

Stakeholder Workshop

Groundwater Extraction Metering Program

Thank You for Joining Us!



San Antonio Basin
Groundwater Sustainability Agency

October 15, 2024

TODAY'S WORKSHOP

<https://sanantoniobasingsa.org/metering-program/>

Outline:

1. Basin Management/Why Metering?
2. Program Development Process/Goals
3. Metering Program Framework
4. Enforcement, Penalties, Appeal Process
5. Timeline for Implementation
6. Q&A Session

Reference Documents:

- Draft Ordinance and Rules & Regs
- Draft Flow Meter Installation Form and Flow Meter Reporting Form
- Draft Administrative Enforcement Policy
- Draft Appeal Form and Appeal Fee and Deposit Agreement
- Frequently Asked Questions
- Resource Documents for Meter Selection
- Approved GSP + Annual Reports
- Quarterly Monitoring Reports

BASIN MANAGEMENT

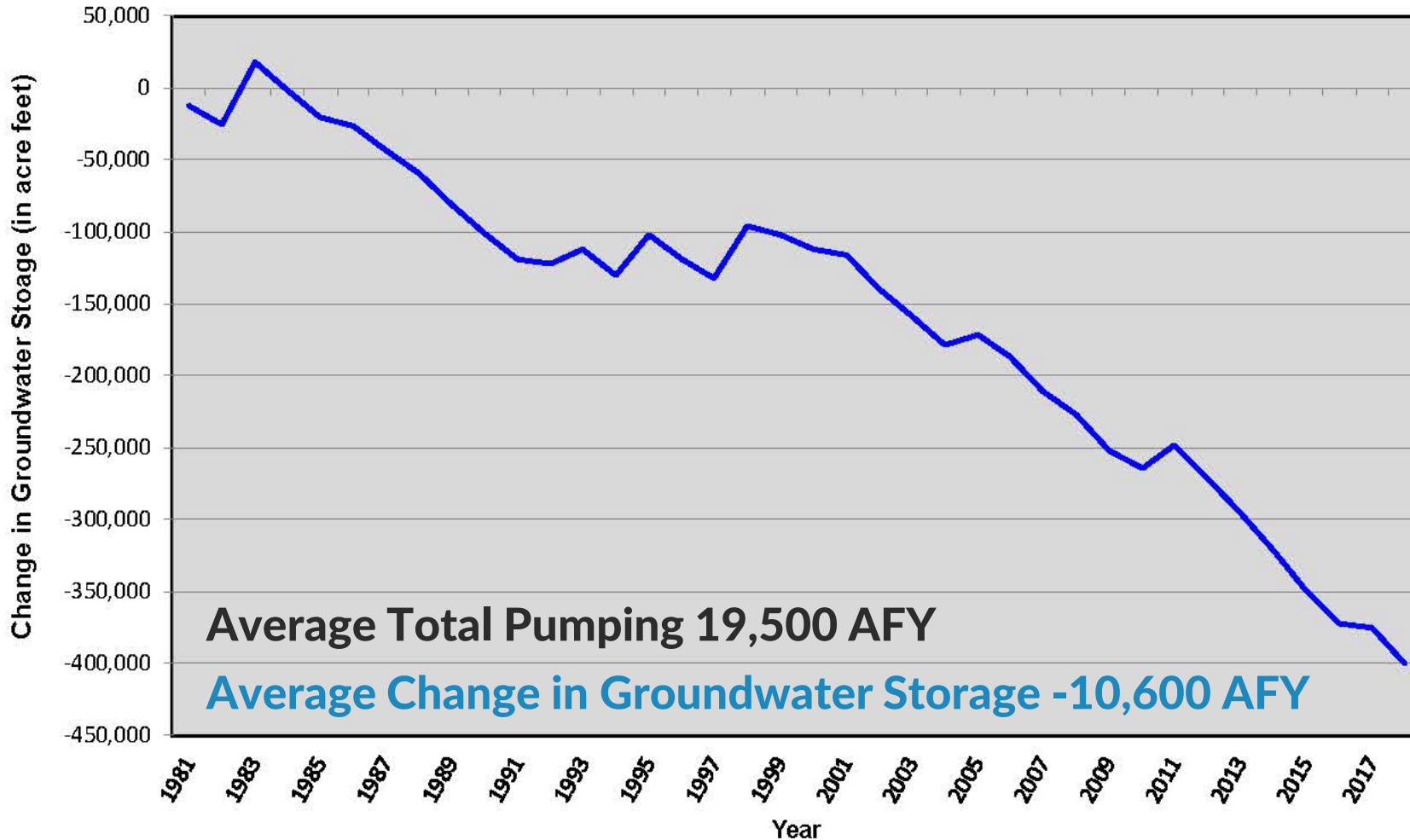
Topics:

