Letter CA: Lisa Hunt, American Rivers (June 22, 2020)

Letter CA

From: Lisa Hunt
To: AgNOI, WB@Waterboards
Cc: Jeff Odefey
Subject: Comments on Draft Ag Order
Date: Monday, June 22, 2020 7:40:09 PM
Attachments: Final comment letter Ag Order 4.0 6-22-20.pdf

EXTERNAL:

Dear Regional Board,

Please find attached my comments on the Draft Agricultural Order 4.0.

Thank you,
Lisa

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June 22, 2020

Via Electronic Mail
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Comments regarding Ag Order 4.0

Dear Chair Wolff and Board Members:

CA-1 Thank you for the opportunity to provide comments on the development of the Draft Agricultural Order 4.0 and the associated Draft EIR. American Rivers is a national nonprofit organization with a mission to protect wild rivers, restore damaged rivers, and conserve clean water for people and nature. Much of our work in California takes place at the interface of agriculture and the water environment, and we are deeply concerned about the continuing impacts of agricultural pollution both on surface water ecosystems and on drinking water and human health.

CA-2 We commend the Central Coast Regional Board staff for their dedication to engaging many stakeholders while developing a regulatory framework to achieve compliance with water quality objectives for both surface water and groundwater. American Rivers previously submitted comments on May 10, 2019 on the recommendations laid out by Board staff. In general, we fully support the framework of the Draft Order, and our comments are primarily focused on refinement of the details. All of the elements proposed in the staff report are essential to achieve protection and restoration of beneficial uses of both surface water and groundwater.

CA-3 However, we do have some concerns regarding the proposed timelines and details of implementation. In particular, more timely action to curb discharges of nitrogen to groundwater is critical to achieve the human right to water goals. Under the timeline proposed by the draft order, conditions will continue to worsen for several decades and the areas impacted by polluted groundwater will expand, increasing the number of communities that lack access to safe drinking water in their homes. The Board must take timely action to address the disproportionate impacts of groundwater pollution on people of color and disadvantaged communities that lack access to clean and safe drinking water. These disproportionate impacts constitute environmental and structural racism, and under the currently proposed timeline these inequities will likely continue to increase during the next few decades before conditions begin to improve. The societal costs of continuing pollution are addressed in a separate letter submitted by my American Rivers colleague, Jeff Odefey, while my comments below focus primarily on technical issues and other details of the draft order.

Nitrogen Discharges to Groundwater

CA-4 Nitrogen application limits specified in Table C.1-1 are set based on restricting application rates to be under the 90th percentile of application rates from 2014 – 2018. However, in almost all cases the proposed application limits are higher than the maximum end of the ranges specified in the 2020 UC Davis

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CA-4 cont. California Fertilization Guidelines. Application limits should be set at or below the maximum of the recommended range for each crop unless there are specific reasons to increase the limit, with data to justify this. The approach that staff is taking in the draft order is to reduce application rates for the "outliers", or the ten percent where current application rates are much higher than typical application rates. However, the proposed application rates are not justified by science or data, and based on best available information that was taken into account in development of the 2020 UC Davis California Fertilization Guidelines, application limits could be set lower than the proposed limits with little or no effect on yield. In addition, the amount of nitrogen in applied irrigation water should be included in total application rates permitted.

CA-5 Table C.1-1 specifies crop-specific limits only for the six most commonly reported crops, and all other crops are assigned an application limit of 500 lbs/acre. However, because current applications rates for 98 percent of all crops are currently under this limit, setting this limit will have almost no effect on reducing nitrogen application. We recommend that the limit for other crops be lower (for example, 300 lbs/acre) with exceptions made for specific crops only with appropriate justification.

CA-6 The nitrogen application limits proposed by staff would result in very small reductions in nitrate discharges to groundwater, and may slow down the rate of additional groundwater pollution but would not be expected to reduce concentrations in groundwater. No substantial changes in application practices would be expected until after 2026 when the nitrogen discharge limits are implemented and ramped down, starting at the current median discharge rate of 300 lbs N/ac/yr and eventually being limited to 50 lbs N/ac/yr in 2050. Once discharges are limited to 50 lbs N/ac/yr, it is expected to take decades longer for nitrate concentrations in groundwater to be reduced below the MCL. So, under the conditions of the current draft permit it will likely take at least 50-100 years to achieve clean and safe drinking water in many areas of the Central Coast region.

CA-7 We understand that major changes in Central Coast agricultural systems will be needed to reduce nitrogen discharge rates from current levels (approximately 340 lbs N/ac/yr) to below 50 lbs N/ac/yr, and that this transition will take time. Some reductions can be made relatively quickly through better management practices and technology improvements, but the level of reduction needed to ultimately achieve clean water goals will likely also require changes in crop patterns and land use. While we understand that it will take time for the agricultural community to adapt while remaining economically viable, 50+ years is just too long of a time period to expect communities to continue to suffer without clean and safe water in their homes.

CA-8 We propose that the Board consider an alternative method to help achieve the human right to water goals in a shorter time frame. The order could be revised to ramp down the nitrogen application limits more quickly, such as setting a discharge limit of 50 lbs N/ac/yr by 2030 or 2035, but in cases where that is not feasible or would cause extreme economic hardship, higher discharge rates could be allowed under certain conditions when appropriate mitigation measures are taken. Mitigation could include active management measures to reduce nitrate concentrations in groundwater at locations where nitrates exceed or are approaching the MCL. For example, this could include "pump and fertilize" and/or groundwater recharge at locations with low residual nitrogen in the soil. The discharger would need to demonstrate a quantitative reduction in nitrate concentrations in groundwater in order for mitigation to qualify. These mitigation opportunities should be coordinated with groundwater management activities under the Sustainable Groundwater Management Act. Under SGMA, groundwater management activities will be implemented regardless of the Ag Order, but coordination between the two regulatory programs to proactively manage these activities to improve groundwater quality could have enormous benefits in helping to achieve water quality objectives, meet human right to water goals, and ensure healthy communities, and support a thriving agricultural economy over the long term. For example, groundwater recharge projects have the potential to either contribute further groundwater quality or to reduce pollutant

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CA-8 cont. concentrations, depending on how recharge projects are planned and designed. However, there is currently no mandate or incentive for planning groundwater management activities in a way that will benefit water quality.

Pesticide Discharges to Groundwater

Although the draft Order requires monitoring of 1,2,3-Trichloropropane (1,2,3-TCP) in on-farm domestic drinking water supply wells, it includes no requirement for monitoring current use pesticides in groundwater, except as directed by the Executive Officer:

> **Part 2, Section C.1. Irrigation and Nutrient Management for Groundwater Protection**
> 24. "When required by the Executive Officer based on water quality data and pesticide use, Dischargers must conduct monitoring and reporting for pesticides in groundwater, either individually or as part of a cooperative effort. The Department of Pesticide Regulation (DPR) monitors groundwater for pesticides that have been detected in groundwater or have the potential to migrate to groundwater. Based on DPR's groundwater monitoring, prioritization, and annual compilation of pesticide use data, a subset of Dischargers may be required to conduct groundwater monitoring and reporting for specific pesticides."

CA-9

The Order should specify under what conditions Dischargers would be required to conduct pesticide monitoring for groundwater, instead of simply referring to future review of DPR data. Data gaps have already been identified, and if DPR does not plan to address them sufficiently they should be addressed in the Order. At a minimum, the Order should require agricultural dischargers to allow DPR access to their wells (both domestic and agricultural) for pesticide sampling. DPR and other agencies currently conduct groundwater monitoring at a very limited number of locations. As summarized in Attachment A of the Order (Item 69) "monitoring data for pesticides in groundwater in the central coast region is limited, meaning the potential impacts to groundwater resources are largely unknown".

CA-10 The Regional Board's mandate for protection of groundwater is different than that of DPR's. It is not sufficient for the Board to defer to DPR for groundwater protection. While DPR is concerned primarily with pesticides that occur at concentrations above human health thresholds in groundwater, the Regional Board must also enforce the Antidegradation Policy by preventing further contamination by pesticides and other pollutants.

Nitrogen Discharges to Surface Water

CA-11 For surface water bodies that do not have a nitrate objective established through a TMDL, the draft Order sets the limit for nitrate in surface water as 10 mg/l as N, which is the MCL for drinking water. Attachment A, page 13, states that "The Central Coast Water Board estimates that concentrations on the order of 1.0 mg/L nitrate as nitrogen are necessary to protect aquatic life beneficial uses from biostimulation based on an evaluation of CCAMP data (CCRWQCB, 2010)." We understand that it is difficult to incorporate a region-wide limit protective of aquatic life into this order because no such water quality objective has been adopted as part of the basin plan. However, given the wide recognition that nitrogen discharges are negatively impacting the ecological health of water bodies in the region, it is extremely disappointing that biostimulatory objectives have not yet been developed or adopted except for specific cases where TMDLs exist. We urge the Regional Board and the State Board to make this a high priority.

CA-12 **Pesticide Discharges to Surface Water**

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CA-12 cont.

The draft Order includes an effective framework to limit impacts of pesticides on surface water bodies and aquatic life. In addition to establishing numeric limits on individual pesticides in receiving waters and discharges from ranches, the draft Orders imposes limits on combined toxicity of multiple pesticides through two methods: Toxic Unit limits based on all pesticides in a given class (total Toxic Units); and compliance with site-specific toxicity testing using organisms sensitive to different classes of pesticides. Inclusion of these three types of monitoring and compliance limits will help prevent further perpetuation of the "pesti-cycle" where growers switch from one bad-actor pesticide class to another, but instead will be required to reduce overall impacts of pesticides. However, there are several issues that should be addressed in the order to improve the its effectiveness and clarify requirements:

CA-13

1. Table C.3-2 includes numeric limits for specific pesticides, and the sources of these limits are listed in Attachment A. In many cases, the limits are based on USEPA aquatic life benchmarks for chronic effects, which are considered to be protective of both lethal and sublethal effects to most aquatic invertebrates. However, in other cases LC50 values are used as limits, with no safety factor or acute-to-chronic adjustment. LC50 values should not be considered to be protective, as these concentrations would be expected to kill 50% of individuals of sensitive species. In addition, there is no provision in the order for adding monitoring and limits for additional pesticides as they become more widely used and as additional aquatic toxicity data become available. There should be a provision for periodically reviewing and modifying toxicity test methods and species to ensure they are able to detect impacts of newer pesticides. Dischargers should be required to adjust the pesticides they are monitoring based on review of most recent pesticide use data, as is required in the Central Valley.

CA-14

2. Table C.3-2 specifies that the sum of additive toxicity (or total Toxic Units) must be less or equal to 1 to achieve compliance, and footnote 4 states that "Toxic Units (TU) are calculated by dividing each measured chemical concentration by that chemical's 50 percent effect concentration (e.g., LC50) (carbon corrected for sediment measurements) and summing those values for all chemicals in the class (e.g. summing all pyrethroid values)." However, it is not clear what LC50 values should be used for this calculation – what species, endpoint, and value should be used for each pesticide? The language of the draft order appears to use the terms LC50 and EC50 interchangeably. However, effects concentrations generally include sublethal endpoints and the abbreviation EC50 is typically used, while lethal concentration is abbreviated as LC50 and includes only mortality (sometimes also including immobilization which is considered equivalent to mortality). It is not clear which is intended to be used here. An EC50 value is generally more protective than an LC50 value, but use of either of these is understood to result in effects to 50% of individuals of the species tested, which is not very protective. A value such as the EC10 should be considered, as this would represent pesticide mixture concentrations expected to affect 10% of individuals. Also, the order does not specify what species the values should be based on – is it the most sensitive species tested for each pesticide? What is the source of data to determine values – the median value of 48 or 96 hr tests for the selected species, based on studies included in the EPA Ecotox database? Or some other source? What quality criteria should be used to determine what test results will be included? Will the Board specify what values are to be used for each chemical, or will the discharger? Will these values be revised over time as new data become available?

CA-15

3. Pesticide concentrations in surface water are highly ephemeral and with monitoring required only once a quarter, many toxic events are likely to go undetected. In the Central Valley, the ILRP generally requires monitoring of both pesticides and toxicity in the water column on a monthly basis during the irrigation season. In addition, it is important to include "first flush" monitoring of surface waters, including pesticide chemistry and toxicity testing (both water column and sediment).

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CA-16

4. The draft Order includes Toxicity Identification Evaluations only as directed by the Executive Officer. This is very unlikely to be effective in determining the cause of observed toxicity, as TIEs need to be conducted immediately upon findings of mortality while the sample is fresh, and the laboratory cannot wait for review and direction. There should be established triggers specified in the Order – if these triggers are exceeded, the lab would automatically conduct TIE tests. For an example of effective TIE triggers, please refer to the East San Joaquin order. Generally, in order for a TIE to be conclusive, there needs to be a substantial toxic effect (for example, ≥50% reduction in the organism response relative to the associated lab control). However, in cases where toxicity is observed and simultaneous pesticide chemistry provides a clear explanation for toxicity (i.e. pesticide levels exceed toxic thresholds), a TIE is not likely to be necessary. TIEs should be reserved for cases where there is substantial toxicity not explained by chemical analysis results.

CA-17

5. It is not clear why pesticide chemistry is not required to always be monitored concurrently with toxicity testing. If a toxicity test results in high mortality, what information would be used to determine likely cause if no pesticide chemistry or TIE tests are done? This information is needed in order for the agricultural community to address the cause of toxicity and reduce future impacts.

CA-18

6. Pesticide chemistry and toxicity monitoring (both water and sediment) should always be conducted concurrently with the bioassessment monitoring that is conducted every 5 years, to assist with identification of potential stressors that affect invertebrate communities. Currently, the schedules do not match up.

CA-19

7. The timeline in the draft Order does not require limits to be met until 2031, with no interim targets. In contrast to groundwater, changes in management practices are expected to result in immediate reductions in pesticide concentrations in surface water. Most current use pesticides are not expected to persist in surface water or sediment for more than a few months. Exceptions include bifenthrin and chlorpyrifos, but even those are not likely to persist in sediment for more than a couple of years. To allow growers time to implement new measures and change pesticide use practices, a timeline of achieving limits within 5 years rather than 10 seems reasonable.

CA-20

Riparian Area Management

American Rivers previously provided detailed comments on the staff recommendations for riparian area management (Attachment 1), and we support the requirements specified in the draft order. Riparian setbacks serve not just as a management practice to mitigate the transport of pollutants to receiving waters, but they also serve another critical purpose: they enhance the resiliency of aquatic ecosystems and allow them to recover more quickly and more fully when these ecosystems are impacted by multiple pollutants, as they inevitably will be in regions with intensive agricultural practices. If the goal is to maintain intensive agricultural production in the region while protecting healthy ecosystems and water resources, establishment of riparian buffers is absolutely essential.

CA-21

However, we do strongly recommend that the Board consider requiring a small setback for Order 1 streams, which include man-made ditches. In the current draft order, there is no setback required for Order 1 streams (except to retain existing setback and riparian area), while there is a 250 ft setback required for the largest streams. However, available data indicate that better protection of the smaller streams actually has more overall benefit to the health of a watershed compared to establishing buffers around the larger bodies. In addition, in many cases an operational setback is already in place for small ditches and streams, because of pesticide label requirements. Once pesticides enter these small waterways they will be quickly transported to the larger water bodies downstream. Installation of grass filter strips or

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CA-21 cont. other low dense vegetation in these operational setbacks will help to prevent transport of pesticides and nitrates.

CA-22 Another consideration to keep in mind is the need to avoid vegetation that will attract pollinators in locations close to crops that may receive pesticide runoff. Systemic pesticides such as the neonicotinoids may be transported off the fields to these operational setbacks, where they are taken up by plants. If these plants flower and attract pollinating insects, those insects may be adversely impacted as well as the birds that normally feed on them. Therefore, in many cases it would be preferable to maintain short mowed vegetation in closest proximity to fields, with taller herbaceous vegetation, shrubs, and trees allowed to grow closer to the water bodies.

CA-23 We appreciate the Board's consideration of these comments, and we look forward to further engaging with the Regional Board and stakeholders to ensure better protection of water resources, ecosystems, and communities in the Central Coast region. Please feel free to contact me with any questions, or to discuss any of the recommendations described above.

Sincerely,



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Attachment 1

Comments regarding Ag Order 4.0

Submitted May 10, 2019 by Lisa Hunt

American Rivers
Rivers Connect Us®

May 10, 2019

Via Electronic Mail
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Comments regarding Ag Order 4.0

Dear Chair Wolff and Board Members:

CA-24 Thank you for the opportunity to provide comments on the development of Ag Order 4.0 in advance of the Board meeting to be held on May 15-16. This letter focuses on Table 5 of the Feb 23, 2019 Staff Report, and also includes a few general comments on related items in the staff report. My American Rivers colleague, Jeff Odefey, is submitting a separate letter focusing on balancing economic costs and benefits.

CA-25 American Rivers is a national nonprofit organization with a mission to protect wild rivers, restore damaged rivers, and conserve clean water for people and nature. Much of our work in California takes place at the interface of agriculture and the water environment, and we are deeply concerned about the continuing impacts of agricultural pollution both on surface water ecosystems and on drinking water and human health. As Director of River Restoration Science in California and a researcher at the University of California - Berkeley, my comments focus on the technical and scientific aspects of the staff recommendations.

CA-26 We fully support the conceptual recommendations laid out by Regional Board staff, recognizing that details still need to be fleshed out and the specific recommendations refined with input from all stakeholders. All of the elements proposed in the staff report are essential to achieve protection and restoration of beneficial uses of both surface water and groundwater, but the emphasis should be on meeting numeric limits in receiving water bodies and enhancing the resiliency of those water bodies so that they can recover more quickly when impacts do occur.

CA-27 **Numeric Limits, Application Limits, and Management Practices**

Despite recent progress in implementation of better management practices to help protect water quality, the impacts to water quality in California and elsewhere continue to worsen with increasing intensification of agriculture and as problematic pesticides are replaced with others that often have equally severe effects. For example, some of the newer insecticide classes such as pyrethroids and neonicotinoids are toxic to aquatic organisms at extremely low concentrations, and are being frequently

CA-27 cont.

detected in surface water at toxic concentrations in California and around the world[1]. Along with the intensification of agriculture, these impacts are expected to worsen due to climate change – for example, we found that rising temperatures associated with climate change in the Sacramento River basin are expected to further increase the use of pesticides, resulting in elevated pesticide concentrations in surface waters and worsening impacts to stream invertebrate communities [2]. Similarly, nitrate contamination of groundwater has continued to grow despite commitments to prioritize the problem[3], and over 1 million people in California lack safe drinking water[4].

CA-28

Numeric limits are absolutely critical to protecting beneficial uses, and requiring achievement of water quality objectives in receiving waters will allow the agricultural community maximum flexibility in finding the most effective ways to meet the objectives. As the Board has heard from the agricultural community, it may not be feasible to meet to meet water quality objectives that are adequately protective without making substantial changes to the way that agriculture operates in the region. Given the severity of the current impacts both to aquatic life and to human health, it is past time to make some major changes.

CA-29

While we encourage incentives to implement better management practices, this is no substitute for monitoring compliance with numeric limits in receiving waters. In the case of discharges to surface waters, it is relatively straightforward to evaluate compliance with numeric limits by sampling. However, in the case of groundwater this is complicated by the extended period of time it takes for discharges to reach groundwater. Therefore, fertilizer applications limits act not just as a management practices, but also as a reasonable surrogate for compliance with groundwater quality objectives.

CA-30

Similarly, as discussed below, riparian buffers serve not just as a management practice to mitigate the transport of pollutants to receiving waters, but they also serve another critical purpose: they enhance the resiliency of aquatic ecosystems and allow them to recover more quickly and more fully when these ecosystems are impacted by multiple pollutants, as they inevitably will be at least occasionally in regions with intensive agricultural practices.

CA-31

Riparian Buffers

Regulations requiring riparian buffers are common around the world. In the European Union, Regulation No. 1307/2013 stipulates buffers along watercourses but leaves the required buffer width determination to each member state[5]. I have conducted research on the effectiveness of riparian buffers in multiple countries in South America, where Paraguay likely has the most stringent regulations, requiring forested buffer widths of at least 100m even on the smallest streams in agricultural areas[6].

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[1] Sebastian Stehle and Ralf Schulz, "Agricultural Insecticides Threaten Surface Waters at the Global Scale," *Proceedings of the National Academy of Sciences* 112, no. 18 (May 5, 2015): 5750–55, https://doi.org/10.1073/pnas.1500232112.

[2] Ming-Chih Chiu, Lisa Hunt, and Vincent H. Resh, "Climate-Change Influences on the Response of Macroinvertebrate Communities to Pesticide Contamination in the Sacramento River, California Watershed," *Science of The Total Environment* 581–582 (March 2017): 741–49, https://doi.org/10.1016/j.scitotenv.2017.01.002.

[3] Thomas Harter et al., "Report for the State Water Resources Control Board Report to the Legislature," n.d., 92.

[4] "TRUE: 'More than a Million Californians' Don't Have Clean Drinking Water … It Could Be Higher | PolitiFact California," accessed May 7, 2019, https://www.politifact.com/california/statements/2019/feb/14/gavin-newsom/true-more-million-californians-dont-have-clean-dri/.

[5] Laura L. de Sosa et al., "Riparian Research and Legislation, Are They Working towards the Same Common Goals? A UK Case Study," *Environmental Science & Policy* 82 (April 2018): 126–35, https://doi.org/10.1016/j.envsci.2018.01.023.

[6] L. Hunt et al., "Do Riparian Buffers Protect Stream Invertebrate Communities in South American Atlantic Forest Agricultural Areas?," *Environmental Management* 60, no. 6 (December 2017): 1155–70, https://doi.org/10.1007/s00267-017-0938-9.

CA-32 The effectiveness of riparian buffers in mitigating impacts of agricultural pollutants to water bodies has been a major focus of my research, and I am very familiar with the global research findings on this subject, as well as current practices and requirements in various locations. I understand that Regional Board staff has undertaken a thorough review of the scientific literature on riparian buffers, as well as existing local, state, and national requirements at the global level. Just recently, there have been several relevant comprehensive review papers published, and I encourage the Regional Board to take new information into account when further refining riparian buffer requirements under Ag Order 4.0. I briefly summarize some of the most recent results below.

CA-33 There is ample and conclusive evidence that riparian buffers help to mitigate water quality impacts of agriculture, including those related to nutrients, pesticides, sediments, and temperature[7]. These benefits have been best documented and quantified for nitrogen. Perhaps surprisingly, riparian buffer zones are even more effective at reducing transport of nitrates to groundwater than to surface water. A recent meta-analysis found an overall NO_3-N reduction of 33% (95% confidence interval of 17 – 45%) in surface water and 70% (95% confidence interval of 62-78%) in groundwater, compared to controls with no buffers[8]. The reduction in concentrations in groundwater is believed to be primarily due to denitrification, which is dependent on an adequate supply of carbon as well as anaerobic conditions, and is most effective in established riparian forest buffers[8,9].

CA-34 Although it is clear that riparian buffers have substantial benefits to water quality, there are no general recommendations for what constitutes protective buffer widths, as this is dependent on many site-specific factors as well as the types of pollutants considered. One meta-analysis found that buffer zones < 10m reduced NO3–N and total N as well as wider buffer zones did, although the variation was too high for the results to be considered conclusive[8]. Another review cited a study that found that 15m wide buffers retained 2.5 times more nitrogen from the sub-surface groundwater than 8m wide buffers, and other studies indicating that buffer widths of 20-30m are necessary to protect streams from temperature impacts[7]. My own research in soybean production regions of three countries in South America found that all samples with total insecticide toxic units >1 (indicating likelihood of invertebrate mortality) were located in streams with riparian buffer widths < 20m, and in Brazil the buffer width was the predictor variable with the greatest influence on total insecticide levels[6]. As I summarized in that paper, other researchers came to similar conclusions, reporting that buffer zones of 5 to 20m helped to mitigate pesticide effects on streams[6].

CA-35 In addition to reducing transport of agricultural pollutants to water bodies, riparian buffers help to protect and restore aquatic ecosystems by providing high quality habitat that builds resiliency in aquatic communities. In my research, I found that in streams in Argentina, where there were no riparian buffers required, there was a clear relationship between pesticide levels and effects to stream invertebrate communities[10]. However, in Paraguay and Brazil where streams generally had ample riparian buffers, there were no discernable effects to invertebrate levels even when pesticides occurred at high levels,

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[7] Christian K. Feld et al., "Evaluating Riparian Solutions to Multiple Stressor Problems in River Ecosystems — A Conceptual Study," *Water Research* 139 (August 2018): 381–94, https://doi.org/10.1016/j.watres.2018.04.014.
[8] Elena Valkama et al., "A Meta-Analysis on Nitrogen Retention by Buffer Zones," *Journal of Environment Quality* 48, no. 2 (2019): 270, https://doi.org/10.2134/jeq2018.03.0120.
[9] Marc Stutter et al., "Current Insights into the Effectiveness of Riparian Management, Attainment of Multiple Benefits, and Potential Technical Enhancements," *Journal of Environment Quality* 48, no. 2 (2019): 236, https://doi.org/10.2134/jeq2019.01.0020.
[10] L. Hunt et al., "Species at Risk (SPEAR) Index Indicates Effects of Insecticides on Stream Invertebrate Communities in Soy Production Regions of the Argentine Pampas," *Science of The Total Environment* 580 (February 2017): 699–709, https://doi.org/10.1016/j.scitotenv.2016.12.016.

CA-35 cont.

similar to those found in Argentine streams[11]. While there may be more than one reason for this, this was likely due in large part to the presence of forested riparian buffers along the entire lengths of all streams we studied in Paraguay and Brazil, increasing the resilience and recovery ability of invertebrate communities in those streams. As I summarized in our paper, this conclusion was corroborated with evidence from other regions: for example, forested headwaters in Europe provide reservoirs of invertebrate populations that improve the recovery of downstream communities after disturbance from pesticide exposure, and upstream forested headwaters in Germany mitigated the effects of pesticides on downstream invertebrate populations[11].

CA-36

In intensive agricultural production regions such as the Central Coast, it is inevitable that there will occasionally be exceedances of protective numeric limits even when the best precautions are taken. This may be exacerbated in the future with extreme weather events that occur under climate change. Maintaining healthy riparian corridors with vegetated buffers will allow for establishment of healthy, diverse ecosystems that can more quickly recover after impacts do occur. If the goal is to maintain intensive agricultural production in the region while protecting healthy ecosystems and water resources in both surface water and groundwater, establishment of riparian buffers is absolutely essential.

CA-37

Another important factor for the Board to consider when contemplating why riparian buffers are necessary in addition to numeric limits is the issue of multiple stressors and cumulative effects. Aquatic Life Benchmarks are applied to individual pesticides, but multiple pesticides are often present in surface waters and sediments, and the combined effects may be significant even if levels of each individual pesticide are below the benchmarks. The cumulative effects are accounted for to some extent in the toxicity testing and the toxic unit summation for all pesticides (both of which are being recommended by board staff in Table 3), but these metrics include only acute toxicity effects (short term mortality), and don't account for the chronic impacts that occur from longer term exposure to multiple pesticides. These cumulative impacts are difficult to accurately evaluate or regulate, and rather than requiring an impractical and extremely expensive level of monitoring and analysis, it would be more effective to offset these adverse effects with riparian buffers which provide an overall protective benefit to invertebrate communities.

CA-38

Some common finding of recent reviews were: (1) there is insufficient data to make conclusive recommendations on what constitutes protective buffer widths, and (2) quantitative before-after-control-impact (BACI) studies evaluating the effectiveness of buffer zone interventions are lacking. Implementation of riparian buffers in specific highly impacted watersheds, the strategy recommended by Board staff, would provide a prime opportunity for these types of quantitative studies and would greatly assist in future adoption of buffer requirements, both in the Central Coast region and elsewhere. In addition to immediate adoption of more riparian buffer requirements in priority watersheds, we recommend that the Board carefully consider how to integrate and adapt monitoring programs to allow collection of adequate data to support these information needs. I and others at American Rivers have considerable expertise and experience with implementing riparian restoration, and I look forward to the opportunity to provide input as further details are developed for Ag Order 4.0.

Safe Drinking Water

CA-39

It is absolutely critical that the Board adopt requirements that demonstrate its commitment stated in the recently adopted Human Right to Water resolution. Action needs to be taken now to put a stop to further pollution of groundwater. This is most clear in the case of nitrates, which is a growing human health problem despite recent efforts to improve conditions. However, it is also necessary for the Board to take

[11] Hunt et al., "Do Riparian Buffers Protect Stream Invertebrate Communities in South American Atlantic Forest Agricultural Areas?"

CA-39 cont.

action on pesticides to prevent them from entering groundwater. Because it often takes many years for pesticides to be transported to aquifers where they can then remain for decades or more, many of the pesticides most frequently detected in groundwater now are no longer used. However, some of the newer pesticides such as neonicotinoids are highly water soluble and are just starting to be detected in groundwater, with potential health effects largely unknown. A recent study of both shallow and deep irrigation wells in Wisconsin found that 78% of them were contaminated with the neonicotinoid thiamethoxam[12]. The neonicotinoid clothianidin was detected in 94% of groundwater samples in a study in Iowa[13], and another study in Iowa found neonicotinoids in finished drinking water, suggesting that conventional water treatment practices do not remove these pesticides[14]. Recent sampling by the California Department of Pesticide Regulation has found neonicotinoids in groundwater in the Central Coast as well as in the Central Valley. Even though concentrations measured thus far are below human health thresholds, once aquifers are contaminated it can be an extremely difficult and long term process to restore water quality once health impacts are found. In addition, pesticides in shallow groundwater can eventually enter surface water and impact aquatic organism.

CA-40

The Regional Board's mandate for protection of groundwater is different than that of DPR's, and it is not sufficient for the Board to defer to DPR for groundwater protection. While DPR is concerned primarily with pesticides that occur at concentrations above human health thresholds in groundwater, the Regional Board must also enforce the Antidegradation Policy by preventing further contamination by pesticides and other pollutants.

CA-41

The Board must also address issues of environmental injustice and the structural racism that is implicit in the disproportionate impacts of groundwater pollution on people of color and disadvantaged communities that lack access to clean and safe drinking water. People living in these communities are often adversely affected not just by polluted water, but by many other environmental impacts and stressors, with a heavy cumulative burden. While no doubt not intentional on the part of either the agricultural or regulatory communities, these disproportionate impacts constitute environmental racism and the Board can choose to either be complicit and perpetuate this, or take action to change it.

CA-42

Economic Analysis and Equity

When conducting any economic analysis under CEQA or other processes, we strongly urge the Board to carefully consider issues of equity in addition to overall economic impacts in the region. This applies to considering the economic impacts on families and communities that are already struggling to get by without the added cost and time commitment of having to purchase bottled water and find alternative places to shower. In addition, it is important to consider the economic impacts to growers, especially in cases where small farmers are disproportionately impacted financially. In the case of riparian buffer requirements, small-scale farmers with fields adjacent to water bodies are likely to experience disproportionate economic impacts if they need to take a significant portion or their land out of production. Allowing participation in a Cooperative Watershed Restoration Program may be a cost-effective way for these small farmers to comply with the requirement, but the fee structure should be carefully considered to avoid putting small farmers out of business or causing disproportionate hardship.

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[12] Benjamin Z. Bradford, Anders S. Huseth, and Russell L. Groves, "Widespread Detections of Neonicotinoid Contaminants in Central Wisconsin Groundwater," ed. Carla A. Ng, *PLOS ONE* 13, no. 10 (October 3, 2018): e0201753, https://doi.org/10.1371/journal.pone.0201753.

[13] Michelle L. Hladik et al., "Neonicotinoid Insecticide Removal by Prairie Strips in Row-Cropped Watersheds with Historical Seed Coating Use," *Agriculture, Ecosystems & Environment* 241 (April 2017): 160–67, https://doi.org/10.1016/j.agee.2017.03.015.

[14] Kathryn L. Klarich et al., "Occurrence of Neonicotinoid Insecticides in Finished Drinking Water and Fate during Drinking Water Treatment," *Environmental Science & Technology Letters* 4, no. 5 (May 9, 2017): 168–73, https://doi.org/10.1021/acs.estlett.7b00081.

CA-43 It is obvious that the Board is carefully considering the many complex issues addressed in Ag Order 4.0, and staff has put substantial time and thought into preparing their recommendations, with input from many stakeholders. We support these efforts and hope to provide additional input during the process of further development of the Order. We appreciate your time to consider these comments and we look forward to participating.

Sincerely,



Lisa Hunt, PhD, PE
Visiting Scholar, University of California at Berkeley
Director, California River Restoration Science
American Rivers
2150 Allston Way, Suite 320
Berkeley CA 94704
510-809-8010

Response to Comment CA-1

The CCWB acknowledges the commenter's background and interests.

Response to Comment CA-2

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

Response to Comment CA-3

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

Response to Comment CA-4

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

Response to Comment CA-5

This comment is summarized and responded to in the following Master Responses: 2.3.2 and 2.3.4.

Response to Comment CA-6 through CA-7

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

Response to Comment CA-8

This comment is summarized and responded to in the following Master Responses: 2.3.3; 2.1.8; and 2.4.6.

Response to Comment CA-9 through CA-10

This comment is summarized and responded to in Master Response 2.4.5.

Response to Comment CA-11

This comment is noted.

Response to Comment CA-12

This comment is noted.

Response to Comment CA-13

This comment is summarized and responded to in the following Master Responses: 2.6.4 and 2.6.3.

Response to Comment CA-14

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

Response to Comment CA-15

This comment is summarized and responded to in the following Master Responses: 2.6.3 and 2.5.1.

Response to Comment CA-16 through CA-18

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

Response to Comment CA-19

This comment is summarized and responded to in Master Response 2.5.1.

Response to Comment CA-20 through CA-22

This comment is responded to in Master Response 2.8.8.

Response to Comment CA-23

Thank you for your comment.

Response to Comment CA-24

Thank you for your comment.

Response to Comment CA-25

The CCWB acknowledges the commenter's background and interests.

Response to Comment CA-26

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

Response to Comment CA-27

This comment is noted.

Response to Comment CA-28

This comment is summarized and responded to in Master Response 2.5.1.

Response to Comment CA-29

This comment is summarized and responded to in Master Response 2.5.1.

Response to Comment CA-30 through CA-38

This comment is responded to in Master Response 2.8.8.

Response to Comment CA-39

This comment is summarized and responded to in Master Response 2.4.6.

Response to Comment CA-40

This comment is summarized and responded to in Master Response 2.4.5.

Response to Comment CA-41

This comment is summarized and responded to in Master Response 2.4.6.

Response to Comment CA-42

This comment is summarized and responded to in the following Master Responses: 2.9.1; 2.9.2; and 2.9.3.

In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CA-43

Thank you for your comment.

Letter CB: Eric Lauritzen, California Strawberry Commission (June 22, 2020)

Letter CB

From: Jennifer Spaletta
To: AgNOI, WB@Waterboards
Cc: Joy Lewis; Eric Lauritzen
Subject: Comments on Draft EIR and Comments on Draft Ag Order
Date: Monday, June 22, 2020 4:22:17 PM
Attachments: Cal Strawberry Comments on Ag Order 4.0 and DEIR.pdf

EXTERNAL:

Please find attached the comments of the California Strawberry Commission.

JENNIFER L. SPALETTA
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CALIFORNIA STRAWBERRY COMMISSION

June 22, 2020

Via email: AgNOI@waterboards.ca.gov

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: Comments on Draft EIR and Draft Ag Order

Dear Board Members:

CB-1 The California Strawberry Commission respectfully submits the following comments on the proposed Ag Order 4.0 (Draft Order). We have limited our comments to issues that are particularly relevant to the California Strawberry industry. We also join the comments of the Ag Partners.

Background

CB-2 Approximately 90% of American strawberry production occurs on the California Central Coast. California strawberry production included 34,167 planted acres in 2020, with most of that acreage in the Oxnard, Santa Maria and Watsonville/Salinas regions. These acres generated $2.34 Billion in production value in 2018 with a total economic contribution of over $3.2 Billion. Strawberries are the fourth most valuable commodity in California, grown on only 1% of the state's acreage. More than 90% of strawberry dollars remain in our local communities here on the Central Coast. These dollars support our local labor force and generate returns to Central Coast land.

The proposed Ag Order 4.0 will dramatically impact the California strawberry industry, as we explain below. We hope these comments provide constructive suggestions to modify the order to maintain its water quality goals, while minimizing the unnecessary adverse impact on the strawberry industry along with the local economy and people it supports.

Issue 1: Economic Impacts

CB-3 The Commission joins the comments of the Ag Partners explaining that the Draft Order and Draft EIR contain an incomplete and inadequate analysis of economic impacts and the resulting environmental impacts. As we explain in more detail below, the Nitrogen (N) discharge limits in the Draft Order, alone, will reduce strawberry production by half within 10 years and in total within 30 years. The economic impacts are not hard to estimate and are not exaggerated or speculative.

The Central Coast provides the ideal soil and climate to grow berries, and these lost acres cannot be replaced. Currently there are two to three crops grown rotationally on most acres, and one of those crops is strawberries. The average N discharge of just two of those crops (as computed using the formulas in the Draft Order) will exceed the N discharge limit in the Draft Order in 10 years. This means

CB-3 cont.

that only one crop will be able to be grown – reducing available strawberry acreage by half. *Half of our industry is over $1 Billion in annual production value, and about $1.5 Billion in annual total economic contribution – 90% of which would be felt locally on the Central Coast.*

But this is not the end of the impact. The N discharge limits in the Draft Order ramp down to 50 lbs/acre by 2050. Strawberries currently cannot be grown and meet the 50 lbs/acre discharge limit, as computed under the Draft Order. *Thus, within thirty years, the Draft Order could eliminate the strawberry industry and its $3.2 billion in economic contribution on the Central Coast.*

These are very serious impacts that can and should be avoided. The order can be crafted to achieve water quality goals and reduce economic impacts. We urge the Board to consider these proposed changes and to direct staff to undertake a complete economic analysis before moving forward.

Issue 2: Nitrogen Discharge Limits

The Draft Order includes both crop specific nitrogen (N) application limits and total N discharge limits. Most strawberry acres already comply with the proposed N application limit of 330 pounds per acre. While we do not think that a specific N application limit is necessary or even legally permissible, it is not the limiting factor for strawberry production under the Draft Order.

CB-4

Rather, it is the proposed total N discharge limit (as currently proposed to be computed) that will cause the most severe impact. The proposed total N discharge limit would apply to each acre of irrigated land over the course of an entire year. Strawberries are a rotational crop. A high percentage of acres are leased for strawberry production for only a season (part of a year) and then rotated to a different crop or two (e.g. leafy greens, cool-season vegetables) within the same 12-month period.

The Draft Order requires that the N discharge from all crops grown on an acre during the year be added together, and not exceed the applicable limit. The proposed N discharge limits begin at 500 lbs/acre in 2020 and ramp down to 50 lbs/acre in 2050. (See Draft Order at page 61, Table C.1-2). If these limits are adopted, strawberries will no longer be able to be rotated with other crops on the same field in the same year, and by 2050, may not be grown at all in the Central Coast. It is environmentally beneficial to encourage crop rotation, yet the Draft Order limits these opportunities.

CB-5

The average strawberry grower in Region 3 applies 250 lbs. of N (applied fertilizer + irrigation N) per acre to produce an average of 65,000-70,000 lbs of fruit per acre (85-90lbs N removed). Under this scenario, using the proposed equations, the computed N discharge would be 140-160 lbs/acre. This would exceed the discharge limit by 2035, assuming the single strawberry seasonal crop was the only crop grown on the land in that year (which is currently untenable). Assuming the normal double-cropping (rotation of strawberries and leafy greens) the computed total N discharge would exceed the discharge limit much earlier – likely in the first five to six years of the order. If adopted, the order would eliminate the ability to double-crop strawberries in the near term – effectively cutting the available acreage for the crop in the Central Coast in half.

CB-6 Carried out to 2050, the Draft Order would eliminate commercial strawberry production on the Central Coast. Strawberries cannot be economically grown and achieve a 50 lbs/acre N discharge as computed under the Draft Order. Given that the Central Coast produces 90% of our nation's strawberries – this is a very serious impact to both the economy and the national food supply.

CB-7 We respectfully suggest that the Board consider alternatives to the strict N discharge limit method in the Draft Order, that can achieve the water quality objectives without these draconian measures. First, the crop coefficients and the formula used to estimate the amount of N that may discharge to groundwater need to be refined. There is too much uncertainty in these numbers today to use them for the purpose proposed in the Draft Order. The current N removal coefficient for strawberries was developed based on the varietal Albion, which represents less than one percent of the strawberries grown in California. Additional research is needed to develop a N removal coefficient that more accurately represents the majority of the strawberries grown.

CB-8 Second, the discharge limit calculation is over-simplified and does not capture critical parts of the N cycle for strawberry plants. One critical factor is mineralization of N that is sequestered in strawberry plant tissue that is not removed from the field at harvest. Bottoms, Hartz and Cahn (http://cemonterey.ucanr.edu/files/171002.pdf) reported that as much as 220 lbs of N is sequestered in a strawberry crop's above ground biomass (fruit, leaves, steams) in a 2 row crop system grown with Albion. In Santa Maria, they use a four-row crop system that has a much higher plant density per acre and thus more plant biomass and more N accumulation in the plant biomass. After harvest, the plant tissue remains in the field and is worked into the soil, providing organic material for the next crop. Mineralized N does not leach and therefore should be subtracted from applied N before estimating potential N discharge. Cahn et al (https://ucanr.edu/blogs/strawberries_caneberries/blogfiles/50203.pdf slide 11) estimates that strawberry crop residues (plants left behind in the field after harvest) can account for mineralization of 30-60 lbs. of N/acre. That 30-60 lbs. could be the difference needed to produce a profitable strawberry crop when discharge limits get below 200 lbs.

CB-9 Further, the industry now uses cultivars that produce at least 20% higher yields. If only 100 or 120 lbs. of N are removed with the marketable fruit, then there is likely more than 100 lbs. remaining in crop residue if we assumed that 100% of the applied N was taken up by the plant and if that N efficiency is in the 90-95% range.

CB-10 The current crop coefficients and formula in the Draft Order are not able to reflect the reality of what is happening in the field or the groundwater table. More research is needed to confirm how much of the N applied to the current varietals of strawberries grown is removed in the fruit, remains in the plant material left in the field to mineralize, and how much really is available for leaching. It is unreasonable to impose strict discharge limitations – with clearly very large economic and food supply impacts – given this uncertainty.

CB-11 This is precisely why the State Water Resources Control Board did not impose specific limits in the precedential East San Joaquin WDR. Rather, the Board recognized the need for additional research, and even more importantly, the need to address N discharge on a regional, rather than field level. A strict discharge limit applied to each farm in the Central Coast does not account for geographic and hydrologic differences or the ability of the larger environment to process N without causing water quality problems. In some areas, more N discharge might be possible without water quality impacts, than in others. The Groundwater Protection Formula and Targets developed in the East San Joaquin WDR were designed to address this specific issue so that farming operations could tailor their N impacts to their surroundings – avoiding water quality impacts while also limiting adverse impacts on the agricultural industry. We urge the Board to adopt that regional approach here.

Issue 3: Ranches with Impermeable Surfaces, Slopes

CB-12 The Draft Order places strict limits on the amount and intensity of stormwater than can leave a ranch with impermeable surfaces – which includes most strawberry acreage. The order also requires all farmers with impermeable surfaces on slopes greater than 5% have a certified sediment and erosion plan. (See Draft Order at page 37). Both of these proposed requirements will be extremely costly for the strawberry industry and are more than is needed to protect water quality.

CB-13 First, the Board does not have authority to regulate stormwater or how it is flows. Rather, the Board has authority to regulate discharge of waste - stormwater is not a waste. The discharge of sediment is a waste subject to regulation. The order can prohibit the discharge of sediment and growers are already required to participate in surface water monitoring plans to identify and correct these problems.

CB-14 Second, the requirement for certified plans for all acres with impermeable surfaces and slopes greater than 5% is excessive and very costly. The Draft Order did not evaluate the full economic impact of this requirement – it only estimated the cost of developing a "plan" at $45 an hour (which is too low). This evaluation omits the fact that strawberry growers will need multiple plans due to crop rotation, as well as the cost of implementing those plans. Implementation is particularly challenging for strawberry growers because they rotate for seasonal production on land rented from others. As proposed, about one-third of all strawberry growers (or their landlords) will need to build detention basins and take land out of production – which will further drive up rents.

CB-15 Ranches with 5% slopes and impermeable surfaces should address erosion issues in their uncertified Sediment and Erosion Management Plan (SEMP). The requirement for a *certified* plan should be limited to acres with impermeable surfaces that have 10% slopes on at least 30% of the farm, or 10 acres, whichever is greater, and are located on land with erodible soil that discharges to a stream or wetland (not a ditch). The order could also allow the executive director to require certified plans for additional acres when circumstances suggest it is needed, such as when the surface water monitoring program identifies sediment discharges traceable to a ranch with impermeable surfaces.

CB-16 Notably most organic strawberry production, small growers and often new and Latino growers, farm on fringe lands with greater slopes. The proposed requirements in the Draft Order will disproportionately impact these important segments of strawberry production on the Central Coast.

Issue 4: Riparian Setbacks and Vegetation Requirements

CB-17 The Draft Order requires "operational set-backs" of 1.5 times the width of the active channel on each side of the stream and "riparian setbacks" of between 50 and 175 feet (Draft Order at pages 41, 78), or more if the land is sloped. These setbacks do not correlate to water quality impacts from the irrigated land – they are required under the Draft Order based on the location of the property, not based on the discharge of waste from the farming operation on that property. The Draft Order estimates that more than 4,000 acres will be taken out of production with the setbacks. (Draft Order, Attachment A, page 226).

CB-18 The setback requirements exceed the Board's authority and are a constitutional taking. There is no nexus between these requirements and the water quality impacts of the regulated operation – rather the regulated operation is being asked to relinquish the ability to farm certain land and develop riparian habitat for a larger public purpose, in exchange for a permit to irrigate and farm the property. The fact that the estimated acreage subject to the setbacks is less than 1% of the total irrigated acreage in the region is immaterial. Any taking of private property for a public purpose without compensation is improper.

CB-19 We urge the Board to delete both the operational and riparian setback requirements.

Thank you for the opportunity to comment on the Draft Order and Draft EIR.

Respectfully submitted,



Eric Lauritzen, Director of Regulatory Affairs
California Strawberry Commission
elauritzen@calstrawberry.org

Response to Comment CB-1

Thank you for your comment.

Response to Comment CB-2

This comment is noted.

Response to Comment CB-3

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

Response to Comment CB-4 through CB-6

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

Response to Comment CB-7

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

Response to Comment CB-8

This comment is summarized and responded to in the following Master Responses: 2.1.8 and 2.3.4.

Response to Comment CB-9 through CB-10

This comment is summarized and responded to in the following Master Responses: 2.3.4 and 2.3.10.

Response to Comment CB-11

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

Response to Comment CB1-2

This comment is summarized and responded to in Master Response 2.2.3.

Response to Comment CB-13

This comment is summarized and responded to in Master Response 2.7.5.

Response to Comment CB-14

This comment is summarized and responded to in Master Response 2.7.8.

Response to Comment CB-15 through CB-16

This comment is summarized and responded to in Master Response 2.7.5.

Response to Comment CB-17

This comment is responded to in Master Response 2.8.8.

Response to Comment CB-18

This comment is responded to in Master Response 2.8.8.

Response to Comment CB-19

This comment is responded to in Master Response 2.8.8.

Letter CC: Allison Jordan, California Sustainable Winegrowing Alliance (June 22, 2020)

Letter CC

From: Allison Jordan
To: AgNOI, WB@Waterboards
Cc: Lisa Francioni
Subject: Comments on Draft Agricultural Order 4.0
Date: Monday, June 22, 2020 4:05:01 PM
Attachments: CSWA letter for Region 3 Order 4.0_2020.pdf

EXTERNAL:

Dear Executive Officer Keeling:

Attached please find a comment letter on the California Regional Water Quality Control Board, Central Coast Region's draft Region 3 Agricultural Order 4.0 that I am submitting on behalf of the California Sustainable Winegrowing Alliance.

Thank you for the opportunity to comment.

Sincerely,

Allison Jordan
Executive Director, California Sustainable Winegrowing Alliance
425 Market Street, Suite 1000
San Francisco, CA 94105
Ph: 415/356-7535
ajordan@wineinstitute.org

CALIFORNIA
SUSTAINABLE WINEGROWING
ALLIANCE

June 22, 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

Re: Comments on draft Agricultural Order 4.0

Dear Executive Officer Keeling:

CC-1 On behalf of the California Sustainable Winegrowing Alliance (CSWA), I appreciate the opportunity to submit comments on the California Regional Water Quality Control Board, Central Coast Region's (RWQCB) draft Agricultural Order 4.0. While we are aware that the Vineyard Coalition is submitting comments on a broader set of issues, CSWA is specifically commenting to urge that the order specify that sustainability certification programs, and the documentation they require, can satisfy the order's Farm Plan requirements.

CC-2 CSWA is a 501(c)(3) nonprofit organization established in 2003 through a partnership between Wine Institute and the California Association of Winegrape Growers to promote sustainable winegrowing from ground to bottle throughout the state, including in the Central Coast region. Among CSWA's educational tools is a comprehensive self-assessment California Code of Sustainable Winegrowing workbook (the Code) covering 140 vineyard and 104 winery sustainable practices. The Code includes dozens of practices that specifically address the control of waste discharges including nitrate, pesticides and sediment to surface or groundwater. Results of self-assessments are aggregated and reported publicly on a continuous basis in California Wine Community Sustainability Reports. (Available at: http://www.sustainablewinegrowing.org/sustainabilityreports.php)

CC-3 Building on the Code and broader Sustainable Winegrowing Program, CSWA introduced Certified California Sustainable Winegrowing in 2010. Certified wineries and vineyards must meet the following requirements each year, verified during an annual third-party audit:

- Complete an annual self-assessment using the California Code of Sustainable Winegrowing.
- Meet 58 vineyard and 37 winery prerequisite practices and exceed an overall score threshold. (For the complete list of prerequisite practices and program requirements see: sustainablewinegrowing.org/certification-resources.)
- Implement an Integrated Pest Management approach and comply with restrictions on crop protection materials.

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CC-3 cont.

- Measure and record sustainability performance metrics including water, energy, and GHGs for wineries, and water and applied nitrogen for vineyards.
- Prioritize, develop and implement action plans to continuously improve.

These certification performance-based requirements align with the water quality objectives of the draft Order. Currently there are 2,180 Certified California Sustainable Vineyards throughout California farming over 189,463 vineyard acres.

CC-4

CSWA requests that the order specify that existing documentation for sustainability certification programs – including Certified California Sustainable Winegrowing – can satisfy Farm Plan requirements. Formally recognizing sustainability certification programs will not only help the Central Coast Regional Water Quality Control Board meet the stated goals of the Order, but will also provide additional incentives for growers to continuously enhance their adoption of practices that have positive environmental and social outcomes. The documentation, planning, and evidence of practice implementation could be used to satisfy the Order's requirements in the INMP, PMP, SEMP, and RAMP. Our voluntary sustainability certification program provides resources and tools to identify environmental Best Management Practices that are best suited to the particular operation. While the information developed may not be in the format specified in the Order's Farm Plan requirements, the Order should allow sustainability certification programs to provide examples of how alternative documentation developed for certification could also satisfy the Order's Farm Plan requirements.

Please feel free to contact me directly with questions or concerns or visit our website to learn more (http://www.sustainablewinegrowing.org). Thank you for your consideration.

Sincerely,

Allison Jordan
Executive Director

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Response to Comment CC-1

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

Response to Comment CC-2

The CCWB acknowledges the commenter's background and interests.

Response to Comment CC-3

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

Response to Comment CC-4

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

Letter CD: Kevin Merrill and Sarah Lopez, Central Coast Water Quality Preservation, Inc. (June 22, 2020)

Letter CD

From: sarah@ccwqp.org
To: AgNOI, WB@Waterboards
Cc: kmerrill@mesavineyard.com; Keeling, Matt@Waterboards; Rose, Chris@Waterboards; Sahl, Elaine@Waterboards; Kukol, Diane@Waterboards; "Abby Taylor-Silva"; "Monterey County Farm Bureau"; "Claire Wineman"; "Kari Fisher"; "Tess Dunham"; "Sarah Lopez"
Subject: CCWQP Comment Letter, Draft Ag Order 4.0
Date: Monday, June 22, 2020 6:19:49 PM
Attachments: AgOrder4_CCWQPletter_062220.pdf

EXTERNAL:

Good afternoon,

Please find attached Preservation, Inc's comment letter on Draft Ag Order 4.0, transmitted at 6:12pm on 6/22/20. We appreciate the opportunity to provide comments. Please acknowledge receipt of this letter.

Thank you,

Sarah G. Lopez
Executive Director
Central Coast Water Quality Preservation, Inc.
831-331-9051 (mobile) // sarah@ccwqp.org

Central Coast Water Quality Preservation, Inc.
PO Box 2227 • Watsonville, CA 95077 • 831-761-8644

June 22nd, 2020

Dr. Jean-Pierre Wolff, Board Chair
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Via Email To: *AgNOI@waterboards.ca.gov*

RE: Comments on Draft Irrigated Lands Regulatory Program 4.0

Dear Chair Wolff and Members of the Board,

CD-1 Central Coast Water Quality Preservation, Inc. (Preservation, Inc.) manages the surface water Cooperative Monitoring Program (CMP) for growers enrolled in the Central Coast Regional Water Quality Control Board's (CCRWQCB) Irrigated Lands Regulatory Program (ILRP). We appreciate this opportunity to comment on the Draft ILRP 4.0. Please note that we have structured our comments according to the Draft MRP sections.

Sections B & C – TNA & INMP Reporting

CD-2 Sections B and C of the Draft MRP cover Total Nitrogen Applied (TNA) Reporting and Irrigation and Nutrient Management Plan (INMP) Summary Report Monitoring and Reporting, respectively. Upon adoption, the Draft MRP would apply TNA requirements to all operations currently required to submit one under Ag Order 3.0 (1,915 ranches). In 2022 it applies to all in Groundwater Phase 1 areas; by 2023 to all in Phase 2 areas; and by 2024 to all in other areas (i.e. Groundwater Phase 3). Subsequently, INMP reporting is phased in for these 3 areas sequentially between 2023 and 2027, and requires all of the TNA information plus nitrogen removal (in harvested product, etc.) and crop evapotranspiration.

CD-3 1) Section B, Items 8-15; Section C, Items 2 and 9-15: These items define specific information required for TNA and INMP reporting. We are not going to comment in this letter on specific TNA/INMP reporting items or formulas, except for the requirement to measure and report nitrate in irrigation water (see our bullet #4 below). However, we note here the large amount of discussion, critical thought, and suggestions for improvement that members of the Central Coast agriculture industry and technical providers have put into the existing TNA reporting system, and into the proposed future INMP reporting. We strongly urge the Water Board to consider this prior feedback, as well as new feedback from this round of public comment, as you move forward with future TNA/INMP reporting requirements.

CD-4 2) Third Party Role: The TNA/INMP reporting is an enormous exercise in data collection, management, and transmittal. There is also high redundancy between the Farm Plan, existing Annual Compliance Form (ACF), and the INMP information precedentially required by the East San Joaquin (ESJ) Order. As the specific contents, format, and data entry/delivery method are developed for the future INMP, it is essential that the CCRWQCB work with a Third Party and interested growers to ensure efficiency, minimize redundancies and potential for errors, and ensure that the required report content accurately conveys the information sought.

Central Coast Water Quality Preservation, Inc.
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CD-5 In order to complete the current TNA forms (i.e. those required for Ag Order 3.0), growers generally need to maintain electronic records and perform calculations in spreadsheet form, and/or work with a contractor to assist them in completing the actual web form submittal to GeoTracker. This submittal currently requires manual entry of calculated values (which must be performed in separate spreadsheets), into custom web forms. Growers should have the option to work with a Third Party to improve the efficiency and accuracy of this reporting (on behalf of growers, the CCRWQCB, and other stakeholders), and to eliminate the need for manual re-entry of data wherever possible.

CD-6 Even very sophisticated growers are challenged to collect highly accurate data to support existing TNA reporting requirements. Fertilization and irrigation schedules are highly individualized and private. Irrigation staff turnover can create inconsistencies in the way systems are operated and negate time spent training existing staff on how to monitor and report irrigation for the ILRP. Even for operations that have the skills and resources to perform the required TNA/INMP data collection and report calculations independently, the process would benefit from having a Third Party serve as an initial clearinghouse for this data, providing uniform assistance to growers or their staff/contractors when questions arise.

CD-7 There are also hundreds of small-acreage growers on the Central Coast who do not have strong English language skills, and/or have limited formal education and computer skills. In cases where they are selling product through a larger company, that company may have a full-time staff person dedicated to assisting these growers with regulatory compliance. With the planned major expansion in the number of growers with the TNA reporting requirement (and in future, INMP), these staff will be beyond over-extended. In cases where these growers do not have the benefit of assistance with regulatory compliance, they will be unable to collect and report meaningful data. In these cases the process simply *cannot* work without the involvement of a Third Party to provide uniform training, assistance, and data management.

