

Central Coast Regional Water Quality Control Board

**IRRIGATED LANDS REGULATORY PROGRAM
RESOURCE FOR GROWERS**

GROUNDWATER MONITORING AND REPORTING GUIDANCE¹
Updated April 7, 2017

<i>Which wells must be sampled?</i>	<i>When are samples collected?</i>	<i>What laboratory tests are required?</i>
ALL domestic wells and the primary irrigation well located at each ranch enrolled in the Ag Order.	Two samples from each well are required in 2017: <ul style="list-style-type: none"> • One sample from March 1 – June 30, 2017 • One sample from Sept. 1 – Dec. 31, 2017 	Samples must be tested by a qualified laboratory for the parameters listed in the table below and results must be submitted electronically to the GeoTracker database.

Required Groundwater Sampling Parameters

Parameter	Reporting Limit	Analytical Test Method	Units
pH	0.1	Field or Laboratory Measurement EPA General Methods	pH Units
Specific Conductance	2.5		µS/cm
Total Dissolved Solids	10		EPA Method 310.1 or 310.2 General Cations EPA 200.7, 200.8, 200.9 General Anions EPA Method 300 or EPA Method 353.2
Total Alkalinity as CaCO ₃			
Calcium	0.05		
Magnesium	0.02		
Sodium	0.1		
Potassium	0.1		
Sulfate (SO ₄)	1.0		
Chloride	0.1		
Nitrate + Nitrite (as N) Or Nitrate as N	0.1		

¹ This guidance is for growers and landowners who are complying with individual groundwater monitoring and reporting requirements. If you belong to a cooperative groundwater monitoring program, you must contact the cooperative program directly for information on specific cooperative program requirements.

FREQUENTLY ASKED QUESTIONS

Why do I have to sample the groundwater wells on my ranch?

Agricultural Order R3-2017-0002 (Ag Order) requires operators (growers) and/or landowners to sample their domestic wells and primary irrigation well, and report the sampling results to the Water Board. A copy of the requirements is available online at:

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

Which groundwater wells must be sampled in 2017?

All domestic use wells and the primary irrigation well that are located within the enrolled ranch county Assessor Parcel Numbers (APNs) must be sampled twice during 2017. This includes all domestic wells located within the enrolled APNs, and not just on the leased property or within the ranch boundary.

Which wells are considered “domestic use” wells?

For the purposes of the Ag Order, a domestic use well is defined as any groundwater well that is connected to a residence, workshop, or place of business that may be used for human consumption, cooking, or sanitary purposes. This includes any “dual-use” well (i.e. a well that is used for both irrigation and domestic purposes).

Do I have to sample my well(s) in 2017 if they were sampled and the results reported in 2016 or earlier?

Yes, you must sample all domestic wells and the primary irrigation well twice during 2017 under the new Ag Order.

What is the cost of the groundwater sampling and analyses?

The approximate cost is \$200-\$300 per sample for each groundwater well, including sampling, laboratory analyses and electronic reporting of results to the Water Board. Landowners and/or growers are responsible for obtaining qualified sampling and laboratory services. A list of laboratories qualified to perform the required analyses and data upload is attached.

What if I use a different laboratory for the 2017 sampling events?

If you are considering changing your laboratory from the one you used for the previous Ag Order requirements, it is important that all the well information is transferred to the new laboratory. If you are sampling the same well, the existing GeoTracker Global ID, ranch names, well name (field point) and location (geo xy coordinates) should remain the same as those you provided previously. It is the responsibility of the grower to ensure that the information presented to the new laboratory is current and correct.

What if I belong to a cooperative groundwater monitoring program?

The following cooperative groundwater monitoring programs are approved by the Executive Officer and are subject to alternative requirements. Please contact the cooperative groundwater monitoring program directly for more information:

Central Coast Groundwater Coalition

Website: <http://www.centralcoastgwc.org/>, Email: rivkah.cohen@curesworks.org

Santa Rosa Creek Valley Groundwater Cooperative

Email: georgekendall01@gmail.com

Sample Collection

When are the domestic and primary irrigation well required to be sampled?

You must conduct two rounds of groundwater sampling during calendar year 2017 for all wells required to be sampled (all domestic wells and primary irrigation well). The first sample must be collected during spring (March - June) and the second sample must be collected during fall (September - December).