Why Well Registration and Metering?
How Will the Metering Information be Used?

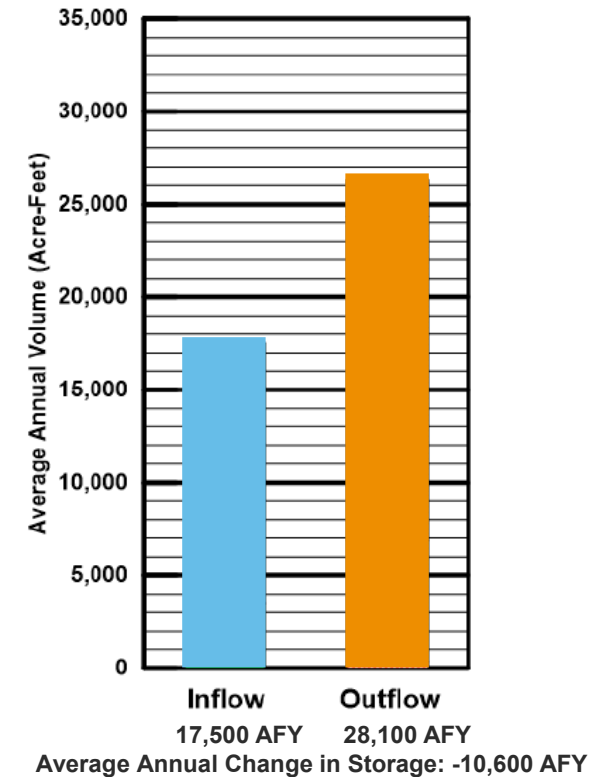
BASIN STATUS

Historical Base Period (1981-2018)

Source: GSP, Figure 3-62



Historical Base Period



BASIN STATUS

Annual Changes in Groundwater in Storage (WY 2019-2023)

Source: GSP Annual Report, WY 2023

Table 9. Annual Changes in Groundwater in Storage

Water Year	Paso Robles Formation (AF)	Careaga Sand (AF)	Total Annual Change in Groundwater in Storage ¹ (AF)
2015	—	—	-26,400
2016	—	—	-23,600
2017	—	—	-2,900
2018	—	—	-23,700
2019	-15,400	-370	-15,800
2020	-18,800	-410	-19,200
2021	-20,500	-540	-21,000
2022	-14,900	-200	-15,100
2023	19,600	10	19,600
Cumulative Change in Groundwater in Storage ¹	-50,000	-1,500	-128,100

Notes

¹ As a result of rounding, totals do not correspond to the sum of all figures shown.

Gray shading indicates a water year included in the historical water budget. A total annual change in groundwater in storage was calculated for the Basin during development of the Basin GSP per SGMA regulations.

— = not calculated

AF = acre-feet

Basin = San Antonio Creek Valley Groundwater Basin

GSP = Groundwater Sustainability Plan

SGMA = Sustainable Groundwater Management Act

WHY METERING?

Understanding Groundwater Extraction in the Basin

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



BASIN MANAGEMENT

How Will the Metering Data be Used by SABGSA?

This information will serve as a baseline that will....

