



SAN ANTONIO BASIN GROUNDWATER SUSTAINABILITY AGENCY

Well Metering & Extraction Reporting Program Frequently Asked Questions

Revised July 11, 2024

(Revisions to What's Next Section – Page 7)

Please Note: The proposed policies, actions, and compliance forms described below are in draft form and are subject to change. The SABGSA will continue to update this document as the framework for the metering program is developed. The intent of this document is to provide landowners with advance notice of policies being considered by the SABGSA.

Key Acronyms

- Sustainable Groundwater Management Act (SGMA)
- Groundwater Sustainability Plan (GSP)
- San Antonio Basin Groundwater Sustainability Agency (SABGSA)
- San Antonio Creek Valley Groundwater Basin (Basin)
- Department of Water Resources (DWR)
- Acre Feet per Year (AFY)
- Acre Feet (AF)

Documents and Presentations for Reference

- Approved GSP and GSP Annual Reports: <https://sanantoniobasingsa.org/approved-gsp/>
- Quarterly Groundwater Level Monitoring and Reports: <https://sanantoniobasingsa.org/groundwater-planning-and-reports/>
- Framework for Metering Program: <https://sanantoniobasingsa.org/metering-program/>

GENERAL QUESTIONS

What is the Sustainable Groundwater Management Act (SGMA)?

The Sustainable Groundwater Management Act (SGMA) was enacted in 2014 and became effective January 1, 2015. The objective of this state law is to ensure the long-term sustainable management of groundwater resources in California. SGMA requires designated medium-and high-priority groundwater basins to form locally controlled Groundwater Sustainability Agencies (GSA) to develop Groundwater Sustainability Plans (GSP).

What is a Groundwater Sustainability Plan (GSP)?

A Groundwater Sustainability Plan (GSP) contains an assessment of groundwater conditions in the basin, describes plans for monitoring conditions, and explains how the Groundwater Sustainability Agency will implement and measure the results of specific actions to achieve or maintain sustainability within 20 years. SABGSA's GSP was approved by the Department of Water Resources on January 18, 2024.



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What's the current state of the Basin?

Extracting More than the Basin's Estimated Sustainable Yield

Current Basin conditions, comparison of current and historical groundwater elevation contour maps, and the Basin's historical water budget presented in the GSP, indicate chronic groundwater pumping in excess of the Basin's estimated sustainable yield (8,900 acre-feet per year [AFY])¹, creating challenging conditions for sustainable management. The average annual change in groundwater in storage during the Basin's historical water budget period [1981–2018] was a decrease of 10,600 AFY².

Chronic Lowering of Groundwater Levels

The 2023 GSP Annual Report indicates that groundwater trends are consistent with historical conditions reported in the GSP. The first Annual Report (water years 2019 through 2021) and second Annual Report (water year 2022) indicated groundwater elevations decreased or remained the same in all representative monitoring sites (RMSs), resulting in an overall decrease in total groundwater in storage.

WELL REGISTRATION & METERING PROGRAM OVERVIEW

What is the purpose of the Well Registration and Metering Program?

The San Antonio Basin Groundwater Sustainability Agency (SABGSA) is working to position you, neighboring landowners, and all groundwater users to achieve groundwater sustainability together as mandated by California's Sustainable Groundwater Management Act. With the completion and approval of the San Antonio Creek Valley Basin GSP, the SABGSA is now turning to implementation strategies. The Well Registration and Metering Program, identified as a Tier 1 Management Action in the GSP, fills critical data gaps and is an essential precursor to the implementation of other projects and management actions vital to achieving sustainability.

To support effective Basin management, two key pieces of information are needed.

1. Where are extractions occurring?
2. How much is being extracted?

The data collected from well registration established the location and type of each well located within the Basin and helped us gain an accurate count and a better understanding of the wells in active use.

¹ SGMA defines sustainable yield as "the maximum quantity of water, calculated over a period representative of long-term conditions in the basin and including any temporary surplus that can be withdrawn annually from a groundwater supply *without causing an undesirable result*". The historical basin yield was estimated by summing the estimated average groundwater storage decrease of 10,600 AFY with the estimated total average amount of groundwater pumping, of 19,500 AFY, for the historical period. This results in a historical basin yield for the Basin of about 8,900 AFY. It is anticipated that this value may fluctuate in the future as conditions change or as more data is obtained. Please refer to Section 3.3 of the GSP. Based on the Basin's sustainable management criteria described in Section 4 of the GSP, the basin yield is equal to the sustainable yield for the Basin calculated for the historical period.