CD-8 3) Data Management and Quality Assurance: Just as Preservation, Inc. currently serves as the initial collection point for thousands of surface water quality monitoring records each quarter, the initial point of TNA/INMP data delivery by growers should be a Third Party. The Third Party should then perform data validation and automated checking, just as Preservation, Inc. currently perform for the surface water CMP. To this end, the TNA/INMP dataset would benefit from having its own QAPP and designated QA Officer, as has always been the case for the surface water CMP dataset. Standard Operating Procedures (SOPs) that are listed in a QAPP result in more uniform measurement and data collection. A QAPP provides controls on precision, accuracy, and contamination/bias, and ensures that corrective actions are taken when problems arise that compromise data integrity. Data qualifiers are applied and "travel with" the final dataset to inform data end-users. A QAPP also documents standards and maintenance/calibration requirements for any equipment used in data collection. To our knowledge the TNA dataset generated during Ag Order 3.0 has not been subject to any of these standard quality assurance procedures. Quality assurance is especially important when the intended end-use of a dataset is verification of compliance with numeric limits that carry penalties for non-compliance.

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CD-9

Following data validation and checking, the Third Party should complete batched, electronic data deliveries, on a compliance schedule and according to a method designated by the CCRWQCB. In this case the term "batched" indicates a single delivery of a large number of fully granular individual records (as for the surface water CMP), and will not result in anonymized data. The TNA/INMP data submitted to the Third Party for checking would require a perjury statement, just as the TNA data do that are currently submitted via CCRWQCB web forms.

CD-10

4) Nitrogen Concentration of the Irrigation Water: Sections B and C in the Draft MRP list a requirement to obtain and report a "precise" (or exact) nitrogen concentration from the irrigation water source, for the purpose of TNA/INMP reporting. Item 13c in Section B of the Draft MRP provides examples of methods that may be used to obtain precise nitrate values in lieu of laboratory analysis, such as "portable measuring devices." However both sections then go on to reference minimum well reporting requirements from Section D of the Draft MRP which include a host of other constituents in addition to nitrate (from Table MRP-3) that are not relevant to TNA/INMP reporting, and which necessitate laboratory analysis. The well reporting requirements referenced from Section D also require that laboratory results be submitted electronically to GeoTracker, directly by the testing laboratory. These requirements effectively negate the option to obtain a precise/exact nitrate measurement via a portable measuring device, which may be an important cost-saving measure for programs providing compliance assistance to lower-resourced growers.

CD-11

While the additional well reporting requirements in Section D make sense in the context of a groundwater "status and trends" type monitoring program, they are unnecessary for TNA/INMP reporting, and in fact the current TNA web forms under Ag Order 3.0 neither request nor accept data for any constituents besides nitrate. The additional constituents required in Section D, as well as the lab-direct GeoTracker reporting requirement, increase the cost of these samples by a factor of at least 5 (from a cost in the ballpark of $25 for a simple nitrate test [less if a portable device is used], to a cost of $125-150 for the full suite of Table MRP-3 constituents with lab-direct GeoTracker reporting).

CD-12

For the purposes of TNA/INMP reporting, a precise measurement of *nitrate* should be the only required analyte. Also for the purposes of TNA/INMP reporting, nitrate measurements can continue to be reported to GeoTracker as they are for TNA reporting under the current Ag Order 3.0, i.e. along with the other required TNA data, by the reporting grower or Third Party program. The additional Section D, Table MRP-3 constituents are only relevant for the objective of assessing groundwater status and trends, and should only be required from the subset of wells needed for the trend monitoring network. Finally, lab-direct GeoTracker reporting is not a necessary step in making data publicly availablble, and ia also unnecessary for the objectives of TNA/INMP reporting and serves only to inflate compliance costs and limit the available selection of certified laboratories. We discuss this further in our comments on Section D – Groundwater Monitoring and Reporting.

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Section D – Groundwater Monitoring & Reporting

CD-13 Section D of the Draft MRP covers Groundwater Monitoring and Reporting. We preface our comments by acknowledging impacts to groundwater quality in Central Coast agricultural areas, and we support the protection of human health, in particular ensuring equitable access to safe domestic water supplies. Our comments on Section D are offered in the spirit of providing a robust groundwater data collection and review process, which generates the information needed to assess groundwater status and trends for the purposes of the ILRP.

CD-14 The Draft MRP discusses four types of groundwater monitoring and reporting in Section D, which are required in addition to a fifth type of monitoring described in Sections B and C (TNA and INMP Monitoring and Reporting). The Draft MRP does not define clear or unique objectives for all of these five monitoring requirements, and each requirement is partially or wholly redundant with at least one other requirement in terms of the data generated. For some monitoring types there is little to no information provided about the intended end-use of the data, and there is almost no discussion of quality assurance, data validation or management. This "menu" of many possible groundwater monitoring activities should be refined and reorganized as described below, to provide a coordinated and cost-effective ILRP groundwater quality program that generates a high-quality and accessible dataset capable of meeting defined objectives:

CD-15 1) On-Farm Domestic Wells – Our understanding is that the objective of this requirement is the *protection of human health*. This objective should be stated clearly in this section of the MRP. Our understanding is also that the CCRWQCB views spatially-explicit monitoring and reporting of every domestic well to be necessary to meet the objective of protecting human health. Finally, we understand that timely notification to domestic well users of potential health risks from the water supply is key in this regard. While we agree that notification to every single unit supplied by a domestic well is important, we do not necessarily agree that monitoring of every single well for every single parameter, every year is necessary to meet this objective. We suggest allowing for the following flexibility in monitoring requirements:

CD-16
- Monitoring for general minerals and nitrate on a schedule supported by existing nitrate data from the well in question. Wells with very high nitrate concentrations, located in basins with known impairment, may not need annual monitoring to confirm a continued health risk. Notifications to users could continue annually, citing the most recent test result. If a domestic well is needed for the regionwide status and trends network (discussed below in our comments on Groundwater Quality Trend Monitoring), it could be monitored at the designated trend monitoring frequency or every 5 years, whichever is more frequent.

CD-17
- Monitoring for 1,2,3-Trichloropropane (1,2,3-TCP) on a schedule supported by data. Wells with 1,2,3-TCP concentrations above a concern threshold, located in basins with known impairment, may not need annual monitoring to confirm a continued health risk. Notifications to users could continue annually, citing the most recent testing result. Wells with 1,2,3-TCP that are part of the trend monitoring network (discussed below) could continue to be monitored at the designated trend monitoring frequency or every 5 years, whichever is more frequent.

CD-18
- For wells that have demonstrated no nitrate or 1,2,3-TCP impairment for at least 3 years prior to 2021, AND are located in an unimpaired basin (as demonstrated by recent data), the frequency of future testing could be reduced.

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CD-19
- The need for *trend monitoring* of constituents of concern should be served primarily by a cooperative trend monitoring program (discussed below); "trend monitoring" should not be the primary objective of the On-Farm Domestic Wells requirement.

CD-20
- Data analysis to support reduced-frequency monitoring of On-Farm Domestic Wells could take place at the expense of the well owner/operator (or Third Party on their behalf), and could be submitted to the Executive Officer for review and approval

CD-21 Finally, we anticipate that the dataset generated by the On-Farm Domestic Wells requirement may contribute to regionwide trend monitoring efforts, especially as related to shallower groundwater zones. In these cases, the On-Farm Domestic Wells data should be leveraged, not duplicated by redundant testing requirements, to meet other groundwater monitoring and reporting needs.

CD-22 2) Irrigation Wells – Of all the groundwater requirements, this section is the most unclear in terms of objectives; is the most redundant with other requirements; and is the most prone to generating data of insufficient quality for intended end-uses. Given the data to be generated by the other four types of groundwater monitoring, we suggest changing the Draft MRP language that treats irrigation wells as a stand-alone monitoring requirement, to focus on clarifying how the desired data will be generated by the other four types of required groundwater monitoring.

CD-23 a. One important objective for monitoring irrigation wells is so that growers know the nitrogen content of their irrigation water and can use that to inform fertilizer management. This objective is accomplished in Sections B and C of the Draft MRP, with the monitoring and reporting required for the TNA and INMP summary reports. The TNA/INMP reporting is public (via GeoTracker submittal, regardless of laboratory involvement) and ranch-specific, and requires a "precise measurement" of irrigation well nitrate concentration. Though many growers will use a certified laboratory for that analysis, only a subset of certified laboratories are set up to perform GeoTracker-direct reporting, and those that are charge an extra fee for the service. If a portable nitrate testing kit can generate a precise measurement, this should remain an option for fulfilling TNA/INMP requirements, especially in technical assistance programs designed to support limited-resource growers.

CD-24 b. The other objective implied by this requirement is to assess groundwater quality status and trends in irrigated agricultural groundwater basins. This objective is partially accomplished by the On-Farm Domestic Well requirements (especially in shallow groundwater zones), and is accomplished in its entirety by the Groundwater Quality Trend Monitoring (GQTM) requirement. On page 17 of the Draft MRP, Item 12 correctly notes that some irrigation wells may be appropriate to include in a GQTM program, but that in these cases additional constituents of concern to the GQTM program would need to be monitored as well. There is no explanation given as to why irrigation wells not deemed necessary/appropriate for a GQTM program also need to be monitored on an individual basis, beyond the "precise measurement" of nitrate needed to support TNA/INMP reporting. And yet Table MRP-3 requires all of these wells to be monitored for major cations, anions, and other parameters in addition to nitrate, and also requires lab-direct GeoTracker reporting at an additional cost to growers.

CD-25 Several major concerns with using arbitrary irrigation well data for basin-wide status and trend analysis are that these wells are not of known construction; are not sampled with nearly the same

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CD-25 cont.

uniformity as wells in a coordinated program network; and may not be fully traceable between years due to inconsistencies in the way unique identifiers are assigned to wells for GeoTracker reporting. And yet, this appears to have been the Water Board's approach to GQTM under the existing Ag Order 3.0, and also appears to be intended as a continued approach, despite the new requirements specific to GQTM.

CD-26

If there are additional objectives that necessitate the specific monitoring and reporting of irrigation wells described in this section, those objectives should be clearly stated. In this case explanation should be added as to why the other four types of monitoring do not generate sufficient data to meet the objective(s). We request further opportunity for public comment to respond to any newly-disclosed objectives. Because the apparent objectives of Irrigation Well monitoring are redundant with other requirements, this adds unnecessarily to growers' cost of compliance and administrative burden, both of which fall disproportionately on operators with smaller acreage, language-barriers, and/or limited education and computing skills.

CD-27

3) Groundwater Quality Trends – This section indicates that a work plan for a Third Party cooperative approach to GQTM should be designed to (quantitatively) evaluate groundwater quality trends and assess the impacts of agricultural discharges on groundwater quality over time. We suggest these be more clearly stated as the program objectives, similar to the way Item E.3. on page 21 of the Draft MRP lays out the objectives for surface receiving water monitoring and reporting. Our detailed comments on a cooperative approach to GQTM are contained in Appendix A ("Concept Proposal for a Central Coast Regional Groundwater Trend Monitoring Program for Irrigated Agriculture"), which follows the close of this letter. We feel it is important for the major components of a regionwide GQTM program to be discussed during the public adoption process so that all stakeholders have the opportunity to review and comment on the general program framework. Please note in the comment package submitted by the Ag Partner Associations, that the industry supports a Third Party-led, cooperative approach to groundwater quality trend monitoring.

CD-28

We generally agree that the Individual Approach to GQTM described on pp. 19-20 of the Draft MRP is the appropriate individual version of the required Cooperative Approach, with two exceptions. First, the cooperative work plan requirement 14.b. on page 18 – to monitor discrete depth intervals - should also apply to individuals (page 19, Item 18). Second, the timeline for individual compliance should be adjusted to ensure that individual monitors perform compliance activities no later than growers participating in the cooperative compliance pathway. While members of a Third Party cooperative program will incur immediate costs in order to meet the specified schedule, enforcement of individual monitoring typically does not take place until *after a deadline has been missed*. Based on our history of managing the surface water cooperative monitoring program, we anticipate a subset of growers will select the individual compliance pathway, perform no compliance activities, and then beg entry into the cooperative program after being notified by the CCRWQB that they have missed a deadline. In fairness to the growers who achieve timely compliance via the cooperative pathway, and to ensure the successful launch of a cooperative program, this individual loophole should be closed. For example, a low-effort interim requirement could be added to file some proof that individual compliance activities are indeed in progress in time to meet the initial deadline.

CD-29

4) Ranch Level Groundwater Discharge – This section appears to require some of the same elements as the Individual Approach to GQTM, with several additional elements. The Draft Order and Draft MRP should clarify the CCRWQCB's intentions with regard to timelines and scope for imposing this requirement.

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CD-30

Section E – Surface Water Monitoring & Reporting

Section E of the Draft MRP covers Surface Water monitoring and reporting. Preservation, Inc. has managed the surface water Cooperative Monitoring Program (CMP) on behalf of Central Coast growers since 2005. We look forward to continuing to provide this service under Ag Order 4.0.

CD-31

1) Objectives for Surface Water Trend Monitoring: The 8th objective (h.) listed for Surface Receiving Water Quality Trend monitoring in the Draft MRP is to "identify specific sources of water quality problems." This is a change in wording from previous Ag Orders (2.0 and 3.0) in which it read, "*assist in* the identification of specific sources of water quality problems." The original wording should be maintained, as the Central Coast's CMP has always been an ambient, receiving water program for which the monitoring design is not conducive to the identification of specific sources. That is a role for Follow-up Monitoring, which is a separate requirement of the Draft MRP.

CD-32

2) Quarterly Exceedance Reports: Item 11 on p. 23 requires a new "Exceedance Report" to accompany each quarterly electronic data submittal. These have historically not been required of the CMP, and exceedance patterns for most sites/parameters monitored by the CMP tend to be recurring such that a quarterly exceedance report would not provide new/unique information as compared to the annual exceedance information that is provided each July 1st with the Annual Monitoring Report. Additionally, in 2019 Preservation, Inc. voluntarily prepared and submitted a user-friendly "Quarterly Report" spreadsheet tool along with our required quarterly data submittals. To our knowledge these were not used, so we discontinued the practice for 2020. Because a quarterly exceedance report will not provide new/unique information and will likely never be used by the CCRWQCB, we suggest removing this requirement.

CD-33

3) Annual Report: We generally concur with the requirements listed in the Draft MRP for the Annual Report, with two exceptions. First, element m. on p. 24 requires evaluation of pesticide and toxicity results. While we have historically provided toxicity bioassay results with the Annual Report, the additional analysis needed to incorporate pesticide results (and relate these to the toxicity bioassay results) often merits its own report. We suggest continuing to allow for an additional report to provide in-depth analysis of concurrent pesticide and toxicity monitoring results, with a separate, September 1 deadline. Second, element u. requires a discussion of potential follow-up actions to correct observed exceedances. This is really outside the scope of the core trend monitoring program, and is better addressed by the Follow-up Surface Receiving Water Program. We suggest removing this requirement or converting it to reference the Follow-up program.

CD-34

4) Follow-Up Surface Receiving Water Monitoring: This section indicates that a work plan for a Third Party cooperative approach to Follow-up surface water monitoring should be developed to achieve four objectives. Our detailed comments on a cooperative approach to Follow-up are contained in Appendix B ("Concept Proposal for an Enhanced Surface Water Follow-up Program"), which follows the close of this letter. We feel it is important for the major components of an Enhanced Surface Water Follow-up Program (ESWFP) to be discussed during the public adoption process so that all stakeholders have the opportunity to review and comment on the general program framework. Please note in the comment package submitted by the Ag Partner Associations, that the industry supports a Third Party-led, cooperative approach to surface water follow-up.

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CD-35

5) Surface Water Priority Areas: Item 14 on p. 25 lists dates by which work plans must be submitted for each of four Surface Water Priority areas. As should be evident from our concept proposal for an ESWFP (Appendix B, attached), we would expect to devote considerable effort and resources to watersheds prioritized for Follow-up in a given year. There are 55 CMP sites, all of which are impaired to some degree (though some more than others). It will not be possible to meaningfully address Follow-up needs of the entire Central Coast region within a 5 year period. The general prioritization phasing described in our (attached) Appendix B has much in common with the schedule in the Draft MRP, however we recommend our Appendix B schedule as more feasible and a better fit for the ESWFP.

CD-36

6) Ranch-Level Surface Discharge Monitoring: This section appears to require some of the same elements and serve generally the same objectives as the Individual Approach to Follow-up Surface Receiving Water Monitoring. The Draft Order and Draft MRP should clarify the CCRWQCB's intentions with regard to timelines and scope for imposing this requirement.

CD-37

7) Table MRP-6, Water Quality Parameters: The water quality parameters alkalinity, calcium, magnesium, sodium, potassium, sulfate and chloride have never in the past been required for the CMP. These are not needed to meet any program objectives and are not specifically diagnostic of agricultural discharges, and should be removed.

CD-38

Also in Table MRP-6, the monitoring frequency for Pesticides and Metals is listed as "every fourth year." In the past monitoring these every fifth year has proven sufficient for trend monitoring purposes. Because additional scrutiny of pesticides and toxicity is expected to take place for Follow-up within the ESWFP, we suggest setting the baseline, core monitoring requirement at "every fifth year" with the understanding that monitoring will occur with greater frequency as warranted within the context of Follow-up.

CD-39

Finally, the monitoring frequency for most surface water parameters in Table MRP-6 is given as "monthly." A recent analysis indicates that monitoring quarterly or every-other-month will result in sufficient confidence to characterize water quality "status" according to basic water quality statistics and will also result in sufficient confidence to determine the Kendall's Tau statistic for trend analysis. As would be expected, statistical power to determine significance of trends is reduced with lower sampling frequencies, however this does not necessarily mean that monthly monitoring at every site for every parameter is essential to meet program objectives. As increasing resources are devoted to Follow-up needs, we look forward to future discussions around efficiencies that can be realized in the baseline CMP. We also look forward to further refining and sharing the results of our sampling frequency analysis.

CD-40

8) Bioassessment: This was a CMP requirement in the first half of the program's history. We don't dispute the requirement, however significant access problems were encountered in the past and we would not necessarily expect to be able to meet the QAPP objective for minimum 90% completeness due to site access issues and trespassing concerns.

CD-41

9) RipRAM as a CMP Requirement: We are unable to comment fully on this newly introduced requirement, as no information is provided in the Draft MRP as to the objective or intended end-use of the data. There are also no specific instructions provided as to how to deliver this data. Since the method was only very recently developed, there does not appear to be a CEDEN upload tool, which is the delivery method required by the CMP QAPP. There is also no clear numeric threshold with which to compare the

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CD-41 cont.

monitoring results. In other sections of the MRP, there is an apparent interest in a reference score of 69. A concern with this approach is that half of the reference sites used to develop this score scored below 69 themselves. Therefore a CMP site scoring below 69 might not necessarily indicate impairment, however there is no existing assessment tool of which we are aware that allows for ambiguity in the inference made when a site does not meet a numeric threshold. In other words, in all other contexts, when a site does not meet a numeric threshold based on a specified exceedance frequency, it is considered "impaired" and we are not aware of a mechanism for handling this differently in the case of RipRAM scores.

Historically, CMP Bioassessment monitoring has included a physical habitat assessment (PHAB), of which the RipRAM protocol is largely duplicative. What additional objective is served by producing RipRAM scores? We request the opportunity for further comment after the objective for including RipRAM in addition to PHAB is provided.

CD-42

Section F – Annual Compliance Form & Riparian Setback Monitoring & Reporting

Section F of the Draft MRP covers the Annual Compliance Form (ACF) and Riparian Setback Monitoring and Reporting. Under the current Ag Order, the ACF is required annually for all Tier 2 and Tier 3 ranches. The ACF is submitted by manually entering information into custom web forms maintained by the CCRWQCB, which transmit the information directly into the operation's GeoTracker account. The information is then available to the public upon request to the CCRWQCB. Current ACF reporting includes discharge characteristics, irrigation and crop type, implementation of management practices, and any water containment or treatment/control measures. The stated purpose is to, "assist in the evaluation of water quality and progress towards compliance with the Agricultural Order".

While the ACF is logical in concept, in practice it is an administrative compliance requirement that can be time consuming to complete (especially for operators who manage multiple ranches) and generally does not provide data helpful to understanding sources of water quality impairment or management changes that can be linked to changes in water quality. Several improvements should be made to the overall Electronic Notice of Intent (eNOI) and ACF reporting systems to make these more useful tools to support both CCRWQCB and Third Party implementation of the ILRP:

CD-43

1) Need for Improved APN Data: Operation/ranch enrollment forms (eNOI, and any other affected web forms) should continue to be refined to ensure accurate and correctly formatted Assessor Parcel Number (APN) data for enrolled ranches. This is necessary to support queries and analysis of ACF data on a watershed basis, in a way that links meaningfully with corresponding water quality data. Historically and into the present, eNOI APN data have been so non-uniform that it is literally impossible to identify the full set of ACF management practice data for a watershed to be analyzed alongside water quality trends. In a recent exploratory analysis, we were able to identify ACF management practice data for only about half of the irrigated acres on test watersheds. This is because eNOI and ACF data are currently indexed by unique Operation identifiers ("AW Numbers"), and many of these records have historically had invalid or missing APNs. A valid APN is needed to identify ACF data that are relevant (geographically and hydrologically) to a specific watershed, basin, or monitoring point.

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CD-43 cont.

We are aware that the CCRWQCB staff have been working to improve APN data entry and storage, and that there are technological challenges involved. We appreciate these efforts and cannot overstate the importance of this dataset to successful implementation and membership management for Third Party programs.

CD-44

2) ACF Review & Revision: The ACF should be reviewed and revised in cooperation with the Third Party and interested growers. A primary objective of revisions is to support the collection of management practice information needed to implement a cooperative approach to Follow-up Surface Receiving Water Monitoring per Section E of the Draft MRP (discussed in Appendix B of this letter). In Appendix B, we discuss an Enhanced Surface Water Follow-up Program (ESWFP) that would rely partially on ACF data to support annual watershed follow-up reports. In a recent exploratory analysis, we queried ACF management practice information for several watersheds and were unable to link changes the ACF management practice data to surface water quality data in a meaningful way. Specific revisions to the ACF, as well as improved APN data, will be essential to generating these follow-up reports.

CD-45

An additional objective of ACF review and revision is to improve the layout and question prompts to capture management information in a way that is:

CD-46

- More relevant to the way growers consider and implement practices;
- A more efficient transfer of information from the Farm Plan that provides opportunities to streamline and eliminate redundant/duplicative data entry;

CD-47

- More relevant to the ESJ Order precedentially-required plans (e.g. INMP, SEMP, etc), to provide opportunities to streamline and eliminate redundant/duplicative data entry and reporting tasks.

CD-48

This latter point is especially important, as the Central Coast ACF already prompts growers for much of the ESJ Order precedentially-required information in these plans (INMP, SEMP, etc), and growers already enter this information in their Farm Plans as well. There is no reason for growers to perform manual entry of the same information three separate times.

CD-49

3) Third Party Data Management – As mentioned above, there is an enormous amount of paperwork with high redundancy between the ACF, Farm Plan and new ESJ Order-precedential reports: INMP, SEMP, PMP, and RAMP. Dischargers should have the option to work with a Third Party to coordinate their Farm Plan and ACF with the other required plans. This is especially appropriate within the Central Coast ILRP, as the existing Central Coast Farm Plan and ACF already contain much of the information identified by the precedential ESJ Order as being required for these plans. As the specific contents, format, and data entry/delivery method are developed for each of the precedentially required plans (none have been developed yet to our knowledge), the Third Party and interested growers should be involved to ensure efficiency, minimize redundancies and potential for errors, and ensure that the required content accurately conveys the information sought. Instead of custom web forms designed by Water Board staff, the initial point of data delivery should be the Third Party, just as Preservation, Inc. already serves as the initial collection point for thousands of surface water quality monitoring records each quarter. Data validation and automated checking should then occur, just as it currently occurs for the surface water CMP, followed by a batched electronic delivery method designated by the CCRWQCB. In this case the term "batched" indicates a single delivery of a large number of fully granular individual records, and will not result in anonymized data.

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CD-50

4) Reporting on the Sediment and Erosion Management Plan: Growers should have the option to work with a Third Party to produce the SEMP without redundant data entry requirements (i.e. Farm Plan and ACF). To the greatest extent possible, sediment/erosion monitoring, reporting and management should be coordinated with a Third Party-run ESWFP. Growers should also have the option to work with a Third Party in cases where SEMP certification is required, as this can be costly, especially for smaller operations.

CD-51

5) Riparian Area Management Plan (RAMP): We are not going to comment at this time on the specific requirements or compliance pathways for RAMP reporting in the Draft MRP. However we do want to convey technical concerns regarding the proposed Strahler Order (stream classification) and resultant riparian setback width designations. The setback width requirements associated with each Strahler Order are given in Draft Order Part 2, Section C.5, Table C.5-1: Minimum Riparian Setback Width and Vegetation Type. We appreciate the CCRWQCB staffs' willingness to dialogue about our concerns and the information already shared in response to our questions about the GIS approach taken to arrive at the numbers in the Draft Order.

CD-52

a) Strahler Stream Order

It is our understanding that the Minimum Setback Widths in Table C.5-1 were assigned to Strahler Stream Orders based upon a GIS analysis which showed that Central Coast agricultural streams have a maximum Strahler Order of 6 (Draft Findings, p. 190, Item 87). It is also our understanding that this analysis was performed using the NHD Plus, version 2 dataset, which at the time of capture showed stream flowlines at a resolution of 1:100,000 (considered medium-resolution). Shortly after this capture date, the dataset was updated by the USGS to show flowlines at a combination of medium- and high-resolution (1:24,000 or better). When we perform the same GIS analysis (for Strahler Order designation) with the newer dataset, it assigns Strahler Orders that are 1-2 orders higher than shown in Table C.5-1, for example showing the Salinas River with an Order of 8 instead of 6. The consequence of this shift is that streams intended by Table C.5-1 to have a Minimum Setback Width of, for example, 75 feet (Order 3) would in some cases instead have a 150 foot (Order 5) setback requirement if newer GIS data are used in future to assess site-specific setback requirements without corresponding adjustments to Table C.5-1.

On June 12th, 2020 the CCRWQCB released an interactive web map (derived from the older NHD Plus dataset) which in theory would be used to designate the Strahler Order of each Central Coast stream. However if a discharger wished to appeal their location's setback requirement or designated Strahler Order, they would not be able to perform independent analysis because use of a different (newer) GIS dataset could result in different Strahler Order designations. And because Strahler classification is a "top down" approach, the re-designation of a reach's Strahler Order would automatically change the Strahler Order designations and setback requirements for many downstream water bodies and adjacent ranches.

At the conceptual level of GIS analysis, we understand the approach taken by CCRWQCB staff and appreciate the efforts to be quantitative and systematic. On a practical and site-specific level however, particularly over long periods of time, this approach is not feasible to implement.

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b) Riparian Setback Intersection with Crop Land

CD-53 It is our understanding that the Acreage Potentially Affected in Draft Order Attachment A (Findings) Table A.C.5-21 was derived from the above-mentioned Strahler Stream Order analysis, with additional assumptions made about stream width that were dependent upon stream order. Actual measurement of stream width (not performed) is based on the active channel width and bank locations. For narrower channels this may only result in a few feet of difference. However for wide meandering high-order streams like the mainstem Salinas or Santa Maria Rivers, stream order-based width assumptions incorrectly place buffer edges within potential active channels. This leads to incorrect mapping, and underestimation of the extent to which the setbacks actually intersect with crop areas. Hence, the current Acreage Potentially Affected as presented in the Draft Findings (Order Attachment A) Table A.C.5-21 likely underestimates the amount of crop area that would presumably need to be taken out of production.

CD-54 In closing, we appreciate the opportunities for cooperative, Third Party implementation programs that have been woven into the Draft MRP and hope that our suggestions for further Third Party engagement in data management and delivery will also be considered. It is our understanding that more information regarding Third Party roles in Ag Order 4.0 will be circulated in the next few months. Though we cannot commit to an as-of-yet undefined role, we would be pleased to expand our current scope of programs to play a broader Third Party role in the future by implementing all Third Party programs as described within in this comment letter.

Thank you for considering these comments.

Sincerely,

Central Coast Water Quality Preservation, Inc.

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Attachments: Appendix A – Concept Proposal for a Central Coast Regional Groundwater Trend Monitoring Program for Irrigated Agriculture;

Appendix B – Concept Proposal for an Enhanced Surface Water Follow-Up Program for Central Coast Irrigated Agriculture

APPENDIX A

CD-55

Concept Proposal for:

Central Coast Regional Groundwater Trend Monitoring Program for Irrigated Agriculture

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June 22, 2020

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1 INTRODUCTION

Irrigated agricultural operations enrolled in the Central Coast Regional Water Quality Control Board's (CCRWQCB's) Ag Order (currently R3-2017-0002, or "Ag Order 3.0") are required to perform individual water quality monitoring or participate in a cooperative water quality monitoring program. In response to this requirement, a Third Party non-profit corporation (Central Coast Water Quality Preservation, Inc., or CCWQP) was formed by the agriculture industry to implement and manage a Cooperative Monitoring Program (CMP) for surface water beginning in 2005. The CMP has performed surface water monitoring and reporting since 2005 on behalf of over 95% of enrolled operations. In 2012, a second Third Party organization (the Central Coast Groundwater Coalition, or CCGC) was formed to implement a cooperative groundwater monitoring program. In 2015 the CCGC produced two Groundwater Characterization Reports on behalf of its enrolled growers, one for northern counties of the Central Coast region and one for southern counties. Growers who elected not to participate in the CCGC were required to individually monitor and report groundwater quality from their own primary irrigation wells and any on-farm domestic wells.

Since 2005 the Central Coast region's Ag Order (also known as the Irrigated Lands Regulatory Program, or ILRP) has undergone several evolutions, each time via a multi-stakeholder public process. More recently in 2018, the State Water Resources Control Board (SWRCB) adopted the Eastern San Joaquin River Watershed Agricultural Order, which carries precedential requirements affecting all regional programs including the Central Coast. Both the regional and statewide Water Boards seek to protect groundwater (and in particular drinking water supplies) from impairments, including those from discharges of nitrogen fertilizers.

The Water Boards' approach to groundwater protection is multi-faceted, however there is a universally recognized need to document the current status and track changes in groundwater quality over time as agricultural management practices change. This document is a proposal for a region-wide, long-term Groundwater Trend Monitoring Program (GTMP) for the Central Coast Ag Order. It is envisioned that the cooperative GTMP will be representative of water quality throughout irrigated agricultural areas of the Central Coast and exempt participating growers from an individual irrigation well monitoring and reporting requirement. Participating growers will continue to monitor irrigation wells for nitrate to inform their management practices, and will report those values in fulfillment of Total Nitrogen Applied (TNA) and Irrigation & Nutrient Management Plan (INMP) monitoring and reporting requirements. The ranch-level nitrate data provided by TNA/INMP reporting and the GTMP's status and trends dataset negate the need for individual trend monitoring and for the existing requirement to perform individual irrigation well monitoring and reporting for a broad suite of constituents.

2 OBJECTIVES

The overall objectives for a regional GTMP are to:

1. Assess the current status of and long-term trends in groundwater basins in irrigated agricultural areas of the Central Coast; and
2. Provide feedback to growers in areas with impaired groundwater quality, to raise awareness of issues, possible links to irrigated agriculture, and the need for management.

The GTMP will provide high quality groundwater data from a scientific study design. However its role within the overall ILRP approach to groundwater protection is limited. The monitoring design and long-term analytical results of the GTMP will provide insights into groundwater areas that could pose a risk to human health if used as a drinking water source. However, complete protection of drinking water requires a different monitoring and notification approach and is not a primary objective of the GTMP. Monitoring of on-farm drinking water wells and notifying users of risk are a separate monitoring and reporting task that is not a function of the GTMP.

Other limitations of the GTMP that should be anticipated include the inability to link detection of short-term trends in groundwater quality to specific land management activities, particularly on a small geographic scale. While desirable, this objective is inherently difficult to achieve with an ambient monitoring approach given the decadal time scale on which impacts to groundwater evolve and also given complexities in the way discharges move throughout aquifers.

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3 INITIAL CHARACTERIZATION REPORT

Prior to any monitoring, the GTMP will produce an Initial Characterization Report for Central Coast groundwater basins influenced by irrigated agriculture. This report will inventory existing groundwater monitoring programs; inventory existing publicly available groundwater datasets; and name and characterize the groundwater basins or management areas to be included in the GTMP.

3.1 Inventory of Existing Monitoring Programs

A primary feature of the GTMP will be to avoid duplication with other regional groundwater monitoring efforts and maximize the utility of otherwise compartmentalized datasets. An inventory will be conducted of existing local water management agencies and their monitoring programs, as well as efforts in progress for the statewide Sustainable Groundwater Management Act (SGMA). Local programs exist for many areas of the Central Coast including the lower Pajaro Valley, Salinas Valley, Santa Maria Valley, Santa Clara Valley, and others.

Many of these entities are funded by the same growers that fund ILRP programs, and duplicative monitoring and reporting should be avoided wherever possible to make efficient use of funds. Additionally, many of these entities have longstanding expertise and established groundwater quality monitoring networks, and these should be evaluated for possible contributions to an ILRP approach.

3.2 Inventory of Existing Groundwater Data

The Initial Characterization Report will include a summary of publicly available data from major groundwater monitoring or data management efforts that have generated datasets for Central Coast basins. These may include:

- Central Coast Groundwater Coalition (CCGC)
- Central Coast Irrigated Lands Regulatory Program (CC-ILRP)
- Monitoring Wells from Water Board Regulated Sites
- Department of Water Resources (DWR)
- Department of Drinking Water (DDW)
- Groundwater Ambient Monitoring and Assessment Program (GAMA)
- Salt and Nutrient Management Plans (SNMPs)

- Integrated Regional Water Management Programs (IRWMP)
- Groundwater Sustainability Agencies (GSAs)
- Local Water Management Agencies that are not GSAs
- Public Supply Wells (typically City- or County-administered)
- National Water Information System (NWIS)
- US Geological Survey (USGS)
- Academic reports (UC Davis, etc.)

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The inventory will describe any relevant datasets identified, summarize key findings related to groundwater quality in basins of interest, and incorporate raw nitrate data into the master dataset from which the Report will draw to produce maps and analyses of regionwide groundwater status and trends.

3.3 Initial Report Components

An initial task of the GTMP will be to name and describe the groundwater basins of interest which underlie irrigated agricultural areas of the Central Coast region. This Initial Characterization should draw from prior characterizations developed by the Central Coast Groundwater Coalition (CCGC), local water management agencies and state agencies where available, and should include the following components:

a. General description of Central Coast irrigated agricultural areas including climate, basic surface and groundwater hydrology, reliance on groundwater supplies, and basic enrolled grower demographics.
b. Brief summary of surface water quality and nexus with groundwater.
c. Listing of groundwater management areas and description of each (to include as available: land use, soils, hydrogeology, water bearing zones, and natural basin boundaries). Many Central Coast groundwater basins have been defined by the DWR, however a small amount of irrigated agriculture occurs in areas not underlain by a DWR-defined basin (for example coastal shelves in the Big Sur and northern Santa Cruz coastal areas).
d. Initial discussion (based on other programs' existing data/reports) of current and historic groundwater quality for each basin/management area, focusing on nitrate and drawing on salts/general minerals data as needed to provide context for nitrate and water balance.
e. Discussion of any groundwater quality trends that can be discerned to date from existing publicly available data. Some of these datasets extend back to the 1980's or prior and should provide sufficient data for trend analysis.

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4 MONITORING DESIGN

4.1 Well Network Development

The development of a well network for the GTMP will involve four sequential tasks.

1. First, an initial pool of candidate wells will be created from existing active programs with monitoring and reporting characteristics that generally align with the GTMP.
2. Second, the initial well network will be spatially assessed based on density/distribution over distinct areas based on (X,Y axes) hydrogeologic characteristics and overlying land use; and also based on (Z axis) depth in relation to water bearing zones of interest.
3. Third, if existing programs do not generate sufficient coverage, wells monitored and reported under Ag Order 3.0 may be added to the pool of candidate wells in locations where additional wells are necessary.
4. Finally, the network will be refined based upon specific well characteristics (e.g. exact depth, perforated interval depths, etc.) and confirmation of accessibility.

A key goal of this approach is to rely on existing groundwater monitoring networks and add existing irrigation or domestic wells as needed to fill identified gaps in the network. Only a subset of the agricultural wells monitored under Ag Order 3.0 are expected to be needed. Given the diversity of existing programs and wells, a need for new installation of dedicated monitoring wells is not anticipated.

Per California's SGMA legislation, localized GSAs are required to perform groundwater monitoring for priority pollutants, beginning in 2020. While evolving on a longer timeline than Ag Order 4.0 adoption, the SGMA process is rigorous and may result in additional monitoring networks in some parts of the Central Coast region. Three Central Coast groundwater areas already operate monitoring and reporting programs approved by the DWR (the Pajaro Valley, the Santa Clara Valley, and the Santa Maria Groundwater Basin). Other groundwater data sources (discussed above in Sections 3.1 and 3.2) should also reflect ongoing monitoring efforts.

It should be noted that the timeframe to add new wells to the GTMP could in some cases rely on the timelines of other agencies. For example, a water agency may currently lack the funding for groundwater monitoring, however they could restart the program with funds paid into a local Groundwater Sustainability Agency within the next few years. In this case, the GTMP will work with Region 3 Water Board staff and agency personnel to make timeline adjustments.

The draft Ag Order 4.0 MRP currently postpones discussions specific to well network characteristics until after adoption, at the time of Work Plan approval. It may be more appropriate for some of these discussions to take place within the context of public process, prior to adoption of finalizing the Order 4.0.

4.1.1 Spatial Design

While balancing network density with economic considerations, the GTMP will aim to characterize water quality in hydrogeologically-defined groundwater basins or sub-areas where a substantial portion of the overlying land surface is in irrigated agricultural land use. Well network coverage will include representation of drinking water supply areas located down-gradient of agricultural activity, particularly

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in the vicinity of disadvantaged communities. Lower-density coverage may be warranted in areas deemed to be of particularly low vulnerability.

Well network density will be assessed using GIS methods supported by hydrogeology and landcover characteristics to develop a scientifically defensible network density. Network criteria must balance technical needs for density and preferred well characteristics with economic considerations.

The GTMP well network design may also include 3-dimensional considerations. These include:

- Deeper water bearing zones that are separated from other sub-aquifers by geologic features, if these zones have the potential to be influenced by irrigated agriculture;
- Benefits and drawbacks related to measuring upper zone groundwater, which bears a more direct relationship to recent land surface activities but may reflect only highly localized conditions (versus slightly deeper zones that reflect greater lateral and vertical transport and mixing of constituents);
- High-capacity wells that draw from a wider zone of capture, versus lower-capacity wells that may be more numerous.
- Preference for wells that are (as a group) representative of important local cropping patterns, basin sub-areas with unique hydrogeology, etc.
- Avoiding wells with expected strong influence from non-agricultural sources such as septic systems, regional wastewater treatment, dedicated monitoring for underground storage tanks or other known point-source discharges, etc.

4.1.2 Individual Well Characteristics

For inclusion in the GTMP well network, preferred wells will have the following known information:

- Well Location
- State Well ID Number
- Total Depth
- Perforation Depths (top and bottom of each perforated interval)
- Construction date
- Well seal information
- Well completion report (if available; provides location-specific lithology)
- Sounding hole or other access port to measure groundwater levels

Exceptions will be considered in the following cases:

- Sufficient wells of known construction not available for a desired area of coverage
- Historic water quality record makes a well particularly informative
- Wells for which a video study can be conducted to develop some of the above information such as perforation depths, total depth, etc.

Where the density of preferred wells exceeds the number of wells required for a desired area of coverage, further preference will be given to wells with appropriate construction that also have an existing historic water quality record.

Where the density of preferred wells is insufficient for a desired area of coverage, non-preferred irrigation wells (ideally of known total depth and seal) will be included. Data and analyses from wells that are not fully characterized will be qualified to convey any resulting uncertainty.

Community water system wells may be of special interest to the program as these tend to have longer historical monitoring records to support retrospective trend analysis. However, since these wells must continue to produce potable water, they may become subject to modification or discontinuation in areas of impaired water quality. These and other changes to well construction or operation must be tracked over time in addition to water quality and depth monitoring results.

Finally, it should be anticipated that over the life of a long-running program, wells will occasionally need to be removed from the network. For example, a well may run dry, have a pump failure or electrical issue, or a casing may cave in. The GTMP will have a plan of action for handling time series data and filling geographic network gaps in such instances.

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4.2 Water Quality Monitoring

4.2.1 Direct Sampling by GTMP

Wells sampled directly by the GTMP will be sampled annually with consistent seasonal timing for the following water quality parameters:

Parameter	Frequency	Method	Units
Water Temperature	Annually[1]	Field Probe	Deg C
Specific Conductance	Annually[1]	Field Probe	uS/cm
pH	Annually[1]	Field Probe	None
Nitrate as N	Annually[1]	Certified Laboratory	mg/L
Total Dissolved Solids	Once per 5 years	Certified Laboratory	mg/L
Major Ions	Once per 5 years	Certified Laboratory	mg/L
General Observations (color, odor, etc.)	Annually[1]	Field Observation	n/a
Dissolved Oxygen (optional)	Annually[1]	Field Probe	mg/L
Depth to Water	Annually[1]	Water Level Meter	m

[1] *Parameters designated for annual monitoring frequency will also be monitored twice-annually in the second year of monitoring to assess sub-annual variability, as discussed below.*

Competing rationales exist for timing sample collection in either the summer, fall or spring. For an agricultural program, important factors to consider include precipitation, pumping activity, and crop cycles. Whichever season is selected, it is important that the timing of annual sampling be consistent from year to year. If existing datasets do not contain sufficient information to resolve sample timing questions, a limited period of twice-annual sampling can be conducted by the GTMP to generate the needed information. Because monitoring frequency is an important driver of program costs, ongoing requirements should be limited to the minimum frequency needed to address program objectives.

4.2.2 Sampling by Other Programs

Water quality data derived from other programs will be used with a preference for seasonality of sample collection that matches the GTMP, with other timing considered as necessary to ensure good network coverage of the monitored basins. Data acquisition from these programs will target the same directly-tested parameters listed in the table in Section 4.2.1 above, ideally using the same EPA or Standard Methods for analysis. Prior to the use of data from other programs, those programs' quality assurance protocols and methods will be reviewed to ensure adequacy for the purposes of the GTMP, as outlined in Section 6 below.

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In cases where data from other monitoring programs are mostly aligned with the GTMP but with small exceptions (for example, dissolved oxygen data may be missing from the dataset or internal reporting schedules mildly exceed GTMP compliance deadlines), the GTMP will work with Region 3 Water Board staff to make accommodations provided overall program goals are not compromised. This approach will maximize the utility of localized program datasets regionwide and also maximize opportunities to economize via collaboration.

Reporting of GTMP data to GeoTracker is addressed in Section 5 below. In the event the GTMP draws upon monitoring data already reported by other agencies, the GTMP will not report data in a way that duplicates prior delivery by another program. In order to support network-wide groundwater analysis and narrative reporting, the GTMP will need to maintain a uniformly formatted, compiled dataset that includes data from GTMP direct sampling as well as data from any other programs. This dataset will be provided in raw form (flat, formatted) as an appendix to any reports for which it is used by the GTMP in fulfillment of an MRP requirement.

4.3 Water Level Monitoring

Prior to sampling of each well, the depth to water in the well will be measured and well operational status noted. If the well is actively pumping (e.g. to irrigate a crop) it may not be possible to measure the standing water level, so in these cases the pumping water level can be measured and the data annotated. The project (quality assurance) completeness requirement for water level monitoring will reflect that this and other wellhead accessibility issues may exist, and the GTMP will not be deemed out of compliance for not collecting depth-to-water measurements where access is unavailable. Other than providing context for well conditions and water quality, water level monitoring is not an intended objective or primary function of the GTMP.

4.4 Follow-up Studies

Questions not answerable by the routine monitoring program described above should be addressed by discrete follow-up studies designed to answer specific questions. The budget for follow-up studies should be determined as a low, "not-to-exceed" percentage of the routine annual program cost.

5 REPORTING AND REVIEW

Data will be managed electronically for internal purposes and also submitted electronically to a Water Board-designated repository as an annual Electronic Data Deliverable (EDD; or EDF if the repository is GeoTracker). Formatting instructions for EDDs (including descriptions of all required and optional fields and valid values lookup lists) should be provided to the GTMP in advance of the first planned field sampling date and remain stable over time. Changes to the EDD template should be infrequent and prior-noticed when they do occur.

Additionally, the GTMP will submit narrative reports containing the following elements at 3 years after adoption, and every 5 years thereafter:

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a. Map of all network wells
b. Discussion of groundwater quality status for each basin/management areas, including tabulated and/or graphed water chemistry results, accompanied by an electronic appendix containing all raw data (this may consist of all EDDs submitted for the reporting period):
    i. Nitrate summary tables showing maximum, minimum, median, mean values & exceedance frequencies. Bar graphs, Box & Whisker plots, or maps may additionally be used to visually display this information.
    ii. Summary tables for major ions. Piper or Stiff diagrams may also be used to convey ionic composition and visually display information.
c. Trend analysis on Nitrate and TDS (accounting for changes in ionic composition).
    i. Time series plots showing nitrate concentration and TDS over time.
    ii. Use of parametric or non-parametric (as appropriate) statistical methods such as Mann-Kendall, Akritas-Theil-Sen, or similar.
    iii. Presentation of trend analysis results for large datasets is often accomplished in summary-table or summary-graphic form showing trend slope direction (test statistic) and p-values by parameter and location.
d. Interpolation maps (color-gradient or "heat") are sometimes used to show 2-dimensional patterns in groundwater quality in shallow aquifers and/or at other relevant depths. However the objective of these maps is enhanced visual display for general conceptual purposes only. If such maps are included, confidence intervals for interpolation will be disclosed for context and to convey uncertainty. However interpolations should not be used to infer high-confidence prediction of groundwater quality outside the immediate vicinity of individual wells with known construction.
e. Discussion of any identified non-agricultural factors influencing the dataset, including climate, groundwater extraction and other (non-agricultural) land uses.

Discussion of data gaps and needs for refinement of the network and/or sampling design will be considered 3 years after GTMP inception, and once every 5 years thereafter. While refinements to the program design may be desirable, any changes should be carefully weighed against the program objective to detect long-term changes in groundwater quality. Stability in monitoring parameters, methods and locations are essential to the ability to detect trends.

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6 QUALITY ASSURANCE

The GTMP will designate a Quality Assurance (QA) Officer to review field and laboratory monitoring results for accuracy, precision, and acceptability. Quality assurance and quality control standards for the GTMP will be documented in a Quality Assurance Project Plan (QAPP). The QAPP will generally conform to the same SWAMP-specified standards to which the existing surface water CMP conforms, with modifications as necessary to accommodate groundwater monitoring methodologies.

Field instruments used by the GTMP will be maintained and calibrated according to manufacturer specifications and will be capable of achieving the reporting limits and precision levels specified in the QAPP. Calibrations will be performed using NIST-certified standards and calibration records will be maintained for review and/or electronic delivery.

Wells will be appropriately purged prior to sample collection to ensure a representative sample. In most cases the standard practice will involve a purging time/volume equivalent to three full evacuations of the well casing. Wells in current, high-frequency use (e.g. irrigation wells) may require less purging at the time of sample collection due to purging by the on-going existing use pattern.

Samples for laboratory analysis will be handled under chain-of-custody, at temperatures and within holding times that meet laboratory-specified standards that will also be documented in the QAPP. Any laboratory contracted by the GTMP will have current ELAP certification, and laboratory Standard Operating Procedures will be included in the QAPP as proprietary appendices.

Quality control samples will be collected and analyzed as necessary to meet Measurement Quality Objectives (MQOs) specified in the QAPP. These are expected to include Equipment Blanks, Field Blanks and Duplicates, Lab Blanks and Duplicates, Laboratory Control Samples, and Matrix Spike/Matrix Spike Duplicates.

Prior to using data from other collaborating programs, QA protocols from these programs will be reviewed to ensure adequacy. Wherever possible, QA protocols that fall short of the GTMP standard will be brought up to standard over time. Where this is not possible (generally due to labor or budget constraints), affected data will be flagged/qualified and used with appropriate disclosures or limitations rather than being rejected for use by the GTMP.

7 EDUCATION AND OUTREACH

The GTMP will perform groundwater education and outreach for its enrolled growers using a variety of methods. The focus of GTMP outreach will be raising industry awareness of specific areas of groundwater contamination throughout irrigated agricultural areas of the Central Coast, and possible linkages to past and current production practices. A summary of outreach activities will be provided in each narrative monitoring report.

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8 GOVERNANCE AND FUNDING MECHANISMS

The GTMP will be implemented by an industry-designated and Water Board-approved Third Party, overseen by a Board of Directors and staffed or contracted as necessary to complete required work. Funding for the GTMP's routine functions will be accomplished via fee assessment on enrolled operations that select the cooperative option to meet groundwater monitoring requirements. Fees will be assessed based on the Central Coast RWQCB's ILRP enrollment database, which will be provided to the Third Party by December 1st of each year to support billing for the subsequent year's monitoring and reporting work. Funding for the GTMP's initial functions (i.e. inventories of existing programs and datasets, Initial Characterization Report, and well network designation) has not been identified at the time of this proposal.

The fee structure and monitoring and reporting requirements that apply to growers who do not elect to participate in the cooperative Third Party groundwater effort must be clearly stated so that growers can make an informed business decision as to how to comply with this portion of the Ag Order.

9 TIMELINE AND DELIVERABLES

The years assigned to tasks/deliverables in the table below assume that the Initial Characterization Report and Well Network Designation are completed prior to initiation of the GTMP. Delay of these tasks would shift the timeline for subsequent tasks/deliverables by an equivalent number of years.

Trend analysis will be of questionable utility by Year 3 of the program, except where historic data from prior monitoring are available. The schedule below anticipates a need to demonstrate program progress and provide a groundwater status report before 5 years have elapsed. This would be possible provided realistic expectations are set on the issue of trend analysis over such a short time period.

Task / Deliverable	Year
Initial Characterization Report	TBD
Well network designation	TBD
Sample directly-tested wells	1, and annually thereafter
Query and compile data from wells sampled by other programs	1, and annually thereafter
Annual EDD of prior-year data	2, and annually thereafter
Conduct twice-annual sampling to assess variability	2
Narrative Report with trend analysis	3, 8, 13, 18, 23, 28, 33
Education and outreach	1, and annually thereafter
Education and Outreach Summary Report	3, 8, 13, 18, 23, 28, 33

APPENDIX B

CD-56

Concept Proposal for:

Enhanced Surface Water Follow-up Program for Central Coast Irrigated Agriculture

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Enhanced Surface Water Follow-up Program Concept

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1 INTRODUCTION

Irrigated agricultural operations enrolled in the Central Coast Regional Water Quality Control Board's (CCRWQCB's) Ag Order (currently R3-2017-0002, or "Ag Order 3.0") are required to perform individual water quality monitoring or participate in a cooperative water quality monitoring program. In response to this requirement, a Third Party non-profit corporation (Central Coast Water Quality Preservation, Inc., or CCWQP) was formed by the agriculture industry to implement and manage a Cooperative Monitoring Program (CMP) for surface water beginning in 2005. The CMP has performed surface water monitoring and reporting since 2005 on behalf of over 95% of enrolled operations, at 50 to 55 ambient monitoring sites in agricultural watersheds of the Central Coast with known water quality impairments.

Since 2005 the Central Coast region's Ag Order (also known as the Irrigated Lands Regulatory Program, or ILRP) has undergone several evolutions, each time via a multi-stakeholder public process. More recently in 2018, the State Water Resources Control Board (SWRCB) adopted the Eastern San Joaquin River Watershed Agricultural Order, which carries precedential requirements affecting all regional programs including the Central Coast.

There is a generally recognized need to follow up on continued surface water impairments related to nutrients, sediment, and aquatic toxicity which occur in a substantial number of agricultural watersheds. This document is a proposal for an Enhanced Surface Water Follow-up Program (ESWFP) for the Central Coast ILRP. It is envisioned that growers who participate in the cooperative ESWFP would not be required to perform individual edge-of-operation monitoring and reporting. Instead these growers would commit to:

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- Participating in an outreach and education program that addresses discharge concerns at the ranch level;
- Reporting resultant management practice changes via the Annual Compliance Form (ACF); and
- Iteratively implementing additional management changes (informed by water quality data) as needed to address water quality impairments in receiving waters.

The CMP's routine monitoring program would continue alongside the new ESWFP, to meet the ILRP's ongoing need for regionwide status and trends assessment in surface water.

2 OBJECTIVES

The overall objectives for the ESWFP are to:

1. Provide education and outreach to growers in prioritized watersheds, to support iterative adaptive management to address surface water quality impairments;
2. Establish regular reporting at the watershed or sub-watershed scale to document grower participation in education/outreach, implementation of management practices, and any water quality changes that can be linked to management changes;
3. Perform Upstream Monitoring (i.e. upstream of core CMP sites) as needed to support other ESWFP objectives;
4. Identify information and technology gaps that result in hard-to-solve water quality problems which may benefit from additional resources and/or research to resolve.

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3 WATERSHED OUTREACH & REPORTING

Outreach and reporting schedules for the ESWFP are generally organized into initial-year activities versus activities that repeat on an annual/on-going basis to support the iterative management process. Initial-year activities will be conducted within the first year of a watershed being designated as prioritized for cooperative follow-up. Annual/on-going activities of the ESWFP and iterative management by growers will continue until a watershed is in compliance with numeric Water Quality Objectives (WQOs). It is expected that annual/on-going activities will place lower demands on Third Party resources such that more resources in a given year can be allocated to watersheds prioritized for initial-year activities. A general phasing of CMP monitoring areas for prioritization was developed based upon CMP results from the most recent three full years of monitoring (2017-2019; supporting CMP data analysis available on request). Beyond these general categories, specific watersheds for initial-year activities should be prioritized based upon practical considerations such as size, complexity, and geographic location. The general phasing categories are:

- **Phase 1** watersheds or sub-watersheds will be prioritized as the focus of ESWFP initial-year outreach and reporting in years 1 through 5 after adoption of Ag Order 4.0, at a rate of 3 to 5 project areas per year. Project areas will correspond to CMP monitoring sites (or groups of sites if hydrologically connected) with a recent history of repeated high-concentration exceedances of nitrate, turbidity, and aquatic toxicity WQOs for all three of these parameters. These sites are located in the Santa Maria and Lower Salinas River watersheds.

- **Phase 2** watersheds or sub-watersheds will be the focus of ESWFP initial-year outreach and reporting in years 5-8 after adoption of Ag Order 4.0, at a rate of 3 to 5 project areas per year. Project areas will correspond to CMP monitoring sites (or groups of sites) with a recent history of at least some exceedances for nitrate, turbidity, or aquatic toxicity WQOs, for one or two of these parameters. These sites are located in the Pajaro River watershed, San Luis Obispo area (sites draining to Morro Bay), and South Coast (near Carpinteria and Goleta), with a few additional sites from the Lower Salinas watershed that do not meet criteria for Phase 1 prioritization.

- **Phase 3** watersheds or sub-watersheds will be prioritized as the focus of ESWFP initial-year outreach and reporting in years 9-10 after adoption of Ag Order 4.0, if any impairments remain by that time. Project areas will correspond to CMP monitoring sites (or groups of sites) with the least history of exceedances for nitrate, turbidity, or aquatic toxicity WQOs. These sites are primarily located on the mainstem Santa Ynez and Salinas Rivers, with an additional site each from the Lower Pajaro and Morro Bay watersheds.

It is simply not possible, within a period of 5 years, to provide every single watershed with the degree of focused outreach and reporting envisioned for initial-year ESWFP activities. However, Central Coast agricultural operations commonly farm multiple ranches, located across different watersheds and even in different parts of the region. Therefore education and training provided to growers in Phase 1 watersheds will also immediately serve some of them as operators of ranches in Phase 2 or 3 watersheds, even though later-phased watersheds will not rotate into prioritization for several years.

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3.1 Initial Watershed Report Components

The Third Party will prepare an Initial Watershed Report for each watershed identified for prioritization in a given year. Important components of the initial report include:

a. Summary and evaluation of relevant CMP data and other locally-relevant and available water quality data for the subject watershed (e.g. USGS, CCAMP, etc.);
b. Summary and evaluation of management practices reported in the ACF to date for ranches within the delineated watershed;
c. Additional/supplemental publicly-available data as deemed appropriate (e.g. agricultural commissioner data or reports);
d. Documentation of outreach/education and grower participation in activities required for Third Party membership.

3.2 Initial Watershed Outreach

In the first year of prioritization for a watershed, the Third Party will conduct both an initial watershed meeting and individual ranch visits with growers/landowners. Initial watershed meetings will accomplish:

a. Education around surface water quality impairments identified at the watershed's core CMP site;
b. Education about general farm discharge types and locally-relevant impacts on receiving water quality;
c. Provide information on the ESWFP and member obligations, relative to individual compliance requirements so that growers can make an informed decision about participation.

Initial ranch visits will accomplish:

a. Training growers to identify discharges that may be contributing to impairments detected at the CMP site, including from irrigation return flows, tile drainage, and stormwater runoff;
b. Training growers to assess management practice choices for their potential to improve discharge water quality and/or substantially reduce discharge volume;
c. Identification of any issues specific to impermeable surfaces;
d. Training growers in documenting management practices in the Farm Water Quality Management Plan (FWQMP) and in the ACF;
e. Referrals to qualified technical assistance providers in the event of management needs requiring special qualifications or funding to address.

