Appendix Z

Standard Operating Procedure for Water Quality Sampling and Reporting

STANDARD OPERATING PROCEDURE

Water Quality Sampling and Reporting

SOP No: SOP-x

Revision 0

Effective Date: xx

Drafted by:

Name and Signature	Date

Reviewed by:

Name and Signature	Date

Adopted by:

Name and Signature	Date

1. SCOPE AND APPLICATION

This Water Quality (WQ) Standard Operating Procedure (SOP) provides guidance for sample data collection and reporting that is consistent with the Subbasin's Groundwater Sustainability Plan (GSP). The Kern County Subbasin has 20 Groundwater Sustainability Agencies (GSAs) and one Water Management Area, which are collectively responsible for complying with the Sustainable Groundwater Management Act (SGMA). Collecting water quality samples that are representative of groundwater conditions is one of the GSAs obligations. To employ a consistent process between all GSAs, this SOP provides guidance for sample procedures following industry-wide best management practices. Additionally, pertinent information on sampling timeframes, Quality Assurance/Quality Control (QA/QC) procedures, and data reporting are covered in this document.

2. SUMMARY OF APPROACH

The objective of water quality sampling is to collect data that is representative of groundwater conditions across the Subbasin that will be compared against baseline conditions presented in the GSP and used to assess the effects of SGMA implementation. Chapter 15 of the 2024 GSP establishes monitoring networks for the four sustainability indicators applicable to the Kern County Subbasin: groundwater levels, water quality, reduction of groundwater in storage, and subsidence.

There are approximately 185 wells designated as groundwater level Representative Monitoring Wells (RMWs), which are also used for calculating reduction of groundwater in storage. The WQ monitoring network is a subset of the groundwater level RMWs. These wells were strategically selected to represent groundwater conditions across each Hydrogeologic Conceptual Model (HCM); some RMWs are designated to represent the relationship between sustainability indicators or SGMA related projects (refer to Chapter 13, Table 13-2). Since RMWs will change over time, the Kern Subbasin Data Management System (DMS) is the most accurate reference for a current list of WQ RMWs.

Water quality samples will be analyzed for Subbasin's constituents of concern:

- 1,2,3–Trichloropropane (1,2,3-TCP)
- Arsenic (As) (total)
- Nitrate as Nitrogen (NO_3)*
- Nitrite as Nitrogen (NO_2)*
- Total Dissolved Solids (TDS)
- Uranium (U)

*Sum of Nitrate and Nitrite will also be reported

3. DEFINITIONS

Chain of Custody (COC) – A legal document which accompanies the sample from beginning of sampling to completion of analysis.

Representative Sample – A sample taken from a location at which specific conditions or parameters may be measured in a manner to characterize the quality or condition of the underlying groundwater.

Trip Blank (TB) – A sample bottle/vial pre-filled with reagent water by the laboratory. The TB follows the sample bottles and is treated as a sample in all respects, including shipment to the sampling site, exposure to the sampling site, storage, preservation, and analysis. The purpose of the trip blank is to determine if analysis method or other interferences are present in the environment.

Water Quality Sample – For the purpose of this SOP, a water sample taken from a representative monitoring well for the purpose of SGMA compliance.

4. SAFETY

Wear appropriate field attire, such as long pants and work boots. If sampling a full day, or more than one day, it may also be appropriate to be prepared with a pop-up tent to provide shade, a folding table and chair to conduct field measurements and write field notes. Sample bottles may contain acids, such as hydrochloric acid and nitric acid. Wear gloves when sampling. Use fresh gloves at each sampling location, if possible.

Prior to each workday, the forecasted temperature and humidity for the worksite should be reviewed to compare against the National Weather Service Heat Index to evaluate the risk level for heat illness. When the temperature equals or exceeds 95°F, or during a heat wave, high heat procedures should be used, which include additional preventive measures including pre-shift meetings to encourage employees to drink plenty of water, working in the buddy system or regular communication so observations can be made for heat related illness, and to remind employees of their right to take a cool-down rest when necessary. To prevent heat-related illness, proper hydration (drinking plenty of water), acclimatization (getting used to weather conditions), and schedules that alternate work with rest shall take place.

Sample site may be located on farmland where access may be limited, or road conditions may not be easily traversable. If sampling will be conducted in remote locations, inform other colleagues where the sampling will be in case of an emergency. It may also be prudent to bring a GPS unit in case sampling site is hard to locate and there is no cell phone reception. When arriving to the well site be aware of your site conditions and surroundings to avoid potential slip trip and fall hazards near the well.