Who must collect the well sample(s)?

Groundwater well samples must be collected by a "...qualified third party" sampler. A qualified third party sampler means any individual, other than the landowner or grower, identified on the electronic-Notice of Intent (eNOI); and who has knowledge and training in proper sampling methods, chain of custody, and quality assurance/quality control protocols. The individual collecting the sample and all others that handle the groundwater sample must sign the laboratory chain of custody form and the grower must maintain a copy of the chain of custody.

Many of the laboratories offering analytical services also provide sampling services. A list of laboratories qualified to perform groundwater sampling, laboratory analyses and data upload is attached. In addition, some laboratories provide training and instruction on proper sampling methods and handling, chain of custody, and quality assurance/quality control protocols.

What containers are needed to collect samples from my groundwater well?

Special sampling kits/containers may be obtained from the laboratory. Growers must contact the laboratory to ensure proper sampling containers for the analyses required by the Ag Order, and to confirm proper sample handling/ transportation protocols.

Where should the well sample(s) be collected?

Groundwater samples must be collected at or near the wellhead before the pressure tank, before any filters or treatment, and before any fertilizer or soil amendment applicators. If a sample can't be collected before the pressure tank, the sample must be collected as close to the pressure tank as possible, and before any filters or water treatment systems. In cases where this is not possible, the water sample must be collected from a sampling point as close to the pressure tank as possible, or from a cold-water spigot located before any filters or water treatment systems.

Laboratory Analyses

Which laboratories must perform the analyses and what tests are required?

Groundwater testing must be conducted by a qualified laboratory. Sample(s) must be tested for the parameters shown in the table on page 1. Test results must be reported electronically to the Water Board's GeoTracker database on behalf of the landowner/grower. A list of laboratories qualified to perform the required analyses and data upload is attached.

How are the sampling results reported to my ranch enrollment record?

A qualified laboratory will upload the analytical results directly to your ranch enrollment record (GeoTracker Global ID) in the required electronic format and report the results to the Water Board. Growers must also provide specific information to the laboratory regarding the groundwater well location (latitude and longitude), well construction information (well screen interval depths, well total depth), and groundwater well type (domestic, irrigation, or used for both purposes).

Results Reporting

How should I name my well for purposes of sampling and reporting?

The landowner and/or grower determine the groundwater well name (field point name), in coordination with the laboratory. The well name should be simple and informative (e.g. Dom1 or AgWell2). Please note that well names are available to the public and displayed on GeoTracker and landowners and growers should name their well accordingly. Results for different wells must be uploaded to the unique well name (field point). If the well was previously sampled, you should use the same well name for the 2017 sampling and reporting, and the laboratory should upload the 2017 results for that well.

When must the groundwater sample results be reported to GeoTracker?

You must request that the laboratory upload groundwater sampling results in the required electronic to their GeoTracker ranch record within 60 days of sample collection. Results must be uploaded to the individual ranch GeoTracker Global ID.

What is the laboratory reporting format for Nitrate?

Laboratory results for nitrate must be expressed as nitrogen. This can either be expressed as "nitrate as nitrogen" or "nitrate + nitrite as nitrogen". The California safe drinking water standard for nitrate is expressed as "10 milligrams/liter (mg/L) nitrate as nitrogen".

Do I have to report the location of my groundwater well(s)?

Yes, you must report the accurate location (latitude and longitude) of the groundwater well(s) sampled. The coordinates of each well is required to be reported in decimal degrees using the NAD 83 (North American Datum 1983) horizontal datum. The location accuracy requirement is for the well to be located within 1,000 centimeters (approx. 30 feet) of the actual well location. The following methods provide acceptable location accuracy: smart phone applications, Google Earth (WGS 84), hand held GPS device, or other similar methods. A third-party sampler or laboratory can assist you in collecting and reporting the Lat/Long in the required electronic format to the GeoTracker database on your behalf.

Can I submit existing (historic) groundwater testing data?

No, only groundwater quality data collected during the required sampling periods, i.e. (March - June) and (September - December) of 2017 will be accepted.

Drinking Water Notification

Do I have to notify well users if my domestic well test exceeds the safe drinking water standard for nitrate?

