

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF MAY 15-17, 2019
Prepared on April 12, 2019

ITEM NO.: 3

SUBJECT: Agricultural Order 4.0 Requirements Recommendations

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ACTION: Informational/Discussion

SUMMARY

This agenda item is a continuance of the March 20-22, 2019 board meeting discussion on Ag Order 4.0. At the March 20-22, 2019 Central Coast Water Board (board) meeting, staff provided presentations on the conceptual options tables 1-4 and stakeholders provided comments on tables 1-5 as part of agenda item 3, Agricultural Order 4.0 Requirements Discussion. The staff report and associated documents are located under item 3 of the March 2019 agenda: https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2019/march/index.html

During the May board meeting, the board will discuss the conceptual requirements in each of the conceptual options tables and provide direction to staff regarding these conceptual requirements for inclusion in draft Ag Order 4.0.

The purpose of Item 3 of the March 2019 board meeting was for staff to present to the board the five updated conceptual options tables for Ag Order 4.0 that were originally presented to the board and public in November 2018, for the board to receive oral comments from the public on the conceptual tables, and for staff to receive the board's input and direction to prepare a draft order. During the time available, staff presented tables 1 through 4 to the board and stakeholders, and the board heard oral comments and presentations from stakeholders. Due to time constraints, staff did not present table 5, and the board did not have an opportunity to provide specific direction to staff regarding preparation of the draft order.

BACKGROUND

In September 2018¹, the board held an Ag Order 4.0 stakeholder workshop. Staff developed a set of framing questions designed to guide discussion during the workshop. The framing

¹ September 2018 board meeting Item 6:

https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2018/september/index.html

questions were developed based on staff's analysis of water quality data and the primary impacts associated with agricultural discharges. The framing questions are:

1. What can growers and the regional board do to demonstrate quantifiable progress to minimize nitrate discharge to groundwater to achieve water quality objectives?
2. What can growers and the regional board do to demonstrate quantifiable progress to minimize nutrient discharge to surface waters to achieve water quality objectives?
3. What can growers and the regional board do to demonstrate quantifiable progress to minimize toxicity in surface waters from pesticide discharges to achieve water quality objectives?
4. What can growers and the regional board do to ensure that riparian and wetland habitat is protected due to agricultural activities and discharges?
5. What can growers and the regional board do to demonstrate quantifiable progress to minimize sediment discharge to achieve water quality objectives?
6. How can the regional board use discharge permit requirements to ensure current and future affordable, safe, and clean water for drinking and environmental uses?

In November 2018², staff presented the five conceptual options tables that were developed as staff's response to the framing questions. A 64-day written public comment period was held subsequent to staff's presentation. Staff requested³ stakeholder input on the conceptual options tables, including specific questions related to the five tables, for example:

What numeric limit(s) would you recommend for nitrogen applications, nitrogen discharges to groundwater, nutrient discharges to surface water, pesticide discharges to surface water, sediment discharges to surface water, and riparian setback width and percent vegetative cover?

as well as open-ended questions related to alternative options, for example:

What alternative options do you recommend? These may include other types of quantifiable milestones, other than numeric limits, per the Nonpoint Source Policy that measure progress towards achieving the project objectives. Please provide alternative options in the options table format. Alternatives need to achieve the Project Objectives.

The notice for public comment also described the project objectives for Ag Order 4.0, which are:

1. Protect and restore beneficial uses and achieve water quality objectives specified in the Basin Plan for commercial irrigated agricultural areas in the central coast region by:
 - a. Minimizing nitrate discharges to groundwater,
 - b. Minimizing nutrient discharges to surface water,
 - c. Minimizing toxicity in surface water from pesticide discharges,
 - d. Protecting and restoring riparian and wetland habitat, and
 - e. Minimizing sediment discharges to surface water.

² November 2018 board meeting item 5:

https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2018/november/index.html

³ November 2018 notice of written public comment period:

https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order4/18dec2018_notice_public_comment_options_tables_updated.pdf

2. Effectively track and quantify achievement of 1.a. through e. over a specific, defined time schedule.
3. Comply with the State's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy), the State Antidegradation Policy, relevant court decisions such as those pertaining to Coastkeeper *et al*/ lawsuits, the precedential language in the Eastern San Joaquin Watershed Agricultural Order, and other relevant statutes and water quality plans and policies, including total maximum daily loads in the central coast region.

In March 2019, staff published updated conceptual options tables, shaped in part by the stakeholder responses and suggestions received during the comment period. During the board meeting, stakeholders provided comments on each of these updated conceptual options tables and discussion on alternative proposals.

Ag Order 4.0 written public comments received are available online at:

https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order4_public_comments.html

AG ORDER 4.0 FRAMEWORK

To further facilitate discussion, staff has developed an additional table that summarizes the five conceptual options tables and recommended framework for Ag Order 4.0 onto one page. For more detail on the proposed framework, the full conceptual options tables and narrative descriptions included in the March 2019 staff report can be referenced; please see Attachment 1 (conceptual options tables) and the link provided above in the Summary section.

The summarized framework table includes the same rows shown in each of the conceptual options tables. Three of the rows (Quantifiable Milestones, Time Schedule, and Monitoring and Reporting) are included in staff's recommended framework to comply with the NPS Policy⁴. These row headings are marked with red asterisks to indicate that they are NPS Policy requirements. The other two rows (Phasing or Prioritization and Incentives) are included in the recommendation as methods to increase the effectiveness and implementation of the order.

