

**Letter BA: Andy Niner, Niner Wine Estates (June 20, 2020)****Letter BA**

**From:** [Andy Niner](#)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comments on Draft Ag Order  
**Date:** Saturday, June 20, 2020 4:51:07 PM

EXTERNAL:

Hi there,

BA-1 I'm commenting as President of Niner Wine Estates. We own a total of roughly 630 acres of which 282 is under vine and/or being developed for grape farming. We are a sustainable operation with LEED certified facilities in Paso Robles and SIP Certified Vineyards in Paso Robles and Edna Valley. We are family owned, long-term operators that want to improve the quality of our land and protect our water supply and we invest accordingly. We are very thoughtful about the chemicals we use and our water protection and conservation practices.

We have serious concerns about the draft Agricultural Order 4.0 that can be summarized as follows:

- BA-2
- **SIP Certified (and other audited sustainable programs) should be recognized as an alternative compliance pathway and SIP documentation should be recognized in lieu of Farm Planning Requirements.** Not doing so will increase the administrative and burden for low risk, sustainable growers and disincentivize the very behavior you are trying to encourage.
  - **The current draft priorities only considers geographic location and not operational risk to water quality.** There needs to be a distinction between vineyards and row crops as the risks to water quality are very different. Some examples:
    - Our vineyards currently meet the 2050 Nitrogen Loading threshold and should be exempted from monitoring and reporting.
    - Our vineyards do not have tailwater and we maintain winter cover.
  - **The current draft will not benefit water quality despite its attempt to be comprehensive.** The extent and scope of the information required is so great that it's doubtful the staff could analyze and act on the information in a meaningful and timely way to improve water quality.
  - **The current draft underestimates the full burden to growers.** The economic analysis is insufficient and does not account for land fallowing, hiring professionals, loss of production, and several other requirements.

BA-5  
BA-6 I ask that staff consider modifying this draft to consider alternative compliance for low risk vineyards, leveraging current successful efforts. Such a system would reward sustainable behavior and improve water quality by reducing regulatory burden for sustainable operators.

Andy Niner  
 President  
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 Office | 805.226.4878

**Response to Comment BA-1**

The CCWB acknowledges the commenter's background and interests.

**Response to Comment BA-2**

This comment is summarized and responded to in Master Response 2.2.2.

**Response to Comment BA-3**

This comment is summarized and responded to in the following Master Responses: 2.1.7; 2.3.5; and 2.5.4.

**Response to Comment BA-4**

This comment is summarized and responded to in the following Master Responses: 2.1.5 and 2.1.4.

**Response to Comment BA-5**

This comment is summarized and responded to in Master Response 2.9.1.

**Response to Comment BA-6**

This comment is summarized and responded to in the following Master Responses: 2.1.14 and 2.2.2.



**Letter BB: Bruce Kobara, S. Kobara and Sons (June 20, 2020)****Letter BB**

**From:** [kob14@aol.com](mailto:kob14@aol.com)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comments of Draft Ag Order 4.0  
**Date:** Saturday, June 20, 2020 11:31:02 AM

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EXTERNAL:

To Water Board directors,

My name is Bruce Kobara I am vice president of S. Kobara & Sons in Arroyo Grande, AW395. I am writing to you in regards to AG order 4.0.

Our Ernie Oliver ranch, APN 075-071-005 Global ID AGL020002542, borders Los Berros Creek. As I see it with the proposed order you are going to require a 75 foot buffer zone. While I understand the need for Buffers, we work very hard at keeping all or tail waters on site any water that does go to the creek is runoff from Los Berros road county maintained. We currently maintain a 30 ft buffer, but with the length of affected ranch ground being roughly 4000 ft and if you add the proposed buffer we would lose the use of 4 valuable acres of farm ground. While I realize the need for increased riparian zone please take into account the added pressure and hardship a large zone would create. We are currently losing crops to the False Chinch Bug not to mention the added cost of pesticides. If we are required to keep a 75 foot buffer and plant grasses to create a Riparian zone I would then be REQUIRED to add a 30 foot buffer from that for Food Safety. This would cause us and many other farmers Extreme Financial Hardships. I am a third generation farmer and I have a son and nephew who hope to keep this area green please help us to do so. Thank You for your time,

Bruce Kobara,  
S. Kobara and

Sons

BB-1

**Response to Comment BB-1**

This comment is responded to in Master Response 2.8.8.

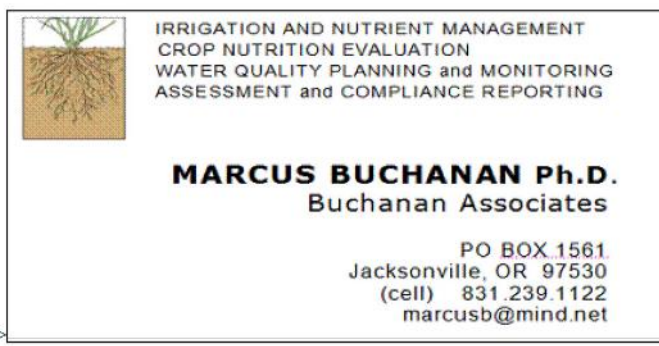
**Letter BC: Marcus Buchanan, Buchanan Associates (June 20, 2020)****Letter BC**

**From:** [Marcus Buchanan](#)  
**To:** [AgNOI\\_WB@Waterboards](#)  
**Subject:** Comments on DRAFT Ag Order  
**Date:** Saturday, June 20, 2020 1:48:04 PM  
**Attachments:** [Jean Pierre RWB Letter June.pdf](#)

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EXTERNAL:

Thank you for your review, consideration, and public posting.



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**MARCUS BUCHANAN Ph.D.**

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Jean Pierre Wolfe, Ph.D.  
Chair  
Central Coast Regional Water Quality Control Board

Dr. Wolfe,

BC-1

This letter serves as my first ever submitted comments on an Irrigated Lands Reporting Program Order proposal after over 25 years of work at the nexus of agriculture and water quality in your region. I am formally trained in soil science, specifically soil fertility and soil organic matter management, plant nutrition, and carbon and nutrient cycle modeling. In days long gone, I held two university teaching, research and advising positions, including a one year appointment heading the UC Agroecology and Sustainable Agriculture Program at Santa Cruz in 1994-95.

I began this work in partnership with the Santa Clara Farm Bureau, and successfully funded (3 grants) and led an integrated field demonstration and research program on compost use and in-field soil nitrate testing (pre-quick test era) for improved nitrogen (N) use efficiency in vegetable production.

1995-98 Funded by the former CA Integrated Waste Management Board (IWMB)

1997-99 Funded by the CDFA Fertilizer Research and Education Program (FREP)

Since that time, I have worked privately with over 135 conventional row crop, berry, tree and vine crop growers in every coastal county from Saratoga (Santa Clara) to Oxnard (Ventura) on soil, crop and water management monitoring and decision making, with focus often on N. I have over 40 hrs of Regional Water Board-approved water quality training.

2002-07 Contractor on water district N management programs (SCLara, SBenito, Pajaro)

2004-06 Technical presentations for the UCCE Irrigated Lands Water Quality Short Courses

Since 2008 my client work has been focused on irrigation system assessment and irrigation management monitoring, scheduling and efficiency analysis. Together with my partners, we work to first, improve the bottomline (yield, quality, profit) for our clients or program partners by increasing input efficiencies, never losing sight of water conservation and quality protection goals.

BC-2

My concerns stated in the following pages regarding Ag Order 4.0 are, in part, a result of being a former UC university researcher and OR Extension Viticulture Advisor. On behalf of clients or other growers, I have had to negotiate-question this rather lengthy 'trial and revise' regulatory process since 2004. All the while knowing that the evolution and change from a Waiver to Waste Discharge Requirement (WDR) was inevitable.

In 1998, as a contributor to the Pajaro Watershed Management Plan, I wrote:

*"... presently the CCRWQCB is encouraging voluntary compliance for NPS controls (first level). However, they will adopt 'regulatory based' encouragement of BMPs (second level) and eventually a WDR, if the first two levels are not successful" (ASE et. al., 1999)*

And so now, 21 years later we are here...

*"It is well established that voluntary participation in best management practice (BMP) programs typically cannot achieve significant reductions in nitrogen pollution from agriculture (Tomich et. al., 2016)*

... with a proposed phase-in of new, and in some cases, un-proven requirements with irrigated agriculture under a General WDR.

|      |   |
|------|---|
|      | <p><b>Where I'm Coming From</b></p> <p>From my perspective, the requirements of each prior Ag Order have not been as effective as their intent. As well the early assumption that ramping up public technical staff and informational resources and programs would accelerate 'voluntary' practice and structural adoption, thus leading to immediate quantitative improvements in GW conditions was naive. Concurrently, the time and costs associated with compliance continue to increase and I have great concerns for smaller companies and individual families that proportionately face a larger time and cost impact than larger companies. Further, in my experience since Ag Order 1.0, my technical and scientific-based concerns, questions, and suggestions have fallen on an increasingly non-responsive staff. Today, the proposed Ag Order 4.0 (4.0) is stepping up the consequences and the 'encouraging' language in prior Waiver Orders is largely gone. From my limited desk view, the 4.0 process has lacked a necessary and robust interactive dialogue between staff-industry-technical advisors leading to the Feb. draft language (Drevno, 2018a). 4.0 is to be a WDR, a huge regulatory sea change advocated by many (Drevno, 2016; 2018b), thus allowing stricter numerical limits to be imposed with better enforcement leverage, but without a process that implicitly recognizes that trust is essential for us in agriculture, as result emotion often continues to lead ahead of science, logic and reason.</p> <p>Over twenty years ago the Llagas Groundwater Basin (Santa Clara County) was the focus of a number of critical studies related to groundwater (GW) nitrate contamination and agricultural N management that informed some of my initial private professional priorities at that time. Of particular concern to me was the fact that there were no soil or agronomy professionals on any of the study teams (engineers), thus the lack of critical perspective and technical capability weakened the accuracy and potential impact of recommendations and follow up, solution-based projects. The growers in South County were far from the 'table', and with reduced funding of the County UCCE office, there was little on-ground expertise and follow up capacity for action (sound familiar?).</p> <p><u>Are All the Ranches Leveled Now?</u></p> <ul style="list-style-type: none"> <li><i>Ranches are classified into geographic groundwater <u>phase areas</u>, surface water priority areas, and riparian priority areas based on the relative <u>level of water quality and beneficial use impairment and risk to water quality</u>.</i></li> </ul> <p>Unfortunately I am aware of a farm business in operation before 2008 that has only recently enrolled and this still causes some lack of faith that indeed all operations will now be <u>equally obligated to identical and enforced monitoring and reporting requirements</u> from 2021 and on. In some respects the proposed phase-in may leave some operators to continue to expect un-even application of requirements. It is still troubling to recall the rollout for 2.0 in 2012 and then disappearance in 3.0 of the required Groundwater Risk Analysis that was, for growers, myself, and at least one UC scientist, a frustrating and uneven classification ranking method riddled with more than one poor assumption. I can fully appreciate the need, as example, to prioritize new GW requirements (Phase 1) based on sub-regional recharge (rapid) characteristics, presence of young groundwater, and prior determination of High Vulnerability GW sub-basins. However, at the same time it appears that staff hold hope and anticipation that <u>evolving production practices and monitoring will result in and uniformly show rapid turnaround in GW conditions</u>, thus validating 4.0 requirements. This unfortunately leaves the impression to some of us that this is potentially again a trial, wait, hope, and see test.</p> <p>A statement contained in the draft Order, explicitly states that time period (2022-2026) following the establishment of a Fertilizer Limit and Discharge Targets, will be used to <u>evaluate outcomes</u>, but also to <u>reconvene an Expert Panel</u> to validate methodology.</p> <p><u>QUESTIONS:</u></p> |
| BC-3 |   |
| BC-4 | 1. What is the contingency plan, if Phase 1 implementation does not lead to statistically valid GW or surface improvements?   |
| BC-5 | 2. Is it possible that revised or additional requirements are planned to address lack of progress?  |
| BC-6 | 3. Could Phase 1 operators/dischargers face different or greater time and cost requirements, than those that follow, whether success or failure is the determined outcome of Phase 1?   |

## Groundwater Elements

$$A_{\text{Fert}} + (C \times A_{\text{Comp}}) + A_{\text{Irr}} - R = \text{Nitrogen Discharge}$$

- BC-7
- *The A-R data-based N discharge values established by this Order act only as targets until 2026 to allow for the learning curve associated with the new monitoring and reporting requirement, as well as to provide additional time for the State Board to convene an expert panel for review and evaluation of the AR (A-R or A/R) values as regulatory tools.*
- The above statement, unfortunately further suggests the possibility that in year 5 (2026) of this WDR, GW requirements could change again, thus growers could actually be participating in a 'trial and let's see', identical to the Groundwater Risk formula embedded in Order 2.0, then pulled for 3.0.
- QUESTIONS:
- BC-8
4. Why are you starting down this new Phase-In path with this huge caveat? ... *"we are certain that these requirements will ensure rapid improvement and protection of water quality.... but the State may over rule and a new WDR could be issued'.... but all growers need to now..."*.
- This does not provide confidence to me as an experienced technical service provider (TSP) that I can provide specific, cost-effective and technically appropriate guidance now.
- BC-9
5. Why, at a minimum, has the Regional Board pulled back from providing technical compliance assistance to smaller, low capitalized growers, especially those whose first language is not English?
- BC-10
6. Alternatively, are you assuming that CDFA's training programs for CCA's will quickly fill in the TSP-gap??
- "This is legacy stuff," said Danny Merkley, director of water resources at the California Farm Bureau. "It's an issue that is really by no means a product of any nefarious act. It's literally people doing what they were told and thought was the best practice at the time." (Ashton, 2016)*
- Parry Klassen points the finger of responsibility at his predecessors: "A lot of what was in the groundwater now was on the surface 10, 20, 40 years ago. We are seeing the effect of what were probably shoddy practices in the '60s and '70s." (Gies, 2017)*
- BC-11
- One of the Cease and Desist studies that I have worked on will always be remembered as the only time I have been able to work with a drill rig and team to sample to GW. The job required coring at numerous locations in and outside of rapid infiltration ponds that received vegetable process wastewater. These ponds were on a loamy sand surface soil. The main parameters of concern were redox status, soluble carbon, salts and nitrate. Sample cores were collected at 4 foot intervals to first encounter with water. Nitrate 'slugs' were found deeper at the discharge outlets and at much more shallow depth at points furthest from the outlets. Nitrate slugs were found at even more shallow depth outside of the 'wastewater exposure' locations. Texture did not vary significantly with depth, ranging from loamy sand, to sand, to sandy loam texture classes to approximately 85 feet.
- These ponds had been loaded with up to 5 AF/year for at least 15 years. There was no evidence of elevated nitrate in GW pumped to the facility, nor did downstream GW show elevated nitrate. There were ample quantities of nitrate (> 10 ppm Nitrate-N) in slugs found 8 to 45 feet deep under ponds, but concentrations immediately above GW contact were close to the 'non-exposed' concentrations from identical depth intervals. We found no evidence to suggest GW impact at the time, but when a simple model was constructed, we determined that redox conditions below the treatment units did support denitrification in the vadose zone, but without better uniformity of water application, nitrate and salts would arrive at GW interface within another 10-12 years below the discharge outlets.
- QUESTION:
- BC-12
7. The quotes shown above point to a critical data gap. What vadose zone and deeper data sets conclusively suggest that evolving production practices will result in a clear GW trend in just five years, thus confirming that 4.0 Targets-Limits will have the assumed positive impacts on GW nitrate?

BC-13

A Digression: This is So Sad to See in a Publicly Available Summary of:

**California Nitrogen Assessment Shows the State of the Science on Nitrogen Use and Pollution  
California Paves the Way for Reconciling Agriculture and the Environment**

August 9, 2016 in [Food & Agriculture](#) [UC-DAVIS.edu](#)



A field of **CELERY** grows in the Salinas Valley. Credit: Pglam/Getty Images

YES, could simply be an editor's error, but I have a grower client who noted this and feels strongly that it symbolizes what he and others feels is the general lack of ag understanding by the non-ag State population.

BC-14

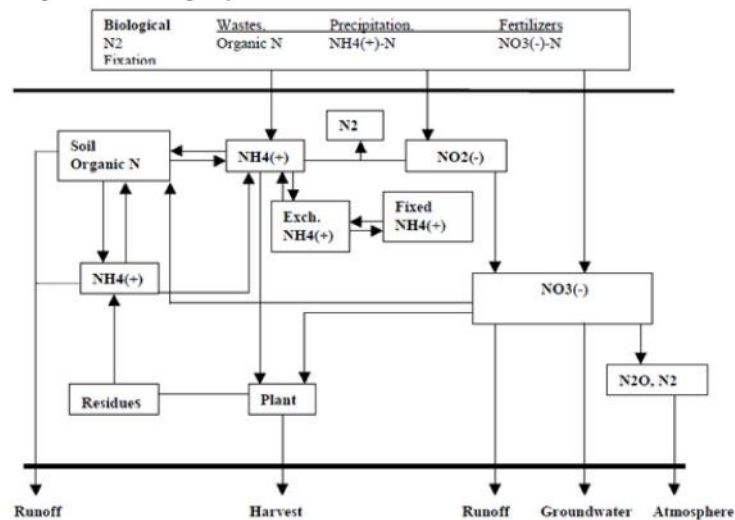
To stimulate my memories for this letter, I reviewed all my email communications with CCRWQCB staff since 2005. My overall impression is that I and clients have lost much time in attempts to explain on ground ranch or production system realities to staff and with a decreasing quality and timeliness of replies as we have moved forward. Trust has been lost.



The N Cycle is Complex: Deserves More Acknowledgement, Respect, and Application

$$A_{\text{Fert}} + (C \times A_{\text{Comp}}) + A_{\text{Irr}} - R = \text{Nitrogen Discharge}$$

After 40 plus years of working around and in the N cycle, first as a 12 acre vegetable grower in N. Carolina, then with central coast California growers at the field/block level and, via simulation modeling at a field and regional level, it is concerning to now see an overly simplified N input - N output mathematical expression proposed as a regulatory standard. As a soil-crop scientist, trained in systems ecology, it is difficult to accept the proposed and simplistic (A-R) = Discharge given our known N cycle reality shown here:



Nitrogen balance is basically defined as the difference between N inputs to and N removed in products from a crop system/field. A relatively *simple* N balance can be calculated from records of inorganic and organic nutrient applications and crop yield. The *most sophisticated* balances can account for additional N inputs, such as atmospheric deposition and net N inputs from legume fixation, as well as variations in the N content of harvested crop materials and changes in soil organic matter content. The cumulative analyses of field data and simulation model results indicate that a robust relationship exists between N balance and environmental N losses. Therefore, N balance is believed to be a useful predictor of field-scale N losses, particularly when aggregated over multiple sites and years (Cassman et. al., 2002; Hermanson et. al., 2015; Brentrup and Lamell, 2016; McLellan et. al., 2018).

McLellan et. al., (2018) state that currently, researchers, policymakers, and food supply-chain companies are reconsidering reasonably rigorous, but 'doable' N balance approaches as *simple* field- and farm-level indicators of N losses, responsive to changes in farm management practices, and likely to be both more credible and more useful to an individual grower. While calls and needs for '*more research*' are inevitable, I am suggesting here that given today's data gaps and the acknowledged complexity of the N cycle, the overly simplistic approach proposed for 4.0 is at best a partial and incomplete N balance.

The current RB proposal for a N balance reporting approach (A-R) is a partial step, but perhaps in long run, a potentially problematic approach to achieving rapid improvement in GW conditions. As example, efficient utilization of N fertilizer requires additional consideration of other N sources/inputs. While residual soil nitrate and nitrate in irrigation water can be measured relatively easily, the potentially large value of *indigenous* soil N should be considered in determining the optimal timing and amount of N fertilizer applications. Crop plant fertilizer recovery efficiency typically decreases as the amount of N fertilizer application increases especially at high rates of fertilizer input, which further increases the '*fertilizer substitution*' value of indigenous soil N (Cassman et. al., 2002; Miller et. al., 2018; Geisseler et. al., 2019).

BC-18

***Strategies intending to reduce nitrate contamination of groundwater but ignoring the complex dynamic relationships with other management factors are likely to fail (Letey and Vaughan, 2013)***

In 2002, I presented the following N Balance tables at a Central Coast vegetable meeting, but at that time I did NOT have the A-R data line. The data had been collected in two double cool season crop rotation blocks the prior season within 10 miles of the meeting location. The majority of growers in the room that day had not ever seen an N Accounting Estimate Budget or Balance that identified and quantified multiple potential N Input sources, and it stimulated thoughtful questions and challenges. I soon stopped using this tool in meetings/reports after it was politely dismissed as *'too complex and impractical'* during subsequent presentation-discussions with public and private professionals and growers. As with many ideas, time passing leads to 'rediscovery', and some form of N balance reporting and analysis is now incorporated or is being proposed in regulatory environments (CV and CC Boards) and being utilized by UC researchers (Oki et. al., 2019).

The below data were collected from two production blocks on the same ranch in the same growing season, but irrigated from different wells and with evolving practices being implemented by the grower (e.g. ET-based irrigation scheduling, soil nitrate quick tests). Crops shown in the first table below were established with sprinklers, then shifted to surface drip irrigation. The table shows the typical grower standard practice (Crop 1) at that time that resulted in a very large N excess remaining after both crops. For Crop 2 the total N input is shown as a range, dependent on the assumed availability of crop residue and residual soil N. Concurrent with cropping, soil and residue N mineralization was estimated with a mesh bag technique in the crop beds (Buchanan, unpublished).

**NOTE:** Potentially Excess N is calculated by two methods to illustrate two possible interpretations of the N potentially *lost* to the environment (e.g. discharge). The A-R analysis of Crop 2 would pass the proposed 2050 Discharge Limit, but would that production practice actually result in < 50lbs potentially moving to GW?

BC-19

| Nitrogen Source   | Crop 1<br>109 Day | Crop 2<br>65 Day |                    |
|---|-------------------|------------------|--------------------|
| Mineralized Soil N [0.5 and 0.75 lbs/day]                   | 55                | 50               |                    |
| Crop Residue N  |                   | 100              | Assume 50% release |
| Residual Soil N (pre-plant test to 12 inches)               | 16                | 45               | Assume 55%         |
| Fertilizer N [C1 pre=88 & fertigate=315; C2 fertigate only] | 403               | 75               |                    |
| Organic N (wastes, manure, compost)                         |                   |                  |                    |
| Irrigation N [C1= 1.8 AF and C2= 0.9 AF @ 8 ppm N]          | 39                | 20               |                    |
| <b>TOTAL N INPUT</b>  | <b>513</b>        | <b>290 - 215</b> |                    |
| Crop N Uptake (Harvest)                                     | 125               | 91               |                    |
| Residue N (Crop/Trim Residues)                              | 60                | 50               |                    |
| Root N  | 40                | 36               |                    |
| <b>TOTAL N UPTAKE</b>                                       | <b>225</b>        | <b>177</b>       |                    |
| <b>TOTAL N REMOVED</b>                                      | <b>125</b>        | <b>91</b>        |                    |
| <b>Potentially Excess N</b>                                 |                   |                  |                    |
| (N Input – N Removed)                                       | 388               | 199 - 124        |                    |
| (A-R)   | <b>317</b>        | <b>4</b>         |                    |

BC-20

The below table summarizes the same crops but with a 'reverse' rotation scheme from the second block. Crop 1 was the first planted crop block on ranch in early February (transplants, not seed) and was partly subsidized with precipitation. Objectives for myself and grower for Crop 2 were to:

- Set transplants with drip only;
- Apply an 'extreme minimum' of N fertilizer to the crop with each drip set (4 to 1 day intervals);
- Using weekly soil nitrate results to confirm decision-making and;
- Rely on assumptions of crop residue (root and shoot) and soil N mineralization input potential

| Nitrogen Source                                     | Crop 1<br>50 Day | Crop 2<br>105 Day |                            |
|---|------------------|-------------------|----------------------------|
| Mineralized Soil N [0.75 and 0.5 lb/day]            | 38               | 50                |                            |
| Crop Residue N                                      |                  | 80                | <i>Assume 50% release</i>  |
| Residual Soil N (pre-plant test)                    | 20               | 80                | <i>Assume 50% released</i> |
| Fertilizer N [no pre, fertigate only]               | 150              | 90                |                            |
| Organic N (compost)                                 | 8                | 4                 | <i>Assume 4.0 10% of N</i> |
| Irrigation N [assume C1=0.8 + C2=1.5 AF @ 19 ppm N] | 41               | 78                |                            |
| <b>TOTAL N INPUT</b>                                | <b>259</b>       | <b>367 - 312</b>  |                            |
| Crop N Uptake (Harvest)                             | 72               | 120               |                            |
| Residue N (Crop/Trim Residues)                      | 48               | 55                |                            |
| Root N  | 32               | 35                |                            |
| <b>TOTAL N UPTAKE</b>                               | <b>152</b>       | <b>210</b>        |                            |
| <b>TOTAL N REMOVED</b>                              | <b>72</b>        | <b>120</b>        |                            |
| <b>Potentially Excess N</b>                         |                  |                   |                            |
| (N Input – N Removed)                               | 187              | 247 - 192         |                            |
| (A-R)   | <b>127</b>       | <b>48</b>         |                            |

In this season, we took a significant risk with Crop 2 and while total yields were about 8% lower than mid-season blocks, crop quality was significantly improved, thus no difference in market yield as estimated by the harvest foreman. A contrast to Crop 1 shown in prior page, first table was dramatic, we knew we had begun to dial in on improved water and fertilizer. Again, NOTE that Crop 2 would also pass the proposed 2050 Discharge Limit based on A-R method.

BC-21

QUESTIONS:

8. Given the complexity of terrestrial and hydrologic systems, please provide more background on staff's technical research and discussion that supports that this simple proposed A-R method/limits really guarantees improving/clean GW (in all sub-regions, soils and crop systems)?

BC-22

9. Please can you consider and provide a more convincing argument that these A-R Limits are ecologic, agronomic, and hydrologically rigorous, and further, economically (beyond time and cost of paperwork) robust, thus ensuring both a future of sustained affordable food production and clean water?

Dig Deeper on Soil Sampling

BC-23

- Dischargers must measure and report the amount of soil nitrogen present in the soil at least once per reporting period.
- Soil nitrogen content must be measured at the time of year or the stage during the crop cycle when soil nitrogen content is high and therefore should be accounted for as a source of nitrogen.

BC-24

I'll admit to a soil scientist bias when it comes to assessing the value in collecting and interpreting soil test data. After having filed the minimally required soil nitrate-N on many past TNA reports, and discussed the Board's intent for a single time point 'measure and report' with a number of growers, I do not believe that it provides any clarity to staff or value linking it to protection of water quality. Yes, if a grower or consultant designs and implements a strict soil sampling program linked to maximizing effectiveness of specific soil N management decisions (as per Board's intent). However, the proposed regulation does not mandate specific post-harvest, pre-planting, or pre-fertigation conditions (e.g. days after residue disc down, days prior to pre-plant, sidedress, or drip injection application). A guess at when nitrate is high, is not useful.

BC-25

For some growers a typical pre-plant soil sample may be collected weeks or months prior to planting to guide phosphorus or potassium decisions, but still satisfies the reporting requirement. For another who may triple crop in a year, an early summer or early fall turnaround sample may be collected by a CCA working for the grower or agronomic service. Some sample the 0-6 inch depth interval, some sample to 12 inches, some sample the effective mature root zone depth of specific crops. Some sample with no care or guidance to be out of the pre-plant band. Some multi-rotation growers might sample prior to applying mid-season pre-irrigation, some might sample listed beds weeks before final shaping. All of these variables can have influence on the nitrate-N data returned and reported.

BC-26

An agronomically and water quality effective sampling program for multi-rotational systems has to be tied to key crop cycle windows, thus require multiple samples per year. Simply requiring one data point for a 500 acre ranch provides little value to grower, regulator, or public.

BC-27

Consideration: An alternative soil sampling or estimation requirement might have advantage in providing a broader overall rule of thumb for a decision maker attempting to maximize all N inputs to one or multiple crops during a year. As per your proposed compost 'discount', a soil organic matter or soil N release 'credit' (as shown below) could be applied to the Discharge equation. (note soil sampling depth specific to root zone of mature crop):

Example: Crop N uptake by onions vs. available N supply from non-fertilizer sources Sullivan et. al. (2001)

| Component of N budget  | (lb/acre)  |
|--|------------|
| Crop N uptake (Tops plus bulbs)                                    | 160        |
| <u>Available N supply</u>  |            |
| Preplant soil nitrate + ammonium N (0 to 24 in)                    | 76         |
| Irrigation water N (via drip irrigation)                           | 79         |
| Estimated soil N mineralization (                                  |            |
| <b>Mineralizable N soil test: (0 to 24 in)</b>                     | <b>116</b> |
| Fertilizer N   | 0          |
| Total estimated available N supply                                 | 271        |
| Estimated crop N uptake efficiency (Uptake ÷ N Supply) x 100 = 59% |            |

BC-28

Example of Possible 'Enhanced' Approaches for Soil N Balance Input: On following page is a protocol that I prepared and the Central Valley Regional Board approved for an animal processing facility. This was a portion of a WDR Cease and Desist Order response and required study. YES, it's a 'model', derived from a published model... sure, just as likely to be partially wrong as correct ... but one regulator thought it was an valid improvement from NO prior accounting for actual soil N processes and outcomes.

BC-28  
cont.

### A Method to Estimate Plant Available N (PAN)

The following describes first, the components of waste applied to soil, and model-derived parameters and equations for estimation of the N made available from soil and waste applications.

#### A. Calculate Organic Nitrogen (ON) in waste

Organic N is derived by subtracting the sum of Ammonium and Nitrate N from Total N.

$$[1] \text{ Organic N (mg L}^{-1}\text{)} = \text{Total Nitrogen (TN)} - (\text{Ammonium N} + \text{Nitrate N}^1)$$

<sup>1</sup>Nitrate N not detected and assumed to be zero in waste

#### B. Plant Available Nitrogen (PAN) for Surface Applied Waste

PAN will account for mineralization of the ON fraction, and explicitly account for volatilization and denitrification potential following application.

**Organic N mineralization** ( $\text{ON}_{\min}$ ) is calculated by multiplying waste organic N by a mineralization factor (MR):

$$[2] \text{ ON} \times \text{MR}^1$$

<sup>1</sup>MR = ON mineralization rate

**Volatilization** is the product of the ammonium-N and a volatilization factor (VR).

$$[3] \text{ NH}_4\text{-N} \times \text{VR}^2$$

<sup>2</sup>VR = volatilization rate

**Denitrification** is derived from the organic N mineralized and the ammonium-N remaining (residual) after volatilization that is ultimately available for nitrification. Therefore, denitrification is calculated by multiplying the sum of  $\text{ON}_{\min}$  and the residual ammonium-N nitrified by a denitrification factor.

$$[4] (\text{ON}_{\min} + \text{NH}_4\text{-N}) \times \text{DN}^3$$

<sup>3</sup>DN = denitrification rate

These parameters are combined into the following equation:

$$[5] \text{ PAN}_{\text{conc}} (\text{mg L}^{-1}) = ((\text{ON} \times \text{MR}) + (\text{NH}_4\text{-N} \times \text{VR})) - ((\text{ON}_{\min} + \text{NH}_4\text{-N}) \times \text{DN})$$

#### C. PAN Method for SRC Effluent

Organic N mineralization (MR) is assumed to be 35 percent per year, similar to manure lagoon and other manure slurries (Gale et al., 2006; Gilmour and Skinner, 1999; USDA, 1992). Ammonia volatilization (VR) is assumed to be 40 percent, based on literature (Chastain, 2006; Gilmour and Skinner, 1999) and model output from the Land Application Study. Denitrification (DN) is estimated at 30 percent as derived from model output. The use of relatively high volatilization and denitrification rates is supported by a.) the unique soil and waste application conditions (i.e., low permeability, high ambient temperatures, high concentrations of ammonium in waste, fluctuating redox conditions, and the presence of available soil organic carbon) described above and in the Land Application Study, and b.) the measurements of low soil nitrate-N (< 5ppm) found in the 5 foot deep vadose zone at the end of the application season, as discussed in the Land Application Study.

$$[6] \text{ PAN} = ((\text{ON} \times 0.35) + (\text{NH}_4\text{-N} \times 0.6)) - ((\text{ON}_{\min} + \text{NH}_4\text{-N}) \times 0.7)$$

**Organic N mineralization** ( $\text{ON}_{\min}$ ) = 35 percent per year

**Ammonia volatilization** (VR) = average of 40 percent over year

**Denitrification** (DN) = average of 30 percent of  $\text{ON}_{\min}$  and residual  $\text{NH}_4\text{-N}$



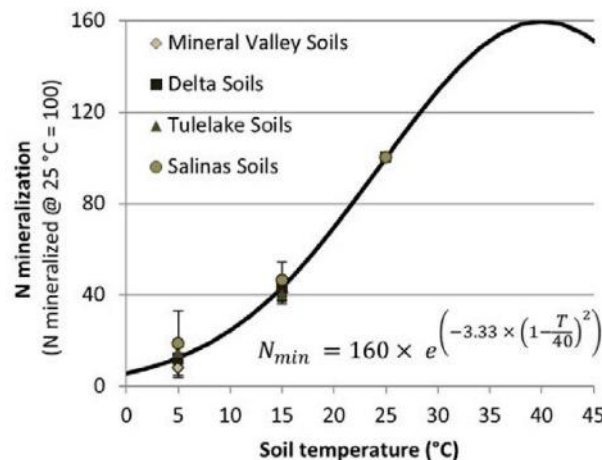
BC-29 Don't Count All That N: A 'Discount' for Compost

- Dischargers have the option of using a compost discount factor (C) to calculate the amount of compost nitrogen mineralized during the report year the compost was applied to the ranch. Different compost discount factors are applied based on the carbon to nitrogen (C:N) ratio of the product.

OK, an incentive for soil organic C management, increased soil organic N, and increased soil N mineralization potential, SO also adds more 'invisible unaccounted for N' to applied thus... A-R = more discharge to GW.

The C:N ratio has more often been found to be a poor and occasionally a good predictor of N release from composts (Buchanan, 2002; Brewer and Sullivan, 2003; Camberdella et. al., 2003; Griffin and Hutchinson, 2007; Sullivan et.al., 2018). The feedstocks and changes that occur during the active composting phase clearly influence the mineralization of both N and C when composts are incorporated into the soil. Prior work has concluded that commonly used maturity parameters like total C, total N, and C:N ratio are poorly correlated with the rate and extent of mineralization, and with plant growth parameters. Sullivan et. al. (2007) also state that the C:N ratio is an unreliable indicator of compost maturity. Griffin and Hutchinson (2007), found that two compost constituent ratios (C:N and C:Organic N) were only weakly correlated with N release, while carbon dioxide release, and two organic C fractions were significant predictors of N release.

BC-30 Sullivan et. al. (2018) might be assumed to be your source for the compost 'discount' guidance in the proposed 4.0 regulation, as they recommend identical credits based on research in Washington and Willamette Valley region of Oregon. In comparison, in-field and lab tests with a wide range of composts, produced by differing central coast California producers and with differing feedstocks, it was found that compost maturity, feedstock type and total N content were better predictors of N release characteristic than C:N ratio (Buchanan, 2002). In that study, N release from various materials ranged from -16% to 56%, with poor correlation to C:N ratio. A simple single factor may be cause for such large differences between Oregon-Washington and Central Coast California findings, higher average annual temperatures in Central Coast soils. Giessler (2017) tested the impact of temperature on N mineralization rate in a range of California soils, finding identical exponential increases regardless of soil type and amount of N mineralized (see below figure).



Consideration - The choice is incentive or the risk of under-estimation of N released from certain composts. Consistent with the points I have raised concerning the complexity of the N cycle and the potential importance of other N sources, a liberal standard assumption about the N release from compost runs is not scientifically based. Buchanan (2002) worked with composts that reduced soil ammonium and nitrate or potentially supplied up to 23.8 lbs N/dry ton and up to (given the highest grower (organic) practice in study) 374 lbs N/acre during a double crop rotation period of 210 days.

QUESTION:

- BC-31 10. Please provide or cite the research results that are the basis for the proposed 'Discount'

|       |   |
|-------|---|
| BC-32 | <u>Estimate or Measure - More Guidance Please?</u>  |
| BC-33 | <ul style="list-style-type: none"> <li>Dischargers must track and record: total nitrogen removed from the ranch and <u>information on irrigation water application and discharge volumes</u>.</li> </ul> <p>The INMP will become a required section of the Farm Plan and must include:</p> <ol style="list-style-type: none"> <li>Monitoring and recordkeeping necessary to submit complete and accurate reports</li> <li>Planning and management practice implementation and assessment (compliance with fertilizer limits)</li> <li>Descriptions of all irrigation, nutrient, and salinity management practices implemented and assessed</li> </ol>   |
| BC-34 | <p><u>Consideration - 'Information on irrigation water application' does not equal guidance.</u> In the past, I was involved in two draft INMP document reviews and noted the great disparity in format, content, and specifics between the two. The prior efforts to have professional certification of required INMPs may have failed, in part due to lack of a specific guidance template provided by Board staff (thereby removing some of perceived liability). Considering your emphasis on Third-Party options that inevitably bring standardization of reporting to all applicable requirements, I am hoping that a guidance document (identical to SAP-QAAP template) will be distributed, if only for 'leveling all the ranches'.</p>   |
| BC-35 | <u>QUESTIONS:</u>   |
| BC-36 | <ol style="list-style-type: none"> <li>Will a new INMP template document be developed and distributed?</li> <li>Or, will the 2018 template for INMP Annual Summary Report remain as your chosen guidance?</li> </ol>  |
| BC-37 | <ul style="list-style-type: none"> <li>Where possible, Dischargers are <u>encouraged to measure</u> the volume of irrigation water applied to the ranch or to each specific crop grown.</li> <li>Dischargers must estimate and report the volume of water discharged through surface outflows, including tile drains, <u>and the volume of water discharged to groundwater through percolation</u></li> </ul>   |
| BC-38 | <p><u>Irrigation Reporting</u> - There are reasons for concern that irrigation estimates can be under or over actual applications. I am concerned that leaving this requirement vaguely as an estimate, could complicate things for a good citizen company whose ranches are surrounded by 'under-estimators'. Imagine, in 2026 the Groundwater Trend analysis (in high recharge rate areas) shows a COVID-like spike in nitrate levels, all fertilizer applications reported are below Limits, but neighbors in reality are applying 160% of crop ET... push push push. Data reported provides no insight into reason for increasing trend and then... the fate of good citizen grower?.</p> <p>More than the total water applied to a ranch area, <u>irrigation scheduling</u> has critical, direct impact on crop fertilizer N use efficiency, temporal spatial distribution of nitrate in soil, as well as, the quantity of post-harvest residual soil nitrate. Other than a reference to the CropManage irrigation and N management tool, there has been little emphasis by the Board on promoting specific tools (rather than vague practice lists) to improve crop water use efficiency other than simply reducing total irrigation.</p> |
| BC-39 | <p><u>Surface Water Discharge</u> - Monitoring and reporting of surface (stormwater) discharges will be difficult to achieve. Robust, therefore useful estimation of surface outflows, <u>require specific methods</u>, yet no guidance is provided for individual growers. My experience with 'rapid' estimation of tile drain outflows (minimum of 1 hour when no meter installed, but flow is variable due to what three other area growers are doing, so changes every day) suggests that no busy grower or staff can consistently record accurate estimates without flow or time on-off meters (with regular confirmation of discharge pump flow rate).</p>  |
| BC-40 | <p><u>Groundwater Discharge</u> - In the last 4.0 draft, there was a proposed equation for calculating the assumed water volume discharged to groundwater, but no specific method is provided in the current 4.0 draft. Of course no simple equation based on water applied versus water removed by crop ET can account for all of the possible variables influencing actual pollutant discharge to GW.</p>   |
| BC-41 | <p><u>QUESTION:</u></p> <ol style="list-style-type: none"> <li>What are the quantitative success or enforceable targets or limits for water volume assumed to be discharged to GW?</li> </ol>   |



BC-42

It is well established that the key to minimizing the risk of fertilizer nitrate movement into groundwater is to minimize deep percolation of water and nitrate in soil. Invoices or weekly application records are common good grower practices potentially allowing accurate N fertilizer use reporting. But in my experience water, perhaps much more critical as the 'surface soil to GW conveyance medium', is less often measured accurately as a basis to develop a useful time on-to-volume relationship, and even less often recorded on a weekly basis.

A reduction of leached N equal to the reduction of N application seems to be a common assumption, as per the A-R approach. This assumption holds true if the higher N application is greater than is necessary to get maximum production, but it will not hold true if the reduced N application induces a reduction in crop growth and yield. Indeed, reductions in N application can in some cases cause only very small reductions in the amount of N leached.

***Strategies intending to reduce nitrate contamination of groundwater but ignoring the complex dynamic relationships with other management factors are likely to fail (Letey and Vaughan, 2013)***

Discounting the critical impact of irrigation management when addressing concerns for N in the environment is common as evidenced by this list contained in the California Nitrogen Assessment Report (Tomich, 2016):

Six actions fundamentally change nitrogen cycling in the state, all intensifying since 1980:

- Nitrogen fertilizer use (both synthetic & organic sources)
  - Manure management
  - Fossil fuel combustion
  - Industrial processes
  - Wastewater management
  - Changes in land use
- Regulations that attempt to reduce groundwater degradation by focusing strictly on the amount of N applied, without consideration for the interactions between the amounts and timing of both fertilizer and water applications, most likely will not achieve their desired goal. (Letey and Vaughn, 2013)

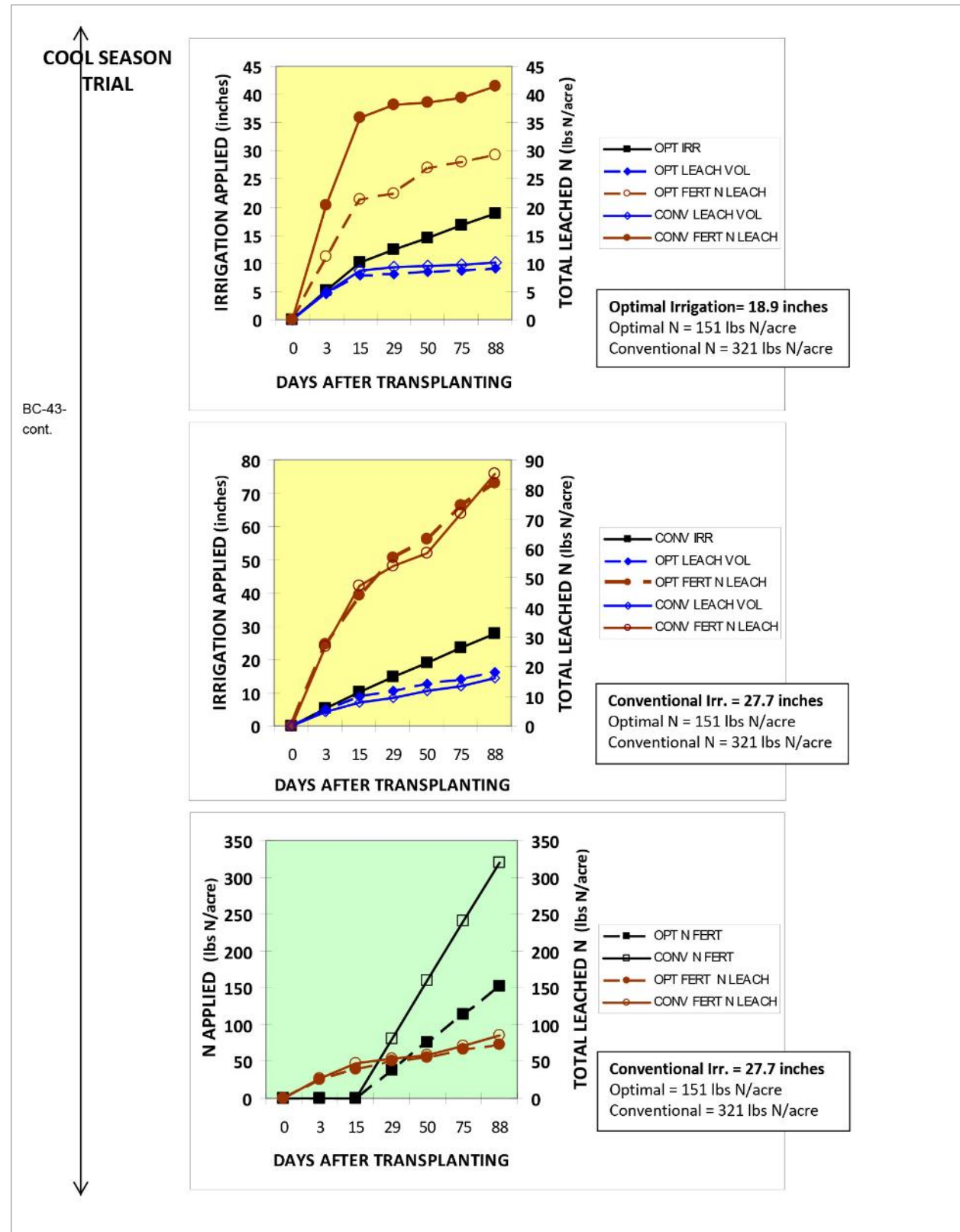
For irrigated agriculture in California environments, nitrate leaching represents the superimposing of water management on fertilization, soil nitrification, crop removal, and denitrification (McNeal and Pratt, 1978). Nitrate leaching is more highly correlated with water moving beyond root zone than with total amount of N applied (Greaves, 1921; Letey et al., 1978; Pratt et al., 1984; Prunty and Montgomery, 1991; Sexton et al., 1996; Spalding et al., 2001; Thompson et al., 2007; Buchanan, 2010; Mikkelsen et al., 2015; Bai et al., 2020). Quemada et al. (2013) reviewed a large number of published research documents concluding that management practices that adjust water application to crop needs reduced N leaching by a mean of 80% without a reduction in crop yield. Improved fertilizer management reduced N leaching by 40%. John Letey (2013) noted that only one of the recommendations made by the State Water Board with regard to nitrate in groundwater identifies water management as a potential controlling factor. Yet it is clear that improvements in N use efficiency for irrigated agriculture must be simultaneously coupled with advances in irrigation scheduling.

BC-43

I am going to present and summarize data from a recent research paper to emphasize this point (following pages). Li et. al. (2018) completed an (irrigation x N fertilizer) trial in a greenhouse cucumber production system, stating in their introduction that "... excessive N fertilization is a common practice ... due to excessive fertilization, N recovery is less than 10%, and ... studies are generally focused on fertilizer, not irrigation". They transplanted cucumbers into production houses in two growing seasons (cool and warm) with these treatments:

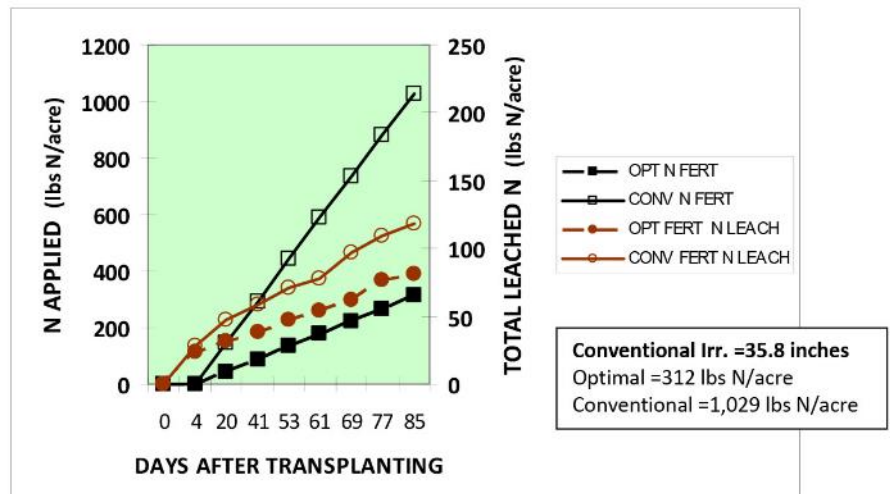
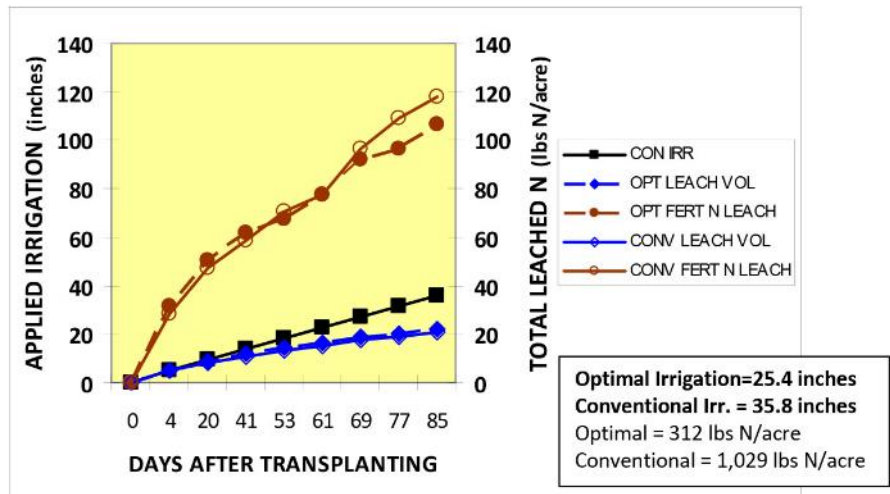
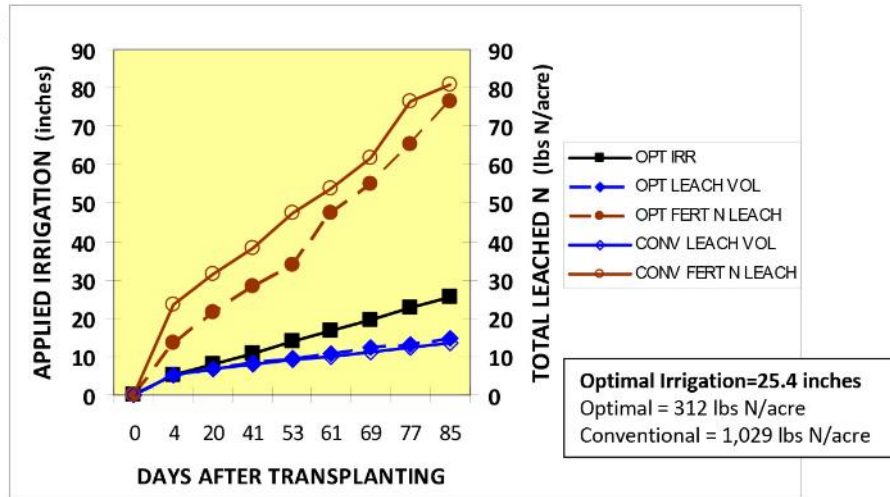
- (1) Conventional irrigation with conventional N fertilization,
- (2) Optimal irrigation with conventional N fertilization
- (3) Conventional irrigation with optimal N fertilization and;
- (4) Optimal irrigation with optimal N fertilization

Irrigation had more influence than N fertilization on leaching water quality in excessively fertilized soils. Overall, while the most excessively fertilized crop (>1,000 lbs N/acre) had the highest total nitrate leaching, optimal irrigation was more efficient than optimal fertilization in reducing nutrient leaching. The following two pages summarize some of their data.



