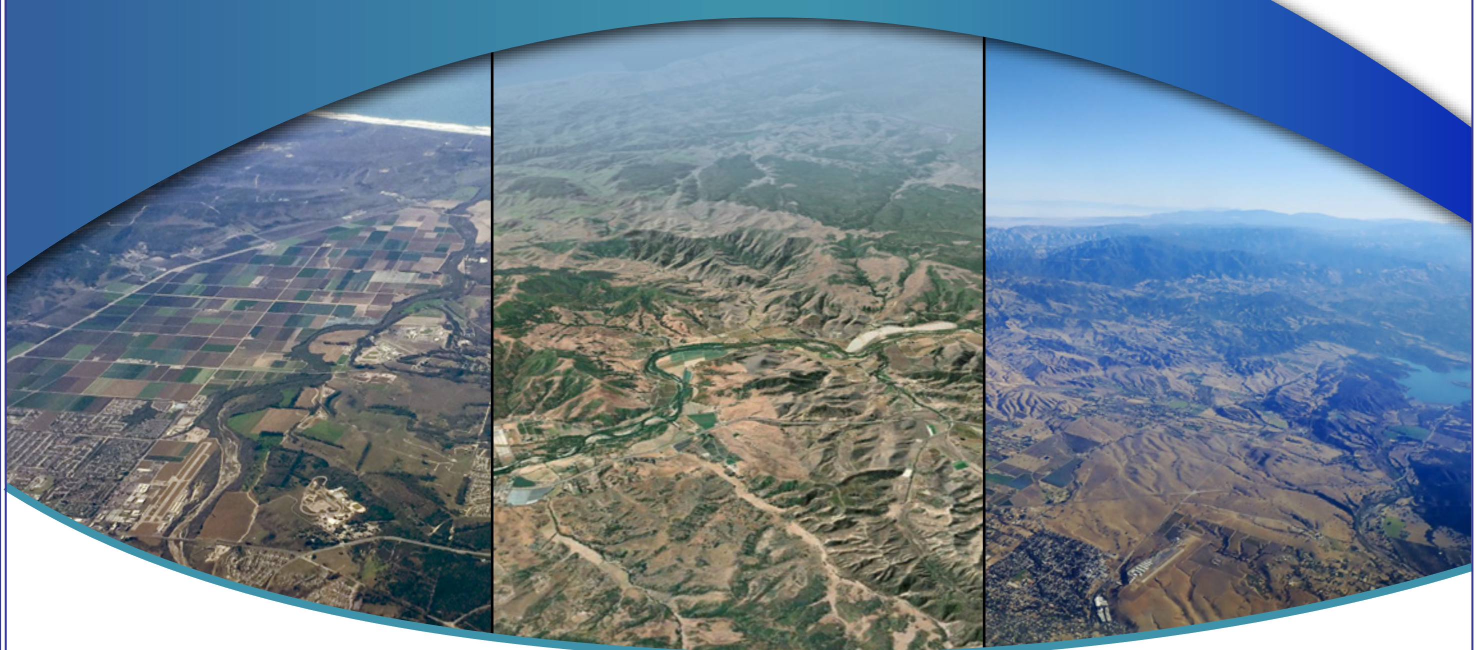
ANNUAL REPORT WATER YEAR 2025
FOR THE
SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN
BULLETIN 118 BASIN NO. 3-15
JOINT REPORT OF THE
GROUNDWATER SUSTAINABILTY AGENCIES

WMA
Western Management Area

CMA
Central Management Area

EMA
Eastern Management Area

FINAL
MARCH 20, 2026



STETSON ENGINEERS INC.

GSI Water Solutions, Inc.

W A T E R R E S O U R C E P R O F E S S I O N A L S
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Cover Photographs

Front Cover: Three aerial views of water from the Santa Ynez River Valley Groundwater Basin area. The left image is of the Western Management Area, photographed by Nate Page during a flight on November 10, 2016. The central image is of the Central Management Area. It is an oblique angle GIS image using November 5, 2022 Vantor/ESRI imagery and ESRI Hillshade Terrain, generated by Stetson Engineers using ArcGIS Pro Local Scene. The right image is of the Eastern Management Area, it was photographed by Stetson Engineers during a flight on October 22, 2019.

Back Cover: National Agriculture Imagery Program (NAIP) natural color orthographic photo mosaic of Santa Ynez River Valley Groundwater Basin area photographed in 2024.

SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN

SGMA Joint Annual Report, Water Year 2025

March 20, 2026

FINAL

APPROVED
MARCH 13, 2026
BY THE BOARDS OF THE
WESTERN MANAGEMENT AREA GROUNDWATER SUSTAINABLITY AGENCY
CENTRAL MANAGEMENT AREA GROUNDWATER SUSTAINABLITY AGENCY
EASTERN MANAGEMENT AREA GROUNDWATER SUSTAINABLITY AGENCY
SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN

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ACKNOWLEDGMENTS

The Western Management Area, Central Management Area, and Eastern Management Area Groundwater Sustainability Agency Boards and the consultant team (Stetson Engineers Inc. and GSI Water Solutions, Inc.) would like to thank and acknowledge the many stakeholders, entities, and private citizens who have contributed their time and expertise to help develop this Annual Report.

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Central Management Area Section

Eastern Management Area Section

LIST OF ACRONYMS AND ABBREVIATIONS

AF	acre-feet
AFY	acre-feet per year
CCR	California Code of Regulations
Basin	Santa Ynez Valley Groundwater Basin
CCWA	Central Coast Water Authority
CEQA	California Environmental Quality Act
CGPS	Continuous Global Positioning System
CIMIS	California Irrigation Management Information System
CMA	Central Management Area
COC	constituent of concern
COGG	California Oil, Gas, and Groundwater
COMB	Cachuma Operation and Maintenance Board
CSD	Community Services District
CWC	California Water Code
DBID	Database Identification Number
DDW	Division of Drinking Water
DWR	California Department of Water Resources
EMA	Eastern Management Area
ET	Evapotranspiration
Ft/ft	feet per foot
FY	Fiscal Year (July 1 through June 30)
GDE	groundwater-dependent ecosystem
Gpm	gallons per minute
GSA	Groundwater Sustainability Agency
GSI	GSI Water Solutions, Inc.
GSP	Groundwater Sustainability Plan
HCM	hydrogeologic conceptual model
ID No. 1	Santa Ynes River Water Conservation District, Improvement District No. 1

ILRP	Irrigated Lands Regulatory Program
InSAR	Interferometric Synthetic Aperture Radar
LRWRP	Lompoc Regional Wastewater Reclamation Plant
MCL	maximum contaminant level
mg/L	milligrams per liter
MHCSD	Mission Hills Community Services District
NAIP	National Agriculture Imagery Program
Plan	Groundwater Sustainability Plan
PRISM	Parameter-elevation Regressions on Independent Slopes Model
RMS	representative monitoring site
RMW	Representative Monitoring Well
RWQCB	Regional Water Quality Control Board
San Antonio	San Antonio Creek Valley Groundwater Basin
SFB	Space Force Base
SGMA	Sustainable Groundwater Management Act
SMCL	secondary maximum contaminant level
SWP	State Water Project
SWRCB	State Water Resources Control Board
SYRA	Santa Ynez River Alluvium
SYRVGB	Santa Ynez River Valley Groundwater Basin
SYRWCD	Santa Ynez River Water Conservation District
UNAVCO	University NAVSTAR Consortium
USBR	United States Bureau of Reclamation
USGS	United States Geological Survey
VSFB	Vandenberg Space Force Base
VVCSD	Vandenberg Village Community Services District
WMA	Western Management Area
WR	Water Rights Order
WY	Water Year (October 1 through September 30)

EXECUTIVE SUMMARY

This is the Water Year 2025 annual Sustainable Groundwater Management Act (SGMA) Annual Report for the three independent groundwater sustainability agencies (GSAs) of the Santa Ynez River Valley Groundwater Basin (SYRVGB or Basin): Western Management Area (WMA), Central Management Area (CMA), and Eastern Management Area (EMA). Each GSA corresponds to a management area, and all three GSAs coordinate to cover the entire Basin. This report describes changes within the Basin and management progress for Water Year (WY) 2025. WY 2025 started on October 1, 2024, and ended on September 30, 2025. This report includes a joint section summarizing the overall information and detailed annual report information about each of the three management areas in separate sections.

The GSAs found that WY 2025 basin conditions were either dry or below normal. Basin-wide, groundwater in storage changes varied throughout the basin, with the groundwater in storage slightly increasing in the WMA and CMA and decreasing in the EMA. All three GSAs report that conditions within their domains continue to meet sustainability goals with no undesirable results during WY 2025.

The total groundwater production in the WMA, CMA, and EMA during WY 2025 was about 23,500; 2,870; and 12,982 acre-feet (AF), respectively, and notably the total groundwater production in each Management Area was below or relatively equal to the sustainable yield for that area[1]. This totals to 39,352 AF of groundwater production for the Basin. The total estimated water use[2] in the WMA, CMA, and EMA is about 30,030; 8,100; and 18,833 AF, respectively. This totals to about 56,963 AF of water use for the Basin.

During WY 2025, the three independent GSAs in the Basin, continued work on the DWR Proposition 68 grant implementation project for the Santa Ynez River Valley Groundwater Basin. The goal of the project is to improve the overall long-term sustainability in the Basin. The project components are being

1 The estimated long-term sustainable yields of the WMA, CMA, and EMA is estimated to be 26,500; 2,800; and 12,870 acre-feet per year (AFY), respectively per the respective 2022 GSPs.
2 Total use includes all water types including groundwater, surface water (surface and underflow), and imported water.

implemented in each management area, including expansion of the monitoring networks to address data gaps.

WESTERN MANAGEMENT AREA

The WMA is the most western management area in the Basin. One of the principal aquifers has a limited coastal interface to the Pacific Ocean. Much of the peripheral area outside of the principal aquifers are the federal lands of the Vandenberg Space Force Base. Analyses conducted for the WY 2025 annual report show that Basin conditions are sustainable with no current undesirable results during WY 2025.

Groundwater Levels	All wells, but one, were above their Minimum Threshold levels for WY 2025.
Groundwater Storage	The Upper Aquifer had an estimated decrease in the amount of groundwater in storage, while the Lower Aquifer had an increase in storage, and overall, storage increased over the water year 2025: a gain of 1,380 acre-feet (AF).
Seawater intrusion	Seawater intrusion indicators of Chloride were relatively stable for the water year 2025 and are below the sustainability indicator.
Degraded water quality	No potential degradation of water quality caused by groundwater pumping or implementation of projects and management actions was found in the WMA.
Land subsidence	InSAR satellite data and continuous global positioning system data show no measurable land subsidence has occurred within the WMA.
Interconnected Surface Water	The three monitoring wells used to assess interconnected river conditions were above the minimum thresholds.

CENTRAL MANAGEMENT AREA

The CMA is the central management area in the Basin. The principal aquifer covers both a rural upland and is partly overlaid by the channel of Santa Ynez River alluvium near the City of Buellton. Analyses conducted for the WY 2025 annual report show that Basin conditions are sustainable with no current undesirable results during WY 2025. Groundwater in storage was estimated to increase. Pumping during WY 2025 was at the long-term sustainable yield estimated in the CMA GSP.

	Groundwater Levels
	All spring groundwater levels in representative wells were above the minimum threshold in the Buellton aquifer.
	Groundwater Storage
	The aquifer had an estimated slight increase in storage: a gain of 100 acre-feet (AF).
	Degraded water quality
	No potential degradation of water quality caused by groundwater pumping or implementation of projects and management actions was found in the CMA.
	Land subsidence
	InSAR satellite data and continuous global positioning system data show no significant land subsidence has occurred within the CMA.
	Interconnected Surface Water
	The three monitoring wells used to assess interconnected river conditions were above the minimum thresholds.

Eastern Management Area

The EMA is the easternmost management area in the Basin. Analyses conducted for the WY 2025 annual report show an overall decrease in groundwater in storage, likely due to below normal conditions. Pumping increased slightly but remained below historically high levels.

Groundwater Levels	Spring groundwater levels generally declined in 2025 compared to the previous year. 46% of representative wells in Paso Robles were below minimum threshold values, and 22% of the representative Careaga Sands wells were below minimum thresholds.
Groundwater Storage	Groundwater in storage decreased in 2025 by 12,487 AF, which is an expected result during below normal hydrologic conditions.
Degraded water quality	No potential degradation of water quality caused by groundwater pumping or implementation of projects and management actions was found in the EMA.
Land subsidence	InSAR satellite data comparing June 2015 and October 2025 shows no measurable land subsidence has occurred within the EMA.
Interconnected Surface Water	Indicator monitoring is still being developed for the EMA areas.

JOINT REPORT SECTION

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

EMA
Santa Ynez River Valley Groundwater Basin
Eastern Management Area
Groundwater Sustainability Agency

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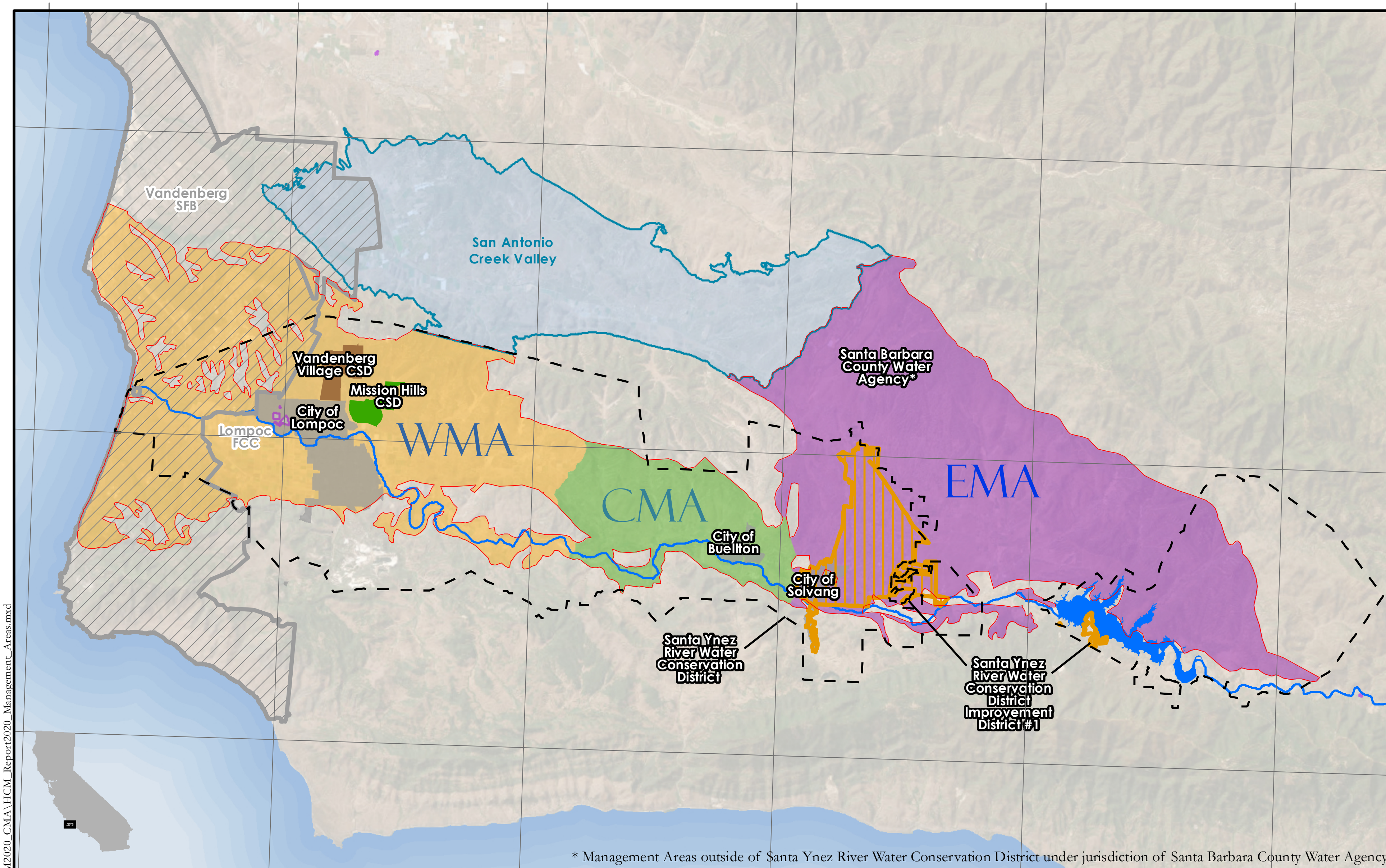
JOINT CHAPTER 1: INTRODUCTION

The Santa Ynez River Valley Groundwater Basin (SYRVGB or Basin) is a groundwater basin located in central Santa Barbara County in the central coast region of California (**Joint Figure 1-1**). The Basin (No. 3-15) encompasses approximately 317.4 square miles (203,100 acres), located within the larger Santa Ynez watershed. **Joint Figure 1-1** shows the location of all three management areas of the Basin.[1]

This WY2025 Annual Report is a joint report of the three GSAs. To be consistent with the California legislature's findings that "Groundwater resources are most effectively managed at the local or regional level"[2], the SYRVGB public water agencies divided the SYRVGB into three local management areas based on the geography and extent of local aquifers. Each of the three management areas (WMA; CMA; EMA) is governed by a separate public entity GSA, referred to as joint powers agency, that was created and exists pursuant to a separate Joint Exercise of Powers Agreement (JPA). Each GSA is independent regarding management decisions and responsibility for collecting groundwater and related data within their respective domains. **Joint Table 1-1** summarizes the physical description and member agencies of all three Basin GSAs.

1 23 CCR § 356.2(a) "[…] location map depicting the basin covered by the report."
2 Sustainable Groundwater Management Act, Uncodified Findings (a)(6)



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Western Management Area (WMA)

Central Management Area (CMA)

Eastern Management Area (EMA)

SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN

(DWR BULLETIN 118 BASIN NO. 3-105)

AND MANAGEMENT AREA BOUNDARIES

0 2 4 Miles

N

Sources:
NAIP (2018)
USGS National Elevation Dataset, 2002
Groundwater basin boundary from DWR Bulletin 118, 2018

Document Path: I:\jn2710\HCM2020_CMA\HCM_Report2020_Management_Areas.mxd

JOINT FIGURE 1-1

Joint Table 1-1
Santa Ynez River Valley Groundwater Basin Groundwater Sustainability Agencies

GSA	Management Area Description	JPA Member Agencies
WMA Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency	133.7 square miles • Santa Ynez River alluvium west of Santa Rosa Park to the Lompoc Narrows • Lompoc Plain • Lompoc Terrace • Burton Mesa • Lompoc Upland • Santa Rita Upland.	• City of Lompoc • Vandenberg Village Community Services District • Mission Hills Community Services District • Santa Ynez River Water Conservation District • Santa Barbara County Water Agency (non-voting member)
CMA Santa Ynez River Valley Groundwater Basin Central Management Area Groundwater Sustainability Agency	32.8 square miles • Santa Ynez River alluvium east of Santa Rosa Park to just west of the City of Solvang • Buellton Upland	• City of Buellton • Santa Ynez River Water Conservation District • Santa Barbara County Water Agency (non-voting member)
EMA Santa Ynez River Valley Groundwater Basin Eastern Management Area Groundwater Sustainability Agency	150.9 square miles • Santa Ynez River alluvium from City of Solvang east • Santa Ynez Upland	• City of Solvang • Santa Ynez River Water Conservation District, Improvement District No.1 • Santa Ynez River Water Conservation District • Santa Barbara County Water Agency

Joint Table 1-2 lists the principal aquifers by GSA. These principal aquifers have limited connections between the management areas.

Joint Table 1-2
Principal Groundwater Aquifers,
by GSA

GSA	Principal Aquifer Name	Acres [A]	Square Miles	Summary Description
WMA	Upper Aquifer	14,500	22.7	Santa Ynez River gravels, younger and older alluvial deposits in Lompoc Plain (below Lompoc Narrows)
	Lower Aquifer	37,700	58.9	Paso Robles and Careaga Formations in Santa Rita Syncline
CMA	Buellton Aquifer	18,800	29.4	Paso Robles and Careaga Formations in Santa Rita Syncline, buried under Santa Ynez River alluvium near the City of Buellton
EMA	Paso Robles Formation	58,000 [B]	91 [B]	Paso Robles Formation and Older Alluvium outcropping across 70 percent of EMA
	Careaga Sand	58,000 [B]	91 [B]	Careaga Sand is deeply buried beneath Santa Ynez Uplands, outcropping near the City of Solvang

[A] Rounded to the nearest ten acres.
[B] The principal groundwater aquifers within the EMA underly the entire Santa Ynez Upland area.
Note: In addition to the SGMA groundwater aquifers noted above, there is an area where the Santa Ynez River, in part, flows underground as underflow in a known and definite channel defined by relatively impermeable banks. The SGMA statute, CWC Section 10721 (g), excludes this from the definition of groundwater.

In addition to the principal aquifers, the Santa Ynez River has an underflow component located upstream of the Lompoc Narrows, where it flows in a "known and definite channel"[3] of high permeability river sediments under and as part of the Santa Ynez River. The State Water Resources Control Board (SWRCB) is involved in the regulation of Santa Ynez River water, including both surface water and underflow of the Santa Ynez River and surface water rights. Upstream reservoirs are operated by the United States Bureau of Reclamation (USBR) which physically impounds and otherwise affects the flows of the Santa Ynez River. USBR conducts releases to meet downstream surface water rights and replenish the downstream alluvium and groundwater basin below the Lompoc Narrows, and for the benefit of fish. The SGMA statute does not authorize the GSAs to determine or alter groundwater rights or surface water rights of the Santa Ynez

[3] CWC Section 10721 (g) "Groundwater" means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water but does not include water that flows in known and definite channels.

River.[4] The SWRCB Orders for the Cachuma Project include coordination of releases from the Cachuma Reservoir for underflow alluvial storage and replenishment, which includes the Santa Ynez Alluvium upstream of the Lompoc Narrows.

This report includes each GSA's separate annual reporting of conditions and an overall basin summary. This report covers the water year 2025 (October 1, 2024– September 30, 2025).

1.1 PURPOSE OF ANNUAL REPORT

The California legislature identified the following items to include in the SGMA annual reports (California Water Code [CWC] Section 10728):

> *On the April 1 following the adoption of a groundwater sustainability plan and annually thereafter, a groundwater sustainability agency shall submit a report to the department containing the following information about the basin managed in the groundwater sustainability plan:*
>
> > *(a) Groundwater elevation data.*
> >
> > *(b) Annual aggregated data identifying groundwater extraction for the preceding water year.*
> >
> > *(c) Surface water supply used for or available for use for groundwater recharge or in-lieu use.*
> >
> > *(d) Total water use.*
> >
> > *(e) Change in groundwater storage.*
>
> *(Added by Stats. 2014, Ch. 346, Sec. 3. (SB 1168) Effective January 1, 2015.)*

Joint Appendix A includes the SGMA statute and regulations related to the required elements of this annual report. In general, the annual report is required to describe progress toward implementing the GSP and groundwater conditions over the year.

4 CWC Section 10720.5 (b) "Nothing in this part, or in any groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights."

This Joint Report covers conditions for WY 2025 (October 1, 2024 - September 30, 2025). This is the second joint report of the three GSAs in the Basin.

1.2 SUSTAINABILITY GOAL AND UNDESIRABLE RESULTS

The three GSPs identified the following coordinated sustainability goal for the Basin:

> "to manage groundwater resources in the WMA, CMA and EMA for the purpose of facilitating long-term beneficial uses of groundwater within the Basin. Beneficial uses of groundwater in the Basin include municipal, domestic, and agricultural and environmental supply. The sustainability goal is in part defined by the locally defined minimum thresholds and undesirable results."[5]

Under SGMA,[6] six indicators of sustainability were considered as part of each GSAs' GSP.[7] The six sustainability indicators are listed as follows.

1. Chronic lowering of groundwater levels

2. Reduction of groundwater storage

3. Seawater intrusion[8]

4. Degraded water quality

5. Land subsidence

6. Depletions of interconnected surface water

---

5 Same phrasing in 2022 WMA GSP, Section 3B.1 Sustainability Goal and 2022 CMA GSP, Section 3B.1 Sustainability Goal. 2022 EMA GSP, Section 5-4 phrased it as "*to sustainably manage the groundwater resources in the Western, Central, and Eastern Management Areas to ensure that the Basin is operated within its sustainable yield for the protection of reasonable and beneficial uses and users of groundwater. The absence of undesirable results, as defined by SGMA and the Groundwater Sustainability Plans (GSPs), will indicate that the sustainability goal has been achieved.*"

6 CWC Section 10721 (x), 23 CCR § 354.28(c), 23 CCR § 354.34(c),

7 23 CCR § 354.30(a) Each Agency shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon.

8 The seawater intrusion indicator is only applicable to the WMA, which is the sole coastal GSA for the Basin.

1.3 Organization of this Report

As requested by the Department of Water Resources (DWR) in 2024, the three GSAs in the Basin collaborated to provide a joint report for WY 2025. The required contents of an Annual Report are provided in the SGMA statutes and regulations (Joint Appendix A). Each GSA evaluated groundwater conditions within their respective management areas and prepared their own respective content for this joint report. This document is organized into the following sections:

- **Joint:** General basin-wide conditions of the Santa Ynez River Valley Groundwater Basin.
- **Western Management Area:** reported groundwater conditions for the Western Management Area GSA and summary of progress toward the WMA GSP implementation.
- **Central Management Area:** reported groundwater conditions for the Central Management Area GSA and summary of progress toward the CMA GSP implementation.
- **Eastern Management Area:** reported groundwater conditions for the Eastern Management Area GSA and summary of progress toward the EMA GSP implementation.
- **Appendices:** Supplementary information.

To aid in the review of the document, the Joint Report section follows the organization of the SGMA statute, which addresses required reporting on overall basin conditions, where possible. The GSP-specific sections about the Western, Central, and Eastern Management Areas follow the SGMA regulations, which address required reporting on the specific GSP areas. These are organized as follows:

- Chapter 1: Introduction: Management Area-specific information.
- Chapter 2: Hydrologic conditions
- Chapter 3: Groundwater elevation data (including contours, with hydrographs as an appendix)
- Chapter 4: Water supply data (including groundwater extraction data)
- Chapter 5: Groundwater storage data
- Chapter 6: Progress towards GSP implementation and sustainability
- Chapter 7: References: citations for this section of the report.

JOINT CHAPTER 2: BASIN CONDITIONS

Since SGMA's inception in 2015, the overall assessment of local groundwater availability and groundwater conditions is determined by each GSA. [9] The water year types are calculated differently by the GSAs within the Basin following the best available information.[10] Each independent GSA in the Basin selected the appropriate method based on the local management needs and coordinated with the other GSAs. All three GSAs found the water year 2025 was below the median condition, classifying the water year as either below normal or dry.

The CMA and WMA receive more runoff and surface flow compared to the EMA, which is at a higher elevation and receives more precipitation. The WMA and CMA use ranking within the period of record of surface flows of Salsipuedes Creek. This follows the method used in managing the Cachuma Project under the 2019 SWRCB Water Rights Order 2019-0148, which also uses surface runoff to determine the water year type. The WMA and CMA determined that WY2025 was a dry year. The EMA uses precipitation data with a local EMA precipitation station, and a water year type index calculated following the DWR's (2021) SGMA Water Year Type Dataset method.[11] The EMA determined that WY2025 was a below normal year. In their sections, the GSAs report details on how they made their determinations and findings of the water year type.

9 Sustainable Groundwater Management Act, Uncodified Findings (a)(6) "*Groundwater resources are most effectively managed at the local or regional level."*

10 DWR (2021) Sustainable Groundwater Management Act Water Year Type Dataset Development Report "*GSAs may choose to use the SGMA WYT dataset as a resource in the development of their water budget but are not required to. GSAs have the option to develop their own water year types based on best available information (23 CCR Section 354.18d).*"

11 Index = (0.40 * Current Year's precipitation) + (0.60 * Previous Year's Precipitation), based on a rolling 30-year period of precipitation.

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JOINT CHAPTER 3: GROUNDWATER HYDROGRAPHS AND CONTOURS

Groundwater levels are a key indicator of sustainability in the basin. The three GSAs have prepared detailed information on the WY 2025 groundwater elevations.[12] The overall groundwater elevation conditions are summarized in the following table, **Joint Table 3-1**:

Joint Table 3-1
WY 2025 Seasonal High (Spring) Groundwater Elevation Data, for Groundwater Level Monitoring, by GSA

GSA	WMA		CMA	EMA		Basin-Wide (Total)
Principal Aquifer	Upper Aquifer	Lower Aquifer	Buellton Aquifer	Paso Robles Formation	Careaga Sand	
No. of Monitoring Network Wells (MNW)	13	13	4	15	9	54
No. of MNW monitored in Spring 2025	10	12	4	13	9	50
No. of MNW Below Minimum Threshold	0	0	0	6	2	8

In individual sections, the GSAs include groundwater level contours for each principal aquifer. The GSAs have produced hydrographs, presented in the appendices, specifically **WMA Appendix A and B**, **CMA Appendix A and B**, and **EMA Appendix B**.

12 CWC Section 10728 (a) "*Groundwater elevation data.*"

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JOINT CHAPTER 4: WATER USE AND AVAILABLE SURFACE WATER

4.1 GROUNDWATER USE

Groundwater production within the Basin is used for agricultural, domestic, and municipal purposes. Most of the Basin is a mixture of rural areas with agriculture and some rural-suburban development. The following table, **Joint Table 4-1**, summarizes groundwater extraction by management area.[13]

Joint Table 4-1
WY 2025 Groundwater Extraction Data, by GSA, in Acre-Feet

GSA	WMA		CMA	EMA	Basin-Wide (Total AF)
Principal Aquifer	Upper Aquifer (AF)	Lower Aquifer (AF)	Buellton Aquifer (AF)	Total (AF)	
Domestic Water Use	80	220	280	1,637	2,217
Agricultural Water Use	14,270	3,230	1,920	9,662	29,082
Municipal Water Use	3,770	1,930	670	1,683	8,053
Total Groundwater Water Use	18,120	5,380	2,870	12,982	39,352

13 CWC Section 10728 (b) "*Annual aggregated data identifying groundwater extraction for the preceding water year.*"

4.2 SURFACE WATER USE AND IMPORTS

Lake Cachuma (Cachuma) is a reservoir behind Bradbury Dam, which is operated by the United States Bureau of Reclamation (USBR). At Cachuma, surface water from the Santa Ynez River watershed is captured, retained, and partially exported for the benefit of uses outside of the Basin. Surface water releases from Cachuma for the benefit of local downstream users of Santa Ynez River water are made under State Water Resources Control Board (SWRCB) Order WR 2019-0148.

In addition to water sources within the Basin, the Central Coastal Water Authority (CCWA) has delivered imported water from the State Water Project (SWP) to portions of the SYRVGB since 1997. In the WMA, water is also imported from the San Antonio Groundwater Basin. **Joint Figure 4-1** is a summary of the annual water imports to the Basin. The amount of precipitation, volume of water flowing in the Santa Ynez River, wastewater volumes, and quantity of imported water is summarized and presented in each management area section of this report. During WY 2025, the GSAs implemented no surface water projects for direct groundwater recharge or in-lieu use.[14]

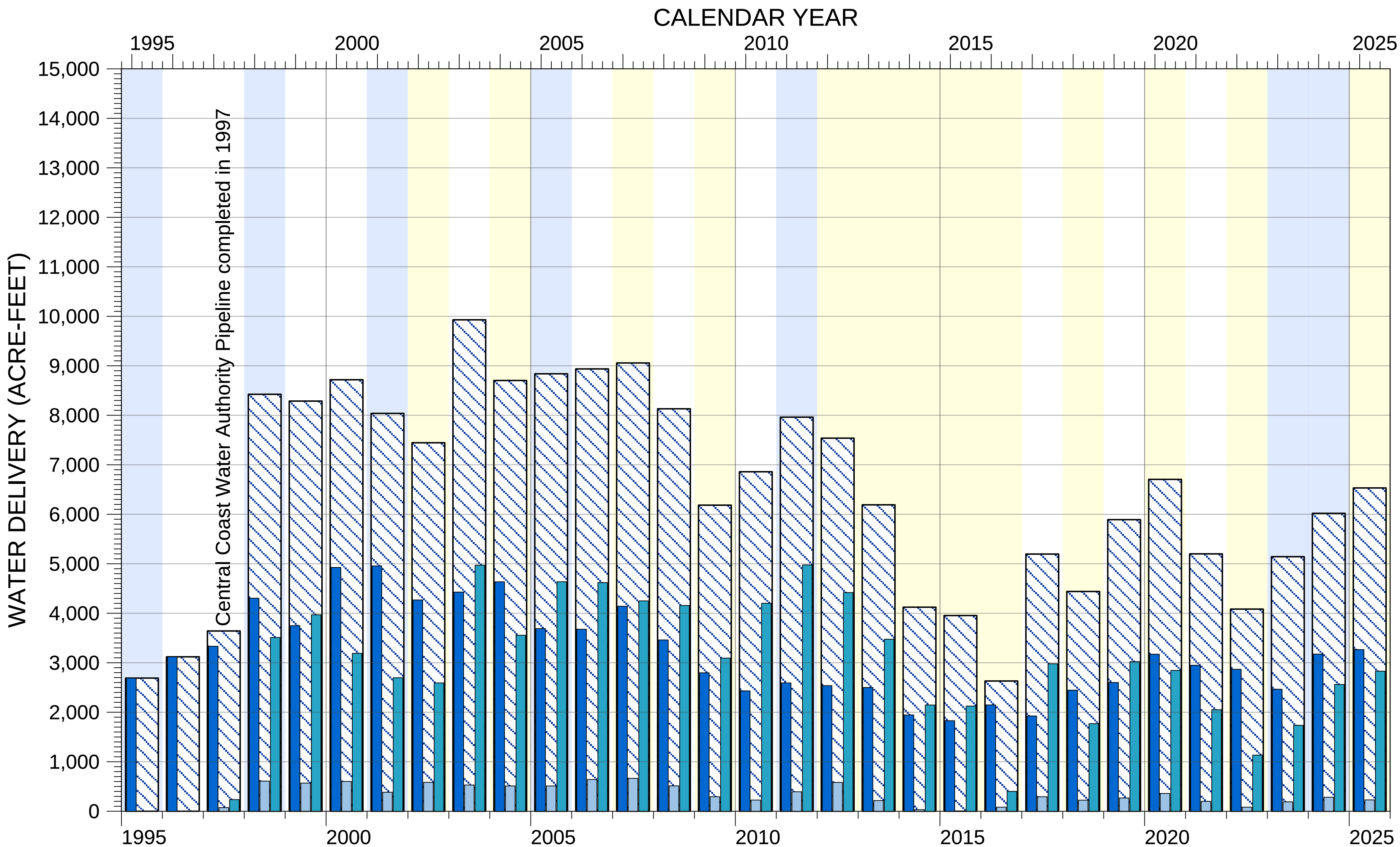
4.3 TOTAL WATER USE

The following table, **Joint Table 4-2**, summarizes total water use by GSA.[15]

Joint Table 4-2
WY 2025 Total Water Use,
by GSA, in Acre-Feet

GSA	WMA	CMA	EMA	Basin-Wide (Total)
Domestic Water Use	330	1,200	1,877	3,407
Agricultural Water Use	20,730	5,700	10,983	37,413
Municipal Water Use	8,970	1,200	5,973	16,143
Total Water Use	30,030	8,100	18,833	56,963

14 CWC Section 10728 (c) "*Surface water supply used for or available for use for groundwater recharge or in-lieu use.*""
15 CWC Section 10728 (d) "*Total water use.*"



Central Coast Water Authority (CCWA) Deliveries and San Antonio Groundwater Basin imports only.
Includes deliveries in exchange for Lake Cachuma water. Does not include: other potential import sources, passthrough to South Coast CCWA customers through Lake Cachuma.

Water Year type from WMA & CMA:
Blue = Wet, Yellow = Dry / Critically Dry, White = Above / Below Normal

STETSON ENGINEERS INC.

ANNUAL WATER IMPORTS
CENTRAL COAST WATER AUTHORITY AND SAN ANTONIO GROUNDWATER BASIN

Santa Ynez Imports
WMA CMA EMA
Basin Total

Source: Central Coast Water Authority (2025), Vandenberg Space Force Base (2026),EMA GSA (2026)

JOINT FIGURE 4-1

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JOINT CHAPTER 5: GROUNDWATER STORAGE

Groundwater in storage is one of the six SGMA sustainability indicators. The three GSAs, in their individual sections, have prepared detailed information on how they have estimated groundwater in storage and changes of groundwater in storage. This detailed information includes maps for each principal aquifer and a graph depicting water year type, and estimated figures for groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage. The following table, **Joint Table 5-1**, summarizes the estimated change of groundwater in storage (in acre-feet) by GSA.[16] Following the WY 2024 report, DWR requested that the GSAs use seasonal low fall water levels. The GSAs will shift to fall water levels once there is sufficient seasonal low data, expected to be 10 years of data. The GSAs address this in their respective Periodic Evaluations.

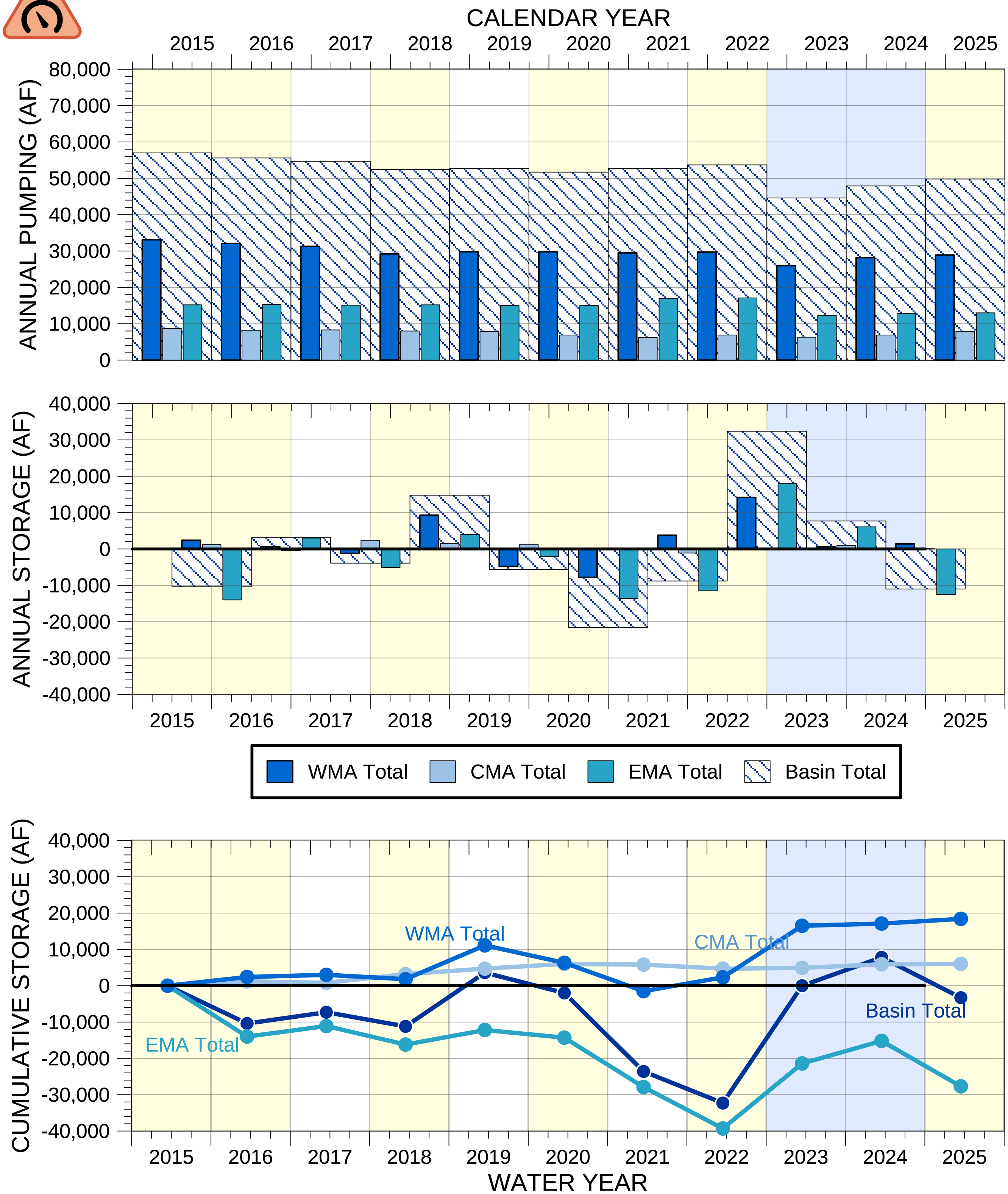
Joint Table 5-1
WY 2025 Change in Groundwater in Storage,
by GSA, in Acre-Feet

GSA	WMA (AF)		CMA (AF)	EMA (AF)		Basin-Wide
Principal Aquifer	Upper Aquifer	Lower Aquifer	Buellton Aquifer	Paso Robles Formation	Careaga Sand	(Total AF)
WY 2025 Change	-700	2,100	100	-12,800	300	-11,000
Total Change Since 2015	13,300	5,100	6,000	-26,900	-800	-3,300

Numbers are rounded to the nearest 100 AF.

