

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

STAFF REPORT FOR REGULAR MEETING OF APRIL 21-22, 2022

Prepared on March 23, 2022

ITEM NUMBER: 14

SUBJECT: Executive Officer's Report to the Board

STAFF CONTACTS: Matt Keeling 805/549-3140
Matt.Keeling@waterboards.ca.gov

ACTION: Information/Discussion

KEY INFORMATION: This item presents a brief discussion of issues that may interest the Board and the program performance measures. Upon request, staff can provide more detailed information about any item.

AGRICULTURAL ORDER 4.0 (R3-2021-0040) UPDATES

[Elaine Sahl, 805/542-4645, Elaine.Sahl@waterboards.ca.gov;
Diane Kukol, 805/542-4637, Diane.Kukol@waterboards.ca.gov; and
Paula Richter, 805/549-3865, Paula.Richter@waterboards.ca.gov]

On April 15, 2021, the Central Coast Water Board adopted [General Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2021-0040](#)¹ (Ag Order 4.0). The following includes updates regarding Irrigated Lands Program (ILP) staff's implementation actions since the last [Executive Officer's Report provided in December 2021](#)². Staff will be using the EO Report to provide periodic Ag Order 4.0 implementation updates, in addition to the more detailed and formal annual update (scheduled for the October 2022 Board meeting). Since December 2021, ILP staff have continued helping growers and technical assistance providers with Ag Order 4.0 reporting requirements. ILP staff have assisted hundreds of growers with compliance by providing reminders for all upcoming reporting requirements and by responding to phone calls and emails regarding enrollment, terminations, fees, monitoring and reporting, notices of violation, and other compliance issues. ILP staff have also worked closely with the approved third-party program, Central Coast Water Quality Preservation, Inc. (Preservation, Inc.) to coordinate assistance with their members to comply with upcoming requirements.

¹ https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ilp/regulatory_information.html

² https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2021/dec/item10_stfrpt

Requirements, Deadlines, and Current Compliance Summary

Annual Permit Fees

All growers are required to pay ILP annual permit fees to the State Water Resources Control Board (State Water Board) according to the [California Code of Regulations Annual Fee Schedule](#)³. Growers have the option to: 1) become a member of an approved third-party program (i.e., Preservation, Inc.) to complete monitoring and reporting requirements cooperatively and pay reduced annual permit fees or 2) complete monitoring and reporting requirements individually and pay increased annual permit fees. As of March 9, 2022, 84% of enrolled operations⁴ (1,319 out of 1,567 operations) are members of the third-party program, while 16% of enrolled operations (248 out of 1,567 operations) have not joined the third-party program. The current level of third-party program enrollment represents approximately 94% of irrigated acres enrolled in the ILP (399,038 out of 425,872 irrigated acres). We anticipate Preservation, Inc. membership will continue to increase over the next few years.

ILP staff are following up with growers and their operations that are not members of the third-party program to require payment of increased annual permit fees, completion of a Surface Receiving Water Trends workplan by July 1, 2022, and sampling for the first round of monitoring that will occur this Fall.

Annual Compliance Form

All growers were required to submit a “year 2021” Annual Compliance Form (ACF) by March 1, 2022. Dischargers must report on irrigation, nutrient, pesticide, and sediment and erosion control management practice implementation and effectiveness to reduce water quality impacts. This is the first year where all growers are required to submit an ACF. In the past, the ACF was required only for a subset of growers. ILP staff sent multiple reminders to growers prior to the reporting deadline. As of March 9, 2022, 46% of required ranches⁵ (2,163 out of 4,704 ranches) have submitted their ACF and 54% of required ranches (2,541 out of 4,704 ranches) have not submitted their ACF. In late March 2022, ILP staff sent a past-due reminder to growers that have not yet submitted their ACF. Growers that do not submit their year 2021 ACF are considered out of compliance and are subject to receiving notices of violation and possibly administrative civil liability penalties. Staff anticipate that the past due reminder emails will increase compliance with this requirement before notices of violation are issued.

