS/EIR, July 2000, pg. 7.1-1.) In 1889, the State's 14,000 farmers irrigated approximately one million acres of farmland between Stockton and Bakersfield. By 1981, the number of acres in agricultural production had risen to 9.7 million. (Littleworth & Garner, California Water II (Solano Press Books 2007) p. 8.) More recently, the amount of agricultural land in the State has declined. From 1982 to 1992, more than a million acres of farmland were lost to other uses. Between 1994 and 1996, another 65,827 acres of irrigated farmland were lost, and this trend is expected to continue.

In order to preserve agriculture and ensure a healthy farming industry, the Legislature has declared that “a sound natural resource base of soils, water, and air” must be sustained, conserved, and maintained. (Food & Agr. Code, § 802(g).) Prior to negatively impacting agricultural lands, decision makers must consider the impacts to the agricultural industry, the State as a whole, and “the residents of this state, each of whom is directly and indirectly affected by California agriculture.” (Food & Agr. Code, § 803.)

CEQA require analysis of significant environmental impacts and irreversible changes resulting from proposed projects. These include unavoidable impacts; direct, indirect, and cumulative effects; irreversible and irretrievable commitment of resources; relationships between short-term uses and long-term productivity; and growth-inducing impacts to the environment. Pursuant to CEQA, the physical environment includes agricultural lands and resources. Given the national and statewide importance of agriculture and the legal requirements of environmental review, Farm Bureau urges the Regional Board to properly assess all direct and indirect effects on the agricultural environment resulting from the proposed Staff Draft Order. As currently drafted, the SEIR fails to meet this requirement.

1. Agricultural Resources Must be Considered In a Legally Defensible CEQA Review

One of the major principles of the State’s environmental and agricultural policy is to sustain the long-term productivity of the State’s agriculture by conserving and protecting the soil, water, and air that are agriculture’s basis resources. (Food & Agr. Code, § 821(c).) As currently proposed, Staff’s Draft Order goes beyond its intent to maintain and improve the quality of waters of the state, and instead, imposes a highly burdensome, enforcement driven program, many aspects of which are beyond the Regional Board’s authority, that will negatively impact the ability to produce food and fiber and will lead to possible changes in the physical environment. It is foreseeable that such impacts have the potential to convert agricultural lands to other uses. This conversion would add to the existing statewide conversion of substantial amounts of agricultural lands to other uses, and may conflict with adopted plans of many local governments, including cities and counties, and existing habitat conservation plans or natural community conservation plans.

2. Analysis under CEQA Guidelines Appendix G is Cursory and Flawed

Of particular relevance is CEQA Guidelines Appendix G, section II, Agricultural Resources, which states the following:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agriculture Land Valuation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optimal model to use in assessing impacts on agriculture and farmland. Would the project:

- (a) Convert prime farmland, unique farmland, or farmland of state-wide importance . . . to non-agricultural use?
- (b) Conflict with existing zoning for agricultural use or a Williamson Act contract?
- (c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use?

(Cal. Code Regs., tit. 14, Appendix G, section II, Agricultural Resources.)

Upon “reevaluation” of impacts on agriculture and farmland, the SEIR concludes that the 2011 Draft Order will have a “less than significant impact with mitigation” on farmland conversion. The SEIR then proposes “mitigation measures to make this potential impact less than significant” for various vegetation and wildlife resources that could be affected by normal farming practices. However, the accompanying conclusory statements outlying possible mitigation measures a grower may take are inappropriate and infeasible. These mitigation measures would require avoidance of sensitive biological resources, riparian areas, and wetlands, require additional CEQA review if such resources cannot be avoided, and would compel agricultural landowners to conduct a U.S. Army Corps of Engineers’ approved delineation of affected wetlands “prior to implementing any management practice that will result in the permanent loss of wetlands.” Such mitigation measures are overreaching.

“A lead agency for a project has authority to require *feasible changes* in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the “nexus” and “rough proportionality” standards established by case law (*Nollan v. California Coastal Commission* (1987) 483 U.S. 825, *Dolan v. City of Tigard*, (1994) 512 U.S. 374, *Ehrlich v. City of Culver City*, (1996) 12 Cal. 4th 854.)” (See Cal. Code Regs., tit. 14, § 15041(a), emphasis added.) However, CEQA confers no independent grant of authority to impose mitigation measures on a project. Mitigation measures, such as the ones described above, go beyond the powers conferred by law to the Regional Board and are legally infeasible. (Pub. Resources Code, § 21004; Cal. Code Reg., tit. 14, § 15040.)

Furthermore, all four “mitigation measures” still lead to the conversion of agricultural lands, the very thing the mitigation measure attempts to avoid. In addition to the proposed mitigation measures, the SEIR includes vague statements that conclude that the 2011 Staff Order’s impacts will be less than significant. Statements such as “staff does not conclude that the costs are going to be so high that it will force agriculture out of business” and “the [economic] effects should be manageable” are not supported by any evidence. (SEIR, pp. 13-14.) As discussed *infra*, mere conclusions not supported by evidence violate CEQA.

Any and all adverse environmental effects on agricultural resources resulting from the project, as well as cumulative impacts that will occur over time, must be fully assessed and disclosed under CEQA, *as well as avoided or mitigated as required by CEQA*. The 2011 Draft Order neither avoids impacts to agricultural lands nor mitigates any such impacts. Thus, proper environmental analysis of agricultural impacts has not occurred.

H. The SEIR May Conflict with CEQA Functional Equivalency of the State’s Pesticide Regulatory Program

The SEIR fails to analyze the interplay with and the duplicity between the State’s pesticide regulatory program and its proposed requirements. Prior to a pesticide being registered for agricultural use, a CEQA functional equivalent EIR must be performed. (See Cal. Code Regs., tit. 14, § 15251(i), “the pesticide regulatory program administered by the Department of Pesticide Regulation and the county agricultural commissioners insofar as the program consists of (1) The registration, evaluation, and classification of pesticides” has been certified as a review process functionally equivalent to a CEQA EIR.) The Department of Pesticide Regulations’ (“DPR”) actions in reviewing pesticides do not constitute a project in the classical CEQA context – there is not a one time environmental review of a specific action or activity that has a specific geographical location or temporal limit. Rather, DPR’s regulatory scheme ensures continuous evaluation of the environmental impacts of registered pesticide products. Additionally, in completing the CEQA functional equivalency document, DPR is required to consider the full and reasonably foreseeable environmental context of its actions. The regulatory scheme also provides for re-registration and re-evaluation to ensure that the continued use of the pesticide is not going to have a significant effect on the environment.

Within the Central Coast region, farmers and ranchers use various products when growing food and fiber. Farmers and ranchers must comply with all applicable laws, regulations, and specific pesticide use requirements, complete pesticide use reporting, and fulfill educational and training requirements. Further requirements are mandated if a restricted material is used and/or the land is located within a groundwater management area. Since CEQA functional equivalency has occurred to allow those pesticides to be used in those areas, the growers should not be now held liable under the 2011 Draft Order if those pesticides are detected in groundwater.

II. THE 2011 STAFF DRAFT ORDER IS IMPROPER

A. The 2011 Draft Order Inappropriately Presumes that All Irrigated Agriculture Creates a Discharge of Waste

The 2011 Draft Order inappropriately presumes that all irrigated agriculture creates a discharge of waste. This presumption is the basis of the entire Order, in spite of the fact that the staff acknowledges that “there are numerous and varying irrigated agricultural operations within the Central Coast Region that have varying degrees of impact on water quality.” (Draft Order, p. 11.) While the Regional Board may have the authority to regulate irrigated agriculture that creates a discharge of waste under a conditional waiver, the Regional Board does not have the unfettered regulatory authority to regulate all agricultural practices, especially those practices that do not create such discharges. A fundamental limitation to the Regional Board’s authority is that an activity must result in a “discharge of waste” that impacts water quality in order for that activity to be subject to regulation. Simply because it may be difficult to determine whether individual irrigated lands are creating a discharge to waste does not eliminate the Regional Board’s statutory authority and obligation to regulate only those activities that create a discharge of waste. Further, the Regional Board provides no evidence to support its inaccurate conclusion that all irrigated agriculture discharges waste to waters of the State.

B. The Tiering Structure is Improper

The 2011 Draft Order groups farm operations, or dischargers, into three tiers with each tier distinguished by four criteria: size of farm operation, proximity to an impaired watercourse, use of certain chemicals, and type of crop grown. (See SEIR, p. 3; Draft Order, pp. 9-11, ¶¶ 9-16.)

The four criteria used to distinguish the tiers are arbitrary designations not based on sound science and not supported by evidence. All of these factors have little bearing on relative risk to water quality: size does not equate to water quality problems;⁸ proper use of two types of approved pesticides does not equate to water quality problems; crop types do not equate to water quality problems; and proximity to a 303(d) listed waterbody does not equate to water quality problems especially since mere location is the trigger.⁹ Additionally, by merely triggering the criteria above, the tiering structure creates a false premise of polluting water unless grower can prove otherwise.

The tiering structure is arbitrary and essentially flawed since it does not look at actual ways to analyze relative risk to water quality. Rather, the tiering structure improperly focuses the program on arbitrary designations associated with agricultural production rather than scientifically sound and proven factors causing water quality impairments.

⁸ The use of 1,000 acres is an arbitrary designation and no evidence is provided to support this criterion.

⁹ Thus, even if a property does not drain into that watercourse but is nevertheless within 1,000 feet, the operation falls within the higher tier.

C. The Monitoring and Reporting Provisions Exceed the Regional Board's Authority Since No Nexus is Provided

Within the 2011 Draft Order, numerous monitoring reports and technical reports are required to be submitted to the Regional Board. (See Draft Order, pp. 15, 16, 18, 22 [annual compliance document], 27 [water quality buffer plan].) Although the Regional Board has the authority, pursuant to Water Code section 13267, to require monitoring reports and technical reports, “the burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.” (Wat. Code, § 13267(b)(1).) Additionally, the Regional Board *shall* provide each person “with a written explanation with regard to the need for the reports, and *shall* identify the evidence that supports requiring that person to provide the reports.” (*Ibid*, emphasis added.)

Although various monitoring reports and technical reports are referenced in the 2011 Draft Order and accompanying appendices, no nexus as to the burden, costs, need, or benefits is found. Furthermore, no concrete evidence is provided that supports requiring farmers to provide such reports. Mere unsupported assertions that a need or nexus exists fail to validate a Section 13267 request. Thus, as drafted, the provisions requiring monitoring reports and technical reports exceed, in whole or in part, the Regional Board's statutory authority and are invalid.

D. The Regional Board Cannot Prescribe Management Practices

The Regional Board has the authority to adopt water quality control plans, water quality objectives to “ensure the reasonable protection of beneficial uses,” and waste discharge requirements. (Wat. Code, §§ 13240, 13241, 13242.) However, the Regional Board does not have the authority to mandate or dictate specific management and business practices undertaken by a landowner to reach the applicable discharge goal. (Wat. Code, § 13360(a).) Specifically, the Water Code states:

No waste discharge requirement or other order of a regional board or the state board or decree of a court issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner.

(*Ibid.*, emphasis added.) Within the SEIR, it states that “the proposed draft 2011 Agricultural Order does not specify the manner of compliance; dischargers may comply in any lawful manner.” (SEIR, p. 12.) Unfortunately, this statement is incorrect since numerous times within the 2011 Draft Order and accompanying documents, specific types of management practices are mandated.

Under the 2011 Draft Order, certain specific management practices are required, such as, but not limited to, riparian habitat buffers of at least 30 feet, vegetation within the buffer zone, mitigation measures to lessen the impact of the riparian habitat buffers, as well as management practices to control erosion and sediment, including maintaining crop residue or vegetative cover

on the soil. However, the Regional Board has no authority to mandate or require the use of integrated pest management by individual growers or the use of specific types of crop covers. Therefore, these provisions should not be included within the conditional waiver.

E. The Time Schedule for Achieving Compliance with Water Quality Standards and Milestones is Improper and Unrealistic

As set forth in the 2011 Draft Order, the milestones and time schedule for achieving compliance with water quality standards are improper and unrealistic. No evidence or a feasibility analysis is provided to determine whether such milestones can be reached. Further, the milestones themselves as well as the time schedule is confusing and contradictory.

The 2011 Draft Order states: “General time schedules for key compliance dates and milestones related to Order Conditions are identified in Table 4 (All Dischargers) and Table 5 (Tier 2 and Tier 3 Dischargers). *Dischargers must achieve compliance with requirements by dates specified.*” (Draft Order, p. 28, ¶ 97, emphasis added.) The italicized statement requires all dischargers to meet all water quality standards within the applicable time frame (two years for pesticides and toxicity, three years for sediment and turbidity, and four years for nutrients and salts.) (Draft Order, p. 29, ¶¶ 98-100.) If a grower does not meet the water quality standard in the applicable time frame, the grower will be in violation of the conditional waiver even if the grower is making substantial progress toward compliance. As discussed with staff, certain management practices, such as collective treatment systems that growers are encouraged to implement (see Draft Order, p. 14, ¶ 38), may take time to construct and put into use. Thus, a grower utilizing such management practices may not meet the limited time frame outlined above but may be making substantial progress toward compliance. A grower should not be penalized for complying with the intent of the Order even if the applicable water quality standard is not met in the time frame listed, as the time frames are arbitrary and unrealistic.

In addition to being unreasonable, an internal inconsistency exists regarding water quality standards and tile drains. The 2011 Draft Order provides:

Within four years from the adoption of this Order, Tier 3 Dischargers must demonstrate that they are not causing or contributing to exceedances of water quality standards for nutrients and salts in surface waters of the state or of the United States. Dischargers may have to implement best management practices, treatment or control measures, or change farming practices to achieve compliance with this Order. (Draft Order, p. 29, ¶ 100.)

With regard to the same milestone, the Time Schedule provides in relevant part:

Demonstrate that discharge (not including subsurface drainage to tiledrains) is not causing or contributing to exceedances of nutrient water quality standards in the waters of the State or Unite States. ... Within four years... (Draft Order, Time Schedule, p. 3.)

The internal inconsistency between the two milestones is confusing. Correspondence with staff has indicated that it has not been the intent to include tile drains in the timeline for elimination of nutrient discharges. In order to reflect this intent, it is suggested that paragraph 100 of the Draft Order be rewritten to include the phrase “not including subsurface drainage to tiledrains” following “Dischargers” in the first line of the paragraph.

F. 2011 Draft Order Causes Foreseeable Negative Consequences to the Environment

While attempting to “protect the environment,” the 2011 Draft Order will cause foreseeable negative consequences to the environment. One such negative consequence is seen in the following general condition and provision for all dischargers:

Dischargers who choose to utilize containment structures (such as retention ponds or reservoirs) to achieve treatment or control of the discharge of wastes, must construct and maintain such containment structures to avoid percolation of waste to groundwater that causes or contributes to exceedances of water quality standards, and to avoid surface water overflows that have the potential to impair water quality. (Draft Order, p. 14, ¶ 34.)

Throughout the Central Coast, numerous agricultural entities and individuals have retention ponds for individual use or for water reclamation projects. In fact, these projects are encouraged by the Regional Board and the Porter-Cologne Act due to their ability to recharge groundwater basins. However, the provision above would require all such retention ponds to be lined to prevent any and all water from leaving the structure, thus preventing all groundwater recharge. If groundwater recharge is precluded throughout the Central Coast, numerous negative environmental consequences will occur and must be evaluated.

G. The Regional Board’s Use of the Nitrate Hazard Index is Flawed

A large portion of the requirements contained within the 2011 Staff Draft Order are based on the Nitrate Hazard Index (“NHI”) developed by University of California, Riverside. The Draft Order describes the NHI as:

The University of California Center for Water Resources (WRC) developed the Nitrate Groundwater Pollution Hazard Index (Nitrate Hazard Index) in 1995. The Nitrate Hazard Index identifies agricultural fields with the highest vulnerability for nitrate pollution to groundwater, based on soil, crop, and irrigation practices. Based on the Nitrate Hazard Index, the following crop types present the greatest risk for nitrate loading to groundwater: Beet, Broccoli, Cabbage, Cauliflower, Celery, Chinese Cabbage (Napa), Collard, Endive, Kale, Leek, Lettuce, Mustard, Onion, Spinach, Strawberry, Pepper, and Parsley. (Draft Order, Attachment A, p. 13, ¶ 50.)

However, upon review of Staff's Nitrate Loading Risk Factor Criteria (Draft Order, Table 2, p. 33), the NHI was not used. The University of California, Riverside Nitrate Hazard Index utilizes various factors in order to calculate the NHI, including crop type, irrigation, and soil type. The "Nitrate Hazard Index" as outlined in the 2011 Draft Order, rather, attempts to utilize only bits and pieces of the actual index and incorporates other factors, such as nitrates in groundwater. Such additions (irrigation water nitrate concentration rating) and deletions (soil type) manipulate the index as well as over-simplifying the index, making its value questionable. Given that Staff's revised NHI is not based on sound science or peer reviewed, it should not be used to determine the Nitrate Loading Risk Factor Criteria, a fundamental component of the 2011 Draft Order.

H. 2011 Draft Order is Internally Inconsistent, Unclear, and Overly Expansive

The 2011 Draft Order seeks to greatly expand the current 2004 Conditional Waiver, venturing from a waiver that aims to improve water quality to a waiver that is unlawful, exceeds Regional Board authority, and contains significant and prescriptive requirements that gravely impact growers and agriculture in the Central Coast. In addition to being overly expansive, the 2011 Draft Order is internally inconsistent and unclear. Given that the 2011 Draft Order aims to regulate agricultural discharges, the scope of the program should be limited to *actual agricultural dischargers*. As currently drafted, the 2011 Draft Order attempts to regulate every acre of agriculture within the Central Coast, whether or not the operation discharges or even has the potential to discharge to waters of the State. Furthermore, given the nature of this order, the focus should be on agriculture. Provision 44 requires monitoring of both private domestic wells and agricultural supply groundwater wells. (Draft Order, p. 15, ¶ 44.) This order should only encompass agricultural wells, as private domestic wells are under the authority of public health departments and county and local municipalities.

III. PROVISIONS RELATIVE TO PESTICIDE REGULATION EXCEED THE REGIONAL BOARD'S AUTHORITY

The discharge prohibitions within the 2011 Draft Order are unlawful and exceed the Regional Board's authority. Although the Regional Board has the statutory authority to regulate and protect water quality, that authority is not without limitations. (See Wat. Code, § 13243; compare to Wat. Code, § 13269 which does not allow blanket prohibitions of discharges as part of conditional waivers.) As such, the Regional Board cannot prohibit the manner of use or amount of certain pesticides. The Regional Board has no authority to regulate pesticides. Rather, the California Legislature has established a comprehensive body of law to *control every aspect of pesticide sales and use* and has deemed the California Department of Pesticide Regulation ("DPR") the entity with authority protect the public health and environment by regulating pesticide sales and use and by fostering reduced-risk pest management. (Food & Agr. Code, §§ 11454, 11454.1, 12981.)

The California Food and Agriculture Code, division 7, chapter 2 and implementing regulations promulgated at title 3 of the California Code of Regulations, division 6 establish a strict and

comprehensive program under which DPR regulates the manufacture, distribution, sale and use of pesticides. The program seeks to provide for the proper, safe, and efficient use of pesticides essential for production of food and fiber, and to protect the public health and safety, as well as the environment, from harmful pesticides by ensuring proper stewardship of those pesticides. (*Californians for Alternatives to Toxics v. California Department of Pesticide Regulation* (2006) 136 Cal. App. 4th 1049, 1057, citing Food & Agr. Code, § 11501.)

DPR oversees a multi-tiered enforcement infrastructure. While the Department has primary responsibility for enforcement of pesticide laws, the Pesticide Enforcement Branch and the Pest Management and Licensing Branch work with the County Agricultural Commissioners to enforce regulations at a local level, including the proper application and use of pesticides. (California Department of Pesticide Regulation, *A Guide to Pesticide Regulation*, p. 45 <<http://www.cdpr.ca.gov/docs/pressrls/dprguide/dprguide.pdf>> [as of Jan. 3, 2011].)