During the March 2019 board meeting, staff presented and discussed the rationale for including each of the Ag Order 4.0 conceptual requirements described in updated options tables 1 through 4. A similar presentation and discussion for table 5 is planned for this May 2019 board meeting item. In determining what to include in the recommended framework, staff considered current surface water and groundwater quality conditions and associated impairments; current agricultural discharges; Basin Plan beneficial uses, water quality objectives, and adopted total maximum daily loads (TMDLs); the NPS Policy and Antidegradation Policy; the precedential components of the State Water Board's Eastern San Joaquin Order (ESJ Order); related permits and scientific literature review; relevant court decisions; and public comments. The recommended framework developed by staff for a compliant and effective Ag Order 4.0 is summarized below.

⁴The NPS Policy:

https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf

SUMMARIZED FRAMEWORK TABLE – AG ORDER 4.0					
	TABLE 1: IRRIGATION & NUTRIENT - GW	TABLE 2: IRRIGATION & NUTRIENT - SW	TABLE 3: PESTICIDES	TABLE 4: SEDIMENT & EROSION	TABLE 5: RIPARIAN HABITAT
Phasing or Prioritization	-Location-specific phasing	-Watershed prioritization	-Watershed prioritization	-Watershed prioritization	-Waterbody prioritization
Quantifiable Milestones* (Numeric Limits)	-Discharge Limit -A _{FER} + A _{IRR} – R -A _{FER} Limit (by crop) -A _{FER} Limit (consequence)	-Receiving SW Limit and/or Discharge Limit -TMDLs or WQOs -A _{FER} Limit (consequence)	-Receiving SW Limit and/or Discharge Limit -TMDLs or WQOs	-Receiving SW Limit and/or Discharge Limit -Impermeable, slope, winter -Sediment mass discharge -Receiving SW alteration -Design storm	-Individual or Cooperative -Priority and non-priority -Setback widths -Vegetation -Prohibition
Time Schedule*	-Time schedule with Discharge Targets & Limits -High A _{IRR} incentive -A _{FER} Limit (by crop)	-TMDL time schedules -Non-TMDL areas TBD	-TMDL time schedules -Non-TMDL areas TBD	-Table 2, 3 time schedules	-TBD
Monitoring and Reporting*	-INMP -TNA, R, Irrigation -Mgmt. Practices -Individual Discharge to GW -Domestic Wells -GW Trends	-INMP -Mgmt. Practices -Receiving SW Trends -Follow-Up Receiving SW -Individual Discharge to SW	-PMP -Mgmt. Practices -Receiving SW Trends -Follow-Up Receiving SW -Individual Discharge to SW -GW Pesticides	-SEMP -Mgmt. Practices -Receiving SW Trends -Follow-Up Receiving SW -Individual Discharge to SW	-RMP -Setbacks and vegetation -Receiving SW Trends
Incentives	-High A _{IRR} incentive -Compost -Increase R -Third party programs	-Third party programs	-Third party programs	-Third party programs	-Cooperative approach
Definitions	<p>*Required elements from the Nonpoint Source Policy; other elements are included to improve the effectiveness of the Order</p> <p>-GW: groundwater; SW: surface water</p> <p>-A_{FER} is the amount of nitrogen applied in fertilizers, compost, and other amendments</p> <p>-A_{IRR} is the amount of nitrogen applied through the irrigation water based on the groundwater nitrate concentration</p> <p>-R is the amount of nitrogen removed through harvest, pruning, or other methods, plus the nitrogen sequestered in perennial crop permanent wood</p> <p>-TMDL is Total Maximum Daily Load and is the amount of a particular material that a waterbody can assimilate on a regular basis while still being protective of the beneficial uses designated for that waterbody</p> <p>-WQOs are Water Quality Objectives defined in the Basin Plan; WQOs can be narrative or numeric</p> <p>-Design storm: the storm intensity and volume that management measures such as sediment retention basins are designed to accommodate</p> <p>-TBD means “to be determined” and is used as a placeholder</p> <p>-INMP: Irrigation and Nutrient Management Plan; TNA: Total Nitrogen Applied reporting; PMP: Pesticide Management Plan; SEMP: Sediment and Erosion Management Plan; RMP: Riparian Management Plan</p>				

CONCLUSION

The conceptual options tables originally presented to the board and public in November 2018 were developed as solutions to the basic water quality-related impacts outlined in the six framing questions. The conceptual requirements in the tables were developed considering the NPS Policy, Antidegradation Policy, relevant court decisions, precedential components from the ESJ Order, scientific literature review, and technical feasibility. Staff received stakeholder suggestions during the public comment period and throughout the Ag Order 4.0 outreach process and incorporated the feedback into the updated options tables presented to the board in March 2019.

Staff recommends that Ag Order 4.0 be drafted following the framework described in the options tables, including the incorporation of incentives and opportunities for third-party implementation programs to provide growers with implementation and tracking assistance.

In September 2017, the board requested they be included in Ag Order 4.0's development process. To proceed with Ag Order 4.0 development, staff requests input and direction from the board regarding the options table recommendations. Based on the input from the board and stakeholders, staff will prepare a draft Ag Order 4.0.

ATTACHMENT

1. Conceptual Options Tables