

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

STAFF REPORT FOR REGULAR MEETING OF MARCH 14-15, 2013

Prepared on February 13, 2013

ITEM NUMBER: 20

SUBJECT: Agricultural Regulatory Program Update – Cooperative Groundwater Monitoring

SUMMARY

This is an information item to update the Board regarding implementation of Agricultural Order R3-2012-0011, specifically activities related to cooperative groundwater monitoring requirements. Nitrate pollution from agricultural fertilizers is a severe problem in the Central Coast Region and groundwater monitoring is one of the Water Board's highest priorities for the Agricultural Order, especially related to the protection of drinking water sources. The Agricultural Order and associated Monitoring and Reporting Programs (MRPs) require growers to conduct groundwater monitoring, either individually or as part of a cooperative program. Many growers have made progress to complete the groundwater monitoring requirements. Several groups are developing cooperative groundwater monitoring programs and staff has both met and consulted with these groups to provide guidance. Staff is also considering changes to the Monitoring and Reporting Program to allow more growers to participate in cooperative groundwater programs that are approved by the Executive Officer.

Staff continues to support growers' efforts to achieve compliance by developing general guidance, assisting individual growers, working with laboratories, meeting with growers interested in pursuing a cooperative program, and providing financial assistance to limited resource growers.

GROUNDWATER MONITORING REQUIREMENTS

The Agricultural Order requires enrolled growers to conduct groundwater monitoring and reporting requirements specified in the Monitoring and Reporting Program, according to the tier that applies to their individual farm/ranch. Growers already or recently enrolled in the Order had the option to select one of two groundwater monitoring options: Individual Groundwater Monitoring or Cooperative Groundwater Monitoring.

Growers who chose to comply with Individual Groundwater Monitoring must sample at least one groundwater well on the individual farm/ranch, including any wells used for domestic drinking water. The requirements specify that samples must be collected during two specific time intervals: September – December 2012 and March – June 2013. Tier 3 farms/ranches must also repeat sampling for one well annually. As an alternative to sampling, Tier 1 and Tier 2 can submit existing nitrate data from groundwater wells collected within the last five years, or reference an existing groundwater study that meets certain criteria and is representative of their local area.

Growers who chose to comply with cooperative groundwater monitoring must submit a cooperative groundwater monitoring proposal by March 15, 2013. At a minimum, the proposal

must identify the participating growers (AW# and ranch/farm name) and must include sufficient monitoring to characterize the groundwater in the local area of the participating growers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. Staff is also considering changes to the Monitoring and Reporting Program to allow more growers to participate in cooperative groundwater programs that are approved by the Executive Officer.

In both cases, individual and cooperative, groundwater monitoring data must be submitted electronically to GeoTracker. Staff has developed two guidance documents to assist growers ("*Individual Groundwater Monitoring*" and "*Cooperative Groundwater Monitoring*") by providing a general overview of the requirements. These documents are included as Attachments 1 and 2 to this staff report and are also available on the Agricultural Regulatory Program website under the heading "Grower Workshops and Resources" at:

http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/index.shtml

COOPERATIVE GROUNDWATER MONITORING

As of January 23, 2013, a total of **1,597** farms/ranches have elected the option to participate in a cooperative groundwater monitoring effort. The majority of these growers elected this option by the August 1, 2012 deadline. Others include new enrollees that elected cooperative groundwater monitoring when they submitted their initial eNOI more recently. Per the MRP, growers electing to participate in a cooperative groundwater monitoring must submit a cooperative groundwater monitoring proposal to the Water Board by March 15, 2013. If no cooperative groundwater monitoring proposal is received for that grower's area by the deadline, the grower has one year to comply with the individual groundwater monitoring requirements.

