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ATASCADERO BASIN Groundwater Sustainability Agency

GSI Water Solutions, Inc.

Water Year 2024

DRAFT - Annual Report for the Groundwater Sustainability Plan for the Atascadero Basin

February 2025

Prepared for: Atascadero Basin GSA

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Water Year 2024

DRAFT - Annual Report for the Groundwater Sustainability Plan for the Atascadero Basin

Prepared for:

Atascadero Basin GSA
5505 El Camino Real
Atascadero, CA 93423

Prepared by:

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Sacramento, CA 95670

February 2025

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WATER YEAR 2024
ANNUAL REPORT FOR THE
GROUNDWATER SUSTAINABILITY PLAN FOR THE ATASCADERO BASIN

Certifications and Seals

This report and analysis were prepared by the following GEI Consultants Inc. professional geologists:

Date: 3-30-2025

Name: Michael Cornelius, P.E.
Professional Geologist

PG No. 6222

Date: 3-30-2025

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Professional Geologist

PG No. 9746

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RESOLUTION 2025-02

APPROVING THE ANNUAL REPORT FOR THE GROUNDWATER SUSTAINABILTIY PLAN FOR THE ATASCADERO BASIN, AND AUTHORIZING AND DIRECTING ITS FILING WITH THE CALIFORNIA DEPARTMENT OF WATER RESOURCES FOR THE WATER YEAR ENDING SEPTEMBER 30, 2024

WHEREAS in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)); and

WHEREAS SGMA requires sustainable management through the development of groundwater sustainability plans ("GSPs"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727); and

WHEREAS the Atascadero Basin GSA Executive Committee approved submittal of a GSP for the Atascadero Basin (3-004.11 Salinas Valley Atascadero Area) to the Department of Water Resourced (DWR) on January 19, 2022; and

WHEREAS the Atascadero Basin GSA submitted the GSP for the Atascadero Basin to the DWR on January 30, 2022; and

WHEREAS GSAs are required to prepare annual reports before April 1 of each year following submittal of their GSP to the DWR; and

WHEREAS a public draft of the annual report for the water year ending September 30, 2024, was made available for review and comment on the Atascadero Basin communication portal (https://portal.atascaderobasin.com/) for a minimum 15-day public review on or before March 15, 2025; and

WHEREAS an email was sent to all interested parties who have registered on the communications portal notifying them that the annual report was available for review and comment.

NOW, THEREFORE, BE IT RESOLVED that the Executive Committee of the Atascadero Basin GSA hereby approves and authorizes the filing of the Atascadero Basin Groundwater Sustainability Plan Annual Report with the California Department of Water Resources or the water year ending September 30, 2024, including consideration of comments received during the public review period.

PASSED AND ADOPTED at a meeting of the Executive Committee of the Atascadero Basin GSA on March 19, 2025, by the following vote:

AYES:
NOES:
ABSENT: Rossi
ABSTAIN:

_____

_____, *Chairperson*

****

Secretary's Certification

I, _____, Secretary of the Atascadero Basin GSA Executive Committee, do hereby certify that the foregoing Resolution is a true and correct copy entered into the Minutes of the Meeting of March 19, 2025, at which time a quorum was present, and no motion to amend or rescind the above resolution was made.

