

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF APRIL 14 - 16, 2022

Prepared on March 29, 2021

ITEM NUMBER: 3

SUBJECT: Consideration of Order No. R3-2021-0040, General Waste Discharge Requirements for Discharges from Irrigated Lands, and Certification of the Associated Final Environmental Impact Report

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KEY INFORMATION

Location: Regional
Type of Discharge: Agricultural
Existing Orders: Agricultural Order 3.0 (Order No. R3-2017-0002)

ACTIONS: **Consideration of proposed:**

1. Resolution No. R3-2021-0039 Certifying Final Environmental Impact Report for General Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2021-0040
2. General Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2021-0040 (Agricultural Order 4.0 or Ag Order 4.0)

SUMMARY

This agenda item is for the consideration of proposed Agricultural Order 4.0 (Ag Order 4.0, PAO, or proposed order) and resolution certifying the Final Environmental Impact Report (EIR) for Ag Order 4.0. The Board must consider and certify the final EIR before it can consider adopting the PAO.

The Board directed staff in the spring of 2017 to begin developing Ag Order 4.0 to replace the existing order regulating waste discharges from irrigated agriculture (i.e., Ag Order 3.0 or Order No. R3-2017-0002). Staff initiated the Ag Order 4.0 development process in August 2017, an extensive, open and transparent public process consisting of numerous stakeholder workshops, Board meetings, coordination meetings between staff and stakeholders, and ex parte meetings between Board members and stakeholders to solicit and receive stakeholder comment to inform development of the Ag Order 4.0 and draft EIR (DEIR). The order and DEIR development public process included California Environmental Quality Act (CEQA) scoping meetings, the release of project objectives, a conceptual order framework and requirement options “tables,” stakeholder workshops to communicate this information, and Board meetings to receive oral comment during each step of the process leading up to the release of a draft order and DEIR.

Draft Ag Order 4.0 (DAO or draft order) and DEIR were released for public comment on February 21, 2020 and were subject to an extended 122-day written comment period that closed on June 22, 2020 due to the COVID-19 pandemic. Between September 10, 2020 and January 8, 2021, the Central Coast Water Board conducted ten days of public meetings for the Board to receive oral public comment (three days were devoted entirely to receiving oral public comment), discuss, and deliberate on the DAO and DEIR and associated written public comments. Following a consensus-based approach culminating on January 8, 2021, the Board provided direction to staff on the development of revised draft Ag Order 4.0 (RAO or revised draft order). The RAO was released for public review and comment on January 26, 2021, and the public comment period closed on February 25, 2021. The DEIR was not recirculated along with the RAO because revisions to the DAO did not result in new or substantially worse environmental impacts than those evaluated in the DEIR. Staff developed the PAO that includes changes in response to comments on the RAO as well as non-substantive changes to improve clarity.

The PAO includes significant changes relative to the original February 21, 2020 DAO in response to stakeholder comments and Board direction. These changes include the addition of a third-party alternative compliance pathway program for groundwater protection in addition to the originally proposed individual grower compliance pathways as the backstop and individual compliance alternative for growers that don't want to participate in a third-party program. The groundwater-focused third-party alternative compliance pathway program very closely approximates the groundwater protection area, formula, value, and target coalition-based program approach contained within the Central Valley/State Water Board Eastern San Joaquin Order, but includes specific triggers and associated consequences/backstops (e.g., certification, training, follow-up, and third-party membership requirements) as directed by the Board to hold the third-party program and its members accountable for making measurable progress towards reduced pollutant loading and water quality improvement. The PAO also includes third-party program priority areas for follow-up surface receiving water implementation, with additional time allowed for a third-party program to submit follow-up surface receiving water implementation work plans. Relative to the DAO, the PAO also includes reduced and streamlined monitoring and reporting requirements, incentives for the use of

compost, organic fertilizers, cover crops, and high carbon amendments to improve soil health, increase moisture retention and carbon and nitrogen sequestration. The PAO also includes incentives to utilize nitrogen in irrigation water to reduce fertilizer-nitrogen application and mine groundwater nitrogen from aquifers. The controversial DAO riparian area and operational setback requirements were removed from the RAO, and carried through in the PAO, with Board direction for staff to propose modifications to the riparian area management requirements in the future. The most substantive changes occurred between the draft and revised draft orders, with some additional changes and refinements to the revised draft order resulting in the PAO.

The PAO framework, based on changes included in the RAO, has been modified relative to the five conceptual “options tables” used to develop the DAO by combining the three surface water quality protection requirements (i.e., Tables 2, 3, and 4 for irrigation and nutrient management, pesticide management, and sediment and erosion management, respectively) into one section and removing the section dedicated to riparian area management requirements (i.e., Table 5). These structural changes along with the addition of the third-party alternative compliance pathway for groundwater protection has resulted in changes to the order section, figure, and table listing conventions.