3.3 Annual Watershed Reports (subsequent years)

Annually after completing the Initial Watershed Report for a prioritized watershed, the Third Party will prepare an Annual Watershed Report. Important components of the annual report will include:

a. Documentation of outreach/education efforts and grower participation in activities required for Third Party membership;
b. Current status and any identified trends in water quality at the core CMP site;
c. Analysis of any Upstream Monitoring that was deemed necessary for the watershed;

d. Summary and evaluation of changes in management practices reported in the ACF for ranches within the delineated watershed;
e. Discussion of any linkages that can be identified between substantial changes in water quality at the core CMP site and management changes reported by watershed growers in the ACF.

Similar to the way enforcement is currently conducted for the existing CMP, the Third Party will annually report participating operations that are in good standing with regard to membership obligations, and the RWQCB will follow up with enforcement for non-participating operations.

CD-56 cont.

4 RATIONALE FOR WATERSHED APPROACH

In 2008 the CMP performed Upstream Monitoring on a group of program watersheds that showed high impairment for nitrate, sediment, and/or aquatic toxicity (CCWQP, 2010). That study demonstrated that impairments measured at CMP sites typically originate from multiple source areas, as opposed to a single source that could be pinpointed by monitoring at increasingly fine spatial scales. For this reason the ESWFP directs resources towards providing water quality education to *all* growers on a watershed. Similarly, implementation of management practices to address site-specific discharge issues will be conducted *throughout* each prioritized watershed. Reported, individual edge-of-operation monitoring would not further or more rapidly improve water quality because the results of such monitoring (and any ensuing enforcement) would result in the same iterative management actions that the ESWFP promotes from inception. The ESWFP also provides documentation for the RWQCB and other stakeholders of good faith engagement by growers in the iterative management process, and resultant changes in water quality.

5 WATERSHED REVIEWS

It is understood that some prioritized watersheds will not meet the numeric limits for all water quality parameters on the timelines specified by the RWQCB. In particular, stormwater discharges will most likely require more time and resources to address than irrigation-related discharges. High nitrate concentrations in tile drain discharges will require extended timelines to resolve due to interactions with high water tables that have historic nitrate contamination in some parts of the Central Coast region.

The Draft Ag Order 4.0 would delegate authority to the Executive Officer to require individual edge-of-operation monitoring in prioritized watersheds that do not meet numeric limits on the specified timelines. However, the ESWFP is intended to result in the same iterative management process that would result from individual edge-of-operation monitoring. Thus, the ESWFP replaces the need for individual edge-of-operation monitoring. Specifically, the Third Party will prepare an expanded Annual Report and/or presentation for the watershed in question if receiving waters do not meet water quality objectives after the specified timelines. The ensuing discussion (Watershed Review) will assist the RWQCB and growers in determining whether edge-of-operation monitoring is indeed warranted for part or all of the watershed at that time. In many cases, the outcome of a Watershed Review will be to highlight hard-to-solve problems that require additional time, resources, and/or research to resolve. In such cases the most efficient approach for all parties will be to continue the ESWFP's iterative management and reporting approach for an additional period of time.

CD-56 cont.

6 QUALITY ASSURANCE & DATA AVAILABILITY

Monitoring at the core CMP site as well as any Upstream Monitoring will be performed in compliance with the CMP's Quality Assurance Project Plan (QAPP; CCWQP, 2013). The CMP maintains a designated Quality Assurance (QA) Officer to review field and laboratory monitoring results for accuracy, precision, and acceptability. All core CMP site and Upstream Monitoring data will be reported on the CMP's quarterly Electronic Data Deliverable (EDD) reporting schedule, with public availability in raw form via the California Environmental Data Exchange Network (CEDEN). Monitoring results will also be made publicly available via the ESWFP's Initial and Annual Watershed Reports, which will include data evaluations and tabular/graphical presentation.

Management practice data will be reported by growers in the individual Annual Compliance Form (ACF). All ACF data will be initially submitted to the Third Party to allow for data validation and automated checking, similar to the process described above for core CMP and Upstream Monitoring data. Following validation and checking, the ACF data will be submitted by the Third Party to the RWQCB in an EDD format specified by the Executive Officer. The ACF data will also be included in the ESWFP's Initial and Annual Watershed Reports, which will include data evaluations and tabular/graphical presentation.

7 GOVERNANCE AND FUNDING MECHANISMS

The ESWFP will be implemented by an industry-designated and Water Board-approved Third Party, overseen by a Board of Directors and staffed or contracted as necessary to complete required work. Funding for the ESWFP's routine functions will be accomplished via fee assessment on enrolled operations that select the Cooperative option to meet surface water follow-up monitoring requirements. Fees will be assessed based on the Central Coast RWQCB's ILRP enrollment database, which will be provided to the Third Party by December 1st of each year to support billing for the subsequent year's monitoring and reporting work.

Whereas fee assessment for the routine CMP has historically been (and may continue to be) performed on a "per Operation" basis (indexed by AW number), fee assessment for the ESWFP may need to be performed on a "Ranch" basis (indexed by Assessor Parcel Number, or APN). In this case successful implementation of a Third Party fee structure for the ESWFP will depend on substantial improvements to the quality of APN data stored in the RWQCB's enrollment database.

The fee structure and monitoring and reporting requirements that apply to growers who do not elect to participate in the ESWFP must be clearly stated so that growers can make an informed business decision as to how to comply with this portion of the Ag Order.

CD-56 cont.

8 TIMELINE AND DELIVERABLES

Task / Deliverable	Completion Date
Initial Watershed Outreach Meeting	Within 6 months of Order 4.0 adoption
Initial Watershed Report*	Ideally within 1 year of Order 4.0 adoption
Initial Round of Ranch-Level Outreach*	Ideally within 1 year of Order 4.0 adoption
Annual Report (subsequent years)	Annually, starting 1 year from Initial Report date
Additional Outreach	Annually on an "as needed" basis
Watershed Review	As needed upon timeline expiration for meeting receiving water numeric limits, or after 10 years
Water Quality Monitoring Data Delivery	Quarterly, every year in EDDs to CEDEN
Management Practice Data Delivery	Annually, every year in the ACF to RWQCB

** Initial-year activities will ideally take place within 1 year of Order 4.0 adoption, however this depends on the calendar month in which adoption occurs. Ranch-level outreach and watershed report production require funding, which will require advance budgeting and fee assessment to generate the necessary funds. Invoicing for existing Third Party activities (i.e. the CMP) currently takes place in December each year, with budgeting and cost allocation during the preceding fall months (September-November).*

9 REFERENCES

Central Coast Water Quality Preservation Inc [CCWQP]. 2013. Quality Assurance and Project Plan (QAPP) for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program. Revision 9. Prepared by Pacific EcoRisk for Central Coast Water Quality Preservation, Inc. (CCWQP). Watsonville, CA, USA. June, 2013.

Central Coast Water Quality Preservation Inc [CCWQP]. 2010. Central Coast Regional Conditional Waiver Cooperative Monitoring Program Follow-Up Monitoring Report: Water Quality Results from Upstream Monitoring, 2008. Watsonville, CA, USA. September, 2010.

Response to Comment CD-1

The CCWB acknowledges the commenter's background and interests.

Response to Comment CD-2

This comment is noted.

Response to Comment CD-3

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

Response to Comment CD-4 through CD-6

This comment is summarized and responded to in Master Response 2.4.3.

Response to Comment CD-7

This comment is summarized and responded to in the following Master Responses: 2.1.13 and 2.4.3.

Response to Comment CD-8

This comment is summarized and responded to in Master Response 2.4.7.

Response to Comment CD-9

This comment is summarized and responded to in Master Response 2.1.5.

Response to Comment CD-10 through CD-12

This comment is summarized and responded to in Master Response 2.4.2.

Response to Comment CD-13

This comment is noted.

Response to Comment CD-14

This comment is summarized and responded to in Master Response 2.4.2.

Response to Comment CD-15 through CD-20

This comment is summarized and responded to in Master Response 2.4.3.

Response to Comment CD-21

This comment is summarized and responded to in Master Response 2.4.4.

Response to Comment CD-22

This comment is summarized and responded to in Master Response 2.4.2.

Response to Comment CD-23

This comment is summarized and responded to in the following Master Responses: 2.4.2 and 2.4.4.

Response to Comment CD-24 through CD-25

This comment is summarized and responded to in Master Response 2.4.4.

Response to Comment CD-26

This comment is summarized and responded to in the following Master Responses: 2.4.2 and 2.4.4.

Response to Comment CD-27

This comment is summarized and responded to in the following Master Responses: 2.2.3 and 2.4.1.

Response to Comment CD-28

This comment is summarized and responded to in Master Response 2.5.3.

Response to Comment CD-29

This comment is summarized and responded to in the following Master Responses: 2.3.3; 2.4.2; 2.5.5; and 2.5.3.

Response to Comment CD-30

This comment is summarized and responded to in the following Master Responses: 2.2.5 and 2.2.1.

Response to Comment CD-31

This comment is noted.

Response to Comment CD-32

This comment is noted.

Response to Comment CD-33

This comment is noted.

Response to Comment CD-34

This comment is summarized and responded to in Master Response 2.2.3.

Response to Comment CD-35

This comment is noted.

Response to Comment CD-36

This comment is summarized and responded to in the following Master Responses: 2.5.5 and 2.5.3.

Response to Comment CD-37

This comment is summarized and responded to in Master Response 2.5.3.

Response to Comment CD-38

This comment is summarized and responded to in Master Response 2.6.5.

Response to Comment CD-39

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

Response to Comment CD-40

This comment is noted.

Response to Comment CD-41

This comment is noted.

Response to Comment CD-42

This comment is summarized and responded to in the following Master Responses: 2.8.8; 2.1.5; and 2.1.4.

Response to Comment CD-43

This comment is noted.

Response to Comment CD-44 through CD-50

This comment is summarized and responded to in Master Response 2.1.5.

Response to Comment CD-51 through CD-53

This comment is responded to in Master Response 2.8.8.

Response to Comment CD-54

This comment is summarized and responded to in Master Response 2.2.5.

Letter CE: Kevin O'Connor, Central Coast Wetlands Group, Moss Landing Marine Labs (June 22, 2020)

Letter CE

From: Kevin O"Connor
To: AgNOI, WB@Waterboards
Cc: Ross Clark
Subject: Comments on Draft Ag Order
Date: Monday, June 22, 2020 12:56:55 PM
Attachments: CCWG comments on Ag Order 4.0.pdf

EXTERNAL:

Hello Central Coast Water Board,

Attached are comments demo CCWG on the Draft Ag Order.

thank you,

Kevin O'Connor
Program Manager
Central Coast Wetlands Group
Moss Landing Marine Labs
Office: 831 771-4495
koconnor@mlml.calstate.edu

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June 22nd, 2020

Central Coast Water Board,

CE-1 Please accept these comments regarding the significant progress that has been made in drafting the current version of the Central Coast Ag Order. Staff efforts to integrate comments from stakeholders and support an ongoing dialog has helped align state water quality goals with the agriculture industry abilities, noting real world examples of progress. Importantly, this version of the draft provides greater guidance and support for the 3rd party option, empowering farmers within geographic areas to select best actions to move towards WQ compliance. Delays in the adoption of the current draft Ag Order have benefited the region by allowing time for many vested stakeholders (CCWG included) to share ideas and develop conceptual approaches that best recognize the legal requirements of Porter-Cologne, challenges documented within existing water quality monitoring data, research associated with management measures to improve water quality, local geographic challenges and constraints, and industry concerns regarding economic viability and food safety.

CE-2 We encourage this dialog to continue through development of industry-led cooperative watershed plans that outline strategies to employ appropriate management measures to improve local water quality impairments. We would like to provide the below ideas to support this continued conceptual dialog and planning process:

1. It would be wise for us to respect the extensive efforts of the ag industry to investigate pathways to achieve water quality objectives in ways that fit with local constraints and farming activities. Recent interest by industry to participate in discussions reflects a significant realignment of industry to help solve environmental impacts and achieve water quality compliance. We recommend that we continue to support industry and regulators efforts to find effective ways forward that lead to the drafting of local plans to achieve watershed compliance. Specifically;
   a. The Monterey County Grower Shippers comment submittal "Ag Association Partners' Comprehensive Submittal, Including Redline Revisions to the General Order (Ag Partner Submittal)" is an excellent example of the ag industry stepping up to provide an approach to achieving the water quality objectives for the region and should be recognized as an important contribution to the conversation. Such input benefits regulatory efforts to identify appropriate management measures and achieve beneficial uses. We support industry efforts to become vested partners in the success of this endeavor and intend to continue to work with industry to find approaches that invest industry and state resources successfully towards fixing our region's water quality impairments.

CE-3

2. By definition, a cooperative approach relies on local growers and technical experts to identify the local water quality problems and select management measures appropriate for that situation. To achieve this objective the cooperatives need the ability to make decisions for themselves that include prioritization of actions and the distribution of resources in a watershed context.
   a. For growers to successfully allocate resources effectively to address defined water quality impairments, growers and the cooperatives need the ability to limit costs associated with mandatory actions (i.e. minimum actions) that may (because of other actions taken within their cooperative efforts) be redundant or unnecessary. Specifically, for every minimum action levied

CE-4

1

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CE-4 cont.

on all farmers there will be less of an incentive to join the cooperative and allocate resources to specific management measures designed to address local water quality issues. We encourage the Board to reduce regulatory compliance measures on individual farmers when they become members of a cooperative.

CE-5

b. In many cases, farm specific circumstances (crop grown, soils, weather, food safety requirements) reduce the reported efficacy of standard management measures that were designed and tested under optimal conditions. Mandated actions should be minimized where cooperatives have proposed alternative strategies so that members can select, design, and invest in management measures best suited for their circumstances.

CE-6

3. Don't require additional buffers around wetland and riparian restoration projects and existing buffers. Many farmers have already worked with resource conservation organizations to move back from waterways and restore habitat or create water quality enhancement areas and transition zones. To require an additional set back from these projects would undermine long term collaborative relationships and compromise future opportunities to do good projects. Regulatory setbacks should be focused where no actions have been done and on landowners who are unable or unwilling to develop voluntary projects to improve water resources.

CE-7

4. Support industry efforts to work with resource conservation organizations to design projects that benefit water resources and fit within their landscape. If projects can be designed to improve water resources to meet local conditions, it is likely that these projects have a greater potential to succeed than projects designed solely to achieve regulatory compliance.

CE-8

Effective "implementation" of Nonpoint Source management measures should rely on a "three-tiered approach," as defined in the State's Non-Point Source Plan, with an emphasis on self-determined cooperation of the stakeholders. Support the selection of projects and actions based on defined water quality impacts. Because industry led cooperatives are a voluntary alternative to standard Ag Order compliance, certain non-standard agreements and concessions may need to be made for industry adoption and success. Specifically, by establishing a cooperative, it is understood that the local landowners and growers are proposing to adopt a different approach to achieving water quality objectives, and by taking this approach will become vested in the outcome of their program. To support cooperative success and ensure that such an alternate approach leads to success, cooperatives will need to develop watershed management plans, set interim goals, and document incremental progress towards meeting the objectives. Our experience suggested that, to ensure cooperatives are successful:

1. Cooperatives should develop watershed plans that identify known water quality problems, and outline management measures appropriate for implementation within various portions of the watershed. Our studies have found that adoption of the appropriate measures for the local water quality problem can lead to improvements in receiving water quality including water quality attainment (CCWG Moro Cojo Slough Delisting letter, 2020).

CE-9

2. Our studies also found that the scale and cost of the measures needed to address watershed scale water quality problems may be greater than what can be sponsored by a farmer-led cooperative. Because state tax payers have sponsored bonds to fund water quality and habitat projects that can (and have)

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CE-9 cont. improved water quality within agricultural watersheds, implementation of the watershed plans needs to be recognized as industry led strategies. Large projects that can be subsidized by state and federal grants should be identified and funding sought for priority projects.

CE-10 3. It should be noted that the success of CCWG efforts to construct watershed-scale wetland treatment projects relies heavily on farmers contributing land to install the management measures. This contribution of active farm land needs to be included in the cost estimates of watershed plan implementation and distributed fairly among vested interests.

CE-11 4. The Cooperatives will need to develop a Long-term maintenance plan for management measures, paid for by farmers in the cooperative.

CE-12 5. Cooperatives will need data to make decisions and those data should not be a legal liability. Therefore, data collected by the cooperative to identify problems, track sources and document success should remain solely for the use decision making purposes of the cooperatives. Data provided by the cooperative to document incremental success and load reductions can help demonstrate benefits but should be the prerogative of the cooperative not a requirement of the state.

CE-13 To ensure that industry investments achieve the greatest environmental benefit, support farmer led selection of projects that are most appropriate for the priority impacts and ensure that regulation similarly drives the selection of the right tool for the defined water quality challenge.

CE-14 1) Support integrated plans to address sub-watershed scale challenges. Projects, strategies, and actions that are designed and implemented collaboratively by all growers along a drainage are likely to have a much greater success than actions designed and implemented individually by each grower. Cooperative projects will likely involve support from resource conservation organizations who are focused on achieving the water quality objectives.

CE-15 2) Water quality enhancement projects proposed by newly developed Cooperatives need to be recognized as voluntary/self-directed actions to achieve water quality objectives, rather that regulatory compliance, freeing them up to receive state-grant support. As CCWG has demonstrated for 20 years, successful implementation of these projects needs support from agriculture partners and State matching funds through grants focused on implementing these types of voluntary efforts. Project outcomes will be far greater if construction costs are reduced/matched by the state agencies vested in success of these projects.

CE-16 3) Support adoption of existing water quality enhancement projects as part of the Surface Water Cooperative approach. Integration of existing water treatment projects into a Cooperative will help ensure ongoing operations and water quality benefits of those projects and will enable industry to invest in proven practices that can continue to provide water quality enhancements. Without such integration, some existing projects may no longer have the operational support needed to remain effective.

CE-17 We also suggest that the Ag Order support watershed planning efforts that integrate surface water quality and riparian enhancements together within one geographic plan. Surface water quality management measures and riparian restoration activities work together to address multiple water quality objectives. Therefore, we recommend;

3

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CE-17 cont.

1) Allow Cooperatives to develop riparian enhancement plans which define priority areas for setback and restoration to address watershed-specific degradation. Support an increased investment in riparian restoration along primary/critical waterways instead of the required minimum setbacks in other places. We suggest that coordinated restoration activities along priority and contiguous drainage ways will provide greater water quality and riparian benefits than disparate actions implemented separately by individual operations (see "Improving California's Riverine and Wetland Management Efforts", CCWG 2019).

CE-18

2) Support adoption of water quality management measures and riparian enhancement efforts that are sustainable and suited to the site specific climatic and hydraulic conditions.

CE-19

3) Minimum "operational setback" riparian requirements for on-farm ditches should be relaxed or eliminated for farms that participate in watershed-scale riparian enhancement planning and implementation efforts (a Coop). Potential impacts to water quality from relaxation of these operational setbacks for on-farm ditches will be addressed more effectively through the implementation of other surface water management measures. This policy alternative will help reduce food safety challenges on farms and allow greater riparian compliance.

CE-20

Because the riparian protection policy is a relatively new concept, we anticipate a significant amount of confusion and questions will remain. CCWG has grant support from USEPA to continue to provide technical support to the Regional Board as they develop their policies, programs and watershed objectives. We are planning to complete several ambient riparian condition assessments for central and southern California watersheds with the intent of aiding goal setting for riparian protection and restoration within these watersheds. These condition assessments can help define reference conditions (using RipRAM) for different regions of the state. Additionally, we have funds to develop a RipRAM training program to assist with the roll out and implementation of the use of this new rapid assessment tool.

CE-21

CCWG is committed to helping the Central Coast Ag community and partner research and resource management organizations develop effective industry led cooperatives to solve water quality and habitat impairments. We encourage continued conversations between Regional Board staff, stakeholders, and the Ag industry through the entire watershed cooperative planning process. We are encouraged by the timeline laid out in Ag Order 4.0 which provides sufficient time for industry and conservation partners to draft watershed plans that they can support that help to achieve the water quality objectives for that drainage.

Thank you,

Ross Clark

Director, Central Coast Wetlands Group

4

Response to Comment CE-1

Thank you for your comment.

Response to Comment CE-2

Thank you for your comment.

Response to Comment CE-3

This comment is summarized and responded to in Master Response 2.2.3.

Response to Comment CE-4

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

Response to Comment CE-5

This comment is summarized and responded to in the following Master Responses: 2.1.8; 2.2.2; 2.3.3; and 2.3.7.

Response to Comment CE-6

This comment is responded to in Master Response 2.8.8.

Response to Comment CE-7 through CE-8

This comment is summarized and responded to in Master Response 2.1.10.

Response to Comment CE-9

This comment is summarized and responded to in the following Master Responses: 2.5.5 and 2.1.11.

Response to Comment CE-10

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

Response to Comment CE-11

This comment is summarized and responded to in Master Response 2.2.1.

Response to Comment CE-12

This comment is noted.

Response to Comment CE-13 through CE-14

This comment is summarized and responded to in Master Response 2.1.10.

Response to Comment CE-15

This comment is summarized and responded to in the following Master Responses: 2.1.10 and 2.3.1.

Response to Comment CE-16

This comment is summarized and responded to in Master Response 2.1.10.

Response to Comment CE-17

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

Response to Comment CE-18 through CE-20

This comment is responded to in Master Response 2.8.8.

Response to Comment CE-21

Thank you for your comment.

Letter CF: Jeffrey Odefey, Clean Water Supply Program, American Rivers (June 22, 2020)

Letter CF

From: Jeff Odefey
To: AgNOI, WB@Waterboards
Cc: Lisa Hunt
Subject: Comment - Ag Order 4.0 DEIS
Date: Monday, June 22, 2020 5:20:47 PM
Attachments: Ag Order 4.0 DEIS comment_AmRiv 6 22 20.pdf
Economic Benefits of On-farm Conservation Efforts 042920 (002).pdf

EXTERNAL:

Dear Regional Water Board Members,
Please accept these comments on the Draft Environmental Impact Statement associated with the Board's consideration of an updated Agricultural Order.
Thank you,

Jeffrey Odefey
Director, Clean Water Supply Programs

w. 530.478-0206 x204
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American Rivers
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American Rivers
Rivers Connect Us®

June 22, 2020

Chair Jean-Pierre Wolff and Board Members
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Via e-mail: AgNOI@waterboards.ca.gov

Re. Comment upon Central Coast Regional Board Draft Agricultural Order 4.0 Draft Environmental Impact Statement

Dear Chair Wolff and Regional Board Members,

1. Frame of comments

CF-1 American Rivers is a national not-for-profit advocacy organization focusing on the protection and restoration of our nation's river systems and the communities that are connected to these rivers. With two offices in California (Berkeley and Nevada City), the organization's in-state activities are centered around reforms to the management of floodplains and water delivery infrastructure; restoration of headwaters forest and meadow functionality; implementation of green stormwater infrastructure policies and projects; and the deployment of groundwater management and surface water protection regulations that protect environmental quality and human health.

CF-2 The purpose of this letter is to convey American Rivers' concerns about the adequacy of the CEQA review of the Central Coast Regional Board's Draft Agricultural Order 4.0 ("Draft Order"). As such, this letter is a complement to a separate American Rivers' letter which provides responses to certain aspects of the Draft Order itself. (See, Lisa Hunt, Comment letter on Draft Ag. Order, 6/22/20). Specifically, American Rivers is concerned that the analysis of the economic impacts of the Regional Board's action unduly privilege costs borne by the regulated community and disadvantage the economic and social costs currently borne by the environment and public. Further, the economic analysis in the Draft Environmental Impact Statement ("DEIS") presents an incomplete and underwhelming account of the economic and social benefits associated with the Draft Order.

CF-3 While the California Environmental Quality Act ("CEQA") does not fully embrace a cost-benefit evaluation of a proposed project, the law and its implementing regulations clearly and explicitly contemplate a rich review of the economic and social implications of a proposed permit or project. See Pub. Res. Code §§ 21001(g), 21082.4. Indeed, a comprehensive evaluation of the economic impacts of the Draft Order is an important prerequisite to a fully reasoned decision by the Regional Board as well as a fundamental step in gaining an understanding of the full range of impacts associated with environmental and public health degradation, protection and restoration.

CF-4 We call upon the Board to insist that the Final EIS be more inclusive of these factors, many of which support the protective measures identified by the Board as its preferred alternative.

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2. Importance of robust econ analysis including costs of pollution and benefits of regulation

CF-5

As noted in an earlier letter to the Board from American Rivers, "the continued degradation of water quality in the rivers of the Central Coast impose valid and quantifiable economic impacts on residents of the Region's communities and on all Californians. These costs are associated with the deprivation of social and environmental values that would otherwise be provided by healthy river ecosystems." Odefey letter of 5/13/19 at 1.[1]

To reiterate a point made in that earlier letter:

> *Indeed, there is a widespread lack of regard for the economic value of the ecosystem services provided by healthy watersheds, in part because assigning value to free flowing, unpolluted rivers is often difficult, or overlooked in preference for realizing profits by exploiting these rivers. "One consequence of the failure to put a price tag on environmental flows is that many environmental water demands remain unsatisfied. In addition, public and private decisions often neglect the economic costs of environmental effects from traditional agricultural and urban water uses."[2] Another consequence is that the public then bears the costs of degraded waterways and aquifers in the form of lost recreational opportunities, increased health costs, increased drinking water treatment costs, deprivation of critical ecosystem function and species, and elimination of economically important fisheries.[3]*

CF-6

When the economic value of ecosystems and public health are given inadequate consideration, permitting agencies regularly place undue and imbalanced importance on the costs of compliance with a regulatory measure. Breaking this cycle of disadvantaging the environment requires that regulatory agencies like the Regional Board insist on more complete economic analyses of pollutant impacts and the benefits of associated control programs and permits. CEQA clearly contemplates such analyses, and we encourage the Board to explore the full reaches of its CEQA authority.

3. CEQA and the CEQA Guidelines contemplate a greater role for economic analysis in supporting the Board's Draft Order

CF-7

The treatment of economic impacts in DEIS focuses almost entirely on the effect of presumed compliance costs on the grower community. After considering these costs, the DEIS records a determination that the Draft Order is likely to have "a less than significant" impact on the environment. This finding would likely be further supported by a more robust analysis of the economic and social effects of the Draft Order. An analysis that considers reduced adverse impacts (i.e., benefits) comports with CEQA and its implementing regulations. Such an analysis would likely provide additional support for WDR provisions that further protect the environment and public health in the areas affected by the Draft Order.

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[1] Jeffrey Odefey, American Rivers, to Chair Wolff and Board Members, "Comments regarding Ag. Order 4.0," May 13, 2019.

[2] Public Policy Institute of California, "California Water Myths," at 15 (internal citations omitted.) Accessed 10 May 2019 at https://www.ppic.org/content/pubs/report/R_1209EHR.pdf.

[3] *Id.*

a. CEQA summary

CF-8

CEQA establishes a clear policy command for lead agencies to "consider qualitative factors as well as economic and technical factors and long-term benefits and costs" their evaluation of projects or actions that affect the environment. Pub. Res. Code § 21001(g). Balanced against this mandate, CEQA generally precludes a lead agency from relying on "evidence of social or economic impacts *that do not contribute to, or are not caused by*, physical impacts on the environment." Pub. Res. Code § 21080(e)(2) (emphasis added.) There is a rich body of case law discussing the propriety of considering various types of economic analyses in CEQA reviews; this case law suggests that, subject to limitations, the Board may properly consider the economic and social impacts associated with the physical, environmental impacts associated with the discharges at issue in the proposed Draft Ag. Order.

This permission is consistent with recent statutory amendments to CEQA. In 2018, AB2782 added Section 21082.4 to the Public Resources Code CEQA provisions. The added language provides that "the lead agency may consider specific economic, legal, social, technological, or other benefits, including regionwide or statewide environmental benefits, of a proposed project and the negative impacts of denying the project." In the context of the current proceeding, the statute clearly contemplates that the Board may take into consideration an evaluation of the economic benefits of the improved water quality resulting from the proposed Ag. Order, and the costs (e.g., "negative impacts") associated with continued un-permitted agricultural discharges.

b. Deficiencies in DEIS

CF-9

Despite the clear statutory allowance for consideration of economic and social impacts, the DEIS prepared by the Board incorrectly states that no federal or state laws, regulations or policies "relate specifically to economics and the Proposed Project." DEIS at 205. As a result of this stance, the DEIS improperly fails to adequately consider the long-term economic and social impacts of the Draft Order, except for those that relate to compliance costs borne by agricultural dischargers. This narrow approach gives under preference to a consideration of compliance costs while under-privileging consideration of reduced economic costs and other economic and social benefits associated with the Draft Order. This bias is reflected in the cursory narrative discussion of costs related to existing water quality impacts. DEIS at 231-234.

CF-10

Furthermore, the DEIS narrowly reads the specific language of CEQA. The methodology for the DEIS' impact analysis considers whether the Draft Order "would result in economic effects that would cause significant adverse physical changes to the environment." (DEIS at 3.5.4 Impact Analysis (p 3.5-30). While this approach reflects one aspect of the role of economic information in making a determination of significance, it reflects only a partial reading of the CEQA Guidelines. See CEQA Guidelines at 15064(e). Of greater relevance is the remainder of section (e): "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*. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant." (emphasis added). In the instance of the Draft Order, a fuller reading of the CEQA Guidelines would indicate that the Board properly ought to consider whether affects "economic or social effects on people" by reducing

CF-10 cont.

existing adverse effects. This revised methodology would appear to be more consistent with the language of Pub. Res. Code § 21080(e)(2) which implicitly envisions consideration of "evidence of social or economic impacts that ... *are* ... *caused by*, physical impacts on the environment."

CF-11

Perhaps as a result of this too narrow reading of the CEQA Guidelines, the DESI proposes two restrictive metrics for finding whether the impacts of Draft Order have met the significance criteria provided by CEQA. These two narrow metrics again focus solely on the economic impacts of compliance costs upon regulated growers. DEIS at 3.5-30, 31. By failing to evaluate these costs against the adverse economic and social effects of the environmental impacts avoided or reduced by the Draft Order, the DEIS presents a woefully incomplete picture of the overall economic effects of the Draft Order and the actions of growers that have precipitated it. A more robust consideration of the reduced economic and social effects of the Order would likely provide additional support for the Board's determination that the Draft Order has a "less than significant impact" upon the environment.

4. *Summary of econ data and sources (repeat from earlier letter)*

CF-12

The DEIS' consideration of the costs of adverse environmental impacts associated with irrigated agriculture begins well, with an assertion that while quantification of the economic value of environment goods is difficult, "this is not to say that environmental goods do not have significant value." DEIS at 3.5-29. However, the resulting consideration of these economic values is given remarkably short shrift, running to two full paragraphs and three bullet points. It is apparent that the authors of the DEIS made little effort to gather regionally relevant economic information or to follow best-practices in conducting an economic review that would fit within the scope of the DEIS. The cursory review of available data and evaluation approaches described in our earlier letter provides information missing from the DEIS and indicates pathways of additional data gathering and evaluation.

CF-13

In short there is sufficient evidence to credibly assess the adverse impacts associated with irrigated agriculture in the Central Coast region and the value of avoiding these impacts through the approaches contemplated by the Draft Order.

5. Expert testimony supports a more complete consideration of economic effects

CF-14

An alternative, more robust approach to examining the economic effects of the Draft Order, and the underlying conditions which make the Order necessary, could follow the methodologies described in the attached memorandum from Dr. Mark Buckley, Ph.D. In his memo, Dr. Buckley cites federal (US EPA and US OMB) guidance and procedures for conducting economic impact analyses of proposed actions or regulations. While not dispositive in this permitting action, these authorities offer both precedent and instruction that are relevant to water pollution control permitting under the Clean Water Act, the federal analog to California's Porter-Cologne Act.

CF-15

The memo further defines types of economic value that ought to be included in a more far-reaching review of the effects of the Draft Order and of the existing conditions. Notably among these values are the job and economic benefits that may accrue from the actions required by the Draft Order, rather than the limited focus on compliance costs. Similarly, personal and municipal investments in the provision of clean water to residents may be

CF-15 cont.

affected by the Draft Order; these costs are reasonably realistic to estimate. Left unaddressed, nitrate and other pollution of drinking water supplies can impose significant financial costs for treatment, costs which in turn can be expected to affect the affordability of water on residents and local small-businesses. The Board should be provided with information in the DEIS that allows it to review these impacts, particularly in light of the state's affirmation of the Human Right to Water. Water Code § 106.3.

CF-16

In short, the methodologies described in the attached memo provide instruction for the Board and the DEIS authors to consider in completing a more inclusive, more supportive analysis of the economic and social benefits associated with improved regulation of Agricultural discharges in the Central Coast Region.

6. Conclusions

CF-17

American Rivers supports the multi-disciplinary approach to reducing agricultural water and groundwater pollution preferred by the Board in its Draft Order. The comments in our complementary letters specifically support the requirements for adequate riparian buffers and nitrogen and pesticide discharges to surface and groundwaters. However, we believe in the importance of the process of reaching environmentally protective decisions. In this regard, the Board's DEIS could be valuably improved by a more comprehensive analysis of economic and social effects of the Draft Order. This improved process would, in our opinion, confer additional support for the protective measures proposed by the Regional Board and inform the implementation of the discharge control and riparian buffer programs in the Draft Order. We encourage the Board, in finalizing the EIS, to follow the recommendations offered by Dr. Buckley:

CF-18
- *Make efforts to identify and systematically describe all benefits of the Board's proposed action.*

CF-19
- *Where methods and data allow, and where the magnitude of the benefit suggests, include economic valuation.*

CF-20
- *Rely upon existing federal and state guidelines for methods.*

CF-21
- *Include distributional analysis of the benefits and costs, with consideration of environmental and social justice implications including water rate affordability.*

CF-22
- *Utilize comprehensible metrics for performance that have ranges and benchmarks of consequence to the public.*

We appreciate this opportunity to provide comment on the DEIS and remain available to answer any questions, etc.

Sincerely,

Jeffrey Odefey
Director
Clean Water Supply Program

encl.

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DATE: April 6th, 2020
TO: Central Coast Regional Water Quality Control Board
FROM: Mark Buckley
SUBJECT: Economic Benefits of Reduced Pollution Discharge from Agriculture in the Central Coast Region

Overview and Purpose

CF-23 This memo is a response to a request by the Central Coast Regional Water Quality Control Board (Board) for comments on its Draft Agricultural Order 4.0. (Draft Order). These comments relate to the economic implications of the Draft Order both in terms of the economic importance of on-farm activities to limit pollutant discharges as well as the policy importance of identifying and attempting to quantify resulting benefits. The Draft Order and accompanying Draft Environmental Impact Report do provide some discussion of the benefits to society of reducing pollutant discharges from agricultural land to surface water and groundwater, but neither provides sufficient economic treatment of these benefits. A more complete discussion and analysis of the economic value and importance of the benefits of reduced pollutant discharges to the scarce water resources of the region would allow for more **informed decision-making** and **socially-efficient outcomes** for the communities of the Central Coast Region.

CF-24 Specifically, the intention of these comments is to: (1) provide support to arguments that CEQA best serves the public interest when it includes economic analysis of outcomes and tradeoffs that consider the full range of effects associated with proposed order, not just compliance costs borne by regulated parties and (2) identify and highlight methods and best practices accepted and applied by federal natural resource agencies including the USEPA and California local agencies including other regional water quality control boards for conducting such economic analyses.

CF-25 I am providing these comments on behalf of American Rivers. I am a senior economist and partner with the economics firm ECONorthwest, where I lead the natural resources practice. My work focuses on analysis of the benefits, costs, and market impacts of public policy involving natural resources, particular water. You can find more information about myself and ECONorthwest on our website www.econw.com. In this memo I provide comments addressing:

- guidelines and regulatory context for economic analysis of environmental effects of public policy
- the value and importance of including an economic analysis of the Draft Order benefits and costs,
- the process and approach for such economic analysis,
- important categories of benefits and costs, and representative values,
- distributional equity considerations, and
- importance of metrics for evaluation.

Economic Policy Context

Federal Guidance

CF-26 I recognize that Board members and Board staff, as well as other members of the public offering comments can speak to the types of benefits and who receives those benefits from reduced pollution to water resources in the Central Coast Region. Many of these benefits, potentially most, are not typically thought of as economic concerns, nor are they generally first considered in terms of their monetary value. It is difficult though for the public as well as regulators to weigh the financial costs of regulatory compliance without information regarding the corresponding public benefits in comparable units of measure. Given the financial costs of achieving these water quality-related benefits, the market activity and associated jobs and wages supported by businesses facing additional costs, rigorous quantitative economic analysis of the benefits can be necessary to evaluate the tradeoffs to the community. The current DEIS provides very little information of this sort to inform public comment on net tradeoffs to society.

CF-27 The Office of Management and Budget provides guidance to federal agencies on development of regulatory economic analyses via Circular A-4.[1] Individual federal agencies reference Circular A-4 as the basis for development of their individual guidelines for economic analysis (e.g., USEPA as described later). Circular A-4 recognizes that proposed regulations require economic analysis to understand tradeoffs. As initial overall guidance, it states,

> *"Cost-benefit analysis is a primary tool used for regulatory analysis. Where all benefits and costs can be quantified and expressed in monetary units, cost-benefit analysis provides decision makers with a clear indication of the most efficient alternative, that is, the alternative that generates the largest net benefits to society (ignoring distributional effects). This is useful information for decision makers and the public to receive, even when economic efficiency is not the only or the overriding public policy objective."*[2]

CF-28 This overall guidance indicates that **all benefits and costs should be considered**, and it recognizes that for a balanced trade-off analysis dollars is the most appropriate metric. Circular A-4 recognizes that cost-benefit analysis can lead to incorrect decisions if it does not include a complete valuation of all benefits and costs.

> *"When important benefits and costs cannot be expressed in monetary units, BCA is less useful, and it can even be misleading, because the calculation of net benefits in such cases does not provide a full evaluation of all relevant benefits and costs."*[3]

[1] Office of Management and Budget. 2003. Circular A-4. http://www.whitehouse.gov/omb/circulars_a004_a-4.

[2] OMB Circular A-4.

[3] OMB Circular A-4.

CF-29 Circular A-4 goes on to provide guidance on how to measure and compare benefits and costs. USEPA echoes and references Circular A-4 guidance and these fundamental principles of cost-benefit analysis in its own *Guidelines for Preparing Economic Analyses*.[4] EPA states in its *Guidelines:*

> *"Estimating benefits in monetary terms allows the comparison of different types of benefits in the same units, and it allows the calculation of net benefits – the sum of all monetized benefits minus the sum of all monetized costs – so that proposed policy changes can be compared to each other and to the baseline scenario."*

CF-30 These types of economic analysis underpin design and implementation of regulations under the Clean Water Act at federal and local levels. USEPA consistently brings economic analysis to bear where assessment of the tradeoffs warrants. We support that work. State and local implementing authorities as well as regulated municipalities consistently apply these methods as well. I was the lead economist for the benefit-cost analysis of a proposed wet weather bacteria TMDL for the San Diego Regional Water Quality Control Board. The billions of dollars of potential compliance costs motivated a joint study by the regulated municipalities and the regional board to assess if the public health and recreation benefits would justify the costs, and it helped improve the design of the regulatory efforts to achieve the most socially-efficient outcomes.

CF-31 CEQA does provide a basis for these types of economic analyses. This includes direction from the legislature:

> *Require governmental agencies at all levels to **consider qualitative factors** as well as **economic and technical factors** and **long-term benefits and costs**, in addition to **short-term benefits and costs** and to consider alternatives to proposed actions **affecting the environment**.*[5]

CF-32 Similarly, the CEQA guidelines include:

> ***Economic or social information** may be included in an EIR or may be presented in whatever form the agency desires….(b) **Economic or social effects** of a project may be used to determine **the significance of physical changes** caused by the project.*[6]

CF-33 The Draft Order suggests that no regulatory language for CEQA requires economic analysis, but as shown above, CEQA does suggest that it should be included when relevant to decision-making.

[4] U.S. Environmental Protection Agency. 2010. Guidelines for Preparing Economic Analyses. December. http://yosemite.epa.gov/ee/epa/eed.nsf/pages/guidelines.html.

[5] Emphasis added. CA PRC §21001 (g).

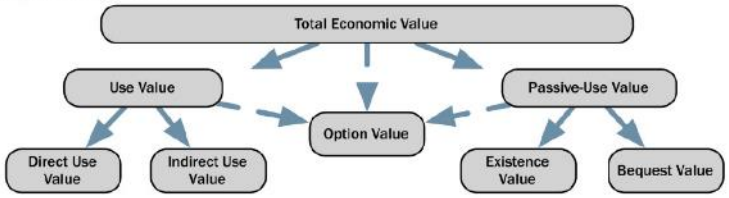
[6] CEQA Guidelines. Sec. 15131.

CF-34

Types of Economic Value

A first step in this process is to identify all of the values at stake, with a focus on final goods and services[7]. Figure 1 summarizes the major categories of economic value for market and non-market goods and services. This concept of total economic value drives the overall benefit framework. The left side of the figure shows use value, which is perhaps the clearest type of economic value. **Direct use value** describes the value associated with the direct use of a good or service, such as reduced illness (improved public health), increased supply of potable water, or an additional day fishing. Indirect use value describes the goods and services that precede direct goods and services, such as the aquatic habitat that nurtures and provides refuge for the targeted fish. In some cases it is more practical to value the indirect resource, but then it is important to not also count the direct use value so as to avoid double-counting.

Figure 1. Types of Economic Value



The right side of the figure shows **passive-use value**, which represents values that exist when there is no direct or indirect use of a resource. For example, a person can appreciate the knowledge that fish and other wildlife are able to survive and thrive in an area, even if that person never directly encounters the wildlife. Passive-use values are less obvious than use values but (in some instances) can represent a greater total value because they incorporate demands from a larger population and less competition or congestion among users. The figure separates passive-use value into two categories. One, existence value, comes from people's desire for the continued existence of a species, landscape, or some other aspect of a resource—or of the ecosystem as a whole—without any contact or use of the good or service. The other, bequest value, arises because people want to ensure that the resource will be available for service and enjoyment by future generations. Typically, these passive-use values are described in terms of an individual's willingness to pay for an object's current or future existence. Passive use values might exist for people outside of the project area who still appreciate water quality improvements even without directly benefiting through use of the resource themselves.

The middle of the figure shows another component of the total economic value, known as option value. Option value refers to the benefit of maintaining an opportunity to derive services from a resource in the future. It can originate from either side of the figure. Market prices sometimes exist that provide information useful for quantifying option values, but not always.

[7] Final goods and services refers to the ultimate use of a good or service, rather than intermediary inputs. This focus is to avoid double-counting, and is consistent with national accounting of Gross Domestic Product (GDP).

CF-34 cont.

In the context of uncertainty over future resource scarcities, due to climate change, population growth, and other factors, option values can be particularly high.

Economic Value vs. Market Impacts

CF-35

One final important point to identify regarding economic evaluation of a new policy such as the Draft Order is in terms of business activity and the importance of distinguishing between benefits and costs vs. resulting changes in jobs and income. Investments to improve water quality can have financial costs for equipment and BMPs and benefits as described above (e.g., improved public health and recreation). A typical problem for economic evaluation of regulation how to treat information about the businesses and jobs associated with these benefits and costs. First it is important to recognize the interrelationships.

Figure 2. Draft Order and Resulting Benefits, Costs and Market Impacts

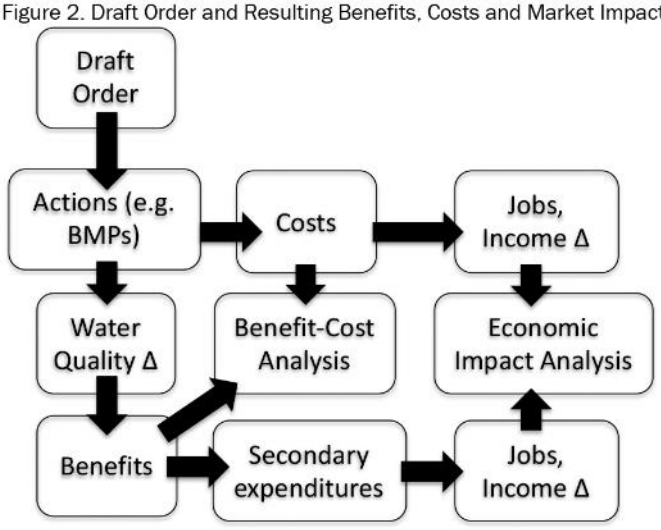


Figure 2 provides an illustration of these relationships. The Draft Order will trigger actions in order to comply. These actions will have financial costs and generate improvements in water quality that can have benefits. These costs and benefits should be compared from a social-efficiency standpoint, that is, to assess if the benefits of the actions justify their costs. These benefits and costs can also have a wide variety of market impacts as well in terms of how businesses respond to the increased costs of operating, impacts on businesses that provide equipment and services necessary for compliance, and even businesses who experience increased demand due to the water quality improvements (e.g. fishing equipment). These job and income impacts can be considered separately in an economic impact analysis, which USEPA and other agencies do utilize and technical guidance is also available. But it is important to keep these separate, because more spending doesn't necessarily always make society better off. The same dollar that is a cost for compliance might be considered a social positive in terms of additional wages for workers providing the Draft Order compliance (e.g. a company installing BMPs for farmers). The key implication is that considering job and income impacts

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CF-35 cont.

can be important, but the Draft Order is likely to trigger job and income impacts in positive and negative ways, due to compliance costs and water quality benefits, and **the more useful analysis from a social efficiency perspective is to focus on the value of benefits and costs.**

CF-36

Availability of Tools and Information to Evaluate the Economic Benefits

The Draft Order will have costs, which have market values and can readily be estimated. The benefits however are diffuse both in their type of beneficiaries, as well as involving market and non-market goods and services. Therefore the critical category of information required therefore to properly assess whether the Draft Order provides net benefits or costs to society is a comprehensive understanding of the value of the benefits it provides. This can be done systematically:

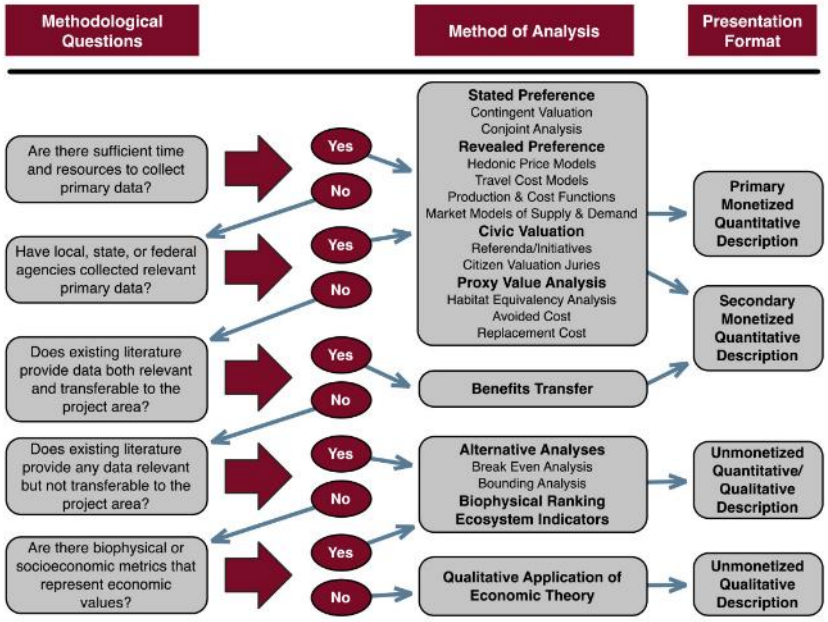
1. **Identify all types of benefits resulting from the Draft Order**
2. **Identify the final goods and services each benefit provides**
3. **Utilize existing literature or data to estimate the value of each benefit**

Fortunately there are numerous valuation methods available, suitable for each pathway of benefit and level of data availability. Figure 3 illustrates the range of available analytical approaches and the process for selecting the appropriate one.[8] The most practical is generally to rely upon existing literature and existing benefits as a first approximation (benefit transfer), which is extensive on the topic of water quality benefits.

Figure 3. Analytical Approach to Quantifying Economic Values

[8] For further description of these valuation methods and others, see U.S. Environmental Protection Agency's Science Advisory Board. 2009. *Valuing the Protection of Ecological Systems and Services: A Report of the EPA Science Advisory Board* (EPA-SAB-09-012). Washington, DC.

CF-36 cont.



CF-37

When applying benefit transfer, it is important to take into account the demand for each type of benefit and the local scarcities. Urban contexts are often quite different from rural contexts for ecosystem-based benefits because populations and related demand are typically greater, and other supply sources are less abundant and therefore scarcity is also typically greater. The Central Coast Region for example faces serious water supply scarcities, which drive up the value of protecting water quality and quantity relative to many other contexts. Consequently if using results from elsewhere, it is important to be sure to properly account for the level of value available in this context.

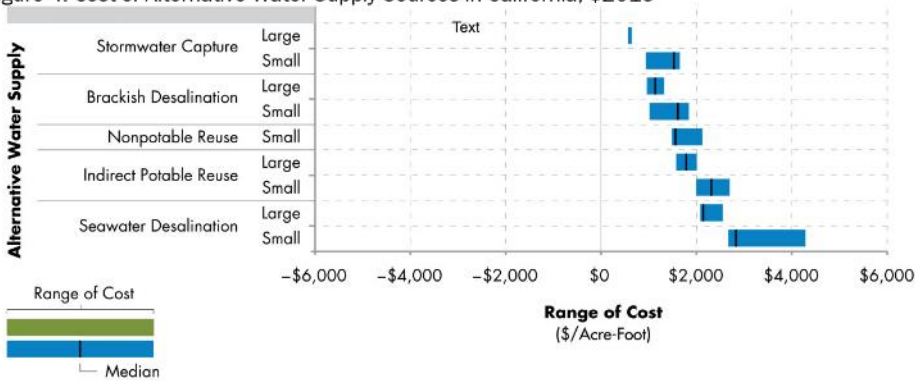
For example, the value of any opportunity to improve the availability of clean water in the Central Coast Region is likely to be very high. From a consumptive perspective alone, these values are particularly high and revealed by expenditures that communities in the region are making to augment water supply. Tertiary treatment of wastewater to reclaimed levels, desalination, groundwater recharge and efforts to fight saltwater intrusion, and binding limits on supply (conservation requirements) are all underway in the Central Coast Region, with reclaimed water and desalination some of the most expensive sources of water supply available, with costs in excess of thousands of dollars per acre-foot (Figure 4). At the same time, irrigators generally pay less than $100 per acre-foot of water due to heavy subsidy from state and federal water projects.[9]

[9] Baldocchi, D. 2018. The Cost of Irrigation Water and Urban Farming. Berkeley News. https://news.berkeley.edu/berkeley_blog/the-cost-of-irrigation-water-and-urban-farming/; U.S. Bureau of

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Figure 4. Cost of Alternative Water Supply Sources in California, $2015



Source: Cooley, H. and Phurisamban, R., 2016. The Cost of Alternative Water Supply and Efficiency Options in California. Oakland: Pacific Institute.

These **rising costs for water supply in the Central Coast Region** due to increasing potable water scarcity come in a context of increasing affordability challenges for households and small businesses. The proposed desalination plant for Monterey County is expected to double household water rates.[10] **Water affordability** has been an increasing concern for communities and utilities providing drinking water, wastewater and stormwater management. Financial Capability Assessment of costs to meet drinking water and wastewater requirements increasingly find that communities have reached their affordability limits. Annual household costs are increasing faster than inflation (Figure 5). If clean water sources are allowed to be contaminated, treatment costs are much greater than pollution prevention costs to restore the water quality, and these costs have affordability constraints for households. These constraints have budget implications and possibly **communities cannot afford other regulatory compliance responsibilities** associated with wastewater discharge. These heightened treatment costs relative to pollution avoidance are particularly acute when involving groundwater.

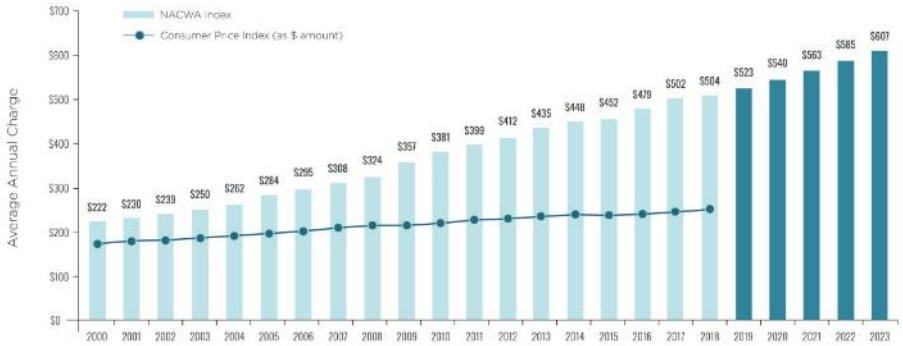
Reclamation. 2019. California-Great Basin 2019 Final Rates. Irrigation Contracts. https://www.usbr.gov/mp/cvpwaterrates/ratebooks/irrigation/2019/index.html.

[10] Cimini, K. 2019. Central Coast Plan to Shift Water to Wealthier Areas Meets Protest. The Californian. October 23. https://www.thecalifornian.com/story/news/2019/10/23/clean-water-calam-desal-plant-plan-faces-pushback-over-cost/4057830002/.

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Figure 5. Average Annual Service Charge for Clean Water



Source: National Association of Clean Water Agencies. 2019. Cost of Clean Water Index. https://www.nacwa.org/news-publications/financial-survey-nacwa-index.

CF-38

Beyond these direct monetary values readily available to show the value of potable water in the Central Coast Region, water quality benefits of the Draft Order will provide a range of other ecological benefits. Several existing studies exist that summarize these values in per-unit formats (e.g. per-acre) that allow easy application as a first approximation. Basic literature searches reveal many more, and tools exist to ease this process. Such tools include databases of economic values from peer-reviewed and gray literature such as the Environmental Valuation Reference Inventory[11] and the Recreation Use Values Database supported by the U.S. Forest Service[12]. Spatial tools also exist for directly mapping and valuing ecosystem services, such as InVEST by the Natural Capital Project at Stanford University.[13]

As a few examples (non-exhaustive) of values relevant to the benefits provided by the Draft Order:

- **People value survival of migratory fish populations (e.g., salmonids):** A study by the U.S. Fish and Wildlife Service and Bureau of Reclamation when considering removal of the Klamath River dams found California households willing to pay $55 per year to reduce the risk of Coho salmon in the basin.[14]
- **Estuaries (affected by upstream water quality) support ocean fisheries.** California's estuaries are extremely scarce relative to historical levels, with the vast majority having been converted. Estuaries affected by upstream water quality in the Central Coast

[11] http://www.evri.ca/en

[12] Hosted by Oregon State University. http://recvaluation.forestry.oregonstate.edu/.

[13] https://naturalcapitalproject.stanford.edu/software/invest

[14] RTI International. (2012). *Klamath River Basin Restoration Nonuse Value Survey*. Prepared for Klamath River Dams Project Office, U.S. Bureau of Reclamation. https://klamathrestoration.gov/sites/klamathrestoration.gov/files/DDDDD.Printable.Klamath%20Nonuse%20Survey%20Final%20Report%202012%5B1%5D.pdf

Region support important commercial fisheries, with values from the fish equated to thousands of dollars per acre per year.[15]

- **Ocean fisheries provide substantial benefits to Californians.** California has the largest ocean-based economy in the United States, valued at $45 billion annually and supporting over 500,000 workers. The state's 19 coastal communities account for 80 percent of the state's wages and GDP and are home to 68 percent of California residents.[16]
- **Groundwater is a critically valuable resource in California.** Over 85 percent of community public water systems (PWS) throughout the state rely on groundwater to supplement their drinking water. In turn, these systems serve 30 million California residents. During a drought, groundwater provides anywhere from one-third to one-half of the state's water supply.[17]
- **Public health, recreation and tourism in California are dependent on water quality.** Much of the recreation base for residents and tourists alike depends on high water quality instream for fishing and boating as well as downstream at beaches. A study of the benefits of improved water quality due to reduced runoff pollution at beaches in San Diego County and Orange County found $160 million worth of avoided illness, and at least $150 million in value of increased beach trips.[18]

CF-38 cont.

The DEIS makes no effort to consider or include information regarding the value of benefits as available in these and similar studies.

Diversity, Equity, Justice Considerations

The benefits of the Draft Order are likely to affect a wide swath of the Central Coast Region's population. As already described, improving water quality will reduce costs to households on their water bills. It will reduce health costs not only of medical treatment but also of lost days of work. And low-income households, most vulnerable to increased household costs and lost wages are also most likely to utilize regional fisheries as a subsistence food source. The key consideration is that a careful assessment of the benefits and costs of the Draft Order needs to look beyond those borne by farms and out to the households of the region via direct and indirect effects of water quality. The region's population has high shares of Hispanic

CF-39

[15] Raheem, N. et al (US EPA), "The Economic Value of Coastal Ecosystems in California," Nov. 2009,

[16] Eastern Research Group, Inc. (2016). The National Significance of California's Ocean Economy. NOAA. Retrieved from: https://coast.noaa.gov/digitalcoast/training/california-ocean-economy.html

[17] Center for Watershed Services, University of California, Davis. (2018). Addressing Nitrate in California's Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater: California Nitrate Project, Implementation of Senate Bill X2 1. Retrieved from: http://groundwaternitrate.ucdavis.edu/. p. 9.