Given the need for proper and effective oversight of pesticide use, pesticide regulation is a matter of “statewide concern” that must be regulated from the state level. (Food & Agr. Code, § 11501.5(a).) The Legislature made this *unmistakably clear* by commencing the section with “this division and Division 7 (commencing with Section 12501) are of statewide concern and occupy *the whole field of regulation*.” (*Ibid.*) The plain meaning of the words within this sentence illustrates the Legislature’s intent for state regulation of pesticides and such regulation to be conducted by the Department of Pesticide Regulation and not the Regional Water Quality Control Boards. Thus, the imposition of pesticide use is improper and exceeds statutory authority.¹⁰

IV. PROVISIONS RELATIVE TO RIPARIAN BUFFERS, AQUATIC HABITAT, AND VEGETATIVE COVER EXCEED THE REGIONAL BOARD’S AUTHORITY

The aquatic habitat, riparian buffer, and vegetative cover provisions within the 2011 Draft Order are unlawful and impractical for many reasons. The provisions result in an unconstitutional taking of private property, unlawfully dictate the manner of compliance, impede the authority of the Department of Fish and Game, prevent waterway maintenance activities for flood control, prohibit growers from complying with buyer specifications that may be necessary for food safety reasons, unlawfully require federal permits under the Clean Water Act for activities that are specifically exempt, and attempt to regulate land use. Regulating land use is not within the purview of the Regional Board. The Water Code and the Basin Plan focus on water quality and activities which may impair water quality. As discussed within, while the Regional Board has authority to prohibit an act which may result in a discharge, the Board does not have authority to require an act which is unrelated to discharges to waters of the state. (Wat. Code, § 13360.) In addition to exceeding its jurisdiction, such requirements deprive farmers from the economic benefit and use of their private property. Additionally, such deprivation constitutes a regulatory

¹⁰ Additionally, the prescription of pesticide application limitations, besides not being within the Regional Board’s jurisdictional authority, equates to a mandate of a specific management practice. Such mandates are not within the Regional Board’s authority.

taking of land by restricting its use without any relationship to water quality under both state and federal law. (See U.S. Const., 5th Amendment, [private property shall not be taken for a public use, without just compensation]; *Penn Central Transp. Co. v. New York City* (1978) 438 U.S. 104.)

V. DISCHARGES FROM AGRICULTURE MUST BE TREATED AS A NON POINT SOURCE

Any such regulatory program designed to regulate agricultural discharges must be a non point source regulatory program. Agriculture is a non point source and shall not be treated as a point source discharge. Thus, any regulatory program's scope, focus, breadth, and enforcement shall remain a non point source program. Comparisons to point source programs, such as municipal wastewater treatment plants, are inapplicable as there is a fundamental difference between point source discharges and non point source dischargers. Further, any agricultural regulatory program must not incorporate regulations beyond the Regional Board's jurisdiction; the Regional Board's jurisdiction arises only when there has been a discharge to waters of the state and the discharge point is the *edge* of the field (not on the field).

VI. THE 2011 DRAFT WAIVER FAILS TO EVALUATE ECONOMIC COSTS

The requirement to consider economics under Porter-Cologne Water Quality Control Act ("Porter-Cologne") is absolute. Water Code, section 13141 explicitly mandates:

State policy for water quality control adopted or revised in accordance with the provisions of this article, and regional water quality control plans approved or revised in accordance with Section 13245, shall become a part of the California Water Plan effective when such state policy for water quality control, and such regional water quality control plans have been reported to the Legislature at any session thereof.

However, prior to implementation of any agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan.

(Wat. Code, § 13141.) Before a Regional Board can impose waste discharge requirements or conditioned water quality certification for discharges from irrigated lands, Porter-Cologne requires that it "shall take into consideration" the following factors: "the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241." (Wat. Code, § 13263.) Section 13241 in turn lists six "factors to be considered," including "economic considerations" and "water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area." (Wat. Code, § 13241.)

Anticipated program implementation costs to the agricultural community include increases in potential fees, management practice implementation, monitoring costs, report preparation, and

cost for education, as well as other costs. Given that the impacts of water quality regulations frequently take years to materialize, the Regional Board should analyze the economic costs and impacts within a dynamic framework taking into account the projected changes in the economic situation *over time*.

In addition to direct costs imposed on the agricultural community, the Regional Board should evaluate indirect costs, including the economic consequences that are transmitted via market interactions to other groups, such as consumers. Water quality regulation, such as Staff's Draft Order, increases the average cost of production and has a direct negative effect on the producer and the consumer through the resulting increase in variable costs and the output price. The propagation of the impacts of a regulation through the economy is well documented and can be quantified by economic analysis. The economics analysis prepared by the Staff is flawed and does not take into account actual costs that will be imposed upon agriculture due to the 2011 Draft Order.¹¹

VII. AGRICULTURE ALTERNATIVE CONDITIONAL WAIVER PROPOSAL

A. The Agriculture Alternative Conditional Waiver Protects Water Quality

Agricultural representatives submitted an Agriculture Alternative Conditional Waiver Proposal in response to Staff's November 19, 2010 release of the 2011 Draft Order. The Agriculture Alternative Conditional Waiver represents a fair, reasonable, and legally sound approach to improving water quality while maintaining agricultural viability throughout the Region. The Agriculture Alternative Conditional Waiver requires growers to:¹²

- Submit an updated Notice of Intent.
- Participate in a region-wide cooperative monitoring program that will conduct monitoring and report annually on monitoring results, including the identification of water quality benchmark exceedances.
- Develop a confidential, proprietary farm water quality management plan (Farm Plan), which identifies management practices that will address water quality benchmark exceedances that stays on the farm.
- Include within the Farm Plan a nutrient management plan, sediment management plan, and pesticide management plan.
- Implementation of the Farm Plan and management practices to improve and protect water quality.
- Complete a verifiable grower survey, Farm Water Quality Survey, to determine what general practices farmers are using to improve surface water and groundwater quality. This document will serve as an educational tool for each grower in order for individuals to make direct changes in order to protect water quality and will also be submitted to the Regional Board.

¹¹ Reliance on economic analysis of the Feb. 1, 2010 Preliminary Staff Draft Order is improper since that draft order is fundamentally different from the current 2011 Draft Order.

¹² Note: this list is not exhaustive. Please see the Agriculture Alternative Conditional Waiver Proposal for additional requirements and details.

- Assess the effectiveness of implemented agricultural management practices in attaining water quality benchmarks and, when necessary to attain water quality benchmarks, identify, implement, or upgrade management practices.
- Be subject to a verification review of a statistically significant sample of Farm Water Quality Surveys per year by a third-party entity or the Regional Board to determine where educational and management practice implementation efforts should be focused;
- Participate in a Water Quality Coalition for Agriculture or conduct individual on farm monitoring to address crops with high nitrate loading potential and irrigated water runoff and sediment.
- The Coalition will audit Farm Water Quality Survey and management practices through a multi-phase audit program.
- The Coalition will work directly with farmers to address issues of concern and find solutions.
- Complete 5 hours of Farm Water Quality Education.
- Conduct annual groundwater sampling of one primary groundwater well on their operation for nitrates, TDS or EC, and pH.
- Comply with reasonable and achievable milestones and timelines in order to achieve water quality improvements.¹³

The Agriculture Alternative Conditional Waiver proposes a more effective and feasible approach to regulating and improving water quality. Through the use of best management practices, education, Farm Water Quality Surveys, verification reviews, and audit reviews of management practices, growers will be directly contributing to water quality improvements tailored to each farm, crop, and geographic area.

B. The Alternative Conditional Waiver Submitted by Agriculture Must be Properly Analyzed

The Agriculture Alternative Conditional Waiver proposes an alternative approach to regulating agricultural discharges. This alternative is not merely an alternative approach to regulating water quality on the Central Coast. Rather, this document is a superior alternative that deals with the true goal of any conditional waiver—improving water quality. As a feasible and achievable approach, the Agriculture Alternative Conditional Waiver must be reviewed under CEQA as a possible alternative. Therefore, additional environmental review must be completed prior to any Regional Board action on the 2011 Draft Order.

¹³ Benchmarks include: Reduce organophosphate toxic units at current CMP sites (by 50% in 4 years); meet water quality objectives for diazinon and chlorpyrifos (within 8 years); Decrease sediment loads from current CMP sites by 20% (within 5 years); Decrease nitrate loads from current CMP sites by 10% (within 10 years).

VIII. CONCLUSION

The agricultural community is committed to being stewards of the land and has attempted to work with the Regional Board on this matter since 2003. The agricultural community is fundamentally interested in ensuring the long term improvement of water quality in the region.

Given the diverse array of geography, topography, soil, microclimates, local conditions, and agricultural commodities grown in the Central Coast, water management and monitoring programs must be flexible and allow for necessary adaptations, both for localized areas and throughout the Central Coast. A one-size-fits-all approach to regulating all types of discharges from irrigated lands does not work in this Region due to the diversity of the Region that supports a corresponding variety of plant and animal communities and crop types. As currently drafted, Staff's 2011 Draft Order and accompanying documents contain numerous flaws, areas of concern, exceedances of authority, and infeasible and improper regulations. In light of these concerns, Farm Bureau urges the Regional Board to adopt the Agriculture Alternative Conditional Waiver in lieu of the 2011 Draft Order as it is a superior option that achieves the Regional Board's goal in protecting water quality.

Sincerely,

A handwritten signature in black ink, appearing to read "Kari Fisher", written in a cursive style.

Kari E. Fisher
Associate Counsel

KEF:pkh



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January 3, 2011

Transmission via E-mail to: AgOrder@waterboards.ca.gov

Mr. Howard Kolb
Central Coast Regional Water Quality Control Board
895 Aerovista Place
San Luis Obispo, CA 93401

RE: Comments to Revised Conditional Waiver Regulating Discharges from Irrigated Lands (Draft Order) and Monitoring and Reporting Program (MRP) and Certification of a Subsequent Environmental Impact Report (R3-2011-0006)

Dear Mr. Kolb:

This organization represents growers of vegetables and strawberries with farming operations located in the Santa Maria, Lompoc and Arroyo Grande valleys of the Central Coast of California. A significant amount of the nation's supply of vegetables and strawberries are produced on 107,144 harvested acres resulting in over \$1 billion in gross revenue yearly to the economy of this region.

Our members are very concerned with the scope and complexity of new regulations being proposed by Regional Board staff. The Draft Order and MRP together are 111 pages in length, containing 173 Findings, 9 pages of Water Quality Standards, 147 Terms and Conditions, along with 67 Definitions. The documents also include 10 Tables, including a List of Impaired Water Bodies, the Recommended Nitrate Hazard Index Rating; Groundwater and Surface Water Monitoring Parameters, and a Time Schedule for Key Compliance Dates and Milestones.

A program of this size and complexity requires a robust and thorough vetting of key program elements with the regulated community. Unfortunately, this has not taken place. The recommendations have been developed by Regional Board staff without significant and meaningful dialogue with the agricultural community. This has led to recommendations for water quality objectives that are technically and economically not achievable within the time frames set forth in the Draft Order.

~ Serving Central Coast Agriculture Since 1947 ~

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The decision by Regional Board staff to “go it alone” has resulted in the agricultural community coming together to develop competing alternative recommendations. The focus of the Agricultural Alternative is to increase accountability through the implementation of management practices. Coalitions will be established, governed and funded by the agricultural community to evaluate the effectiveness of such practices at improving water quality and hold growers accountable.

This Association believes both water quality and agricultural interests will be best served through a “melding” of those two approaches. The Board can attempt to harmonize using the public hearing process or could direct Regional Board staff and representatives of the agricultural organizations to meet to discuss, at a minimum, the following program elements:

- The achievability of water quality objectives within the time frames recommended.
- Whether the criteria to establish tiers is reflective of the threat to water quality.
- Whether the range of requirements is proportional to the threat posed by each tier.
- Whether improvements to water quality will be achieved through the alternative “coalition approach” or the Board staff “monitoring and reporting approach.”
- Whether it is fair and equitable to segregate Tier 3 dischargers and impose compliance dates and milestones upon them.
- Reconciling the conflict between preserving aquatic habitat and vegetative buffers with food safety standards common to the industry.
- The burden of reporting all fertilizer and the difficulties of achieving fixed nitrate balance targets.
- Whether individual monitoring or the cooperative monitoring program will best capture trends in water quality.

The Association also offers the following comments to specific provisions of the Draft Order and MRP.

The Size of a Farming Operation By Itself Does Not Pose the Highest Threat to Water Quality

The Tiering system set forth in the Draft Order automatically places all vegetable and strawberry growers with distinct farming **businesses greater than 1000 acres** in the highest Tier. Such operations with less than 1000 acres are placed in lower tiers representing a lower risk to water quality. This is an **arbitrary** distinction. This criteria simply punishes larger farming operations while rewarding others based upon their small size. Large operators, due to their size have no opportunity to move out of Tier 3 regardless of improvements to water quality. Condition 13 of the Draft Order does allow the Executive Office to approve a transfer to a lower tier, but there is no criteria, process or standards enumerated that govern this vague and uncertain transfer process. The threat to water quality is not determined by the size of the farming operation.

The Modified Nitrate Hazard Index Used in the Draft Order Does Not Reflect Risk to Groundwater

The Association believes the risk of salt and nitrate leaching into groundwater is heavily influenced by **soil type**. Those farming in sandy soils typically have to apply more nutrients than farmers in areas with loam soils that hold nutrients. Moreover, irrigation water moves faster through sandy soils into groundwater aquifers than those farming in more textured soils. This important factor is not included in Table 2 of the Draft Order.

Moreover the **Irrigation System Type Rating** is also flawed. Vegetable growers who use sprinklers for plant establishment and then convert to micro-irrigation receive the same ranking as farmers who use sprinklers for the entire growing cycle. Vegetable farmers who continue to use flood and furrow irrigation systems receive only one more point than do growers who convert to drip systems following plant establishment, arguably the single most important change in irrigation practices benefiting water quality in vegetable production. The rating system needs to reward growers who reduce their risk through changes in management practices and account for soil types prone to nitrate leaching.

It is Arbitrary and Unfair to Single out Tier Three Dischargers to Require Them to Meet Compliance Milestones

The Draft Order sets forth dates for Tier 3 dischargers to demonstrate compliance with Toxicity Standards (Condition 98), Sediment and Turbidity Standards (Condition 99) Nutrient in Surface Water (Condition 100) and Nutrients in Groundwater (Condition 101). Staff has estimated that approximately 100 farming operations in Region 3 will fall within Tier 3. The remaining 1600 operators who fall into lower tiers will not be required to demonstrate compliance with these Standards. Such a distinction is inconsistent with the basic tenet of **equal application and protection** of laws.

The Draft Order Sets Forth Discharge Prohibitions that are Arbitrary and Vague

The Draft Order in Condition 25 prohibits the “**presence of bare soil vulnerable to erosion.**” Condition Number 66 states that discharges must minimize the presence of bare soil vulnerable to erosion and stormwater runoff. Condition Number 71 requires erosion control practices to protect the heavy use or bare soil areas from concentrated flows of stormwater. Finally Condition 78 requires the photo monitoring of the presence of bare soils vulnerable to erosion.

This term “presence of bare soil vulnerable to erosion” is not defined in the Order. Those subject to this prohibition have no real basis for determining whether they are in violation of this prohibition. There are times between plantings when an entire agricultural field is bare soil.

There are other times when crops are planted that bare soils are limited to equipment staging areas and access roads. Yet under this prohibition, there is no way for farmers to determine with any amount of certainty whether they are in compliance with this prohibition.

Similarly, Condition 26 prohibits the discharge of **agricultural rubbish and solid waste**. The prohibition against trash does not set forth the amount or location of trash that would trigger an enforcement action. The prohibition is also not linked to any water quality impairment. The Association does not believe that carton dunnage or food wrappers from farm workers' lunches or rubbish in general has any appreciable impact on water quality.

Water Discharged by the Operation of Tile Drains are not Considered Waste and Should not be Subject to the Order

The operation of drainage systems to lower the water table below irrigated lands occurs in the lower end of several coastal valleys. These areas have perched water tables and naturally flowing artesian wells.

Farmers in those areas pump this subsurface water discharging it directly to drainage channels to lower the water table. These discharges typically **do not contain any materials that were not present** prior to the water being brought to the surface and discharged. The drainage system simply raises groundwater to the surface and discharges it without adding any waste substances associated with human or animal origin. Accordingly tile drains should not be included as a regulated type of discharge under the Draft Order.

The Subsequent Environmental Impact Report Understates the Impact to Agricultural Resources and Needs to be Revised and Recirculated.

The Environmental Impact Report submitted fails to analyze the impacts of the project and understates the loss of agricultural resources as a result of Water Quality Buffer Plan requirements.

The analysis in Appendix F determined the level of environmental impacts. It includes only operations greater than 1,000 acres in size located adjacent to waterbodies listed for sediment, turbidity or temperature on the **2006** 303(d) List of Impaired Waterbodies. The conclusion set forth in the report is that approximately 82 to 233 acres would be taken out of agricultural production. This analysis however is not consistent with the recommendations set forth in the Draft Order and MRP.

The Draft Order used the **2010** List of Impaired Waterbodies, which is set forth in Table 1 as triggering a Water Quality Buffer Plan (Draft Order Condition 92). This newer list dramatically expanded the number of impaired waterbodies. Moreover, the MRP on Page 16 (Subparagraph F) requires a water quality buffer plan be prepared by all Tier 3 dischargers located not **adjacent to**, but **within 1,000 feet** of such impaired waterbody.

This discrepancy between the proposed project and what was analyzed results in the impacts being severely understated in the Environmental Impact Report. Moreover, the four **mitigations** identified in the report are **not feasible**. Those mitigations refer to other practices besides buffers which are identified as sediment basins, cover crops and vegetative roads. These mitigations will result in the loss of even more farmland than riparian buffer strips. They do not mitigate the impacts but actually increase the loss of agricultural land.

The findings in the Environmental Impact Report that the percentage of farmland that will be converted to riparian buffers to be **less than significant with mitigation** is based on a flawed analysis. It does not comply with CEQA. It needs to be revised to fairly disclose the impacts consistent with the Draft Order and MRP being recommended for adoption.

Thank you for allowing the Association to submit comments.

Sincerely,

Richard S. Quandt
President & General Counsel

January 3, 2011

Submitted electronically

Ms. Angela Schroeter
Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906
AgOrder@waterboards.ca.gov

SUBJECT: Comments on Draft Order No. R3-2011-0006, Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands

Dear Ms. Schroeter:

Our firm represents the California Strawberry Commission (CSC) in the Central Coast Regional Water Quality Control Board's (Central Coast Water Board) matter for adoption of new regulations pertaining to discharges from irrigated lands. On behalf of the CSC, we have reviewed Draft Order No. R3-2011-0006, Conditional Waiver of Waste Discharge Requirements (Draft Waiver), the Draft Monitoring and Reporting Program for Order No. R3-2011-0006 (Draft MRP), and all other associated materials.

Based on our review of the Draft Waiver, we must express grave concern with many of the findings and provisions. In general, we find the Draft Waiver similar in nature to the Preliminary Draft Order issued in early 2010, as it continues to propose prescriptive requirements that are unreasonable and unlawful. Our detailed comments on the many provisions of concern are detailed below.

As a preliminary matter, the CSC was a signatory on and continues to support the *Draft Central Coast Agriculture's Alternative Proposal for the Regulation of Discharges from Irrigated Lands* (Agricultural Alternative) submitted on December 3, 2010. The CSC believes the Agricultural Alternative represents a viable and appropriate approach for addressing water quality issues and impairments in the Central Coast. Specifically, the Agricultural Alternative as applied to strawberry growers and others would create an agricultural Coalition with specific duties and functions that would help to assist agricultural operations in the Central Coast address the many complex water quality problems that exist. Through the Coalition, grower operations and associated farm plans would be subject to

multiple audits, and where warranted, additional assistance would be provided directly to growers to improve agricultural operations.

In contrast, the Draft Waiver consists primarily of an expensive, draconian, paperwork exercise that relies almost exclusively on the submittal of paper reports and monitoring information in an attempt to improve water quality. While this approach may allow the Central Coast Water Board to bring multiple enforcement actions for paper violations and alleged violations of water quality objectives, it fails to provide any real or direct assistance to growers to help them change and modify operations for the protection of water quality. Without this essential link, growers may be unfairly penalized for violating water quality objectives.