The following figure, **Joint Figure 5-1**, summarizes the annual change of groundwater in storage by GSA since 2015.

16 CWC Section 10728 (e) "*Change in groundwater storage.*"



EMA Storage Calculations from GSI Water Solutions, Inc.
Water Year type from WMA & CMA: Blue = Wet, Yellow = Dry / Critically Dry, White = Above / Below Normal

STETSON ENGINEERS INC.

BASINWIDE COMPARISON OF WATER YEAR TYPE, GROUNDWATER USE, ANNUAL STORAGE, AND CUMULATIVE STORAGE RELATIVE TO MARCH 2015

F:\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 JOINT Storage\JOINT Fig 5-01 Storage_Comparison.2015.gpj 2/21/2025 M. McCammon

JOINT CHAPTER 6: PROGRESS TOWARD GSP IMPLEMENTATION AND SUSTAINABILITY

All three GSAs are working to implement their respective GSPs. A summary of progress is presented in each GSA section.

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WESTERN MANAGEMENT AREA

Santa Ynez River Valley Groundwater Basin

Western Management Area

Groundwater Sustainability Agency

Water Year 2025 (October 2024-September 2025)

Board of Directors:

City of Lompoc

Jeremy Ball, Director
Kristin Worthley, Alternate Director

Santa Ynez River Water Conservation District

Steve Jordan, Director
Philip Carpenter, Alternate Director

Vandenberg Village Community Services District
Ron Stassi, Director
James Lamont, Alternate Director

Mission Hills Community Services District
James Keeling, Director
Mike Garner, Alternate Director

Santa Barbara County Water Agency (non-voting)

Joan Hartmann, Director
Meighan Dietenhofer, Alternate Director

Officers:

Jeremy Ball, Chair

Charlotte Arnao, Secretary
Amber Thompson*, Secretary*
Daniel Heimel, Executive Director
William J. Buelow*, Interim Plan Manager*

Ron Stassi, Vice Chair
Chris Brooks*, Vice Chair*
Daniel Heimel, Treasurer
William J. Buelow*, Treasurer*

Isaac St. Lawrence, Legal Counsel

GSA Member Agency Staff Representatives:

Matthew Young
Santa Barbara County Water Agency
William J. Buelow, PG
Santa Ynez River Water Conservation District

Kristin Worthley
City of Lompoc
Mike Garner, ***Brad Hagemann***
Mission Hills Community Services District

Cynthia Allen
Vandenberg Village Community Services District

Updated January 8, 2026.

Italicized and gray indicates former Board members or staff representatives.

WMA CHAPTER 1: INTRODUCTION

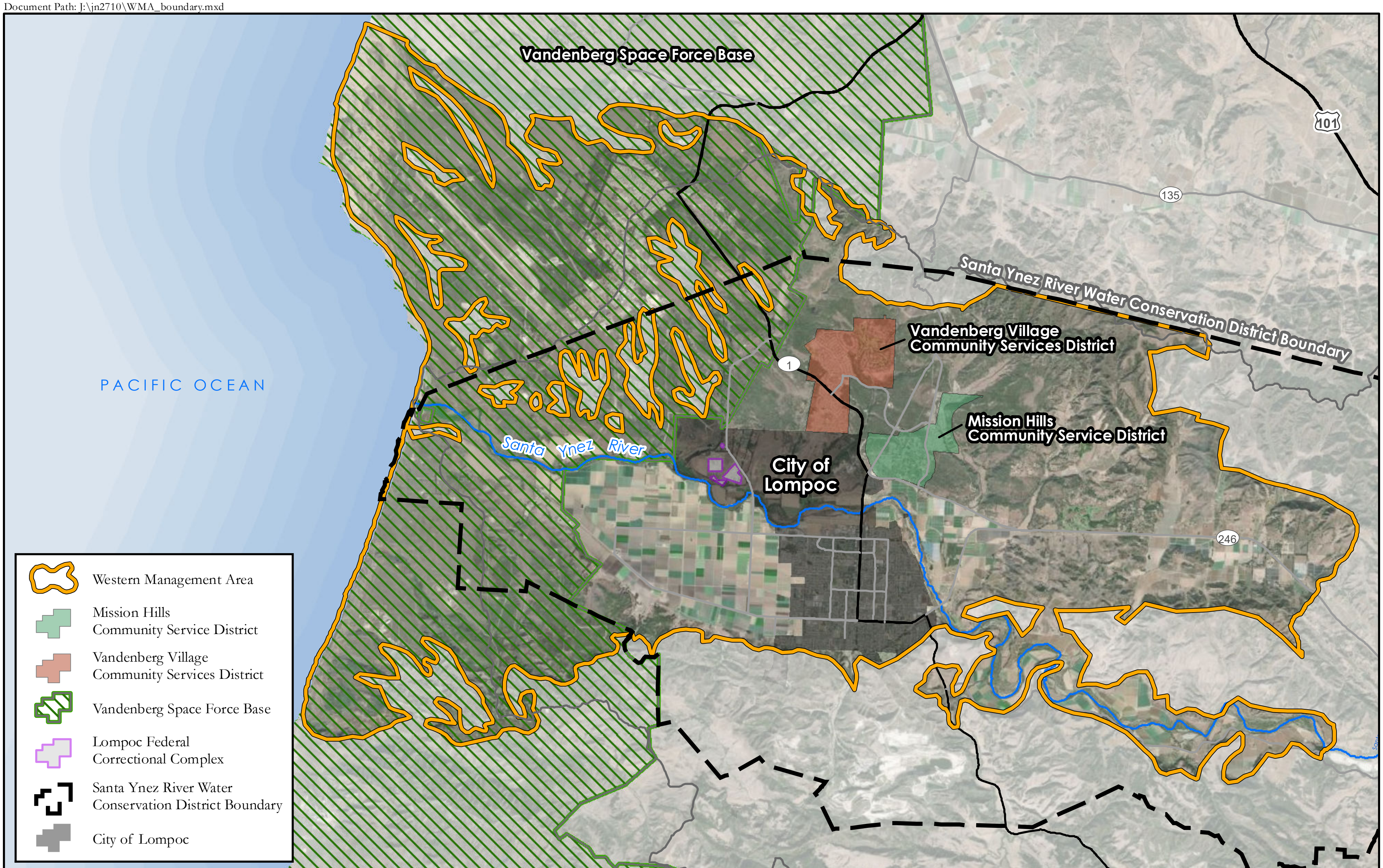
The Santa Ynez River Valley Groundwater Basin Western Management Area (WMA) Groundwater Sustainability Agency (GSA) is the exclusive agency responsible for complying with Sustainable Groundwater Management Act (SGMA)[1] requirements in the western portion of the Santa Ynez River Valley Groundwater Basin (SYRVGB).

The WMA covers the area known as the Lompoc Valley, and the immediate vicinity. The WMA is bordered on the west by the Pacific Ocean, on the north by the Purisima Hills, on the east by the Central Management Area (CMA), and on the south by the White Hills. **WMA Figure 1-1** shows the extents of the WMA[2] and areas within the jurisdictional boundaries of the constituent public member agencies of the WMA GSA: Santa Ynez River Water Conservation District (SYRWCD), City of Lompoc, County of Santa Barbara, Mission Hills Community Services District (MHCSD), and Vandenberg Village Community Services District (VVCSD). Although partially within the WMA, as a federal facility, Vandenberg Space Force Base (VSFB) is not subject to SGMA.

The WMA is a diverse area divided into six subareas[3] based on more homogeneous hydrogeologic and topographic characteristics. The six subareas are the Lompoc Plain, Lompoc Terrace, Lompoc Upland, Santa Rita Upland, Santa Ynez River Alluvium, and Burton Mesa. **WMA Figure 1-2** shows the locations and extents of the subareas, and **WMA Table 1-1** summarizes the sizes of each subarea.

1 CWC Section 10720 et seq. and 23 CCR § 350 et seq.
2 23 CCR § 356.2(a) "[…] location map depicting the basin covered by the report."
3 Subareas are like and based on the Santa Ynez River Water Conservation District Annual Report subareas, also used for managing pumping in much of the WMA. Extents were adjusted to cover the entire Bulletin 118 Interim Update 2016 (DWR 2016a) basin boundary.

Document Path: J:\jn2710\WMA_boundary.mxd



STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

WESTERN MANAGEMENT AREA BOUNDARY
SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN
GROUNDWATER SUSTAINABILITY AGENCY

0 1 2 Miles

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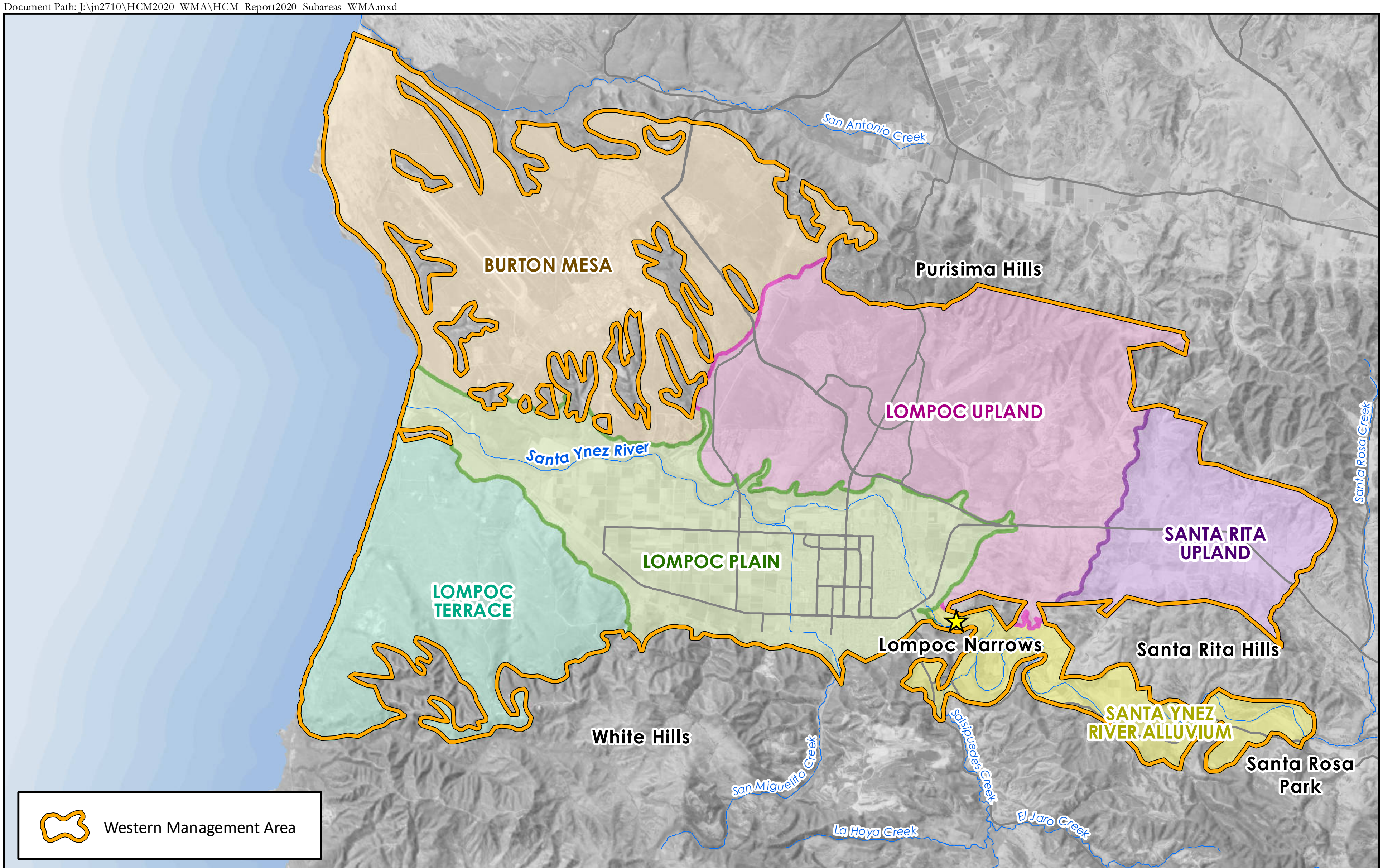
WMA FIGURE 1-1

Document Path: J:\jn2710\HCM2020_WMA\HCM_Report2020_Subareas_WMA.mxd



STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

SUBAREAS
WESTERN MANAGEMENT AREA

Sources:
USGS Nationa l Elevation Dataset, 2002
NAIP (2018)

WMA FIGURE 1-2

WMA Table 1-1
Summary of WMA Subareas by Area

WMA Subarea	Acres [A]	Square Miles
Lompoc Plain	18,780	29.3
Lompoc Terrace	10,560	16.5
Lompoc Upland	21,170	33.1
Santa Rita Upland	7,090	11.1
Santa Ynez River Alluvium	4,940	7.7
Burton Mesa[B]	23,060	36.0
Total	**85,600**	**133.7**

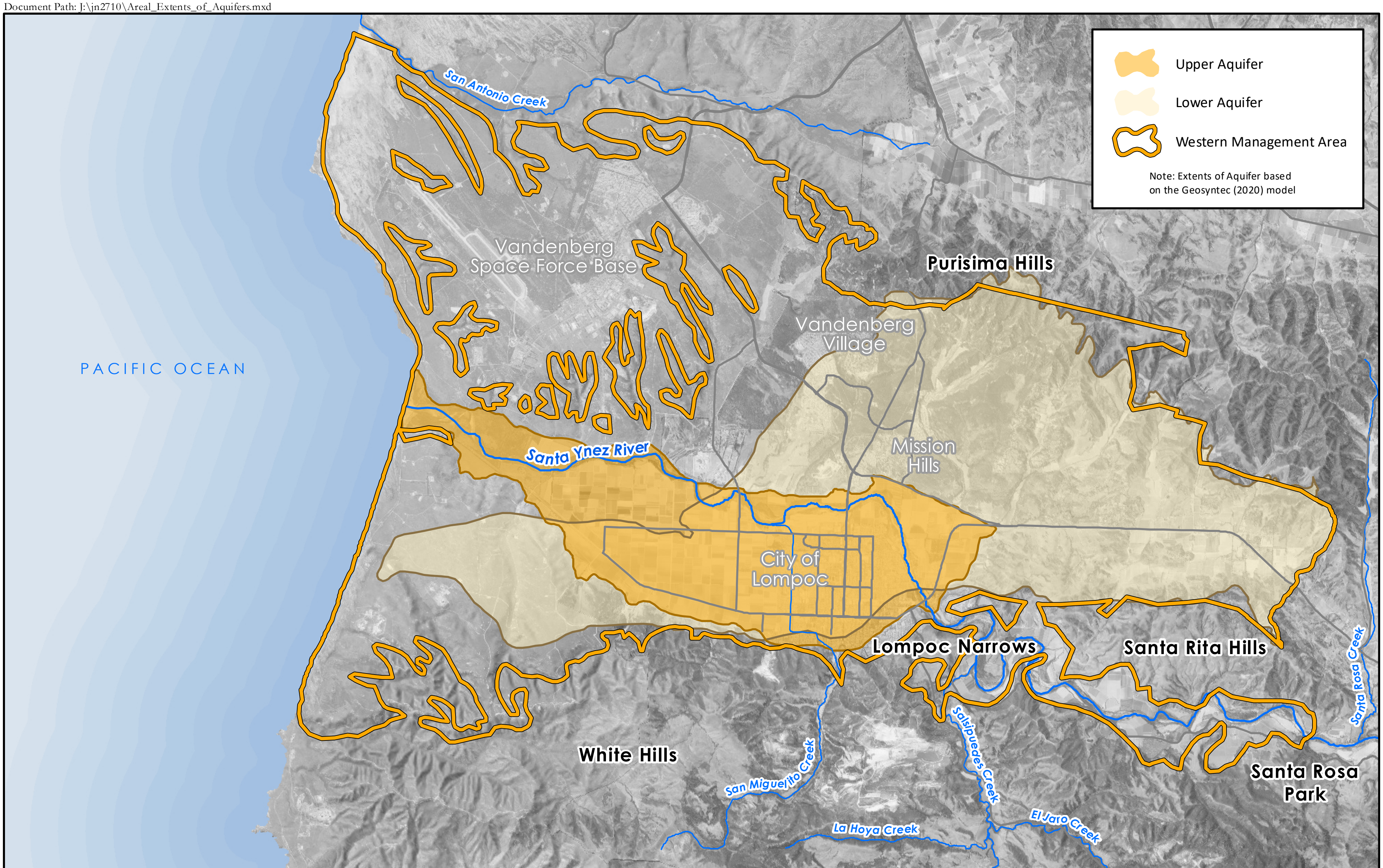
[A] Rounded to the nearest ten acres.
[B]Most of Burton Mesa is in the VSFB.

Surface water drains to the Pacific Ocean through the Santa Ynez River and its tributaries. The State Water Resources Control Board (SWRCB) is involved in the regulation of Santa Ynez River water, including both surface water and underflow of the Santa Ynez River and surface water rights. The upstream Cachuma Reservoirs are operated by the United States Bureau of Reclamation (USBR) which physically impounds and otherwise affects the flows of the Santa Ynez River. USBR conducts releases to meet downstream surface water rights, replenish the downstream alluvium and groundwater basin, and for the benefit of fish. The SGMA statute does not authorize the WMA GSA to determine or alter the surface or ground water rights of the Santa Ynez River.[4] The SWRCB Orders for the Cachuma Project include coordination of releases from the Cachuma Reservoir for underflow alluvial storage and replenishment, which includes the Santa Ynez Alluvium upstream of the Lompoc Narrows.

The WMA has two aquifers, an "Upper Aquifer" and a "Lower Aquifer." The Upper Aquifer consists of the current and historical deposits of the Santa Ynez River downstream of the Lompoc Narrows. The Lower Aquifer consists of older Paso Robles and Careaga Sand Formations. The Lower Aquifer is within a wide geologic syncline fold. **WMA Figure 1-3** shows where these two aquifers are located within the extent of the WMA.

[4] CWC Section 10720.5 (b) "Nothing in this part, or in any groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights."

Document Path: J:\jn2710\Areal_Extents_of_Aquifers.mxd



STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

AREAL EXTENTS OF THE PRINCIPAL AQUIFERS
WESTERN MANAGEMENT AREA

WMA FIGURE 1-3

In addition to the aquifers, the Santa Ynez River in part flows through a “known and definite channel”[5] of high permeability river sediments under and adjacent to the Santa Ynez River. These sediments fill a river channel historically cut into the relatively impermeable silts and clays of the Monterey Formation by past flows of the river. In the WMA Santa Ynez River Alluvium, upstream of the Lompoc Narrows, these underflow deposits are physically disconnected from the groundwater aquifers (Stetson 2022). Conditions within the WMA Santa Ynez River Alluvium upstream of the Lompoc Narrows are consistent with the SWRCB’s tests for water that flows in known and definite channels including subterranean stream underflow (Stetson 2023),[6] which are not groundwater as defined by SGMA. Releases of surface water for the Lompoc Plain and downstream users under SWRCB Order WR 2019-0148 are conveyed through the surface flow and underflow of the Santa Ynez River.

5 CWC Section 10721 (g) “Groundwater” means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

6 See the 1999 State Water Board’s Decision 1639 (In the Matter of Application 29664 of Garrapata Water Company) and subsequent rulings such as North Gualala Water Company v. State Water Resources Control Board (2006).

WMA CHAPTER 2: BASIN CONDITIONS

The water year type is a classification of how wet or dry basin conditions are due to weather during the year. This is a potential cause of changes to groundwater conditions, as measured through groundwater levels, storage, and water quality. This chapter updates the "Hydrologic Characteristics" subsection of the Hydrogeologic Conceptual Model section of the GSP through the end of WY 2025.

WMA Table 2-1 summarizes the precipitation and the water year type for the recent years of WY 2015 through WY 2025.

WMA Table 2-1
Annual Precipitation and Water Year Classification for WMA for Recent Years

Water Year	Lompoc City Hall		Hydrologic Year Type Classification USGS Gage 11132500 (Salsipuedes Creek)	
	Precipitation (in/year)	% Of Average [A]	Percentile Rank	Water Year Type Classification
2015	8.03	54%	0%	Critically Dry
2016	11.68	79%	2%	Critically Dry
2017	22.49	152%	71%	Above Normal
2018	8.29	56%	5%	Critically Dry
2019	20.44	138%	77%	Above Normal
2020	12.97	88%	33%	Dry
2021	10.79	73%	48%	Below Normal
2022	12.46	84%	22%	Dry
2023	32.02	217%	94%	Wet
2024	23.53	159%	90%	Wet
2025	8.72	59%	26%	Dry

Years are color-coded as follows: yellow indicates dry and critically dry years (below 40 percentile); blue indicates wet years (above 80 percentile); unshaded indicates years that were either below normal or above normal (40 to 80 percentile). Percentages and percentiles are calculated from the respective periods of record.
[A] The average is calculated as the mean of the period of record (WY1955-WY 2025).
Notes: WMA = Western Management Area; USGS = U.S. Geological Survey; SWRCB = State Water Resources Control Board; in/year = inches per year.
Source: Precipitation from Santa Barbara County - Flood Control District station #439 - Lompoc City Hall

2.1 PRECIPITATION

Within the WMA, direct annual average precipitation ranges from 12.7 inches per year at the Santa Ynez River estuary to 20.5 inches per year at a corner of the Lompoc Terrace. **WMA Figure 2-1** shows the average precipitation within the WMA and adjacent watershed.[1] Orthographic lift effects are the primary driver of precipitation within the WMA, and portions of the WMA at lower elevations generally receive less direct precipitation. **WMA Table 2-2** summarizes the annual average direct precipitation for the subareas of the WMA.

WMA Table 2-2
Average Annual (1991-2020) Precipitation by WMA Subarea

WMA Subarea	Size (Acres) [A]	Average Annual Precipitation Per Subarea (Average 1991-2020) inches per year		
		Average	Average Annual Minimum	Average Annual Maximum
Lompoc Plain	18,780	14.8	12.7	17.6
Santa Rita Upland	7,090	17.0	16.3	17.7
SYR Alluvium	4,940	17.0	15.6	18.4
Lompoc Upland	21,170	15.8	14.6	17.8
Burton Mesa	23,060	14.4	13.3	16.5
Lompoc Terrace	10,560	15.7	12.9	20.5

[A] Rounded to the nearest 10 acres.
Source: Derived from PRISM Climate Group (2021), Average Annual Precipitation 1991-2020.

The precipitation station at Lompoc City Hall is the primary gauge for precipitation within the WMA. Total precipitation during WY 2025 was 8.72 inches. **WMA Figure 2-2** presents annual precipitation data from this station for WY 1955 to the present (WY 2025) and the cumulative departure from the mean (CDM). The CDM trends provide a representation of wet and dry periods within the overall period of record. On a CDM graph, a wet period is indicated with an upward trend over the years. Conversely, a downward trend on the graph indicates a dry period.

1 Average conditions here are updated to include newly released data for the period 1991-2020, compared to the GSP (including GSP Figure 2a.3-2) which used available data for the period 1981-2010.

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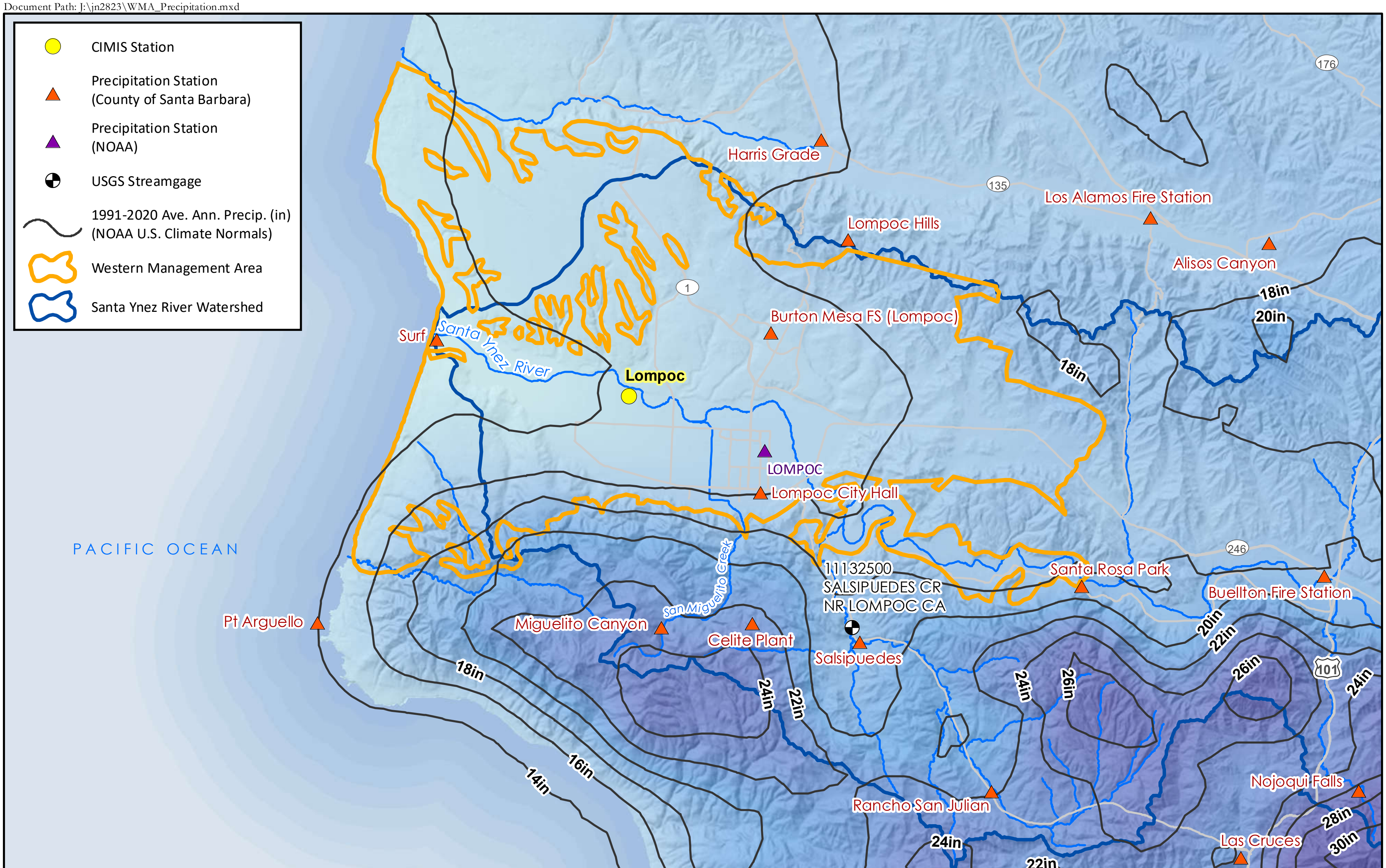


PRECIPITATION STATIONS AND ISOHYETALS
1991-2020 CLIMATE NORMALS
WESTERN MANAGEMENT AREA

STETSON ENGINEERS INC.

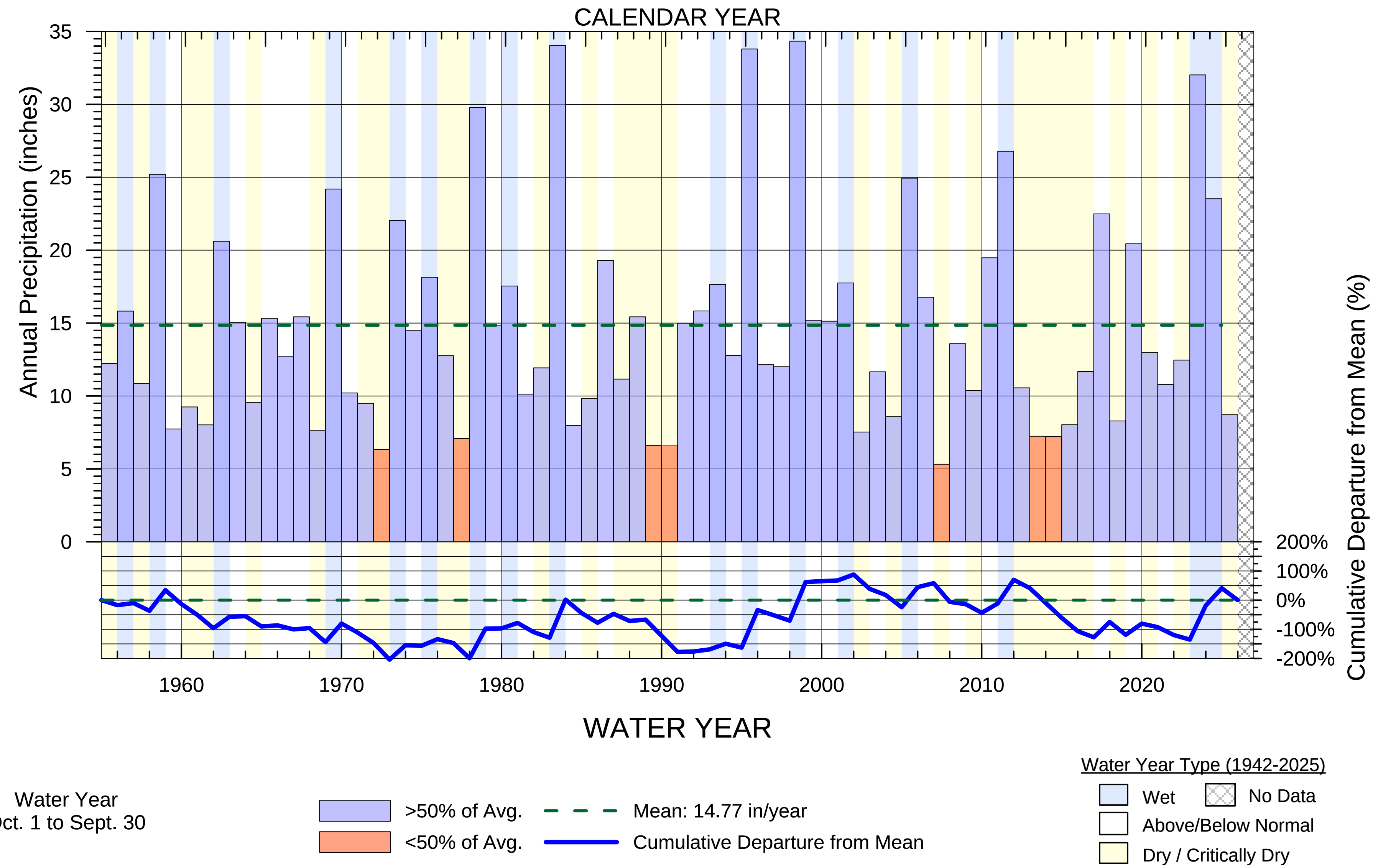
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

0 2 4 Miles

Source:
ESRI World Imagery (2018 Maxar)
NOAA (2020), WRCC (2020)

N

WMA FIGURE 2-1



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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

LOMPOC CITY HALL
PRECIPITATION AND
CUMULATIVE DEPARTURE FROM MEAN
WY 1955 - 2025

Source: Santa Barbara County (2025)
Precipitation Gage #439

WMA FIGURE 2-2

F:\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 Precipitation CDM Graphs\Fig 2-02 WMA_Lompoc_City_Precip_CDM WY2025.gpj 12/4/2025 J. Baca

2.2 CLASSIFICATION OF WATER YEAR 2025

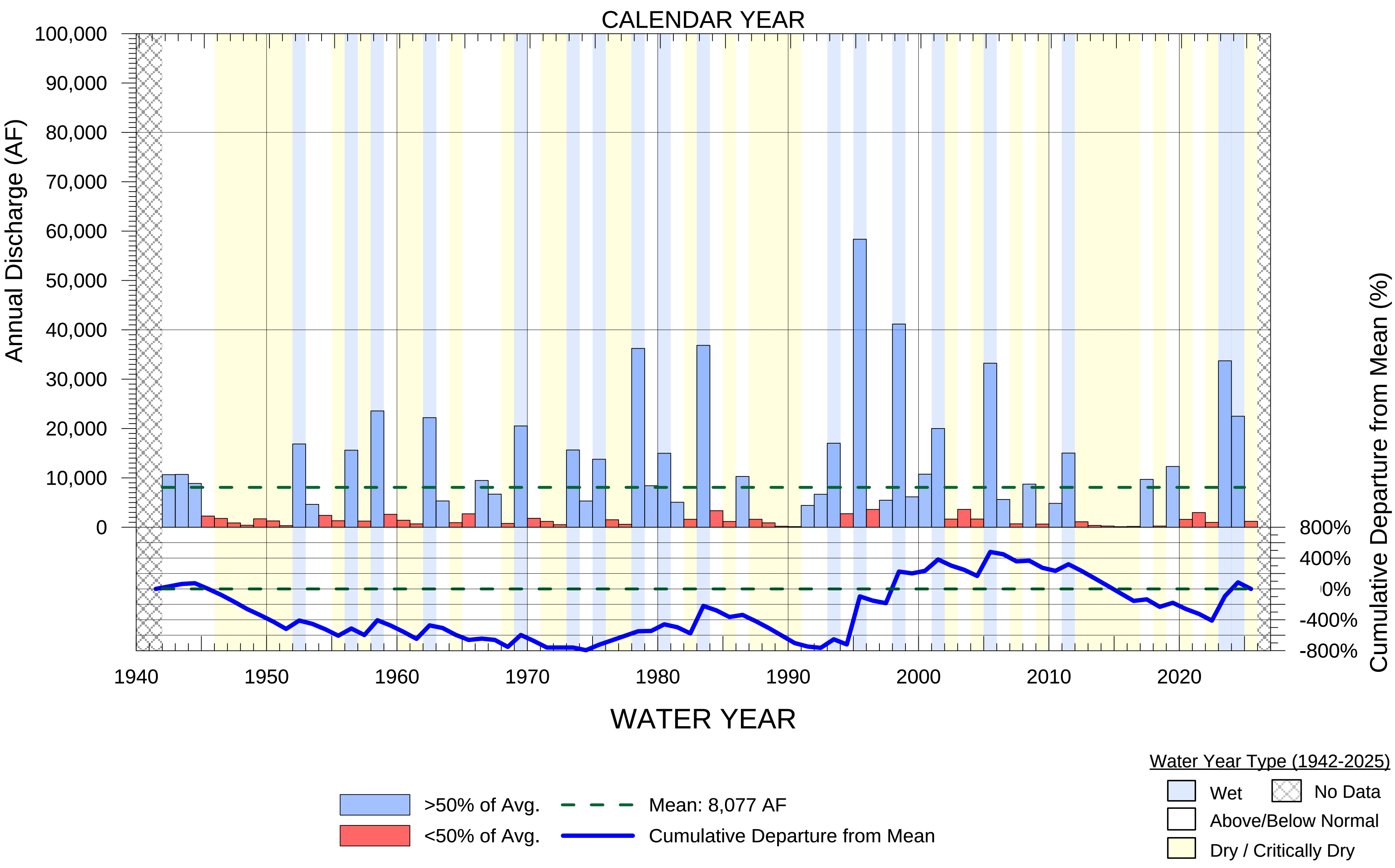
The WMA classified WY 2025 as a dry year based on the Water Year Type. [2] Conditions for recent years, WY 2015 through WY 2025, are summarized in WMA Table 2-1. The basin was experiencing a historic drought before WY 2023.

Water Year Type is a generalized characterization of the amount of water that is available in a year. It is a summary of general precipitation and streamflow conditions during the year. Salsipuedes Creek flows measured at the USGS stream gage (U.S. Geological Survey [USGS] gage 11132500) are used as the monitoring location for calculating water year types. The relative ranking in the period of record is used to classify the hydrologic year types into one of five categories: critically dry (bottom 20th percentile), dry (20th to 40th percentile), below normal (40th to 60th percentile), above normal (60th to 80th percentile), and wet (80th to 100th percentile).

The Salsipuedes Creek USGS streamflow gage is located on Salsipuedes Creek just below the confluence with El Jaro Creek and has a drainage area of 47.1 square miles (show in WMA Figure 2-1). The 84-year dataset for the Salsipuedes Creek stream gage spans 1942 through 2025 (in **WMA Figure 2-3**) and represents unimpeded runoff due to the absence of upstream water diversions and storage reservoirs. The gage type, proximity, long history, and development of the Salsipuedes Creek are all contributing factors for selecting this as the indicator of WMA water year type.

Annual Salsipuedes Creek flow data ordered by the amount of flow in each year are shown in **WMA Figure 2-4**. WY 2025 is indicated in WMA Figure 2-4, which shows that WY 2025 was a dry year compared to the period of record. The background colors on most time series figures in this report are derived from WMA Figure 2-4 and likewise indicate the relative year type.

2 All three Santa Ynez management areas classified WY 2024 as a wet year. WMA and CMA use the same method based on measured streamflow, described here. EMA uses a different method based on precipitation, described by DWR (2021).



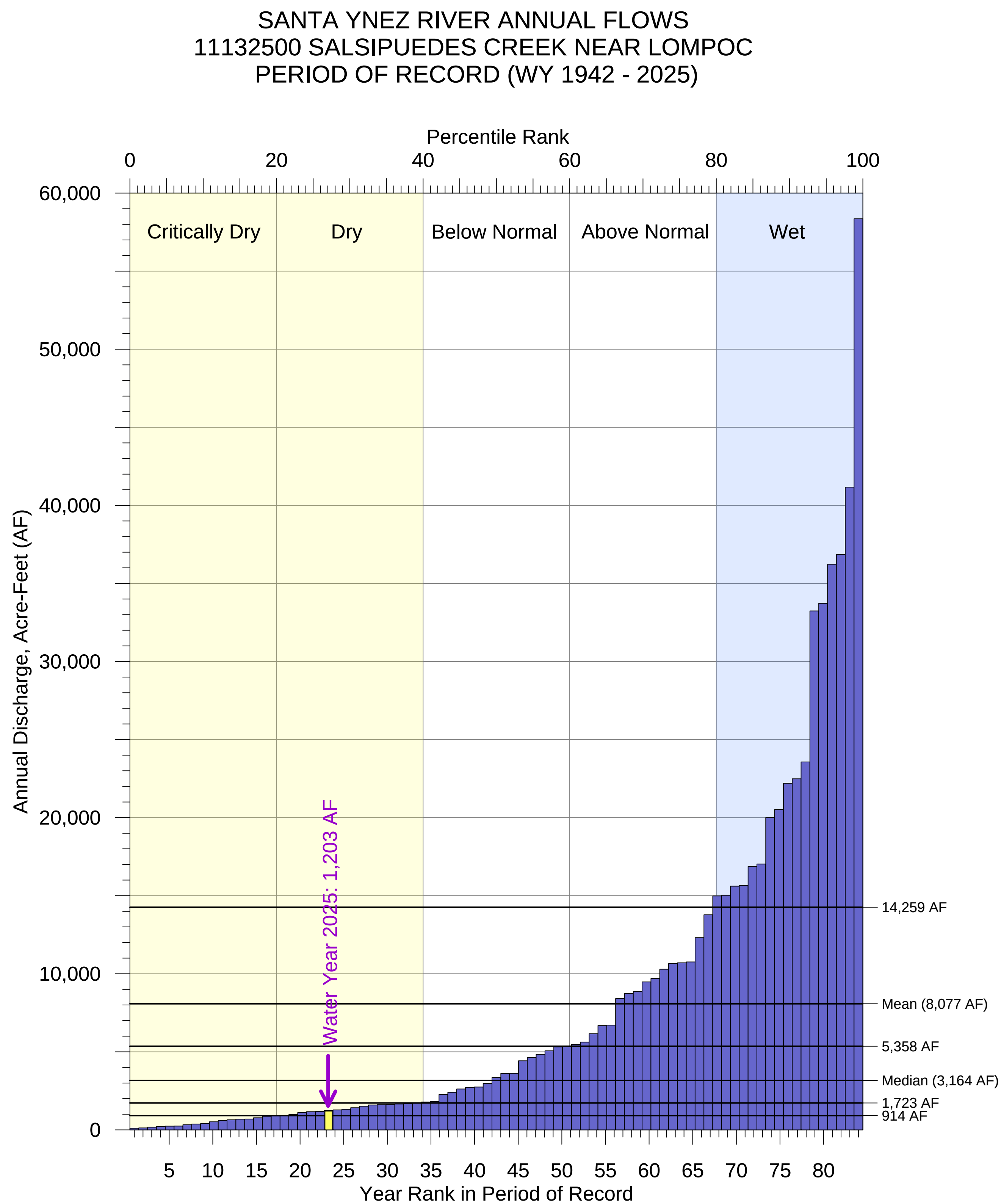
11132500 SALSIPUEDES CREEK NEAR LOMPOC
CUMULATIVE DEPARTURE FROM MEAN AND
PERIOD OF RECORD (WY 1942 - 2025)

STETSON ENGINEERS INC.