5. EQUIPMENT AND SUPPLIES

Refer to Appendix A for a checklist of supplies needed prior to sampling.

1. Calibrated field meters for conductivity, pH, temperature, and turbidity (for dedicated monitoring well only) analysis. Field meter selection considerations:
    a.) Meter should allow for calibration and verification for conductivity, pH and turbidity against standards to ensure accurate readings. (Pen meters that do not allow for calibration should not be used).
    b.) Calibration range should encompass expected sample reading.
    c.) Conductivity probe sensitivity should encompass expected sample reading.
2. Clean sample container for conducting field measurements.
3. Disposable wipes for field meters.
4. Deionized water (DI water) to rinse field meters.
5. Sample bottles – Defer to laboratory for sample bottle type and preservative. Example bottles include:
    a.) 3 x 40-mL Amber glass vials with hydrochloric acid dropper.
    b.) 250-mL HDPE with no preservatives.
    c.) 250-mL HDPE with nitric acid.
    d.) 1-L HDPE or amber glass with no preservative.
6. Disposable gloves
7. Ice chest
8. Frozen ice pack or wet ice
9. Sharpie
10. Blue or black ballpoint pen
11. Chain of Custody (COC)
12. Field Log Sheet
13. Sampling instructions
14. Spare sample bottles and vials
15. Spare batteries for field meters

6. SAMPLING SCHEDULE COORDINATION

Samples are collected ***twice a year*** to align with the Subbasin's seasonal monitoring protocols for the wells listed in the DMS. Due to operational differences between agricultural, municipal supply wells, and dedicated monitoring wells, and conflicts between the protocols for collecting water level measurements and water quality samples, the following is the recommended to collect representative water quality sampling that align with water level measurement protocols (see Water Level Measurement SOP).

Agricultural Wells

- In Spring, collect water level measurements prior to turning the well on for the season. Water quality samples should be collected within 2 weeks of water level measurements. Ideally, the well would be operational for at least one week before samples are collected to allow stagnant water in the well column and casing to be thoroughly flushed. Testing field parameters (conductivity, pH, temperature and turbidity) are an import measurement to validate water quality is stable before collecting samples for laboratory analysis.
- In Fall, collect water quality samples prior to turning the well off for the season. After sampling, allow the well to remain offline for at least 24 hours before collecting water level measurements but, not more than two weeks later.

Municipal Wells

- For wells that operate year-round but a limited number of hours per day, water quality samples should be collected when the well has been running for at least two hours. For example, if a well normally operates 12 hours per day from 5 pm to 5 am, and the sampler arrives at 9 am, the well switch should be on hand or auto until field parameters (conductivity, pH, temperature) are stable (typically 5 – 15 minutes).
- If the well operates seasonally, samples should be collected on a normal daily operating schedule, at least one week after turning the well on for the season but no more than two weeks after water level measurements. It should also be running continuously for a minimum of two hours before sample collection.
- Water level data should be collected when the well has been resting for at least 24 hours.

Monitoring Wells

- For dedicated monitoring wells, the well must be purged before a sample is collected. It is recommended to purge at least three times the well volume or until the field parameters (conductivity, pH, temperature and turbidity) stabilize to obtain a representative water quality sample.

Offline Wells

- If a well is not operational and has not been pumped in the past 30 days, it should either be purged consistent with the monitoring well protocol (three times the well volume) if a representative sample can be collected. However, most agricultural or municipal supply wells are constructed with mild steel casing which takes more than three times the well volume to obtain a representative sample due to tuberculation on the casing and its perforations. In this circumstance, samples should not be collected. Well operation should be documented with an explanation that can be included in the DWR Annual Report.

7. PROCEDURE

7.1 Pre-field Preparation

There are preparation steps that should occur in advance of sampling. Coordination with well owners and current operation will take time and should be initiated early in the monitoring period. The following tasks need to be completed prior to field sampling to ensure equipment and supplies are available and functioning.