This staff report provides an overview of the following:

- General background information,
- Iterative nature of Ag Order implementation process and annual updates,
- Water quality conditions supporting the need for Ag Order 4.0,
- Ag Order 4.0 project objectives,
- DAO public process (and references/links to public process documents leading up to the September 10-11, 2020 Board workshop),
- Changes made to the DAO resulting in the RAO,
- Public comments received on the RAO and changes made to the RAO in response to the public comments, resulting in the PAO,
- Third-party program considerations, and
- Development and certification of the final EIR.

DISCUSSION

General Background Information

Ag Order 3.0 is a waiver of waste discharge requirements (waiver of WDRs). The PAO, if adopted, will replace Ag Order 3.0 as a WDR general order. WDRs do not expire; however, WDRs need to be reviewed periodically and the Board has discretion to review and revise WDRs at any time on its own motion or in response to stakeholder requests. To facilitate regular review of Ag Order 4.0, the PAO includes a provision for annual order implementation effectiveness updates to inform potential revisions to Ag Order 4.0 at five year or more frequent intervals based on lessons learned and new information.

Ag Order 3.0 was challenged in the Sacramento County Superior Court. In September 2019, the parties partially resolved the litigation, and the court ordered the Central Coast Water Board to adopt Ag Order 4.0 to replace Ag Order 3.0 by January 31, 2021. At the request of the Central Coast Water Board, the court later granted an extension for adoption of Ag Order 4.0 to April 16, 2021.

Iterative Nature of Ag Order Implementation Process and Annual Updates

A 30-year schedule to meet the individual compliance pathway numeric nitrogen discharge targets and limits for groundwater protection is built in to the PAO to facilitate incremental, stepwise reductions in nitrogen loading to groundwater over time through the development and implementation of new and improved agricultural management practices. Various irrigation and nutrient management practices are already being implemented by some growers to reduce nitrogen discharges while also maintaining agricultural productivity. Similarly, the PAO includes time schedules to comply with surface receiving water limits for nutrients, pesticides, and sediment/turbidity as specified in the Central Coast Basin Plan as Total Maximum Daily Loads (TMDLs) and water quality objectives. Third-party alternative compliance pathways require growers to develop schedules with interim and final targets or limits to show progress towards achieving compliance with water quality objectives. The schedules, consistent with the Nonpoint Source Program approach, will allow time for growers to apply and adapt existing management practices while working with technical service providers and researchers to develop, test, and implement new management practices via an iterative process.

In acknowledgement of the extended schedules and iterative nature of developing new and improved management practices over time to meet the objectives of the Ag Order, by either following the individual or third-party compliance pathways, the PAO includes an Order Effectiveness Evaluation provision that clarifies the Central Coast Water Board's intent to conduct annual review updates on Ag Order implementation. The annual updates will consist of presentations during public meetings by Water Board staff and, as applicable, third-party programs, technical assistance providers, researchers, and other agencies. The purpose of these updates is to evaluate and report out on individual discharger and third-party program compliance; identify successes, challenges, and emerging science and management practices; consider potential Ag Order modifications as may be appropriate at five-year intervals; and generally inform the Board and public regarding the Ag Order's effectiveness towards achieving the stated objectives.

Water Quality Conditions Supporting the Need for Ag Order 4.0

Unlike other parts of the state, high-value, high-risk crops like lettuce, broccoli, spinach, cauliflower, and strawberries requiring significant fertilizer nitrogen, herbicide, pesticide, and other agrichemical inputs are grown year-round in the central coast region due to the coastal Mediterranean climate. Multiple cropping cycles per year, sometimes up to three to four crops per acre per year, result in multiple applications of agricultural inputs that cause well-documented severe and widespread impacts to surface and

groundwater quality, and impairment of drinking water, surface water and riparian habitat beneficial uses as discussed below:

- In groundwater basins in prime agricultural areas, between 25 and 64 percent of on-farm drinking water wells exceed the safe drinking water standard for nitrate. Similar percentages of non-farm domestic wells are unsafe due to nitrate in agricultural areas.
- Approximately 40 surface waterbodies in agricultural areas in the region are impaired due to nitrate.
- Approximately 40 surface waterbodies in agricultural areas in the region are impaired due to toxicity from pesticides.
- Approximately 25 surface waterbodies in agricultural areas in the region are impaired for turbidity, which is a measurement that reflects sediment discharges to surface water.

Groundwater and drinking water impacts are particularly significant and problematic in the central coast because it is a groundwater-dependent region, relying on groundwater for approximately 90 percent of its water supply. Unsafe drinking water severely and disproportionately impacts disadvantaged communities within and surrounding agricultural areas, and high nitrate concentrations in groundwater increases water costs to all users, including those connected to public water systems.