Sources: USGS (2025) streamflow data

WMA FIGURE 2-3

F:\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 SW Flow Statistics\Salsipuedes_CDM_WY25.grj 12/4/2025 J. Baca



Data Source: USGS (2025) streamflow data

WATER YEAR TYPE
SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN

STETSON ENGINEERS INC.

F:\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 SW Flow Statistics\Salispuedes_Year_type_WY25.gpj 1/28/2026 J. Baca

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WMA CHAPTER 3: GROUNDWATER HYDROGRAPHS AND CONTOURS

Groundwater levels are a key indicator of sustainability in the basin. Groundwater levels directly impact the beneficial use of the Basin and correlate with or impact most of the groundwater sustainability indicators. The SGMA regulations require that GSP Annual Reports contain "...*groundwater elevation data from monitoring wells identified in the monitoring network [which] shall be analyzed and displayed*."[1]

The WMA assesses the following three SGMA sustainability indicators using groundwater level data:

- Chronic lowering of groundwater levels
- Reduction of groundwater storage (see WMA Chapter 5)
- Depletion of interconnected surface water

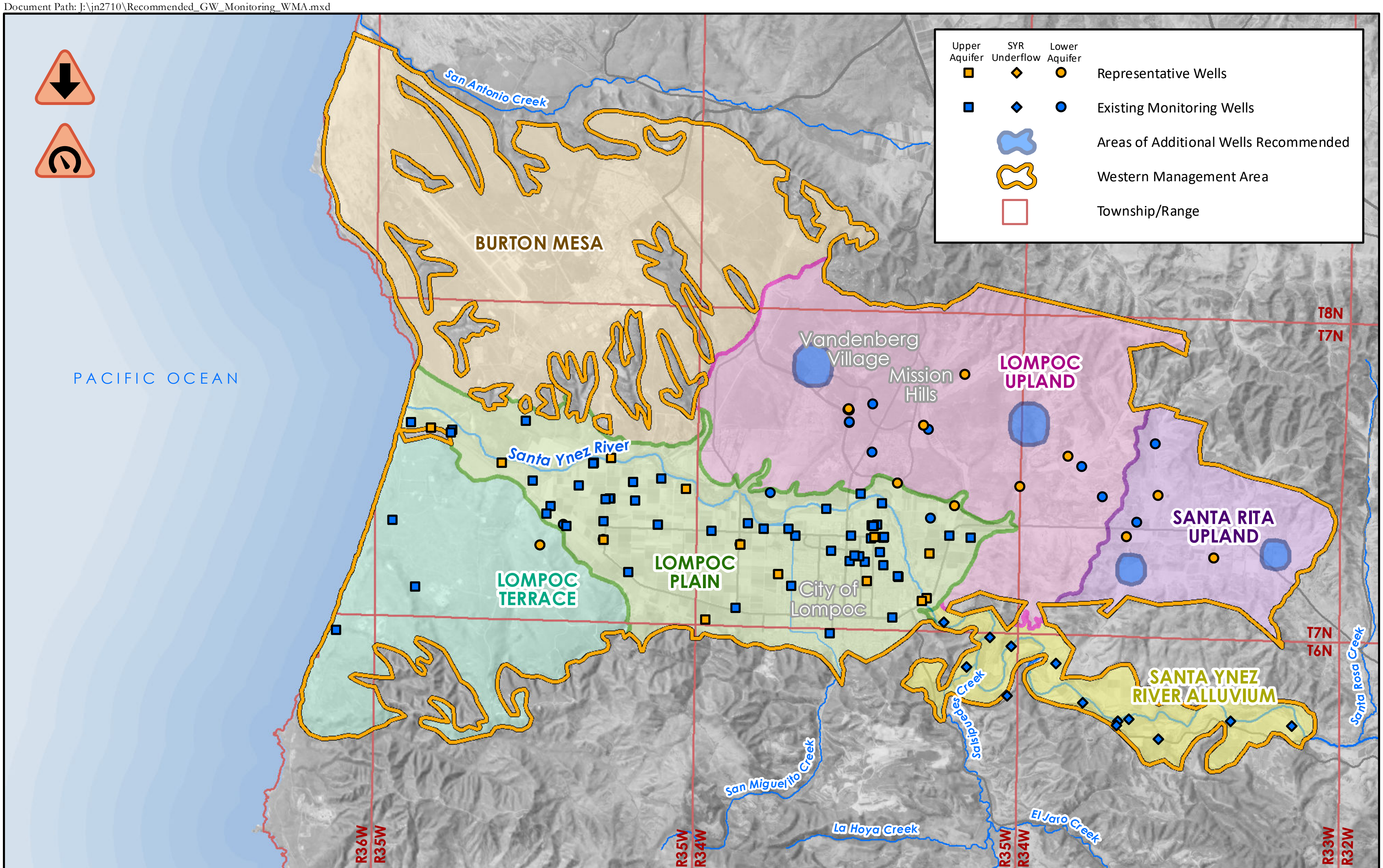
3.1 GROUNDWATER ELEVATION DATA AND HYDROGRAPHS

WMA Figure 3-1 is a map of the locations of groundwater monitoring network wells. Two appendices contain groundwater level hydrographs[2]: **CMA Appendix A**, which is entitled groundwater level hydrographs for assessing chronic decline in groundwater levels, and **CMA Appendix B**, which is entitled groundwater level hydrographs for assessing surface water depletion. Several public entities collect groundwater level data in the WMA. In the WMA, these public entities include Santa Barbara County Water Agency, the City of Lompoc, USBR, Vandenberg Village, and Mission Hills.

1 23 CCR § 356.2(b)(1)

2 23 CCR § 356.2(b)(1)(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.

Document Path: J:\jn2710\Recommended_GW_Monitoring_WMA.mxd



Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

WMA MONITORING NETWORK AND REPRESENTATIVE MONITORING WELLS FOR GROUNDWATER LEVELS AND GROUNDWATER STORAGE

WMA FIGURE 3-1

The SGMA water year runs from October 1st through September 30th. The seasonal high data refers to March and April 2025. Seasonal low data is the data from October 2025. While this fall collection of data is technically collected in WY 2026, it is less than a month after the end of the water year. The WMA GSA considers this fall data as representative of the seasonal low conditions for WY 2025.

3.2 GROUNDWATER ELEVATION CONTOUR MAPS

This GSP Annual Report must contain "*...elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.*"[3] according to the SGMA regulations. This Annual Report includes Fall 2024 (**WMA Figure 3-2)**, Spring 2025 (**WMA Figure 3-3**), and Fall 2025 (**WMA Figure 3-4**) contour maps. These correspond to the seasonal high and seasonal low groundwater conditions.

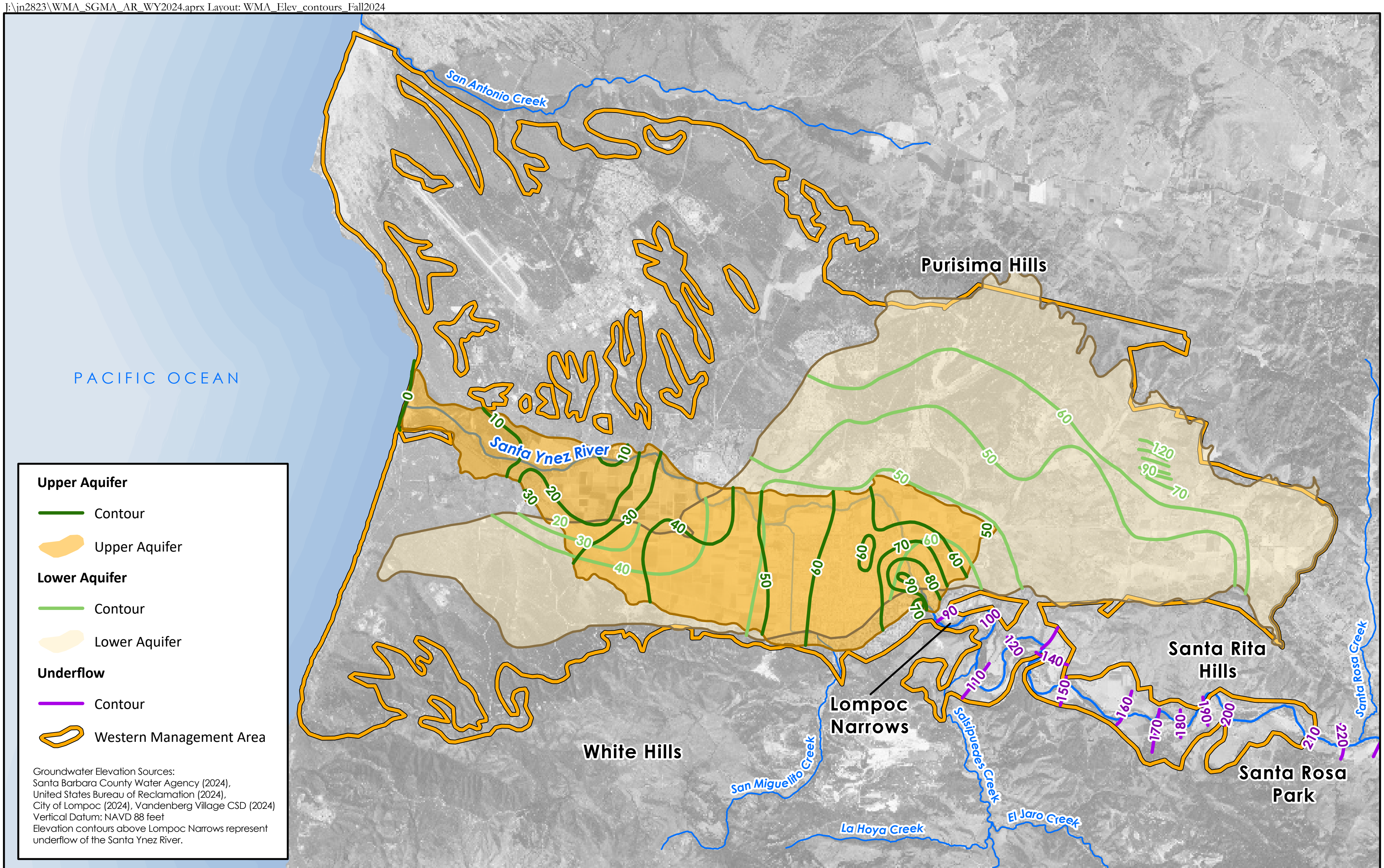
The WMA developed six sets of groundwater elevation contours for WY 2025, including Fall 2024, Spring 2025, and Fall 2025 for the two principal aquifers and the river underflow. The Upper Aquifer consists of the Santa Ynez River deposits within the Lompoc Plain. The Lower Aquifer consists of the water-bearing Careaga Sand and Paso Robles Formations. River underflow occurs upstream of the Lompoc Narrows. Pursuant to WR 2019-0148, the SWRCB administers the Santa Ynez River underflow as part of the river, so it is not a principal aquifer of the WMA.

3.2.1 Fall 2024 –Start of Year Seasonal Low Contours

WMA Figure 3-2 reproduces the groundwater elevation contour map for Fall 2024 included in the WY 2024 Annual Report. The map for Fall 2024 represents conditions at both the end of WY 2024 and at the start of WY 2025. Please see the WY 2024 Annual Report for additional discussion of the Fall 2024 map.

3 23 CCR § 356.2(b)(1)(A)

J:\jn2823\WMA_SGMA_AR_WY2024.aprx Layout: WMA_Elev_contours_Fall2024



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WMA
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Western Management Area
Groundwater Sustainability Agency

GROUNDWATER AND UNDERFLOW ELEVATION CONTOURS
SEASONAL LOW
FALL 2024
WESTERN MANAGEMENT AREA

WY2024 Annual Report

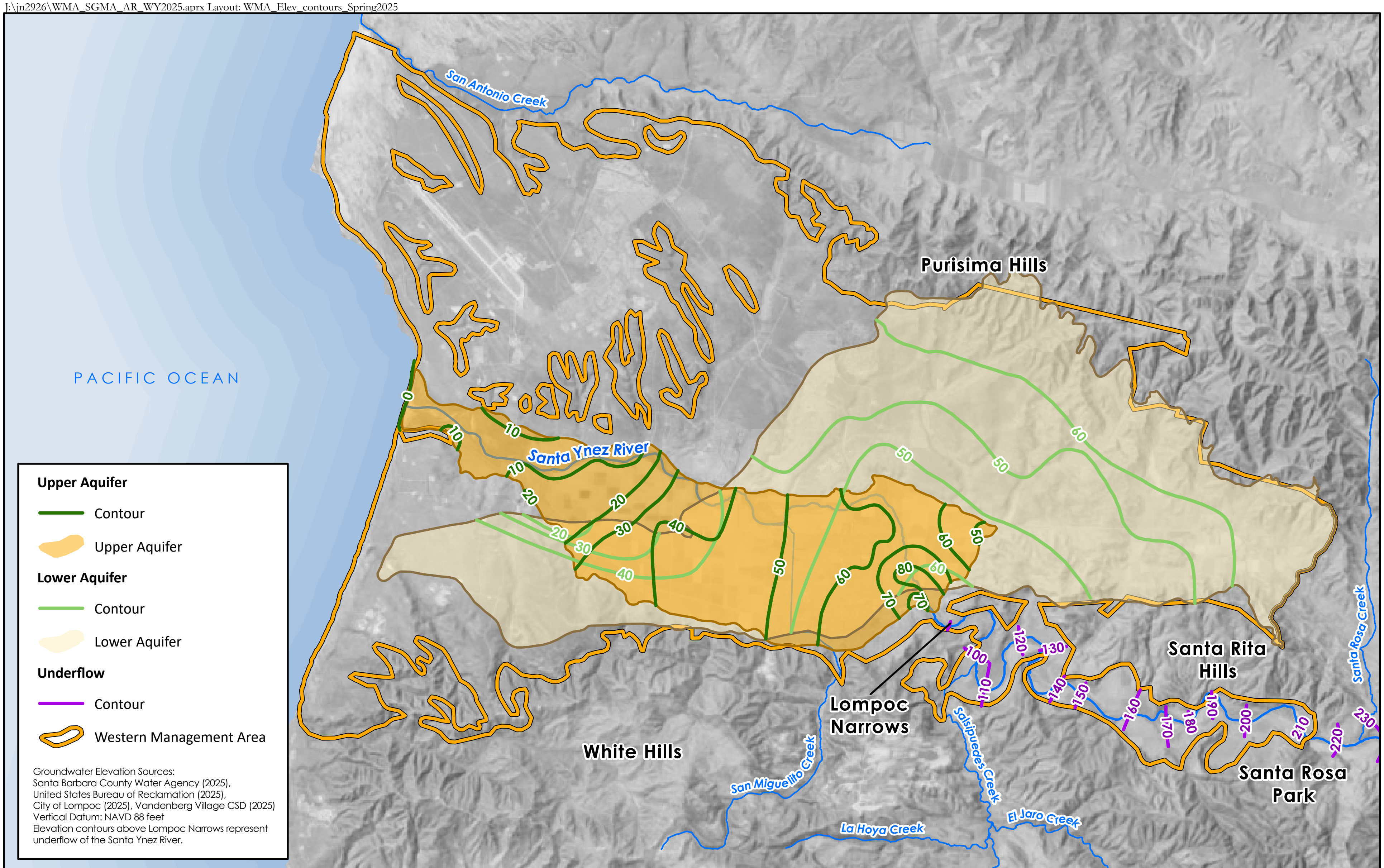
0 1 2 Miles

N

Sources:
USGS National Elevation Dataset, 2002
Lompoc (2024) and VVCSD (2024)

WMA FIGURE 3-2

J:\jn2926\WMA_SGMA_AR_WY2025.aprx Layout: WMA_Elev_contours_Spring2025



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WMA

Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

GROUNDWATER AND UNDERFLOW ELEVATION CONTOURS
SEASONAL HIGH
SPRING 2025
WESTERN MANAGEMENT AREA

WY2025 Annual Report

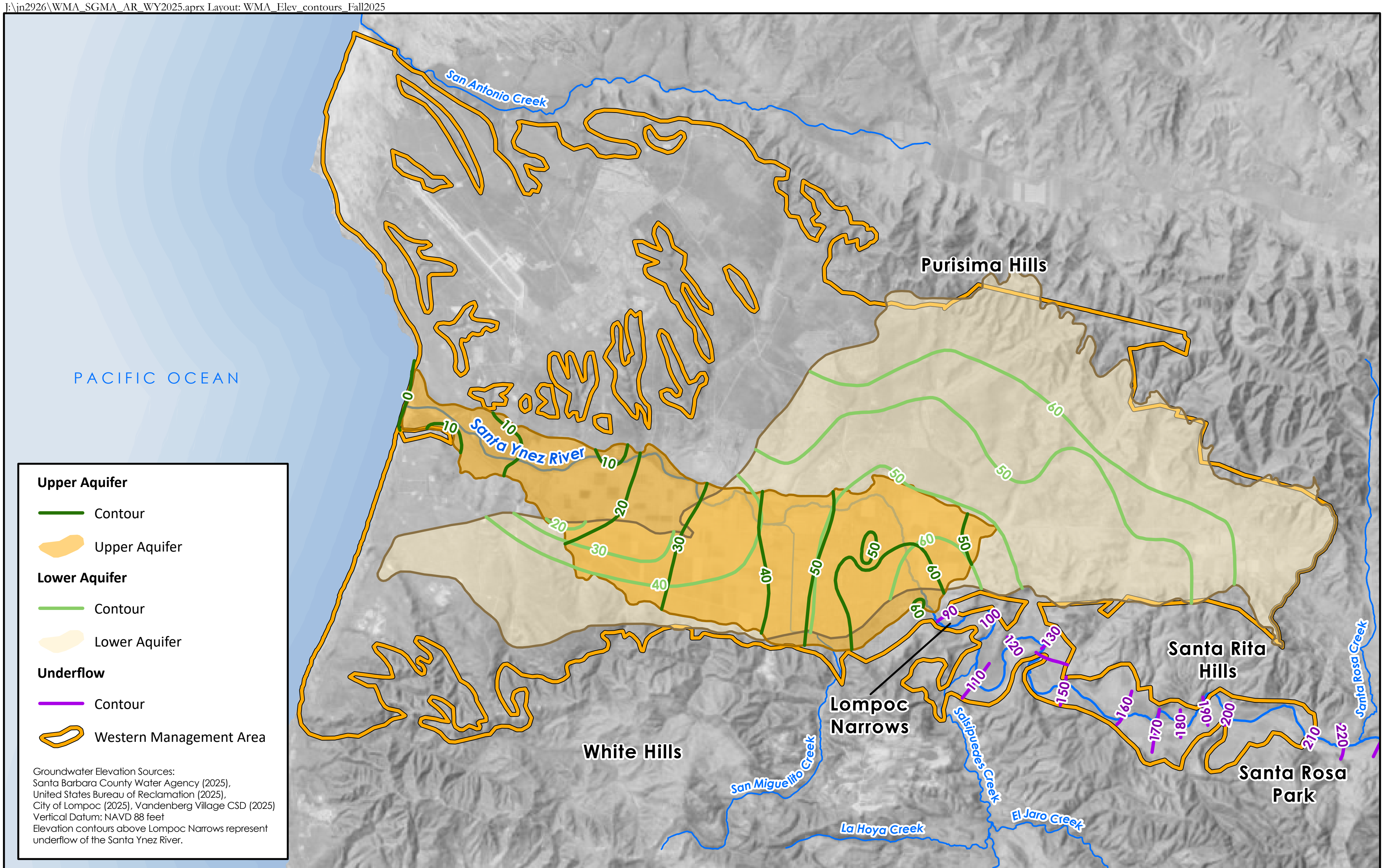
0 1 2 Miles

N

Sources:
USGS National Elevation Dataset, 2002
Lompoc (2025) and VVCSD (2025)

WMA FIGURE 3-3

J:\jn2926\WMA_SGMA_AR_WY2025.aprx Layout: WMA_Elev_contours_Fall2025



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WMA

Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

GROUNDWATER AND UNDERFLOW ELEVATION CONTOURS
SEASONAL LOW
FALL 2025
WESTERN MANAGEMENT AREA

WY2025 Annual Report

0 1 2 Miles

N

Sources:
USGS National Elevation Dataset, 2002
Lompoc (2025) and VVCSD (2025)

WMA FIGURE 3-4

3.2.2 Spring 2025– Seasonal High Contours

WMA Figure 3-3 is a groundwater level contour map developed for Spring 2025, which is the seasonal high for WY 2025. Relative to Spring 2024, the measured groundwater levels collected in the Spring 2025 from the Upper Aquifer were higher at some monitoring locations and lower in others. On average, the water level decreased by about 0.5 feet in Spring 2025 compared with Spring 2024, likely due to the dry year conditions.

Groundwater elevations from the Lower Aquifer were both higher and lower in the Spring of 2025 compared to the Spring of 2024. On average, the water level increased by about 0.2 feet in Spring 2025 compared with Spring 2024, likely due to a combination of the current dry year (2025) along with the previous two wet years (2023 and 2024) and the longer it takes to recharge the Lower Aquifer compared with the Upper Aquifer. The Upper Aquifer is also recharged from surface water. The greatest increase in groundwater levels was observed in the very far eastern portion of the Santa Rita subarea. Decreases were observed in the Lompoc Plain subarea.

3.2.3 Fall 2025 – End of Year Seasonal Low Contours

The Fall 2025 groundwater elevations represent the seasonal low groundwater levels for WY 2025. WMA Figure 3-4 is a groundwater level contour map developed for this seasonal low. Relative to the start of WY 2025 (Fall 2024), at the end of WY 2025 (Fall 2025), the groundwater elevations measured in the Upper Aquifer were both higher and lower than previous groundwater elevations measured. On average, the water levels decreased by about 0.3 feet in Fall 2025 compared with Fall 2024, likely due to the dry year conditions.

Groundwater elevation data from the Lower Aquifer in the Fall of 2025 were higher compared to the Fall of 2024. On average, the water levels increased by about 0.8 feet in Fall 2025 compared with Fall 2024, likely due to a combination of the current dry year (2025) along with the previous two wet years (2023 and 2024) and the longer it takes to recharge the Lower Aquifer compared with the Upper Aquifer. The greatest increase in groundwater levels was observed in the very far eastern portion of the Santa Rita subarea. Decreases were observed in the Lompoc Upland subarea.

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WMA CHAPTER 4: WATER USE AND AVAILABLE SURFACE WATER

Water use is a major component of the water budget. The SGMA regulations require that "*...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.*"[1] This chapter of the Annual Report provides an update on water use in the Basin.

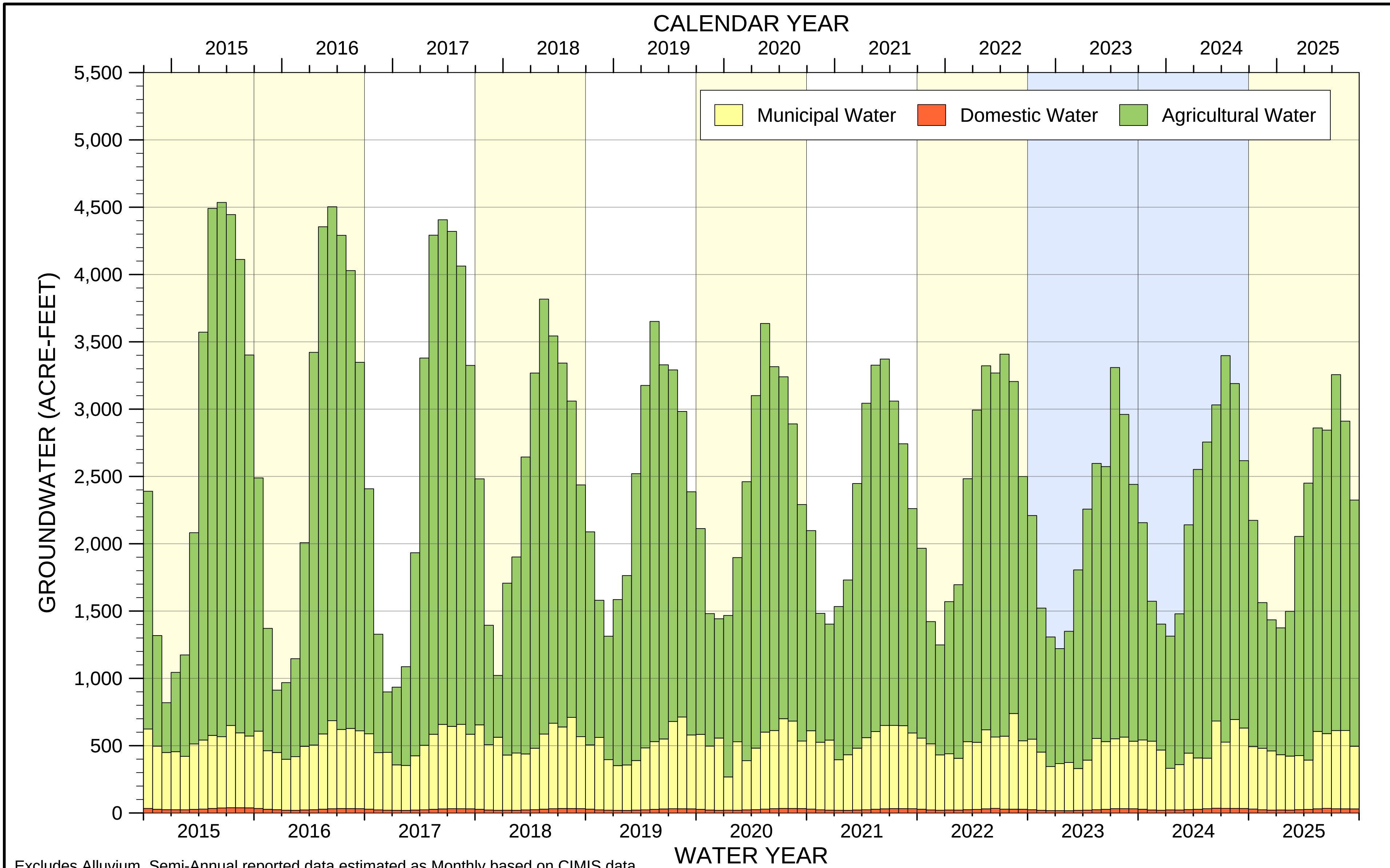
4.1 GROUNDWATER USE

Groundwater production within the WMA for both the Upper and Lower Aquifers is used for agricultural, domestic, municipal, and industrial purposes. Outside of the municipal users, most of the WMA is a mixture of rural areas with agriculture and some rural-suburban development. Groundwater production is reported semi-annually to the SYRWCD.

SYRWCD's semi-annual groundwater production data were converted to monthly values using monthly evapotranspiration (ET) data from the California Irrigation Management Information System (CIMIS) sites (see WMA Figure 2-1 for CIMIS site locations). Municipal data provided by the City of Lompoc, Vandenberg Village CSD, and Mission Hills CSD were compiled into monthly data. **WMA Figure 4-1** shows the monthly groundwater use in the WMA, and **WMA Figure 4-2** shows the annual groundwater use for each water year.[2] **WMA Figure 4-3** is a map showing the spatial distribution of WMA groundwater pumping during WY 2025. The Upper Aquifer annual groundwater use is shown in **WMA Figure 4-4**, and the Lower Aquifer annual groundwater use is shown in **WMA Figure 4-5**. **WMA Table 4-1** summarizes the groundwater production for WY 2025.

1 23 CCR § 356.2(a) 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.

2 Figures in the GSP showed groundwater production based on the SYRWCD's Fiscal Year (July-June), production data presented here is recalculated to the Water Year (October-September) basis.



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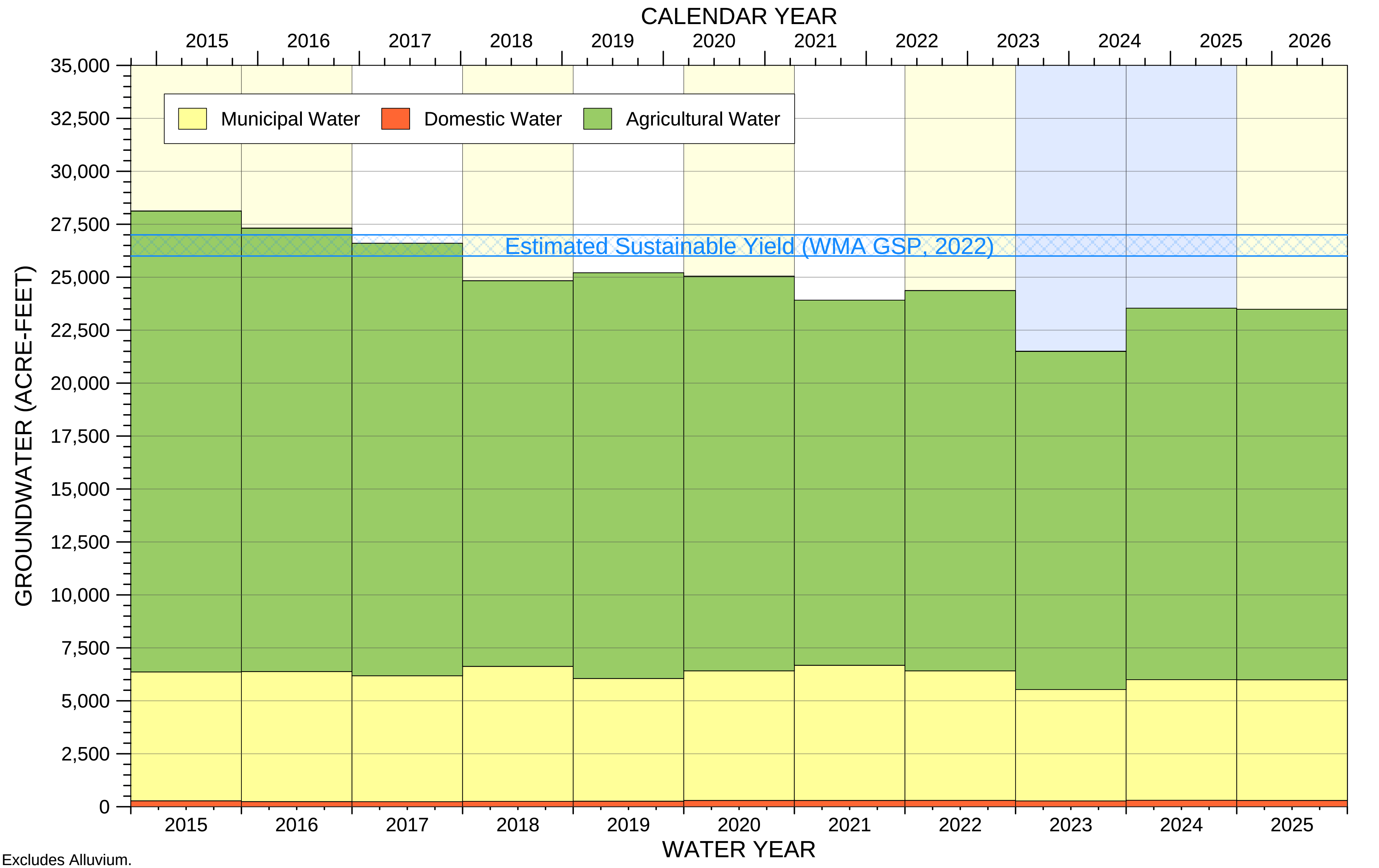
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

MONTHLY GROUNDWATER USE
TOTAL WESTERN MANAGMENT AREA

Water Year Type (1942-2025)
- Wet
- Above/Below Normal
- Dry / Critically Dry

Source: Santa Ynez River Water Conservation District (2026), City of Lompoc (2025), Mission Hills CSD (2025), Vandenberg Village CSD (2025)

WMA FIGURE 4-1



Excludes Alluvium.

ANNUAL GROUNDWATER USE
TOTAL WESTERN MANAGMENT AREA

Source: Santa Ynez River Water Conservation District (2026), City of Lompoc (2025), Mission Hills CSD (2025), Vandenberg Village CSD (2025)

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WMA Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency

WMA FIGURE 4-2

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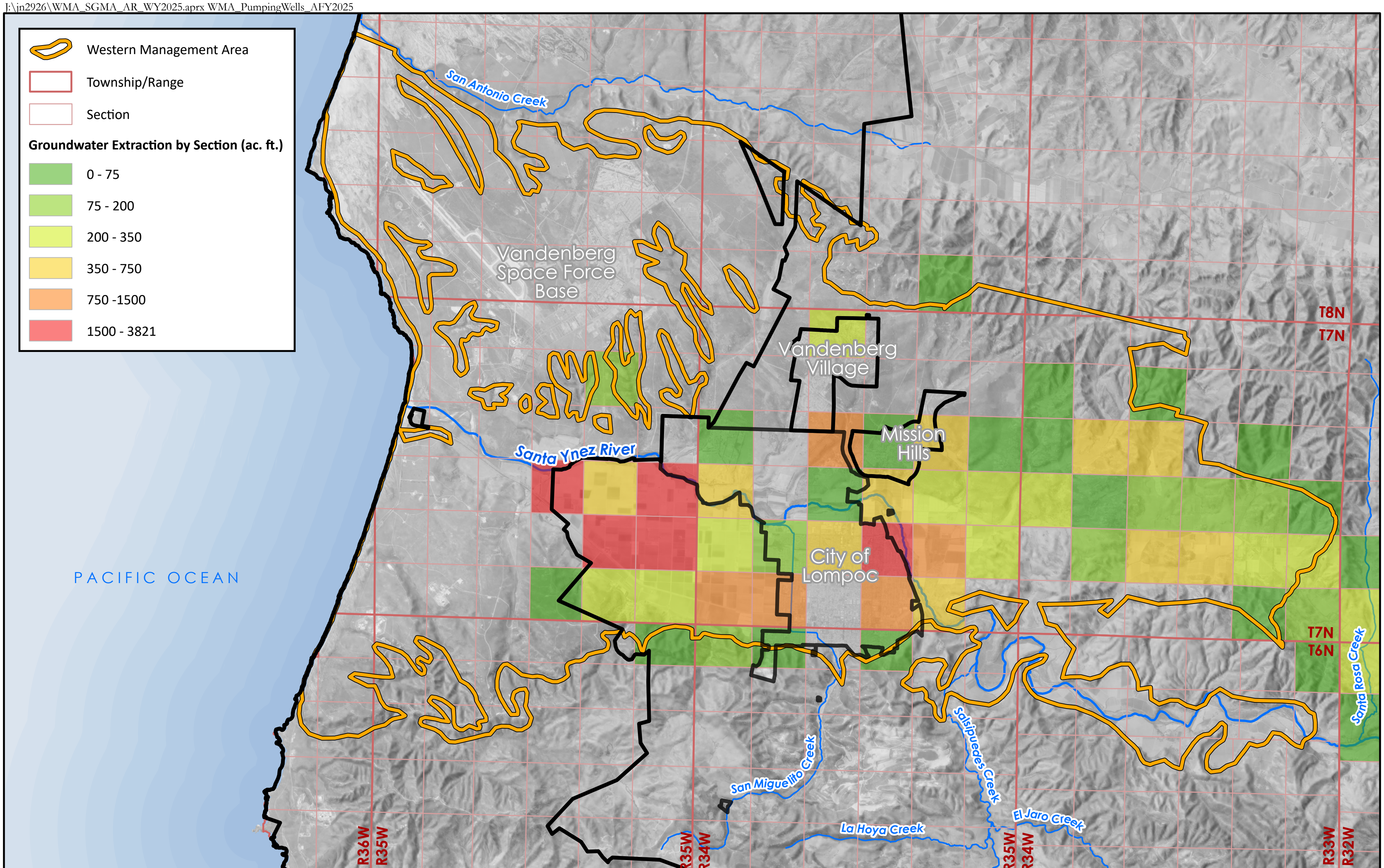

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WMA

Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

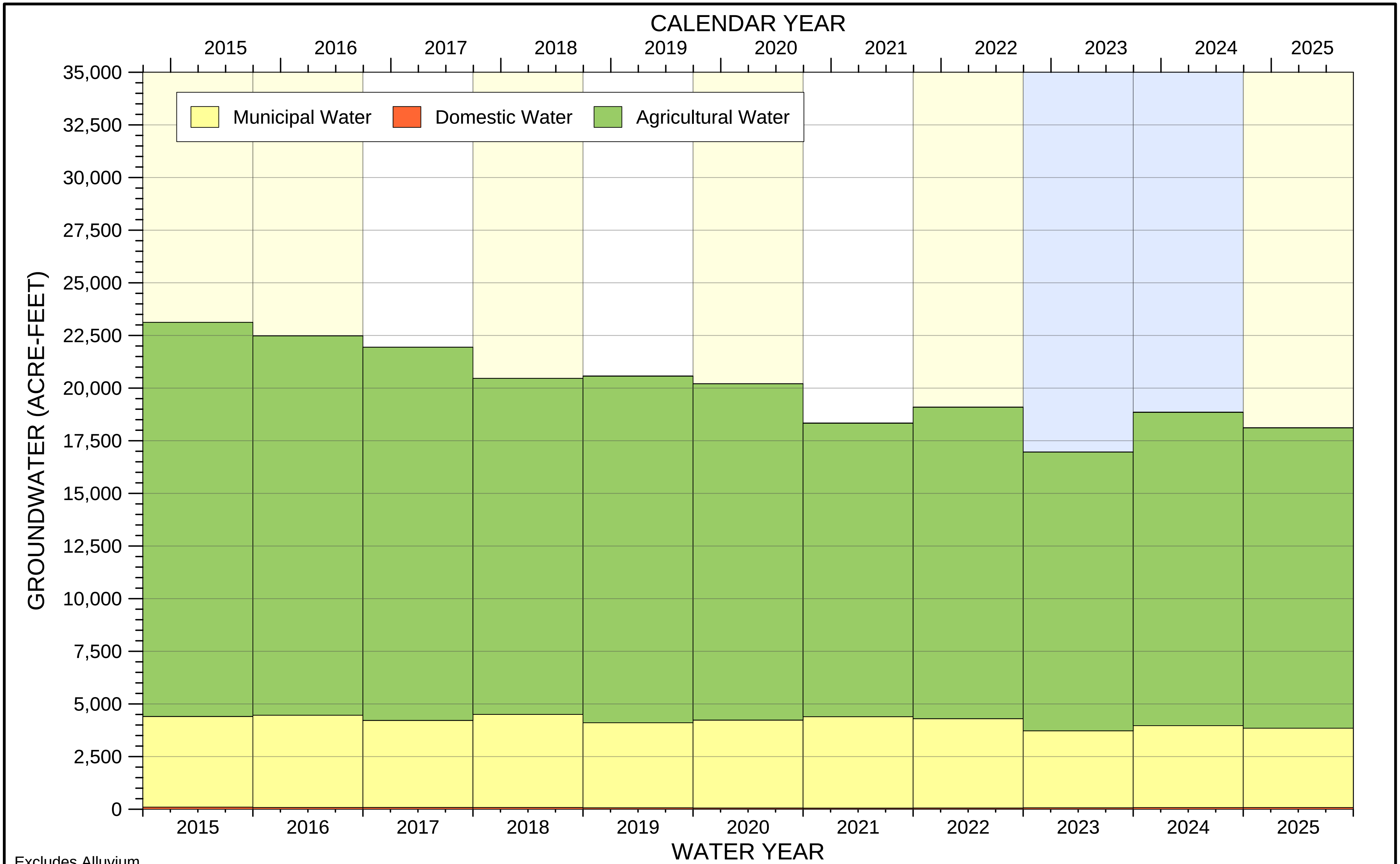
LOCATION AND VOLUME OF GROUNDWATER EXTRACTION 2025

Source: Santa Ynez River Water Conservation District (2025)

0 1 2 Miles

N

WMA FIGURE 4-3



Excludes Alluvium.