[18] ECONorthwest and Environmental Incentives. 2017. Cost-Benefit Analysis: San Diego Region Bacteria Total Maximum Daily Loads. Conducted for San Diego County, City of San Diego, Orange County, and the San Diego Regional Water Quality Control Board. https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/issue3/Final_CBA.pdf

households and households in poverty, as well as per capita income levels that are below the state average in Monterey County (Table 1).

CF-39 cont.

Table 1. Select Demographics of Central Coast Region Households

	California	San Luis Obispo County	Monterey County
Persons 65 years and over, percent	14.3%	20.1%	13.6%
Hispanic or Latino, percent	39.3%	22.8%	59.1%
Language other than English spoken at home, percent of persons age 5 years+, 2014-2018	44.1%	17.9%	55.1%
Median household income (in 2018 dollars), 2014-2018	$71,228	$70,699	$66,676
Per capita income in past 12 months (in 2018 dollars), 2014-2018	$35,021	$35,832	$28,836
Persons in poverty, percent	12.8%	12.7%	13.3%

CF-40

Metrics for Evaluating Benefits of the Draft Order

Communicating a diverse set of market and non-market benefits to the public and decision-makers can be challenging. It's useful to translate the benefit information into units or metrics that have direct relevance and reference points. It's important to consider how to use the information to understand the absolute value of the benefit (or cost) as well as relative value in comparison across options or scenarios. Some of the benefits described above lend themselves to per-household or per-user benefit estimates. And existing experienced cost and benefit levels can be useful benchmarks. For example, current household water bills and wastewater/stormwater charges are a useful comparison. E.g., the benefits of improved water quality due to the Draft Order are likely to equate to a per household value equal to X percent of current average household water bills. Or if a river, estuary, or beach is likely to experience water quality improvements, its expected level of achieved water quality could be related to water quality at reference streams. E.g., water quality conditions for the Salinas River are expected to achieve levels found on the Carmel River X days per year. The key objective is to **translate benefit and cost metrics into units with benchmarks that are relatable.**

The Draft Order does not include any metrics that speak to the benefits of improved water quality to the regional community, such as public health impacts or water rate affordability.

Comment Summary

CF-41 To summarize, my experience and understanding of the Draft Order and DEIS suggest that the Board should:

- *Make efforts to identify and systematically describe all benefits of the Board's proposed action.*

CF-42

- *Where methods and data allow, and where the magnitude of the benefit suggests, include economic valuation.*

CF-43

- *Rely upon existing federal and state guidelines for methods.*

CF-44

- *Include distributional analysis of the benefits and costs, with consideration of environmental and social justice implications including water rate affordability.*

CF-45

- *Utilize comprehensible metrics for performance that have ranges and benchmarks of consequence to the public.*

Response to Comment CF-1

Thank you for your comment.

Response to Comment CF-2

Thank you for your comment. The CCWB acknowledges the underlying purpose behind the submittal of comments by American Rivers; more generally understood to express the organization's concerns related to the adequacy of the CEQA review of DAO 4.0, including potential adverse economic impacts, and indirect social implications that could result from implementation of RAO 4.0. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-3

The comment discusses the need to evaluate economic and social implications of a project under CEQA. The comment cites CEQA language, which states:

> In describing and evaluating a project in an environmental review document […] the lead agency may consider specific economic, legal, social, technological, or other benefits, including regionwide or statewide environmental benefits, of a proposed project and the negative impacts of denying the project. Any benefits or negative impacts considered pursuant to this section shall be based on substantial evidence in light of the whole record.

(CEQA, § 21083.) In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-4

The comment requests that the FEIR be more inclusive of social and environmental factors. Please see Response to Comment CF-3.

Response to Comment CF-5

The comment expresses concern that the environmental effects of urban and agricultural uses create economic impacts in the form of lost recreational opportunities, increased health costs, increased drinking water treatment costs, deprivation of critical ecosystem function and species, and elimination of economically important fisheries. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-6

The comment requests that the CCWB include an analysis of ecosystem services and public health as part of its CEQA analysis. The DEIR includes an analysis of "Costs of Adverse Effects on the Environment from Irrigated Agriculture." (DEIR, pp. 3.5-33 to 3.5-34.) The analysis acknowledges the benefits to tourism, recreation, wildlife, and public health that may be conferred by clean water. In addition, the DEIR provides analysis and estimates regarding the

potential negative impacts of sediment, nutrients, and pesticides in drinking water. (DEIR, pp. 3.5-32 to 3.5-33.)

Response to Comment CF-7

The comment suggests that a CEQA analysis that considers the benefits of the project on factors such as the environment and public health would provide additional support for waste discharge requirement (WDR) requirements. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-8

The comment cites provisions of CEQA pertaining to a lead agency's authority to consider economic, technical, social, and legal factors in a CEQA analysis. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-9

The comment states that the DEIR "incorrectly states that no federal or state laws, regulations or policies 'relate specifically to economics and the Proposed Project.'" However, the comment does not cite any specific federal or state laws, regulations, or policies that should have been incorporated into the DEIR's analysis. The comment also expresses concern that the DEIR limits its analysis of economic impacts to only an analysis of compliance costs borne by agricultural dischargers. Please see Response to Comment CF-6.

Response to Comment CF-10

The comment cites CEQA Guidelines section 15064(e) and requests that the CCWB consider whether the project affects economic or social impacts on people by reducing existing adverse effects. The CCWB has considered this comment and concluded that the approach used in the DEIR is appropriate.

Response to Comment CF-11

The comment expresses concern that the economic analysis is incomplete because it does not explicitly include a discussion of the negative economic impacts that might result from denying the project. The comment suggests that a CEQA analysis that considers the benefits of the project on factors such as the environment and public health would provide additional support for the CCWB's less than significant findings for economic impacts. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-12

The comment expresses concern that the economic analysis in the DEIR does not include all available data, including information from a previous letter sent by the commenter. As stated in the CEQA Guidelines, "CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters." (CEQA Guidelines § 15204(a).) In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's

approach for impact analysis, please refer to Master Response 2.10. In addition, please refer to Response to Comment CF-6.

Response to Comment CF-13 through CF-16

Please refer to Response to Comment CF-12.

Response to Comment CF-17

The comment suggests that a more comprehensive CEQA analysis of economic and social effects of the project would provide additional support for DAO 4.0. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-18

The comment requests that the FEIR "make efforts to identify and systematically describe all benefits" of the project. Please refer to Response to Comment CF-6.

Response to Comment CF-19

The comment requests that the FEIR include economic valuation of the project "where methods and data allow, and where the magnitude of the benefit suggests." In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10. In addition, please refer to Response to Comment CF-6.

Response to Comment CF-20

The comment requests that the FEIR "rely upon existing federal and state guidelines for methods." Please refer to Response to Comment CF-9.

Response to Comment CF-21

The comment requests that the FEIR "include distributional analysis of the benefits and costs, with consideration of environmental and social justice implications including water rate affordability." Please refer to Response to Comment CF-12.

Response to Comment CF-22

The comment requests that the FEIR "utilize comprehensible metrics for performance that have ranges and benchmarks of consequence to the public." Please refer to Response to Comment CF-12.

Response to Comment CF-23

The comment suggests that a more complete discussion and analysis of the economic value and benefits of reduced pollutant discharges would "allow for more informed decision making and socially efficient outcomes for the communities of the Central Coast Region." In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-24

The comment indicates the intent of the comment letter. The comment is noted.

Response to Comment CF-25

The comment provides background on the commenter and a summary of the contents of the comment letter. The comment is noted.

Response to Comment CF-26

The comment expresses concern that the DEIR does not contain more information regarding the economic benefits of the Proposed Project. Please refer to Response to Comment CF-12.

Response to Comment CF-27

The comment cites guidance from the federal Office of Management and Budget for federal agencies in developing regulatory economic analyses. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-28

The comment cites guidance from the federal Office of Management and Budget for federal agencies in developing regulatory economic analyses. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-29

The comment cites guidance from the federal Office of Management and Budget for federal agencies in developing regulatory economic analyses. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-30

The comment describes the commenter's experience using cost benefit analysis on another project. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-31

The comment cites provisions of CEQA pertaining to a lead agency's authority to consider qualitative factors as well as economic and technical factors and long-term benefits and costs in a CEQA analysis. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-32

The comment cites provisions of CEQA pertaining to a lead agency's authority to consider economic or social effects to determine the significance of physical changes of a project. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-33

The comment suggests generally that economic analysis should be included for decision making under CEQA. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-34

The comment describes different types or categories of economic value. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CF-35

The comment describes a model for evaluating how DAO 4.0 may result in various benefits, costs, and market impacts. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-36

The comment describes a method of quantifying the economic values of implementing DAO 4.0. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-37

The comment describes the need to consider specific regional demands and scarcities when creating a cost-benefit analysis of DAO 4.0. The comment also describes some issues related to water affordability and the costs of water supply in the Central Coast region. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-38

The comment describes some of the benefits that could result from improved water quality. The comment is noted. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-39

The comment describes the demographics of the central coast region and suggests that improved water quality would have benefits to people within the region. The comment is noted.

Response to Comment CF-40

The comment expresses concern that DAO 4.0 does not include metrics that describe the benefits of improved water quality to the regional community. The comment is noted.

In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CF-41

The comment requests that the FEIR "make efforts to identify and systematically describe all benefits" of the project. Please refer to Response to Comment CF-6.

Response to Comment CF-42

The comment requests that the FEIR include economic valuation of the project "where methods and data allow, and where the magnitude of the benefit suggests." Please refer to Response to Comment CF-6.

Response to Comment CF-43

The comment requests that the FEIR "rely upon existing federal and state guidelines for methods." Please refer to Response to Comment CF-9.

Response to Comment CF-44

The comment requests that the FEIR "include distributional analysis of the benefits and costs, with consideration of environmental and social justice implications including water rate affordability." Please refer to Response to Comment CF-12.

Response to Comment CF-45

The comment requests that the FEIR "utilize comprehensible metrics for performance that have ranges and benchmarks of consequence to the public." Please refer to Response to Comment CF-12.

Letter CG: Debi Ores, Community Water Center (June 22, 2020)

Letter CG

From: Debi Ores
To: AgNOI, WB@Waterboards
Cc: Brandon Bollinger; Mayra Hernandez; Reyna; Heather Lukacs
Subject: Comments on draft Ag Order 4.0
Date: Monday, June 22, 2020 8:09:21 PM
Attachments: Ag Order 4.0 comments.pdf

EXTERNAL:

Please find attached comments on behalf of the Community Water Center on the draft Ag Order 4.0. Please do not hesitate to reach out if you have any questions.

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Please note that all CWC staff are currently working remotely
Debi Ores
Senior Attorney
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COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA

June 20, 2020

Chair Jean-Pierre Wolff and Board Members
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Via e-mail: AgNOI@waterboards.ca.gov

Re: Comments upon Central Coast Regional Board Draft Agricultural Order 4.0

Dear Chair Wolff and Regional Board Members,

CG-1 Thank you for the opportunity to comment on the Draft Ag Order 4.0. We applaud the number of significant improvements over Ag Order 3.0 that aim to address the ever worsening water quality issues on the Central Coast due to excess and inappropriate fertilizer applications and practices. However, we have a number of concerns that center around impacts to access to safe drinking water for communities throughout the region. Many of the timelines and requirements within the draft Order allow for the continued degradation of groundwater supplies for decades, and while on-farm domestic well users will be provided with safe drinking water where there are nitrate exceedances, no such protection is provided to everyone else on the Central Coast who are exposed to high levels of nitrate in their drinking water. Low-income communities of color are disproportionately impacted by unsafe and unaffordable drinking water, and this draft Order will further compound these inequities.

CG-2 We provide a number of recommendations below that will help protect drinking water supplies throughout the region.

Coalitions

CG-3 In terms of providing necessary education and assistance to growers working to comply with the Ag Order and to learn of new practices they can implement to reduce their impact on the environment, we support the use of Coalitions. However, we want to ensure that the coalition model being put forth by the CCRWB will not trigger the anonymity requirement found within the East San Joaquin Order. One of ways the Central Coast Ag Order has set itself apart from other ILRP Orders is its commitment to transparency of field-level data, and to lose such an important component would be a step backwards.

CG-4 Also, to provide an observation on the Central Valley coalitions, one significant area in which they are lacking is adequate outreach and education to non-English speaking growers. Even if educational opportunities and materials are provided to non-English speaking growers, the materials are often not culturally relevant, making it difficult for the audience to follow along and get the most out of the materials. The Board and staff may want to keep an eye out for this on the Central Coast as there are a large number of non-English speaking growers and we need to ensure they are getting the same quality of educational opportunities as English-speaking growers.

CG-5 **Fertilizer Application Limits**
The inclusion of fertilizer application limits for the most common crops is a good start to helping reduce the overapplication of fertilizer to crops and on first glance appear to provide growers with a useful metric to compare their current application rates to. However, we are disappointed at how high the limits are set and by the lack of a timeline for updating these limits. Draft Attachment A explains that the limits set for the six most common crops is based on what approximately 90% of growers are already applying and that this 90th percentile level has held steady since 2014,[1] showing that growers have not been adjusting their practices to be more conscientious about the impacts to groundwater. The groundwater basins within the Central Coast would not be seeing such extensive nitrate contamination if only 10% of growers were in fact applying more fertilizer than sufficient for their crops. Only one subbasin on the Central Coast has a mean nitrate concentration in tested domestic wells below the MCL, and yet 25% of the wells tested in that basin do exceed the nitrate MCL.[2] Further, trends show that in many cases nitrate concentrations are continuing to rise.[3] A more aggressive approach to limiting the overapplication of fertilizer must be implemented. It is also disappointing how high these "limits" are when compared to the recommended fertilizer application rates taken from a UCANR study. Only broccoli's fertilizer application limit falls within the recommended range, whereas the other crops exceed the recommended ranges, with celery and strawberries exceeding the ranges by 85 and 130 pounds of nitrogen per acre respectively.[4]

CG-6 As for the remaining crops grown on the Central Coast, the Order puts in place a limit of 500 pounds per acre, yet the Order admits that **over 98%** of crops already meet this standard.[5] When all but a handful of fields are already meeting the standard, it is not in fact a limit on applications. A limit must encourage changes in practices, yet none of the fertilizer application limits are likely to do just that.

CG-7 Attachment A states "[i]t is anticipated that future iteration of this Order may establish crop-specific application limits for additional crops based on future reporting" but this vague intention is not sufficient to address the current and future overapplication of fertilizers. In particular, since Ag Order 4.0 is proposed to be a WDR, rather than a conditional waiver, there is no definitive

[1] Attachment A, p. 109.
[2] Attachment A, p. 103-104.
[3] Attachment A, p. 105.
[4] Attachment A, p. 109-110.
[5] Attachment A, p. 110.

CG-7 cont. point in time when Ag Order 5.0 would be presented. This Order must be revised to include an expected date for an update of crop-specific fertilizer application limits, including the lowering of the currently listed crop-specific limits to be within the recommended ranges, as well as expanding the list of crop-specific limits.

CG-8 While we acknowledge that the CCRWB has stated that fertilizer application limits are not meant to be the primary means of reducing nitrate leaching to groundwater, that the nitrate discharger targets and limits will achieve these goals, the discharge limits do not go into effect until 2028 and allow for nearly 30 years of further degradation. This also brings into question the usefulness of having fertilizer application limits if they are not intended to actually reduce nitrate loading. Properly developed and implemented, application limits can help signal to growers one means of addressing their impact to groundwater and help growers meet the nitrate discharge targets and limits.

CG-9 Fertilizer application limits must be strengthened in order to play an essential role of helping reduce nitrate loading to groundwater. In that regard, limits should be set within the established crop fertilizer needs ranges. At minimum a schedule must be included in this order which ramps down the fertilizer application limits until they are within crop need ranges. This schedule must be as short as practicable to meet the requirements of the Non-Point Source Policy. Finally, there needs to be a firm commitment to establish more crop-specific fertilizer application limits, rather than allowing all other crops to fall into a one-size-fits-all limit.

CG-10 **Nitrogen Discharge Targets and Limits**
We applaud the CCRWB for establishing nitrate discharge limits with this draft Order. However, the extended timeline will allow for continued degradation of groundwater and drinking water supplies. Further, there is the issue of several components to the nitrogen discharge calculation that are not transparent nor subject to any review or approval by the Regional Board which can result in the falsification of the data submitted by growers.

CG-11 *Timeline:*
While we understand that reaching the level where impacts to groundwater are negligible or nonexistent is no small undertaking, 28 years is longer than necessary to achieve that goal. SGMA requires that GSAs meet sustainability of their groundwater basins within 20 years, which depending upon the priority of the basin means 2040 or 2042. Meanwhile, draft Ag Order 4.0 will allow until 2050 for nitrate discharges to be limited to a level that is expected to eventually lead to nitrate concentrations in groundwater below the MCL. Even after 2050, water quality will continue to decline as excess nitrogen leaches down to groundwater. What 2050 signifies is only that no new nitrogen would be added to the system, but we would still have the existing nitrogen in the groundwater and vadose zone to contend with. While restoration efforts can begin before additional loading is halted (something that is not required by this Order), it will be significantly hindered by continued pollution. The CCRWB should consider the need for restoration efforts, especially considering the serious drinking water issues apparent throughout the region. Already we are seeing levels of nitrate in drinking water supplies that are above the upper limit for POU/POE devices, leaving well users with only far more expensive options to

CG-11 cont. access safe water. As pollution continues, so will nitrate concentrations. This will lead to domestic well users without a source of water, and contribute to the unaffordability of water throughout the region. We ask that the timeline be revised so as to not be a barrier to the access of the Human Right to Water throughout the region.

CG-12 *Coefficients:*
A number of the coefficients that are used within the nitrogen discharge calculations are to be developed by the growers themselves.[6] While this in of itself is not a significant issue, the fact the methodology behind the development of the coefficients is not subject to mandatory CCRWB approval or disclosure in a transparent fashion is a concern. Transparency is necessary for public trust in the program. The RWB also needs to play a role in ensuring that the methodologies developed by growers are accurate and backed by best available science. Failure to do so can result in intentionally or unintentionally inaccurate calculations of the nitrogen discharge levels below farms. The order should require dischargers to submit draft methods for development of coefficients, and in addition to review by the CCRWB these drafts should be made available to the public for review before approval.

CG-13 **Soil Monitoring**
We are pleased by the inclusion of a soil monitoring requirement. Collective loading over the course of the year can be quite significant, especially when a grower has no idea how much fertilizer the previous grower used. With that in mind, we also suggest that where there are multiple growers using the same field at different times of the year, records of applications and removals should be kept on-farm for future users to review.

CG-14 **Well testing**
We appreciate the expanded scope for on-farm well testing. We agree that in order to collect adequate data on the extent of nitrate contamination of the aquifers within the CCRWB's jurisdiction, that all on-farm wells should be tested, rather than just a select few.

CG-15 **Domestic wells**
The clear guidance on when domestic wells must be tested each year will ensure consistency from year-to-year on the same farm, and make it easier to compare results from farm-to-farm. We do ask why the results are required to be reported to the RWB up to two months past the testing window though, especially when each well is only being tested for a small number of contaminants.

CG-16 It is highly encouraging to see the required testing of 1,2,3-TCP within domestic wells. While no longer directly applied to fields, it is often indirectly applied via irrigation which allows it to percolate to shallower levels of the aquifer where domestic wells draw from. Additionally, one is exposed to TCP found in water not only through ingesting it, but also through inhalation of steam. As TCP was used extensively on ag lands, it only makes sense that domestic wells on-farm are tested for this contaminant as well as nitrate.

[6] The coefficients are RHARV, RSEQ, RTREAT, and ROTHER.

CG-17 We also want to thank the RWB for requiring the provision of safe drinking water where there is a nitrate MCL exceedance. It is essential that growers are providing safe drinking water to everyone who may consume water from an on-farm well. We would like to see the program extended to include ensuring safe water when there are TCP exceedances as well. While there is currently no certified POU or POE device for TCP, there are a few pilot projects in the works both on the Central Coast and within the Central Valley that could result in data that allows for the mandate that wells impacted by high levels of TCP are fitted with such treatment devices.

CG-18 *Notice*
While it is important to provide notice of well results in the first place, it is also important as to when those results are shared and how that information is shared.

CG-19 Well results must be provided to well users much sooner than 10 days. In the case of nitrate, labs must notify the person who submitted the well sample within 24-hours if there is an MCL exceedance. This is because of nitrate's acute health risk. Allowing the grower/owner/operator to delay notification is in disregard to these serious public health concerns. We recommend that notice be provided within 48 hours of receiving the test results from the lab in order to better protect the health of the well users.

CG-20 We want to acknowledge the draft Order does require notice to any new well user, an important requirement to help people not slip through the cracks. However, again there is no reason to delay the relay of that information for 10 days after someone begins using the well. This delay is even more significant as generally the well owner is aware of new users prior to their actual arrival on-farm. Notice must then be provided no later than the new user's first day working or living on-farm.

CG-21 While information is provided as to the health risks associated with nitrate in drinking water, no such information is provided where there is an exceedance of 1,2,3-TCP. Health risk information must be provided where there is a TCP exceedance, and such notice must warn against not only consuming or cooking with TCP contaminated water, but also explain that one can be exposed to TCP through the inhalation of steam created by water contaminated with TCP, including through showering. This notice must also include recommendations on how to reduce one's exposure to TCP including taking cooler or cold showers, using a bathroom fan, leaving open a window, and generally taking shorter showers.

CG-22 Finally, where there are on-farm exceedances of nitrate or 1,2,3-TCP, if there are nearby residential properties, in particular properties reliant upon state or local small water systems or domestic wells, notice needs to be provided. The notice should state that an exceedance of nitrate and/or TCP has been detected nearby as such the well users are recommended to have their well tested as well. The RWB can also use this data to help identify potential candidates for their own well testing program.

Trend monitoring

CG-23 We appreciate the inclusion of trend monitoring in Ag Order 4.0. While it can take several years in some areas to see how on-farm practices are impacting groundwater quality, this data is essential for determining the effectiveness of current best practices and can help develop new practices.

Nonpoint Source Policy

CG-24 While there is a timeline for meeting water quality objectives in a grower's discharges that includes clear quantifiable milestones as required by Element 3 of the Nonpoint Source Policy, the timeline allows for continued pollution until 2050. Element 3 requires time schedules that are not longer than which is reasonable to achieve water quality objectives. The draft Order provides no justification as why the compliance timeline cannot be shortened. Growers have had the data available to them that on-farm practices are resulting in nitrate exceedances and that they are largely overapplying fertilizer based on crop needs and yet they have been resistant to changing their practices. As the currently proposed timeline is not in compliance with the Nonpoint Source Policy, a more appropriate timeline for compliance must be required.

CG-25 Element 1 of the Nonpoint Source policy also requires that management practices have a strong correlation between the practice and the applicable water quality goal. Within the draft Order fertilizer application limits are proposed yet, as stated earlier in this letter, these "limits" will not address excess nitrate loading. Even when the proposed limits are crop-specific, they are set far beyond crop needs and are based on what 90% of growers are already applying. Further, the remaining 72% of crops are subject to a proposed limit of which over 98% of growers are already meeting. These proposed limits are also not subject to a time schedule for reducing the allowable application rates, thus failing to address nitrate loading now or into the future. Therefore, the proposed fertilizer application limits are not in compliance with the Nonpoint Source policy and must be revised to actually be correlated to the water quality goal for nitrate.

Anti-degradation Policy

CG-26 Attachment A states that at least at some point in time since 1968, all basins in the Central Coast were of high quality water for nitrate and many other contaminants.[7] However, at this point in time every basin has higher levels of nitrate than what the best quality of water once was, with the vast majority over current water quality objectives. Thus, all the basins are subject to and in violation of the anti-degradation policy.

CG-27 We question some of the other assertions made within this section. Attachment A claims that the "[d]egradation that has occurred to-date is not permanent and can be remedied by actions consistent with this Order" yet it then fails to explain what those actions are and whether they are feasible or will be mandated through other means. In fact, later on the document concedes that the cost to clean up groundwater may be prohibitively expensive and logistically difficult.[8]

[7] Attachment A, pgs. 51-52.
[8] Attachment A, p. 61.

CG-28

Attachment A goes onto to claim that "[n]one of the previous agricultural orders authorized degradation of high quality waters." However, this is simply not true. By failing to prohibit the discharge of nitrate to high quality waters, the orders did in fact authorize degradation of high quality waters. It is worth noting that since every basin on the Central Coast has at least some portion of it exceeding the water quality objective for nitrate, that any additional nitrate loading is no longer considered "degradation" but "pollution". Degradation is for lowering water quality that still meets water quality objectives, but pollution is the term used for worsening water quality beyond the objectives. Further, Ag Order 4.0 also expressly authorizes further degradation and pollution of high quality waters by allowing continued polluted discharges until 2050. While the Order repeatedly states that the degradation that will occur under this Order will be "short-term, limited, and reversable [sic]", over 30 years of continued degradation is not "short-term" nor "limited" and again there is no discussion as to how the harm is in fact reversible. It is thus arbitrary to write off continued degradation as acceptable due to a hope that the harm is reversible. Further, there is no justification provided for how it can be claimed that allowing continued degradation will not "unreasonably affect present and future beneficial uses, and will not result in water quality less than prescribed objectives."[9] Allowing for continued degradation means that drinking water sources will continue to worsen, oftentimes to levels "less than prescribed objectives". Public water system customers will likely see their water rates increase as their systems have to increase testing and either treat or find alternative sources of water. People on state or local small water systems or domestic wells may not even be aware of the unsafe levels in their drinking water resulting in significant harm to health, or if they do know will mean they have to install costly treatment devices, or purchase bottled water. Bottled water in particular can become quite expensive but it may be the only alternative for those who cannot afford the upfront costs of a POU/POE or whose water has such high levels of nitrate that treatment devices cannot help.

CG-29

CG-30

Human Right to Water

CG-31

It is concerning that the CCRWB does not agree that Water Section 106.3 applies to Ag Order 4.0. Ag Order 4.0 is a part of the Irrigated Lands Regulatory Program, and is the means by which that regulation will be implemented on the Central Coast. As such the Ag Order is a regulatory program, which is expressly covered by the plain language of Water Code Section 106.3. We do acknowledge that the Order does go on to describe how Order complies with the HR2W, but the repeated insistence that the HR2W does not in fact apply in this instance raises concerns as to the Board's commitment to ensuring all residents in their region have access to safe and affordable drinking water.

CG-32

Further, while the means in which the Ag Order is stated to be in compliance with the Human Right to Water are commendable, as stated elsewhere in this letter, they still fall short in a number of ways, including allowing for pollution to continue for another 30 years and not providing notice as to the health impact associated with elevated TCP concentrations.[10]

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[9] Attachment A, p. 54.

[10] Attachment A, p. 65 "...providing notification to the users of the wells of the results of the monitoring and of the health impacts associated with elevated nitrate concentrations in drinking water."

Cost Considerations

CG-33 It is hard to conduct an adequate cost consideration analysis without also looking at the costs of inaction - namely the costs associated with increasing contaminant levels in drinking water wells. While Attachment A includes a table titled "Key Uncertainties and Potential Effects on Estimated Costs"[11] which lays out costs and uncertainties that reflect upon the CCRWB, it does not include the costs associated with impacts to human health. Ever increasing nitrate levels in drinking water supplies play a significant role in access to safe and affordable drinking water. For domestic well users, if they are even aware of the quality of their water, nitrate concentrations above the MCL may require the use of a POU/POE device, and if nitrate levels are too high for filters, residents will be forced to turn to the much more expensive and difficult option of purchasing bottled water or hauled water for all consumptive uses in the home. If domestic well users are not aware of the quality of their drinking water, it can result in significant health risks, especially for vulnerable populations such as infants and pregnant women. Residents reliant upon public water systems which are experiencing ever increasing nitrate concentrations will see ever increasing water bills to the point of unaffordability, if the bills are not already unaffordable.

CG-34 Regardless of many of these easier to quantify costs associated with higher nitrate levels, there are many impacts that are impossible to quantify. Families having to make the unfair and difficult choices between safe drinking water and other essentials such as medical care, healthy food, new clothes for their children, and so much more. The loss of income associated with illness caused by unsafe water that keeps wage earners home. More income going towards medical care necessitated by consuming unsafe drinking water. And then there's the mental impacts from knowing the water coming out of one's tap is unsafe and being unsure what to do. It is impossible to adequately and justly quantify the costs associated with the physical and mental impacts felt by those living with unsafe drinking water. This reality must be acknowledged by the Order and in any regulatory program that impacts not just the regulated population, but by everyone else impacted by the actions of a regulated population.

CG-35 Thank you again for the opportunity to comment on the draft Ag Order 4.0. We look forward to continuing to work with the Board and staff on ensuring that the adopted Order is protective of drinking water interests throughout the region.



Debi Ores
Senior Attorney
Community Water Center

[11] Attachment A, p. 12.

Response to Comment CG-1

This comment is summarized and responded to in the following Master Responses: 2.1.1; 2.3.2; and 2.4.6.

Response to Comment CG-2

This comment is noted.

Response to Comment CG-3

This comment is summarized and responded to in Master Response 2.2.3.

Response to Comment CG-4

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

Response to Comment CG-5

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

Response to Comment CG-6 through CG-7

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

Response to Comment CG-8

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

Response to Comment CG-9

This comment is summarized and responded to in the following Master Responses: 2.3.10 and 2.3.4.

Response to Comment CG-10

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

Response to Comment CG-11

This comment is summarized and responded to in the following Master Responses: 2.3.1 and 2.4.6.

Response to Comment CG-12

This comment is summarized and responded to in Master Response 2.3.4.

Response to Comment CG-13

This comment is noted.

Response to Comment CG-14

This comment is summarized and responded to in Master Response 2.4.3.

Response to Comment CG-15

This comment is summarized and responded to in Master Response 2.4.6.

Response to Comment CG-16

This comment is summarized and responded to in Master Response 2.4.3.

Response to Comment CG-17 through CG-20

This comment is summarized and responded to in Master Response 2.4.6.

Response to Comment CG-21

This comment is noted.

Response to Comment CG-22

This comment is noted.

Response to Comment CG-23

This comment is summarized and responded to in Master Response 2.4.1.

Response to Comment CG-24

The comment states that the timeline for meeting water quality objectives allows for continued pollution until 2050 and that the DAO 4.0 provides no justification as why the compliance timeline cannot be shortened. The comment also states that the fertilizer application limits do not have a strong correlation with the applicable water quality goal and will not address excess nitrate loading. The comment asserts that the crop-specific limits are set far beyond crop needs, the remaining 72 percent of crops are subject to a proposed limit of which over 98 percent of growers are already meeting, and the proposed limits are not subject to a time schedule for reducing the allowable application rates, thus failing to address nitrate loading now or into the future. The nitrogen discharge limits are phased in over 30 years to allow sufficient time for Dischargers to adapt (RAO 4.0, page 50, Table C.1-3) and for development of new and improved management practices and tools. The Order's Findings explain the connection between overapplication of fertilizer and exceedances of the nitrogen water quality objectives in groundwater, as well as the use of the outlier approach to establish the fertilizer nitrogen application target and limits. (See RAO 4.0, Attachment A, Findings, at pages 96-101, paragraphs C.12¬ C.24.) Timelines established for the crop-specific application limits begin with the 90th percentile at the end of 2023 and move to the 85th percentile at the end of 2025.

Response to Comment CG-25

See Response to Comment CG-24.

Response to Comment CG-26

The comment expresses general concern with the antidegradation findings of DAO 4.0. The antidegradation findings in RAO 4.0 were revised to add clarity to the findings and respond to comments raised. See RAO 4.0, Attachment A, pages 37-56, paragraphs 103-177.

The comment states that every basin has higher levels of nitrate than what the best quality of water since 1968, with the vast majority over current water quality objectives, and that all the basins are thus subject to and in violation of the antidegradation policy. The CCWB acknowledges in its antidegradation findings that many of the basins have high levels of pollutants that exceed the objectives. The Antidegradation Policy requires the CCWB to make findings consistent with the Antidegradation Policy when adopting an order permitting discharges to these basins. Consistent with the policy, the draft findings justify degradation of water bodies that are or were high quality at some point since 1968 – i.e. of higher quality than the quality required to protect beneficial uses – because the degradation is to the maximum benefit of the people of the state and the permit imposes best practicable treatment control (BPTC). Consistent with the policy, the findings state any degradation of high-quality waters must not result in water quality less than water quality objectives. For basins where degradation below water quality objectives has already occurred, the Antidegradation Policy does not require immediate cessation of discharges. Rather, the conditions imposed on these basins must be consistent with the requirements of the Water Code to restore the water quality to the objectives in accordance with a time schedule. (Wat. Code §13263.)

Response to Comment CG-27

See Response to Comment CG-26.

Response to Comment CG-28

The comment expresses general concern with the antidegradation findings of DAO 4.0. The antidegradation findings in RAO 4.0 were revised to add clarity to the findings and respond to comments raised. See RAO 4.0, Attachment A, pages 37-56, paragraphs 103-177.

The comment takes issue with the finding that "[n]one of the previous agricultural orders authorized degradation of high-quality waters," arguing that, by failing to prohibit the discharge of nitrate to high quality waters, the orders did in fact authorize degradation of high-quality waters. Commenters misconstrue the meaning of the identified statement in the findings. The CCWB is not asserting that the prior orders prevented degradation, but rather that the prior orders did not contain antidegradation findings authorizing the degradation that may have occurred while the orders were in effect. This is an element of the baseline analysis to determine whether the antidegradation findings in a prior order may have reset the baseline for purposes of the antidegradation analysis supporting the current order.

The comment states that, since every basin on the Central Coast has at least some portion of it exceeding the water quality objective for nitrate, that any additional nitrate loading is no longer considered "degradation" but "pollution." The CCWB agrees that antidegradation findings may not authorize degradation below water quality objectives. The appropriate regulatory framework through which to address exceedances of water quality objectives is not the Antidegradation Policy but the Water Code. (See ESJ Order, p. 76.) The Order addresses exceedances through receiving water limitations, discharge targets and limits, and TMDL requirements imposed in accordance with a compliance schedule.

Response to Comment CG-29

The comment expresses general concern with the antidegradation findings of DAO 4.0. The antidegradation findings in RAO 4.0 were revised to add clarity to the findings and respond to comments raised. See RAO 4.0, Attachment A, pages 37-56, paragraphs 103-177.

The comment states that, contrary to the findings, degradation will not be "short-term, limited, and reversible" because over 30 years of continued degradation is not "short-term" nor "limited" and there is no discussion as to how the harm is in fact reversible. The antidegradation findings have been revised in response to this comment. Please also refer to RAO 4.0 (April 2021), Master Response to Comments 10.

Response to Comment CG-30

The comment expresses general concern with the antidegradation findings of DAO 4.0. The antidegradation findings in RAO 4.0 were revised to add clarity to the findings and respond to comments raised. See RAO 4.0, Attachment A, pages 37-56, paragraphs 103-177.

The comment asserts that there is no justification provided for how it can be claimed that allowing continued degradation will not "unreasonably affect present and future beneficial uses and will not result in water quality less than prescribed objectives." The comment further states that allowing for continued degradation means that drinking water sources will continue to worsen, oftentimes to levels "less than prescribed objectives," with significant costs to users of the water. The extensive social and economic costs to users of water are primarily associated with historic degradation of water bodies below applicable objectives, which is prohibited by the antidegradation policy. These costs are addressed by the Order's requirement for dischargers to meet receiving water limitations – the floor of the Antidegradation Policy – in accordance with time schedules that support restoration of impaired water bodies to objectives over time. The CCWB recognizes that users of groundwater for drinking water may continue to bear the cost of the historic degradation of high-quality waters for the duration of the time schedules, but such costs are being addressed through other authorities requiring replacement water. Further, the permit does not allow further degradation of such impaired water bodies, but instead requires the establishment of quantifiable interim milestones tied to improved water quality results in agricultural discharges. A finding has been added to RAO 4.0 to clarify this point.

Response to Comment CG-31

This comment is summarized and responded to in Master Response 2.4.6.

Response to Comment CG-32

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

Response to Comment CG-33 through CG-34

This comment is summarized and responded to in Master Response 2.9.5.

Response to Comment CG-35

Thank you for your comment.

Letter CH: Ryan R. Waterman, Brownstein Hyatt Farber Schreck, LLP, on behalf of Costa Farms Inc., Costa Family Farms, and Anthony Costa & Sons (June 22, 2020)

Letter CH

From: Carlson, Mack
To: AgNOI_WB@Waterboards
Cc: Waterman, Ryan R.; Hastings, Stephanie; David@CostaFarmsInc.com
Subject: Comments on Draft Ag Order
Date: Monday, June 22, 2020 3:10:58 PM
Attachments: 2020.06.22 Comment Letter - Draft Ag Order 4.0_(21173728_1).PDF

EXTERNAL:

To whom it may concern:

Please find the attached comment letter on Draft Ag Order 4.0 and the accompanying Draft EIR.

Thank you for your consideration of these comments and please contact me if you experience any issues with the document.

Best,

Mack Carlson
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Brownstein Hyatt Farber Schreck

June 22, 2020

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VIA ELECTRONIC MAIL
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Irrigated Lands Regulatory Program ("ILRP")
Central Coast Water Board
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San Luis Obispo, CA 93401

RE: Comments on Draft Ag Order 4.0

To the Central Coast Water Board:

CH-1 Costa Farms Inc., Costa Family Farms and Anthony Costa & Sons' ("Costa") agricultural operation spans multiple generations that have been farming the Salinas Valley since 1956. Farm operations consist of a total of 43 individual ranches supporting four families and over 700 employees in the Central Coast region. Costa's operation consists of over 433 blocks with an average size of 13.3 acres, while the smallest ranch is only 5 acres in size. Ranches are planted for organic and conventional production with an average of 2.2 crop cycles each year. Presently operations produce over twenty-five different crops from more than 1,500 individual planting in each year. Many of these ranches are located near or adjacent to waterbodies of varying classifications. For example, at least 12 of these ranches in the Salinas Valley are immediately adjacent to a waterbody. Each ranch has unique topography, infrastructure and agricultural conditions. Each watershed sits in a distinctive land class and has unique geomorphology, soils, slope, climatic gradients, ecological functions, and environmental stressors.

CH-2 The Central Coast Regional Water Quality Control Board's ("Regional Board") proposed Draft General Waste Discharge Requirements for Discharges from Irrigated Lands ("Draft Ag Order 4.0" or "Draft Order") will have significant and varying impacts to each of these ranches. Based on our preliminary assessment, however, at least nine ranches in the Salinas Valley may need to implement riparian setbacks and all the ranches will need to implement "one-size fits all" operational setbacks. Implementation of riparian setbacks will fallow valuable crop lands, reduce production and limit food availability for our nation. An independent expert has estimated that the Draft Order's riparian setbacks could require Costa to remove hundreds of acres of agricultural land from production. As a result, Costa has a keen interest in assisting the Regional Board to implement a straightforward and practical Ag Order 4.0 that will actually improve water quality and protect beneficial uses while maintaining agricultural productivity for growers throughout the Central Coast region.

CH-3 Brownstein Hyatt Farber Schreck, LLP represents Costa, and with the foregoing in mind, respectfully submits the following comments on Draft Ag Order 4.0 on Costa's behalf.

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I. RIPARIAN AREA MANAGEMENT PROGRAM

A. Setback Requirements Violate the State Water Code Because there is No Evidence that Setbacks Will, Throughout the Central Coast, Improve Water Quality

CH-4

Under the Porter-Cologne Act Water Quality Control Act ("Porter-Cologne Act"), the Regional Board may only regulate discharges of waste onto land that could affect the quality of state waters. (*Id.* at §§ 13263(a); 13000 ["[A]ctivities and factors which *may affect the quality of waters of the state shall be regulated* to attain the highest water quality which is reasonable, considering all demands being made and to be made on those water and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." (Emphasis added)].) The Regional Board cannot impose a riparian setback without first showing that there is a connection between a water discharge and impacts to waters of the state.[1] (Wat. Code §§ 13225(b), 13260(a)(1).) This limitation is reflected in Attachment C of Draft Ag Order 4.0 ("Attachment C"), which defines "Discharger" as the "owner or operator of irrigated lands that discharges or has the potential to discharge waste that *could directly or indirectly reach waters of the State* and affect the quality of any surface water or groundwater water."[2] (Draft Order, Attachment C, § B, ¶ 30 [emphasis added].) Thus, before regulating through the Draft Order, the Regional Board must demonstrate that water may discharge and affect waters of the state, and that the regulation ameliorates the discharge of waste to a water of the state.

CH-5

Draft Ag Order 4.0 requires setbacks between commercial crop production and adjacent waterbodies even where physical circumstances prevent irrigation and storm water flows from those ranches from reaching those waterbodies. (Draft Order, Part 2, § C.5, ¶¶ 3-4.) Draft Ag Order 4.0 establishes two setback requirements — an operational setback and a riparian setback (collectively, "setbacks") — for irrigated agriculture with waterbodies within or near their ranch. (Draft Order, Part 2, § C.5, ¶ 3.) All irrigated agriculture is required to establish an operational setback by October 1, 2022, and ranches in "Riparian Priority areas" are required to implement an additional riparian setback. (*Id.* at ¶¶ 3-4.)

CH-6

Operational setbacks must be 1.5 times the width of the active channel, on each side of the stream, or 35 feet for waterbodies that are not streams, such as wetlands, or the applicable riparian setback, whichever is less. (Draft Order, Part 2, § C.5, at ¶ 4.b.) Only select permitted activities may occur within an operational setback including (1) conservation of soil, vegetation, water, aquatic and terrestrial wildlife; (2) control of invasive species; or (3) emergency work necessary for public health and safety. (*Id.* at ¶ 7.) Within the operational setback, the discharge of waste from irrigated agricultural activities is prohibited. (*Id.* at ¶ 4.a.) Operational setbacks also must minimize bare soil vulnerable to erosion. (*Id.* at ¶ 4.c.) This establishes the minimum setback requirements for non-exempt portions of a ranch that are generally applicable to all Central Coast ranches.[3, 4] Given differences between ranches, including but not limited to

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CH-7

[1] State law only requires a discharger to file a report of waste discharge where that discharge will have an impact to waters of the state. (Wat. Code §§ 13260(a)(1).) Note that reports of waste discharge are not required for "percolation to the groundwater of water resulting from irrigation crops." (Cal. Code Regs., tit. 23, § 783.)

CH-8

[2] See also Draft Order, Attachment A, § C.5, ¶ 108 ("The California State Water Resources Control Board, along with the nine regional water quality control boards in the state, *may prohibit the discharge of waste in certain areas* pursuant to Water Code section 13243 and *encourage* setbacks as a management measure to meet performance standards." (Emphasis added).) Note that the Regional Board may "encourage" setbacks as a management practice rather than mandate setbacks as a requirement.

[3] See Draft Order, Attachment A, § C.5, ¶ 66 (stating the riparian and operational setbacks are discharge prohibitions).

CH-6 cont. topography, intervening structures like levees and storm water capture systems, existing vegetative cover, and the nature of the water of the state to be protected, this type of one-size-fits-all setback is arbitrary.

CH-9 Riparian setback requirements in Riparian Priority areas are even more onerous. (Draft Order, Table C.5-1, C.5-1.) Ranches adjacent to or near riparian priority areas that do not meet riparian setback requirements must implement one of four compliance pathways. (*Id*. at Part 2, § C.5, ¶ 11.) These compliance pathways are defined as: (1) cooperative approach; (2) on-farm setback; (3) rapid assessment method; or (4) alternative proposal.

CH-10 None of these compliance pathways, however, replace the minimum operational setback requirement applicable to all ranches within the Central Coast region absent extremely narrow exemptions — effectively, all ranches must implement at least an operational setback, while in Riparian Priority areas are subject to larger and more intensive riparian setbacks. (*Id*. at ¶¶ 3-4, 32-36.)

CH-11 As described above, the Regional Board does not have jurisdiction to impose, at a minimum, strict operational setback requirements on all ranches.

CH-12 In many places, Costa ranches do not release irrigation water or storm water flows from commercial crop producing areas to adjacent water bodies due to storm water capture systems, topography, and physical barriers, such as levees. For example, the northern portion of the Binsacca ranch along the Salinas River slopes away from the river. (See Attachment A.) Because the northern portion of the Binsacca ranch slopes away from the Salinas River, there is no risk that irrigation water or storm water flows from this portion of the ranch may affect the Salinas River.[5] Yet, Draft Ag Order 4.0 would require Costa to remove substantial acreage from production to comply with operational and riparian setback requirements nonetheless.[6]

CH-13 In addition, several ranches in the Soledad region, including the Luchessa, Lanini, Rianda, and Dudgeon ranches, do not passively discharge irrigation water to the Salinas River because a hydrologic barrier has been created by the levees between the ranch border and the River. These existing barriers prevent the accidental discharge of irrigation water to waters of the state. No setback requirement is necessary. Costa

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CH-14 [4] As discussed further below, Draft Ag Order 4.0 contains narrow exceptions pertaining to (1) existing state or Federal conservations plans; (2) manmade barriers that are not under the grower's "legal control"; (3) legally binding easements; or (4) an existing permanent structure within the setback that agrees to implement an additional setback elsewhere on the ranch or other form of alternative compliance. (Draft Order, Part 2, § C.5, ¶¶ 32-35.)

CH-15 [5] At other ranches, such as the Johnson and Turri ranches, roads and drainage across the ranches—including within the operational and riparian setback areas—are engineered so that precipitation does not discharge into waterbodies. Although Costa implemented these management practices at great expense, Draft Ag Order 4.0 would nullify these efforts in favor of strict setback requirements that do not take into account site specific conditions.

CH-16 [6] Costa's agriculture consultant, Kay Mercer, performed an extensive review of the impact of the proposed riparian buffers on her clients' ranches. (Kay Mercer, Comments on Draft Ag Order, Riparian Area Management Requirement (June 22, 2020) ("Mercer Comment Letter".) As explained in her letter, Ms. Mercer could not calculate the riparian setback widths based on the information made available by Regional Board staff and thus her calculations likely underestimate the amount of agricultural land removed from production. Ms. Mercer calculates the range of average percent of agricultural land removed—3 to 6 percent—in Monterey County due to riparian setbacks. In some areas, Ms. Mercer estimated ranches may be required to remove up to 11 percent of their land from agricultural production due to riparian setbacks. (Mercer Comment Letter, p. 5.)

CH-13 cont.

installed the barriers and associated irrigation and storm water control infrastructure at significant cost to implement best management practices to control discharges. Requiring buffers for these ranches would not provide any additional water quality benefits and would be costly for Costa. These measures document that there are alternative solutions to protect waters of the state from the discharge of waste from irrigated lands other than the strict application of an operational or riparian setback.

CH-17

Currently, Draft Ag Order 4.0 does not permit sufficient exemptions to the operational setback requirements. (See Draft Order, Part 2, § C.5, ¶¶ 3-4, 32-36.) Instead, it arbitrarily applies this setback requirement to all ranches even if there is no risk that irrigation water may affect waters of the state. For example, the Soledad region ranches with hydrologic barriers must still implement the operational or riparian setback requirements. Although difficult to calculate based on the ambiguities in the Draft Order, strict application of the riparian setback requirement on these ranches would result in the removal of tens of acres of productive agricultural land on these ranches without any corresponding benefits to water quality.[7] A legally compliant Ag Order 4.0 must only impose setback requirements in situations where irrigation or storm water may affect the quality of waters of the state and the application of setbacks would ameliorate that impact. (Wat. Code §§ 13260(a)(1), 13263(a).)

CH-18

Draft Ag Order 4.0 exceeds the Regional Water Board's jurisdiction by imposing a strict setback requirement without first showing a nexus between the discharge of waste and impacts to waters of the state.

B. Imposing Setbacks that Do Not Improve Water Quality Exceeds the Central Coast Water Board's Jurisdiction

CH-19

The Regional Board is barred from imposing an operational or riparian setback where no water discharge will reach adjacent waterbodies and such setbacks will not achieve their stated purposes. Water Code section 13263 specifies that waste discharge requirements "*shall implement any relevant water quality control plans* that have been adopted, and shall take into consideration *the beneficial uses to be protected*, the *water quality objectives reasonably required* for that purpose. . . " (Emphasis added.) Notably, the Regional Board's Water Quality Control Plan for the Central Coastal Basin, June 2019 Edition ("Basin Plan") does not contemplate a water quality objective for riparian habitat, or require growers to plant native vegetation around water bodies.[8] (See, e.g., Basin Plan, pp. 190-191, 213-214, 232-233, 250-251 ["[Irrigated Agricultural Lands] are strongly *encouraged* to maximize overhead riparian canopy using riparian vegetation, *where and if appropriate*, because doing so *could* result in achieving nutrient-response indicator targets before allocation s are achieved." (Emphasis added)].") The Draft Ag Order's mandatory setback requirements exceed the directives of the Basin Plan that setbacks are advisory, and therefore is an unlawful mandate.

CH-20

Further, case law does not mandate an operational or riparian setback requirement. In the litigation concerning State Water Resources Control Board ("State Board") Order WQ 2013-0101 ("Ag Order 2.0"),

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CH-21

[7] See discussion in Section II, below, describing the lack of information made available to growers that would allow them to estimate the potential impact riparian and operational setback buffers have on their operations. All estimates should be treated as preliminary and likely underestimate the total impact of riparian and operational setbacks on Central Coast agriculture because of the lack of clarity in Draft Ag Order 4.0 and failure to provide timely information.

CH-22

[8] During the June 6, 2020, Ag Order 4.0 Workshop, staff indicated that "riparian areas are considered waters of the State" for the purpose of implementing the Draft Order. Staff, however, failed to justify this statement with either a scientific or legal basis for expanding the definition of "waters of the State" to encompass any area near a waterbody, regardless of the presence of riparian or wetland habitat.

CH-20 cont.

environmental plaintiffs alleged that Ag Order 2.0 had to impose vegetative/riparian buffers in order to comply with the Water Code. (*Monterey Coastkeeper v. State Water Resources Control Board* (2018) 28 Cal.App.5th 342, 353 ("*Monterey Coastkeeper*").) Although this specific issue was not before the appellate court on review, the Third District Court of Appeals noted that, "[s]ignificantly, the [trial] court did not find that an adequate waiver must include . . . 'mandatory vegetation/riparian buffers . . . .'"[9] (*Id.* at p. 362 [footnote omitted].) As result, *Monterey Coastkeeper* does not stand for the principle that the Regional Board must implement a setback requirement through Ag Order 4.0.[10]

CH-23

Furthermore, there is no precedent to require growers to establish setbacks in the State Board-modified Waste Discharge Requirements General Order in the Eastern San Joaquin Area ("Eastern San Joaquin Order"). (See Central Valley Regional Board Order R5-2012-0116-R4 as modified by State Board, Order WQ 2018-0002.) In fact, the Eastern San Joaquin Order did not specify vegetative setbacks at all.[11] (See *id.*) The Regional Board appears to acknowledge this fact, since a staff summary of the regulatory or case precedent from the Eastern San Joaquin Order includes no information regarding vegetative setbacks. (See Staff Report for Regular Meeting of March 20-22, 2020, Agricultural Order Recommendations, Attachment 3 *available at* https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4_renewal/2019march/attachment_3.pdf.) Thus, the Eastern San Joaquin Order does not require mandatory setback requirements in order to create a legally compliant Ag Order 4.0.

CH-24

Draft Ag Order 4.0 asserts that imposing both operational and riparian setbacks will allow riparian areas to provide and continue to provide twelve functions, such as "maintain the physical, chemical, and biological integrity of water resources," and "treat polluted surface and subsurface waters through filtration, sequestration, biological degradation and chemical oxidation . . . ." (Draft Order, Part 2, § C.5, ¶ 1.b.i - xii.) Rather than focus on management practices to achieve these functions, Draft Ag Order 4.0 requires growers to minimize "bare soil" within setbacks by growing "vegetative cover." (*Id.* ¶¶ 4.c, 11.) It also prohibits the disturbance of existing, naturally occurring and established native riparian vegetative cover unless authorized by another permit. (*Id.* at ¶¶ 5-6.) For Riparian Priority Areas, riparian setbacks must include vegetative lands, including native grasses, shrubs and trees, regardless of existing conditions. (*Id.* at ¶¶ 17, 19, Table 5.C-1.) Despite these substantial requirements for setbacks, Draft Ag Order 4.0 fails to demonstrate that a setback requirement will uniformly help achieve the Draft Order's stated water quality functions.

CH-25

As described in Ms. Mercer's comment letter, most, if not all, riparian habitat restoration guidance manuals and technical documents make a point that successful riparian habitat must be customized for the endemic conditions of a watershed and specific site. (See Mercer Comment Letter, pp. 9-12.) The Draft Order's proposed approach, by applying strict riparian habitat requirements, repudiates existing riparian habitat science. As an example, Ms. Mercer prepared a comprehensive analysis of the soil types found in the

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CH-26

[9] We note that the appellate court did not consider the review of vegetation/riparian buffers, since the trial court did not base its decision on its ruling on the vegetative/riparian buffer requirements in Ag Order 3.0. (*Monterey Coastkeeper*, 28 Cal.App.5th at p. 360.)

[10] Neither does the Regional Board's stipulation with petitioners in litigation challenging Ag Order 3.0, which simply requires Ag Order 4.0 to comply with the *Monterey Coastkeeper* decision.

CH-27

[11] The State Board's Eastern San Joaquin Order does not specify any requirements related to riparian setbacks and native vegetation. The Eastern San Joaquin Order primarily refers to native vegetation and habitat in the California Environmental Quality Act (CEQA) context. (ESJ Order, Appendix A.) In fact, the CEQA analysis for the Eastern San Joaquin Order indicates that management practices should mitigate impacts to vegetation and wildlife, not that implementation of the Eastern San Joaquin Order itself will require planting of native vegetation. (Eastern San Joaquin Order, Appendix A, p. 6.)

CH-25 cont.

proposed riparian setback areas, which is attached to Ms. Mercer's comment letter as Appendix V. Based on United States Department of Agriculture ("USDA") soil data, Ms. Mercer identifies soil types within the riparian habitat areas that are not suitable for the types of riparian habitat required by the Draft Order. (*Id.*) Some of these soils may never have historically sustained riparian habitat. As a result, there remains substantial uncertainty that riparian setbacks—if created by growers as provided by the Draft Order—will actually restore historical environmental beneficial uses. Instead, it is more likely that the Draft Order will impose a fruitless requirement. Nothing in the Water Code permits the Regional Board to create new riparian habitat or environmental beneficial uses as part of a WDR or otherwise, let alone to the detriment of existing agricultural beneficial uses.

CH-28

To present another concrete example, the northern portion of the Binsacca Ranch does not release irrigation or storm water flows into a water body due to the topography of the ranch. (See Attachment A.) Accordingly, imposing a setback requirement will not provide the "functions" set forth in the Draft Order, such as "maintain[ing] the physical, chemical, and biological integrity of water resources," "treat[ing] polluted surface or subsurface waters . . .", or "prevent[ing] additional nonpoint source pollution of waters by providing buffers," nor will they contribute to improving water quality. (See Draft Order, § C.5, ¶ 1.b.) In this situation, a setback on this portion of the Binsacca Ranch is unnecessary and arbitrary as it will not support the "functions" in the Draft Order, nor improve water quality. As such, a uniform operational setback requirement cannot be supported when ranch-specific alternative management practice implementation would achieve similar, if not better, water quality benefits. For example, a Finding acknowledges that the effectiveness of setbacks "greatly decreases when water flow is concentrated into channels or small streams" and "commercial irrigated agricultural land practice often concentrate flows into ditches prior to discharging from the farm." (Draft Order, Attachment A, § C.5, ¶ 96.) As such, it is not clear that setback requirements will uniformly achieve the same water quality benefits that management practices may provide.

CH-29

Exemptions set forth in Draft Ag Order 4.0 are not sufficiently broad to meaningfully exempt ranches from the setback requirements where such setbacks would not provide any water quality benefits. For example, Draft Ag Order 4.0 does not require a setback where there is an "existing permanent structure," such as a building or a roadway, "within the required minimum setback area," however, the Draft Order requires the ranch to "include an acreage equivalent to the acreage of the permanent structure in another segment of the setback on the farm or select the Alternative Compliance pathway." (Draft Order, § C.5, ¶ 35.) Yet there is no evidence to suggest that additional acreage would provide functions for beneficial uses nor contribute to the attainment of a water quality objective. (See Draft Order, Attachment A, § C.5, Finding ¶ 184, see also Draft Order, Part 2, § C.5 ¶ 1.b.) The requirement to provide equivalent acreage is not justified legally or factually, and should be removed from the exemption.

CH-30

By the same token, Draft Ag Order 4.0 does not require ranches bordered by a manmade barrier to establish a setback, but limits the exception by requiring that such manmade barrier "not [be] under the Discharger's legal control . . . ." (Draft Order, Part II, § C.5, ¶ 33.) The Findings related to exemptions do not provide any justification for this exemption, nor its limitation to barriers "not under the Discharger's legal control." (See Draft Order, Attachment A, § C.5, ¶¶ 184-186. Not only is it unclear what being "under the Discharger's legal control" means, but also the limitation is unjustified in the case of levees that have long been in place and are maintained by growers. (See Section III, below.)