² Please refer to Figure 3-62. Average Groundwater Budget Volumes, Historical Period in the GSP



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Well metering and extraction reporting is intended to facilitate consistent and reliable reporting of groundwater extraction volumes, excluding de minimis wells (extraction of less than 2 AFY).³

Why metering and how will the data from the Metering Program be used by SABGSA?

Accurately estimating private groundwater usage and the change of groundwater in storage is a challenge, hampered by a lack of systematic and quantitative monitoring. The absence of such information makes it difficult for SABGSA to develop and implement sustainable management policies. The most equitable method for landowners and for SABGSA to measure groundwater extraction is through the implementation of flow measurement devices on all non de minimis wells. Simply put, estimates cannot provide the same accuracy that a permanently installed totalizing flow meter can.

Flow measurement and reporting allows SABGSA and landowners to accurately measure and record the volume of pumped groundwater by well across the Basin, as well as seasonal variation in water demand. This information will serve as a baseline that will enable proactive and adaptive management of groundwater resources, inform future SABGSA demand management actions and policies, provide additional information to be used by the SABGSA for analyzing projected Basin conditions, update the water budget and hydrogeological conceptual model (HCM), identify wells and landowners that could be included in the Basin's groundwater level monitoring network, and complete annual reports and 5-year GSP assessment reports required by DWR. Ultimately, this information will allow SABGSA to sustainably manage, protect, and maintain the groundwater resources within the Basin consistent with SGMA for the benefit of all water users.

Is participation mandatory?

Yes, participation is proposed to be mandatory. All wells located within the Basin (excluding de minimis wells – defined as extraction of less than 2 AFY for domestic supply) would be required to be metered. Following a series of public workshops and hearings, the SABGSA will consider an Ordinance in Fall 2024 requiring meters to be installed on all non-de minimis wells and monthly groundwater extraction data to be reported twice per year. Water Code § 10725.8 authorizes a GSA to require through their GSP that the use of every groundwater extraction facility (except those operated by de minimis extractors) be measured. Wells operated by the Los Alamos Community Services District and Vandenberg Space Force Base are already metered and extraction is reported to SABGSA.

Is a flow meter required for a domestic well?

No, unless use is over two-acre feet per year. SGMA does not authorize GSAs to require metering of de minimis, domestic use wells. Domestic (i.e., residential) well users generally fall within the Sustainable Groundwater Management Act's (SGMA) definition of a de minimis extractor. SGMA defines a de minimis extractor as "a person who extracts, for domestic purposes, two acre-feet or less (of groundwater) per year." (Cal. Water Code § 10721(e).)

³ SGMA defines a de minimis extractor as "a person who extracts, for domestic purposes, two acre-feet or less (of groundwater) per year." (Cal. Water Code § 10721(e).)



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What's the ratio of metered to un-metered wells in the Basin?

The SABGSA's well registration data indicates that 1/3 of private groundwater wells in the Basin currently have meters in place while 2/3 of wells did not report the presence of meters. Wells operated by the Los Alamos Community Services District and Vandenberg Space Force Base are already metered and extraction is reported to SABGSA.

Is there a penalty for non-compliance?

The SABGSA is asking for your assistance and cooperation as we work together toward achieving sustainability within the Basin. In accordance with California Water Code Section 10732, the SABGSA's Board of Directors reserves the right to impose administrative or civil penalties for failure to comply.

FLOW METER SELECTION, INSTALLATION, AND CALIBRATION

What type of meter is required?

The SABGSA will require a flow meter with a totalizer. The SABGSA will not dictate the type of flow meter and is providing landowners with the flexibility to select the best flow measurement device for their wells based on production capacity, size of the discharge pipe diameter, budget, etc.

Regardless of the type of totalizing flow meter selected (propeller, electromagnetic, ultrasonic, to name a few) to be used for reporting to the SABGSA, the meter must meet the following requirements to support accurate measurement of flows:

- Equipped with a direct reading rate-of-flow indicator showing instantaneous flow in gallons per minute or a sweep hand indicator for which rate-of-flow can be determined by timing.
- Equipped with a visual, volume-recording totalizer recorded in gallons, cubic feet, acre-inches, or acre-feet.
- Calibrated prior to installation with an accuracy level of +/- 5% by volume.
- Installed, operated, and maintained to the manufacturer's specifications, instructions, and recommendations.