Total Nitrogen Applied Report

A subset of growers that were previously required to submit a Total Nitrogen Applied (TNA) report under Ag Order 3.0 were required to submit a year 2021 TNA report by March 1, 2022. Growers can submit TNA reports directly to GeoTracker or via Preservation, Inc., the approved third-party program. This report requires growers to

³ https://www.waterboards.ca.gov/resources/fees/water_quality/docs/fy2122_fee_schedule.pdf#page=21

⁴ Operation. A distinct farming business, generally characterized by the form of business organization, such as a sole proprietorship, partnership, corporation, and/or cooperative. A farming operation may be associated with one or multiple individual ranches.

⁵ Ranch. A tract of land where commercial crops are produced or normally would have been produced. Individual ranches associated with an operation typically have a similar ranch manager, operator, or landowner, and are categorized by geographic location.

submit information on the total amount of nitrogen applied from all sources of nitrogen as well as acres of each specific crop grown, whether each crop was grown using organic or conventional growing methods, and information describing the basis for the amount of nitrogen applied. ILP staff sent multiple reminders to growers prior to the TNA reporting deadline. As of March 9, 2022, 82% of required ranches (1,479 out of 1,796 ranches) have submitted their TNA report and 18% of required ranches (317 out of 1,796 ranches) have not submitted their TNA report. In late March 2022, ILP staff sent a past-due reminder to growers that have not yet submitted their TNA report. Growers that do not submit their year 2021 TNA report are out of compliance and are subject to receiving notices of violation. Staff anticipate that the past due reminder emails will increase compliance with this requirement before notices of violation are issued.

Outreach and Coordination

2022 Irrigation and Nutrient Management Meeting

The University of California Cooperative Extension (UCCE) hosted the [2022 Irrigation and Nutrient Management Meeting](#) virtually on February 23, 2022.⁶ Researchers from University of California, ILP staff from the Central Coast Water Board, Salinas Valley Basin Groundwater Sustainability Agency, and Central Coast Water Quality Preservation, Inc., discussed irrigation and nutrient management in vegetable crops and water quality regulations. Central Coast Water Board staff's presentation summarized nitrogen related targets and limits, reporting requirements including the nitrogen applied minus removed (A-R) metric, incentives for reducing nitrogen discharge to groundwater (e.g., credits for increasing nitrogen removed by cover crops, woody mulch, and high carbon amendments), and the compliance schedule for these requirements. This year's meeting agenda also included:

- Nitrogen mineralization from organic fertilizers and composts
- California Department of Food and Agriculture (CDFA) Water Efficiency and Enhancement Program (SWEEP) and Healthy Soils Program (HSP)
- Weather-based irrigation scheduling for optimizing artichoke and cabbage
- Third-party program for Ag Order 4.0 update
- Factors affecting the removed side of the applied minus removed (A-R) metric
- Cover crop research

California Marine Sanctuary – Vegetated Management Practices / Food Safety Workshop

ILP staff is coordinating with the California Marine Sanctuary (CMS) and partners to develop a workshop focused on identifying information gaps in understanding the benefits and risk(s) associated with implementing on-farm vegetated management practices and food safety. Presenters include Pam Krone (CMS), Daniel Karp (UCCE), Sarah Lopez (Preservation, Inc.), and Paula Richter (ILP staff). Taylor Farms is also participating in the planning process to provide a grower/buyer perspective. This is the second workshop on this topic organized by CMS. The first was held on September 9,

⁶ <https://cemonterey.ucanr.edu/Irrigation - Nutrient Management Meeting Presentations 282/>

2021 and focused on growers. This second workshop is tentatively planned for the summer/fall of 2022 and will focus on auditors and buyers.

Third-Party Program Planning

Background

Ag Order 4.0 includes a third-party compliance assistance program framework and associated process to form and administer third-party program(s). ILP staff have been collaborating with the approved third-party program, Preservation, Inc., since August 2021. Preservation, Inc.'s Board of Directors has mandated that all members must participate in both groundwater and surface water quality trend monitoring and reporting. Preservation Inc. offers additional services including tools to track and report TNA and they plan to extend these services to the ACF and Irrigation and Nutrient Management Plan (INMP) summary report data.