- Accurately measure and record the volume of pumped groundwater by well across the Basin, as well as seasonal variation in water demand
- 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 and updating the water budget and hydrogeological conceptual model (HCM)
- Identify wells and landowners that could be included in the Basin's groundwater level monitoring network
- Be utilized to 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 current and future water users.

PROGRAM DEVELOPMENT PROCESS

Topics:

Ad Hoc Committee / Program Development
Two Step Process – Well Registration then Metering
Program Goals

PROCESS OVERVIEW

1st Step Toward Demand Management

The draft framework for the metering program has been developed over the course of the last year and discussed regularly at SABGSA Board meetings:

- July 18, 2023 – Conceptual Framework
- August 16, 2023 – Conceptual Framework
- October 17, 2023 – Conceptual Framework
- November 28, 2023 – Installation and Reporting Forms
- March 19, 2024 – Frequently Asked Questions
- May 21, 2024 – Review DRAFT Ordinance
- July 16, 2024 – Administrative Policy / Appeal Process
- August 20, 2024 – Stakeholder Workshop Outline
- September 18, 2024 – Appeal Process

<https://sanantoniobasinga.org/metering-program/>

AD HOC COMMITTEE MEMBERS

Kevin Merrill, SABGSA Board Member
Chris Wrather, SABGSA Board Member
Matt Scrudato, SB County Water Agency
Donna Glass, SABWD
Stephanie Bertoux, SABGSA

OTHER METERING PROGRAMS STUDIED

Borrego Valley GSA
Cuyama GSA
Fox Canyon GSA
Greater Kaweah GSA
McMullin Area GSA
Mid Kings River GSA
North Folk Kings GSA
Upper Ventura River GSA

RESOURCES CONSULTED

GSI Water Solutions
Brownstein, Hyatt, Farber & Schreck
Fresno State, Center for Irrigation Technology

PROCESS OVERVIEW

Step 1: Well Registration

- Completed March 2023
 - Identified De Minimis Wells
 - Identified Well Types in Basin
 - Identified Extraction Points
- Wells operated by the Los Alamos Community Services District and Vandenberg Space Force Base are already metered and extraction is reported to SABGSA.

Step 2: Well Metering and Reporting

SABGSA Well Registration Program Stats

- Registered Wells: 268
 - Accounts for 12,784.79 irrigated acres – roughly 96% of total irrigated acres within the Basin
 - Outstanding Well Registrations account for 555.07 irrigated acres - roughly 4% of total irrigated acres within the Basin
- Metered Wells: 94 of 268 – 35%
 - Electromagnetic: 17
 - Propeller: 73
 - Ultrasonic: 2
 - Unknown: 2
- Unmetered Wells: 174 of 268 – 65%

METERING PROGRAM OVERVIEW

Tier 1 Management Action Outlined in the GSP

- **Program Objective:** Facilitate consistent and reliable reporting of groundwater extraction volumes excluding de minimis wells (under 2AFY).
- **Program Purpose:** Provide accurate and reliable data of groundwater extraction volumes as specified in the GSP (Tier 1 Management Action)
- **Overarching Goal:** Sustainably manage, protect and maintain the groundwater resources within the Basin consistent with SGMA for the benefit of all water users.

Workshop Goal

Provide landowners with advance notice of policies being considered by the SABGSA and allow ample time to form a plan for compliance

METERING PROGRAM FRAMEWORK

Topics:

Program Components
Installation Requirements
Reporting Requirements

METERING PROGRAM COMPONENTS

Specifications, Installation, and Calibration Requirements

Who?