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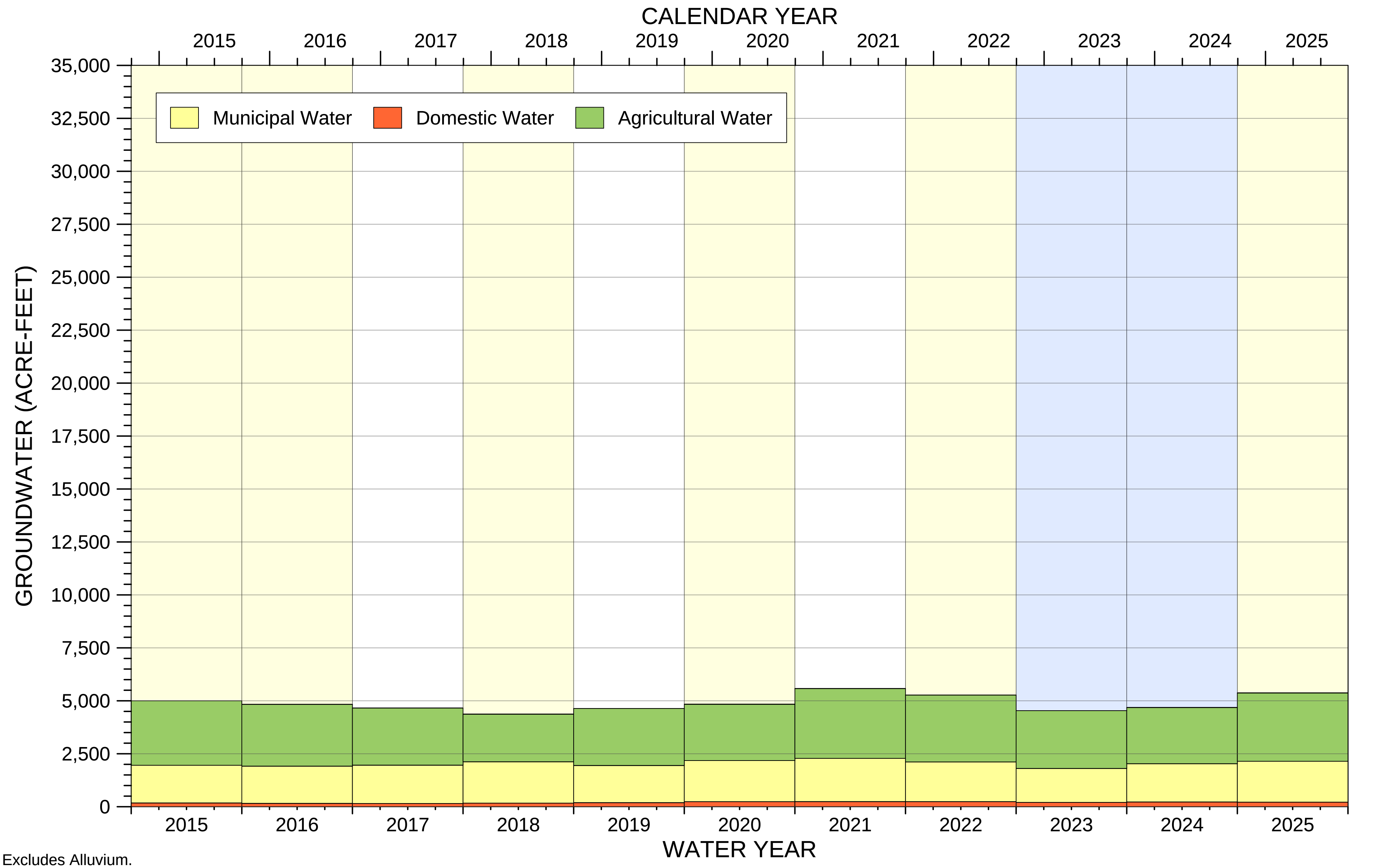
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

ANNUAL GROUNDWATER USE
UPPER AQUIFER
WESTERN MANAGMENT AREA

Water Year Type (1942-2025)
- Wet
- Above/Below Normal
- Dry / Critically Dry

Source: Santa Ynez River Water Conservation District (2026), City of Lompoc (2025), Mission Hills CSD (2025), Vandenberg Village CSD (2025)

WMA FIGURE 4-4



Excludes Alluvium.

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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

ANNUAL GROUNDWATER USE
LOWER AQUIFER
WESTERN MANAGMENT AREA

Water Year Type (1942-2025)
- Wet
- Above/Below Normal
- Dry / Critically Dry

Source: Santa Ynez River Water Conservation District (2026), City of Lompoc (2025), Mission Hills CSD (2025), Vandenberg Village CSD (2025)

WMA FIGURE 4-5

F:\DATA\2823\Analyses\WY2025-5th_Report\2026-02 WY25 GW Pumping\Figures\Fig 4-05 Annual_Water_Use_WMA.LA.gpj 1/26/2026 M. McCammon

WMA Table 4-1
Summary WMA Groundwater Extraction for Water Year 2025

Water Use Sector	Upper Aquifer	Lower Aquifer	Total	Method of Measurement	Estimated Accuracy
	Acre-Feet	Acre-Feet	Acre-Feet		Acre-Feet
Domestic	80	220	300	Self-reported to SYRWCD	± 30 (~10%)
Agricultural	14,270	3,230	17,500	Self-reported to SYRWCD may include estimates using crop usage	± 1,750 (~10%)
Municipal	3,770	1,930	5,700	Daily totalizer values	± 60 (~1%)
Total	**18,120**	**5,380**	**23,500**		**± 1,840**

SYRA pumping (SYRWCD Zone A) is managed as surface water and excluded from Table 4-1 (see **Error! Reference source not found.**).
All numbers rounded to the nearest 10 acre-feet.
Source: SYRWCD (2026), City of Lompoc (2025), MHCSD (2025), VVCSD (2025)

4.2 SURFACE WATER USE

The WMA relies on two surface water source types: local water and imported water. Local water includes both local tributary flows and the flows of the Santa Ynez River, which are partially stored in Lake Cachuma for later release downstream. Vandenberg Space Force Base (VSFB) is the sole water-importing entity in the WMA. VSFB imports water from the State Water Project (SWP) through the Central Coastal Water Authority (CCWA)'s pipeline or groundwater from the adjacent San Antonio Basin.

4.2.1 Surface Water Diversions Upstream of the Lompoc Narrows

Upstream of the Lompoc Narrows, a portion of the Santa Ynez River flows as underflow through a known and definite channel of alluvium. Water flowing in known and definite channels is not groundwater under SGMA,[3] however, this underflow is managed by other agencies. For example, subsurface water above the Lompoc Narrows that is underflow is partially stored in Lake Cachuma per SWRCB Order 2019-0148 for later release, sometimes referred to as a water rights release. Pumpers from the underflow are legally

3 CWC Section 10721 (g) "Groundwater" means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

required to report the amount pumped to both the SYRWCD[4] and SWRCB. Unlike SGMA, SYRWCD's enabling act's definition of groundwater within the purview of the SYRWCD generally covers all water beneath the earth's surface including underflow of a stream.[5] The SWRCB water rights orders applicable to the release of water downstream of Bradbury Dam of the Cachuma Project include the Order of 1973 (WR 73-37), amended in 1989 (WR 89-18) and most recently amended in 2019 (WR 2019-0148). **WMA Table 4-2** shows the total extraction of river wells upstream of the Lompoc Narrows in the WMA for WY 2025.[6]

WMA Table 4-2
Summary WMA Surface Water Diversions for Water Year 2025

Water Use Sector	Total	Method of Measurement	Estimated Accuracy
	Acre-Feet		Acre-Feet
Domestic	30	Self-reported to SYRWCD	± 1 (~10%)
Agricultural	3,230	Self-reported to SYRWCD may include estimates using crop usage	± 320 (~10%)
Municipal	0	NA	NA
Total	**3,260**		**± 321**

4.2.2 Water Imports

The Central Coastal Water Authority (CCWA) has delivered imported water from the SWP to the SYRVGB since 1997. CCWA delivers water to turnouts for water distribution systems. CCWA delivers to Lake Cachuma for the South Coast customers outside of the SYRVGB. The Cachuma Project Settlement Agreement allows for the comingling of CCWA water with local water for water rights releases. Within the SYRVGB, four agencies contract with CCWA for SWP deliveries: VSFB, the City of Buellton, the City of

4 CWC Section 75640 "Any person who fails to register a water-producing facility, as required by Chapter 2 (commencing with Section 75540) of this part, is guilty of a misdemeanor."
5 CWC Section 75502 " 'Ground water' means all water beneath the earth's surface, but does not include water that is produced with oil in the production of oil and gas, or from gravity or natural springs. For the purpose of this section 'groundwater' includes water produced from artesian wells."
6 The SYRWCD records pumping in the Santa Ynez River Alluvium as Zone A.

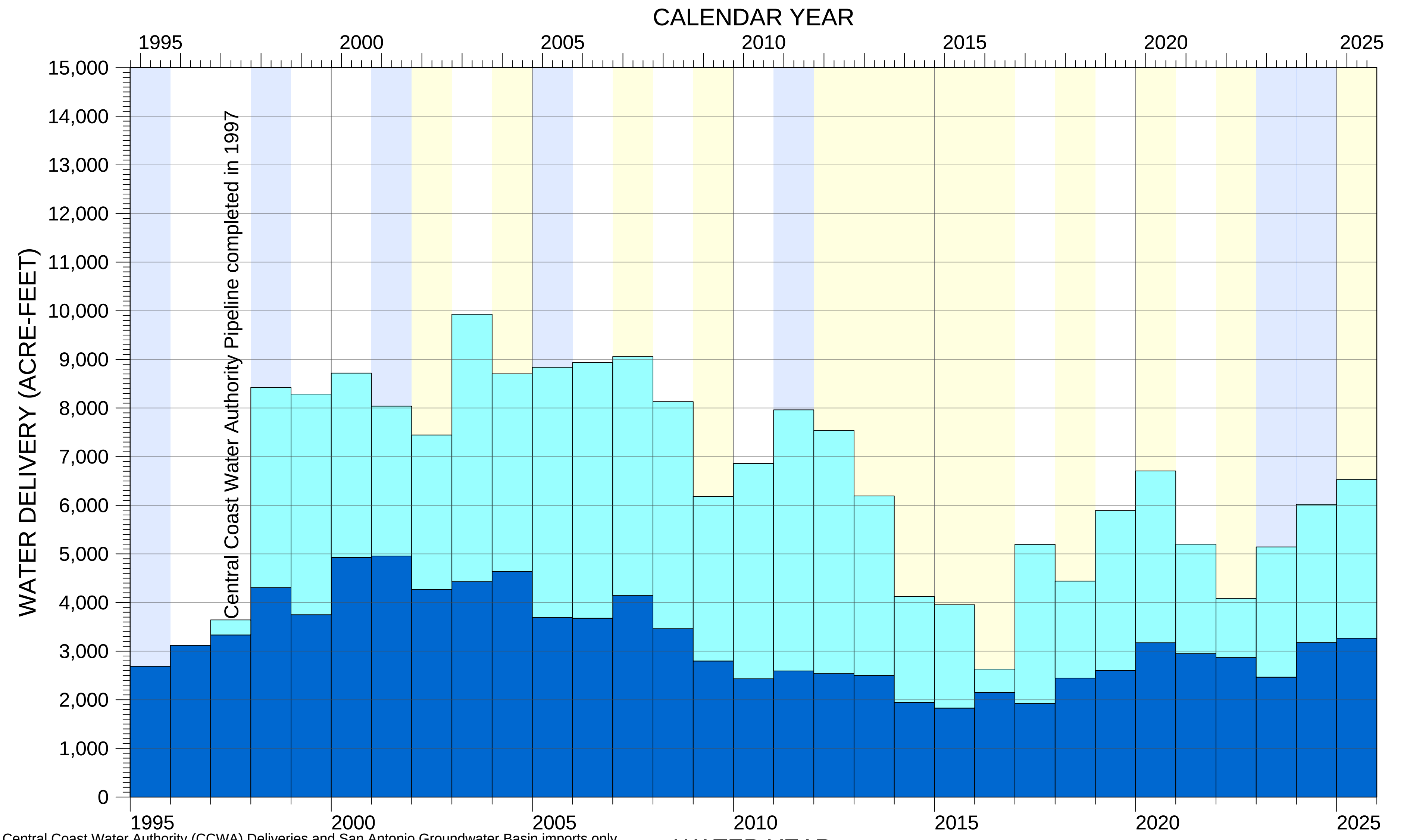
Solvang, and the Santa Ynez River Water Conservation District Improvement District, No. 1. Of these, only the VSFB is located within the WMA.

During WY 2025, VSFB imported 3,266 acre-feet of water. This includes 2,906 acre-feet of water sourced from the SWP through the CCWA pipeline, with the remainder as groundwater from the San Antonio groundwater basin. A portion of the VSFB-imported water re-enters the WMA as wastewater through the Lompoc Regional Wastewater Reclamation Plant. **WMA Table 4-3** and **WMA Figure 4-6** show the annual imports to the WMA and the entire SYRVGB, updated through the end of WY 2025.

WMA Table 4-3
Santa Ynez River Valley Groundwater Basin Water Imports in Acre-Feet for Recent Years

Water Year	WMA	CMA	EMA	Total Basin
2019	2,601	268	3,022	5,891
2020	3,173	359	2,845	6,377
2021	2,949	200	2,051	5,200
2022	2,868	82	1,134	4,084
2023	2,465	190	1,736	4,391
2024	3,175	283	2,561	6,019
2025	3,266	229	2,830	6,325

The WMA via the Vandenberg Space Force Base (VSFB) includes imports from the San Antonio Groundwater basin.
Source: CCWA (2025); VSFB (2025)



Central Coast Water Authority (CCWA) Deliveries and San Antonio Groundwater Basin imports only.
Includes deliveries in exchange for Lake Cachuma water. Does not include: other potential import sources, passthrough to South Coast CCWA customers through Lake Cachuma.

Source: Central Coast Water Authority (2025), Vandenberg Space Force Base (2026), EMA GSA(2026)

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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

ANNUAL WATER IMPORTS
CENTRAL COAST WATER AUTHORITY AND
SAN ANTONIO GROUNDWATER BASIN

Water Year Type (1942-2025)
- Wet
- Above/Below Normal
- Dry / Critically Dry

Santa Ynez Imports
- WMA
- Non-WMA

WMA FIGURE 4-6

F:\DATA\2823\Analyses\WY2025-5th_Report\2026-02 WY25 Water Imports\Fig 4-06 Imports WMA.gpj 3/6/2026 J. Baca

4.3 SURFACE WATER AVAILABLE FOR GROUNDWATER RECHARGE OR REUSE

During WY 2025, there were no projects within the WMA for direct groundwater recharge or in-lieu use.[7]

The Santa Ynez River and its underflow are within the jurisdiction of and regulated by the SWRCB. SWRCB regulates river flows for beneficial purposes, including supporting the steelhead trout (*Oncorhynchus mykiss, O. mykiss*) population pursuant to WR 2019-0148.[8] Following the SWRCB, USBR releases water stored in Lake Cachuma to meet downstream water rights, for downstream alluvium and groundwater basin replenishment, and to support fish habitat.

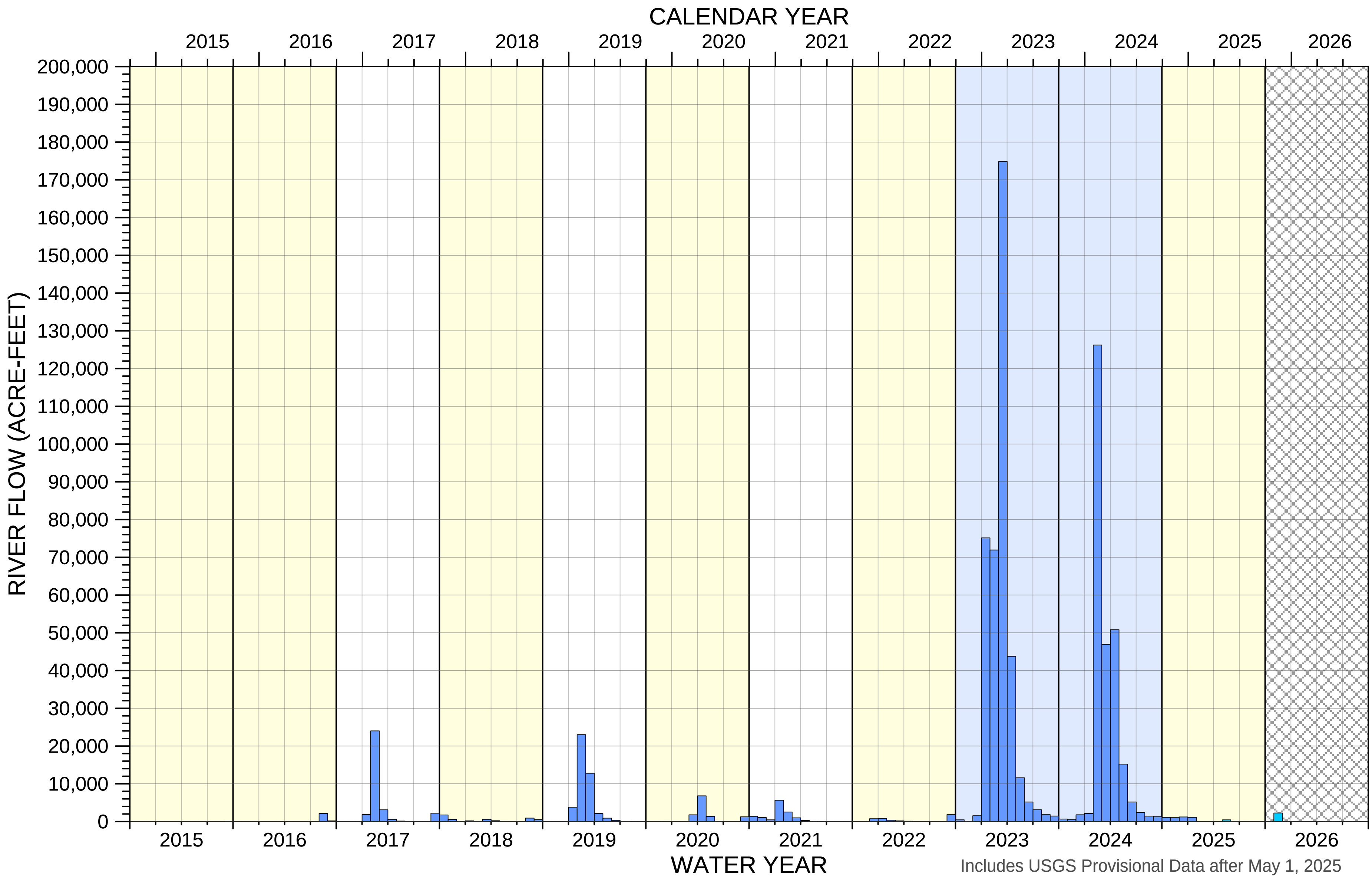
The method for the volume and timing of water rights releases is set forth in the SWRCB Orders of 1973 (WR 73-37), 1989 (WR 89-18), and 2019 (WR 2019-0148). The orders call out two accounts to manage the water-rights releases. The Above Narrows Account (ANA) accounts for the area from Bradbury Dam to the Lompoc Narrows. The ANA is a relatively narrow channel of alluvium along the river (underflow), parts of which are within all three SGMA management areas. The Below Narrows Account (BNA) accounts for a relatively wider area below the Lompoc Narrows, the Lompoc Plain subarea of the WMA.

During all of WY 2025, the volume of dewatered storage in the ANA area was relatively low, meaning the elevation of water in the subsurface was high. This was due to the preceding year (WY2024) being wet. Due to low dewatered storage, at the direction of the SYRWCD pursuant to WR 2019-0148, the USBR did not make water rights releases from Lake Cachuma during 2024.

Measurements at the Lompoc Narrows stream gauge represent more than 85% of all local surface water flows entering the WMA (Stetson, 2022). **WMA Figure 4-7** shows flows of the Santa Ynez River at the USGS Streamflow gage 11133000 at Lompoc Narrows, downstream of the WMA-CMA boundary for WY 2015 through October 2025. The location of the Lompoc Narrows gage is shown in WMA Figure 2-1.

7 23 CCR § 356.2(b)(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.

8 The Cachuma Operation and Maintenance Board (COMB) Fisheries Division conducts the monitoring of steelhead (*Oncorhynchus mykiss*) population in the Santa Ynez River and its tributaries. However, the COMB report comes out in the second quarter of the following water year, which is expected to be published concurrent or after this annual report.



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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

MONTHLY SURFACE FLOW
SANTA YNEZ RIVER AT LOMPOC NARROWS
USGS STREAMGAGE 11133000

Water Year Type (1942-2025)

Wet
No Data
Above/Below Normal
Dry / Critically Dry

Source: USGS NWIS (2025)

WMA FIGURE 4-7

4.3.1 Treated Wastewater Sources

Wastewater in the WMA is managed by the City of Lompoc, the Federal Bureau of Prisons, Mission Hills CSD, Vandenberg Village CSD, and VSFB. Annual volumes of water collected by the Lompoc Regional Wastewater Reclamation Plant (LRWRP) and the Mission Hills CSD systems since 2015 are summarized in **WMA Table 4-4**.

WMA Table 4-4
Wastewater Volumes for Recent Years

Water Year	Lompoc Regional Wastewater Reclamation Plant	Mission Hills Community Services District
	Acre-Feet per Year	Acre-Feet per Year
2015	3,334	212
2016	3,324	247
2017	3,439	265
2018	3,338	240
2019	3,392	300
2020	3,404	224
2021	3,329	196
2022	3,318	180
2023	3,530	204
2024	3,451	206
2025	3,251	202

Source: City of Lompoc (2021-2025), MHCSD (2021-2025; meter malfunction in months May and June 2024, so data estimated using April and July flow values).

LRWRP includes tertiary-treatment and water is discharged into San Miguelito Creek near its confluence with the Santa Ynez River. Mission Hills CSD system includes secondary-treatment and water is percolated in a series of ponds.

4.3.2 Reuse of Treated Wastewater Sources

The LRWRP has programs to enable the use of recycled water, which can offset the use of groundwater. SWRCB Order WW0101, dated May 30, 2018, authorized up to 69 AFY of water used for local construction purposes.[9] In 2019, the Division of Drinking Water approved a Site Use Report approving irrigation use of LRWRP recycled water (WCI, 2021). Due to high costs, the City of Lompoc suspended the recycled water program during WY 2022.

4.4 TOTAL WATER USE

Total water use in the WMA during WY 2025 is comprised of groundwater supplies, surface water diversions upstream of the Lompoc Narrows, and imported SWP water. See Chapters 4.1 and 4.2 above for additional details on these supplies. **WMA Table 4-5** shows the summary of total water use for total water by sector for the water year 2025. **WMA Table 4-6** shows the summary of total water use by source for WY 2015-WY 2025. Total water use in the WMA was 30,030 AF in WY 2025.

WMA Table 4-5
Summary WMA Total Water Use by Sector for Water Year 2025

Water Use Sector	Total	Method of Measurement	Estimated Accuracy
	Acre-Feet		Acre-Feet
Domestic	330	Self-Reported to SYRWCD	± 30
Agricultural	20,730	Self-reported to SYRWCD	± 2,000
Municipal	8,970	Daily totalizer values; Includes CCWA imports to VSFB	±90
Total	**30,030**		**± 2,120**

[9] "The authorized place of use for up to 62,000 gallons per day of treated wastewater for industrial uses is 7,488 acres within the City of Lompoc city limits and within 30 miles radius of Lompoc Regional Wastewater Reclamation Plant."

WMA Table 4-6
Summary WMA Total Water Use by Source for Recent Years

Water Year	Total Groundwater (Upper and Lower Aquifer)	Total Surface Water (River Well Pumping)	Total Imports	TOTAL WATER USE
	Acre-Feet per Year	Acre-Feet per Year	Acre-Feet per Year	Acre-Feet per Year
2015	28,120	5,260	1,830	35,210
2016	27,320	5,530	2,150	35,000
2017	26,600	5,770	1,920	34,290
2018	24,830	5,790	2,450	33,070
2019	25,210	4,460	2,600	32,270
2020	25,050	4,290	3,170	32,510
2021	23,920	4,580	2,950	31,450
2022	24,370	4,710	2,870	31,950
2023	21,500	4,050	2,465	28,015
2024	23,540	4,070	2,795	30,405
2025	23,500	3,260	3,265	30,025

Note: Total water use has been updated to include all pumping data reported to the SYRWCD, including additions and revisions received by the District after the reporting period. Total imports include water supplied to the VSFB, which overlies both the WMA and the adjacent San Antonio Groundwater Basin. The imported water includes CCWA imports and San Antonio Basin Groundwater imports. All effluent from the VSFB goes to the LRWRP (Table 4-4).

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WMA CHAPTER 5: GROUNDWATER STORAGE

Groundwater in storage is one of the SGMA sustainability indicators. This chapter presents the changes in groundwater in storage components required by the SGMA regulations:

> *"(5) Change in groundwater in storage shall include the following:*
>
> *(A) Change in groundwater in storage maps for each principal aquifer in the basin.*
>
> *(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."*
>
> *(*23 CCR § 356.2(b))

Changes in groundwater in storage are calculated and mapped for the seasonal high (spring-to-spring) using a Thiessen polygon[1] method. This method uses water level observations at representative monitoring wells. In the WMA there is a longer period of record for seasonal high spring water levels than there is for seasonal low fall water levels. DWR requested that the WMA use seasonal low fall water levels. The WMA will shift to fall water levels once there is sufficient data, expected to be 10 years of data. The WMA addresses this in the Periodic Evaluation.

1 This method for tessellation goes by several names. Voronoi diagrams or Dirichlet tessellation are both names use in mathematics. The name Thiessen polygons comes from the application to hydrology.

5.1 CHANGE IN GROUNDWATER IN STORAGE MAPS

The SGMA regulations[2] require every Annual Report to contain *"change in groundwater in storage maps for each principal aquifer in the basin."* On the following maps, the polygon color indicates the change in groundwater in storage. Blue indicates increased groundwater in storage. Orange indicates decreased groundwater in storage. Color intensity is relative to the area of the polygon. Darker colors indicate a greater change in storage per acre. Numbers shown in each polygon are the estimated volume change in acre-feet. **WMA Figure 5-1** and **WMA Figure 5-2** show spring change in groundwater in storage. The storage calculations will transition to fall water level data once a ten-year period of data is collected.

The node of each polygon comes from existing representative monitoring wells (WMA Figure 3-1). The area of each polygon is the area that is closest to the node point, compared to the other node points. The external boundary is the aquifer extent. The WMA uses the following equation to calculate the change in groundwater in storage for each polygon:

Change of Groundwater in Storage (acre-feet) = [area (acres)] x [Sy (unitless)] x [change in groundwater elevation (ft)]

Total Change of Groundwater in Storage (acre-feet) = Σ (Change in Storage for each Polygon)

WMA Table 5-1 summarizes the total change in groundwater in storage calculated for each aquifer for WY 2025.

WMA Table 5-1
Estimated Change in Groundwater in Storage
By Aquifer in Acre-Feet

Period		Lower Aquifer	Upper Aquifer	Total
Seasonal High	Spring 2024 to Spring 2025	2,060	-680	1,380

Numbers rounded to the nearest 10 AF.

2 23 CCR § 356.2(b)(1)

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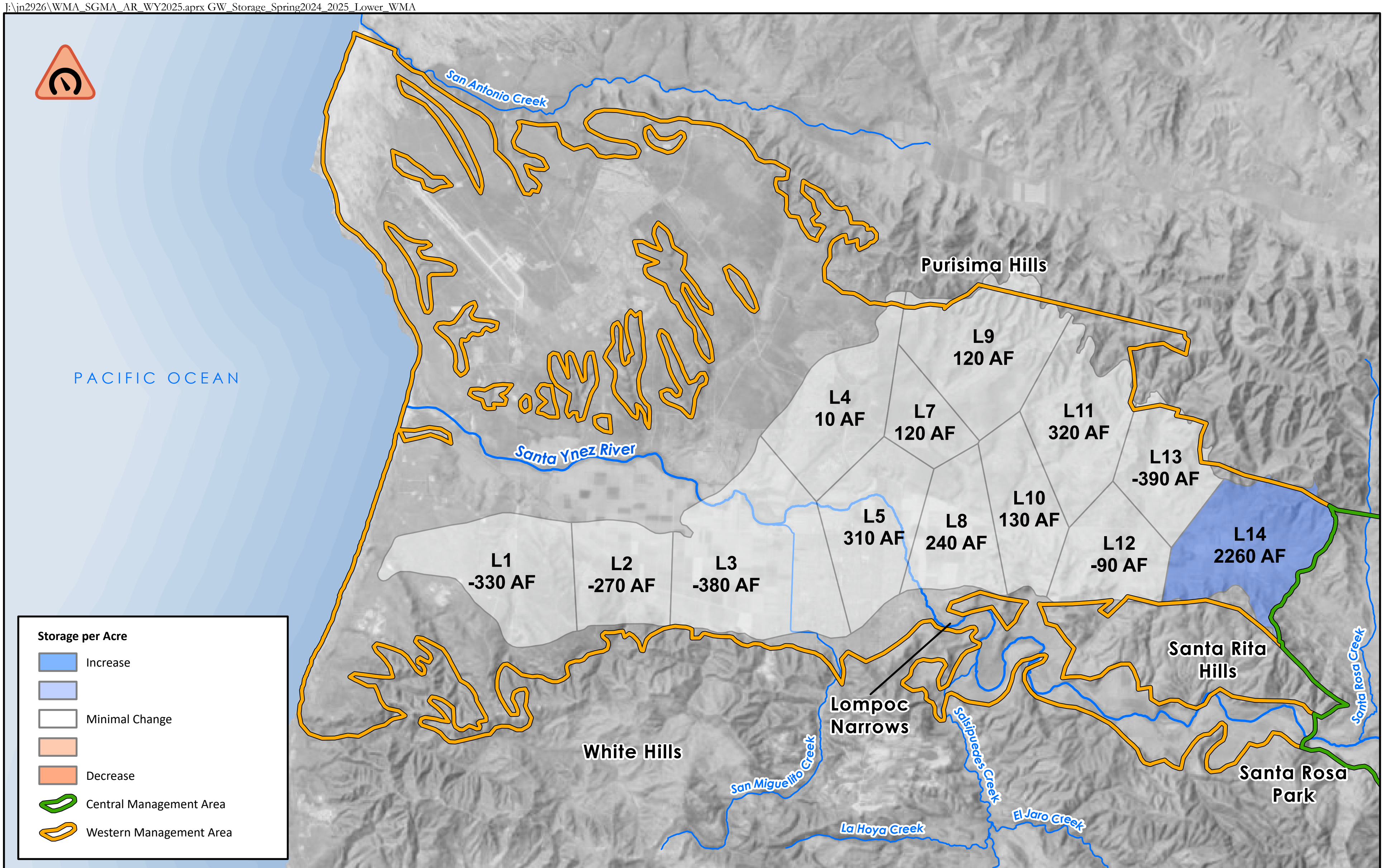

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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

CHANGE IN GROUNDWATER IN STORAGE
SPRING 2024-SPRING 2025
LOWER AQUIFER
WESTERN MANAGEMENT AREA

0 1 2 Miles

Sources:
USGS National Elevation Dataset, 2002

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WMA FIGURE 5-1

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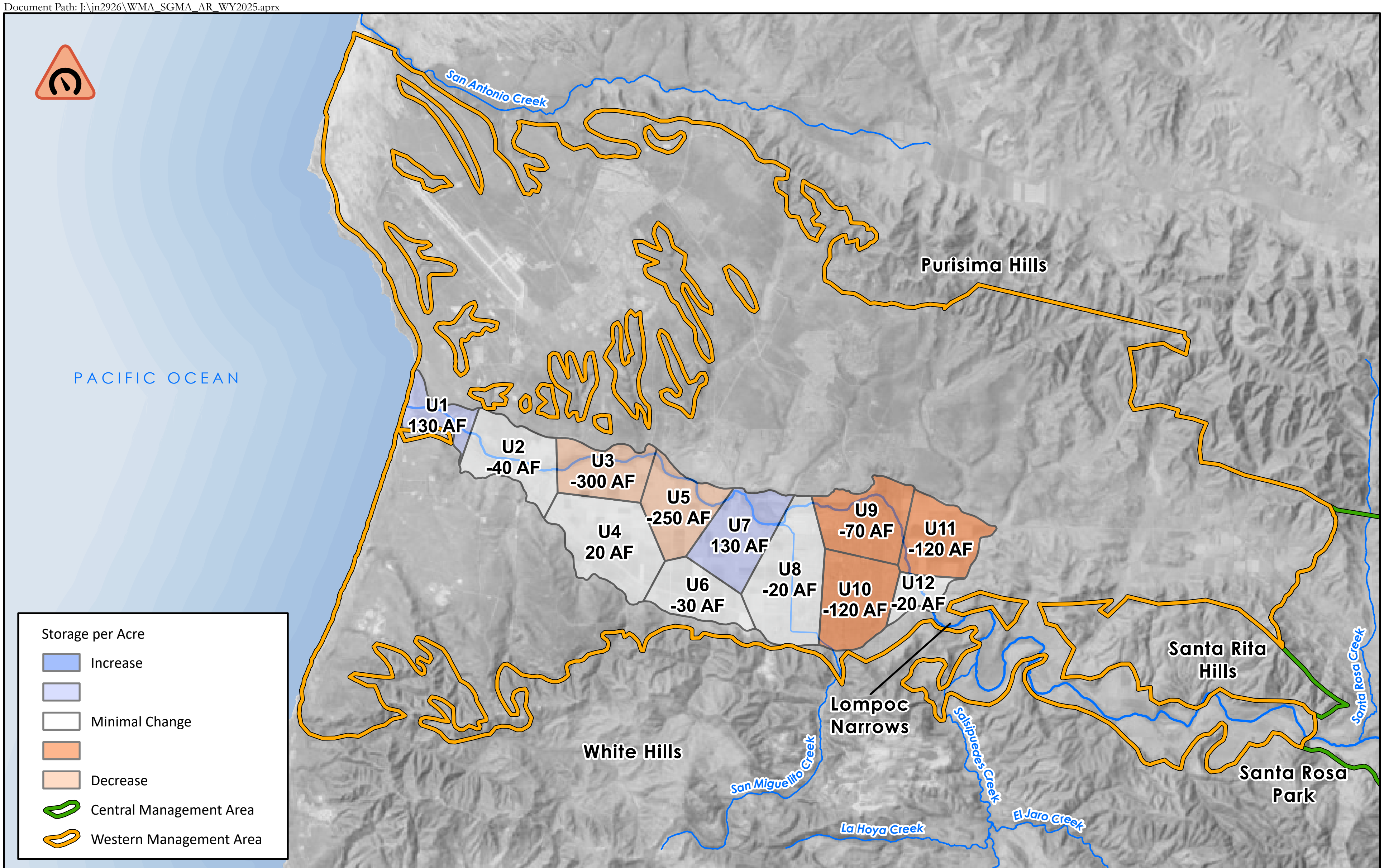

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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

CHANGE IN GROUNDWATER IN STORAGE
SPRING 2024-SPRING 2025
UPPER AQUIFER
WESTERN MANAGEMENT AREA

0 1 2 Miles

Sources:
USGS National Elevation Dataset, 2002

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WMA FIGURE 5-2

The Spring 2024 to Spring 2025 change in groundwater in storage is shown for the Lower Aquifer in WMA Figure 5-1 and the Upper Aquifer in WMA Figure 5-2. The total groundwater in storage change for the WMA was a gain of 1,380 AF. WMA Figure 5-1 shows groundwater in storage in the Lower Aquifer increased in the middle of the aquifer and in the far east of the aquifer; elsewhere, there was a decrease. WMA Figure 5-2 shows that the volume of groundwater in storage increased in the center of the Upper Aquifer but declined in the eastern and western areas of the aquifer. The Lower Aquifer has an overall increase in storage of 2,060 AF. The Upper Aquifer has an overall decrease of 680 AF.

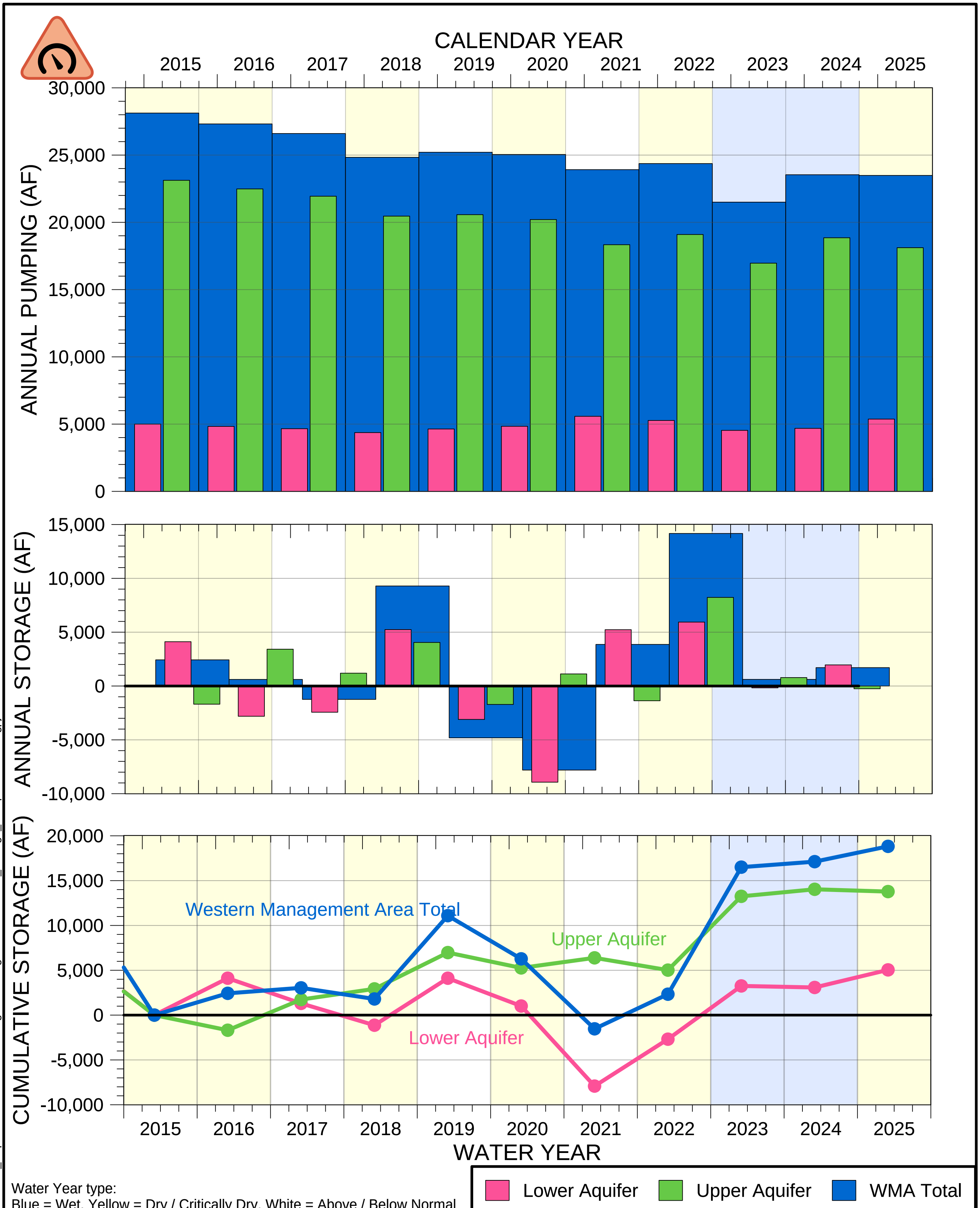
5.2 GROUNDWATER USE AND EFFECTS ON STORAGE

The SGMA regulations require that GSP Annual Reports contain "*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*."[3]

The Water Year Type is classified in Chapter 2 of this report using the same method described in the WMA GSP. Updated groundwater use for WY 2024 is described in Chapter 4. The method for calculating the annual change in groundwater in storage is described earlier in this chapter. Annual storage change was calculated for historical years, including from WY 2015 through the present.