WARM SEASON  
TRIAL

BC-43-  
cont.



QUESTIONS:

BC-44

14. So much emphasis on N fertilizer inputs and so little emphasis on water management. At one time or another Santa Clara Valley Water, San Benito Water, Pajaro Water, and Monterey Water entities ran Mobile Irrigation Labs (or something similar).

What has happened to the former emphasis and consensus recognition of the value of evaluating application uniformity of irrigation systems and estimating Irrigation Efficiency (IE)?

BC-45

15. Theoretically, since at least 2010, assigned staff within the public TSPs (NRCS, RCD) have received training and funds to purchase flow monitoring equipment, even constant recording data loggers and modem data retrieval systems. Beyond that, IMHO, there is under-utilized skill and experience in the private sector, both TSPs and irrigation designers and suppliers.

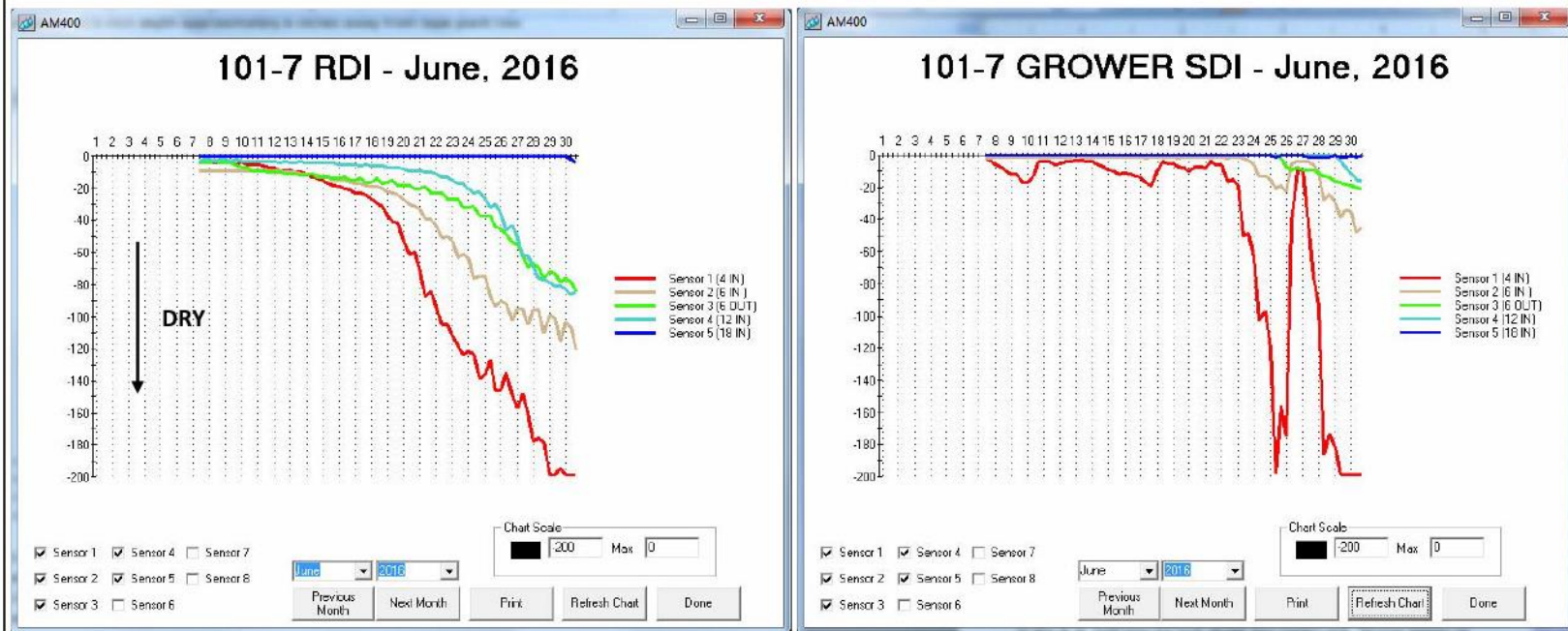
Why not use that investment to create a mandatory and regionally phased-in effort to, at a minimum, provide growers with at least enough repeated flow data records to confidently use a time on-time off system to develop and maintain irrigation records?

|       |  |
|-------|--|
| BC-46 | <p><u>Crop Plant Physiology: Possible Conundrums for 2021 to 2050?</u></p> <ul style="list-style-type: none"> <li>• <i>"If you're a farmer and you're rotating multiple crops per year in a field, you will not be able to have multiple crops because the minimum nitrogen that you have to apply to crops," said Brent Burchett, Executive Director of the San Luis Obispo County Farm Bureau. "This is a pretty crazy standard in that we no longer think that we'll have year long production, which is a hallmark of California agriculture."</i></li> <li>• <i>Farmers must achieve significant improvements in Nitrogen Use Efficiency to maintain acceptable standards of environmental quality and farmers must make a profit to stay in business (Cassman, 2002)</i></li> </ul> <p>Crop N demand is determined by biomass yield and the physiological requirements for tissue N. In general, the amount of N accumulated by a crop plant is affected by:</p> <ol style="list-style-type: none"> <li>a) The amount of N supplied by the soil or added as fertilizer;</li> <li>b) the genetic potential of the species or cultivar to absorb N, which is influenced by genetic factors such as tolerance to biotic and abiotic stresses, rooting pattern and physiological N uptake efficiency;</li> <li>c) the growth or yield potential under a set of environmental conditions and soil properties; and</li> <li>d) the ability to retain N in the rooting zone during the period of crop N uptake</li> </ol> <p>Crop physiological N requirements (crop N need) are controlled by the efficiency with which N in the plant is converted to biomass (root, shoot, leaf, fruit, or grain yield). Nitrogen use efficiency (NUE) comprises three key components: the N uptake efficiency, the crop's internal N utilization efficiency in producing biomass, and the nitrogen harvest index or harvested product. For each component, many underlying physiological mechanisms and (combinations of) genetic traits are relevant. These may include diverse and complex traits such as root architecture, the N uptake per unit of root length, leaf senescence and (re)mobilization of N in the plant, and harvest N index.</p> <p>Grower applied fertilizer N not taken up by the crop or immobilized in soil organic N—which includes both microbial biomass and soil organic matter—is vulnerable to losses from volatilization, denitrification, and leaching. The overall NUE of an irrigated cropping system can therefore be increased by optimized irrigation scheduling, achieving greater uptake efficiency from applied N inputs, and/or by reducing the amount of N lost from soil organic and inorganic N.</p> |
| BC-47 | <p><u>The 'Tyranny' of A-R</u> - There is a looming 'catch' in the rather large assumptions concerning the proposed Discharge Limits for 2026 to 2050, not to mention the 300 lbs N/acre/year Fertilizer Limit. The tremendous diversity of Central Coast region crop types, also belies a diversity of crop product harvest indicies/portions/fractions. This may further the potential 'tyranny of A-R'... where for example, crops with High A's and High R's, more easily and sooner meet the targets-limits of <math>D_{GW}</math> and <math>D_{SW}</math>, compared with crops with High A's and Low R's, and some that might not ever be able to meet the 2050 Discharge Limit.</p> <p>In many crops, only a proportion of the N taken up by the plants is removed with the harvested plant parts. The proportion of above-ground N removed from the field with harvested materials is crop-specific and may range in annual crops from about one third (e.g. broccoli) to almost 100% (e.g. silage corn or forage crops).</p> <p>As example, a short-cycle crop such as lettuce or spinach (35-65 days) needs to be able to capture and exploit available soil N as efficiently as possible, in a short period, and at an early stage. At harvest, depending on market specs/pack, the harvest portion typically exceeds 60 to 70 percent of total plant N uptake (including root N). These crops also have some 'elasticity', as example, when N stress occurs in a lettuce crop in the upper soil layer, roots can elongate and increase root length density at deeper soil layers to capture more N. The same elasticity could likely be promoted with irrigation management.</p> <p>Bell peppers are in the ground for ~160 to ~210 days, and may be harvested three times. However to support that harvest product a sturdy large plant is necessary and with that, harvest portions are lower than leafy greens. Additionally that large sturdy plant has a high N requirement, but also allocates a large amount of N to mature fruit. We have observed some 'elasticity' in this crop as well, and a not universal practice of 'cheating back' on irrigation water after transplant establishment and well ahead of flower development allows for deeper root penetration and more effective N uptake during the remaining cropping period.</p>  |



BC-47-  
cont.

In 2016, we monitored an irrigation trial on red bell peppers, where two drip tape technologies were compared for overall growth pattern, yield, quality, N use, weekly and total crop and irrigation water requirement. Standard technology (SDI) was used with weekly CIMIS Spatial ET-based scheduling advising, that allowed the irrigation foreman to adjust based on specific experience and crop observation. Ultimately the second technology (left graph below) could be characterized as providing a type of regulated deficit irrigation in the first month after planting. Moisture sensors were placed immediately adjacent to plant row and drip tape at 4, 6, 12, and 18 inches. An additional sensor was installed at 6 inch depth approximately 8 inches away from tape plant row.



A quasi Regulated-Deficit irrigation (RDI) schedule occurred due to characteristics and operational aspects of this product. Lower volumes of water, compared to the grower standard on right were provided at a 6 inch depth. Roots developed rapidly into lower soil depths due to increasing water deficit at 4 and 6 inches and at 30 June the plants were substantially larger, with greater canopy cover.

Grower Standard Drip (SDI) had expected moisture changes at 4 and 6 inch depths, reveals the foreman's dry down practice, and shows response to irrigation on June 27. It appears that roots began to draw water from the 12 inch depth by late June. The 6 inch tape away from the row began to dry and is not showing response to irrigation. The soil remained saturated at the 18 inch depth.

BC-47  
cont.

Unfortunately much of the genetic 'wiring' for crop plants may be largely fixed. As I consider the 4.0 proposed progress of Discharge Targets and Limits and effective actions, it is critical to consider implications for farm economics, crop types, crop systems, and crop rotational systems, barring future miracle breakthroughs in plant breeding. The following table uses published and unpublished data to describe how a number of Central Coast region crops looked like in recent past, to consider how they may fare in the proposed future.

The table below uses reported fertilizer applied and N uptake by various crop components in the following calculations:

Harvest N Fraction = (Harvest N Accumulation/Total N Uptake)\*100 - This considers how 'efficient' the specific crop and conditions of growth are in allocating N to the harvested product (sic. N Removed). We must consider this ratio as relatively 'fixed' by the crops 'wiring'.

NUE = (Harvest N Accumulation/Fertilizer N)\*100 - This is a 'standard' assessment that provides indication of how efficient is the crop and management practice (e.g. fertilizer amount, timing and irrigation scheduling) in getting applied N into the harvested product. (NUE = Nitrogen Use Efficiency)

A-R = (A<sub>fert</sub> + A<sub>irr</sub> - Crop N Removed) - As defined in 4.0, and assumes no irrigation water N, no cover crops, no residue removal from field, no surface water or groundwater discharge treatment.

BC-48

| Crop                    | Fertilizer | Total N Uptake | HarvestN     | Residue N  |      | Harvest N Fraction | NUE         | A-R          |
|-------------------------|------------|----------------|--------------|------------|------|--------------------|-------------|--------------|
|                         |            |                |              | Shoot-Leaf | Root |                    |             |              |
|                         |            |                | (Lbs N/acre) |            |      | (%)                |             | (lbs N/acre) |
| <b>Leaf Lettuce</b>     |            |                |              |            |      |                    |             |              |
| *****Spring             | 200        | 115            | 80           | 35         | 18   | <b>69.6</b>        | <b>40.0</b> | <b>120</b>   |
| *Summer                 | 124        | 100            | 70           | 30         | 15   | <b>70.0</b>        | <b>46.7</b> | <b>54</b>    |
| <b>Baby Lettuce****</b> | 192        | 84             | 57           | 27         | nd   | <b>67.9</b>        | <b>29.7</b> | <b>135</b>   |
| <b>Spinach****</b>      | 180        | 124            | 90           | 34         | nd   | <b>72.6</b>        | <b>50.0</b> | <b>90</b>    |
| <b>Bell Pepper</b>      |            |                |              |            |      |                    |             |              |
| *Early                  | 428        | 245            | 142          | 83         | nd   | <b>62.3</b>        | <b>33.2</b> | <b>286</b>   |
| *Mid-Late               | 360        | 242            | 126          | 116        | 38   | <b>52.1</b>        | <b>35.0</b> | <b>234</b>   |
| **Late                  | 252        | 224            | 111          | 113        | nd   | <b>49.6</b>        | <b>44.0</b> | <b>141</b>   |
| <b>Jalapeno**</b>       | 280        | 240            | 139          | 101        | nd   | <b>57.9</b>        | <b>49.6</b> | <b>141</b>   |
| <b>Cauliflower</b>      |            |                |              |            |      |                    |             |              |
| *****1st crop (40")     | 300        | 220            | 80           | 140        | 33   | <b>40.0</b>        | <b>26.7</b> | <b>220</b>   |
| *****2nd crop (40")     | 175        | 180            | 60           | 120        | 28   | <b>34.3</b>        | <b>33.3</b> | <b>115</b>   |
| ***Summer (40"-80")     | 221        | 355            | 67           | 288        | nd   | <b>18.9</b>        | <b>30.3</b> | <b>288</b>   |
| ***Winter (40"-80")     | 351        | 273            | 70           | 203        | nd   | <b>25.6</b>        | <b>19.9</b> | <b>281</b>   |
| <b>Broccoli</b>         |            |                |              |            |      |                    |             |              |
| ***Summer (40"-80")     | 182        | 337            | 99           | 238        | nd   | <b>29.4</b>        | <b>54.4</b> | <b>83</b>    |
| ***Winter (40"-80")     | 272        | 249            | 94           | 155        | nd   | <b>37.8</b>        | <b>34.6</b> | <b>178</b>   |

\*Buchanan, unpublished    \*\*Baameur and Smith, 2012    \*\*\*Smith et. al., 2015    \*\*\*\*Smith et. al., 2016    \*\*\*\*\*Hartz, 2007

Clearly cauliflower, broccoli, and peppers may become much more challenging crops to produce. The Harvest Fractions for the Brassica crops are relatively lower in comparison to leafy greens and peppers. At the same time peppers, regardless of the amount of time they are in the ground (early vs. late related to total applied fertilizer N) have a relatively higher Harvest Fraction and large Harvest N (removed).



|                |   |
|----------------|---|
| BC-48<br>cont. | <p>Note that NUE for these crops and systems producing this data, has a large range, that is more influenced by management than the genetic and physiologically determined Harvest Fraction. Again the cauliflower data jump out. Broccoli could have a large seasonally-driven range, and data concerning the extent of it's root system (like cabbage and cauliflower) has revealed that it can be grown with consistently higher NUEs. Leafy greens due to their generally more shallow root system and high growth and N demands early are more sensitive to management practices driving NUE.</p> <p>The concept of NUE and this way of ranking effectiveness of crop management has been in my head since a 1980s published study done in Pajaro Valley with N<sup>15</sup>-labeled fertilizer, that found that NUE for head lettuce was as low as 12% (Welch et. al., 1983). Looking at the leafy green data from the prior table, we can conclude likely positive progress over the years since 1982-83 towards optimization of fertilizer efficacy, assisted by (technology drip systems and N injection, perhaps varieties, and precision application of less lbs/acre). As example, NUE is significantly increased by injecting N fertilizer in the irrigation water, when compared to the soil application of the identical quantity of N. At the same time Thompson et al. (2000a, 2000b) found that even in drip-irrigated systems, maximizing broccoli or cauliflower yield by the maintenance of low soil moisture tension (wet) can result in a large leaching fraction, and associated N loss. Smith et. al. (2016) note that cole crop residue management presents a serious challenge to N efficiency in these production systems. Both residue amount and N concentration are high, and the rapid mineralization of residue N is an additional management challenge.</p> |
| BC-49          | <p>Finally, given the current A-R Limits proposed in 4.0, it is clear that much work and advancements, both genetic and management, will HAVE to co-evolve between 2026 and 2050. As per the quotation at the head of this section, we can not be sure that the Limits proposed can be met by technology and human operators and there will be economic uncertainty ahead for certain crops and rotational systems. There is no doubt regarding the potential for required shifts in farm economies whether in a more automated (increased capitalization) scenario of software, field-installed real-time sensors, satellite driven irrigation and precision nutrient application -or- alternatively, a less food and profit produced per acre scenario.</p> <p>Plant breeders suggest that there are limits to genetic manipulation of crop physiological efficiency, whether root uptake, nitrate assimilation, or N reallocation efficiencies. Breeding for NUE has not yet been incorporated to a large extent in practical breeding programs of many crops, because NUE is not only a complex trait but also one that is largely influenced by soil conditions that are difficult to measure or control. Cassman et. al. (2002) see little hope for genetic improvement in physiological efficiency because the relationship between economic yield and crop-N uptake is tightly conserved. This suggests only marginal gains in N efficiency are possible from molecular engineering of N assimilation and bio-chemical transformation pathways within the plant. Likewise, N-uptake capacity of crop root systems does not appear to be a sensitive factor limiting the efficiency with which most crops acquire soil or fertilizer N, especially when compared to potential improvements in NUE from better crop- and soil-management practices.</p>                                 |
| BC-50          | <p><u>QUESTIONS:</u></p> <p>16. Are Board staff preparing to inform and financially assist with the required ongoing research in crop breeding and field-evaluation of emerging technologies that appears essential to the proposed Discharge Limit timelines?</p>  |
| BC-51          | <p>17. Taking the 'Early' bell pepper data shown and adjusting for a realistic increase in NUE via grower crop management and a fertilizer limit of 300 lbs N/acre, it still suggests that an early planted pepper crop currently in the ground from April to November will perhaps not be viable well before 2050. For a grower the first 'reach' to maintain net revenues might be grow more acres.</p> <p>Is the Board and staff intent, to use these requirements to reduce annual production acreage, as additional means to reduce annual N loading?</p>  |
| BC-52          | <p>18. None of the in-grower field research data provided in this section's table (prior page), indicates that these growers would comply with the 2050 A-R Discharge Limit. Growers will need to develop additional 'R's'...</p>   |

### How About Clarity?: Defining How and When Cover Crops are 'R's' and when they are 'A's'

$$R = R_{Harv} + R_{Seq} + R_{Treat} + R_{Other}$$

BC-53 My argument in the previous section on the N cycle is that the proposed A-R approach is overly simplistic and, perhaps is a 'baby step' to use N balance analysis towards improving GW quality, but discounts/ignores other sources of N (=A) vulnerable to movement to GW. Well the other parameter (=R) is clearly defined in 4.0, whether  $R_{Harv}$  or  $R_{Seq}$ , even the 'anything could be possible'...  $R_{Other}$ . BUT I am surprised that after years of hearing a refrain... '... if only growers planted cover crops... then...', that there is no detailed referencing or defining how cover crops will be evaluated... credit or debit? OK, so there is mention that  $R_{Seq}$  includes semi-permanent crops.

- $R_{Seq}$  is the amount of nitrogen removed from the field through sequestration in woody materials of permanent or semi-permanent crops

### QUESTION:

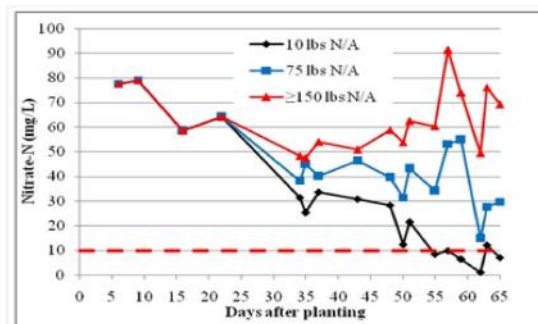
BC-54 19. Does that includes a 3 month grass, legume, or mixture cover crop? Please, specific language!!

BC-55 The use of cover crops to limit fallow-season nitrate-N leaching loss has been widely studied. Although winter cover cropping has been shown to substantially reduce nitrate leaching in Salinas Valley vegetable production (Jackson et. al., 1993a, 1993b; Wyland et al., 1996; Smith et. al., 2005; Hartz, 2006; Smith and Cahn, 2011; Brennan and Boyd, 2012; Brennan et. al., 2013; ), cover crop usage remains uncommon, for logistical or even soil water conservation reasons. Research data can occasionally point to benefits, but then when a more expansive and systematic approach is applied, it may muddy things.

BC-56 Smith et. al., (2005) concluded that white mustard and Merced rye covers crops planted in October, disked into in late November (or before excessive winter precipitation), clearly reduced nitrate levels at the 90 cm (35 inch) soil depth. Both cover crops contained ~200 lbs N/acre prior to soil incorporation. Based on this finding, a mustard or Merced rye cover crop might, in some logic bubble, be assigned as  $R_{Seq}$  in the A-R formula. Indeed, but what is the potential fate of the nitrate-N mineralized from the incorporated residue N in the upper portion of the soil?

BC-57 Smith and Cahn (2011) evaluated low growing cover crops, planted on listed beds in November, then 'burned down' with herbicides in late January. While leaching losses were highest in bare winter fallowed soil, there was very little positive reduction in leaching losses by the cover crops as water infiltration and percolation was higher, thus water volume x lower nitrate concentration still produced a similar N load to winter fallow (less water volume x higher nitrate concentration). So what is a grower going to enter for  $R_{Seq}$  in this system?

BC-58 The above cover crop impacts can be interpreted two ways, a narrow view leads to assumption that  $R_{Seq}$  for mustard and Merced rye could be as high as 200 lbs N/acre, but actually it's only just for that moment. After incorporation into soil the fate of residue N, may be loss due to denitrification, microbial (active soil C) immobilization, 'occlusion' inside soil aggregates, discharge to surface water, and microbial mineralization (release) to nitrate. 'Nitrogen conscious farming' will 'credit and conserve' that mineral and microbial N for a subsequent food crop, as stated by Greaves (1921)... 'bigger crops if N maintained in soil'. Conversely, in my experience (and unpublished data), all it takes is an aggressive post-seeding or post-transplanting irrigation schedule to lose that N to leaching below the developing and later maturing crop rooting depth. Smith (2010) noted (below) significant early nitrate concentrations in leachate under lettuce with only 10 lbs N/acre applied.



|       |   |
|-------|---|
| BC-59 | <p><u>QUESTIONS:</u></p> <p>20. In my mind I must assume, based on the 4.0 proposal, that a cover crop would be entered in the R-portion of the A-R for year xxxx, then some portion of that could (will be required??) to be entered as an 'A' for the following year yyyy.</p> <p>Is this the staff and Board intent?</p> <p>What guidance will be provided to estimate N mineralization from cover crop residues that also could become <math>D_{GW}</math>??</p>  |
| BC-60 | <p>21. As far as I can tell, there is no guidance, reference to, definition for legume (N-fixing) cover species. How will you look at N-fixing crops, that typically accumulate both soil (<math>R_{Seq}</math>) and atmospherically fixed-N (A)? Clearly, many growers historically and pragmatically, look at these crops as organic matter and N sources.</p> <p>Again, how is a grower who cover crops with legumes to fill out the Total N Applied report???</p> |
| BC-61 | <p>22. Will need a N Removal Coefficient for cover crops or as you approach compost, an incentive 'discount'?</p> <p>How is this to work for cover crops?</p> <p>Will a grower be required to submit a technical proposal for approval of method and confirmation (statistical?) of how much ' <math>R_{Seq}</math>, <math>R_{Other}</math> -or- 'A<sub>portion</sub>' is possible with a specific cover crop species and/or practice?</p>                            |

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| BC-62 | <p><u>We Don't Plant in Soil: Greenhouse Bench, Nursery Containers, and Container Food Crops?</u></p> <p><i>This Order does not cover point source-type discharges from <u>commercial nurseries, nursery stock production, greenhouses, or other operations</u>.</i></p> <p><i>Dischargers who can quantifiably demonstrate that their ranches pose no threat to surface water quality or groundwater quality may submit a technical report to the Executive Officer for review. <u>The technical report must demonstrate that nitrogen applied at the ranch does not percolate below the root zone in an amount that could degrade groundwater and does not migrate to surface water through discharges, including drainage, runoff, or sediment erosion.</u></i></p> <p><i>If approved, the Discharger is <u>not required</u> to conduct the nitrogen application (A) or removal (R) monitoring and reporting or to submit the INMP Summary report.</i></p>   |
| BC-63 | <p>I have worked for three greenhouse growers in the past and wish to document here an attempt made in 2014 to submit data for staff review and provide a strong rationale as to why this particular grower's practices would be considered a High Risk to GW (recall when you used the UC Nitrate Hazard Index to assign Low or High GW risk to specific ranches). The main point being, yes nitrate and water do hit the ground below the benches, but there is not enough annual water volume infiltrating-percolating to move this nitrate very far, given this grower's practice.</p> <p>The 4.0 proposal includes many statements that... 'Dischargers who can demonstrate.... may submit a report to the EO'. In 2014, I submitted a report to justify a formal proposal to exempt a greenhouse client's facility from the TNA report requirement. Concurrently in that time Dr. John Letey (author of UC Nitrate Hazard Index) and the Expert Panel provided a number of criticisms of the 3.0 GW Nitrate Risk Analysis approach in this regulatory context. Unfortunately, this data report appeared to have been discounted by staff, there was never any dialogue about the implications, and the client's High Risk determination for one facility was not reviewed. Nor did the client feel confident/willing about paying for a formal proposal, given the implied 'brush off' reaction to the study report. I too lost any confidence that knowledge, experience, and data carried any 'weight' with staff, and by association, the Board.</p> |
| BC-64 | <p><u>QUESTIONS:</u></p> <p>22. Can staff provide some <i>a priori</i> statements for growers and technical service providers to have some clarity on the submission and review process for both technical proposals and reports?</p>   |
| BC-65 | <p>23. While all things are addressed to the Executive Officer, what staff committee would review a proposal similar to the example I am providing here?</p>  |
| BC-66 | <p>24. Would a proposal review allow for grower suggested outside technical reviewers if clear that staff do not have specific expertise?</p>   |
| BC-67 | <p>25. Is there a mechanism in place for a post-report appeal (e.g. review by a 'Third Party'), should staff deny the evidence submitted?</p>   |
| BC-68 | <p>Please consider the example (data summaries deleted/edited for brevity and confidentiality) on following pages in light of the greater water volumes needed to push nitrate to GW than shown, as there is only limited seasonal leaching below benches available to drive it. In comparison to grower fields, vineyards, and orchards, where larger water volumes percolating into soil due to winter precipitation and irrigation, it was/is very difficult to equate risk.</p>   |
| BC-69 | <p>Alternative 4.0 compliance models <b>MUST</b> be developed for non-row/field crop production systems, as soon as practical. Ideally these would be developed in a 'partnership' of staff and representatives of these sectors (growers or their TSPs). I recognize, from many attempts to get answers from staff, that the time and attention paid to and assumed to be required to move the 4.0 process along, has not allowed a clear, pragmatic approach to special circumstances. In all frankness, I have grown weary of oft repeated statements and unanswered questions.... 'we are under-staffed... we'll work on your questions/proposals after 4.0 is in place in 2021'.</p>   |

BC-70

### Evaluation of Annual Potential Leaching Depth Due to Irrigation of xxx xxxx xxx xxxxxxxx

Given increasing concerns and assumptions concerning current risks of crop production practices to groundwater and thus drinking water quality, xxxxx xxxxx has initiated a self-assessment program starting with irrigation management. It is well established that the key to minimizing the risk of fertilizer nitrate movement into groundwater is to minimize deep percolation of water and nitrate in soil. This summary report provides estimates for the probable annual depth of water infiltration and thus nitrate-N leaching for major crops at all of our facilities. This work largely demonstrates that our .... .... irrigation management practices have a reasonably low potential for deep percolation of water and nitrate entering the soil beneath our production benches.

This work and summary also address the Central Coast Regional Water Quality Board requirements for producers to assess their operation's potential risk for nitrate movement into groundwater. The methods required assume that the permeability of the soil, the total N applied (fertilizer and irrigation nitrate-N), and the irrigation system type (e.g. micro versus furrow) are the key elements that control the groundwater nitrate risk potential. The State Water Board has stated that any operation that has a field, ranch, or facility that rates 'HIGH' by their methods must then provide additional records of nitrogen (N) management. We do not feel that the required methods accurately reflect the characteristics and processes associated with our production systems and therefore they may grossly and unfairly overestimate potential impacts to groundwater quality. We have chosen to develop and assess this risk by emphasizing actual water management (sic. irrigation scheduling) and the effect of daily evaporation and soil water holding capacity.

During the 2014 season, xxxxx collected irrigation management information to begin to describe the potential risk for deep leaching of soil, fertilizer, and irrigation nitrogen (N) at our facilities. Irrigation scheduling (set duration and intervals) was recorded at example facilities for three major crop types, xxxxx, xxxx, and xxxx. Additionally, replicated measurements of the water volume that passes thru the growth media (.... leachate) were made by placing containers of known collection area (square feet) and measuring the volume captured following each irrigation.

#### Methods

Irrigation logs were maintained during typical vegetable transplant xxx xxx production cycles (or turns). We have previously documented the typical nozzle flow rate and given the number of nozzles per irrigation cart can calculate irrigation applications as gallons per pass. Each irrigation log records the number of irrigation cart passes per set applying to a known bench area (square feet). During any production cycle, the number of passes is adjusted based on experience of the irrigator and additional water is applied to leach excess accumulated salts from the media to maintain plant vigor and development. In order to estimate the amount of water that percolates through the media and potentially will infiltrate into soil, we place duplicate pans of known dimensions underneath bench, and measure the volume immediately following a set. Figure 1 provides a visual depiction of our water management 'model' and the components we are measuring directly or estimating indirectly.

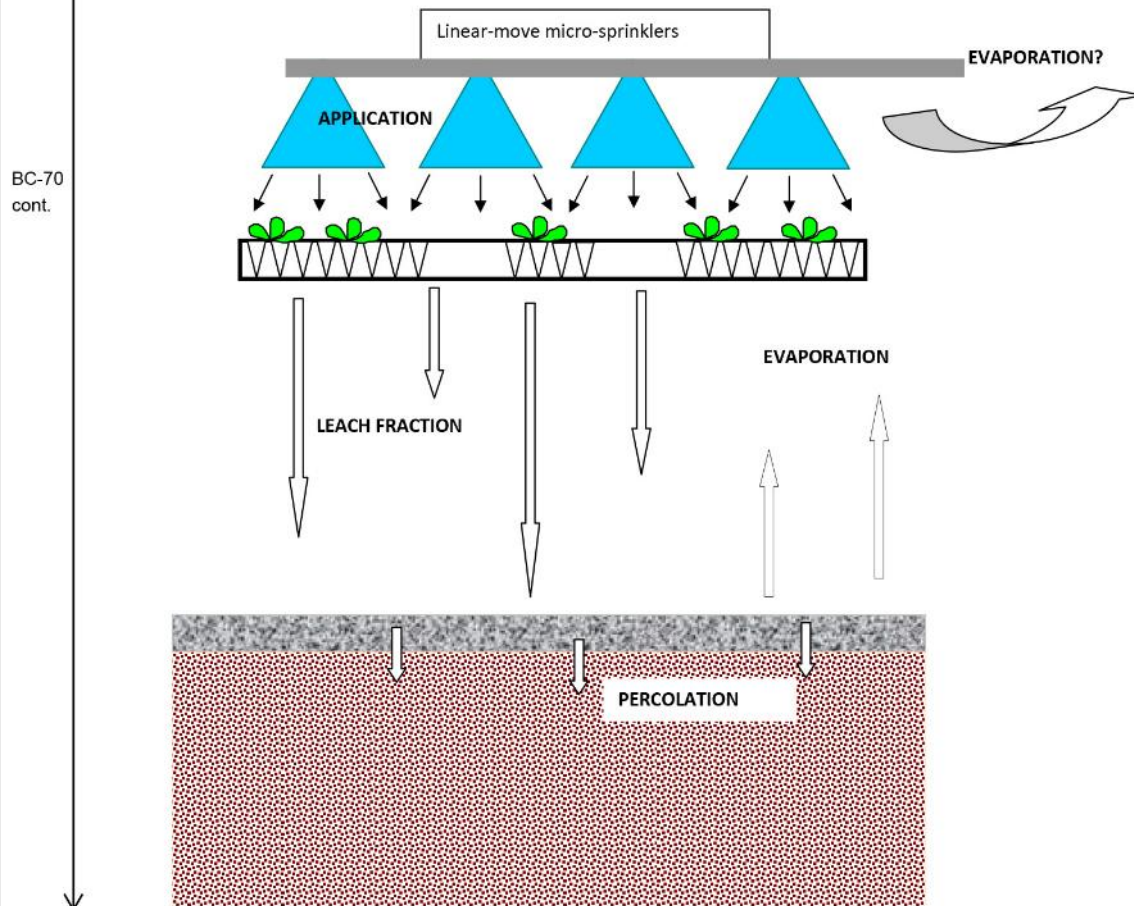
We can also directly estimate evaporative losses that potentially reduce the amount of remaining media 'leach thru' water volume. USDA soil survey data provides water holding capacity and soil water conductivity-percolation rates. These can be used to estimate depth of water movement. Following irrigation and measurement of the 'leach thru' volume, water is placed back in the pan. Immediately prior to the next irrigation, the water volume is measured again and the difference provides a measure of evaporative loss.

Irrigation applications to plants and growth media and the amount of leach through is converted to a gallon and acre inch basis. These data are then entered into a modified model that estimates the probable depth of nitrate leaching (Smith and Cassel, 1991). This model incorporates precipitation, irrigation, soil water holding properties, and evapotranspiration (ETo) to estimate potential water (and therefore nitrate) percolation depths. We have modified the model specifically to integrate a daily evaporation factor (based on evapotranspiration provided by the CIMIS network). The irrigation scheduling information collected in our logs are then entered in the model. For now, we have used identical irrigation regimes collected at a subset of our facilities to estimate potential conditions at all of our facilities. Each model 'run' uses the appropriate ETo for the location, as well as, the specific soil type and properties associated with the facility location.



Figure 1 suggests the water budget components that can be estimated either directly or indirectly. The most critical component is soil water percolation, and additionally, how evaporation of 'leach thru' water from greenhouse 'floor' plays a role in further reducing percolation volume and therefore groundwater risk. While the concentration of N in that water is important, it is the percolation of water that will move any nitrate-N deeper into soil or potentially to groundwater.

Figure 1. Water budget components for a typical xxxxx greenhouse system



We have modeled percolation risk by estimating the volume potentially reaching soil surface, accounting for evaporation potential from the greenhouse floor, and then using USDA soil water holding and conductivity data, and thus calculating worst and best case for downward movement of this water, per irrigation and for the entire production period or season. At this time we do not account for evaporation of water that occurs before applied water reaches the xxxx, plants, or growth media.

#### 2014 Assessment of Probable Leaching Depth

We applied our collected irrigation scheduling and leachate volume data for four (4) major crop types to all of xxxxxx facilities. Crops include xxxxx, xxxxx, xxxx, and xxxxx. Daily evapotranspiration (ETo) data for 2014 was acquired from the xxxxx, xxxxx, and xxxxxx CIMIS stations. We calibrated our leaching depth model with actual field measured evaporation data. The results of this calibration step confirmed that direct evaporation from beneath the benches is a variable fraction of the daily ETo. Depending on the time period and production location in 2014, this fraction (defined as the ETo coefficient) varied from less than 2 percent of ETo to about 28 percent of ETo. We assume that greenhouse operations (e.g. venting/cooling) alter evaporative conditions. Further as there is little to no direct sunlight when benches are full, evaporation will be lower than ETo. For most of the data collected, we confirmed an average ETo coefficient of 0.19 ( $ETo \times 0.19 = \text{daily evaporation in inches}$ ). This value was estimated from an evaporation study conducted on outdoor benches, that resulted in the lowest 'estimation error' in the calibration process.

BC-70  
cont.

xxxxxx (xxxxxxx) - As an example of how the ETo coefficient or assumed evaporation rate affects estimates of probable leaching depth, Figure 1(a,b,c) compares annual xxxx production at the xxxxx facility with a range of evaporation rates from 1.7 to 28 percent of full ETo. The soil is sandy, highly permeable with low water holding capacity, and is considered a 'high risk' soil for leaching potential. Here with the ETo coefficient=19 percent of daily ETo (Figure 1a), the **maximum probable percolation depth for water is estimated to be only 9 inches**. This condition is more likely to occur in the earlier portion of the production season when weather is cooler and solar radiation (daylength and intensity) is lower than mid-summer. Continued evaporation between crop turns reduces soil moisture that then limits the depth of percolation during the following crop turn. Figure 1b shows a maximum leaching depth of about 4 to 5 inches when evaporation is assumed to be 28 percent of ETo. Finally, as a worst case example that applied the lowest evaporation rate measured (1.7 percent), Figure 1c indicates a constant increase in water percolation with a five foot depth maximum.

xxxxxx and xxxxxx (xxxxx)- Figure 2a and b compare the maximum probable percolation depth estimated for 5 turns of xxxx (or xxxx assumed to have similar irrigation) at the xxxxxx facility. When daily evaporation is assumed to be constant as 19 percent of ETo (Figure 2 a) the **probable leaching depth does not exceed 4 inches**. Between each crop (fallow period) the surface soil is predicted to dry down substantially prior to the first leachate water again entering the soil. Obviously under a very low evaporation condition (Figure 2b), the soil accumulates greater moisture therefore increasing the possible leaching depth to close to 7 inches.

Soil Type (texture) and Local Weather Effects - Figures 3 and 4 show differences in probable leaching depth by comparing the xxxx irrigation schedule modeled for the xxxxxx, xxxxxx, and xxxxxx facilities. Here the sandier soil and slightly lower average ETo at the xxxxxx site, allows for greater potential leaching, compared to less than 6 inches at xxxxxx (Figure 3). As well, the generally lower ETo at xxxxxx compared to xxxxxx also leaves more residual soil moisture, thus increasing the probable depth of percolation is approximately 12 inches (Figure 4).



BC-70  
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Figure 1a. xxxxxxxx xxxxx probable leaching depth with a constant 19 percent of daily evapotranspiration

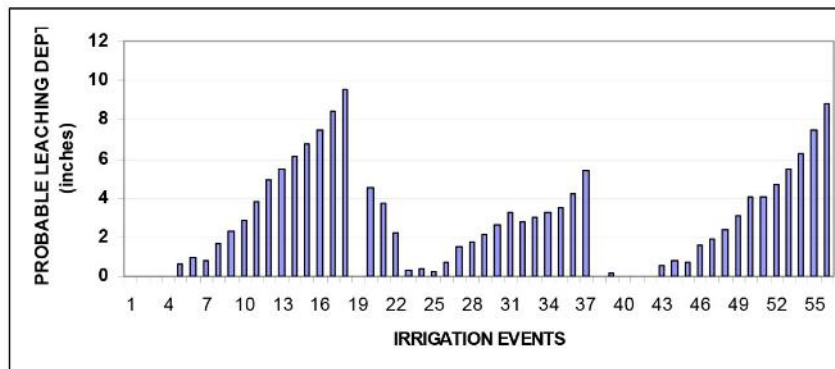


Figure 1b. xxxxxx xxxxx probable leaching depth with a constant 28 percent of daily evapotranspiration

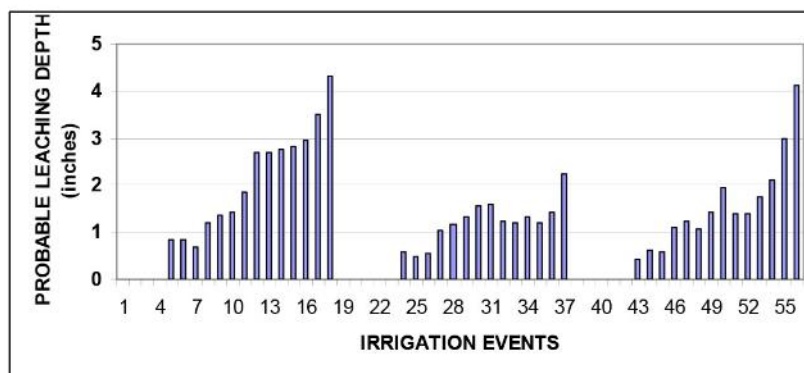
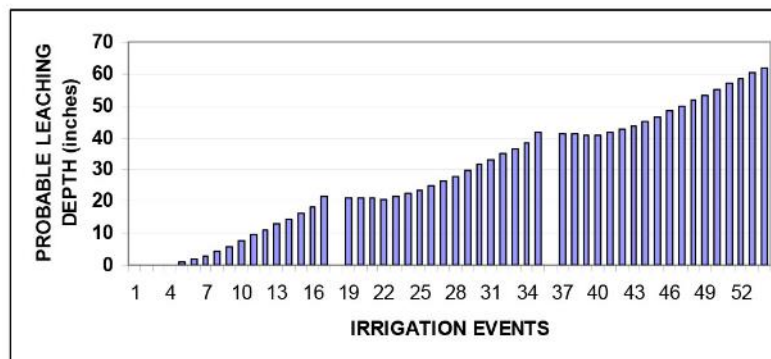


Figure 1c. xxxxxxxxxx probable leaching depth with a constant 1.7 percent of daily evapotranspiration



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Figure 2a. xxxxxxxx probable leaching depth with a constant 19 percent of daily evapotranspiration

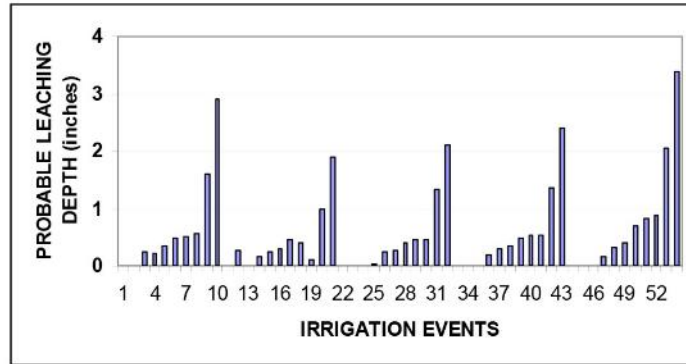


Figure 2b. xxxxxxxx probable leaching depth with a constant 1.7 percent of daily evapotranspiration

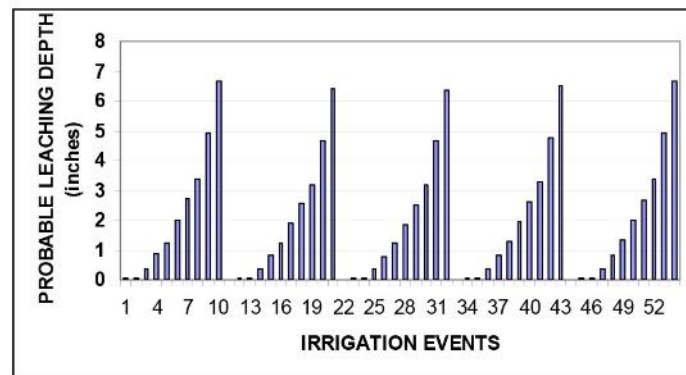


Figure 3. xxxxx xxxx vs. xxxxx xxxxx as indication of effect of soil type and weather on probable leaching depth

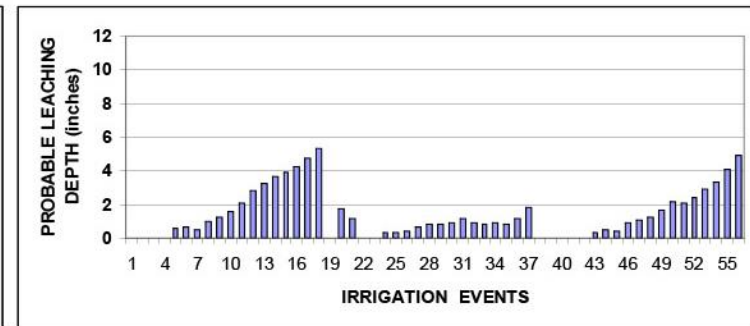
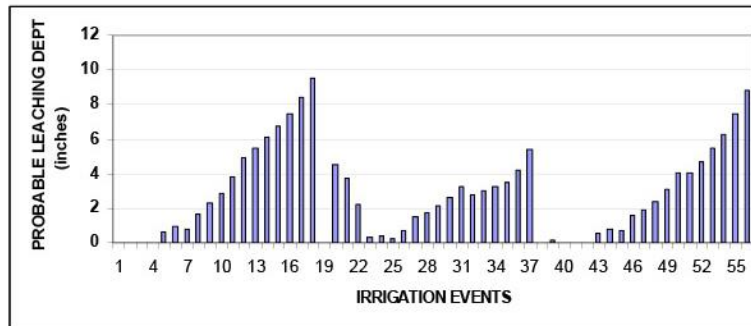
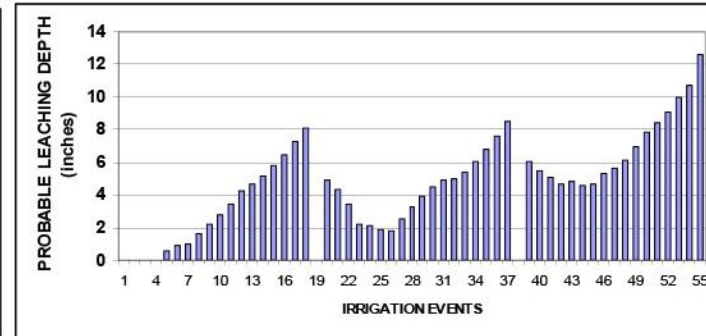
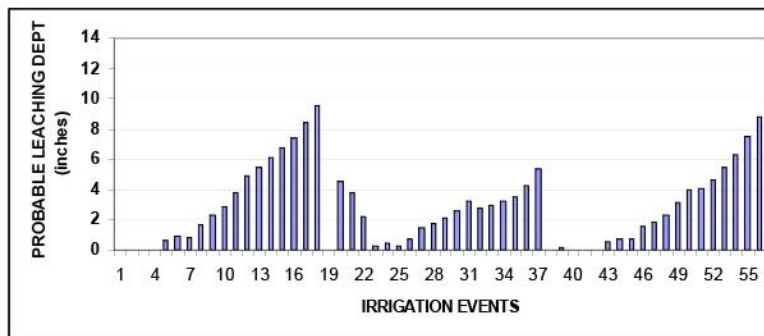


Figure 4. xxxx xxxx vs. xxxxx xxxxxx as indication of effect of soil type and weather on probable leaching depth

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cont.

### Summary

This self-assessment work demonstrates that our xx xxx irrigation management practices may have a reasonably low potential for 'deep percolation' of water and nitrate infiltrating soil beneath our production benches. The estimates for probable leaching depth account for the actual water volumes reaching the soil, different soil textures and water holding capacities, as well as, accounting for daily evaporation potential from the soil below our benches.

Additional considerations - We have not accounted for the possibility that the infiltration and percolation rates for the soils at our facilities are lower than that published in USDA soil surveys. **Prior to construction of greenhouses, the soils were mechanically compacted. This compaction may first reduce infiltration and percolation**, thus allowing more water (and nitrate) to remain closer to the floor (soil) surface, thus increasing evaporation potential.

It is important to note that the high solubility and mobility of nitrate in soil leads to bi-directional vertical movement between irrigation and leach-thru events (sic. leaching), and during soil drying (capillary rise). This means that a significant portion of any nitrate-N that percolates into surface soil, will tend to move upwards between irrigation sets, and thus nitrate may accumulate higher in the soil profile than the model estimates suggest.

The groundwater risk determination methods required by the CCRWQCB were developed for row, field, tree, and vine crop production systems, that experience precipitation events. This is a key underlying assumption in determining this risk. Rainfall percolation and soil water transport is a key driver of surface water flows and essential to groundwater recharge. In outdoor crop production systems, nitrate that may still reside in the upper soil profile is likely to be moved downward during and following significant rainfall events. This uncontrollable percolation is absent in a greenhouse production system.