- All wells in the GSA (excluding de minimis wells)


Specifications - Flow Meter with Totalizer

- Equipped with a direct reading rate-of-flow indicator
- Equipped with a visual, volume-recording totalizer
- SABGSA NOT dictating type of flow meter. **Landowner has flexibility to select based on production capacity, size of the discharge pipe diameter, budget, etc.**

Installation, Operation, Maintenance and Calibration

- Must be installed, operated, and maintained to the manufacturer's specs, instructions, and recommendations
- Calibrated w/accuracy of +/- 5% prior to install.
- If not dictated in manufacturers specifications, routine calibration is once every 5 years.
- Recalibrate or replace if verification error exceeds 5%

Deadline for Installation – 1 Year from Program Adoption Targeting March 2026



**SAN ANTONIO BASIN GROUNDWATER SUSTAINABILITY AGENCY
FLOW METER INSTALLATION AND CALIBRATION COMPLIANCE FORM**

Due to SABGSA by March 20, 2026

This form should be completed for EACH flow meter installed in the San Antonio Creek Valley Groundwater Basin, unless your annual groundwater production is less than 2 AFY. A fillable pdf version of this form can be downloaded at: <https://sanantoniobasingsa.org/metering-program/>

Please return your form(s) to the San Antonio Basin Groundwater Sustainability Agency ("SABGSA") by mail to P.O. Box 196, Solvang, CA 93464 or via email to admin@sanantoniobasingsa.org.

- 1. Landowner and Well Information**
Property Owner Information
Landowner Name: _____ Email: _____
Well Operator Information (if different than above)
Contact Name: _____ Email: _____
- 2. Well and Meter Location**
Assessor's Parcel No. (APN): _____
Geographical Coordinates for Well (decimal degree): [Instructions to find coordinates.](#)
Latitude: _____ Longitude: _____
- 3. Meter Information**
Flow Meter Make and Model: _____
Flow Meter Serial Number: _____
Flow Meter Size (inches): _____ Discharge Pipe Size: _____
Well Use: Agricultural Domestic Municipal Industrial Livestock Watering
Meter Units of Measure: Acre-feet Cubic-feet Gal Other: _____
Schedule for Routine Calibration (per Manufacturer's Specifications):
 Annually Every 3 Years Every 5 Years Other: _____
- 4. Installation Information**
Installation Date: _____ Date of Last Calibration: _____
- 5. Attestation and Signature of Property Owner or Property Owner's Legal Designee**
I attest to and certify that each of the following statements are true and correct.
 The flow meter with totalizer is installed per the manufacturer's specifications.
 The flow meter is calibrated within an accuracy range of +/- 5%.
 Supporting documentation will be provided to SABGSA upon request.

Signature: _____ Date: _____



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Landowner Name: _____ Email: _____

Well Operator Information (if different than above)

Contact Name: _____ Email: _____

2. Well and Meter Location

Assessor's Parcel No. (APN): _____

Geographical Coordinates for Well (decimal degree): [Instructions to find coordinates.](#)

Latitude: _____ Longitude: _____

3. Meter Information

Flow Meter Make and Model: _____

Flow Meter Serial Number: _____

Flow Meter Size (inches): _____ Discharge Pipe Size: _____

Well Use: Agricultural Domestic Municipal Industrial Livestock Watering

Meter Units of Measure: Acre-feet Cubic-feet Gal Other: _____

Schedule for Routine Calibration (per Manufacturer's Specifications):

Annually Every 3 Years Every 5 Years Other: _____

4. Installation Information

Installation Date: _____ Date of Last Calibration: _____

5. Attestation and Signature of Property Owner or Property Owner's Legal Designee

I attest to and certify that each of the following statements are true and correct.

The flow meter with totalizer is installed per the manufacturer's specifications.

The flow meter is calibrated within an accuracy range of +/- 5%.

Supporting documentation will be provided to SABGSA upon request.

Signature: _____ Date: _____

FLOW METER INSTALLATION AND COMPLIANCE

Frequently Asked Questions

Is a flow meter required for a domestic well?

- No, unless use is over two-acre feet per year

What if I already have a meter?

- Same meter specs apply
- Use same form to attest to compliance

Who can install the meter?

- At the discretion of the landowner to select a qualified individual to install the flow meter per the manufacturer's specifications.

How much does it cost to purchase a flow meter?

