

**CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD
ILRP GROUNDWATER UPDATE
May 28-29, 2015**

The following information is provided to update the Water Board on the status of the implementation of the Agricultural Order groundwater monitoring and reporting requirements. Staff will be available to answer any questions, but does not plan to provide a presentation on this topic, as staff's May 2015 Board meeting presentation will focus on ILRP implementation related to the Annual Compliance Form. Staff is preparing a detailed discussion of the groundwater monitoring and reporting results for a future, as-yet-unspecified Board meeting.

Groundwater Monitoring and Reporting

- As of April 15, 2015, approximately 3476 groundwater wells have been sampled in compliance with the Agricultural Order and associated Monitoring and Reporting Programs (MRPs). Of the 3476 total groundwater wells sampled, 1463 are domestic wells and 2013 are irrigation wells.
- Approximately 25% of the groundwater wells sampled region wide exceed the drinking water standard for nitrate, including both domestic drinking water wells and irrigation wells (approximately 884 total wells).
- All ILRP groundwater data is managed in the Water Board's GeoTracker data management system. All ILRP groundwater monitoring data is displayed to the public in GeoTracker GAMA, with the exception of a small subset of groundwater wells sampled by the Central Coast Groundwater Coalition (CCGC) that is not yet displayed in order to comply with the approved workplans for CCGC. CCGC data will be displayed to the public using GeoTracker GAMA on March 15, 2016. Currently, the public can get a copy of CCGC data by submitting a Public Records Act request to the Water Board. If interested parties wish to evaluate the specific characteristics of a particular CCGC monitoring result or relate the CCGC data to an individual farm or ranch, they must also use the relational key provided to the Water Board by CCGC.

Drinking Water Notifications

- As of April 15, 2015, approximately 350 of the 1463 domestic drinking water wells sampled indicated an exceedance of the drinking water standard (approximately 24%). Of the 350, CCGC reported 227 domestic drinking water well exceedances and individual growers reported 123 domestic drinking water well exceedances.
- Using the results of individual groundwater monitoring, the Water Board continues to issue drinking water notification letters to growers and landowners whose domestic water supply wells exceed the drinking water standard for nitrate. Using the results of cooperative groundwater monitoring, CCGC continues to issue drinking water notification letters to CCGC members whose domestic drinking water supply wells exceed the drinking water standard for nitrate.
- As of April 15, 2015, the Water Board issued approximately 136 drinking water notification letters to growers and landowners who have one or more domestic drinking water wells which exceed the nitrate drinking water standard—some farms and ranches have multiple groundwater wells with exceedances.
- As of April 15, 2015, CCGC issued approximately 274 drinking water notification letters to CCGC members whose farms or ranches have one or more domestic drinking water

wells which exceed the nitrate drinking water standard. See the CCGC section below for additional details regarding the drinking water notification process.

- The number of drinking water notification wells does not exactly match the number of domestic drinking water wells with exceedances because one letter may address multiple wells and one well may have multiple letters over time.

Individual Groundwater Monitoring and Reporting Compliance Status

- Pursuant to the Agricultural Order and MRP, landowners and operators of enrolled farms and ranches must sample all domestic drinking water wells and the primary irrigation well and report results to the Water Board in GeoTracker by October 1, 2013, or within approximately one year of enrollment for new operations.
- Water Board records indicate that approximately 799 farms/ranches enrolled in the Agricultural Order have at least one groundwater well identified in their eNOIs, but have not submitted any groundwater monitoring data as required by the Agricultural Order. Water Board staff is in the process of sending notices of violation to growers and landowners to follow up with those that failed to comply with individual groundwater monitoring and reporting requirements.

Central Coast Groundwater Coalition (CCGC) - Cooperative Groundwater Monitoring and Reporting Compliance Status

Staff is working closely with CCGC to confirm that CCGC has completed or is on track to complete all tasks and deliverables identified in the CCGC workplan, as required. At the time of this staff report's writing, CCGC completed the tasks identified below and submitted the following workplan deliverables:

- CCGC membership and organizational information.
- GIS spatial map data for the CCGC's northern and southern county boundaries.
- Quality Assurance Project Plans and Sampling and Analysis Plans.
- Lists of wells and sampling schedules for the Salinas Valley/Lockwood Valley, Pajaro Valley, Gilroy Hollister, and southern counties (San Luis Obispo, Santa Barbara, and Ventura counties).
- Completion of all groundwater sampling for Salinas Valley/Lockwood Valley, Pajaro Valley, Gilroy Hollister, and southern counties (San Luis Obispo, Santa Barbara, and Ventura counties); CCGC sampled 486 wells (domestic drinking water wells) in the northern counties and 621 wells (irrigation and domestic drinking water wells) in the southern counties.
- Upload of all CCGC groundwater nitrate and general chemistry monitoring data to GeoTracker. CCGC has not submitted any isotope or age-dating-related monitoring data and has indicated it will not be because the data is not required under the MRP.
- Technical memorandums summarizing nitrate results in domestic supply wells located in the Salinas Valley/Lockwood Valley, Pajaro Valley, and Gilroy-Hollister.
- Draft Groundwater Characterization Report for the Northern Counties.

The following CCGC tasks and deliverables are still outstanding:

- Final Groundwater Characterization Reports for the Northern Counties (*extended due date June 1, 2015*).

- Draft and Final Groundwater Characterization Reports for the Southern Counties (*extended due dates July 15, 2015, and July 31, 2015*).