Preliminary Conclusions - Collection of irrigation and xxx leach through volumes, and consideration of daily evapotranspiration effects on water loss from soil beneath the benches, as well as, the differing water holding capacity at our facilities provide preliminary insight into the average and absolute worst case potential for water percolation and therefore nitrate-N transport into the soil profile below our greenhouse. In comparison to row crop production that may be considered 'Low Risk' by methods required by the CCRQCB, xxxxxx's potential to impact groundwater quality (sic. nitrate) is substantively lower. Applied water and nitrate in xxx leach through may rarely exceed the one foot depth. Additionally, the typical seasonal volume of precipitation that will increase the probable depth of nitrate leaching in field soils is not factor in greenhouses.

Additional monitoring of irrigation and tray leach through is planned for the 2015 season. Our preliminary predictive modeling should be enhanced by some targeted sampling beneath benches.

### Literature Cited

Smith, S.J. and D.K. Cassel. 1991. Estimating Nitrate Leaching in Soil Materials. In: Managing Nitrogen for Groundwater Quality and Farm Profitability. (Follett et. al., Ed), SSSA pp. 165-188

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| BC-71 | <p><b>Priority Surface Water Elements</b></p> <ul style="list-style-type: none"> <li>• Dischargers in an area <u>with or without</u> an established TMDL for a pollutant must not cause or contribute to an exceedance of the pollutant's surface receiving water limit</li> <li>• Dischargers with waterbodies within or bordering their ranch must measure and report the current <u>on-farm setback width and vegetative cover</u></li> <li>• Dischargers who select the <u>On-Farm Setback compliance pathway</u> whose on-farm setbacks and vegetation do not meet the values must update and implement their RAMP to achieve the minimum riparian and/or wetland setback distance and vegetation requirements and the success criteria,</li> </ul> <p><u>Channel and Riparian Conditions</u></p> <p>I was once on a team assessment of watershed and creek channel and riparian conditions for the pre-TMDL sediment assessment for a Pajaro River subwatershed area. We utilized the Proper Functioning Condition (PFC) and Bank Erosion Hazard Index (BEHI) as objective evaluative tools (FCE-BA, 2004). Perhaps the <u>most significant condition/predictor</u> of the resulting PFC and BEHI rating scores and potential sediment delivery was the 'amount' or type of historical channel alteration, followed by bank vegetation classes and cover. Examples of channel straightening and/or channel relocation are ubiquitous in the region, with perhaps the most impactful being alterations that resulted in 75-90 degree 'turns' of channels.</p> <p>I have worked on many leased ranches where natural storm runoff events upstream cause sedimentation and erosion chaos year after year. In some cases, due to such 'inherited' conditions and issues, informal and formal legal multi-operator drainage channel management agreements exist. Some of these legal Drainage Associations were formed generations ago to mitigate flooding, sedimentation, or erosion. Drainage agreement documents that I have reviewed may include specific bank and channel vegetation management tasks that become landowner specified requirements for grower tenants.</p> |
| BC-72 | <p><u>Consideration</u>- It is likely that there are creek sections that have been so damaged by historical alterations that <u>no amount of setback and riparian re-vegetation</u> will reestablish a properly functioning system (line the channel, rip rap the banks?). Effective, but dramatic <u>restoration actions may be limited</u> by current parcel boundaries and owners who may not be agreeable to giving up land <u>to re-establish a functional and protective creek channel</u>. Nowhere in the many 4.0 related documents have I noted acknowledgment that if, as example, sediment mitigation for some creeks or creek sections can be shown to be functionally impossible or economically impractical that a Discharger (or landowner) could meet a modified expectation.</p> <p>Riparian setbacks, per se, may not always be the proper, most effective mitigation strategy, <u>cooperative watershed groups are the ONLY way to develop and implement a coherent, functional watershed plan.</u></p>  |
| BC-73 | <p><u>When and How Did It Become a Creek?</u></p> <p>During a recent five-year period, I became reasonably more familiar with a central coast region watershed where I had sporadic experiences for 10 years prior. Specifically, I had clients that farmed along different valley floor sections of this waterbody, and found challenge in attempting to better understand <u>where and when a few intermittent channels were altered or created to facilitate land drainage</u>. The growers all used the same creek name to describe the massively altered channel (~1930s) adjacent to their ranches, even as most sections had only the characteristics of a human-made drainage ditch, and it was nested through contiguous ranches all with varied dimensioned drainage ditches. About a year ago I located a series of <u>historical topographic maps</u> that indicate the time period when this 'creek section' was created, by essentially cutting off and diverting a number of very small natural intermittent hillside channels that originally flowed to a different creek, then ultimately directing all storm season runoff into the (outside ranch boundaries) actual named historically located creek channel.</p>   |
| BC-74 | <p><u>QUESTION:</u></p> <p>26. I have noted recently noted that the cannabis permit program's website has a stream class ID resource shows that the staff assumed 'creek' is classified a 'drainage ditch'.</p> <p>Assuming that much of the proposed Riparian Management might be approved, will there be an 'appeal' process for cases similar to above description or at least the possibility for negotiation to identify circumstance-specific mitigation or restoration measures?</p>   |



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| BC-75 | <b>Other Vagueness</b>  |
|       | <p><i>Dischargers must attend outreach and education events to obtain technical skills and assistance necessary to achieve compliance with the limits established by this Order.</i></p>  |
|       | <ul style="list-style-type: none"> <li>- How many? Required hours or credit system in place?</li> </ul>   |
| BC-76 | <p><i>Outreach and education events should focus on meeting water quality objectives and protecting beneficial uses by identifying water quality problems, implementing pollution prevention strategies, and implementing management practices designed to protect water quality and beneficial uses and resolve water quality problems to achieve compliance with this Order.</i></p>  |
|       | <ul style="list-style-type: none"> <li>- Sounds like a revival of the OG Irrigated Lands Short Course. Will you organize, sponsor, and present?</li> <li>- Will growers and TSPs have a seat to contribute at the course planning tables this time?</li> </ul>  |
| BC-77 | <p><i>Dischargers who exceed the fertilizer nitrogen application limits, nitrogen discharge targets and limits, or surface water limits must complete additional relevant water quality education to inform the implementation of additional or improved management practices to avoid future exceedances.</i></p>  |
|       | <ul style="list-style-type: none"> <li>- Is the vision similar to a Traffic School model? Who will design this curriculum? Will growers, UCCE, CCAs, and TSPs have a seat to contribute at the course planning tables?</li> </ul>   |
| BC-78 | <b>Consequences</b>   |
|       | <p><i>Progressive enforcement actions may begin with informal enforcement actions such as a verbal, written, or electronic communication between the Central Coast Water Board and a Discharger. The highest level of informal enforcement is a Notice of Violation.</i></p>  |
|       | <p>In the past, I worked on eight (8) environmental engineering teams hired by Central Valley food processors and wineries in response to WDR Notices of Violation. Beyond administrative concerns, the most consistent frustrations for the companies were subjective interpretations of monitoring data by staff, inability to get staff on site to gain a more complete understanding of site characteristics, constraints, and confirmation of standard practices and processes trialed and implemented.</p>  |
|       | <p>From my experiences, perhaps the most critical aspect of the proposed 4.0, is the evolution to the General WDR. And herein lies my core problem with the approach. Almost as a rule farming is always situational, crop type specific, and sometimes adaptive management is necessary due to challenges of location. The proposed WDR is actually too simple an umbrella that appears to not acknowledge the diversity of microclimates, crops, production systems, scale and economies of production, and complexity of a number of watersheds.</p>   |
| BC-79 | <p>I fully agree with the conclusions stated by Drevno (2018a):</p>   |
|       | <p>CCRWQCB should invest in rebuilding its important relationships with growers as it proceeds through the stakeholder collaboration processes for the next agricultural <i>waiver</i>. To begin to rebuild trust, agricultural representatives and CCRWQCB members might sit down and review together existing empirical, scientific studies on Central Coast water pollution, and, at the very least, come to a consensus regarding the state of regional water quality and the sources of pollution. Growers' perception of unfairness in the water quality regulations needs to be addressed, but that's the most difficult task of all — to weigh growers' perceived fairness with more effective pollution control measures.</p>  |
|       | <p>I agree that additional research must proceed strategically and collaboratively to reduce the uncertainty of N-balance calculations at the field and farm scale by better quantifying N inputs (and losses) from organic amendments, soil N mineralization and biological N fixation; improving estimates of the N content of harvested crops, and estimating changes in soil organic N levels. Private industry investment in innovations and services (e.g., new fertilizer formulations, precision fertilizer application equipment, and sophisticated decision-support tools) will help growers achieve the needed improvements in N balance. Increased technical assistance is needed to help incorporate and evaluate these technologies into their operations. As was noted by Ketterings (2014), outcome-based approaches to farm management are most effective in an adaptive management setting that combines on-farm research, extension, and collaboration with growers to help them achieve their (and public) goals.</p> |

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**Response to Comment BC-1**

The CCWB acknowledges the commenter's background and interests.

**Response to Comment BC-2**

The comment is noted.

**Response to Comment BC-3**

Thank you for your comments.

**Response to Comment BC-4**

The commenter's question is noted.

**Response to Comment BC-5**

The commenter's question is noted.

**Response to Comment BC-6**

The commenter's question is noted.

**Response to Comment BC-7**

The comment is noted.

**Response to Comment BC-8**

The commenter's question is noted.

**Response to Comment BC-9**

The commenter's question is noted.

**Response to Comment BC-10**

The commenter's question is noted.

**Response to Comment BC-11**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-12**

This comment requests information about the data sets used to support CCWB's assumption that Agricultural Order 4.0 targets and limits will have positive impacts on groundwater nitrate levels. For response to comments concerning groundwater protection, refer to Master Response 2.4.

**Response to Comment BC-13**

The comment is noted.

**Response to Comment BC-14**

The comment is noted.

**Response to Comment BC-15**

The comment is noted.

**Response to Comment BC-16**

The comment is noted.

**Response to Comment BC-17**

The comment is noted.

**Response to Comment BC-18**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-19**

The comment is noted.

**Response to Comment BC-20**

The comment is noted.

**Response to Comment BC-21**

This comment requests background on the CCWB's technical research to support the decision to implement the proposed A-R method (e.g., nitrogen discharge limits) as part of DAO 4.0, and how/whether this method guarantees improving clean groundwater in all sub-regions, soils, and crop systems. For response to comments concerning nitrogen discharge limits, refer to Master Response 2.4.

**Response to Comment BC-22**

This comment requests supporting evidence for the CCWB's assertion that the A-R Limits are ecologic, agronomic, and hydrologically rigorous, and further, economically robust, thus ensuring both a future of sustained affordable food production and clean water. For response to comments concerning nitrogen discharge limits, refer to Master Response 2.4.

**Response to Comment BC-23**

The comment is noted.

**Response to Comment BC-24**

This comment asserts that, because proposed regulations do not mandate specific post-harvest, pre-planting, or pre-fertigation conditions, soil sample testing and reporting requirements will not necessarily provide successful protection of water quality. Thank you for your comment.

**Response to Comment BC-25**

The comment is noted.

**Response to Comment BC-26**

The commenter's concerns are noted.

**Response to Comment BC-27**

The comment is noted.

**Response to Comment BC-28**

Thank you for your comment.

**Response to Comment BC-29**

The comment is noted.

**Response to Comment BC-30**

Thank you for your comment.

**Response to Comment BC-31**

This comment requests the research on which the CCWB based the nitrogen discount. For response to comments concerning nitrogen applied discount factors, refer to Master Response 2.3.6.

**Response to Comment BC-32**

The comment is noted.

**Response to Comment BC-33**

The comment is noted.

**Response to Comment BC-34**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-35**

This comment requests information about the INMP. For response to comments regarding irrigation water reporting requirements, refer to Master Response 2.3.9.

**Response to Comment BC-36**

This comment requests information about the INMP. For response to comments regarding irrigation water reporting requirements, refer to Master Response 2.3.9.

**Response to Comment BC-37**

The comment is noted.

**Response to Comment BC-38**

The commenter's concerns are noted.

**Response to Comment BC-39**

For response to comments regarding surface water protection, refer to Master Response 2.5.

**Response to Comment BC-40 through BC-41**

For response to comments regarding groundwater protection, refer to Master Response 2.4.

**Response to Comment BC-42**

For response to comments regarding irrigation and nutrient management for groundwater protection, refer to Master Response 2.3.

**Response to Comment BC-43**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-44**

For response to comments regarding irrigation and nutrient management for groundwater protection, refer to Master Response 2.3.

**Response to Comment BC-45**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-46**

Comment noted. For response to comments regarding fertilizer application limits, refer to Master Response 2.3.10.

**Response to Comment BC-47**

Comment noted. For response to comments regarding nitrogen discharge limits, refer to Master Response 2.3.3.

**Response to Comment BC-48**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-49**

The comment is noted.

**Response to Comment BC-50**

The comment is noted. For response to comments regarding research and science, refer to Master Response 2.1.1.

**Response to Comment BC-51**

The commenter's concern is noted.

**Response to Comment BC-52**

The commenter's concern is noted.

**Response to Comment BC-53**

The comment is noted.

**Response to Comment BC-54**

The comment is noted.

**Response to Comment BC-55**

The commenter's concern is noted.

**Response to Comment BC-56**

The comment is noted.

**Response to Comment BC-57**

The comment is noted.

**Response to Comment BC-58**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-59**

The commenter's concern is noted.

**Response to Comment BC-60**

The comment is noted.

**Response to Comment BC-61**

The comment is noted.

**Response to Comment BC-62**

The comment is noted.

**Response to Comment BC-63**

The comment is noted.

**Response to Comment BC-64 through BC-68**

The comment is noted. For response to comments regarding reporting requirements, refer to Master Response 2.1.5.



**Response to Comment BC-69**

The comment is noted. For response to comments regarding reporting requirements, refer to Master Response 2.1.5.

**Response to Comment BC-70**

The CCWB acknowledges the commenter's input.

**Response to Comment BC-71**

The comment is noted.

**Response to Comment BC-72**

The comment is noted. For response to comments regarding riparian and operational setbacks, refer to Master Response 2.8.8.

**Response to Comment BC-73**

The comment is noted. For response to comments regarding riparian and operational setbacks, refer to Master Response 2.8.8.

**Response to Comment BC-74**

The commenter's concern is noted.

**Response to Comment BC-75**

The commenter's concern is noted.

**Response to Comment BC-76**

The comment is noted.

**Response to Comment BC-77**

The comment is noted.

**Response to Comment BC-78**

The CCWB acknowledges the commenter's background and interests.

**Response to Comment BC-79**

The CCWB acknowledges the commenter's input.

**Letter BD: Kelly Damewood, CCOF (June 20, 2020)****Letter BD**

**From:** [Jane Sooby](#)  
**To:** [AgNOI\\_WB@Waterboards](#)  
**Cc:** [Rebekah Weber](#); [Kelly Damewood](#)  
**Subject:** Re: CCOF Comments on Draft Ag Order 4.0 June 20, 2020  
**Date:** Saturday, June 20, 2020 7:01:47 PM  
**Attachments:** [CCOF comment on Draft Ag Order 4.0 June 20 2020.pdf](#)

EXTERNAL:

Dear Central Coast Water Board staff,

Attached is CCOF's comment on the draft Ag Order 4.0. Having sufficient time to comment on the many regulations in the proposed rule was helpful. Thank you for extending the deadline.

We look forward to continuing to engage as the draft order goes through next steps.

Sincerely,

**Jane Sooby**

Senior Outreach & Policy Specialist  
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# CCOF

Advancing organic agriculture through certification, education, advocacy, and promotion.

June 20, 2020

Irrigated Lands Regulatory Program (ILRP)  
Central Coast Water Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401

Re: CCOF Comments on Draft Ag Order 4.0

Dear Central Coast Regional Water Quality Control Board Members:

BD-1

Thank you for the opportunity to comment on the Draft General Waste Discharge Requirements for Discharges from Irrigated Lands (Draft Ag Order 4.0) and associated documents.

California Certified Organic Farmers (CCOF) advances organic agriculture for a healthy world. We advocate on behalf of our members for organic policies, support the growth of organic through education and grants, and as a USDA-accredited certification agency, provide organic certification that is personal and accessible.

BD-2

CCOF supports sensible state and regional oversight of agriculture to protect surface and groundwater quality and is committed to protecting and improving drinking water quality for rural areas close to intensive agricultural production. CCOF encourages the state and regional water quality control boards to think of organic farms and farming practices as important partners and crucial elements in protecting surface and groundwater quality.

Certified organic farmers are well positioned to demonstrate compliance with water quality regulations because under federal law they already record all input applications including fertilizers, document all field practices including irrigation dates, and maintain harvest records. Organic farmers' production records are verified annually by skilled accredited certification agency staff and during an annual on-site inspection by professional inspectors.

Organic farms are compensated in the marketplace for making these efforts through the organic premium, but farmers are not compensated for the amount of time they must take away from the intense work of growing and marketing food to keep up with recently imposed food safety and water quality rules. Increased regulatory pressure is an issue for many categories of growers on the Central Coast including beginning farmers, small and medium-sized highly diversified farmers, and diversified socially disadvantaged farmers.

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**CCOF Comments on Draft Ag Order 4.0**

BD-3

Since the Final Ag Order 4.0 will be in the form of waste discharge requirements rather than the waivers previously implemented, it is important to ensure these rules are workable because the time interval between renewing orders is likely to increase and it may take longer to make any necessary adjustments to the order.

BD-4

We appreciate the hard work by Central Coast Water Board members and staff in developing Draft Ag Order 4.0 while striving to balance numerous, often seemingly contradictory, requirements.

Thank you for taking into account our comments and suggestions.

Sincerely,



Senior Outreach and Policy Specialist

Cc: Kelly Damewood, CEO  
Rebekah Weber, Policy Director

### CCOF Comments on Draft Ag Order 4.0

#### Support and incentivize organic farming

Organic agriculture is a vital sector of Central Coast agriculture. The California Dept. of Food and Agriculture's *Agricultural Statistics Review* shows that there were 941 organic operations in the five counties completely located in the Central Coast region (Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz), that sold almost \$96 million worth of organic agricultural products in 2018.<sup>1</sup> Of these, 489 are CCOF-certified organic operations. Our Central Coast members grow a wide range of crops, from berries and vegetables to tree fruits, nuts, flowers, and grains on over 200,000 acres. This is acreage on which no synthetic pesticides or fertilizers are applied.

Organic farmers choose to comply with a rigorous set of production standards that are designed to be protective of natural resources. Specifically, the federal organic standards require that organic farmers use practices that maintain or improve natural resources including water quality.<sup>2</sup> Organic agriculture protects water quality by not using synthetic pesticides or fertilizers. Additionally, organic management practices—such as crop rotation, cover cropping, and use of biological sources of nutrients – increase soil organic matter and soil aggregate stability,<sup>3</sup> increasing the soil's ability to retain water and nutrients which reduces nitrate leaching into waterways and soil loss through erosion.<sup>4</sup>

One of the few studies that has examined nitrogen (N) leaching from organic farms in California found that in Yolo County, well-managed certified organic farms have "tightly coupled" N cycling in the soil, which results in low soil N loss and high yields.<sup>5</sup> These farms are characterized by having consistently low soil nitrate levels, high soil microbial activity, and efficient nitrogen management.<sup>6</sup> By carefully managing biological sources of nutrients, these farmers maintain yields competitive with county averages and reduce nutrient leaching by building active microbial communities that cycle nutrients within the soil rather than releasing them into the environment.

In the Central Coast region, a six-year study on organic vegetable production in the Salinas Valley found that despite intensive tillage, adding organic matter through annual cover cropping and compost applications increased soil health, as measured by increased overall soil

<sup>1</sup> CDFA. (2020). California Agricultural Statistics Review 2018-2019. Retrieved from <https://www.cdfa.ca.gov/statistics/PDFs/2018-2019AgReportnass.pdf>

<sup>2</sup> General. (2018). U.S. Government Printing Office, Electronic Code of U.S. Federal Regulations, Title 7, Subtitle B, Chapter I, Subchapter M, Organic Foods Production Act Provisions Part 205. 7 CFR §205.200. Retrieved from [https://www.ecfr.gov/cgi-bin/text-idx?SID=46cfdff2923554e8b0ce0c6fbb30baeb&mc=true&node=se7.3.205\\_1200&rgn=div8](https://www.ecfr.gov/cgi-bin/text-idx?SID=46cfdff2923554e8b0ce0c6fbb30baeb&mc=true&node=se7.3.205_1200&rgn=div8)

<sup>3</sup> Wolf, K., Herrera, I., Tomich, T. P., & Scow, K. (2017). Long-term agricultural experiments inform the development of climate-smart agricultural practices. *California Agriculture*, 71, 120-124.

<sup>4</sup> Cambardella, C. A., Delate, K., & Jaynes, D. B. (2015). Water quality in organic systems. *Sust Ag Res.*, 4(3), 60-69.

<sup>5</sup> Bowles, T. M., Hollander, A. D., Steenwerth, K., & Jackson, L. E. (2015). Tightly-Coupled plant-soil nitrogen cycling: comparison of organic farms across an agricultural landscape. *PLOS ONE*, 10(6), e0131888.

<sup>6</sup> Bowles et al. *ibid.*



### CCOF Comments on Draft Ag Order 4.0

BD-6  
cont.

microbial populations and levels of soil carbon in organic plots.<sup>7</sup> CCOF recommends the Central Coast Water Board incentivize organic farming and cover cropping in the region which would result in more farms that have healthy soils and reduced nutrient leaching.

Generally, organic farming practices are acknowledged by experts as an important strategy to reduce nitrate leaching. The Harter report documenting unhealthy levels of nitrate in California's groundwater recommended that research focus on replacing synthetic fertilizers with organic fertilizers as well as agricultural management practices that reduce N inputs and improve crop N efficiency.<sup>8</sup>

BD-7

#### **Include mineralization discount factors for organic fertilizers in addition to compost**

CCOF commends Central Coast Water Board staff for encouraging the use of compost by allowing growers to apply a discount factor when determining the amount of compost N contributed to total nitrogen applied (A).<sup>9</sup>

However, organic farmers are at a disadvantage in complying with future N fertilizer application limits because the Draft Ag Order 4.0 does not include a discount factor for organic fertilizers or other organic amendments that, similar to compost, release N over time. Failing to include such a discount factor will disincentivize the use of fertilizers approved for use in certified organic production because the total N content of the fertilizer would be included in calculating A instead of the small fraction of total N released in the first year of application.

As noted in Attachment A, Draft Ag Order 4.0 "incentivizes the use of compost nitrogen through the compost nitrogen discount factor because land application of compost directly stimulates biological processes, including increases in soil microbial and plant biomass that sequester carbon into stable long-term organic matter."<sup>10</sup> Using this same logic, Final Ag Order 4.0 should include a mineralization factor for fertilizers approved for organic production based on the fertilizer's C:N ratio because, similar to compost, they too supply carbon to soils, build soil organic matter, and release N slowly.<sup>11</sup> CCOF supports the comment submitted by True Organic Products on this point.

<sup>7</sup> Brennan, E.B., & Acosta Martinez, V. (2017). Cover cropping frequency is the main driver of soil microbial changes during six years of organic vegetable production. *Soil Biology and Biochemistry*, 109, 188-204.

<sup>8</sup> Harter, T., Lund, J. R., Darby, J., Fogg, G. E., Howitt, R., Jessoe, K. K., . . . Rosenstock, T. S. (2012). Addressing nitrate in California's drinking water with a focus on Tulare Lake Basin and Salinas Valley groundwater. Report for the State Water Resources Control Board Report to the Legislature. Center for Watershed Sciences, University of California, Davis.

<sup>9</sup> Draft General Waste Discharge Requirements for Discharges from Irrigated Lands, Part 2, Section C.1 Irrigation and Nutrient Management for Groundwater Protection: Quantifiable Milestones and Time Schedules: Nitrogen Discharge Targets and Limits, paragraph 6 (p. 26).

<sup>10</sup> Attachment A: Findings: Section C.1. Irrigation and Nutrient Management for Groundwater Protection: Nitrate in Groundwater: Nitrogen Discharge Targets and Limits: Compost Discount Factor, paragraph 41 (p. 115).

<sup>11</sup> Lazicki, P., Geisseler, D., & Lloyd, M. (2020). Nitrogen mineralization from organic amendments is variable but predictable. *J. Env. Qual.* 10.1002/jeq2.20030; Gaskell et al. *op. cit.*

### CCOF Comments on Draft Ag Order 4.0

#### Include a reporting phase-in for small-scale and diversified socially disadvantaged growers

The State Water Board's Eastern San Joaquin order that was adopted in early 2018 gives regional water boards discretion to develop alternative reporting requirements for growers in three categories:

1. Growers that (1) operate in areas with evidence of no or very limited nitrogen impacts to surface water or groundwater, (2) have minimal nitrogen inputs, and (3) have difficulty measuring yield, may report the A value only. The regional water board may exercise its discretion as to when, if at all, these growers will begin reporting R. An example of this grower category could be irrigated pastures.

2. Diversified socially disadvantaged growers, as defined by the Farmer Equity Act of 2017, with (1) a maximum total acreage of 45 acres, (2) gross annual sales of less than \$350,000, and (3) a crop diversity greater than 0.5 crops per acre (one crop for every two acres), may initially report the A value only. The regional water board may exercise its discretion as to when these growers will begin reporting R and may accept alternative methodologies for estimating R. The regional water board may exercise its discretion as to whether these growers must receive targeted self-certification training.

3. Growers with (1) a maximum total acreage of 20 acres, and (2) a crop diversity greater than 0.5 crops per acre (one crop for every two acres), may initially report the A value only. The regional water board may exercise its discretion as to when these growers will begin reporting R and may accept alternative methodologies for estimating R. This category would include, for example, small growers with multiple crops that sell their crops primarily at farmers' markets.<sup>12</sup>

In sum, the Eastern San Joaquin order provides the regional water board discretion on when diversified socially disadvantaged farmers and small-scale growers must begin reporting N removed (R). Flexibility on R reporting is important because reporting accurate R values will be challenging, particularly for highly diverse vegetable farms that will need to track accurate yields from each field on a per-crop basis.

While Draft Ag Order 4.0 generally recognizes the need to provide technical assistance to and flexibility in achieving compliance by limited resource growers,<sup>13</sup> the draft order does not specify what type of operations will be provided this flexibility and technical assistance. Attachment A acknowledges the flexibility granted it by the State Water Board, stating, "This Order does not include explicit exemptions for Dischargers meeting the categories described in

<sup>12</sup> California State Water Resources Control Board. 2018. P. 40-41, [Order WQ 2018-0002](#). In the Matter of Review of Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group.

<sup>13</sup> Draft General Waste Discharge Requirements for Discharges from Irrigated Lands, Part 1, Section A. Findings: Scope of Order: Dischargers Regulated Under this Order, paragraph 29 (p. 11).

### CCOF Comments on Draft Ag Order 4.0

|               |   |   |
|---------------|---|---|
| BD-9<br>cont. | ↑ | item (b) above, due primarily to the widespread scale and severity of groundwater degradation from nitrate contamination in the central coast region.” <sup>14</sup> It does allow dischargers to submit a proposal to the Executive Officer for alternative requirements, but this option is not likely to be utilized by small-scale and diversified socially disadvantaged farmers because of the time and expertise required to develop such a proposal.  |
| BD-10         | ↑ | Draft Ag Order 4.0 does not present data that show R reporting by these operations will significantly improve regulation of such operations or that such operations are responsible for a significant volume of N discharges.   |
| BD-11         | ↑ | The regional water board should exercise the discretion allowed it by the Eastern San Joaquin order to develop alternative reporting requirements for small-scale operations and operations managed by diversified socially disadvantaged growers as defined in California’s Farmer Equity Act. <sup>15</sup> Final Ag Order 4.0 should offer phase-in of R reporting requirements to these operations. <sup>16</sup>   |
| BD-12         | ↑ | <p><b>Mitigate regulatory costs on small and medium-scale farmers</b></p> <p>Draft Ag Order 4.0 includes new monitoring and reporting requirements that will increase costs of compliance.<sup>17</sup> Table A.B-5 acknowledges that the cost estimates presented likely underestimate actual costs,<sup>18</sup> and indeed the 1.5-3 minutes estimated time to track per acre N removed (R) and irrigation volumes<sup>19</sup> is one example of an estimate that seems unlikely.</p> <p>Per-acre costs estimated in the draft order show increases of at least 75-88%,<sup>20</sup> and these estimates do not include per-acre costs for follow-up surface receiving water monitoring or riparian setback requirements. Additionally, estimated costs for groundwater trend monitoring, tracking, and reporting are based on the cost to install 150 monitoring wells throughout the region and exclude the costs of actually monitoring and reporting the data from these wells.</p> |

<sup>14</sup> Attachment A: Findings: Section B. Legal and Regulatory Considerations: Eastern San Joaquin Watershed Agricultural Order, Paragraph 169. Exemption from nitrogen management requirements (c) (p. 74).

<sup>15</sup> Aguiar-Curry, C. (2017). AB 1348, Farmer Equity Act of 2017. Retrieved from [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180AB1348](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1348)

<sup>16</sup> This would fit under Draft General Waste Discharge Requirements for Discharges from Irrigated Lands, Part 2, Section C.1. Irrigation and Nutrient Management for Groundwater Protection: Quantifiable Milestones and Time Schedules: Nitrogen Discharge Targets and Limits (p. 28).

<sup>17</sup> Attachment A: Findings: Section B. Legal and Regulatory Considerations: Cost Considerations, paragraph 15 a (p. 10).

<sup>18</sup> Attachment A: Findings: Section B. Legal and Regulatory Considerations (p. 12).

<sup>19</sup> Attachment A: Findings: Section B. Legal and Regulatory Considerations: Cost Considerations, paragraph 18 b i (p. 16). “It is estimated that a Discharger who is inexperienced at tracking nitrogen removed and irrigation information for the INMP Summary report would spend approximately 0.05 hours per acre to track the information the first time and then need only about 0.025 hours per acre to track the information for subsequent reports.”

<sup>20</sup> Based on calculations of projected costs provided in Attachment A: Findings: Section B. Legal and Regulatory Considerations: Cost Considerations.

### CCOF Comments on Draft Ag Order 4.0

- BD-13 The cost of compliance will be particularly hard on small and medium-sized farms attempting to comply on an individual basis. Small and medium-sized farms and ranches face higher per-acre costs of compliance than large-scale operations due to economies of scale for the cost of labor.<sup>21</sup> Internal CCOF data on California member attrition between 2017-2019 reveal that 80% of farm operations that went out of business produced under \$300,000 of organic products annually, suggesting that smaller scale producers are more at risk of losing or selling their farms than larger operations.
- Actual costs for smaller-acreage farms could be in the hundreds to thousands of dollars per acre per year for those farms that pursue individual compliance pathways.<sup>22</sup> The cost of documenting R alone for a small-scale, highly diversified farm that must hire outside expertise because English is not the growers' first language is estimated at \$500 annually.<sup>23</sup>
- BD-14 Water Code section 13241 requires regional boards to consider several factors, including "economic considerations" when establishing water quality objectives to ensure the reasonable protection of beneficial uses and prevent nuisance.<sup>24</sup> The water board should consider every means possible to reduce the regulatory cost impact on small scale farms. Specific recommendations are:
- **Subsidize third-party monitoring programs.** Draft Ag Order 4.0 sets forth criteria for third-party programs that will conduct cooperative monitoring and reporting.<sup>25</sup> The Central Coast Water Board should subsidize third-party monitoring programs for small and medium-sized farms to ensure third-party services are available to all growers regardless of scale.
  - **Phase in R reporting requirements**
  - **Fund landscape-level riparian restoration projects**
  - **Compensate qualified growers for production lost from acreage devoted to riparian and operational setbacks.** The Draft EIR estimates approximately 4,000 acres will be removed from production as a result of the setback requirements.<sup>26</sup> The Central Coast Water Board should work with the agricultural community to develop a reimbursement formula to offset production losses from setback installation.
- BD-15
- BD-16
- BD-17
- BD-18

<sup>21</sup> McCullough, M., Hamilton, L., & MacEwan, D. (2017). The Costs of Regulation to California Farmers. Selected Paper prepared for presentation at the Agricultural & Applied Economics Association's 2017 Annual Meeting, Chicago, IL, July 30–August 1, 2017.

<sup>22</sup> Sarah Lopez, personal communication, April 15, 2020.

<sup>23</sup> Nathan Harkleroad, personal communication, June 15, 2020

<sup>24</sup> Cited in Attachment A: Findings: Section B. Legal and Regulatory Considerations, California Water Code: paragraph 3 (p. 8).

<sup>25</sup> Draft General Waste Discharge Requirements for Discharges from Irrigated Lands, Part 2, Section A. Enrollment, Fees, Termination, General Provisions, and Third-Party Programs: Third-Party Programs, paragraphs 31-34 (p. 19-20).

<sup>26</sup> Draft Environmental Impact Report for Draft General Waste Discharge Requirements for Discharges from Irrigated Lands. Table 3.1-3.



### CCOF Comments on Draft Ag Order 4.0

- BD-19 |
- **Compensate Cooperative Extension personnel, non-profits, and other technical assistance providers** who provide crucial assistance by helping small-scale and non-English speaking growers verify compliance
- BD-20 |
- **Offer financial assistance including fee waivers to small and medium-scale farms and to diversified socially disadvantaged growers**
- BD-21 |
- **Reduce data reporting requirements**
- BD-22 |
- Simplify and reduce data reporting requirements**
- Draft Ag Order 4.0 requires growers to monitor and report numerous measurements to verify compliance.<sup>27</sup> Every data point requires that farmers invest time and expense to monitor, document, and report. The cumulative impact on small- and medium- scale farmers is disproportionate compared to the impact on large corporate farms.<sup>28</sup> We submit that not all of these pieces of data are necessary.
- BD-23 |
- Early input to the State Water Board on the Irrigated Lands Regulatory Program (ILRP) emphasized using restraint in gathering data from farmers. The State Water Board's Expert Panel on ILRP wrote,
- The recommended data collection/reporting effort ... purposefully limits data collection to basic information that can be easily obtained and all farmers need and should be knowledgeable of as part of their nitrogen management.<sup>29</sup>
- The Expert Panel recommended that only the following information be collected annually:
1. Location of reporting unit
  2. Crop
  3. Nitrogen removed or sequestered in permanent wood
  4. Crop acreage
  5. Nitrogen applications, including organic sources, synthetic sources, and irrigation water<sup>30</sup>

<sup>27</sup> Attachment B: Monitoring and Reporting Program. A. General Monitoring and Reporting Requirements, paragraph 2 (p. 3).

<sup>28</sup> McCullough et al. *op.cit.*

<sup>29</sup> Burt, C., R. Hutmacher, T. Angermann, B. Brush, D. Munk, J. duBois, M. McKean, and L. Zelinski. (2014). [Conclusions of the Agricultural Expert Panel: Recommendations to the State Water Resources Control Board pertaining to the Irrigated Lands Regulatory Program](#). P. 37. Cal Poly San Luis Obispo Irrigation Training & Research Center.

<sup>30</sup> *Ibid.* p. 37.

### CCOF Comments on Draft Ag Order 4.0

The following data monitoring and recording requirements should not be included in Final Ag Order 4.0:

*Nitrogen present in the soil:* The Expert Panel specifically did not include reporting of residual soil N levels “because it is difficult to quantify and is subject to potentially large short-term fluctuations.”<sup>31</sup> Additionally, N tests are not reliable guides for organic farmers when calculating a crop’s N needs: “In organic systems, appropriate nitrogen management cannot be directly inferred from a simple soil test...”<sup>32</sup>

*Crop evapotranspiration (ET):* Growers will be required to report the ET for each crop using reference ET data from a local weather station multiplied by a crop-specific conversion factor, or by direct measurement.<sup>33</sup> These data do not clarify the N balance or risk of nitrate, pesticide, or sediment leaching from the field. Further, reporting these data will be unreasonably time-consuming for highly diversified farms that grow numerous crops in a season because they will have to look up values for each crop on top of production and marketing duties of a typical family farm. Finally, a member of the public attending the Central Coast Water Board staff’s June 3, 2020 virtual workshop reported that many CIMIS stations are not reliably reporting ET values, which also places the utility of this requirement in question.

*Irrigation discharge to surface and groundwater:* The draft order proposes that growers estimate the volume of water leaving the farm through surface flows and percolation to groundwater. This requirement will be almost impossible for individual farms to comply with as it would require installation of monitoring wells. At a minimum, the Central Coast Water Board should phase in this reporting requirement until third-party verification programs have been approved and reimbursement procedures for small-scale, limited resource, and diversified socially disadvantaged farmers are in place.

#### **Develop new metrics that better estimate water quality risk posed by individual farms**

The Central Coast Water Board should devote resources to developing new metrics for measuring risk to surface and groundwater that are more readily complied with by growers. As written, fulfilling the data monitoring and reporting requirements in Draft Ag Order 4.0 will be difficult for many growers including beginning farmers, small- and medium-scale farmers who grow a diversity of crops for the fresh market, and diversified socially disadvantaged farmers as defined in California’s Farmer Equity Act.<sup>34</sup>

In addition to the challenges of monitoring and reporting soil N levels, crop ET, and irrigation discharge to surface and groundwater, deriving accurate measurements of N removed (R) will

<sup>31</sup> *Ibid.* p. 37

<sup>32</sup> Gaskell et al. *op. cit.*

<sup>33</sup> Attachment B: Monitoring and Reporting Program. C. Irrigation and Nutrient Management Plan (INMP) Summary Report Monitoring and Reporting: Irrigation Water: paragraph 14 a Crop evapotranspiration (p. 15).

<sup>34</sup> Aguiar-Curry *op. cit.*



### CCOF Comments on Draft Ag Order 4.0

- BD-26  
cont. ↑ be problematic, especially for small-scale, highly diversified growers during the peak of the growing season who sell multiple harvests of the same crop from different fields at farmers' markets. It's not feasible that all harvests will be weighed at edge of field before going to market, and sales records are likely to underestimate actual R because of lost biomass through routine activities such as trimming for market, culling for quality, sharing with family and friends, and decisions to not harvest when a crop fails.
- BD-27 ↑ The State Water Board acknowledged this in allowing small-scale and diversified socially disadvantaged growers a phase-in period for having to report R.<sup>35</sup> R is likely to consistently be overestimated, placing growers at a disadvantage when it is assumed that the difference between A and R is the likely nitrate loading into surface or groundwater. The Central Coast Water Board should continue to investigate metrics that are more readily and accurately reported by growers.
- BD-28 ↑ **Retain the option for commodity-specific orders**  
Draft Ag Order 4.0 includes the option for growers or groups of growers with similar production systems or geographic conditions to request the development of a general order for "regulatory requirements tailored to their specific operation" or a "commodity-specific general order."<sup>36</sup> CCOF is weighing the pros and cons of requesting an organic-specific order because it may simplify monitoring and reporting requirements for approved grower groups. This option is useful and CCOF supports it being retained in the final order.

<sup>35</sup> California State Water Resources Control Board *op.cit.*

<sup>36</sup> Draft Ag Order 4.0 Part 2, Section A. Enrollment, Fees, Termination, General Provisions, and Third-Party Programs: Enrollment, paragraph 12 (p. 16-17).

### Response to Comment BD-1

The CCWB acknowledges the commenter's background and interests.

**Response to Comment BD-2 through BD-3**

This comment is summarized and responded to in Master Response 2.1.2.

**Response to Comment BD-4**

This comment is summarized and responded to in Master Response 2.1.1.

**Response to Comment BD-5**

The comment is noted.

**Response to Comment BD-6**

The comment is noted.

**Response to Comment BD-7**

This comment is summarized and responded to in Master Response 2.1.8.

**Response to Comment BD-8**

This comment is summarized and responded to in the following Master Responses: 2.1.7; 2.1.13; 2.3.7; 2.3.1; 2.3.10; 2.3.3; 2.3.4; 2.4.1; 2.4.4; and 2.7.1.

**Response to Comment BD-9**

This comment is summarized and responded to in Master Response 2.1.13.

**Response to Comment BD-10**

The comment is noted.

**Response to Comment BD-11**

This comment is summarized and responded to in Master Response 2.1.13.

**Response to Comment BD-12**

This comment is summarized and responded to in the following Master Responses: 2.9.7; 2.9.8; 2.9.1; and 2.9.2.

**Response to Comment BD-13**

This comment is summarized and responded to in Master Response 2.9.8.

**Response to Comment BD-14**

The comment states that Water Code section 13241 requires regional boards to consider several factors, including “economic considerations” when establishing water quality objectives to ensure the reasonable protection of beneficial uses and prevent nuisance. The commenter states that the water board should consider every means possible to reduce the regulatory cost impact on small scale farms.

Please refer to Responses to Comments BN-007, BN-008, BN-009, BN-010, BN-011, BN-012, BN-013, BN-014, BN-015, BN-016, BN-017, BN-018 regarding the application of Water Code section 13241 and Master Response 2.9.1.

**Response to Comment BD-15**

The comment is noted.

**Response to Comment BD-16**

The comment is noted.

**Response to Comment BD-17**

This comment is summarized and responded to in Master Response 2.8.8.

**Response to Comment BD-18**

The comment requests that growers be compensated for lost production due to riparian and operational setbacks. Please note that the RAO 4.0 does not include the riparian and operational setback components. For more information related to riparian and operational setbacks, please refer to Master Response 2.8.8.

**Response to Comment BD-19**

The comment is noted.

**Response to Comment BD-20**

The comment is noted.

**Response to Comment BD-21**

This comment is summarized and responded to in Master Response 2.1.6.

**Response to Comment BD-22**

This comment is summarized and responded to in the following Master Responses: 2.1.5 and 2.1.4.

**Response to Comment BD-23**

The comment is noted.

**Response to Comment BD-24**

The comment is noted.

**Response to Comment BD-25**

This comment is summarized and responded to in Master Response 2.3.3.

**Response to Comment BD-26**

The comment is noted.

**Response to Comment BD-27**

The comment is noted.

**Response to Comment BD-28**

This comment is summarized and responded to in Master Response 2.1.8.

**Letter BE: Heather Golden, Golden Ag Assistance LLC (June 20, 2020)****Letter BE**

**From:** [heathergoldencore@gmail.com](mailto:heathergoldencore@gmail.com)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comments on Draft Ag Order 4.0 Golden Agg Assistance LLC  
**Date:** Saturday, June 20, 2020 1:10:07 PM  
**Attachments:** [Ag Order 4.0 Comment LetterGAA.pdf](#)

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EXTERNAL:

Attached is my comment letter for Draft AG Order 4.0

With Regards,

*Heather Golden*  
*Golden Ag Assistance LLC*  
*Cell(831)320-8698*  
*Fax(831)417-5045*  
[hgolden@fitforgold.com](mailto:hgolden@fitforgold.com)

*This message, including attached files, contains confidential information intended for a specific purpose, is protected by law and is intended only for the person or entity to which it is addressed. If you are not the intended recipient any retransmission, disclosure, copying, or distribution of this message is strictly prohibited; please delete this message and any attachments if you received this transmission in error.*

**Golden Ag Assistance, LLC**

Heather Golden  
1172 S. main St #237  
Salinas, Ca. 93901  
(831)320-8698

State of California  
Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo CA 93401 -7906

June 12, 2020

Subject: Response to Ag Order 4.0

To Whom It May Concern:

- BE-1 | This letter is in response to the Ag Order 4.0. I represent several growers and landowners totaling over 5000 acres of agricultural land on the Central Coast.
- BE-2 | My clients are very concerned about the direction of Ag Order 4.0 as it is written. Ag Order 4.0 does not offer forward moving solid solutions to our environmental concerns. The effort needs to be for a solution driven waiver.
- BE-3 | Please consider the following concerns prior to the acceptance of the Ag Order 4.0. I would hope that the Board members will reach out to educate yourselves and understand the far-reaching, unpredictable, unintended consequences affecting Regional, County, State and Federal interests. There would be benefits to increase public dialogue.
- BE-4 | 1) I would like to point out that the Ag Order 3.0 compliant growers are not the bad guy. They have for the most part continued to and make huge progress in farming practices/methods to protect the environment which is crucial to their success in farming.
- BE-5 | 2) There is a misconception that if they do not participate in government grant programs, they are doing nothing. This is not true. Growers are proactive in their conservation activities without unwanted publicity and the burdensome paperwork.
- BE-6 | 3) They all recognize that regulations are necessary, but Ag Order 4.0 is an extreme example of Government overreach without adequate education to the impact of unintended consequences.
- BE-7 | 4) Land leases are lease/rent per acre which means every agricultural acre converted to non-agricultural land in the "setback" requirements is going to be costly in unpredictable unmeasurable ways.
- BE-8 | 5) The setback requirement will impact ground water extraction to irrigate riparian recovery.
- BE-9 | 6) Many of the waterbodies/streams on the Strahler Stream Order map have not existed for several decades and there is no physical/visible evidence of their existence ever.
- BE-10 | 7) Consequences of taking farmland out of production will include an unknown impact on domestic and international food markets and food availability.
- BE-11 | 8) Ag Order 4.0 will squash the smaller to midsize operators as they do not have the resources or workforce to absorb the costs for the additional regulatory requirements. They are overwhelmed as it is. Many of these operations are family owned and run.
- BE-12 | As some of us are members of the Grower-Shipper Association we join in support of the concerns that they have submitted during the comment period. The areas of concern include Irrigation and Nutrient Management for Groundwater Protection, Sediment & Erosion Control, Surface Water Monitoring & Reporting, Riparian Area Management & Setbacks (conversion of agricultural land to nonagricultural land) and general economic impacts.
- BE-13 | I would like to note that the agriculture community does not need more time to effectively present their concerns for this AG Order 4.0. Its is my opinion that the Water Board members need more time for more public dialogue and education to learn the impacts that have obviously not been considered.

Respectfully,

  
Heather Golden



**Response to Comment BE-1**

The CCWB acknowledges the commenter's background and interests.

**Response to Comment BE-2 through BE-3**

This comment is summarized and responded to in Master Response 2.1.2.

**Response to Comment BE-4 through BE-5**

This comment is summarized and responded to in Master Response 2.3.1.

**Response to Comment BE-6**

This comment is summarized and responded to in Master Response 2.1.2.

**Response to Comment BE-7 through BE-10**

This comment is responded to in Master Response 2.8.8.

**Response to Comment BE-11**

This comment is summarized and responded to in Master Response 2.1.7.

**Response to Comment BE-12**

This comment is summarized and responded to in the following Master Responses: 2.3.1; 2.7.1; 2.5.3; 2.8.8; and 2.9.1.

**Response to Comment BE-13**

The comment is noted.

**Letter BF: John Tubb, Que Sera Syrah Vineyard (June 20, 2020)****Letter BF**

**From:** [John Tubb](#)  
**To:** [AgNOI.WB@Waterboards](mailto:AgNOI.WB@Waterboards)  
**Subject:** Comments on Draft Ag Order  
**Date:** Saturday, June 20, 2020 3:42:38 PM

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EXTERNAL:

June 20, 2020

Mathew T. Keeling, Executive Officer  
 Central Coast Regional Quality Control Board  
 895 Aerovista Place, Suit 101  
 San Luis Obispo, CA. 94301

Delivered via electronic mail to: [AgNOI@waterboards.co.gov](mailto:AgNOI@waterboards.co.gov)  
 Re: Vineyard coalition comments on Draft Ag Order 4.0

Dear Sirs:

BF-1

My name is John K. Tubb, owner of Que Sera Syrah Vineyard located at 1640 Circle B Rd, Paso Robles, and I would like the Draft Ag Order 4.0 look at Vineyards differently than general agriculture. As written, it is burdensome and overly complex, without a benefit to water quality. Also, the reporting and subsequent costs are prohibitive.

BF-2

I have farmed 5.0 acres here for 17 years growing French ENTAV clones of syrah, and selling to the same winery.

BF-3

I am very concerned with water consumption (used only 61 AF/acre) last year, using a low volume drip system rated 92% efficient in 2020 by the Upper Salinas-Las Tablas Resource Conservation District. I am also very aware of possible problems with water runoff. At this vineyard there is no runoff at all. We adhere to nutrient budgets, based on water, soil, and tissue sampling. Pesticides are kept on site and used as little as possible.

BF-4

I participate in the SIP program, and adhere to all their practises. Under this program, it is required to report pesticide, water, and nutrient use, and I have a conservation plan.

BF-5

I am opposed to the Ag Order 4.0 as written, and hope you will consider changes that give credit to vineyard growers, instead of being penalized and over charged for actions already being taken. Thank you.

Sincerely,

John K. Tubb

Que Sera Syrah Vineyard  
 1640 Circle B Rd  
 Paso Robles, CA. 93446

805-674-1240  
[jkl47@gmail.com](mailto:jkl47@gmail.com)

**Response to Comment BF-1**

This comment is summarized and responded to in the following Master Responses: 2.1.2 and 2.1.4.

**Response to Comment BF-2**

This comment is summarized and responded to in the following Master Responses: 2.1.5 and 2.1.4.

**Response to Comment BF-3**

This comment is summarized and responded to in Master Response 2.3.10.

**Response to Comment BF-4**

This comment is summarized and responded to in Master Response 2.2.2.

**Response to Comment BF-5**

This comment is summarized and responded to in the following Master Responses: 2.9.1 and 2.1.2.