Collaboration Efforts

ILP staff and Sarah Lopez from Preservation, Inc. meet every two weeks to collaborate and discuss third-party program development efforts. Additional focused topic meetings are also held on an as needed basis. Since August 2021, ILP staff and Preservation, Inc. have developed a timeline for third-party program invoicing, collection and reporting of TNA data for batch upload to GeoTracker, groundwater well sampling and reporting by contracted laboratories, focused efforts to identify areas for groundwater follow-up prioritization based on drinking water quality data and alignment with the Human Right to Water Law, website updates, and revisions to annual reports for surface receiving water quality trend monitoring to align with Ag Order 4.0 requirements (targets and limits). Additionally, preliminary collaboration and planning has begun related to monitoring workplan development, preparation for the annual Central Coast Water Board update regarding Ag Order 4.0 effectiveness (planned for the October 2022 Board meeting), and development of INMP summary report forms and guidance documentation.

Groundwater Well Monitoring and Reporting Notices of Violation

Background

Ag Order 3.0 required all growers to sample all domestic (drinking water) wells and their primary irrigation well twice during the 2017 calendar year (one sample event during spring (March-June) and one during fall (September-December)). Growers were required to upload the sampling results to GeoTracker within 60 days of sample collection.⁷ Growers that did not comply with the spring 2017 reporting requirement⁸ were issued a notice of violation in 2017, and offered the opportunity to comply by sampling in the fall of 2017 and spring of 2018. Growers that did not comply with the 2017 notices of violation were issued reminder e-mails in the summer of 2020, and

⁷ Growers that were members of the Central Coast Groundwater Coalition were required to comply with Ag Order 3.0 groundwater well monitoring and reporting requirements by 2019. The Central Coast Water Board allowed this extra time to comply with Ag Order 3.0 groundwater monitoring and reporting requirements as an incentive for growers to join the third-party coalition.

⁸ For the spring sampling event, the groundwater sample results were required to be posted to GeoTracker no later than August 31, 2017.

offered the opportunity to not be referred to the enforcement program if they reported the sample results from on-farm domestic and primary irrigation wells by November 2020.

Notices of Violation in 2022

Despite a significant outreach effort over an extended period of time to allow growers to submit their groundwater sampling results, approximately 5% of actively enrolled growers representing 235 ranches did not submit groundwater sampling results. On February 23, 2022, ILP staff issued notices of violation to both operators and landowners associated with the 235 ranches for not submitting groundwater sample results as required by Ag Order 3.0. The February 2022 notices of violation included a summary of the previous Central Coast Water Board outreach efforts and notices of violations for failing to submit the groundwater results and notified the growers of the potential consequences for failing to submit groundwater monitoring results (e.g., accrual of civil liability penalties). The notices of violation also reminded operators and landowners of upcoming Ag Order 4.0 groundwater monitoring requirements and stated that ILP staff will take into account past compliance history, as well as compliance with Ag Order 4.0 groundwater monitoring and reporting requirements, when considering future enforcement actions. The notices of violation also provided growers with contact information for the approved third-party program (Preservation, Inc.) and information about Preservation, Inc.'s ability to assist growers with groundwater well sampling and reporting.

Follow up coordination with the "out of compliance" growers indicate some of the violations were associated with issues other than the failure to collect and report the required groundwater quality data, such as failure to terminate ranches, incorrect well reporting on the electronic Notice of Intent, and data coordination issues associated with shared wells and operator lease rotations. In some cases, groundwater sampling was implemented but the resulting data were either not uploaded to GeoTracker or were uploaded incorrectly. ILP staff are continuing to work with the growers to upload available data and resolve the violations in addition to developing improved GeoTracker reporting and assessment tools to address some of the identified issues. It is anticipated that these efforts and third-party implementation of groundwater well sampling and reporting will reduce the occurrence of non-compliance and reporting issues.

Next Steps

ILP staff will conduct groundwater monitoring and reporting compliance evaluations after the Ag Order 4.0 July 31, 2022 reporting due date for growers to upload their 2022 groundwater well sampling results to GeoTracker. ILP staff will use the compliance evaluation and growers' past compliance history to prioritize potential future enforcement actions.