On April 22, 2015, the Executive Officer approved extension requests to provide CCGC additional time to complete these deliverables, as indicated above in italics. These extensions were necessitated because of changes in elements within technical memorandums and characterization reports, discussions related to contour map adequacy and development and in part due to delays in Water Board staff availability to review and provide comments on these reports. CCGC will complete all work to comply with cooperative groundwater monitoring and reporting requirements for CCGC members by July 31, 2015.

Verification of CCGC Compliance with Drinking Water Notification Process

As discussed at the July and November 2014 Board meetings, the method staff uses to verify CCGC compliance with the drinking water notification process is to conduct an in-person audit of a CCGC binder containing relevant CCGC member information, including copies of individual drinking water notification letters. The purpose of the audit is to verify compliance with the Agricultural Order and CCGC Workplan approval by the Executive Officer, as well as to identify specific situations where staff would consider further follow-up with growers and landowners. As part of the audit, staff reviews completeness of the CCGC binder and individual documents, including exceedance reports, individual drinking water notification letters, and responses to individual drinking water notification letters.

On February 10, 2015, staff met with CCGC to conduct an audit of the drinking water notification binders for CCGC members. At that time, staff was unable to conduct a detailed review of the information because it was not possible to link the information from the drinking water exceedance follow-up report submitted to the Water Board to individual CCGC members. In addition, the binders included the follow-up responses from CCGC members, but did not include the actual CCGC drinking water notification letters themselves. CCGC representatives agreed to improve the organization of the binder and to include copies of the individual drinking water notification letters.

On March 18, 2015, staff conducted a second audit of the CCGC drinking water notification binders. Staff's review of the binder information focused on several ranches of interest and involved review of the exceedance information including CCGC's drinking water notification letters and the corresponding follow-up responses from CCGC members. The binders included a table of contents, a copy of the *Comprehensive Expanded Exceedance Report for all Domestic Exceedances to Date* and an updated *Relational Key*, both subjects of discussion at the November 2014 board meeting. The exceedance report provides a listing of all domestic drinking water wells that exceed the drinking water standard for nitrate and the relational key table allows Water Board staff to link the CCGC ID (CCGC Well) directly to the GeoTracker Member Global ID (individual farm/ranch). These two documents allow Water Board staff to identify and link the individual exceedances on the follow-up report to the specific relevant document in the binder. While staff must expend additional time to conduct an in-person audit of this information (in comparison to receiving this information from growers directly and having compliance information readily available at their work location), staff finds that the CCGC drinking water notification binder contains sufficient information to verify compliance with the Agricultural Order and CCGC Workplan.

Status of CCGC Groundwater Nitrate Concentration Contour Maps

As follow-up to the January 2015 Board meeting, Water Board staff met with CCGC staff and their consultants on February 10, 2015, and again on March 18, 2015, to discuss the CCGC groundwater nitrate concentration contour maps. In these meetings, Water Board staff attempted to find a nitrate contour map solution that met both the conditions stated in the CCGC Work Plan approval letters and CCGC's stated obligations to their constituency, but this nexus could not be achieved. The meetings also involved discussions concerning the completion of technical memorandums for the northern counties and the submittal of the draft and final groundwater characterization reports for the northern and southern counties, including associated contour maps. Staff also participated in several telephone conference calls to discuss technical details concerning the required deliverables and submittal deadlines.

Staff determined that the CCGC contour maps for the Salinas Valley do not meet Conditions 10 through 13 of the Executive Officer's Workplan Approval letter and the contour maps alone are not sufficient for providing reliable information to the public, in lieu of the actual groundwater data. In addition, due to the significant impacts to groundwater that serves as a source of drinking water, staff also concluded that the Water Board must prioritize safe drinking water and maximize the public's access to information and data regarding nitrate impacts to groundwater. Staff discussed these issues with the CCGC, and the Executive Officer issued a letter to the CCGC on February 20, 2015 indicating:

1. The Executive Officer will not approve the groundwater nitrate concentration contour maps for the Salinas Valley in lieu of displaying the actual nitrate concentration data because of the reasons state above, and
2. The Central Coast Water Board will display CCGC groundwater nitrate concentration data for the public as individual wells on GeoTracker GAMA on March 15, 2016.

Acknowledging CCGC members' desire for anonymity, staff agreed to identify the individual CCGC wells on GeoTracker GAMA with the CCGC well identification number provided by CCGC, rather than displaying individual farm information. In addition, consistent with the Agricultural Order (Condition 65), well location and data will only be displayed on GeoTracker GAMA within a one-half mile radius of the actual well location. On March 20, 2015, the Executive Officer issued a similar letter to CCGC rejecting the groundwater nitrate concentration contour maps for the Pajaro Valley and Gilroy-Hollister areas, in lieu of actual groundwater data.

Staff recognizes that the CCGC contour maps can be improved and may be useful to help inform the public's understanding of nitrate in shallow groundwater, as a supplement to the actual nitrate groundwater concentration data. Staff coordinated with CCGC and their consultants to refine expectations for finalizing the contour maps as a supplement to the actual nitrate groundwater concentration data displayed on GeoTracker. Once the CCGC reports and associated contour maps are finalized in June and July 2015, the Water Board will make the CCGC reports and associated contour maps available to the public on the Water Board's website.

On March 23, 2015, CCGC petitioned the State Water Board to review the Executive Officer's decision not to approve the groundwater nitrate concentration contour maps. CCGC contends that the contour maps are sufficient for providing reliable information to the public, in lieu of displaying actual individual well nitrate groundwater concentration data on the Water Board's GeoTracker data management system. The State Water Board has 90 days from that date to accept or dismiss the petition. Staff will continue to update and inform the Water Board as this petition proceeds.