**Letter BG: Gina Bella Colfer, Wilbur-Ellis Agribusiness (June 20, 2020)****Letter BG**

**From:** [Gina Colfer](#)  
**To:** [AgNOI\\_WB@Waterboards](#)  
**Subject:** organic fertilizer comment  
**Date:** Saturday, June 20, 2020 9:30:29 AM  
**Attachments:** [image001.png](#)  
[Irrigated Lands Program Letter - Organic Fertilizers.docx](#)

EXTERNAL:

BG-1

Good Day Water Board,

I am attaching a letter that I would like you to consider. We are working diligently to build soil health in the Salinas Valley, and I work directly with organic growers to do this. The main way they are able to achieve this at this point is by using high carbon fertilizers, where the N mineralization rate is slow and not efficient. I realize the best way to build soil carbon is by cover cropping, but since cover cropping is not incentivized by any organization, growers are reluctant to do it because it is costly and takes ground out of production for a period of time. Cover cropping must be incentivized for these growers to even consider this process, and if they were able to see firsthand the benefits to the soil over time, like increased water holding capacity, increased microbial diversity, increased organic matter content, which would eventually reduce fertilizer and water applications, we would have a different story to tell.

Thank you for your consideration.

Gina Colfer



**Gina Colfer**  
 Key Account Manager - Organics  
 PCA/CCA Sustainability SSP.  
 Wilbur-Ellis Agribusiness  
 1427 Abbott St  
 Salinas, Ca 93901  
 Office: 831-422-6473  
 Cell : 831-809-5437  
[gcolfer@wilburellis.com](mailto:gcolfer@wilburellis.com)  
[ag.wilburellis.com](http://ag.wilburellis.com)

Irrigated Lands Program  
 Central Coast Regional Water Quality Control Board  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, CA 93401  
[AgNOI@waterboards.ca.gov](mailto:AgNOI@waterboards.ca.gov)

Subject: Comments on Draft Ag Order 4.0

BG-2 Thank you for the opportunity to comment on the proposed Ag Order 4.0. We are an organic distributor located in Salinas, CA, where also Wilbur Ellis operates other branches in CA and throughout the United States. I represent the Wilbur Ellis Branch in Salinas, CA where we consult with various organic and conventional growers, recommending and applying fertilizers and pesticides for these various growers. We are aware of the Ag Order 4.0 proposed requirements and are here to help our growers comply, but we also have some concerns.

BG-3 We believe that the proposed order's compliance pathways for nitrogen discharge target and limits will negatively impact organic growers' fertility programs and economic sustainability due to the lack of recognition or discount provided to fertilizers used in organic agriculture. We are supportive of the nitrogen discount factor provided to application of composts due to their nitrogen mineralization rates based on their carbon-to-nitrogen ratio.

BG-4 We recommend that fertilizers used in organic farming be provided the same nitrogen discount factor as compost. The chemical characteristics of organic fertilizers align with compost, i.e. nitrogen mineralization rates and carbon-to-nitrogen ratios. Organic fertilizers are known to similarly contribute to on-farm soil health, nutrient and carbon sequestration, and water holding capacity. Building carbon in the soil is the backbone to building soil health, so putting extreme limits on growers that want to build carbon through organic fertilizer amendment applications could impact the viability of farming organically in the Salinas Valley.

BG-5 We are also supportive of the comments provided to the board regarding this proposed rule from True Organic Products, Inc.

Sincerely,

Gina Bella Colfer  
 Agronomist – Organics  
 Wilbur Ellis Co.  
 1427 Abbott St. Salinas, CA 93901  
[gcolfer@wilburellis.com](mailto:gcolfer@wilburellis.com)  
 831-809-5437

**Response to Comment BG-1**

This comment is summarized and responded to in Master Response 2.1.8.

**Response to Comment BG-2**

The CCWB acknowledges the commenter's background and interests.

**Response to Comment BG-3 through BG-4**

This comment is summarized and responded to in Master Response 2.1.8.

**Response to Comment BG-5**

This comment is noted.



**Letter BH: Jonathan Evans, Center for Biological Diversity (June 21, 2020)****Letter BH**

**From:** [Jonathan Evans](#)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comments on Draft Ag Order  
**Date:** Sunday, June 21, 2020 4:30:49 PM  
**Attachments:** [2020-6-21.CBD.Ag Order 4.0 comments.pdf](#)

---

**EXTERNAL:**

Dear Central Coast Regional Water Board members and staff:

Attached are comments submitted on behalf of the Center for Biological Diversity on the fourth Agricultural Order, Draft General Waste Discharge Requirements for Discharges from Irrigated Lands (Ag Order 4.0).

Thank you,

Jonathan Evans  
Environmental Health Legal Director and Senior Attorney  
Center for Biological Diversity  
1212 Broadway  
Suite 800  
Oakland, CA 94612  
tel: (510) 844-7100 x318  
cell: (213) 598-1466

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CENTER for BIOLOGICAL DIVERSITY

*Because life is good.**via e-mail*

June 21, 2020

Central Coast Regional Water Quality Control Board (Region 3)  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, CA. 93401-7906  
 (805) 549 3147  
[AgNOI@waterboards.ca.gov](mailto:AgNOI@waterboards.ca.gov)

RE: Comments on Ag Order 4.0, Draft General Waste Discharge Requirements for  
 Discharges from Irrigated Lands

Dear Central Coast Regional Water Board members and staff:

BH-1

These comments are submitted on behalf of the Center for Biological Diversity on the fourth Agricultural Order, Draft General Waste Discharge Requirements for Discharges from Irrigated Lands ("Ag Order 4.0"). Discharge from agricultural uses, such as nutrients from fertilizers, pesticides, and sediment, result in significant damage to surface water, groundwater, and wildlife. We urge the California Regional Water Quality Control Board, Central Coast Region ("CCWB") to approve strong protections for water quality in the Ag Order 4.0.

BH-2

Ag Order 4.0 takes some important steps to rein in that pollution within the CCWB's jurisdiction. Setting numeric application and discharge limits for fertilizers, such as nitrogen, is a valuable step to reduce nutrient pollution and protect groundwater. Numeric discharge limits for pesticides and aquatic toxicity testing are also critical to reduce the pervasive harms of pesticides in waterbodies. Vegetated setbacks of 35 to 250 feet, depending on the class of waterbody or wetlands, is one of the most important steps that the CCWB could establish for economical and effective tools to improve water quality, while providing co-benefits for wildlife and the public.

BH-3

However, Ag Order 4.0 must do more to protect the region's water quality and it must better protect the needs of aquatic life and endangered species as beneficial uses, as required by both state and federal law. The comments provided below outline steps to improve Ag Order 4.0 to better achieve water pollution reductions.

BH-4

The Center for Biological Diversity ("Center") is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and supporters throughout the United States, including residents within the CCWB's jurisdiction. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in California and the Central Coast region.

Arizona • California • Colorado • Florida • Hawaii • Mexico • Minnesota • New York • Oregon • Washington • Washington D.C.

Jonathan Evans, Environmental Health Legal Director & Senior Attorney  
 1212 Broadway, Suite 800, Oakland, CA 94612  
 tel: (510) 844-7100 x318 fax: (510) 844.7150 email: [jevans@biologicaldiversity.org](mailto:jevans@biologicaldiversity.org)  
[www.BiologicalDiversity.org](http://www.BiologicalDiversity.org)

|       |   |
|-------|---|
| BH-5  | <p style="text-align: center;"><b><u>Irrigation and Nutrient Management for Groundwater and Surface Water</u></b></p> <p>The Center urges CCWB to adopt strong basin wide numeric discharge and application limits for farm nutrients, such as nitrogen fertilizers, because of negative impacts to groundwater and surface waters. For nitrate as nitrogen in surface waters, the water standard should be more protective than 10 milligrams per liter (“mg/L”) of nitrate, which is the minimum necessary, because that is the current limit required by drinking water standards. Levels below 10 mg/L can negatively affect aquatic life, which is one of the beneficial uses that the Ag Order 4.0 is tasked with protecting. Given the cumulative pollution burden from nutrients a lower standard is necessary.</p> |
| BH-6  | <p>Ag Order 4.0 should also reduce the allowable nitrogen application limits and phase in more aggressive standards. Ag Order 4.0 assumes application limits that are above the maximum recommended range for many crops contributing to continued surface and groundwater pollution. Nitrogen discharge limits and reductions in those limits are also phased in to gradually and would unnecessarily result in continued surface water and groundwater pollution.</p>   |
| BH-7  | <p style="text-align: center;"><b><u>Pesticide Management for Groundwater and Surface Water</u></b></p> <p>The Center urges you to adopt strong numeric discharge limits for pesticides in receiving waters and groundwater, with comprehensive testing for aquatic toxicity. Ag Order 4.0’s mechanism to establish Toxic Units based on all pesticides in a given class and site-specific toxicity testing using organisms that are sensitive to different classes of pesticides are important tools to help avoid data gaps and the failure to achieve reductions in pesticides when farmers inevitably switch from one harmful pesticide to another.</p>   |
| BH-8  | <p>Ag Order 4.0 should not rely on LC50 values, which are designed to set a threshold that results in a lethal concentration for 50% of the population of organisms. LC50 values are not protective of aquatic life because those standards result in a 50% loss of individuals of sensitive species. More protective values are needed to protect aquatic life.</p>  |
| BH-9  | <p>Ag Order 4.0 should also require provisions for adding monitoring and limits for additional pesticides as they become more widely used and as additional aquatic toxicity data become available. Dischargers should be required to adjust the pesticides they are monitoring based on review of most recent pesticide use data.</p>  |
| BH-10 | <p>The pesticide monitoring frequency proposed in Ag Order 4.0 must be improved. Pesticide concentrations in surface water are highly variable based on use and weather events. If monitoring is required infrequently, such as only 4 times per year, many toxic events are likely to go undetected. At a minimum, monitoring the water and sediment on a monthly basis during the irrigation cycle and during “first flush” events is essential to obtaining accurate monitoring of pesticide pollution.</p>  |

June 21, 2020  
Page 2 of 3

**Riparian Area Management for Water Quality Protection**

BH-11

The Center urges you to adopt the maximum vegetated buffers between all waterways and farm fields. These setbacks are an effective, low-cost way to improve water quality, provide benefits for wildlife habitat and the public, while protecting agricultural production. Riparian setbacks serve as an effective practice to mitigate the transport of pollutants to receiving waters, while providing resilience to aquatic ecosystems and better reducing the impacts of multiple pollutants from agricultural discharges.

BH-12

The Center is concerned by the failure to establish a setback for Order 1 streams (such as man-made ditches) and urges CCWB to require setbacks of at least 35 feet for Order 1 streams. Installation of grass filter strips or other low vegetation in these operational setbacks for Order 1 streams will help to prevent transport of pesticides and nitrates.

BH-13

We also urge the CCWB to require larger setbacks than those proposed when there will be the application of neonicotinoid or systemic pesticides. Systemic insecticides will have greater impacts to riparian vegetation and increased setbacks will allow for additional buffers of vegetation, such as grasses or non-flowering plants, adjacent to pesticide use to minimize impacts to pollinators and species that feed on them. Systemic pesticides such as the neonicotinoids may be transported off the fields to setbacks, where they are taken up by plants. When these plants attract pollinators, those insects or birds may be adversely impacted as well as the predators that feed on them. Increasing the setback to allow for nonflowering vegetation in closest proximity to fields, with more diverse closer to the water bodies would better protect riparian ecosystems.

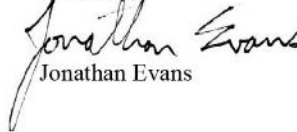
BH-14

Finally, Ag Order 4.0 must ensure that all requirements are fully enforceable to protect riparian habitat and wetlands. Loopholes or off-ramps that allow farmers to avoid enforceable standards, especially the protection of wetlands and riparian habitats, undermine the integrity of CCWB's waste discharge requirements and contribute to violations of water quality standards.

BH-15

We thank you for the opportunity to submit these comments and appreciate the work done by CCWB staff and Board members to better protect water quality in the Central Coast region of California.

Sincerely,



Jonathan Evans

June 21, 2020  
Page 3 of 3

**Response to Comment BH-1**

This comment is summarized and responded to in Master Response 2.1.1.

**Response to Comment BH-2**

This comment is summarized and responded to in the following Master Responses: 2.8.8; 2.3.10; 2.3.2; and 2.5.1.

**Response to Comment BH-3**

This comment is summarized and responded to in Master Response 2.1.3.

**Response to Comment BH-4**

CCWB acknowledges the commenter's background and interests.

**Response to Comment BH-5**

This comment is summarized and responded to in Master Response 2.3.2.

**Response to Comment BH-6**

This comment is summarized and responded to in Master Response 2.3.10.

**Response to Comment BH-7**

The CCWB appreciates the commenter's comment regarding the DAO 4.0's establishment of Toxic Units based on all pesticides in a given class and site-specific toxicity testing using organisms that are sensitive to different classes of pesticides. This comment is summarized and responded to in the following Master Responses: 2.6.5 and 2.6.2.

**Response to Comment BH-8**

This comment is summarized and responded to in Master Response 2.6.4.

**Response to Comment BH-9 through BH-10**

This comment is summarized and responded to in Master Response 2.6.3.

**Response to Comment BH-11**

The comment urges the CCWB to adopt maximum vegetated buffers between all waterways and farm fields. Please note that RAO 4.0 does not include the riparian and operational setback components. This comment is responded to in Master Response 2.8.8.

**Response to Comment BH-12**

The comment urges the CCWB to require setbacks of at least 35 feet for Order 1 streams. Please note that RAO 4.0 does not include the riparian and operational setback components. This comment is responded to in Master Response 2.8.8.

**Response to Comment BH-13**

The comment urges the CCWB to expand setbacks when neonicotinoid or systemic pesticides will be used. Please note that RAO 4.0 does not include the riparian and operational setback components. This comment is responded to in Master Response 2.8.8.

**Response to Comment BH-14**

This comment is responded to in Master Response 2.8.8.

**Response to Comment BH-15**

Thank you for your comment.



**Letter BI: Colby Pereira (June 21, 2020)****Letter BI**

**From:** [colbypereira4@gmail.com](mailto:colbypereira4@gmail.com)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comments of Draft Ag Order 4.0  
**Date:** Sunday, June 21, 2020 8:05:43 AM  
**Attachments:** [Ag Order 4.0 - Colby Pereira 6.20.20.pdf](#)

---

EXTERNAL:

Thank you for the opportunity to submit attached comments.  
~ Colby Pereira

June 20, 2020

Central Coast Regional Water Quality Control Board  
 Att: Matthew T. Keeling, Executive Officer  
 895 Aerovista Place, Ste. 101  
 San Luis Obispo, CA 93401

VIA: E-mail to AgNOI@waterboards.ca.gov

**RE: Comments on Draft Ag Order 4.0**

Dear Mr. Keeling:

Thank you for the opportunity to provide comments on the Draft Ag Order 4.0

BI-1

I write to express concern with certain elements of the proposed Irrigated Lands Regulatory Program (Ag Order 4.0). Most of my comments provided during this development process have been targeted towards Riparian Area Management and Food Safety. I have previously provided extensive comments related to the Ag Order 4.0 Option Tables (see attached letter dated January 15, 2019) and also presented in front of the full board at its Food Safety Workshop, held in Watsonville in September 2019.

BI-2

Within the draft order, riparian setbacks are required for ranches in Riparian Priority areas with a discharge prohibition and requirement for implementation of management measures to protect and/or restore riparian areas. Additionally, operational setbacks are required for ranches outside of the Riparian Priority areas with a discharge prohibition. All farms with waterbodies within or bordering their ranch (not a manmade ditch) must record an operation setback on October 1, 2022; required riparian setback from these waterbodies ranges from 50' to 250' depending on Strahler Stream Assessment designation and require establishment of maintenance of grasses, shrubs, and trees in most instances. Riparian setbacks must consist of vegetative land extending along the side of a waterbody and its adjacent wetlands and slopes; prohibited activities in this vegetated wetland area are commercial crop production, permanent structures (including roads), application of chemicals (fertilizers and pesticides), and operation of heavy machinery.

BI-3

With the addition of excess vegetation comes additional food safety risks. Heavy riparian area/vegetation increases the likelihood of animal intrusion into adjacent production locations. Harborage for rodents and other small animals increases, as does the attraction for birds which are enticed to perch upon the overgrowth. Rodents, birds and other larger animals are vectors for disease and contamination, including E. coli and Salmonella. Their physical presence alone inside a field is problem enough, but of even higher concern is the potential for contamination from their fecal matter and repercussions to public health. Additionally, the increase in foreign material associated with increased vegetation is problematic for growers. This can include vegetation debris, bird feathers or even small rodents that end up in adjacent growing areas, thus leading to a physical contamination issue that could result in loss of crop.

BI-4

Significant conflicts with food safety measures come with vegetative setbacks adjacent to production fields. Growers find themselves in a "no-win" situation, where on one hand State and Federal regulatory food safety programs (example: CA Leafy Green Marketing Agreement "LGMA" and FDA's Food Safety Modernization Act "FSMA") are directing that areas adjacent to production locations are kept free of

BI-4  
cont.

excess vegetation and on the other hand an Ag Order mandate for installation and/or expansion of vegetated areas. This puts landowners and growers in the middle of conflicting rules from regulatory bodies and ultimately sets producers up for failure. Aside from regulatory pressure to minimize excess vegetation adjacent to production locations, many 3<sup>rd</sup> party auditing bodies and independent Shipper companies require specific distances from any type of vegetation to the edge of the field. These distances can range from 30 feet – 300 feet, depending on the crop being grown and the auditing body or end buying customer. To satisfy these requirements, growers will be forced to take acreage out of production, thus reducing field production areas, impacting crop production yields per acre and costs of production (reducing financial return per acre). This has the potential to take out many thousands of acres of prime production land across the region. For landowners, this loss of production areas will reduce rental income and overall land value.

BI-5

As you can see, mandated vegetation and food safety co-management gets complicated. Flexibility in practices is paramount, as they pertain to vegetated buffers and riparian habitat. Riparian setbacks should be a management practice elective by farm, and incentivized, as envisioned in the Ag Association Partners' Comprehensive Submittal, Including Redline Revisions to the General Order (Ag Partner Submittal), in watersheds where there are scientifically reasonable mitigation strategies, not a prescriptive requirement for compliance. It is critical for growers as we navigate between good environmental stewardship and producing safety, healthy crops for consumers.

Thank you for your consideration of these comments.

Respectfully,



Colby Pereira

## Attachments

|            |  |
|------------|--|
| Attachment | Anthony Costa & Sons Comments to Ag Order 4.0<br>Options Tables (January 15, 2019) |
|------------|--|

## Note to Readers:

The materials provided in Attachment have been omitted from this section because they do not contain specific comments on the DEIR or DAO 4.0.

These materials are available for review in Section 3.3.

## Response to Comment

**Response to Comment BI-1**

Thank you for your comments. This comment is responded to in Master Response 2.8.8.

**Response to Comment BI-2 through BI-5**

This comment is responded to in Master Response 2.8.8.

**Letter BJ: Daniel M. Rodrigues, Vina Quest (June 21, 2020)****Letter BJ**

**From:** [Daniel Rodrigues](#)  
**To:** [AgNOI\\_WB@Waterboards](#)  
**Subject:** Comments on Draft Ag Order  
**Date:** Sunday, June 21, 2020 3:51:35 PM  
**Attachments:** [Response to Ag Order 4.0 2020.pdf](#)

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EXTERNAL:

Please see attached comments.

Dan Rodrigues  
Vina Quest  
(805) 459-5514





06/20/2020

Matthew T. Keeling, Executive Officer  
 Central Coast Regional Water Quality Control Board  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, CA 94301

Dear Sir,

- BJ-1 I am writing this letter in response to my concerns of the propose Ag Water order 4.0. The purpose of this letter is to voice these concerns prior to any changes that will be made.
- BJ-2 To start, I am a vineyard consultant and certified crop advisor in the central coast region for over 35 years ranging from San Benito county all through the Santa Barbara county. My area of expertise is fertilization, irrigation management, and pest management of wine grapes and other small crops. During that time, great strides have been made by the vineyard community and agriculture, to reduce and lessen the impacts of production to the environment and the public. Improvement of irrigation scheduling, nitrate management and reduction of pesticide use has been a major priority of the ag community for the past 4-5 decades. These improvements have been made internally within each industry and industry group and not by regulation by the state government. A large motivation for making these improvements has been due to our love of the central coast region, protection of our families and the people involved in the production of our ag commodities. Billions of dollars of farm commodities are at stake every year and many of thousands of people and their livelihoods are dependent upon a strong ag community. This proposed ag order will do damage to all those people.
- Concerns**
- BJ-3 1) Current draft is too complicated and very confusing in regard to reporting and timelines
- BJ-4 2) The details of the annual reporting have not been sufficiently explained to understand what the grower is to be responsible for.
- BJ-5 3) Reporting as proposed is burdensome to growers which will result in higher costs. NO IMPROVEMENT IN WATER QUALITY IS ACCOMPLISHED.
- BJ-6 4) The breath of the information that is asked for is so wide that staff will not be able to interpret and response back to the grower in a meaningful timeline.
- BJ-7 5) The proposed draft economic analysis is insufficient and does not account of several things such as land fallowing, production loss and extra cost associated with complying to this order.
- BJ-8 6) No consideration to operational risk. All the draft considers is the geographical location and does not look at the individual commodity. Not all commodities have the same impact to the environment.

BJ-9 | 7) Vineyards should not be held in the same standard due to its low impact to water quality. Vineyards do not have any tail water in their irrigation. Also, vineyards currently meet the 2052 Nitrogen loading standards and should be exempted from monitoring and reporting related to ground water.

BJ-10 | A major conflict I have with this proposed order is not allowing commodity groups such as SIP to qualify as an alternative compliance pathway and farm planning requirements. Many of the standards that SIP certification is covered in the proposed ag order. SIP works with grower along with Certified Crop Advisors (CCA) to fulfill the reporting testing and reporting of many of the requirements needed for certification. With the current proposal, there will be a vast amount of duplication that the growers will have. SIP certification should be allowed to fulfill the compliance of the orders

BJ-11 | I would conclude by asking that you consider the ramifications the current proposed Ag Order will have on the region's ag community. Based on the current proposals, no real improvements of the regions water quality will be improved by the massive reporting requirements this plan has. Please considered reviewing the above-mentioned concerns and work with the ag industry to make a better and more robust plan.

Thank you,



Daniel M. Rodrigues

Vina Quest

(805) 459-5514

**Response to Comment BJ-1**

The CCWB acknowledges the commenter's input.

**Response to Comment BJ-2**

This comment is summarized and responded to in the following Master Responses: 2.9.1 and 2.3.1.

**Response to Comment BJ-3**

This comment is summarized and responded to in the following Master Responses: 2.1.5 and 2.1.4.

**Response to Comment BJ-4**

This comment is summarized and responded to in the following Master Responses: 2.1.4 and 2.3.1.

**Response to Comment BJ-5**

This comment is summarized and responded to in the following Master Responses: 2.1.6; 2.1.8; and 2.1.4.

**Response to Comment BJ-6**

This comment is summarized and responded to in the following Master Responses: 2.9.1; 2.1.6; 2.1.8; and 2.1.4.

**Response to Comment BJ-7**

This comment is summarized and responded to in Master Response 2.9.1.

**Response to Comment BJ-8**

This comment is summarized and responded to in Master Response 2.5.4.

**Response to Comment BJ-9**

This comment is summarized and responded to in Master Response 2.3.5.

**Response to Comment BJ-10**

This comment is summarized and responded to in the following Master Responses: 2.1.8 and 2.2.2.

**Response to Comment BJ-11**

Thank you for your comments.

**Letter BK: Doug Filipponi, Margarita Vineyards, LLC (June 21, 2020)****Letter BK**

**From:** [Doug Filipponi](#)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comments on Draft Ag Order  
**Date:** Sunday, June 21, 2020 8:02:44 AM

EXTERNAL:

June 18, 2020

Matthew T. Keeling, Executive Officer  
 Central Coast Regional Water Quality Control Board  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, CA 94301

Delivered via electronic mail to [AgNOI@waterboards.ca.gov](mailto:AgNOI@waterboards.ca.gov)

Dear Executive Officer Keeling:

- BK-1 | Margarita Vineyards is located in Santa Margarita between Highway 101 and Pozo Road. We are in the center of the Santa Margarita Ranch. The vineyards were planted nearly 20 years ago by the Mondavi Family using the utmost care to protect the environment. The standards used then provided for wildlife corridors, cover crops, filter strips with vegetation between the vineyards and the creeks on the ranch. The use of owl boxes, bird and bat boxes for pest control causes less chemicals to be implemented. Many of the standards used then were incorporated in the best practices followed by many new plantings thereon. Many of the creek set backs are natural as turn around space is necessary in vineyards. We took over the vineyards in 2005 and have been farming in the area for over 40 years.
- BK-2 | We participate in the Central Coast Vineyard team initiated program for sustainability, SIP or Sustainability In Practice. This provides the grower with numerous standards to meet to qualify. Some examples are the ones mentioned above as well as limited watering, reduced inputs of nitrogen, the use of soft chemicals and erosion control to name a few. We are required to report on water tests, nutrients, erosion, pest, and riparian information. Creek setbacks are required. This rigorous program helps the grower reduce effects on the environment as well as educate them. This documentation should be used in lieu of Farm Plans.
- BK-3 | We are committed to the betterment of the land and water we have been stewards of for nearly 20 years. I was born and raised in the Paso Robles area and our lands are important to us. We understand water quality is critical to our current farm and for the future generations. We are committed to protect our surface water and streams running thru the ranch.
- BK-4 | The current Draft, EIR and attachments are long and complicated. There are far too many reports, timelines and confusing requirements. Staff did a good job on the webinars, however, it is still very difficult to provide the information necessary in a 2 hour webinar. Too much information in too little time. Imagine this is not your full time job and trying to cope with the reality of farming, managing people, a difficult market and having a cumbersome reporting system on top of it.
- BK-5 ↓ The Draft economic analysis fails to account for many factors such as, land fallowing, hiring professionals, loss of production and the market. We are spending thousands per year on

BK-5   
cont.

compliance from professionals currently. Additional reporting is time consuming and costly.

BK-6

As a certified member of the SIP program we encourage staff to consider modifying the draft to allow vineyards participating in the SIP, or other sustainable organizations, as an alternative compliance pathway and consider using SIP documentation in lieu of Farm Planning Requirements. Vineyards are a low risk farming practice to start with as we are on drip using small amounts of water. Quality standards require low inputs and most wineries are very strict on the input of nitrogen. This is a tough business to begin with and requiring more compliance is costly and cumbersome. Voluntary compliance through education and participation in SIP and the like are far superior to regulatory hammers.

Thank you for your consideration,

*Doug Filipponi*

**Margarita Vineyards, LLC  
22720 El Camino Real  
Santa Margarita, Ca 93453**

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**Response to Comment BK-1**

The CCWB acknowledges the commenter's background and interests. In addition, this comment is summarized and responded to in Master Response 2.3.1.

**Response to Comment BK-2**

This comment is summarized and responded to in Master Response 2.2.2.

**Response to Comment BK-3**

This comment is summarized and responded to in Master Response 2.3.1.

**Response to Comment BK-4**

The comment is noted. The CCWB appreciates that the comment that webinars have been helpful to the commenter. In addition, this comment is summarized and responded to in the following Master Responses: 2.1.5; 2.1.6; 2.1.8; 2.1.4; 2.2.2; and 2.2.3.

**Response to Comment BK-5**

This comment is summarized and responded to in Master Response 2.9.1.

**Response to Comment BK-6**

This comment is summarized and responded to in the following Master Responses: 2.1.14 and 2.2.2.



**Letter BL: Stephen Sinton (June 21, 2020)****Letter BL**

**From:** [ssinton@earthlink.net](mailto:ssinton@earthlink.net)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comments on Draft Ag Order 4.0  
**Date:** Sunday, June 21, 2020 12:30:35 PM  
**Attachments:** [Ag Order 4.0 comments 6-21-20.pdf](#)

---

EXTERNAL:

My comments on Ag Order 4.0 are attached.

**STEPHEN SINTON**  
**P.O. BOX 112**  
**SHANDON, CA 93461**

June 21, 2020

Matthew T. Keeling, Executive Officer  
 Central Coast Regional Water Quality Control Board  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, CA 94301

Dear Executive Officer Keeling:

- BL-1 | Honestly, it makes me both sad and angry when I feel that we, the governed, are no longer considered by those who govern. Such is the case with the Regional Board and agriculture. We are the ones who produce your food, wine and open spaces, but are repeatedly under attack. Why can't we instead address any problems through mutual efforts that provide sustainability for all? At a minimum that should be the starting point for regulators, rather than the assault that is Ag Order 4.0.
- BL-2 | I live on our family ranch south of Shandon. We are as diversified as we know how to be in order to maintain our agricultural tradition that has continued for five generations in San Luis Obispo County. We raise cattle, grow wine grapes and lease farm land where tomatoes, carrots, onions and grain are grown. Our rangeland is certified organic and our grapes are SIP certified. We try our best and are as interested in protecting our groundwater and other natural resources as anyone because this is where we live.
- BL-3 | Although I am well educated, I find Ag Order 4.0 and its related documents too dense and complicated to allow for a thorough understanding of how this heavy hammer will be brought down upon us.
- BL-4 | We are a family operation, working long hours every day to keep everything going. We don't have the time or people to dedicate ourselves to examining such impenetrable regulations to assure ourselves that we are fully compliant, nor do we have the time or people to fill out the onerous annual reporting that seems imminent. That means, despite already being squeezed by difficult cattle and grape markets, that we almost certainly will have to hire someone to do our compliance work. I am already forced to contribute funds to cover the regional costs of water monitoring, an expense for which I have no direct connection. Ag Order 4.0 just makes this unfair situation worse. Each additional, unproductive expense, places those of us in agriculture that much closer to failure. Any regulation that is so invasive that we cannot comply with good practices and simple reporting is just wrong.
- BL-5 | One wonders if the Board somehow thinks that water quality will be improved if we are forced out of business, our lands are subdivided and our food has to be trucked in from afar. The answer surely is "no", yet without looking at the financial and other real-world consequences of its actions, that is the logical consequence of myopic regulatory actions.

- BL-6 | One aspect of Ag Order 4.0 deals with extensive new buffer areas. Anyone who is familiar with our area of the Central Coast would know immediately how absurd those buffers are. We are in dry, semi-desert area where swales are open and largely barren. They are not riparian areas and haven't been so in millennia. In addition, much of that land has been farmed for over a century. When regulatory overreaching is that obvious, it seems clear that the staff has failed to properly evaluate the resources before creating such a new and broad-brushed regulation. The consequences are that at least some agricultural operations will be curtailed to the point of ruin. Is there no interest in evaluating those impacts to the local economy or the local environment?
- BL-7 | A similar objection exists for lumping all operations into comprehensive reporting. Risks to our natural resources differs greatly by area, agricultural activity and practices. None of that seems to have been adequately taken into consideration in the creation of Ag Order 4.0. For instance, our vineyards use no applied nitrogen and are very water efficient, with no tail water. Nothing in Ag Order 4.0 will help us improve the water quality of our groundwater basin. On the contrary, it will take away funds that we could have used to buy new or improved water monitoring equipment. That is so counterproductive!
- BL-8 | Why isn't SIP Certified a recognized compliance process? Why isn't Certified Organic similarly recognized?
- BL-9 | The Order is backward - punishing all rather than those who may be a problem. The State should identify problem areas and focus on those people and places. Success will come from solving those problems, not from punishing everyone.
- BL-10 | It is not too late to fix this mess. Staff should start by working with responsible farming and ranching organizations, UC Cooperative Extension, Resource Conservation Districts and other knowledgeable entities and develop ways to achieve Water Board goals and objectives through cooperation and incentivizing all to do the right thing. The Board should specifically identify where improvement is required in order to protect our state waters and then provide the agricultural community the opportunity to evaluate those problems and bring to the Board solutions that will be effective and have the support and cooperation of responsible farmers. Ruling through hostile measures isn't necessary and arguably way less effective than reason and cooperation. Every agriculturalist is dependent of safe water, so it isn't as though we need to be motivated. If we could spend our scarce fiscal resources on solutions rather than dealing with expensive regulations and sometimes impossible, and other times irrelevant, monitoring, we could certainly help achieve the water quality objectives being sought through Ag Order 4.0.
- BL-11 | The staff needs to modify this draft to consider alternative compliance for low risk vineyards and other farming, leveraging current successful efforts, such as SIP Certified, and creating a framework that incentivizes adoption of practices that protect water quality by reducing the regulatory requirements. A revised and sensible Order should recognize that frequently there is no impact from a farming operation, so the Order needs to provide an easy way to identify those who don't cause problems and provide them with a way that they don't have to report.

Sincerely,

  
 Stephen Sinton  
 sjsinton@earthlink.net

**Response to Comment BL-1**

Thank you for your comment.

**Response to Comment BL-2**

This comment is summarized and responded to in Master Response 2.3.1.

**Response to Comment BL-3**

This comment is summarized and responded to in Master Response 2.1.4.

**Response to Comment BL-4**

This comment is summarized and responded to in the following Master Responses: 2.1.5; 2.1.6; 2.1.8; 2.2.2; and 2.4.3.

**Response to Comment BL-5**

This comment is summarized and responded to in Master Response 2.9.1.

**Response to Comment BL-6**

This comment is responded to in Master Response 2.8.8.

**Response to Comment BL-7**

This comment is summarized and responded to in the following Master Responses: 2.1.7; 2.3.5; 2.3.10; and 2.4.3.

**Response to Comment BL-8**

This comment is summarized and responded to in Master Response 2.2.2.

**Response to Comment BL-9**

This comment is summarized and responded to in Master Response 2.3.1.

**Response to Comment BL-10**

This comment is summarized and responded to in Master Response 2.1.11.

**Response to Comment BL-11**

This comment is summarized and responded to in the following Master Responses: 2.1.14; 2.2.3; and 2.3.9.

**Letter BM: Tom Ikeda (June 21, 2020)****Letter BM**

**From:** [Tom Ikeda](#)  
**To:** [AgNOI\\_WB@Waterboards](mailto:AgNOI_WB@Waterboards)  
**Subject:** Comment of Draft Ag Order 4.0  
**Date:** Sunday, June 21, 2020 8:24:30 PM  
**Attachments:** [Letter to RWQCB.docx](#)

---

EXTERNAL:

Attached is my comment letter for Draft Ag Order 4.0..

Sincerely,

Tom Ikeda

Central Coast Regional Water Quality Control Board  
 Attention: Matthew T. Keeling, Executive Director  
 895 Aerovista Place  
 San Luis Obispo, CA 93401

Dear Mr. Keeling,

- BM-1 Thank you for your time in this process. I am a farmer within the Central Coast Region. As a smaller farming operation, we have tried to do things in-house to keep our cost under control. The requirements in proposed Ag Order 4.0 Draft will add to the time requirement and expertise to needed to satisfy. This will require us to have to seek outside professional help, at considerable cost, to comply with the development and updating of the different sections of the Farm Plan. With the Plan comes with increased data collection and retention as well as reporting in the Annual Compliance Form (ACF). This reporting must be input manually since the ACF does not have upload function from standardized formats or spreadsheets. This will increase the time and cost of reporting.
- BM-2 We are committed to improving water quality, but it must be done in a balanced way. The draft recommendation would make it very difficult to farm more than 1 crop per year from 2050 and on with a 50# discharge limit. This would make farming uneconomical unless the consumer pays more than double for the food we produce.
- BM-3 The riparian setbacks are very concerning. As we farm next to a riparian area, we risk the loss of significant production area. With the requirement to have vegetation maintained in the riparian buffer, Food Safety protocols require us to buffer an extra 30' from the vegetation meaning even more production ground is lost. As a smaller farm, this loss of productive ground is not as easily compensated for as for the larger operations.
- BM-4 If adopted, the recommendations in the Ag Order 4.0 Draft will have greater impact on the smaller farming operations who do not have a staff of employees concentrating on compliance. Those who also do not have the acreage to spread out the cost of compliance. Even though we all have an obligation to try to achieve clean water, it should not put a greater burden on those less able to pay for these changes. Incentivizing actions, such as in the Riparian Area Management and Setbacks would help to create a more level playing field between the larger and smaller operations. Prescriptive requirements favor the larger operations who have the size to spread out their costs. I ask that you consider a more incentive base approach that would be more equitable for all. Thank you for your consideration.

Sincerely,

Tom Ikeda



**Response to Comment BM-1**

This comment is summarized and responded to in the following Master Responses: 2.1.5; 2.1.6; 2.1.8; 2.1.14; 2.1.4; and 2.4.3.

**Response to Comment BM-2**

This comment is summarized and responded to in Master Response 2.1.11.

**Response to Comment BM-3**

This comment is responded to in Master Response 2.8.8.

**Response to Comment BM-4**

This comment is summarized and responded to in the following Master Responses: 2.8.8; 2.1.7; and 2.1.8.

## Letter BN: Abby Taylor-Silva et al, Grower-Shipper Association of Central California et al (June 22, 2020)

### Letter BN

**From:** [Liz Simms](#)  
**To:** [AgNOI\\_WB@Waterboards](#)  
**Cc:** [Yu, Stephanie@Waterboards](#); [Wadhvani, Emel@Waterboards](#); [Abby@growershipper.com](#); [GDelihant@WGA.com](#); [sarah@ccwqb.org](#); [kfisher@cfbf.com](#); [norm@montereycfb.com](#); [reneep@healthyplants.org](#); [Claire.wineman@grower-shipper.com](#); [Tess Dunham](#)  
**Subject:** Comments on Draft Ag Order 4.0 – Part 1 of X for Ag Association Partners - Part 1  
**Date:** Monday, June 22, 2020 4:56:14 PM  
**Attachments:** [image002.png](#)  
[6-22-2020 Cover letter .pdf](#)  
[Exhibit 1 Legal and Policy Comments.pdf](#)  
[Exhibit 2 - CEQA Arguments 6-22-2020 FINAL.pdf](#)  
[Exhibit 2 - Attachment 1 Costa Cover Letter re MCWRA DEIR riparian comments 6-4-20.pdf](#)

EXTERNAL:

On behalf of the Agricultural Association Partners listed in the attached cover letter, we are pleased to submit the Agricultural Association Partners (Ag Partners) Comprehensive Submittal in Response to the Central Coast Water Board's February 21, 2020 notice regarding the availability of Draft General Waste Discharge Requirements and Draft Environmental Impact Report. Our submittal includes all of the following documents:

- Cover Letter to Chairman Wolff
- Exhibit 1 – Legal and Policy Comments
- Exhibit 2 – CEQA Arguments and Attachment 1 to CEQA Arguments
- Exhibit 3 – Draft General Order (redline version); New Table C.5-1; Draft MRP (redline version)
- Exhibit 4 – Narrative Explanation of Redlines to Draft General Order
- Exhibit 5 – ERA Economics Technical Memorandum No. 1
- Exhibit 6 – ERA Economics Technical Memorandum No. 2
- Exhibit 7 – Exponent Technical Memorandum
- Exhibit 8 – Attachment A Transcript of proceedings; Attachment B State Board Brief; Attachment C1 Review Central Valley Basin Plan; Attachment C2 Review Los Angeles Basin Plan; Attachment D January 2019 Ag Response

Due to the size of some documents, it will be necessary to send the Exhibits in batches as follows:

Part 1 will include the Cover Letter, Exhibit 1 and Exhibit 2

Part 2 will include the Exhibit 3 and Exhibit 4

Part 3 will include Exhibit 5, Exhibit 6 and Exhibit 7

Part 4 will include Exhibit 8 Attachment A

Part 5 will include Exhibit 8 Attachment B, C1, C2 and Attachment D

Please contact Theresa Dunham at (916) 718-5774 if there are any problems with the transmittals.

Thank you.



Elizabeth (Liz) Simms  
Legal Assistant  
KAHN, SOARES & CONWAY, LLP  
1415 L Street, Suite 400  
Sacramento, CA 95814  
(916) 448-3826  
(916) 448-3850 Fax  
[lsimms@ksacsacramento.com](mailto:lsimms@ksacsacramento.com)  
[www.ksclawyers.com](http://www.ksclawyers.com)

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June 22, 2020

Chairman Jean-Pierre Wolff  
 California Regional Water Quality Control Board  
 Central Coast Region  
 895 Aerovista Place, Suite 101  
 San Luis Obispo, CA 93401-7906

RE: Agricultural Association Partners' Comprehensive Submittal, Including Redline Revisions to the General Order (Ag Partner Submittal) in Response to Draft Environmental Impact Report (DEIR) and Draft General Waste Discharge Requirements for Discharges from Irrigated Lands within the Central Coast Region.

Dear Chairman Wolff:

BN-1



Numerous agricultural partners in the Central Coast Region have come together to evaluate and respond collectively to the Draft Environmental Impact Report (DEIR) and Draft General Waste Discharge Requirements for Discharges from Irrigated Lands within the Central

Chairman Wolff  
 Ag Partners' Submittal - Response to Draft Order and DEIR  
 June 22, 2020  
 Page 2

- BN-1  
 cont.
- Coast Region (Draft Order). The Grower-Shipper Association of Central California, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties, Monterey County Farm Bureau, Western Growers Association, Western Plant Health Association and California Farm Bureau Federation have all put forward significant time and resources to carefully consider the Draft Order and its potential impacts to Central Coast agriculture, develop alternatives to what is proposed, and have retained subject matter experts to evaluate certain provisions contained within the Draft Order and the DEIR. Other agricultural partners also supporting this effort include: California Strawberry Commission, California Association of Pest Control Advisors, Monterey County Vintners & Growers Association, San Benito County Farm Bureau, San Luis Obispo County Farm Bureau, San Mateo County Farm Bureau, Santa Barbara County Farm Bureau, Santa Clara County Farm Bureau and Santa Cruz County Farm Bureau (hereafter all of the Agricultural Association Partners identified above are referred to collectively as "Ag Partners").
- We thank you and your staff for providing the additional consideration for submittal of public comment given the unprecedented circumstances associated with the COVID-19 pandemic. That time has allowed us to communicate with our collective grower members, and to obtain input from them and the professionals they rely on for implementation of the Central Coast Regional Water Quality Control Board's (Central Coast Water Board) Irrigated Lands Regulatory Program. Please be assured that we have used the time judiciously to prepare comprehensive and constructive responses to the Draft Order and DEIR. Also, we wish to convey a special thank you to the Irrigated Lands Program staff led by Chris Rose. Mr. Rose and his staff have been available to answer many questions that have arisen over the last five (5) months, and prior to that as well. We very much appreciate their continued availability via email, phone and Zoom.
- BN-2
- The Ag Partners identified here cannot support the Draft Order as proposed. As a practical matter, the economic impact of this Draft Order will devastate agriculture in the Central Coast region. The economic cost of nitrogen discharge limits alone (for one crop, in one area) would be over \$635 million *annually*. This, coupled with mandatory riparian and operational setbacks, ranch level monitoring, other prescriptive requirements and a seriously deficient DEIR leaves us no choice but to oppose the Draft Order.
- BN-3
- However, after much careful thought and deliberation, the Ag Partners have developed revisions to the Draft Order and offer them in redline format in Exhibit 3. These revisions incorporate several alternative approaches that are more refined versions of what was conveyed in concept with our January 21, 2019 submittal. The alternatives proposed by the Ag Partners are consistent with the State Water Resources Control Board's (State Water Board) precedential provisions of Order WQ 2018-0002, *In the Matter of Review of Waste Discharge Requirements General Order No. R5-2012-0116* (ESJ Order), and are intended to provide a reasonable path forward towards our mutual goal of protecting and improving water quality. Importantly, the Ag Partners consider the revisions to be a package approach for Central Coast Water Board consideration and the rejection of any single revision may still render the Draft Order unsupportable for the Ag Partners collectively or individually.

Chairman Wolff  
 Ag Partners' Submittal - Response to Draft Order and DEIR  
 June 22, 2020  
 Page 3

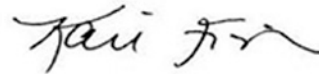
BN-4

We look forward to working with you and your staff as the process continues to move forward. We are hopeful that we can all agree on an approach that is designed to protect and improve water quality while maintaining stable agricultural economies in our Central Coast communities. The comments and information provided with this submittal were prepared in part by Theresa Dunham of Kahn, Soares & Conway, and Kari Fisher of the California Farm Bureau Federation. Any general legal questions should be directed to Theresa Dunham at [tdunham@kcsacramento.com](mailto:tdunham@kcsacramento.com), or (916) 718-5774; CEQA legal questions should be directed to Kari Fisher at [kfisher@cfbf.com](mailto:kfisher@cfbf.com), or (530) 574-7727. For all other questions, please feel free to contact Abby Taylor-Silva at [abby@growershipper.com](mailto:abby@growershipper.com), or (831) 422-8844, who can then coordinate with all Ag Partners.

Sincerely,



Abby Taylor-Silva  
 Grower-Shipper Association of Central California



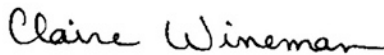
Kari Fisher  
 California Farm Bureau Federation



Gail Delihant  
 Western Growers Association



Norman C. Groot  
 Monterey County Farm Bureau



Claire Wineman  
 Grower-Shipper Association of Santa Barbara  
 and San Luis Obispo Counties



Renee Pinel  
 Western Plant Health Association

California Association of Pest Control Advisors  
 California Strawberry Commission  
 Monterey County Vintners & Growers  
 Santa Barbara County Farm Bureau  
 San Benito County Farm Bureau  
 San Luis Obispo County Farm Bureau  
 Santa Clara County Farm Bureau  
 Santa Cruz County Farm Bureau  
 San Mateo County Farm Bureau



**EXHIBIT 1****AGRICULTURAL ASSOCIATION PARTNERS' LEGAL AND POLICY RESPONSES  
TO DRAFT WASTE DISCHARGE REQUIREMENTS FOR AGRICULTURAL WASTE  
DISCHARGES FROM IRRIGATED LANDS WITHIN THE CENTRAL COAST  
REGION**

BN-5

On February 21, 2020, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) issued a Notice of Availability and Opportunity to Comment on the Draft Environmental Impact Report (DEIR) and Draft Waste Discharge Requirements from Irrigated Lands within the Central Coast Region (Draft Order). The public review period on the DEIR and Draft Order as issued on February 21, 2020, ends at 11:59 p.m. on June 22, 2020.

In response to the Notice of Availability and Opportunity to Comment, the Agricultural Association Partners (Ag Partners) have compiled a complete packet of materials that includes the following: 1) Exhibit 1 – Legal and Policy Responses to Draft Order; 2) Exhibit 2 – Legal and Policy Responses to DEIR; 3) Exhibit 3 – Revised Draft Order, New Table C.5-1, Revised MRP; 4) Exhibit 4 – Narrative Comments/Reasoning for Revisions to Draft Order; Exhibit 5 – ERA Technical Memorandum, *Economic Review of Central Coast Water Board Ag Order 4.0 and Draft Environmental Impact Report* (May 11, 2020) (ERA TM 1); Exhibit 6 – ERA Technical Memorandum, *Example Economic Impacts of the Central Coast Water Board Ag Order 4.0* (June 19, 2020) (ERA TM 2); Exhibit 7 – Exponent Technical Memorandum on the *Central Coast Regional Board's Draft Ag Order 4.0* (June 22, 2020) (Exponent TM); and Exhibit 8 – Other Materials. This Exhibit (Exhibit 1) provides written comments on the legal and policy issues raised by the Draft Order, and its many requirements.

Notably, the Ag Partners submitted exhaustive comments on January 21, 2019, in response to the Central Coast Water Board's Conceptual Regulatory Requirement Option Tables. Many of the comments provided then remain applicable to the Draft Order. To avoid duplication, we incorporate by reference the comments in Exhibit 1 to our January 21, 2019 submittal, which are already part of the Administrative Record. We specifically incorporate all of Parts I and II (*General Legal and Policy Concerns* and *Legal Limitations on Ag Order 4.0*, respectively), which establish foundational legal requirements, limitations and considerations for Central Coast Water Board actions related to the issuance of this Draft Order. (Included in Exhibit 8 to the Ag Partners Comprehensive Submittal.)

Here, we address legal and policy issues specifically associated with requirements in the Draft Order. We reserve the right to augment these comments if new or additional information is obtained after the close of the public comment period.

BN-6

**I. If Adopted as Proposed, the Draft Order Will Have Devastating Economic Impacts on the Central Coast Region**

The Ag Partners support the fundamental goal and purpose of the Draft Order to protect water quality. However, it is critical that in adopting the Draft Order, the Central Coast Water

BN-6  
cont.

Board does not devastate the Central Coast Region and its inhabitants economically. In the first six months of 2020, the world has faced unprecedented circumstances with the onset of COVID-19. This global pandemic has dramatically changed the way the world operates and has left in its wake economic devastation in many sectors. Even though agriculture is considered an essential industry, it too has endured significant economic impacts caused by the world's response to controlling COVID-19 to protect public health. It is estimated that the direct economic impact of COVID-19 on California agriculture to date is between \$5.6 and \$8.3 billion this year. (ERA Economics, *Impacts of the COVID-19 Pandemic on California Agriculture* (June 16, 2020).) Between April 2019 and April 2020, California total farm employment declined by over 23%, or 94,800 jobs; Monterey County went from 54,000 jobs in April 2019 to 32,400 jobs in April 2020, which is a 40% reduction in farm employment. The total annual impact of COVID-19 on California's agricultural industry will depend greatly on how rapidly the food service sector and other sectors of the economy recover. While significant, direct and indirect economic impacts from COVID-19 are hopefully temporal in nature as treatments and vaccines become available to address the public health threat of this virus.