What if I already have a meter on my well?

SABGSA's well registration data indicates that 1/3 of wells in the Basin currently have meters in place. The existing meter must be a flow meter with a totalizer and meet the requirements outlined above. Utilizing SABGSA's [Flow Meter Installation and Calibration Compliance Form](#), landowners will provide meter and installation information including the most recent date of calibration. The draft form is provided for reference and is subject to change.

How much is a flow meter and who pays for it?

The cost to purchase a flow meter can range anywhere from \$1,000 to over \$10,000, depending on the size of the system and the type of flow meter. Per Water Code Section 10725.8(b), all costs associated with the purchase and installation of the water-measuring device shall be borne by the well owner or operator.



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The SABGSA will make every effort to identify potential state and federal programs and grants, such as the Bureau of Reclamation, to help landowners offset the cost of implementing flow meters. In addition, the Santa Barbara County Water Agency has implemented a Well Metering Assistance Program (WMAP) designed to provide funding to offset up to \$500 of the equipment cost of qualifying water meters. Eligibility is limited to 1 meter per applicant. More information can be found at: <https://www.countyofsb.org/2568/Well-Metering-Assistance-Program-WMAP>.

Who can install the flow meter?

The SABGSA does not have a preferred list of vendors, and it would be at the discretion of the landowner to select a qualified individual to install the flow meter. SABGSA's only requirement is that installation is done per the manufacturer's specifications. Assistance from a qualified professional in flowmeter selection and installation is recommended to ensure proper installation and accuracy of future flow measurements.

What is the deadline for well meter installation and documentation required by SABGSA?

The SABGSA intends to give landowners one year from the date the Well Metering & Extraction Reporting Ordinance is adopted to install a flow meter with a totalizer on all non-de minimis wells. It is anticipated that the SABGSA Board will consider a Well Metering & Extraction Reporting Ordinance in Fall 2024 with installation required by Fall 2025. To demonstrate compliance, landowners will need to return SABGSA's [Flow Meter Installation and Calibration Compliance](#) form by the 2025 deadline that will be specified at the time the Ordinance is adopted. The draft form is provided for reference and is subject to change.

What is the timeline for routine flow meter calibration?

Flow meters should be routinely calibrated per the schedule outlined in the manufacturer's specifications. If no such schedule exists, the SABGSA will require routine calibration to be performed once every five years. If the verification error exceeds 5%, then the flow meter must be recalibrated or replaced with a certifiable meter.

FLOW METER REPORTING

How often will meters need to be read and recorded?

The SABGSA will require meters to be read and recorded monthly between the 1st and 5th day of each month. Monthly reporting of meter totalizer readings will enable a more accurate representation of spatial and seasonal variations (and variation during different water year types) of water demand as well as allow for more consistent analysis with other Basin monitoring networks and analyses. For example, monthly reporting of meter totalizer readings could be used to correlate the response in groundwater levels to known volumes of pumping throughout the Basin to inform annual reports, etc. Likewise, the metered data can be used to further validate the satellite-based method of calculating Basin agricultural groundwater extractions and vice versa.



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When are the monthly readings due to SABGSA and how to report them?

Monthly flow meter readings must be reported twice per year in Spring and Fall using [SABGSA's Groundwater Extraction / Flow Meter Reporting Form](#). The draft form is provided for reference and is subject to change. SABGSA's reporting schedule is based on the water year (October 1 – September 30) in order to capture usage during seasonal highs and lows. The SABGSA will give landowners 60 days to compile and submit the report for each period. The SABGSA anticipates the initial flow meter reporting period to begin in Fall 2025 with the first report due May 1, 2026.

- Reporting period #1: Monthly readings for April through September are due by November 1
- Reporting period #2: Monthly readings for October through March are due by May 1

How do I return the form(s)?

Please return your form(s) to the San Antonio Basin Groundwater Sustainability Agency ("SABGSA") via email to admin@sanantoniobasingsa.org or by mail to P.O. Box 196, Solvang, CA 93464. Email is the preferred method. It is anticipated that the SABGSA will eventually require all flow meter reporting to be done electronically utilizing an online form, portal, or cell phone app. The SABGSA is currently exploring cost effective options that will simplify compliance for landowners and reduce staff/consultant time for SABGSA.