Ag Order 4.0 Project Objectives

Ag Order 4.0 addresses not only the environmental and rural drinking water safety issues raised above and in the litigation leading to the Court of Appeals decision associated with Ag Order 2.0, but also the precedential requirements (with minor exceptions as warranted based on regional data and factors) for all agricultural orders as articulated in the State Water Board's Order WQ-2018-0002 addressing waste discharge requirements for the Eastern San Joaquin River Watershed – an order regulating agricultural discharges in the central valley. The PAO has been developed to also comply with the Water Code and applicable state policies and water quality control plans. The requirements in the PAO were developed to protect human health, protect and restore beneficial uses, and achieve water quality objectives specified in the Central Coast Basin Plan by:

- Minimizing nitrate discharges to groundwater,
- Minimizing nutrient discharges to surface water,
- Minimizing toxicity in surface water from pesticide discharges,
- Protecting riparian and wetland habitat, and
- Minimizing sediment discharges to surface water.

The PAO requirements include:

- Planning, management practice implementation, and continuing education,
- Numeric targets and limits for fertilizer nitrogen application,

- Numeric targets and limits for nitrogen discharge to groundwater, along with long-term timelines to achieve those limits (i.e., 30 years),
- Numeric limits for pesticides, nutrients, and turbidity/sediment in surface water,
- Protection of existing riparian areas and wetlands,
- Monitoring and reporting to document progress and compliance,
- On-farm domestic well monitoring for nitrate and 1,2,3-trichloropropane (TCP) to ensure well users are aware of any potential human health risks associated with their groundwater, and
- Third-party program criteria, third-party alternative compliance pathway program for groundwater protection, and third-party program surface water priority areas.

Draft Ag Order 4.0 Public Process and Supporting Information

The item no. 3 staff report titled, *Draft Ag Order 4.0 Workshop - Requirements, Stakeholder Input, and Board Discussion and Direction*, from the September 10-11, 2020 Central Coast Water Board public meeting provides an overview of the DAO and DEIR, written public comments received, and the public process leading up to that meeting date. The September 10-11, 2020 staff report also includes discussions regarding the consideration of the Nonpoint Source Policy, Antidegradation Policy, Eastern San Joaquin River Watershed Agricultural Order, human right to water, disadvantaged communities, and climate change that are still relevant to the PAO. The staff report is available on the Central Coast Water Board's website at:

https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2020/sep_10/item03_stfrpt.pdf.

The DAO and attachments (i.e., order; monitoring and reporting program; findings; and acronyms, abbreviations, and definitions) are available on the Central Coast Water Board's website at:

https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order4_renewal.html

Public comments received during the DAO public comment period (February 21, 2020 through June 22, 2020) are available to view and download through a File Transfer Protocol (FTP) link on the Central Coast Water Board's Ag Order 4.0 Renewal website at:

https://www.waterboards.ca.gov/rwqcb3/water_issues/programs/ag_waivers/ag_order4_renewal.html

Written responses to the DAO public comments received on or before June 22, 2020 can be found in Volume 3, Chapter 2 of the final EIR. The final EIR is available to view and download through a FTP link on the Central Coast Water Board's Ag Order 4.0 Renewal website at:

https://www.waterboards.ca.gov/rwqcb3/water_issues/programs/ag_waivers/ag_order4_renewal.html

The Central Coast Water Board dedicated ten days of public meetings to receive public comment and to discuss and deliberate on the DAO. The first three days of the public

meetings (September 10, 11, and 23, 2020) were devoted entirely to receiving oral public comment in the form of stakeholder panel presentations and individual stakeholder comment during which the Board engaged with the commenters. The Board received staff presentations and engaged with staff on the DAO, DEIR, public comments, and potential revisions to the DAO during the remaining seven days of public meetings (September 24, October 22-23, December 10-11, 2020, and January 7-8, 2021). The Board used a consensus-based, deliberative process to provide staff with direction on developing the RAO. In particular, the Board directed staff to consider and include a third-party alternative compliance pathway, incentives, and compliance backstops; to eliminate the riparian and operational setback requirements¹ and revisit riparian area management requirements at a later date; to trim down and streamline various monitoring requirements; and to generally simplify the order to the extent practicable.

The combined minutes for the September 10, 2020 through January 8, 2021 sequential Ag Order 4.0 Board public meetings are available on the Central Coast Water Board's website at:

https://www.waterboards.ca.gov/centralcoast/board_info/minutes/2021/ag_min.pdf

Video and teleconference recordings of the meetings are currently available on the following website at: <https://cal-span.org/static/meetings-RWQCB-CC.php>

Changes Made to the Draft Ag Order Resulting in a Revised Draft Ag Order

The RAO was released for public review and comment on January 26, 2021, and the public comment period closed on February 25, 2021. Relative to the DAO, the RAO included the following changes in response to the written and oral public comments on the DAO, and Board direction during the September 10, 2020 through January 8, 2021 meetings.