The annual reported groundwater use for the WMA Upper Aquifer is compared to the annual change in Upper Aquifer groundwater in storage in **WMA Figure 5-3**. The Water Year classifications shown in this figure are consistent with the classification of water years shown in WMA Figure 2-3. The top of WMA Figure 5-3 shows the annual reported groundwater use for the WMA Upper Aquifer, Lower Aquifer, and combined. The middle of WMA Figure 5-3 shows the annual change in storage for the Upper Aquifer, Lower Aquifer, and combined total, and the bottom of WMA Figure 5-3 set shows the cumulative change for the Upper Aquifer, Lower Aquifer, and combined total starting in March 2015.

3 23 CCR § 356.2(b)(5)(B)



F:\DATA\2823\Analyses\WY2025-5th_Report\2026-02 WY25 Storage\WMA Fig 5-03 Dewatered_Storage_Comparison.2015.gpj 1/26/2026 J. Baca

STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

COMPARISON OF WATER YEAR TYPE, GROUNDWATER USE, ANNUAL STORAGE, AND CUMULATIVE STORAGE RELATIVE TO MARCH 2015

WMA CHAPTER 6: PROGRESS TOWARD GSP IMPLEMENTATION AND SUSTAINABILITY

The SGMA regulations (Joint Appendix A) require that the SGMA Annual Reports contain "*A description of progress towards implementing the [GSP], including achieving interim milestones, and implementation of projects or management actions since the previous annual report*."[1] As indicated by the previous chapters discussing groundwater levels, water use, and storage, groundwater conditions within the WMA remain sustainable with no undesirable results for the SGMA sustainability criteria. The conditions within the WMA for the additional SGMA indicators are summarized below.

The WMA GSP Implementation of general projects and management actions identified in the WMA GSP has begun. The WMA is taking steps to ensure funding to complete the actions planned in the GSP.

6.1 SUSTAINABILITY INDICATORS

Analyses conducted for the WMA GSP indicate that Basin conditions are sustainable with no current undesirable results during WY 2025. This chapter discusses GSP-identified minimum thresholds, measurable objectives, and interim milestones[2] for both the previously discussed sustainability indicators (groundwater levels [Chapter 3], interconnected surface water [Chapter 3], and storage [Chapter 5]), as well as the remaining sustainability indicators (seawater intrusion, water quality, and land subsidence).

1 23 CCR § 356.2(a) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

2 23 CCR § 356.2(a) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

Groundwater Levels

Groundwater Storage

Seawater intrusion

Degraded water quality

Land subsidence

Interconnected surface water

6.1.1 Chronic Lowering of Groundwater Levels

Chapter 3 provided data and maps for the chronic lowering of groundwater levels sustainability indicator. The WMA GSP states the following regarding monitoring groundwater levels for undesirable results:

> "Spring groundwater elevations that drop below the established groundwater elevation minimum thresholds in more than 50% of the representative monitoring wells in the Upper Aquifer or 50% of the representative monitoring wells in the Lower Aquifer for two consecutive, non-drought years[3] would correspond to an undesirable result associated with chronic lowering of groundwater elevations."

Similarly, for measurable objectives and interim milestones, the WMA GSP states:

3 Two or more consecutive years that are classified as Dry or Critically Dry (Chapter 2, GC) will be defined as drought years. All other year types and combination of year types will be defined as non-drought years for the purpose of defining undesirable results under a groundwater sustainability plan.

"Measurable objectives are achieved when the 2011 groundwater elevation is reached in half of the representative monitoring wells (RMWs)."

The interim milestones were set to measurable objectives due to GSP's finding that the WMA conditions were sustainable with no current undesirable results. The measurable objectives and interim milestones will need to be re-evaluated when the WMA switches to using fall water levels

The WMA currently has twenty-six representative groundwater level monitoring wells, thirteen each in the Lower Aquifer (**WMA Table 6-1**) and Upper Aquifer (**WMA Table 6-2**). These tables compare the groundwater level elevations to the sustainable management criteria for each well. The sustainable management criteria include Measurable Objectives, Early Warning, and Minimum Thresholds. These tables show all wells, but one (7N/34W-35K9) were above their Minimum Threshold levels for WY 2025. No undesirable results related to water levels occurred in WY 2025.

WMA Table 6-1
Groundwater Elevations for
Lower Aquifer Groundwater Levels (feet in NAVD88)

Name	ID	Measuring Point	Reference Values			Water Year 2024		Water Year 2025	
			Measurable Objective	Early Warning	Minimum Threshold	Spring	Fall	Spring	Fall
7N/35W-26L04	17	36.10	28	11	6	28	18	26	23
7N/34W-29N7	28	68.16	43	21	15	44	35	43	36
7N/34W-22J6	22	97.81	55	33	28	50	50	52	50
7N/34W-24N1	23	131.77	56	34	29	50	49	52	50
7N/35W-27P01	44	262.55	43	25	20	40	38	39	38
7N/34W-15D3	602	193.12	58	36	31	53	50	53	51
7N/34W-14F4	52	276.04	50	28	23	45	45	46	43
7N/34W-12E1	51	388.21	62	40	35	54	53	55	55
7N/33W-19D1	49	255.05	56	33	28	48	n/a	n/a	n/a
7N/33W-17M1	47	329.33	62	36	31	45	41	47	46
7N/33W-28D3	81	354.04	42	30	25	43	41	43	41
7N/33W-21G2	78	421.76	85	51	46	61	58	59	59
7N/33W-27G1	80	437.03	56	36	31	49	46	56	55

n/a = No available data
NAVD88 = North American Vertical Datum of 1988

WMA Table 6-2
Groundwater Elevations for
Upper Aquifer Groundwater Levels (feet in NAVD88)

Name	ID	Measuring Point	Reference Values			Water Year 2024		Water Year 2025	
			Measurable Objective	Early Warning	Minimum Threshold	Spring	Fall	Spring	Fall
7N/35W-17M1	2	11.92	5	5	0	5	8	10	10
7N/35W-21G2	39	22.57	8	5	0	8	6	8	9
7N/35W-23B2	40	32.50	8	5	0	6	2	3	3
7N/35W-26L1	15	36.01	30	25	20	30	28	30	n/a
7N/35W-26L2	16	35.72	32	23	18	31	26	30	27
7N/35W-24J4	33	59.94	30	25	20	34	26	32	28
7N/34W-29N6	27	67.59	41	31	26	43	38	45	38
6N/34W-6C4	20	104.04	42	27	22	n/a	n/a	n/a	n/a
7N/34W-32H2	31	77.85	45	33	28	n/a	n/a	n/a	43
7N/34W-27F9	1162	99.40	56	42	37	62	61	61	50
7N/34W-34F6	501	101.40	57	39	34	72	73	n/a	n/a
7N/34W-26Q5	60	114.00	68	49	44	71	62	69	59
7N/34W-35K9	32	106.92	80	73	68	82	80	81	66

n/a = No available data
NAVD88 = North American Vertical Datum of 1988
The Minimum Threshold for 7N/34W-35K9 was corrected based on 2020 water levels and corrected datum.

6.1.2 Reduction of Groundwater in Storage

Chapter 5 of this report addresses the reduction of groundwater in storage. In addition, progress towards sustainability for groundwater in storage is tracked along with groundwater levels, as discussed in Section **Error! Reference source not found.**.

6.1.3 Water Quality

The WMA GSP found that "Groundwater quality in the WMA is currently suitable for agricultural, domestic, and municipal supply purposes." The SGMA statute and SGMA regulations on Annual

Reports (23 CCR § 356.2) do not include a discussion of general water quality. The DWR in the acceptance of the Joint Annual Report for 2024 requested annual water quality data.

> "The Department noted that the annual report did not provide an update on all the applicable sustainable management criteria for the Basin, as required by GSP Regulations (23 CCR § 356.2). The Department will require that you include information on all applicable sustainable management criteria in your subsequent annual report, including a description of progress towards implementing the Plan for each of the applicable sustainability indicators."

To support the Central Coast Water Board's water quality mission[4] and to provide the requested information above, the WMA includes a water quality evaluation in this report as **WMA Appendix C**. Recent water quality data for the WMA indicate no undesirable results since the 2022 GSP.

The wells monitored by the USGS identified in the GSP are now partially monitored by the County of Santa Barbara. The Periodic Evaluation will detail any wells that are no longer viable and any shifts in monitoring wells.

6.1.4 Seawater Intrusion

Seawater intrusion is the inflow of seawater into the aquifer and adversely affects groundwater quality and, therefore, suitability for beneficial uses. Per SGMA regulations,[5] this is characterized by relatively high concentrations of chloride. The GSP identified the 500 mg/L chloride isocontour as the key indicator for assessing seawater intrusion.

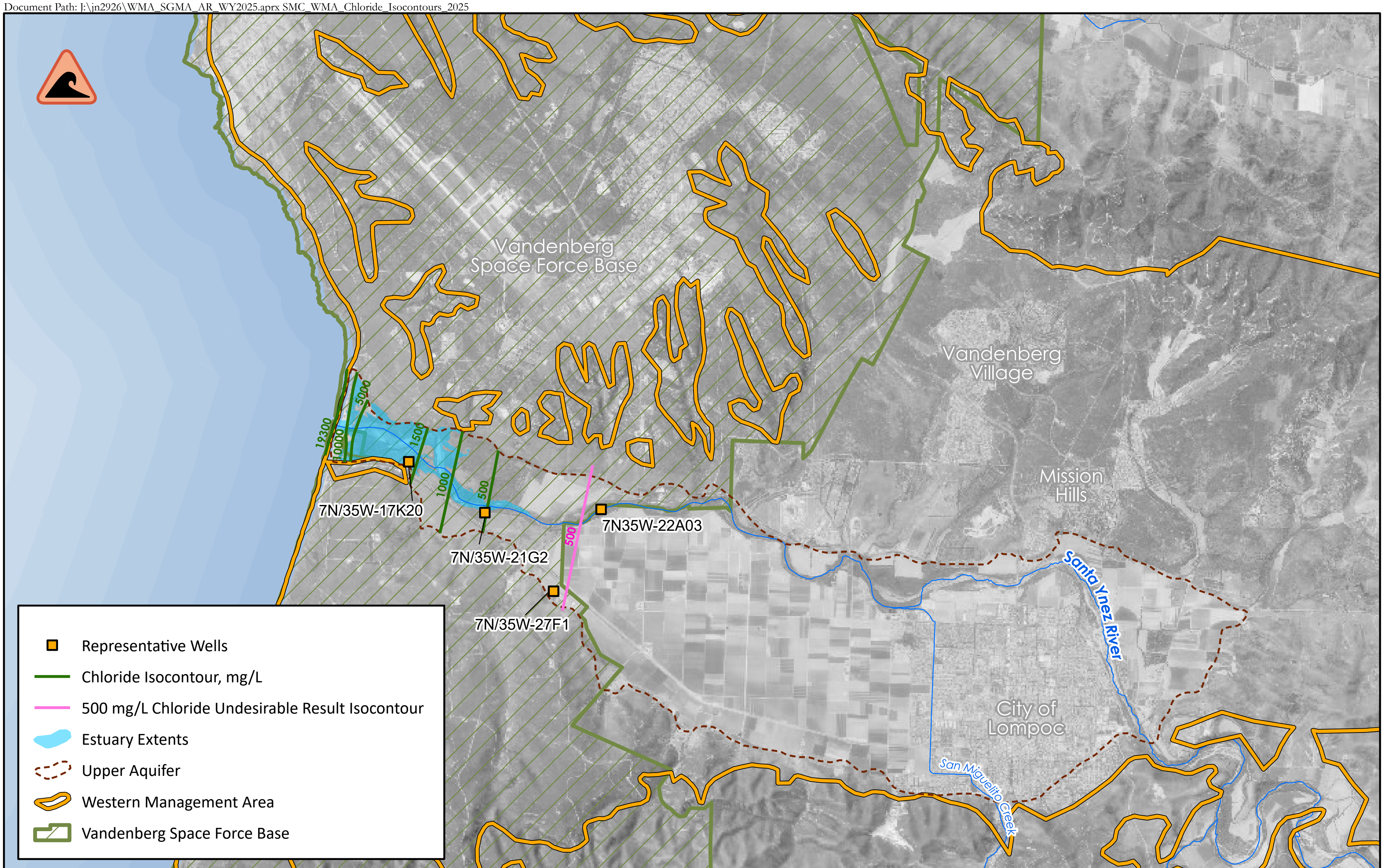
WMA Figure 6-1 shows the location of the estimated groundwater chloride isocontour for 2025 based on collected water samples. These were primarily based on chloride concentration in samples collected at

4 Central Coast Regional Water Quality Control Board. Bishop, James. June 22, 2023. Public Comment Letter for The Santa Ynez River Valley Groundwater Basin – Annual Report Water Year 2022. 3 pg. https://sgma.water.ca.gov/portal/gspar/comments/214. Access date 2023-12-05.

5 23 CCR § 356.28(c)(3) Seawater Intrusion. The minimum threshold for seawater intrusion shall be defined by a chloride concentration isocontour for each principal aquifer where seawater intrusion may lead to undesirable results. Minimum thresholds for seawater intrusion shall be supported by the following: [...]

the wells 7N/35W-17K20, 7N/35W-21G2, 7N/35W-27F1, and 7N35W-22A3. **WMA Figure 6-2** plots recent salinity, chloride, and sodium trends for the two western wells (7N/35W-17K2 and 7N/35W-21G2), and **WMA Figure 6-3** plots recent salinity, chloride, and sodium for two of the more inland wells (7N/35W-27F1 and 7N35W-22A3). The western estuary wells show a slight increase in all three analytes since 2015. The inland well with recent data shows relative stability. Previously, the Santa Barbara County Water Agency provided the annual water quality data used in monitoring seawater intrusion for the wells. In 2024, the WMA GSA started quarterly monitoring of well 7N/35W-17K20, 7N/35W-21G2, and 7N/35W-27F1. Monitoring of well 7N35W-22A3 is evaluated in the Periodic Evaluation.

Document Path: J:\jn2926\WMA_SGMA_AR_WY2025.aprx SMC_WMA_Chloride_Isocontours_2025



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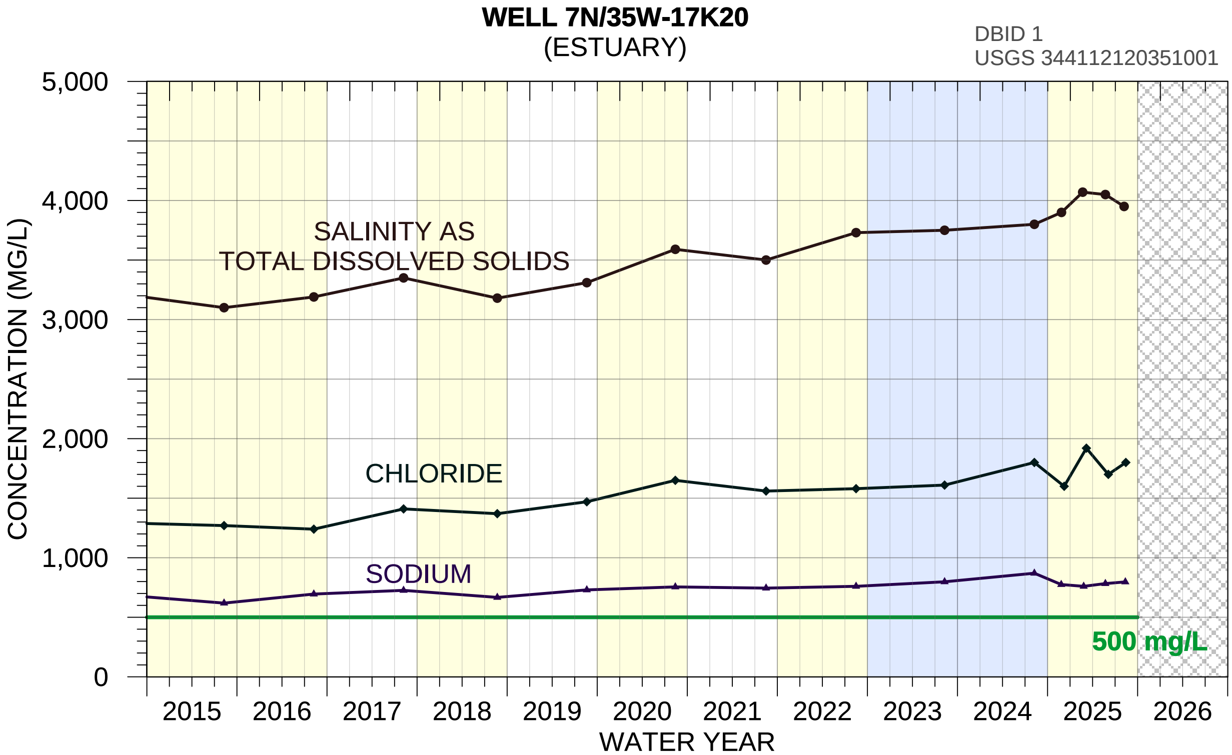
500 MG/L CHLORIDE ISOCONTOUR IN 2025
WESTERN MANAGEMENT AREA

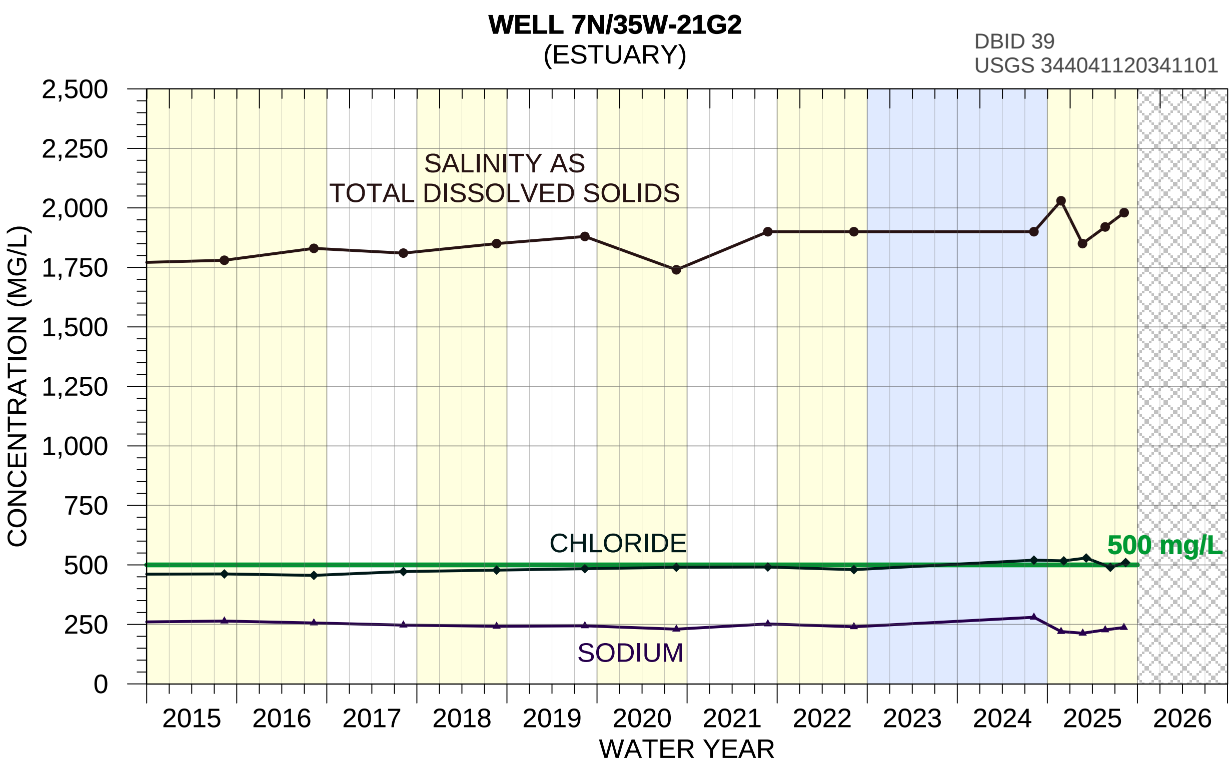
0 0.7 1.4 Miles

N

Sources:
Pacific States Marine Fisheries Commission (2018)
NAIP (2012)

WMA FIGURE 6-1





Water Year type:
Blue = Wet, Yellow = Dry / Critically Dry, White = Above / Below Normal
Data Source: WMA GSA (2025), COSB (2024), and USGS (2024) water quality data.

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SANTA YNEZ RIVER ESTUARY
MAJOR WATER QUALITY TRENDS
SELECTED WELLS
LOMPOC PLAIN SUBAREA

TDS
Chloride
Sodium

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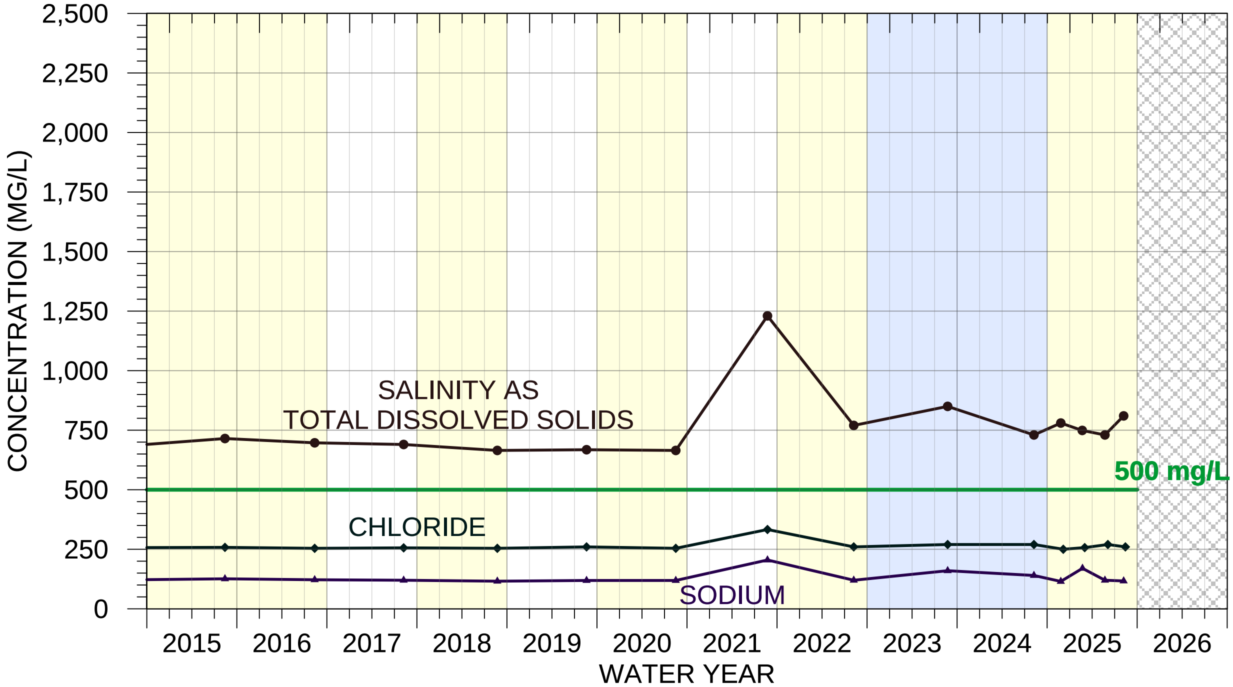
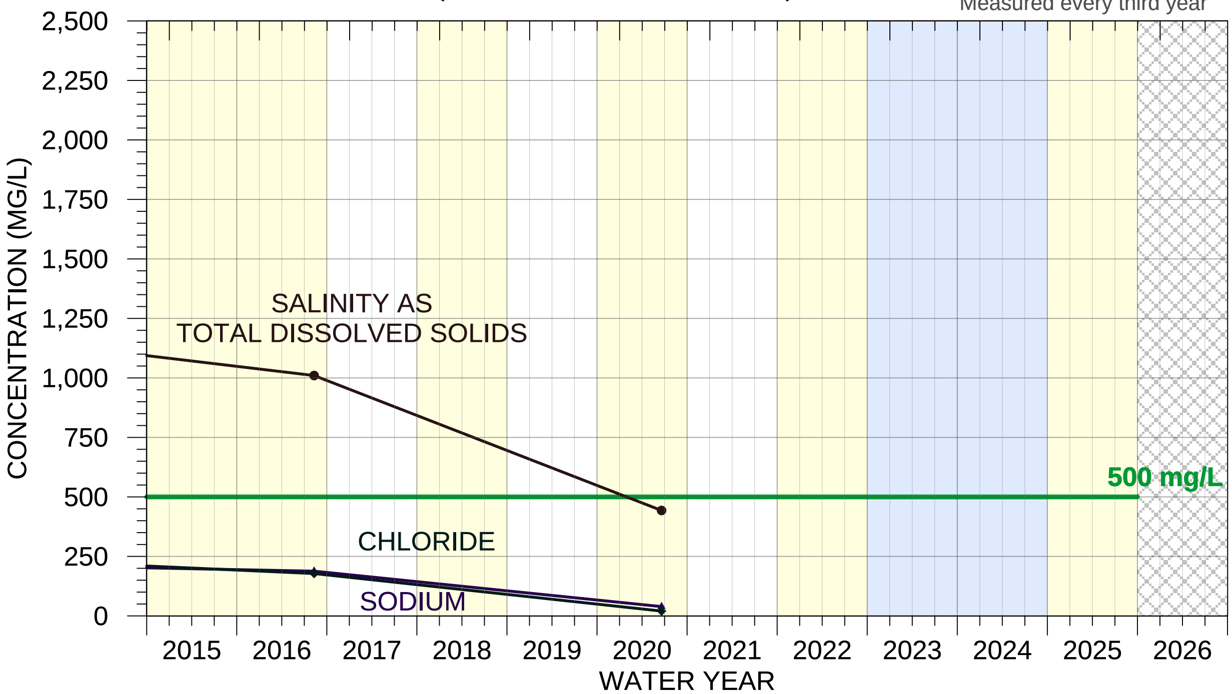
WELL 7N/35W-27F1
(WESTERN LOMPOC PLAIN)

DBID 41
USGS 343952120332001



WELL 7N/35W-22A3
(WESTERN LOMPOC PLAIN)

DBID 300
USGS 344045120324601
Measured every third year



Water Year type:
Blue = Wet, Yellow = Dry / Critically Dry, White = Above / Below Normal
Data Source: WMA GSA (2025), COSB (2024), and USGS (2024) water quality data.

F:\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 Seawater\Fig 6-03 Seawater_Trends_Plain.gpj 12/8/2025 J. Baca

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WESTERN LOMPOC PLAIN
MAJOR WATER QUALITY TRENDS
SELECTED WELLS
LOMPOC PLAIN SUBAREA

TDS
Chloride
Sodium

6.1.5 Land Subsidence

Significant land subsidence due to groundwater withdrawal is not occurring in the WMA. Conditions in the WMA are considered to have dropped below the land subsidence minimum threshold when both (1) a decline of six inches (a half foot) from the 2015 land surface elevation because of groundwater extractions, and (2) that decline interferes with either land use or infrastructure.

Two primary sources of data are used to characterize the movement of the land surface: remote sensing area data from Interferometric Synthetic Aperture Radar (InSAR) and point data from continuous global positioning system (CGPS). Both InSAR and CGPS methods provide absolute changes in elevation and do not differentiate between land subsidence resulting from excessive groundwater extraction and other sources of vertical movement such as tectonic movement. Any significant lowering of ground surface elevations indicated by these methods would need to be reviewed to identify the cause.

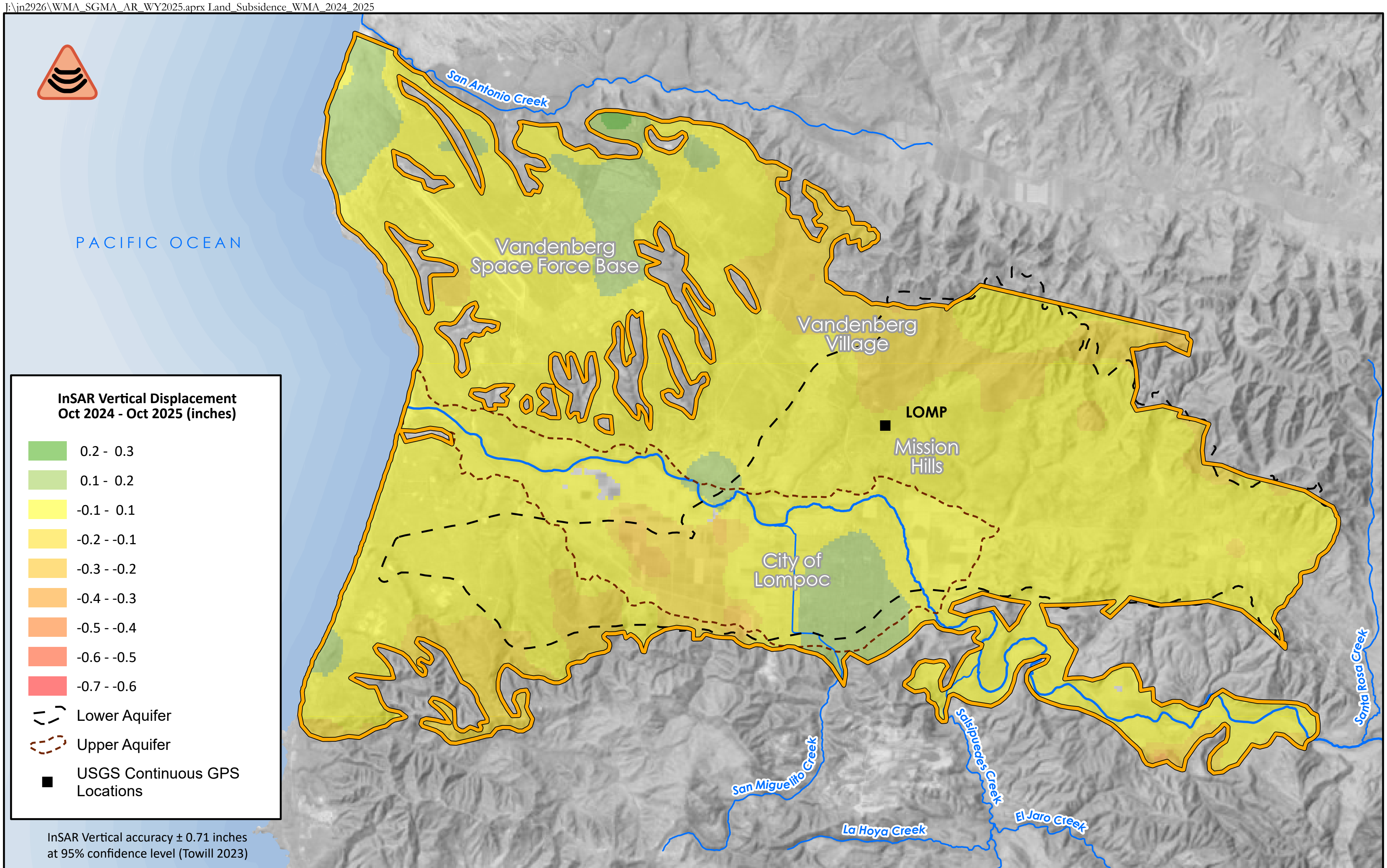
The InSAR maps show the elevation change of the ground surface over a wide area between two points in time. **WMA Figure 6-4** is a comparison of October 2024 and October 2025 data, showing change in vertical displacement during WY 2025. **WMA Figure 6-5** is a comparison of January 2015 and October 2025 data showing cumulative change since 2015. These two figures indicate that the vertical change is less than the InSAR method accuracy for most of the WMA.[6]

CGPS collects very high-resolution three-dimensional movement of a sensor over time. The LOMP station, located near Mission Hills (see WMA Figure 6-5), is a CGPS station that has been in operation since May 15, 2015. **WMA Figure 6-6** graphs the horizontal movement (north-south, east-west) and vertical movement (up-down). Since 2015 the graph shows movement to the north of 16 inches and movement west of 13 inches. Vertical movement is down by less than an inch, with a datum entry change in 2017. This lateral movement is aseismic tectonic movement, and not due to groundwater conditions.

Both InSAR and CGPS methods show there were no undesirable results related to land subsidence during WY 2025.

6 Reported as 18 mm (0.71 inches) vertical accuracy at 95% confidence level in Towill (2023).

J:\jn2926\WMA_SGMA_AR_WY2025.aprx Land_Subsidence_WMA_2024_2025



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LAND SUBSIDENCE
OCTOBER 2024 TO OCTOBER 2025
INSAR DATA
WITHIN WESTERN MANAGEMENT AREA

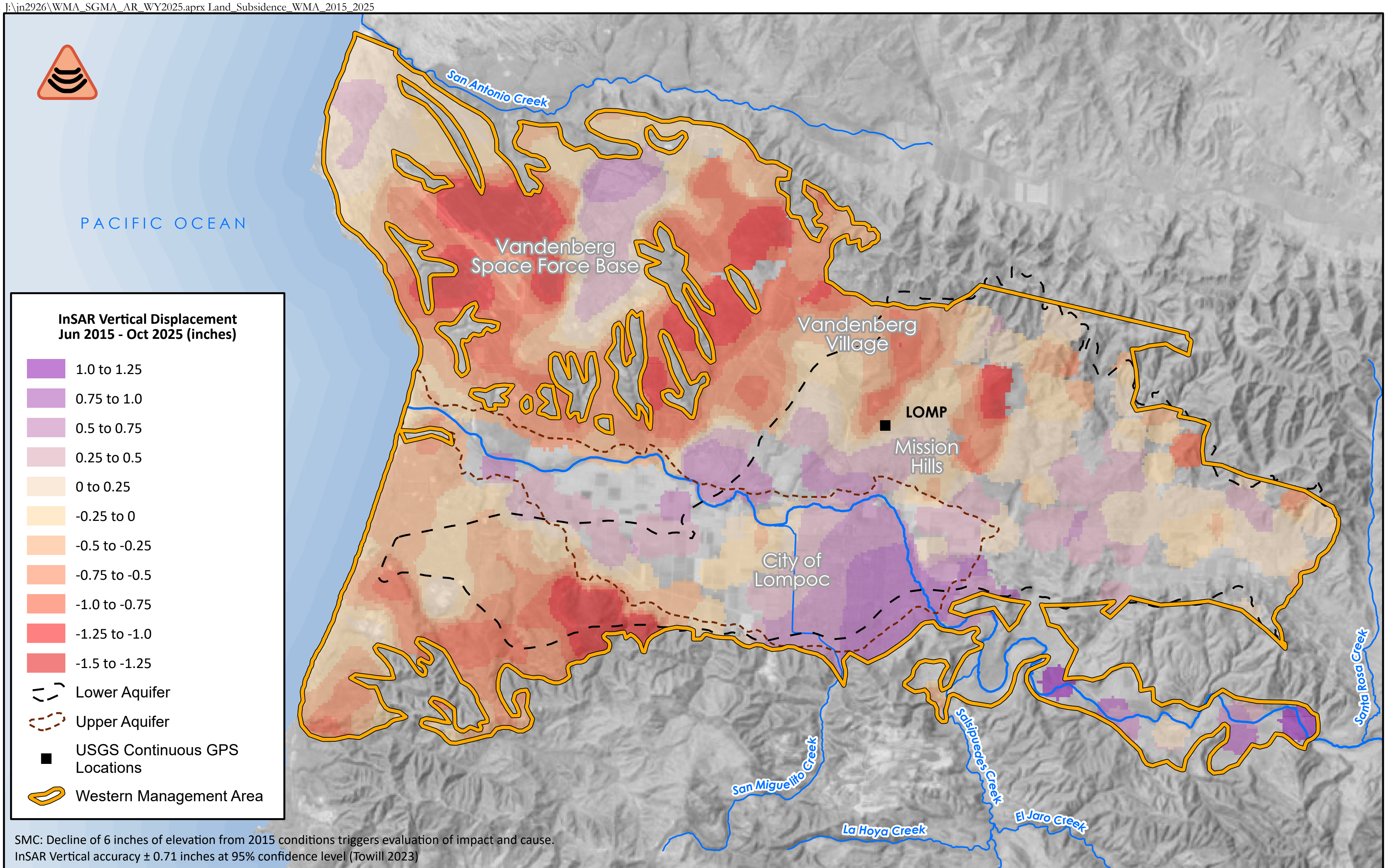
0 1 2 Miles

N

Sources:
USGS National Elevation Dataset, 2002
NAIP (2012/2022), DWR (2025)

WMA FIGURE 6-4

J:\jn2926\WMA_SGMA_AR_WY2025.aprx Land_Subsidence_WMA_2015_2025



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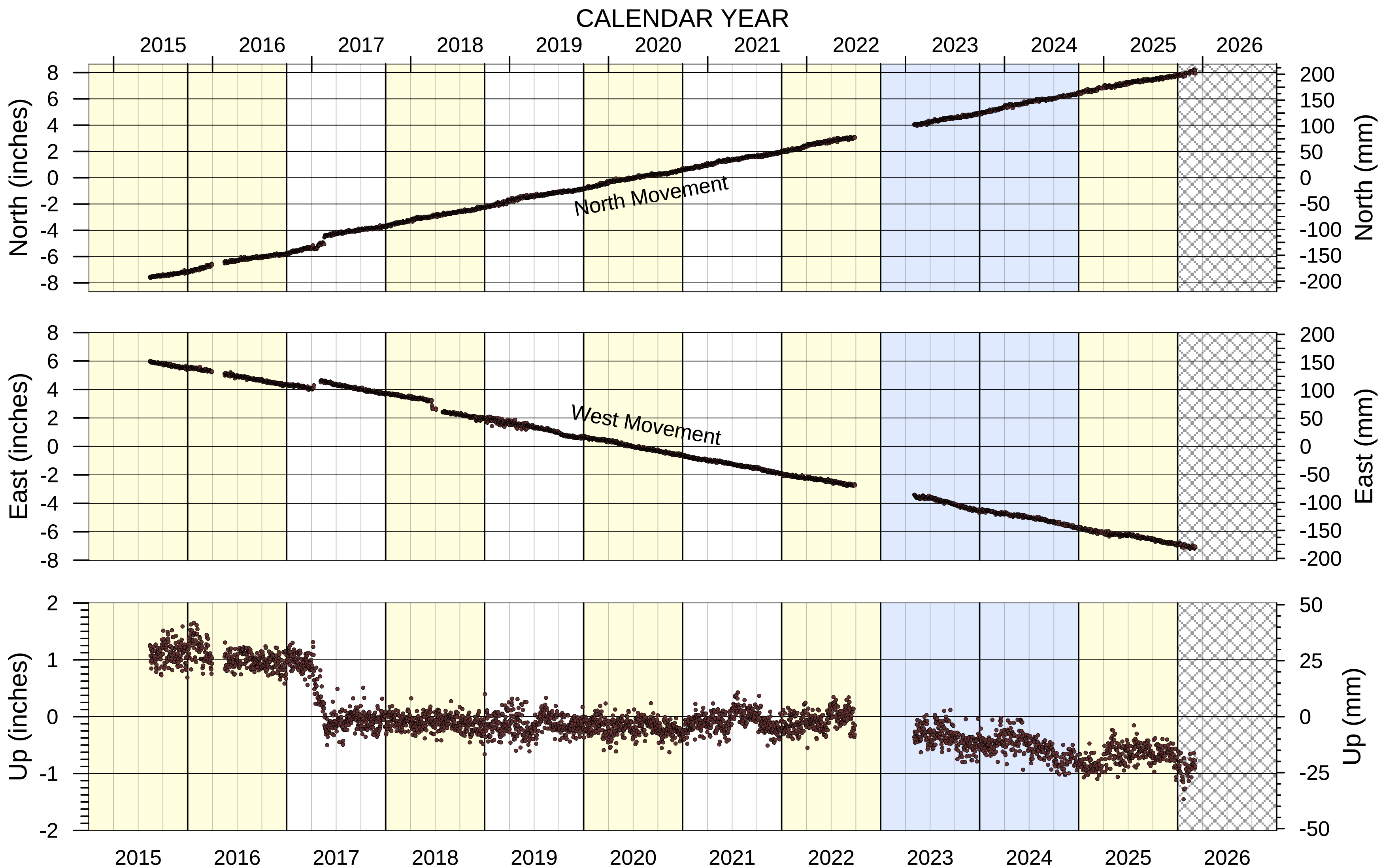
LAND SUBSIDENCE JUNE 2015 TO OCTOBER 2025 INSAR DATA

WITHIN WESTERN MANAGEMENT AREA

Sources:
USGS National Elevation Dataset, 2002
NAIP (2012/2022), DWR (2025)

WMA FIGURE 6-5



Decline of 6 inches of elevation from 2015 conditions triggers evaluation of impact and cause.