Although the CSC supports the Agricultural Alternative as proposed and believes it is superior to the Draft Waiver, CSC is not opposed to revisions to the Agricultural Alternative if the Central Coast Water Board finds it necessary for it to be a viable alternative. For example, CSC understands that the Central Coast Water Board may be more amenable to the Agricultural Alternative if it contained more specific milestones related to water quality improvement. Further, CSC understands that it may be necessary to expand application of the Coalition requirements to those that may cause a threat to water quality due to the use of certain pesticides such as diazinon and chlorpyrifos, or even to expand the Coalition requirements universally to all operations subject to the Draft Waiver. CSC does not speak or comment for other agricultural organizations on this issue, but CSC would not oppose such revisions.

With respect to the Draft Waiver, Draft MRP, and other associated documents as proposed, the CSC submits the following comments.

I. Draft Waiver Includes a Number of Inappropriate and Unsupported Findings¹

In California, the Central Coast Water Board must support its decisions with specific findings based on evidence in the record. In particular, the Central Coast Water Board must “set forth findings to bridge the analytical gap between the raw evidence and the ultimate decision or order.” (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515 (*Topanga*); see also *In Re Petition of the City and County of San Francisco, et al.* (Sept. 21, 1995) SWRCB Order No. WQ 95-4, at pp. 10, 13.) Further, the findings must be supported by evidence in the record. (*Topanga* at pp. 514-515.) In other words, findings must be based on specific evidence and may not be a statement based on rhetoric.

¹ Findings 29 through 31 regarding compliance with the California Environmental Quality Act (CEQA) are addressed in detail by the California Farm Bureau Federation (CFBF). CSC hereby incorporates by reference CFBF’s comments on Findings 29-31 and the Draft Subsequent Environmental Impact Report. Finding 32 incorporates the findings from Attachment A, which are addressed separately in section III below.

Here, the Draft Waiver uses significant rhetoric to portray agriculture as the evil polluter that has caused undue harm to fish and public drinking water supplies throughout the Central Coast. While the CSC admits that agriculture may be contributing to some water quality impairments in the Central Coast, CSC declines to believe that it has caused the wide-spread harm portrayed by the Draft Waiver. Further, careful review of data and information apparently relied on by Central Coast Water Board staff to find this wide-spread harm shows that at least some data and information may be inappropriately manipulated and fail to represent the premise for which they are proposed. Due to the short timeframe available to review the extensive Draft Waiver and its related documents, the CSC was unable to critically review all data and information. However, if the manipulation of one data set (e.g., groundwater nitrate data) is indicative of the Central Coast Water Board staff's practices for reviewing data and making findings, then other findings based on supposed "available data and information" may also be questionable and may not be supported by evidence in the record.

A. Finding That Irrigated Agriculture Is the Primary Source of Nitrate Pollution in Drinking Water Wells Is Not Supported by Available Data and Information

Finding 6 of the Draft Waiver states in part that, "[n]itrate pollution of drinking water supplies is a critical problem throughout the Central Coast Region. Studies indicate that fertilizer from irrigated agriculture is the largest primary source of nitrate pollution in drinking water wells and that significant loading of nitrate continues as a result of agricultural fertilizer practices. Researchers estimate that tens of millions of pounds of nitrate leach into groundwater in the Salinas Valley alone each year. Studies indicate that irrigated agriculture contributes approximately 78 percent of the nitrate loading to groundwater in agricultural areas." This finding is largely responsible for many of the groundwater and nitrate related requirements proposed in the Draft Waiver. (See, e.g., Provisions 80 through 91, at pp. 22-27.) However, critical review of available data and information question the finding and the evidence from which it is supposedly derived.

A report prepared by Robert Dolezal, *Anomalies in Data Supporting Proposed Regulations Offered by the Central Coast Regional Water Quality Control Board: A Critical Analysis – November-December 2010* (Dolezal 2010), provides significant information that questions the statements made in Finding 6. (Dolezal 2010, Attachment 1, submitted on CD that was sent via Federal Express to the Central Coast Water Board on December 30, 2010.) For example, Dolezal 2010 summarizes results from several U.S. Geological Survey reports to show that in fact there is not widespread nitrate groundwater contamination in the Central Coast. (Dolezal 2010 at pp. 4-5.) Dolezal 2010 also provides evidence that disputes the statement that tens of millions of pounds of nitrate leach into groundwater in the Salinas Valley. (See Dolezal 2010 at pp. 5-6.)

Of even greater concern is a presentation of data in Mr. Matthew Keeling's powerpoint to the Central Coast Water Board at its April 8, 2010, workshop and as presented to the Sustainable Agriculture Expo by Central Coast Water Board staff member, Ms. Lisa McCann. To the extent Finding 6 is based on data presented in Mr. Keeling and Ms. McCann's presentations, the finding is not supported by substantial evidence in the record. Specifically, Dolezal 2010 found that when Ms. McCann's graphics of public supply wells were compared to data from the Geo Tracker GAMA database, Ms. McCann's graphics greatly under-depicted the actual number of wells in the area. For example, for the Castroville area, Ms. McCann's graphics showed a total of six wells in the area; however, the GAMA database reveals that there are actually one hundred twenty-two wells in nine different clusters. For the King City area, Ms. McCann's graphics depict an estimated thirteen wells of which seven supposedly have exceedences above the drinking water standard. (Dolezal 2010 at pp. 9-11.) In comparison, the GeoTracker GAMA records show one hundred nine wells of all types comprising twenty clusters. Fifty-two of the wells are drinking water wells. According to the GAMA database wells, two clusters of drinking water wells for a total of eight individual wells showed historic exceedences of the drinking water standard. Of these eight wells, two no longer had exceedences and all but one was located in a cluster in downtown King City. (Dolezal 2010 at pp. 10-11.)

Overall, the evidence provided in Dolezal 2010 clearly indicates that statements proposed in Finding 6 are overstated and not supported by evidence in the record. Thus, Finding 6 fails to support the proposed Draft Waiver provisions that are intended to "rectify" agriculture's impacts to groundwater. Without supporting substantial evidence, many of the nitrate and groundwater requirements are inappropriate.

B. Finding That Compliance Based on Mere Possibility of Discharge Inappropriate

Finding 21 states that landowners and operators of irrigated lands who obtain a pesticide use permit *may* have a discharge of waste that could affect surface or groundwater, and therefore *must* submit a completed Notice of Intent (NOI) to comply with the Draft Waiver. Inherent in this finding is an improper presumption that simply because a landowner has obtained a pesticide use permit, that the landowner may have a discharge of waste. The Draft Waiver provides no information or evidence to support this finding. Conversely, pesticide use permits are issued for various pesticide applications, including use permits for pesticides and herbicides that are not typically considered to be present in irrigation return flows or migrate to groundwater. Thus, the presence of a pesticide use permit itself does not constitute evidence of a potential discharge of waste.

The Central Coast Water Board has the authority to regulate "discharges of waste" from irrigated agriculture operations. (Wat. Code, § 13260.) However, the Central Coast Water Board does not have unfettered regulatory authority to regulate irrigated agriculture just because a pesticide use permit exists. Accordingly, this finding should be eliminated or

amended to reflect that the Central Coast Water Board's authority does not extend to irrigation practices that do not result in a "discharge of waste."

II. Draft Waiver Includes a Number of Inappropriate Substantive Provisions

The Draft Waiver contains a number of substantive provisions that are of concern to the CSC. Collectively, the provisions set forth an impossible program that would prohibit any discharge that may exceed water quality standards on the day of adoption—regardless of the inferences made to time schedules and the need to implement best management practices (BMPs). Further, as a practical matter, the Draft Waiver includes a number of specific provisions that are unrealistic for agriculture in the Central Coast. Our specific comments on the provisions are provided here in the order as they appear in the Draft Waiver.

A. Provision 1 Inappropriately References Water Code Section 13263

This provision lists the relevant statutory authority under which dischargers must comply with the terms and conditions of the Draft Waiver, including Water Code sections 13263, 13267, and 13269. However, one of the listed code sections, Water Code section 13263, is not applicable to the Draft Waiver and should not be included. Water Code section 13263 addresses the Central Coast Water Board's ability to prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge, and places certain restrictions on that authority. (Wat. Code, § 13263(a).) However, the Draft Waiver is not a waste discharge requirement or change to an existing waste discharge requirement, but rather a conditional waiver of waste discharge requirements. (See Wat. Code, § 13269.) As the Subsequent Environmental Impact Report (SEIR) acknowledges, discharge authorization can be in the form of waste discharge requirements *or* a conditional waiver of waste discharge requirements. (SEIR, p. 2, § 2.2.) The reference to and inclusion of Water Code section 13263 in this provision is inappropriate and should be eliminated.

B. Provision 3 Creates an Unspecified Prohibition

This provision states that dischargers must not discharge any waste not specifically regulated by the Draft Waiver. However, there is no designation or reference as to what types of waste are specifically regulated by the Draft Waiver, or what types of waste are not included in the Draft Waiver. Such a provision provides no clarity or guidance to dischargers. Thus, this language is far too broad and requires some clarification.

C. Provision 8 Inappropriately Places Landowners In a Regulatory Role

This provision would require landowners to police lessees to ensure that they are complying with the terms of the Draft Waiver. Such a provision is improper for several reasons. First, determining compliance with the Draft Waiver is a Central Coast Water Board function—not a landowner function. While the Central Coast Water Board may arguably

have the authority to hold both landowners and operators jointly responsible for compliance with the Draft Waiver, the Central Coast Water Board has no authority to require landowners to “police” operators and determine if they are compliant with the terms of the Draft Waiver.

Second, as proposed, this provision puts landowners in jeopardy of being responsible for multiple violations for one act of wrongdoing. Under this provision, a landowner could theoretically be liable for a violation of the Draft Waiver individually, and also be liable for the very same violation by not “ensuring” that the operator was compliant. Accordingly, this provision should be deleted.

D. Provisions 9-16 Create an Inappropriate Tiering System

Central to the Draft Waiver and its requirements is the tiered system proposed in Provisions 9-16. The proposed tiered system attempts to equate threat to water quality based on pesticides used, type of crop grown, size of the operation, and physical location as compared to surface waterbodies listed as impaired on the state’s 303(d) list. It fails to recognize or take into account that the implementation of certain BMPs and/or certain cultural practices by various commodities may be more effective in protecting water quality than the mere presence of the physical parameters identified in the Draft Waiver.

Further, the tiered approach sets forth a paperwork exercise that is burdensome on growers and less effective in improving water quality regulation as compared to the Coalition approach proposed in the Agricultural Alternative. The Coalition approach would work directly with growers to help to design and implement BMPs that are protective of water quality. Further, the audit system built into the Coalition approach provides for substantially more accountability than the tiered approach proposed in the Draft Waiver.

Also as proposed, the establishment of tiers is somewhat illusory. Specifically, Provision 14 would allow the Executive Officer (EO) of the Central Coast Water Board to elevate Tier 1 or Tier 2 dischargers to a higher tier, if the EO finds the discharger poses a higher threat. However, there are no objective criteria listed to determine when a discharger is to be elevated from one tier to another, and there are no listed identifying factors the EO is to consider when making this determination. Thus, there is nothing in the Draft Waiver that would provide an agricultural operator and/or landowner with any guidance as to what might trigger their elevation to a higher tier, nor are there any procedural or due process elements included that would allow an agricultural landowner or operator to challenge the EO’s decision before the Central Coast Water Board. All that is required under the proposed provision is that the discharger, in the opinion of the EO, poses a “higher threat.” This term is not defined and is subject entirely to the EO’s discretion. The decision to elevate a discharger to a higher tier can have serious ramifications for a discharger, yet it is essentially at the whim of the EO.

Water Code section 13223(a) provides the Central Coast Water Board with the authority to delegate its powers to the EO with the exception of, among others, the promulgation of any regulation and the issuance, modification, or revocation of any water quality control plan, water quality objective, or waste discharge requirement. The amount of discretion given to the EO under this provision, and in numerous other provisions within the Draft Waiver, seemingly delegates to the EO the authority to revise requirements in the Draft Waiver. Although revisions to conditional waivers adopted pursuant to Water Code section 13269 are not specifically enumerated in Water Code section 13223(a), revisions to waivers are akin to revisions in waste discharge requirements. Specifically, changing the status of a discharger from a lower tier to a higher tier fundamentally alters the burdens and regulatory requirements placed on that discharger—much like a revision to waste discharge requirements. Considering the potential changing regulatory burden and fundamental due process concerns, such an action should not be delegated to the EO. Thus, if the Central Coast Water Board decides to maintain the tiered system, this provision must be removed, or, at the very least, be revised to include specific criteria that would trigger a change in tier categorization for the agricultural operator and/or landowner.

E. Proposed Discharge Prohibitions Create Immediate Non-Compliance

Nearly all of the discharge prohibitions listed in Part B, Provisions 17-28, are inappropriate and problematic for agricultural landowners and operators. As a general matter, these discharge prohibitions would become effective on the day of adoption and would effectively prohibit the discharge of any waste that has the reasonable potential to cause or contribute to a violation of a water quality standard regardless of the time schedules contained in Provisions 98-101. Thus, the supposed findings and provisions that suggest the Draft Waiver includes moderate time schedules are negated by the proposed discharge prohibitions.

In general, the inclusion of discharge prohibitions exceeds the authority of the Central Coast Water Board under relevant provisions in the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) (Porter-Cologne). Specifically, Water Code section 13243 states that, “[a] regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.” However, Porter-Cologne does not authorize a regional board to prohibit discharges as part of a conditional waiver issued pursuant to Water Code section 13269. As noted above, the statutory provisions governing the issuance of conditional waivers are separate and distinct from those governing waste discharge requirements, and should not control the content of the Draft Waiver. More fundamentally, these discharge prohibitions undercut the primary purpose for the adoption of a waiver. Discharge requirements, and waivers from discharge requirements, are intended to ensure that discharges of waste are controlled to protect water quality considering the beneficial uses of waters of the state, and water quality objectives reasonably required for the purpose of protecting beneficial uses. (See Wat. Code, §§ 13263, 13269.) The prohibitions contained in Part B are in fact blanket prohibitions on any discharge that might violate water quality

standards, containing no discussion of beneficial uses or reasonableness, and entirely inappropriate in the context of a conditional waiver of waste discharge requirements.

Further, this section proposes blanket prohibitions on any discharge specified, without reference to or consideration of time schedules included in the Draft Waiver. For example, Provision 100 states that within four years of adoption of the Draft Waiver, certain dischargers must demonstrate that they are not causing or contributing to exceedances of water quality standards for nutrients and salts. However, Provision 17 would prohibit the discharge of any waste that causes or has reasonable potential to cause, or contribute to an exceedance of water quality standards, including nutrients and salts, on the day of adoption. These are two contradictory provisions, one prescribing immediate prohibition and one allowing four years for compliance. The immediate waste discharge prohibitions in Part B essentially overwrite any of the time schedules allowed in the Draft Waiver. Such an approach is inconsistent with statements made by Central Coast Water Board members at the May 12, 2010, workshop in San Luis Obispo, as well as the July 8, 2010, workshop in Watsonville. (See May 12, 2010, Workshop, Audio #12 [“timelines . . . need to be reasonable”]; see also July 8, 2010, Workshop, Audio #8 [“there is a misconception that we intend to have everything clean in the next two to four years . . . I want to respond to that . . . we are not going to see everything cleaned up in four or five years. We hope to see a trend develop where we are on the path to getting where that goal needs to be”].) Accordingly, the discharge prohibitions need to be deleted from the Draft Waiver. In the alternative, the prohibitions need to at least be revised to incorporate reasonable time schedules.

There are also specific concerns regarding several of the individual discharge prohibitions. For example, the discharge prohibition in Provision 19 is incredibly overbroad. It states that the discharge of any waste not specifically regulated by the Draft Waiver is prohibited. There is no designation or reference to what specific waste is not designated in the Draft Waiver, or what types of discharge of waste might be included under this provision. The Draft Waiver cannot purport to prohibit discharge of all waste of any type, without reference to or respect for the relevant time schedules, conditions, and restrictions, both within the Draft Waiver and external to the Draft Waiver. This language, much like the language in Hereby Ordered Provision 3, is far too broad and requires some clarification by the Central Coast Water Board.

Several of these prohibitions are unlawful because they are unrelated to the discharge of waste, and hence are outside the Central Coast Water Board’s authority to regulate. For example, Provisions 22 and 23 prohibit the legal application of fertilizer, fumigants, and pesticides if such application results in a discharge of waste to groundwater. Central Coast Water Board authority does not extend to regulating the application of commercial fertilizers or pesticides to crops, as those acts in themselves are not a discharge of waste.

With respect to fertilizers, there currently exists no state regulation of their use by agricultural operations. The California Department of Food and Agriculture has limited authority over labeling, and conducts extensive research and educational programs. (See, e.g., Food & Agr. Code, § 14501 et seq.) However, in the future, should the California legislature determine that regulation of such use is necessary, then it is on the legislature to act accordingly. It is improper and unlawful for the Central Coast Water Board to create this authority for itself as part of the Draft Waiver.

With respect to pesticides, their use and registration is regulated exclusively by the California Department of Pesticide Regulation (DPR). (See Food & Agr. Code, § 11501.1 [“This division and Division 7 (commencing with Section 12501) are of statewide concern and occupy the whole field of regulation regarding the registration, sale, transportation, or use of pesticides to the exclusion of all local regulation.”].) Conversely, the Central Coast Water Board’s authority is limited to matters that pertain to water quality, and does not include the authority to direct growers with regard to their pesticide applications or to direct the means to comply with a DPR permit. (See Wat. Code, § 13225; see also *id.*, § 13360 [“No . . . order of a regional board . . . shall specify the . . . particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner.”].)

As another example, Provision 25 prohibits the presence of bare soil vulnerable to erosion. Allowing the presence of “bare soil” as identified under this prohibition is not a discharge of waste and prevention of such a condition is incredibly impractical and infeasible for an owner or operator of irrigated agricultural land. Provision 26 prohibits the discharge of agricultural rubbish, refuse, and other solid wastes at any place where they may contact or may eventually be discharged to surface waters. While CSC understands the need to control rubbish and refuse and prevent littering from occurring, as proposed the prohibition is impractical.

Further, Provision 21 would prohibit the discharge of waste to groundwater that has the MUN beneficial use designation if the discharge would cause or contribute to an exceedance of U.S. EPA or California Department of Public Health (DPH) drinking water standards, whichever is more stringent. This prohibition is problematic for several reasons. First, the prohibition would apply to drinking water standards that are not properly adopted water quality objectives. Specifically, the Water Quality Control Plan for the Central Coast (Basin Plan) incorporates drinking water standards from title 22 (i.e., standards from DPH)—not from U.S. EPA. (Basin Plan at p. III-2.) Further, the Basin Plan only includes certain sub-sets of state drinking water standards (e.g., primary MCLs for organic and inorganic constituents)—and not all drinking water standards (e.g., secondary MCLs). (Basin Plan at pp. III-5 - III-7.) Thus, the reference to drinking water standards generically is overbroad and fails to acknowledge that not all standards are properly adopted water quality objectives contained or incorporated in the Basin Plan.

Second, the Central Coast Water Board has no authority to incorporate U.S. EPA drinking water standards as pseudo water quality objectives through its adoption of the Draft Waiver. As discussed further in section III.H below, water quality objectives must be adopted into the Basin Plan pursuant to Water Code sections 13241 through 13245. U.S. EPA's drinking water standards have not been adopted into the Basin Plan pursuant to these requirements. Thus, any reference to U.S. EPA's standards is inappropriate and must be removed.

Collectively, the provisions in Part B prohibit all discharge of waste at any location immediately, without due regard to beneficial uses, particular constituents, the Basin Plan, or reasonable time schedules for compliance. Many of these prohibitions are beyond the scope of authority for the Central Coast Water Board and prohibit acts that are not discharges of waste. The entirety of the discharge prohibitions section is contrary to statute and Central Coast Water Board member direction to staff, and must therefore be removed.

F. Part C Includes Improper General Conditions

Part C includes a number of general conditions that would apply to dischargers in all three tiers. However, several of the general conditions are improper conditional waiver requirements and should be removed. Further, some of the conditions either undermine time schedule provisions, and/or are undermined by the discharge prohibitions as discussed above. Specific comments on certain general conditions are provided here.