General

- Added one year to all compliance dates to account for COVID-19 pandemic-related delays and additional public meetings leading up to the proposed order hearing.
- Inclusion of an Order Effectiveness Evaluation finding regarding annual updates to the Board and public regarding implementation progress and effectiveness in meeting the Ag Order 4.0 objectives, to consider new information, and inform potential order modifications at five-year intervals. Updates will occur at a public meeting and will include input from Central Coast Water Board staff and as appropriate, other agencies, experts, growers and/or their representatives, and third-party administrators. (*RAO/PAO², Part 1, Section A, Order Effectiveness Evaluation*)
- Revisions to the findings to support changed requirements in the DAO.

¹ The riparian and operational setback requirements were included in Table 5 of the conceptual order framework and requirement option tables developed early in the Ag Order 4.0 development process.

² "RAO/PAO" signifies that the reference applies to both the RAO and the PAO.

- Non-substantive changes proposed by staff and stakeholders clarifying various findings and requirements.

Groundwater Protection

- Inclusion of Ag Partners' proposed third-party alternative compliance pathway for groundwater protection that is consistent with the Eastern San Joaquin River Watershed Agricultural Order groundwater protection area, formula, value and target development and implementation process (*RAO, Part 2, Section C.2, Third-Party Cooperative Alternative Compliance Pathway for Groundwater Protection and Trend Monitoring*). Requirements for the third-party alternative compliance pathway program include specific conditions (i.e., criteria and associated response actions) to hold the third-party administered program and its members accountable for making measurable progress towards water quality improvement. The alternative compliance pathway program is discussed in more detail in the Third-Party Program Considerations section below.
- Inclusion of stepdown fertilizer nitrogen application targets and limits based on 85th percentile of total nitrogen applied (TNA) data in addition to the 90th percentile fertilizer nitrogen application limit originally included in the DAO (*RAO/PAO, Tables C.1-2 and C.2-1*).³
- Inclusion of an additional compliance pathway for growers to comply with nitrogen discharge targets and limits ("*Compliance Pathway 3*," *RAO/PAO, Tables C.1-3 and C.2-2*). Compliance Pathway 3 is focused on incentivizing the use of nitrate in irrigation water for wells with lower nitrate concentrations to compliment Compliance Pathway 2, which is focused on incentivizing the use of nitrate in high nitrate irrigation wells. Both compliance pathways are intended to reduce fertilizer nitrogen applications and reduce discharges of "new" nitrogen.
- Inclusion of incentives for the use of organic fertilizers and amendments, nitrogen-scavenging cover crops, and nitrogen-scavenging high carbon amendments during the wet/rainy season. These incentives are meant to improve soil health and increase moisture retention and carbon and nitrogen sequestration, and ultimately reduce nitrogen loading (*RAO/PAO, Part 2, Section C.1, Groundwater Protection*).
- Reduced monitoring parameters and frequencies for on-farm domestic well monitoring and reporting (*RAO/PAO, Att. B -MRP, Section C, On-Farm Domestic Wells and Table MRP-5*):
 - Eliminated total dissolved solids and general minerals parameters and retained only nitrate (or nitrate plus nitrite) and 1,2,3-trichloropropane (1,2,3-TCP).
 - Reduced 1,2,3-TCP monitoring frequency and elimination of testing based on non-detection of 1,2,3-TCP over time.

³ The 85th percentile nitrogen application limit goes into effect for year 2025 for growers following the individual compliance pathway and year 2026 as a target for growers participating in the third-party alternative compliance pathway for groundwater protection.

- Decreased time frame from ten to three days for providing notification of on-farm domestic well testing results summaries to residents, renters and/or workers (*RAO/PAO, Att. B -MRP, Section C, On-Farm Domestic Wells*).
- Reduced monitoring requirements and parameters for irrigation supply wells (*RAO/PAO, Att. B -MRP, Section C, Irrigation Wells Prior to the Start of Trend Monitoring and Table MRP-6*):
 - Reduced from all irrigation wells to the primary irrigation well (consistent with Ag Order 3.0) and elimination of irrigation well monitoring when groundwater quality trend monitoring begins.
 - Eliminated general minerals parameters and retained only total dissolved solids and nitrate (or nitrate plus nitrite).
- Modified groundwater quality trend monitoring and reporting program requirements for growers selecting the individual option (*RAO/PAO, Att. B -MRP, Section C, Groundwater Quality Trends*):
 - Reduced groundwater quality trend monitoring and reporting from quarterly to semi-annual.
 - Eliminated SAP/QAPP requirement from individual work plan requirements.
 - Eliminated requirement for the installation of monitoring well(s) on ranches without a well to conduct trend monitoring and allowed growers without a well to use an offsite, nearby well and associated water quality data for trend monitoring.
- Included temperature as an additional standard field parameter to ensure the collection of representative groundwater samples (*RAO/PAO, Attachment B - MRP, Section C, Section C and Tables MRP-5 through MRP-8*).
- Included advanced notification requirements prior to requiring ranch-level discharge monitoring and extended time frames for preparing a work plan (*RAO/PAO, Part 2, Section C.1, Groundwater Monitoring and Reporting and Att. B - MRP, Section C, Ranch-Level Groundwater Discharge*).