Source: Murray, J.R. and Svarc, J. (2017), Global Positioning System data collection, processing, and analysis conducted by the U.S. Geological Survey Earthquake Hazards Program, Seismol. Res. Lett., doi:10.1785/022016020 .

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CONTINUOUS GLOBAL POSITIONING SYSTEM
LOMP STATION TRENDS
LAND SUBSIDENCE

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

WMA FIGURE 6-6

6.1.6 Interconnected Surface Water and Groundwater Dependent Ecosystems

The SGMA sustainability indicator "depletion of interconnected surface water," is related to the effects of groundwater pumping on surface water flows. Under the SGMA statute, groundwater is water in the identified groundwater aquifers, "but does not include water that flows in known and definite channels"[7] such as the underflows of the Santa Ynez River through its alluvial sediments. The SWRCB, under Order WR 2019-0148 and earlier orders and decisions, regulates all flows of the Santa Ynez River. This regulation by the SWRCB extends to and includes the subsurface flows through the alluvial channel.

The groundwater level hydrographs presented in WMA Appendixes A and B further address the potential depletion of interconnected surface water. As stated in the 2022 WMA GSP (Section 3b.2-6), groundwater elevations that would drop to below ten feet below 2020 groundwater elevations in two out of the three representative monitoring wells in the Upper Aquifer for two consecutive non-drought[8] years would indicate significant and undesirable results for interconnected surface water and groundwater-dependent ecosystems. Similarly, the measurable objective and interim milestone (2022 GSP, Sections 3b.4-6 and 3b.5-6) established for the depletion of interconnected surface water are groundwater elevations equal to five feet below the channel thalweg of the Santa Ynez River. **WMA Table 6-3** summarizes the groundwater elevations at the three wells used to measure potential impacts on surface water. This table shows that all wells, but one, had water levels above the minimum threshold during WY 2025.

In WY 2025, all three representative monitoring wells were above their respective Measurable Objectives for spring water level measurements. Well 7N/34W-35K9's water level, the most upstream well, did fall below the Minimum Threshold for fall 2025, but the other monitoring wells remained at or above the minimum threshold and Measurable Objectives in the fall 2025.

7 CWC Section 10721 (g) "Groundwater" means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

8 For this purpose, a year is a drought if it is two or more consecutive years that are classified as Dry or Critically Dry (see Chapter 2 for year classifications). All other year types and combination of year types will be defined as non-drought years for the purpose of defining undesirable results under a groundwater sustainability plan.

WMA Table 6-3
Groundwater Elevations for Interconnected Surface Water (feet in NAVD88)

Name	ID	Measuring Point	Reference Values		Water Year 2024		Water Year 2025	
			Measurable Objective	Minimum Threshold	Spring	Fall	Spring	Fall
7N/35W-21G2	39	23	4	0	7	8	7	6
7N/34W-29F2	167	65.39	41	31	45	51	49	41
7N/34W-35K9	32	106.9	77	68	80	82	81	66

NAVD88 = North American Vertical Datum of 1988.
The Measurable Objective is 5 feet below the channel thalweg.
The Minimum Threshold is 10 feet below the 2020 groundwater level or Mean Sea Level.
The Minimum Threshold for 7N/34W-35K9 was corrected based on 2020 water levels and corrected datum.

On behalf of the US Bureau of Reclamation, the Cachuma Operation and Maintenance Board (COMB) Fisheries Division monitors the migration of the Southern California Steelhead/rainbow trout (*O. mykiss*) in the Santa Ynez River from Lake Cachuma to the Pacific Ocean. The COMB publishes the report concurrently or after this annual report,[9] and therefore conclusions from that report about WY 2025[10] are unavailable before the SGMA annual reporting deadline.

The most recent COMB report was on WY 2024 (COMB, 2025). Due to "high flows throughout the migration season" during WY 2024, no trapping was conducted at any traps along the Lower Santa Ynez River (LSYR) Mainstem Trap. The "Cadwell" and "Cargasacchi" properties are within the WMA boundaries. In August 2024, "divers confirmed O. mykiss in each sub-reach where visibility allowed observation, but in relatively low numbers compared to the management reaches located further upstream. No O. Mykiss less than 6 inches were observed, suggesting that successful spawning was unlikely in the lower reach of the LSYR Mainstem. Many of the lower portions of the LSYR mainstem had compromised visibility so accurate fish counts for those reaches could not be obtained."

9 The COMB Fisheries Division report on WY 2024 was published on March 4, 2025.
10 The COMB Water Year is the same as SGMA, running October 1st to September 30th.

6.2 IMPLEMENTATION OF PROJECT AND MANAGEMENT ACTIONS SINCE PREVIOUS ANNUAL REPORT

The WMA GSA continues to work on SGMA compliance and progress on projects and management actions identified in the GSP to improve sustainability (**WMA Table 6-4**). During WY 2025, the WMA made progress on thirteen (13) tasks in WMA Table 6-4.

WMA Table 6-4
Summary of WMA GSP Implementation Projects – WY 2025

Project Category	Task	Occurrence	Water Year 2025 Status
Completing Ongoing Field Investigations	Surveying Representative Wells	One Time	In Progress
	SkyTEM Airborne Geophysics	One Time	**Completed**
Monitoring Network Gaps	Video Logging and Sounding Wells	One Time	In Progress
	Groundwater Level Monitoring Wells	One Time	In Progress
	WQ Seawater Monitoring	Annual	In Progress
	SW Gage Installation (planning)	One Time	In Progress
Projects and Management Actions	Water Conservation	Annual	In Progress
	Groundwater Extraction Fee Study	5 Year	**Completed**
	Feasibility Study for Recycled Water Project	One Time	In Progress
	Feasibility Study for Bioswale Stormwater Retention[A]	One Time	In Progress
	Ban on Water Softeners	One Time	On Hold
Improved Data Collection for Management	Update Well Registration Program	One Time	In Progress
	Well Metering Requirement	One Time	In Progress
Data Management	Data Updates	Annual	In Progress
Reporting and Plan Updates	SMGA WY Annual Reports	Annual	In Progress
	SGMA Five-Year Plan Assessment	5 Year	In Progress

[A] Bioswale Stormwater Retention has been integrated into a broader Stormwater Runoff Capture and Recharge project.

6.2.1 Governance Update

The member agencies ratified the Joint Exercise of Powers Agreement (JPA) forming the GSA at the beginning of WY 2024. The WMA GSA's Board of Directors met eight times in WY 2025, including two joint meetings with the other management areas in the SYRVGB. In WY 2025, the Board received updates on various staffing and administrative matters, including funding work on the projects in WMA Table 6-4 and the process of adopting the Groundwater Extraction Fee.

6.2.2 Public Workshops

In September 2025, the WMA, CMA, and EMA held public workshops as part of DWR's required Action Plan for Management of All Well Production in Santa Ynez River Alluvium Area, Above the Lompoc Narrows. The GSAs held four community workshops across the basin. Three of the workshops were held on September 12, 2025, and an additional workshop was held on September 19, 2025. Participants were able to join all meetings with remote access. The GSAs sent a public notice to invite participants. The workshop was a part of the GSAs' work to increase public awareness on reporting requirements and groundwater versus surface water designation around the Santa Ynez River alluvium, in accordance with the provisions of the Action Plan. The workshop presentation can be found on https://www.santaynezwater.org/public-workshops-action-plan.

6.2.3 Grants Received

In WY2024, the WMA received a portion of a $5.5M grant from the California Department of Water Resources ("DWR") to benefit the Santa Ynez River Valley Basin GSAs and specific GSP Implementation projects. The grant agreement is between DWR and the SYRWCD on behalf of the management areas in the Basin. A Subgrant Agreement between the SYRWCD and the GSAs was executed to facilitate grant implementation and allow reimbursement to the WMA GSA. There are eight components of the grant work that began in WY2024, including:

1. Grant administration
2. Well Extraction Measurement and Reporting
3. Rate Study
4. Annual Report and Periodic GSP Evaluation
5. Monitoring Improvements
6. Storm Water Capture
7. Water Use Efficiency
8. Recycled Water Feasibility Study

The grant components are the Group 1 Projects and Management Actions identified in the WMA 2022 GSP. In WY 2024, the WMA chose a consultant, EKI Environment & Water, Inc. (EKI), to implement many of the grant components, including components 2 and 5-8 above. The focus of the WMA GSA in WY 2025 was the Groundwater Extraction Fee Study, Well Registration and Extraction Measurement Program, and Periodic Evaluation.

The progress on these activities is described below.

6.2.4 Groundwater Extraction Fee Study

The WMA selected Raftelis to conduct a rate study to study mechanisms to fund the administration of the GSA including its implementation of the GSP. The work for this study is partially funded by Component 3 of the Prop 68 grant. The Western Management Area Groundwater Sustainability Fee Study Report was published on April 22, 2025. The WMA adopted the fee at the Public Hearing on June 25, 2025. The WMA passed two Resolutions that created the process for adoption: Resolution No. 2025-001 and Resolution No. 2025-002. The first resolution adopted the fee. The second resolution directs the fee to be collected through the County of Santa Barbara. The fee will start in the 2025-26 fiscal year. The Groundwater Extraction Fee is primarily intended as a regular source of revenue for the GSAs to use in maintenance and new projects. As a fee for groundwater extraction , it is also intended to encourage conservation and reduce groundwater extraction. The WMA GSA will continue to work to ensure an appropriate implementation.

6.2.5 Update Well Registration and Extraction Measurement Program

As part of implementing Component 2 of the Prop 68 Grant, Well Extraction Measurement and Reporting, work was continued in WY 2025 on the pilot tests to evaluate several well extraction measurement methods. Landowner outreach was conducted to identify WMA sites that meet the study's criteria. Land access agreements and Notices of Exemptions (NOEs) were drafted for all of the landowners for the study. EKI worked with AgMonitor to implement projects that measure or estimate extraction through meter and power consumption, and LandIQ to install ET measurement stations to measure plant water consumption.

In WY 2025, the different well extraction methods (meter, power consumption, and crop consumptive use) were studied through monthly values measured daily to bi-weekly. Mechanical flow meters and meter calibrations were completed. Photo documentation of the ET stations and proof of equipment purchases have been completed. Data collection and assessment have continued, and the pilot tests are to be completed by December 2026. EKI is actively working on the technical memorandum, which will summarize pilot test site data, site characterization, and data evaluation. The findings of this project will inform the development of the Implementing Rules and Regulations Document to provide specific guidance to well owners on well registration, measurement method criteria, and reporting requirements.

The SYRWCD has concurrently worked to update its water production and well registration reporting system. The new system is expected to be operational in June/July 2026. This update is intended to streamline and ensure well registration and reporting.

6.2.6 Stormwater Runoff Capture and Recharge

The WMA GSA and member agencies (City of Lompoc) continued Proposition 68 Grant efforts and separate grant funding awarded to the City of Lompoc from the Guadalupe Lompoc Regional Climate Collaboratives Program (GLI) to increase recharge of stormwater runoff in the WMA. The funding supports a desktop screening study to prioritize potential rainfall runoff capture and infiltration sites, followed by geotechnical data collection and confirmation, 30% engineering design plans, and community outreach and engagement efforts. The study approach can serve as a model for all GSAs in the Basin.

In WY 2025, landowner outreach and a desktop screening were completed to identify potential rainfall capture and infiltration sites, and further pre-design field investigations were conducted, including geophysical surveys and CPT tests, at the identified sites to confirm site suitability. A total of four sites were identified for geotechnical investigation (Rucker Ponds [Mission Hills], Briar Creek Park [Lompoc], Westvale Park [Lompoc], and Barton Park [Lompoc]). Based on the geotechnical surveys, two sites were identified for 30% Design Plans: Rucker Ponds (Prop 68 funded site) and Barton Park (GLI funded site). A 30% conceptual project plan and preliminary project design plans are under development for the highest ranked sites (i.e., Rucker Ponds [Prop 68 funded site] and Barton Park [GLI funded site]). The project is planned to be completed by February 2027.

6.2.7 Recycled Water Feasibility Study

As part of implementing Component 8 of the Proposition 68 Grant, Recycled Water Feasibility Study, possible service areas for the use of recycled water will be analyzed to assess hydrologic effects on river flows and identify areas that maximize the benefit-to-cost ratio of using non-potable recycled water to replace groundwater pumped. The results of the analysis and the recommended project (including the costs, conceptual design, implementation plan, as applicable, and legal review and recommendations) will be summarized in the feasibility study report.

In WY 2025, the WMA GSA held an initial meeting on project alternatives for reusing a portion of the LRWRP wastewater effluent. The Recycled Water Feasibility Study is expected to be completed by Q4 2026.

6.2.8 Water Use Efficiency Study

Component 7 of the Proposition 68 Grant involves formulation of a basin-wide Water Use Efficiency Strategic Plan through assessment of current water efficiency activities in the Basin, planning, constructing, and implementing demonstration projects, and stakeholder outreach and engagement. In WY 2025, the WMA GSA completed technical memoranda summarizing updated land use datasets and water demand, and existing water efficiency activities in the Basin. The Water Use Efficiency Strategic Plan is expected to be completed by Q2 2026.

6.2.9 Monitoring Improvements

In WY 2025, improvements were implemented to improve water level monitoring in the data gap areas identified in the GSP. A new well site in the Santa Rita subarea was chosen, and drilling is expected to begin in WY2026. The Periodic Evaluation will evaluate the groundwater level network and any changes in the data gaps.

In WY 2025, seawater intrusion monitoring was continued by the WMA GSA after the USGS suspended its water quality monitoring of key representative monitoring wells for seawater intrusion identified in the 2022 GSP. The WMA GSA provided quarterly data as discussed in the sustainability indicator section.

Monitoring improvements were also made with streamflow gages at the downstream end of the management area, as identified in the 2022 GSP. A new stream gage location was identified near the estuary. Preliminary data is being reviewed and will become available in WY2026

Field verification of potential Groundwater Dependent Ecosystem (GDE) was conducted in WY 2025. A report to summarize the field assessment will become available in WY 2026.

6.2.10 Data Updates and Annual Reporting

The required water level, water quality, and water use data collection, processing, and Data Management System (DMS) maintenance was completed to support the preparation of the WY 2025 Annual Report and this WY 2025 Annual Report. The WMA allows public access to portions of the DMS at the following web address: https://sywater.info/. During WY 2025, the WMA published its fourth annual report for the Water Year 2024 (October 2023-September 2024) as a sub-report in the Joint Annual Report to DWR. The Joint Annual Report includes annual reports from each of the GSAs (WMA, CMA and EMA) under a single cover, and was submitted on March 28, 2025, before the April 1 deadline.[11] This WY 2025 report is the second Joint Annual Report.

[11] CWC Section 10728 "On the April 1 following the adoption of a groundwater sustainability plan and annually thereafter, a groundwater sustainability agency shall submit a report to the department [..]"

6.2.11 5-Year Periodic Evaluation and Potential Plan Amendment

Under SGMA and GSP Regulations, a Periodic Evaluation of a Basin's GSP is due to the California Department of Water Resources (DWR) at least every five years after initial GSP submission for each basin with an approved GSP or any time the GSP is amended. The WMA GSA's initial GSP was adopted by the WMA GSA Board and submitted in January 2022. A periodic evaluation is due to DWR on or before January 18, 2027. The WMA GSA contracted Stetson Engineers to complete the Periodic Evaluation. Proposition 68 funding for the Periodic Evaluation, which was scheduled to cease in early 2026 received a funding extension from DWR on September 3, 2025, to complete the Periodic Evaluation by December 31, 2026. The GSAs requested an extension of funding, primarily due to the approval of the GSPs in January 2024. With the funding time extended, the GSAs will be able to provide a comprehensive report through WY 2025.

WMA CHAPTER 7: REFERENCES

COMB (Cachuma Operation and Maintenance Board). 2025. WY2024 Annual Monitoring Summary for The Biological Opinion For The Operation And Maintenance Of The Cachuma Project On The Santa Ynez River In Santa Barbara County, California. Cachuma Operation and Maintenance Board Fisheries Division. SYWATER 576.

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DWR. 2021. Sustainable Groundwater Management Act Water Year Type Dataset Development Report. SYWATER 473.

SWRCB (State Water Resources Control Board). 1999. In the Matter of Application 29664, Garrapata Water Company: Extraction of Water by Garrapata Water Company from the Alluvium of the Valley of Garrapata Creek in Monterey County, California. 36 pg. SYWATER 508.

SWRCB. 2019. Order WR 2019-0148. In the Matter of Permits 11308 and 11310 (Applications 11331 and 11332) held by the United States Bureau of Reclamation for the Cachuma Project on the Santa Ynez River. State Water Resources Control Board, State of California. SYWATER 218.

SWRCB. 2018. Order Approving Change in Purpose of Use and Place of Use. In the Matter of Wastewater Petition WW0101. SYWATER 474.

Stetson (Stetson Engineers). 2022. Groundwater Sustainability Plan. Santa Ynez River Valley Groundwater Basin Western Management Area. Prepared for Western Management Area Groundwater Sustainability Agency. 1,413 pg. SYWATER 454.

Stetson. 2023. Santa Ynez River Alluvium Underflow and Subterranean Stream Report Prepared in Response to the April 14, 2023, Comments by State Water Resources Control Board Staff regarding Groundwater Sustainability Plans for the Santa Ynez River Valley Groundwater Basin. 75 pg. SYWATER 521.

Towill (2023) InSAR Data Accuracy for California Groundwater basins CGPS Data Comparative Analysis January 2015 to October 2022. Final Report. Towill, Inc. California Department of Water Resources. Contract 4600013876 TO#1. 131 pg. SYWATER 528.

Water Systems Consulting Inc. (WCI). 2021. 2020 Urban Water Management Plan. Final. City of Lompoc. 181 pg. SYWATER 308.

CENTRAL MANAGEMENT AREA

Santa Ynez River Valley Groundwater Basin

Central Management Area

Groundwater Sustainability Agency

Water Year 2025 (October 2024-September 2025)

Board of Directors:

City of Buellton

John Sanchez, Director
Hudson Hornick, Alternate Director

Santa Ynez River Water Conservation District

Robert Dunlap, Director
J. Brett Marymee, Alternate Director

Santa Barbara County Water Agency (non-voting)

Joan Hartmann, Director
Meighan Dietenhofer, Alternate Director

Agricultural Directors (non-voting)

Michael Anderson, Director
Sara Rotman, Alternate Director

Officers:

John Sanchez, Chair
Larry Lahr*, Chair*

Robert Dunlap, Vice Chair

Amber Thompson, Secretary

William J. Buelow, Treasurer

William J. Buelow, Plan Manager

Steve Torigiani, Legal Counsel

GSA Member Agency Staff Representatives:

Matthew Young
Santa Barbara County Water Agency

Rose Hess, PE
City of Buellton

William J. Buelow, PG
Santa Ynez River Water Conservation District

Updated January 8, 2026.

Italicized and gray indicates former Board members or staff representatives.

CMA CHAPTER 1: INTRODUCTION

The Santa Ynez River Valley Groundwater Basin Central Management Area (CMA) Groundwater Sustainability Agency (GSA) is the exclusive agency responsible for complying with Sustainable Groundwater Management Act (SGMA)[1] requirements in the central portion of the Santa Ynez River Valley Groundwater Basin (SYRVGB).

The CMA covers the area known as the Buellton Uplands, and the immediate vicinity. The CMA is bordered on the west by the Western Management Area (WMA), on the north by the Purisima Hills, on the east by the Eastern Management Area (EMA), and the south by hills along the Santa Ynez River floodplain. **CMA Figure 1-1** shows the extents of the CMA[2] and the areas within the jurisdictional boundaries of the constituent public member agencies of the CMA GSA: the City of Buellton, the Santa Ynez River Water Conservation District, and the Santa Barbara County Water Agency.

The CMA is a diverse area divided into two subareas[3] based on more homogeneous hydrogeologic and topographic characteristics. The two subareas are the Buellton Upland and the Santa Ynez River Alluvium. **CMA Figure 1-2** shows the locations and extents of the subareas and **CMA Table 1-1** summarizes the sizes of each subarea.

CMA Table 1-1
Summary of CMA Subareas by Area

CMA Subarea	Acres [A]	Square Miles
Buellton Upland	14,220	22.2
Santa Ynez River Alluvium	6,800	10.6
Total	**21,020**	**32.8**

[A] Rounded to the nearest ten acres.

Note: The Buellton Aquifer includes all the Buellton Upland and extends underneath a part of the Santa Ynez River Alluvium.

1 CWC Section 10720 et seq. and 23 CCR § 350 et seq.
2 23 CCR § 356.2(a) "[…] location map depicting the basin covered by the report."
3 Subareas are like and based on the Santa Ynez River Water Conservation District Annual Report subareas, also used for managing pumping in much of the WMA and a portion of the EMA. Extents were adjusted to cover the entire Bulletin 118 Interim Update 2016 (DWR 2016a) basin boundary.

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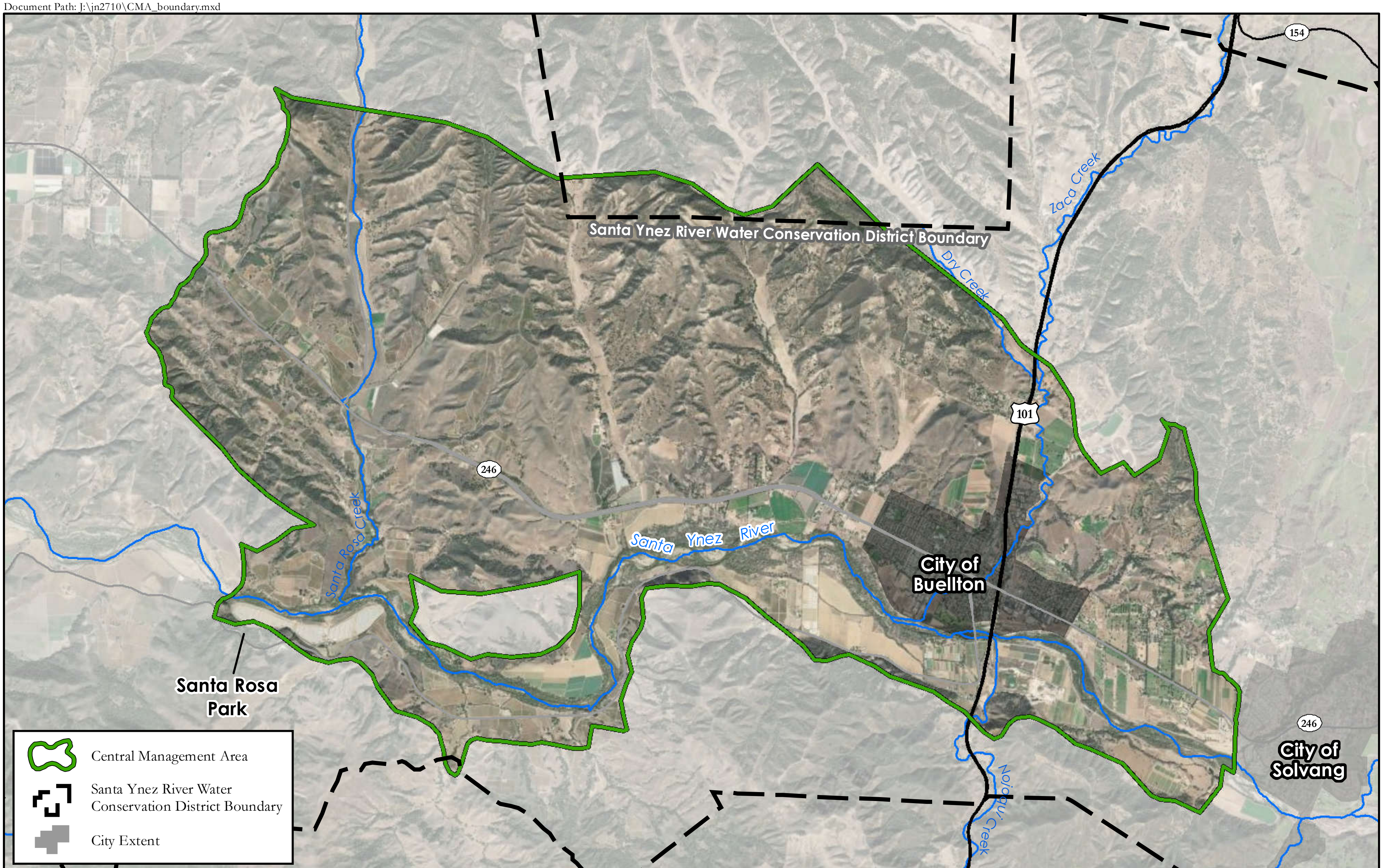

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CMA

Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

CENTRAL MANAGEMENT AREA BOUNDARY

SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN
GROUNDWATER SUSTAINABILITY AGENCY

0 0.5 1 Miles

N

CMA FIGURE 1-1

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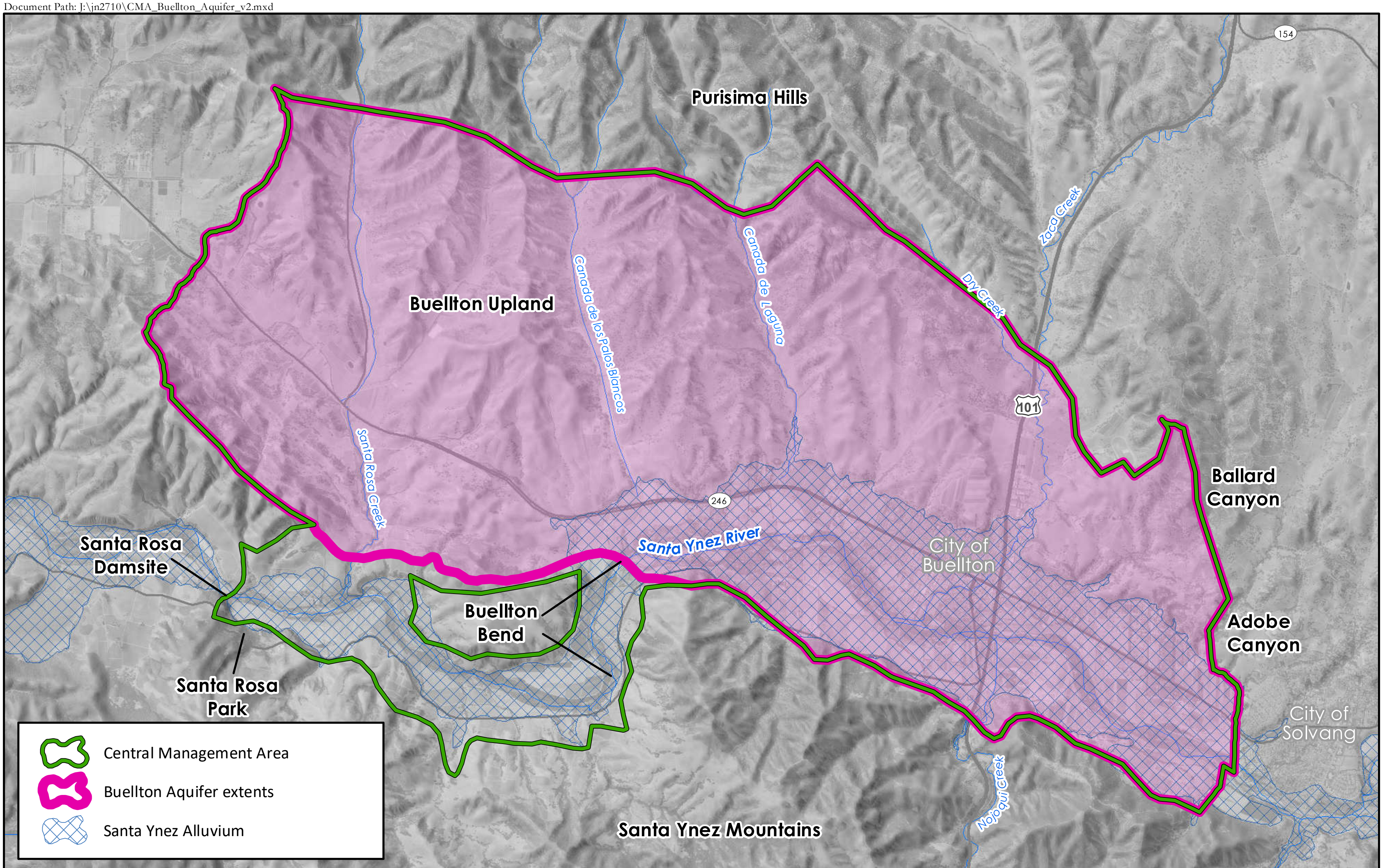

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Central Management Area
Groundwater Sustainability Agency

EXTENTS OF THE BUELLTON AQUIFER
CENTRAL MANAGEMENT AREA

0 0.5 1 Miles

N

CMA FIGURE 1-2

Surface water flows through the CMA and drains to the Pacific Ocean through the Santa Ynez River and its tributaries. The State Water Resources Control Board (SWRCB) is involved in the regulation of Santa Ynez River water, including both surface water and underflow of the Santa Ynez River and surface water rights. Upstream reservoirs are operated by the United States Bureau of Reclamation (USBR) which physically impounds and otherwise affects the flows of the Santa Ynez River. USBR conducts releases to meet downstream surface water rights, replenish the downstream alluvium and groundwater basin, and for the benefit of fish. The SGMA statute does not authorize the CMA GSA to determine or alter the surface or ground water rights of the Santa Ynez River.[4] The SWRCB Orders for the Cachuma Project include coordination of releases from the Cachuma Reservoir for underflow alluvial storage and replenishment, which includes the Santa Ynez Alluvium upstream of the Lompoc Narrows.

The CMA has one aquifer, the "Buellton Aquifer." The Buellton Aquifer consists of the Paso Robles and Careaga Sand Formations. These two formations are in a wide geologic syncline fold that extends below the underflow of the Santa Ynez River and the Santa Ynez River Alluvium. **CMA Figure 1-3** shows where this aquifer is located within the extent of the CMA.

4 CWC Section 10720.5 (b) "Nothing in this part, or in any groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights."

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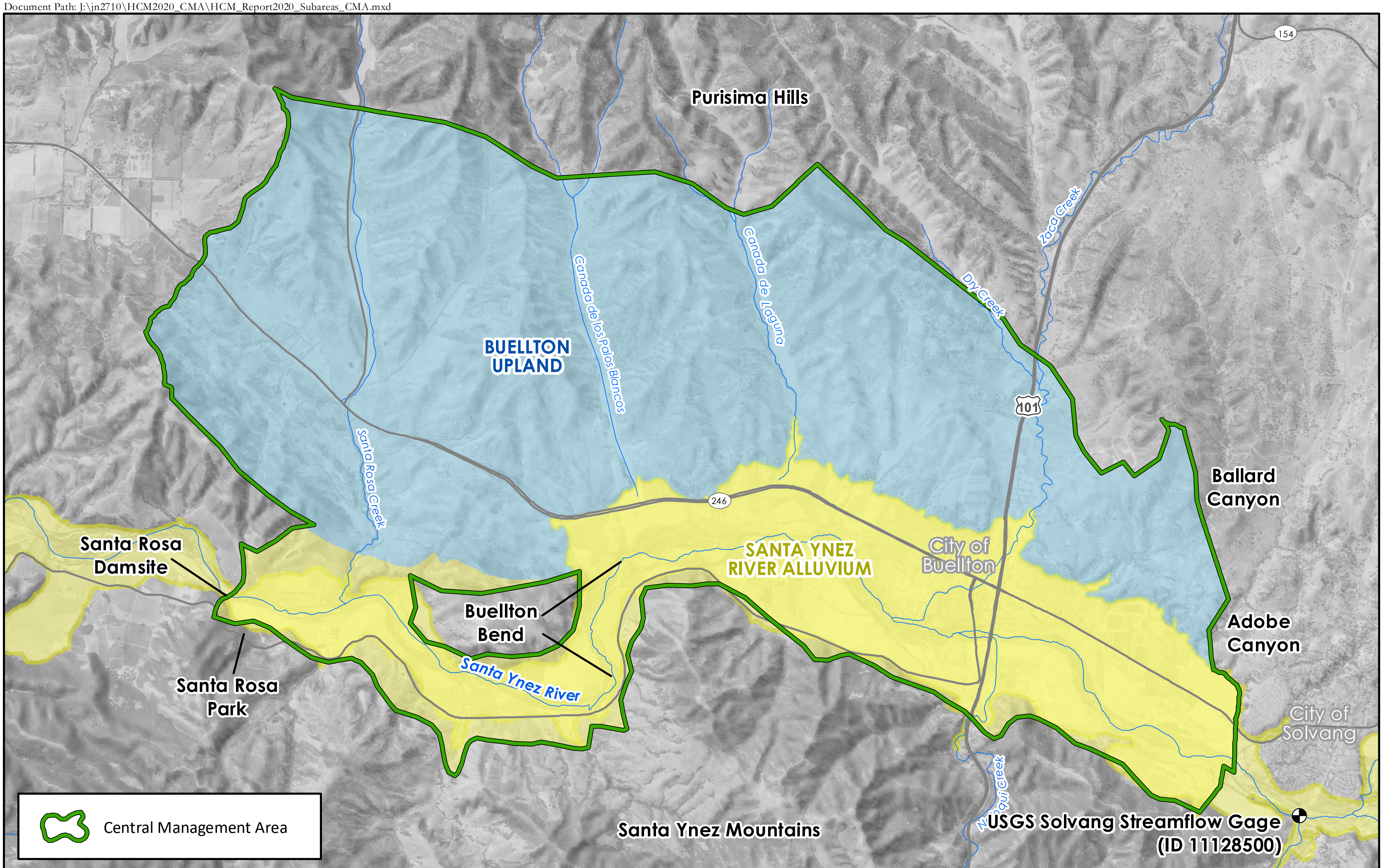

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CMA

Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

SUBAREAS
CENTRAL MANAGEMENT AREA

0 0.5 1 Miles

Sources:
USGS Nationa l Elevation Dataset, 2002
NAIP (2018)

N

CMA FIGURE 1-3

In addition to the aquifer, the Santa Ynez River in part flows through a "known and definite channel"[5] of high permeability river sediments under and adjacent to the Santa Ynez River. These sediments fill a river channel historically cut into relatively impermeable older geological units. In most places in the CMA, this older geology consists of the silts and clays of the Monterey Formation. In the western portions of the CMA the channel over the silts and clays is physically disconnected from the groundwater aquifers (Stetson 2022). In the eastern part of the CMA, a small stretch of the alluvium in the channel partially overlies the groundwater aquifer. However, subsurface channel remains present and has relatively impermeable bed and banks. Conditions throughout are consistent with the SWRCB's tests for water that flows in known and definite channels including subterranean stream underflow (Stetson 2023),[6] which are not groundwater as defined by SGMA. Rapid response of water levels in the shallow alluvium to Santa Ynez surface water releases is characteristic of wells located within the underflow of the Santa Ynez River (Stetson 2023). Releases of surface water for the downstream users under SWRCB Order WR 2019-0148 are conveyed through the surface flow and underflow of the Santa Ynez River.

5 CWC Section 10721 (g) "Groundwater" means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

6 See the 1999 State Water Board's Decision 1639 (In the Matter of Application 29664 of Garrapata Water Company) and subsequent rulings such as North Gualala Water Company v. State Water Resources Control Board (2006).

CMA CHAPTER 2: BASIN CONDITIONS

The water year type is a classification of how wet or dry basin conditions are due to weather during the water year. This is a potential cause of changes to groundwater conditions, as measured through groundwater levels, storage, and water quality. This chapter updates the "Hydrologic Characteristics" subsection of the Hydrogeologic Conceptual Model section of the GSP through the end of WY 2025.

CMA Table 2-1 summarizes the precipitation and the water year type for the recent years of WY 2015 through WY 2025.

CMA Table 2-1
Annual Precipitation and Water Year Classification for CMA for Recent Years

Water Year	Buellton Fire Station		Hydrologic Year Type Classification USGS Gage 11132500 (Salsipuedes Creek)	
	Precipitation (in/year)	% of Average [A]	Percentile Rank	Water Year Type Classification
2015	7.01	42%	0%	Critically Dry
2016	10.68	65%	2%	Critically Dry
2017	20.36	123%	71%	Above Normal
2018	7.92	48%	5%	Critically Dry
2019	19.22	116%	77%	Above Normal
2020	15.44	93%	33%	Dry
2021	8.56	52%	48%	Below Normal
2022	9.51	57%	22%	Dry
2023	29.15	176%	94%	Wet
2024	21.80	132%	90%	Wet
2025	7.63	46%	26%	Dry

Years are color-coded as follows: yellow indicates dry and critically dry years (below 40 percentile); blue indicates wet years (above 80 percentile); unshaded indicates years that were either in the below normal or above normal years (40 to 80 percentile). Percentages and percentiles are calculated from the respective periods of record.
[A] The average is calculated as the mean of the period of record (WY1955-WY 2025).
Notes: CMA = Central Management Area; USGS = U.S. Geological Survey; SWRCB = State Water Resources Control Board; in/year = inches per year.
Source: Precipitation from Santa Barbara County - Flood Control District station #233 - Buellton Fire Station

2.1 PRECIPITATION

Within the CMA, direct annual average precipitation ranges from 16.6 inches per year in portions of Santa Rosa Creek up to 20.4 inches per year along the north side of the Santa Ynez River. **CMA Figure 2-1** shows the average precipitation within the CMA and adjacent watershed.[1] Orthographic lift effects are the primary driver of precipitation within the CMA, and portions of the CMA at lower elevations generally receive less direct precipitation. **CMA Table 2-2**, below, summarizes the annual average direct precipitation for the subareas of the CMA.

CMA Table 2-2
Average Annual (1991-2020) Precipitation by CMA Subarea

CMA Subarea	Size (Acres) [A]	Average Annual Precipitation Per Subarea (Average 1991-2020) inches per year		
		Average	Average Annual Minimum	Average Annual Maximum
Buellton Upland	14,220	17.5	16.6	18.5
Santa Ynez River Alluvium	6,800	18.5	17.3	20.4

[A] Rounded to the nearest ten acres.
Source: Derived from PRISM Climate Group (2021), Average Annual Precipitation 1991-2020.

The precipitation station at Buellton Fire Station is the primary gauge for precipitation within the CMA. Total precipitation during WY 2025 was 7.63 inches. **CMA Figure 2-2** presents annual precipitation data from this station for WY 1955 to the present (WY 2025) and the cumulative departure from the mean (CDM). The CDM trends provide a representation of wet and dry periods within the overall period of record. On a CDM graph, a wet period is indicated with an upward trend over the years. Conversely, a downward trend on the graph indicates a dry period.

1 Average conditions here are updated to include newly released data for the period 1991-2020, compared to the GSP (including GSP Figure 2a.3-2) which used available data for the period 1981-2010.