Unlike COVID-19, economic impacts from the Draft Order would not be temporal in nature but permanent. Thus, a true and comprehensive economic impacts analysis needs to accompany the Draft Order so that the Central Coast Water Board is fully informed as to the short-term and long-term economic impacts that may occur from Draft Order implementation. Because of the importance of this issue, the Ag Partners engaged ERA Economics to evaluate the adequacy of economic analysis contained in the Draft Order and the DEIR collectively. (See Exhibit 5, ERA TM 1.) The team from ERA that conducted the analysis are known experts in conducting economic analysis of environmental regulations and have particular expertise as it relates to agricultural economics. (See Exhibit 5, ERA TM 1, Attachment 1 for ERA Team resumes.) The results of their initial review are documented in ERA TM 1, which is attached as Exhibit 5. In summary, ERA found that "[t]he economic analysis developed by the CCWB and its consultants is limited and fails to capture important, quantifiable economic and associated impacts of the proposed Order." (Exhibit 5, ERA TM 1, page 1.)

As a follow up to ERA's initial analysis, the Ag Partners then engaged ERA to conduct an example analysis that illustrates the likely cost and economic impacts of the Order. For this analysis, ERA looked specifically at the nitrogen discharge limits and developed an impact analysis for iceberg lettuce in Monterey County as an example crop. The results of this analysis are staggering! For lettuce in Monterey County alone, the total gross cost of nitrogen discharge limits will range between \$119.4 million at the 200 lb/ac limit to \$683 million per year at the 50 lb/ac limit. (Exhibit 6, ERA TM 2, page 2.) ERA's results are discussed in more detail below.

The results of ERA's illustrative analysis for lettuce in Monterey County clearly shows that the Draft Order will have devastating economic impacts. Unfortunately, the Draft Order, Attachment A and the DEIR collectively fail to actually estimate the full impact of the Draft Order. Attachment A provides short-term cost estimates (which themselves are inadequate) for some monitoring and reporting requirements but completely ignores the cost of meeting substantive Draft Order requirements such as nitrogen discharge limits, surface water receiving water limits, and other provisions. The Central Coast Water Board cannot properly consider the

|               |   |   |
|---------------|---|---|
| BN-6<br>cont. | ↑ | full impact of the Draft Order until a comprehensive, economic impacts analysis has been performed.   |
|               |   | <b>A. The Central Coast Water Board Must Consider Economic Impacts When Adopting Draft Order</b>  |
| BN-7          | ↑ | When adopting waste discharge requirements, the Porter Cologne Water Quality Control Act (Porter-Cologne) requires regional boards to take into consideration “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(a).) These provisions that are required to be considered include, in part, water quality conditions that can reasonably be achieved through the coordinated control of all factors affecting water quality as well as economic considerations. (See Wat. Code, § 13241.) In other words, in its development of waste discharge requirements, the Central Coast Water Board is mandated to consider the reasonableness of meeting the water quality objectives (WQOs) in question, as well as economic considerations. Such considerations must be more than conclusory findings, and findings must be supported by substantial evidence in the record. (See <i>Environmental Protection Information Center v. California Department of California Dept. of Forestry &amp; Fire Protection</i> (2008) 44 Cal.4th 459, 516-517; see also <i>Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Board</i> (2012) 210 Cal.App.4th 1255, 1268.) |
| BN-8          | ↑ | Also, adequate consideration of economics does not stop with a blanket acknowledgement of potentially heightened costs of compliance but needs at least some estimate of the costs of compliance. (See, e.g., <i>City of Gardena v. Regional Water Quality Control Board, Los Angeles Region</i> (Super Ct. Orange County, Dec. 31, 2018, No. 30-2016-00833722-CU-WM-CJC).) Further, Porter-Cologne provides regional boards with the authority to relax permit requirements due to consideration of costs. (See <i>City of Burbank v. State Water Resources Control Bd.</i> (2005) 35 Cal.4th 613, 626, fn. 7 [“State law, as we have said, allows a regional board to consider a permit holder’s compliance cost to <i>relax</i> pollutant concentrations, as measured by numeric standards, for pollutants in a wastewater discharge permit.”].)”)   |
| BN-9          | ↑ | In addition to needing to consider costs of compliance under Porter-Cologne, the Central Coast Water Board is also required to consider economic impacts that result in environmental impacts under the California Environmental Quality Act (CEQA). This issue is addressed exhaustively in Exhibit 2, and is not repeated here.   |
| BN-10         | ↑ | As shown in ERA TM 1, the Draft Order has failed to properly consider the economic impact that will occur if the order is adopted as proposed. Moreover, as illustrated in ERA TM 2, the costs are likely to be extraordinary, which directly challenges the reasonableness of the requirements being proposed.   |
| BN-11         | ↓ | <b>B. Draft Findings In Attachment A Are Not Supported by Evidence in the Record</b>  |

BN-11  
cont.

As explained by ERA, the cost of regulatory compliance with the Draft Order falls across 5 general categories: “1. Direct costs of fees, assessments, and paperwork 2. Changing management practices, inputs, rotations, and land use to comply with discharge targets/limits (additional direct costs), and potential loss of commercially marketable yield 3. Changing land use to comply with riparian and operational set back requirements and developing a RAMP 4. Opportunity costs of management time for compliance paperwork, training and other administration 5. Opportunity costs of land out of production (e.g. riparian setbacks).” (ERA TM 1, page 12.) While Attachment A includes a number of findings that are purported to convey cost considerations, only example costs for category 1 are included. (Attachment A, pages 9-25.) Thus, the findings collectively are inadequate as they fail to consider any costs associated with the other 4 categories.

Additional comments on specific findings are provided here.

- BN-12
- Paragraph 13, page 9: Per paragraph 13, the findings discuss changes in regulatory costs between the 2017 agricultural order (Ag Order 3.0) and the Draft Order. Such a focus is too narrow and ignores the fact that regulatory costs are cumulative. “Any economic assessment should acknowledge the current regulatory environment and how that is changing so that the incremental cost of additional regulations can be assessed *in addition* to the cumulative effect on the industry.” (ERA TM 1, page 19, emphasis added.)
- BN-13
- Paragraph 14, page 9: The finding in this paragraph cannot be supported by evidence in the record. The paragraph claims that when the Central Coast Water Board adopted water quality objectives that “it took economic considerations into account...” (Attachment A, page 9.) First, it is well known that when many water quality objectives were first adopted into water quality control plans in the early 70’s that little to no economic consideration was given towards the adoption and economic impact of the water quality objectives in question, and more specifically how they would apply to irrigated agriculture. (See, e.g., LWA and FlowScience reviews of LA and Central Valley Water Board Basin Plans, attached to Exhibit 8.) Second, the Central Coast Water Board has not included the administrative records for adoption of the Central Coast Water Quality Control Plan (Basin Plan) into this administrative record. Thus, there is no evidence in this record to support this blanket statement. Third, previously considered costs are not directly relevant to an assessment of the economic impact of the Draft Order. To the extent the Central Coast Water Board intends to rely on previously considered costs, the findings need to identify with specificity such costs and explain their applicability to the Draft Order and its requirements in question.
- BN-14
- Paragraph 15 (and its sub-paragraphs), pages 10-11: Throughout paragraph 15 and its sub-paragraphs, Attachment A refers to “total costs.” Such a reference is misleading in that, as identified by ERA, Attachment A only considers direct costs associated with fees, assessments and paperwork. (ERA TM 1, page 3.) No consideration is given to economic impacts of surface water limits, nitrogen

|                |   |
|----------------|---|
| BN-14<br>cont. | <p>discharge limits or riparian setbacks, and therefore, these are <i>not</i> total costs. Sub-paragraph c, Attachment A explains that the cost analysis represents estimated costs over a five-year project period, and in fact is limited to the first five years of Draft Order implementation (2021-2025). Limiting the cost analysis to the first five years is arbitrary and not reflective of the longer-term nature of a General WDR versus a five-year Conditional Waiver. Sub-paragraph e assumes that all Dischargers subject to the Draft Order would perform compliance tasks with in-house employees. The assumption is not supported by evidence in the record, nor is it supported by practical experience and knowledge based on implementation of Ag Order 3.0. To estimate costs, Attachment A uses an average hourly rate of \$45. This rate is significantly under-estimated, and is more than likely closer to \$120 per hour.</p>  |
| BN-15          | <ul style="list-style-type: none"> <li>• Further, we find it odd that Attachment A fails to identify the aggregated costs it identifies in the various paragraphs. By our calculation, these aggregated costs as identified in Attachment A may equal between \$36,000,000 and \$55,000,000 in monitoring and reporting costs alone over the first five years. This of course does not include any implementation costs associated with specific prescriptive requirements contained in the Draft Order.</li> </ul>   |
| BN-16          | <p><b>C. Economic Impact of Nitrate Discharge Limits Are More than Significant</b></p> <p>Although we do not know the true cost and impact of the nitrate discharge limits as proposed in the Draft Order, the ERA TM 2 illustrates just how large of an impact these limits are likely to be on the Central Coast economy. ERA TM 2 takes lettuce in Monterey County to estimate the potential economic impacts associated with these limits, including annual job losses, loss in labor wages and net local economic activity. (ERA TM 2, page 2.) Looking at lettuce alone in Monterey County, the economic impact of a nitrogen discharge limit set at 200 lbs/ac per year is likely to result in an economic impact of \$119.4 million per year. At 50 lbs/ac per year the estimated impact climbs to \$683 million per year. (ERA TM 2, page 2.) Using the Impacts for Planning and Analysis (IMPLAN) model, ERA estimates that job losses would be between 1,985 jobs at 200 lbs to 11,340 jobs lost at 50 lbs. Unaccountable in the impact summary is the socioeconomic and social justice impacts that would occur as many of these jobs would be lost for by those that reside in economically disadvantaged communities. (ERA TM 2, page 7.)</p> |
| BN-17          | <p>As noted in ERA TM 2, this analysis is an example for one crop, in one area. Without a doubt, the magnitude of the impacts would expand substantially as economic impacts are evaluated for more crops grown in the Central Coast region. The primary take away from ERA TM 2 is that the example provided shows that: “(i) an economic analysis of the requirements of the Order can and should be developed using standard applied economic principles, (ii) the costs of implementing the Order are substantial and would lead to land fallowing, crop switching, and severe business and job losses, and (iii) a standard economic analysis of the requirements specified in the Order would provide a foundation to identify ways to reduce implementation costs and resulting economic and environmental impacts.” (ERA TM 2, page 2.)</p>   |

BN-18

Considering the information provided in ERA TMs 1 and 2, the Ag Partners fail to see how the Central Coast Water Board can further consider the Draft Order until a proper economic impact analysis is prepared. As ERA points out, “[s]tandard, peer-reviewed economic methods are available, and have been applied by the [Central Valley Water Board] and other state agencies, to quantify the economic impact of similar regulatory programs and policies.” (ERA TM 1, page 19.) Thus, the failings of Attachment A cannot be overlooked and the Central Coast Water Board must direct Central Coast Water Board staff to prepare, or hire an outside consultant to prepare, a proper economic impact assessment. Until such an assessment is prepared, the Central Coast Water Board cannot properly move forward in considering the Draft Order.

BN-19

## **II. Part 2, Section C.1 Irrigation and Nutrient Management for Groundwater Protection**

### **A. The Central Coast Water Board Does Not Have the Legal Authority to Adopt Fertilizer Nitrogen Application Limits**

The Central Coast Water Board is limited to regulating the discharge of waste, not the application or use of a lawful, useful substance. (Wat. Code, § 13263.) Waste is defined as “sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation.” (Wat. Code, § 13050(d).) Lawfully applied fertilizers are not waste substances, but rather beneficial substances that are integral to successful agricultural production.

The Clean Water Act also defines “pollutant” as, among other things, chemical or agricultural *waste*, and does not broadly define the term to include all agricultural chemicals, especially those applied for a beneficial purpose. (33 U.S.C. § 1362(6) [The Clean Water Act uses the term “pollutant” in a similar fashion to how Porter-Cologne uses the term “waste”].) The usage in the Clean Water Act acknowledges the difference between a useful substance and a waste substance, with only the latter being the focus.

Because the application fertilizers cannot be considered “waste,” the application of such inputs to fields cannot then be considered a discharge of a waste and the Central Coast Water Board cannot impose fertilizer nitrogen application limits. However, despite this constraint on Central Coast Water Board authority, the Draft Order includes Fertilizer Nitrogen Application Limits. (See Draft Order, pages 24, 61 [Table C.1-1].)

Attachment A to the Draft Order (hereafter referred to as “Attachment A”) purports to contain “additional findings that further describe the Water Board’s legal and regulatory authority; ... and the rationale for this Order.” (Draft Order, page 12.) In Attachment A, there are several paragraphs that explain how the Central Coast Water Board derived the Nitrogen Fertilizer Application Limits. For example, paragraph 23 explains that the approach follows the State Water Board’s ESJ Order by making comparisons among dischargers to determine outliers. Accordingly, the Draft Order sets crop specific Nitrogen Fertilizer Application Limits by using the 90<sup>th</sup> percentile of fertilizer nitrogen application for each crop. (See Attachment A, pages 110

BN-19  
cont.

and 111, Table A.C.1-3.) The Ag Organizations *do not* oppose the approach used for setting the values contained in Table C.1-1 (and also as shown in Table A.C.1-3) but rather the use of these values as “Application Limits.” In fact, the Ag Organizations support using the values as outliers for an intervening time period. (See Exhibits 3 & 4 for further explanation.)

With respect to legal justification for the Nitrogen Fertilizer Application Limits, Attachment A is void of any legal justification except to state that the application limits are established “[t]o make progress towards reducing nitrogen waste discharges and reduce the risk of nitrogen discharge, ...” While that may be the proposed goal, it is not legal justification for the imposition of Nitrogen Fertilizer Application Limits. Moreover, the adoption of Nitrogen Fertilizer Application Limits directly contravenes the State Water Board’s direction in its precedential ESJ Order. As acknowledged in Attachment A, the State Water Board focused on identifying outliers and target values for the purpose of making progress towards reducing nitrogen waste discharges. (See, e.g., ESJ Order, pages 52-53.) The State Water Board specifically stated that any move towards a different regulatory approach would only occur after convening an expert panel to determine the appropriate use of targets for irrigated lands programs statewide. (ESJ Order, page 74.)

The State Water Board’s intent regarding these provisions is further expressed in recent briefing associated with environmental petitioner challenges to the ESJ Order. In responding to environmental petitioner claims that nitrogen loading limits are required, the State Water Board states as follows:

Protectores cites no authority for this proposition, as there is none. The State Water Board appropriately considered available evidence, made required findings, and determined that the Order had sufficient feedback mechanisms to deter or prevent exceedances. (citation omitted.) Specifically with regard to nitrogen application limits, consistent with the recommendations of the Agricultural Expert Panel, the State Water Board determined that it was premature to impose limits but directed the Central Valley Water Board to use data gathered through agricultural permits to develop appropriate targets.

(Exhibit 8 - Respondent State Water Resources Control Board, and Real Party in Interest Central Valley Water Quality Control Board’s Brief, filed March 11, 2020 in *Protectores Del Agua Subterranea v. State Water Resources Control Board, et al.*, Sacramento County Superior Court, Case No. 34-2018-80002852, pp. 26:23-27:4.)

In conclusion, the adoption of Nitrogen Fertilizer Application Limits exceeds the Central Coast Water Board’s legal authority under Water Code section 13263, and is not supported by previous State Water Board decisions. We recommend that calculated values be used to identify outliers for the first few years of the program until other appropriate targets can be developed.

BN-20

**B. The Proposed Nitrogen Discharge Targets and Limits Are Contrary to the State Water Board’s Direction in the ESJ Order**



BN-20  
cont.

The Draft Order proposes nitrogen discharge targets and limits as set forth in Table C.1-2. (Draft Order, page 61.) To determine compliance with such targets/limits, Dischargers are required to use one of two equations. Both equations are fundamentally based on the difference between the amount of fertilizer applied and the amount of nitrogen removed from the field either through crop harvest, sequestration, or other removal methods, in pounds per acre. (Draft Order, page 25.) Compliance with limits is to be assessed in pounds of nitrogen per acre per year and include all crops grown and harvested on the entire ranch. (Draft Order, page 61, Table C.1-2.) The targets/limits start applying in 2022 and ratchet down overtime until 2050 when a limit of 50 pounds becomes the final limit for compliance. This means that by 2050, growers in the Central Coast must show that the difference between the amount of nitrogen applied on the ranch for all crops collectively and the amount of nitrogen removed from all crops on the ranch in any given year does not exceed 50 pounds. For many crops in the Central Coast, such a requirement is impossible to meet and will greatly impact agriculture and the Central Coast economy. (See, e.g., ERA TM 2.) Putting aside the technical and economic infeasibility of the proposed 50 pound limit momentarily, the proposed approach is contrary to the State Water Board's precedential directives in the ESJ Order.

**1. The Draft Order Attempts to Rationalize Discharge Limits as Being Compliant with State Board's Requirement for Groundwater Protection Formula, Values and Targets – Such Rationalization is Arbitrary and Misapplies Groundwater Protection Formula, Values and Targets**

BN-21

To justify the improper inclusion of nitrogen discharge limits into the Draft Order, Attachment A claims that the Groundwater Protection Formula for the Central Coast is A-R (which is the basis for determining compliance with nitrogen discharge limits). (Draft Order, page 76.) Attachment A then states that the Groundwater Protection Value that will be protective of drinking water is 50 pounds of nitrogen per acre per year. (*Id.*) Next, Attachment A claims that setting the Groundwater Protection Values at the farm level is equally or more effective in achieving the purposes of the values. The statements provided in Attachment A show a clear misunderstanding of the intent and purposes of the Groundwater Protection Formula, Values and Targets requirements that were adopted in the ESJ Order.

BN-22

First, the purpose of the Groundwater Protection Formula is to "generate a value (the Groundwater Protection Value or GWP Value), expressed as either a nitrogen loading number or a concentration of nitrate in water (e.g., mg/L) as appropriate, reflecting the total applied nitrogen, total removed nitrogen, recharge conditions, and other relevant and scientifically supported variables that influence the potential average concentration of nitrate in water expected to reach groundwater in a given *township*<sup>1</sup> over a given *time period*." (ESJ Order, Attachment B to Appendix A, page 22.) Once a GWP Value is established, a GWP Target is to be developed for each township, and the purpose of the GWP Target is to set targets intended to achieve compliance with receiving water limits within specified time schedules. (*Id.*) In other words, the

<sup>1</sup> The ESJ Order uses townships to define an area spatially, and also states that other programs should apply the methodology to high priority townships "or other geographic areas." (ESJ Order, page 66.) Reference to "other geographic areas" is intended to be something similar to township or broad geographic area rather than having the methodology apply at a ranch level.

- BN-22  
cont. ↑ Formula is used to compute the GWP Values. The GWP Values are an estimate of the average concentration of nitrate in water that may be reaching groundwater from irrigated agriculture over a given specified area. Once there is an estimate of the average amount of nitrate that may be reaching groundwater for the specified area, then a GWP Target can be developed that is designed to achieve receiving water limits – over time.
- BN-23 Most significantly, the aggregation of information to the township level, or some other broad geographic area, is necessary because of the way discharges impact groundwater. The State Water Board, when it adopted the GWP Formula, Values and Targets processes relied on evidence in the record that field-level monitoring and reporting is not necessary, or scientifically justified, for detecting or preventing exceedances of the nitrate WQO in groundwater. As stated by Dr. Thomas Harter, a well-known expert on these matters, “[t]here’s not a monitoring device that measures the discharge of nitrates to groundwater under every field.” (Exhibit 8, Transcript of Proceedings Videoconferenced Open Meeting, Tuesday, May 17, 2016, Sacramento Workshop Review of Eastern San Joaquin Agricultural General WDRs (ESJ Proceedings Transcript), at SWBESJ005202.) Dr. Harter further explained that for irrigated agricultural areas, the landscape is complex and actual sources are difficult to identify. (ESJ Proceedings Transcript, SWBESJ005202 –005205.) In light of this complexity, Dr. Harter found that aggregating and reporting data at the township level was sufficient and appropriate.<sup>2</sup> The State Water Board was persuaded and required that data be reported at a township level. (ESJ Order, page 49 [“This data set sets out A-R difference data by crop aggregated at the township level, average A/R ratio data by crop at a township level, and some of the underlying data by crop again aggregated at the township level.”].)
- BN-24 Next, the Draft Order misinterprets the use and purpose of the GWP Value. As explained above, the GWP Value is supposed to reflect the amount of nitrate (averaged over a large geographic area) in water that is expected to reach groundwater over a given time-period. As part of the GWP Value, many variables are to be considered in addition to A-R, including but not limited to, recharge conditions and other relevant and scientifically supported variables. The Nitrogen Discharge Targets/Limits in the Draft Order fail to do any of this. Specifically, the “limits” are designed to protect groundwater – not estimates of current nitrate in water that may reach groundwater as averaged over an appropriate geographic area; the limits are set at a ranch level rather than being associated with an appropriately scaled geographic area; the limits fail to consider other variables such as recharge conditions, gaseous losses, and other variables. In short, the Draft Order’s Nitrogen Discharge Limits look nothing like the GWP Value requirement in the ESJ Order.
- BN-25 ↓ In the event that there is a future attempt to claim that the Nitrogen Discharge Targets/Limits are instead representative of being a GWP Target rather than a value GWP Value,
- BN-26 ↑ <sup>2</sup> See e.g., ESJ Transcripts Proceeding at SWB005206 [“... the public data submitted to the Regional Water Board, if those are submitted, aggregated to the township level and include the total nitrogen applied per crop and total nitrogen removed by crop, the A over R ratio is completely sufficient to do an assessment of how much crops contribute relative to each other, to nitrate and groundwater, how farmers are doing relative to each other, and to give us a tool to do trend assessment and larger regional establishments.”]; see also (SWB005201 [“... I think the proposal by the Regional Board ... and coalitions to aggregate data to the township level by crop, is perfectly sufficient for doing the kind of science analysis and assessment that needs to be done.”].)

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|----------------|---|
| BN-25<br>cont. | <p>↑</p> <p>this argument will also fail as the Draft Order’s Nitrogen Discharge Targets/Limits are inconsistent with the ESJ Order’s meaning of GWP Targets. Like with GWP Values, GWP Targets are intended to be established to reflect a geographic area that is larger than the individual ranch level. Moreover, targets are just that – targets – not limits. Attachment A notes that the values in Table C.1-2 that in 2022 and 2024 respectively are “targets” and thus not enforceable in the event of non-compliance. In contrast, the “limits” in Table C.1-2 that apply starting in 2026 and beyond are enforceable in the event of non-compliance. (See Attachment A, page 76.) The transition of these values from targets to limits directly contravenes the State Water Board’s directives in the ESJ Order.</p>  |
| BN-27          | <p>Like with the Nitrogen Fertilizer Application Limits, the State Water Board has not sanctioned the use of nitrogen discharge limits at this time. Rather, the State Water Board has specifically indicated that it is premature to adopt and apply limits until further data and information is available. The State Water Board clearly stated that any move to change the ESJ Order approach of utilizing A/R and/or A-R as multi-year targets would only occur “after convening an expert panel...” (ESJ Order, page 74.) In short, the Draft Order’s attempt to justify its Nitrogen Discharge Targets/Limits by claiming that it satisfies the ESJ Order’s requirements for GWP Formula, Values and Targets is farcical as there is no relationship or similarities between the two sets of provisions.</p>   |
| BN-28          | <p><b>2. The Central Coast Water Board’s Failure to Adopt More Precise Crop Conversion Coefficients Renders the Targets/Limits Meaningless per the ESJ Order</b></p> <p>The State Water Board clearly expects that the Central Coast Water Board will spend time developing crop conversion coefficient values for Central Coast crops before using R as a metric in any Draft Order requirements. As noted in the ESJ Order, which is particularly applicable to the Central Coast’s vast array of specialty crops, “[t]here is insufficient information currently available to calculate the R value for most crops.” (ESJ Order, <i>supra</i>, p. 41.) In Exhibit 3, we recommend that the Central Coast Water Board develop and approve more precise crop conversion coefficients for 85 percent, and then 95 percent of the total crop acreage in the Central Coast before identifying crop-specific and/or crop type ranges of target values that are then used for identifying outliers based on A-R. Waiting until at least 85 percent of crop acreage has an approved R metric is consistent with the ESJ Order as applied in the Central Valley, in that the East San Joaquin Coalition needs to identify coefficients for 95 percent of crop acreage, and because the State Water Board specifically called out regional board discretion to determine the number of crops and the timeline for development of coefficients. (ESJ Order, <i>supra</i>, p. 42.)</p> |
| BN-29          | <p>Second, the ESJ Order refers to A and R, and in particular the ratio of A/R as a “new metric for nitrogen application management.” (ESJ Order, <i>supra</i>, p. 36.) Relying on the Agricultural Expert Panel, the ESJ Order sets forth the multi-year A/R ratio (or alternatively a multi-cropping cycle) as a performance metric for measuring nitrogen left in the field. A high multi-year or multi-cropping cycle ratio is then to be used, in this case by the regional board, to conduct education and outreach to outliers. Use of such information for purposes beyond education and outreach to outliers is not anticipated or directed in the ESJ Order. (<i>Id.</i> at p. 73.) Rather, the State Water Board clearly states that it is premature to use the A/R ratio target values</p> <p>↓</p>   |

BN-29  
cont. ↑ as a regulatory tool: “It is premature at this point to project the manner in which the multi-year A/R ratio target values might serve as regulatory tools. That determination will be informed by the data collected and the research conducted in the next several years. If we move forward with a new regulatory approach in the future, we expect to do so only after convening an expert panel that can help evaluate and consider the appropriate use of the acceptable ranges for multi-year A/R ratio target values in irrigated lands regulatory programs statewide.” (*Id.* at p. 74.)

BN-30 Third, use of a nitrogen discharge limit goes beyond what the experts who testified before the State Water Board thought was scientifically supportable. For example, during the ESJ Order proceedings, Dr. Thomas Harter from the University of California, Davis stated that “the A over R ratio is completely sufficient to do an assessment of how much crops contribute relative to each other, to nitrate and groundwater, how farmers are doing relative to each other, and to give us a tool to do trend assessment and larger regional establishments.” (Exhibit 8, ESJ Proceedings Transcript at SWBESJ005206.) Other experts opining on the A/R ratio acknowledged its limitations, particularly that insufficient information regarding A/R ratios in California crops currently exist and such ratios and targets must be developed and refined as data is gathered. (ESJ Proceedings Transcript, at SWBESJ005238-5242.)

BN-31 Fourth, in the ESJ Order the State Water Board refers to A-R difference data as being informative to focus on follow-up management practice implementation as well as research and modeling on groundwater loading. (ESJ Order, *supra*, p. 39.) Nowhere in the ESJ Order, or during the State Water Board’s proceedings, did the State Water Board or its staff suggest, recommend, or advocate for use of A-R as a numeric discharge limit. Accordingly, use of A-R as a discharge limit would completely take out of context the State Water Board’s reasons for referencing the difference value between A-R.

BN-32 Finally, use of a discharge limit based on A-R for an amount that is designed to ensure that no residual nitrogen is available for potential leaching to groundwater would surely cripple the economic sustainability of Central Coast agriculture. (See Exhibit 6, ERA TM 2.) The Central Coast region is unique in that it has weather and topography to support specialty crops, which rely on multi-cropping cycles to maintain the economics of farming. This is due to a combination of factors, including high land values, high labor costs, labor-intensive crops, and costs related to food safety, in addition to a plethora of other regulatory restraints put on Central Coast farming. Applying a nitrate discharge limit that essentially limits the number of pounds of nitrate that can be applied per acre per ranch per year would more than likely eliminate multi-cropping cycles, which would in return eliminate the economic viability of many crops along the Central Coast. (See Exhibits 5 & 6, ERA TMs 1 and 2.) As discussed previously, consequences such as this run afoul of the Legislature’s directives with respect to implementation of Porter-Cologne, which is to regulate to the highest level that is reasonable – considering all the demands placed on the waters.

### BN-33 3. The Draft Order Improperly Prohibits Discharges in Excess of Nitrogen Discharge Limits

The Draft Order would prohibit discharges of nitrogen in excess of the nitrogen discharge limits contained in Table C.1-2. As discussed in greater detail below, the Draft Order seeks to

BN-33  
cont. ↑ expand discharge prohibition authority improperly. In all other traditional point source programs, dischargers are not typically prohibited from discharging in excess of limits but rather are subject to enforcement actions if discharges exceed applicable limits. Moreover, in traditional point source permits, discharge prohibitions usually apply to hazardous substances or materials that are otherwise not authorized to be discharged in the permit at issue. Creating a discharge prohibition as proposed in the Draft Order is problematic for several reasons.

BN-34 First, as indicated, such a provision goes well beyond what is normally contained in permits, and misuses statutory discharge prohibition authority. Second, for irrigated agriculture, such prohibitions could potential result in creating a prohibition on use of materials that are necessary and beneficial for crop production. The ESJ Order properly points out how irrigated lands regulatory programs are distinguishable from most other programs because "... the production of crops typically requires the beneficial application of nutrients and pesticides to land, ...." (ESJ Order, page 47.) Stringent pollution controls, and even pollutant specific discharge prohibitions, in other traditional programs "does not directly interfere with the underlying regulated Activity." (ESJ Order, page 48.) Here, the proposed prohibit very well could impact the viability of the irrigated agricultural activity if it prevents growers from using the amount of nitrogen necessary to grow the crop in question.

Accordingly, the nitrogen discharge prohibition is improper and must be removed.

#### 4. It is Inappropriate to Require Ranch-Level Groundwater Discharge Monitoring and Reporting

BN-35 Besides the discharge limit and use restrictions, the Draft Order suggests that individuals may be required to conduct ranch level groundwater discharge monitoring and reporting. (Draft Order, page 29.) This approach is inappropriate because the effort associated with this monitoring would exceed the usefulness of the information gathered.

Notably, the use of irrigation water on agricultural fields is not a discharge of a waste. In fact, regulations state that no discharger "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.) On this basis, the Central Coast Water Board has no authority to regulate the amount of irrigation water that percolates to groundwater, because this percolation is not a discharge of a waste. Attempting to combine monitoring of the volume of water with nitrate concentrations in the water does not eviscerate this requirement.

BN-36 The Draft MRP sets forth minimum criteria for a work plan for ranch-level groundwater discharge monitoring. (Draft MRP, page 21.) The requirements are significant and not easily applied to irrigated agriculture. The State Water Board recognized this limitation in the ESJ Order. (ESJ Order, page 18, ["..., in a landscape-based, nonpoint source program such as the irrigated lands regulatory program, monitoring the numerous and sometimes indeterminate set of all farm discharge points to surface water and groundwater is an impractical, prohibitively costly, and often ineffective method for compliance determination and the Nonpoint Source Policy accordingly does not mandate such monitoring."].) In sum, monitoring the amount of nitrate in

BN-36  
cont. ↑ irrigation water that goes beyond the root zone would be impractical, and the burden of monitoring such discharges would come at a cost that is well beyond the usefulness of the information. This, in turn, would violate Water Code section 13267, which places reasonableness and practical constraints on the regional board's authority to require technical reports and monitoring. (See Wat. Code, §13267 ["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."].)

BN-37 ↓ For these reasons, the Ranch-level discharge monitoring requirement must be removed from the Draft Order and the Draft MRP.

### III. Part 2, Sections C:2, C:3 and C:4 Surface Water Protection Requirements

BN-38 ↓ The Draft Order includes three separate sections for requirements that generally pertain to Surface Water Protection (putting aside the riparian requirements into a separate category). Although the sections each address a different category of pollutants, the approach in all three sections is almost identical in that they start with a planning element, then impose receiving water limits, potential requirements for ranch-level surface discharge monitoring, and a prohibition for discharges from a ranch in excess of the receiving water limits after the compliance date. The discharge prohibitions in these three sections are akin to "end-of-pipe" limits that would be applied at the edge-of-operation, and ranch-level surface discharge monitoring would be used to determine compliance with such limits. These two provisions combined result in the Draft Order imposing (improperly) a traditional, point source regulatory program onto nonpoint source discharges.

BN-39 ↓ The Ag Partners retained expert consultants at Exponent to evaluate the surface water provisions contained in the Draft Order. (Exhibit 7, Exponent TM.) Exponent reviewed the surface water and riparian area requirements in the Draft Order, including the scientific basis for the requirements, whether implementation could reasonably be expected to lead to achieving the Draft Order's stated goals and objectives, and whether the Draft Order could be modified to improve water quality and beneficial use outcomes. (Exponent TM, Section 1.0, Executive Summary.) Key findings in the Exponent TM include, but are not limited to, the following: it is not currently not possible to calculate numeric limits for agricultural discharges, and even more inappropriate to apply such limits at the edge-of-field (Exponent TM, Section 3.1.3); the numeric limits in the Draft Order are scientifically unsupported and inappropriate (Exponent TM, Section 3.1.5); water quality concerns need to be addressed holistically on a watershed level (Exponent TM, Section 3.2); requirements for field-level monitoring will not provide data and information necessary to advance the purposes of the program (Exponent TM, Section 3.6); and, the Draft Order needs to be modified to better incorporate a watershed-based approach (Exponent TM, Section 3.7).

BN-40 ↓ The Exponent TM also points out that when the Central Coast Water Board adopted the Water Quality Control Plan for the Central Coast Region (Basin Plan), it did not anticipate or consider applying water quality objectives at the edge-of-field like an effluent limitation. Rather, the Central Coast Water Board limited its discussion of agricultural controls to improvements in



BN-40  
cont. ↑ management practices – pesticide use and limits on fertilizer applications were not considered. (Exponent TM, Section 3.1.2.) Thus, when water quality objectives were adopted into the Basin Plan, the Central Coast Water Board did not contemplate that they would be used to calculate effluent limits from nonpoint source discharges. This means that the Porter-Cologne factors pursuant to Water Code section 13241 were not considered as related to the application of water quality objectives to discharges from agricultural operations. (Exponent TM, Section 3.1.2.)

BN-41 ↓ Consequently, the Draft Order's approach of imposing edge-of-field limits through the discharge prohibition is inconsistent with the Basin Plan and must be rejected. Moreover, the overall approach in the Draft Order as it relates to field-level monitoring must be rejected as it is not scientifically or technically supportable. Water quality concerns in the Central Coast are better addressed holistically on a watershed level.

**A. The Central Coast Water Board Cannot Legally Impose Prohibitions on the Discharge of Pollutants Generally**

BN-42 ↓ The Draft Order would prohibit the discharge of pollutants in excess of applicable limits after the compliance dates in all three surface water related sections. (Draft Order, pages 31, 34 37.) As discussed above, the use of discharge prohibitions in this manner is improper and well exceeds regulatory and statutory authority as it pertains to discharge prohibitions. Nutrients and pesticides are legal materials that are applied legally and beneficially to crops. Prohibiting the discharge of such materials, even if aligned with proposed limits, may result in prohibiting the use of the material altogether. Such a result is problematic.

BN-43 ↓ Specific to pesticides, the Central Coast Water Board has no authority to legally impose prohibitions on the use of pesticides. Although the Water Board has the statutory authority to reasonably regulate and protect water quality, that authority is not without limitations. (See Wat. Code, § 13243; compare to Wat. Code, § 13263 which does not allow blanket prohibitions of discharges as part of waste discharge requirements or conditional waivers.) As such, the Water Board cannot prohibit the manner of use or amount of certain pesticides. Further, the Water 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 Department of Pesticide Regulations (DPR) to be 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.)

BN-44 ↓ Further, the use of pesticides to assist in agricultural production is a legal use explicitly recognized by the Legislature. (Food & Agr. Code, §§ 822; 11501; 12786; Cal. Code Regs., tit. 3, § 6100 (quoting the findings of the Legislature in Section 1, Chapter 308, Statutes 1978), [The Legislature has repeatedly voiced its desire for a healthy and robust agricultural industry, recognizing the essential role that pesticides perform in supporting that industry.]) The Legislature has continually declared that agriculture is a major and essential component of California's economy and continued viability of the agricultural economy is of paramount importance to the people of California; as such, the continued and "proper, safe and efficient use of pesticides is essential for the protection and production of agricultural commodities and for health protection." (Cal. Code Regs., tit. 3, § 6100(a)(1)-(2); Food & Agr. Code, § 12786.)



BN-44 ↑ Therefore, prohibitions that may result in prohibiting the use of pesticides are unlawful and  
cont. ↓ exceed the Central Coast Water Board's authority.

BN-45 ↑ Moreover, as discussed in the Exponent TM, the Basin Plan does not contemplate  
↓ imposing "effluent" limits on agricultural discharges. (Exponent TM, Section 3.1.2.) However,  
the discharge prohibitions are just that thus are inconsistent with the Basin Plan.

#### **B. Pesticide Water Quality Objectives Have Not Been Properly Adopted**

BN-46 ↑ The Draft Order proposes to impose specific surface water receiving water limits on  
↓ dischargers for a number of pesticides that are listed in Table C.3-2. (Draft Order, page 33.) For  
most, if not all, of the pesticides listed in Table C.3-2, these are improper limits, as the Central  
Coast Water Board has not adopted *any* numeric pesticide water quality objectives (WQOs) for  
these listed pesticides pursuant to law. (See Wat. Code, § 13241.)

BN-47 ↑ Porter-Cologne requires WQOs to ensure reasonable protection of beneficial uses. (Wat.  
↓ Code, § 13241.) As outlined in Water Code section 13241, "each regional board shall establish  
water quality objectives in water quality control plans as in its judgment will ensure the  
reasonable protection of beneficial uses and the prevention of nuisance." Within its Basin Plan,  
the Central Coast Water Board has established numerous general narrative and numeric WQOs,  
including a narrative WQO for pesticides. (Central Coast Basin Plan, pp. 29-31.) However, there  
are not specific WQOs for the 35 pesticides listed in Table C.3-2. Thus, the Central Coast Water  
Board has not considered or applied section 13241 to the limits expressed in Table C.3-2, and  
therefore has no way of knowing if compliance with such limits is reasonable to achieve  
considering all controllable factors. (Wat. Code, § 13241(c).)

BN-48 ↑ Before being used as a numeric limit, a pesticide WQO must be adopted properly,  
↓ pursuant to Water Code sections 13240 et seq., and must be based on proper evidence. (See,  
Exponent TM, Section 3.1.2) The Central Coast Water Board cannot incorporate by reference or  
rely on analytical numeric values to interpret and apply the narrative pesticide WQOs within its  
Basin Plan, without at least having an adopted policy for such interpretations. No such policy  
exists in the Basin Plan.

#### **IV. Riparian Habitat Management for Water Quality Protection**

##### **A. The Central Coast Water Board Does Not Have Legal Authority to Impose Riparian and Operational Setbacks and Require Certain Percentages of Native Vegetative Cover**

BN-49 ↑ The Draft Order contains prescriptive requirements that mandate riparian and operational  
↓ setbacks of various sizes and prohibits all agricultural activities within these mandated setbacks.  
Such requirements exceed the Central Coast Water Board's legal authority when issuing waste  
discharge requirements under Porter-Cologne. A fundamental limitation to the Water 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. (Wat. Code, §§ 13260(a); 13263; 13267;

BN-49  
cont. ↑ 13269.) Riparian habitat, setbacks, and native vegetative cover are not discharges of waste. Further, riparian habitat, setbacks, and native vegetative cover are not WQOs. Accordingly, the Central Coast Water Board cannot regulate riparian habitat and native vegetative cover under the guise of water quality protection. Moreover, regulating land use is not within the purview of the Regional Board.

**1. The Draft Order Misuses Central Coast Water Board Discharge Prohibition Authority To Justify Riparian and Operational Setbacks**

BN-50 ↑ In an unprecedented move, the Draft Order attempts to use discharge prohibition authority to provide legal justification for the riparian and operational setback requirements. (Attachment A, page 184.) The Draft Order's reliance on Water Code section 13243 misconstrues the application of this statutory provision. The statute states in its entirety as follows: "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." (Wat. Code, § 13243.) When applied in the issuance of a waste discharge requirements, this provision must be read in context with, and is otherwise limited by, authority associated with the adoption of waste discharge requirements in general.

BN-51 ↑ Key to waste discharge requirements are that they are requirements that pertain to the nature of any proposed discharges that are related to "...the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed." (Wat. Code § 13263(a).) In other words, they are restrictions related to the discharge and its impact on receiving waters. The Draft Order ignores the necessary fundamental connection between the discharge and potential impacts on receiving waters. Instead, the Draft Order mandates that Dischargers establish riparian and operational setbacks, and then prohibits the discharge of waste within the setback area. "The operational and riparian setbacks established through this Order prohibit the discharge of agricultural waste within the setback area." (Attachment A, page 184.) So, in other words, the Draft Order creates setback areas and then says that discharges of waste are not allowed in the areas, and it prohibits virtually all economic activities from occurring within this artificially created setback area.

BN-52 ↓ This concept is problematic. First, setback areas established in the Draft Order are not waters of the state. Yet, the Draft Order treats the setback areas like they are waters of the state and then looks to prohibit activities within them. Second, the Draft Order's use of Water Code section 13243 in this manner is not supported by any legal authority and is an example of overreaching efforts to expand discharge prohibition authority. For example, soon after submittal of these comments, the Central Coast Water Board will consider amendments to the Basin Plan that would amend, and improperly expand, discharge prohibition provisions. (See *Amending the Water Quality Control Plan for the Central Coastal Basin to Improve and Clarify Waste Discharge Prohibition Language*, Project Report, (draft January 16, 2020).) The Project Report proposes to amend the Basin Plan to prohibit all discharges of waste to land or waters of the

BN-52 ↑  
cont.

state, unless authorized by waste discharge requirements. This broad prohibition contradicts the express language of Water Code section 13243 as well as the implied intent.<sup>3</sup>

BN-53

Additionally, setback width and percentages of native vegetative cover requirements dictate the manner of compliance contrary to Water Code section 13360. The Water Board cannot prescribe how a discharger will comply with discharge requirements. Although regional boards may impose waste discharge requirements (or conditions in waivers) on dischargers, including irrigated agriculture, such conditions cannot specifically dictate the manner of compliance. (Wat. Code, § 13360(a).) Water Code section 13360(a) provides in pertinent part that:

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.

In other words, section 13360 allows the Central Coast Water Board to identify the “disease and command that it be cured,” but prohibits the Water Board from dictating the cure. (See *Tahoe-Sierra Preservation Council v. State Water Resources Control Bd.* (1989) 210 Cal.App.3d 1421, 1438.) Limiting agricultural activities in setback areas is dictating the cure, which is specifically prohibited by section 13360. Dictating setbacks and mandating vegetative cover also dictates the cure and is prohibited by section 13360.

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**B. The Draft Order’s Riparian and Operational Setback Requirements Will Result in Takings of Private Property Requiring Just Compensation Be Paid to Impacted Landowners**

The Takings Clause of the Fifth Amendment prohibits states from taking property for public use without compensation. (U.S. Const. Amend. 5.) Takings involve direct appropriations or physical invasions of property or its functional equivalent. Regulatory restrictions may also be so onerous that its effect is tantamount to a physical appropriation or invasion ousting the owner’s possession. (*Lingle v. Chevron U.S.A. Inc.* (2005) 544 U.S. 528, 537.)

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The Draft Order will severely limit if not destroy agricultural landowners’ ability to beneficially use their land within the setbacks. Growers must cease all commercial crop production and related activities (Draft Order, page 41-42), which will result in taking farmland completely out of production. (DEIR, page 3.1-22.) According to estimates in the Draft Order, the setbacks may cover 554 miles of streams (Attachment A, page 226) and result in taking 4,064 acres out of production. (DEIR, page 3.1-23.) Farmland taken out of production “would [then] be converted to riparian or other vegetation.” (DEIR, page 3.1-24.) This will require removal of

BN-56

<sup>3</sup> Not addressed in this document is the fact that the proposed discharge prohibitions directly undermine the intent and purposes of Porter-Cologne’s notice requirements associated with the issuance of waste discharge requirements. The proposed amendments to the Basin Plan would give the Central Coast Water Board direct authority to bring an enforcement action against *any* individual for discharging without a permit. This circumvents Porter-Cologne’s express requirement that a violation for discharging waste without authorization does not occur until the violation has been called to attention in writing by the regional board. (Wat. Code, § 13265(a).)

BN-55 cont. ↑ crops, light disking, and the seeding or planting of riparian vegetation. (DEIR, pages 2-36, 3.5-34.) Requiring landowners to destroy their crops and physically covert their lands to riparian habitat is functionally equivalent to a physical appropriation of land for a conservation easement. (See *Penn Cent. Transp. Co. v. City of New York* (1978) 438 U.S. 104, 128 [state actions “that may be characterized as acquisitions of resources to permit or facilitate uniquely public functions” constitute takings]; see also *United States v. Causby* (1946) 328 U.S. 256, 265 [if by reason of government action owners could not beneficially use their land, their loss “would be complete as if the government had entered . . . the land and taken exclusive possession of it.”] (emphasis added); see e.g. *Tulare Lake Basin v. U.S.* (2001) 49 Fed. Cl. 313, 319 [State Water Board’s redirection of water through the Sacramento-San Joaquin Delta to protect fish that would otherwise be available for water users mirrored a physical invasion of their water rights requiring compensation].)

BN-57 ↑ The Draft Order on its face results in a taking of property in that it requires growers with waterbodies on or adjacent to their farms to establish setbacks from those waterbodies and prohibits agricultural production therein. “Riparian setbacks,” depending on the classification of the waterbody, are set anywhere from 50 to 250 feet. “Operational setbacks” must be either 1.5 times the width of the active channel or 35 feet for other waterbodies that are not streams such as wetlands or lakes. (Draft Order, page 41-42.) These setbacks result in the physical conversion of agricultural land to riparian habitat. (DEIR, page 3.1-22.) (See *Causby*, 328 U.S. at 262 [just compensation must be provided for interfering with landowner’s exclusive control over some part of the property and destroying a beneficial use therein].)

BN-58 ↑ The setbacks here are strikingly similar to conservation easements. California law recognizes conservation easements as a real property interest in the form of an easement or restriction for the purpose of “retain[ing] land predominantly in its natural, scenic, historical, agricultural, forested, or open-space condition.” (Code Civ. Proc. §§ 815.2(a), 815.1.) The state may only acquire title to conservation easements if they are voluntarily conveyed by the owner. (Code Civ. Proc. § 815.3(b); *Building Industry Assn. of Central California v. County of Stanislaus* (2010) 190 Cal.App.4th 582, 601 [this “prevents the state from requiring an involuntary conveyance of a conservation easement and thus, protects the landowner from an unreasonable taking of property rights.”].) Similar to an acquisition of land for conservation easements, the Draft Order seeks to protect and restore riparian and wetland habitat by prohibiting essentially all activities within the setbacks except control of invasive species, and emergency work necessary for public safety. (Draft Order, page 41-42.) However, in this case, the easement is not being voluntarily conveyed but is being mandated through the Draft Order. By prohibiting all economic activities and requiring the conversion of crops to riparian habitat, the Central Coast Water Board is appropriating an interest in property for the purpose of establishing conservation easements. Although the state may not be acquiring title to the easement, they are locking up the land for an indefinite number of years. (*Lingle*, 544 U.S. at 547 [such dedications of property would be so onerous that they would be deemed *per se* physical takings].) Thus, the setbacks constitute a taking of conservation easement involuntarily and without compensation.

BN-59 ↓ Further, the destruction and conversion of agriculture may directly conflict with county land use policies. As noted in the DEIR, the conversion of cropland would conflict with county

BN-59  
cont.

land use policies and Williamson Act Contracts that require minimum agricultural acres and prohibit conversion. (DEIR, pages 3.1-27, 3.1-28.) For example: Monterey County prohibits land uses that interfere with existing agriculture and the subdivision of farmland except for exclusively agricultural purposes (Monterey County Agricultural Element, Policy AG-1.1, AG-1.3); Santa Barbara County prohibits land uses incompatible with agriculture, prohibits the conversion of agricultural lands that interfere with other agricultural operations (Santa Barbara Agricultural Element, Goal I, A, Goal III, A), and reserves land with prime and non-prime soils exclusively for agriculture (Santa Barbara County Land Use Element, Goals & Policies); Santa Cruz County maintains for exclusive agricultural use lands best suited for commercial agriculture, prevents conversion of agriculture (Santa Cruz County Conservation Element, Objective 5.13), maintains existing parcel sizes of viable agricultural lands, and only allows conversion for exclusively agricultural purposes (Santa Cruz County Conservation Element, Objective 5.13.14.) Prohibiting agriculture within the setbacks effectively eliminates all beneficial use of land as a matter of law where the setbacks overlap with county agricultural zones. (See *Bridge Aina Le'a, LLC v. Land Use Commission* (2020) 950 F.3d 610, 629 [the existence of permissible, local land uses “determines whether a [regulatory] restriction denies a property owner economically viable use of his property.”].) Thus, the setbacks will result in takings where the only permitted land use by the county is commercial agriculture. This is functionally equivalent to a practical ouster of landowners in those areas, regardless of the size of the area to be taken out of production and converted. (See *Pennsylvania Coal Co. v. Mahon* (1922) 260 U.S. 393, 414 [“To make it commercially impractical to [exercise a property right] has very nearly the same effect for constitutional purposes as appropriating or destroying it.”].)

BN-60

**1. The Setbacks Will Result in Regulatory Takings Because the Economic Impacts and Interference with Investment-backed Expectations are High, and the Mandated Conversion of Cropland to Riparian Habitat is Tantamount to a Physical Appropriation**

Regulatory takings depend on three factors. “Primary among [them] are the economic impact of the regulation and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations.” The character of the government action is also relevant. (*Lingle, supra*, 544 U.S. at 538-539.) Applying these factors to the Draft Order’s setback requirements demonstrates that regulatory takings will likely result in some areas.