Yes, if the test results indicate that water in any well that is used or may be used for drinking water exceeds the California safe drinking water standard (10 mg/L of nitrate as nitrogen), you must notify the users in writing within 10 days of learning of the exceedance and mail a copy of the written notification letter to the Central Coast Water Board. The drinking water notification must state that the water poses a human health risk due to elevated nitrate concentration, and that the water should not be used for drinking or cooking. In addition, if there is a change in occupancy, you must immediately notify any new well users in writing (e.g. tenants and employees with access to the affected well).

Where can I find information on nitrate in drinking water?

Nitrate is a common contaminant found in groundwater that can have serious health effects if consumed at high levels. Drinking water with nitrate above the California safe drinking water standard is not safe for human consumption, especially for infants six months of age and younger, and pregnant and nursing women. A “Nitrate in Drinking Water” handout is available that includes information and resources related to nitrate in drinking water and is provided in English, Spanish and Chinese. The handout is available at the link below, on the Water Board’s web page in the section titled “Grower Workshops and Resources”:

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

Grower and Landowner Coordination

If a domestic well is located within a county Assessor Parcel Number (APN) that I have enrolled, but it is not part of my lease or under my control, who is responsible for sampling?

Both the landowner and grower of the enrolled ranch are responsible for compliance with the Ag Order, however only one party (typically the grower) is required to sample the well and report the results to the Water Board. Therefore the grower and landowner must coordinate to assure all domestic wells are identified, sampled and results reported. The landowner will need to provide access for sampling to occur or will be required to complete sampling using a qualified third party sampler and laboratory.

If a well is shared between two ranches, do both growers sample the well?

No, only one ranch enrollment must identify and claim the well in their enrollment and sample the shared well. If the well is located within the property boundary of your enrolled ranch, it must be sampled and the results must be uploaded to your ranch GeoTracker Global ID. If there are no wells located on your enrolled property boundary, no groundwater sampling is required. The grower and landowner must coordinate to assure all wells are identified, sampled and results reported.

Do I need to sample my well(s) if a prior grower has already sampled and reported results for 2017?

No, you are not required to sample the same well again if the prior grower or landowner completed the groundwater sampling for 2017. You must confirm with the prior grower or landowner that groundwater sampling and reporting is complete and must provide the following information to Water Board staff: GeoTracker Global ID Number (AGL#), ranch name and well name. If the prior grower did not conduct and report both rounds of groundwater sampling, then you should contact the landowner and prior grower to determine who will complete the sampling to achieve full compliance. Pursuant to the Ag Order and MRPs, landowners and grower(s) are jointly responsible for compliance with requirements.

What if the landowner refuses to provide access to sample a domestic well or primary irrigation well?

Landowners and growers are jointly responsible for compliance with the Ag Order. If the grower has contacted the landowner and the landowner refuses to provide access, then the grower should provide this information to the Water Board. The Water Board will follow-up with the landowner and will require them to complete the sampling and testing using a qualified third party sampler and laboratory.

electronic-Notice of Intent (eNOI)

Which wells must be reported on my eNOI?

All active wells located within the county Assessor Parcel Number (APN) boundaries of the enrolled ranch, including all irrigation and all domestic wells must be reported on your eNOI.

What is considered to be an “active well”?

If a groundwater well is being used or is anticipated to be used for either irrigation of domestic use purposes and has electrical power and piping for that purpose, then it is considered active, and must be reported on your enrollment.

How do I report a well that is used for both irrigation and domestic uses in my enrollment?

A well that is used for both irrigation and domestic purposes, i.e. “dual-use” well shall be reported as a domestic well, and only be counted once in the section for active domestic drinking water well(s).

How do I login to my GeoTracker eNOI account?

To login to your secure GeoTracker account you must have been issued a username and password, go to: <https://geotracker.waterboards.ca.gov/esj>.

What if I forgot my eNOI login information?

If you have forgotten your password, you can create a new password by requesting a password reset email. Go to the login page at <https://geotracker.waterboards.ca.gov/esj> and down below the Login to ESI button, where it says “Forgot your password? Have a password reset link emailed to you”, click on the word “emailed” and submit your email address. An email will be sent to you immediately that will contain your username and a lengthy hyper-link to click on to allow you to create a new password. You may also contact the GeoTracker Help Desk directly at Geotracker@waterboards.ca.gov or (866) 480-1028.

For more information, please contact:

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