WHAT'S NEXT?

In the future, will there be limitations imposed on how much groundwater a landowner can pump?

The GSP indicates a chronic lowering of groundwater levels and that a chronic reduction of groundwater in storage has been occurring in the Basin (an average decrease in groundwater in storage of 10,600 AFY was calculated for the Basin from 1981 through 2018). Although the SABGSA is working to implement projects and management actions (described in the GSP), including projects that enhance groundwater recharge and importing water, the additional volume of groundwater recharge or water supplies from an alternate source(s) (e.g., surface water or imported water) is not anticipated to be enough to offset the current Basin groundwater demand and chronic reduction of groundwater in storage. At some point in the future, it is likely that some reduction in water demand will be required in the Basin, meaning there may be a need to limit the amount of groundwater that can be pumped, aimed at both keeping groundwater levels stable and avoiding undesirable results (as defined in the GSP).

What future demand management actions are being considered by SABGSA?

Section 6 of the GSP outlines a portfolio of potential projects and management actions that the SABGSA could employ based on Basin conditions and progress toward sustainability. As part of the GSP implementation process, the SABGSA will explore various financing options to cover its operational costs, monitoring of the Basin, implementation of management actions, and potential future projects. The SABGSA may consider, for example, adopting a groundwater pumping fee program or developing a sustainable yield allocation with a water marketplace program. In any case, accurate measurement of groundwater extraction through metering is a critical first step and would help ensure that any action taken is equitable for all Basin users and is based on proven, reliable data. Future demand management



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actions will continue to undergo study and discussion, including taking into account the financial impacts on landowners and existing [San Antonio Basin Water District assessments](#).

The SABGSA will continue to monitor the effectiveness of these Tier 1 management actions on an annual basis to determine if they will be sufficient to achieve the Basin sustainability goals defined in the GSP. The overall effectiveness of individual management actions will also be evaluated annually to determine if continued investment in those actions is warranted or if other actions should be considered.

If pumping is limited in the future through groundwater pumping “allocations,” on what basis will pumping allocations be awarded?

The SABGSA understands the importance of any allocations imposed on future pumping from the Basin, and the desire for landowners and other stakeholders to have certainty to guide business planning and investments. The only document involving pumping allocations that has been formally adopted by the SABGSA’s Board of Directors is the GSP. The GSP includes a “Groundwater Basin Pumping Allocation (BPA) Program” as a Tier 2 management action.⁴ “Tier 2” management actions are those that are not included in the highest-priority Tier 1 management actions but will likely be implemented if a determination is made that degraded conditions in the Basin are a direct consequence of groundwater pumping in the Basin.

Any allocation program must be designed to avoid undesirable results in the Basin and achieve SGMA’s required goal of sustainability. Crafting an allocation program that effectively furthers these objectives requires better data than currently exists. Such data is currently being developed through specific measures to address data gaps as identified in the GSP⁵ (e.g., stream gage installation, well monitoring, etc.) and the implementation of the well registration and well meter installation programs, which are all identified as Tier 1 management actions in the GSP. Given the importance of any future allocation program for landowners and the likelihood of differing viewpoints, it is important that the SABGSA avoid a pre-determination of how any pumping allocations would be awarded, particularly before the necessary data is available.

The policies and actions discussed above will be all be reviewed and discussed in open sessions during Board meetings with an opportunity for public comment. Stay tuned!

How do I stay informed?

We encourage active participation and input from landowners, Basin stakeholders, and interested parties. To stay informed on the latest news, updates, policies, and board meeting notices, please join our e-mail communication list by contacting admin@sanantoniobasingsa.org or register as an

⁴ See GSP, Section 6, pp. 6-3, 6-5 & 6-43.

⁵ GSP, Section 6, p. 6-5.



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interested party through our communication portal at <https://portal.sanantoniobasingsa.org/>. The SABGSA has also created a [Metering Program page on our website](#) to house the latest information and presentations on the draft framework. Board meetings are held on the 3rd Tuesday of each month at 6pm. Agendas and supporting documents can be found at: sanantoniobasingsa.org/meeting-agendas/.