As described in Table 1, a significant number of growers have selected the cooperative groundwater monitoring option, especially compared to the limited number of active efforts to develop cooperative groundwater monitoring proposals known to staff. To date, staff is aware of efforts to develop cooperative groundwater monitoring proposals in three general areas: 1) North Central Coast area (including primarily the Salinas Valley), 2) Santa Maria Watershed, and 3) Santa Rosa Creek, Morro Creek, and Little Morro Creek Watersheds. Discussions related to these efforts are summarized below:

- *Northern Central Coast Cooperative Groundwater Program* - Western Growers and the Grower-Shipper Association of Central California are actively assisting growers to pursue a cooperative groundwater monitoring program in the northern part of the region. The specific boundaries of the study area are still under development but project proponents have indicated that it will likely cover areas in the counties of Monterey, Santa Cruz, Santa Clara and San Benito. On January 22, 2013, Water Board staff met with representatives of the Grower-Shipper Association, Western Growers, Monterey County Farm Bureau, and their consultants to discuss their conceptual cooperative groundwater monitoring proposal. At the time of this meeting, the proposal was very preliminary and did not yet have details regarding monitoring program boundaries, scale, scope, or timeframe. Water Board staff provided initial feedback and identified specific areas where the proposal needs additional information: 1) timeframe for sampling and initial groundwater data reporting - especially related to priority drinking water sources, 2) assurances of long-term commitment given multi-year timeframe for implementation and potential costs, and 3) program administration to manage participation, fee payment, access to monitoring sites, water quality monitoring data and electronic submittals to GeoTracker, and any other items necessary to ensure long-term success. Agricultural representatives provided a revised draft work plan on

February 6, 2013 and have indicated they will submit a final proposal by the March 15, 2013 deadline.

- *Santa Maria Watershed* – The Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties also participated in the January 22, 2013 meeting described above. Representative Claire Wineman indicated that growers in the Santa Maria area are pursuing establishment of a cooperative groundwater monitoring program in the southern part of the region. Staff shared initial feedback on the *Northern Central Coast Cooperative Groundwater Program* with Ms. Wineman, as described in 1), 2) and 3) above, so the southern Grower-Shipper Association and growers can benefit in development of their own program. Lisa McCann verified in a phone conversation with Ms. Wineman on February 13, 2013, that development of the southern area cooperative groundwater monitoring program is progressing and Ms. McCann reiterated the Water Board staff's expectations that proposals for cooperative groundwater monitoring programs include information items 1), 2) and 3) above.
- *Santa Rosa Creek, Morro Creek, and Little Morro Creek Watersheds* – The San Luis Obispo County Farm Bureau is actively assisting local growers to pursue a cooperative groundwater monitoring program for growers located within the Santa Rosa Creek watershed in Cambria and the Morro Creek and Little Morro Creek watersheds in Morro Bay. On January 28, 2013, Water Board staff met with Farm Bureau staff and individual growers to discuss their cooperative monitoring effort. Staff clarified the requirements and provided general feedback regarding their effort. The program boundaries are relatively small in scale and their proposal is based on their evaluation of the site-specific hydrogeology and groundwater use in the local area. The growers involved appear to have detailed knowledge and understanding of the local hydrogeology and have made significant progress towards developing their proposal. Water Board staff indicated to the group that the proposal must also include timeframe for sampling and initial groundwater data reporting - especially related to priority drinking water sources, and that the proposal must confirm the commitment of participating growers and identify who will administer the program. The meeting was very productive and the project proponents have indicated they will submit the proposals by the March 15th deadline.

Staff has invited the above agricultural representatives to the March Board Meeting to describe their specific proposal for cooperative groundwater monitoring. Staff will review cooperative groundwater monitoring proposals received by March 15, 2013 and aims to provide comments within 30 to 45 days, pending available resources. Similarly, staff will provide the groups proposing the monitoring programs an additional 45 days after receipt of comments to submit revisions, if necessary.

Growers who elected cooperative groundwater monitoring, but do not submit a proposal by March 15, 2013, must conduct individual groundwater monitoring between September–December 2013 and March-June 2014.

In general, acceptable proposals will address both the technical requirements as specified in the MRP and the roles and responsibilities of the third-party groups that will implement the cooperative monitoring program on behalf of enrolled growers, as appropriate for the scope and scale of the proposed program.

Staff is evaluating lessons learned from our experience with implementation of the existing surface water cooperative monitoring program and the experiences of third-party group

implementation in other regions, such as the coalitions in the Central Valley region, to provide Central Coast Region growers enrolled in the Order the most effective and sustainable opportunities to comply with the Order via third-party groups, in this context cooperative groundwater monitoring programs. For example, the Central Valley Water Board's Waste Discharge Requirements for Growers within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group (Order R5-2012-0116), includes the following requirements to explicitly identify roles and responsibilities for the third-party group:

A. Application to Serve as a Third-Party Representing Members

Within 30 days of the effective date of this Order, the third-party must submit a letter to the Executive Officer requesting that the third-party serve as a third-party representing Members to carry out the third-party responsibilities. The Executive Officer will consider the following factors in determining whether to approve the request by issuing a Notice of Applicability (NOA) to the third-party.