1. Provision 30 Creates an Immediate Discharge Prohibition and Undercuts Time Schedules

As proposed, Provision 30 states, “[d]ischargers must not cause or contribute to exceedances of water quality standards . . . [and] . . . may have to implement best management practices, treatment or control measures, or change farming practices to achieve compliance with this Order.” (Draft Waiver at p. 13.) Much like the Part B Discharge Prohibitions, this provision would require immediate compliance with all water quality standards, without due regard for time schedules or other considerations. It also assumes that BMPs exist and if utilized will ensure compliance with water quality standards. However, as repeatedly indicated by agricultural specialists and researchers that is not necessarily the case. For example, in testimony provided by Dr. Timothy K. Hartz, Extension Specialist and Agronomist with the University of California, to the Central Coast Water Board at its July 8, 2010, workshop, he stated that, “[t]here are practical limitations on agriculture that will make control of nitrate losses especially concentration based control down to 10 ppm, very difficult or impossible to reach.” (Central Coast Water Board Workshop to Discuss Preliminary Draft Staff Report Recommendations for an Updated Agricultural Order, Public Comments and Alternative (July 8, 2010) (July 2010 Workshop), Audio 4, at 40:30.) Dr. Hartz also testified that, “[c]ertain conservation measures discussed to remove discharge from fields such as vegetative ditches and filter strips may have good effectiveness for certain pollutants, but for nitrates they have very limited effectiveness.” (July 2010 Workshop, Audio 4, at 38:30.)

Similarly, Mr. Michael Kahn, an Irrigation Water Resource Advisor for the University of California Cooperative Extension, testified that, “UC researchers and advisors like myself participate in evaluation and development of practices that can improve farm water quality. However, although we are developing effective practices, these practices can’t be used in every situation.” (Transcript of part of July 2010 Workshop at p. 9:8-15.)

Considering the uncertainty associated with meeting water quality standards even with the implementation of BMPs, provisions such as this must be deleted from the Draft Waiver as they create an impossibility of compliance for agricultural operations in the Central Coast.

2. Provision 31 Fails to Account for Assimilative Capacity in Groundwater

This provision states that dischargers must ensure that agricultural discharges percolating into groundwater must be of such quality at the point where they enter the ground to assure the protection of all actual or designated beneficial uses of groundwater. (Draft Waiver at p. 12.) This provision fails to account for potential assimilative capacity of groundwater and treatment (i.e., de-nitrification) that may occur in the soil profile.

Although this provision requires irrigation water to be of a quality that complies with groundwater quality objectives at the time it enters the ground, as a practical matter, this means that the water must be of such quality at the time of application. This requirement in effect regulates the quality of water at the moment it is used rather than at the moment it becomes a discharge of waste. Such a requirement is unreasonable and inconsistent with Porter-Cologne because the use of water for irrigation purposes is not considered a discharge of waste that can be regulated in this manner. The legislative history of Porter-Cologne indicates, “[t]he discharge of waste does not take place while water is still being used to irrigate crops in the fields.” (Report of the Assembly Committee on Water concerning Assem. Bill 413 (Assembly Report) at p. 3.) In addition, the State Water Resources Control Board’s (State Board) regulations governing the appropriation of water rights specifically provide that, “[n]o permittee shall be required to file a report of waste discharge pursuant to Section 13260 of the Water Code for percolation to the groundwater of water resulting from the irrigation of crops.” (Cal. Code Regs., tit. 23, § 783.) It is apparent that the Legislature and the State Board do not consider the percolation of irrigation water to groundwater a discharge of waste. As such, the Central Coast Water Board’s effort to require irrigation waste to be of sufficient quality to protect beneficial uses at the moment it enters the ground exceeds its authority.

Furthermore, this requirement that water be of sufficient quality at application does not account for the treatment in the soil profile that occurs after application, nor does it account for the assimilative capacity of groundwater. There is considerable treatment that may occur as water makes its way through the soil profile, and in many areas it can be reasonably expected that there will be significant dilution and attenuation of constituents after application. (See Dolezal 2010 at pp. 5-6; see also section I, *post.*) Because the lands covered

by the Draft Waiver are so varied in soil composition, the assimilative capacities of those lands also vary, and a requirement that all discharges be of sufficient quality to protect beneficial uses at the point where they “enter the ground” is inappropriate.

3. Provision 39 Is an Improper General Application of Authority to Enter Discharger Property

This provision states that pursuant to Water Code section 13267(c), representatives of the Central Coast Water Board may enter a discharger’s property, inspect and photograph certain locations and activities, have access to records, and perform sampling or monitoring activities. It is inappropriate to apply this provision generally to all dischargers as opposed to individual dischargers in instances where there is a known and demonstrated need to enter the landowner’s property and undertake these activities. Water Code section 13267(c) states that, “[i]n conducting an investigation pursuant to subdivision (a), . . . The inspection shall be made with the consent of the owner or possessor of the facilities or, if the consent is withheld, with a warrant duly issued pursuant to the procedure set forth in [Code of Civil Procedure section 1822.50].” The Draft Waiver fails to acknowledge that an individual showing would be required whenever the Central Coast Water Board seeks to act under this provision. Central Coast Water Board authority to enter onto the property of a discharger is an individualized determination and is improper as a provision of general applicability.

Under California Code of Civil Procedure section 1822.51, the Central Coast Water Board or its representatives would only be allowed to enter a discharger’s property upon a showing of cause, which is an individualized determination depending on the facts and circumstances surrounding the individual discharger. In stark contrast, the language of this provision is general and contains no such restriction or limitation on the action of the Central Coast Water Board. Such a general provision implies that the Central Coast Water Board has the authority to enter onto the property of a discharger without providing a demonstration of cause in the individual instance, and assumes that a representative of the Central Coast Water Board may undertake these investigations without any individual justification or suspicion of wrongdoing. Accordingly, this provision should be deleted, or at least amended to reflect that the Central Coast Water Board would be unable to enter the property of a discharger and undertake an investigation under Water Code section 13267(c) without an equivalent individual showing.

4. Provision 40 Exceeds Water Code Section 13267’s Authority and Includes an Improper Reference to Section 13304

This provision states that the EO may require dischargers to locate and conduct sampling of private domestic wells “in or near agricultural areas with high nitrate in groundwater” and submit technical reports evaluating the sampling results. (Draft Waiver at p. 14.) As noted in greater detail in comments to Provision 59 below, Water Code section 13267 governs the submission of technical reports and requires that the Central Coast Water Board provide justification and evidence for the request on an individualized basis.

(Wat. Code, § 13267(b)(1).) In order for such requests to be upheld, the Central Coast Water Board has the responsibility of explaining to the discharger the need for the information and identifying substantial factual evidence that supports requiring the reports. Further, the burden, including costs, of obtaining the report must bear a reasonable relationship to the need. This provision implies that no such showing on the part of the Central Coast Water Board is required before the EO can request such reports. In addition, the term “near” agricultural areas with high nitrate is undefined and gives too much discretion to the EO in broadly authorizing requests for such technical reports. Specific criteria identifying which dischargers are subject to this requirement are required, as is an acknowledgment that the EO does not have the authority to request such reports without the individualized showing required under Water Code section 13267.

With respect references to Water Code section 13304, such references are inappropriate and misplaced in the Draft Waiver. Under Water Code section 13304, the Central Coast Water Board may, in an action unrelated to the Draft Waiver, require a discharger to, “clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.” As part of a cleanup and abatement order issued pursuant to this authority, the State Board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. (Wat. Code, § 13304(a).) However, Water Code section 13304 is an individualized remedy and determination, and only applies to a person who has discharged waste in violation of a waste discharge requirement or other order, or who creates or threatens to create a condition of pollution or nuisance with their discharge. (Wat. Code, § 13304(a).) By referencing Water Code section 13304 in the Draft Waiver, this provision wrongfully implies that the Central Coast Water Board can arbitrarily require dischargers to provide replacement water merely by violating a provision of the Draft Waiver. Simply stating that all dischargers may be required to undertake these activities, without also requiring that the Central Coast Water Board provide some demonstration that the requirement is related to an action of the discharger as described above, is entirely inappropriate. Thus, reference to Water Code section 13304 should be deleted from the Draft Waiver.

G. Monitoring and Technical Report Requirements Exceed Central Coast Water Board’s Authority

Parts D and E include a number of provisions that would require monitoring and submittal of technical reports from irrigated agricultural operations on the Central Coast. Most of the proposed provisions are inappropriate as they exceed the Central Coast Water Board’s authority to require such information and/or require the submission of confidential, proprietary information. In general, the Central Coast Water Board’s authority to require monitoring and technical reports is not without constraints. Under section 13267 of the Water Code, the legal authority to require such information, the Central Coast Water Board has the

burden of explaining to the discharger the need for the information and for identifying substantial factual evidence that supports requiring the reports, i.e., demonstrates a nexus between the requested information and the Central Coast Water Board's statutory authority to investigate water quality. Mere assertions that such a nexus exists are insufficient to support requests pursuant to Water Code section 13267. Most of the monitoring and technical report requirements in Parts D and E, as well as the specific monitoring requirements in the Draft MRP, fail in whole or part to meet the Central Coast Water Board's statutory burden. Further, many of the monitoring and technical report requirements include practical constraints that make compliance difficult if not impossible for many dischargers. Our specific comments on the monitoring and technical report provisions identified in the Draft Waiver are provided here. Where the Draft Waiver provisions identify requirements contained in the Draft MRP, the comments here apply to parallel provisions in the Draft MRP as well and are not repeated later in these comments.

1. Provision 44 Improperly Requires Public Disclosure of Confidential Information

This provision states that dischargers must sample private groundwater wells in agricultural areas, and identify areas of the greatest risk for waste discharge and other concerns in compliance with the Draft MRP. As proposed, this requirement is overly broad. Further, it would require the monitoring results to be submitted to the Central Coast Water Board as a public document. We have concerns with this requirement for several reasons. First, sampling information from private domestic wells and agricultural supply wells may be useful for management purposes; however, such information is not appropriate for determining compliance with Draft Waiver. Thus, the CSC recommends that monitoring results from domestic wells and agricultural supply wells be maintained in confidential, on-farm water quality management plan. (See Agricultural Alternative at p. 12.)

Second, it is not necessary to require the frequency and number of samples as proposed in the Draft MRP. Groundwater data is unlikely to change rapidly and thus annual monitoring of one primary well is sufficient information for improving the Farm Water Quality Management Plan (Farm Plan). It is not necessary to require samples from multiple wells on a quarterly basis to obtain information regarding nitrate and salinity levels in domestic or agricultural supply wells.

2. Provision 48 Improperly Requires Individual Discharge Monitoring

This provision would require Tier 3 dischargers to conduct individual discharge monitoring in compliance with the Draft MRP. This is an unnecessary requirement that exceeds the Central Coast Water Board's authority under Water Code section 13267. Section 13267 requires that the Central Coast Water Board's request for technical information be reasonable as compared to the burden of compiling the information, including the cost.

Further, the request for such information must be supported by evidence as to why the information is necessary.

In this case, the Draft Waiver and Draft MRP collectively fail to identify why such information is necessary from “Tier 3” dischargers, and fail to identify evidence in the record that supports such a requirement for all Tier 3 dischargers. In particular, the proposed criteria for categorizing dischargers into Tier 3 are generic in nature and are not necessarily related to an individual operation’s actual threat to water quality. Thus, the Draft Waiver assumes that operations meeting Tier 3 criteria are a threat to surface water quality to such an extent that individual discharge monitoring is required. However, there is no specific evidence that links the proposed criteria to actual water quality threats and therefore there is no evidence to support the requirement for individual discharge monitoring.

3. Provision 50(d) Is Impractical

This provision states that in the event of any change to operations or ranch/farm information, dischargers must submit an updated NOI to reflect the change. (Draft Waiver at pp. 16-17.) The term “any change” is not defined or adequately explained as part of this provision or the Draft Waiver. This provision fails to account for the fact that farming is an iterative and dynamic process. Changing circumstances require changes in operations on a frequent basis, far more often than farmers would be capable of submitting, and the Central Coast Water Board would be capable of reviewing, updated NOIs. It is infeasible and impracticable for every individual farmer or rancher to submit an updated NOI whenever there is “any change” in operations. This requirement should be limited to changes that meet certain criteria or thresholds that need to be specifically identified in the Draft Waiver.

4. Provision 51 Delegates Excessive Authority to the EO

As with a number of other provisions within the Draft Waiver, this provision would delegate too much discretion to the EO after adoption of the Draft Waiver. Specifically, this provision would require dischargers to include specified information requested in the NOI, including but not limited to those listed in the provision. The inclusion of this phrase “including but not limited to” in this context is entirely inappropriate. This provision implies that the EO has the authority to request more information at his or her discretion without criteria or justification for the request. The information to be submitted could change on a regular basis, subject to the whims of the EO and without any consistent guidance for agricultural operations. This results in a situation of perpetual uncertainty for those operating under the Draft Waiver, and delegates excessive authority to the EO. Under this provision, the EO seemingly has the authority to demand any amount of additional information, without justifying such a request as reasonably related to the burden on the discharger as required under Water Code section 13267, and without undertaking any formal notice and hearing procedures as would be required if the new requirement were an addition or amendment to the existing regulatory requirements. These unknown and unidentified future additions to the

NOI, left wholly to the discretion of the EO, represent potentially significant burdens on dischargers without procedural limitations or accountability on the part of the EO.

5. Provision 59 Violates Statutory Requirements

This provision states that all dischargers *must* submit technical reports that the EO *may* request to determine compliance with the Draft Waiver, as authorized by Water Code section 13267. (Draft Waiver at p. 18.) However, this provision, like many others, is not consistent with the identified code section, and gives excessive authority and discretion to the EO. The Central Coast Water Board's ability to require reports pursuant to Water Code section 13267 is not without constraint, and in order for such a request to be upheld, the Central Coast Water Board has the burden of explaining to the discharger the need for the information and identifying substantial factual evidence that supports requiring the reports. Specifically, Water Code section 13267 authorizes the Central Coast Water Board to require reports from those who discharge waste, but requires that the Central Coast Water Board "provide the person with a written explanation with regard to the need for the reports" and "identify the evidence that supports requiring that person to provide the reports." (Wat. Code, § 13267(b)(1).) Provision 59 contains no such requirement and states that *all* dischargers must submit these technical reports upon request, essentially at the unfettered discretion of the EO. It does not require that there be a written explanation regarding the need for the reports provided to the discharger, or that there be evidence to support such a request, both mandatory statutory requirements. A mere assertion that such evidence exists in the broadest sense, without more, is insufficient to support a Water Code section 13267 request.

In addition, this provision seemingly eliminates the statutory requirement that the Central Coast Water Board demonstrate that the burden on the discharger in submitting these reports, including costs, bears a reasonable relationship to the need for such reports. Specifically, Water Code section 13267 states that when the Central Coast Water Board requests a discharger to furnish a technical or monitoring report, ". . . the burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports." (Wat. Code, § 13267(b)(1).) In many instances, the burden on the individual discharger operating under the Draft Waiver will not bear a reasonable relationship to the need for report being requested, yet under the language of this provision, the EO has the authority to request such reports nonetheless. The onus is on the Central Coast Water Board to demonstrate that this reasonable relationship between burden and benefit exists for each report requested. The Draft Waiver cannot automatically satisfy this burden for every discharger and create the authority for the Central Coast Water Board to act in each individual instance. As such, this provision vests far too much authority in the EO and is contrary to the sections of Porter-Cologne from which the Central Coast Water Board claims the authority to act.

H. Certain Pollutant Specific Conditions Applicable to All Dischargers Are Unreasonable, Inconsistent With Other Provisions, and Create Double Jeopardy

1. Provision 61 Undermines Time Schedules

This provision states that dischargers must not cause or contribute to exceedances of pesticide and toxicity water quality standards, but does not include timeframes for compliance or incorporate reasonable time schedules. Again, as with the discharge prohibition provisions and others, this immediate requirement defeats the purpose of reasonable time schedules. As identified in comments pertaining to Part B (Prohibition of Discharges), such a broad and immediate requirement puts agricultural operations in immediate jeopardy of noncompliance, and is both inconsistent with the other time schedule provisions in the Draft Waiver and infeasible for discharger compliance.

Further, and as identified in comments pertaining to Provision 30, and others, the implementation of BMPs does not provide certainty with respect to being able to comply with water quality standards. As indicated by many professionals, although certain BMPs can be effective in controlling some parameters, they are not effective in controlling all parameters. Clearly, the control of non-point source pollution is an iterative process that requires time and adaptation to protect water quality. Creating a scenario of immediate non-compliance will only jeopardize the viability of agriculture in the Central Coast. As with other similar provisions, this provision must be deleted from the Draft Waiver.

2. Provision 62 Creates Double Jeopardy for Same Violation

This provision states that dischargers must comply with any DPR adopted or approved surface water protection requirement. (Draft Waiver at p. 19.) Clearly, where DPR has adopted regulations that are applicable to agricultural operations in the Central Coast, such agricultural operations must comply. However, this statement of fact is inappropriate as a provision of the Draft Waiver. As noted in comments regarding Provisions 22 and 23, pesticide use in California is regulated exclusively by DPR and the Central Coast Water Board's authority does not include the ability to direct growers with regard to pesticide applications or to direct the means to comply with a DPR permit. In addition, this provision improperly creates a situation of double jeopardy for the discharger. The Double Jeopardy Clause prohibits successive punishment for the same offense. (*United States v. Gartner* (1996) 93 F.3d 633, 634 [citing *Dept. of Revenue of Montana v. Kurth Ranch* (1994) 511 U.S. 767; *United States v. Halper* (1989) 490 U.S. 435, 451].) A discharger cannot be subject to both DPR action and Central Coast Water Board action concurrently, creating a situation where dischargers are punished twice by two different agencies for the exact same act. If a discharger fails to comply with a DPR regulation, then that person should be subject to DPR enforcement exclusively and not also be subject to a concurrent enforcement by the Central Coast Water Board for violation of the Draft Waiver. Thus, this provision should be deleted as it is unnecessary and creates double jeopardy.

3. Provision 63 Undermines Time Schedules

This provision states that discharges must not cause or contribute to exceedances of nutrient and salt water quality standards, but does not provide a reasonable timeframe for compliance, or reference the relevant time schedules in other sections of the Draft Waiver. Again, much as with the discharge prohibition sections, this immediate requirement that dischargers comply defeats the purposes of time schedules. For example, Provision 100 states that within *four years* of adoption of the Draft Waiver, certain dischargers must demonstrate that they are not causing or contributing to exceedances of water quality standards for nutrients and salts. These are two contradictory provisions, one prescribing immediate compliance and one allowing four years for compliance.

4. Provision 64 Creates Double Jeopardy for Same Violation

Like with Provision 62, this provision requires dischargers that apply fertilizers, pesticides, or other chemicals to comply with applicable DPR requirements or local ordinances. As noted above, pesticides are regulated by DPR under the Food and Agriculture Code, and the Central Coast Water Board's authority does not include the ability to direct growers with regard to its pesticide applications or to direct the means to comply with a DPR permit. Also, similar to Provision 62, this provision creates a situation of double jeopardy. If the discharger fails to comply with a DPR regulation or local ordinance, then that discharger should be subject to DPR or local agency enforcement process, not a Central Coast Water Board action for failure to comply under the Draft Waiver. A discharger cannot be subject to both DPR/local action and Central Coast Water Board action concurrently for the same act.

5. Provision 65 Defeats Purpose of Time Schedules

This provisions states that dischargers must not cause or contribute to excursions or exceedances of sediment, turbidity, or temperature water quality standards. This provision, as with numerous others including the discharge prohibitions in Part B, defeats the time schedules outlined in Part I, Provisions 97-101.

6. Provision 66 Is Irrelevant in Light of Discharge Prohibition

This provision states that dischargers must minimize the presence of bare soil vulnerable to erosion and soil runoff to surface waters to meet turbidity and sediment water quality standards. However, the more restrictive discharge prohibitions in Part B make this provision irrelevant. Specifically, Provision 25 entirely prohibits the presence of bare soil vulnerable to erosion such that it results in a discharge of waste. Theses are two contradictory provisions that make the Draft Waiver internally inconsistent and fail to provide appropriate guidance to dischargers.