Surface Water Protection

- Combined and streamlined the surface water protection irrigation and nutrient management, pesticide management, and sediment and erosion management requirement sections of the order (*DAO, Part 2, Sections C.2, C.3 and C.4*) into one surface water quality protection requirements section (*RAO/PAO, Part 2, Section C.3*) to eliminate redundancy and increase clarity. This has resulted in different section and table references throughout the RAO and PAO and the associated monitoring and reporting program.
- Added third-party program priority areas and associated follow-up implementation work plan due date schedule for surface water protection (*RAO/PAO, Part 2, Section C.3, Priority Areas*).
- Established a uniform surface receiving water limit compliance date of December 31, 2032 for non-TMDL areas and for all past due and pre-December 31, 2032 compliance dates for TMDL areas to streamline and better coordinate implementation of follow-up surface receiving water work plan(s) (*RAO/PAO, Part 2, Section C.3, Monitoring and Reporting*).

- Removed slope and certified sediment and erosion control plan requirements for impermeable surfaces (*DAO, Part 2, Section C.4*).
- Removed the requirement for quarterly exceedance reports as part of each quarterly data submittal for surface receiving water trend monitoring (*RAO, Att. B - MRP, Surface Receiving Water Quality Trends*).
- Removed the requirement for a summary of exceedance reports as part of the Annual Report for surface receiving water trend monitoring (*RAO, Att. B - MRP, Surface Receiving Water Quality Trends*).
- Included advanced notification requirements prior to requiring ranch-level surface discharge monitoring and extended time frames for preparing a work plan (*RAO/PAO, Part 2, Section C.3, Monitoring and Reporting and Att. B - MRP, Section E, Ranch-Level Surface Discharge*).

Riparian Area Protection

- Removed some riparian area management requirements (i.e., operational and riparian area setback requirements). The RAO and PAO contain a requirement for enrolled growers to measure and report the width of their riparian areas on their Annual Compliance Form and also require growers to maintain existing, naturally occurring, and established native riparian areas unless otherwise authorized (*RAO, Part 2, Section D*).

Public Comments Received on the Revised Draft Ag Order 4.0

A total of 34 comment letters were received during the public comment period for the RAO. Comment letters were submitted by various affiliations: farming operations, governmental organizations, and nongovernmental organizations. Many of the comment letters included multiple attachments, resulting in staff review of 67 documents in total. Below is a summary of the number of comments received by source type.

- 14 letters from farming operations
- 2 letters from governmental organizations
- 18 letters from non-governmental organizations (e.g., agriculture, environmental, and environmental justice organizations)

Public comments received during the RAO public comment period (January 26, 2021 through February 25, 2021) and written responses to RAO public comments are available to view and download on the Central Coast Water Board's Ag Order 4.0 Renewal website at:

https://www.waterboards.ca.gov/rwqcb3/water_issues/programs/ag_waivers/ag_order4_renewal.html

Changes Made to the Revised Draft Ag Order Resulting in the Proposed Ag Order

Changes made to the RAO, resulting in the PAO, are outlined further in the following sections. The PAO consists of the following documents:

- Proposed Order No. R3-2021-0040
- Attachment A: Findings
- Attachment B: Monitoring and Reporting Program
- Attachment C: Acronyms, Abbreviations, and Definitions

The PAO documents, both clean and tracked change versions, are available on the Central Coast Water Board's Ag Order 4.0 Renewal website at:

https://www.waterboards.ca.gov/rwqcb3/water_issues/programs/ag_waivers/ag_order4_renewal.html

The RAO was revised based on written public comments and communication with various stakeholder representatives, resulting in the PAO. The PAO includes the following changes relative to the RAO:

General

- Non-substantive changes proposed by staff and stakeholders clarifying various findings, definitions, and requirements,
- Modified eNOI requirement for growers to provide information regarding third-party program memberships (*PAO, Part 2, Section A, Enrollment*),
- Added eNOI requirement for growers to provide status of drinking water notification to well users (*PAO, Part 2, Section A, Enrollment*),
- Clarified how growers enroll in a third-party program (*PAO, Part 2, Section A, Third-Party Programs*),
- Clarified how a third-party program administrator notifies the Water Board of their membership (*PAO, Part 2, Section A, Third-Party Programs*),
- Added flexibility for third-party programs that do not have a physical presence in the region (i.e., headquarters) that can demonstrate they can effectively establish, maintain, and engage with core membership (*PAO, Part 2, Section A, Third-Party Programs*),
- Moved the requirement to maintain ranch-level discharge monitoring information in the INMP from the INMP, groundwater and surface water protection sections to the Farm Plan section (*PAO, Part 2, Section B, Farm Plan*),
- Updated CEQA Mitigation Measure Implementation, Monitoring, and Reporting provision and associated footnote from the language in the DAO/RAO (*PAO, Part 2, Section B, CEQA Mitigation Measure*),
- Clarified when a time schedule order must be requested (*PAO, Part 2, Section D, Additional Requirements and Prohibitions*),
- Removed requirement to comply with the Handbook for Forest, Ranch, and Rural Roads (*PAO, Part 2, Section D, Additional Requirements and Prohibitions*), and
- Replaced the term "access road" with "farm road" (*PAO, Part 2, Section D, Additional Requirements and Prohibitions*).