CH-31

The Regional Board must demonstrate a connection between the requirements to obtain an exemption and water quality benefits. Rather than create exemptions that have no appreciable effect on water quality, Draft Ag Order 4.0 must create exemptions and opportunities for growers to implement management practices that actually improve water quality and support beneficial uses.

C. The Regional Water Board is Prohibited from Mandating the Means for Compliance by Imposing Setbacks On All Growers

The Porter-Cologne Act limits the Regional Board's authority to mandate that all growers implement setbacks. As described by one appellate court, the State Board and regional boards, when implementing waste discharge requirements, "may identify the disease and command that it be cured but not dictate the cure." (*Tahoe–Sierra Preservation Council v. State Water Resources Control Bd.* (1989) 210 Cal.App.3d 1421, 1438.) Instead, state law prohibits a waste discharge requirement, like Draft Ag Order 4.0, from specifying "the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree . . . ." (Wat. Code § 13360(a).) In relevant part, Section 13360(a) states:

> ". . . [n]o 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."

CH-32

(Wat. Code, § 13360, subd. (a) [emphasis added].)

The Draft Order requires every ranch, regardless of location, existing levees, existing storm water retention facilities or direction of water flows, to implement operational setbacks. (Draft Order, Part 2, § C.5, ¶ 3.) Ranches in riparian priority areas that do not meet riparian setback requirements must implement one of four compliance pathways. (*Id.* at Part 2, § C.5, ¶ 11.) Of these compliance pathways, all require implementation of the operational setback and, at least, three expressly require implementation of the riparian setback. (*Id.* at ¶¶ 1.b.iii, 4.d, 16; see also *id.* at ¶ 3, fn. 8 ["The riparian setback requires also apply to ranches in Riparian Priority areas whether the Cooperative Approach or Alternative Approach compliance pathways are selected."][12].) The Riparian Rapid Assessment Method ("RipRAM") compliance method is the only compliance pathway that does not expressly require implementation of a riparian setback. RipRAM compliance, however, effectively requires implementation of a riparian setback because it is seemingly impossible for a grower to achieve a site score of 69 without implementing and maintaining a riparian habitat corridor. (See Central Coast Wetlands Group, Riparian Rapid Assessment Method for California Field Book (2019) Metric 5; Draft Order, Attachment A, § C.5, ¶¶ 14.e, 20.f.) As such, all compliance pathways require implementation of some setback requirement.[13]

CH-33

Moreover, RipRAM was not designed to be a regulatory tool. (Central Coast Wetlands Group, Development of New Tools to Assess Riparian Extent and Conditions, p. 10 (Jan. 17, 2017) ["This project

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CH-34

[12] We also note that the compliance deadline for the Cooperative Approach is one year later than the other compliance pathways. (Draft Order, Attachment B, Tables MRP-17-20.) This begs the question of whether numerous growers will be out of compliance with Draft Ag Order 4.0 if a Cooperative Approach has not been approved by the deadline and the growers have not also implemented one of the other compliance pathways.

CH-35

[13] Further, the proposed Findings conflict with the contents of Draft Ag Order 4.0. (*Compare* Draft Order, Attachment A, § C.5, ¶ 65["The operational setback applies to ranches outside of Riparian Priority areas and to ranches that select the Cooperative Approach compliance pathway."] *with* Draft Order, Part 2, § C.5, ¶ 4 ["This [operational setback] requirement applies regardless of whether the ranch is in a Riparian Priority area or what compliance pathway the Discharger selects."].)

CH-33 cont.

was designed to be a pilot effort to provide the CCRWQCB and regional resource managers a current inventory of riparian extent on the Central Coast and a remote riparian assessment tool, allowing for the assessment of inaccessible stream reaches."].) The intent of RipRAM was to assess a variety of factors to establish a numeric score to gauge the health of a particular riparian habitat relative to a reference watershed for local watershed planning. In fact, Ms. Mercer's research has identified that RipRAM may not be suited for use as a regulatory metric, since it measures riparian ecosystem health in reference to a watershed or site, and staff have not identified reference sites that growers can use that are suitable for comparison. (Mercer Comment Letter, pp. 42-43.) Ms. Mercer's research also indicates that RipRAM may not be appropriate to assess intermittent waterbodies or arid environments. (*Id.*) Thus, the Draft Order does not, and likely cannot, provide sufficient information to make RipRAM a straightforward regulatory tool that could be broadly applied across the Central Coast.

CH-36

Despite these deficiencies and the narrow purpose for which RipRAM was created, the Draft Order would use RipRAM as a regulatory tool for diverse biomes across the entire Central Coast without evidence that RipRAM can be applied in this manner or achieve stated water quality goals. The Draft Order cannot, and does not, show that RipRAM is suitable as a regulatory tool to serve as an alternative compliance pathway. At a minimum, there must be alternative, more appropriate, regulatory tools to evaluate site-specific riparian habitat and meet water quality goals.

CH-37

Although the four compliance pathways provide the illusion of choice, Draft Ag Order 4.0 mandates compliance through a setback requirement. As outlined above, site-specific conditions including but not limited to topographic and site conditions, such as levees and existing structures, variances in eco-regions, hydromodifications, or other watershed specific conditions, adequately prevent discharges of water into waters of the state. Instead of allowing growers the flexibility to implement management practices to achieve water quality objectives and beneficial uses, Draft Ag Order 4.0 mandates setbacks in areas where water discharges do not impact waters of the state and where such setbacks will not provide any additional protection of beneficial uses. Not only does imposing setbacks as a one-size-fits-all approach to achieve the requirements of the Draft Order fail to achieve its intended water quality goals, but it also exceeds the Regional Water Board's legal authority by mandating the means of compliance.

D. Draft Ag Order 4.0 Conflicts With State Wetlands Policy, Which Excludes Agricultural Activities from the "Wetland" Definition

CH-38

Draft Ag Order 4.0 conflicts with the State Board's State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State ("State Wetlands Policy") that comes into effect in June 2020, in two ways. First, Draft Ag Order 4.0 does not recognize the exceptions to "artificial wetlands" included in the State Wetlands Policy, and instead, would require setbacks to be created adjacent to "waterbodies," even if they are non-jurisdictional under the State Wetlands Policy.

CH-39

Second, the Draft Order lacks any procedure for resolving wetland jurisdictional issues, especially in circumstances where the State Wetlands Policy would not grant the Regional Board jurisdiction.

1. <u>The State Wetlands Policy</u>

CH-40

The State Wetlands Policy's definition of a "wetland" constrains the Regional Board's jurisdictional reach under the Porter-Cologne Act. (State Wetlands Policy, § II.) The State Wetlands Policy establishes three general categories of wetlands: (1) "natural wetlands;" (2) "wetlands created by modification of a water of the state" and "artificial wetlands." (*Id.*)

With respect to "artificial wetlands." the State Wetlands Policy clarifies specific circumstances that do not qualify as wetlands. (State Wetlands Policy, Section II.3.) Notably, the State Wetlands Policy defines the following agricultural areas to be excluded from the definition of an "artificial wetland":

- Resulted from historic human activity, and subject to ongoing operation and maintenance; (*Id.*, II.3.c.)

- "Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b): . . .

  "Settling of sediment," (II.3.d.ii.)

  "Treatment of surface waters," (II.3.d.iv.)

  "Agricultural crop irrigation or stock watering," (II.3.d.v.)

  "Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or" (II.3.d.xi.)

CH-41

2. Draft Ag Order 4.0 would require growers to maintain operational or riparian setbacks from "waterbodies" even if they are non-jurisdictional

CH-42 Draft Ag Order 4.0 creates a conflict with the State Wetlands Policy because it will require growers "with waterbodies within or bordering their ranch" to build operational or riparian setbacks in areas that have been intentionally excluded from the State Wetlands Policy's definition of an "artificial wetland." (Draft Order, Part 2, § C.5, ¶ 3.) This is because the Draft Order's overbroad definition of a "waterbody" includes "wetlands," "drainages," and "canals," which are all water features that could be excluded from the definition of a "wetland" under the State Wetlands Policy depending on the circumstances. (Draft Order, Attachment C, § B, ¶ 136.)

CH-43 The Draft Order creates regulatory conflicts where an "artificial wetland" — not subject to the State Wetlands Policy — would be subject to operational and/or riparian setback requirements. For example, a sediment settling basin would be excluded from the definition of an "artificial wetland" pursuant to Section II.3.d.ii of the State Wetlands Policy. Under Draft Ag Order 4.0, however, where a sediment settling basin exists adjacent to a "waterbody" to protect water quality, the Draft Order would require destruction of the sediment settling basin in order to create a setback. Similar conflicts are inevitable for other agricultural features excluded from the "artificial wetlands" definition, including but not limited to surface water treatment basins and features used for agricultural crop irrigation (such as man-made ditches).

CH-44 This conflict must be rectified by revising the Draft Order's definition of a "waterbody" to include areas excluded from the definition of "artificial wetlands." (See State Wetlands Policy, § II.3.d.i-xii.)

3. The Draft Order lacks any procedure for resolving wetland jurisdictional issues

CH-45 The Draft Order's definition of a "wetland" quotes Section II of the State Wetlands Policy verbatim, including the portion that states that ". . . the burden is on the applicant to demonstrate that the wetland is not a water of the state." (Draft Order, Attachment C, ¶ B.138, quoting State Wetlands Policy, § II.) Yet Draft Ag Order 4.0 provides no mechanism to illustrate how a grower is supposed to make this application to the Regional Board. This failure to provide for a specified process and to define an exemption from this

CH-45 cont.

requirement based on the limits of the Regional Board's jurisdiction risks growers misunderstanding the limits of the Draft Order's setback requirements and building setbacks in ranch areas that have been intentionally excluded from the Regional Board's jurisdiction by the State Wetlands Policy.

Draft Ag Order 4.0 must remedy these inconsistencies with the State Wetlands Policy.

E. Setback Requirements in Draft Ag Order 4.0 Conflict with the Proposed Findings

CH-46

An administrative agency abuses its discretion when its order is not supported by the findings or where the findings are not supported by the evidence. (*Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 516; Code Civ. Proc., § 1094.5(c).) Essentially, the agency must set forth "findings to bridge the analytic gap between the raw evidence and ultimate decision or order." (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515.) This evidence is restricted to the administrative record, which consists of all the documentary and testimonial evidence presented during the administrative proceedings.

CH-47

Setback requirements in Draft Ag Order 4.0 conflict with the proposed Findings and generally lack evidentiary support. For example, Draft Ag Order 4.0 prohibits the "discharge of waste from irrigated agricultural activities" within the operational setback, which includes irrigation return flows. (Draft Order, Part 2, § C.5, ¶ 4.a; Attachment A, § C.5, ¶ 68.) Conversely, the Findings justifying Draft Ag Order 4.0 indicate that waste discharge from "irrigated agricultural fields and flowing over the setback areas via overland flow or flowing through the soil profile in the setback area" is permitted. (*Id.*, Attachment A, § C.5, ¶ 70.) This Finding conflicts with what appears to be a flat prohibition in the Draft Order.

CH-48

Further, the Draft Order provides no basis for treating overland flow of irrigated water into the setback differently than direct application irrigation water. (See Draft Order, Attachment A, § C.5, ¶¶ 67-70.) In fact, overland flow of irrigation waters into the riparian buffer area rather than direct application creates, at a minimum, the same risk of discharges to waters of the state due to the volume of water potentially involved and the increased sediment load. There is simply no evidence to suggest irrigation water applied within the setback area constitutes a "discharge of waste" where irrigation water applied immediately adjacent to the setback and flowing into the setback does not.[14] In this way, the Draft Order is arbitrary and lacking in evidentiary support. If anything, Draft Ag Order 4.0 and the irrigated lands regulatory programs seek to prevent the discharge of waste from irrigated lands into waters of the state, not the application of incidental irrigation water near waterbodies.[15] Draft Ag Order 4.0 must clarify the nature and scope of discharges prohibited within setback areas and provide sufficient justification for the distinction.

CH-49

[14] The Findings do state that "[t]he setback requirements are focused on prohibiting the discharge of waste originating within the setback areas and allowing the setback areas to provide water quality benefits of pollutant load reduction." (See also Draft Order, Attachment A, § C.5, ¶ 70.) This statement does not demonstrate why irrigation water originating within the setback has a different effect than water flowing into the setback, and it does not provide a justification for why the setback area would similarly provide water quality benefits to incidental irrigation water applied within the setback. Further, this approach is inconsistent with Water Code section 13360 because specifies the manner of compliance. (See Section I.C.)

CH-50

[15] In one Finding, the Draft Order acknowledges that the width of riparian setbacks "is almost entirely based on sheet flow," yet sheet flow discharges are permitted within the riparian setback area. (Draft Order, Attachment A, § C.5, ¶ 96.) The Draft Order, however, appears to have rejected the multitude of testimony and comment that diffuse sheet flow is not the predominant form of water runoff from Central Coast agricultural lands due to the implementation of management practices and other projects to manage storm water runoff.

CH-51 The prohibition on applied irrigation water in setback areas is particularly concerning due to the requirements to plant native species within operational and riparian setbacks, which may require irrigation during planting and under certain hydrologic conditions. (See Draft Order, Part 2, § C.5, ¶¶ 4.c, 17, 19, Table C.5-1.) Despite barring irrigation activities within a setback as the discharge of waste, Draft Ag Order 4.0 acknowledges that irrigation and/or soil amendments and fertilizer may be needed to sustain native vegetation within the buffer. (Draft Order, Attachment A, § C.5, ¶ 193; see also; Draft Order, Attachment C, Table MRP-7 [specifying a "Years Without Supplemental Irrigation" as a monitoring and reporting metric acknowledges].) Thus, the Draft Order may require growers to irrigate native plant species in the setback with water that would otherwise constitute a "discharge of waste." There is simply no justification to treat incidental overspray of irrigation water in a setback as a discharge of waste, while requiring growers to use the same water to irrigate native plant species.

CH-52 The internal inconsistency between the Draft Ag Order 4.0 and its Findings related to application of irrigation water within the setback make the setback requirements unsupportable.[16]

F. Draft Ag Order 4.0 and the Accompanying Draft Environmental Impact Report Do Not Evaluate Flooding Risks Associated with Required Vegetated Setbacks

CH-53 Draft Ag Order 4.0 and the accompanying Draft Environmental Impact Report ("Draft EIR" or "DEIR") espouse the benefits of riparian habitat for flood protection but fail to analyze the impact of additional vegetation on congesting waterways and existing flood control infrastructure. (Draft Order, Part 2, § C.5, ¶ 1.b.viii; Attachment A, § C.5, ¶¶ 57-58; DEIR, p. 3.9-51-62 [Impact HWQ-3].)

CH-54 The establishment of vegetated setbacks will lead to increased plant material in Central Coast waterways. This plant material can create congestion in waterways and existing flood control infrastructure. Congested waterways and flood control infrastructure reduces flow capacity and increases the risk of flood water inundating and overtopping levees, flooding ranches, infrastructure and posing a significant risk to human health and safety for rural communities near waterbodies. This risk has been long-recognized in rivers within the Central Coast and has been the subject of projects, such as the Salinas River Stream Maintenance Program, to maintain channel capacity and to reduce flood risk. The riparian habitat requirements in Draft Ag Order 4.0 raise similar concerns that Costa highlighted in the attached comment letter on the Salinas River Stream Maintenance Program Draft Environmental Impact Report, which is included as Attachment B.

CH-55 Plant material in the waterways also will go through its usual cycle of dying and decaying, therefore releasing increased nutrients into the waterways. There is evidence of this occurring especially within constructed wetlands. Draft Ag Order 4.0 and the accompanying DEIR do not assess the potential adverse effects of vegetated riparian habitat on water quality. (See Draft Order, Attachment A, § C.5, ¶¶ 1-80.)

CH-56 Substantial maintenance activities, at a minimum, will be required to ensure newly-created vegetation does not increase the risk of flooding. (See, e.g., Monterey County, Water Resources Agency, Salinas River Stream Maintenance Program, *available at* https://www.co.monterey.ca.us/government/government-links/water-resources-agency/programs/salinas-river-stream-maintenance-program-smp [accessed on Apr.

CH-57 [16] This is just one of many examples of Findings that conflict with Draft Ag Order 4.0 or lack sufficient clarity for meaningful analysis and implementation. (See, e.g., Draft Order, Part 2, § C.5, ¶ 7 [specifying limited permitted activities within setbacks, including conservation of soil and vegetation, without describing how these practices are to implemented] and Attachment A, § C.5, ¶ 69 ["Sediment and erosion control practices are required within the operational setback areas to prevent sedimentation and erosion from impacting surface water quality."].)

CH-56 cont.

3, 2020].) Draft Ag Order 4.0 and the accompanying DEIR must evaluate the risks associated with increased vegetation in waterways and assess the costs associated with maintenance activities.

CH-58

Moreover, vegetative setbacks are not consistent with Federal best management practices associated with earthen levees and other critical flood infrastructure. Current United States Army Corps of Engineers ("USACE") Guidance recommends a vegetation-free zone surrounding all levees, floodwalls, embankment dams, and critical structures related to flood damage reduction systems. (See USACE, Engineering Pamphlet (EP 1110-2-218), Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams and Appurtenant Structures § 2-2 (May 1, 2019) *available at* https://www.publications.usace.army.mil/ Portals/76/Users/182/86/2486/EP_1110-2-18.pdf?ver=2019-04-10-161259-723; see Mercer Comment Letter, pp. 22-26.) This guidance also recommends a slightly larger vegetation-management zone designed to manage larger trees. (*Id.* at § 2-3.) By requiring vegetated riparian setbacks on top of or adjacent to flood control infrastructure, Draft Ag Order 4.0 conflicts with Federal guidance on levee safety, may weaken levees and increase liability for growers. Draft Ag Order 4.0 does not evaluate whether vegetated setback requirements are consistent with best management practices for flood control infrastructure such as levees.[17]

CH-59

Draft Ag Order 4.0 and the accompanying Draft EIR must analyze potential impacts from increased vegetation on flood control vulnerabilities and associated management costs, and other public health and welfare considerations related to fire safety, climate change, and vector abatement. Draft Ag Order 4.0 setback requirements also must provide sufficient flexibility to allow growers to preserve existing flood control infrastructure.

G. Draft Ag Order 4.0 and the Draft EIR Fail to Evaluate the Impact of Setbacks on Other Public Health and Welfare, Including Wildfire Risk, Pest Abatement and Climate Change.

1. Wildfire Risk

CH-60

Draft Ag Order 4.0 and the Draft EIR neglect to consider the increased wildfire risk due to the creation of new riparian habitat and wildfire fuel load through riparian setbacks requirements. The Findings reference State Board Resolution No. 2017-0012, which states:

> Regional Water Boards are encouraged to, update plans, permits, and policies, and coordinate with other agencies to enhance ecosystem resilience to the impacts of climate change, including but not limited to actions that protect headwaters, facilitate restoration, enhance carbon sequestration, build and enhance healthy soils, and *reduce vulnerability to and impacts from fires*. Staff shall also collaborate with the California Department of Food and Agriculture, CalRecycle, and other agencies to advance carbon sequestration.

(Draft Order, Attachment A, § B, ¶ 153 [emphasis added]; State Board, Resolution No. 2017-0012 Comprehensive Response to Climate Change *available at* https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf ("Resolution No. 2017-0012").) Resolution No. 2017-0012 further states that the "Regional Water Boards

CH-61

CH-62

[17] As discussed above in Section I.B, the existing exemptions for manmade barriers and existing permanent structures fail to address potential conflicts between vegetative setback requirements and levee infrastructure. (Draft Order, Part 2, § C.5, ¶¶ 33, 35; see also Draft Order, Attachment C, § B, ¶ 82 [definition of "Permanent Structure" does not include "levees."].)

CH-61 cont.

are encouraged to, work with California Department of Forestry and Fire Protection, Federal land management, and other relevant agencies to restore and maintain healthy watersheds, reduce vulnerability to catastrophic fires, and support resilience in recovery efforts." (*Id.*, ¶ 14)

CH-63

Despite acknowledging the need to consider fire impacts and the need to collaborate with other agencies, there are no Findings related to fire protection or wildfire risk. (See Draft Order, Attachment A.) Similarly, the Draft EIR only provides a cursory review of the wildfire risks associated with riparian setbacks. (DEIR, pp. 3.12-1 – 3.12.4, Figure 3,8-3,) The entirety of the DEIR's analysis related to setbacks states:

> Some of the reasonably foreseeable management practices that may be implemented under the Proposed Project include new vegetated areas (e.g., vegetated filter strips, riparian buffer areas, etc.); however, vegetation would occur within/interspersed with tracts of irrigated farmland and/or be located along riparian or wetland areas (which are usually moist) and thus would not substantially increase wildfire risk.

(DEIR, pp. 3.12-3 – 3.12.4,) This analysis assumes without evidence that riparian setbacks will be interspersed, despite the strict setback requirements in the Draft Order, and contained within moist riparian or wetland areas. As discussed in Ms. Mercer's comment letter, the Draft EIR's analysis fails to consider established state and Federal research on potential wildfire risk associated with the additional fuel load created by vegetated riparian setbacks within the variety of climates and eco-regions across the Central Coast. (Mercer Comment Letter, pp. 27-32, 42.) The Draft EIR's analysis relies solely on the California Department of Forestry and Fire Protection's Fire Risk Assessment Program, which describes fire risk based on past and existing conditions rather than predicting future fire risk with the riparian setbacks proposed by the Draft Order. (*Id.* at p. 32.)

CH-64

As drafted, neither the Draft Order nor the Draft EIR assess the potential wildfire risk posed by the implementation of riparian setbacks on agriculture or communities along the Wildland Urban Interface. The Regional Board must evaluate and propose plans to mitigate these impacts and demonstrate that the Ag Order will "reduce vulnerability to and impacts from fires" prior to its adoption.

CH-65

2. Pest Abatement

Creation of new riparian habitat will inevitably result in additional habitat for mosquitos, invasive species and other pests that impact both irrigated agriculture and Central Coast communities.

CH-66

The Draft Order and Draft EIR do not discuss the potential increased risk of mosquito and insect-based disease transmission associated with the creation of new riparian habitat. As noted in Ms. Mercer's letter, mosquitos are a common carrier for infectious diseases and local agencies, including mosquito abatement districts and county health departments, actively manage mosquitos and mosquito habitat to prevent the spread of infectious disease. (Mercer Comment Letter, pp. 35-36.) Costa has numerous ranches near Central Coast communities, including the City of Soledad and Chualar, that could be affected by the proliferation of mosquito habitat. Ag Order 4.0 must consider and incorporate the advice of mosquito abatement districts and County health officials to avoid potential impacts to Central Coast communities and farm workers.

CH-67

Further, the Draft Order does not address riparian habitat impacts on the proliferation of invasive species and pests. The Findings acknowledge that numerous Resource Conservation Districts identified that establishing riparian areas can lead to weed maintenance needs and attract pests to adjacent cropland. (Draft Order, Attachment A, § B, ¶ 127 [noting that the Resource Conversation Districts do not support set requirements without site-specific planning].) Despite acknowledging this impact, Draft Ag Order 4.0 and

CH-67 cont.

the Draft EIR, do not adequately address the potential impacts that the proliferation of invasive species in riparian habitat may have on irrigated agriculture. (Mercer Comment Letter, pp. 36-38.) Although the Draft Order authorizes control of invasive species within riparian and operational setbacks, it does not provide any meaningful guidance for growers to understand when removal of invasive species is appropriate nor provide any economic incentive for growers to maintain riparian areas. (Draft Order, Part 2, § C.5, ¶ 7.) Further, the Draft EIR contains no evaluation of the potential impacts associated with invasive species or the potential impacts associated with efforts to control invasive species.

CH-68

Draft Ag Order 4.0 and the Draft EIR do not adequately evaluate the foreseeable impacts of mosquitos, invasive species and other pests associated with implementation of riparian and operational setbacks. The Regional Board must consider these impacts in order to protect the public health, safety and welfare of Central Coast residents and farmworkers.

3. Climate Change

CH-69

Climate change will further exacerbate the aforementioned flood, wildfire and pest abatement problems as well as create increased food security risk for California and the United States. (Draft Order, Attachment A, § B, ¶¶ 151-157; DEIR, pp. 3.7-6.) Both Draft Ag Order 4.0 and the Draft EIR discuss climate change in terms of the greenhouse gas impacts without considering the impact riparian and operational setbacks will have on climate change adaption strategies.

CH-70

In Resolution 2017-002, the State Board acknowledges that it is a principal of the state's adaptation strategy, Safeguarding California, to implement adaptation measures in order to "protect the state's natural and built infrastructure, communities, environmental quality, public health, safety and security, natural resources, and economy from the unavoidable impacts of climate change."[18] (Resolution No. 2017-0012, Recital ¶ 9; see also Resolution No. 2017-0012, ¶ 4 [discussing adaption in the storm water context].) Further, the Findings state:

> Climate change also affects the habitat and prevalence of crop pests and weeds. These climate change impacts will affect agriculture in the central coast region and therefore the Regional Board's program activities. The Central Coast Water Board is making a concerted effort to begin identifying the nexus between climate change, its impacts on the agricultural industry and water quality in the central coast region, and programmatic planning.

CH-71

(Draft Order, Attachment A, § B, ¶¶ 151.) Despite asserting a commitment to "programmatic planning," the Draft Order fails to even consider the broader impacts climate change will have on the proposed setback requirements and the future of agriculture on the Central Coast. To comply with the state's California Adaptation guidance and Resolution No. 2017-0012, Draft Ag Order 4.0 and the Draft EIR must assess the public health and welfare impacts posed by riparian and operational setbacks in light of climate change and propose adequate mitigation strategies.

CH-72

[18] The State also released a subsequent Safeguarding California: Implementing Action Plans – Agricultural Sector Plan that specifically calls for state action to "reduce farmland and rangeland conversion," which conflicts with the conversion of substantial agricultural lands to riparian habitat. (California Natural Resources Agency, Safeguarding California: Implementing Action Plans – Agricultural Sector Plan, pp. 24-26 *available at* http://files.resources.ca.gov/docs/climate/safeguarding/Agricultural%20Sector%20Plan.pdf (accessed on June 15, 2020).)

H. The Draft Order Ignores Available Data on Food Safety Buffers and Fails to Calculate How Food Safety Buffers Will Compound Fallowing Caused by Riparian Setbacks

CH-73

Although Draft Ag Order 4.0 and the Draft EIR calculate potential impacts associated with riparian setbacks, they fail to calculate the concurrent and foreseeable fallowing to create food safety buffers along those riparian setbacks. In fact, the Regional Board alleges that calculating whether food safety requirements will cause additional fallowing of productive agricultural land is not possible. (Draft Order, Attachment A, § C.5, ¶¶ 163-183; DEIR, pp. 3.1-25, 3.5-35 ["Because Agricultural Order 4.0 would not mandate the manner of compliance, it is impracticable to determine which growers may implement which management practices in which locations."], 3.8-28–3.8-29.)

CH-74

To the contrary, the growers have submitted evidence that the Regional Board can use to calculate food safety buffer impacts, which are not speculative and can be evaluated using public information.[19] At a presentation to the Regional Board in September 2019, representatives from Costa and Rincon Farms presented "Food Safety, A Farmer's Perspective" ("Food Safety Presentation"). (Attachment C.) This presentation concludes that growers are required to implement between a 30 – 150 foot food safety buffer from riparian areas by shippers and the Leafy Green Management Agreement, while food retailers require a buffer of 50 – 150 feet. (See Food Safety Presentation, p. 5.) Ms. Mercer's letter further supplements this information with a literature review on food safety risks. (Mercer Comment Letter, pp. 32-36.) The Regional Board had this information in hand when it prepared the Draft Order and DEIR, and could have calculated a range of food safety buffer impacts associated with the setback requirements.

CH-75

To supplement these presentations, Costa provides numerous photographs in Attachment D depicting the impact of maintaining existing habitat adjacent to crops. These photographs of bird damage to crops show that establishing habitat adjacent to crops will not fly. When presented the opportunity, birds and other terrestrial species will consume crops and further require the destruction of crops due to food safety standards. (21 C.F.R. §§ 112.83, 112.112; *see* California Leafy Green Marketing Agreement, Commodity Specific Food Safety Guidelines for the Production and Harvest of Lettuce and Leafy Greens (Oct. 24, 2019).) These impacts are not "speculative." The Draft Order and DEIR can and must analyze the cumulative impact that stacked riparian setback and food safety buffers will have on agricultural lands.

CH-76

This information is sufficient to allow calculation and presentation of the potential combined impact that both the setback requirement and food safety buffers will have on farming operations in the Central Coast by assuming a minimum 50 foot food safety buffer adjacent to all newly created riparian setbacks.[20]

CH-77

[19] The Findings make statements about the negative impacts associated with removal of native vegetation to accommodate adequate food safety buffers. (Draft Order, Attachment A, § B, ¶¶ 169, 175.) These statements, however, are not relevant to the issue of whether growers will have to remove productive agricultural land to accommodate food safety requirements in addition to implementing the vegetative setback requirements mandated by Draft Ag Order 4.0.

CH-78

[20] The Draft EIR states that "growers may decide to increase bare ground area flanking the newly established non-crop vegetation" and the impacts to croplands "would not be a result of compliance with [Draft Ag Order 4.0], but from food safety concerns." (DEIR, p. 3.1-25.) The application of food safety buffers beyond riparian impacts plainly qualifies as an "indirect" impact, which requires analysis in an EIR. (Cal. Code Regs., tit. 13, § 15064(d)(4) ["An indirect physical change in the environment is a physical change … which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change … then the other change is an indirect physical change in the environment."]; see also *id.* at §15358(a)(2) ["Indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or second effects may include … other effected related to induced changed in the

CH-79 Further, this food safety buffer likely reflects the minimum requirements, since the riparian habitat mandated by Draft Ag Order 4.0 would likely result in additional food safety issues associated with increased animal crop contact.[21]

CH-80 The Draft Order appears to dismiss grower concerns about the financial and operational impacts of setbacks and food safety buffers on the grounds that setbacks will primarily impact currently bare ground. The proposed Findings assert that "[t]he riparian area management requirement will not necessarily result in a conversion of cropland to non-crop vegetation, but rather conversion from bare ground to non-crop vegetation in riparian areas." (Draft Order, Attachment A, § B ¶ 167.) This is misleading. The bare ground areas are currently in-place food safety buffers. (*Id.* ["Evidence suggests that much conversion from non-crop vegetation to bare ground or croplands occurred relatively recently, *following food safety events*." (emphasis added)].) The existing bare soil is a direct result of food safety setbacks. Waste discharge requirements that would force growers to vegetate setbacks and remove more cropland from production will plainly necessitate reestablishment of these buffers.

CH-81 In fact, Costa generated a preliminary analysis of the combined impact of riparian setbacks, including food safety buffers, on some of its ranches. Relying on the riparian setback analysis described above, Costa estimates food safety buffer requirements would remove several hundred additional acres of land from cultivation. Combined the riparian setback and food safety buffer would remove even more acres of agricultural land from production. Ms. Mercer prepared these estimates based on the limited information made publicly available during the comment period, which likely underestimates the amount of acreage removed. Revised calculations using the Regional Board's Interactive Map could not be prepared in time to submit this letter (see Section II, below); however, Ms. Mercer's analysis and the Interactive Map demonstrate that an analysis of food safety buffer impacts could be prepared, even if there is some uncertainty regarding growers' selection of the various compliance pathways.

CH-82 Accordingly, Draft Ag Order 4.0 and the accompanying DEIR must evaluate the combined impacts of setbacks and food safety buffers on agricultural operations in order to assess the impacts on growers and the environment.

I. Draft Ag Order 4.0 Conflicts with State and Federal Laws and Programs Designed to Protect Agricultural Lands

CH-83 Numerous state and Federal law and programs preserve and protect agricultural lands. The proposed operational and riparian setback requirements in Ag Order 4.0, if implemented, could create conflicts with two significant laws—the Williamson Act and United States Farm Land Protection Act—designed to preserve productive agricultural land and promote California agriculture.

1. Williamson Act

CH-84 The California Land Conservation Act of 1965 (Gov. Code, §§ 51200-51297.4), commonly called the Williamson Act, was adopted to support the agricultural economy of the state, to assure sufficient food

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CH-78 cont. pattern of land use … and other natural systems, including ecosystems."].) The Draft EIR must evaluate the impacts of food safety buffers to be legally sufficient.

[21] See Draft Order, Attachment A, C.5, ¶ 65 ("Riparian areas provide essential habitat for a diverse community of terrestrial wildlife. … Cross (1985) suggested that riparian zones support higher diversity and density of small mammals than upland habitat. Riparian areas also support diverse and abundant reptile and amphibian populations. ... More than 225 species of birds, mammals, reptiles, and amphibians depend on California's riparian areas (RHJV, 2004).")

CH-84 cont.

supplies, to discourage the premature and unnecessary conversion of agricultural lands and to preserve open space and aesthetic values of agricultural lands. (Gov. Code, § 51220.) The Williamson Act provides for the preservation of agricultural land by restricting the use of agricultural land to agricultural and compatible uses through long-term contracts between landowners and local governments. Land subject to a Williamson Act contract is then assessed for tax purposes according to its restricted use rather than its development potential. (Gov. Code, § 51252; Rev. & Tax. Code, §§ 421-430.5; see also Cal. Const. art. XIII, § 8.)

CH-85

Williamson Act contracts are interpreted based on the general principals of contract law. (*County of Marin v. Assessment Appeals Bd.* (1976) 64 Cal.App.3d 319, 325-26.) Williamson Act contracts must "[p]rovide for the exclusion of uses other than agricultural, other than those compatible with agricultural uses, for the duration of the contract." (Gov. Code, § 512439(a).) Although Williamson Act contracts permit "open-space use" and habitat, as described above in Section I, it is unclear that riparian habitat mandated by the setbacks in the Draft Order are compatible with agricultural uses and specific local agency contract requirements.[22] (Gov. Code, §§ 51220.5, 51205, 51238, 51238.1.) Further, riparian setback requirements may conflict with the Williamson Act's definition for "wildlife habitat area." (Gov. Code, § 51201(j).) Thus, riparian setbacks, in some instances, may be inconsistent with the Williamson Act and may require growers to breach, modify or rescind their Williamson Act contracts at significant expense. (Gov. Code, §§ 51280-51287, 51203(e), 51240.) The Findings and Draft Order offer no resolution of this issue, as they do not mention the Williamson Act.

CH-86

Approximately one-third of Costa's agricultural operations in the Central Coast are on lands covered by Williamson Act contracts. Given the substantial acreage and number of Williamson Act contracts, it is critical that growers understand how the Draft Order's setback requirements may affect Williamson Act contracts, especially if contracts may need to be breached, modified or rescinded.[23] Regardless, Costa will need to expend substantial time and resources in individualized assessments of whether the setback requirements in Draft Ag Order 4.0 would cause Costa to violate the terms of any Williamson Act contracts covering ranches it owns or operates.

CH-87

[22] Government Code section 51220.2(a) states:

> "Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:
> (1) *The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel* or parcels or on other contracted lands in agricultural preserves.
> (2) *The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves*. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.
> (3) *The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use*."

(Emphasis added.)

CH-88

[23] Costa also leases ranches with Williamson Act contracts. If the landowner for a leased ranch determines that a riparian setback would violate the terms of its Williamson Act contract and refuses to implement riparian setbacks, Costa's compliance with the Draft Order may exceed Costa's control.

CH-89 Draft Ag Order 4.0 and the Draft EIR must assess whether the proposed riparian and operational setback requirements are consistent with the purposes of the Williamson Act. Further, to adequately evaluate the economic and operational impacts of the Draft Order, the Regional Board must consult with local agencies and evaluate the extent that setback requirements will growers to breach, modify or rescind their Williamson Act contracts.

2. United States Farmland Protection Policy Act

CH-90 In 1981, the United States Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98), which contained the Farmland Protection Policy Act ("FPPA") (7 U.S.C. §§ 4201 *et seq.*). On June 17, 1994, the Natural Resources Conservation Service ("NRCS") branch of the United States Department of Agriculture ("USDA") adopted final rules and regulation implementing the FPPA. The FPPA is intended to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. (7 U.S.C. § 4201.)

CH-91 The FPPA also authorizes the Secretary of USDA to issue grants, contracts and any other financial means to reduce the conversion of farmland. (7 U.S.C. § 4206; see also 7 U.S.C. § 4204 [permitting the USDA Secretary to provide technical assistance].) Many of USDA's grant programs were supplemented through the Agricultural Improvement Act of 2018 (Public Law 115-334) ("2018 Farm Bill"). Federal grant programs applicable to the Central Coast include the Conservation Stewardship Program, and the Environmental Quality Incentives Program. (NRCS, Financial Assistance *available at* https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/ (accessed on June 16, 2020).) The eligibility criteria and amount of a grant award or contract under Federal assistance programs is, in part, contingent on the amount of agricultural lands. (See, e.g., NRCS, Conservation Stewardship Program *available at* https://www.nrcs.usda.gov/wps/portal/ nrcs/main/ca/programs/financial/csp/ (accessed on June 16, 2020).) Thus, removal of substantial agricultural lands to create riparian and operational setbacks will reduce growers' potential grant awards and hinder ability of growers to qualify for much needed grant funding.

CH-92 Further, growers may be unable to utilize Federal grants and other Federal resources to implement riparian and operational setback requirements. (7 C.F.R. § 658.3 ["In cases where either a private party or a non-Federal unit of government applies for Federal assistance to convert farmland to a nonagricultural use, the Federal agency should use the criteria set forth in this part to identify and take into account any adverse effects on farmland of the assistance requested and develop alternative actions that would avoid or mitigate such adverse effects."].) Without Federal resources, growers will likely have to bear the costs of installing and maintaining riparian and operational setbacks.

CH-93 Riparian and operational setbacks will remove agricultural land from production thereby limiting the ability of Central Coast growers to secure important Federal funding sources. Draft Ag Order 4.0 must evaluate these potential impacts and consult with Federal agencies to ensure the setback requirements do not conflict with FPPA and Federal farmland policy.

II. INSUFFICIENT NOTICE OF THE RIPARIAN AREA MANAGEMENT PROGRAM

CH-94 The Draft Order lacks sufficient clarity to allow growers to evaluate the full impact of the setback requirements on their ranches. Costa and other growers lack sufficient information to fully assess the operational and economic impacts that Draft Ag Order 4.0's setback requirements will have on their agricultural operations. Without this information, Costa and other growers cannot meaningfully evaluate and comment on the Draft Order and Draft EIR.

CH-95 The Draft Order does not allow growers to assess the buffer requirements on their ranches because they lack readily accessible information on the Strahler classification for waterbodies adjacent to their ranches

CH-95 cont.

and they are unable to determine where to start the setback measurement. (See Draft Order, Part 2, § C.5, ¶¶ 4, 16-21, Table C.5-1, Attachment C, ¶¶ 14, 120; but see also Draft Order, Attachment B, § F, ¶ 1.e.iv [requiring submittal of a "[d]igital map of farm and setback boundaries" in the Annual Compliance Form] .) As a result, Costa and other large-scale growers have had no practical means to evaluate the actual impacts of operational and riparian setbacks on their ranches.

CH-96

The Regional Board attempted to rectify this uncertainty through publication of an "Interactive Map" on June 12, 2020, merely 10 days before comments are due on the Draft Order. As noted in Ms. Mercer's letter, the Interactive Map remains materially deficient and did not allow her to assess the potential riparian setbacks on her clients' ranches. (Mercer Comment Letter, pp. 3-4, Appendix III.) Most notably, the Interactive Map still does not allow growers to determine where to begin the riparian setbacks because the map does not depict a location, such as the "top of the bank." where the riparian setback requirements start. (*Id.*) Further, the Interactive Map provides no information that would allow growers to evaluate the extents of required operational setbacks. (*Id.* at p. 3.)

CH-97

For Costa's ranches adjacent to Chualar Creek, Salinas River, Quail Creek, Esperanza Creek, Gonzales Slough and Arroyo Seco River among other water bodies, the Interactive Map still does not provide Costa with adequate notice of the extent of riparian setbacks on these ranches without identifying and depicting the start of the riparian setback area. Further, the Interactive Map is completely deficient in allowing Costa to identify the extent of operational setbacks at ranches along the Arroyo Seco River and other unidentified water bodies.

CH-98

Without this information, growers cannot assess the impact that operational and riparian setbacks may have on their agricultural operations. Lack of information and notice has the effect of suppressing grower engagement and participation in the Draft Ag Order process. Growers must be able to practically evaluate the potential impacts of setbacks on their operations in order to meaningfully comment on Draft Ag Order 4.0 and the accompanying Draft EIR.

CH-99

III. TAKINGS

A. Setback Requirements Violate the State and Federal Constitutional Prohibitions on Takings Without Just Compensation

If not revised, Draft Ag Order 4.0 will affect a constitutional taking on Costa's property in violation of its Federal and state constitutional rights by requiring the creation and maintenance of riparian setbacks—indistinguishable from conservation easements—over a significant amount of private property.

CH-100

The Fifth Amendment of the United States Constitution provides that private property shall not "be taken for public use, without just compensation." Furthermore, article 1, section 19 of the California Constitution provides that "[p]rivate property may be taken or damaged for public use only when just compensation … has first been paid to … the owner." The State has the express authority to exercise eminent domain along navigable waters of the state; however, to do so, it must pay just compensation. (See Cal. Const., art. X, § 1 ["The right of eminent domain is hereby declared to exist in the State to all frontages on the navigable waters of this State."].) The Fifth Amendment Takings Clause "is designed not to limit the governmental interference with property rights per se, but rather to secure compensation in the event of otherwise proper interference amounting to a taking." (*First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304, 314-15 (1987).)

CH-101

A taking occurs where the government . . .

CH-101 cont.

- authorizes a physical occupation of property or completely prohibits all economically productive or beneficial use of land, also known as a *per se* or categorical taking. (See, *Loretto v. Teleprompter Manhattan CATV Corp.* (1982) 458 U.S. 419; *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003, 1027.)
- makes an improper demand for property, or an "exaction," as a permit condition. (*Nollan v. California Coastal Comm'n* (1987) 483 U.S. 825; *Dolan v. City of Tigard* (1994) 512 U.S. 374.)
- regulation of private property limits its use to such a degree that the regulation effectively deprives the property owners of most economically reasonable use or value of their property. (*Penn Cent. Transp. Co. v. City of New York* (1978) 438 U.S. 104, 124.)

CH-102

By requiring that riparian setbacks be created and maintained indefinitely, Draft Ag Order 4.0 works a regulatory taking by placing a burden on Costa that is not roughly proportional to the damage caused to Costa's operations and property rights, when compared to the alleged burden the Draft Order is designed to address. Furthermore, the economic impact of the setback requirement and interference with Costa's reasonable, investment-backed expectations is not outweighed by the intended benefits asserted by the Regional Board. As such, the Regional Board must exercise its eminent domain authority and pay growers just compensation to impose the proposed vegetated riparian habitat setbacks proposed in Draft Ag Order 4.0.

B. Exceptions In the Draft Order Do Not Avoid Inverse Condemnation

CH-103

Draft Ag Order 4.0 does not require ranches bordered by a manmade barrier to establish a setback, but limits the exception by requiring that such manmade barrier "not [be] under the Discharger's legal control . . . ." (Draft Order, Part II, § C.5, ¶ 33.) The Findings related to exemptions do not provide any justification for this exemption, nor its limitation to barriers "not under the Discharger's legal control." (See Draft Order, Attachment A, § C.5, ¶¶ 184-186.) Because this narrow exception only applies to manmade barriers outside of the Discharger's control, it implicates inverse condemnation by requiring ranches with existing manmade barriers to remove them in order to comply with the setback requirements.

CH-104

Costa's Lanini and Rianda ranches are protected by a levee constructed by Monterey County Flood Control and Water Conservation District as part of a USACE program and now maintained by Costa's and the property owner. The Dudgeon ranch is protected by a levee constructed in the wake of a 1995 flood, and maintained by Costa and the property owner. Costa and the property owner "inherited" maintenance of these levees, at their own expense, after the USACE and local flood control district abdicated their responsibility over this critical flood control infrastructure.

Strict application of the setback requirement would require removal of these manmade barriers and expose those ranches to periodic flooding. The current exemptions in Draft Ag Order 4.0 are not sufficiently flexible to account for situations where a property owner maintains an existing piece of flood control infrastructure. As such, the exemptions do not protect the Regional Board from inverse condemnation claims associated with requiring growers to remove existing critical infrastructure. Draft Ag Order 4.0 must incorporate flexible exemptions or permit growers to implement the Alternative Compliance Pathway in a manner that accounts for existing levees, among other critical infrastructure, to avoid legal challenge.

IV. TRADE SECRETS

CH-105

The Draft Ag Order 4.0 demands the production of extremely sensitive competitive data that constitutes protectable trade secrets and, in several instances, constitutes a full crop report both directly and indirectly.

CH-105 cont. In addition to the other concerns raised in this letter, these invasive disclosures are troubling from a trade secret perspective.

CH-106 In short, the Regional Board's current protective protocols are not sufficient to prevent unwarranted disclosure of this information. Water Code section 13267(b)(2) provides that reports that contain trade secret information may not be disclosed to the public. The Regional Board is acting contrary to those non-disclosure provisions, and the Trade Secret Guidance demonstrates that this conduct will continue. January 4, 2018 Resources for Growers Protection of Trade Secrets and Secret Processes ("Trade Secret Guidance"). The commercial value of the information required to be disclosed is unprecedented — public disclosure of even portions of that information would be ruinous, if not outright fatal, to these growers' operations.

CH-107 Absent significant revisions to the Regional Board's trade secret guidance and review process it is inevitable that the Regional Board will attempt to improperly disclose trade secrets. It is the growers' view that any additional disclosure requirements cannot be justified unless and until the Regional Board revises its protocols and procedures to comply with the non-disclosure provisions as explained below.

CH-108 In order to protect the growers, the Water Code includes a non-disclosure provision for trade secrets in Water Code section 13267(b)(2). Water Code section 13267(b)(2) requires that "the portions of a report that *might disclose* trade secrets or secret processes *may not be* [disclosed] . . . ." (Emphases added). From the language itself, two important observations can be made. First, only possible disclosure of a trade secret is required for the prohibition against disclosure to apply due to the "might disclose" provision. Second, the "may not be" phrase is a mandatory prohibition that does not allow for discretion.

CH-109 Another critical observation can be drawn by comparing Water Code 13267(b)(2), and the Water Code generally, with the California Uniform Trade Secrets Act ("CUTSA"). CUTSA, which contains significant restrictions on the disclosure of trade secret information, has a specific provision that precludes it from being applied against the Public Records Act. (Civ. Code § 3426.7(c).) Water Code section 13267 has no such provision. Furthermore, this is an intentional omission, as two other sections of the Water Code make explicit mention of the Public Records Act. (Water Code §§ 6102(5)(d)(1), 71596.) From this, one can conclude that Water Code section 13267(b)(2) was intended to prevent disclosure under the Public Records Act and constitutes a disclosure exemption pursuant to Government Code section 5264(k).

CH-110 Like Water Code section 13267(b)(2), the duty to not disclose records under Government Code section 5264(k) is mandatory. Government Code section 5264(k) precludes disclosure of records under the Public Records Act when such disclosure would be contrary to state or Federal law. When this provision is explicitly to prevent unlawful disclosure, no reasonable argument can be made that the prohibition from disclosure is anything but mandatory. The decision in *Uribe v. Howie* (1971) 19 Cal.App.3d 194, 208 ("*Uribe*"), which will be discussed more below, relied exclusively on the Evidence Code section1060 portion of Government Code section 5264(k).[24] However, Government Code section 5264(k) incorporates any state or Federal law prohibition against disclosure as an exemption to the Public Records Act. Water Code section 13267(b)(2), as a state law prohibition against disclosure, is therefore an exemption to the Public Records Act through Government Code section 5264(k). A separate and independently sufficient duty not to disclose can be found in the Federal Defend Trade Secrets Act. (18 U.S.C. 1839(5) [defining "misappropriation" to include disclosure without permission when the knowledge was acquired pursuant to

[24] The *Uribe* decision was then used as the foundation for the analysis in the Superior Court decision in *Rava Ranches, Inc., et al. v. Cal. RWQCB, Central Coast Region*, Case No. 16CV000255 (Monterey Cal. Sup. Ct.) ("*Rava*"). The non-binding *Rava* decision considered a very different water reporting form and is only relevant because the Regional Board's Trade Secret Guidance tracks the *Rava* and *Uribe* decisions very closely.

CH-110 cont. a duty to maintain secrecy of the trade secret].) Either of these grounds is sufficient to end the analysis before the *Uribe* or Trade Secret Guidance analyses are even considered.

CH-111 In addition, the Regional Board's Trade Secret Guidance contains multiple points of error. First, the Trade Secret Guidance adopts the view that Water Code section 13267(b)(2) has no independent scope of protection and is completely subsumed by the Evidence Code section 1060 provision. (Trade Secret Guidance, p. 1.) This is mistaken for the reasons discussed above.

CH-112 Second, the Trade Secret Guidance compounds the error by adopting the view that any trade secret exception under Government Code section 5264(k) requires a balancing test. This also is mistaken, as it conflates two very distinct analyses – the extent of the qualifications on the "qualified" trade secret privilege, and the public interest balancing test of *Uribe*. (See *Uribe, supra*, 19 Cal. App. 3d. 194.)

In *Uribe*, the Court applied the balancing test that was recited in Evidence Code section 1040 as it existed at that time, which did contain a general balancing of the interests test. (*Uribe*, 19 Cal. App. 3d. at 207, citing *Terzian v. Superior Court* (1970) 10 Cal. App. 3d 286, 294.) In contrast, Evidence Code section1060 has a more restrictive qualification, stating that the privilege will apply unless non-disclosure will "tend to conceal fraud or otherwise work injustice." The phrase "work injustice" is not the same as the general balancing test of Evidence Code section 1040 wrongly applied by *Uribe* and incorporated into the Regional Board's Trade Secret Guidance.

CH-113 The Trade Secrets Guidance, in summary, wrongfully (1) ignores the mandatory duty of non-disclosure in Water Code section 13267(b)(2) applied through Government Code section 5264(k); (2) ignores the mandatory duty of non-disclosure in Federal trade secret law (18 U.S.C. 1839) applied through Government Code section 5264(k); and (3) uses the wrong analysis to the qualifications of the qualified trade secret privilege of Evidence Code section 1060 applied through Government Code 5264(k). Importantly, these are all independently fatal errors, any one of which is sufficient on its own to preclude disclosure. If the demands for information in the Draft Ag Order 4.0 are to be imposed, then at a minimum the required trade secret protections must be enforced.

CH-114 In addition, the effect of a disclosure cannot be considered in a vacuum, and must be considered in the context of previously disclosed information. As one example, the requirement to report nitrogen removed allows a trivial calculation to reveal specifically what crop was planted in a particular field, and to reliably estimate the crop yield. This means that, in light of other information previously disclosed to the public, the disclosure of nitrogen removed effectively acts as the disclosure of a crop report. Previous Orders from the State Board do not reflect an appreciation of this critical nuance. (*See, e.g.*, Eastern San Joaquin Order at p. 46 [holding that reporting of nitrogen removed is not materially different than requiring reporting of nitrogen applied].) And, more information is being made public, such as groundwater well data and eNOI filings. (See IRLP Staff email to AgNOI@waterboards.ca.gov, Public Access to eNOI Information in GeoTracker (Nov. 6, 2019, 2:30 p.m.).) It is therefore critical that this information and similar information be analyzed for disclosure purposes in the context of its informative value both alone and in combination with other public information.

CH-115 The current proposal requires the reporting of core competitive information without procedures or processes in place to enforce the protections accorded to such sensitive information under California law. If the Regional Board will not respect those protections then required reporting becomes tantamount to delayed theft of these cornerstone trade secrets.

V. CONCLUSION

CH-116 Draft Ag Order 4.0 proposes to overhaul the irrigated lands regulatory program for the entire Central Coast. Such a substantial change in regulations must be thoughtful, thorough, practical and sustainable. Costa has a long history of employing best management practices to improve water quality based on site-specific conditions. Despite Costa's history of compliance, Draft Ag Order 4.0 seeks to mandate an operational and riparian setback requirement that does not result in water quality benefits; conflicts with the United States and California Constitutions, Water Code, and State Board orders and policies; contravenes riparian habitat science; possibly conflicts with other Federal and state programs and policies designed to preserve agriculture; and creates numerous potential public health and safety impacts. The evidence and law simply do not support the operational and riparian setback requirements proposed in Draft Ag Order 4.0.

CH-117 Costa and the agriculture community supports water conservation and management practices that protect all existing beneficial uses and improve the water quality of the state. Further work, however, is needed to develop robust, practical and sustainable general waste discharge requirements for irrigated agriculture on the Central Coast.

CH-118 Costa urges the Regional Board to study the agricultural community's proposed Surface Water Program as a comprehensive alternative to Draft Ag Order 4.0. The proposed Surface Water Program will address many of the existing deficiencies with the Draft Order and offers comparable water quality benefits and protections for existing beneficial uses within the boundaries of the Regional Board's legal authority. Costa looks forward to continuing to collaborate with the Regional Board, staff and other stakeholders to develop an effective regulatory scheme that both protects water quality and preserves agriculture tradition of the Central Coast.

Thank you for your thoughtful consideration.

Sincerely,

Ryan R. Waterman

Enclosures:

Attachment A: Aerial and Terrestrial Photographs of Binsacca Ranch
Attachment B: Costa Comment Letter on the Salinas River Stream Maintenance Program Draft Environmental Impact Report
Attachment C: Food Safety, A Farmer's Perspective (September 2019)
Attachment D: Costa Photographs Showing Crop Damage by Birds

cc: Mr. David Costa (via electronic mail)
Ms. Stephanie Hastings (via electronic mail)

21155115

Attachments

Attachment A.	Aerial and Terrestrial Photographs of Binsacca Ranch
Attachment B.	Costa Comment Letter on the Salinas River Stream Maintenance Program Draft Environmental Impact Report
Attachment C.	Food Safety, Farmer's Perspective (September 2019)
Attachment D.	Costa Photographs Showing Crop Damage by Birds

Note to Readers:

The materials provided in Attachments A through D have been omitted from this section of the document 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 CH-1

The CCWB acknowledges the commenter's background and interests.

Response to Comment CH-2

The comment generally expresses concern regarding the riparian and operational setback components of DAO 4.0. Please note that 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 CH-3

This comment is noted.

Response to Comment CH-4 through CH-51

This comment is responded to in Master Response 2.8.8.

Response to Comment CH-52

The comment expresses concern that DAO 4.0 and the Findings are inconsistent with regard to the application of irrigation water within a riparian setback. Please note that 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 CH-53

The comment expresses concern that DAO 4.0 and the DEIR do not analyze the impact of additional vegetation that would be part of the proposed riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-54

The comment describes the risk of plant material in riparian setbacks causing congestion in waterways and existing flood control infrastructure. Please refer to Response to Comment CH-52.

Response to Comment CH-55 through CH-56

The comment expresses concern that DAO 4.0 and the DEIR do not analyze the water quality impacts of dying and decaying plant material as part of riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-57

The comment expresses concern that DAO 4.0 and the DEIR do not provide sufficient detail regarding sedimentation and erosion control within operational setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-58

The comment expresses concern that the vegetative setback requirements in DAO 4.0 are inconsistent with Federal best management practices associated with earthen levees and other critical flood infrastructure. Please refer to Response to Comment CH-52.

Response to Comment CH-59

The comment requests that DAO 4.0 and the FEIR analyze potential adverse impacts that may result from increased vegetation associated with the proposed riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-60

The comment expresses concern that DAO 4.0 and the DEIR do not analyze the impact of additional vegetation that would be part of the proposed riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-61

The comment cites a State Water Resources Control Board (SWRCB) Resolution stating that Regional Water Boards are encouraged to work with relevant federal and state agencies to maintain healthy watersheds, reduce vulnerability to catastrophic fires, and support resilience in recovery efforts. The comment is noted.

Response to Comment CH-62

The comment expresses concern that the exemptions for manmade barriers and existing permanent structures in the riparian setback provisions of DAO 4.0 do not adequately address conflicts between vegetative setback requirements and levee infrastructure. Please refer to Response to Comment CH-52.

Response to Comment CH-63 through CH-64

The comment expresses concern that DAO 4.0 and the DEIR do not adequately analyze impacts related to wildfire risks as a result of the proposed riparian setback requirement. Please refer to Response to Comment CH-52.

Response to Comment CH-65

The comment expresses concern that creation of new riparian habitat will result in additional habitat for mosquitos, invasive species and other pests that impact both irrigated agriculture and Central Coast communities. Please refer to Response to Comment CH-52.

Response to Comment CH-66

The comment expresses concern that DAO 4.0 and the DEIR do not address the risks of mosquito and insect-based disease transmission as a result of creation of new riparian habitat. Please refer to Response to Comment CH-52.

Response to Comment CH-67

The comment expresses concern that DAO 4.0 and the DEIR do not address potential impacts of proliferation of invasive species associated with riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-68

The comment expresses concern that DAO 4.0 and the DEIR do not evaluate potential impacts of mosquitos, invasive species, and other pests associated with riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-69

The comment expresses concern that DAO 4.0 and the DEIR do not evaluate potential impacts of riparian setbacks on climate change adaptation strategies. Please refer to Response to Comment CH-52.