7. Provision 67 Constitutes a Taking and Exceeds Regulatory Authority

This provision, and Provisions 92-94, collectively require certain dischargers to implement a Water Quality Buffer Plan, which includes the dedication of portions of agricultural lands to uses prescribed by the Central Coast Water Board. Individually and collectively these requirements are governmental regulations that deprive agricultural landowners near streams of the economic benefit of their private property. The state and federal Constitutions guarantee real property owners just compensation when their land is taken for public use. (*Allegretti & Co. v. County of Imperial* (2006) 138 Cal.App.4th 1261, 1269.) Regulatory takings, though not direct appropriation or physical invasion of private property, are compensable under the Fifth Amendment. (*Lingle v. Chevron U.S.A. Inc.* (2005) 544 U.S. 528, 537.) Courts examining regulatory takings challenges generally analyze three factors to determine whether a taking has been effected, including the economic impact of the regulation on the claimant, the extent to which the regulation has interfered with distinct investment-backed expectations, and the character of the governmental action. (*Penn Central Transp. Co. v. City of New York* (1978) 438 U.S. 104.) The requirements in the Draft Waiver relating to aquatic habitat protection and the establishment of water quality buffer zones would likely be considered a regulatory taking.

The economic impact of the proposed buffer zone approach on agricultural landowners is potentially significant given that productive farmland will be forced out of production as a result of these buffer zones. In addition, this requirement that a landowner or operator essentially dedicate portions of productive agricultural land to the Central Coast Water Board unreasonably impairs the value or use of the property. The land covered by these buffer zones is most likely designated for and dedicated to the production of agriculture, a use which would be completely eliminated by these regulatory requirements. Such a buffer zone also severely interferes with the investment-backed expectations of the landowners who operate under the assumption that these dedicated buffer zones would be put to productive agricultural use. By depriving landowners of all economically beneficial use of land designated as a riparian buffer zone, the proposed regulation will severely interfere with the investment-backed expectations of landowners. Finally, while the proposed regulation may not constitute a typical physical invasion or appropriation of land, the proposed regulation would effectively appropriate these riparian buffer zones to the Central Coast Water Board for a public use. Even if no such appropriation is found, the severity of the economic impact and the devastation of the investment-backed expectations of the landowners are sufficient to demonstrate a regulatory taking.

8. Provision 67(a) Would Improperly Supersede Streambed Alteration Requirements

Subpart (a) of this provision states that dischargers must maintain a number of riparian functions, including streambank stabilization and erosion control. By including this

provision, the Central Coast Water Board is attempting to take control of decisions that are rightfully administered by the California Department of Fish and Game (DFG). Fish and Game Code section 1600 et seq. provide DFG with the authority for reviewing and approving proposed activities that may substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. (Fish & G. Code, § 1602.) Here, the Central Coast Water Board is attempting to interfere with DFG's authority by prohibiting any such activities altogether. The Central Coast Water Board has neither the authority nor the expertise to prohibit and regulate such activities. Moreover, relevant portions of the Fish and Game Code may only be administered and enforced through DFG. (Fish & G. Code, § 702.) DFG staff have the necessary expertise to determine precisely what activities in streams may be detrimental to aquatic life, leading to better results than blanket prohibition by the Central Coast Water Board under the Draft Waiver. Thus, reference here is unnecessary and should be deleted.

9. Provisions 67(a)-(c) Unlawfully Dictate Manner of Compliance

Water Code section 13360 states that the Central Coast Water Board may not specify the manner of compliance with orders of the Central Coast Water Board, but rather that the discharger may comply with the order in any lawful manner. As applied to the Draft Waiver, the Central Coast Water Board may adopt waiver conditions that identify what must be done, however, the Central Coast Water Board cannot prescribe the methods used to accomplish that objective. The Draft Waiver, specifically provisions dealing with the riparian buffer zones, dictates that landowners must undertake specified activities including streambank stabilization and erosion control, stream shading and temperature control, and maintaining vegetative cover in specified areas. All of these requirements clearly dictate the manner of compliance with the Draft Waiver to protect aquatic habitat. As such, these requirements exceed the Central Coast Water Board's authority under the Water Code.

10. Provision 73h May Require Individual Monitoring by All Dischargers

This provision states that Farm Plans must demonstrate that discharges do not cause or contribute to exceedances of water quality standards by including, "methods and results to evaluate progress and effectiveness of water quality management practices . . ." (Draft Waiver at p. 21.) The only certain method for meeting this requirement is to conduct on-farm, edge of field monitoring. Thus, this provision implies that individual farm monitoring would be required of all dischargers—not just those in Tier 3. The CSC is not opposed to the implementation of *voluntary*, on-farm SMART Sampling. (See Agricultural Alternative at pp. 9-10.) However, the CSC does oppose any mandate that would require individual, on-farm monitoring. Such a mandate is inappropriate for the reasons specified in section G.2 above.

11. Provision 74 Requires Too Frequent Updates

This provision requires dischargers to update their Farm Plans at least annually. As a practical matter, a mandatory annual update of individual Farm Plans is far too frequent and exceedingly burdensome on landowners and operators.

12. Provision 76 Requires Onerous Education Requirements

The requirement that dischargers complete 15 hours of farm water quality education within 18 months of adoption of the Draft Waiver is burdensome. This is a significant amount of educational hours that would need to be completed in a relatively short period of time.

In contrast, the previous conditional waiver required dischargers to complete 15 hours of education in a 3-year period. The CSC supports the need for continuing education. However, the CSC believes that 5 hours for growers that were subject to the 2004 Conditional Waiver is sufficient. Conversely, 15 hours for new growers may be appropriate.

I. Additional Conditions for Tier 2 and Tier 3 Dischargers Are Unreasonable

Parts G and H propose significant requirements that would apply to Tier 2 and Tier 3 dischargers. Of particular concern are the requirements associated with the Nitrate Hazard Index Rating, certification and submittal of elements of an Irrigation and Nutrient Management Plan (INMP), and application of nitrogen balance ratios. In general, the approach proposed in the Draft Waiver looks to individual farming operations and operation specific parameters to determine if there is a risk of nitrate loading to the groundwater. (Draft Waiver at pp. 22-24.) However, this approach is contrary to the Hazard Index Concept developed by the University of California Center (UC Center) for Water Resources, which was apparently relied on in part by the Central Coast Water Board staff to create its "Nitrate Loading Risk Factor." (See Draft Waiver, Table 22, at p. 33.) The primary purpose of establishing a hazard index is to reduce nitrogen contamination potential to groundwater by identifying the fields with the highest intrinsic vulnerability. (See Hazard Index Concept, Attachment 2, at p. 2.) Unfortunately, the Draft Waiver departs from this well-reasoned and scientific approach and instead focuses only on types of crops and individual operational practices. The Draft Waiver does not consider or incorporate any of the hazard index concepts that are related to intrinsic groundwater vulnerability. By ignoring this fundamental element, the Central Coast Water Board has created an arbitrary risk factor determination and associated requirements that may or may not be related to groundwater quality. Accordingly, the nitrate-associated requirements are not supported by evidence in the record, and inappropriately apply a University of California management guidance concept known as the hazard index.

1. Nitrate Loading Risk Factor Determinations Are Arbitrary

Specifically, Provisions 80-85 require calculation of a nitrate loading risk factor for each ranch/farm included in the operation. (Draft Waiver at pp. 22-23.) Based on the calculated score, agricultural operations may be subject to additional reporting and management plan requirements. (Draft Waiver at pp. 23-24.) However, the nitrate loading risk factor determinations are improper for several reasons. First, the purpose of the nitrate Hazard Index Concept developed by the UC Center for Water Resources is “[t]o provide information for farmers to voluntarily target resources for management practices that will yield the greatest level of reduced nitrogen contamination potential for groundwater by identifying the fields of highest intrinsic vulnerability.” (See Hazard Index Concept, Attachment 2, at p. 2.) It was not developed as, nor is it intended to be, a regulatory tool. Further, its use as a regulatory tool is improper and unlawful for it has not been adopted into the Basin Plan pursuant to relevant Water and Government Code statutory provisions. (See Wat. Code, §§ 13240, 13242, 13244, 13245; see also Gov. Code, § 11353(b).)

Second, the nitrate loading risk factor criteria proposed in the Draft Waiver are not consistent with the nitrate Hazard Index Concept developed by the UC Center. For example, Provision 80 and Table 2 identify three criteria for determining nitrate loading risks. (Draft Waiver at pp. 22, 33.) The three factors include crop type, irrigation system type, and irrigation water nitrate concentration. Missing from the Central Coast Water Board’s proposed criteria is a criterion related to soil type. As indicated in documents prepared by the UC Center, soil type is a key element in determining nitrate loading risks and vulnerability to groundwater. (See Hazard Index Concept, Attachment 2, at pp. 2-3 [“Soils classified as 1 are those that have textural or profile characteristics that inhibit the flow of water and create an environment conducive to denitrification. Both denitrification and restrictive water flow decrease migration of nitrate to groundwater. Conversely those soils classified as 3 are most sensitive to groundwater degradation by nitrate because of the high water infiltration rates, high transmission rates through their profile, and low denitrification potential.”].)

Further, in supporting evidence for the Hazard Index Concept, the UC Center identifies soil and sediment texture as a key factor in the hazard index. The UC Center specifically found that NO₃ concentrations were not significantly correlated to the estimated amount of nitrogen fertilizer, and concentrations, therefore, “were most likely affected by factors such as soil and sediment texture.” (Supporting Evidence for the Nitrate Groundwater Pollution Hazard Index Concept, Attachment 3, at p. 2.) In the same document, the UC Center also notes as follows:

Letey et al. (977) reported the results of an extensive investigation of agricultural tile drain effluents in California. The annual total mass of the NO₃ collected in tile drainage water was inversely correlated to the highest percent of clay in the soil above the tile depth. This is consistent with the hypothesis that clay layers in the soil reduce the hazard index by restricting the rate of

water flow and/or causing denitrification. Other studies in California have shown that textural changes in profiles can have significant effects on NO₃ loss below the root zone (Lund et al. 1974, Pratt et al. 1972). (Supporting Evidence for the Nitrate Groundwater Pollution Hazard Index Concept, Attachment 3, at p. 2.)

Considering the UC Center's evidence with respect to soil characteristics and effects on NO₃ concentrations, a nitrate loading risk factor determination that ignores soil types and characteristics is seriously flawed. Also, the UC Center does not include irrigation water concentration in its hazard index concept. Instead, it consists of an overlay and index using soils, crops and irrigation systems. Accordingly, the Central Coast Water Board's inclusion of irrigation water nitrate concentration is inconsistent with the UC Center's hazard index concept and is not supported by evidence in the record.

Next, the Draft Waiver proposes to categorize risk based on arbitrary scores of 10, 10-15, and more than 15. (Draft Waiver at p. 23.) The scores and their associated characterizations are not supported by evidence in the record and are arbitrary. As far as we can tell, the Central Coast Water Board "made up" the proposed scores and categories, as no references are provided to support the calculations or the proposed characterizations. (See, e.g., Table 2, at p. 33.) However, contrary to the Draft Waiver's characterizations, the UC Center finds that a hazard index (that considers soil type) between 1 and 20 is of minor concern, while an index number greater than 20 should receive careful attention. (Interpretation of Nitrate Groundwater Pollution Hazard Index Number, Attachment 4, at p. 1; see also Draft Waiver, Attachment A at p. 44, definition of Nitrate Hazard Index.)

Considering the lack of supporting evidence for the Central Coast Water Board's nitrate loading risk approach, and significant evidence to the contrary, Provisions 80-85 and Provisions 86-91, which are triggered by the results of the nitrate loading risk calculation, must be deleted from the Draft Waiver.

2. Annual Reporting of INMP Elements Improper

The CSC does not oppose requirements for irrigation and nutrient management plans per se. In fact, the Agricultural Alternative includes similar requirements to be part of the Farm Plan. (See Agricultural Alternative at pp. 8-9.) Essential elements of irrigation and nutrient management plans identified in the Agricultural Alternative are similar to those identified in Provisions 87-88, and are intended to achieve the same purpose, which is to ensure proper irrigation and nutrient management to protect water quality. (*Ibid.*) However, unlike the Agricultural Alternative, the Draft Waiver would make certain elements of the irrigation and nutrient management plans public by requiring annual reporting. (See Draft Waiver at p. 25.) The CSC opposes any mandate that would make any part of the Farm Plan, including irrigation and nutrient management plans, a public document. Such information is proprietary and not appropriate for release in the public domain. As proposed in the Agricultural Alternative, the irrigation and nutrient plans must be developed, and must be

made available to Central Coast Water Board staff at the agricultural operation's place of business if requested. By allowing such review, Central Coast Water Board staff has the opportunity review and critique the information without transforming proprietary information into public records. Thus, it is not necessary to require annual reporting of certain elements.

3. Certification of INMPs Impractical and An Unnecessary Expense

Provision 87 would require the INMP to be certified by a Professional Soil Scientist, Professional Agronomist, or Certified Crop Advisor. While many growers consult and work with such professionals, it is not necessary for an INMP to be certified in order to be an effective management tool. Many growers have in-depth practical experience as well as formalized training in irrigation and nutrient management techniques and are able to develop effective INMPs without professional assistance. Also, the requirement creates a new costly burden that many growers may not be able to afford.

Alternatively, the CSC and other organizations can develop and offer educational training courses that will assist growers in developing effective INMPs. This assistance can be offered in conjunction with providing educational opportunities to growers to meet the educational mandates in Provisions 75 and 76. Assuming *arguendo*, of course, that the INMPs, or similar Farm Plan elements, remain confidential, proprietary documents.

4. Nitrogen Balance Ratios Fail to Account for Actual Groundwater Vulnerability and Crop Needs

Provision 90 would require Tier 3 dischargers to achieve certain nitrogen balance ratios without considering if groundwater beneath the fields in question is intrinsically vulnerable, and fails to consider practical implications. Provision 90 also attempts to oversimplify crop nutrient needs as compared to the amount of nutrients (i.e., nitrogen) applied. For example, while a nitrogen balance ratio of 1.2 may sound appropriate, in reality it is not always possible or practical. (See Dynamics of Nitrogen Availability and Uptake, Attachment 5, at p. 1 [“The temporal supply of plant available N must match the temporal N demand by the crop to achieve the goal of ‘provide adequate, but not excessive levels of soil nitrogen throughout the growing season.’ Achieving this goal may not always be possible or practical, but one should strive to do so to the extent possible.”].)

As indicated above, the largest threat to groundwater is more closely related to intrinsic vulnerability associated with physical factors versus actual agricultural operations. Thus, strict requirements for nitrogen balance ratios that fail to consider actual groundwater vulnerability are arbitrary and capricious. Further, the Draft Waiver and its record fail to include any findings or supporting evidence that indicate the ratios proposed are appropriate for rotational and annual crops. The CSC is currently conducting research to collect information necessary for determining nutrient sufficiency needs for strawberry production and there is currently no agreement on the levels necessary for successful production of

strawberries across all varieties, production systems and locations. Without a more complete research basis for establishing such findings, the requirements are arbitrary and unlawful.

Further, basing nitrogen management on a strict requirement on the amount of nitrogen applied per crop fails to take into account the many factors that influence the potential for nitrogen leaching, such as soil type, timing of application, method of application, etc. It is undoubtedly more important to apply nitrogen at the correct time for the crop and in the correct manner than to focus a grower's efforts on the total amount applied. For this reason, the development and implementation of BMPs to minimize nitrogen leaching, which may include N ratio guidelines, would provide better management of nitrogen leaching than strict N ratios that fail to consider a number of other factors.

J. Time Schedule Provisions Are Unreasonable and Impractical

The time schedules and milestones identified in Provisions 97-101, and in the time schedule attachment, are aggressive and unreasonable. As indicated previously, significant research and study is needed to determine the effectiveness of BMPs, and the ability of certain BMPs to ensure compliance with water quality standards. There are no existing BMPs that can guarantee 100% compliance with water quality standards, 100% of the time, without greatly impacting the productivity of Central Coast agricultural operations. Also, the time schedules require only Tier 3 dischargers to demonstrate compliance with water quality standards while growers in other tiers are not held to the same standards. Such a requirement is arbitrary for it places all responsibility for water quality compliance on Tier 3 and fails to consider impacts by operators in other tiers. Furthermore, given the blanket discharge prohibitions contained elsewhere in the Draft Waiver, the time schedules are seemingly irrelevant.

III. Attachment A Includes Inappropriate Findings and Incorporates Improper Water Quality Objectives

A. Finding A1 Is Contrary to Other Permit Provisions

These provisions include in part, the Discharge Prohibitions in Part B, Provisions 17-28. Other provisions that conflict with this finding, and which indicate dischargers will be in immediate jeopardy of noncompliance regardless of the time schedule order, include Provision 63 (nutrients and salts) and Provision 31 (all discharges). The other discharge prohibitions and other provisions throughout the Draft Waiver render this finding—that the Central Coast Water Board is providing reasonable schedules for dischargers to reach full compliance—completely untrue. As discussed in detail above, the Draft Waiver includes many provisions that result in immediate compliance and undermine any intent that the Central Coast Water Board may have to allow time schedules.

B. Finding A11 Improperly States That Porter-Cologne Grants Water Rights Authority

This finding states that Porter-Cologne grants authority to the State Board with respect to water rights and water quality regulations and policy, and gives regional boards the authority to regulate discharges and adopt water quality regulations and policy. As a clarification, Porter-Cologne does not grant water rights authority to the State Board. (See Wat. Code, § 13000 et seq.) Porter-Cologne governs water quality and gives the State Board and regional boards certain authority with respect to water quality. The State Board's water rights authority is found in other provisions of the Water Code—not Porter-Cologne. This finding should be amended accordingly.

C. Finding A13 Overstates Authority Pursuant to Water Code Section 13267

This finding highlights that Water Code section 13267(b)(1) authorizes the Central Coast Water Board to require dischargers to submit technical reports, and that the Draft Waiver itself provides evidence that discharges of waste from irrigated lands pollutes waters of the state, thereby requiring persons subject to the Draft Waiver to prepare and submit technical reports without any additional showing from the Central Coast Water Board. This is entirely inappropriate for a variety of reasons. The Central Coast Water Board cannot grant itself the authority to circumvent legally required findings in individual cases by inserting a provision that purports to be a blanket justification for requesting technical reports. Generic findings do not satisfy the individualized requirements of the statute. As noted in the discussion of Provision 59, above, there must be some justification for these technical report requests, and the Central Coast Water Board's ability to require reports pursuant to this part are not without constraints. An assessment that there is some evidence demonstrating that discharges from some irrigated lands have degraded or polluted waters of the state is insufficient to allow the Central Coast Water Board or EO to require all dischargers to irrigated lands to prepare and submit technical reports at their discretion. The Draft Waiver cannot automatically satisfy this burden and create the authority for the Central Coast Water Board in each individual instance.

In addition, Finding A13 suggests that the Central Coast Water Board is exempting itself from requirements under the Water Code and circumventing section 13267. Water Code section 13267 authorizes the Central Coast Water Board to require reports from those who discharge waste, but requires that the Central Coast Water Board "provide the person with a written explanation with regard to the need for the reports" and "identify the evidence that supports requiring that person to provide the reports." Unless the Central Coast Water Board undertakes these activities in individual instances, it has not satisfied its burden. In contrast, this finding would subject all operations to various reporting requirements without providing a written explanation or supporting evidence. This is inappropriate and unsupportable under Porter-Cologne.

In many cases, the burden of preparing the individual discharge characterization and conducting individual discharge monitoring will not bear a reasonable relationship between the Central Coast Water Board's need for information as compared to the benefits to be obtained, as required under Porter-Cologne. (See Wat. Code, § 13267(b)(1).) The collective costs for all of the monitoring requirements contained in the Draft Waiver are likely to be extensive, and the Central Coast Water Board will obtain a great deal of information that does not directly convey relevant information regarding water quality in waters of the state. As such, the burden on the discharger in producing such information will not bear a reasonable relationship to the benefit derived from the receipt of such information, and the requests will be unsupportable under Porter-Cologne.