Groundwater Protection

- Clarified that the following types of products are not eligible for the organic fertilizer discount in the nitrogen discharge targets and limits compliance pathways: a) products with no organic compounds (long chain carbon) molecules, such as conventional fertilizer, slow release fertilizers, b) products that do not depend on microbial mineralization to release nitrogen to mineral form to make it available for crop uptake, c) products without C:N ratio information available, and d) organic liquid fertilizers that are in the liquid and/or emulsified form (*PAO, Part 2, Section C.1, Groundwater Protection*),
- Clarified that growers who quantify nitrogen removal through treatment or other innovative methods (R_{TREAT}) must quantify the nitrogen removed from their individual ranch discharge to groundwater or surface water (*PAO, Part 2, Section C.1, Groundwater Protection*),
- Removed lower fertilizer nitrogen application limits as a potential follow-up requirement when a ranch exceeds an applicable nitrogen discharge target or limit (*PAO, Part 2, Section C.1, Groundwater Protection*),
- Clarified that growers who declare exemptions from all or portions of the INMP summary reporting must provide sufficient annual updates to the Water Board to confirm that the exemption is still applicable (*PAO, Part 2, Section C.1, Groundwater Protection*),
- Added language stating that the nitrogen discharge limits will be re-evaluated prior to becoming effective (*PAO, Part 2, Section C.1, Groundwater Protection*),
- Clarified that growers who are members in good standing with the third-party alternative compliance pathway program for groundwater protection are not subject to ranch-level groundwater discharge monitoring and reporting (*PAO, Part 2, Section C.2, Third-Party Alternative Compliance Pathway for Groundwater Protection*),
- Added language stating that staff will coordinate with growers that are members of a third-party alternative compliance pathway program prior to requiring compliance with individual groundwater protection requirements due to non-compliance with the fertilizer nitrogen application and nitrogen discharge targets (*PAO, Part 2, Section C.2, Third-Party Alternative Compliance Pathway for Groundwater Protection*),
- Removed the groundwater quality trend monitoring component from the third-party alternative compliance pathway program. In its place, a requirement is included for the development and implementation of an assessment and evaluation program as part of the third-party alternative compliance pathway (*PAO, Part 2, Section C.2, Third-Party Alternative Compliance Pathway for Groundwater Protection*),
- Clarified that the third-party alternative compliance pathway assessment and evaluation program needs to align and inform the third-party groundwater quality trend monitoring and reporting (*PAO, Part 2, Section C.2, Third-Party Alternative Compliance Pathway for Groundwater Protection*),
- Clarified that the nitrogen removal conversion coefficient standard protocols will be developed in coordination with the University of California Cooperative

Extension and California Department of Food and Agriculture and made available within 12 months of order adoption for growers to use (PAO, Att. B-MRP, Section B, INMP Summary Report Requirements),

- Clarified that the nitrogen removal conversion coefficients can be developed individually or cooperatively (PAO, Att. B-MRP, Section B, INMP Summary Report Requirements),
- Revised the R_{SCAVENGE} credit for nitrogen scavenging cover crops and high carbon amendments so that the management practices must be grown/retained for three months instead of four months during the wet season (PAO, Att. B-MRP, Section B, INMP Summary Report Requirements),
- Removed the requirement for growers to estimate and report the volume of water discharged to groundwater through percolation (PAO, Att. B-MRP, Section B, INMP Summary Report Requirements),
- Removed the requirement for plots of field parameter measurements (i.e., pH, temperature, and specific conductance) for growers choosing individual groundwater quality trend monitoring and reporting (PAO, Att. B-MRP, Section C, Groundwater Quality Trends, Individual Approach),
- Included options for growers without a well on their ranch to choose from, to comply with individual groundwater quality trend monitoring and reporting requirements. Included authorization requirement for the use of offsite well(s) and data generated by others. (PAO, Part 2, Section C.1, Monitoring and Reporting and Att. B-MRP, Section C, Groundwater Quality Trends, Individual Approach),

Surface Water Protection

- Further clarified individual versus third-party program surface water priority areas and associated timelines for follow-up surface receiving water implementation work plan(s) (PAO, Part 2, Section C.3, Priority Areas),
- Removed lower fertilizer nitrogen application limits as a potential follow-up requirement when a ranch exceeds an applicable surface receiving water limit (PAO, Part 2, Section C.3, Quantifiable Milestones and Time Schedules),
- Revised the third-party program surface water priority areas so that the “low priority” priority area also includes all other areas that are not prioritized as low, medium or high priority (PAO, Part 2, Section C-3, Monitoring and Reporting). Also, revised the associated table and figure (PAO, Table C.3-1.3P and Figure C.3-1.3P),
- Clarified that the follow-up surface receiving water implementation work plan(s) should contain “numeric” interim quantifiable milestones (PAO, Part 2, Section C-3, Monitoring and Reporting),
- Revised the footnote related to how toxic units and/or additive toxicity units are calculated (PAO, Table C.3-5, Compliance Dates for Pesticide and Toxicity Limits – Non TMDL Areas).