Response to Comment CH-70

The comment cites a SWRCB Resolution relating to the need to implement climate adaptation measures. The comment also cites a SWRCB Resolution relating to impacts of climate change on agriculture. The comment is noted.

Response to Comment CH-71

The comment expresses concern that DAO 4.0 and the DEIR do not evaluate potential impacts of climate change on riparian setbacks and agriculture on the Central Coast. Please refer to Response to Comment CH-52.

Response to Comment CH-72

The comment expresses concern that state mandates to reduce farmland and rangeland conversion conflict with the conversion of agricultural lands to riparian habitat. Please refer to Response to Comment CH-52.

Response to Comment CH-73

The comment expresses concern that DAO 4.0 and the DEIR do not evaluate impacts related to fallowing of agricultural land as a result of implementing food safety buffers on riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-74

The comment cites presentations and correspondence related to required food safety buffers from riparian areas and suggests that this information should be included in DAO 4.0 and the DEIR. Please refer to Response to Comment CH-52.

Response to Comment CH-75

The comment references photographs related to habitat adjacent to crops and requests that DAO 4.0 and the DEIR analyze impacts of riparian setbacks and adjacent food safety buffers. Please refer to Response to Comment CH-52.

Response to Comment CH-76

The comment suggests that information provided in the comment letter is sufficient to calculate and analyze impacts related to food safety buffers adjacent to riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-77

The comment expresses concern that while the DAO 4.0 Findings considers the impacts of native vegetation removal for riparian setbacks, it does not evaluate impacts related to removal of agricultural land for food safety buffers. Please refer to Response to Comment CH-52.

Response to Comment CH-78

The comment expresses concern that the DEIR does not evaluate food safety buffers as an indirect impact related to the proposed riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-79

The comment suggests riparian setbacks would trigger a food safety buffer requirement. Please refer to Response to Comment CH-52.

Response to Comment CH-80

The comment expresses concern that DAO 4.0 mischaracterizes the ability of farmers to use existing bare ground food safety barriers as vegetated riparian setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-81

The comment asserts that the combined food safety barriers and riparian setbacks would remove “several hundred additional acres of land” from cultivation. Please refer to Response to Comment CH-52.

Response to Comment CH-82

The comment requests that DAO 4.0 and the DEIR evaluate combined impacts of food safety buffers and riparian setbacks on agricultural operations. Please refer to Response to Comment CH-52.

Response to Comment CH-83

The comment expresses concern that riparian and operational setback requirements in DAO 4.0 may conflict with the Williamson Act and the United States Farm Land Protection Policy Act (FPPA). Please refer to Response to Comment CH-52.

Response to Comment CH-84

The comment describes some key provisions of the Williamson Act. The comment is noted.

Response to Comment CH-85

The comment expresses concern that riparian setback requirements in DAO 4.0 may conflict with Williamson Act contracts. Please refer to Response to Comment CH-52.

Response to Comment CH-86

The comment states that approximately one-third of the commenter's operations are on lands covered by Williamson Act contracts, and expresses concern about whether these contracts may need to be breached, modified, or rescinded. Please refer to Response to Comment CH-52.

Response to Comment CH-87

The comment cites provisions from the Williamson Act. The comment is noted.

Response to Comment CH-88

The comment expresses concern that agricultural operations that lease ranches may not be able to implement riparian setbacks on Williamson Act lands. Please refer to Response to Comment CH-52.

Response to Comment CH-89

The comment requests that DAO 4.0 and the DEIR evaluate whether the proposed riparian and operational setback requirements would conflict with the Williamson Act. Please refer to Response to Comment CH-52.

Response to Comment CH-90

The comment describes some key provisions of the FPPA. The comment is noted.

Response to Comment CH-91

The comment describes some key provisions of the FPPA and some Federal assistance programs. The comment expresses concern that growers may qualify for less grant funding if agricultural land is removed from production due to riparian and operational setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-92

The comment expresses concern that growers may not be eligible to use federal assistance to maintain riparian and operational setbacks. Please refer to Response to Comment CH-52.

Response to Comment CH-93

The comment requests that DAO 4.0 and the DEIR evaluate whether the proposed riparian and operational setback requirements would conflict with FPPA and Federal farmland policy. Please refer to Response to Comment CH-52.

Response to Comment CH-94 through CH-96

Please refer to Response to Comment CH-52.

Response to Comment CH-97

This comment expresses concern related to the Interactive Map, and the adequacy for noticing the commenter about potential riparian and operational setback requirements that would be necessary for compliance by ranches adjacent to various water bodies. For more information related to riparian and operational setbacks, please refer to Master Response 2.8.8.

Response to Comment CH-98 through CH-105

This comment is responded to in Master Response 2.8.8.

Response to Comment CH-106

This comment is noted.

Response to Comment CH-107

This comment is noted.

Response to Comment CH-108

This comment is noted.

Response to Comment CH-109

This comment is noted.

Response to Comment CH-100

This comment is noted.

Response to Comment CH-111

This comment is noted.

Response to Comment CH-112

This comment is noted.

Response to Comment CH-113

This comment is noted.

Response to Comment CH-114

This comment is noted.

Response to Comment CH-115

This comment is noted.

Response to Comment CH-116

This comment is responded to in Master Response 2.8.8.

Response to Comment CH-117

Thank you for your comment.

Response to Comment CH-118

This comment is summarized and responded to in Master Response 2.1.14.

Letter CI: Don Chartrand, Creek Lands Conservation (June 22, 2020)

Letter CI

From: Don Chartrand
To: AgNOI, WB@Waterboards
Subject: Comments on Draft Ag Order
Date: Monday, June 22, 2020 4:34:21 PM
Attachments: CLC Support for Ag Order 4.pdf

EXTERNAL:

Greetings,

Please find our comment letter attached to this email.

Sincerely,

Don Chartrand
Executive Director
Creek Lands Conservation
Mobile: 805-294-2575
don@creeklands.org

CREEK LANDS Conservation

Creek Lands Conservation

Board of Directors:

Karen Worcester
President

Sarah Sandstrom
Vice President

John Sanders
Secretary

Lew Leichter
Treasurer

Kevin Shaw, Esq.
Member

We envision resilient Central Coast ecosystems and communities, where nature and people thrive.

We conserve and restore freshwater and near shore marine ecosystems throughout California's Central Coast.

We reach sustainable solutions for both working lands and natural areas through:

- Scientific studies that inform restoration and conservation solutions for private landowners, public agencies, and allied nonprofits
- Partnerships that leverage and catalyze effectiveness
- Programs that engage students, adults, and stakeholders in conservation and watershed science

Mr. Jean-Pierre Wolff, Chair
Mr. John Robertson, Executive Officer
Mr. Chris Rose, Environmental Program Manager
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
Via email: AgNOI@waterboards.ca.gov

Re: Comments to Ag Order 4.0

Dear Mr. Wolff, Mr. Robertson, Mr. Rose, Board Members, and Regional Board Staff:

Thank you for the opportunity to comment on development and plans to implement Ag Order 4.0. This submittal offers some general suggestions, followed by preliminary ideas about how Creek Lands Conservation could support implementation and grower adoption over time. CI-1

First, we wish to express our support for the Board's efforts to include riparian protections in the Order. We recognize that this is controversial new territory for the Board, but we believe it is critically important to protect these important areas that serve as key wildlife corridors, protect aquatic habitat, and improve water quality. CI-2

Thoughts on Table C.5: in Table C.5-1, Order 1 streams and "non-man-made ditches" are required to have "existing setback" maintained. It is unclear what the existing setback is. We think it might be the "1.5 times the width of the stream channel on each bank" described on p. 41, 4.b of draft Order, but it would be helpful to have that clarified in the Table footnotes. CI-3

Related to the above (if true): for Order 1 streams that might be only a few feet across, 1.5 times the active channel width may not be sufficiently protective. Perhaps there should be an absolute minimum set as well (20 feet?), whichever is more. This is critical from a water quality as well as riparian standpoint. A lot of sediment can be delivered by these small, often upper watershed channels. A good example is an upper watershed vineyard that might want to do a lot of re-contouring and vegetation removal. Buffers on those Order 1 streams are key to prevent newly disturbed soil from moving downstream. CI-4

229 Stanley Avenue
Arroyo Grande, CA 93420

CreekLands.org

Office phone (805) 473-8221
Fax (805) 473-8167

CI-5 Clarification of various plan requirements: the Riparian Area Management Plan (RAMP) applies to all dischargers who have riparian habitat within or bordering their ranch. It is maintained as part of their required Farm Plan and is only submitted to the Board upon request. There's a whole list of necessary content related to maintaining or improving riparian uses. There are different setback requirements depending on whether they are in or outside of a Riparian Priority Area and which compliance approach they select.

CI-6 The Cooperative Watershed Management Plan is one of the 4 compliance pathways for the Riparian requirements. It identifies and implements projects to improve riparian and water quality. This is a cooperative approach in which dischargers form a group or collaborate to identify a third party to develop the plan scope "within the watershed where the ranch is located."

CI-7 RIPRAM assessment by a qualified practitioner is another compliance pathway. If scores don't meet reference site scores, RAMP needs to be updated and implemented to ultimately achieve the score. Dischargers need to meet the score by the compliance date described in Table C.5.3. and is typically approximately 10 years from now. This appears to be undertaken at the level of the individual ranch.

CI-8 Follow-up surface receiving water implementation work plans are focused on surface water. All dischargers have to do them. These can be implemented individually or cooperatively. If they do them cooperatively, they don't have to do Ranch scaled discharge monitoring.

CI-9 Combining the various plan requirements into a single document will help streamline the reporting requirements for growers. Aligning different growers with their selections of options may be challenging; for example, maybe all but one grower in a watershed area opt to participate in Cooperative approaches, and the odd man out decides to use the RIPRAM pathway. We think it is key to work early with growers to get them all on-board well ahead of the requirement deadlines for selecting a cooperative planning option.

CI-10 We suggest that development and implementation of CWRPs consider and integrate various monitoring and reporting requirements (i.e. follow-up, groundwater), as well as ambient data (such as CCAMP) to support better decision-making at a watershed or basin scale. We believe it is critical to understand where groundwater recharge areas are, and that they be considered in any CWRPs.

CI-11 We further suggest that the Board require annual pre-field season calibration training for RIPRAM, between any teams that are engaged to conduct that assessment. This will help avoid subjectivity of assessment processes and will improve the Board's ability to compare scores between areas. In our opinion, the fewer assessment teams in the field, the easier it will be to achieve consistency between assessments. Perhaps CCAMP could provide field verification and oversight to the RIPRAM implementation processes.

CI-12 We also wish to acquaint the Board with Creek Lands Conservation's extensive background in developing watershed plans throughout the Central Coast. These local watershed planning and restoration efforts are already in place, and we offer them as

CI-12 cont.

"launch pads" to Cooperative Watershed Restoration Plans (CWRPs) that are in development. Following is a partial list of projects and plans that may be useful:

- San Antonio and Nacimiento Rivers Watershed Management Plan
- Big Sur River Watershed Management Plan
- Salinas River Watershed Coordination
- Santa Rosa Creek Watershed Management Plan
- Arroyo Grande Creek Watershed Management Plan
- Pismo Creek Edna Area Watershed Management Plan

CI-13

CLC Opportunities for Supporting Agricultural Order 4.0.

1. CLC could contribute services to conduct ambient RIPRAM monitoring at long-term monitoring sites in Region 3 from San Luis Obispo County and south, either independently from or in collaboration with other teams (MRP Table 6, page 41).
2. CLC could serve as third-party organization to develop Cooperative Watershed Restoration Plans (CWRP) for individual watersheds or watershed areas. (Draft Order Part 2, Section C.5.12, p. 43). These CWRPs could incorporate planning for follow-up monitoring (MRP, p. 24) and potentially groundwater monitoring requirements.
3. CLC could develop small-scaled Cooperative Groundwater Monitoring options for our small central coast watersheds, possibly in concert with CWRP development, and/or follow-up monitoring. Since groundwater monitoring isn't due until Phase 3, 2027 for most of these areas, and since the Central Coast Groundwater Coalition already monitors Phase 1 and 2 areas (e.g., Paso Robles, Santa Maria, Santa Ynez, and Morro Bay watersheds), we believe that smaller areas may be better served by participating in smaller cooperative programs. CLC is well suited to help with local problem solving in smaller areas.
4. CLC could use Watershed CWRP requirements to help growers and their watershed neighbors to develop and implement follow-up work plans to identify and solve their water quality problems.
5. CLC could help individual growers develop and implement Riparian Area Management Plans (RAMPs) (Draft Order Part 2, Section C.5.1, page 40).

CI-14

We understand that many of the decisions about who will provide support services to growers are not in the Board's hands. However, in addition to providing feedback on draft Ag Order 4.0, we wanted to acquaint the Board with our Central Coast-grown capabilities.

Thank you for your consideration of our suggestions and ideas.
Sincerely,

Don Chartrand
Executive Director

Response to Comment CI-1

Thank you for your comment.

Response to Comment CI-2 through CI-11

This comment is responded to in Master Response 2.8.8.

Response to Comment CI-12

This comment is summarized and responded to in the following Master Responses: 2.8.8 and 2.2.5.

Response to Comment CI-13

This comment is responded to in Master Response 2.8.8.

Response to Comment CI-14

Thank you for your comment.

Letter CJ: Darlene Din (June 22, 2020)

Letter CJ

From: Darlene Din
To: AgNOI, WB@Waterboards
Cc: darlenedin@earthlink.net
Subject: Comments of Draft Ag Order 4.0"
Date: Monday, June 22, 2020 9:38:09 PM
Attachments: Economic Impacts of Proposed Central Coast Irrigated Lands Regulatory Program .pdf
Importance: High

EXTERNAL:

June 22, 2020

To: Matthew T. Keeling, Executive Officer
Central Coast Regional Water Quality Control Board
895 Aeorvista Place, Ste. 101, San Luis Obispo, CA 93401
AgNOI@waterboards.ca.gov

RE: "Comments of Draft Ag Order 4.0"

From: Darlene Din

June 22, 2020

To: Matthew T. Keeling, Executive Officer
Central Coast Regional Water Quality Control Board
895 Aeorvista Place, Ste. 101, San Luis Obispo, CA 93401
AgNOI@waterboards.ca.gov

RE: "Comments of Draft Ag Order 4.0"

Dear Mr. Keeling and Members of the Board,

CJ-1

In reviewing the probable economic impacts of the draft Ag Order 4.0 there is likely to be broader policy consequences both currently and post COVID 19 than have been evaluated in the economic review in the DEIR . "Everybody is scrambling to figure out what to do," says Gail Feenstra, deputy director of the Sustainable Agriculture Research and Education Program at the University of California, Davis, who studies food systems and supply chains. "There's just a lot of disruption." The resilience of the agricultural sector has been tested by the COVID-19 outbreak and the California's regulatory system including CEQA does not have policies dealing with a pandemic. How will the COVID-19 pandemic affect California's agricultural sector—which is important for food supplies locally, nationally, and in many other countries?

"The disruption of markets—such as the closure of restaurants and food service operations—is a huge concern for growers. Impacts will vary by region, commodity, and individual company exposure. Western Growers reports that some farmers are heavily embedded in the food service supply chain with crops in the ground now. They have nowhere to put that food because other growers with retail channels for those commodities are operating at maximum capacity and cannot take any more product into their systems. Other farmers say they may need to scale back acreage. Some crops could be affected by changing international markets or the general financial downturn. There's the potential for huge swings in marketability and profitability for many farmers." [1] We cannot assume that COVID 19 is not affecting the economic viability of agriculture on the Central Coast.

CJ-2

Regulatory costs affect competitiveness of the California agriculture industry. Regulatory costs are cumulative. In addition to the Ag Order agricultural operations on the central coast have an increased of local, state, and federal regulations that have been implemented. "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 impact analysis of additional regulations specified under the proposed Order. In the past decade, regulatory compliance costs have increased 795% for a typical leafy-greens grower."

[1] Food Security in a Time of COVID-19 Insecurity: How the Virus Affects Farming Lori Pottinger March 30, 2020 The Public Policy Institute of California (PPIC) is a nonprofit, nonpartisan think tank.

-1-

CJ-3 "Over a third of the country's vegetables and two-thirds of all fruits are grown in California. Lettuce, one of California's top ten commodities, directly added $1.81 billion and millions of dollars in indirect business activities to the California economy in 2018. The impact of this public health crisis on the demand for fresh produce can be described in three distinct phases—panic buying, supply chain challenges, and emerging new consumer patterns. Responding to social distancing rules meant reducing employment by 18% in processing and 15% in harvesting and resulted in efficiency losses. Washing and disinfecting stations have also been added and PPE is widely made available. However, a large share of the now essential workers—many of whom are undocumented immigrants—return to financially vulnerable homes without adequate access to health care."[i2] Lower production values can lead to job losses, impacting communities with higher levels of unemployment and lower tax revenues.

CJ-4 "Strawberries are another crop likely to be affected, though for different reasons. California strawberry growers do not rely as heavily on a workforce from outside of the U.S., but laborers would typically congregate more closely than is advised to prevent the spread of the virus. Mark Bolda, a University of California Cooperative Extension farm adviser based in Watsonville, says farmers he has spoken to in the surrounding county—where roughly 40 percent of the state's strawberries sold fresh are produced—have already begun making plans to spread workers between rows." Strawberries, however, hit prime ripeness within a narrow window of just two to three days and must be picked quickly," Bolda says. Spacing workers this way may slow picking, which could lead to more fruit being left to rot in the fields. This situation could, in turn, slow the harvest process even further as workers pause to remove old fruit so rot does not spread to ripening berries. Such a slowdown would reduce the amount of fruit picked per hour that workers were paid for and could hurt a farmer's profits, Bolda says. "Being slower is expensive."[3]

CJ-5 Central Coast Regional Water Quality Control Board is proposing "an onerous and restrictive regulatory program" in a time of great economic insecurity in the middle of a pandemic. 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, amidst the coronavirus pandemic, few industries have been quite as essential to the nation as agriculture and since there is a well- established and widely used approach to quantify the economic impact of Ag Order 4.0 it is crucial that the DEIR analyze the overall impact of Draft Order 4.0.

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[2] How is Fresh Produce Adjusting to the Public Health Crisis? By Kristin Kiesel an assistant professor of teaching in agricultural and resource economics at UC Davis. Special thanks to Mark Borman, president of Taylor Farms California, and Frances Dillard, senior director of brand and product marketing at Driscoll's, for their willingness to share their insights.

[3] The Effects of COVID-19 Will Ripple through Food Systems. Scientific American By Laura Poppick on 3/26/ 2020

CJ-6 "Nearly 60% of the farmers attributed losses to the pandemic as shelter-at-home orders closed customers' businesses, farmers' markets shut down and international customers canceled orders over health concerns. Of the respondents, 24% also said they had to furlough, lay off or terminate workers, primarily due to the downturn in orders."[4]

CJ-7 In closing, it is essential for the agricultural industry on the Central Coast that the DEIR evaluate all economic, regulatory costs, and impacts of Draft Order 4.0.

Sincerely,

Darlene Din

Darlene Din: Ag Land Use & Public Policy Consultant

P.O. Box 2152, Bakersfield, Ca 93303

[4] Farmers must diversify in a post-pandemic world, ag experts say by Kate Cimini, Salinas Californian 5/28/2020

Response to Comment CJ-1

The comment expresses concern that the economic impact analysis in the DEIR does not take into account the effects of the COVID-19 pandemic. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CJ-2

The comment expresses concern that regulatory compliance costs for agricultural operations are increasing over time. The comment is noted. Please refer to Master Response 2.9.1.

Response to Comment CJ-3

The comment describes some economic impacts to agricultural operations resulting from the COVID-19 pandemic. The comment is noted. Please refer to Master Response 2.9.1.

Response to Comment CJ-4

The comment describes potential impacts to strawberry growers resulting from the COVID-19 pandemic. The comment is noted. Please refer to Master Response 2.9.3.

Response to Comment CJ-5

The comment requests that the DEIR analyze the overall economic impact of DAO 4.0. Please see Response to Comment CJ-1 and Master Response 2.9.3.

Response to Comment CJ-6

The comment cites a Salinas Californian article from the describing economic impacts of the COVID-19 pandemic on agricultural operations. The comment is noted. Please refer to Master Response 2.9.3.

Response to Comment CJ-7

The comment requests that the DEIR analyze the economic and regulatory costs and impacts of DAO 4.0. Please refer to Response to Comment CJ-1.

Letter CK: David Goldfarb, Clos de la Tech Vineyards and Winery (June 22, 2020)

Letter CK

From: David Goldfarb
To: AgNOI, WB@Waterboards
Cc: vm tirodgers.com
Subject: Comments on Draft Ag Order
Date: Monday, June 22, 2020 11:16:10 AM

EXTERNAL:

Dear Executive Officer Keeling,

CK-1

We farm 40 acres of Pinot Noir in the Santa Cruz Mountains, San Mateo County. While our operation is outside the area potentially impacted by this draft Ag Order, I am writing to express our concern for its impact on other Central Coast vineyard operations. I do not necessarily oppose making an effort to better understand, track and possibly regulate water use and total nitrogen applied but I am opposed to the current Draft, EIR, and Attachments which are way too long (900 pages?!), complicated, and confusing. I am concerned that overly burdensome regulations are making business far too difficult and bureaucratic for California/Central Coast vineyards & wineries to remain competitive in the global market in which we compete. Any proposed regulations with the potential to impact winegrowers must acknowledge the fact that vineyards have long been planted on marginal soils with good drainage because they do best with little water and little nutrients, especially compared to other crops. This puts vineyards at the bottom of the list of concerns regarding water use and total nitrogen applied. Any monitoring/reporting system for the wine industry must reflect this fact by being simple and concise--not a 900-page document. Without government mandates, vineyards, perhaps more than any other farming entity, have embraced environmentally-friendly best practices on their own accord because minimizing fertilizer and water inputs through precision farming techniques such as plant tissue analysis, soil moisture probes, directly measuring plant water status, cover cropping, etc. lead to higher quality grapes & wines, environmental sustainability and economic profitability. I hope that you will consider modifying this draft Ag Order to exempt vineyards or focus instead on creating a framework that incentivizes the adoption of practices that protect water quality by reducing the regulatory requirements. These changes would reflect the direction from the Board over the last several years in addition to vineyard stakeholders who are affected by this Order.

Sincerely,

David Goldfarb, M.Sc.

Winegrower

Clos de la Tech Vineyards and Winery

Response to Comment CK-1

This comment is summarized and responded to in the following Master Responses: 2.1.5; 2.1.7; 2.1.4; and 2.2.2.

Letter CL: David Lafond, Lafond Vineyard (June 22, 2020)

Letter CL

From: David Lafond
To: AgNOI, WB@Waterboards
Cc: Kim Lafond
Subject: Writen comment on Draft order
Date: Monday, June 22, 2020 11:53:28 AM
Attachments: Written comment for Draft Agg order.pdf

EXTERNAL:

David Lafond
Lafond Vineyard
6855 Santa Rosa Road
Buellton CA 93427
805-688-7921
805-452-4241 cell

Dear Agnoi Water board

I am writing this letter as a concerned Vineyard owner operator

CL-1

I have been operating our family vineyard in Buellton CA 93427 for the last 21 years. We have approximately 200 acres of land and farm 160 acres of Vineyard for wine grapes that go to our family winery. We have been SIP certified for 4-5 years. Our farming practices include minimizing storm water runoff, cover cropping buffer zones natural habitat buffer areas and animal corridors. As well as minimal irrigation. We conduct plant health analysis annually to determine efficient nutrient rates. Inputs are expensive and wine quality is achieved by maintaining and keeping requirements to a minimum in our vines. Too much vigor and high yields do not produce good wines. I participate in Seminars tailgate meetings to keep informed of current industry subjects and discussions... We are committed to protecting water quality. My wife and I live and work at the vineyard and have three of our boys currently living and working on the ranches as well. We eat bathe drink and live with the water on our ranch. We rely on the water for our livelihoods.

CL-2

The current draft EIR and attachments are long and complicated. The reporting is overly burdensome and expensive for growers. At our Winery we are currently being required to monitor storm water runoff from our 800 sq. ft. crush pad that is 20 feet from our vineyard. This requires hundreds of hour's labor and thousands of dollars every year and does absolutely nothing to protect water quality. Our entire industry (Wine Industry) is under a lot of stress right now due to market conditions and over regulation. This draft only considers geographic location and not operational risk. Vineyards are low risk to water quality and should be handled separately regarding monitoring and reporting.

CL-3

If true water quality is the goal and not simply regulation for regulations sake. Please consider allowing SIP certification as a third party alternative for compliance. We are operating within long term sustainable farming and sustainable in economic consistency. Duplicative requirements do little to help the environment and place great burden on operators both in terms of hours spent on unnecessary work (we already don't have enough time for real work) and also unnecessary costs such as lab work and compliance entry.

David Lafond

General Manager

Lafond Winery and Vineyards

6855 Santa Rosa Road

Buellton CA 93427

805 452 4241 805 688 7921 dl@lafondwinery.com

Response to Comment CL-1

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

Response to Comment CL-2

This comment is summarized and responded to in the following Master Responses: 2.8.8; 2.1.5; 2.1.7; 2.2.2; and 2.5.4.

Response to Comment CL-3

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

Letter CM: David Marihart, Marihart Family LLC (June 22, 2020)

Letter CM

From: David Marihart
To: AgNOI, WB@Waterboards
Subject: Ag Order 4.0 Comments
Date: Monday, June 22, 2020 10:31:03 AM

EXTERNAL:

Dear Sirs,

CM-1 My name is David Marihart, co manager of the Marihart Family LLC who owns farmland in the Salinas Valley. I have read your Ag Order 4.0 and fully agree with the Talking Points brought up in comments on your proposed plan. Comments link is below.

CM-2 I would like to add that the proposed plan doesn't take into account the economic impact this will have on the consumers of coastal farming products. Due to these increased regulations there will be a great increase in consumer prices of ag products due to less availability along with huge increased cost of production.

CM-3 This large increased economic impact on the farming community will definitely drive some farmers out of business. This unnecessary economic impact will spare no one, from small to large farming operations. Let me ask you this, who is going to pay for the increased supervision such a plan would require? The infrastructure is not present to support such an intensive oversight of the farming operations in the Central Coast.

CM-4 This report also does not take into account alternate types of nitrogen fertilizers that are coming or on the market that do not leach out of the soils. That would require testing of water discharge for nitrogen content that is not adequately covered in the report.

Thank you for your time and consideration,
David Marihart
Co Manager, Marihart Family LLC

https://files.constantcontact.com/299a175d001/6f0a5afc-262b-4c01-8de8-3977db3bc1d3.pdf

Talking Points

Economic Impacts of Proposed Central Coast Irrigated Lands Regulatory Program (Ag Order 4.0)

This Order Significantly Expands Requirements.

- Expansion of Requirements Compared to the Previous Central Coast Irrigated Lands Regulatory Program (Ag Order) to include:
- Expanded requirements for irrigation and nutrient management for both surface and groundwater, including targets and prescriptive nitrogen discharge limits
- Expanded pesticide management for surface water and groundwater, including specified surface water monitoring and threshold limits
- Limits on fertilizer applications that are not supported by agronomic science
- Expanded riparian habitat management requirements that would require retiring productive farmland and developing set-back areas from most ditches and streams and planting native riparian vegetation
- Expanded sediment and erosion management for surface water, primarily on sloped farmland
- Increased reporting and compliance requirements in surface water and groundwater reporting areas with an Annual Compliance Submission, Riparian Area Management Plan, Total Nitrogen Applied, Sediment and Erosion Management Plan, and Irrigation and Nutrient Management Plan.

Each of these components would impose significant costs on Central Coast growers.

Some regulatory components, such as proposed nitrogen discharge limits, may make current rotation systems economically or agronomically infeasible.

This would result in substantial economic impacts (e.g., precipitous drop in land values and property taxes, and lease rates) that were not quantified or discussed in the Draft Environmental Impact Report (DEIR).

Economic review in the DEIR does not evaluate the economic impacts on jobs, land use, and agricultural resources if Ag Order 4.0 is adopted.

- The DEIR includes estimates of some costs and requirements that would almost certainly result in changes in the physical farming environment. Costs of nitrogen discharge requirements, compliance with surface water discharge limits, riparian setback areas, and other key substantive provisions are *not* estimated. Examples of these costs include, but are not limited to:
  - Meeting the nitrogen discharge limits in the Ag Order would require reducing applied nitrogen and/or incurring additional management costs. This would result in potential changes to yield, quality, and costs that affect the mix (or number) of crops that can be grown in the region and lead to land being idled and permanently removed from production.
  - Implementation of the operational and riparian set-backs will automatically result in land-idling and land use changes because commercial crop production is prohibited in such areas.
- 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.
- 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 and widely used approach to quantify the economic impact of Ag Order 4.0.

The key economic impacts would be driven by:

- Direct costs of fees, assessments, and paperwork.
- Changing management practices, inputs, rotations, and land use to comply with discharge targets/limits (additional direct costs). This would include the effect of nitrogen discharge limits on the ability to continue multi-cropping (2-3 crops/year) that is prevalent in the Central Coast and directly contributes to current land and lease values in the region, as well as ability to meet surface water discharge limits using currently available pesticide chemistries.
- Changing land use / taking land out of production to comply with riparian and operational setback requirements and developing a RAMP.
- Opportunity cost of management time for compliance paperwork, training, and other administration.

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.
- Impacts disproportionately fall on disadvantaged or severely disadvantaged communities (DAC/SDAC) because these communities are where people that work the fields, coolers, processing facilities, and equipment often reside.
- Regulatory costs are cumulative. In addition to the Ag Order, the Central Coast is 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 impact analysis of additional regulations specified under the proposed Order. In the past decade, regulatory compliance costs have increased 795% for a typical leafy-greens grower.

The bottom line is that farming economics will change if Ag Order 4.0 is adopted as proposed.

- Central Coast Regional Water Board is proposing an onerous and restrictive regulatory program in a time of great economic uncertainty for the farming community.
- Lower production values will lead to job losses, impacting communities with higher levels of unemployment and lower tax revenues.
- Regulatory compliance costs will reduce available funding for capital improvements.
- Change of land use due to land idling will become a much larger issue for Central Coast counties.

Provide comments on the draft Ag Order 4.0 to the Central Coast Water Board.

- All comments must be submitted to Central Coast Regional Water Quality Control Board by Monday, June 22, 2020 by 11:59pm.
- Submit to: AgNOI@waterboards.ca.gov with "Comments of Draft Ag Order 4.0" in the subject line of the e-mail.
- Letters can be mailed to: 895 Aeorvista Place, Ste. 101, San Luis Obispo, CA 93401.
- Note that e-mail submissions are preferred.
- Address comments to the attention of Matthew T. Keeling, Executive Officer.

Response to Comment CM-1

The comment states that the commenter agrees to a set of "talking points" regarding the economic impacts of DAO 4.0. These comments are summarized and responded to in Master Response 2.10.

Response to Comment CM-2 through CM-3

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

Response to Comment CM-4

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

Letter CN: Dennis Lebow, Reiter Affiliated Companies (June 22, 2020)

Letter CN

From: Dennis Lebow
To: AgNOI, WB@Waterboards
Subject: Comments on Draft Ag Order 4.0
Date: Monday, June 22, 2020 11:36:54 PM
Attachments: image001.png
RAC_4.0 comment_ltr_061920_v3.pdf

EXTERNAL:

Thank you

Dennis Lebow | Director of Land and Water Resources
REITER AFFILIATED COMPANIES
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REITER
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June 21, 2020

Central Coast Regional Water Quality Control Board (CCRWQCB)
895 Aerovista Place
Suite 101
San Luis Obispo, CA 93401

RE: Comments on Draft Irrigated Lands Regulatory Program 4.0

Dear Members of the Board and Staff,

Reiter Affiliated Companies (RAC) is family owned and operated by long-term residents and growers who have been farming in coastal regions of Central California for decades. Our focus is growing premium fresh market berries which rely heavily on the availability and sustainability of long-term sources of high-quality irrigation waters. From this perspective, RAC clearly shares a common goal with the CCRWQCB to preserve and/or improve the quality and beneficial uses of our water resources.

CN-1

RAC growing operations have been enrolled and operating under the Irrigated Lands Regulatory Program (ILRP) since its' inception and we sincerely appreciate this opportunity to comment on the Draft ILRP 4.0.

We continue to be active stakeholders in this public process as many of RAC's operations are unique, and include multiple partner operations, therefore we feel compelled to help inform and advise those who have the responsibility to appropriately regulate our farming operations.

We preface our comments by acknowledging there have been groundwater quality impairments in selected agricultural areas along the central coast of California, and we support the protection of human health, in particular ensuring equitable access to safe domestic drinking water supplies. Our comments are offered in the spirit of contributing to the development of a practical and effective ILRP that will allow us all to accomplish our common goals.

CN-2

Over the last 50 years, agriculture has expanded and innovated in response to growing consumer demands. The industry has been able to provide global populations with a reliable year-round product, appealing in appearance and quality, regardless of the environmental or physical growing conditions. This has resulted in increased environmental impact within the prime growing regions of Central California.

We clearly recognize the need to protect our natural resources, but we are concerned with some of the long-term agronomic implications of nitrogen limits proposed in the ILRP that may cause increased nitrogen loading in random or unpredictable areas as the industry struggles to adapt and comply with these new requirements.

As mentioned previously, consumer demands and expectations have mandated consistent, reliable and high-quality fruit and vegetable products year round which is the new reality of our evolving business

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CN-2 cont. environment. The industry has developed production schedules and harvest models to consistently meet demands, regardless of environmental growing conditions.

CN-3 The proposed long term discharge or loading limits will all but eliminate a grower's ability to advance or slow the maturity of their product so the crop can be harvested on time and be available to the market when needed. Over supply or poor quality product will result in excessive nitrogen loading as unwanted crops are abandoned and never harvested. In this scenario, 250 lbs. of nitrogen applied, with 0 lbs. removed. With the proposed annual limits of 50lbs/ac., we would have to wait 5 years to be able to farm this area again. Given this possible scenario, we are very concerned that many crops will simply be early/late or not suitable in appearance or quality to ever be harvested. This scenario could be widespread and result in excessive nitrogen loading into our groundwater systems that will take years or decades to mitigate.

CN-4 The proposed order significantly expands the monitoring and reporting requirements for agricultural operators and will create a tremendous administrative burden for growers and the RWQCB. The RWQCB must use accurate data and science, along with sound reasoning and logic to develop and implement practical and meaningful regulations for agricultural dischargers. We also need the support of a third-party monitoring group to help properly manage those regulations otherwise, the industry will adjust, adapt and move to alternate regions better suited for their operations.

CN-5 The Water Boards' approach to ground and surface water protection is multi-faceted and every attempt must be made to reduce and/or eliminate redundant, duplicative efforts to minimize economic waste and maximize the value of the data sets that will be generated from all of the additional monitoring and reporting.

CN-6 In general, we want to provide encouragement and support for the following:

1) Cooperative third-party monitoring and reporting party/s.
2) Trend monitoring networks.
3) Regulatory flexibility to adjust requirements as new and improved science and/or data becomes available.
4) Clear and practical objectives, along with reasonable and meaningful ways to reduce or end regulation as objectives are achieved over time.
5) Appropriate regulatory requirements for proprietary genetics/production systems (e.g. containerized production – see details below).
6) A return to the original 10% slope as the criteria triggering the requirement for certified erosion plans by qualified professionals
7) Improved Board and Staff training and knowledge of agricultural operations

CN-7 We generally oppose the following in the proposed ILRP:

1) Ambiguous or duplicative objectives.
2) The use of arbitrary or single value regulatory limits for all operations (i.e. 50 lbs/acre nitrogen loading limits). One value grossly oversimplifies the complexities and realities of subsurface geology and the soils in which we farm.
3) Redundant or frequent testing of well water quality for known problem areas.

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CN-7 cont.

4) Mandatory monitoring and reporting in areas with no documented impairment or water quality exceedances.
5) Agricultural operator or tenant responsibility to monitor, report and manage nitrogen exceedance notifications pertaining to drinking water wells on ranches.
6) Riparian Setback requirements.

CN-8 Please note the following comments are structured according to the Draft MRP sections.

Sections B & C – TNA & INMP Reporting

CN-9 Sections B and C of the Draft MRP cover Total Nitrogen Applied (TNA) Reporting and Irrigation and Nutrient Management Plan (INMP) Summary Report Monitoring and Reporting, respectively. Upon adoption, the Draft MRP would apply TNA requirements to all operations currently required to submit TNA report under Ag Order 3.0. In 2022, it applies to all in Groundwater Phase 1 areas; by 2023 in Phase 2 areas; and by 2024 in all other areas (i.e. Groundwater Phase 3). Subsequently, INMP reporting is phased in for these 3 areas sequentially between 2023 and 2027, and requires all of the TNA information, plus nitrogen removal (in harvested product, etc), and crop evapotranspiration.

CN-10 1) Section B, Items 8-15; and Section C, Items 2 and 9-15: These items define specific information required for TNA and INMP reporting. We are not going to comment in this letter on specific TNA/INMP reporting items or formulas, except for the requirement to measure and report nitrate in irrigation water (see our bullet #4 below). However, we note here the large amount of discussion, critical thought, and suggestions for improvement that members of the Central Coast agriculture industry and technical providers have put into the existing TNA reporting system, and into the proposed future INMP reporting. We urge the Water Board to consider prior feedback, as well as new feedback from this round of public comment, as you move forward with future TNA/INMP reporting requirements.

CN-11 2) Third-Party Role: The TNA/INMP reporting is an enormous obligation for data collection, management, and transmittal. There are also redundant and duplicative requirements between the Farm Plan, existing ACF, and the INMP information precedentially required by the East San Joaquin (ESJ) Order. As the specific contents, format, and data entry/delivery method are developed for the future INMP, the Region 3 Water Board should work with the Third Party and interested growers to ensure efficiency, minimize redundancies and potential for errors, and ensure that the required report content accurately conveys the information sought.

In order to complete the current TNA forms (i.e. those required for Ag Order 3.0), growers generally need to maintain electronic records and perform calculations in spreadsheet form, and/or work with a contractor to assist them in completing the actual web form submittal to GeoTracker. This submittal currently requires manual entry of calculated values (which must be performed elsewhere), into custom web forms. Growers should have the option to work with a Third Party to improve the efficiency and accuracy of this reporting (on behalf of growers, the Water Board, and the public), and to eliminate the need for manual re-entry of data wherever possible.

Even very sophisticated growers are challenged to collect highly accurate data to support existing TNA reporting requirements. Fertilization and irrigation schedules are highly

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CN-11 cont.

individualized and private. Irrigation staff turnover can create inconsistencies in the way systems are operated and negate time spent training existing staff on how to monitor and report irrigation for the ILRP. Even for operations that have the skills and resources to perform the required TNA/INMP data collection and report calculations independently, the process would benefit from having a Third Party serve as an initial clearinghouse for this data, providing uniform assistance to growers or their staff/contractors when questions arise.

There are also hundreds of small-acreage growers on the Central Coast who will need assistance. In cases where they are selling product through a larger company, that company may have a full-time staff person dedicated to assisting these growers with regulatory compliance. With the planned major expansion in the number of growers with the TNA reporting requirement (and in future, INMP), these existing staff will not be capable of supporting all of the small growers. In cases where these growers do not have the benefit of assistance with regulatory compliance, they will be unable to collect and report meaningful data. In these cases, the process simply *cannot* work without the involvement of a Third Party to provide uniform training, assistance, and data management.

CN-12

3) Data Management and Quality Assurance: Just as Preservation, Inc. currently serves as the initial collection point for thousands of surface water quality monitoring records each quarter, the initial point of TNA/INMP data delivery by growers should be the Third Party. The Third Party should then perform data validation and automated checking, just as Preservation, Inc. currently performs for the surface water CMP. To this end, the TNA/INMP dataset would benefit from having its own QAPP and designated QA Officer, as has always been the case for the surface water CMP dataset. Standard Operating Procedures (SOPs) that are listed in a QAPP result in more uniform measurement and data collection. A QAPP provides controls on precision, accuracy, and contamination/bias, and ensures that corrective actions are taken when problems arise that compromise data integrity. Data qualifiers are applied and "travel with" the final dataset. A QAPP also documents standards and maintenance/ calibration requirements for any equipment used in data collection. To our knowledge the TNA dataset generated during Ag Order 3.0 has not been subject to any of these standard quality assurance procedures. Quality assurance is especially important when the intended end-use of a dataset is verification of compliance with numeric limits that carry penalties for non-compliance.

Following data validation and checking, the Third Party should complete batched, electronic data deliveries, on a compliance schedule and according to a method designated by the Region 3 Water Board. In this case the term "batched" indicates a single delivery of a large number of fully granular individual records (as for the surface water CMP), and will not result in anonymized data. The TNA/INMP data submitted to the Third Party for checking would require a perjury statement, just as the TNA data do that are currently submitted via Region 3 Water Board web forms.

CN-13

4) Nitrogen Concentration of the Irrigation Water: Sections B and C in the Draft MRP list a requirement to obtain and report a "precise" (or exact) nitrogen concentration from the irrigation water source, for the purpose of TNA/INMP reporting. Item 13c in Section B of the Draft MRP provides examples of methods that may be used to obtain precise nitrate values in lieu of

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CN-13 cont.

laboratory analysis, such as "portable measuring devices." However, both sections go on to reference minimum well reporting requirements from Section D of the Draft MRP which include a host of other constituents in addition to nitrate (from Table MRP-3) that are not relevant to TNA/INMP reporting, and which necessitate laboratory analysis. The well reporting requirements referenced from Section D also require that laboratory results be submitted electronically to GeoTracker, directly by the testing laboratory. These requirements effectively negate the option to obtain a precise/exact nitrate measurement via a portable measuring device, which may be an important cost-saving measure for programs providing compliance assistance to lower-resourced growers.

While the additional well reporting requirements in Section D make sense in the context of a groundwater "status and trends" type monitoring program, they are unnecessary for TNA/INMP reporting, and the current TNA web forms under Ag Order 3.0 neither request nor accept data for any constituents besides nitrate. The additional constituents required in Section D, as well as the lab-direct GeoTracker reporting requirement, increase the cost of these samples by a factor of at least 5 (from a cost in the ballpark of $25 for a simple nitrate test [less if a portable device is used], to a cost of $125-150 for the full suite of Section D constituents with lab-direct GeoTracker reporting) or even higher.

For the purposes of TNA/INMP reporting, a precise measurement of nitrate should be the only fixed requirement. Also, for the purposes of TNA/INMP reporting, nitrate measurements should continue to be reported to GeoTracker as they are for TNA reporting under the current Ag Order 3.0, along with the other required TNA data, by the reporting grower or Third Party program. The Section D, Table MRP-3 constituents are only relevant for the objective of assessing groundwater status and trends and should only be required from the subset of wells needed for the trend monitoring network. Finally, lab-direct GeoTracker reporting is unnecessary for the purpose of making nitrate data publicly available via GeoTracker and serves only to inflate compliance costs and limit the available selection of certified laboratories. We discuss this further in our comments on Section D – Groundwater Monitoring and Reporting.

CN-14

Section D – Groundwater Monitoring & Reporting

Section D of the Draft MRP covers Groundwater Monitoring and Reporting. The Draft MRP discusses four types of groundwater monitoring and reporting in Section D, which are required in addition to a fifth type of monitoring described in Sections B and C (TNA and INMP Monitoring and Reporting). The Draft MRP does not define clear or unique objectives for all of these five monitoring requirements, and each requirement is partially or wholly redundant with at least one other requirement in terms of the data generated. For some monitoring types, there is little to no information provided about the intended end-use of the data, and there is almost no discussion of quality assurance, data validation or management. This "menu" of many possible groundwater monitoring activities should be refined and reorganized as described below, to provide a coordinated and cost-effective ILRP groundwater quality program that generates a high-quality and accessible dataset capable of meeting defined objectives:

CN-15

1) On-Farm Domestic Wells – Our understanding is that the objective of this requirement is the *protection of human health*. This objective should be stated clearly in this section of the MRP. Our

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CN-15 cont.

understanding is also that the CCRWQCB views spatially explicit monitoring and reporting of every domestic well to be necessary to meet the objective of protecting human health. Finally, we understand that timely notification to domestic well users of potential health risks from the water supply is key in this regard. While we agree that notification to every single unit supplied by a domestic well is important, we do not necessarily agree that monitoring every single well for every single parameter, every year, is necessary to meet this objective. We suggest allowing for the following:

- Monitoring for general minerals and nitrate on a schedule supported by existing nitrate data from the well in question. Wells with very high nitrate concentrations, located in basins with known impairment, may not need annual monitoring to confirm a continued health risk. Notifications to users could continue annually, citing the most recent testing result. If a domestic well is needed for the regionwide status and trends network (discussed below in our comments on Groundwater Quality Trend Monitoring, or GQTM), it could be monitored at the designated trend monitoring frequency or every 5 years, whichever is more frequent.
- Monitoring for 123-TCP on a schedule supported by data. Wells with high 123-TCP concentrations, located in basins with known impairment, may not need annual monitoring to confirm a continued health risk. Notifications to users could continue annually, citing the most recent testing result. Wells with 123-TCP that are part of the GQTM network could continue to be monitored at the designated trend monitoring frequency or every 5 years, whichever is more frequent.
- For wells that have demonstrated no contamination for at least 3 years prior to 2021, *and* are located in an unimpaired basin (as demonstrated by recent data), their frequency of future testing could be reduced.
- The need for *trend monitoring* of constituents of concern should be served primarily by the GQTM program; "trend monitoring" should not be the primary objective of the On-Farm Domestic Wells requirement.
- Data analysis to support reduced-frequency monitoring of On-Farm Domestic Wells could take place at the expense of the well owner/operator (or Third Party on their behalf), and could be submitted to the EO for review and approval

Finally, we anticipate that the dataset generated by the On-Farm Domestic Wells requirement may contribute to regionwide GQTM efforts, especially as related to shallower groundwater zones. In these cases, the On-Farm Domestic Wells data should be leveraged, not duplicated by redundant testing requirements, to meet other groundwater monitoring and reporting needs.

CN-16

2) Irrigation Wells – Of all the groundwater requirements, this section is the most unclear in terms of objectives; is the most redundant with other requirements; and is the most prone to generating data of insufficient quality for intended end-uses. Given the data to be generated by the other four types of groundwater monitoring, we suggest changing the Draft MRP language that treats irrigation wells as a stand-alone monitoring requirement, to focus on clarifying how the desired data will be generated by the other four types of required groundwater monitoring.

CN-17

a. One important objective for monitoring irrigation wells is so that growers know the nitrogen content of their irrigation water and can use that to inform fertilizer management. This objective is accomplished in Sections B and C of the Draft MRP, with the monitoring and

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CN-17 cont.

reporting required for the TNA and INMP summary reports. The TNA/INMP reporting is public (via GeoTracker submittal) and ranch-specific and requires a "precise measurement" of irrigation well nitrate concentration. Though many growers will use a certified laboratory for that analysis, only a subset of certified laboratories are set up to perform GeoTracker-direct reporting, and those that are, charge an extra fee for the service. If a portable nitrate testing kit can generate a precise measurement, this should remain an option for fulfilling TNA/INMP requirements, especially in technical assistance programs designed to support limited-resource growers.

CN-18

b. The other objective implied by this requirement is to assess groundwater quality status and trends in irrigated agricultural groundwater basins. This objective is partially accomplished by the On-Farm Domestic Well requirements (especially in shallow groundwater zones) and is accomplished in its entirety by the GQTM requirement. On page 17 of the Draft MRP, Item 12 correctly notes that some irrigation wells may be appropriate to include in a GQTM program, but in these cases, additional constituents of concern to the GQTM program would need to be monitored as well. There is no explanation given as to why irrigation wells not deemed necessary/appropriate for a GQTM program need to be monitored on an individual basis, beyond the "precise measurement" of nitrate needed to support TNA/INMP reporting. And yet, Table MRP-3 requires all of these wells to be monitored for major cations, anions, and other parameters in addition to nitrate, and also requires lab-direct GeoTracker reporting at an additional cost to growers.

   Several major concerns with using arbitrary irrigation well data for basin-wide status and trend analysis are that these wells are not of known construction; are not sampled with nearly the same uniformity as wells in a coordinated program network; and may not be fully traceable between years due to inconsistencies in the way unique identifiers are assigned to wells in GeoTracker (i.e. in a manner that is not necessarily static). Yet, this appears to have been the Water Board's approach to GQTM under the existing Ag Order 3.0, and also appears to be intended as a continued approach, despite the new requirements specific to GQTM.

CN-19

If there are additional objectives that necessitate the specific monitoring and reporting of irrigation wells described in this section, those objectives should be clearly stated; explanation added as to why the other four types of monitoring do not generate sufficient data to meet the objective(s); and further opportunity for public comment then provided to respond to any newly-disclosed objectives. Because the apparent objectives of Irrigation Well monitoring are redundant with other requirements, this adds unnecessarily to growers' cost of compliance and administrative burden, both of which fall disproportionately on operators with smaller acreage, language-barriers, and/or limited education and computing skills.

CN-20

3) Groundwater Quality Trends – This section indicates that a work plan for a Third Party cooperative approach to GQTM should be designed to (quantitatively) evaluate groundwater quality trends and assess the impacts of agricultural discharges on groundwater quality over time. We suggest these be more clearly stated as the program objectives, similar to the way Item E.3. on page 21 of the Draft MRP lays out the objectives for surface receiving water monitoring and reporting. We feel it is important for the major components of a regionwide GQTM program to be discussed during the

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CN-20 cont.

public adoption process so that all stakeholders have the opportunity to review and comment on the general program framework.

We generally agree that the Individual Approach to GQTM described on pp. 19-20 of the Draft MRP is the appropriate individual version of the required Cooperative Approach, with two exceptions. First, the cooperative work plan requirement 14.b. on page 18 – to monitor discrete depth intervals - should also apply to individuals (page 19, Item 18). Second, the timeline for individual compliance should be adjusted to ensure that individual monitors perform compliance activities no later than growers participating in the cooperative compliance pathway. While members of a Third Party cooperative program will incur immediate costs in order to meet the specified schedule, no enforcement of individual monitoring will take place until *after a deadline has been missed*. We anticipate a subset of growers will select the individual compliance pathway, perform no compliance activities, and then beg entry into the cooperative program after being notified by the CCRWQB that they have missed a deadline. In fairness to the growers who achieve timely compliance via the cooperative pathway, and to ensure the successful launch of a cooperative program, this individual loophole should be closed. For example, a low-effort interim requirement could be added to file some proof that individual compliance activities are indeed in progress in time to meet the initial deadline.

CN-21

4) Ranch Level Groundwater Discharge – This section appears to require some of the same elements as the Individual Approach to GQTM, with several additional elements. The Draft Order and Draft MRP should clarify the CCRWQCB's intentions with regard to timelines and scope for imposing this requirement.

CN-22

Section E – Surface Water Monitoring & Reporting

Section E of the Draft MRP covers Surface Water monitoring and reporting.

CN-23

1) Objectives for Surface Water Trend Monitoring: The 8th objective (h.) listed for Surface Receiving Water Quality Trend monitoring in the Draft MRP is to "identify specific sources of water quality problems." This is a change in wording from previous Ag Orders (2.0 and 3.0) in which it read, "*assist in* the identification of specific sources of water quality problems." The original wording should be maintained, as the Central Coast's CMP has always been an ambient, receiving water program, and the monitoring design is not conducive to the identification of specific sources. That is a role for Follow-up Monitoring, which is a separate requirement of the Draft MRP.

CN-24

2) Quarterly Exceedance Reports: Item 11 on p. 23 requires a new "Exceedance Report" to accompany each quarterly electronic data submittal. These have historically not been required of the CMP, and exceedance patterns for most sites/parameters monitored by the CMP tend to be recurring such that a quarterly exceedance report would not provide new/unique information as compared to the annual exceedance information that is provided each July 1st with the Annual Monitoring Report. Because a quarterly exceedance report will not provide new/unique information and will likely never be used by the CCRWQCB, we suggest removing this requirement.

CN-25

3) Annual Report: We generally concur with the requirements listed in the Draft MRP for the Annual Report, with 2 exceptions. First, element m. on p. 24 requires evaluation of pesticide

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CN-25 cont.

and toxicity results. We suggest continuing to allow for an additional report to provide in-depth analysis of concurrent pesticide and toxicity monitoring results. Second, element u. requires a discussion of potential follow-up actions to correct observed exceedances. This is really outside the scope of the core trend monitoring program and is better addressed by the Follow-up Surface Receiving Water Program. We suggest removing this requirement or converting it to reference the Follow-up program.

CN-26

4) Follow-Up Surface Receiving Water Monitoring: This section indicates that a work plan for a Third Party cooperative approach to Follow-up surface water monitoring should be developed to achieve four objectives. We feel it is important for the major components of an Enhanced Surface Water Follow-up Program (ESWFP) to be discussed during the public adoption process so that all stakeholders have the opportunity to review and comment on the general program framework.

CN-27

5) Surface Water Priority Areas: Item 14 on p. 25 lists dates by which work plans must be submitted for each of four Surface Water Priority areas. It will not be possible to meaningfully address Follow-up needs of the entire Central Coast region within a 5-year period. The attached Prioritization Schedule (Appendix C) has much in common with the schedule in the Draft MRP, however we recommend this schedule as more feasible.

CN-28

6) Ranch-Level Surface Discharge Monitoring: This section appears to require some of the same elements and serve generally the same objectives as the Individual Approach to Follow-up Surface Receiving Water Monitoring. The Draft Order and Draft MRP should clarify the CCRWQCB's intentions with regard to timelines and scope for imposing this requirement.

CN-29

7) Table MRP-6, Water Quality Parameters: The water quality parameters alkalinity, calcium, magnesium, sodium, potassium, sulfate and chloride have never in the past been required for the CMP. These are not needed to meet any program objectives and are not specifically diagnostic of agricultural discharges and should be removed.

Also, in Table MRP-6, the monitoring frequency for Pesticides and Metals is listed as "every fourth year." In the past, monitoring every fifth year has proven sufficient for trend monitoring purposes (Lopez, 2019 – ACS book chapter). Because additional scrutiny of pesticides and toxicity is expected to take place for follow-up within the ESWFP, we suggest setting the baseline, core monitoring requirement at "every fifth year" with the understanding that monitoring will occur with greater frequency for follow-up.

Finally, the monitoring frequency for most surface water parameters in Table MRP-6 is given as "monthly." A recent analysis indicates that monitoring quarterly or every-other-month would result in sufficient confidence to characterize water quality "status" according to basic water quality statistics and would also result in sufficient confidence to determine the Kendall's Tau statistic for trend analysis. As increasing resources are devoted to follow-up needs, we look forward to future discussions around efficiencies that can be realized in the baseline Receiving Water Trends program.

CN-30

Bioassessment: This was a CMP requirement in the first half of the program's history. We do not dispute the requirement, however significant access problems were encountered in the past

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CN-30 cont.

and we would not expect to be able to meet the QAPP objective for a minimum 90% completeness due to site access issues and trespassing concerns.

CN-31

8) RipRAM as a CMP Requirement: We are unable to comment fully on this newly introduced requirement, as no information is provided as to the objective or intended end-use of the data. There are no specific instructions provided as to how to deliver this data. Since the method was only very recently developed, there does not appear to be a CEDEN upload tool, which is the delivery method required by the CMP QAPP. There is also no clear numeric threshold with which to compare the monitoring results. In other sections of the MRP, there is an apparent interest in a reference score of 69. A concern with this approach is that half of the reference sites used to develop this score scored below a 69 themselves. Therefore, a CMP site scoring below 69 might not necessarily indicate impairment, however there is no existing assessment tool of which we are aware that allows for ambiguity in the inference made when a site does not meet a numeric threshold. In other words, in all other contexts, when a site does not meet a numeric threshold, it is considered "impaired" and we are not aware of a mechanism for handling this situation differently. It is also unclear what the value of RipRAM scores would be given the fact that Bioassessment monitoring is also required. Historically, CMP Bioassessment has included a physical habitat assessment (PHAB), with which the RipRAM protocol is largely redundant. We request the opportunity for further comment after the objective for including RipRAM in addition to PHAB is provided.

CN-32

Section F – Annual Compliance Form & Riparian Setback Monitoring & Reporting

Section F of the Draft MRP covers the Annual Compliance Form (ACF) and Riparian Setback Monitoring and Reporting. Under the current Ag Order, the ACF is required annually for all Tier 2 and Tier 3 ranches. The ACF is submitted by manually entering information into custom web forms maintained by the CCRWQCB, which transmit the information directly into the operation's GeoTracker account. The information is then available to the public upon request to the CCRWQCB. Current ACF reporting includes discharge characteristics, irrigation and crop type, implementation of management practices, and any water containment or treatment/control measures. The stated purpose is to, "assist in the evaluation of water quality and progress towards compliance with the Agricultural Order" (cite ACF Instructions document, CCRWQCB3 2019).