- Wide range depending on type/size selected
- \$1,000 - \$10,000
- SB County Well Meter Assistance Program

METERING PROGRAM COMPONENTS


Meter Reading and Reporting Requirements

Meters are Required to be Read and Recorded each Month

- Monthly Readings: Within the first 5 days of each month.
- Monthly Recordings: Utilize SABGSA Reporting Form

Reporting of Extraction Data is Required 2x per Year

- Monthly flow meter readings must be reported twice a year in Spring and Fall (SABGSA schedule based on WY)
 - 60 Days to Submit Report to SABGSA
 1. April 1 – September 1 readings – due Nov. 1
 2. October 1 – March 1 readings – due May 1
- Submit SABGSA Flow Meter Reporting Form
 1. Submit form via regular mail
 2. Submit form via email
 3. Submit form via SABGSA portal (in progress)



SAN ANTONIO BASIN GROUNDWATER SUSTAINABILITY AGENCY
GROUNDWATER EXTRACTION / FLOW METER REPORTING FORM

Due to SABGSA by November 1, 2026
(Reporting Period: Monthly readings for April 1, 2026 – September 1, 2026)

This form should be completed for EACH flow meter installed in the San Antonio Creek Valley Groundwater Basin on all non-de minimis production (> 2AFY) wells. **Monthly readings are required to occur within the first 5 days of each month.** Complete and accurate responses are critical for an equitable and data driven approach to groundwater management in the Basin. A fillable pdf version of this form can be downloaded at: <https://sanantoniobasingsa.org/metering-program/>

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Property Owner Information
Landowner Name: _____ Email: _____

Well Operator Information (if different than above):
Contact Name: _____ Email: _____
- 2. Well and Flow Meter Information**

Assessor's Parcel No. (APN): _____

Geographical Coordinates for Well (decimal degree): [Instructions to find coordinates.](#)
Latitude: _____ Longitude: _____

Flow Meter Make and Model: _____ Serial Number: _____
- 3. Flow Meter Measurement Data**

Month	Measurement Date	Totalizing Flow Meter Reading (listed on face)	Flow Measurement Unit (acre-feet, cubic feet, etc.)	Total Extracted (by Month)
April 2026				
May 2026				
June 2026				
July 2026				
August 2026				
September 2026				

Notes: _____
- 4. Supporting Documentation:**

The SABGSA reserves the right to request supporting documentation from the landowner including, but not limited to, proof of flow meter accuracy, photographs, etc.



**SAN ANTONIO BASIN GROUNDWATER SUSTAINABILITY AGENCY
GROUNDWATER EXTRACTION / FLOW METER REPORTING FORM**

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(Reporting Period: Monthly readings for April 1, 2026 – September 1, 2026)

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May 2026				
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July 2026				
August 2026				
September 2026				

Notes: _____

4. Supporting Documentation:

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FLOW METER REPORTING

Frequently Asked Questions

Why do I need to record monthly meter readings?

- Enable a more accurate representation of spatial and seasonal variations (and different water year types)
- More consistent analysis with other Basin monitoring networks and indicators
- Used to correlate the response in groundwater levels to known volumes of pumping throughout the Basin to inform quarterly monitoring reports and GSP annual reports
- Early detection of metering malfunctions

ADMINISTRATIVE POLICY

Topics:

Program Enforcement

Appeal Process

Penalties for Non-Compliance

ADMINISTRATIVE POLICY

PROGRAM ENFORCEMENT

Proposed Enforcement Process: Well Registration, Meter Installation, Meter Reporting

- 1. Investigation.** Not required in all instances (e.g., failure to register a well).
 - Investigation may (but is not required to) include a property inspection under warrant.
- 2. Warning Letter**
 - SABGSA has discretion to set deadline for compliance.
 - For failure to register a well: 30 days to comply.
- 3. Notice of Violation**
- 4. Opportunity to Appeal**
 - Deadline to file appeal is 30 days after issuance of the Notice of Violation. Section 11 of Rules & Regulations.
- 5. Fines Imposed.** Discretion to impose fines *up to* the maximum amounts under Water Code Section 10732.
- 6. Civil Suit.** Within SABGSA's sole discretion whether to pursue civil suit.