D. Findings A44-A45 [Groundwater Pumping Provisions] Are Outside the Central Coast Water Board's Authority

Both of these findings are irrelevant because they are unrelated to the discharge of waste, and hence outside the Central Coast Water Board's authority to regulate them. Finding A44 states that groundwater pollution due to salts is a significant problem in the region and agricultural activities are a significant cause of the pollution due to, among other things, seawater intrusion caused by "excessive" agricultural pumping and agricultural pumping/recycling of groundwater that concentrates salts in the aquifer. Agricultural pumping activities as a potential cause of salt pollution are not the subject of the Draft Waiver and addressing these issues is beyond the scope of the Central Coast Water Board's authority. Agricultural pumping is not a discharge of waste, and the Central Coast Water Board does not have the authority to determine whether dischargers are engaging in "excessive" agricultural pumping. Finding A45 states that agricultural pumping of groundwater contributes to saltwater intrusion in certain basins. However, groundwater pumping or the right to put groundwater to beneficial use is not the subject of the Draft Waiver, and thus, it is inappropriate for the Central Coast Water Board to be commenting on these matters.

E. Finding A59 Improperly References an Un-Adopted Water Quality Objective

This finding states that the drinking water standard is not intended to protect aquatic life and that Central Coast Water Board staff estimate that 1 mg/L nitrate is necessary to protect aquatic life beneficial uses. However, the use of this 1 mg/L nitrate standard is not a proper water quality standard and is not an objective adopted in the Basin Plan. (See section II.H, *post.*)

F. Finding A61 Improperly References an Un-Adopted Water Quality Objective

This finding states that more than 60 percent of all sites in the region have average nitrate concentrations that exceed the drinking water standard and limits necessary to protect aquatic life. However, the Central Coast Water Board seemingly refers to the same pseudo

water quality objective referenced in Finding A59, which is not a legally adopted objective. As noted in comments regarding Table 1A, indicator values in the Draft Waiver are not legitimate water quality objectives established through the basin planning process. Thus, reference to “limits necessary to protect aquatic life” must be deleted.

G. Findings A66-A67 Unlawfully Equate Detections to Water Quality Objective Violations

These findings state that based on monitoring data, multiple pesticides and herbicides have been detected in Central Coast waterbodies and that this is a violation of the Basin Plan general objective for pesticides. This provision improperly assumes that “detection” is the equivalent of or means there is necessarily an impact to a beneficial use. A mere “detection” does not equal impairment to a beneficial use or violation of a water quality objective. In discussing the objectives for pesticides, the Central Coast Basin Plan states, “No individual pesticide or combination of pesticides shall reach concentrations *that adversely affect beneficial uses*. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life” (Basin Plan, chapter II, p. III-4.) These findings make collectively the inappropriate leap that merely because the identified pesticides and herbicides have been detected that they are therefore adversely affecting beneficial uses in that waterbody. There is no support for this conclusion, and no additional analysis or evidence to suggest this is the case. Thus, the findings should be deleted.

H. Table 1A Unlawfully Includes Indicators of Narrative Objectives

The inclusion of “Indicators of Narrative Objectives” in this table represents an attempt by the Central Coast Water Board to establish de facto water quality objectives without going through the appropriate procedures. Water quality objectives are defined to mean, “the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water” (Wat. Code, § 13050(h).) Porter-Cologne requires each regional board to establish water quality objectives in Basin Plans, and to adopt the Basin Plans through a public hearing process. (Wat. Code, §§ 13241, 13244.) More importantly, when adopting water quality objectives, regional boards must comply with Water Code sections 13241 and 13242. Section 13241 requires consideration of a number of factors including economics and feasibility of meeting the objective. (Wat. Code, § 13241(c), (d).) Section 13242 requires regional boards to adopt a program of implementation that is designed to meet the water quality objective.

Table 1A identifies many “Indicators of Narrative Objectives.” For example, the Biostimulatory Substances objective includes an indicator of 1 mg/L of nitrate to protect aquatic life beneficial uses from biostimulation. (Attachment A, p. 33.) The source for this indicator is a technical paper prepared by Central Coast Water Board staff. This indicator has never been proposed or adopted as a water quality objective and is not listed as such in the Basin Plan. Thus, it has not been found to be necessary to reasonably protect the aquatic life beneficial use. Further, without going through the formal adoption process, it is impossible to

know the economic impacts associated with meeting this objective, and whether it can reasonably be achieved. The Central Coast Water Board cannot ignore its legal responsibility to adopt water quality objectives pursuant to Porter-Cologne simply by claiming they are “Indicators of Narrative Objectives.” Unless and until the Central Coast Water Board adopts these pseudo water quality objectives pursuant to the law, these “indicator” values identified are unlawful and must be removed from Table 1A. Only actual water quality objectives adopted legally into the Basin Plan should be included in the tables, and all others must be deleted, as they represent unlawfully adopted water quality objectives.

I. Certain Definitions Are Overly Broad

1. Definition of Discharge Waste Is Overly Broad

The proposed definition for “Discharge of Waste From Irrigated Lands” is overly broad and inappropriate. (Attachment A at p. 11.) Under the Draft Waiver, a discharge of waste includes irrigation return flows, tailwater, drainage water, and stormwater runoff, to name a few. However, as noted above in comments to Provision 31, the discharge of waste likely does not take place while water is still being used to irrigate crops in the field, and the State Board does not consider the percolation of irrigation water to groundwater a discharge of waste. The definition for a “discharge of waste” should be limited to those particular actions that result in actual discharge of waste to the waters of the state.

2. Definition of Operation Is Not Consistent With Proposed Requirements

The proposed definition of an operation would mean a, “[a] distinct farming business, organized as a sole proprietorship, partnership, corporation, and/or cooperative.” (Draft Waiver at p. 45.) In other words, an operation is the collective business and would not be limited to contiguous agricultural parcels in one area. By defining operation in this manner, the characterization of operations into tiers becomes extremely problematic. Specifically, key criteria associated with tier characterization is if the “operation’s” total acreage is greater than 1000 acres, and if an “operation” is located within 1000 feet of a list surface waterbody. (Draft Waiver at pp. 10-11.)

Under the proposed definition, an “operation” would be ineligible for Tier 1 if a grower’s total business acreage exceeded 1000 acres even if the acreage is spread-out throughout the Central Coast, includes various crops, and the various crops have a different threat to water quality. Further, as used in relationship to location within 1000 feet of impaired surface waters, the term operation implies that it is one contiguous agricultural parcel. However, as defined, this is not the case. As a practical matter, many agricultural operations on the Central Coast include multiple properties (either owned or leased) that may or may not be within 1000 feet of an impaired surface waterbody. As proposed here, if a grower had one property out of twenty that was within 1000 feet of an impaired surface

waterbody, then all properties under that operation would automatically be in Tier 2 even if the collective operation was less than 1000 acres, and did not use chlorpyrifos or diazinon.

Considering the proposed application of the term “operation” in determining tier characterizations, the term must be carefully defined and be parcel specific, or at least specific to contiguous parcels farmed by one business entity. Otherwise, the tier determinations are arbitrary and unrelated to threat to water quality.

IV. Cost Considerations in Appendix F Understate the Potential Implications to Agriculture

As a preliminary matter, the Draft Technical Memorandum: Cost Considerations Concerning Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands (Draft Technical Memorandum: Cost Considerations) mischaracterizes the Central Coast Water Board’s obligations under Water Code section 13141. (See Draft Technical Memorandum: Cost Considerations at p. 4.) The Draft Technical Memorandum: Cost Considerations implies that regional boards are only required to estimate costs for agricultural quality control programs when a basin plan is being amended. However, the legislative history of this statute suggests otherwise.

When Water Code section 13141 was amended to include requirements related to agricultural water quality control programs, it was clear that these requirements would be met before implementation of any such program, including the type and nature of programs identified in the Draft Waiver. More specifically, the State Water Board stated in its Enrolled Bill Report to the Governor’s office that, “[t]his bill will not prevent implementation and enforcement of agricultural water quality control programs. It will require, however, that the State and Regional Boards consider, and include in the basin plans, an economic study of an agricultural water quality control program in terms of total cost estimate and potential sources of financing *before* implementing such a program.” (See Enrolled Bill Report to SB 904 from State Water Resources Control Board at p. 1, emphasis added.) The purpose of this provision, and the State Water Board’s reason for encouraging signature of the legislation, was further expressed as follows:

This bill is consistent with existing SWRCB policy regarding regulation of agricultural wastewater discharges.

Agriculture is presently the largest user of the State’s freshwater resources. The Board recognizes that in many instances discharges of agricultural wastewaters create water quality problems. However, the Board also recognizes that there are inadequate institutional, financial, and technological means at this time for the development and management of a comprehensive and effective agricultural water quality control program. While, in specific instances, agricultural discharges can and should be dealt with under existing law, long-term water quality problems, such as nonpoint source control and

salinity control programs, represent more difficult problems and the costs associated with implementation of these programs can be enormous. *Therefore, it is the Board' policy that any agricultural water quality control program must be carefully examined and formulated before it is implemented, and the costs and sources of financing would be a material consideration before any decision is made.* (Enrolled Bill Report to SB 904 from State Water Resources Control Board at p. 2, emphasis added.)

In light of the requirements expressed in Water Code section 13141, and the clear intent with respect to application of these requirements, the Draft Waiver Staff Report must reflect the Central Coast Water Board's obligation to pursue a Basin Plan amendment accordingly prior to adoption of the program described in the Draft Waiver. Further, as indicated above, the Central Coast Water Board must materially consider the costs associated with the program prior to adoption.

In general, the Draft Technical Memorandum: Cost Considerations appears to greatly under-estimate the costs associated with the Draft Waiver and its economic impact to the region. For example, it attempts to limit application of certain requirements for cost considerations in a manner that is inconsistent with actual Draft Waiver requirements. More specifically, to calculate an estimated cost for Aquatic Habitat Protection using buffers, the Central Coast Water Board staff only estimates costs for operations that were larger than 1000 acres *and* adjacent to an impaired waterbody. (Draft Technical Memorandum: Cost Considerations at p. 27.) However, the water quality buffer plan requirements would apply to Tier 3 dischargers with operations adjacent to impaired waterbodies regardless of their size. (See Draft Waiver at p. 27.) Accordingly, the staff's analysis in Table 8 grossly under-estimates these costs by limiting their applicability only to operations that exceed 1000 acres.

The Draft Technical Memorandum: Cost Considerations also fails to include any real information on the potential impacts to the regional economy. Although it includes a section allegedly dedicated to this issue, the information referenced does not achieve that purpose. Specifically, Draft Technical Memorandum: Cost Considerations attempts to review the economics of strawberry production as an indicator of how Central Coast agriculture will adjust to the economic impact of the Draft Waiver. Unfortunately, this assessment is incomplete, includes outdated reports, and draws false conclusions.

First, the Draft Technical Memorandum: Cost Considerations fails to actually quantify the costs associated with the Draft Waiver. For example, there are no commercial ready production practices in the world that can immediately comply with some of the prohibitions included in the Draft Waiver. Thus, in those cases, the cost is not some incremental regulatory cost, but in fact impacts the ability to remain in farming.

Second, the Draft Technical Memorandum: Cost Considerations selects various excerpts from outdated reports and draws erroneous conclusions. For example, the Draft Technical Memorandum: Cost Considerations quotes a 2005 research study as follows:

“demand at every price is increasing, because of income and population growth effects . . . at a rate estimated at 2.3% annually. [This] effect dominates, suggesting that farmers will not face losses at all but simply a slowing of the rate of increase in the gains that they would have expected in the absence of a cost increase.” (Draft Technical Memorandum: Cost Considerations at p. 40.) The Draft Technical Memorandum: Cost Considerations then acknowledges, “[t]he current conditions of stagnating income growth are different from 2005 when this research was completed.” (*Ibid.*) To say that current economic conditions are “different” than in 2005 is an understatement. To further suggest that the study is still relevant and that demand will simply outweigh costs fails to recognize that consumer demand is associated with retail price. The price that retailers (i.e., grocery stores) pay to farmers will always be highly competitive. In fact, in a global economy, other countries such as Mexico are also able to supply strawberries during some of the same time periods as the Central Coast. Thus, retailers will turn to the lower price supply if available versus paying Central Coast producers more.

Although the Draft Technical Memorandum: Cost Considerations recognizes the effects of globalization as a legitimate factor, it references an outdated study to dismiss its impact. More specifically, the Draft Technical Memorandum: Cost Considerations quotes the report, “. . . capacity to produce for export in Mexico would have to grow dramatically at a rate without historical precedent for imports to make a serious dent in the U.S. market” (Draft Technical Memorandum: Cost Considerations at p. 40.) It adds, “[i]n the last 10 years, Mexican strawberry exports to the U.S. have quadrupled. If they quadruple again in the next 10 years and if the U.S. market does not grow at all . . . Mexican imports would then be 24% of U.S. consumption.” (*Ibid.*) A review of U.S. Department of Commerce, Bureau of Census import data indicates that in fact strawberry imports from Mexico for the past five years (2004-2009) have nearly doubled (\$96 million in 2004 compared to \$180 million in 2009). Thus, had current data available from the U.S. Department of Commerce, Bureau of the Census, been reviewed, then the Draft Technical Memorandum: Cost Considerations would have found that the scenario that the study stated was “without historical precedent” is in fact the scenario that is currently taking place.

Finally, Draft Technical Memorandum: Cost Considerations references USDA Economic Research Service outlook reports on the impacts of weather. The reports referenced highlight how weather can have a significant impact on the supply and pricing of strawberries. It then states, “[t]he strawberry example illustrates the relative influence of multiple factors in determining the ultimate economic viability of farming enterprises, and places in context the incremental cost of production attributable to environmental compliance.” Unfortunately, the Draft Technical Memorandum: Cost Considerations misses entirely what happens in reality. A deeper review of the USDA outlook reports reveals that retailers shift the source of their supply to the lowest price available. As a result, regulatory costs have an even greater impact.

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For example, the Draft Technical Memorandum: Cost Considerations reviews a 2004 report prepared in conjunction with Monterey County's General Plan but fails to include any other information or analysis that attempts to quantify the potential regional economic impacts associated with implementation of the Draft Waiver.

Considering the significant deficiencies in the Draft Technical Memorandum: Cost Considerations, Central Coast Water Board members will not be able to materially consider the cost implications of this program without further information. To help fill this void, the CSC encourages Central Coast Water Board consideration of an in-depth study report that has been commissioned by the Grower-Shipper Association of Central California. We understand that this in-depth report will be available and transmitted to the Central Coast Water Board in early February.

In conclusion, the Draft Waiver and its associated documents present a draconian regulatory scheme that will not improve water quality but will dramatically increase costs and subject growers to unnecessary enforcement actions. Overall, the Draft Waiver includes many findings and requirements that are not supported by the evidence in the record, requires immediate compliance, and fails to include reasonable time schedules. Due to the Draft Waiver's many failings, and the superior approach proposed in the Agricultural Alternative, CSC encourages the Central Coast Water Board reject the Draft Waiver in its entirety and adopt the Agricultural Alternative and its Coalition approach.

Very truly yours,



Theresa "Tess" A. Dunham

Attachments

cc: Rick Tomlinson, California Strawberry Commission
TAD:cr



THE HAZARD INDEX CONCEPT

A supporting document for the UC Center for Water Resources (<http://www.waterresources.ucr.edu>) Nitrate Groundwater Pollution Hazard Index

The United States Congress appropriated funds to the US Geological Survey (USGS) to begin the National-Water Quality Assessment (NWQA) Program in 1991. As part of the NWQA Program the USGS works with other federal, state and local agencies to understand the spatial extent of water quality, how water quality changes with time and how human activities and natural factors affect water quality across the nation. The USGS published a report (USGS 1999) entitled, "The Quality of Our Nation's Waters" with specific reference to nutrients and pesticides. For the purposes of our report, we will only address nitrogen issues.

Some of the highest levels of nitrogen were reported to occur in streams and groundwater in agricultural areas. However, concentrations were found to vary considerably from season to season as well as among watersheds. A graphical plot of nitrogen inputs to agricultural land versus median nitrate concentrations in underlying shallow groundwater produced a complete scatter of points (USGS 1999, p 47). The range of nitrate concentrations was the same for all levels of nitrogen input. Differences in natural features and land management practices make some areas more vulnerable to contamination than other areas. Recognition of differences in vulnerability to contamination can help target the appropriate level of protection and monitoring to major aquifers at greatest risk. The most extensive control strategies should be considered in the more vulnerable settings.

Nolan (2001) used multi variant logistic regression models based on more than 900 sampled wells to predict the probability of exceeding 4 mg/L of nitrate in ground water in the United States. The model consisted of 6 variables: nitrogen fertilizer loading, percent crop land-pasture, natural log of population density, percent well-drained soils, depth to seasonally high water table, and presence or absence of a fracture zone within an aquifer. Although valuable at the large landscape scale, the results are not useful on a farm level scale where management decisions are made which could affect ground water degradation from nitrogen. Nevertheless, the concept of establishing vulnerability to groundwater contamination is valid and even more appropriate on a farm scale.

Estimates of groundwater vulnerability can be separated into intrinsic vulnerability and specific vulnerability (National Research Council, 1993). Intrinsic vulnerability is related to factors of which the farmer has no control such as the hydrologic properties of the soil and hydrogeologic factors



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such as proximity of an aquifer to land surface, etc. Although the farmer can choose the crop to grow, the choice is usually made on economic factors. Once a crop is chosen, each crop has an intrinsic vulnerability for groundwater contamination from nitrates. Likewise, irrigation systems may be selected, but each irrigation system has an intrinsic vulnerability. Specific vulnerability is a function of management factors such as quantity, rate, timing, and methods of nitrogen and water application and other agricultural management practices. Therefore, the farmer has some level of control over the specific vulnerability with little or no control over the intrinsic vulnerability.

The National Academy of Science Water Science and Technology Board appointed a committee on Techniques for Assessing Groundwater Vulnerability. The committee defined groundwater vulnerability as: “The tendency or likelihood for contaminants to reach a specified position in the groundwater system after introduction at some location above the uppermost aquifer.” They pointed out that this definition of groundwater vulnerability is flawed, as is any other, by a fundamental principle that they stated as the First Law of Groundwater Vulnerability: “All groundwater is vulnerable.” They also proposed a Second Law of Groundwater Vulnerability: “Uncertainty is inherent in all vulnerability assessments.”

The committee suggested a vulnerability assessment process. The first step is to identify the purpose of the assessment. The next step is to select a suitable approach for conducting the assessment. They listed three methods of assessment: 1) overlay and index methods, 2) methods using process-based simulation models, and, 3) statistical methods. The report elaborated on each of these methods. We will follow the proposed steps by stating the purpose and then describing the assessment method.

PURPOSE: To provide information for farmers to voluntarily target resources for management practices that will yield the greatest level of reduced nitrogen contamination potential for groundwater by identifying the fields of highest intrinsic vulnerability.

ASSESSMENT METHOD: We used the overlay and index method. Although process-based simulation models were not specifically used, the basic physical and chemical factors that are incorporated into these models were used in deriving an index number. The overlay consists of soil maps, crop and irrigation system distributions. The soils, crops and irrigation systems were each indexed by an approach described below.

This approach is consistent with the recommendations of a Nutrient Technical Advisory Committee (TAC) appointed by the California State Water Resources Control Board. The TAC was assigned to propose a nutrient management approach in California that would meet the varied interests of those who have a stake in the quality of California’s waters. The TAC proposed that farmers complete a hazard index for each field on their farm based on the soil, crop and irrigation systems. The TAC proposed that the soil be assigned a hazard value of 1, 2 or 3. Soils classified as 1 are those that have textural or profile characteristics that inhibit the flow of water and create an environment conducive to denitrification. Both denitrification and restrictive water flow decrease the migration of nitrate to groundwater. Conversely those soils classified as 3 are most sensitive to groundwater degradation by nitrate because of the high water infiltration rates, high transmission rates through their profile, and



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low denitrification potential. In our case, we expanded the hazard values to 1 through 5, but used the same criteria as proposed by TAC for assigning higher or lower hazard values.

The TAC proposed that crops be classified into three hazard indices based on their degree of potential for nitrate leaching. They suggested that those with the highest potential for nitrate leaching, which would have a hazard index of 3, are those with the following characteristics: (1) The nitrogen uptake in the crop is a small fraction of the total nitrogen applied to the crop; (2) the crop requires high nitrogen input and frequent irrigation to ensure rapid vegetative growth; (3) the value of the crop is such that there is a tendency to add excess nitrogen to ensure no nitrogen deficiencies; (4) the crop is not adversely affected when more than adequate amounts of nitrogen are applied; and (5) the crop has a shallow root system where a small amount of water movement could carry nitrate below the root system. Crops with the opposite characteristics of those listed would have a low potential for nitrate leaching and have a hazard index of 1. Crops with intermediate characteristics would be classified with a hazard index of 2.