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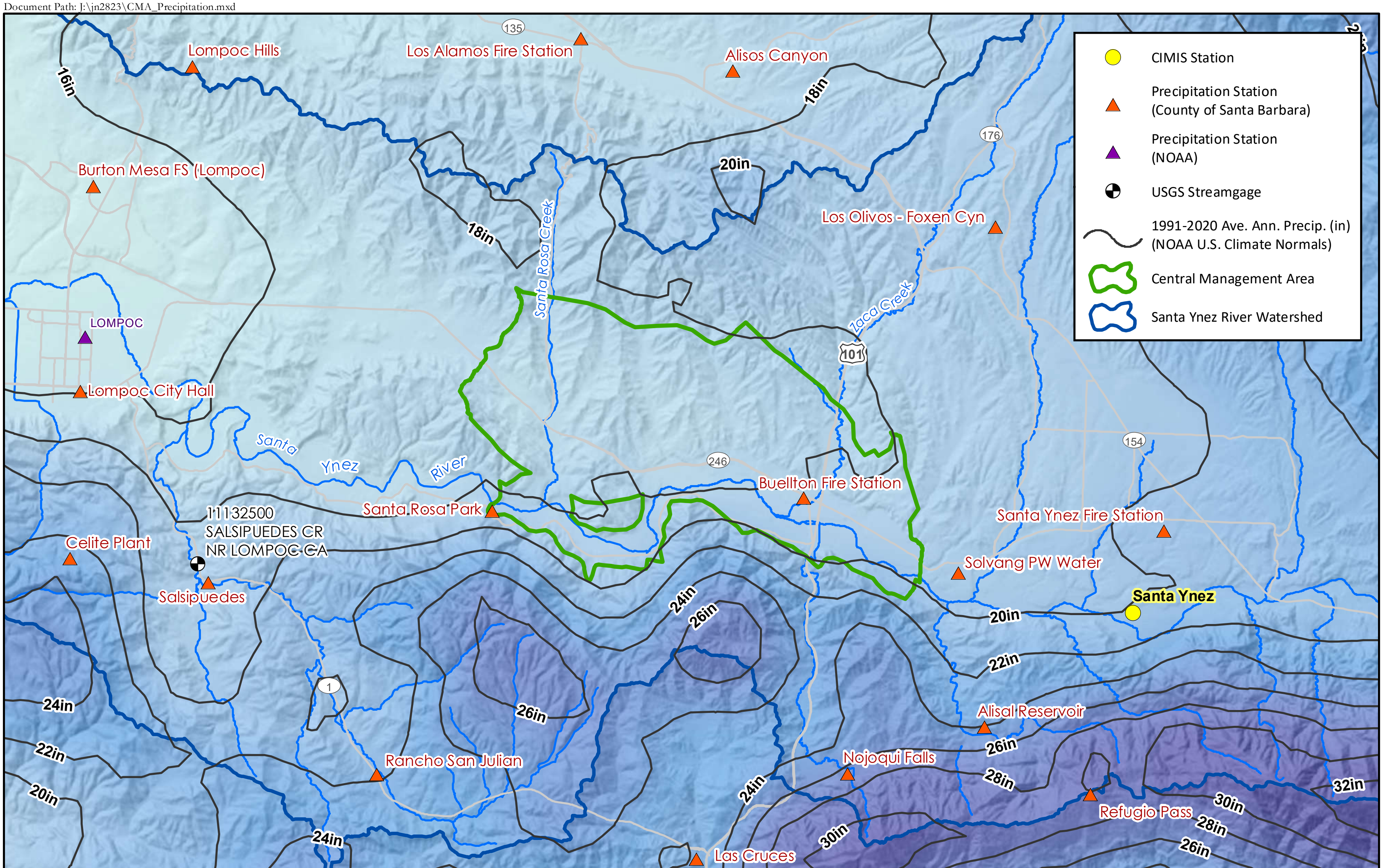

PRECIPITATION STATIONS AND ISOHYETALS
1991-2020 CLIMATE NORMALS
CENTRAL MANAGEMENT AREA

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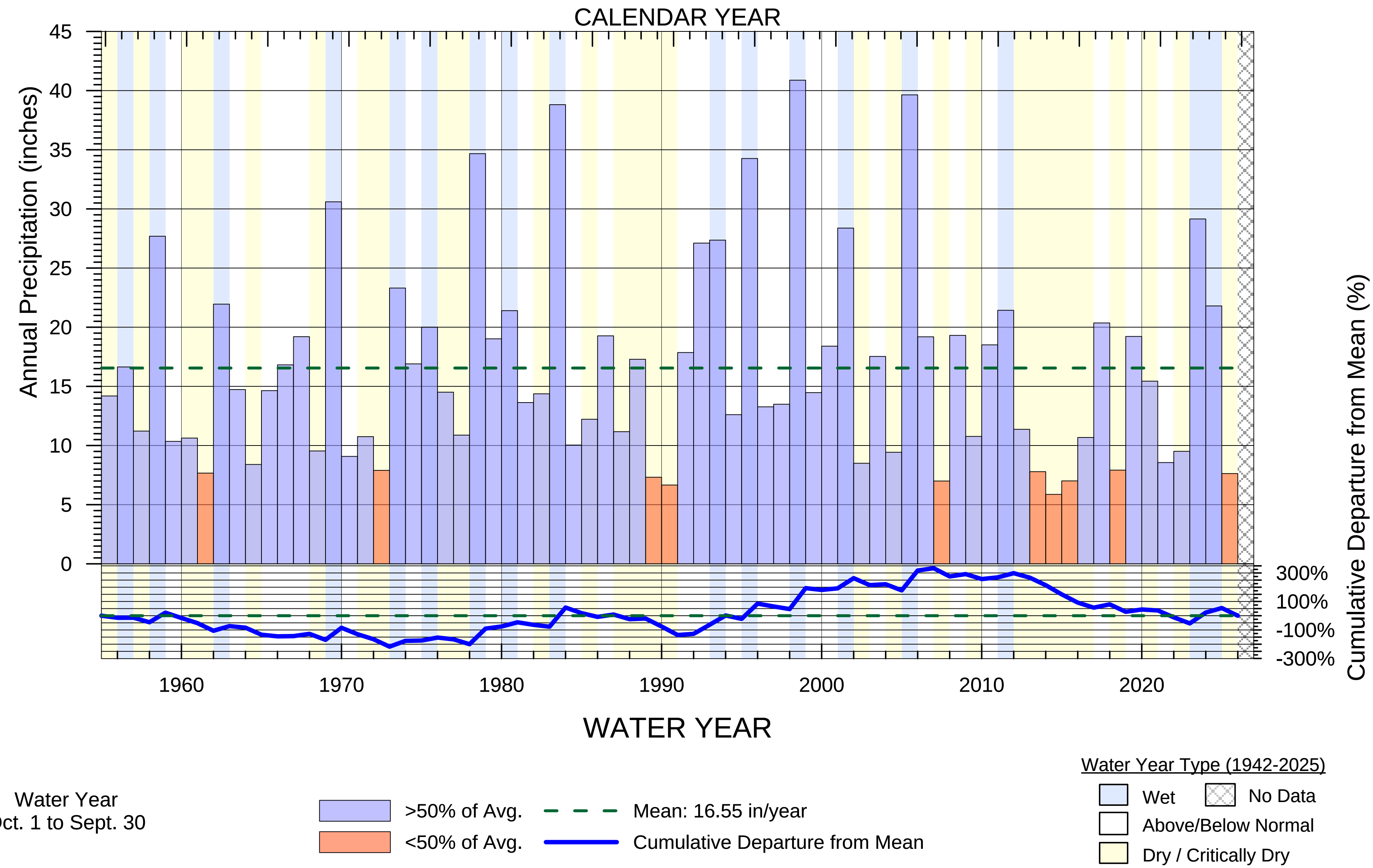
CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

0 1.5 3 Miles

N

Source Imagery:
ESRI World Imagery (2018 Maxar)
NOAA (2020), WRCC (2020)

CMA FIGURE 2-1



BUELLTON FIRE STATION PRECIPITATION AND CUMULATIVE DEPARTURE FROM MEAN WY 1955 - 2025

Source: Santa Barbara County (2025)
Preciptiation Gage #233

CMA FIGURE 2-2

F:\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 Precipitation CDM Graphs\Fig 2-02 CMA_Buellton_Fire_Station_Precip_CDM WY2025.gpj 12/4/2025 J. Baca

2.2 CLASSIFICATION OF WATER YEAR 2025

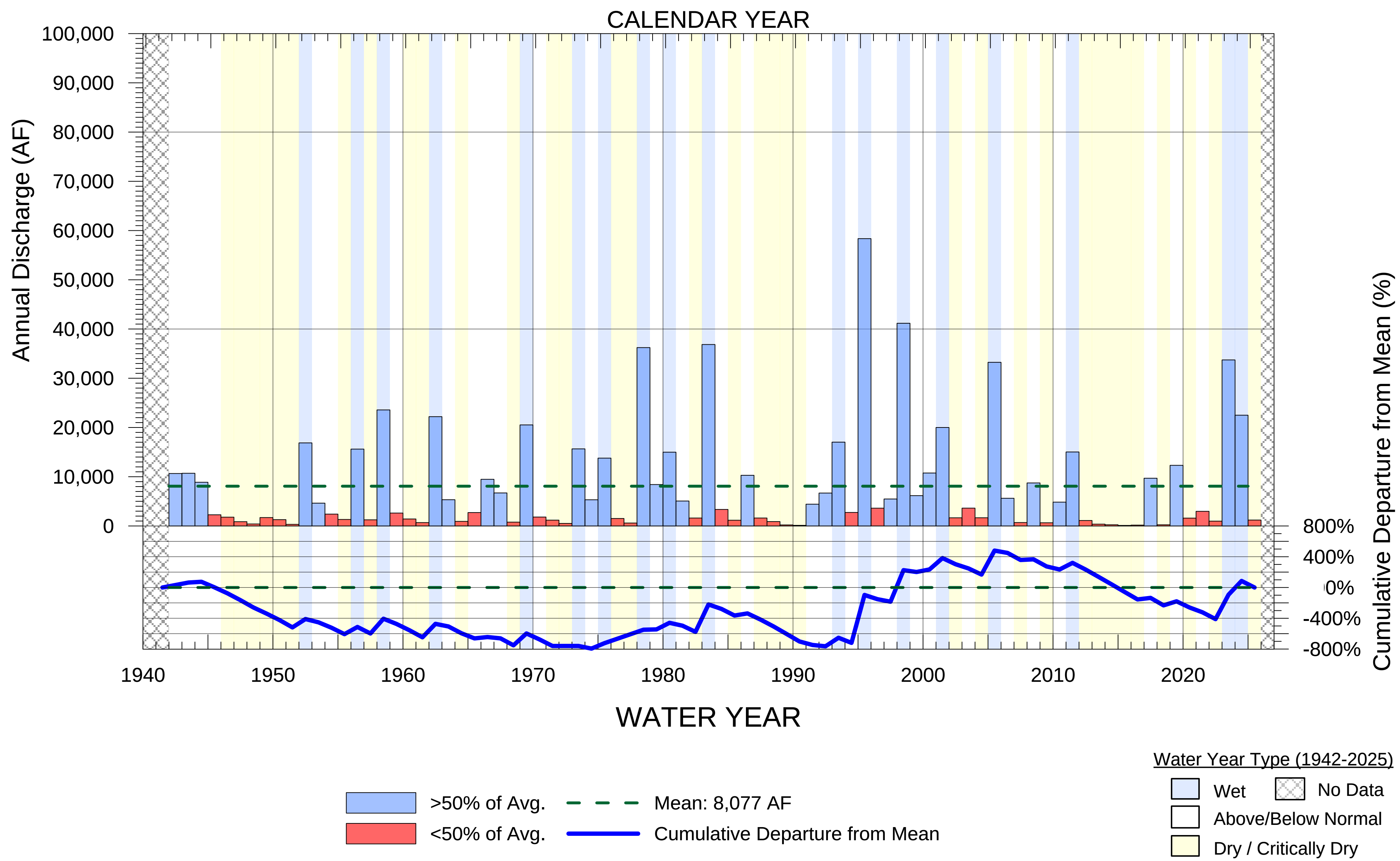
The CMA classified WY 2025 as a dry year based on the Water Year Type.[2] Conditions for recent years, WY 2015 through WY 2025, are summarized in CMA Table 2-1. The basin was experiencing a historic drought before WY 2023.

Water Year Type is a generalized characterization of the amount of water that is available in a year. It is a summary of general precipitation and streamflow conditions during the year. Salsipuedes Creek flows measured at the USGS stream gage (U.S. Geological Survey [USGS] gage 11132500) are used as the monitoring location for calculating water year types. The relative ranking in the period of record is used to classify the hydrologic year types into one of five categories: critically dry (bottom 20th percentile), dry (20th to 40th percentile), below normal (40th to 60th percentile), above normal (60th to 80th percentile), and wet (80th to 100th percentile).

The Salsipuedes Creek USGS streamflow gage is located on Salsipuedes Creek just below the confluence with El Jaro Creek and has a drainage area of 47.1 square miles (shown in CMA Figure 2-1). The 84-year dataset for the Salsipuedes Creek stream gage spans 1942 through 2025 (in **CMA Figure 2-3**) and represents unimpeded runoff due to the absence of upstream water diversions and storage reservoirs. The gage type, proximity, long history, and development of the Salsipuedes Creek are all contributing factors for selecting this as the indicator of CMA water year type.

Annual Salsipuedes Creek flow data ordered by the amount of flow measured each year is shown in **CMA Figure 2-4.** WY 2025 is indicated in CMA Figure 2-4 which shows that WY 2025 was a dry year compared to the period of record. The background colors on most time series figures in this report are derived from CMA Figure 2-4 and likewise indicate the relative year type.

2 All three Santa Ynez management areas classified WY 2024 as a wet year. WMA and CMA use the same method based on measured streamflow, described here. EMA uses a different method based on precipitation, described by DWR (2021).



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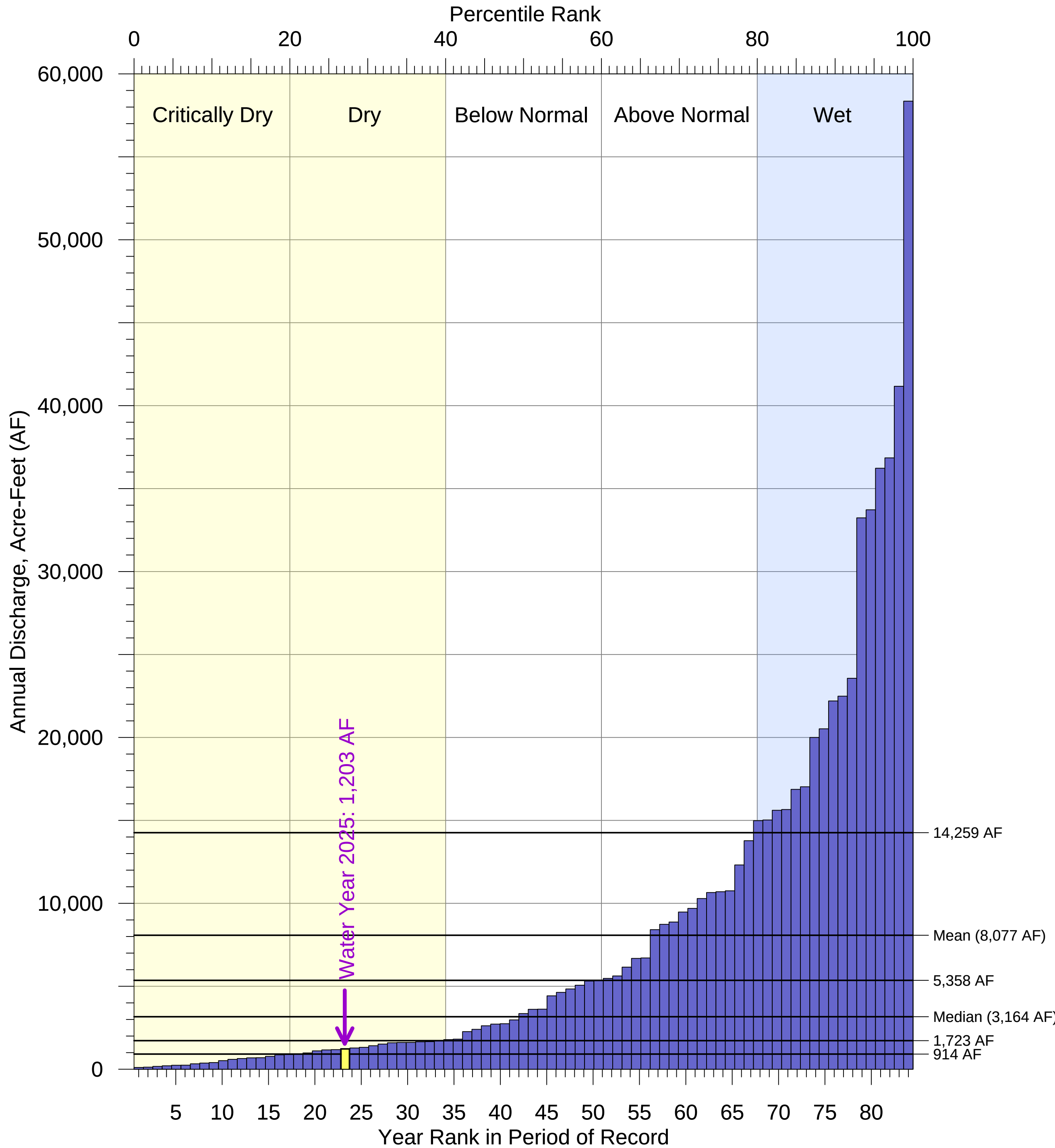
11132500 SALSIPUEDES CREEK NEAR LOMPOC
CUMULATIVE DEPARTURE FROM MEAN AND
PERIOD OF RECORD (WY 1942 - 2025)

Sources: USGS (2025) streamflow data

CMA FIGURE 2-3

SANTA YNEZ RIVER ANNUAL FLOWS
11132500 SALSIPUEDES CREEK NEAR LOMPOC
PERIOD OF RECORD (WY 1942 - 2025)



Data Source: USGS (2025) streamflow data

WATER YEAR TYPE
SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN

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CMA CHAPTER 3: GROUNDWATER HYDROGRAPHS AND CONTOURS

Groundwater levels are a key indicator of sustainability in the basin. Groundwater levels directly impact the beneficial use of the Basin and correlate with or impact most of the groundwater sustainability indicators. The SGMA regulations require that GSP Annual Reports contain "...*groundwater elevation data from monitoring wells identified in the monitoring network [which] shall be analyzed and displayed*."[1]

The CMA assesses the following three SGMA sustainability indicators using groundwater level data:


Chronic lowering of groundwater levels


Reduction of groundwater storage (see Chapter 5)


Depletion of interconnected surface water

1 23 CCR § 356.2(b)(1)

3.1 GROUNDWATER ELEVATION DATA AND HYDROGRAPHS

CMA Figure 3-1 is a map of the locations of groundwater monitoring network wells. There are several wells included in the CMA monitoring network. Two appendices contain the groundwater level hydrographs[2]: **CMA Appendix A** which is entitled groundwater level hydrographs for assessing chronic decline in groundwater levels, and **CMA Appendix B** which is entitled groundwater level hydrographs for assessing surface water depletion.

Several agencies collect groundwater level data in the CMA. In the CMA these agencies include Santa Barbara County Water Agency, the City of Buellton, and USBR.

The SGMA water year runs from October 1st through September 30th. Seasonal high data is collected from March and April 2025. Seasonal low data is collected in October 2025. While this fall collection of data is technically collected in WY 2026, it is less than a month after the end of the water year. The CMA GSA considers this fall data as representative of the seasonal low conditions for WY 2025.

3.2 GROUNDWATER ELEVATION CONTOUR MAPS

This GSP Annual Report must contain "*...elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.*"[3] according to the SGMA regulations. This Annual Report includes Fall 2024 (**CMA Figure 3-2**), Spring 2025 (**CMA Figure 3-3**), and Fall 2025 **(CMA Figure 3-4**) contour maps. These correspond to the seasonal high and seasonal low groundwater conditions.

The CMA developed six sets of groundwater elevation contours for WY 2025, including Fall 2024, Spring 2025, and Fall 2025 for the Buellton Aquifer and the river underflow. The Buellton Aquifer consists of the water-bearing Careaga Sand and Paso Robles Formations. River underflow occurs along the Santa Ynez River. Pursuant to pursuant to WR 2019-0148, the SWRCB administers Santa Ynez River underflow as part of the river, so it is not a principal aquifer of the CMA.

2 23 CCR § 356.2(b)(1)(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.

3 23 CCR § 356.2(b)(1)(A)

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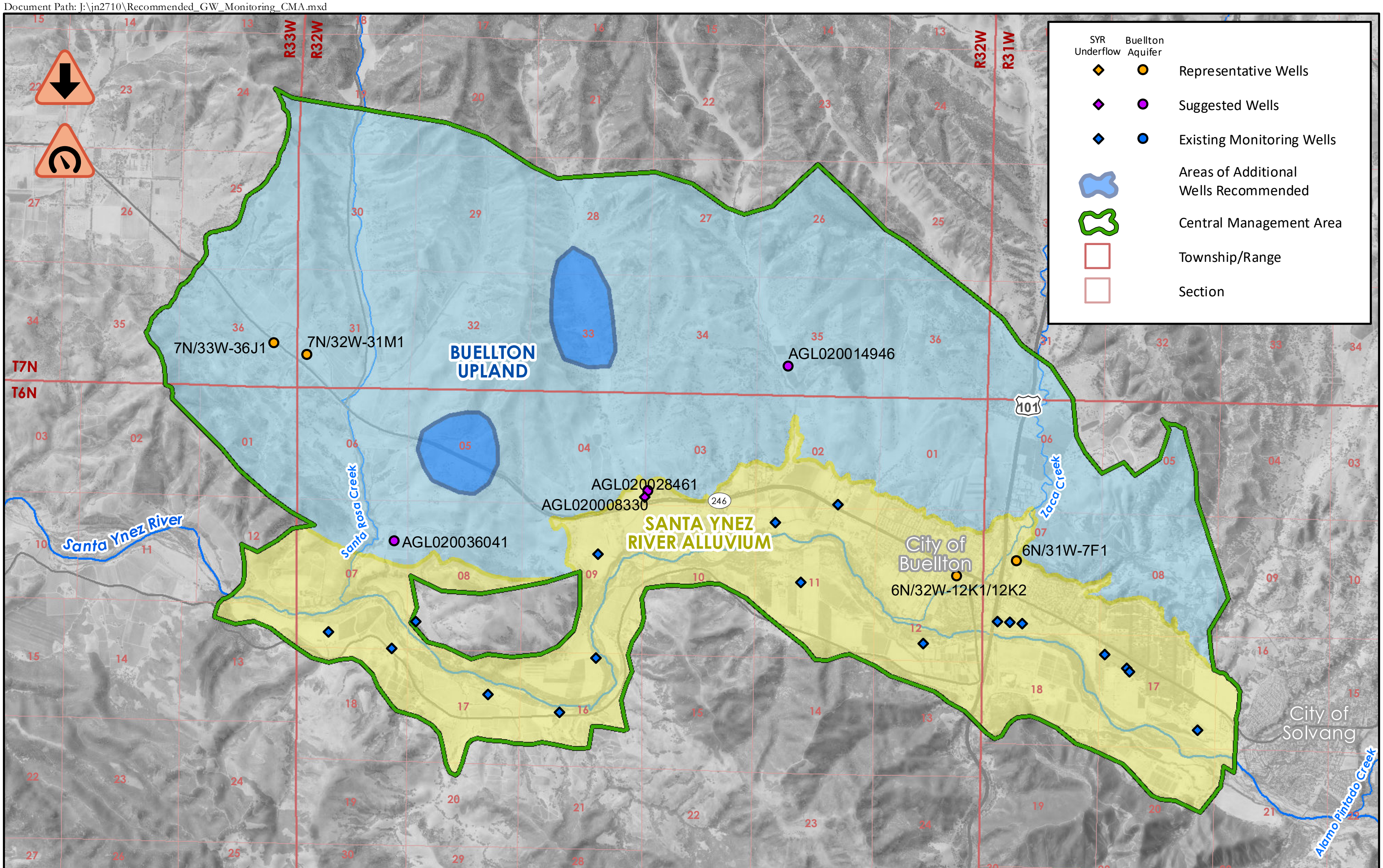

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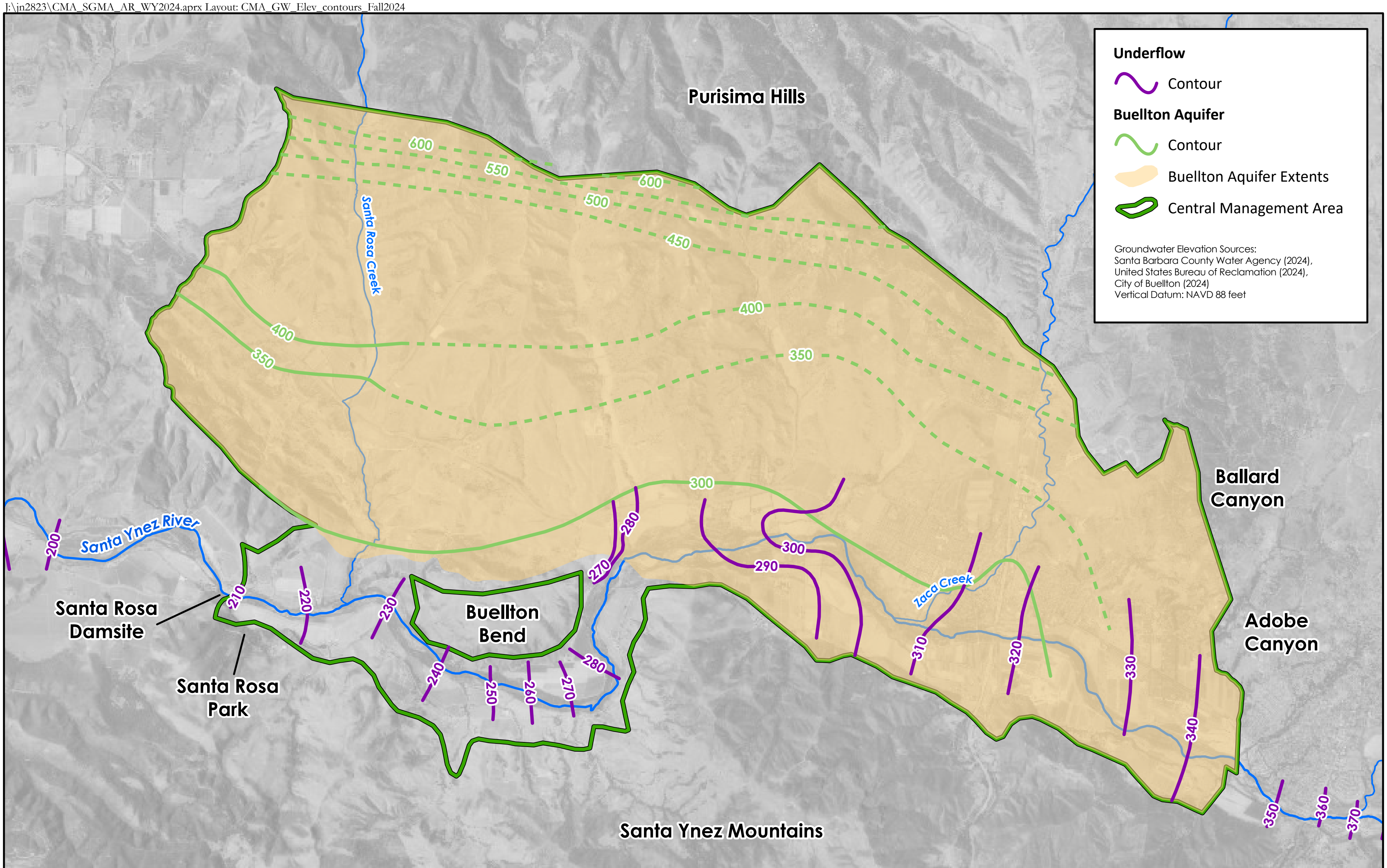
Central Management Area
Groundwater Sustainability Agency

CMA MONITORING NETWORK AND REPRESENTATIVE MONITORING WELLS FOR GROUNDWATER LEVELS AND GROUNDWATER STORAGE

CMA FIGURE 3-1

J:\jn2823\CMA_SGMA_AR_WY2024.aprx Layout: CMA_GW_Elev_contours_Fall2024



GROUNDWATER AND UNDERFLOW ELEVATION CONTOURS
SEASONAL LOW
FALL 2024
CENTRAL MANAGEMENT AREA

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Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

WY2024 Annual Report

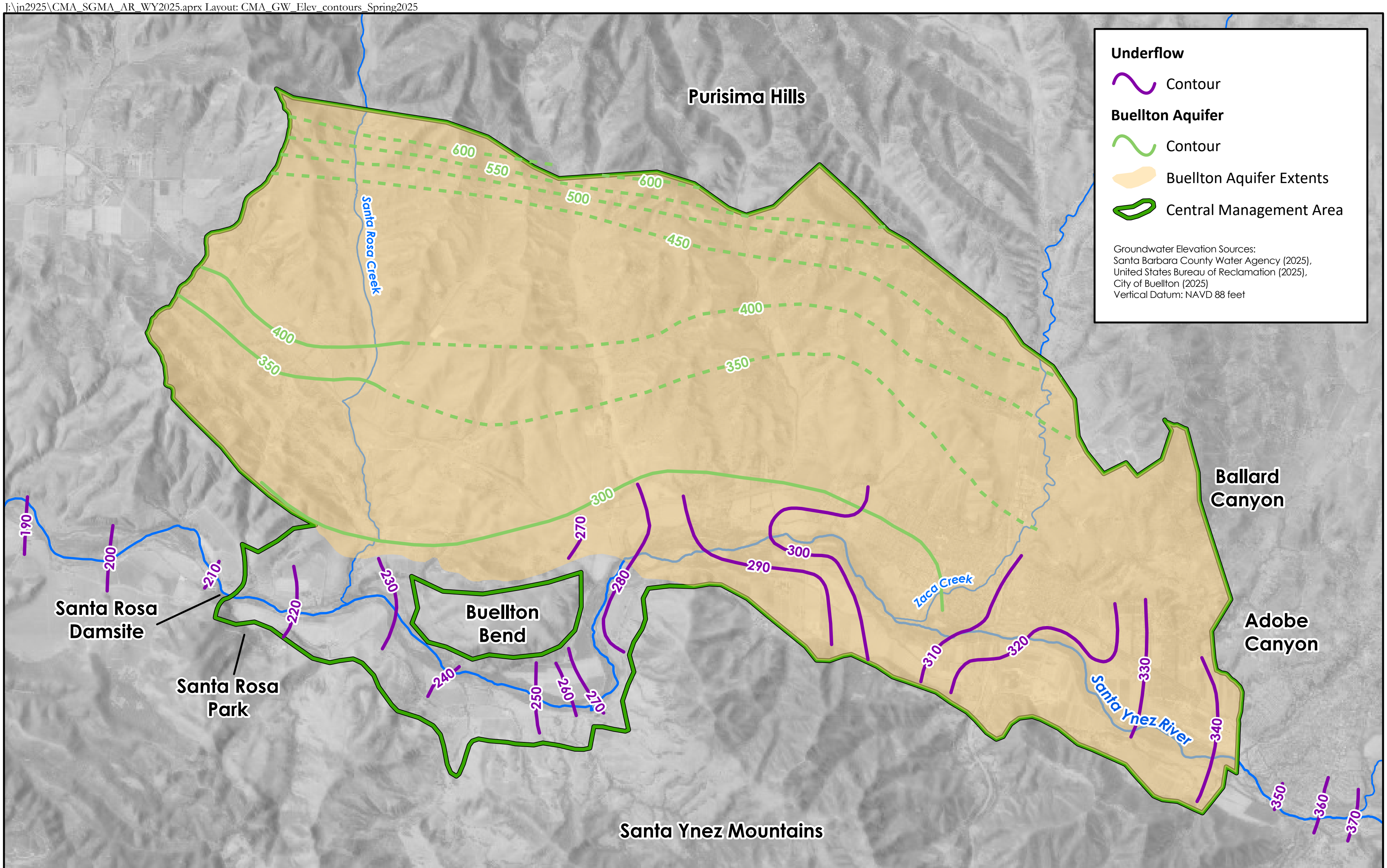
0 0.5 1 Miles

N

Sources:
USGS National Elevation Dataset, 2002

CMA FIGURE 3-2

J:\jn2925\CMA_SGMA_AR_WY2025.aprx Layout: CMA_GW_Elev_contours_Spring2025



STETSON ENGINEERS INC.

CMA

Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

GROUNDWATER AND UNDERFLOW ELEVATION CONTOURS
SEASONAL HIGH
SPRING 2025
CENTRAL MANAGEMENT AREA

WY2025 Annual Report

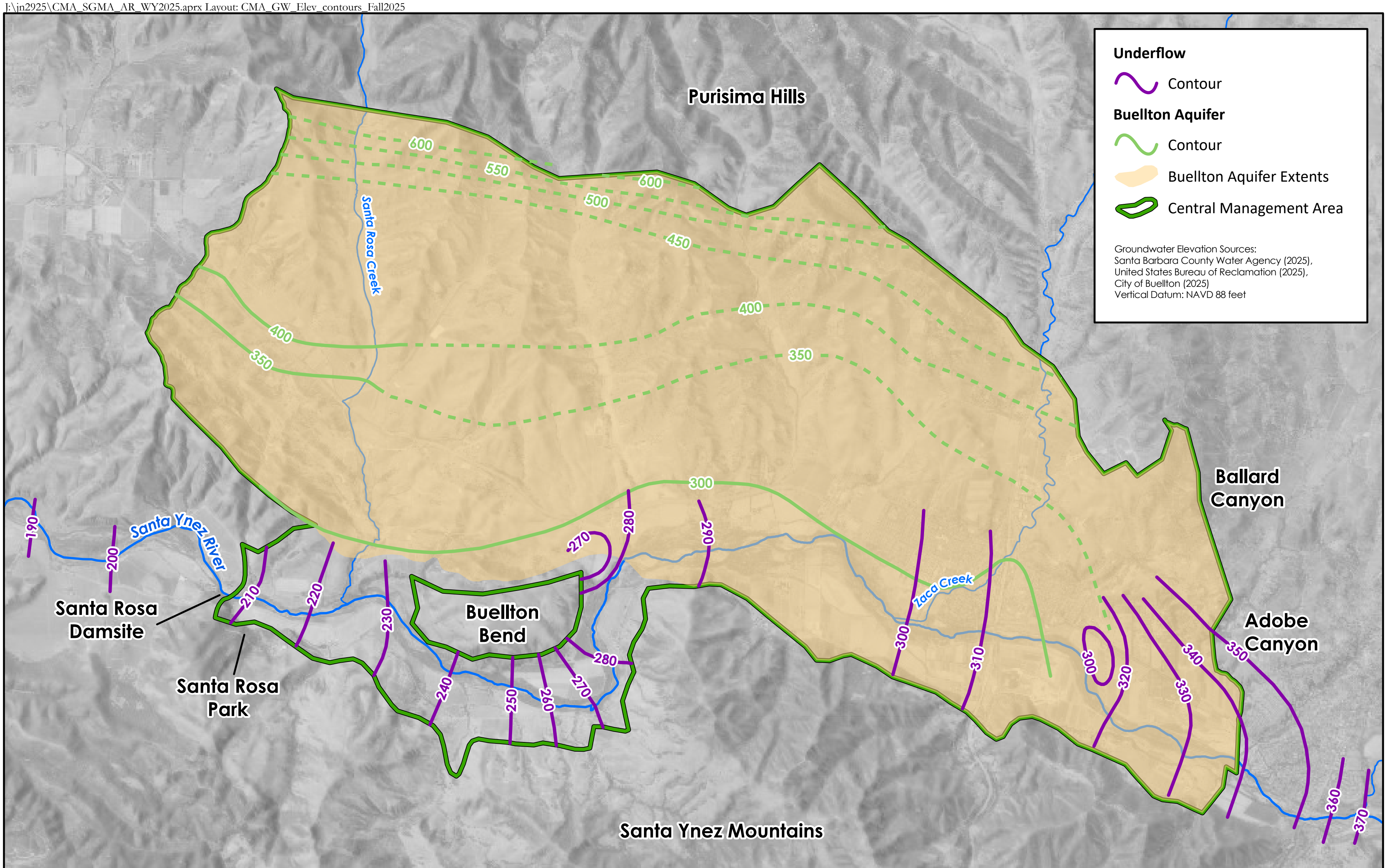
0 0.5 1 Miles

Sources:
USGS National Elevation Dataset, 2002

N

CMA FIGURE 3-3

J:\jn2925\CMA_SGMA_AR_WY2025.aprx Layout: CMA_GW_Elev_contours_Fall2025



GROUNDWATER AND UNDERFLOW ELEVATION CONTOURS
SEASONAL LOW
FALL 2025
CENTRAL MANAGEMENT AREA

WY2025 Annual Report

0 0.5 1 Miles

N

Sources:
USGS National Elevation Dataset, 2002

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CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

CMA FIGURE 3-4

3.2.1 Fall 2024 – Start of Year Seasonal Low Contours

CMA Figure 3-2 reproduces the groundwater elevation contour map for Fall 2024 included in the Second Annual Report. The map for Fall 2024 represents conditions at both the end of WY 2024 and at the start of WY 2025. Please see the Fourth Annual Report for additional discussion of the Fall 2024 map.

3.2.2 Spring 2025 – Seasonal High Contours

CMA Figure 3-3 is a groundwater level contour map developed for Spring 2025, which is the seasonal high for WY 2025. Relative to Spring 2024, the water levels remained relatively constant in the Buellton Aquifer. This is likely due to the combination of the dry winter conditions in 2025 and the previous wet winters of 2023 and 2024. As identified in the CMA GSP, the well network for the CMA has data gaps. Chapter 6 addresses the progress of plans to resolve these data gaps.

3.2.3 Fall 2025 – End of Year Seasonal Low Contours

The Fall 2025 groundwater elevations represent the seasonal low groundwater levels for WY 2025. CMA Figure 3-4 is a groundwater level contour map developed for this seasonal low. In the Buellton Aquifer, the median water level change was a half-foot increase in Fall 2025 compared to Fall 2024. As with the Spring 2025 water levels, the CMA identified data gaps. Chapter 6 addresses the progress of plans to resolve these data gaps.

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CMA CHAPTER 4: WATER USE AND AVAILABLE SURFACE WATER

Water use is a major component of the water budget. The SGMA regulations require that *"...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*. "[1] This chapter of the Annual Report provides an update on water use in the Basin.

4.1 GROUNDWATER USE

Groundwater production within the CMA Buellton Aquifer is used for agricultural, domestic, municipal, and industrial purposes. There are no managed wetlands in the CMA. Outside of the municipal uses by the City of Buellton, most of the CMA is a mixture of rural areas with agriculture and some rural-suburban development. Groundwater production is reported semi-annually to the SYRWCD.

SYRWCD's semi-annual groundwater production data was converted to monthly values using monthly evapotranspiration (ET) from California Irrigation Management Information System (CIMIS) sites (see CMA Figure 2-1 for CIMIS site locations). Municipal data provided by the City of Buellton was compiled into monthly data. **CMA Figure 4-1** shows the monthly groundwater use in the CMA Buellton Aquifer, and **CMA Figure 4-2** shows the annual groundwater use for each water year.[2] **CMA Figure 4-3** is a map[3] showing

1 23 CCR § 356.2(a) 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.

2 Figures in the GSP showed groundwater production based on the SYRWCD's Fiscal Year (July-June), production data presented here is recalculated to the Water Year (October-September) basis.