APPEAL PROCESS RULES & REGS

Landowner Can Initiate (Within 30 days of Notice of Violation)

SABGSA Appeal Form

A Property Owner and/or Operator may appeal a decision made by **filing a written notice of appeal with SABGSA within 30 calendar days** of the notice of the Agency's decision.

1. Name of the Property Owner and/or Operator and address of the Groundwater Extraction Facility (if applicable),
2. Brief description of the project (if applicable),
3. The specific decision that is appealed,
4. The date on which the decision was made,
5. The basis or bases for the appeal,
6. The specific action which the Property Owner and/or Operator requests be taken on appeal, and
7. All information or evidence relied upon to support the appeal.



SAN ANTONIO BASIN GROUNDWATER SUSTAINABILITY AGENCY

DRAFT APPEAL FORM

Pursuant to Section 11 of the San Antonio Basin Groundwater Sustainability Agency ("SABGSA") Rules and Regulations ("Regulations"), the undersigned Appellant¹ appeals a decision made under the Regulations to the SABGSA Board of Directors ("Board") for review.² A complete copy of this Form and the Appeal Fee and Deposit Agreement (Attachment A)³ are required for any appeal under the Regulations.⁴

Appellant Information:

Landowner Name: _____
Landowner Address/APN: _____
Landowner Phone/Email: _____

Operator Name: _____
Operator Address: _____
Operator Phone/Email: _____

Groundwater Extraction Facility Address/APN/State Well No.: _____

Lands served by Groundwater Extraction Facility (Addresses/APNs): _____

Brief Description of Project (if applicable):

Decision Subject of the Appeal:

Date of Decision:⁵ _____

¹ For the purposes of this Appeal, Appellant refers to a Property Owner and/or Operator, as those terms are defined in Section 1 of the Regulations, challenging a decision of the SABGSA.

² The Board's decision shall constitute final action of the appeal, subject to judicial review pursuant to California Civil Code section 1094.5.

³ A complete and signed Appeal Fee and Deposit Agreement along with the deposit payment must be submitted with this Appeal Form.

⁴ Please include attachments if more space is required to respond to a particular answer.

⁵ The Appeal must be filed within 30 days of the SABGSA decision.

APPEAL PROCESS RULES & REGS

SABGSA Board Will Review Within 60 Days

Once an Appeal is Received by SABGSA

- SABGSA reviews appeal at 1st board meeting following receipt, if possible, but no more than 60 days from date appeal was filed.
- SABGSA Board's decision on appeal is final.
- Appellant is responsible for all fees and costs, including staff time, associated with an appeal.
- SABGSA will establish a fee by Resolution. Appellant submits signed fee and deposit agreement along with written appeal.

Attachment A



SAN ANTONIO BASIN GROUNDWATER SUSTAINABILITY AGENCY

DRAFT APPEAL FEE AND DEPOSIT AGREEMENT

THIS APPEAL FEE AND DEPOSIT AGREEMENT ("Agreement") is made and effective on _____ ("Effective Date") by and between the San Antonio Basin Groundwater Sustainability Agency ("SABGSA"), and _____ ("Appellant"). SABGSA and Appellant are each referred to as a "Party" and collectively referred to as the "Parties" in this Agreement.

RECITALS:

A. Appellant seeks to appeal issuance of a Notice of Violation, fine or other decision issued by the SABGSA ("Appeal") pursuant to the SABGSA Rules and Regulations ("Regulations").

B. Section 11 of the Regulations requires the Appellant to bear all fees and costs, including staff time, associated with processing an Appeal and permits the SABGSA to create a deposit agreement required to file an Appeal.