- 1. Ability of the third-party to carry out the identified third-party responsibilities.*
- 2. Whether the third-party is a legally defined entity (i.e., non-profit corporation; local or state government; Joint Powers Authority) or has a binding agreement among multiple entities that clearly describes the mechanisms in place to ensure accountability to its members.*
- 3. Whether the third-party has binding agreements with any subsidiary group (e.g., subwatershed group) to ensure any third-party responsibilities carried out by the subsidiary group, including the collection of fees, are done so transparently and with accountability to the third party. If the third-party will not rely on any subsidiary group to carry out any of its responsibilities, the third-party must state that in its application letter.*
- 4. Whether the third-party has a governance structure that includes a governing board of directors composed in whole or in part of Members, or otherwise provides Members with a mechanism to direct or influence the governance of the third-party through appropriate by-laws.*

C. Requirements for the Third-Party Group

In order to remain eligible to serve as a third-party representative to Members, the third-party shall perform the following:

- 1. Provide the Central Valley Water Board documentation of its organizational or management structure. The documentation shall identify persons responsible for ensuring that program requirements are fulfilled. The documentation shall be made readily available to Members.*
- 2. Prepare annual summaries of expenditures of fees and revenue used to comply with this Order. The summaries shall be provided to or made readily available to Members.*
- 3. If the third-party group receives a notice of violation (NOV) from the Central Valley Water Board, the third-party must provide to Members in the area addressed by the NOV appropriate information regarding the reason(s) for the violation. The notification must be provided to all Members within the area affected by the NOV within thirty (30) days of receiving the NOV from the board. The third-party group must provide*

confirmation to the board of each notification. A summary of all notices of violation received by the third-party group must be provided to all Members annually.

- 4. Provide timely and complete submittal of any plans or reports required by this Order.*
- 5. Within 30 days of receiving a Notice of Applicability from the Central Valley Water Board [to serve as a third party group], inform Members of this Order's requirements by providing a notice of confirmation form to be completed by each Member.*
- 6. Work cooperatively with the Central Valley Water Board to ensure all Members are providing required information and taking necessary steps to address [any obstacles, issues or violations of Order requirements that arise]. As part of the Membership List submittal, identify the growers who [are responsible for any obstacles, issues or violations. e.g., failed to submit required fees to the third-party].*
- 7. Ensure that any activities conducted on behalf of the third-party by other groups meet the requirements of this Order. The third-party is responsible for any activities conducted on its behalf.*
- 8. Collect any fees from Members required by the State Water Board pursuant to the fee schedule contained in Title 23 CCR. Such fees shall then be submitted to the State Water Board.*

PROPOSED CHANGES TO THE MONITORING AND REPORTING PROGRAM

Agricultural representatives proposed the original 90-day timeframe adopted by the Board to elect cooperative groundwater monitoring. In response to a later request from agricultural representatives, the Executive Officer approved an extension, beyond the 90 days, to elect cooperative groundwater monitoring until August 1, 2012. At this time, agricultural representatives and individual growers are requesting additional time to elect cooperative groundwater monitoring and participate in the specific efforts described above.

In response, staff has proposed additional draft edits to the MRP to allow growers to elect cooperative groundwater monitoring for a specific period of time, once a proposed plan is approved. In general, the grower would have to be in compliance with other monitoring and reporting requirements of the Order before they can switch from individual to cooperative. This proposed MRP revision will benefit the cooperative groundwater monitoring efforts because it will increase the number of participants, allowing for more resources to implement the cooperative program. The proposed MRP revisions under consideration by the Executive Officer are included as Attachment 3.

OTHER GROUNDWATER MONITORING INFORMATION

Recent Activities to Support Groundwater Monitoring Requirements

Since the adoption of the Agricultural Order, staff has been working diligently with growers, technical assistance providers, consultants, laboratories, and the GeoTracker HelpDesk staff at the State Water Board, to help growers achieve compliance with the groundwater monitoring and reporting requirements. As discussed in previous information updates to the Board, staff sent out reminders to growers regarding upcoming deadlines, developed various guidance documents, met with individual growers and grower representatives, and organized and participated in many outreach workshops.