**(a) Economic Impact**

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The economic impact from the setbacks will be extraordinarily high if not fatal to some agricultural operations. Landowners and growers will be required to take prime farmland out of production and plant riparian vegetation in its place. (DEIR, pages 3.5-34, 3.1-22.) This will result in removing all economical beneficial uses from the property in question. The diminution in value from irrigated agriculture, particularly prime farmland, will be high. (See *Bridge Aina Le'a, supra*, 950 F.3d at 631 [diminution in value indicates whether the regulation is functionally equivalent to an appropriation of property].) Not only is the diminution in value to the land high, landowners must also bear “the cost of removing and disposing existing crops/ vegetation in the area to be converted to [the] riparian setback . . . [and] establish[ing] riparian vegetation in the area.” (DEIR, page 3.5-34.) The conversion of farmland to riparian habitat is estimated to range

BN-61  
cont. ↑ from \$800 to \$2,150 per acre. (Attachment A, page 25.) While this alone is tantamount to state appropriation of property—in that it reduces economic usefulness and value of land to nothing and then adds costs to the landowner—some agricultural operations may be forced to go out of business entirely. (DEIR, page 3.1-26.)

**(b) Investment-Backed Expectations**

BN-62 The setbacks and resulting conversion of agriculture clearly interfere with landowners' investment-backed expectations when they purchased farmland in areas dedicated exclusively for agriculture. (See *Bridge Aina Le'a*, *supra*, 950 F.3d at 633-634 [this depends on landowners' reasonable expectations when the land was purchased in light of the regulatory environment at that time].) The setback requirements were not a foreseeable regulatory development until they were made available for public comment on February 21, 2020. County land use policies seeking to preserve and expand agriculture have been in place for a number of years, and certainly were in place before the Central Coast Water Board issued its first Agricultural Order in 2004. For example, County land use policies in three of the counties were adopted as follows: 1984 in Monterey County (see Monterey County 1984 General Plan, p. 120); 1991 in Santa Barbara County (see Santa Barbara County Comprehensive Plan Agricultural Element, p. 6); and 1994 in Santa Cruz County (see Santa Cruz County General Plan, p. 5-44).

BN-63 The setbacks are also not a foreseeable outgrowth of Agricultural Order 3.0 (2017), which included Water Quality Buffer Plans for some Tier 3 Dischargers. Setbacks have never been mandated by the Central Coast Water Board in a general manner to "all Dischargers with waterbodies within or bordering their ranch" as opposed to individual dischargers with individual plans. (Draft Order, page 41.) Indeed, "[c]ompared to Agricultural Order 3.0, Agricultural Order 4.0 would differ primarily in that it would outline specific quantifiable milestones" that establish setbacks for the first time. (DEIR, page 2-12; Draft Order, page 41.) Additionally, no previous order or other regional board orders have required agricultural landowners to convert their farmland to riparian habitat. If the setbacks were actually foreseeable, it is highly unlikely any grower would want to buy land in those areas given the economic impacts discussed above.

BN-64 Because the economic impact and interference with investment-backed expectations "are the primary factors" in this analysis (*Bridge Aina Le'a*, *supra*, 950 F.3d at 630), it is clear that the setback and conversion requirements under the Draft Order would likely result in regulatory takings requiring just compensation.

**(c) Character of Government Action**

BN-65 The setback requirements to physically remove crops and convert land to riparian habitat is functionally equivalent to an appropriation of a conservation easement, the most intrusive form of government action. (See *Lingle*, 544 U.S. at 539 [the character of the action may turn on "whether it amounts to a physical invasion or merely affects property interests . . . [by] adjusting the benefits and burdens of economic life to promote the common good."]; See e.g. *Loretto v. Teleprompter Manhattan CATV Corp.* (1982) 485 U.S. 419, 426 [when the character of the action constitutes a physical appropriation, it is a taking].)



BN-66 Even if there is no physical appropriation, “the government cannot force some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.” (*Bridge Aina Le’a, supra*, 950 F.3d at 636.) The setbacks require that landowners destroy their crops, plant riparian habitat, and cover the costs regardless of their individual impacts to water quality, if any. This places an extremely unfair burden on landowners who have to finance the conversion of farmland (at least 4,064 acres) to riparian habitat while the public reaps the benefits. While the Central Coast Water Board has authority to regulate discharges to waters of the state, it does not have the authority to require landowners to remove crops from their land and plant riparian habitat in its place. If the Central Coast Water Board desires to establish riparian habitat to “adjust the benefits and burdens of economic life to promote the common good,” it alone must bear those costs.

## 2. The Setbacks Constitute Unconstitutional Permit Conditions Requiring Just Compensation as Physical Takings

BN-67 Requiring landowners to relinquish private property in exchange for a permit is a taking. Imposing setbacks on individual landowners therefore requires just compensation unless there is an essential nexus and rough proportionality between the setbacks and the impact of an individual landowner’s agricultural operation on water quality. (See *Koontz v. St. Johns River Water Management Dist.* (2013) 570 U.S. 595, 599; *Dolan v. City of Tigard* (1994) 512 U.S. 374, 375 [rough proportionality requires “some sort of individualized determination that the required dedication is related both in nature and extent to the [impacts of the proposed land use.”].) All growers must comply with setback distances, depending on the classification of the waterbody. (Draft Order, page 41.) This broad requirement is not based on an individualized determination of any particular grower’s impacts on water quality. Rather, it simply assumes that all growers cause the same impacts to water quality, regardless of geography, hydrology, farming practices, or any other relevant physical characteristics that may impact water quality. The Central Coast Water Board may not leverage its power to regulate waters of the state by requiring that all growers establish setback widths bearing no reasonable relationship to actual water quality impacts.

## C. There Are No Properly Adopted WQOs for Riparian Habitat Within the Basin Plan

BN-68 The riparian habitat management requirements proposed in the Draft Order are improper because there are no properly-adopted WQOs for riparian habitat. Porter-Cologne defines “water quality objectives” as the allowable “limits or levels of water quality constituents or characteristics that are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.” (Wat. Code, § 13050(i).) Riparian habitat is not a limit or level on water quality constituents or characteristics under Porter-Cologne. Further, it is not a “waste” that can be discharged, and thus regulated, under Porter-Cologne. (Wat. Code, § 13050(d).)

BN-69 As specifically stated in the Central Coast Water Board’s Basin Plan, “[i]n setting waste discharge requirements, the Regional Board will consider the potential impact on beneficial uses within the area of influence of the discharge, the existing quality of receiving waters, and the



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cont.

appropriate water quality objectives. The Regional Board will make a finding of beneficial uses to be protected and establish waste discharge requirements to protect those uses and to meet water quality objectives.” (Basin Plan, p. 29.) Thus, waste discharge requirements (or conditional waivers of waste discharge requirements) protect beneficial uses and “meet water quality objectives.” Riparian habitat management, native vegetative cover, and setbacks are not water quality constituents. Further, riparian habitat management, native vegetative cover, and setbacks are not adopted WQOs and the Water Board cannot legally prescribe allowable limits or levels of riparian habitat, or prohibit their removal. (See Wat. Code, § 13050(h); see also Wat. Code, § 13240 et seq. regarding establishment of WQOs.)

**D. Riparian Setbacks May Conflict with Food Safety Requirements Imposed by Buyers and Food Safety Programs and Threaten Public Health**

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In addition to the problems addressed above, the requirements to impose riparian setbacks in the Draft Order may conflict with food safety requirements imposed by buyers and others.<sup>4</sup> Regulating land use is not within the purview of the Regional Board. The Water Code and the Basin Plan focus on water quality and discharges which may impair water quality. As discussed within, while the Regional Board has authority to regulate a discharge of waste, the Board does not have authority to require or regulate an act which is unrelated to discharges to waters of the state. (Wat. Code, §§ 13260(a); 13263; 13267; 13269; 13360.) In addition to exceeding its jurisdiction, riparian setbacks may deprive farmers from the economic benefit and use of their private property by prohibiting growers from complying with buyer specifications that may be necessary for food safety reasons.

**V. Part 2, Section D. Additional Requirements and Prohibitions**

**A. Access Road Requirements from the Forest Practice Regulations Are Not Applicable and Need to Be Deleted**

BN-71

Paragraphs 15-19 require that access roads be constructed and maintained in compliance with certain requirements from the California Code of Regulations. (Draft Order, page 50.) These requirements, however, are inappropriate as they apply to logging roads under the Forest Practices Act – not roads subject to waste discharge requirements. The Draft Order’s citation to Title 14 is relatively incomplete as there are many Divisions within Title 14 that then have Chapter 4s. However, based on the subject at hand, we presume that the Draft Order is referring

<sup>4</sup> “In early 2007, with oversight by the California Department of Food and Agriculture (CDFA), produce industry representatives developed the California Leafy Green Products Handler Marketing Agreement (see [www.caleafygreens.ca.gov](http://www.caleafygreens.ca.gov)). More than 100 handlers (companies that move fresh produce products from growers to retail and food-service buyers) are signatories. Representing more than 99% of the leafy greens production in California, they are obligated to handle leafy green produce only from growers who adhere to the best management practices detailed in the Commodity Specific Food Safety Guidelines for the Production and Harvest of Lettuce and Leafy Greens, known as the “Metrics” (see [www.caleafygreens.ca.gov](http://www.caleafygreens.ca.gov)). The Metrics were developed and continue to be updated through a process involving the produce industry, government agencies, natural resource organizations and scientists.” (Beretti et al., *Food safety and environmental quality impose conflicting demands on Central Coast growers* (April-June 2008) *California Agriculture* at p. 69.)

BN-71 cont. ↑ to Title 14, Division 1.5 Department of Forestry and Fire Protection, Chapter 4 Forest Practices. More specifically, within Chapter 4 of the Forest Practices regulations, Subchapter 4, Article 12 applies to Logging Roads, Landing and Logging Road Watercourse Crossings. The provisions of Article 12 relate directly to “logging roads, landings, and/or watercourse crossings.” Nothing within Article 12 suggests or implies that the provisions are appropriate to apply to farm roads.

BN-72 | Farming and logging are distinctively different industries, with different regulatory requirements. It is inappropriate for the Draft Order to take logging road regulations (developed for that specific purpose) and generically apply them to farm roads that may exist in irrigated agricultural areas. As a practical matter, logging typically occurs on rugged terrain in mountainous areas while irrigated agriculture is more likely to be found in valleys and across relatively flat terrain. As a legal matter, logging is regulated by the Department of Forestry and Fire Protection, and the Department of Forestry’s regulations have undergone years of scrutiny by logging practitioners and professionals. No scrutiny has been applied to these regulations as they would apply to farming roads for irrigated agriculture in the Central Coast region.

BN-73 | The Draft Order would take these timberland regulations and make them a requirement for all access roads on properties that otherwise fall under this general order. This is improper.

## BN-74 | VI. Definitions

### • Definition of Discharge is Overly Broad

The Draft Order in Attachment C proposes to define discharge to include stormwater runoff conveyed in channels or canals resulting from the discharge from irrigated lands. Stormwater conveyed in a channel is neither a pollutant nor a discharge of a waste under state or federal law.<sup>5</sup> (See Wat. Code, § 13050.)

BN-75 | Porter-Cologne focuses on receiving waters – such that runoff is rendered a discharge of “waste” only if it contains harmful concentrations of pollutants. (See State Water Resources Control Board, Order WQ 2001-15, p. 12, [concluding that stormwater is not waste *per se*; rather, it is the pollutants in runoff that are waste].) The State Board clearly concluded that “it is the waste or pollutants in the runoff that meet these definitions of “waste” and “pollutant,” and not the runoff itself.” (*Ibid.*)

<sup>5</sup> Porter-Cologne defines “waste” and “pollution” as follows:

“‘Waste’ includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.” (Wat. Code, § 13050(d).)

“‘Pollution’ means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:

(A) The waters for beneficial uses.

(B) Facilities which serve these beneficial uses.

(2) ‘Pollution’ may include “contamination.” (Wat. Code, § 13050(f)(1).)

BN-76 Additionally, in the 1977 amendments to the Clean Water Act, Congress expressly reversed a court decision which would have required NPDES permits for return flows from irrigated agriculture. Congress accomplished this through amendments to the CWA: (1) exempting irrigation return flows from permitting (33 U.S.C. § 1342(l)(1)), and (2) excluding return flows from the definition of point source (33 U.S.C. § 1362(14)). The legislative history of the amendments demonstrates that Congress had assumed that such discharges from irrigated agriculture would be nonpoint source discharges. (3 Legislative History of the Clean Water Act, 1978 at 527.) Case law has further reiterated that agricultural stormwater runoff is not a discharge of pollutants from a point source under the federal CWA: “We believe it reasonable to conclude that when Congress added the agricultural stormwater exemption to the Clean Water Act, it was affirming the impropriety of imposing, on “any person,” liability for agriculture-related discharges triggered not by negligence or malfeasance, but by the weather – even when those discharges came from what would otherwise be point sources. There is no authoritative legislative history to the contrary.” (*Waterkeeper Alliance, Inc. v. U.S. E.P.A.* (2d Cir. 2005) 399 F.3d 486, 507.)

BN-77 Given that rainwater itself is not a “waste” or “pollution” as defined within Porter-Cologne and that agricultural stormwater runoff is not a discharge of pollutants from a point source under the federal CWA, the inclusion of stormwater into the definition of discharge is improper. The definition of discharges of waste from irrigated lands suffers from the same infirmity and must also be revised.

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- **Definition of Enhancement, Establishment, Reestablishment and Rehabilitation Are Unnecessary**

Attachment C attempts to take everyday terms such as enhancement and establishment redefine them for purposes of the Draft Order. Creating new definitions for such standard terms is inappropriate and unnecessary. These definitions need to be removed.

BN-79

- **Definition of Nonpoint Source Pollution**

Attachment C incorrectly states that diffuse pollution sources are not generally subject to NPDES permitting. In fact, the nonpoint source pollution is not subject to NPDES permitting.

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- **Definition of Waters of the State**

Attachment C improperly broadens the definition of water of the state. The proposed definition is inconsistent with Water Code section 13050(e), and would claim that, among other things, water in an irrigation system is a water of the state. Such an expansive definition is not supported by law or policy. The definition of water of the state needs to be limited to that as contained in statute.

BN-81

- **Definition of Waterbody**

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cont.



Like with the definition of waters of the state, the definition provided in Attachment C is overly broad. Drainages, canals and artificial bodies of water are not waterbodies subject to the requirements of the Draft Order and should not be included in the definition here.

BN-82



## **VII. CONCLUSION**

For the reasons provided above, the Draft Order is legally deficient in many ways and cannot be adopted as proposed. Substantial revision is necessary before the Draft Order can be considered by the Central Coast Water Board. Considering the level of deficiency, and necessary level of revision, a revised version of the Draft Order will need to be circulated of additional public review and comment. Thank you for the opportunity to provide comments.

## EXHIBIT 2

**AGRICULTURAL ASSOCIATION PARTNERS LEGAL AND POLICY RESPONSES  
TO THE DRAFT ENVIRONMENTAL IMPACT REPORT AND ITS COMPLIANCE  
WITH CEQA**

**I. INTRODUCTION**

BN-83 The Central Coast Regional Water Quality Control Board's (Regional Board) Draft General Waste Discharge Requirements for Discharges from Irrigated Lands (Ag Order 4.0 or proposed Project) Draft Environmental Impact Report (DEIR) constitutes a prejudicial abuse of discretion<sup>1</sup> in that the Regional Board failed to proceed in a manner required by law and its decision is not supported by substantial evidence. In addition to those comments laid out in Exhibit 1, the Agricultural Association Partners' Legal And Policy Responses To Draft Waste Discharge Requirements For Agricultural Waste Discharges From Irrigated Lands Within The Central Coast Region, the DEIR accompanying the draft Ag Order 4.0 does not comply with the California Environmental Quality Act (Pub. Resources Code, §§ 21000 et seq.,) The draft Ag Order 4.0 includes significant and prescriptive requirements that gravely impact growers and the agricultural industry in the Central Coast. Although growers and the agricultural community are supportive of maintaining quality waters throughout the region, the draft Ag Order 4.0 not only contains unlawful requirements not supported by law or substantial evidence but put Central Coast growers at a severe disadvantage in a very competitive marketplace.

BN-86 As the state agency tasked to ensure the *reasonable* regulation of the Central Coast's water quality given all the demands made upon the water, it is imperative that the Regional Board comply with all laws, including CEQA, and act appropriately and reasonably when it adopts Ag Order 4.0. (Wat. Code, §§ 13241; 13260(a); 13263; 13267; 13269; Pub. Resources Code, § 21001.)

BN-87 CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) CEQA is designed to inform decision-makers and the public about potential, significant environmental effects of a project. (Cal. Code Regs., tit. 14, § 15002(a)(1), ("CEQA Guidelines").) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment, but also informed self-government.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.)

BN-88 In general, the Regional Board failed to properly follow and comply with CEQA in that the analysis in the DEIR is superficial, fails to include an adequate project description for the draft Ag Order 4.0, fails to adequately represent baseline conditions, fails to evaluate the entire project, inadequately analyzes the environmental impacts associated with the project, fails to analyze the

<sup>1</sup> "A prejudicial abuse of discretion occurs 'if the failure to include relevant information precludes informed decision-making and informed public participating, thereby thwarting the statutory goals of the EIR process.'" (*Berkeley Keep Jets Over the Bay v. Board of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1355 (quoting *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 829).)

BN-88  
cont. ↑ economic impacts associated with the proposed Project, fails to properly identify and analyze alternatives, fails to adequately address cumulative impacts, fails to analyze the program's potential inconsistencies with general plans, regional plans, regulations and zoning ordinances to protect agricultural uses, and fails to support several of its conclusions and thresholds with substantial evidence. Due to these inadequacies, the DEIR is not a legally adequate document and cannot be relied upon.

## ARGUMENT

### II. THE DEIR FAILS TO COMPLY WITH THE REQUIREMENTS OF CEQA

BN-89 ↑ The California Environmental Quality Act ("CEQA"), Pub. Resources Code, §§ 21000 et seq., 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 ("Laurel Heights I"); *Citizens of Goleta Valley, supra*, 52 Cal.3d at p. 564.) As the lead agency for the proposed Project, the regulation of discharges from irrigated lands via waste discharge requirements, the Regional Board must comply with CEQA's overall objectives, which are to: 1) inform the decision-makers and public about the potential significant environmental effects of a proposed project; 2) identify ways that environmental damage may be mitigated; 3) prevent significant, avoidable damage to the environment by requiring changes in projects, through the use of alternatives or mitigation measures when feasible; and 4) disclose to the public why an agency approved a project if significant effects are involved. (Pub. Resources Code, § 21080.5(a).)

BN-90 ↑ An attempt to review the environmental impacts of the Ag Order 4.0 was included within the DEIR. Unfortunately, a full CEQA review and environmental analysis has been avoided due to the DEIR's improper conclusions of "speculative" and "less than significant." Without preparing a proper and adequate environmental document, the public has been precluded from gaining a full understanding of the environmental impacts and consequences of the draft Ag Order 4.0 as well as gaining assurance that all consequences have in fact been analyzed to the fullest extent required by law. (See *Vineyard Area Citizens for Responsible Growth, Inc., supra*, (2007) 40 Cal.4th at pp. 449–450, ["The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, *equally important, that the public is assured those consequences have been taken into account.* [Citation.] For the EIR to serve these goals it must present information in such a manner that the foreseeable impacts of pursuing the project can actually be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made."], *emphasis added.*)

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As described herein, the Regional Board has failed to comply with the provisions of CEQA as the DEIR prepared for the proposed Project<sup>2</sup> fails to satisfy the requirements of CEQA and the CEQA Guidelines, title 14, California Code of Regulations, section 15000 et seq.<sup>3</sup> As demonstrated below, the Regional Board's DEIR is fatally flawed and legally inadequate. Draft Ag Order 4.0 consists of requirements which are more stringent or onerous than required by or provided for under current law. These requirements will threaten the economic survival of many agricultural lands owned or operated by farmers and ranchers in the region, will reduce land and lease rates, affect agricultural businesses and local economies, affect food prices, and disproportionately impact disadvantaged or severely disadvantaged communities. (ERA Economics LLC, Economic Review of Central Coast Water Board Ag Order 4.0 and Draft Environmental Impact Report, Technical Memorandum No. 1 (May 11, 2020), pp. 7, 16-17, 18, Exhibit 5 (hereinafter ERA Economics, Technical Memorandum No. 1).) Unfortunately, the DEIR fails to properly analyze these significant impacts, as well as others, and therefore violates CEQA.

BN-92

#### A. CEQA Requires An Adequate Project Description

The DEIR fails to include an adequate project description for the Project. "[A]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." CEQA requires an EIR to have an accurate and stable project description. (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199.) Under 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).) "Among other things, a project description must include a clear statement of 'the objectives sought by the proposed project,' which will help the lead agency 'develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision-makers in preparing findings or a statement of overriding considerations, if necessary.'" (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654-655 quoting Cal. Code Regs., tit. 14, § 15124(b).) The description must also include "[a] general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities." (Cal. Code Regs., tit. 14, § 15124(c).) As part of the project description, an EIR is to also contain:

"A statement of objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project."

<sup>2</sup> The term "project" refers to the draft Ag Order 4.0 Waste Discharge Requirements and all attachments in their entirety.

<sup>3</sup> All future references to Guidelines are to the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) developed by the Governor's Office of Planning and Research and adopted by California's Natural Resources Agency. (Pub. Resources Code, § 21083.) "[C]ourts should afford great weight to the Guidelines except when a provision is clearly unauthorized or erroneous under CEQA. [Citation.]" (*Laurel Heights I, supra*, (1988) 47 Cal.3d 376, 391, fn. 2.)



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cont.

(Cal. Code Regs., tit. 14, § 15124(b); *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1163, overturned on other grounds.)

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The identification of the project objectives and scope is crucial to the proper consideration and analysis of the project, especially analysis of potentially significant impacts be evaluated in the EIR. (Cal. Code Regs., tit. 14, § 15124(b); *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1163, overturned on other grounds.) As stated in the seminal “project description” interpretation of *County of Inyo v. City of Los Angeles*, *supra*, 71 Cal.App.3d at pp. 192-193:

“A curtailed or distorted project description may stultify the objective of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposals benefit against its environmental cost, consider mitigation measures, assess the advantages of terminating the proposal (i.e., the “no project” alternative) and weigh other alternatives in the balance.”

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The adequacy of an EIR’s project description is closely linked to the adequacy of the impact analyses. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722-723.) More specifically, the project description provides the analytical foundation for the entire EIR and allows for the required “rigorous analysis” to dispose of an impact as less than significant. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App.3d 692, 735, 736; *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592, [“An accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity.” A narrow view of a project could result in the fallacy of division, that is, overlooking its cumulative impact by separately focusing on isolated parts of the whole.” (internal citations omitted)].) Such a rigorous analysis is not possible if the project description is inaccurate, inconsistent, or misleading. In other words, if the description is inadequate because it fails to discuss an aspect of the project, the environmental analysis will probably reflect the same mistake. (*San Joaquin Raptor/Wildlife Rescue Center*, *supra*, pp. 722-723.) Moreover, without a well-defined project or program at the *beginning* of the CEQA process, the lead agency cannot compare the project to a reasonable range of alternatives in order to determine feasibility and ability to avoid significant environmental impacts as required by CEQA Guidelines section 15126.6.

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It is therefore essential that the EIR has an accurate, well-conceived, stable, and finite project description. Thus, if the description is inadequate because it fails to discuss an aspect of the project or incorrectly frames the scope of the project, the environmental analysis will probably reflect the same mistake. (*Ibid.*) As demonstrated below, the DEIR’s distorted project description truncates both the assessment of impacts and consideration of meaningful alternatives.

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#### **B. The DEIR’s Project Description is Inadequate**

The DEIR does not include an accurate project description in the document, and instead refers the reader to DEIR Appendix A, which is the entire Draft Ag Order 4.0 and its appendices, consisting of 459 pages. (See DEIR pp. 2-12, 2-13.) The project description needs to be in the

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cont. ↑  
DEIR itself, not in an appendix. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 955, [“Defendants insist that there is sufficient documentation in the EIR to discern all necessary information, and plaintiffs insist just as adamantly that there is not. It may well be that by cobbling together information included in and appended to the EIR, a reader might be able to calculate historic water releases and gain a better understanding of how PG&E had operated the lakes in the past and how defendants intended to operate them in the future. But such an effort should not be necessary. An adequate EIR requires more than raw data; it requires also an analysis that will provide decision-makers with sufficient information to make intelligent decisions. (See, e.g., Guidelines, § 15151.)”].)

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Although the DEIR contains section 2.6 Summary of the Proposed Agricultural Order 4.0, the “summary” of the complicated 78-page draft order and 300-page Attachment A-Findings is presented in one-half page and merely describes ways in which the proposed project will differ from Ag Order 3.0, an entirely distinct project. Statements such as “numeric limits for discharges” is cursory, does not provide the reader or decision-makers with the full scope and breadth of the project, prevents adequate review, and improperly describes the project in such a way that understates and fails to recognize project impacts. (*City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1450-1451.) Further, Tables 2-3 and 2-4 do not aid in describing the project; Table 2-3 does not explain the substance of draft Ag Order 4.0 and confusingly references to drafts from March and May 2019, and Table 2-4 truncates requirements under the draft Ag Order 4.0 to such a degree as to be useless as a means of understanding what draft Ag Order 4.0 requires. As such, the DEIR’s project description does not allow the public or reviewing agencies the ability to understand what the project is in its entirety (“whole of the action”)<sup>4</sup> and evaluate and review its potential impacts. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26 [“A project description that omits integral components of the project may result in an EIR that fails to disclose the actual impacts of the project. (*Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 829 [173 Cal.Rptr. 602].)”].)

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Additionally, the DEIR’s description of the “project” is inadequate and does not provide the reader with a valid basis through which to discern what the proposed Project is and therefore understand the DEIR’s environmental analysis since it does not “include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the

BN-99  
↑<sup>4</sup> The entire project being proposed for approval (and not some smaller aspect of it) must be described in the DEIR. This requirement reflects the CEQA Guidelines’ definition of a “project” as “the whole of an action” that may result in either a direct physical environmental change or a reasonably foreseeable indirect change. (Cal. Code Regs., tit. 14, § 15378.) The project description in the DEIR does not reflect the entire project being proposed, and instead only describes selected aspects. (DEIR, pp. 2-12 – 13.) For example, the DEIR states “the purpose of project is to benefit the environment.” (DEIR, p. 4-40.) Agriculture is part of the environment that must be analyzed under CEQA but is not treated as such throughout the DEIR. (Pub. Resources Code, § 21060.5; Cal. Code Regs., tit. 14, § 15360; CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources.)

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cont. ↑

issues raised by the proposed project. (*Laurel Heights I, supra*, at p. 405.)” (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26; see also *ibid.*, [An adequate EIR must be “prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences.”]; Cal. Code Regs., tit. 14, § 15151.) For example, “the environmental setting is partially based on old data and fails to convey the important features of Central Coast agriculture that are relevant for assessing the economic impact of the Order.”

BN-100

Further, by failing to adequately describe the project, and failing to use an accurate, stable, and finite project description throughout the document, project impacts are improperly understated, especially those related to agriculture. (*City of Santee, supra*, 214 Cal.App.3d at pp. 1450-1451.) Improperly understating and/or ignoring project impacts results in, among other things, improper and inadequate mitigation measures, improper analysis of cumulative impacts, and the inability to prepare and evaluate a reasonable range of alternatives. (Cal. Code Regs., tit. 14, § 15124(b); § 15151; *County of Amador v. El Dorado County Water Agency, supra*, 76 Cal.App.4th at p. 955, [description of environmental setting should be sufficiently clear to allow informed comparison of preproject and postproject conditions.]; *Cadiz Land Co., Inc. v. Rail Cycle, L.P.* (2000) 83 Cal.App.4th 74, 94.) Further, without a proper project description, reasonably foreseeable impacts, alternatives, and mitigation measures cannot be prepared or evaluated. For example, the DEIR fails to analyze the reasonably foreseeable consequences of required operational setbacks and riparian setbacks as well as the environmental effects of required operational setbacks and riparian setbacks in terms of food safety, threat to human health, increase in insects, increase in flood risks, increase in fire risks, etc. (Letter from Costa Farms (Jan. 15, 2019) regarding food safety, riparian setbacks and impacts, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter1.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter1.pdf)> [as of June 18, 2020]; Letter from David Costa (June 3, 2020) regarding Salinas River Stream Maintenance Program, pp. 7, 12, Attachment 1; *Laurel Heights I, supra*, 47 Cal.3d at p. 396; Cal. Code Regs., tit. 14, § 15126; ERA Economics, Technical Memorandum No. 1, pp. 1-2; ERA Economics, Example Economic Impacts of the Central Coast Water Board Ag Order 4.0, Technical Memorandum No. 2 (June 19, 2020), Section Setback Requirements, Exhibit 6 (hereinafter ERA Economics, Technical Memorandum No. 2).)

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Additionally, the project description does not include a general description of the proposed Project’s “technical, economic, and environmental characteristics.” (Cal. Code Regs., tit. 14, § 15124(c).) There is no description of the agricultural environmental characteristics (location maps and the approximate total number of irrigated farmland in the nine counties within the Central Coast Regional Board’s boundaries is not adequate), and there is no general description of the economic characteristics.

BN-103 ↓

Further, the vague and uncertain project description is not remedied by the DEIR’s attempts to examine the “maximum environmental impacts” of the proposed project’s requirements. (*Stopthemillenniumhollywood.com v. City of Los Angeles* (2019) 39 Cal.App.5th 1, 13, 15; *Washoe Meadows Community v. Department of Parks & Recreation* (2017) 17 Cal.App.5th 277, 286-289.) Here, the DEIR identifies, although incorrectly, the maximum number of acres of agricultural land “potentially being taken out of production” due to riparian setback and operational setback requirements as 4,064 acres. (DEIR, p. 3.1-23.) Additionally, the DEIR estimates that the

BN-103  
cont. ↑ maximum acres under Williamson Act contracts that will be converted to non-agricultural use to be 2,665.71 acres. (DEIR, pp. 3.1-27 – 28.) Although the DEIR attempts to analyze “the greatest environmental impacts” to occur under Draft Ag Order 4.0, an examination of “maximum environmental impacts” of any proposal do not correct the flaw of excessive vagueness or uncertainty in the description of the proposed project. (*Stopthemillenniumhollywood.com*, *supra*, at pp. 13, 15; *Washoe Meadows Community*, *supra*, at pp. 286-289.)

BN-104 ↑ Accordingly, the DEIR must be revised to include the appropriate project description. Without this, the DEIR fails to satisfy CEQA’s fundamental requirements.

### C. The DEIR’s Project Stated Objectives are Inadequate

BN-105 ↑ In addition to the flawed project description, the project purpose and project objectives are also inadequate. Not only has the project purpose changed since the Initial Study, the project purpose is described differently throughout the DEIR. In Section 2.4, the project purpose is the three listed objectives. (DEIR, p. 2-10.) In section 4, the DEIR states “the purpose of project is to benefit the environment.” (DEIR, p. 4-40.) Under either project “purpose,” agriculture is improperly left out of the definition of “environment.” (Pub. Resources Code, § 21001(a); Pub. Resources Code, § 21060.5; Cal. Code Regs., tit. 14, § 15360; CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources; see Section E. 3, The DEIR’s Analysis of Agriculture and Forest Resources Is Improper And Flawed, *post*.) The use of a narrow and improper purpose nullifies the objectives of CEQA. (*County of Inyo v. City of Los Angeles*, *supra*, 71 Cal.App.3d at pp. 192-193; see also *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654-655; Cal. Code Regs., tit. 14, § 15124(b).)

BN-106 ↑ Regarding the proposed Project’s objectives, they collectively do not mention the agricultural environment or include maintaining viable agricultural activity in the Central Coast region through reasonable regulations, which are part of the mandates provided by the Porter-Cologne Water Quality Control Act and CEQA. (Wat. Code § 13000; CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources; Pub. Resources Code, § 21060.5; Cal. Code Regs., tit. 14, § 15360; see, e.g., Wat. Code, § 13241, [calling for water quality objectives that will provide “the reasonable protection of beneficial uses” upon mandated review of specific factors including economics (emphasis added)]; *id.* § 13050(h), [defines “water quality objectives” as “the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area” (emphasis added)]; *id.* § 13263, [requiring regional water boards to take into consideration “water quality objectives reasonably required” to protect beneficial uses as well as all provisions of section 13241 when prescribing discharge requirements]; *id.* § 13267(b)(1), [requiring technical or monitoring program reports for waste discharge requirements (WDRs) or conditional waivers to “bear a reasonable relationship to the need for the report and the benefits to be obtained”]; *City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 619.)

BN-107 Additionally, Objective 1.d, protecting and restoring riparian and wetland habitat, is a land use control plan, which is outside the scope of the Regional Board's authority.<sup>5</sup> (See Agricultural Association Partners' Legal And Policy Responses To Draft Waste Discharge Requirements For Agricultural Waste Discharges From Irrigated Lands Within The Central Coast Region, Exhibit 1, Sections IV. A. and IV. A. 1, [regarding the Regional Board's lack of authority; only authorized to regulate the discharge of waste that could affect the quality of the state's waters]; Wat. Code, §§ 13260, 13263; see also Central Coast Regional Water Quality Control Board Basin Plan (2019), Section 5.2, ¶ 4, p. 259, deference to local land use entities.) Objective 1.e, minimizing sediment discharges to surface water, conflicts with the Regional Board's 2019 Basin Plan, which indicates that local government should take the lead in sediment management, with Regional Board support. (Central Coast Regional Water Quality Control Board, Basin Plan, Section 5.3.6, ¶ 2, ¶ 4, p. 260.)

BN-108 Accordingly, the DEIR must be revised to include the appropriate project purpose objectives. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

**D. The DEIR is Legally Deficient Because It Fails to Properly Identify the Baseline and Environmental Setting**

BN-109 The DEIR contains an incomplete and flawed environmental baseline and environmental setting. (See Cal. Code Regs., tit. 14, §§ 15125(a), (c).) The existing setting omits relevant information, including but not limited to, relevant regulations, programs, and plans such as the Sustainable Groundwater Management Act (SGMA), and truncates information that is included. Further, the cursory treatment of the existing setting in the DEIR, for an area encompassing more than 431,298 acres of irrigated land, is insufficient. The environmental setting fails to describe accurately the existing environmental conditions, and thus, prevents a proper analysis of significant adverse effects. (Pub. Resources Code, § 21061; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428, *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 447, [An EIR must contain an appropriate environmental baseline and environmental setting in order for a legally proper analysis of any significant effects the project may have on the environment].) "Knowledge of the regional setting [of the project] is critical to the assessment of environmental impacts . . . . The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context." (Cal. Code Regs., tit. 14, § 15125(c).) "To make such an assessment, an EIR must delineate environmental conditions prevailing absent the project, defining a "baseline" against which predicted effects can be described and quantified. (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 315.)" (*Neighbors for Smart Rail*, *supra*, 57 Cal.4th at p. 447.) Toward that end, the

BN-110 <sup>5</sup> As estimated in the draft Ag Order 4.0 and DEIR, the setbacks may cover 554 miles of streams (Draft WDR Attachment A, p. 226) and result in taking 4,064 acres out of production. (DEIR, p. 3.1-23.) Farmland taken out of production "would [then] be converted to riparian or other vegetation" and could no longer be used for agricultural purposes. (DEIR, p. 3.1-24.) As described herein, the number of impacted agricultural acres cited in the DEIR is grossly low and does not evaluate how growers and the agricultural industry will comply with riparian management areas and additional food safety setbacks, pesticide, surface runoff, and net nitrogen targets/limits, changes in crops grown, and lands not being able to do multiple cropping.

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cont. ↑ DEIR “must include a description of the physical environmental conditions in the vicinity of the project, . . . from both a local and a regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant.” (*Id.* at § 15125(a); *Neighbors for Smart Rail, supra*, 57 Cal.4th at p. 447.)

BN-111 ↑ For example, “the environmental setting is partially based on old data and fails to convey the important features of Central Coast agriculture that are relevant for assessing the economic impact of the Order.” (ERA Economics, Technical Memorandum No. 1, p. 10.) Table 3.5-1 relies upon 2002 baseline data and does not reflect current cropping patterns and cropping values. (DEIR, pp. 3.5-2 – 3.5-3; ERA Economics, Technical Memorandum No. 1, p. 10.) Tables 3.5-3 and 3.5-4 give an example of the costs of production for growers in the Central Coast but utilizes only one crop, romaine hearts. (DEIR, pp. 3.5-3 – 3.5-8; ERA Economics, Technical Memorandum No. 1, pp. 10-11.) The Central Coast grows a diverse number of crops that cannot be represented by a single crop, crop type, or cropping system. (See ERA Economics, Technical Memorandum No. 1, pp. 10-11.) Additionally, the DEIR fails to include baseline market conditions, cropping rotations, cropping practices, costs, and the interplay with surface water, riparian areas, and groundwater zones. (*Id.* at p. 17.) The DEIR, especially the environmental setting and baseline, “does not provide an accurate overview of crop production throughout the Central Coast region or the economic factors that affect planting decisions, land retirement, and jobs, and income opportunities for communities in the region, especially disadvantaged communities. There is no discussion of how implementation of the Order would impact standard rotations and cultural practices in the Central Coast Region, and thus would significantly affect the costs of implementing the Order.” (*Id.* at p. 2.) “Agriculture is fundamentally an economic activity that makes use of, and affects, many aspects of the physical environment. Therefore, understanding the environmental impact of the Order requires that its economic effect on agricultural operations play an important role in the analysis.” (*Id.* at p. 1.) The DEIR’s use of outdated and limited information fails to appropriately capture and describe the proposed Project’s environmental setting.

BN-112 ↓ The baseline analysis is also improper for various reasons: first, the baseline does not describe the local and regional environmental conditions at the time of issuance of the notice of preparation. (Cal. Code Regs., tit. 14, § 15125(a)(1).) Under California Code of Regulations, title 14, section 15125(a)(1), the baseline physical environmental conditions are typically those that “exist at the time the notice of preparation” from both a local and regional perspective. Here, the DEIR uses fall 2017 as the environmental baseline, although Notice of Preparation was issued in February 2018. (DEIR p. 3.0-2.) To use a baseline that differs from what existed at Notice of Preparation requires reasonable basis supported by substantial evidence, which is nowhere stated in DEIR. (Cal. Code Regs., tit. 14, §§ 15125(a), 15126.2(a); *Neighbors for Smart Rail, supra*, 57 Cal.4th at pp. 450, 452.) Although the CEQA Guidelines provide that the physical conditions existing when CEQA review begins “normally” constitute the environmental baseline, lead agencies may elect to use a different baseline in certain situations to “provide the most accurate picture . . . of the project’s impacts” if there is a reasonable basis for doing so. (*Neighbors for Smart Rail, supra*, 57 Cal.4th at pp. 447, 449-450, 452.) Here, the DEIR does not describe a “reasonable basis” supported by substantial evidence for departing from the “Notice of Preparation” baseline to a point in time prior to the start of CEQA review. Rather, the DEIR is silent on why fall 2017 was chosen. (DEIR, p. 3.0-2.) Further, the DEIR does not provide substantial evidence to support



BN-112  
cont. ↑ when it is “appropriate” to use “more or less recent data or information” in certain situations. (*Ibid.*) Additionally, the DEIR does not detail when more recent data is used as opposed to older data nor why more recent data isn’t used. For example, cost analysis should have included the 2018 lettuce regulatory cost data (Hamilton and McCullough, *A Decade of Change: A Case Study of Regulatory Compliance Costs in the Produce Industry* (Dec. 15, 2018) <[https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1156&context=agb\\_fac](https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1156&context=agb_fac)> [as of June 18, 2020]); all Sustainable Groundwater Management Act data should have been used and analyzed, especially for cumulative impacts (see Section II.H., *The DEIR Fails To Consider the Cumulative Effects of the Sustainable Groundwater Management Act*, *post.*) Without a reasonable basis supported by substantial evidence, the baseline’s deviation of existing physical environmental conditions is flawed. (*Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1278; *Save our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 117, 118, 119-120.)

BN-113 ↓ Further, the baseline does not include “conditions expected when the project becomes operational.” (Cal. Code Regs. tit. 14, § 15125(a)(1).) Particularly, the baseline and environmental setting fails to recognize the local and regional environmental conditions impacted by the Sustainable Groundwater Management Act (SGMA)<sup>6</sup>, which was enacted prior to fall 2017. Detailed discussion of SGMA, groundwater basins within the Regional Board’s jurisdiction, and groundwater sustainability plans (GSP) in development are needed “to provide the most accurate picture practically possible of the project’s impacts.”<sup>7</sup> (*Ibid.*) SGMA, GSPs, and resulting impacts are not hypothetical situations, and substantial evidence exists regarding GSP related impacts warranting analysis, such as individual and cumulative impacts on groundwater supplies from

<sup>6</sup> “On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA). For the first time in its history, California has a framework for sustainable, groundwater management – ‘management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.’ SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline.

... SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California.” (CA Department of Water Resources, SGMA Groundwater Management <<https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>> [as of June 18, 2020]; see also State Water Resources Control Board, Sustainable Groundwater Management Act (SGMA), <[https://www.waterboards.ca.gov/water\\_issues/programs/gmp/sgma.html](https://www.waterboards.ca.gov/water_issues/programs/gmp/sgma.html)> [as of June 18, 2020].)

BN-114 ↑ <sup>7</sup> Although the DEIR briefly mentions groundwater sustainability plans, a proper analysis supported by substantial evidence was not completed. (DEIR, p. 3.9-54.) Rather, a conclusory statement that “the Proposed Project is not expected to conflict with implementation of these GSPs in any way” is provided. (*Ibid.*)



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cont. ↑ reduced recharge, reduced quantities of water available to agriculture, increased costs to agriculture, and fallowing/land conversion. (See *County of Amador v. El Dorado County Water Agency*, *supra*, 76 Cal. App. 4th at p. 952.) By not including these reasonably foreseeable direct and indirect conditions in the environmental setting and baseline, the potentially significant impacts of the proposed Project cannot be properly analyzed and are improperly minimized. (*Save our Peninsula Committee v. Monterey County Board of Supervisors*, *supra*, 87 Cal.App.4th at p. 120.)

BN-115 ↑ Additionally, the DEIR fails to provide substantial evidence in support of its assumptions regarding economics, impacts, agricultural land conversion, recharge, water use, etc., within the project boundaries, and therefore fails to accurately reflect and detail existing conditions. This sets up for a false impact analysis as the impacts of the project must be measured against the “real conditions on the ground.” (*Save our Peninsula Committee*, *supra*, 87 Cal.App.4th at p. 121; see also *City of Carmel-by-the Sea v. Board of Supervisors* (1986) 183 Cal.App.3d 229, 246; *Environmental Planning & Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354; *County of Amador v. El Dorado County Water Agency*, *supra*, 76 Cal.App.4th at p. 952; *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, (1997) 60 Cal.App.4th 1109, 1122.)

BN-116 ↑ By choosing a baseline not supported by substantial evidence and merely presenting unsupported conclusions, figures, or references to projects/studies/plans without analysis, the DEIR fails to provide sufficient baseline and environmental setting information for intelligent decision-making and skirts CEQA’s requirements. “The court in *County of Amador* underscored the ‘importance of an adequate baseline description, for without such a description, analysis of impacts, mitigation measures and project alternatives becomes impossible.’ (*Id.* at p. 953.) The court concluded that ‘[a]n adequate EIR requires more than raw data; it requires also an analysis that will provide decision makers with sufficient information to make intelligent decisions.’ (*Id.* at p. 955; see also Guidelines, § 15151.)” (*Save our Peninsula Committee*, *supra*, 87 Cal.App.4th at p. 124; see also *County of Amador*, *supra*, 76 Cal.App.4th 931, 955.)

“Even when a project is intended and expected to improve conditions in the long term—20 or 30 years after an EIR is prepared—decision makers and members of the public are entitled under CEQA to know the short- and medium-term environmental costs of achieving that desirable improvement. These costs include not only the impacts involved in constructing the project but also those the project will create during its initial years of operation. Though we might rationally choose to endure short- or medium-term hardship for a long-term, permanent benefit, deciding to make that tradeoff requires some knowledge about the severity and duration of the near-term hardship. An EIR stating that in 20 or 30 years the project will improve the environment, but neglecting, without justification, to provide any evaluation of the project’s impacts in the meantime, does not “giv[e] due consideration to both the short-term and long-term effects” of the project (Cal.Code Regs., tit. 14, § 15126.2, subd. (a)) and does not serve CEQA’s informational purpose well. The omission of an existing conditions analysis must be justified, even if the project is designed to alleviate adverse environmental conditions over the long term.”

(*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority*, *supra*, 57 Cal.4th at p. 455.)

BN-117 Accordingly, the DEIR must be revised to include the appropriate project baseline. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

**E. The DEIR Contains an Inadequate Assessment Of Significant Impacts And Effects On The Environment**

BN-118 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.) According to Public Resources Code section 21083 and CEQA Guidelines section 15065(a), if any of the following impacts would result from a proposed project, the project is considered to have a significant effect on the environment:

- (1) "The project has the potential to substantially degrade the quality of the environment; ...
- (2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- (3) The project has possible environmental effects which are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of reasonably foreseeable probable future projects.
- (4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly."

BN-119 (Cal., Code Regs., tit. 14 § 15065(a).) In determining whether a project will have a significant environmental effect, the lead agency must consider the "whole of the action," which includes all discretionary approvals by governmental agencies, ministerial actions as well as discretionary actions, and all constituent parts of a project. (Cal. Code Regs., tit. 14, §§ 15003(h), 15378.)

BN-120 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. (Cal. Code Regs., tit. 14, § 15064(f)(5).) However, potential impacts are not limited to Appendix G nor are questions within Appendix G necessarily thresholds of significance. (CEQA Appendix G.)

BN-121 Here, the DEIR's analysis of Ag Order 4.0 fails to fully consider many of the proposed Project's significant impacts on the environment, fails to provide adequate analysis of the proposed

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cont. ↑ Project's impacts that are reviewed, and improperly fails to provide sufficient detail regarding the foreseeable and cumulative significant impacts that will arise pursuant to draft Ag Order 4.0's onerous requirements on irrigated agriculture. The DEIR fails to comply with the requirements of CEQA in that it fails to adequately disclose, analyze and/or mitigate the proposed Project's environmental<sup>8</sup> impacts as required by law, and its conclusions regarding the proposed Project's environmental impacts are not supported by substantial evidence. As a result, the proposed Project will result in significant environmental impacts that the DEIR fails to address or mitigate.

BN-122 ↑ 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 should review and use all data, facts, evidence, and personal knowledge prior to determining draft Ag Order 4.0's potential to significantly impact the environment.<sup>9</sup> By failing to proceed in this manner, the DEIR does not contain an adequate environmental review for draft Ag Order 4.0.

BN-123 ↑  
↓ **1. The DEIR Improperly Shifts The Burden Of Proof And Determination Of Significance To The Public**

When conducting environmental review pursuant to CEQA, the burden of proof is on the lead agency to show that the project won't have an impact on the environment. (Cal. Code Regs., tit. 14, § 15064.) Under CEQA, if a project clearly will have an impact on the environment, its proponents, here the Regional Board, must properly identify those impacts and propose mitigations. (Cal. Code Regs., tit. 14, § 15002.) The burden of proof is *not* on the public to show

BN-124 ↑ <sup>8</sup> CEQA defines "environment" broadly to include the agricultural environment. (CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources; Pub. Resources Code, § 21060.5.) "'Environment' means the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The 'environment' includes both natural and man-made conditions." (Cal. Code Regs., tit. 14, § 15360; see also Pub. Resources Code, § 21060.5.) In other words, the DEIR's Environmental Analysis of Agricultural and Forestry Resources must review of the proposed Project's potential impacts on agricultural environment and analyze any resulting direct, indirect, and/or cumulative impacts that may impact agriculture. For example, the DEIR should have analyzed resulting impacts on irrigation management such as increased salinity of the soil. Increased salinity or sodic soils change soil chemistry and the soil structure, which can impact the ability to grow crops, soil water-holding capacity, and reduce nutrient uptake, among other things. Unfortunately, such analysis was not conducted.

BN-125 ↑ <sup>9</sup> 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 of significant impacts is needed here.

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that an environmental impact may occur. Further, the public does not bear the burden of determining which portions of a project will have a significant impact or effect on the environment. Rather, that is the fundamental duty of the lead agency. (Cal. Code Regs., tit. 14, § 15064.)