_____

_____, *Secretary*

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Abbreviations and Acronyms

§	Section
AF	acre-feet
AFY	acre-feet per year
Basin	Atascadero Basin
CCR	California Code of Regulations
COC	constituent of concern
CSD	Community Services District
Department	California State Department of Water Resources
DU	domestic units
DWR	California State Department of Water Resources
ET	evapotranspiration
ft/msl	feet above mean sea level
gpm	gallons per minute
gpm/ft	gallons per minute per foot
GAMA	Groundwater Ambient Monitoring and Assessment
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GSP basin model	GSP model
GWE	groundwater elevation
InSAR	interferometric synthetic-aperture radar
MOs	measurable objectives
MTs	minimum thresholds
MWC	Mutual Water Company
NWP	Nacimiento Water Project
Paso Robles Area Groundwater Subbasin of the Salinas Valley Basin	
Plan	Atascadero Basin Groundwater Sustainability Plan
PWS	public water system
RMS	representative monitoring site
S	storage coefficient
SGMA	Sustainable Groundwater Management Act
SLOFCWCD	San Luis Obispo Flood Control and Water Conservation District
SPI	Standardized Precipitation Index
TDS	total dissolved solids
WQCP	Water Quality Control Plan
WQO	water quality objective
WY	Water Year

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Annual Report Elements Guide and Checklist

California Code of Regulations – GSP Regulation Sections	Annual Report Elements	Location in Annual Report
Article 7	Annual Reports and Periodic Evaluations by the Agency	
§ 356.2	Annual Reports	
	Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:	
	(a) General information, including an executive summary and a location map depicting the basin covered by the report.	Executive Summary (§356.2[a])
	(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:	Section 2.4 Groundwater Elevation Monitoring (§356.2[b])
	(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:	Section 3 Groundwater Elevations (§356.2[b][1])
	(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.	Section 3.2 Seasonal High and Low (Spring and Fall) (§356.2[b][1][A])
	(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.	Section 3.3 Hydrographs (§356.2[b][1][B], and Attachment E)
	(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.	Section 4 Groundwater Extractions (§356.2[b][2])
	(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.	Section 5 Surface Water Use (§356.2[b][3])
	(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.	Section 6 Total Water Use (§356.2[b][4])
	(5) Change in groundwater in storage shall include the following:	Section 7 Change in Groundwater in Storage (§356.2[b][5])

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California Code of Regulations – GSP Regulation Sections	Annual Report Elements	Location in Annual Report
Article 7	Annual Reports and Periodic Evaluations by the Agency	
§ 356.2	Annual Reports	
	(A) Change in groundwater in storage maps for each principal aquifer in the basin.	Section 7.1 Annual Changes in Groundwater Elevation (§356.2[b][5][A])
	(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.	Section 7.2 Annual and Cumulative Change in Groundwater in Storage Calculations (§356.2[b][5][B])
	(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.	Section 8 Progress towards Implementing the GSP (§356.2[c])

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Executive Summary

With the submittal of the Atascadero Basin Groundwater Sustainability Plan (GSP; Plan), the Groundwater Sustainability Agency (GSA) is required to submit an annual report for the preceding Water Year (October 1 – September 30) to California Department of Water Resources (DWR) by April 1, 2025. The annual report shall be provided by April 1 of each year following adoption of the Plan and provide monitoring and water use data to the DWR and Atascadero Basin (Basin) stakeholders to gauge performance of the Basin relative to sustainability goals set forth in the GSP.

This document provides annual monitoring data required by the DWR for a GSP and consistent with the GSP dated January 19, 2022, for the Basin. The DWR provided a letter to the Atascadero Basin GSA on January 31, 2024, recognizing the submittal of the Atascadero Basin GSP even though the Basin is very low-priority. The letter noted that DWR prioritized the review of the GSPs in the medium and high priority basins and stated that the low and very low priority basin GSPs would be reviewed the and assessments and determinations would be made as soon as practicable. The letter also encouraged the Atascadero Basin GSA to continue implementing its GSP and providing information to DWR through its annual reports. A copy of the letter provided by DWR is included in **Attachment A**. This report contains monitoring data for WY 2024 (October 1, 2023 – September 30, 2024). The values for WYs 2017 through 2023 are included for reference purposes.