While the ACF is logical in concept, in practice it is an administrative compliance requirement that can be time consuming to complete (especially for operators who manage multiple ranches) and generally does not provide data helpful to understanding sources of water quality impairment or management changes that can be linked to changes in water quality. Several improvements should be made to the overall Electronic Notice of Intent (eNOI) and ACF reporting systems to make these more useful tools to support both CCRWQCB and Third Party implementation of the ILRP:

CN-33

1) Need for Improved APN Data: Operation/ranch enrollment forms (eNOI, and any other affected web forms) should continue to be refined to ensure accurate and correctly formatted Assessor Parcel Number (APN) data for enrolled ranches. This is necessary to support queries and

REITER AFFILIATED COMPANIES

CN-34 cont.

analysis of ACF data on a watershed basis, in a way that links meaningfully with corresponding water quality data. Historically and into the present, eNOI APN data have been so non-uniform that it is literally impossible to identify the full set of ACF management practice data for a watershed to be analyzed alongside water quality trends. This is because eNOI and ACF data are currently indexed by unique Operation identifiers (AW Numbers), and many of these records have historically had invalid or missing APNs. A valid APN is needed to identify ACF data that are relevant (geographically and hydrologically) to a specific watershed, basin, or monitoring point.

We are aware that the CCRWQCB staff have been working to improve APN data entry and storage, and that there are technological challenges involved. We appreciate these efforts and cannot overstate the importance of this dataset to successful implementation and membership management for Third Party programs.

CN-35

2) ACF Review & Revision: The ACF should be reviewed and revised in cooperation with the Third Party and interested growers. A primary objective of revisions is to support the collection of management practice information needed to implement a cooperative approach to Follow-up Surface Receiving Water Monitoring per Section E of the Draft MRP. Specific revisions to the ACF, as well as improved APN data, will be essential to generating these follow-up reports.

CN-36

3) An additional objective of ACF review and revision is to improve the layout and question prompts to capture management information in a way that is:

- More relevant to the way growers consider and implement practices;
- A more efficient transfer of information from the Farm Plan that provides opportunities to streamline and eliminate redundant/duplicative data entry;
- More relevant to the precedentially-required plans (e.g. INMP, SEMP, etc), to provide opportunities to streamline and eliminate redundant/duplicative data entry and reporting tasks.

This latter point is especially important, as the Central Coast ACF already prompts growers for the ESJ Order precedentially-required information in these plans (INMP, SEMP, etc), and growers already enter this information in their Farm Plans as well. There is no reason for growers to perform manual entry of the same information three separate times.

CN-37

4) Third Party Data Management – As mentioned above, there is an enormous amount of paperwork with high redundancy between the ACF, Farm Plan and new ESJ Order-precedential reports: INMP, SEMP, PMP, and RAMP. Dischargers should have the option to work with a Third Party to coordinate their Farm Plan and ACF with the other required plans. This is especially appropriate within the Central Coast ILRP, as the existing Central Coast Farm Plan and ACF already contain the information identified by the precedential ESJ Order as being required for these plans. As the specific contents, format, and data entry/delivery method are developed for each of the precedentially required plans (none have been developed yet to our knowledge), the Third Party and interested growers should be involved to ensure efficiency, minimize redundancies and potential for errors, and ensure that the required content accurately conveys the information sought. Instead of custom web forms designed by Water Board staff, the initial point of data delivery should be the Third Party, just as Preservation, Inc. serves as the initial collection point for thousands of surface water quality monitoring records each quarter.

REITER AFFILIATED COMPANIES

CN-37 cont.

Data validation and automated checking should then occur, just as it currently occurs for the surface water CMP, followed by a batched electronic delivery method designated by the CCRWQCB. In this case, the term "batched" indicates a single delivery of a large number of fully granular individual records and will not result in anonymized data.

CN-38

5) Reporting on the Sediment and Erosion Management Plan: Growers should have the option to work with a Third Party to produce the SEMP without redundant data entry requirements (i.e. Farm Plan and ACF). To the greatest extent possible, sediment/erosion monitoring, reporting and management should be coordinated with a Third Party-run ESWFP. Growers should also have the option to work with a Third Party in cases where SEMP certification is required, as this can be costly, especially for smaller operations.

CN-39

6) Riparian Area Management Plan (RAMP): We are not going to comment at this time on the specific requirements or compliance pathways for RAMP reporting in the Draft MRP, except to note the Cooperative Approach Compliance Pathway and express support for the idea of growers having the option to submit a Cooperative Watershed Restoration Plan (CWRP).

CN-40

We appreciate the opportunities for cooperative, Third Party implementation programs that have been woven into the Draft MRP and hope that our suggestions for further Third Party engagement in data management will also be considered. It is our understanding that more information regarding Third Party roles in Ag Order 4.0 will be circulated in the next few months.

CN-41

We believe that our joint commitment to environmental stewardship and agricultural vitality can help support the environmental initiatives and water management practices in the Central Coast. There is opportunity to make substantial, quantifiable improvements in water quality while allowing agriculture to continue to thrive. In particular, we highlight five areas in the proposed regulations that we encourage additional consideration: 1) Incentivizing new technologies including container production, 2) Potential unintended consequences of biomass removal, 3) N removal research, 4) Plastics on slopes and 5) Operational setbacks for permanent and semi-permanent crops. We welcome continued engagement with the Staff and Board on these topics.

CN-42

1. Incentivizing New Technologies: The Opportunity of Container Production

As your Board has highlighted, there is a substantial need to incentivize new technologies and innovation to reach our joint water quality objectives. We believe effective management of container production can provide a unique opportunity to improve water quality. *Technology Background:* Container production involves the use of pots to grow plants above ground. Agricultural operators have used container production successfully across the globe for decades to optimize plant growth, increase management precision, reduce water use and solve for labor challenges. More recently, container production has expanded in the Central Coast Region for berries, among other crops.

When pots sit on the ground they are functionally equivalent to in-soil production. However, container production presents an opportunity to capture and treat or reuse any potential excess water and nutrients moving beyond the root zone using drain collection gutters, effectively halting irrigation discharge.

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REITER AFFILIATED COMPANIES

CN-43

Water Quality Opportunity: Container production, unlike in-soil agriculture, allows for the direct capture of all irrigation discharge. Examples of ways this captured drain water can be managed to address water quality objectives include:

1. **Recirculation:** Reusing the captured irrigation drain water on the same plants, resulting in both water and nutrient savings.
2. **Reutilization:** Reusing the captured irrigation drain water on another crop to allow nutrients that move beyond the root zone of Crop A to be utilized by Crop B.
3. **Treatment:** The use of a water treatment system to extract nitrogen from irrigation drain water and release as inert N_2 gas.

Although very exciting, recirculation and reutilization do not work for every operation based on source water quality, ranch set-up and plant pathogen management, among other factors. Each ranch must use the drain water strategy that makes the most sense for their unique situation.

CN-44

2. Unintended Consequences of Biomass Removal

We recognize the need to reduce N application to achieve water quality objectives in the Central Coast. However, we are quite concerned about the potential long-term unintended consequences of the ultimate 50 pound Applied – Removed limit on soil health and biomass removal.

Mulching biomass back into the soil for improved soil health would halt entirely in response to the way Ag Order 4.0 draft regulations are currently written. Instead, the biomass would be landfilled, burned or composted. Current composting facilities would be unable to process the volume of biomass that would be generated with the proposed regulations. Even if additional composting facilities were developed, an oversupply of compost in the region could lead to undesirable health impacts and the potential over-application of compost, leading to negative water quality impacts

Recommendation: We strongly encourage the Regional Board to apply a biomass discount factor to plant biomass mulched back into the field as a part of the A-R regulations. Similar to the compost factor, the biomass discount factor could estimate the amount of N that is broken down in the first year from different plant biomass types based on C:N ratios. This would account for the fact that much of the N in biomass is not immediately available and can be locked in soil for extended periods and is consistent with the best available science.

CN-45

3. N Removal Research

Draft regulations require individual dischargers to develop their own N removal values for both crop material and biomass following the approved method provided in the Monitoring and Reporting Program (Draft Order, pg 26). Raspberry, blackberries and blueberries do not have pre-approved N values for crop material and biomass.

Recommendation: We request that Driscoll's be allowed to develop N crop material and biomass removal values on behalf of their raspberry, blackberry and blueberry growers. Growers could then reference these values when submitting paperwork without having to conduct their own individual testing on the farm. This approach would result in robust N removal values, a more streamlined process for staff and a reduction of costs and paperwork for growers. Driscoll's has trained agronomists on staff that can work closely with the Executive Officer to ensure removal coefficients are developed using proper sampling techniques.

CN-46

4. Plastics on Slopes

We support the Staff's desire to decrease erosion impacts from agriculture and recognize that field plastics can contribute to erosion events.

REITER AFFILIATED COMPANIES

CN-46 cont.

Recommendation: We strongly urge the Board to return to the original 10% slope as the trigger for requiring certified erosion plans by qualified professionals (Draft Order, pg 37). We urge the return to the 10% slope qualifier for a number of reasons.

First, this proposed regulation would dis-proportionately affect organic acres.

Second, we are concerned about the unintended consequences of requiring a certified erosion control plan on crop rotation in the Central Coast. Certifying an erosion control plan will likely take months to put into place. With crop rotation, growers typically move on and off a ranch over the course of a single year. The logistical challenge of obtaining a certified plan in the period of typical crop rotations would likely make crop rotation infeasible, as non-plastic users would have no incentive to work with berry growers on certified plan development. We are concerned with requiring a certified erosion plan, the proposed regulations may inadvertently increase pesticide use through dis-incentivizing crop rotation. Finally, we believe the strong language limiting discharge from all impermeable surfaces already provides substantial regulatory oversight for all berry ranches using plastics. Returning to a 10% slope value for additional regulations would not mean that ranches at 5% slope are left unregulated. They would still be required to reduce erosion and storm water runoff through parts C.4.7 and C.4.8 of the proposed regulations. Instead, the move to 10% slope would reduce the logistical challenges of certifying plans within a crop rotation while ensuring erosion issues are still being addressed.

CN-47

5. Operational Riparian Setbacks for Permanent and Semi-Permanent Crops

We urge the Board to consider delaying the October 1, 2022 deadline for permanent and semi-permanent crops to comply with the Riparian Operational Setbacks established in Section C.5.4. Many crops in the Central Coast have lifecycles of three or more years (e.g. wine grapes, blackberries, blueberries). Growers have made substantial investments, often tens of thousands of dollars or more per acre, in establishing these semi-permanent and permanent crops. At the time of their establishment they were in full compliance with the regulatory requirements. The forced removal of hundreds, if not thousands, of acres of semi-permanent and permanent crops before their useful life ends would result in a substantial cost to growers.

Recommendation: We encourage the Board to extend the riparian operational setback deadline for permanent and semi-permanent crops to the end of the crop's useful life.

REITER
AFFILIATED COMPANIES

CN-48 In conclusion, we would like to thank you for the opportunity to submit comments and perhaps more importantly, the continued collaboration and commitment to working together in an effort to identify solutions and achieve our common goal/s. We believe the regulations would be substantially improved by considering the ideas, concerns and recommendations highlighted in this letter.

As always, we welcome and encourage staff and board members to contact us anytime if they have questions or would like to learn more about what we do to grow berries that meet or exceed consumer demands and expectations.

Thank you

Eric Reiter
SVP Baja and California Operations

Response to Comment CN-1

Thank you for your comment. The CCWB acknowledges the commenter's background and interests.

Response to Comment CN-2

Thank you for your comment.

Response to Comment CN-3

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

Response to Comment CN-4

This comment is summarized and responded to in the following Master Responses: 2.1.5; 2.2.2; 2.2.3; and 2.2.4.

Response to Comment CN-5

This comment is summarized and responded to in Master Response 2.1.5.

Response to Comment CN-6

This comment is summarized and responded to in the following Master Responses: 2.1.8; 2.1.11; 2.2.4; 2.4.1; 2.5.5; and 2.7.5.

Response to Comment CN-7

This comment is summarized and responded to in the following Master Responses: 2.1.6; 2.3.10; 2.3.3; 2.4.7; 2.4.3; 2.4.4; 2.5.2; 2.5.4; and 2.8.8.

Response to Comment CN-8

This comment is noted.

Response to Comment CN-9

This comment is noted.

Response to Comment CN-10

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

Response to Comment CN-11

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

Response to Comment CN-12

This comment is summarized and responded to in the following Master Responses: 2.1.5 and 2.4.7.

Response to Comment CN-13

This comment is summarized and responded to in the following Master Responses: 2.4.2 and 2.4.4.

Response to Comment CN-14

This comment is summarized and responded to in Master Response 2.4.2.

Response to Comment CN-15

This comment is summarized and responded to in Master Response 2.4.3.

Response to Comment CN-16 through CN-18

This comment is summarized and responded to in Master Response 2.4.4.

Response to Comment CN-19

This comment is summarized and responded to in Master Response 2.4.2.

Response to Comment CN-20

This comment is summarized and responded to in the following Master Responses: 2.4.1; 2.4.2; 2.5.5; 2.5.11; and 2.5.3.

Response to Comment CN-21

This comment is summarized and responded to in the following Master Responses: 2.3.9; 2.3.3; and 2.4.2.

Response to Comment CN-22

This comment is noted.

Response to Comment CN-23

This comment is noted.

Response to Comment CN-24

This comment is noted.

Response to Comment CN-25

This comment is noted.

Response to Comment CN-26

This comment is summarized and responded to in Master Response 2.2.3.

Response to Comment CN-27

This comment is noted.

Response to Comment CN-28

This comment is summarized and responded to in the following Master Responses: 2.5.5; 2.5.11; 2.5.2; 2.5.3; 2.6.6; and 2.7.3.

Response to Comment CN-29

This comment is summarized and responded to in the following Master Responses: 2.5.3; 2.6.5; and 2.6.3.

Response to Comment CN-30

This comment is noted.

Response to Comment CN-31

This comment is noted.

Response to Comment CN-32

This comment is summarized and responded to in the following Master Responses: 2.8.8; 2.1.5; and 2.1.4.

Response to Comment CN-33

This comment is noted.

Response to Comment CN-34

This comment is noted.

Response to Comment CN-35 through CN-38

This comment is summarized and responded to in Master Response 2.1.5.

Response to Comment CN-39

This comment is responded to in Master Response 2.8.8.

Response to Comment CN-40

This comment is summarized and responded to in Master Response 2.2.5.

Response to Comment CN-41

This comment is summarized and responded to in the following Master Responses: 2.8.8; 2.1.8; 2.1.11; 2.3.4; and 2.7.5.

Response to Comment CN-42 through CN-44

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

Response to Comment CN-45

This comment is summarized and responded to in Master Response 2.1.8 and 2.3.4.

Response to Comment CN-46

This comment is summarized and responded to in Master Response 2.7.5.

Response to Comment CN-47

This comment is responded to in Master Response 2.8.8.

Response to Comment CN-48

Thank you for your comment.

Letter CO: Dirk Giannini, Christensen & Giannini, LLC (June 22, 2020)

Letter CO

From: Dirk Giannini
To: AgNOI, WB@Waterboards
Cc: Dirk Giannini
Subject: Comments of Draft Ag Order 4.0
Date: Monday, June 22, 2020 10:30:06 PM
Attachments: CG letterhead Ag Order 4.0.docx

EXTERNAL:

Please submit my attached public comments.

Dirk Giannini
Christensen & Giannini, LLC
1588 Moffett Street, Suite B
Salinas, California 93905
(831) 449-2494 (Telephone)
(831) 449-4951 (Fax)
dgiannini@christensenandgiannini.com



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Christensen & Giannini

GROWERS OF TOP QUALITY VEGETABLES

June 22, 2020

Matthew T Keeling
895 Aeorvista Place, Ste. 101
San Luis Obispo, CA 93401

Mr. Keeling,

CO-1 The bottom line to implementing the Proposed Central Coast Irrigated Lands Regulatory Program (Ag Order 4.0) will be devastating to local, small and mid-sized farmers who comprise the majority of farmers along our Central Coast.

CO-2 This order significantly expands the requirements for reporting, compliance, and management; which small and mid-sized farmers simply do not have the resources or available professional assistance to comply without considerable additional costs. From experience, our TNA reports the last 2 years have taken our compliance coordinator over 500 hours to compile and review the data produced from our farm managers and fertilizer suppliers. We feel that this time would be better spent and invested in "on-farm" practices in watersheds where the results are actually going to improve our water quality (surface and groundwater) rather than submitting these rates of Nitrogen on a per acre on a commodity basis (not a wholistic ranch basis).

CO-3 The fertilizer nitrogen application limits that are proposed are not based on science. Scientists are saying these numbers are not obtainable. The proposed "targets" is the way an order of this magnitude and seriousness should be written. The proposed "limit" is prescriptive and unattainable with the science and tools we have today. Reducing crop production in this highly intensive Farming Region is the only method available in hitting these limits. This will have a negative financial impact on my operation. These limits do not consider soil type and the Nitrogen uptake on many of the specialty crops that we grow which are not developed by scientists. The Draft Environmental Impact Report does attempt to represent the financial impacts, but the economic review does not fully evaluate true impacts to jobs, land use and ag resources citing 'complicated' or 'speculative' practices, when in fact there is a widely used approach to quantify this impact. Fees, assessments and compliance paperwork, management practice changes, inputs, rotations and land use requirements will all have significant economic impact

1588 Moffett Street, Suite B, Salinas, CA 93905
(831) 449-2494 (Telephone) / (831) 449-4951 (Fax)

Response to Comment CO-1

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

Response to Comment CO-2

This comment is summarized and responded to in the following Master Responses: 2.9.1 and 2.1.5.

Response to Comment CO-3

This comment is summarized and responded to in the following Master Responses: 2.1.8; 2.3.10; and 2.3.4. In response to comments related to the DEIR's analysis of economic impacts, including CEQA Guidelines compliance requirements and the adequacy of the DEIR's approach for impact analysis, please refer to Master Response 2.10.

Response to Comment CO-4 through CO-5

This comment is responded to in Master Response 2.8.8.

Response to Comment CO-6

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

Letter CP: Danilu Ramirez, DRAM Agricultural Consulting (June 22, 2020)

Letter CP

From: Danilu Ramirez
To: AgNOI, WB@Waterboards
Subject: Comments on Draft Ag Order 4.0
Date: Monday, June 22, 2020 6:28:37 PM
Attachments: Ag Order 4.0 Comments_DRAM.pdf

EXTERNAL:

Please see attached.

Danilu Ramirez, CCA, PCA
DRAM Agricultural Consulting
Mobile: 805-363-0761
www.daniluramirez.com

Ag Order 4.0 Comments by Danilu Ramirez, CCA SSp, PCA

President, DRAM Agricultural Consulting, INC.

A small raspberry farmer, sells most of his fruit to the community. Husband and wife, hoping to retire within the next few years are now not even able to continue farming. A ranch foreman that has been with the farm for over 20 years loses his job and way of life. His whole family suffers with no income and no way of finding a job in the near future. The husband and wife sell their land. They are no longer able to provide healthy and organic fruit to the community.

A vegetable grower with only a few acres of land sells to farmers markets in LA once a week. He worked as a harvester when he came to the United States in search of a better life for his family. This immigrant worked hard and used savings to begin farming on his own. The true American dream fulfilled. The operation cannot keep up with compliance requirements and is forced out of business. Family members helped form the business and were working countless hours on the farm. They are now forced to work as farm labor and start at one of the lowest paying positions, weeding fields for a local large grower. They feel as though they have lost every single day of hard work and progress toward their dream.

CP-1

A small family farm making and selling specialty items like jam, juice and pies has been producing high quality produce for over 30 years. The grower has two sons, whom she has taught everything. They all share the same love for the land. The sons have acquired Ag Business degrees and are looking forward to expanding sales throughout the whole state, while remembering their home community comes first. The family business is now barely profitable with increasing compliance requirements. They can hardly keep up with paying their tractor driver, ranch manager and harvesters. The operation struggles on for another year, on the losing end. This family business will continue on as long as possible through extra hours, not taking in any profits, and only hiring part time labor.

A medium sized landowner loves growing strawberries. This grower is running a tight farming operation to keep his business profitable and has a handful of employees paid full time. The operation is no longer is able to keep up with monitoring and reporting requirements. The grower is forced to sell his land. Twelve employees are now out of a job. The grower has given up land that has been in his family for many generations. The once organically farmed ground is now sold to developers who build homes in its place. This berry grower is the first of 5

CP-1 cont.

generations to move out of state, as he can no longer live in the area his entire legacy once existed in.

A large vegetable grower accumulates expenses towards monitoring and reporting for each ranch averaging $19,500 per acre which totals 1.95 million dollars per year for their operation. There is simply is no way to sustain that expense year after year. The first ranches to stop farming operations are on leased ground. About twenty percent of their farm labor is laid off permanently. Their ranch managers are reduced in half. Irrigation, fertilizer, pesticide, tractor and ag equipment companies all are affected greatly by the decline in this operation. The reach is not only to the owner of this farming operation, not only to the employees but the whole agricultural industry. This industry is the life source of communities in towns like Santa Maria and Watsonville. Ag Order 4.0 will disproportionately affect disadvantaged communities. These disadvantaged communities of immigrant labor do not have a voice, they do not have advocates.

CP-2

CP-3

If improving water quality is the end goal, on farm management practices can provide the progress needed to improve. Instead of focusing on calculations and limitations to applied nitrogen, education and technical assistance can help growers apply the correct amount of nitrogen at the correct time. By implementing practices such as applying nitrogen to match uptake curves, not only is less nitrogen applied, nitrogen is applied at the correct time and not leached or exposed to run-off. Asking growers to substantially limit applied nitrogen does not achieve the same efficiency or improvement in water quality. Management practices such as a change in an irrigation system can improve fertilizer uniformity, therefore reducing nitrogen applications significantly. Other extreme requirements in the order, such as planting setbacks and pulling farmable acres out of production, come at too high of a cost versus the benefit to water quality. Education, assessments, and creating processes to reach targets is the best way to improve water quality.

CP-4

CP-5

Sincerely,



Danilu Ramirez

Technical Consultant for over 40 operations in Region 3

Response to Comment CP-1

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

Response to Comment CP-2

This comment is summarized and responded to in the following Master Responses: 2.1.6; 2.1.10; 2.1.13; 2.1.4; 2.4.1; and 2.7.1.

Response to Comment CP-3

This comment is summarized and responded to in the following Master Responses: 2.1.8 and 2.1.15.

Response to Comment CP-4

This comment is responded to in Master Response 2.8.8.

Response to Comment CP-5

This comment is summarized and responded to in Master Response 2.1.10.

Letter CQ: Dustin Hauge (June 22, 2020)

Letter CQ

From: dustin.hauge@gmail.com
To: AgNOI, WB@Waterboards
Subject: Comments of Draft Ag Order 4.0
Date: Monday, June 22, 2020 9:22:31 AM

EXTERNAL:

CQ-1 Dear Waterboard, as a grower it concerns me deeply to read the new 4.0 draft and know that there may not be a future for my kids in Agriculture. The limits and restriction that are posed in the draft will hinder our operations significantly not only with our current operation but any future plans we currently have in place. There are significant costs for a small farm like ours to comply with all the restrictions and testing your proposing. A big majority of our fruits and vegetables that are growing here are sold to local markets where local consumers by our product. Consumers will suffer along if we have to reduce acreage and increase prices to comply to stay in business.

CQ-2 Here are a list of my concerns:
Restrictions and limitation on the Riparian setbacks are a killer to the farm. Many of these do not flow year round or even 6 months our of the year. Restrictions on buffers where our land is located will greatly hinder the acreage we farm and will directly effect production immediately and eventually put the family farm out of business. I would like to see exemptions for growers where we can comply and show improvements if they are needed in these areas. Not just a blanket buffer away from blue line creeks and rivers. This is our livelihood and more thought should be given to these areas. Also limitations on blanket Irrigation plans and nutrient plans should also be left up to

CQ-3 the consultants who review crop inputs and outputs for the growers and/or the growers themselves, again not a blanket overview. Pesticide management plan is also very difficult to manage. I am

CQ-4 using more pesticides now than I was before the Asian Citurs Psyllid was here. These are enforced by USDA to use these insecticides and we have no control over this. Again another plan and cost we

CQ-5 don't need. Sediment and Erosion Management Plan is another one, stormwater cannot be predicted. We are stewards of the land and manage all this accordingly to mother nature, many times we have not control what she throws and this is more time and money wasted on paperwork.

CQ-6 Riparian area Management plan, water quality education and CEQA Mitigation Measure Implementation are others that are very costly. The Riparian vegetation requirement for water quality compliance is not consistent with CCRWQCB authority related to an Ag Order waiver or waste discharge requirements order and should not be mandated. Many of these plans are paperwork driven and do not consider all the variables associated with all the elements we are affected with every day as growers. All these plans that will generate a outcome, not the most efficient or science based must be done in a balance where we can still farm long term and make money for ourselves

CQ-7 and our community. It is vey important to me to manage water quality both on the farm and off the farm, we take this very seriously. But what you have drafted in the 4.0 document will make it

CQ-8 impossible to farm long term. Other concerns are access roads that are costly and unnecessary.

CQ-9 These are the my major concerns along with many others in the grower community. I would hope that you would consider other alternatives or remove these from the draft 4.0 order altogether.

Dustin Hauge.

Response to Comment CQ-1

The comment expresses concern regarding the costs and restrictions that may result from the implementation of DAO 4.0. Thank you for your comment. The CCWB acknowledges the commenter's opposition to the implementation of Agricultural Order 4.0. In addition, please refer to Master Responses 2.9.1 and 2.1.7.

Response to Comment CQ-2

This comment is responded to in Master Response 2.8.8.

Response to Comment CQ-3

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

Response to Comment CQ-4

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

Response to Comment CQ-5

This comment is summarized and responded to in Master Response 2.9.2.

Response to Comment CQ-6

The comment expresses concern that the riparian area management plan, water quality education and CEQA mitigation measure implementation will be costly. Please refer to Master Response 2.8.8.

The comment does not identify specific CEQA mitigation measures that would result in additional costs to agricultural operations. The DEIR contains the following mitigation measures:

- **Mitigation Measure BIO-1:** Avoid and Minimize Impacts on Sensitive Biological Resources.
- **Mitigation Measure CUL-1:** Cultural Resources Inventory, Evaluation of Resources for Significance, and Implementation of Avoidance and/or Minimization Measures.
- **Mitigation Measure CUL-2:** Comply with State Laws Pertaining to the Discovery of Paleontological Resources.
- **Mitigation Measure CUL-3:** Comply with State Laws Pertaining to the Discovery of Human Remains.
- **Mitigation Measure HAZ-1:** Hazardous Materials Spill Prevention, Control, and Counter-Measures for Land Disturbance Activities.
- **Mitigation Measure HAZ-2:** Review Proximity to Existing Known Hazardous Materials Cleanup Sites and Conduct an Environmental Site Assessment if Proposed Activity is Located on or in Close Proximity to an Area of Hazardous Materials Contamination.

- **Mitigation Measure HWQ-1:** Implement Construction Best Management Practices for Erosion Control.

- **Mitigation Measure HWQ-2:** Place Management Practices that Involve Retention and/or Treatment of Surface Runoff Outside of 100-Year Floodplains or Tsunami or Seiche Inundation Zones.

- **Mitigation Measure NOI-1:** Reduce Noise Generated by Pumps or Other Stationary and Permanent Noise-Generating Equipment.

Almost all of the mitigation measures (BIO-1, CUL-1, CUL-2, CUL-3, HAZ-1, HWQ-1, and HWQ-2) would apply to agricultural operations only in the event that the operation elects to install certain management practices such as sediment basins, vegetated filter strips, or bioreactors as part of a compliance plan. These mitigation measures would be incorporated as part of the construction process and would be a one-time cost. Also, many of these measures are not additional requirements, but rather reiterations of the general requirement that all agricultural operations in the state must follow all state and federal laws that would apply to any construction project. Without specific details describing any particular mitigation measure, including its size, location, and the potential for sensitive species at the project site, it would be impossible to quantify the costs of any such project, including any incremental cost of mitigation measures.

Mitigation Measure NOI-1 requires that if "well or irrigation system pumps or other stationary and permanent noise-generating equipment is proposed to be installed, enrollees or third-party members must ensure that such facilities are enclosed or located behind barriers such that noise does not exceed applicable local noise standards or limits specified in the applicable county ordinances and general plan noise elements." Again, this mitigation measure does not impose any additional cost-generating requirements; rather, it requires that any equipment that is installed by agricultural operations must comply with existing local noise limits or standards.

Response to Comment CQ-7

The commenter expresses support for water quality protection but expresses concern that DAO 4.0 will make it difficult to farm in the future. The comment is noted.

Response to Comment CQ-8

This comment is summarized and responded to in Master Response 2.1.12.

Response to Comment CQ-9

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

Letter CR: Frank Arciero Jr., Arciero Farms (June 22, 2020)

Letter CR

From: Frank Arciero
To: AgNOI, WB@Waterboards
Subject: Comments on Draft Ag Order 4.0
Date: Monday, June 22, 2020 10:20:42 AM

EXTERNAL:

Dear Mr. Keeling,

CR-1 I am a small farmer in the Shandon area, Arciero Farms, and I want to say that what the Central Coast Regional Water Quality Control Board is proposing will definitely make me either file for bankruptcy or try and sell our farm for half of what it is worth. I really can't afford to have an attorney review all that is contemplated so with out rewriting a response I would like to use the same letter sent to you by the Farm Bureau of Monterey in restating all of our concerns and support their response. I really want to also say that you are going to truly impact a tremendous amount of farmers and possibly put them all out of business.

Sincerely

Frank Arciero Jr.
frank@arcieroracing.com

Response to Comment CR-1

This comment is summarized and responded to in the following Master Responses: 2.9.1 and 2.1.7.

Letter CS: Fred Holloway, JUSTIN Vineyards & Winery LLC (June 22, 2020)

Letter CS

From: Peterson Chattman, Christina
To: AgNOI, WB@Waterboards
Subject: Comments on Draft Ag Order
Date: Monday, June 22, 2020 8:32:34 AM
Attachments: image001.png
Ag Order 4.0 Comments June_JUSTIN.pdf

EXTERNAL:

Central Coast Water Board,

On behalf of JUSTIN Vineyards & Winery, please find the attached comment letter in response to the Board's Draft Ag Order 4.0. Let me know if you have any questions.

Best,
Christina

Christina Chattman
Government Affairs Manager
theWonderful company™
Office 310.966.8714 | Cell 310.562.1636
11444 W Olympic Blvd. | Los Angeles, CA 90064

wonderful.com



JUSTIN

June 22, 2020

Via Email: AgNOI@waterboards.ca.gov

Matthew T. Keeling, Executive Officer
California Regional Water Quality Control Board
Central Coast, Region 3
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Re: Comments on Draft Ag Order 4.0

Dear Mr. Keeling:

CS-1 JUSTIN Vineyards & Winery LLC ("JUSTIN") appreciates the opportunity to provide comments to the Central Coast Regional Water Quality Control Board ("Board") regarding the Draft Agricultural Order 4.0 of the Irrigated Lands Regulatory Program ("ILRP") for the regulation of waste discharge from irrigated lands throughout the central coast region (herein referred to "Draft Order"). We support the Board finalizing Ag Order 4.0 in a manner that protects water quality while still enabling the diverse agricultural region to thrive.

CS-2 JUSTIN farms and processes wine grapes in the Paso Robles region of the Central Coast. The distinct climate, rich soils and water quality provide a unique opportunity to produce award winning California wines. Every year we aspire to bring only the best quality wines to our customers. The natural environment is a critical element to helping us achieve this goal, and absolutely vital to our wine operations. We strive for environmental sustainability in our farming and processing practices and use the latest technologies available to conserve energy, water and other resources.

CS-3 At the outset, it is important to note that vineyards are inherently low risk in terms of impacts to water quality and should be treated as such under Ag Order 4.0. Most vineyards apply minimal inputs of constituents of concern, namely nitrogen, resulting in low levels of Total Applied Nitrogen in the majority of vineyards. The proposed regulatory requirements included in the Draft Order would be overly burdensome and costly for vineyards to implement, without significantly increasing the watershed protections the Ag Order 4.0 is aiming to provide. Furthermore, many wineries have traditionally participated in good stewardship programs that require adherence to a multitude of environmental best practices, which should be recognized. Any changes to current practices should be based off of risk, and not applied as blanket requirements for all dischargers on the Central Coast.

CS-4 We applaud the Board for its commitment to working with stakeholders throughout this process, and appreciate the Board's flexibility on the comment deadline during this unprecedented time. JUSTIN generally supports the agricultural comments submitted by the Western Growers Association and the Wine Institute, and respectfully requests the Board take the following comments into consideration prior to finalizing the Ag Order 4.0:

11680 Chimney Rock Rd, Paso Robles, CA 93446 805.238.6932



CS-5

1. **Ag Order 4.0 Should Allow for Additional Flexibility on How "Offset Setbacks" Are Applied**
The Board should expressly allow offset setbacks to be applied in a non-riparian priority area of a property. We appreciate the Board building additional flexibility into the current Draft Order to allow a landowner to apply a non-riparian priority area setback in another segment of the property if the required minimum setback area includes existing permanent structures. This is critically important as many ranches operating today are utilizing facilities that were erected prior to the application of these orders, and providing this flexibility will ensure impacted stakeholders are able to comply without having to disrupt pre-existing infrastructure.

CS-6

2. **Riparian Setback Requirements Should Be Based on Risk and Determined at the Ranch Level**
The Board should incentivize riparian setbacks as an elective management practice based on the situation on the farm, rather than imposing these requirements as an overall compliance obligation. Compliance with the setback requirements in the Draft Order would cause significant disruptions to vineyard operations and plantings while providing little to no direct benefit to water quality. Furthermore, these requirements seem contradictory to the efforts that are already in place for managing buffer zones in line with current vineyard practices. Ag Order 4.0 should recognize that riparian setback requirements are not scientifically reasonable mitigation strategies necessary for **all** watersheds; and as such, should not make this a requirement for all dischargers. In situations where setbacks are deemed essential to protect water quality, the Board should build in adequate flexibility to expressly allow these setback areas to be used by tractors and other heavy farm equipment. This will, at the very least, ensure that growers who must implement further setbacks are not required to remove additional vines in order to adhere to the setback requirements.

CS-7

3. **Ranch Level Monitoring Should Not Be a Blanket Requirement; Watershed Based Monitoring Should be Allowed, if Appropriate, Based on Risk Level**
The current version of the Draft Order is still too broad in its definition of the circumstances under which ranch-level monitoring is required. Ranch level monitoring should be tied to risk, and dependent upon the actual potential to discharge constituents of concern (*e.g.*, if a producer isn't applying chemicals tied to exceedances or nitrogen over the allowable limit, it doesn't make sense to require monitoring at the ranch level). The planning and implementation of ranch-level discharge monitoring imposes a significant cost and burden to the discharger, and as such, should only be required when **absolutely necessary** to protect water quality. This is especially true in situations where a discharger can demonstrate that their operation has no potential to contribute to a specified surface water exceedance, in which case, requiring ranch-level monitoring would be unnecessary.

CS-8

Additionally, the current version of the Draft Order adopts a final limit for nitrogen and considers compliance with this final limit to be protective of groundwater quality. As such, if a discharger is in compliance with the final nitrogen limit, there should be no need for a work plan or quantitative assessment of the operator's nitrogen discharge. Compliance with the nitrogen limit should remove any obligation to implement a ranch-level groundwater discharge monitoring work plan.

11680 Chimney Rock Rd, Paso Robles, CA 93446 · 805.238.6932

JUSTIN

CS-9

Finally, wineries and other agricultural producers in the Central Coast have already been working on watershed-based third-party concepts for surface water monitoring and reporting, and we believe this process should be encouraged and allowed by Ag Order 4.0. To this end, we agree that the final Ag Order 4.0 should adopt specific guidelines and a review process for determining whether ranch level monitoring is justified based on specific on-site conditions.

CS-10

4. **Sediment and Erosion Control Measures Should Be Based on Risk**
We recommend that the Board only require Sediment and Erosion Control Plans (SEMPs) in areas that are susceptible to erosion, not all slopes. Applying SEMP requirements in all areas is overly burdensome and not necessary to protect water quality.

CS-11

5. **Construction and Maintenance of Roads Should Be Managed at the Farm Level**
The Board has proposed to require access roads to be constructed and maintained in accordance with certain onerous regulatory requirements. Constructing farm roads to state code is unnecessary and overly burdensome. Farmers already construct roads in accordance with local permitting and county requirements, and maintain roads as needed to ensure access for tractors and other farm vehicles. As such, incorporating additional requirements is unnecessary.

CS-12

6. **The Board Should Take Into Account Existing Sustainability Programs**
Wineries have a long history of participation in – and compliance with – sustainability certification programs. Certification in these programs, such as the Sustainable In Practice program (SIP), require significant analysis of winery and vineyard practices and annual recertification to ensure compliance. Participating in programs like SIP, and the associated documentation required to be maintained by participating members, should be recognized as being in compliance with the Farm Plan requirements in Ag Order 4.0.

***

JUSTIN Vineyards & Winery LLC appreciates the Board's consideration of these comments and looks forward to continuing to work with various stakeholders and the Board to finalize and implement Ag Order 4.0.

Sincerely,

Fred Holloway
Vice President, Production

11680 Chimney Rock Rd, Paso Robles, CA 93446 · 805.238.6932

Response to Comment CS-1

Thank you for your comment.

Response to Comment CS-2

The CCWB acknowledges the commenter's background and interests.

Response to Comment CS-3

This comment is summarized and responded to in the following Master Responses: 2.9.1; 2.1.7; 2.1.2; and 2.2.2.

Response to Comment CS-4

This comment is summarized and responded to in Master Response 2.9.3.

Response to Comment CS-5 through CS-6

This comment is responded to in Master Response 2.8.8.

Response to Comment CS-7

This comment is summarized and responded to in the following Master Responses: 2.3.9; 2.3.3; 2.4.2; 2.5.5; 2.5.11; 2.5.2; 2.5.3; 2.6.6; and 2.7.3.

Response to Comment CS-8

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

Response to Comment CS-9

This comment is summarized and responded to in Master Response 2.5.5.

Response to Comment CS-10

This comment is summarized and responded to in the following Master Responses: 2.7.5 and 2.7.1.

Response to Comment CS-11

This comment is summarized and responded to in Master Response 2.1.12.

Response to Comment CS-12

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

Letter CT: Benjamin Waddell, Fruit Growers Laboratory, Inc. / FGL Environmental (June 22, 2020)

Letter CT

From: Ben R. Waddell
To: AgNOI, WB@Waterboards
Cc: Kelly Dunnahoo; David Terz; Glenn Olsen
Subject: Comments on Draft Ag Order 4.0
Date: Monday, June 22, 2020 10:27:56 AM
Attachments: ATT83976.png

EXTERNAL:

Greetings Central Coast Water Board,

CT-1 In review of the proposed reporting limits in the new Ag order 4.0, it was noticed in Attachment B, table MRP-2, pg. 37, that the method and proposed reporting limit for TDS determination was SM 2540 D, and 0.5 mg/l, respectively. This method corresponds with the determination of Total Suspended Solids, not dissolved solids, and as such we believe there is an error in the text here. The correct method would be SM 2540 C. Additionally, a RL of 0.5 mg/l would be unnecessarily low as it is unlikely that a ground water sample would approach that low of a TDS value. In order to achieve this low of a RL, using our current method of SM 2540 C a sample volume

CT-2 of 2000 ml would be necessary. This would lead to increased error in the calculation given the need to dry the sample down in increasingly smaller vessels. There would also be significantly more time involved, and therefore more expense, in carrying this out. From FGL's perspective, we believe that a reporting limit of 20 mg/l is sufficient for determination of ground water TDS and ask that consideration be given to adjusting this requirement.

Thank you for your time and consideration on this matter. Have a great day.
--
Sincerely,
Benjamin Waddell

FGL ENVIRONMENTAL AGRICULTURAL Analytical Chemists
Benjamin R. Waddell
Director of Agricultural Services
Horticulturist
Office: (805)392-2092
Cell: (805)245-9965
www.fglinc.com

Response to Comment CT-1 through CT-2

This comment is summarized and responded to in Master Response 2.4.7.

Letter CU: George Adam (June 22, 2020)

Letter CU

From: Deborah Adam
To: AgNOI, WB@Waterboards
Subject: Comment on Ag Discharge order 4.0
Date: Monday, June 22, 2020 10:05:22 AM

EXTERNAL:

CU-1 The order does not consider the degradation of groundwater caused by the policies and lack of enforcement of municipal and industrial discharge standards by the water board over the past 5 decades.

CU-2 1. The city of Santa Maria Waste water treatment plant on Black road west of Santa Maria was allowed to discharge far above the state set standard
Of 1000 ppm TDS for at least 20 years from 1975 until 1995. The tolerance of this groundwater pollution will make it virtually impossible to adhere to any of the standards of fertilizer discharge requirements in the order.

CU-3 2. Exacerbating the problem mentioned in issue #1, the regional board failed to incentivize the use of the discharges from this waste water treatment plant for its nitrate. Instead rewarded the use of the cleaner, deeper strata waters. In so doing, many deeper wells were drilled and utilized for farming which spread the high salt water into deeper stratus traditionally conserved for drinking water. The clay layer being compromised in so many areas has forever changed the hydrology of the subregion in my opinion.

CU-4 3. Additional impacts upon water quality West of the City of Santa Maria have been the operation of Sinton and Brown feedlot, as many as 70 Dairies and the oil industry. All of which have significantly added to the salt load upon the water supply.

CU-5 4. The mitigating factors of purchasing 12,000+ AFY of State Water by the City of Santa Maria has made a positive impact over the past 20+ years. However, not nearly enough to undo the previous damage nor the compounding of damage caused by the more recent policies of the region 3 water board staff.

Respectfully,
George Adam

Sent from my iPhone

Response to Comment CU-1

This comment is noted.

Response to Comment CU-2

This comment is noted.

Response to Comment CU-3

This comment is noted.

Response to Comment CU-4

This comment is noted.

Response to Comment CU-5

This comment is noted.

Letter CV: Greg Gonzalez, Scheid Family Wines (June 22, 2020)

Letter CV

EMAIL: AgNOI@waterboards.ca.gov

SUBJECT LINE: "Comments on Draft Ag Order"

June 22, 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

Dear Executive Officer Keeling:

CV-1

Let me start with my background. My name is Gregory Gonzalez and my grandparents immigrated to America many decades ago and today, I'm a third generation US born Latino. Currently, I serve as the Director of Vineyard Operations for Scheid Family Wines, a role I have held for a few years. I have been growing wine grapes in the Salinas Valley for the past 11 years and have the privilege of serving as a Director on the following boards: The Vineyard Team (SIP), California Association of Winegrape Growers, California Sustainable Winegrowing Alliance, and the Monterey County Farm Bureau. Additionally, I serve on Technical Advisory Committees and lead or participate in organizational collaborations with Cal State and UC institutions for advancements in farming systems. I'm a certified Geographic Information Systems Professional and Agricultural Irrigation Specialist. I received my undergraduate degree in Social and Behavioral Sciences at California State University Monterey Bay, where I concentrated on the study of local ethnographic (study of culture) research and Geographic Information Systems. It was through my undergraduate studies that I discovered the interdependency of the Salinas Valley's cropping systems and the general wellbeing of our

CV-1 cont.

communities. My professional experience and educational background have allowed me to review the current proposed Ag Order 4.0 regulations through a broad multispectral lens. I represent the new demographic of articulate millennial agronomists that are passionate environmentalists formally trained in the most advanced farm management practices based on scientific methodologies.

CV-2

Today, I am writing in support of the winegrower industry and I'm requesting your support for the following:

- Recognition of "Sustainability Certifications" as an alternative pathway to compliance for Ag Order 4.0 proposed regulations.

CV-3

- It is important that the board acknowledges, through CEQA, the magnitude and overall agroecological impacts of Ag Order 4.0 regulation on our community's economic, social and cultural wellbeing. Salinas Valley's 8 unique city/communities need a seat at the table.

CV-4

- A new generation has arrived amidst the long-debated Ag Order regulation process and we are the ones who bear the weight of the outcomes. The current draft is long and complicated, confusing, and addresses issues that need investment in solutions rather than limits. My demographic is marginalized due to institutional structures and participation methodologies, we seek a more inclusive process developing solutions.

CV-5

- From a social perspective, the Ag Order 4.0 distracts my demographic from continued innovation and collaboration due in part to under-resourced UC Extension and other field level educational institutions. Innovations will be redirected towards the advancement of technologies that reduce the costs, time and energy required for regulatory reporting. The Ag Order 4.0 must be oriented towards education, training, innovation and solutions.

CV-6

- Vineyards maintain headlands that account for a natural buffer zone on properties farmed near riparian habitats. It is common practice to have a 30'-40' end of row space (headland) to allow for mechanical harvester turns away from river banks, creeks, ditches and swales. The vineyard industry should be allowed to continue this practice without regard to proposed riparian metrics.

CV-7

- The Ag. 4.0 phases and priorities ignore low risk crop systems. Instead, priorities are based on geographic location and this alone does not address the operational risk to water quality. Vineyards are a low risk and minimal impact. Vineyards operating under third party sustainability certifications currently meet the 2050 Nitrogen Loading threshold and should be excluded from the Ag Order 4.0.

CV-8

- The COVID-19 Pandemic has put unprecedented pressures on agricultural business, agricultural communities and farm workers. Ag Order 4.0 is an untimely added burden the weight of which is borne on few who can afford it, particularly underserved communities.

CV-9

Scheid Family Wines farms 12 estate vineyards comprising of 4,000 acres located along a 70-mile spread from Soledad to Hames Valley. While our wealth of vineyard resources is exceptional, it is our employees that are at the heart of everything we do. Much of our 280-employee workforce has been with us for over 25 years, with several of our vineyard managers employed for over 40 years.

Our estate vineyards span four climate zones. The unique geography of Monterey County and the diversity of our estate vineyards allow us to grow 39 varieties in a spectrum of styles. Our vineyards are officially certified by the California Sustainable Winegrowing Alliance, Sustainability in Practice (SIP) and Global GAP. We undergo annual third-party audits to maintain our certifications and demonstrate our commitment to continuous improvement and the adoption and implementation of sustainable winegrowing practices.

Our commitment to environmental stewardship and equitable treatment of our employees is woven into the fabric of Scheid Family Wines. An example of our sustainability commitment is our wind turbine that powers 100% of our winery operations and generates enough surplus energy to power 125 homes in the surrounding area. Our longstanding support for Salinas Valley communities is expressed thru nearly 50 years of philanthropy including hundreds of thousands of dollars contributed in educational scholarships, the development and construction and maintenance of sports fields and thousands of hours of volunteering. These efforts earned SFWs the Association of Fundraising Professionals award for the "Outstanding Philanthropic Corporation" in 2018.

CV-10

As a community leader in the Salinas Valley, SFW believes that the Central Coast RWQCB must acknowledge the magnitude and overall agroecological impacts of regulation on our community's economic, social and cultural wellbeing. The Salinas Valley's agricultural systems deploys the world's state-of-the-art crop and soil management technologies making it the most sustainable and valuable agricultural lands in the world. Moreover, the relationship of our community's health and wellness are linked to these advancements and the services the agricultural entities provide locally. The extent of this impact reach far beyond the Salinas Valley with the produce that is distributed throughout the nation providing a core primary needs and food security to countless programs that feed the 1 in 6 children nationally (Feeding America, 2018) that experience these insecurities. These specific issues should be studied and made available to our communities through the CEQA process before Ag Order 4.0 is adopted.

CV-11

We believe advancement is achieved through collaboration and investment in scientific research, engineering, innovation, clear communication, transparency and foremost, education. The new generation bears the burden of the Ag Order 4.0 regulation process and we must carry the costs and invest time and other resources, additional barriers to success in agribusiness. The current draft is long and complicated, confusing, and addresses issues that need investment in solutions rather than limits at a time when government resources are being cut. From a social perspective, it distracts my demographic from continued innovation and collaboration at a time when we most need support, education and public-private partnerships.

CV-12

SFWs operating under the CSWA and SIP certifications annually calculate the nitrogen applied minus removed, coupled with advanced nutrient and irrigation technologies that create a positive impact for soil, water, and air quality. In addition to limited nitrogen use, vineyards do not have tailwater and manage cover crop specifically planted for nitrogen sequestration and erosion control. Monitoring and reporting requirements must reflect these common practices in wine grapes. Vineyards also maintain headlands that account for a natural buffer zone on properties farmed near riparian habitats. It is common practice to have a 30'-40' end of row space (headland) to allow for mechanical harvester turns and that distance increases based on geography and potential operator safety risks. Sustainability certifications also address this setback and we implement practices based on university proven research to protect our entire vineyard ecosystems. Removing vineyards to increase riparian setbacks will only disrupt and decrease the soil carbon sequestration practices and investments from sustainable farming practices that are in place to increase riparian habitat health.

CV-13

It is important that the board recognize the efforts of sustainable farming certifications as an alternative to the purposed Ag Order. Sustainably certified vineyards are a low risk and often have positive environmental impacts particularly in soil stability and stormwater percolation. Vineyards operating under third party sustainability certifications currently meet the 2050 Nitrogen Loading threshold and should be excluded from the Ag Order 4.0.

CV-14 Scheid Family Wines has a commitment to our community and protecting the Salinas Valley's way of life. Recent analysis of sustainable farming practices using the USDA COMET-Farm tool Greenhouse Gas calculator also support the argument that the Central Coast RWQCB's attention should be focused on innovation, education and research of best management practices rather than focused on regulatory limits and reporting. Summary results from the COMET-Farm tool for all Scheid Family Wines vineyards operating under sustainability certifications are net negative (-167.9 tons/yr.) on Carbon.

CV-15 Most importantly, the tool establishes a methodology outside of the regulatory environment that promotes sustainable farming practices and leads to clear and simple measurable results.

CV-16 The entire process of the regulatory landscape must be rethought, specifically due to the current unprecedented circumstances before us in the age of pandemic management. The burdensome impact regulation has on the health and social wellbeing of our already underserved Latino community and the social programs supported by the agricultural economy is harmful. The regulatory landscape and compliance in the state of California is at the point at which valuable funds, once dedicated to agricultural advancements, innovation, and education are being redirected towards maintaining compliance reporting. Having experienced the recent decade of increasing State mandated regulations on agriculture, my observation is that regulations aimed at "environmental" causes are suppressing the Latino demographics ability to achieve a higher economic status. The regulations have the potential to decrease food security and social programs that depend on the agricultural economy in the Salinas Valley.

Cv-17 Over complicated regulations stunt advancements in continued progress of sustainable farming and detours future generations from taking on the challenge of feeding the world.

Summary

CV-18 The board must acknowledge Sustainability Certifications as an alternative to the current proposed Ag Order 4.0. It is important that the board acknowledges, through CEQA, the

CV-19 magnitude and overall agroecological impacts of Ag Order 4.0 regulation on our community's

CV-20 economic, social, and cultural wellbeing. The current draft is long and complicated, confusing, and addresses issues that need investment in solutions rather than limits. My demographic is

CV-21 marginalized due to institutional structures and participation methodologies, we seek a more inclusive process developing solutions. My demographic believes innovations will be redirected towards the advancement of technologies that reduce the costs, time and energy required for

CV-22 regulatory reporting. Alternatively, Ag Order 4.0 should be oriented towards education, training, innovation, and solutions. It is common practice to have a 30'-40' end-of-row space

CV-23 (headland) to allow for mechanical harvester turns away from rivers, creeks, ditches and swales. The vineyard industry should be allowed to continue this practice without regard to

CV-24 proposed riparian metrics. The Ag. 4.0 phases and priorities ignore low risk crop systems. Instead, priorities are based on geographic location, this alone does not address the operational

CV-25 risk to water quality. Vineyards are a low risk and minimal impact. Vineyards operating under third party sustainability certifications currently meet the 2050 Nitrogen Loading threshold and

CV-25 cont. should be excluded from the Ag Order 4.0. The COVID-19 Pandemic has put unprecedented pressures on agricultural business, agricultural communities, and farm workers. Ag Order 4.0 is CV-26 an untimely added burden the weight of which is borne on few who can afford it, particularly underserved communities. I believe the implementation of Ag Order 4.0 is untimely and far CV-27 from complete and requires much more public input before implementation.

Sincerely,

Greg Gonzalez

Director of Vineyard Operations,

Scheid Family Wines

Response to Comment CV-1

Thank you for your comment. The CCWB acknowledges the commenter's background and interests.

Response to Comment CV-2

The comment requests that DAO 4.0 recognize sustainability certifications as an alternative pathway to compliance. In response to comments related to Sustainability in Practice (SIP) Certifications, refer to Master Response 2.2.2.

Response to Comment CV-3

Thank you for your comment. The CCWB acknowledges the importance of CEQA compliance and the individual interests of the Salinas Valley community. The CCWB asserts that the DEIR, as presently drafted, meets the applicable regulatory requirements for CEQA compliance. No changes have been made in response to this comment.

Response to Comment CV-4

This comment is summarized and responded to in Master Response 2.1.4 and 2.1.11.

Response to Comment CV-5

This comment is summarized and responded to in the following Master Responses: 2.1.8; 2.1.15; 2.2.1; 2.3.1; and 2.3.3.

Response to Comment CV-6

This comment is responded to in Master Response 2.8.8.

Response to Comment CV-7

This comment is summarized and responded to in the following Master Responses 2.1.7; 2.2.2; and 2.3.5.

Response to Comment CV-8

This comment is summarized and responded to in Master Response 2.9.3.

Response to Comment CV-9

The CCWB acknowledges the commenter's background and interests. In addition, please refer to Master Response 2.2.2.

Response to Comment CV-10

The comment requests that the CCWB study the magnitude and agroecological impacts of regulation on the economic, social, and cultural wellbeing of the Salinas Valley Community as part of the CEQA process for DAO 4.0.

CEQA provides a mechanism to identify, evaluate and disclose to the public whether a government project will result in significant effects on the physical environment, to identify alternatives to the project, and to indicate whether any significant effects to the environment

can be mitigated or avoided. As required by CEQA, the DEIR provides an analysis of the economic impacts of DAO 4.0, insofar as those impacts may create a significant impact on the environment. Please refer to Master Response 2.10. In addition, while CEQA requires an analysis of whether a project may have impacts on cultural resources, the analysis is limited by CEQA to impacts on physical resources, such as historical buildings or objects, archaeological resources, or paleontological resources. (CEQA Guidelines §15064.5.) The DEIR provides an analysis of the impacts of DAO 4.0 as it relates to these types of physical cultural resources. CEQA does not provide a mechanism for or a mandate to evaluate social impacts of projects.

Response to Comment CV-11

The comment expresses concern that the DAO 4.0 is too long, complicated, and confusing, and discourages innovation and solutions. The comment is noted. Please also see Master Response 2.1.11 and 2.1.4.

Response to Comment CV-12

This comment is summarized and responded to in the following Master Responses: 2.8.8 and 2.2.2.

Response to Comment CV-13

This comment is summarized and responded to in the following Master Responses: 2.2.2 and 2.3.5.

Response to Comment CV-14

This comment is summarized and responded to in the following Master Responses: 2.1.8; 2.1.15; 2.2.2; 2.2.3; 2.3.7; 2.3.10; 2.3.3; and 2.5.8.

Response to Comment CV-15

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

Response to Comment CV-16

This comment is summarized and responded to in the following Master Responses: 2.9.1; 2.9.3; 2.1.5; 2.1.13; 2.1.15; 2.1.2; 2.1.4; 2.2.1; 2.3.1; 2.5.1; and 2.5.2.

Response to Comment CV-17

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

Response to Comment CV-18

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

Response to Comment CV-19

Thank you for your comment. The CCWB acknowledges the importance of CEQA compliance and the individual interests of the Salinas Valley community. The CCWB asserts that the DEIR, as presently drafted, meets the applicable regulatory requirements for CEQA compliance. No changes have been made in response to this comment.

Response to Comment CV-20

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

Response to Comment CV-21

This comment is summarized and responded to in the following Master Responses: 2.1.8; 2.1.11; and 2.1.13.

Response to Comment CV-22

This comment is summarized and responded to in the following Master Responses: 2.1.11 and 2.1.15.

Response to Comment CV-23

This comment is responded to in Master Response 2.8.8.

Response to Comment CV-24

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

Response to Comment CV-25

This comment is summarized and responded to in the following Master Responses: 2.2.2 and 2.3.5.

Response to Comment CV-26

This comment is summarized and responded to in the following Master Responses: 2.9.1; 2.9.3; and 2.1.13.

Response to Comment CV-27

Thank you for your comment.

Letter CW: Abby Taylor-Silva, Grower-Shipper Association of Central California (June 22, 2020)

Letter CW

From: Abby Taylor-Silva
To: AgNOI, WB@Waterboards
Cc: Chris Valadez
Subject: Grower-Shipper Association of Central California Comment Letter - Comments on Draft Ag Order & Draft EIR
Date: Monday, June 22, 2020 5:02:46 PM
Attachments: GSA ILRP 4.0 Comment Letter (6.22.20) FINAL.pdf

EXTERNAL:

To: Central Coast Regional Water Quality Board
Attached please find the Grower-Shipper Association of Central California's comments on the Draft Ag Order and Draft EIR.
Sincerely,
Abby

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GROWER-SHIPPER ASSOCIATION of Central California Since 1950

Grower-Shipper Association of Central California
ADVANCING FAMILIES, FOOD AND FARMING ON THE CENTRAL COAST

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: Comments 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,

CW-1 The Grower-Shipper Association of Central California (GSA) is a trade association that includes growers, shippers and processors of vegetables, strawberries, mushrooms, wine grapes and more crops operating in Monterey, Santa Cruz, San Benito and Santa Clara Counties. We represent more than 325 agricultural entities on California's Central Coast. We are driven by our mission to advance families, food and farming on the Central Coast of California.