1. Order sample bottles from the contract lab. Note that preserved sample bottles expire; samples should be collected within one month of receiving the bottles, or before the noted expiration date.
2. Review and gather supplies from checklist of supplies (Appendix A).
3. Inspect bottles for correct bottle type, quantity and preservative based on contract lab requirements/bottle order form. Contact lab if additional sample bottles are needed.
4. Review lab provided sampling instructions. Ask the Project Manager or contact the lab if there are questions on sampling procedures.
5. Pre-populate COC with GSA contact, sample site and analysis required information. See Appendix B for COC template.
   a.) **NOTE:** When filling out a COC, use a non-erasable, waterproof blue or black pen. **DO NOT use white out**. If there is an error, cross out the error with one strikethrough, initial, date, and write in the correct value.
   b.) Constituents and associated analysis methods are listed in Table 1.

Table 1. Constituents and Lab Analysis Methods

Analyte	Method
1,2,3 - TCP	SRL 524M-TCP
Arsenic	EPA 200.8
Nitrate	EPA 300.0
Nitrite	EPA 300.0
Nitrate + Nitrite (calculated result)	EPA 300.0
Uranium	EPA 200.8
TDS	SM 2540C

6. Pre-populate sample bottle label with GSA name and sample site.
7. Pre-populate Field Sampling Log (Appendix C) with sampling site information.
8. Freeze icepacks or prepare Ziploc bags with fresh wet ice.

a.) NOTE: Extra, thoroughly frozen icepacks or fresh wet ice packs will be needed if samples will be shipped to the lab after sampling.

b.) NOTE: Wet ice may be more effective at getting samples to temperature as it encompasses the sample bottle.

7.2 Sampling

1. Calibrate field equipment (conductivity, pH, temperature and turbidity) in accordance with manufacturer's instructions, each day that samples will be collected.

    a.) Note: Field equipment should be calibrated prior to leaving for the field to minimize setup needed in the field.

2. Pack lab provided trip blanks (TB) in sample cooler. TBs should accompany sample bottles throughout the sampling process, including exposure from the shipment to the sampling site, exposure to the sampling site, storage and shipment to the lab.

3. At the sampling site, flush sample port to clear stagnant water from piping. Reference Section 6 for recommended flushing time to obtain a representative sample.

4. Adjust flow of the sample tap to be approximately 500 mL/min, if needed, prior to collection of any field or lab samples. Maintain this flow throughout sample collection, on both field analyses and lab samples.

5. Wear latex or laboratory-style (such as neoprene) gloves when sampling. A new set of gloves needs to be worn for each sampling location.

6. Conduct field analyses for conductivity, pH, temperature and turbidity (if applicable) following manufacturer’s manual.

    a.) General procedure for conductivity, pH and temperature field analysis:

        i. Dip the probe in and out and stir it in the sample water occasionally before taking a measurement. Watch the reading and wait for it to stabilize before recording.

        ii. Do not touch the sampling device on the walls or the bottom of the sampling container while taking the reading.

        iii. Rinse the probe immediately after use with Deionized (DI) water to keep the field instrument clean and avoid cross contamination.

    b.) General procedure for turbidity field analysis:

i. Rinse vial with sample water.

ii. Fill vial with sample and cap.

iii. Place vial in meter, cap/close the meter lid and wait for reading to stabilize.

iv. Rinse vial with DI water.

c.) Store field equipment probes and sample containers as specified in the manufacturer's instructions when not in use and between samples. Rinse probe before and after being placed in any storage solution, if applicable.

7. Fill out COC and field log with the following:

    a.) Sample date and time.

    b.) Sampler initials.

    c.) Field analyses results.

    d.) Flow conditions/observations.

        i. Observations may include water quality (such as odor or color), weather conditions that may cause environmental contamination (wind debris, rain, etc.), the sampling site itself, and anything else that may be important to note for the sampling event.

    e.) If not pre-populated during pre-field preparation, also populate GSA contact, sample site and analysis required (Table 1).

8. Fill out sample bottle label with the following information:

    a.) Sample date and time.

    b.) Sampler initials.

    c.) If not pre-populated during pre-field preparation, also populate sample site information.

9. Fill sample bottles in accordance with sampling instructions. Note:

    a.) **DO NOT overflow** sample bottles with preservatives. Insufficient preservative may lead to invalidation of the sample.

    b.) Fill each sample bottle at least to the neck of the sample bottle to ensure adequate sample volume for analysis.

c.) Fill VOA vials so that there is a convex meniscus, leaving **NO headspace** when capped. **DO NOT overflow** VOA vials. Air bubble(s) may lead to sample invalidation.