On May 10, 2024, DWR provided a letter (see **Attachment B**), that acknowledging they received the Atascadero Basin GSP Water Year 2023 Annual Report. The DWR letter and noted that it appeared to satisfy the requirements of the GSP Regulations (23 California Code of Regulations [CCR] § 356.2) and no additional information was required at this time regard the WY 2023 Annual Report. The letter also noted the Basin does not have a sustainability goal that is part of an approved Plan, thus the DWR cannot independently evaluate whether the information in the annual report indicates that the Plan is being implemented in a manner to achieve the sustainability goal for the Basin at this this time, but that determination will be included in the Department's forthcoming evaluation of the Plan.

Water levels, groundwater extractions, surface water diversions, and total water usage measurements and change in groundwater storage estimates are presented. The measurements and information presented demonstrate the groundwater in the Basin is sustainable, consistent with the GSP findings.

Sections of the WY 2023 Annual Report include the following:

- **Section 1. Introduction:** a brief background of the Atascadero Basin GSA and a location map.
- **Section 2. Atascadero Basin Setting and Monitoring Networks:** a summary of the Basin setting, Basin monitoring networks, and ways in which data are used for groundwater management.
- **Section 3. Groundwater Elevations (§356.2[b][1]):** a description of recent monitoring data with groundwater elevation contour maps for spring and fall monitoring events and representative hydrographs.

- **Section 4. Groundwater Extraction (§356.2[b][2]):** compilation of metered and estimated groundwater extractions by land use sector and location of extractions.
- **Section 5. Surface Water Use (§356.2[b][3]):** a summary of reported surface water use.
- **Section 6. Total Water Use (§356.2[b][4]):** a presentation of total water use by source and sector.
- **Section 7. Change in Groundwater in Storage (§356.2[b][5]):** a description of the methodology and presentation of changes in groundwater in storage.
- **Section 8. Progress Towards Implementing the GSP (§356.2[c]):** a summary of sustainability of the Basin.
- **Section 9. References:** includes the references used for this Annual Report.

Water Year 2024 Hydrologic Conditions

Water Year (WY) 2024 in California was marked by above average conditions along the Central Coast. Current hydrologic trends suggest that state's annual hydrologic conditions are going to continue to be highly variable oscillating between wet and dry years.

Groundwater Elevations

Groundwater elevations observed in the Basin during WY 2024 are generally similar to WY 2023 across a majority of the Basin, due to above-average rainfall conditions during the winter of 2023/2024. Both positive and negative changes in groundwater elevations (GWEs) are observed from year to year in different parts of the Basin, as has been the pattern in the Basin for many years. Seasonal trends of slightly higher spring GWEs compared with lower fall levels continued in each of the water years.

Groundwater Extractions

Total groundwater extractions in the Basin for WY 2024 is 14,500 acre-feet (AF). **Table ES-1** summarizes the groundwater extractions by water use sector for each water year. The values for WYs 2017-2023 (grayed out) are included for reference purposes. This convention is carried throughout the report.

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Table ES – 1. Groundwater Extractions by Water Use Sector

Water Year	Groundwater Extractions by Water Use Sector			Total (AF)
Source	Municipal (AF)	PWS and Rural Domestic (AF)	Agriculture (AF)	
2017	8,760	1,206	4,900	15,000
2018	10,227	1,218	4,300	15,800
2019	9,442	1,230	5,000	15,800
2020	10,611	1,243	4,700	16,600
2021	10,860	1,252	4,500	16,700
2022	10,242	1,262	4,500	16,000
2023	9,739	1,272	3,100	14,100
2024	**9,691**	**1,159**	**3,600**	**14,500**
Method of Measure	Metered	2016 Groundwater Model	Soil- Water Balance Model, OpenET (2021 and 2022 only)	
Level of Accuracy	high	low-medium	medium	

Notes:
AF = acre-feet; PWS = public water systems

Surface Water Use

The Basin currently benefits from surface water entitlements from the Nacimiento Water Project (NWP) to supplement municipal demands in the city of Paso Robles, Templeton Community Services District (TCSD; a census-designated place), and Atascadero Mutual Water Company. The city of Paso Robles uses a portion of their NWP deliveries within the adjacent Paso Robles Subbasin, so those volumes do not show up in this accounting. Locations of communities dependent on groundwater and with access to surface water are shown on Figure 10. There is currently no surface water available for agricultural or recharge project use within the Basin. A summary of total actual surface water use by source is provided in **Table ES-2**.