CW-2 GSA has been an engaged participant in the Central Coast Regional Water Quality Control Board's (Regional Board) irrigated lands process for more than 10 years. Over the last decade, we have actively worked toward identifying solutions to achieve our mutual goal of protecting and improving water quality. GSA and partner organizations have been working together and with advisors, including growers, CCAs, PCAs, and consultants, for the past few years to identify solutions related to the Irrigated Lands Regulatory Program. These advisors have included GSA and Monterey County Farm Bureau's joint Technical Advisory Committee, which has been meeting for two and a half years to find solutions that protect and improve water quality while sustaining a profitable and vibrant agricultural industry in our region. We have all put forward considerable time and resources to review, understand and provide comment on this draft order.

CW-3 The Ag Association Partners' Comprehensive Submittal, Including Redline Revisions to the General Order (Ag Partner Submittal) submitted on behalf of our organization and others, is the result of thousands of hours of thoughtful dialogue and a forward-thinking multi-benefit focus. In it you will find a legally defensible, solution-oriented plan for the next 28 years and the majority of our arguments, concerns and solutions.

CW-4 In addition to participating in the development of, and supporting, the Ag Partner Submittal, GSA is providing separate comments. Our comments here consist of six parts,

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CW-4 cont.

categorized as follows: Limits, Targets & Groundwater Priorities; Surface Water & Multi-Benefit Projects; Food Safety & Unintended Consequences; Economic Analyses; Third Parties; and Public Posting of Forms & Trade Secrets.

Limits, Targets & Groundwater Priorities

CW-5

Our Ag Partner Submittal includes legal arguments that detail strong reasoning as to why the Nitrogen Fertilizer Application Limits proposed in the Draft Order are void of legal justification and directly contravene the State Water Resources Control Board's (State Water Board) direction in the precedential East San Joaquin Order (2018). The State Water Board's focus was on outlier and target values, for the purpose of making progress toward reducing nitrogen waste discharges. In their comments, the State Water Board specifically called out that they weren't going to pre-suppose how the A and R reported data should be used in a regulatory context.

"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." (ESJ Order, Page 74).

CW-6

In our conversations with various agronomists, hydrogeologists, and advisors, it's become apparent that there are a number of factors that influence what occurs after water and nitrogen fertilizer is applied to a field. The SBX21 Report's calculation that is being referenced for the Regional Board's proposed limits was a rough yardstick, not a regulatory metric, and is not meant to be used in the way it's been proposed. This calculation referred to the water that recharges to groundwater after the crop has taken up its share of the water. There are a number of factors that influence the volume of water recharging to groundwater, including and not limited to irrigation, percolation, evapotranspiration, recharge from water bodies, etc. Groundwater can't be effectively measured on a farm-by-farm basis with all of the various factors contributing to the source of the water contributing to the recharge.

CW-7

We've researched the factors that make a straight limit based upon only applied and removed problematic, and many times we were drawn back to this statement in the UC Davis Report for the SWRCB SBX21 Report to the Legislature (SBX21 Report):

"Due to nonuniform mixing, transport, and dispersion of nitrate in groundwater, it is difficult to quantify the impact of a unit of fertilizer on nitrate contamination of drinking water over time." (Page 64)

CW-8

Additionally, we know that there are gaseous losses to the atmosphere from volatilization, and denitrification that may occur through the soil profile that will influence the A-R equations, but we don't have exact measurement techniques for these at this time. We also know that the maximum amount that could be discharged and still meet the MCL of 10 ppm nitrate-N for specific fields would vary considerably across the region in relation to differences among production fields influenced by root-zone soil water holding capacity, soil type, hydrogeology, type of crops grown, use of products or other methods to foster N sequestration, and method of irrigation.

CW-9

In lieu of these limits, we urge you to look to targets and use the equations that we have further built out in our Ag Partner Submittal to help landowners and growers calculate their target values. We've worked with our UCCE Farm Advisors, growers, CCAs and others to identify further definitions associated with applied and removed values, and these will help growers and landowners to easily identify the actions that they are already taking that lead to denitrification today, while also keeping an open door, via R^{OTHER} to projects or inputs that may seem far-fetched today, but may get us where we all want to be in the next few decades.

CW-10

In the Ag Partner Submittal, we propose that there be two different and distinct sets of targets. First, there should be crop specific or crop type ranges of target values that are developed in coordination with third party groups, the State Water Board, other Regional Boards, CDFA, Commodity groups and others, after more precise crop conversion coefficients are adopted, that are used to identify outliers. Then, we also propose, consistent with the ESJ Order, that there be Groundwater Protection Targets.

The State Water Board was very specific in its purpose related to the Groundwater Protection Targets, noting that the targets weren't an individual grower metric and the intent of that was to set a target for coming into compliance collectively. To point to the limits being proposed and state that they will make the Regional Board's order compliant with the State Water Board's ESJ requirement for Groundwater Protection Formula, Values and Targets is misguided, and shows a misunderstanding of the intent and purpose of that process and the ultimate targets.

Groundwater Protection Targets that are fine-tuned to regional areas instead of individual ranch level are a more appropriate metric for assessing the potential for nitrogen movement to groundwater. Targets also need to be adjustable for the site-specific conditions.

Research will be a critical component of this next phase, and the highest priorities for research we've identified, as it relates to irrigated lands and our goals, include:

- Identifying Additional Removal Options (R_{OTHER}) and Trialing Those
- Identifying Numeric Value Ranges Associated with Various Removal Options
- Identifying Target Values based upon current research, and conducting additional research over these decades to continuously inform the formula and target values

based upon a variety of factors, including but not limited to, soil type, ET, crop, hydrogeology, etc.

- Continued Surface Water Best Management Practice development and trialing.

CW-10 cont.

We encourage the Regional Board to embrace the process for determining these two types of targets as outlined in the Ag Partner Submittal. There you will find a proposed process for Regional Board and stakeholder engagement, potentially via a third-party, to build out crop specific and/or crop type ranges of target values as well as Groundwater Protection Targets to help us achieve our mutual goal of protecting and improving water quality.

Surface Water & Multi-Benefit Projects

CW-11

For more than a year, we have worked with the team at Preservation, Inc. to identify opportunities to bring forward a robust surface water third party program. This work was done, in part, in response to the board member comments at the March 2019 workshops. Last year we began bringing these ideas to staff and board members to gauge their interest and questions, and we continued to reformulate and revise our idea based upon those conversations.

We envision a program that operates in conjunction with the Cooperative Monitoring Program (CMP), which as you know is managed through Preservation, Inc., titled an Enhanced Surface Water Follow-up Program (ESWFP), that brings together watersheds through common education and outreach, individual field visits, annual reports that provide a characterization of the watershed and changes made through BMPs, and additional follow-up on a watershed basis to address problem constituents.

CW-12

Our plan provides a process for improving water quality in compliance with time schedules associated with meeting receiving water limits. Those who participate in this adaptive management program will not be subject to requirements inherent to the approach in the Draft Order that includes ranch-level surface discharge and reporting, a practice that is fraught with technical inaccuracies and challenges (see Exponent's Report in the Ag Partner Submittal) and is not supported by the State Water Board, as noted in their State Water Board Order which amended Ag Order 2.0, which was reiterated in the East San Joaquin Order.

"We are skeptical that the Central Coast Water Board has adopted the monitoring program best suited to meet the purpose of identifying and following up on high risk discharges. The variability in the composition of end-of-field discharges makes it difficult to characterize such discharges through sampling at a limited number of locations and in a limited number of sampling events. Further, even though the surface water discharge monitoring requirements are targeted to the highest risk dischargers, problem discharges and areas are likely to be found outside of the influence of farms operated by Tier 3 dischargers. The better approach may be to rely on receiving water monitoring data and to require the third party monitoring groups administering receiving water monitoring to pursue exceedances with increasingly focused monitoring in upstream channels designed to narrow down and identify the sources of the exceedances." (State Water Board Order WQ 2013-0101)

CW-12 cont.

The requirements for participation in this program are detailed in the Ag Partner Submittal, and include conditions related to participation in outreach and education, changing management practices as indicated by water quality information, and documenting/reporting management practice changes and assessing their effectiveness. Upstream monitoring is also envisioned in this program, where applicable and identified by the CMP, in an effort to help educate growers and landowners as they implement and adjust best management practices.

CW-13

In our Ag Partner Submittal, you'll find that we strongly disagree with the Draft Order's claim that the Regional Board has the legal authority to mandate riparian and operational setbacks and prohibit agricultural activities within these areas. The Regional Board may not regulate riparian habitat and native vegetative cover under the guise of water quality protection.

CW-14

There are situations however, where we envision that participating in a cooperative project that includes a riparian element as part of a multi-benefit approach could have a benefit to the grower or landowner and water quality, and therefore we detailed an option for that type of circumstance in our approach. We came together with various conservation organizations, including the Resource Conservation District of Monterey County and the Central Coast Wetlands Group among others, as these are organizations that we've had a history of working collaboratively with to support projects that benefit water quality and help sustain productive agricultural lands. These have included the Moro Cojo Treatment Wetland project as well as the Salinas River Stream Maintenance Program. Based upon these partnerships, and a history of trust-building and collaboration, we ventured to understand whether we might be able develop mutual core objectives for identifying when a cooperative project that has multiple benefits would be best suited in the irrigated lands context.

Based on this collaboration, the Ag Partner Submittal envisions a Cooperative Watershed Restoration Plan that, once approved and if meeting interim and final milestones, would allow participating growers/landowners to comply with surface water receiving limits for that watershed. (This is similar to municipal stormwater permitting approaches whereby municipalities are in compliance with limits if they are implementing approved plans.)

We have collectively created an option that encourages projects that result in riparian establishment, re-establishment, and/or enhancement projects that benefit water quality objectives for sediment, toxicity, nutrients, and/or temperature for growers and landowners who see benefit in that choice. The project must do more than preserve and protect riparian areas, it must also have a water quality nexus. Projects must also have reasonable and appropriate success criteria, a schedule of implementation with interim milestones, monitoring and recordkeeping, and a plan to sustain the project.

We also foresee growers and landowners working with conservation entities and professionals that have knowledge, information and experience in riparian area management or watershed restoration projects. As written in the Ag Partner Submittal, we believe that these types of projects will improve water quality and provide incentives for

CW-14 cont.

participation that will make them sustainable. We also believe we have the conservation partners in our region who are similarly focused on using tools to identify areas where these types of projects will have positive influence on water quality rather than prescriptively mandating riparian vegetation that will create food safety concerns in areas that are not suited for its establishment.

CW-15

Food Safety & Unintended Consequences

The comments that we and our members have submitted previously related to food safety, and associated citations made to research still apply. It's important to remember that the food safety buffers that we have referred to aren't only buyer requirements, they are based on genuine concern for public health. Colby Pereira and Jynel Gularte cited Michele Jay-Russel's research "*What is the risk from wild animals in food-borne pathogen contamination of plants*" (July 2013) in their September 2019 presentation to the Regional Board, noting that pathogen movement by birds and rodents remain a legitimate concern. We repeat those quotes here.

"Wild rodents and birds are common in agricultural areas, and may represent a potential source of Salmonella contamination of plants. Birds aggregating in large numbers may cause heavy faecal contamination of the production environment, especially under roosting areas (powerlines, trees)." Michele T. Jay-Russell (2013)

"Owing to the low infectious dose of zoonotic enteric pathogens and the potential for attachment and possibly ingress into edible parts of plants, even a low level of contamination from faecal pathogens represents a significant public health concern."
Michele T. Jay-Russell (2013)

Despite our food safety concerns, the Regional Board has continued to pursue these riparian areas on a broad scale, instead of focusing on areas where there's mutual benefit to the grower or landowner and the water quality objectives.

Since our last public meetings about this topic, the Food and Drug Administration published a report on the outbreak that occurred last fall, titled "Factors Potentially Contributing to the Contamination of Romaine Lettuce Implicated in the Three Outbreaks of E. coli O157:H7 During the Fall of 2019" (FDA Report). That report is attached to this letter.

In the FDA report's summary of factors potentially contributing to contamination, animal activity is noted as a potential source.

"FDA notes evidence of wild animal activity including rodents and birds near the examined fields, which warrants consideration as a possible source(s) or route of the human pathogen found in the contaminated product." FDA Romaine Outbreak Report (May 2020)

We implore the Regional Board to move away from their current trajectory of attempting to force the establishment and farming of riparian areas that will attract further birds and

CW-15 cont. rodents into our fields, without the legal authority to do so, and instead encourage Cooperative Watershed Groups as envisioned in the Ag Partner Submittal.

CW-16 We also encourage review of the points made by Kay Mercer of Provost & Pritchard regarding the proposed riparian management provisions, especially as it relates to conversion of farmland and associated local, State and Federal Laws in place to protect it; the effect these requirements could have on Williamson Act contracts; the principles of riparian areas and associated connection with water and moist soils; the natural history of soils and plant communities in the region; the decades of multi-benefit and stakeholder partnerships that have thrived in the region; the draft requirements' potential to contribute to levee failure; the potential for increased fire risk; and more. We believe these are compelling and important points related to the infeasibility and unintended consequences of the Draft Order's proposed riparian management areas.

Economic Analyses

CW-17 Within the Ag Partner Submittal, you will find a comprehensive review of the Draft Environmental Impact Report (DEIR) published as part of your draft order. We are concerned that this EIR is not adequately detailing the project, and therefore isn't sufficiently analyzing the order. Additionally, assumptions made, such as that in Attachment A (Additional Findings and Regulatory Considerations) that the costs of in-house staff capable of submitting reports related to this order is approximately $45/hour is significantly lower than our estimations of costs for that type of work, especially given the complexity of this Draft Order, the fact that many growers must hire outside consultants to assist with compliance reporting, and that this number, especially if accounting for in-house staff overhead costs such as insurance requirements and compensation packages, is significantly less than that which is actually being paid at a fair market rate for these services. Our estimate is that the cost is at least higher than $100/hour, and probably more, depending on the type of work being done.

CW-18 We also wonder why the study published by Hamilton and McCullough, *A Decade of Change: A Case Study of Regulatory Compliance Costs in the Produce Industry* (Dec. 15, 2018), wasn't referenced in the cost study, as it provided a current analysis of all of the cumulative factors that are contributing to grower costs in today's regulatory context, as well as those that are expected in the coming years. According to this study, regulatory compliance costs have increased 795% for a typical Central Coast leafy-greens grower.

In particular, we take exception to this statement in the DEIR:

"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.)

Public testimony has been made by our members detailing the costs of the irrigated lands order, based upon their experience as Tier 3 growers in the current order. Specifically, in a January 21, 2019 letter to the Regional Board regarding the matrix options, Mark Mason of Huntington Farms noted that in 2018, their gross estimate of total costs of Ag Waiver

CW-18 cont.

Compliance plus ILRP-related management practice improvements was $286,298 or $83.09 per acre. They then reference that of those costs, the compliance costs for their Tier 3 acres is $99.10/acre, as compared to $14.62/acre for their Tier 1 & Tier 2 ranches. They further surmised that "it can only be assumed that costs associated with both draft options [staff options 1 & 2 at the time] will not only exceed the current Tier 3 compliance costs; but will be substantially higher. It might not be unreasonable to estimate that costs could be double current Tier 3 costs, once all of the compliance requirements are revealed and adopted."

That dramatic increase of $14.62/acre to $99.10/acre is already substantial for growers who haven't had to do edge-of-operation monitoring or INMP reporting. Imagine that jump actually doubling to $198.20/acre. For many, that much of a jump in regulatory costs, combined with the various regulatory costs already in place and coming (as referenced in the study by Hamilton and McCullough), could make their businesses unprofitable and therefore unsustainable.

CW-19

Because of our substantial concerns with costs associated with the Draft Order, and the lack of any real economic consideration contained in the Draft Order or the DEIR, the Ag Partners retained ERA Economics to provide an objective review of the proposed nitrogen discharge limits and develop example per acre compliance costs for iceberg lettuce, which are extended to a partial economic impact analysis of total lettuce production in Monterey County. This and another report focused on deficiencies in the DEIR economic analysis, are included in the Ag Partner Submittal.

CW-20

Summary conclusions from ERA, applying to lettuce in Monterey County only, included:

- 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.
  - 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.
  - Labor wages fall by between $54.1 million and $309.4 million per year.
  - Value added, which is a measure of net local economic activity, falls by between $85.6 and $489.6 million per year.

CW-21

- Losses to consumers due to higher lettuce prices are estimated between $87.4 and $472.6 million per year.

CW-22

- 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.

CW-23

- 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.

CW-24

- 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.

CW-25 (See Ag Partners Submittal, ERA Economics, Technical Memorandum No. 2, p. 2.)

CW-26 In ERA's expert opinion, the costs of this order are very significant, and a more thorough analysis, as defined by ERA Economics should be undertaken immediately.

CW-27 It's important to also note, that ERA's analysis was based upon publicly-available information, and that represents the information that was also readily available to the Regional Board. However, it should be noted that their analysis of related to losses (ERA Economics, Technical Memorandum No. 2) was based upon an average land rent value of $1,900/acre, which ERA noted is conservative. Speaking to growers in Monterey County, our understanding is that land rents can be as high as $4,000/acre, and the average throughout the County is considered to be closer to $2,200. We bring this up to further substantiate the important findings in the ERA technical report, and note that actual losses may be even higher, due to the figures having been cited through public sources and not grower interviews.

CW-28 Additionally, the ERA reports (ERA Economics, Technical Memorandum No. 1 and 2) refer to changes in crop composition as a potential outcome of these regulations. It's important to note that in Monterey County there is not a readily identified profitable crop to switch to different from those we are growing now. Instead, we've phased out or grow much less of some crops due to their unprofitability over the years (e.g. sugar beets) and a switch to most other crops would not be feasible at the current rent rates.

CW-29 ERA's technical approach includes five steps that focus on incremental compliance costs for actions and equipment, monitoring and record-keeping and administration; an assessment of how regulatory costs would apply to different crop categories, regions and alternatives; development of a regional agricultural economic model to evaluate how costs by each alternative will affect agricultural production, returns and land use; use results from that model to evaluate direct effects on agricultural income output and jobs and then extend the analysis to the broader economy and include disadvantaged communities; and use the results of all of these to assess the significance of socioeconomic, agriculture resource, land use, environmental justice, and other associated impacts, then revise the DEIR. (ERA Economics, Technical Memorandum No. 1, p. 17-18.)

CW-30 The Regional Board must conduct this comprehensive and transparent analysis prior to adopting ILRP 4.0.

CW-31 **Third Party Group**
Preservation, Inc. has shared with us their submittal, which includes in part, a document titled "Appendix B" which complements our Enhanced Surface Water Follow-up Program (ESWFP) proposal. As you know, we have been proponents of having a third party carry out

CW-31 cont.

certain components of this Order. These elements include: the ESWFP, which provides grower support, education and outreach and watershed-based analysis; continued implementation of the Cooperative Monitoring Program (CMP); and facilitation of a new cooperative Groundwater Trend Monitoring Program.

We appreciate that third-party implementation programs have been contemplated as an option for compliance within the Draft Order, and we look forward to actively participating in the process for identifying a third-party to assist farmers in ILRP 4.0. We also appreciate Preservation, Inc.'s thoughtful approach to considering the elements of a third party in their comments, and we are supportive of their continuing to consider their role as a third-party entity as we proceed in developing ILRP 4.0.

CW-32

Public Posting of Forms & Trade Secrets

As you prepare to adopt a new order, we also want to encourage the Regional Board to balance interest in the public's need to know information with the safety and security of agricultural operations, as well as respecting trade secret claims, especially as more information, and information specifically about crop removal, is being reported to the Regional Board. This is a new data point that in other regions is reported in aggregate, not directly. As the Central Coast Regional Board has been very clear that they will not accept applied (A) or removed (R) data reported in aggregate, we ask that you give significant consideration to trade secret claims, as this data being reported now is unique and has, for decades, been confidentially held by agricultural businesses.

Last fall, the Regional Board began posting ILRP information, specifically the eNOI form, on Geotracker directly. Although this information had historically been publicly available through a Public Records Act (PRA) request, this creates a significantly increased level of exposure to information that could be used in ways that could harm agricultural stakeholders. Our concerns at the time, and today, include the fact that no other region's Irrigated Lands Regulatory Program is posting this level of information on a public website.

This means Region 3 enrollee information will be much more publicly accessible than that of any other region in the state without a PRA request. A PRA request provides for some level of accountability and acts as a barrier to nefarious activity because it requires the requesting person to share some personal information as well. While the data collected (and submitted to a public agency) can currently be obtained through a Public Records Act request, that process at least ensures that the public agency (as well as those whose data and information is being shared) is aware of who is requesting such data and information.

This is important because it provides for some level of accountability should individuals residing in homes be bothered or harassed by members of the public based on the availability of this information. Conversely, the availability of this data on the internet through the GeoTracker database eliminates any level of accountability and allows for this data to be obtained by anyone, anywhere, anonymously.

CW-33

Additionally, we have no insight into what will be added to the eNOI in the future, which will now be public. What will the process be? Will stakeholders be included in these discussions?

CW-33 cont.

Regional Board staff, related to the posting of the eNOI, were responsive to some of the concerns we raised in this regard, specifically regarding personal contact and residential information, and the fact that maps may show more detail than required by the Regional Board. With that feedback, they allowed for portions of the form to remain private, extended deadlines and allowed us time to encourage members to amend maps, which we appreciated.

CW-34

However, we are concerned that this is the beginning of an effort to post all submitted materials directly to GeoTracker, with no PRA requirement attached. To that end, it is imperative that there be a public process associated with any decision by the Regional Board to post this information publicly. When groundwater well locations became public in early 2016, it was based upon legislation that amended state law (WC section 13752) that allowed, upon request, the public to obtain access to well completion reports. The State Water Board then initiated a public process to discuss whether or not this information should be posted on GeoTracker. There was no similar public process in this situation as it related to the eNOI form, and that must be remedied before any other information is publicly posted to GeoTracker.

Thank you for your consideration of my comments. Please contact me at 831-422-8844 with any questions.

Sincerely,

Abby Taylor-Silva

Abby Taylor-Silva
Vice President, Policy & Communications

Attachments

Attachment A. Investigation Report: Factors Potentially Contributing to the Contamination of Romaine Lettuce Implicated in the Three Outbreaks of *E. Coli* O157:H5 During the Fall of 2019

Note to Readers:

The materials provided in Attachment A 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 CW-1

Thank you for your comment. The CCWB acknowledges the commenter's background and interests.

Response to Comment CW-2

Thank you for your comment.

Response to Comment CW-3

Thank you for your comment.

Response to Comment CW-4

This comment is noted.

Response to Comment CW-5

The comment states that the Nitrogen Fertilizer Application Limits proposed in the DAO are void of legal justification and directly contravene the State Water Board's direction in the ESJ Order. The comment further states that the State Water Board's focus was on outlier and target values, for the purpose of making progress toward reducing nitrogen waste discharges. The underlying water quality order addressed in the State Water Board ESJ Order does not include application limits, and therefore, the ESJ Order does not provide specific direction. Please also refer to Response to Comment BN-19 discussing the legal justification for establishing nitrogen fertilizer application limits. The Order's Findings explain the connection between overapplication of fertilizer and exceedances of the nitrogen water quality objectives in groundwater, as well as the use of the outlier approach to establish the fertilizer nitrogen application limits. (See Attachment A, Findings, pages 96-101, paragraphs 12-24.) By establishing crop-specific fertilizer application limits at the 90th and 85th percentile of data received from 2014 to 2019 TNA reporting information during, RAO 4.0 takes an outlier approach as the vast majority of dischargers are expected to meet the crop-specific application limits. Similarly, the application limit for all other crops is set at a "per acre, per crop" level that 98 percent of those crops are currently achieving. Please also refer to Master Response 2.3.10 (Fertilizer Application Limits).

Response to Comment CW-6

This comment is noted.

Response to Comment CW-7

This comment is summarized and responded to in Master Response 2.5.3.

Response to Comment CW-8

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

Response to Comment CW-9

This comment is summarized and responded to in Master Response 2.2.3.

Response to Comment CW-10

This comment is summarized and responded to in the following Master Responses: 2.1.8 and 2.2.3.

Response to Comment CW-11

This comment is summarized and responded to in Master Response 2.5.5.

Response to Comment CW-12

This comment is summarized and responded to in the following Master Responses: 2.5.5; 2.5.3; and 2.5.4.

Response to Comment CW-13 through CW-16

This comment is responded to in Master Response 2.8.8.

Response to Comment CW-17

The comment expresses concern that the DEIR does not adequately detail the project. The comment does not indicate any specific instances where the DEIR lacks detail; however, the comment indicates that the "Ag Partner Submittal" comments include a comprehensive review of the DEIR. Please refer to the CCWB's response to the Ag Partner Submittal [Comments BN-01 through BN-566].

In addition, the comment expresses concern that CCWB's estimate of hourly costs for in-house staff for completion of compliance reporting is too low. Please refer to Master Response 2.9.1.

Response to Comment CW-18

The comment expresses concern that the DEIR improperly concluded that DAO 4.0 would have less than significant impacts on agricultural land conversion due to economic impacts. The comment refers to a study published by Hamilton and McCullough, *A Decade of Change: A Case Study of Regulatory Compliance Costs in the Produce Industry* (Hamilton and McCullough 2018). The study documents the rising costs of regulatory compliance for a lettuce farm in the Salinas Valley. The study examines the cost of all regulatory compliance costs, including education and training, air quality, pesticide regulation, food safety, workers compensation, worker health and safety, and wage requirements. The study concludes that the cost of all regulatory compliance for this farm rose from $109.16 per acre in 2006 to $977.30 per acre in 2017. However, the study does not examine or make conclusions about whether these costs would have any impact on a farm's ability to do business, make profits, or result in a conversion of agricultural land.

In addition, the comment cites a January 21, 2019 letter to CCWB from Mark Mason of Huntington Farms, describing a rise in compliance costs as a result of compliance with previous Agricultural Waiver requirements. A copy of the referenced letter is not included with the comment. Without a specific review of the referenced letter, CCWB is not prepared to comment on its contents. CCWB recognizes that RAO 4.0 will result in increased compliance costs for some agricultural operations. However, the comment does not provide substantial evidence that the increased cost of compliance would result in a significant impact related to the conversion of agricultural land. Please refer to Master Response 2.10.

Response to Comment CW-19

The comment states that the Ag Partners retained ERA Economics to review compliance costs for iceberg lettuce and that review is included in the "Ag Partner Submittal." Please refer to the CCWB's response to the Ag Partner Submittal [Comments BN-01 through BN-566]. In addition, please refer to Master Response 2.9.1.

Response to Comment CW-20 through CW-30

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

Response to Comment CW-31

This comment is summarized and responded to in the following Master Responses: 2.9.1; 2.2.5; 2.2.3; and 2.5.7.

Response to Comment CW-32

The comment requests that the CCWB give significant consideration to trade secret claims related to the nitrogen removed data reported to the CCWB, as this data being reported now is unique and has, for decades, been confidentially held by agricultural businesses. The comment also states that allowing ILRP information, specifically the electronic Notice of Intent (eNOI) form, on the internet through the GeoTracker database eliminates any level of accountability and allows for this data to be obtained by anyone, anywhere, anonymously, whereas information sought through a Public Records Act request provides for some level of accountability and acts as a barrier to nefarious activity because it requires the requesting person to share some personal information as well.

The concern that nitrogen removed data may be a trade secret is noted. As appropriate, the CCWB will update its trade secrets guide for Dischargers (Resources for Growers, Protection of Trade Secrets and Secret Processes, available at https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/resources4growers/trade_secrets_guide.pdf), which is consistent with the process described in the Monterey County Superior Court's Statement of Decision in Rava Ranches, Inc., et al. v. California Regional Water Quality Control Board, Central Coast Region, et al., (Case No. 16CV000255):

1. If no [California Public Records Act (CPRA)] request has been made, then Water Code section 13267 (b)(2) imposes a mandatory duty on Respondent to refrain from making portions of a report available for public inspection when (1) requested by the person furnishing a report, and (2) the portions of the report might disclose trade secrets.

2. If a CPRA request for the records has been made, then Water Code section 13267(b)(2) imposes a mandatory duty on Respondent to refrain from releasing portions of a report to the public when

    a. requested by the person furnishing a report,

    b. the report contains trade secrets as defined by [the California Uniform Trade Secrets Act]; and

c. the interest in maintaining the confidentiality of the trade secrets outweighs the public interest in disclosure. (See Wat. Code, § 13267, subd. (b)(2); see also Gov. Code, § 6254, subd. (k); see also Evid. Code, §§ 1060 & 1061, subd. (a)(l); see also Uribe, supra, at p. 206.)

In providing access to eNOI information on GeoTracker, the CCWB's practice is consistent with the Public Records Act and mindful of individual privacy rights. The publicly-available information on GeoTracker does not include phone numbers or email addresses of operators, landowner, or the ranch/farm point of contact, nor the mailing addresses of the landowner or ranch/farm point of contact. Although most requesters of information under the Public Records Act do provide agencies with a name and contact information to facilitate the exchange of information, nothing in the Public Records Act precludes an anonymous request except in limited circumstances not relevant to the RAO 4.0. The CCWB cannot require requesters to identify themselves to obtain disclosable information. Finally, an agency may not require the requester provide the purpose for which the records are being requested. Due to the frequency with which certain types of information are sought through Public Records Act requests and the deadlines in which a State agency must respond, the CCWB has chosen to make some information, such as portions of eNOIs for the Agricultural Order, available to the public online.

Response to Comment CW-33

This comment is noted.

Response to Comment CW-34

The comment states a concern that all submitted materials directly to GeoTracker will be publicly available, with no Public Records Act (PRA) requirement attached and requests a public process associated with any decision by the Regional Board to post this information publicly. Prior to making a category of information available to the public through GeoTracker, the CCWB considers whether such information is disclosable under the Public Records Act. The CCWB does not believe that the process described in the comment is necessary.

Letter CX: Claire Wineman, Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties (June 22, 2020)

Letter CX

From: Claire Wineman
To: AgNOI, WB@Waterboards
Subject: Comments on Draft Ag Order; Comments on Draft EIR
Date: Monday, June 22, 2020 4:21:29 PM
Attachments: GSA SB SLO Ag Order 4.0 and DEIR comment letter 6.22.2020.pdf

EXTERNAL:

Good afternoon,

Please see attached.

Thank you,
Claire

Claire Wineman
President
Grower-Shipper Association of
Santa Barbara and San Luis Obispo Counties
534 E Chapel St
Santa Maria, CA 93454
Phone: 805.343.2215
Cell: 805.868.8245
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Email: claire.wineman@grower-shipper.com

Grower Shipper ASSOCIATION of Santa Barbara and San Luis Obispo Counties

June 22, 2020

Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
Submitted via email to AgNOI@waterboards.ca.gov

Re: Ag Order 4.0 Public Review Draft and Draft Environmental Impact Report

Dear Chair Wolff:

CX-1 The Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties represents over 170 growers, shippers, farm labor contractors, and supporting agribusinesses. Our members grow diverse field and nursery crops such as broccoli, strawberries, vegetable transplants, and wine grapes. We recognize that the implementation of the Order will continue to have a lasting impact on the ability of farmers to grow safe, healthy produce on the Central Coast and support vibrant rural communities.

CX-2 **We emphatically support the Ag Association Partners' Comprehensive Submittal, Including Redline Revisions to the General Order (Ag Partner Submittal).**

These comments are intended to complement our joint submission with our agricultural partners. We would like to briefly highlight a few issues of particular importance to our members and issues that we have previously articulated in our January 21, 2019 comment letter regarding the Ag Order 4.0 Proposed Options Tables and April 30, 2018 joint letter regarding CEQA scoping (hereby incorporated by reference and made a part hereof).

CX-3 As detailed in the Ag Partner Submittal, we are concerned with the Ag Order prescribing requirements that are not reasonably feasible to implement given social, economic, or technical constraints. We oppose the focus on numeric limits, especially related to Irrigation and Nutrient Management, and individual monitoring for enrollees who make a good faith effort to comply. We are particularly concerned with policies that could compromise food safety, including those that are prescriptive of vegetation or onsite water retention.

CX-4 We remain concerned with policies that create a disincentive to utilize irrigation water that is high in nitrate.

CX-5 We continue to advocate for reporting requirements that generate meaningful data and balance the level of detail with the reporting burden. This includes: utilizing estimates, rather than measurements, especially as it pertains to the irrigation and nutrient reporting requirements; developing a range of values when considering crop coefficients for nitrogen removal and adequate time to consider the diversity of crop types and varieties grown on the Central Coast; establishing time schedules that are realistic and consider administrative constraints; considering the dynamic land tenure and rotation of operators and crops on the Central Coast; and considering implementation constraints, such as lab certifications, analytical capabilities, and capacity; the availability of technical assistance resources, especially with specific certifications or qualifications; and other implementation barriers impacting feasibility.

GROWER-SHIPPER ASSOCIATION OF SANTA BARBARA AND SAN LUIS OBISPO COUNTIES
534 E Chapel St • Santa Maria, CA 93454 • (805) 343-2215

Grower Shipper ASSOCIATION of Santa Barbara and San Luis Obispo Counties

CX-6 We support the Ag Partner Submittal regarding Sediment and Erosion provisions and Cooperative Monitoring Program. As articulated in previous comment letters, agriculture on slopes has provided protection of life and property in places like the South Coast of Santa Barbara County. Additionally, the use of impermeable plastic mulch and impermeable hoop houses facilitate the cultivation of certain crops types that offer employees choice in working environment, income, and employment and can be an important tool for plant health and integrated pest management.

CX-7 The CEQA analysis has failed on numerous fronts, including responding to legitimate concerns raised in the April 30, 2018 joint comment letter regarding CEQA scoping and detailed in the Ag Partner Submittal.

CX-8 Our members renew their ongoing commitment to continuing to improve water quality. We urge the Water Board to carefully consider and incorporate the Ag Partner Submittal in Ag Order 4.0.

Sincerely,

Claire Wineman

Claire Wineman
President

GROWER-SHIPPER ASSOCIATION OF SANTA BARBARA AND SAN LUIS OBISPO COUNTIES
534 E Chapel St • Santa Maria, CA 93454 • (805) 343-2215

Response to Comment CX-1

The CCWB acknowledges the commenter's background and interests.

Response to Comment CX-2

This comment is noted. Please refer also to Master Response 2.1.14.

Response to Comment CX-3

This comment is summarized and responded to in the following Master Responses: 2.8.8.; 2.9.1; 2.1.11; 2.1.2; and 2.3.3.

Response to Comment CX-4

This comment is summarized and responded to in Master Response 2.3.9.

Response to Comment CX-5

This comment is summarized and responded to in the following Master Responses: 2.1.5; 2.3.7; 2.3.1; 2.3.10; 2.3.3; and 2.3.4.

Response to Comment CX-6

This comment is summarized and responded to in the following Master Responses: 2.7.5 and 2.7.1.

Response to Comment CX-7

The comment expresses concern that the CEQA analysis does not respond to the commenter's concerns raised in the April 30, 2018 joint comment letter regarding CEQA scoping. The comment does not describe these concerns but indicates that they are detailed in the "Ag Partner Submittal." Please refer to the CCWB's response to the Ag Partner Submittal [Comments BN-01 through BN-566].

Response to Comment CX-8

Thank you for your comment.

Letter CY: Jynel Gularte, Rincon Farms, Inc. (June 22, 2020)

Letter CY

6/22/2020

Dear Matthew T. Keeling, Executive Officer,

CY-1 We are all well aware that agriculture has been the main industry of the Central Coast for decades. Our farmland quite literally nurtures our bodies, supports our communities (on both an economic and physical level), provides jobs, and preserves rural landscapes. We would not be where we are today without the careful management and care that farmers have given to our soil and been able to pass down from generation to generation. Farmers continue to look for better ways to farm to further preserve their land for the future to come. With advancements in technology and management practices in our industry there have been noted setbacks. We learn, we adapt, we change and we manage. It is important to note that laws and regulations are there to help manage resources and to provide judgement for the 5% of people who choose to break them.

Many groups, agencies or regulatory bodies want to "work with" agriculture yet so often we in agriculture have to constantly defend ourselves. Defense and offense are not collaborative. Open discussions, understandings and compromise need to be recognized so that we can achieve *feasible*, *attainable,* and *realistic* goals.

CY-2 I would like to first recognize that there are some unintentional paradigm shifts that are being proposed within Ag Order 4.0. The water board needs to address and recognize how these shifts- not just within the agricultural community but society at large- will be combated by these proposed regulations. Realize that what this Draft Ag Order is asking is actually far more than what is solely suggested in the single context of the written regulations.

CY-3 The first paradigm is that the Draft Ag Order is a prescriptive, "one size fits all" approach. Every farm, every business, every parcel of land is different. Second, the change in management of farms, such as fertilizer and pesticide management programs, will change the quality/aesthetics, quantity (yields), and potentially flavor of our produce. This is asking buyers of all levels across the nation and globe to sacrifice and change their view of food and produce. The average consumer of fruits and vegetables has a preconceived notion that all

CY-4 produce should look perfect. We grow our produce to our consumer demands/views. Produce brokers, buyers, chefs and consumers are looking for high quality produce. They seek perfection in quality and flavor while looking for reasonable pricing and unconsciously assuming 100% safety. We do as much as we can in the fields to provide a safe product while balancing a plethora of regulations. The management practices we use, such as fertilizer and pesticide management is to ensure top quality and safety. A change in these management practices will result in a change in the final product. The question remains, are consumers in line with this change? Is the board and staff aware of the potential for unintended consequences or change? Or maybe this is part of the unintentional demands the proposed Draft Ag Order is asking. The third paradigm shift is that farmers need to look to be price makers- increase our pricing to cover the costs of additional regulations and compliance. Quite the opposite is true; farmers are price takers. Our commodities are driven by the

CY-5 economics of supply and demand- we do not get to set prices; we are dependent upon the market. Thus a change in our cultural practices and yield will drastically change the market prices, demand and supply. Which this demand also ties into the second paradigm shift I mentioned- demand for quality produce. But what will that quality produce now look like after management changes? I also need to mention, there is the constant loom of foreign suppliers such as farmers from other countries (for example Central and South America) who, might I add, do not have the same amount of regulations as we do here in California, let alone anything like an Ag order or Waste Discharge Requirement Order. This provides quite the advantage for them to produce vegetables and fruit that align with consumer perception and demand along with a competing price. Because laws and regulations are different in other countries most often times they can be price takers of a lower price than American and Californian farmers.

6/22/2020

Ag Order Tables

Farm Plans and INMP Summary Report

CY-6 Plans for smaller farms will require significant professional expertise to develop and update, at considerable cost and there are not enough professionals to service all farms for these plans. Many small to medium sized farms do not have departments that can divide and conquer tasks or collect data. Small farms lack resources and monetary capital to complete compliance reporting calculations and will require technical assistance. Also to note, in light of recent events and supporting people of color, the 400+ pages or regulations does not encourage minority farmers or workers. Nor did I see any translated versions of the draft in any other language besides English.

Irrigation and Nutrient Management for Groundwater Protection

CY-7 We need more resources to invest in research for developing Central Coast specific coefficients for the proposed N applied exceedance and N removed. Without factual, evidence based research, any application or data is neither representative nor accurate. Requiring N removed also dives into the issue of intellectual property and trade secrets. By disclosing what we apply, how much water and what our yield is that encompasses much of our growing practices that are trade secrets and have taken years, even generations to develop. Also, what are the considerations for if there is a total crop loss due to market conditions, a natural disaster (i.e. flooding), food safety issue, pest/disease pressure, and/or other unforeseen factors? These situations are not the complete fault of the grower as we are beckoned by market conditions (consumer demand and supply), our shippers, our customers and Mother Nature. I highly recommend allowing for comment/pardon in such cases and such cases will occur. That is simply part of working in agriculture- accidents happen and we cannot predict the markets nor Mother Nature. A grower should not be penalized for and unavoidable crop loss due to factors that are out of our control. We can do everything right and something can still go wrong.

CY-8 In light of recent times this is a very real concern of complete losses or zero N removed in cases of unpredicted and unintentional disruptions to the market. During COVID-19 for example, many growers have had to disc unharvested product into the soil. This is almost considered an act of God, unforeseen or predicted by growers when we planted back in December 2019 or January/February 2020. There was no idea or notion that the market for some of our produce would quite literally disappear, leaving us with no outlet for acres of fresh, ready to harvest product, ultimately causing zero Nitrogen to be removed. Many farmers are struggling to pay workers, have had to cut back costs, and take out extra loans. Some businesses who have workers who are sick have additional regulations and costs to cover wages and medical care. And when this is all said and done we will still have to "pay" for these consequences because we had 0 Nitrogen removed. I encourage staff to consider an "off ramp" or exception if something that is unforeseen disrupts the market. This is not just limited to a pandemic- we saw a similar complete disappearance of markets for produce in 2006 with the E.Coli outbreak in spinach- which did not just leave acres of spinach to be plowed under, but due to a lack of education in consumers, most people thought all lettuce was contaminated leaving many other types of produce left unharvested. This sadly occurred again when we had food borne illness outbreaks in 2017 and 2018. Farmers had to disc product because there was no outlet, leaving us with zero Nitrogen removed. We had no idea a biological hazard would cause our vegetables that were planted months in advance to have no home. Other situations such as an uncontrollable crop disease or other reasons for low demand can cause zero nitrogen removed. It's in these situations (which I foresee to continue but hopefully not often), we need to have some help. No one can predict a pandemic or a biological hazard or even a natural disaster that could completely wipe out a market. We need to have some understanding for scenarios in which we have no control over.

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CY-9 In regards to nutrient management, does it make sense to classify a 30 acre ranch of organic vegetables and conclude that they have the exact same discharge as a 1,000 acre conventional grower? Organic growers can only use non-synthetic fertilizers (usually in the form of chicken meal, pellets or fish emulsion). These are 100% organic certified fertilizers which are generally insoluble in water. This insolubility makes them break down much slower and release nutrients more slowly allowing plants to more effectively uptake nutrients and in essence has little to no leaching with the proper management (Hadad and Anderson, Floriculture Research Report 19-04). The biological makeup of these fertilizers more closely match to the organic compounds found naturally in the soil. Thus, the chemical composition and bonds are stronger which makes them hold onto water better and break down much slower. Due to this slower breakdown, this means it's less likely for nitrogen to seep into groundwater. Also, many organic growers use cover crops in the winter or in rotation which helps in taking up any extra nitrogen or nutrients in the soil, sequesters more carbon from the atmosphere and is then used as natural fertilizer and organic material for our next crop. Having an organic certification should be proof of eligibility in crediting or reducing monitoring because of my points of N use/fertilizer in organics, which is highly different from conventional growers and they are audited annually to verify if that they are following the rigorous federally regulated organic standards which includes soil, fertilizer and water management. I highly suggest the reconsideration of classification for organic growers into less reporting or consider organic fertilizers similar to compost in regards to the credit of Nitrogen. Any management practice as recommended in the State Healthy Soils Program (which cover cropping, organic fertilizers or soil amendments and composting are) should be encouraged and supported. I support the equation proposal from Grower Shipper Association in which farm level practices are considered and credited to growers.

CY-10 The consideration of using Crop ET is also not helpful in that many CIMIS stations are inactive and there are not enough to be representative of every growing region on the Central Coast with our different microclimates.

Sediment and Erosion Control

CY-11 The precedential Eastern San Joaquin Irrigated Lands Program only requires Sediment & Erosion Control Plans in areas susceptible to erosion, not all slopes; the same should be applied to the Central Coast region. Storm water cannot be predicted nor controlled in high rate flow events, particularly on short notice; this requires construction and maintenance of retention ponds, at great expense. There must also be consideration of worker safety and liability. Most agricultural workers do not work during storms or heavy rains. It is important to consider worker safety and OSHA/CALOSHA standards. Monitoring and reporting of surface (storm water) discharges will be difficult and dangerous to achieve.

CY-12 In addition, what is the relevance of crop evapotranspiration for the water board? How do we measure irrigation discharge to surface water and groundwater? Do growers pay an employee to measure flow rate during a storm event? The minimum wage will reach $15 per hour by 2022 (in agriculture we are almost at that level in 2020) and our workers will have a 40 hour work week by 2022 with any excess hours being considered overtime (which is 1.5X the minimum wage). Will farmers be compensated or credited for this increase in work, money and monitoring or is this now considered part of the cost of doing business?

CY-13 Some incentives should be if a grower diverts irrigation tail water or uses and saves their own surface water through a reservoir or pond to treat and use again on their ranch for irrigation. There is research being done in the food safety sector to see if this will be a conflict of interest in food safety but with scarce and limited water supplies this is something innovative and needed for the future. Growers should not be penalized for catching/keeping their own water to either reuse (for germination or pre-irrigation/weed management) or treat. This seems even like an even better option then letting it be discharged.

Groundwater monitoring and Reporting

CY-14 The precedential Eastern San Joaquin Irrigated Lands Program only requires an averaging of irrigation wells, not all; the same requirement should apply here. In the past there were allowances for much higher or lower than the MCL for domestic wells; those allowances should remain in place, to require less frequent domestic

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CY-14 cont. well sampling in certain situations. Wells with historical data that is compliant to mineral levels should have less frequent sampling. Individual groundwater trend monitoring will be difficult to substantiate trends due to groundwater movement in any aquifer or sub-basin and is quite difficult for individual growers to achieve on their own. Many do not have the capital or technology to do such things on their own. Trend monitoring by a third-party will require data aggregation from multiple wells and cooperation from multiple ranch managers and/or landowners. Ranch-level groundwater discharge monitoring and reporting is punitive and will not provide additional insight into groundwater quality. There are no metrics for determining that a well must be monitored for pesticides and this type of testing is extremely expensive.

Surface receiving water monitoring and reporting

CY-15 Central Coast agricultural organizations have been working on a watershed-based third-party group concept for surface water monitoring and reporting; this process should be encouraged by CCRWQCB and implemented in priority watersheds.

Growers who farm near impacted waterways may already be taking practices and measurements to prevent any water from leaving their ranch. It should not be a penalization for their location near an impaired waterway when they themselves are not contributing to the impairment. These growers should actually be incentivized for managing their water and preventing runoff into the already impaired canal or waterway.

CY-16 It is important to note that organic growers who are certified through an accredited association like CCOF or ASCO are regulated under federal law and must document all input applications including input type application date, location. Organic growers are inspected annually to maintain certification and to verify if they are following the rigorous organic federal standards, one of which is the use of 100% certified organic fertilizers and pesticides. They are banned from the use of all traditional synthetic pesticides which hugely limits pest management practices. Certified organic pesticides are "derived from natural substances such as plants or bacteria, go through a strict regulatory approval process to ensure they are not harmful to the environment and human health, and are only allowed to be used when other pest control methods aren't successful" (Non GMO Report, 2017). There are only 25 federally registered organic pesticides, where as there are 900 federally registered conventional pesticides.

CY-17 Some incentives or credits should be considered for catch ponds/reservoirs, treatments ponds, bioreactors, cover crops, lined water ways, no run off water, organic inputs such as organic fertilizers and pesticides/ biopesticides. Incentives for the following best management practices should be less monitoring/less reporting or a later phase in of these ranches for reporting. Or an adjusted price or monetary credit based on ranch acreage. Erosion plan, cover crop, buffer areas, lined water ways, sediment management plan should all be considered as incentives to being placed in a different phasing or prioritization and or less reporting/monitoring. Sustainability certificates could also be an incentive or an exemption too based on their own requirements for erosion control which SIP (Sustainability in Practice) requires and growers are audits annually.

Riparian Area Management and Setbacks

CY-18 Installation of new riparian vegetation as a requirement for water quality compliance is not consistent with CCRWQCB authority related to an Ag Order (waiver) or Waste Discharge Requirements Order, and should not be mandated. What scientific evidence is being used to prove that if no irrigation tail water is being discharged into a riparian area that water quality can be improved? If no irrigation tail water is being discharged from a grower managed or landowner parcel why should there be a buffer? Where is the start of this buffer? We should not be required to pay to set up our new fences due to this buffer. Riparian setback expansion will reduce field production areas, impacting crop production yields per acre and costs of production (reducing financial return per acre- which this return is how farmers will pay for additional regulatory costs and proposals in this Ag order). For landowners, loss of production areas will reduce rental income and possibly overall land

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CY-18 cont.

value. Many landlords are elderly people who are on a fixed income, much of which is their rent. All of these economic impacts were not quantified or discussed in the Draft Environmental Impact Report (DEIR). Establishment of vegetation will add costs and take significant effort, along with maintenance, and will require irrigation and possibly fertilizers along with pest management to establish. Additional water use in these areas also will contradict water allocation and supply based on new restrictions from SGMA (Sustainable Groundwater Management Act). Significant conflicts with food safety measures come with vegetative setbacks adjacent to production fields. More land will need to be buffered from the buffer due to food safety regulations. This also increases the probability of feeding and defecation in production areas. Riparian setbacks should be a management practice elective by farm, and incentivized, in watersheds where these are scientifically reasonable mitigation strategies, not a prescriptive requirement for compliance.

CY-19

Another consideration in riparian areas is controlling public access and illegal activity. For decades people have been off-roading in local streams and water ways, causing habitat damage and loss, disruption, litter, pollution, and worker safety hazards. Some of this illegal dumping includes needles, lead bullets and shells along with many other types of debris. Not to mention the channel damage to the river that vehicles cause. A farmer would be fined for not having to drive a tractor into the river to fix a levee or remove invasive species yet the damage done by off roading vehicles is almost always left with no consequence. See some photo evidence below:

Channel damage in the Salinas River



6/22/2020

CY-19 cont.

Habitat disturbance in the Salinas River



Illegal shooting and safety concerns under Chualar River Road Bridge



6/22/2020

Economics

CY-20 The proposed Draft Ag Order 4.0 would result in substantial economic impacts (i.e. precipitous drop in land values and property taxes, and lease rates) that were not quantified or discussed in the Draft Environmental Impact Report (DEIR). Economic review in the DEIR does not evaluate the economic impacts on jobs, land use, and agricultural resources if Ag Order 4.0 is adopted. Property taxes do a great deal of funding for many community and government services. The DEIR includes estimates of some costs and requirements that would almost certainly result in changes in the physical farming environment. Costs of nitrogen discharge requirements, compliance with surface water discharge limits, riparian setback areas and other key substantive provisions are not estimated. Examples of these costs include, but are not limited to:

CY-21 - Meeting the nitrogen discharge limits in the Ag Order would require reducing applied nitrogen and/or incurring additional management costs. This would result in potential changes to yield, quality, and costs that affect the mix (or number) of crops that can be grown in the region and lead to land being idled and permanently removed from production.

CY-22 - Implementation of the operational and riparian set-backs will automatically result in land-idling and land use changes because commercial crop production is prohibited in such areas.

CY-23 - 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.

CY-24 - 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. This will also be the same for economic impact on farmers- complicated and speculative.

CY-25 The key economic impacts would be driven by:

- Direct costs of fees, assessments, labor and paperwork.

CY-26 - Changing management practices, inputs, rotations, and land use to comply with discharge targets/limits (additional direct costs). This would include the effect of nitrogen discharge limits on the ability to continue multi-cropping (2-3 crops/year) that is prevalent in the Central Coast and directly contributes to current land and lease values in the region, as well as ability to meet surface water discharge limits using currently available pesticide chemistries.

CY-27 - Changing land use / taking land out of production to comply with riparian and operational setback requirements and developing a RAMP.

CY-28 - Opportunity cost of management time for compliance paperwork, training, and other administration. The economic impacts of Ag Order 4.0 are likely to result in broader policy implications.

CY-29 - 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.

CY-30 - Impacts disproportionately fall on disadvantaged or severely disadvantaged communities (DAC/SDAC) because these communities are where people that work the fields, coolers, processing facilities, and equipment often reside.

CY-31 - Regulatory costs are cumulative. In addition to the Ag Order, the Central Coast is 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 subbasins. 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 impact analysis of additional regulations specified under the proposed Order. In the past decade, regulatory compliance costs have increased 795% for a typical leafy-greens grower. So far in the Draft Ag Order Proposal I have yet to see monetary incentive or monetary credit for any measures done by growers.

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CY-32 The bottom line is that farming economics will change if Ag Order 4.0 is adopted as proposed. Not to mention that this is a time of great economic uncertainty for the farming community. Lower production values will lead to job losses, impacting communities with higher levels of unemployment and lower tax revenues. Regulatory compliance costs will reduce available funding for capital improvements. Change of land use due to land idling will become a much larger issue for Central Coast counties, possibly creating our very own dustbowl which in itself will have environmental and societal impacts.

CY-33 **Final Thoughts**

Farmers are being stretched thin with resources, labor, time and productivity by having to follow an onset of new regulations year after year from multiple regulatory agencies.

CY-34 I highly recommend and support the letters and proposals by the Grower Shipper Association, Farm Bureau, Resource Conservation District and UC Farm Extension Service recommendations. Please look and lean upon the "Ag Association Partners' Comprehensive Submittal, Including Redline Revisions to the General Order (Ag Partner Submittal)." It is only with collaboration and communication can we achieve goals together and in solidarity. Thank you for your consideration, I know this task is not easy, but nor will it be easy to comply with.

Sincerely,



Jynel Gularte

Controller and Compliance

Rincon Farms, Inc.

Response to Comment CY-1

Thank you for your comment.

Response to Comment CY-2

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

Response to Comment CY-3

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

Response to Comment CY-4

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

Response to Comment CY-5

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

Response to Comment CY-6

This comment is summarized and responded to in the following Master Responses: 2.1.7 and 2.1.4.

Response to Comment CY-7

This comment is summarized and responded to in the following Master Responses: 2.1.11 and 2.3.3.

Response to Comment CY-8

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

Response to Comment CY-9

This comment is summarized and responded to in the following Master Responses: 2.1.7; 2.1.8; 2.2.2; and 2.2.3.

Response to Comment CY-10

This comment is summarized and responded to in Master Response 2.3.9.

Response to Comment CY-11

This comment is summarized and responded to in the following Master Responses: 2.7.5; 2.7.6; and 2.7.1.

Response to Comment CY-12

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

Response to Comment CY-13

This comment is summarized and responded to in the following Master Responses: 2.1.8 and 2.3.9.

Response to Comment CY-14

This comment is summarized and responded to in the following Master Responses: 2.4.2 and 2.4.4.

Response to Comment CY-15

This comment is summarized and responded to in the following Master Responses: 2.2.2 and 2.5.5.

Response to Comment CY-16

This comment is summarized and responded to in Master Response 2.6.6.

Response to Comment CY-17

This comment is summarized and responded to in the following Master Responses: 2.1.8; 2.2.2; and 2.3.5.

Response to Comment CY-18 through CY-19

This comment is responded to in Master Response 2.8.8.

Response to Comment CY-20

The comment expresses concern that the DEIR did not evaluate certain economic impacts, including land values, property taxes, and lease rates. Please refer to Master Response 2.10. In addition, please refer to Master Response 2.9.1.

Response to Comment CY-21

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

Response to Comment CY-22

This comment is summarized and responded to in Master Response 2.9.2.

Response to Comment CY-23

The comment expresses concern that the economic analysis in the DEIR does not examine impacts to growers, linked industries (e.g., processing and shipping), communities, and the region. In response to the comment, please refer to Master Response 2.10.

Response to Comment CY-24

The comment states that the economic impacts on farmers as a result of DAO 4.0 will be complicated and speculative. The comment is noted. It does not address environmental issues evaluated in the DEIR, and no further response is necessary.

Response to Comment CY-25 through CY-26

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

Response to Comment CY-27

This comment is summarized and responded to in Master Response 2.9.2.

Response to Comment CY-28 through CY-33

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

Response to Comment CY-34

This comment is summarized and responded to in Master Response 2.1.14.

Letter CZ: Karl F. Wittstrom, Margarita Vineyards (June 22, 2020)

Letter CZ

From: Karl Wittstrom
To: AgNOI, WB@Waterboards
Subject: Comments on Draft Ag Order
Date: Monday, June 22, 2020 11:16:57 AM

EXTERNAL:

June 22, 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

Dear Executive Officer Keeling:

CZ-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.

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.

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.

CZ-2 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.

CZ-3 The Draft economic analysis fails to account for many factors such as, land fallowing, hiring

CZ-3 cont.

professionals, loss of production and the market. We are spending thousands per year on compliance from professionals currently. Additional reporting is time consuming and costly.

CZ-4

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,

Sincerely

Karl F. Wittstrom

Check out our event center www.oysterridge.com

Response to Comment CZ-1

Thank you for your comment. The CCWB acknowledges the commenter's background and interests. Please refer also to Master Response 2.3.10.

Response to Comment CZ-2

The CCWB appreciates that the comment that webinars have been helpful to the commenter. Please refer also to Master Response 2.1.4

Response to Comment CZ-3

This comment asserts deficiencies in the economic analysis, including deficiencies related to land fallowing, cost for professional support, loss of production, and the market. For comments related to adverse economic impacts resulting from implementation of DAO 4.0, refer to Master Response 2.9.1. In response to comments related to the adequacy of the economic impact analysis in the DEIR and the requirements for CEQA compliance, refer to Master Response 2.10.

Response to Comment CZ-4

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