The criteria that we used in assigning a hazard index for crops were consistent with those suggested by TAC, but differed in detail. We also expanded the crop hazard index to 1 through 4. The factors considered in establishing a hazard index for field crops and vegetables were as follows: 1) rooting depth, 2) ratio of N in the crop tops to the recommended N application, 3) fraction of the crop top N that is removed from the field in the marketed product, 4) the magnitude of the peak N uptake rate, and 5) whether the crop is harvested at a time when N uptake rate is high. A slightly modified set of criteria was used for tree and vine crops. The rooting depth is quite great in all cases and none is harvested at the time of peak N uptake rate. Therefore, these criteria were eliminated and replaced by the magnitude of leaf N deposit for trees and vines.

The crops with a shallower rooting depth have a higher potential for N leaching than deep-rooted crops. Crops that take up a high percentage of the recommended N application provide for a lower hazard for N leaching than those which take up a low percentage, thus leaving much N in the soil. Furthermore, removal of much of the N in the crop tops with the harvested product creates a lower hazard than when the crop residues containing much N are left on the field. Crops that have a very high peak N uptake rate over a short period are considered to be more hazardous than those with low peak N uptake rate because they require large quantities of mineral N to be available for that time period.

A matrix was constructed for each crop and the criteria used to establish the hazard index. The hazard index number that was chosen for each crop was based on an overall consideration of all the criteria. For example, lettuce has a hazard index of 4 because it is shallow rooted, is harvested at the time of peak uptake rate, and much of the N in the tops remains in the field. Conversely, alfalfa has a hazard index of 1 because it is deep rooted and nitrogen fertilizer application is not required. The matrix, as well as the hazard index number, will be reported for each crop.

The TAC recommended that the irrigation system be classified into a hazard index of 0 through 3. The "0" hazard index is a micro-irrigation system accompanied by fertigation. Small amounts of



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water and nutrients can be frequently applied in quantities to match the crop need. A micro irrigation system without fertigation is assigned a hazard index of 1. Sprinklers used throughout the irrigation season or for pre-irrigation for crop establishment is assigned a hazard index of 2. Entire surface irrigation systems such as furrow are assigned a hazard index of 3. We used the same criteria for indexing irrigation systems except that our range was 1 through 4 rather than 0 through 3.

In our case, the overlay and index method consists of having an overlay of the soil, crop and irrigation system maps and multiplying the hazard index numbers for each. The intrinsic hazard index number can range from 1 through 80. The TAC suggested adding the index numbers. Adding the numbers would provide a much smaller range between 3 and 13, which would consequently make it more difficult to distinguish the relative hazards among combinations of soils, crops, and irrigation systems.

Although the TAC proposed that farmers complete a hazard index for each field, the proposal has never been implemented. A major impediment to the implementation is that soils and crops have not been assigned hazard rating values. We have developed tables of hazard rating numbers for the major irrigated soils and crops in Arizona, California, and Nevada that can be used by farmers to assess the relative hazard for groundwater degradation by nitrate for each of their fields.

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SUPPORTING EVIDENCE FOR THE NITRATE GROUNDWATER POLLUTION HAZARD INDEX CONCEPT

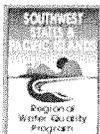
**A supporting document for the
UC Center for Water Resources (<http://www.waterresources.ucr.edu>)
Nitrate Groundwater Pollution Hazard Index**

The USGS measured the occurrence of nitrate in ground water beneath three agricultural land-use settings in the Eastern San Joaquin Valley of California during the period 1993-1995 (Burow et al. 1998). Water samples were collected from 60 domestic wells in land-use settings of (1) vineyards, (2) almond trees, and (3) a crop grouping of corn, alfalfa, and vegetables.

The vineyards and almonds were located on similar coarse-grained, upper and middle parts of the alluvial fans with rather rapid water transmission properties and low potential for denitrification. The three-crop setting was on the lower part of the fan consisting of relatively fine-grained sediments that would have lower water transmission properties and a denitrification potential. We would rate the soil hazard index higher on the vineyard and almond lands than the three-crop lands. We give the vineyards a lower hazard index than the almonds because of the much lower N application to vineyards. The three-crop system includes alfalfa with the lowest hazard index and vegetables with the highest hazard index so the cumulative effect is unknown and is expected to be intermediate.

The NO_3 concentrations in the wells were highest in the almond area, intermediate in the three-crop area, and lowest in the vineyard area. We have emphasized that NO_3 concentration is not necessarily a reliable indicator of management, but in this case it is an appropriate criterion for some comparisons. The concentrations of chloride and NO_3 were correlated in the almond and vineyard settings indicating very little denitrification and that is consistent with the soil properties. We assume that the irrigation of the two crops provided similar leaching fractions. Therefore, the higher concentration would be associated with the higher N application to almonds than for the vineyards. Furthermore, with similar amounts of deep percolation, the higher concentration would also mean higher N mass flow.

The soils for the three-crop system were expected to have lower hydraulic conductivity and also possible denitrification. The electrical conductivity (EC) and chloride concentration of the water



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were higher in the three-crop area than for the other two orchard crops, suggesting a lower leaching fraction consistent with the soil properties. Also, the NO_3 and chloride concentrations were not correlated in the three-crop system, which indicates denitrification. The dissolved oxygen was also lower in the three-crop system than the others. Because of the diversity of crops in the three-crop system, it is not possible to draw other conclusions.

The USGS measured the NO_3 concentrations in ground water samples collected from 3 domestic wells in 1995 (Burow et al. 1998). The results were related to various physical and chemical factors in an attempt to understand the processes that control the occurrence and concentrations of nitrates. The results were also compared with results of the analyses of samples collected in 1986-87.

One major finding, which is consistent with numerous other studies, is that the NO_3 concentrations were not significantly correlated with the estimated amount of nitrogen fertilizer applied within a 0.25- and a 0.5-mile radial distance from the sampled well. The concentrations, therefore, were most likely affected by factors such as soil and sediment texture.

Nitrate concentration generally decreased with increasing depth below the water table. The deeper waters are older waters, which reflect lower historical application rates of nitrogen fertilizers.

The investigators did not find a relationship between NO_3 concentrations and soil permeability, hardpan percent, and clay percent. The lack of correlation may be explained by counterbalancing effects of these soil properties on NO_3 concentrations. Low soil permeability, hardpans, and clay would restrict the rate of water flow contributing to a low leaching fraction, which could lead to higher NO_3 concentrations. Additionally, these soil properties are conducive to higher denitrification, which would reduce the NO_3 concentrations. Since there was no significant correlation between the soil properties and NO_3 concentration, neither mechanism predominated. Both mechanisms, however, contribute to lower NO_3 mass movement, but this was not measured.

Nitrate concentrations were positively correlated to dissolved oxygen concentrations. This result provides evidence that denitrification was a factor affecting the NO_3 concentrations. Nitrate concentrations were also positively correlated to specific conductance, which is related to salt concentration. This result provides evidence that increased concentration associated with lower leaching fractions was a factor affecting NO_3 concentrations. This conclusion is further supported by the finding that the nitrate and specific conductance was more strongly correlated when the chemically reduced environmental samples were removed from the data set used in the statistical analyses.

Letey et al. (1977) reported the results of an extensive investigation of agricultural tile drain effluents in California. The annual total mass of the NO_3 collected in tile drainage water was inversely correlated to the highest percent of clay in the soil above the tile depth. This is consistent with the hypothesis that clay layers in the soil reduce the hazard index by restricting the rate of water flow and/or causing denitrification. Other studies in California have shown that textural changes in profiles can have significant effects on NO_3 loss below the root zone (Lund et al. 1974, Pratt et al. 1972).



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INTERPRETATION OF NITRATE GROUNDWATER POLLUTION HAZARD INDEX NUMBER

**A supporting document for the
UC Center for Water Resources (<http://www.waterresources.ucr.edu>)
Nitrate Groundwater Pollution Hazard Index**

The hazard index number can range from 1 through 80 with the hazard increasing with increasing hazard index number. The first and second laws of groundwater vulnerability (National Research Council, 1993) are important to consider in application of the hazard index. The first law states “all groundwater is vulnerable” which recognizes that some groundwater degradation can occur even with a hazard index of 1. The second law states “uncertainty is inherent in all vulnerability assessments.” Therefore, the following suggestions on interpreting the hazard index number are not absolute and are intended as general guidelines. We invoke the wisdom of Aristotle who stated “It is the mark of an instructed mind to rest satisfied with the degree of precision which the nature of the subject permits, and not to seek an exactness where only an approximation of the truth is possible.”

We propose that a hazard index of 1 through 20 is of minor concern. The farmer must still implement sound management practices but extraordinary procedures are not required. An index number greater than 20 should receive careful attention. The first step is to determine whether the soil, crop, irrigation system, or a combination of them contributed to the larger index number. This evaluation will help the farmer focus on the segment of his management system that requires the greatest attention.

The factors listed in the matrix should be considered in addition to the hazard index number for a crop. For example, if a shallow root system was a factor in raising the hazard index for a given crop, careful attention should be given to irrigation to minimize the water that would percolate below the root zone. If a crop hazard index was high because of a high residual mineral and/or organic N after crop harvest, the use of a cover crop to capture the N and prevent leaching would be advisable.

Assume that the high hazard index number was caused by both a high soil and irrigation system hazard index, careful attention must be given to the irrigation management. If irrigation is by furrows, decreasing the length of the furrow, increasing the flow rate as high as possible without stimulating erosion and decreasing the duration of irrigation to decrease the total amount of infiltration.



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The main message is that the hazard index number per se is of little value unless it is less than 20, which is an indicator that no special management is necessary. If the number is greater than 20, comparing a number of 40 to 60 is not useful. Identifying the factors that lead to the number is important because they identify the management factors, for that specific field, that would reduce the potential for N leaching. Management guidelines for specific hazard factors are presented in other parts of this report.

References:

National Research Council. 1993. Ground water vulnerability assessment – Predicting relative contamination potential under conditions of uncertainty. National Academy Press, Washington, DC.



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DYNAMICS OF NITROGEN AVAILABILITY AND UPTAKE

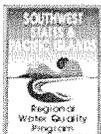
A supporting document for the UC Center for Water Resources (<http://www.waterresources.ucr.edu>) Nitrate Groundwater Pollution Hazard Index

Doerge et al. (1991) concluded that "The most effective management strategy will be one that recognizes the pattern of nitrogen demand by the crop and the nitrogen release characteristics of all important nitrogen sources to provide adequate, but not excessive levels of soil nitrogen throughout the growing season." Implementation of this strategy requires knowledge of the temporal N demand by the crop and the release characteristics of all important nitrogen sources. The nitrogen sources include: initial soluble mineral N content in the soil; the amount and mineralization rate of soil and applied organic matter; amount and timing of applied readily available N fertilizers; amount, time of application, and rate of release of slow release fertilizers; and N in the irrigation water.

The temporal supply of plant available N must match the temporal N demand by the crop to achieve the goal of "provide adequate, but not excessive levels of soil nitrogen throughout the growing season." Achieving this goal may not always be possible or practical, but one should strive to do so to the extent possible. The complete evaluation of a management strategy also requires understanding N losses by leaching, denitrification, and volatilization as well as plant demand and N supply sources. The expectation is that N losses by these mechanisms will be minimal if the available N at any given time is "not excessive."

Cumulative annual crop N uptake typically follows a sigmoid relation where the uptake curve initially increases gradually followed by a rapid increase and finally a plateau. When the vegetative part of the plant is marketed, the crop is usually harvested before the uptake curve plateaus. The slope of the uptake curve provides the daily rate of N uptake during the growth period.

The rate of N supply must be equal to the rate of uptake or some decrease in plant size will occur. But we will first analyze the case from a quantitative point of view. The effects of applying all the N requirement in a single application at the beginning of the crop season compared with multiple applications during the season is illustrated in figure 1. Clearly the impact of a large precipitation or irrigation event that causes leaching is greater from the large single application than the multiple split applications. One guiding principle, therefore, is that multiple applications, which more closely match the uptake, are better than a single application.



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Although evaluating N uptake and supply on a quantitative basis as illustrated in figure 1 is very useful, a comparison of the temporal rates of uptake and rate of supply is a more accurate assessment of whether the crop requirements for maximum growth is being met. Nitrogen moves by two mechanisms from the soil solution to the root surface where it can be taken up by the crop. Water flowing to the root to meet transpiration demand transports soluble N to the root surface. If the rate of N transport to root surface by flowing water exceeds the rate of N uptake, the N concentrates at the root surface and moves away from the root surface by diffusion in response to a concentration gradient. If the N uptake is more rapid than that transported by flowing water, the concentration at the root surface decreases, creating a concentration gradient causing diffusion toward the root. If the combined rate of transport by flowing water and diffusion is less than the potential N uptake rate, plant growth will be less than optimal.

Whether transport of N by flowing water is adequate to meet the plant requirement can be estimated using the following rationale. On a field basis, transpiration rate (TR) has units of $m^3/m^2/d$ and N uptake rate (NUR) has units of $kg/m^2/d$. Nitrogen uptake rate divided by transpiration rate has units of kg/m^3 , which are units of concentration. If the N concentration in the soil solution is equal to or higher than NUR/TR , adequate N is transported to the roots by flowing water. If the concentration is less than NUR/TR , water moving to the root will not supply adequate N, and the plant will be impacted unless diffusion is sufficiently rapid to provide the additional required N.

The quantitative analysis of N diffusion to a root system is very difficult, if not impossible, to accomplish. However, some generalizations are possible. Diffusion occurs through root surfaces; therefore, the total amount of N that can be made available to the plant by diffusion is related to the total area of root surface that actively take up N. A plant with a dense root system with many root hairs will be better supplied by diffusion than a plant with a sparse root system.

Information on the rate of N uptake as a function of time is valuable for programming N applications. These curves are presented for field corn and wheat in figure 2. The corn data are from Iowa State University of Science and Technology Cooperative Extension Services (STCES of Iowa State University, 1992) and the wheat data are from Doerge et al. (1991). The total N uptake was 294 kg/ha for corn and 258 kg/ha for wheat. Note that N uptake rate curve for corn is characterized by a much higher peak of shorter duration than wheat. Although the difference in total amount of N taken up between the two crops is not great (36 kg/ha), the N availability as a function of time is very different. Corn requires a very high supply for a relatively short time when compared to wheat.

The curves presented in figures 1 and 2 can be very misleading when one considers the N requirement at the early crop growth stage. Both figures would suggest that very little N is required during crop establishment. However, neither figure addresses the rate of N supply to the plant roots. The NUR/TR ratio identifies the soil solution concentration of N that is required for the transpiration stream to adequately transport N to root surfaces. Although the NUR is initially low (fig. 2), the TR is also small during the seedling stage. Uptake of N is required for the plant to enlarge and uptake must precede growth. Transpiration will increase as the plant becomes larger, but it is a responder to



plant size rather than a contributor. Therefore the NUR/TR ratio can be large and indicate the need of a large soil solution concentration of N in the root zone. Diffusion is not expected to be a major contributor of N supply to the roots because of the sparse root system during crop establishment. Therefore, even though the amount of N per land area may not need to be great during the seedling stage, that N must be concentrated in the zone where the plant roots exist.

One fact emerges when one considers the mechanism of N transport to plant roots. It is impossible to extract all the soluble mineral N from soil solution without suffering decreased plant growth. The consequence of this fact is that there will always be some soluble N that can be leached beyond the root zone when "excess" water is applied. The amount and concentration of N leached depends on the several dynamic and temporal factors discussed above.

Thus far, plant N uptake dynamics and mechanisms of transporting N in the soil solution to plant roots have been discussed. Consideration must now be given to the various sources of N supply and matching this information with plant uptake dynamics. The initial soluble mineral N content in the soil represents the amount in the soil that is available for plant uptake or leaching throughout the year. The N in the irrigation water is supplied at the time of irrigation and at the amounts that are related to the concentration of N in the water and the amount of water that is applied. Commercial mineral N fertilizers are available for leaching or plant uptake based on the amount and time of application. These sources can be quantified both by amount and time. In principle, these sources could be managed to match the time and amount of crop N uptake to the extent practicable.

Organic sources and slow release fertilizers require evaluation of the dynamics of the N becoming available for plant uptake or leaching. Organic materials must be mineralized before the N becomes available for plants. Different organic materials have a very high level of variability of mineralization rates, and precise quantitative information is generally not available for a given source. Nevertheless, very important general information is known about mineralization that is significant to the topic under consideration.

The rate of mineralization is highest when the organic material is first incorporated in the soil and tends to decrease exponentially with time after incorporation. The temporal rate of mineralization pattern does not match the temporal rate of plant N uptake. The plant uptake pattern approximates a bell shaped curve (fig. 2) whereas the rate of mineralization is a continuous downward sloping curve. Therefore, it is impossible to program organic material application so that the rate of available N supply coincides with the rate of N uptake. This is particularly true for crops that have a very high rate of N uptake over a relatively short period of time.

Pang and Letey (2000) used the ENVIRO-GRO model to simulate the consequences on plant growth and N leaching of applying two manures with different mineralization rates to corn and wheat that have different temporal N uptake rates. They concluded that crops with high uptake rates for a short time are not well adapted to be fertilized solely by organic matter. Doerge et al. (1991) suggest supplying only a portion of the nitrogen requirement of a crop in organic forms and utilize immediately available nitrogen materials to insure adequate nutrition during periods of peak nitrogen demand.



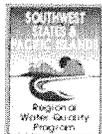
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Slow release commercial fertilizers behave somewhat like organic materials in that the rate of release is highest initially and decreases with time. The big difference is that the rate of release is much greater than the mineralization rate of most organic materials, and essentially all the N is released during the growth period of a crop. Slow release fertilizers have greater utility for crops that have fairly gradual uniform N uptake demand over the production period rather than for a crop with a very high peak demand.

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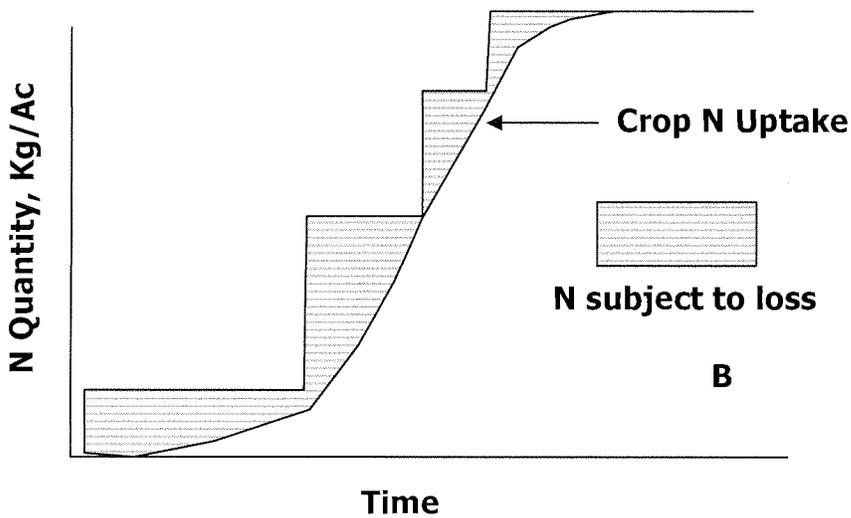
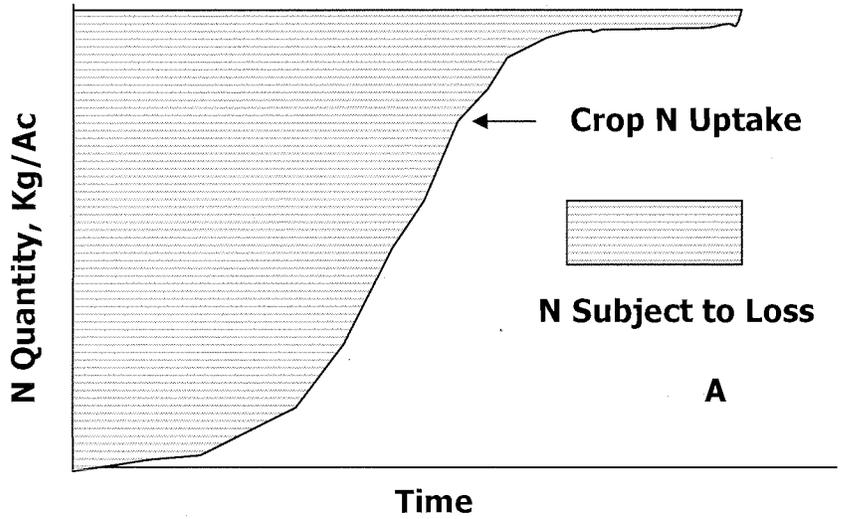


Figure 1. The quantity of N taken up by the crop or subject to loss from a single N application (A) or split N applications (B) (Adapted from Doerge et al., 1991).