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Table ES – 2. Total Surface Water Use by Source

Water Year	Nacimiento Water Project Water Available			Total (AF)	Nacimiento Water Project Water Used			Total (AF)
	City of Paso Robles[1] (AF)	Templeton CSD[2] (AF)	Atascadero MWC[3] (AF)		City of Paso Robles (AF)	Templeton CSD (AF)	Atascadero MWC (AF)	
2017	6,488	406	3,244	10,138	134	274	0	408
2018	6,488	406	3,244	10,138	862	258	854	1,974
2019	6,488	406	3,244	10,138	356	157	47	560
2020	6,488	406	3,244	10,138	804	0	1,372	2,176
2021	6,488	406	3,244	10,138	746	97	2,218	3,061
2022	6,488	406	3,244	10,138	1,102	131	1,945	3,088
2023	6,488	406	3,244	10,138	632	144	220	996
2024	**6,488**	**406**	**3244**	**10,138**	**487**	**38**	**0**	**526**

Notes:
[1] Contract annual entitlement to the city of Pas Robles. Note that city of Paso Robles uses some water outside Atascadero Basin
[2] Contract annual entitlement to Templeton Community Services District
[3] Contract annual entitlement to Atascadero Mutual Water Company
AF= acre feet
CSD = Community Services District
MWC = Mutual Water Company

Total Water Use

For WY 2024, quantification of total water use was completed through reporting of metered water production data from municipal wells, metered surface water use, and models used to estimate agricultural crop water supply requirements. In addition, rural water use and small commercial public water system (PWS) use was estimated using the ground\water model. **Table ES-3** summarizes the total annual water use in the Basin by source and water use sector.

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Table ES – 3. Total Water Use in the Basin by Source and Water Use Sector

Water Year	Municipal (AF)		PWS and Rural Domestic (AF)	Agriculture (AF)	Total (AF)
Source	Groundwater	Surface Water	Groundwater	Groundwater	
2017	8,760	408	1,080	4,900	15,100
2018	10,227	1,974	1,091	4,300	17,600
2019	9,442	560	1,102	5,000	16,100
2020	10,611	2,176	1,113	4,700	18,600
2021	10,860	3,061	1,123	4,500	19,500
2022	10,242	3,088	1,135	4,500	19,000
2023	9,741	996	1,146	3,100	15,000
2024	**9,961**	**526**	**1,159**	**3,600**	**15,000**
Method of Measure	Metered	Metered	2016 Groundwater Model	OpenET	
Level of Accuracy	high	high	low-medium	medium	

Notes:
AF = acre-feet
PWS = public water systems

Change in Groundwater in Storage

The calculation of change in groundwater in storage in the Basin was derived from comparison of fall GWE contour maps from one year to the next in each principal aquifer. The annual changes of groundwater in storage calculated for WY 2024 totaled a net gain of 3,600 AF as presented in **Table ES-4**.

Table ES – 4. Annual Change of Groundwater in Storage

Water Year	Annual Change (AF)
2017	14,600
2018	-5,400
2019	4,300
2020	100
2021	-5,200
2022	-8,000
2023	15,700
2024	**3,600**

Note: AF = acre-feet

Progress towards Meeting Basin Sustainability

The Basin continues to be managed sustainably, as evidenced by historic groundwater levels in the Basin so no projects or management actions that are required to achieve sustainability at this time. A number of management actions and conceptual projects were included in the GSP to provide a means to ensure the

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Basin is operated to maintain its sustainable yield and sustainability. The Basin will continue to be managed in an adaptive management approach as described in the GSP.

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