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The determination of whether a project may have a significant effect on the environment is a critical step in the CEQA process, and one that requires professional knowledge and judgment, as described in California Code of Regulations, title 14, section 15064. The determination should be based on information and evidence in the record and, to the extent feasible, on scientific and factual data. (*Ibid.*) This determination is made prior to and separate from the development of mitigation measures for the project. During opportunities to provide oral and written comments on both the development of draft Ag Order 4.0 and CEQA scoping process, members of the agricultural community provided testimony regarding the draft Ag Order 4.0's impacts on agricultural resources, including economic impacts, impacts to total farmland acreage and land use, food safety impacts, and impacts from riparian buffer requirements. (See Letter from Costa Farms (Jan. 21, 2019) regarding Ag Order 4.0 Options Tables including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter2.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter2.pdf)> [as of June 18, 2020]; Letter from Costa Farms (Jan. 15, 2019) regarding food safety, riparian setbacks and impacts, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter1.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter1.pdf)> [as of June 18, 2020]; Letter from Huntington Farms (Jan. 21, 2019) regarding costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_huntingtonfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_huntingtonfarms_letter.pdf)> [as of June 18, 2020]; Letter from Berry Mist Farms, LP (Jan. 17, 2019) regarding impacts including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_berrymistfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_berrymistfarms_letter.pdf)> [as of June 18, 2020]; Letter from California Farm Bureau Federation (Jan. 21, 2019) regarding CEQA compliance, project objectives, and alternatives, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_cafambureauofederation\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_cafambureauofederation_letter.pdf)> [as of June 18, 2020]; Letter from California Avocado Commission (Jan. 15, 2019) regarding nitrogen application rates for avocados, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/15jan2019\\_calavocadocommission\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/15jan2019_calavocadocommission_letter.pdf)> [as of June 18, 2020]; Letter from University of California Cooperative Extension Monterey County (Jan. 21, 2019) regarding nitrogen requirements, uptake, efficiency, reasonableness, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_uccemonterey\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_uccemonterey_letter.pdf)> [as of June 18, 2020]; Letter from Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties (Jan. 21, 2019) regarding slopes, food safety, regulatory compliance, reasonableness, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_gsasbslo\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbslo_letter.pdf)> [as of June 18, 2020]; Letter and Exhibits from Grower-Shipper Association of Central California, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties, Monterey County Farm Bureau, Central Coast Groundwater Coalition, Western Growers, and California Farm Bureau Federation on behalf of Monterey County Farm Bureau, San Benito County Farm Bureau, San Luis Obispo County Farm Bureau, San Mateo County Farm Bureau, Santa Barbara County Farm Bureau, Santa Clara County Farm Bureau, and Santa Cruz County Farm Bureau (Jan. 21, 2019) regarding reasonableness, legal authority, numeric limits, regulatory compliance, reasonableness, riparian setbacks, food safety, etc., <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/](https://www.waterboards.ca.gov/centralcoast/water_issues/)

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programs/ag\_waivers/docs/ag\_order4\_public/21jan2019\_gsaetal\_exhibit1.pdf> [as of June 18, 2020]; Letter from Grower-Shipper SB SLO, Grower-Shipper CC, Western Growers, SLO County Farm Bureau, California Strawberry Commission, Central Coast Groundwater Coalition (April 30, 2018) regarding Williamson Act, economics, alternatives, feasibility, mitigation, compliance with land use plans, policies, and regulations, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_gsasbsloetal\\_ccqa\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbsloetal_ccqa_letter.pdf)> [as of June 18, 2020].)

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By providing oral and written comments, the public provided ample information in the form of substantial evidence to make a “fair argument” that the proposed Project may have a significant environmental impact, especially on the agricultural environment. (Cal. Code Regs., tit. 14, § 15064(g)(1); *Friends of B Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 1002.) Notwithstanding those comments raised, the DEIR concludes that the majority of impacts to agriculture are speculative in nature, thus warranting no additional analysis and resulting in less than significant conclusions. For example, the DEIR states:

Regarding potential economic impacts, it is “unknown” and “speculative” regarding which ranches will have increased costs and which agricultural lands will be converted out of production. (DEIR, p. 3.1-21.)

“The additional costs of management practice implementation are speculative because it is unknown which management practices will be implemented by which growers...” (DEIR, p. 3.1-26.)

“While Agricultural Order 4.0 would result in some increased costs, it is largely speculative as to whether these increased costs could lead to conversion of agricultural lands to non-agricultural uses.” (DEIR, p. 3.1-26.)

“As a result of the speculative nature of Agricultural Order 4.0’s effects on agricultural land conversion due to economic impacts, this impact would be **less than significant**.” (DEIR, p. 3.1-26, emphasis in original.)

“As a result, it cannot be determined how many acres of land may be taken out of production due to implementation of management practices (other than setbacks). Therefore, this impact is speculative and **less than significant**.” (DEIR, p. 3.1-27, emphasis in original.)

Regarding costs to growers, “As discussed throughout this DEIR, there are certain elements of the Proposed Project that are speculative in terms of which growers may choose to implement which management practices in which locations.” (DEIR, p. 3.5-31.)

“Even assuming that growers may need to take areas of land out of production, along with the potentially increased costs of compliance associated with additional management practice implementation and new or expanded monitoring and reporting requirements from Agricultural Order 4.0, the question of whether these increased costs could impact growers in the central coast region to such a degree as to cause them to go out of business or sell

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their lands is essentially speculative. It would take another speculative leap to determine whether this would then result in the new business or landowner converting these lands to non-agricultural uses or otherwise taking actions to cause an adverse physical change in the environment.” (DEIR, p. 3.5-35.)

“Due to all of these unknown and variable factors, it would be speculative to conclude that the costs associated with Agricultural Order 4.0 would result in a physical change in the environment.” (DEIR, p. 3.5-35.)

“Overall, this analysis finds that the potential for agricultural lands to be converted to non-agricultural uses as a result of increased costs from Agricultural Order 4.0 is speculative.” (DEIR, p. 3.5-35.)

“Even considering all of the potential increased costs for growers, the costs of compliance for most growers would still likely comprise a relatively minor component of their total cash costs per acre. These additional costs could still impact profits, but specific impacts would depend on a number of factors that are impossible to predict (e.g., domestic and international markets). As such, this impact is speculative, and, therefore, **less than significant**.” (DEIR, p. 3.5-36, emphasis in original.)

“As discussed in Impact ECON-1, the specific impacts of increased compliance costs on small or large farms in terms of potential resultant conversion of agricultural lands to non-agricultural lands is speculative.” (DEIR, p. 3.5-36.)

“There is potential for economic impacts to be higher on small farms; however, it is speculative whether any potential impacts would result in physical changes in the environment (i.e., agricultural land conversion).” (DEIR, p. 3.5-37.)

“[T]his DEIR has found that it is speculative whether the increased costs of compliance from Agricultural Order 4.0 would in turn result in adverse physical changes in the environment (e.g., conversion of farmland to non-agricultural uses).” (DEIR, p. 4-9.)

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These conclusions, as well as others within the DEIR incorrectly and improperly shift the burden of identifying significant environmental impacts from the lead agency to the public in direct violation of CEQA. (Cal. Code Regs., tit. 14, § 15064.) The DEIR’s conclusions also ignore relevant evidence. Public testimony, such as “relevant personal observations” are evidence. (See Letter from Costa Farms (Jan. 21, 2019) regarding Ag Order 4.0 Options Tables including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter2.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter2.pdf)> [as of June 18, 2020]; Letter from Costa Farms (Jan. 15, 2019) regarding food safety, riparian setbacks and impacts, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter1.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter1.pdf)> [as of June 18, 2020]; Letter from Huntington Farms (Jan. 21, 2019) regarding costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_huntington\\_farms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_huntington_farms_letter.pdf)> [as of June 18, 2020]; Letter from Berry Mist Farms, LP (Jan. 17, 2019) regarding impacts including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_berrymistfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_berrymistfarms_letter.pdf)> [as of June 18, 2020]; Letter from California Avocado



BN-143 cont. Commission (Jan. 15, 2019) regarding nitrogen application rates for avocados, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order\\_4\\_public/15jan2019\\_calavocadocommission\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order_4_public/15jan2019_calavocadocommission_letter.pdf)> [as of June 18, 2020].) For example, an adjacent property owner may testify to traffic conditions based upon personal knowledge. (Citizens Association for Sensible Development of Bishop Area v. County of Inyo (1985) 172 Cal.App.3d 151, 173.) Additionally, pertinent information in the public domain was available to the Regional Board and should have been analyzed and utilized within the DEIR. (See Hamilton and McCullough, *A Decade of Change: A Case Study of Regulatory Compliance Costs in the Produce Industry* (Dec. 15, 2018) <[https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1156&context=agb\\_fac](https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1156&context=agb_fac)> [as of June 18, 2020].) Such information provide evidence of significant or potential significant impacts on agricultural resources, thus changing the “less than significant” determinations. “CEQA places the burden of environmental investigation on government rather than the public,” and if “the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record.” (*Sundstrom v. County of Mendocino, supra*, 202 Cal.App.3d 296, 311.) The agency may not “hide behind its own failure to gather relevant data.” (*Ibid.*)

BN-147 By concluding that many agricultural impacts are “speculative,” the DEIR attempts to shift the burden of proof to the public and thus avoiding the issue entirely. (DEIR, pp. 3.5-35, 3.5-36, 3.5-37, 4-9.) Given this, the conclusions within the DEIR regarding agricultural resources and project impacts are improper and contrary to law.

## 2. The DEIR Is Not Based on Substantial Evidence But Rather Mere Speculation

BN-148 Prior to approving a project, and public and decision-makers must be provided with the fullest extent of information available upon which to base their decision. (Cal. Code Regs., tit. 14, § 15151; Pub. Resources Code, § 21005(a); *Santiago County Water Dist. v. County of Orange, supra*, 118 Cal.App.3d at p. 829, “[T]he ultimate decision of whether to approve a project, be that decision right or wrong, is a nullity if based upon an EIR that does not provide the decision-makers, and the public with the information about the project that is required by CEQA.”.) This determination is based upon whether it can be fairly argued, given the substantial evidence in light of the whole record, that a project may or may not have a significant effect on the environment. “Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by fact.” (Cal. Code Regs., tit. 14, § 15064(f)(5).)

BN-149 The DEIR, especially in Chapters 3.1 Agriculture and Forestry Resources and 3.5 Economics, is not based on substantial evidence but rather mere speculation, unsupported conclusions, and uncertainty. The DEIR is replete with the terms “uncertainty,” “speculative” “could be,” “insufficient,” “not possible,” “unknown,” and “may be.” (DEIR pp. 3.1-21, 3.1-26, 3.1-2, 3.5-31, 3.5-35, 3.5-36, 3.5-37, 3.5-32, 3.5-33, 3.5-35, 4-9; see also Section II. E. 1., The DEIR Improperly Shifts The Burden Of Proof And Determination Of Significance To The Public, *ante.*)

BN-150 As evidenced in the small selection of examples referenced above, the DEIR, especially the Agriculture and Economics chapters, are based upon speculation, uncertainty, and inaccurate



BN-150 cont. conclusions rather than substantial evidence. “Like an EIR, an initial study or negative declaration ‘must focus on impacts to the existing environment, not hypothetical situations.’ (*County of Amador v. El Dorado County Water Agency*, *supra*, 76 Cal.App.4th at p. 955, 91 Cal.Rptr.2d 66.)” *Communities For A Better Environment v. South Coast Air Quality Management Dist.*, *supra*, 48 Cal.4th at p. 322.) By speculating on what could happen, rather than on actualities, an improper environmental baseline and resulting conclusions regarding potential significant agricultural and economic impacts have been drawn. (*Ibid.*, [“By comparing the proposed project to what *could* happen, rather than to what was actually happening, the District set the baseline not according to ‘established levels of a particular use,’ but by ‘merely hypothetical conditions allowable’ under the permits. (*San Joaquin Raptor Rescue Center v. County of Merced*, *supra*, 149 Cal.App.4th at p. 658, 57 Cal.Rptr.3d 663.),” emphasis original]; ERA Economics, Technical Memorandum No. 1, p. 1-2; 3; 9-14.) Mere statements of uncertainty or deflections to avoid a proper analysis regarding impacts to agricultural resources or economic impacts do not meet CEQA burdens. Further, notwithstanding the written and oral testimony provided by agricultural stakeholders, the DEIR provides no analysis, unsupportable conclusions, and attempts to improperly shift the burden of providing the evidence to the public.<sup>10</sup> (See Section II. E. 1., *The DEIR Improperly Shifts The Burden Of Proof And Determination Of Significance To The Public*, *ante*.) Thus, given the lack of substantial evidence to support the conclusions within the DEIR and the improper reliance on uncertainty and speculation, the DEIR fails to satisfy the requirements of CEQA.

### 3. The DEIR’s Analysis of Agriculture and Forest Resources Is Improper And Flawed

BN-152 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); 821(c) see also *id.* § 12786(a), [“The continued viability of the agricultural economy is of paramount importance to the people of California.”]; *id.* at § 12786(c), [“The ability of the state to control, detect, exclude, and eradicate pest infestations is necessary to continue the preeminent position of this state as the leading farm state and is essential for the continuing supply of foodstuffs.”].) Agriculture is one of the foundations of this state’s prosperity, providing employment for many Californians and a variety and quantity of food products that both feed the region, state, and nation, and a significant source of exports. (Food &

BN-153 <sup>10</sup> “The economic analysis developed by the CCWB and its consultants is limited and fails to capture important, quantifiable economic and associated impacts of the proposed Order.” (ERA Economics, Technical Memorandum No. 1, p. 1.) Instead of utilizing existing accounting measures to properly assess the proposed Project’s significant impacts, the DEIR merely lists various accounting measures, lists costs per acre for one crop, and lists costs associated with Ag Order 3.0. (DEIR, pp. 3.5-4 – 30.) Additionally, the DEIR concludes that costs associated with the proposed Project speculative, thus punting on conducting an economic analysis of significant impacts to the agricultural industry. (DEIR, pp. 3.5-35 – 37; p. 4-9.) However, quantifying costs are not speculative, but rather known and established. (ERA Economics, Technical Memorandum No. 1, p. 13-18, [“Management practices and potential costs are known, and others that are missing from the DEIR can be established. Therefore, these costs are not speculative and can be estimated.”].) Additionally, methods exist “to translate regulatory costs to economic impacts and changes to the physical environment.” (*Id.* at p. 14.)

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| BN-152<br>cont. | <p>Agr. Code, § 566.) In addition to substantially impacting the state's and local counties' economy, agriculture also provides substantial benefits to the state's employment force. California agriculture provides "one out of 10 jobs in California." (Food &amp; Agr. Code, § 566.) On the Central Coast, agriculture and associated businesses is a leading source of employment.</p>   |
| BN-154          | <p>In order for agriculture to remain and thrive in the Central Coast, farmers and ranchers must be able to continue to be farm, especially since changes, even small ones, in agricultural production sets in motion a series of "ripple effects," which collectively cause changes in output (economic production) throughout the economy. 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 &amp; Agr. Code, § 803.)</p>  |
| BN-155          | <p>Here, the DEIR fails to properly analyze the significant impacts to agricultural resources, including the conversion of agricultural lands to non-agricultural uses. Although the DEIR appropriately concludes that the conversion of Prime, Farmland of Statewide Importance, and Unique Farmland to non-agricultural use due to the setback requirements is a significant and unavoidable impact, the analysis itself is flawed. (See DEIR, p. 3.1-23.) First, the amount of agricultural land estimated to be converted is significantly low and a fair argument based on substantial evidence exists that additional acreage will be taken out of production due to the setbacks. (ERA Economics, Technical Memorandum No. 2, pp. 12-13; Letter from Costa Farms (Jan. 15, 2019) regarding food safety, riparian setbacks and impacts, &lt;<a href="https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order_4_public/21jan2019_costafarms_letter1.pdf">https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order_4_public/21jan2019_costafarms_letter1.pdf</a>&gt; [as of June 18, 2020]; (Letter from David Costa (June 3, 2020) regarding Salinas River Stream Maintenance Program, pp. 7, 12, Attachment 1; <i>Sundstrom v. County of Mendocino</i> (1988) 202 Cal.App.3d 296, 311.) Second, the DEIR does not include an analysis on the substantial economic impacts, valuation damage, and lost lease values due to imposed setbacks. (ERA Economics, Technical Memorandum No. 2, pp. 12-13.) Third, a fair argument based on substantial evidence also exists, as detailed below, that the proposed Project will cause additional significant impacts resulting in additional agricultural lands to be directly converted to non-agricultural use and/or conversion due to cost of compliance and economic infeasibility. (ERA Economics, Technical Memorandum No. 2, pp. 2-12; ERA Economics, Technical Memorandum No. 1, pp. 3, 7, 13, 14, ["It is clear that the Order will impose direct implementation costs on Central Coast growers and linked industries...Importantly, costs of nitrogen discharge requirements, compliance with surface water discharge limits, riparian setback areas, and other key substantive provisions are <i>not</i> estimated." (<i>Id.</i> at p. 3.); "Further, the inclusion of mandatory operational and/or riparian setbacks are arguably requirements that mandate a specific management action. These implementation costs, including costs associated with mandated operational and riparian setbacks, can affect land use, land retirement, and jobs in the Central Coast. However, the existing analysis did not evaluate these factors. Notably, employment and income impacts from these requirements are likely to fall disproportionately on disadvantaged communities." (<i>Id.</i> at p. 2.)).) Fourth, the lack of project alternatives and analysis of mitigation measures is improper. (DEIR, p. 3.1-28; see Section II. E. 7., The DEIR's Mitigation Measures Are Inadequate, <i>post</i>; see Section II. F., The DEIR Fails to Provide a Legally Adequate Alternatives Analysis, <i>post</i>.)</p> |
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| BN-158          |   |
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BN-160 By failing to properly analyze the other potential impacts associated with the proposed Project on agricultural resources, the DEIR is lacking. This improper review includes failure to analyze evidence provided by the public. (See Letter from Costa Farms (Jan. 21, 2019) regarding Ag Order 4.0 Options Tables including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter2.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter2.pdf)> [as of June 18, 2020]; Letter from Costa Farms (Jan. 15, 2019) regarding food safety, riparian setbacks and impacts, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter1.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter1.pdf)> [as of June 18, 2020]; Letter from Huntington Farms (Jan. 21, 2019) regarding costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_huntingtonfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_huntingtonfarms_letter.pdf)> [as of June 18, 2020]; Letter from Berry Mist Farms, LP (Jan. 17, 2019) regarding impacts including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_berrymistfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_berrymistfarms_letter.pdf)> [as of June 18, 2020]; Letter from California Farm Bureau Federation (Jan. 21, 2019) regarding CEQA compliance, project objectives, and alternatives, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_cafarmbureau federation\\_1\\_etter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_cafarmbureau federation_1_etter.pdf)> [as of June 18, 2020]; Letter from California Avocado Commission (Jan. 15, 2019) regarding nitrogen application rates for avocados, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/15jan2019\\_calavocadocommission\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/15jan2019_calavocadocommission_letter.pdf)> [as of June 18, 2020]; Letter from University of California Cooperative Extension Monterey County (Jan. 21, 2019) regarding nitrogen requirements, uptake, efficiency, reasonableness, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_uccemonterey\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_uccemonterey_letter.pdf)> [as of June 18, 2020]; Letter from Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties (Jan. 21, 2019) regarding slopes, food safety, regulatory compliance, reasonableness, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_gsasbslo\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbslo_letter.pdf)> [as of June 18, 2020]; Letter and Exhibits from Grower-Shipper Association of Central California, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties, Monterey County Farm Bureau, Central Coast Groundwater Coalition, Western Growers, and California Farm Bureau Federation on behalf of Monterey County Farm Bureau, San Benito County Farm Bureau, San Luis Obispo County Farm Bureau, San Mateo County Farm Bureau, Santa Barbara County Farm Bureau, Santa Clara County Farm Bureau, and Santa Cruz County Farm Bureau (Jan. 21, 2019) regarding reasonableness, legal authority, numeric limits, regulatory compliance, reasonableness, riparian setbacks, food safety, etc, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_gsaetal\\_exhibit1.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsaetal_exhibit1.pdf)> [as of June 18, 2020]; Letter from Grower-Shipper SB SLO, Grower-Shipper CC, Western Growers, SLO County Farm Bureau, California Strawberry Commission, Central Coast Groundwater Coalition (April 30, 2018) regarding Williamson Act, economics, alternatives, feasibility, mitigation, compliance with land use plans, policies, and regulations, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_gsasbsloetal\\_ceqa\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbsloetal_ceqa_letter.pdf)> [as of June 18, 2020].)

BN-171 Additionally, the environmental impacts analysis of agricultural lands ignores the legislative declarations embedded in CEQA. CEQA is a vehicle to preserve agricultural lands, prevent significant impacts to agricultural lands, and prevent conversion of agricultural lands. (See

BN-171 cont. ↑ *Masonite Corp. v. Cnty. of Mendocino* (2013) 218 Cal. App. 4th 230, 238, 241, [discussing conserving agricultural land as a mitigation measure for CEQA projects]; see also Cal. Code Regs., tit. 14, § 15387 Appendix G [listing the conversion of farmland as a potentially significant effect on the environment].) “The California legislature has indicated that the CEQA process is an important mechanism for preserving agricultural land.” (*Masonite Corp.*, *supra*, 218 Cal. App. 4th at p. 241.) Specifically, the legislature declared it is the policy of the state to:

(a) “Develop and maintain a high-quality environment now and in the future, and take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.”

BN-172 ↓ (Pub. Resources Code, § 21001(a).) The DEIR’s environmental analysis overlooks Public Resources Code section 21001(a) because it ignores that agriculture is an environmental resource of the state that should be protected and enhanced “now and in the future.” (Pub. Resources Code, § 21001(a); Pub. Resources Code, § 21060.5; Cal. Code Regs., tit. 14, § 15360; CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources.) Further, the Environmental Analysis ignores environmental benefits from agricultural lands, such as soil retention, pollination, biological control, sustainable management of natural resources, biodiversity preservation, and contribution to the socioeconomic viability of rural areas, among others. The DEIR should have recognized that Central Coast agriculture provides economic, environmental, and socio-cultural benefits, as well as food and fiber and included analysis of resulting impacts to these agricultural benefits.

BN-173 ↓ In conducting its impact analysis, the DEIR relies solely on the five significant criteria for agricultural resources listed in Appendix G of the CEQA Guidelines to determine if the proposed Project impacts agricultural resources. (DEIR, p. 3.1-21.) Although the five significant criteria listed in Appendix G are valuable, additional criteria should have been used to analyze impacts to agriculture. (CEQA Appendix G.) Upon a quick review of the Agricultural Element of Appendix G, a “fair argument,” supported by substantial evidence in the record,<sup>11</sup> can be made that the

BN-174 ↑ <sup>11</sup> As provided in oral and written public comments, “substantial evidence of potential impacts” beyond those listed in Appendix G have been raised which warrant appropriate review and analysis within the DEIR. (See Letter from Costa Farms (Jan. 21, 2019) regarding Ag Order 4.0 Options  
BN-175 Tables including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter2.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter2.pdf)> [as of June 18, 2020]; Letter from Costa Farms (Jan. 15, 2019) regarding food safety, riparian setbacks and impacts,  
BN-176 <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter1.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter1.pdf)> [as of June 18, 2020]; Letter from Huntington Farms (Jan. 21, 2019) regarding costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_huntingtonfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_huntingtonfarms_letter.pdf)> [as of June 18, 2020]; Letter from Berry Mist Farms, LP (Jan. 17, 2019) regarding impacts including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_berrymistfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_berrymistfarms_letter.pdf)> [as of June 18, 2020]; Letter from California Farm Bureau Federation (Jan. 21, 2019) regarding CEQA compliance, project objectives, and alternatives, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_cafarmbureauofederation\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_cafarmbureauofederation_letter.pdf)> [as of

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| BN-173<br>cont. | <p>proposed Project may result in significant environmental impacts to agriculture since the project will not only: a) covert prime farmland and unique farmland to non-agricultural use, b) fails to meet policy consistency analysis by conflicting with existing zoning for agricultural land use and Williamson Act contracts currently on the agricultural lands throughout the Project site, and c) will involve other changes in the existing environment will could result in conversion of farmland to non-agricultural use, but will also result in many other significant impacts, and as such, analysis should not be limited to the significance criteria laid out in the DEIR. (DEIR, p. 3.1-21; CEQA Appendix G, [“Substantial evidence of potential impacts that are not listed on this form must also be considered.”]; <i>Sundstrom v. County of Mendocino</i> (1988) 202 Cal.App.3d 296, 311, [“CEQA places the burden of environmental investigation on government rather than the public,” and if “the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record.”].)</p>   |
| BN-179          | <p>Rather than conducting a thorough analysis<sup>12</sup> of all potential impacts to agricultural lands, agricultural vitality, agricultural production, agricultural resources, related regional economic sectors including employment and wages, processing, shipping, and retail industries, and socioeconomic impacts to Central Coast communities, the DEIR includes conclusory statements, such as:</p>   |
| BN-178<br>cont. | <p>June 18, 2020]; Letter from California Avocado Commission (Jan. 15, 2019) regarding nitrogen application rates for avocados, &lt;<a href="https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/15jan2019_calavocadocommission_letter.pdf">https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/15jan2019_calavocadocommission_letter.pdf</a>&gt; [as of June 18, 2020]; Letter from University of California Cooperative Extension Monterey County (Jan. 21, 2019) regarding nitrogen requirements, uptake, efficiency, reasonableness, &lt;<a href="https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_uccemonterey_letter.pdf">https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_uccemonterey_letter.pdf</a>&gt; [as of June 18, 2020]; Letter from Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties (Jan. 21, 2019) regarding slopes, food safety, regulatory compliance, reasonableness, &lt;<a href="https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbslo_letter.pdf">https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbslo_letter.pdf</a>&gt; [as of June 18, 2020]; Letter and Exhibits from Grower-Shipper Association of Central California, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties, Monterey County Farm Bureau, Central Coast Groundwater Coalition, Western Growers, and California Farm Bureau Federation on behalf of Monterey County Farm Bureau, San Benito County Farm Bureau, San Luis Obispo County Farm Bureau, San Mateo County Farm Bureau, Santa Barbara County Farm Bureau, Santa Clara County Farm Bureau, and Santa Cruz County Farm Bureau (Jan. 21, 2019) regarding reasonableness, legal authority, numeric limits, regulatory compliance, reasonableness, riparian setbacks, food safety, etc, &lt;<a href="https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsaetal_exhibit1.pdf">https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsaetal_exhibit1.pdf</a>&gt; [as of June 18, 2020]; Letter from Grower-Shipper SB SLO, Grower-Shipper CC, Western Growers, SLO County Farm Bureau, California Strawberry Commission, Central Coast Groundwater Coalition (April 30, 2018) regarding Williamson Act, economics, alternatives, feasibility, mitigation, compliance with land use plans, policies, and regulations, &lt;<a href="https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbsloetal_ceqa_letter.pdf">https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_gsasbsloetal_ceqa_letter.pdf</a>&gt; [as of June 18, 2020].)</p> |
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| BN-182          |   |
| BN-183          |   |
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| BN-185          | <p><sup>12</sup> The Impact Analysis for Agriculture and Forestry Resources is limited to just a little over 8 pages. (DEIR pp. 3.1-21—29.)</p>   |

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“Because Agricultural Order 4.0 would not specify the manner of compliance, it is not possible to determine which ranches will implement which management practices in which locations. As a result, it cannot be determined how many acres of land may be taken out of production due to implementation of management practices (other than setbacks). Therefore, this impact is speculative and less than significant.” (DEIR, p. 3.1-26—27.)

“While Agricultural Order 4.0 would result in some increased costs, it is largely speculative as to whether these increased costs could lead to conversion of agricultural lands to non-agricultural uses.” (DEIR, p. 3.1-26.)

“CCWB does not find that the anticipated increased costs would be large enough to necessarily cause any existing agricultural operations to go out of business or otherwise choose to abandon their operations, and thereby potentially result in farmland being converted to non-agricultural uses.” (DEIR, p. 3.1-26.)

“As a result of the speculative nature of Agricultural Order 4.0’s effects on agricultural land conversion due to economic impacts, this impact would be less than significant.” (DEIR, p. 3.1-26.)

CEQA’s informational purposes are not satisfied by an EIR that simply ignores impacts, potential alternatives, and assumes only one approach is suitable for the regulation of potential discharges to waters of the state from agricultural lands. (*Citizens Association for Sensible Development of Bishop Area v. County of Inyo*, *supra*, 172 Cal.App.3d at p. 167.) Rather, decision-makers and the public must be presented with sufficient facts to evaluate the pros and cons of requirements in the form of draft Ag Order 4.0. (Cal. Code Regs., tit. 14, §§ 15002(a), 15121; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, *supra*, 40 Cal.4th 412; *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 160 Cal.App.4th 715.) Further, conclusory comments in support of environmental conclusions are generally inappropriate. (*Laurel Heights I*, *supra*, at p. 404.) “Mere conclusions simply provide no vehicle for judicial view.” (*Citizens Assn. for Sensible Development of Bishop Area*, *supra*, at p. 171.) By failing to appropriately analyze all evidence that provides a “fair argument” of an impact, the DEIR fails 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.’” (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515; *Sundstrom v. County of Mendocino*, *supra*, 202 Cal.App.3d at p. 311; *Friends of B Street v. City of Hayward*, *supra*, 106 Cal.App.3d at p. 1002.)

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These conclusory statements within the DEIR 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 I*, *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



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cont. ↑ 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 discussion of probable impacts, project alternatives, mitigation measures, and the environmental consequences of those contingencies. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, supra, 40 Cal.4th at p. 432.) Such discussion must also be supported by substantial evidence and allow for public participation and review.<sup>13</sup> (Pub. Resources Code, § 21091(d)(2); Cal. Code Regs., tit. 14, §§ 15088, 15121, 15384.)

BN-187 ↑ The proposed Project includes expanded requirements for irrigation and nutrient management for both surface and groundwater, including prescriptive nitrogen application limits, nitrogen discharge targets, and nitrogen discharge limits not supported by agronomic science (Draft WDRs, pp. 30-32, 61), expanded pesticide management for surface water and groundwater, including specified surface water monitoring and threshold limits, (Draft WDRs, pp. 33-35), improper operational and riparian setbacks (Draft WDRs, pp. 40-47), expanded riparian habitat management requirements that would require retiring productive farmland and developing setback areas from most ditches and streams, and planting native riparian vegetation (Draft WRDs, pp. 40-47), expanded sediment and erosion management for surface water, primarily on sloped farmland, (Draft WDRs, pp. 36-39), and increased reporting and compliance requirements in surface water and groundwater reporting areas with new or updated reporting forms, such as Annual Compliance Form, Pesticide Management Plan, Riparian Area Management Plan, Total Nitrogen Applied, Sediment and Erosion Management Plan, and Irrigation and Nutrient Management Plan. (Draft WDRs, pp. 21; 24; 28; 33; 36-39; 40-46; see ERA Economics, Technical Memorandum No. 1, p. 8.) However, these impacts were not adequately addressed; impacts were either ignored or deemed speculative. (DEIR, p. 3.1-26 – 27.) These new requirements are not analyzed sufficiently within the DEIR. In addition to needing to analyze these new requirements, the DEIR’s analysis also “needs to be expanded to evaluate the costs of setbacks, nitrogen discharge targets and limits, surface water discharge limits, and receiving water limits. With respect to the nitrogen discharge limits, the analysis should consider whether such limits would make it economically or agronomically infeasible to rotate multiple crops per year. This alone would have substantial economic impacts resulting in a drop in land values and lease rates. Combined with impacts from other provisions, there could be significant impacts to overall economic activity in the region.” (ERA Economics, Technical Memorandum, No. 1, p. 6.)

BN-188 ↓ Of particular importance, the DEIR fails to account for loss of farmland attributable to food safety buffering and/or undercounts loss of farmland due to failure to account for loss attributable to food safety buffering; does not analyze conflicts with the California Leafy Greens Product

BN-189 ↑ <sup>13</sup> By relying on conclusory language, lack of evidence, unidentified and unsubstantiated claims, and unlike comparisons to support its findings less than significant environmental impacts or significant impacts with no possible mitigation 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.)



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Handling Marketing Agreement requirements;<sup>14</sup> fails to account for impacts of fallowing on small farming operations; fails to account for Sustainable Groundwater Management Act, conflicts with local groundwater sustainability plans, and groundwater sustainability plan-related land fallowing; fails to address food safety, flood, insect vector control related to setback requirements; fails to address potential impacts to human health due to imposed setbacks; fails to properly analyze impacts to Williamson Act contracts and associated fees for cancellation of contracts when agricultural land in production is converted to open space as well as loss of County tax revenue if that land is permanently taken out of production;<sup>15</sup> fails to analyze decreases in overall land value and reductions of rental income due to loss of agricultural production area; fails to take into account increased reporting management due to the overwhelming increase in data collection points related to irrigated and nutrient management; fails to analyze economic infeasibility; fails to analyze compliance issues for smaller farms and the need for professional expertise to comply with reporting; fails to analyze substantial land fallowing and crop switching; fails to analyze significant costs of meeting receiving water limits, nitrogen discharge targets and limits, and setback requirements; fails to analyze the economic or agronomic feasibility to continue multiple crops per year on a field; fails to analyze ripple or “multiplier” effects on other agricultural related businesses and employment; and fails to analyze reductions in employment in Central Coast communities due to reduced production land area, particularly for disadvantaged communities.<sup>16</sup> (ERA Economics,

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<sup>14</sup> Although the DEIR contains a section on the California Leafy Greens Product Handling Marketing Agreement (LGMA) within Hazards and Hazardous Materials section, the information within the section simply describes LGMA Metrics. The DEIR does not include grower evidence provided in oral and written comments regarding what a grower does on the ground to comply with LGMA metrics and how such metrics conflict with requirements within the proposed Project. (Central Coast Regional Water Quality Control Board, Board Meeting, Presentation by J. Gularte and C. Pereira, Item 5 Food Safety and Riparian Habitat Management Workshop, (Sept. 19, 2019).) Significant conflicts have been raised regarding food safety measures that arise when vegetative buffers are adjacent to production fields. Further, the DEIR does not include any analysis regarding conflicts between LGMA Metrics, buyer requirements, and requirements within the proposed Project. Nor does the DEIR analyze how all of these requirements will impact agricultural resources.

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<sup>15</sup> Growers with land currently under Williamson Act contracts may have to petition to cancel the contract in order to take lands out of agricultural production comply with setback requirements. If required findings for cancellation are met, the landowner is required to pay a cancellation fee equal to 12.5 percent of the cancellation valuation (unrestricted fair market value) of the property. (Gov. Code, § 51283(b).) If the land is under a Farmland Security Zone Contract, the cancellation fee is 25 percent of the cancellation valuation (unrestricted fair market value) of the property. (Gov. Code, § 51297(b)(3).) These cancellation fees alone can be thousands of dollars and cost prohibitive for a grower. Also, cancellation is not necessarily a given. “The owner of any property within the county of city of the agricultural preserve is situated may protest such cancellation to the city or county conducting the hearing.” (Gov. Code, § 51285.)

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<sup>16</sup> “Impacts of changes in crop mix (i.e., impacts to labor intensive crops) and land retirement or fewer crop rotations per year will be felt by all of agriculture, and likely will be disproportionately felt by farmworkers, packing house, cooler, and processing plant employees. Workers filling positions in packing houses and picking crops often reside in economically disadvantaged communities in the region, or in other regions within driving distance to the Central Coast.”

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| BN-188<br>cont. | <p>Technical Memorandum, No. 1, pp. 2-3, 4, 6, 18; ERA Economics, Technical Memorandum No. 2, pp. 12-13.) Information within the public domain also raises questions regarding potential flooding risks citing past floods, how “damages from past flooding events can be used as references to estimate future and anticipated damages and costs,” loss of topsoil, the need to account for “increased water demand by increased riparian habitat that could deplete surface and subsurface water availability for other beneficial uses,” and costs that should be analyzed. (Letter from David Costa (June 3, 2020) regarding Salinas River Stream Maintenance Program, pp. 7, 12, Attachment 1.)</p>  |
| BN-193          | <p>Further, the DEIR fails to properly quantify and analyze the impacts of operational and riparian setbacks on agricultural resources. (ERA Economics, Technical Memorandum No. 2, pp. 12-13; ERA Economics, Technical Memorandum No. 1, pp. 2, 3, 6, 18.) The DEIR relies upon the Strahler Stream Order or wetland area and associated minimum setback widths listed in Table C.5-1 to determine significant impacts, especially on agricultural lands. (Draft WDRs, p. 78; DEIR, p. 3.1-22 – 3.1-27.) However, the conclusion that only 4,064 acres of agricultural land will be taken out of production is an underestimation since the Draft WDRs and DEIR relies upon an outdated NHDPlus dataset. The updated dataset will result in assigning higher orders and greater minimum setback widths, and thus, will result in significantly more impacts and agricultural land taken out of production.</p> |
| BN-194          | <p>The DEIR also fails to properly quantify and analyze the impacts of nitrogen discharge limits for crops. Setting aside the legality of these limits, the proposed Project’s nitrogen discharge limits will be cost prohibitive for many crops. (ERA Economics, Technical Memorandum No. 2, pp. 4-12.) In a study looking solely at the impacts of nitrogen discharge limits on lettuce grown in Monterey County, ERA Economics concluded:</p>  |
| BN-195          | <p>“Summary conclusions are as follows (again, these impacts apply to <u>lettuce in Monterey County only</u>):</p> <ul style="list-style-type: none"> <li>• The loss in gross value of lettuce production in Monterey County due to the nitrogen discharge limits specified in the Order is estimated at \$119.4 million per year at the 200 lb/ac limit and \$683 million per year at the 50 lb/ac limit. <ul style="list-style-type: none"> <li>◦ Total annual job losses for these scenarios vary between 1,985 and 11,340. Most of these jobs are filled by residents of economically disadvantaged communities.</li> <li>◦ Labor wages fall by between \$54.1 million and \$309.4 million per year.</li> <li>◦ Value added, which is a measure of net local economic activity, falls by between \$85.6 and \$489.6 million per year.</li> </ul> </li> </ul>  |
| BN-196          | <ul style="list-style-type: none"> <li>• Losses to consumers due to higher lettuce prices are estimated between \$87.4 and \$472.6 million per year.</li> </ul>   |
| BN-197          | <p>“Economic impacts felt by agriculture and other businesses reliant on the agricultural sector in this region, are likely to have a disproportionate impact on jobs that are performed by those that reside in economically disadvantaged communities, raising important environmental justice considerations that were not evaluated in the DEIR.” (ERA Economics, Technical Memorandum No. 1, p. 4.)</p>  |

- BN-198
- Farming risk would increase substantially. The probability of covering operating and overhead farming costs for a typical lettuce rotation would fall from 73% currently to 45% under a 50 lb/ac/yr nitrogen discharge limit. That is, in more than half of years a producer would not be able to cover the cost of raising the crop. The probability of generating revenue greater than total costs (i.e., making an economic profit) would fall to 14% under a 50 lb/ac/yr nitrogen discharge limit. This would cause growers to leave the industry, fallow land, and switch crops.
- BN-199
- A multi-crop rotation would likely become economically infeasible under the proposed nitrogen discharge limits. It would not be profitable to produce multiple crops per year and stay under the proposed nitrogen discharge limits. As shown in our analysis, this would likely cause a sharp reduction in land values, lease rates, local businesses, and jobs.
- BN-200
- Many of the farm jobs affected by the Order are in job classifications and areas that would affect economically disadvantaged communities. Therefore, these losses are likely to result in additional socioeconomic and social justice impacts that are not quantified in our example summary."

BN-201 (ERA Economics, Technical Memorandum No. 2, p. 2.) None of the significant impacts cited above are included in the environmental analysis within the DEIR. Since "the costs of implementing the Order are substantial and would lead to land fallowing, crop switching, and severe business and job losses," full environmental review of these impacts is required. (ERA Economics, Technical Memorandum No. 2, p. 2.)

BN-202 By not including a meaningful review of the proposed Project's impacts on agricultural resources, the DEIR 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 I, supra*, at p. 404; Cal. Code Regs., tit. 14, § 15063(c); see Cal. Code Regs., tit. 14, § 15088.5).) By failing to identify and analyze probable impacts and merely concluding that impacts are speculative or less than significant, the DEIR is improper, and the error is prejudicial. (See Section II. E. 2., The DEIR Is Not Based on Substantial Evidence But Rather Mere Speculation, *ante*.)

#### 4. The DEIR's Economics Analysis Is Improper And Flawed

BN-203 Although the DEIR contains an Economics Analysis of the proposed Project, the analysis is fundamentally flawed. "The economic analysis developed by the CCWB and its consultants is limited and fails to capture important, quantifiable economic and associated impacts of the proposed Order. Agriculture is fundamentally an economic activity that makes use of, and affects, many aspects of the physical environment. Therefore, understanding the environmental impact of the Order requires that its economic effect on agricultural operations play an important role in the analysis. The DEIR analysis, significance determination, and associated findings for the Order did not quantify important economic impacts that can be reasonably quantified. As a result, the analysis was unable to assess potential effects of the economic impacts on the physical environment and could not incorporate these linkages into significance determinations. The Order increases monitoring and reporting requirements (e.g., Annual Compliance Forms, Total Nitrogen Applied, Riparian Area Management Plans, Irrigation Nutrient Management Plans, etc.), and

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would impose significant management costs for growers to comply with riparian management areas, pesticide, surface runoff, and net nitrogen targets/limits. The DEIR and Order describe the accounting cost of some example management practices, but do not evaluate how growers, the agricultural industry, and linked economy (socioeconomic impacts) would adjust in response to these substantial regulatory costs. In other words, the DEIR does not prepare any economic analysis.” (ERA Economics, Technical Memorandum No. 1, pp. 1-2;<sup>17</sup> see Exponent Technical Memorandum, (June 22, 2020) Section 3.1.2, p. 23, “[W]e find no evidence that the Regional Board fully considered all economic impacts or the remaining Porter-Cologne section 13241 factors in establishing the requirements of the Draft WDRs, including in applying water quality objectives as numeric effluent limitations.”), Exhibit 7; see also Section I of the Agricultural Association Partners’ Legal And Policy Responses To Draft Waste Discharge Requirements For Agricultural Waste Discharges From Irrigated Lands Within The Central Coast Region, Exhibit 1.)

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First, the significance criteria for the impact analysis is fundamentally flawed, which results in a flawed analysis of economic impacts. Criteria A improperly requires increased costs to be significant only if a grower goes out of business. (DEIR, p. 3.5-30.) The DEIR then diminishes any potential cost increase or impact as speculative because “Agricultural Order 4.0 would not specify the manner of compliance,” historical “trends support the theory that the regulatory compliance costs associated with CCWA Agricultural Orders have not been sufficient to result in significant conversion of agricultural lands to non-agricultural use,” and “[o]verall, this analysis finds that the potential for agricultural lands to be converted to non-agricultural uses as a result of increased costs from Agricultural Order 4.0 is speculative.” (DEIR, pp. 3.5-31, 3.5-35.) Further cursory statements include:

“While Agricultural Order 4.0 would result in some increased costs, it is largely speculative as to whether these increased costs could lead to conversion of agricultural lands to non-agricultural uses.” (DEIR, p. 3.1-26.)

“CCWB does not find that the anticipated increased costs would be large enough to necessarily cause any existing agricultural operations to go out of business or otherwise choose to abandon their operations, and thereby potentially result in farmland being converted to non-agricultural uses.” (DEIR, p. 3.1-26.)

“As a result of the speculative nature of Agricultural Order 4.0’s effects on agricultural land conversion due to economic impacts, this impact would be **less than significant**.” (DEIR, p. 3.1-26, emphasis in original.)

“The Proposed Project allows growers to select the specific management practices to implement on their ranch; therefore, it is unknown which management practices may be implemented at a particular ranch. Additionally, while the potential for increased monitoring costs associated with the Proposed Project can be estimated generally, it is speculative as to which ranches will experience increased costs such as to force or cause

<sup>17</sup> ERA Economics, Technical Memoranda No. 1 and No. 2 re incorporated by reference in their entirety.

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cont.

them to sell their property or allow their land to go fallow as a result of the Proposed Project.” (DEIR, p. 3.1-21.)

“Even assuming that growers may need to take areas of land out of production, along with the potentially increased costs of compliance associated with additional management practice implementation and new or expanded monitoring and reporting requirements from Agricultural Order 4.0, the question of whether these increased costs could impact growers in the central coast region to such a degree as to cause them to go out of business or sell their lands is essentially speculative.” (DEIR, p. 3.1-35.)

Conclusory statements such as these provide no opportunity for comparison of the proposed Project to alternatives and require “blind trust” by the public of the potential environmental impacts of the Project. (*People v. County of Kern, supra*, 39 Cal.App.3d at pp. 841-842; *Laurel Heights I, supra*, at p. 404; *City of Redlands v. County of San Bernardino, supra*, 96 Cal.App.4th at p. 415.) Further, many of the conclusory statements are incorrect. “The DEIR states, in general, that economic effects were not estimated because the market and regulatory environment is complicated and/or because management practices are speculative. In fact, there is a well-established approach to quantify the economic impact of Ag Order 4.0.” (ERA Economics Technical Memorandum, No. 1, p. 5.) “Analyzing economic impacts of increasing regulatory costs does not require knowing what management practice would be adopted by any given grower. If this was the standard, there would never be any economic impact assessment developed. The purpose of an economic impact analysis is to establish likely impacts, disclose those impacts, and inform development of the regulations based on those impacts. Moreover, besides the economic impact requirements associated with CEQA, the California Water Code mandates that the CCWB consider economics in adoption of the Order. (See Water Code sections 13263 and 13241.)” (*Id.* at pp. 5-6.) A proper economics analysis is needed especially since “[a]n increase in cost affects the supply for agricultural products produced in the Central Coast. This has a resulting effect on the relative profitability of crops, land use decisions, ability to continue farming, and employment and other input purchases. In addition, the economic analysis should evaluate effects on farming risk and competitiveness of the Central Coast industries.” (*Id.* at p. 6.)

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Further, as the basis of its economic analysis, the DEIR cannot compare total regulatory costs of previous Ag Orders to the proposed Project as the requirements in each Order are vastly different and not analogous. (DEIR, pp. 3.5-12 – 3.5-26.) Any conclusions based on regulatory cost comparisons associated with previous Ag Orders are faulty and attempt to misconstrue what the project is (Ag Order 4.0) and its impacts.

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The majority of the Economics Section of the Environmental Analysis discusses the costs of compliance with Ag Order 3.0. (DEIR, pp. 3.5-12 – 3.5-30.) The Impacts Analysis then discusses changes in regulatory costs between Ag Order 3.0 and the proposed Project over a five-year period. (DEIR, pp. 3.5-30 – 3.5-36; DEIR, p. 3.5-32, [“Table 3.5-17 provides a summary of the potential total costs over a five-year period for several new or expanded requirements and attempts to provide a sense of the per acre costs. Several new or expanded requirements are not included in the table because total costs cannot be estimated and are discussed below.”]; Attachment A, p. 10, ¶15c, [“This costs analysis presents estimated costs associated with

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cont. ↑ implementing Ag Order 3.0 versus implementing Ag Order 4.0 over five-year project periods.”]; Attachment A, p. 10, ¶15d, [“Most costs discussed below are ‘total costs’ representing the cost of complying with the require over the course of five years.”].) This analysis is limited, too narrow, and ignores the fact that regulatory costs are cumulative. “Any economic assessment should acknowledge the current regulatory environment and how that is changing so that the incremental cost of additional regulations can be assessed in addition to the cumulative effect on the industry.” (ERA Economics, Technical Memorandum No. 1, p. 19.)

BN-207 ↑ Additionally, previously considered costs from prior regulations (Ag Order 3.0) are not directly relevant to an assessment of the economic impact of the proposed Project since the proposed Project includes substantial new requirements not imposed under Ag Order 3.0. Further, in addition to not utilizing reasonably available economic methods to analyze economic impacts, the DEIR’s economics analysis does “not evaluate how growers, the agricultural industry, and linked economy (socioeconomic impacts) would adjust in response to these substantial regulatory costs” or analyze the full range of “total costs.” (ERA Economics, Technical Memorandum No. 1, p. 2.) Although the DEIR and Attachment A states that the economics analysis considers “total costs” over a five-year period, this is misleading in that the DEIR only considers direct costs associated with fees, assessments, and paperwork. (DEIR, pp. 3.5-8; 3.5-10; 3.5-24 – 3.5-26; ERA Economics, Technical Memorandum No. 1, pp. 12-13.) The “total costs” do not include the economic impacts of surface water limits, nitrogen discharge limits, riparian setbacks, or cumulative costs, and therefore, are *not* total costs. Additionally, limiting the analysis to only five years (years 2021-2025) grossly underestimates costs given the nature of the proposed Project, a long-term general waste discharge requirements.

BN-208 ↑ Although the DEIR includes estimates of some costs, mostly in the form of direct costs of fees, assessments, and paperwork, most costs to agriculture are not analyzed or are analyzed improperly. The DEIR presents some example accounting costs but does not use those costs to quantify potential economic impacts to growers, linked industries (processing, shipping, etc.), communities, and the region as a whole. (ERA Economics, Technical Memorandum No. 1, p. 2.) Costs of nitrogen discharge requirements, compliance with surface water discharge limits, riparian setback areas, and other key substantive provisions are *not* estimated within the DEIR. The DEIR failed to analyze the economic impacts on jobs, land use, and agricultural resources if the proposed Project is adopted; failed to quantify, discuss, or analyze various regulatory components, such as proposed nitrogen discharge limits, that may make current rotation systems economically or agronomically infeasible, which would result in substantial economic impacts (e.g., precipitous drop in land values and property taxes, and lease rates); failed to analyze the resulting effects of implementing operational and riparian set-backs which will automatically result in land-idling and land use changes because commercial crop production is prohibited in such areas; failed to analyze changing management practices, inputs, rotations, and land uses to comply with discharge targets/limits; failed to analyze the ability to meet surface water discharge limits using currently available pesticide chemistries; failed to adequately analyze land use changes / taking land out of production to comply with riparian and operational setback requirements and developing a RAMP; and opportunity cost of management time for compliance paperwork, training, and other administration.