10. Place samples immediately after collection in designated coolers/ice chests with frozen icepacks or wet ice to begin the cooling process.

    a.) Note: Do not put anything other than sample bottles the cooler since this may cause contamination.

11. Take pictures of the sample tap and location. (Optional: record GPS coordinates of sample location). This supporting documentation may be referenced if there are uncertainties during data interpretation, pictures of the sampling location may help explain the results.

7.3 Sample Storage

Samples should be delivered to the lab as soon as possible. If samples will be shipped, repack the sample cooler with fresh frozen ice packs or wet ice to ensure the sample arrives at the lab within the temperature requirements, which is typically 4ºC and samples are scheduled for overnight delivery. Nitrate and nitrite analysis have short hold times (48 hours) and should be sent to the lab same day as collection to ensure hold time is met. Labs would provide a sticker to affix to the sample cooler stating “Short Hold” samples. In addition, **do not** ship samples on Fridays. Most labs are not open for Saturday receiving from shipping/mail carriers.

8. TROUBLESHOOTING

8.1 Unusual Field Readings

When sampling in the field, there may be times where an unusual field reading will occur. To ensure that the field reading is correct, record the initial reading and then take at least two more field readings to confirm the original reading. It is also best to document these on the field log sheet. If the unusual field reading is confirmed, in addition to documenting it on the field log sheet, also notify the Project Manager or supervisor to see if there are any other actions that he/she recommends before leaving the well site.

9. QUALITY ASSURANCE AND CONTROL

Quality assurance and control measures for sample collection and recording, preservation and transportation, analyses, and data review are in place to ensure data is representative and suitable to demonstrate compliance. Most, if not all the time, the lab would notify the client of samples with issues, such as sample missing hold time, not meeting temperature requirements upon receipt, incorrect amount of preservative or incorrect preservative used.

9.1 Water Quality Sampling Best Practices

1. Recognize the samples represent a single point in time (e.g., grab samples). When samples are representative of groundwater conditions, results will be within a consistent range and align with other wells in the area. However, if there are anomalies, it can be very difficult to interpret or explain. Good documentation of the sample site and conditions, and following procedures outlined in this SOP are important to collecting representative samples.
2. Samples are collected from designated WQ RMWs. Changes to designated WQ RMWs requires approval from the Subbasin and Department of Water Resources (DWR).
3. Field equipment is calibrated per manufacturer's instructions. Calibration standards need to be identified and labeled upon opening and periodically checked that they have not expired. Readings from calibrating field instruments should be recorded in a logbook including any issues that arise from calibration of the field units. If a probe cannot be calibrated with an acceptable slope, a new probe should be obtained and used for field measurements.
4. Trip blanks (TB), provided by the laboratory, follow the sample bottles and are treated as a sample in all respects, including shipment to the sampling site, exposure to the sampling site, storage, preservation, and analysis.
5. Samples are collected after sufficient flushing of the well (reference Section 6).
6. Chain of Custody is filled out completely. Samples may require recollection, if it does not meet laboratory sample acceptance requirements, such as:
    a.) Incomplete sample collection information
    b.) COC filled out with erasable ink
    c.) White out was used on COC

9.2 Sample Preservation and Transportation

1. Sample bottles are provided by the laboratory to ensure sufficient sample volume is collected with appropriate preservation.
2. Samples are collected and transported to the lab in accordance with laboratory and method requirements. Samples may require recollection for the following reasons:
    a. Missed hold time
    b. Inadequate preservation
    c. Sample not meeting temperature requirements
    d. Laboratory invalidated sample due to sample not meeting laboratory sample acceptance requirements (ex. Insufficient sample, broken bottle, etc.)

9.3 Sample Analysis

Analytical methods for constituents of concern are approved methods for drinking water analysis and laboratory performing analysis have state certification for the analysis method. If alternative methods are used, it should be addressed with the appropriate GSA representative to ensure the preferred method will provide consistent results: issues to consider are the appropriate method detection limit, potential laboratory interferences, etc.

9.4 Data Package Review

Most, if not all the time, the laboratory would notify the client of samples with potential issues so that recollection can be scheduled in a timely manner. In an event where the client is not notified, timely review of the data package allows the client to identify any anomalies and schedule confirmation sampling during the same period of groundwater conditions, if needed.