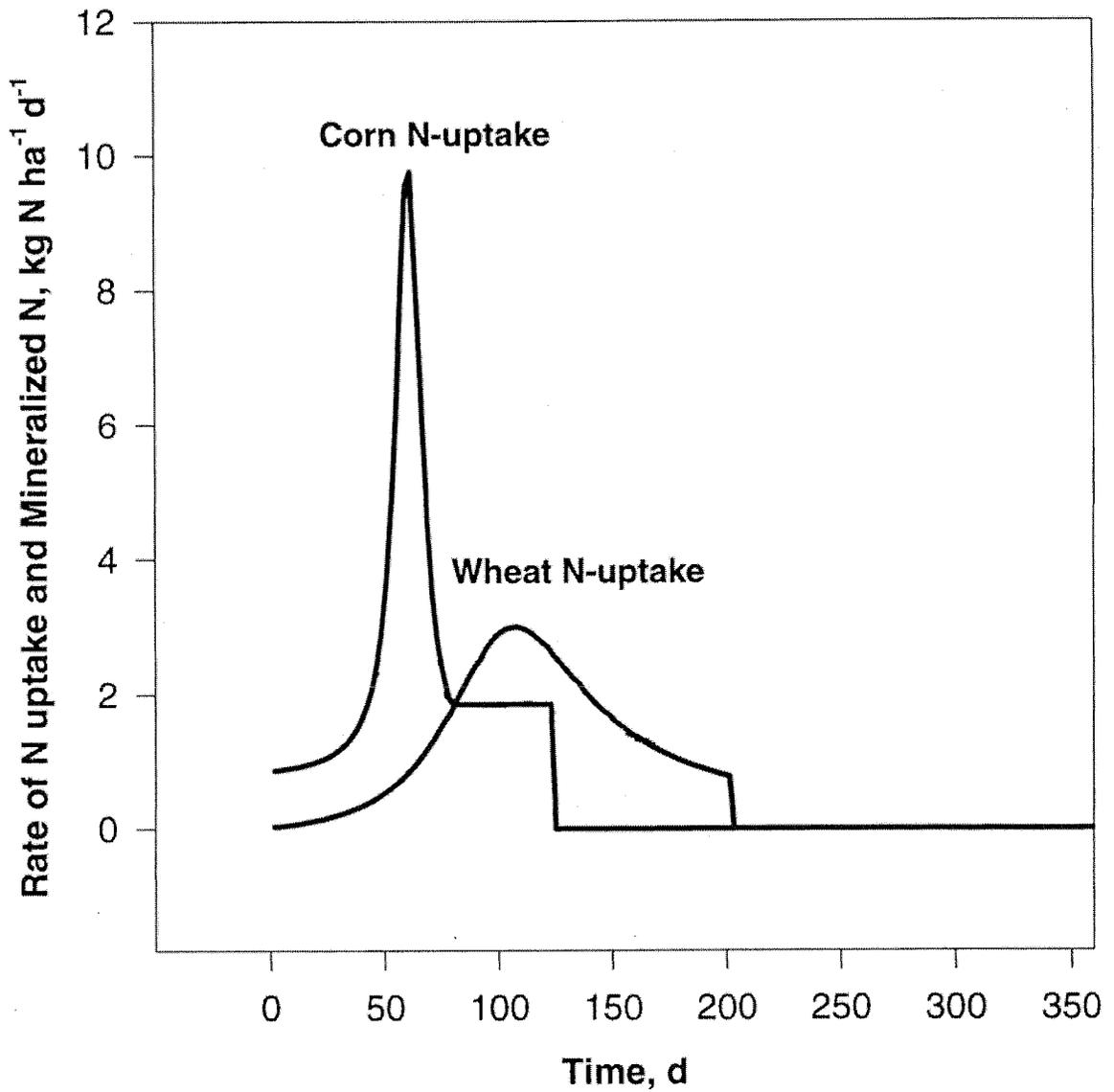


Figure 2. The rate of N uptake for corn and wheat as a function of plant growth over time.



January 3, 2011

Chairman Jeffrey Young
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Dear Chairman Young,

Thank you for the opportunity to provide comments on the Staff Draft Agricultural Order dated November 19, 2010. As a trade association representing almost 100 growers and shippers on the Central Coast and a signor of the Draft Central Coast Agriculture's Alternative Proposal for the Regulation of Discharges from Irrigated Agricultural Lands (Ag Proposal), we have been actively involved in the development of a renewed "Conditional Waiver" for discharges from irrigated lands. We believe the Ag Proposal created by agricultural groups and submitted to you on December 3, 2010 is a strong, accountable proposal and we are very concerned with the sustainability of staff's most recent proposed draft Ag Order (Staff Draft Proposal).

We agree that improvements should be made to water quality. Over the last five years the Cooperative Monitoring Program (Central Coast Water Quality Preservation, Inc.) has demonstrated water quality impairment and enlightened many about the problem. However, we don't have a strong characterization of what sources are contributing to impairment and exactly when or where it is occurring. Without knowing that we can't know what needs to be done without more science and more cooperative monitoring data. Conversely, the on-farm data collection proposed of Tier 3 growers in the Staff Draft Proposal is a waste of resources. Let growers instead use those funds to work with a Coalition focused on actual on-farm management changes to show improvement, not simply monitor the problem.

Accountability is a necessary segment of any regulation. The challenge with the staff approach as it is currently written lies in the fact that agriculture is a non-point source discharger, which makes it very difficult to make a conclusion for either fault or improvement based upon one data set, at one point in time, on one farm. Solid research and development are required to find an actual solution and make improvement.

We also have some major concerns with the Staff Draft Proposal, including the short comment period given, a 45-day span in which three major holidays occurred. The Ag Proposal is the best solution for all. It will provide accountability to the Board, staff and public while simultaneously linking growers with resources, feedback and technology so that they may update growing practices to achieve significant milestones related to diazinon and chlorpyrifos water quality objectives, a decrease in sediment loads by 20 percent at CMP sites; and a decrease in nitrate loads from current CMP sites by 10 percent. Here are a handful of reasons the Ag Proposal is stronger than the Staff Draft Proposal:

1. **Jurisdictional Challenges:** The Staff Draft Proposal is attempting to influence land use, riparian area and wetland habitat, over which they have (at best) questionable oversight, but more likely, no jurisdiction. The Coalition approach instead allows for a reasoned, collaborative system for sharing research, technology and ideas without confusing multi-agency jurisdiction.
2. **Research & Technology-Based Ag Proposal:** The Staff Draft Proposal is a point-source solution applied to a non-point source problem and it makes assumptions based on faulty reasoning. Instead of the punitive approach the Staff Draft Proposal recommends, the Ag Proposal will align growers with research, technology, and assistance so that they can take steps toward making actual improvements to water quality.
3. **Effectiveness:** Instead of making assumptions about impairment and tying up resources with individualized data collection, the Ag Proposal focuses on tools for actual improvement to water quality. More aggregated data, combined with a coalition-approach focused on on-farm improvements, will provide a coordinated, effective solution.
4. **Ingenuity:** Improvements should be made to water quality and growers are the ones to do it through innovation in the field, not individualized monitoring. Growers in the Salinas Valley have spent decades fine-tuning their practices to achieve goals (i.e. yields, food safety standards, etc.). Ingenuity only exists when creativity and opportunity merge. This Staff Draft Proposal doesn't allow for either. The Coalition does so by aligning growers with new ideas, agronomists and researchers that can synergize to create new solutions.
5. **Focus on Impaired Areas, Not Acreage:** Acreage size should not be a trigger for assumed impairment. We have five years of data showing us where the most affected sub-watersheds sit. Use the Coalition approach to focus on these instead of arbitrarily and ineffectively focusing on the biggest growers who likely have already invested enormous financial capital in making improvements to benefit water quality.
6. **Industry-Funded:** The Coalition approach pays for itself, providing the Regional Board information it needs to show improvement without costing taxpayers.
7. **Triple-Bottom-Line Achieved:** The Staff Draft Proposal mentions the importance of the triple-bottom-line of financial, social and environmental priorities. The unfortunate reality about the Staff Draft Proposal is that its compliance costs would likely unfairly target small, family-owned farms, some of which are organic, or owned by disenfranchised growers. There are growers in the region that have indicated that they would elect to go out of the farming business if the current Staff Draft Proposal became their water quality regulation.

ECONOMICS

The Grower-Shipper Association has initiated a thorough economic analysis of the November 19, 2010 Staff Draft Proposal, working with Brad Barbeau at California State University, Monterey Bay. Professor Barbeau will conduct a more in-depth study than the analysis we presented at the May 12 meeting, including a careful statistical analysis of the Staff Draft Proposal and the Ag Proposal.

On a related note, we have some concerns regarding the Staff Draft Proposal Cost Analysis Appendix F, including:

1. EQIP is mentioned as a funding resource for growers. However, it's important the Board understands that the EQIP program oversees a limited amount of money. Not every grower that would need funding would be able to participate in the program and there are income limitations in some situations. Please do not consider EQIP to be an across-the-board offset of grower costs.

2. We are concerned that Appendix F does not factor in lost acreage and/or customers due to extended riparian buffers. While the costs of installing such buffers is included in staff's analysis, the cost of buffering out further acreage (besides the 30 or 50 foot riparian buffer) for food safety purposes is not addressed. We ask that the board consider the tremendous costs of installing new vegetation that creates a major food safety complication, potentially eliminating some customers, and definitely eliminating usable land.
3. In Appendix F, 2.2.2.4.3 the staff refers to Management Cost Estimates from the Central Valley Region. Please do not use these cost estimates to determine Central Coast costs. The Central Valley has significantly lower acreage rent and mostly grows crops not under the purview of the Leafy Green Handlers Marketing Agreement. Comparing grower costs in the Central Valley are related to land use, buffers, inputs, and more is like comparing apples and oranges.
4. The staff state: "Therefore, Tier 3 dischargers will most likely incur higher costs than Tier 1 or Tier 2 dischargers and a greater increase in costs compared to the cost of complying with the 2004." We don't dispute that Tier 3 dischargers will have higher costs. We however are appalled at the arbitrary triggers used to determine which operations sit in Tier 3. Specifically, acreage that sits within a 1,000-foot distance from an impaired water body does not automatically mean it drains into said waterbody. There are instances within the Salinas Valley where a ranch literally drains away from the waterbody it backs against, or where the water would have to flow up a hill and across a levy to drain into the impaired waterbody. In these cases, it doesn't matter if you're 1,000 feet or two feet from the waterbody, you're not contributing to its impairment through irrigated water runoff. Additionally, a 1,000-acre trigger by organization is irrational. If you operate 1,000 acres you have likely already invested in management practices that benefit water quality. Why are those who are already focused on this issue being given a disincentive to do more by mandating on-farm monitoring, thereby pulling resources out of improvements to pay for on-farm data collection?
5. In our calculation of the February Staff Draft we learned that lost tax revenue is between \$19,624,441 and \$25,326,816 with 2,572 to 3,320 jobs lost. Staff's findings in the November 19, 2010 Staff Draft Proposal of "A range of approximately \$774K to \$2.2M of gross value would be lost to riparian buffers region-wide, based on this analysis" is considerable. Our economic analysis will look to equate staff's findings and our own to lost tax revenue and lost jobs. Staff's finding that "Lost income to an individual grower, while not known, is a fraction of gross value lost, since the grower avoids costs of farming areas no longer in production" does not look at the bigger question, being: how much lost tax revenue for our local governments and how many jobs are lost due to these substantial buffers? We believe our analysis will show each of these losses to be considerable.
6. The Staff Draft Proposal MRP document, Appendix B, Page 12, item 3 requires Dischargers, as part of the Groundwater Report, to submit laboratory data in a format compatible with the GAMA program's Electronic Deliverable Format. This is a requirement for fairly sophisticated and time-consuming data formatting. The staff has estimated in Appendix F, page 33 that the costs of having a contractor collect the samples, assess depth to groundwater and deliver the results to be approximately \$1,260/test for a Tier 3 grower and \$690 for a Tier 1 or 2 grower. We suspect the costs for doing so will be much more than staff estimates, being that this is a much more difficult data formatting challenge than they substantiate in their economic findings. In our estimation, it would require someone with a strong understanding of this data system to spend at least 30 hours (at a conservative hourly rate of \$100) to complete this requirement. For someone who needs to learn this system anew (e.g. a current staff member), our estimate would be 40 hours minimum. The minimum cost for complying with this requirement will likely

be at least \$3,000 just for staff/consultant time, much higher than the \$500 estimated by staff. More information on these data formatting requirements may be found here: http://www.swrcb.ca.gov/ust/electronic_submittal/docs/faq.pdf.

FOOD SAFETY

Also disconcerting are the riparian vegetation mandates that contradict nationally- recognized and customer-required food safety practices. This waiver will reverse some of the major food safety improvements we've worked hard for over the past five years.

Major concerns include:

- That operators are prohibited from having bare soils vulnerable to erosion that contribute to an exceedance of sediment run-off.
- That operators must protect existing aquatic habitat by maintaining riparian functions such as streambank shading, aquatic and wildlife support and maintain naturally occurring mixed vegetative cover in aquatic habitat areas
- That by October 1, 2012 Tier 2 and 3 dischargers with operations adjacent to or containing an impaired waterbody for sediment, temperature or turbidity must conduct photo monitoring to document the condition of the waterbody including the estimated widths of vegetative filter strips and management practices or measures to address impairment
- That by October 1, 2015, Tier 3 dischargers with operations adjacent to or containing an impaired waterbody (listed in Table 1) must submit a Water Quality Buffer Plan that protects the waterbody and its associated perennial and intermittent tributaries that includes a minimum 30 foot buffer measured horizontally from the top of bank on either side of the waterway, vegetated zones within the buffer to control temperature, reduce velocity, control sediment deposition, provide treatment through infiltration.

Each of these bulleted concerns directly contradict a grower's ability to meet food safety standards, thereby creating an untenable situation in which growers will be unable to make a decision without breaking a contract, rule or regulation. We would strongly encourage the Central Coast Regional Water Quality Control Board and staff to consider the proposed agricultural alternative as a more pragmatic solution to improving water quality in the region. The Ag Alternative encourages growers to work in concert to reduce the discharge of waste in reasonable time frames using practical and proven solutions. The Ag Alternative enjoys broad consensus amongst agriculturalists in the region and if viewed as a baseline could provide a strong starting point for continued or expanded collaboration between the CCRWQB and growers to collaborate on the common goal of improved regional water quality.

Faulty Nitrate Data Presentation

In response to a November 15, 2010 presentation to the Sustainable Agriculture Expo by CCRWQCB staff member Lisa McCann, a literature review titled "Anomalies in Data Supporting Proposed Regulations Offered by the Central Coast Regional Water Quality Control Board: A Critical Analysis — November-December 2010" was conducted by Robert Dolezal on behalf of our colleagues at the California Strawberry Commission. This analysis of the staff's November presentation found a "Distortion of statistics, omission of critical facts, and ignoring alternative causation possibilities that favor one's own conclusions." It was the finding of the author that "Data represented in the maps and narrative presented by CCRWQCB fails to meet minimal standards for accuracy and fails to avoid statistical bias due to the choice of presentation. In addition, a number of well clusters were omitted entirely, further falsifying the ratio of exceeding wells to the total population of wells. It is impossible to reconcile the

data depicted by the Board staff with the actual data in the State Water Resources Control Board's GeoTracker GAMA database for the sampled cluster areas described here." The conclusion stated that "Substantial evidence impeaches the conclusions reached by the Central Coast Regional Water Quality Board's staff in justifying the draft Ag Waiver Order as it pertains to nitrate contamination in the areas sampled."

The analysis verified that much more research needs to be conducted to fully understand agriculture's role in the nitrate discussion. It cited a definitive study from 1995, "Wellhead Protection for Rural Communities Facing Threats from Nonpoint Source Nitrate Contamination, Case Study, King City, Salinas Valley, California" (Monterey County Water Resources Agency), that provides consummate understanding of the various aspects of King City area's nitrate contamination of groundwater. The study states, *"All of the small rural communities in the Salinas Valley are supported by ground water. ... The nitrate contamination of the Salinas valley ground water supplies is a cumulative problem that has been evolving over time. The sources of nitrate contamination are widely dispersed throughout the Salinas Valley, and are the result of long standing management practices used by both agriculture and municipal entities. As a result, the historic nitrate contribution and origins of the nitrate problem are difficult to quantify."*

We implore the Board to take these concerns into consideration and use the ag alternative's approach of using the next Ag Waiver period to better understand nitrate contamination data while instituting a region-wide Nutrient Management Plan system for all growers to use all available research and understanding to address this valid and important concern in our community.

Appeals Process

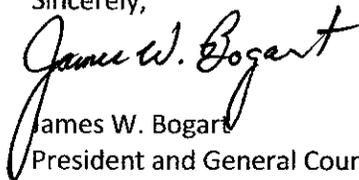
We were pleased to meet with staff on December 15, 2010 to discuss our Ag Proposal and the Staff Draft Proposal. However, we were concerned when each time we cited a concern with the Tier triggers the response by staff was that a grower could appeal the concern to the Executive Officer. Statements have been made by some of your executive staff that growers should consider not growing crops with high nitrate loading potential any longer on the Central Coast. With that concern in mind, how would an executive staff that has a perceived bias against a commodity be able to make a fair, unbiased recommendation to allow a grower to move from Tier 3 to Tier 2 or Tier 1, no matter how compelling the argument?

The Staff Draft Proposal does not foster collaboration, provides no incentives for growers to participate in water quality best management practices and will be difficult to comply with and enforce. It is a punitive proposal that stifles collaboration and innovation. The "tiering" mechanism embodied in the Staff Draft Proposal is an example of an arbitrary and punitive approach in that it assigns select operations to high risk Tiers based on size, proximity to surface water and/or crops grown regardless of the actual risk those operations may present.

We urge you to base the new Conditional Ag Order for the Central Coast on the Ag Proposal . An Ag Order must be designed with achievable objectives and must be a transparent and collaborative process that encourages agricultural stakeholders – as they are uniquely positioned to provide innovative solutions to enhance the region's water quality. The failure to constructively engage growers and landowners will be counterproductive to short and long-term efforts to improve water quality.

Thank you for considering our views.

Sincerely,



James W. Bogart
President and General Counsel
Grower-Shipper Association of Central California



Abby Taylor-Silva
Vice President, Policy & Communications
Grower-Shipper Association of Central California

cc:

California State Governor Jerry Brown
United States Senator Barbara Boxer
United States Senator Dianne Feinstein
United States Congressman Sam Farr
United States Congresswoman Anna Eschoo
United States Congressman Jerry McNerney
United States Congressman Mike Honda
California State Secretary of Food & Agriculture A.G. Kawamura
California State Water Resources Control Board Chairman Charles R. Hoppin
California State Water Resources Control Board Vice Chairwoman Frances Spivy-Weber
California State Water Resources Control Board Member Arthur Baggett, Jr.
California State Water Resources Control Board Member Tam Doduc
California State Water Resources Control Board Member Walter Pettit
California State Water Resources Control Board Executive Director Dorothy Rice
California State Water Resources Control Board Irrigated Lands Program Manager Johnny Gonzales
California State Senator Sam Blakeslee
California State Senator Anthony Canella
California State Senator Elaine Alquist
California State Senator Joe Simitian
California State Assembly Member Luis Alejo
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Monterey County Supervisor Louis Calcagno
Monterey County Supervisor Simon Salinas
Monterey County Supervisor Jane Parker
Monterey County Supervisor Dave Potter
San Benito County Supervisor Margie Barrios
San Benito County Supervisor Anthony Botelho
San Benito County Supervisor Rick Rivas
San Benito County Supervisor Jerry Muenzer

San Benito County Supervisor Jaime De La Cruz

Santa Cruz County Supervisor John Leopold

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