BN-209 Collectively, the proposed Project's requirements would almost certainly result in changes in the physical farming environment and the socioeconomic environment. Additionally, the economic impacts of Ag Order 4.0 are likely to result in broader policy implications. "Regulatory costs affect competitiveness of the California agriculture industry. This can push crop production out of the state or to other countries, and with it jobs and income for the state and region." (ERA Economics, Technical Memorandum No. 1, p. 7.) Lower production values will lead to job losses, impacting communities with higher levels of unemployment and lower tax revenues. These impacts will disproportionately fall on disadvantaged or severely disadvantaged communities. (*Id.* at pp. 7, 19.) "Agriculture is a significant share of jobs and income for many Central Coast communities. These communities provide the people that work the fields, factories, and equipment in the Central Coast. Regulations can have the indirect effect of reducing jobs and wages in these communities." (*Id.* at p. 19.)

BN-210 Further, regulatory costs are cumulative. (ERA Economics, Technical Memorandum No. 1, p. 7.) In addition to Ag Order 4.0, Central Coast growers are managing implementation of other regulations. For example, implementation of the Sustainable Groundwater Management Act will result in changes in the availability and cost of groundwater in Central Coast sub-basins. In addition, the study by Hamilton and McCullough (2018) identifies other regulatory compliance costs that are increasing over time and should be appropriately considered in any economic and cumulative impact analyses for the proposed Project. (Hamilton and McCullough, *A Decade of Change: A Case Study of Regulatory Compliance Costs in the Produce Industry* (Dec. 15, 2018) <[https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1156&context=agb\\_fac](https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1156&context=agb_fac)> [as of June 18, 2020].) For example, Hamilton and McCullough found that in the past decade, regulatory compliance costs have increased 795% for a typical leafy-greens grower. (*Id.* at p. 2.)

BN-211 "The implementation costs of the Order are likely to cause land retirement, land use change, and direct, indirect, and induced socioeconomic impacts to producers and ancillary businesses in the Central Coast. The Order and DEIR did not prepare an economic impact analysis to quantify these effects." (ERA Economics, Technical Memorandum No. 1, p. 19.) Accordingly, the DEIR must be revised to include an appropriate economics analysis. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

#### 5. The DEIR Fails to Identify and Discuss the Proposed Project's Inconsistency with Relevant Local Plans

BN-212 "A project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." (*California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal. App. 4th 603, 637-638 [citations and internal quotation marks omitted].) In order to be consistent with the general plan, the proposed Project must be compatible with the objectives, policies, general land uses, and programs specified in the applicable plan. (*Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal. App. 4th 357, 373, citing Gov. Code, § 66473.5.) Here, within the DEIR's Environmental Analysis for Agriculture and Forestry Resources, one short paragraph is included regarding general plans:



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cont.

“General plans are long-range comprehensive plans developed for cities and counties to govern growth and development. Many county general plans include goals and policies to preserve agricultural land and forest resources through a variety of mechanisms, such as creation of urban growth boundaries, designation of agricultural overlay zones, requirement of buffers between agricultural and other uses, and mitigation fees for conversion of agricultural land associated with development. Appendix B presents goals and policies in county general plans within the central coast region that are applicable to the Proposed Project.”

(DEIR, p. 3.1-2.) The DEIR simply refers to Appendix B but contains no analysis regarding the proposed Project’s inconsistency with each adopted county general plans. Further, Appendix B is incomplete and fails to include all relevant county general plan policies and goals related to agricultural resources, land use, conservation, and economics (maintaining economically viable agricultural resources). Although the DEIR does contain a section on Impact AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract, the discussion is minimal:

“Much of the land that could be taken out of production as a result of Agricultural Order 4.0 is zoned for agricultural use by the applicable county government and/or under a Williamson Act contract. Although zoning regulations vary by jurisdiction, in general, agricultural zoning districts encourage conservation of agricultural lands and continuation of agricultural uses. Riparian vegetation/habitat is not a use that would typically be specifically prohibited in an agricultural zoning district, but it also would not further the purpose of the district by conserving agricultural lands.”

(DEIR, pp. 3.1-27 – 28.) Given that each Central Coast county’s agricultural zoning districts “encourage conservation of agricultural lands and continuation of agricultural uses,” the DEIR should contain an analysis of each agricultural related general plan policy and goal that conflicts with the proposed Project. (DEIR, 3.1-27). After all, since each county recognizes agriculture as a top economic priority and prohibits the conversion and subdivision of agricultural land with only very limited exceptions, a cursory statement is improper.<sup>18</sup> (Cal. Code Regs., tit. 14, § 15125(d),

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<sup>18</sup> For example, Monterey County prohibits land uses that interfere with existing agriculture and the subdivision of farmland except for exclusively agricultural purposes (Monterey County Agricultural Element, Policy AG-1.1, AG-1.3); Santa Barbara County prohibits land uses incompatible with agriculture, prohibits the conversion of agricultural lands that interfere with other agricultural operations (Santa Barbara Agricultural Element, Goal I, A, Goal III, A), and reserves land with prime and non-prime soils exclusively for agriculture (Santa Barbara County Land Use Element, Goals & Policies); Santa Cruz County maintains for exclusive agricultural use lands best suited for commercial agriculture, prevents conversion of agriculture (Santa Cruz County Conservation Element, Objective 5.13), maintains existing parcel sizes of viable agricultural lands, and only allows conversion for exclusively agricultural purposes (Santa Cruz County Conservation Element, Objective 5.13.14.); Santa Clara County agriculture should be encouraged and agricultural lands retained for their vital contributions to the overall economy (Policy C-RC 37) and agricultural areas of greatest potential long-term viability should be identified and formally designated for permanent preservation (Policy C-RC 41); San Mateo County encourages existing and potential agricultural activities (Ag Resources Policy 9.28) and

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cont. ↑ [“The EIR *shall discuss* any inconsistencies between the proposed project and the applicable general plans and regional plans.” Emphasis added.] The DEIR may not focus only on the elements of its choosing; rather, the agency is required to show that there be little or no probability that the project would be detrimental to or interfere with the general plan as a whole. Inconsistency with simply one general plan policy is enough to scuttle a project. (See *San Bernardino Valley Audubon Society, Inc. v. County of San Bernardino* (1984) 155 Cal. App. 3d 738, 753, [court held that the project was inconsistent with a general plan because it conflicted *with one policy in the conservation element*].)

BN-214 ↑ It is readily apparent that the proposed Project is inconsistent with many of the agriculture, land use, and economics policies and goals set forth within the county general plans governing the conservation and preservation of agricultural resources (including agricultural economies). By failing to adequately disclose, analyze, remedy, and/or mitigate the proposed Project’s inconsistencies with the general plans, the DEIR fails to disclose to decision-makers and the public the many ways in which the proposed Project will not meet, and in fact, may impede counties’ long-standing and long-term planning and preservation goals. Thus, the DEIR must be revised to present each applicable general plan policy and goal, discuss significant impacts and potential alternatives, and present mitigation measures. (Cal. Code Regs., tit. 14, §§ 15125(d), 15126.2; *San Bernardino Valley Audubon Society, Inc. v. County of San Bernardino*, supra, 155 Cal. App. 3d at p. 753.) Without such analysis, the DEIR downplays the extent of significant impacts and fails as an information document.

BN-215 ↑ **6. The DEIR Failed to Adequately Disclose, Analyze and/or Mitigate the Proposed Project’s Land Use and Planning and Population and Housing Impacts**

The DEIR eliminated various topics from detailed analysis in the DEIR “because little or no potential exists for activities associated with the Proposed Project to have a physical effect on the specified resources, based on the nature and scope of activities,” including land use and planning area and the population and housing area. (DEIR, p. 3.0-3.) A fair argument exists that such areas should be fully analyzed within the DEIR as the proposed Project could result in potential significant effects.

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cont. ↑ protects agricultural lands by applying methods to assist in the retention and expansion of agricultural lands (Ag Resources Policy 9.31), (see also Land Use Impacts (2.35), Ag Resources Policy 9.30); San Benito County protects the integrity of existing agricultural resources and provides for flexibility and economic viability of farming and ranching operations (Goal LU-3.2, Goal LU-3.3, Policy LU-3.4) and requires mitigation for conversion of Prime Farmland (LU-3.10); and San Luis Obispo County support agricultural production (Goal AG1), and seeks to maintain the agricultural land base of the county by clearly defining and identifying productive agricultural lands for long-term protection and conserving the soil and water that are the vital components necessary for a successful ag industry in this county (Goal AG2, Goal AG3, AGP14: Agricultural Preserve Program, AGP16: Agricultural Land Conservation Programs, AGP17: Agricultural Buffers, AGP18: Location of Improvements, AGP24: Conversion of Agricultural Land.)

BN-216 The DEIR dismisses analyzing land use and planning as “Agricultural Order 4.0 would not require constriction of any structures or infrastructure.” (DEIR, p. 3.0-4.) Land use and planning is not limited to the “constriction of any structures or infrastructure,” but rather refers to how land is used. (*Ibid.*; Gov. Code, § 65302(a), [“A land use element that designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, greenways, as defined in Section 816.52 of the Civil Code, and other categories of public and private uses of land.”].) The DEIR should have analyzed whether draft Ag Order 4.0 would conflict with any applicable land use plan, policy, or regulation for any local jurisdiction with land use authority within area that Ag Order 4.0 would apply. (See Section II. E. 5., The DEIR Fails to Identify and Discuss the Proposed Project’s Inconsistency with Relevant Local Plans, *ante*.)

BN-217 CEQA also requires that an EIR discuss the ways in which a project could directly or indirectly foster economic or population growth or the construction of new housing in the surrounding environment. (Pub. Resources Code, § 21100(b)(5); Cal. Code Regs., tit. 14, § 15126.6(d).) A project has growth inducing impacts if it would (1) foster economic or population growth or additional housing; (2) remove obstacles to growth; or (3) facilitate other activities that cause significant environmental effects. (Cal. Code Regs., tit. 14, § 15126.2(d).) An EIR must discuss growth-inducing effects even though those effects will result only indirectly from the project. (*Napa Citizens for Honest Government v. Napa County Board of Supervisors*, *supra*, 91 Cal.App.4th at p. 368; see *City of Antioch v. City Council*, *supra*, 187 Cal.App.3d at p. 1335-1337; *Friends of “B” Street v. City of Hayward*, *supra*, 106 Cal.App.3d 988, 998-999.) Such discussion must describe the growth-accommodating features of the project that may remove obstacles to population growth. (*Ibid.*) Population growth resulting from a project can indirectly lead to further development by taxing existing community service facilities, which could require construction of new facilities. (Cal. Code Regs., tit. 14, § 15126.2(d).)

Here, the DEIR concludes that the Project is not growth inducing or growth reducing since it “would not result in the construction of any housing, office buildings, or related structures.” (DEIR, p. 3.0-5.) Although the proposed Project itself will not require housing, it does have the potential to impact existing population, housing, and employment conditions. The proposed Project does eliminate an obstacle to growth as it will take agricultural lands out of production, which can result in growth inducement, facilitate land use conversion to other land uses besides agriculture, accelerate conflicts with local general plans, lead to community and economic distress due to lack of jobs, etc. (See Cal. Code Regs., tit. 14, § 15126.2(e); Pub. Resources Code, § 21100(b)(5); ERA Economics, Technical Memorandum No. 1, p. 8; DEIR, p. 3.1-23.) This may lead to the demise of the many viable small farms in the area as has happened elsewhere in the state.

BN-218 In addition to the possibility of growth-inducing impacts with the conversion of lands out of agricultural production, the project could also cause a socioeconomic impact on population, potentially leading to population reduction due to decrease in productive acreage, which would then have an environmental impact on towns throughout the region, disproportionately impacting specific disadvantaged members of the community. (DEIR, p. 3.0-5; ERA Economics, Technical Memorandum No. 1, pp. 2, 4, 7, 8-9, 13, 14, 18-19, [“Due to the potential that growers on the

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cont. ↑ Central Coast would not be able to double-crop, among other challenges due to the complexities associated with compliance, the Order would disproportionately affect small farms or ranches. In turn, this would result in a significant loss of agricultural employment that will disproportionately impact disadvantaged communities.”.)

BN-219 ↑ Because the proposed Project converts agricultural land to other uses, thereby impacting a large economic and job sector in the region, the DEIR should contain population and housing, and land use and planning sections in which the proposed Project’s potential impacts on these areas can be analyzed. Accordingly, the DEIR must be revised to include the environmental impact analyses of these sections. Without this, the DEIR fails to satisfy CEQA’s fundamental requirements.

### 7. The DEIR’s Mitigation Measures Are Inadequate

BN-220 ↑ CEQA mandates a lead agency to adopt feasible alternatives or feasible mitigation measures that can substantially lessen the project’s significant environmental impacts. (Pub. Resources Code, § 21002; Cal. Code Regs., tit. 14, §§ 15002(a)(3), 15126.4; *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41.) For that reason, “[t]he core of an EIR is the mitigation and alternatives sections.” (*Citizens of Goleta Valley v. Board of Supervisors, supra*, 52 Cal.3d at p. 564.) “The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.” (Pub. Resources Code, § 21002.1(a); see also Pub. Resources Code, § 21061.) Mitigation measures must be feasible, legally enforceable, and consistent with constitutional standards limiting exactions by public agencies, including “nexus” and “rough proportionality.” (Cal. Code Regs., tit. 14, § 15126.4.) Proposed mitigation measures must be consistent with the agency’s existing powers under existing law because CEQA does not grant an agency any new powers. (Cal. Code Regs., tit. 14, § 15040.) Here, in addition to an improper and inadequate alternatives analysis, the DEIR’s evaluation of mitigation measures is also inadequate and certain required mitigation measures are improper. (See Section II. F., The DEIR Fails to Provide a Legally Adequate Alternatives Analysis, *post*.)

BN-221 ↓ The DEIR identifies mitigation measures that apply to growers who seek regulatory coverage under the draft Ag Order 4.0. (See DEIR Chapter 3, Environmental Analysis.) Some of the measures logically require that any modifications of a farming operation that cause impacts (such as noise impacts) be performed in accordance with existing law (such as county noise ordinances). (DEIR, p. 3.10-9.) However, some of the identified mitigation measures are infeasible and exceed the Regional Board’s authority. (See DEIR, pp. 3.3-28 – 33, 3.8-21 – 29, 3.11-7 – 9; see Wat. Code, § 13360(a).) First, how these measures would be triggered is uncertain. The measures appear to apply to routine farming management and operational decisions that normally would not involve regulatory approval by a public agency. If a grower chooses to implement a farm management method for reasons independent of Ag Order 4.0, it appears that the mitigation measure could still be triggered, subjecting the grower to a level of regulatory approvals and expense that otherwise would not apply. Further, even if the grower chooses to implement a management practice because of Ag Order 4.0, the Regional Board still would not have authority to approve that individual management decision. Yet, in this scenario, the grower

BN-221 ↑ might be deemed in violation of Ag Order 4.0 if he or she did not implement the measure, even if  
cont. ↓ he or she has not actually discharged waste into water of the state.

BN-222 Second, the measures seek to dramatically expand the Regional Board's authority over normal farming activities beyond what is otherwise required or allowed by state and federal law. (See Wat. Code, § 13360(a).) Growers are already required to comply with applicable federal and state laws, such as endangered species laws, with certain operations on their property. Yet, various mitigation measures add a new and expanded level of regulation, and potential further CEQA review, to normal management activities that are not subject to discretionary public agency approvals. For example, BIO-3 discusses impacts to state or federally protected wetlands but fails to mention farmlands that are otherwise statutorily exempt from such regulation under the federal Clean Water Act. (See 33 C.F.R. § 328.3(a)(8).) Finally, by imposing expanded regulation on normal farm management decisions, beyond what is required by other federal and state environmental laws, the measures do not satisfy constitutional limitations. (Cal. Code Regs., tit. 14, § 15126.4.) The excessive cost of cultural resource surveys, biology surveys, and wetlands delineation and mitigation on individual fields is not roughly proportional to the likely less than significant impact from management decisions on a single farm. Nor can the Regional Board establish a rational nexus between the expanded regulation and cost imposed in the measures and the as yet unidentified impacts from any of these potential management practices. Thus, the majority of mitigation measures must be revised or deleted

BN-223 In addition to including improper mitigation measures, the DEIR fails to properly identify mitigation measures for significant impacts from the proposed Project. Specifically, when concluding that setback requirements will be a significant effect due to taking agricultural land out of production, the DEIR also concluded that the impact is unavoidable because no feasible mitigation measures exist. (DEIR, p. 3.1-26.) The DEIR states:

“CCWB considered alternative methods for reducing the potentially significant impacts associated with the setback requirements, including financial contributions to an entity such as the California Farmland Conservancy Program, which establishes conservation easements to preserve existing farmland in California. Based on the value of irrigated farmland (the farm real estate average value per acre in California was \$9,000 in 2018 [USDA 2018]), contributions to such a program to off-set potential agricultural resources impacts from the Proposed Project could amount to a large sum (potentially in the range of \$36.5 million assuming up to 4,064 acres could be impacted). Additionally, such a mitigation approach, while it would help to conserve and steward remaining agricultural land resources, would not replace the Farmland that could be taken out of production as a result of the Proposed Project. Also, a large percentage of lands in the central coast region are already under Williamson Act contracts (see Table 3.1-2), so additional conservation easements may not be needed or as effective in this case. Establishing a new agricultural land conservation or trading program (e.g., to directly compensate for lost productive acres for individual farmers) would be beyond the current resources of CCWB given its many other commitments, the scope of CCWB's statutory jurisdiction, and the potential complexity of such a scheme.”

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(DEIR, p. 3.1-25.) Unfortunately, the DEIR fails to adequately identify, discuss, and analyze potential mitigation measures.<sup>19</sup> (See *Masonite Corp. v. Cnty. of Mendocino* (2013) 218 Cal. App. 4th 230.) Financial contributions are mentioned, but quickly deemed infeasible.<sup>20</sup> (*Ibid.*) The DEIR also concludes, with no discussion, that a large portion of lands are already under Williamson Act contracts so mitigation would not be effective or needed. (*Ibid.*) This cursory statement ignores impacts to lands under Williamson Act contracts, especially those contracts that will need to be canceled and pay large cancellation fees in order to comply with setback requirements. The DEIR, also states, in the section on Economics, that “phasing and time schedules... would mitigate potential effects by providing growers ample time to comply with the Order requirements.” (DEIR p. 3.5-37.) Apart from not being within the Environmental Analysis section of the DEIR, time schedules and phasing are not mitigation measures. (Wat. Code, § 13263(c); Nonpoint Source Policy Key Element 3.) Additionally, Impact AG-2 also ignores conflict with existing zoning for agricultural use along with not properly analyzing impacts to lands under existing Williamson Act contracts. (See Section II. E. 5., The DEIR Fails to Identify and Discuss the Proposed Project’s Inconsistency with Relevant Local Plans, *ante*.)

The analysis to Impact AG-5 is limited to the following:

“The Proposed Project would not result in any other changes in the existing environment (apart from the effects described in Impact AG-1) which could result in conversion of Farmland to non-agricultural use. The Proposed Project would be limited to the adoption of Waste Discharge Requirements (WDRs) for irrigated agricultural lands and would not include any new urban or residential development or any other land uses or infrastructure which could directly or indirectly result in agricultural land conversion. As such, this impact would be **less than significant**.”

(DEIR, pp. 3.1-28 – 29, emphasis in original.) In addition to an improper and limited analysis within Impact AG-2, Impact AG-5’s cursory conclusions are also inadequate as they fail to properly analyze direct and indirect economic impacts, impacts to local communities, especially disadvantaged communities, cumulative impacts, and more. (ERA Economics, Technical Memorandum No. 1, pp. 2, 4, 7, 8-9, 14, 18-19.) Further, “[t]he conclusion that Impact AG-5 (conversion of farmland to other uses) is less than significant is not supported by the analysis in the DEIR. Conversion of farmland to non-agricultural uses (e.g., land retirement) would result in additional socioeconomic impacts that are not disclosed in the DEIR. These impacts would be likely to fall disproportionately on disadvantaged communities in the Central Coast.” (*Id.* at p. 9.) Such errors compound and prevent proper identification of significant effects and discussion of the manner in which those significant effects can be mitigated or avoided. (See *Masonite Corp. v. Cnty. of Mendocino*, *supra*, 218 Cal. App. 4th at pp. 238, 241.)

BN-224 <sup>19</sup> The Agricultural Organizations reserve the right to raise improper analysis and identification of additional mitigation measures in the future.

BN-225 <sup>20</sup> It is improper to use a statewide “farm real estate average value per acre” to determine the value of irrigated agriculture in the Central Coast; the Regional Board should be using figures specific to the Central Coast. (DEIR p. 3.1-26.)



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Accordingly, the DEIR must be revised to include the appropriate mitigation measures. Without this, the DEIR fails to satisfy CEQA's fundamental requirements.

#### **F. The DEIR Fails to Provide a Legally Adequate Alternatives Analysis**

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Section 15126.6(a) of the CEQA Guidelines states that "an EIR shall describe a range of reasonable alternatives to the project or to the location of the 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."<sup>21</sup> (Cal. Code Regs., tit. 14, § 15226.6(a); Pub. Resources Code, § 21061; *County of Inyo, supra*, 71 Cal. App. 3d at p. 200, ["An EIR must describe all reasonable alternatives to the project."].) The EIR is to consider a "reasonable range" of alternatives to foster informed decision-making and public participation. (Cal. Code Regs., tit. 14, § 15126.6(a).) CEQA requires the EIR to identify alternatives to the proposed project that will feasibly attain most of the project's basic objectives while avoiding, or at least lessening, significant impacts associated with the project. (Cal. Code Regs., tit. 14, § 15126.6(a); *Citizens of Goleta Valley v. Board of Supervisors, supra*, 52 Cal.3d at p. 566, ["CEQA review must consider a reasonable range of alternatives to the project, or to the location of the project, which: (1) offer substantial environmental advantages over the project proposal (Pub. Resources Code, § 21002); and (2) may be "feasibly accomplished in a successful manner" considering the economic, environmental, social and technological factors involved. (Pub. Resources Code, § 21061.1; Guidelines, § 15364; *Goleta I, supra*, 197 Cal.App.3d 1167, 243 Cal.Rptr. 339.)"])

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A fundamental mandate of CEQA is that "public agencies should not approve projects as proposed if there are feasible<sup>22</sup> alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of the project." (Pub. Resources Code, §§ 21002, 21081.) Therefore, as part of the decision-making process for projects involving the preparation of an EIR, governmental agencies are required under CEQA to consider alternatives to proposed actions affecting the environment. (Pub. Resources Code, § 21001(g).) One of the purposes of an EIR is to identify alternatives to a proposed project and evaluate the comparative merits of feasible alternatives. (CEQA Guidelines Section 15126.6(d).) By examining a range of alternatives, the Lead Agency can demonstrate that it has taken a "hard look" at the project objectives to select alternatives that allow for meaningful comparison. (*Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287; *Wildlife Alive v. Chickering* (1976) 18

<sup>21</sup> Alternatives, in the context of CEQA, are optional ways that the project proponent could achieve most of the project objectives, while also reducing or eliminating the environmental impacts of the proposed project. (Pub. Resources Code, § 21002; Cal. Code Regs., tit. 14, § 15126(a); *Citizens of Goleta Valley, supra*, 52 Cal.3d at pp. 564-566.) Alternatives typically involve changes to the location, scope, design, extent, intensity, or method of construction or operation of the proposed project.

<sup>22</sup> CEQA defines "feasible" as follows: "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (Cal. Code Regs., tit. 14, § 15364; see also Cal. Code Regs., tit. 14, § 15126.6(f)(1).)



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Cal.3d 190, 197, [A major function of an EIR is “to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official” or board.]

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Further, EIRs “must produce information sufficient to permit a reasonable choice of alternatives.” (*San Bernardino Valley Audubon Society, Inc.*, *supra*, 155 Cal.App.3d at p. 750.) Here, the DEIR failed to consider and analyze a reasonable range of alternatives. (Cal. Code Regs., tit. 14, § 15126.6; Pub. Resources Code, § 21100(b)(4).) Other than draft conceptual proposals, which are not true project alternatives under CEQA, the DEIR’s alternative analysis contained only the proposed project and the no project alternative, which the Regional has been forthcoming in saying would not be chosen as the project. The DEIR neglected to include even one additional alternative, let alone “a range,” of reasonable alternatives that would feasibly attain most of the Project’s objectives. (Cal. Code Regs., tit. 14, § 15126.6(a).) Without proper information, the DEIR fails to “produce information sufficient to permit a reasonable choice of alternatives.” (*San Bernardino Valley Audubon Society, Inc.*, *supra*, 155 Cal.App.3d at p. 750; Cal. Code Regs., tit. 14, §§ 15126.6(d), 15150.)

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In addition to the proposed Project and the No Project Alternative, the DEIR includes two additional “alternatives.” (DEIR, p. 4-3.) However, the documents put forth by the “Ag Organization” and “Environmental Advocate” were documents prepared in response to an initial conceptual proposal released by staff with general concept tables and “TBD,” “X,” and “20XX” placeholders for many variables. The stakeholder alternatives were not intended to replace the Regional Board’s obligation to identify and consider alternatives for the purposes of an adequate CEQA analysis.<sup>23</sup> (Central Coast Regional Water Quality Control Board, Notice of Written Public Comment Period For Ag Order 4.0 Conceptual Regulatory Requirement Options (Nov. 19, 2018) Attachment 1 pp. 1-10.) As stated in the Public Notice accompanying the conceptual proposal and requesting public comment,

“As part of this public process, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) is releasing a set of Ag Order 4.0 regulatory requirement options in a table format, herein referred to as options tables, to inform public comment. **The requirements outlined in the options tables are conceptual at this time** and address five agricultural-related water quality issues: 1) nitrate loading to groundwater, 2) nutrient loading to surface water, 3) pesticide discharges to surface water and groundwater, 4) sediment discharges to surface water, and 5) the protection of riparian habitat. **The options tables convey a range of regulatory requirements addressing each of these five water quality issues that could be included in Ag Order 4.0 relative to the existing Ag Order 3.0 requirements.**” (Central Coast Regional Water Quality Control Board, Notice of Written Public Comment Period For Ag Order 4.0 Conceptual Regulatory Requirement Options (Nov. 19, 2018) p. 1, emphasis added.)

The DEIR itself further recognizes that the request for comments and “alternative options” was to a “conceptual regulatory requirement options table:”

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<sup>23</sup> In addition to containing little information and placeholders, the conceptual tables did not include a monitoring and reporting plan or other pertinent aspects of the proposed Project.

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“Subsequent to the initial CEQA scoping comment period, CCWB circulated draft conceptual regulatory requirement options tables for public review and comment. Overall, during the draft conceptual regulatory requirement options comment period, CCWB received 97 comments and two primary alternative proposals:

- “Ag Organization Alternative” proposal, submitted by Grower-Shipper Association of Central California, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties, Monterey County Farm Bureau, Central Coast Groundwater Coalition, Western Growers, and California Farm Bureau Federation on behalf of Monterey County Farm Bureau, San Benito County Farm Bureau, San Luis Obispo County Farm Bureau, San Mateo County Farm Bureau, Santa Barbara County Farm Bureau, Santa Clara County Farm Bureau, and Santa Cruz County Farm Bureau; and
- “Environmental Advocate Alternative” proposal, submitted by The Otter Project and California Coastkeeper Alliance.”

(DEIR, p. 4-3.) Merriam-Webster’s Thesaurus defines the synonyms for “conceptual” as “abstract, ideal, ideational, metaphysical, notional, and theoretical.” (Merriam-Webster Thesaurus, Conceptual, as of June 4, 2020, available at <https://www.merriam-webster.com/thesaurus/conceptual>.) The public could not respond with an alternative project proposal when the “project” provided to them for public comment was merely conceptual, theoretical, and abstract options in the form of a table.<sup>24</sup> (DEIR, p. 4-3.)

The “Ag Organization Alternative” proposal and the “Environmental Advocate Alternative” proposal were just that, conceptual proposals in response to “conceptual options tables” put forth by Regional Board staff. (DEIR, p. 4-3.) The alternatives to be evaluated within the EIR must be true “alternative” proposals and not abstract drafts. In order to allow for an evaluation on its merits that the alternative “may be ‘feasibly accomplished in a successful manner’ considering the economic, environmental, social and technological factors involved” and to allow for a robust comparison to the preferred project, alternatives must be detailed, complete, and comprehensive proposals. (Pub. Resources Code, § 21061.1; Guidelines, § 15364; *Goleta I, supra*, 197 Cal.App.3d 1167, 243 Cal.Rptr. 339.)” (*Citizens of Goleta Valley supra*, 52 Cal.3d at p. 566.) After all, “evaluat[ion] of the comparative merits of the alternatives” cannot be done if the alternatives are cursory drafts. (CEQA Guidelines, § 15126.6(a).) Here, by using cursory concept

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<sup>24</sup> For example, regarding Riparian Habitat Management for Water Quality Protection and numeric limits, the staff Options Tables proposes “Setback Width and Native Vegetative Cover: Ranch-level setback width and percent native vegetative cover requirements are based on a stream classification system. Class X width = TBD feet; Class X native grasses = TBD%; Class X native shrubs = TBD%; Class X native trees = TBD% OR Participate in an approved watershed restoration program.” (Central Coast Regional Water Quality Control Board, Notice of Written Public Comment Period For Ag Order 4.0 Conceptual Regulatory Requirement Options (Nov. 19, 2018) Attachment 1 p. 9.) With no details proposed, how can the public provide appropriate comments or a full alternative program?

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proposals, a true analysis between alternatives is thwarted. Given the cursory nature of the two concept proposals, any comparison with the Draft Ag Order 4.0 and use of the screening criteria results in both deemed inferior or inadequate. (DEIR, p. 4-2.) As evidenced in the DEIR, the “project,” draft Ag Order 4.0, appears to be predetermined in regulatory scope which runs afoul of CEQA: “The full consideration of environmental effects CEQA mandates must not be reduced “to a process whose result will be largely to generate paper, to produce an EIR that describes a journey whose destination is already predetermined.”” (*Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 135–136, citing *Natural Resources Defense Council, Inc. v. City of Los Angeles* (2002) 103 Cal.App.4th 268, 271, internal citations omitted.) This failure to include the full reasonable range of alternatives in the environmental analysis directly contrasts with the explicit intent and heart of CEQA. (*Watsonville Pilots Association v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1086-1088.) CEQA places the burden on the approving agency, here the Regional Board, to affirmatively show that it has considered the project alternatives as well as identified means of lessening or avoiding the project’s significant effects, and to explain its decision to proceed with or reject alternatives and mitigation measures. (Guidelines, § 15126.6.) “The writing of a perfect EIR becomes a futile action if that EIR is not adequately considered by the public agency responsible for approving a project. Indeed, it is almost as if no EIR was prepared at all . . .” (*Resource Defense Fund v. Local Agency Formation Com.* (1987) 191 Cal.App.3d 886, 898.) Additionally, using cursory draft documents as alternatives prohibits rather than fosters meaningful public participation and informed decision-making. (Cal. Code Regs., tit. 14, § 15126.6(a).)

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Further, the Regional Board’s job in the DEIR’s alternatives analysis is to consider not only what it was provided by other parties, but to craft alternatives that could feasibly reduce significant impacts, even if the alternatives will not accomplish all of the project’s objectives. (*Watsonville Pilots Assn. v. City of Watsonville, supra*, 183 Cal.App.4th at p. 1087, [“It is virtually a given that the alternatives to a project will not attain *all* of the project’s objectives.]; Cal. Code Regs., tit. 14, § 15126.6(c).) By simply evaluating cursory comments submitted in the beginning stages of the project development and CEQA process and not also using its own resources to craft appropriate alternatives, the Regional Board’s alternatives preparation and analysis failed. (Cal. Code Regs., tit. 14, § 15126.6.)

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In addition to not including a reasonable range of alternatives, the analysis of the cursory proposals was flawed. For example, the Regional Board found the “Ag Organization” alternative inadequate because it did not provide a specific, defined time schedule for compliance. (DEIR, p. 4-18.) The Regional Board could and should have added an alternative time schedule itself or reached out the “Ag Organizations” to provide one.<sup>25</sup> (Cal. Code Regs., tit. 14, § 15226.6(d), [The EIR must contain sufficient information about *each alternative* to permit an evaluation of the relative merits of the alternatives and the project.].) Additionally, the DEIR states “the Ag Organization Alternative’s effectiveness in reducing agricultural discharges is at least somewhat speculative and dependent on the specific contents of the templates, scoring metrics, and education programs that would be developed by the agricultural third party or others.” (DEIR, p. 4-26.)

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<sup>25</sup> It is worth noting that as staff continued to build out its regulatory options table and create its draft Ag Order 4.0, the public was not allowed to provide additional written comments, nor were Ag Organizations allowed to build out its alternative.

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Again, if given the opportunity to provide a detailed alternative in response to staff's alternative, such speculation would not exist. Instead, by comparing cursory proposals to a fully developed project, the DEIR's alternatives analysis is faulty.

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Finally, the Regional Board abdicated its responsibility to design alternatives that reduced significant environmental impacts. Neither the Ag Organization nor Environmental Advocate alternatives had the benefit of knowing what the project's significant environmental impacts were, so neither alternative could not have been designed to reduce significant environmental impacts. The DEIR limits analysis of alternatives to significant and immitigable impacts, but CEQA requires that alternatives be evaluated to reduce *any* significant impact to the maximum extent feasible, whether it can otherwise be mitigated or not. (*Laurel Heights Improvement Ass'n v Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 403, [The Supreme Court held that an EIR must include a discussion of both mitigation measures and project alternatives so that decision-makers will be provided with adequate information about the range of options available to reduce or avoid environmental impacts.]; see also *Kings County Farm Bureau v. City of Hanford*, *supra*, 221 Cal.App.3d at p. 732.) Although the DEIR contains Table 4-4, which ranks the alternatives against one another, no analysis is included indicating how each alternative would perform in respect to reducing significant impacts. (DEIR, pp. 4-4 – 42.)

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As evidenced throughout, the DEIR's preferred alternative, Ag Order 4.0, was the only alternative truly considered. Therefore, the DEIR fails to include a reasonable range of alternatives and cannot be relied upon. (*San Bernardino Valley Audubon Society, Inc.*, *supra*, 155 Cal.App.3d at p. 750.)

#### **G. The DEIR's Cumulative Impacts Analysis is Cursory and Inadequate**

BN-239

The CEQA Guidelines define cumulative effects as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts." (Cal. Code Regs., tit. 14, § 15355; Cal. Code Regs., tit. 14, § 15130(a)(1), ["[A] cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."].) The CEQA Guidelines further state that the individual effects can be the various changes related to a single project or the changes involved in a number of other closely related past, present, and reasonably foreseeable future projects. (Cal. Code Regs., tit. 14, §§ 15355(a), (b).) Additionally, "[c]umulative impacts can result from individually minor but collectively significant projects taking place over a period of time. (Cal. Code Regs., tit. 14, § 15355(b).)

Within the DEIR, the cumulative impacts analysis fails to provide an adequate analysis of impacts to agricultural resources. The DEIR does not analyze the cumulative impact of loss of production agricultural lands across the state, although it recognizes that the proposed Project will contribute to the statewide reduction in agricultural lands. (See DEIR, p. 3.1-4; p. 5-11.) The DEIR does not analyze the proposed Project's contribution of loss of agricultural land in context with the statewide trend of loss of agricultural land, does not analyze impacts related to local groundwater sustainability plans, does not analyze impacts to disadvantaged communities, and lacks a discussion of the cumulative impacts of the proposed Project when taken within the context of regional growth patterns. (ERA Economics, Technical Memorandum No. 1, pp. 2, 4, 7, 8-9,

BN-239 cont. 14, 18-19; see Section II. E. 3., The DEIR's Analysis of Agriculture and Forest Resources Is Improper And Flawed, *ante*; see Section II. E. 4., The DEIR's Economics Analysis Is Improper And Flawed, *ante*.)

BN-240 Additionally, the DEIR does not identify all "projects or programs adequately similar in nature, location, and type to result in a meaningful comparative analysis" that are known or should be known to the Regional Board that can lead to compounding cumulative impacts with the implementation of the proposed Project. Other programs and projects that have the potential to compound or increase other environmental impacts, especially to agricultural resources, include requirements within the U.S. Food and Drug Administration's Food Safety Modernization Act, California Leafy Greens Products Handling Marketing Agreement requirements, applicable National Pollutant Discharge Elimination System ("NPDES") permits and other permit actions, the Regional Board's Groundwater Assessment and Protection program, the Central Coast Ambient Monitoring Program, and Regional Board's regionally scaled water quality monitoring and assessment program. All of these, as well as additional, similar pending<sup>26</sup> and existing programs and projects have the potential to create cumulative impacts on agricultural and other environmental resources, and, thus, require analysis along with the proposed Project.

#### BN-241 **H. The DEIR Fails To Consider the Cumulative Effects of the Sustainable Groundwater Management Act**

Signed into law in 2014, the Sustainable Groundwater Management Act (SGMA) requires local public agencies and Groundwater Sustainability Agencies (GSAs) in medium-and high-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) – to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. (See Wat. Code, § 10720.1.) The GSPs covering medium-and high-priority basins identified by DWR as critically over drafted were submitted to DWR by January 31, 2020. (Wat. Code, § 10720.7.) GSPs covering all other medium-and high-priority basins must be submitted to DWR by January 31, 2022. (*Ibid.*) Under SGMA, these basins should reach sustainability within 20 years of GSP implementation.

There are 40 GSAs responsible for implementing SGMA in 25 basins in the Central Coast region, and DWR has identified the following six central coast basins as critically overdrafted: Santa Cruz Mid-County; Corralitos-Pajaro Valley; Salinas Valley-180/400 Foot Aquifer; Salinas Valley-Paso Robles Area; Los Osos Valley-Los Osos Area; and Cuyama Valley. (Central Coast

BN-242 <sup>26</sup> Current projects along with "reasonably anticipated future projects" should be considered in the DEIR and discussed in a cumulative analysis. (See *Laurel Heights Improvement Assn. v. Regents of University of California*, *supra*, 47 Cal.3d 376, 394 and *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo*, *supra*, 172 Cal.App.3d 151, 168.) As noted in *Citizens Assn. for Sensible Development of Bishop Area*, "[r]elated projects currently under environmental review unequivocally qualify as probable future projects to be considered in a cumulative analysis. [Citation.] In addition, even projects anticipated beyond the near future should be analyzed for their cumulative effect. [Citation.]" (*Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo*, *supra*, 172 Cal.App.3d 151, 168.)" *City of Santee*, *supra*, 214 Cal.App.3d at pp. 1452–1453.)

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Regional Water Quality Control Board, Staff Report For Regular Meeting Of December 12-13, 2019, Item 5 Sustainable Groundwater Management Act (SGMA) Implementation in the Central Coast Region, p. 3, <[https://www.waterboards.ca.gov/centralcoast/board\\_info/agendas/2019/december/item\\_05/item05\\_stfprt.pdf](https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2019/december/item_05/item05_stfprt.pdf), [as of June 18, 2020], hereinafter “Staff Report.”) DWR has also identified an additional five Central Coast basins as high priority (but not critically overdrafted): Gilroy-Hollister Valley-Llagas Area; Salinas Valley-East Side Aquifer; Salinas Valley-Langley Area; San Luis Obispo Valley; and Carpinteria. (*Id.* p. 4.) GSPs must indicate how sustainability will be achieved while avoiding six undesirable results, which include: 1) chronic lowering of groundwater levels, 2) depletion of interconnected surface water, 3) reduction of groundwater storage, 4) seawater intrusion, 5) land subsidence, and 6) degraded water quality. The California Water Code (Water Code, section 10721(x)(4)) specifies requirements that GSPs must address how undesirable results will be avoided. (Regional Board Staff Report, *supra*, p. 2) With respect to water quality, SGMA requires that groundwater be managed to avoid “significant and unreasonable degraded water quality,” and “the minimum threshold shall be based on the number of supply wells, a volume of water, or a location of an isocontour that exceeds concentrations of constituents determined by the GSA to be concern for the basin.” (Cal. Code Regs., tit. 4, § 354.28(c)(4).)

GSPs are very detailed road maps for how groundwater basins will reach long term sustainability. (CA Department of Water Resources, Groundwater Sustainability Plans (2020) <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainability-Plans>, as of June 11, 2020.) Each GSP is required to include monitoring protocols (Cal. Code Regs., tit. 4, § 352.2), data reporting standards (*id.* at § 352.4), along with both basin-wide and site-specific sustainable management criteria. (*Id.* at §§ 354.22-354.30). GSPs also include projects and management actions with timeframes and associated costs. (*Id.* at § 354.44.) The various GSP components and required quantitative metrics that define sustainable management of a basin will undoubtedly impact the environmental setting, financial obligations of water users, and water availability within the Central Coast region. Thus, the GSPs being implemented in the Central Coast region will present new challenges and have widespread impacts on water users. The DEIR briefly mentions GSPs, but it does not include a proper analysis of the widespread impacts that follow regulatory compliance mandated by SGMA.<sup>27</sup> A SGMA analysis supported by substantial evidence was not completed. (DEIR, p.

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<sup>27</sup> SGMA does not define a role for Regional Water Quality Boards, however it is evident that the Central Coast Regional Board has been involved in coordination efforts with various stakeholders regarding SGMA implementation in the Central Coast region. (Regional Board Staff Report, *supra*, pp. 1-3; Central Coast Regional Water Quality Control Board, Letter to GSA Mangers, *Central Coast Regional Water Quality Control Board Issues For Consideration In Development Of Groundwater Sustainability Plans For Central Coast Groundwater Basins* (Dec. 20, 2019) [https://www.waterboards.ca.gov/centralcoast/docs/gsa\\_outreach.pdf](https://www.waterboards.ca.gov/centralcoast/docs/gsa_outreach.pdf), as of June 11, 2020). Regional Board staff have also attended GSA public meetings and provided oral comments on water quality issues and concerns. (Regional Board Staff Report, *supra*, p. 3.) The active outreach and involvement from the Regional Board staff regarding the development and implementation of GSPs reveals the importance, interest, and impact of SGMA compliance in the Central Coast region. Further, given the possibly of direct or secondary effects between GSPs and the proposed Project’s requirements that are reasonably foreseeable, this potential impact should have been



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3.9-54.) Rather, a conclusory statement that “the Proposed Project is not expected to conflict with implementation of these GSPs in any way” is provided. (*Ibid.*)

By failing to consider SGMA as a cumulative impact, even though SGMA and relevant GSPs will have widespread impacts on groundwater monitoring, water resources, hydrology, and economics, the DEIR is incomplete and flawed.

#### **I. The DEIR Fails To Consider the Significance Of Social And Economic Impacts And Cumulative Effects**

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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, 15382.) 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 properly considered in the DEIR, 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.”<sup>28</sup> (*Ibid.*)

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analyzed. When evaluating the significant effects caused by the proposed Project, the lead agency should include and review an indirect physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. (See Cal. Code Regs., tit. 14, § 15064.)

<sup>28</sup> See also *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1205:

“‘CEQA is not a fair competition statutory scheme.’ (*Waste Management of Alameda County, Inc. v. County of Alameda* (2000) 79 Cal.App.4th 1223, 1235, 94 Cal.Rptr.2d 740.) Therefore, the economic and social effects of proposed projects are outside CEQA’s purview. (Guidelines, § 15131, subd. (a).) Yet, if the forecasted economic or social effects of a proposed project directly or indirectly will lead to adverse physical changes in the environment, then CEQA requires disclosure and analysis of these resulting physical impacts. (*Friends of Davis v. City of Davis*



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The draft Ag Order 4.0's requirements will result in 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, possible elimination of multi cropping cycles, loss of jobs, loss of food supply, loss of agricultural lands, economic collapse of local communities, changes to the landscape and land uses, loss of wildlife habitat, loss of groundwater recharge areas, disproportionate impacts to disadvantaged communities and severely disadvantaged communities, as well as other social and economic impacts. (ERA Economics, Technical Memorandum, No. 1, pp. 2-3, 4, 6, 7, 18, 19.) In addition to direct impacts, and indirect impacts and consequences, these cumulative<sup>29</sup> social and economic consequences are reasonably foreseeable and must be analyzed.

Realizing that the second and third sentences of section 15382 can cause confusion, the discussion portion of the section provides:

"The second and third sentences pose a problem of interpretation that has caused controversy for many years. The controversy centers around the extent to which CEQA applies to economic and social effects of projects. In determining whether an effect is significant, however, Section 21083(c) of CEQA requires an effect to be found significant *if the activity would cause an adverse effect on people.*"

(Discussion following Cal. Code Regs., tit. 14, § 15382, emphasis added.) As indicated during public testimony and written comments, the draft Ag Order 4.0 will have an adverse effect on the

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(2000) 83 Cal.App.4th 1004, 1019, 100 Cal.Rptr.2d 413 (*Friends of Davis*); *Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d 433, 445–446, 243 Cal.Rptr. 727 (*Mt. Shasta*).) Subdivision (e) of Guidelines section 15064 provides that when the economic or social effects of a project cause a physical change, this change is to be regarded as a significant effect in the same manner as any other physical change resulting from the project. (See, e.g., *El Dorado Union High School Dist. v. City of Placerville* (1983) 144 Cal.App.3d 123, 131, 192 Cal.Rptr. 480 [potential of increased student enrollment in an already overcrowded school resulting from construction of the proposed apartment complex was an environmental effect that required treatment in an EIR because it could lead to the necessity of constructing at least one new high school].) Conversely, where economic and social effects result from a physical change that was itself caused by a proposed project, then these economic and social effects may be used to determine that the physical change constitutes a significant effect on the environment. (See, e.g., *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180, 197, 228 Cal.Rptr. 868 [when a waste management facility was proposed next to a religious retreat center, CEQA required study whether the physical impacts associated with the new facility would disturb worship in the natural environment of the retreat center].)"

<sup>29</sup> "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.)

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agricultural community in many ways. (Letter from Huntington Farms (Jan. 21, 2019) regarding costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_huntingtonfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_huntingtonfarms_letter.pdf)> [as of June 18, 2020], [“Therefore, it can only be assumed that costs associated with both draft options will not only exceed the current Tier 3 compliance costs; but will be substantially higher. It might not be unreasonable to estimate the costs could be double current Tier 3 costs, once all of the compliance requirements are revealed and adopted.”]; Letter from Berry Mist Farms, LP (Jan. 17, 2019) regarding impacts including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_berrymistfarms\\_letter.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_berrymistfarms_letter.pdf)> [as of June 18, 2020], [“My strawberry operation is about 50 acres of a 100 acre ranch our family owns.....With the increased reporting requirements, well testing, water trend monitoring and erosion management, plus the potential set-back because of our proximity to the Pajaro River, I think these regulations could cost \$2,500 per acre.”]; Letter from Costa Farms (Jan. 21, 2019) regarding Ag Order 4.0 Options Tables including costs, <[https://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/ag\\_waivers/docs/ag\\_order4\\_public/21jan2019\\_costafarms\\_letter2.pdf](https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_public/21jan2019_costafarms_letter2.pdf)> [as of June 18, 2020]; ERA Economics, Technical Memorandum No. 2, pp. 2-12; ERA Economics, Technical Memorandum No. 1, pp. 2, 3, 7, 13, 14; see Section II. E. 4., The DEIR’s Economics Analysis Is Improper And Flawed, *ante*.) These economic and social impacts will adversely affect people within the Central Coast and the state.

Notwithstanding substantial evidence pointing to significant impacts, the DEIR contains no cumulative impacts analysis on social and economic resources impacted by the proposed Project. This is an error. Accordingly, the DEIR be revised to evaluate the resulting social and economic effects from the proposed Project.

#### **J. Substantial Evidence Exists that Require Revision and Recirculation of the DEIR**

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The DEIR fails to adequately include significant and pertinent information about the project and its potential significant impacts on the environment, including, but not limited to, economics, cumulative impacts, impacts to agricultural resources, SGMA and its impacts, recharge, water availability, land conversion, and conflicts with existing county general plans. Additionally, due to substantial evidence that was ignored, along with new substantial evidence submitted, the DEIR must be revised and recirculated. (Cal. Code Regs., tit. 14, § 15088.5(a).)<sup>30</sup> The EIR must be appropriately revised to reflect the new information and then subjected to the same “critical evaluation that occurs in the draft stage” so that the public and the regulated

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<sup>30</sup> 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.

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community is not denied “an opportunity to test, assess, and evaluate the data and make an informed judgment as to the validity of the conclusions drawn therefrom. (*Sutter Sensible Planning, Inc. v. Board of Supervisors* (1981) 122 Cal. App. 3d 813, 822.)

### III. CONCLUSION

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CEQA’s statutory framework 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.) Specifically, the basic purposes of CEQA review include: informing governmental decision-makers and the public about the potential significant environmental effects of proposed activities; identifying ways that environmental damage can be avoided or significantly reduced; requiring changes in projects through the use of alternatives or mitigation measures when feasible; and disclosing to the public the reasons why a project was approved if significant environmental effects are involved. (See Pub. Resources Code, §§ 21001, 21001.1, 21002, 21003, 21006, 21064.) Adopting a project without complying with the above requirements violates CEQA.

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Given the numerous violations contained within the DEIR discussed herein, the appropriate remedy for the Regional Board is conduct appropriate environmental review of the proposed Project, revise the DEIR, and recirculate it accordingly.

## **Exhibit 2. CEQA Arguments and Attachment 1 to CEQA Arguments**

Attachment 1. 2013 Comment Letter on Salinas River Stream  
Maintenance Program Draft EIR

## **Exhibit 3. Draft General Order (redline version); New Table C.5-1; Draft MRP (redline version)**

### **Note to Readers:**

The materials provided in the attachment to Exhibit 2 and Exhibit 3 have been omitted from this section because they do not contain specific comments on the DEIR or DAO 4.0 (which are not covered elsewhere in the responses to comments). The redline suggestions provided in Exhibit 3 are responded to in Responses to Comments BN-249 through BN-287.

These materials are available for review in Section 3.3.