C. Pursuant to SABGSA Resolution No. 24-00 __, the SABGSA Board of Directors ("Board") approved the appropriate fees to reimburse SABGSA staff and consultants for the reasonable costs of an Appeal as provided herein, and establish a deposit amount required to file an Appeal.

D. The Parties agree that it is impossible to ascertain the full extent of the costs associated with the Appeal due to the size, nature or scope of the Appeal and therefore the Parties desire to enter into this Agreement to specify the terms of the Appellant's deposit and reimbursement of costs to process and review the Appeal.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants set forth herein, and for other consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Construction.

This Agreement shall be liberally constructed to accomplish its intent. In the event of any irresolvable conflict or inconsistency in the terms of the Agreement, the SABGSA, in its sole discretion, shall resolve the conflict or inconsistency and implement the final decision.

2. The Deposit: Additional Advances.

- a) Establishing and Supplementing Deposit. Upon execution of this Agreement, Appellant shall provide to the SABGSA an initial deposit of _____ dollars (\$X,XXXX.XX) ("Initial Deposit") to reimburse the SABGSA for Eligible Expenses, as defined in Section 2(b). The SABGSA shall monitor its expenses and the balance in the deposit account and whenever it believes, in good faith, that there will be insufficient funds to pay the SABGSA's expenses to process the Appeal, the SABGSA may make one or more written requests for additional funds (each an "Additional Advance"), which shall state the

ADMINISTRATIVE POLICY

PENALTIES FOR NON-COMPLIANCE

Preserves SABGSA's Maximum Potential Enforcement Authority (Water Code § 10732):

- \$500 per each acre-foot extracted in excess of amount authorized to extract WC § 10732(a)(1)
 - Any water extracted without a meter (except *de minimis*) would be in excess of "amount" authorized (per proposed Rules & Regs, Section 3.C.5)
 - Would need to reasonably estimate extraction based on acreage/crop type
- \$1,000 fine plus \$100 for each day a violation continues (WC § 10732(a)(2))
- Any other civil remedies under statute or common law (e.g. public/private nuisance, enforcement of CA Constitution Article II, Section 10) or later added to SGMA/other sources of GSA authority