1. Review data package narrative and sample results for QA/QC flags. If flags are present, determine if data is suitable for compliance purposes.
2. If samples cannot be used for compliance purposes, confirm samples have been recollected or are scheduled for recollection, if needed.
3. If sample result exceeds SMCs, confirmation samples should be collected within two weeks of being notified of the first sample results. Current groundwater conditions should also be evaluated to determine if changes in well operation, groundwater levels, or other conditions influenced the result. Additional sampling, such as collecting time series samples, may also be considered to validate the results.

10. REPORTING

10.1 Data Entry

10.1.1 Data Management System (DMS)

WQ RMW sample results will be entered into the DMS. Data may be entered manual or imported via an import template. See Appendix D for Quick Guide for Entering Water Quality Data. All sample results are then extracted into DWRs template and reported to the SGMA Portal.

10.1.2 Compliance Evaluation

While entering data, review data for SMC compliance. QA/QC procedure in the DMS presents sample results on a chemograph with historical results as well as the Measurable Objective (MO) and Minimum Threshold (MT). Any MT exceedance may trigger additional action. The Subbasin's MT Exceedance policy should be referenced in the event of an exceedance. It should also be noted that the DMS will distribute email notification to Kern's GSA Manager's and Point-of-Contact once the sample result(s) are approved.

10.2 Data Accessibility

WQ data collected for SGMA compliance is publicly available data. Users may view water quality data via the guest portal of DMS (map viewer). Data will also be made publicly available through the SGMA Portal. At this time, there is no requirement to submit SGMA sample results to GeoTracker or other State water quality databases. However, the SGMA portal may be publicly available through GAMA.

10.3 Annual Reporting to Department of Water Resources (DWR)

WQ RMW data is provided to DWR as part of seasonal data reporting (July 1 and January 1). Annual Reports will also contain a written narrative and chemographs addressing water quality compliance in the Subbasin.

11. REFERENCES

Berg, E. Handbook for Sampling and Sample Preservation of Water and Wastewater. U.S. Environmental Protection Agency. EPA/600/4-82/029

USGS, National Field Manual for the Collection of Water-Quality Data (NFM), https://www.usgs.gov/mission-areas/water-resources/science/national-field-manual-collection-water-quality-data-nfm, February 28, 2019.

Appendix A

Field Sampling Supplies Checklist

FIELD SAMPLING SUPPLIES CHECKLIST

The following is a supplies checklist for field sampling. Items listed below are the minimum supplies needed. Depending on the project, more items may be required.

- ☐ Calibrated pH probe
- ☐ Calibrated conductivity probe
- ☐ Calibrated turbidity meter
- ☐ Sufficiently charged pH, conductivity and turbidity meters
- ☐ Clean sample cup/container for conducting field measurements
- ☐ Deionized water (DI Water) to rinse field meters
- ☐ Disposable wipes for field meters
- ☐ Ice chest/sampling cooler
- ☐ Frozen ice packs or wet ice
- ☐ Chain of Custody
- ☐ Field Log Sheet
- ☐ Fine point Sharpie pen to write on sample bottle/vial label
- ☐ Ballpoint pen for Chain of Custody and Field Log Sheet
- ☐ Verify correct type and quantity of sample bottles/vials
- ☐ Extra sample bottles/vials
- ☐ Two 1-Liter Amber glass bottle with no preservative for each sampling site
- ☐ Disposable gloves for each sampling location
- ☐ Review sampling instructions
- ☐ Phone camera/digital camera to take pictures of sampling location
- ☐ Extra batteries for digital camera or car charger/external battery charger
- ☐ Proper attire for sampling
- ☐ GPS unit, if necessary
- ☐ Extra batteries for field equipment, if necessary
- ☐ Pop-up tent and Folding table/chair, if necessary

Appendix B

Chain of Custody Template

☐ **Turnaround Time Request**
☐ Standard - 10 business days
Rush (Surcharge may apply) Date needed:

ANALYTICAL CHAIN OF CUSTODY

***Required Fields** Temp: Thermometer ID:

Company/Client Name*:	**Report Attention*:**	**Invoice To*:**	**Phone*:**	**Fax:**
<AGENCY/CLIENT NAME>	Additional cc's: <ATTN NAME>	PO#:	**E-mail*:** <PHONE>, <E-MAIL>	

Address*:	**City*:**	**State*:**	**Zip*:**
<ADDRESS>	<CITY>	CA	<ZIP>

Project:	Project #:

☐ Reporting Options: Trace (J-Flag) ☐ Swamp ☐ EDD Type: _____

Sampler Name (Printed/Signature)*:

☐ Regulatory Carbon Copies SWRCB (Drinking Water)
☐ Other: _____

☐ Regulatory Compliance
EDT to California SWRCB (Drinking Water) System Number*: _____
Geotracker #: _____

Matrix Types: SW=Surface Water BW=Bottled Water GW=Ground Water WW=Waste Water STW=Storm Water DW=Drinking Water SO=Solid

#	Sample Description*	Sampled* Date	Sampled* Time	Matrix*	Comments / Station Code / WTRAX	1,2,3 - Trichloropropane (SRL 524M-TCP)	Arsenic (EPA 200.8)	Nitrate (N), Nitrite (N), Nitrite+Nitrite (N) (EPA 300.0)	Uranium (EPA 200.8)	Total Dissolved Solids (SM 2540 C)				
	RMW-XXX					x	x	x	x	x				

Relinquished by: (Signature and Printed Name)	Company	Date	Time	Received by: (Signature and Printed Name)	Company
Relinquished by: (Signature and Printed Name)	Company	Date	Time	Received by: (Signature and Printed Name)	Company
Received for Lab by: (Signature and Printed Name)		Date	Time	Payment Received at Delivery: Date: Amount: PIA#: Check Init / Cash	

Shipping Method: ONTRAC UPS GSO WALK-IN FED EX Courier: _____
Cooling Method: Wet Blue None

Custody Seal: Y / N
Chilling Process Begun: Y / N

Appendix C

Field Log Sheet Template

FIELD SAMPLING LOG SHEET

GSA and Well Name: _____ Date: _____

Arrival Time: _____ First Sample Time: _____

Departure Time : _____ End Sample Time: _____

Site ID: _____ Sample Lat. & Long.: _____

Water Depth: _____ Sampler Initials: _____

Sampler Observations					
Estimated well **runtime** prior to sampling:					
Sample Tap:	Hose Bib	Stainless Steel, down-turn dedicated sample tap		Other (describe)	
Water Color:	Colorless	White	Yellow	Brown	Other (describe)
Water Clarity:	Clear	Cloudy/Milky	Floaters/Precipitate		
Water Odor:	None	Sulfides	Sewage	Petroleum	Other (describe)

Field Analysis						
Water Temp◦C	pH	EC (µS/cm)	Turbidity (NTU)			Analyst Initials

Picture Name/No.:

Notes:

Appendix D

DMS Data Import

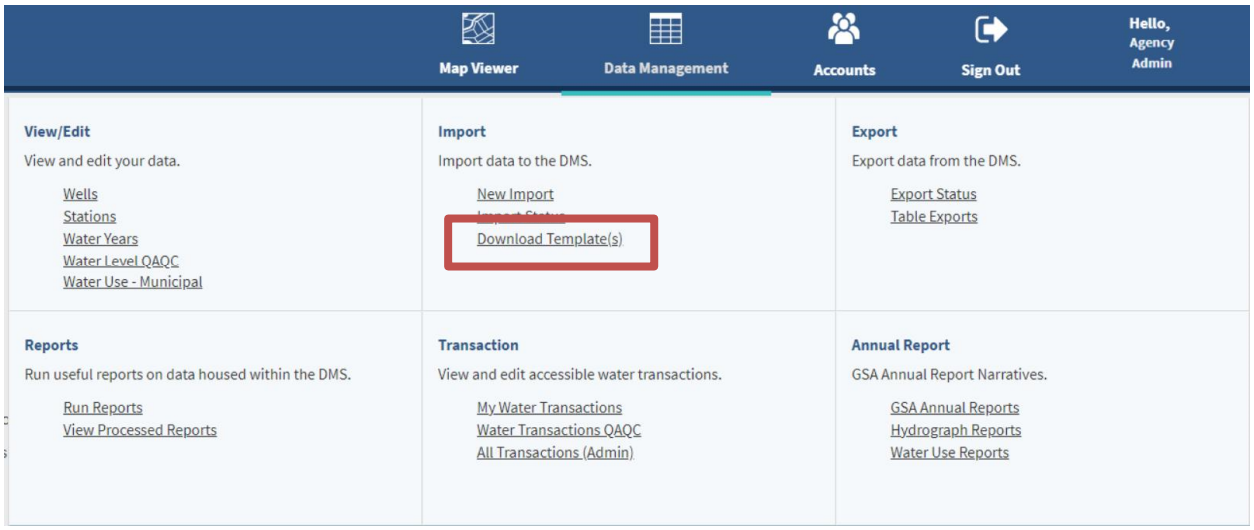
Entering Water Quality Data

This help topic steps through the process for entering and water quality data for wells in DMS for SGMA Annual Report. Water Quality Representative Monitoring Well (WQ RMW) well data may be imported or manually entered into DMS. If you have questions or need additional help entering your data, please email dmshelp@geiconsultants.com.