Third-Party Program Considerations

Consistent with the DAO, the PAO includes provisions and associated criteria for the development, approval, and implementation of third-party programs to provide compliance assistance to growers. The PAO encourages growers and technical service providers to form or join third-party programs, and it is expected that third-party programs will be a cost-effective option for many growers, considering economies of scale and associated cost savings that third-party programs can provide.

Growers may choose to comply with certain PAO requirements on an individual basis or via membership in a third-party program. Third-party programs can come in a variety of forms ranging from certification programs, watershed groups, water quality coalitions, monitoring coalitions, or other cooperative efforts depending on the services provided. Services could include conducting education and outreach, collecting and reporting data, performing data quality control and management, developing and implementing work plans, and documenting or otherwise facilitating compliance with requirements.

Part 2, Section A of the PAO describes the general framework and minimum criteria for third-party programs. The PAO also includes specific provisions for the alternative compliance pathway program and timelines for groundwater protection, as well as third-party program surface water priority areas and timelines for follow-up surface receiving water implementation. The PAO requires third-party programs to develop criteria to evaluate whether third party program members are in good standing. Members that are not in good standing will be subject to follow-up actions and could ultimately lose their membership and be required to comply with individual groundwater protection and/or surface water protection requirements. The PAO strikes a balance between incentivizing third-party programs and ensuring they are transparent and effective relative to achieving water quality outcomes consistent with the Ag Order 4.0 project objectives.

Request for Proposal (RFP) Process and Third-Party Formation Criteria

All third-party programs are subject to a third-party program proposal and approval process. Third parties must obtain Executive Officer approval for the establishment of third-party programs, as well as for work plans subsequently prepared by third parties on behalf of program members. The schedule for submitting third-party formation proposals will be included in the Central Coast Water Board's release of a Request for Proposal (RFP) package made available to interested persons following adoption of Ag Order 4.0. The RFP package will provide more specific guidance (i.e., third-party expectations) based on the minimum third-party criteria included in the PAO (Part 2, Section A). All third-party programs, including the one or ones administering the third-party alternative compliance pathway for groundwater protection and the third-party program for surface water priority areas, will be subject to the RFP process and Executive Officer approval prior to submitting the third-party program work plans.

Third-Party Alternative Compliance Pathway for Groundwater Protection

As noted earlier in this staff report, the PAO includes provisions for a third-party administered alternative compliance pathway program for groundwater protection (i.e., the *Third-Party Alternative Compliance Pathway for Groundwater Protection*). This third-party alternative compliance pathway was included in the RAO and carried over to the PAO with slight modifications as noted above. This alternative compliance pathway allows an approved third-party program to define groundwater protection areas and develop formulas, values, and targets for the assessment of nitrogen discharge and water quality protection that will be applied at the scale of the forthcoming groundwater protection areas (see PAO Part 2, Section C.2). In contrast to the individual requirement compliance approach, which is based on ranch-level nitrogen discharge targets and limits (PAO Part 2, Section C.1), this third-party alternative compliance pathway program will implement a collective basin-scale approach to compliance.

This third-party alternative compliance pathway program is subject to an incremental three-step work plan submittal, review, and approval process to develop the proposed groundwater protection areas, formulas, values, and targets and associated effectiveness assessment evaluation process (i.e., for 35, 70 and 100 percent work plans). Each step of the work plan process is subject to Executive Officer approval with the 35 percent and 70 percent work plans being subject to a 30-day public comment period followed by a public meeting for Board discretionary review prior to Executive Officer approval.

Growers electing to participate in the *Third-Party Alternative Compliance Pathway for Groundwater Protection* and that remain in good standing based on requirements contained in PAO Part 2, Section C.2 and forthcoming third-party membership eligibility requirements are not subject to certain PAO requirements. For example, members in good standing are not subject to ranch-level discharge monitoring and reporting requirements for groundwater. They are also not subject to fertilizer nitrogen application or nitrogen discharge limits. Instead they are subject to fertilizer nitrogen application and nitrogen discharge targets with an extra year to achieve compliance relative to the individual compliance requirements (PAO Tables C.2-1 and C.2-2). These targets are intended to effect reductions in fertilizer nitrogen application and nitrogen discharge while the third-party alternative compliance pathway program is being developed during the approximately five-year incremental work plan process. The PAO includes various individual and collective backstops and associated consequences to ensure the third-party program and its members make measurable progress to decrease nitrogen loading to groundwater. For example, repeated failure by individual members to comply with fertilizer nitrogen application targets and nitrogen discharge targets or failure by the collective membership to comply with groundwater protection (GWP) area collective interim and/or final targets as described in the PAO will result in various potential consequences (e.g., additional education and/or implementation of additional or improved management practices, INMP certification by a qualified professional, or loss of their third-party membership). After losing third-party membership, a grower must comply with individual groundwater protection requirements.