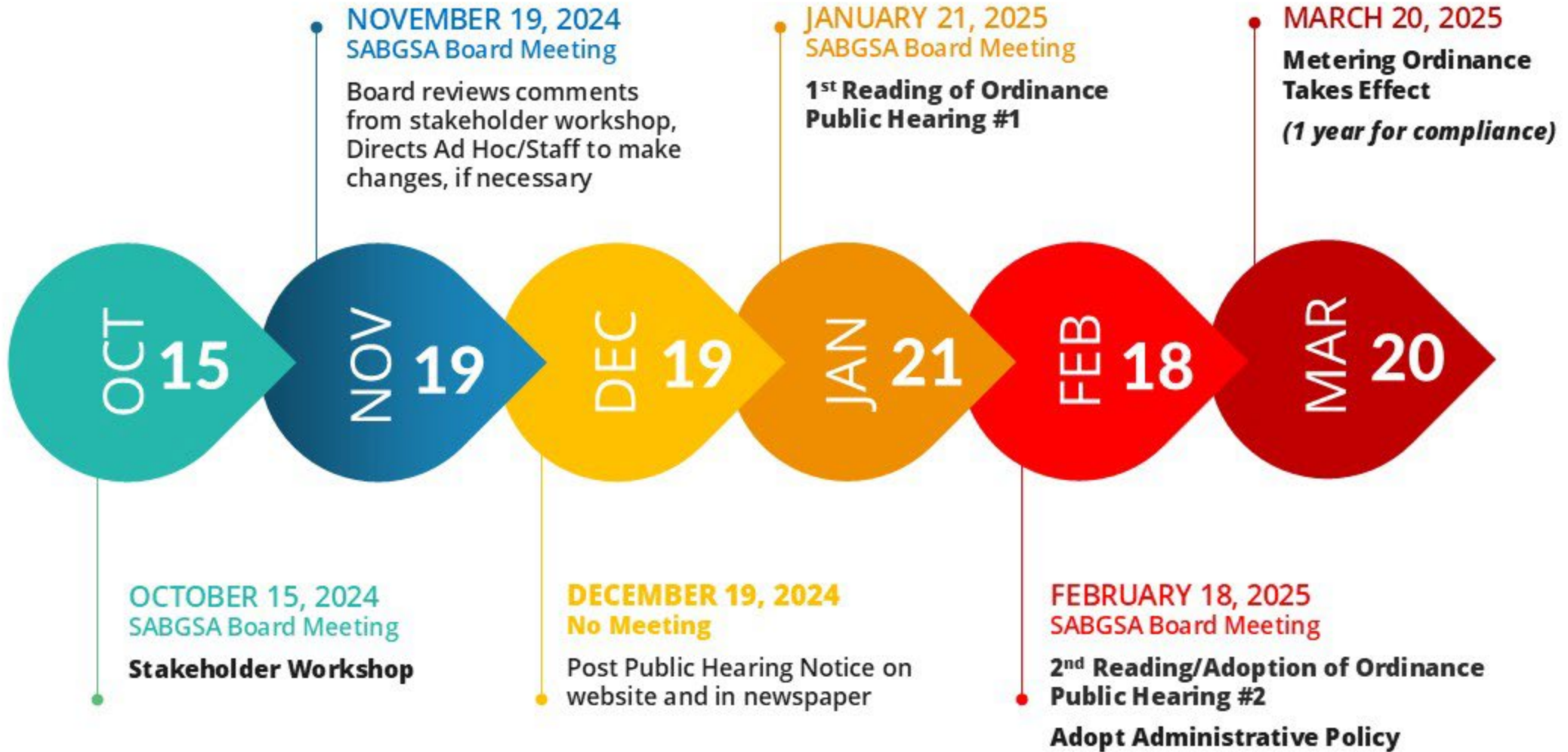
TIMELINE FOR IMPLEMENTATION

Topics:

Program Adoption - Ordinance
Meter Installation & Reporting

DRAFT SCHEDULE FOR ORDINANCE

Take Effects March 2025; Deadline for Install March 2026



DRAFT SCHEDULE FOR ORDINANCE

Deadline for Install March 2026; Deadline to Report November 2026

METER INSTALLATION

Installation and
Calibration Compliance
Form due March 20, 2026

METER READINGS & RECORDINGS

April 1, 2026
May 1, 2026
June 1, 2026
July 1, 2026
August 1, 2026
September 1, 2026

METER REPORTING

60 days to Report
Due November 1, 2026

QUESTIONS & ANSWERS

We want to hear from you!

Comments?

Questions?

Concerns?

LEGAL AUTHORITY

Water Code 10725.8 - SGMA

(a) **WATER MEASURING DEVICE:** A groundwater sustainability agency may require through its GSP that the use of **every groundwater extraction facility** within the management area of the GSA be **measured by a water-measuring device** satisfactory to the GSA.

(b) **COSTS, INSTALL, CALIBRATION:** **All costs associated** with the purchase and installation of the water-measuring device shall be **borne by the owner** or operator of each groundwater extraction facility. The water-measuring devices shall be **installed by** the GSA or, at the groundwater sustainability agency's option, by **the owner or operator** of the groundwater extraction facility. Water-measuring devices shall be **calibrated on a reasonable schedule as may be determined by the GSA.**

(c) **REPORTING:** **A GSA may require,** through its GSP, that the owner or operator of a groundwater extraction facility within the GSA file **an annual statement** with the GSA **setting forth the total extraction in acre-feet** of groundwater from the facility during the previous water year.

(d) In addition to the measurement of groundwater extractions pursuant to subdivision (a), a GSA may use any other reasonable method to determine groundwater extraction.

(e) **DE MINIMIS EXTRACTORS EXEMPT:** This section does not apply to de minimis extractors.