Entering Data via Import Template

Downloading Templates

1. In the navigation bar along the top of the screen, hover over Data Management. A menu of options appears.



2. Click Download Templates. The Templates page appears.
3. Under Well Data Templates, select "Well Water Quality Template" if importing multiple reports at once and select "Well Water Quality Template Single" if only import one report's data.

Populating Templates

The Excel template has three sheets:

- **Data Entry** – Data to be imported to the DMS. Enter your data on this tab.
- **Lookup Table** – Selections for cells with drop-down choices. **CAUTION**: Do not edit the lookup tables. The DMS will not accept new lookup entries.
- **Description** – Descriptions of the data columns on the Data Entry tab. Refer to this tab if you are unsure what information should go in a column.

Enter your data in the appropriate columns. If you have a question about what data belongs in a column, refer to the Description tab. Some fields must be populated by a drop-down menu. Other fields may require numerical or alphabetical entries only. These constraints are designed to normalize data entry.

Uploading Templates

1. In the navigation bar along the top of the screen, hover over Data Management. A menu of options appears.

2. Under the Import heading, click New Import. The New Import page appears.

Figure 1. New Import on the Data Management Menu

3. Under Step 1, click the drop-down menu and select "Well Data". Step 2 appears
4. Under Step 2, select appropriate template: Water Quality Data (for multiple report entry) or Water Quality Data (for single report entry). Step 3 appears.
   Under Step 3, click the box or drag files into the box to upload. Step 4 appears.
5. Click Submit. The batch number appears.
6. To see the results of your upload, check the Status column on the Import Status table.
   - If your batch number status is Success, your data was successfully loaded to the DMS.
   - If your batch number status is Processing, your data is still being validated by the system before import. Check again later.
   - If your batch number status is Error(s). Refer to "Resolving Data Errors".

Resolving Data Errors

1. Under the Data Management module, navigate to Import Status page.
2. Select the row with errors (highlight blue).
3. Scroll down to Error Table (Figure 16).
4. Click the > and the error details will appear.
5. Click the to correct the error, then save.
6. Once all errors are resolved, your full template should be uploaded, and data will be uploaded to the DMS.

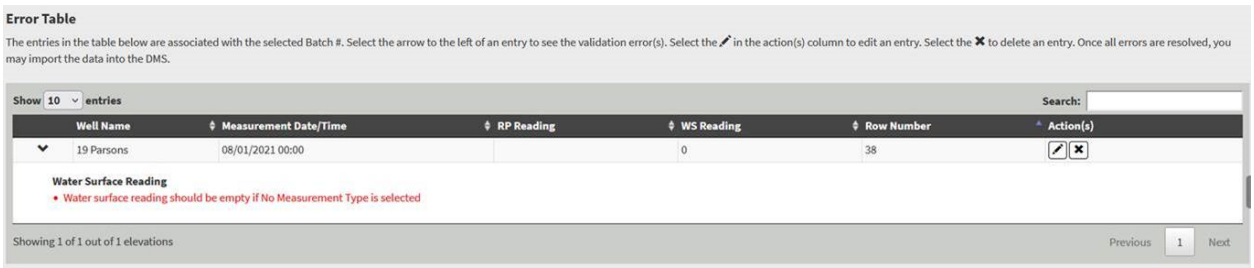


Figure 2. Error Table

Entering Data via Manual entry

1. Select the "Wells" *Data Management* module in the navigation bar.
2. On the *Well Data Table*, enter the number of the well you want to edit in the search bar.

   Note: Well Name is the Priority Name in the DMS and has to be entered exactly as it is in the DMS.

3. Select the well (highlight blue).
4. Scroll down to the *Water Quality Data* section.
5. Select *Add New*.

   Note: All field with a ***** must be completed.

6. Once entered, click Save.

If you have questions, please email the DMS Help Desk at the email below.

NEED HELP?
Send an email to: dmshelp@geiconsultants.com