During the individual groundwater monitoring sampling period (September 2012 – December 2012), staff responded to hundreds of telephone calls and emails regarding the groundwater monitoring and reporting requirements. Staff was available and expended much effort to field questions and clarify the monitoring requirements to individual growers. Staff continues to be available to assist growers, although questions regarding groundwater monitoring have significantly reduced.

Additional efforts included the establishment of a grant project using \$10,000 in PG&E Settlement Funds to provide free groundwater sampling and laboratory analytical services to small and/or economically disadvantaged growers who qualify as “Limited Resource Farmers/Ranchers or Socially Disadvantaged Operators” as defined by the U.S Department of Agriculture. Grant funds are now fully expended, which provided growers with free sampling and analyses for more than 70 groundwater wells.

Groundwater Wells Reported in GeoTracker

There are approximately 4200 individual farms/ranches enrolled in the Agricultural Order. Growers enrolled in the Agricultural Order are required to report the number of groundwater wells on their farm/ranch on their electronic-Notice of Intent (eNOI). Based on information reported by growers in the eNOI, there are approximately 3803 Agricultural Wells and approximately 942 Domestic Drinking Water Wells on farms/ranches enrolled in the Agricultural Order. At this time, some enrolled growers have not updated their eNOI to include information about the number of groundwater wells and these numbers may increase. Staff is currently evaluating data completeness regarding groundwater wells, as well as other areas of the eNOI. Table 1 below summarizes the groundwater well data related to the number of farms/ranches selecting individual and cooperative groundwater monitoring.

Table 1. Groundwater Information Reported in GeoTracker¹

Number of Groundwater Wells	Agricultural Wells ~ 3803 Domestic Drinking Water Wells ~ 942
Number of Farms/Ranches Selecting COOPERATIVE Groundwater Monitoring	1,597 Farms/Ranches (Includes ~2,354 Agricultural Wells and ~500 Domestic Drinking Water Wells)
Number of Farms/Ranches Selecting INDIVIDUAL Groundwater Monitoring	2,603 Farms/Ranches (Includes ~1,449 Agricultural Wells and ~442 Domestic Supply Wells)
Number of Farms/Ranches Submitted Groundwater Data to GeoTracker	709 Ranches (~514 EDF Uploads; ~195 PDF Uploads)

¹Data as of January 23, 2013.

Status of Individual Groundwater Monitoring

As of January 23, 2013, a total of **2,603** farms/ranches selected the Individual Groundwater Monitoring Option. Of these farms/ranches, approximately **709** have submitted groundwater data to GeoTracker. While many growers are continuing to take action to comply appropriately with individual sampling requirements and there are others who have not yet provided their existing groundwater data (deadline is October 1, 2013), the status described in Table 1 indicates that compliance with the individual groundwater monitoring requirements is relatively low. Staff has been informing growers, grower representatives and laboratories that those growers that did not sample their groundwater wells during the sampling period are now out of compliance. Staff continues to provide assistance and advises growers to complete the required groundwater sampling as soon as possible, to limit the risk of potential enforcement. Several growers who did not conduct individual groundwater monitoring have indicated that they did not conduct the first round of sampling as they now want to opt into one of the cooperative groundwater monitoring programs discussed above. The second round of groundwater sampling must be conducted during spring of this year (March-June, 2013).

Staff is prioritizing the evaluation of the results of groundwater monitoring at those wells used for drinking water purposes. Staff plans to conduct a more thorough evaluation and assessment of the individual groundwater monitoring results and compliance following the October 1, 2013 reporting deadline.

In several cases, staff has received requests for postponement of the individual groundwater sampling requirements. The most common reasons for these requests include a pump that is under repair or the excessive electricity demand fees the grower will incur for turning on their well during a time that it is not normally used. Staff considers and has approved several reasonable requests for postponement of the sampling deadlines. Growers must provide justification for any request and staff evaluates each request on a case-by-case basis. Staff has approved many such requests.

ATTACHMENTS

1. Individual Groundwater Monitoring Guide
2. Cooperative Groundwater Monitoring Guide
3. Proposed Draft Revisions to the Monitoring and Reporting Program