Third-Party Surface Water Priority Areas and Alternative Schedule for Follow-up Implementation Work Plan(s)

The PAO includes third-party program surface water priority areas and an alternative, extended time schedule for submitting follow-up surface receiving water implementation work plan(s), as defined in Part 2, Section C.3, Table C.3-1 and Figure C-3.1. The third-party surface water priority areas and alternative, extended time schedule for follow-up implementation work plan(s) is intended to incentivize participation in a third-party program.

Development and Certification of the Final Environmental Impact Report

The Central Coast Water Board is the lead agency for the EIR under the California Environmental Quality Act (CEQA). Since issuance of a Notice of Preparation and Initial Study in February 2018, the Central Coast Water Board and its contractor (Horizon Water and Environment, LLC) have been working on EIR preparation. As noted in the Summary section of this staff report, the DEIR was circulated for a 122-day comment period beginning February 21, 2020.

The final EIR is available to view and download through a FTP link on the Central Coast Water Board's Ag Order 4.0 Renewal website at:

https://www.waterboards.ca.gov/rwqcb3/water_issues/programs/ag_waivers/ag_order4_renewal.html

The following documents comprise the final EIR:

- Volume 1: Main Body (DEIR with redline/highlighted changes)
- Volume 2: Appendices (PAO, County General Plan and Policies, Special-Status Species Table, Mitigation and Monitoring and Reporting Program)
- Volume 3: Comments and Responses to Comments on the Draft Environmental Impact Report and Draft Agricultural Order 4.0

The Central Coast Water Board significantly reduced riparian area requirements from requiring setbacks included in the DAO, to prohibiting removal of existing riparian vegetation and requiring growers to measure and report riparian area width in the RAO. Even with this significant change to the DAO, the RAO did not result in any new, previously undisclosed, or substantially worse impacts from those evaluated and disclosed in the DEIR, and therefore, recirculation of the DEIR was not required.

In response to the reduction of riparian area requirements, the final EIR was modified as follows:

- The Project Description was revised, and project objective 1.d now reads: "Protecting riparian and wetland habitat."
- Two significant and unavoidable impacts originally identified in the "Agricultural Resources" section of the DEIR were reduced to "less than significant."

The final EIR also reflects modifications made in response to public comments received during the public comment period beginning on February 21, 2020. Comments, and responses to comments on the DEIR are included in Volume 3 of the final EIR.

The final EIR concludes that the PAO accomplishes the water quality goals of the Central Coast Water Board, while minimizing environmental impacts to the extent possible. In addition, the final EIR fulfills the Board's CEQA compliance requirements for issuance of the waste discharge requirements contained in the PAO.

The Board must consider and certify the final EIR before it can consider adopting the PAO. Adoption of Resolution No. 2021-0039 would certify the final EIR for the PAO.

RECOMMENDATION

1. Certify the Proposed General Waste Discharge Requirements for Discharges from Irrigated Lands (Agricultural Order), Final Environmental Impact Report via adoption of Resolution No. R3-2021-0039, and
2. Adopt Proposed General Waste Discharge Requirements for Discharges from Irrigated Lands, Order R3-2021-0040 (Ag Order 4.0), thereby replacing Order R3-2017-0002 (Ag Order 3.0).

ATTACHMENTS

Note: The below listed attachments are available on the Central Coast Water Boards Ag Order 4.0 Renewal website at:

https://www.waterboards.ca.gov/rwqcb3/water_issues/programs/ag_waivers/ag_order4_renewal.html

1. Proposed Order No. R3-2021-0040 (Agricultural Order 4.0)
 - a. Attachment A: Findings to Proposed Order No. R3-2021-0040
 - b. Attachment B: Monitoring and Reporting Program to Proposed Order No. R3-2021-0040
 - c. Attachment C: Acronyms, Abbreviations, and Definitions to Proposed Order No. R3-2021-0040
2. Proposed Resolution No. R3-2021-0039 (EIR Certification)
 - a. Attachment A: Proposed General Waste Discharge Requirements for Discharges from Irrigated Lands (Agricultural Order), Final Environmental Impact Report
 - i. Volume 1 – Main Body
 - ii. Volume 2 – Appendices
 - iii. Volume 3 – Comments and Responses to Comments on the Draft Environmental Impact Report and Draft Agricultural Order 4.0
 - b. Attachment B: CEQA Findings
3. Public comment letters received during the public comment period on the Revised Agricultural Order 4.0
4. Response to comments on the Revised Agricultural Order 4.0