Standard Protocol Development

Nitrogen Removal Conversion Coefficients

Ag Order 4.0 includes nitrogen removal conversion coefficients for 93% of all crop acres in the central coast region. University of California Cooperative Extension researchers are working on developing conversion coefficients for additional crops. This effort will

increase the nitrogen removal conversion coefficient coverage to approximately 97% of all crop acres on the central coast region. This work will be finalized in December 2023. Growers who grow specialty crops for which nitrogen removal coefficients are not available or choose not to use coefficients provided by the Central Coast Water Board have the option of developing their own conversion coefficient by following approved standard protocols to collect samples from their operation, or similar operation, and obtain a laboratory result for the samples. These standard protocols are being finalized by Central Coast Water Board staff in coordination with UCCE researchers and CDFA and are on track to be approved by the Executive Officer within 12 months of Ag Order 4.0 adoption (by April 2022).

Cover Crop Nitrogen Scavenging Credit

In addition to the standard maximum allowable cover crop nitrogen scavenging credit, Ag Order 4.0 allows for the use of a calculated cover crop nitrogen scavenging credit based on certain criteria and forthcoming standard protocols to determine the nitrogen concentration in cover crops. ILP staff are coordinating with UCCE and U.S. Department of Agriculture (USDA) researchers to develop the standard protocols. UCCE and USDA researchers are in the process of collecting and analyzing cover crop samples to inform the development of the standard protocols and are on track to submit them for Executive Officer approval within 18 months of Ag Order 4.0 adoption (by October 2022).

Upcoming Ag Order 4.0 Requirements (within the next 6 months)

Groundwater Monitoring and Reporting for On-Farm Domestic Wells and Primary Irrigation Wells

Beginning in 2022, and annually thereafter, growers with ranches actively enrolled in Ag Order 4.0 are required to sample all on-farm domestic wells and each ranch's primary irrigation well⁹ between March 1 and May 31. Well samples must be analyzed by a qualified laboratory, and the testing results must be uploaded to the GeoTracker database by July 31.

In addition, and annually beginning in 2022, growers must provide on-farm domestic well users with a summary of laboratory results and health risk information associated with nitrate and 1,2,3-trichloropropane (1,2,3-TCP) within three business days of receiving testing results from the laboratory, or when the population of well users changes. This information must be provided even if nitrate or 1,2,3-TCP concentrations are below drinking water quality standards. Growers must update their electronic Notices of Intent each year to confirm that domestic well users have been provided with this information. ILP staff developed, and posted to our website, a [water quality results reporting template](#)¹⁰ that includes health risk information for these parameters and instructions for growers to use when notifying on-farm domestic well users of nitrate and

⁹ Annual monitoring and reporting of ranches' primary irrigation wells is required until groundwater quality trend monitoring goes into effect.

¹⁰https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ilp/groundwater_quality_monitoring_and_reporting.html

1,2,3-TCP laboratory results. Spanish and Chinese translations of the template, health risk information, and instructions are forthcoming.

ILP staff sent reminder emails to actively enrolled operations regarding the groundwater well monitoring and reporting requirements. The reminder emails were sent in December 2021, February 2022, and March 2022, and included an additional reminder that Preservation, Inc. is available to assist growers with compliance of various Ag Order 4.0 requirements, including groundwater well monitoring and reporting. The reminder emails included Preservation, Inc.'s contact information.

Surface Receiving Water Quality Trends

All dischargers must conduct surface receiving water monitoring and reporting, either individually or through a third-party program effort. Third-party programs may submit work plans on behalf of participating dischargers. This monitoring and reporting requirement is equivalent to the monitoring and reporting currently conducted by Preservation Inc.'s Cooperative Monitoring Program. All workplans are due by July 1, 2022. ILP staff are working with Preservation, Inc. to incorporate the Ag Order 4.0 targets and limits into the evaluation of the surface water quality trends data and the cooperative monitoring program's annual report.

PROGRAM PERFORMANCE MEASURES

Please see the following standard attachments.

ATTACHMENTS

1. [Table 1](#) - 401 Water Quality Certification Applications Received
2. [Table 2](#) - 401 Water Quality Certifications Issued
3. [Table 3](#) - Groundwater Section, Case Closure Performance Scoreboard
4. [Table 4](#) - Groundwater Case Closures
5. [Table 5](#) - Enrollments in General Orders/Waivers

R:\RB3\Shared\ - Board Meetings\Current
Agenda\2022\04_APR_21\Item_14\Item14_Stfrpt.Docx