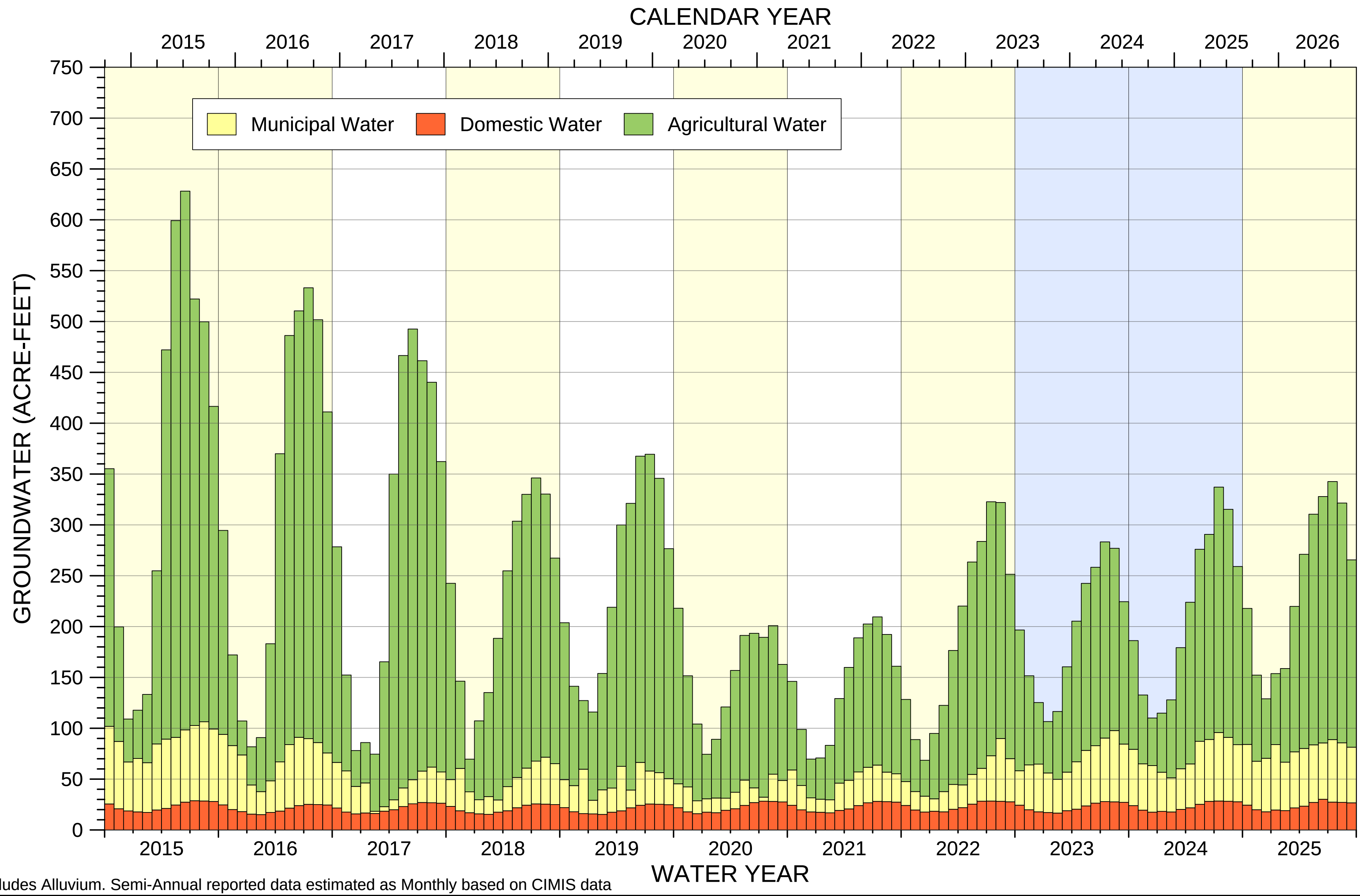
3 23 CCR § 356.2(a)(2) "Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in [..] a map that illustrates the general location and volume of groundwater extractions."

the spatial distribution of groundwater pumping in the Buellton Aquifer during WY 2025. **CMA Table 4-1** summarizes the groundwater production for WY 2025.

CMA Table 4-1
Summary CMA Groundwater Extraction for Water Year 2025

Water Use Sector	Buellton Aquifer	Method of Measurement	Estimated Accuracy
	Acre-Feet		Acre-Feet
Domestic	280	Self-reported to SYRWCD may include estimates using crop usage	± 30 (~10%)
Agricultural	1,920	Self-reported to SYRWCD may include estimates using crop usage	± 200(~10%)
Municipal	670	City of Buellton Daily totalizer values	± 10 (~1%)
Total	**2,870**		**± 240**

SYRA pumping (SYRWCD Zone A) is managed as surface water and excluded from **Error! Reference source not found.** (see **Error! Reference source not found.**).
All numbers rounded to the nearest 10 acre-feet.
Source: SYRWCD (2026), City of Buellton (2025)



Excludes Alluvium. Semi-Annual reported data estimated as Monthly based on CIMIS data

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MONTHLY GROUNDWATER USE
BUELLTON AQUIFER

Water Year Type (1942-2025)

- Wet
- Above/Below Normal
- Dry / Critically Dry

Source: Santa Ynez River Water Conservation District (2026), City of Buellton (2025)

CMA FIGURE 4-1

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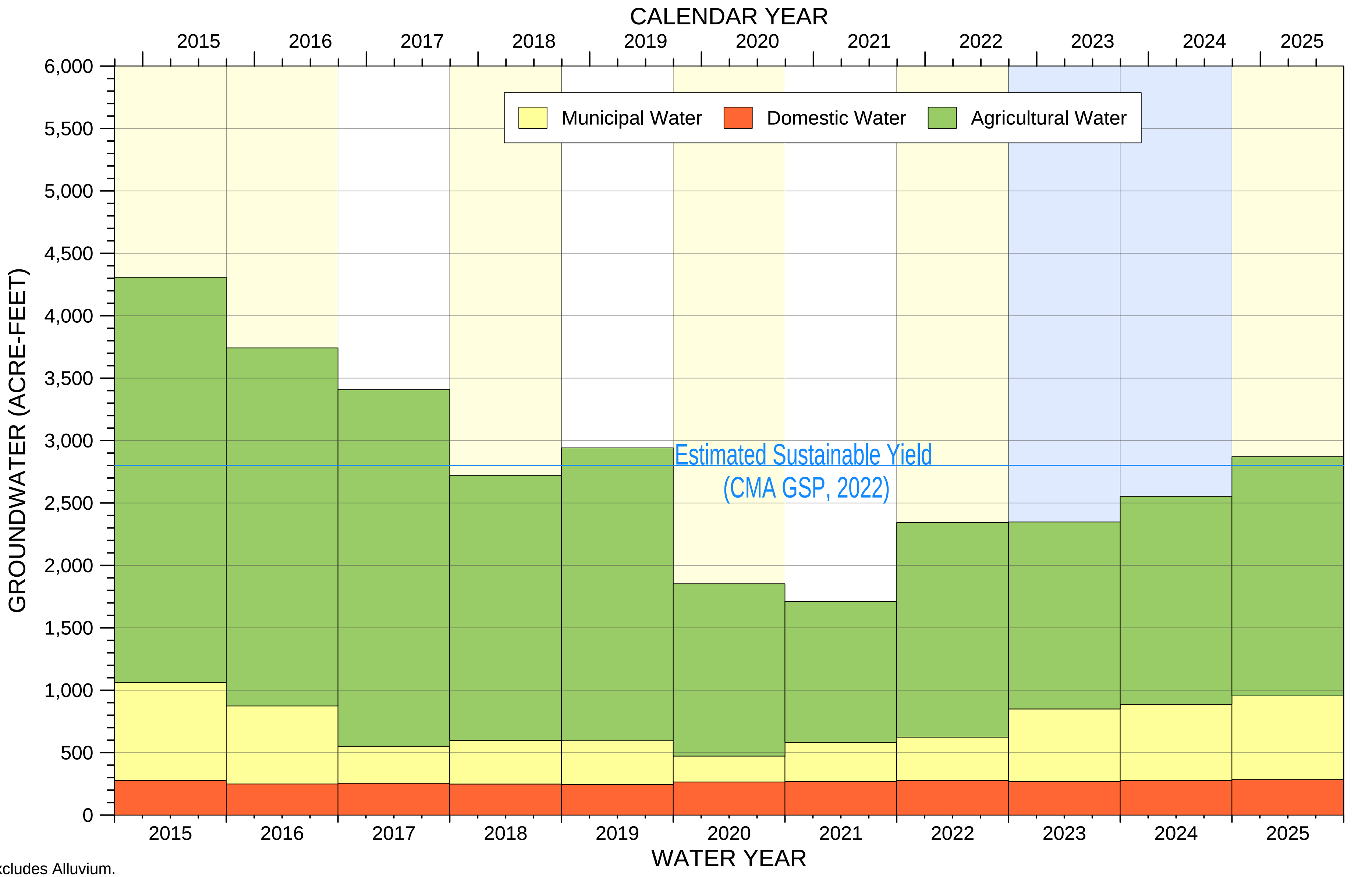

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ANNUAL GROUNDWATER USE
BUELLTON AQUIFER

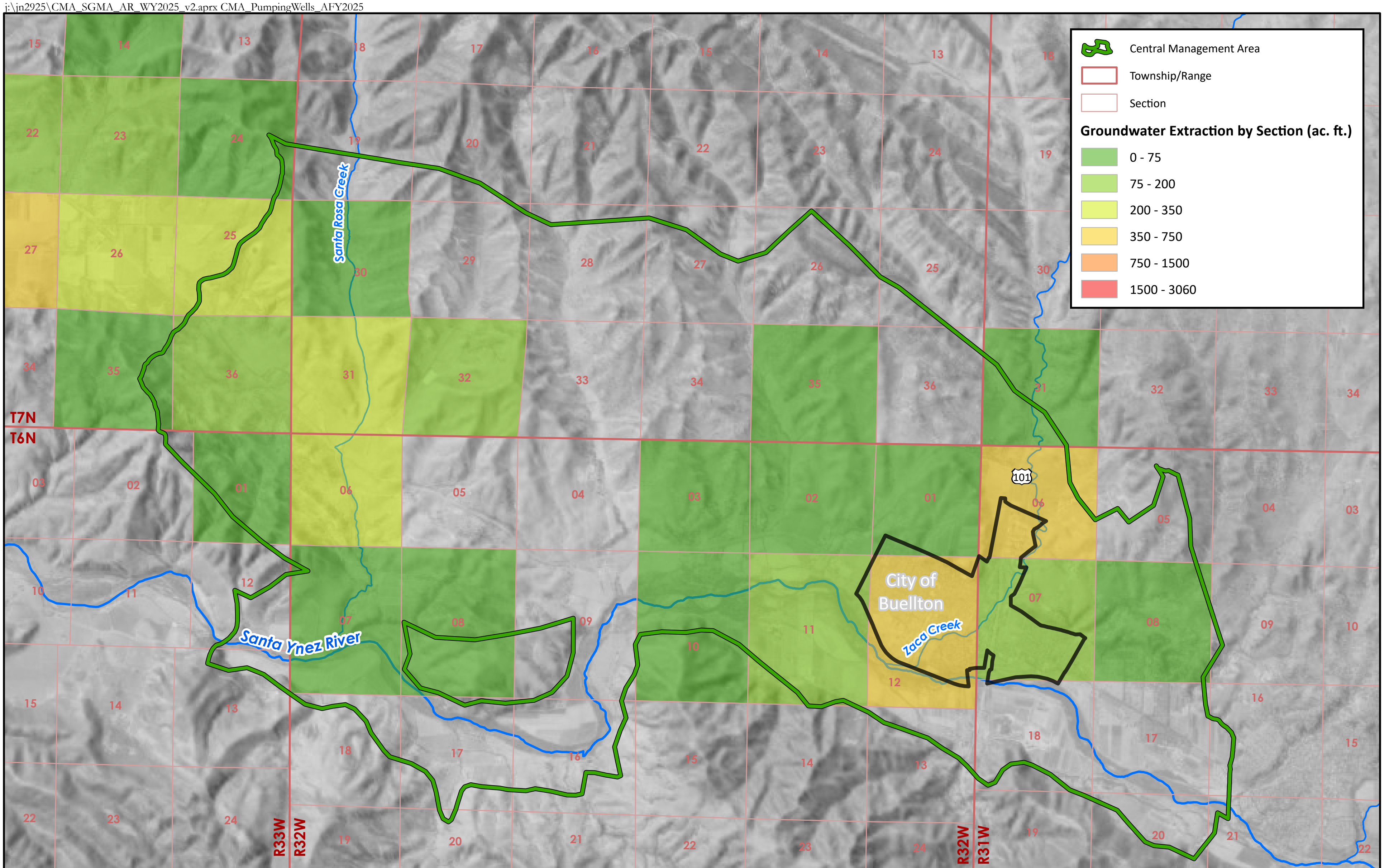
Water Year Type (1942-2025)

- Wet
- Above/Below Normal
- Dry / Critically Dry

Source: Santa Ynez River Water Conservation District (2026), City of Buellton (2025)

CMA FIGURE 4-2

j:\jn2925\CMA_SGMA_AR_WY2025_v2.aprx CMA_PumpingWells_AFY2025



Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

LOCATION AND VOLUME OF GROUNDWATER EXTRACTION 2025

Source: Santa Ynez River Water Conservation District (2025)

0 0.5 1 Miles

N

CMA FIGURE 4-3

4.2 SURFACE WATER USE

Surface water production in the CMA is from the Santa Ynez River Alluvium (underflow) and imported water. Local surface water includes both local tributary flows and the flows of the Santa Ynez River which are partially stored in Lake Cachuma for later release downstream. Imported water is from the State Water Project (SWP) through the Central Coastal Water Authority (CCWA)'s pipeline. The City of Buellton is the sole water-importing entity in the CMA.

4.2.1 Surface Water Diversions from Santa Ynez River Underflow

Upstream of the Lompoc Narrows, a portion of the Santa Ynez River flows as underflow through a known and definite channel of alluvium. Water flowing in known and definite channels is not groundwater as defined by SGMA,[4] however, this underflow is managed or administered by other agencies. For example, subsurface water above the Lompoc Narrows that is underflow is partially stored in Lake Cachuma per SWRCB Order 2019-0148 for later release, sometimes referred to as a water rights release. Pumpers from the underflow are required to report the amount pumped to both the SYRWCD[5] and the SWRCB. Unlike SGMA, SYRWCD's enabling act's definition of groundwater within the purview of the SYRWCD generally covers all water beneath the earth's surface including underflow of a stream.[6] The SWRCB water rights orders applicable to the release of water downstream of Bradbury Dam of the Cachuma Project include the Order of 1973 (WR 73-37), amended in 1989 (WR 89-18) and most recently amended in 2019 (WR 2019-0148). **CMA Table 4-2** shows the total extraction of underflow via river wells upstream within the CMA for WY 2025.[7]

4 CWC Section 10721 (g) "Groundwater" means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

5 CWC Section 75640 "Any person who fails to register a water-producing facility, as required by Chapter 2 (commencing with Section 75540) of this part, is guilty of a misdemeanor."

6 CWC Section 75502 " 'Ground water' means all water beneath the earth's surface, but does not include water that is produced with oil in the production of oil and gas, or from gravity or natural springs. For the purpose of this section 'groundwater' includes water produced from artesian wells."

7 The SYRWCD records pumping in the Santa Ynez River Alluvium as Zone A.

CMA Table 4-2
Summary CMA Surface Water Diversions for Water Year 2025

Water Use Sector	Total	Method of Measurement	Estimated Accuracy
	Acre-Feet		Acre-Feet
Domestic	920	Self-reported to SYRWCD	± 90 (~10%)
Agricultural	3,780	Self-reported to SYRWCD may include estimates using crop usage.	± 380 (~10%)
Municipal	300	City of Buellton Daily totalizer values	± 10 (~1%)
Total	**5,000**		**± 480**

4.2.2 Water Imports

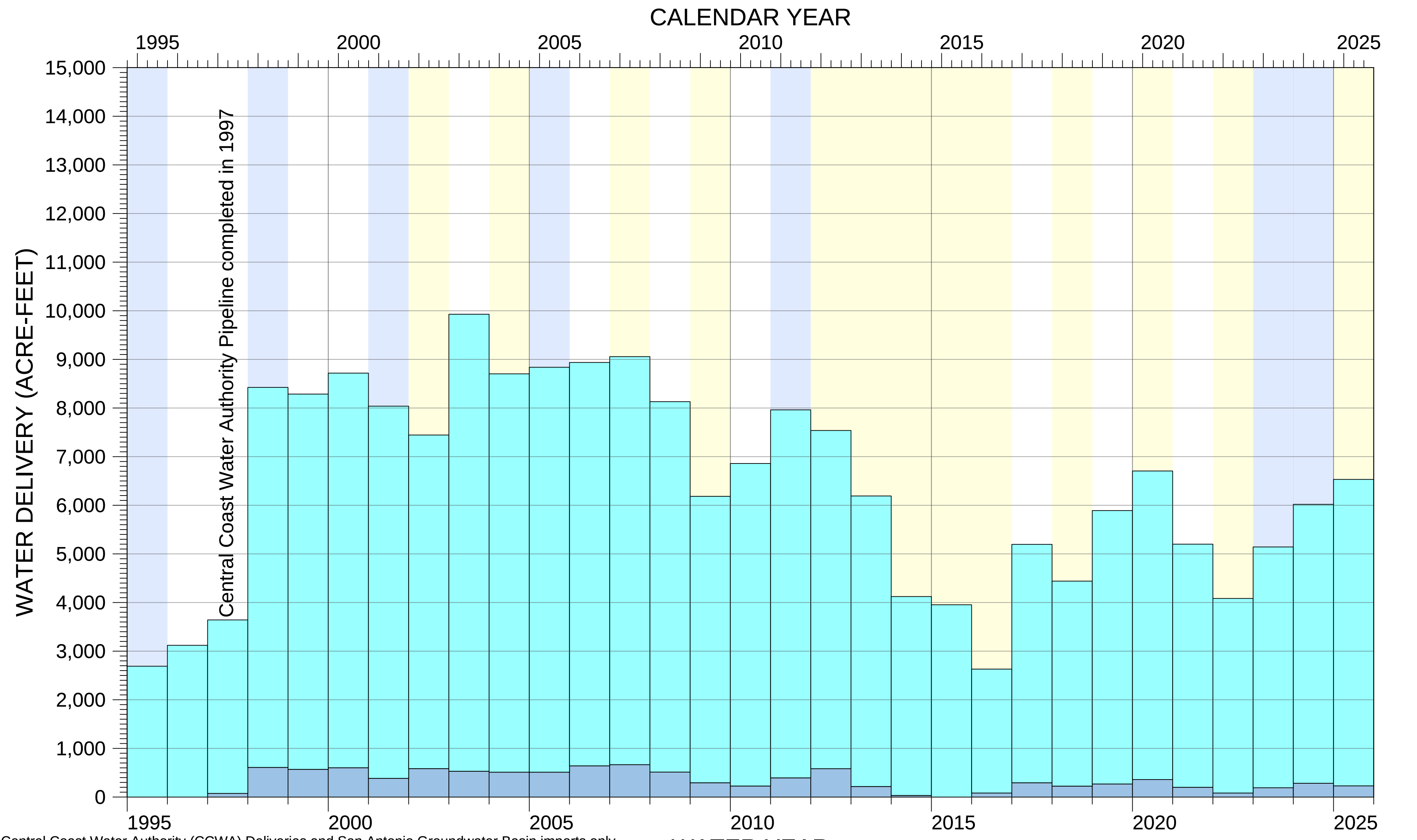
The Central Coastal Water Authority (CCWA) has delivered imported water from the SWP to the SYRVGB since 1997. CCWA makes water deliveries at turnouts to water distribution systems. CCWA delivers to Lake Cachuma for the South Coast customers outside of the SYRVGB. The Cachuma Project Settlement Agreement allows for the comingling of CCWA water with local water for water rights releases. Within the SYRVGB, four agencies contract with CCWA for SWP deliveries: VSFB, the City of Buellton, the City of Solvang, and the Santa Ynez River Water Conservation District, Improvement District No. 1. Of these, only the City of Buellton is in the CMA.

During WY 2025, the City of Buellton imported 229 acre-feet of water, all sourced from the SWP through the CCWA pipeline. **CMA Table 4-3** and **CMA Figure 4-4** show the annual imports through the CCWA pipeline to the CMA and the entire SYRVGB updated through the end of WY 2025.

CMA Table 4-3
Santa Ynez River Valley Groundwater Basin Water Imports
in Acre-Feet for Recent Years

Water Year	WMA	CMA	EMA	Total Basin
2019	2,601	268	3,022	5,891
2020	3,173	359	2,845	6,377
2021	2,949	200	2,051	5,200
2022	2,868	82	1,134	4,084
2023	2,465	190	1,736	4,391
2024	3,175	283	2,561	6,019
2025	3,266	229	2,830	6,325

The WMA via the Vandenberg Space Force Base (VSFB) includes imports from the San Antonio Groundwater basin.
Source: CCWA (2025); VSFB (2025)



Central Coast Water Authority (CCWA) Deliveries and San Antonio Groundwater Basin imports only. Includes deliveries in exchange for Lake Cachuma water. Does not include: other potential import sources, passthrough to South Coast CCWA customers through Lake Cachuma.

Source: Central Coast Water Authority (2025), Vandenberg Space Force Base (2026), EMA GSA (2026)

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Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

ANNUAL WATER IMPORTS
CENTRAL COAST WATER AUTHORITY AND
SAN ANTONIO GROUNDWATER BASIN

Water Year Type (1942-2025)
- Wet
- Above/Below Normal
- Dry / Critically Dry

Santa Ynez Imports
- City of Buellton
- Non-CMA

CMA FIGURE 4-4

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4.3 SURFACE WATER AVAILABLE FOR GROUNDWATER RECHARGE OR REUSE

During WY 2025, there were no projects within the CMA for direct groundwater recharge or in-lieu use.[8]

The Santa Ynez River and its underflow are within the jurisdiction of and regulated by the SWRCB. SWRCB regulates river flows for beneficial purposes including supporting the steelhead trout (*Oncorhynchus mykiss, O. mykiss*) population pursuant to WR 2019-0148.[9] USBR releases water stored in Lake Cachuma to meet downstream water rights, for downstream alluvium and groundwater basin replenishment, and to support fish habitat.

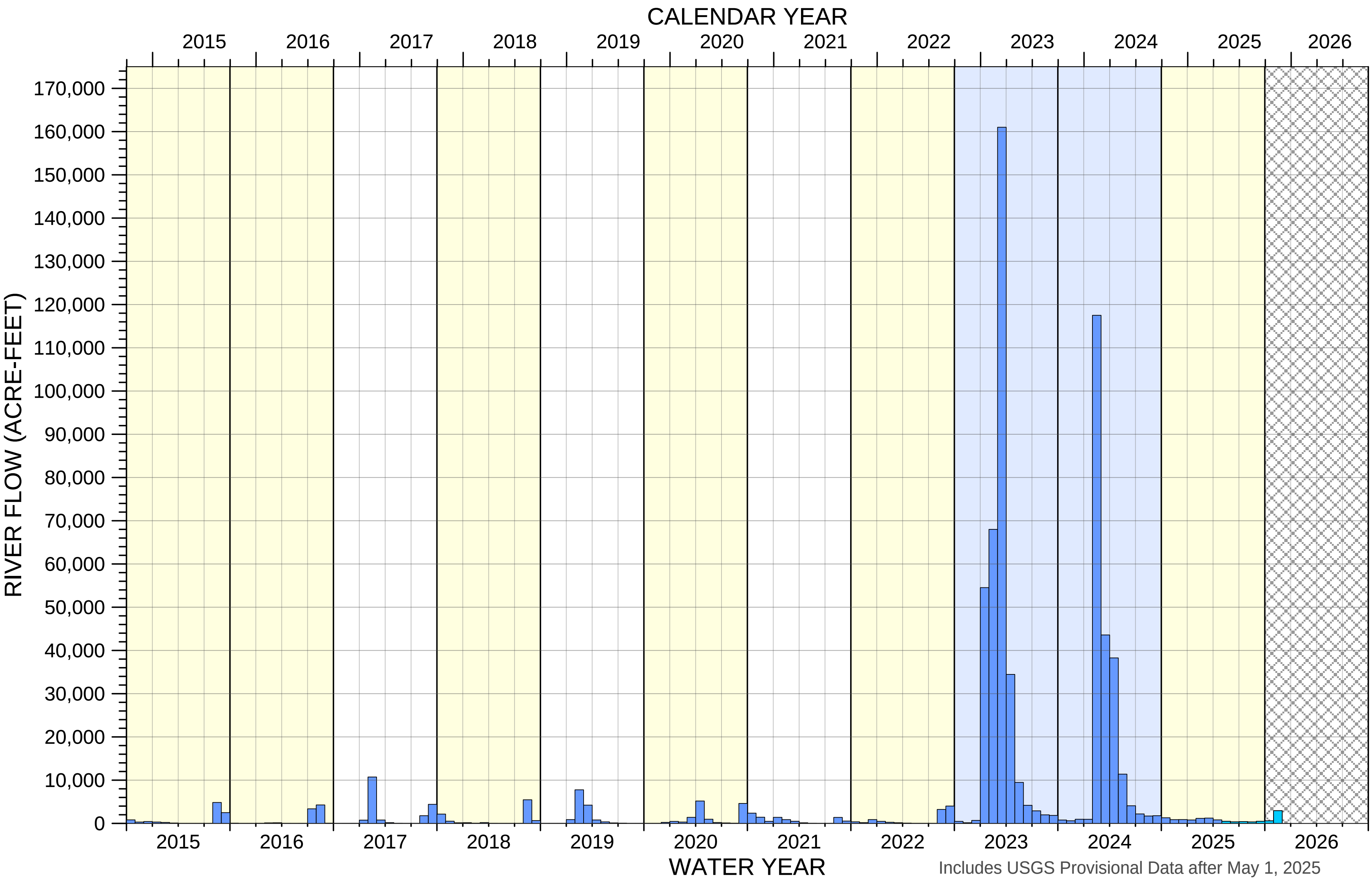
The method for the volume and timing of water rights releases comes from the SWRCB Orders of 1973 (WR 73-37), 1989 (WR 89-18), and 2019 (WR 2019-0148). These orders identify two accounts for managing water rights releases. The Above Narrows Account (ANA) accounts for the area from Bradbury Dam to the Lompoc Narrows. The ANA is a relatively narrow channel of alluvium along the river (underflow), parts of which are within all three SGMA management areas. The Below Narrows Account (BNA) accounts for a relatively wider area below the Lompoc Narrows in the WMA.

During all of WY 2025, the volume of dewatered storage in the ANA area was relatively low, meaning the elevation of water in the subsurface was high. This was due to the preceding year (WY 2024) being wet. As a result of low dewatered storage (high water levels), at the direction of the SYRWCD pursuant to WR 2019-0148, the USBR did not make water rights releases from Lake Cachuma during 2024.

Measurements at the Solvang stream gauge represent more than 90% of all local surface water flows entering the CMA (Stetson, 2022). **CMA Figure 4-5** shows flows of the Santa Ynez River at the USGS Streamflow gage 11128500 at Solvang, at the EMA-CMA boundary for WY 2015 through October 2025. The location of the Solvang gage is shown in CMA Figure 2-1.

8 23 CCR § 356.2(b)(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.

9 The Cachuma Operation and Maintenance Board (COMB) Fisheries Division conducts the monitoring of steelhead (*Oncorhynchus mykiss*) population in the Santa Ynez River and its tributaries. However, the COMB report comes out in the second quarter of the following water year, which is expected to be published concurrent or after this annual report.



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MONTHLY SURFACE FLOW
SANTA YNEZ RIVER AT SOLVANG CALIFORNIA
USGS STREAMGAGE 11128500

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

Source: USGS NWIS (2025)

CMA FIGURE 4-5

4.3.1 Treated Wastewater Sources

Within the CMA, wastewater is managed by the City of Buellton and the City of Solvang[10]. Wastewater is conveyed to the treatment facilities before it is discharged as treated effluent to percolation ponds over the Santa Ynez River alluvium. The average daily secondary treated effluent from the City of Buellton and the City of Solvang since 2015 is provided in **CMA Table 4-4** as wastewater plant influent flows.

CMA Table 4-4
Wastewater Influent Volumes for Recent Years

Water Year	City of Buellton Plant Influent	City of Solvang Plant Influent
	Acre-Feet per Year	Acre-Feet per Year
2015	447	710
2016	469	705
2017	473	719
2018	523	696
2019	571	736
2020	504	690
2021	508	717
2022	487	702
2023	478	795
2024	487	808
2025	473	801

Source: City of Buellton (2021-2025), City of Solvang (2021-2025)

10 Solvang Wastewater Treatment Plant is located within the City of Solvang outside of the CMA but discharges its wastewater at the border of the CMA and EMA inside the CMA.

4.4 TOTAL WATER USE

Total water use in the CMA during WY 2025 is comprised of groundwater supplies, surface water diversions from the Santa River underflow, and imported SWP water. See Chapters 4.1 and 4.2 above for additional details on these supplies. **CMA Table 4-5** shows the summary of total water use by sector for the water year 2025. **CMA Table 4-6** shows the summary of total water use for WY 2015-WY 2025. Total water use in the CMA was 8,100 AF in WY 2025.

CMA Table 4-5
Summary CMA Total Water Use by Sector for Water Year 2025

Water Use Sector	Total	Method of Measurement	Estimated Accuracy
	Acre-Feet		Acre-Feet
Domestic	1,200	Self-Reported to SYRWCD	± 120
Agricultural	5,700	Self-reported to SYRWCD	± 570
Municipal	1,200	Daily totalizer values; Includes CCWA imports to the City of Buellton	± 120
Total	**8,100**		**± 810**

CMA Table 4-6
Summary CMA Total Water Use by Source for Recent Years

Water Year	Total Groundwater (Buellton Aquifer)	Total Surface Water (River Underflow Well Pumping)	Total Imports (CCWA)	TOTAL WATER USE
	Acre-Feet per Year	Acre-Feet per Year	Acre-Feet per Year	Acre-Feet per Year
2015	4,310	4,420	0	8,730
2016	3,740	4,460	80	8,280
2017	3,410	4,900	290	8,600
2018	2,720	5,230	220	8,170
2019	2,940	4,940	270	8,150
2020	1,850	5,040	360	7,250
2021	1,710	4,460	200	6,370
2022	2,340	4,520	80	6,940
2023	2,350	3,990	180	6,520
2024	2,550	4,360	280	7,190
2025	2,870	5,000	230	8,100

Note: Total water use has been updated to include all pumping data reported to the SYRWCD, including additions and revisions received by the District after the reporting period. Significant revisions have been made to the water years 2023 and 2024 following a water user's discovery of an error in the self-reported data submitted to the SYRWCD. These annual groundwater pumping amounts for water years 2023 and 2024 are about 2,000 AFY less than previous reports.

CMA CHAPTER 5: GROUNDWATER STORAGE

Groundwater in storage is one of the SGMA sustainability indicators. This chapter presents the changes in groundwater in storage components required by the SGMA regulations:

> *"(5) Change in groundwater in storage shall include the following:*
>
> *(A) Change in groundwater in storage maps for each principal aquifer in the basin.*
>
> *(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."*
>
> *(*23 CCR § 356.2(b))

Changes in groundwater in storage are calculated and mapped for the seasonal high (spring-to-spring) using the Thiessen polygon method. This method uses water level observations at representative monitoring wells. In the CMA there is a longer period of record for seasonal high spring water levels than there is for seasonal low fall water levels. DWR requested that the CMA use seasonal low fall water levels. The CMA will shift to fall water levels once there is sufficient data, expected to be 10 years of data. The CMA addresses this in the Periodic Evaluation.

5.1 CHANGE IN GROUNDWATER IN STORAGE MAPS

The SGMA regulations[1] require every Annual Report to contain *"change in groundwater in storage maps for each principal aquifer in the basin."* On the following maps, the polygon color indicates the change in groundwater in storage. Blue indicates increased groundwater in storage. Orange indicates decreased groundwater in storage. Color intensity is relative to the area of the polygon. Darker colors indicate a greater change in storage per acre. Numbers shown in each polygon are the estimated volume change in acre-feet. **CMA Figure 5-1** shows the spring change in groundwater in storage.

1 23 CCR § 356.2(b)(1)

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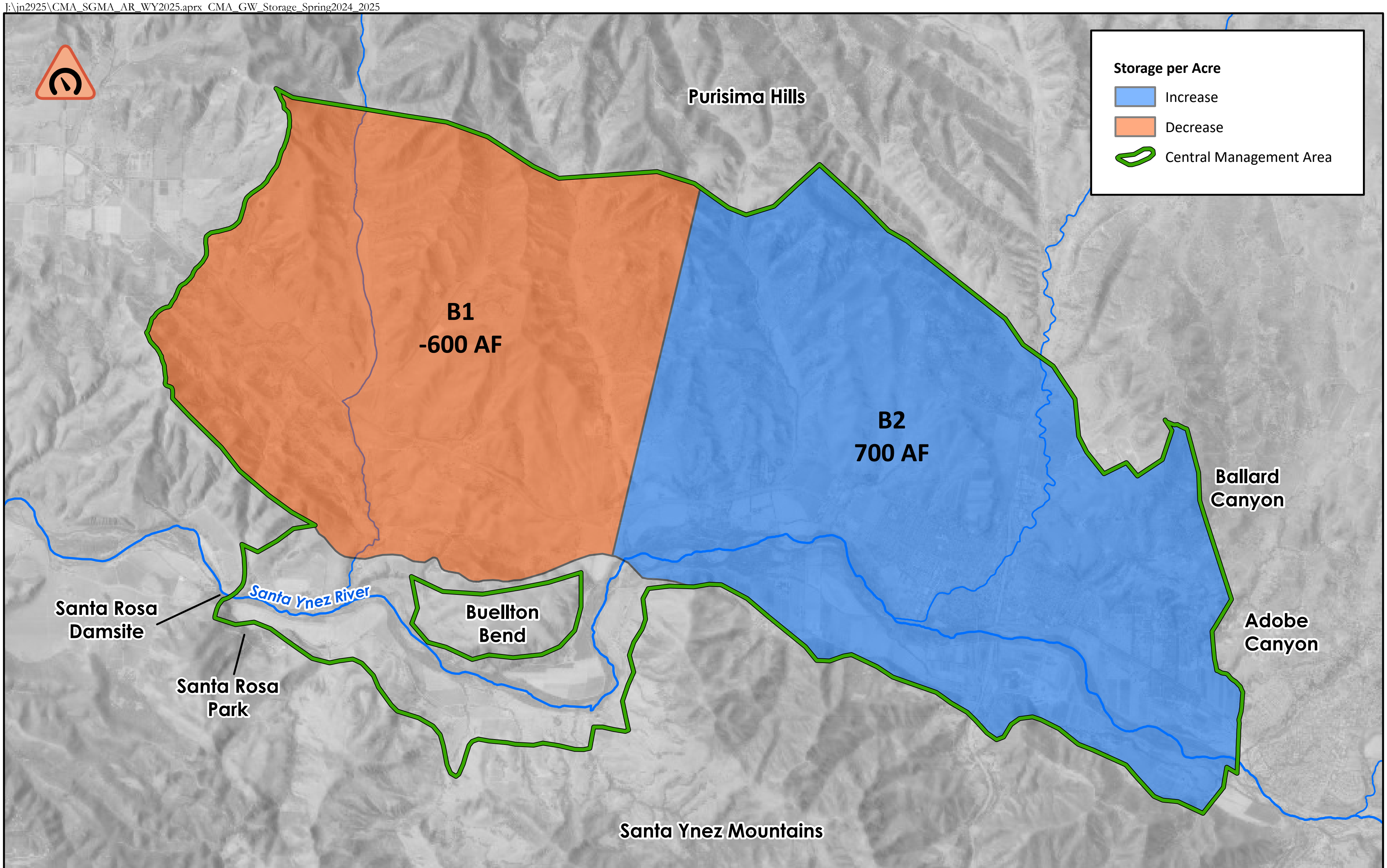

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CHANGE IN GROUNDWATER IN STORAGE
SPRING 2024-SPRING 2025
BUELLTON AQUIFER
CENTRAL MANAGEMENT AREA

DRAFT

0 0.5 1 Miles

Sources:
USGS National Elevation Dataset, 2002

N

CMA FIGURE 5-1

The node of each polygon comes from existing representative monitoring wells (CMA Figure 3-1). The area of each polygon is the area that is closest to the node point, compared to the other node points. The external boundary is the aquifer extent. The CMA uses the following equation to calculate the change in groundwater in storage for each polygon:

Change of Groundwater in Storage (acre-feet) = [area (acres)] x [Sy (unitless)] x [change in groundwater elevation (ft)]

Total Change of Groundwater in Storage (acre-feet) = Σ (Change in Storage for each Polygon)

CMA Table 5-1 summarizes the total change in groundwater in storage calculated for WY 2025.

CMA Table 5-1
Estimated Change in Groundwater in Storage
in Acre-Feet.

Period		Buellton Aquifer
Seasonal High	Spring 2024 to Spring 2025	100

Numbers rounded to the nearest 100 AF.

The Spring 2024 to Spring 2025 change in groundwater in storage is shown in CMA Table 5-1. This figure represents changes between the seasonal high of 2024 and 2025. CMA Table 5-1 shows that the volume of groundwater in storage increased in the east and decreased in the west. The total change in groundwater in storage for the CMA's Buellton Aquifer was a gain of 100 AF using this spring-to-spring approach. The storage calculations will use the fall water level data once ten-years of data are collected.

5.2 GROUNDWATER USE AND EFFECTS ON STORAGE

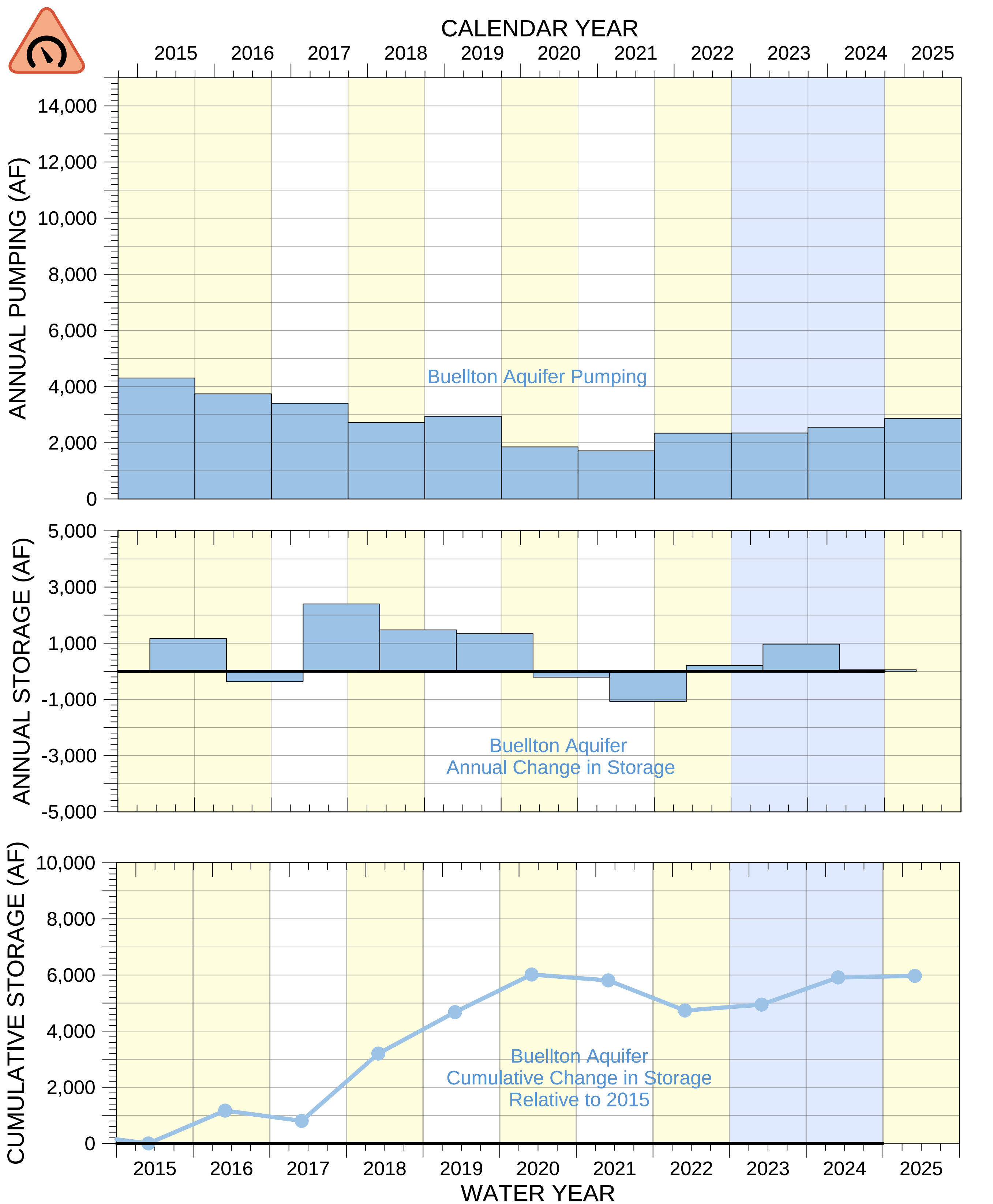
The SGMA regulations require that GSP Annual Reports contain "*A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year*."[2]

The Water Year Type is classified in Chapter 2 of this report using the same method as described in the CMA GSP. Updated groundwater use for WY 2025 is described in Chapter 4. The method for calculating the annual change in groundwater in storage is described earlier in this chapter. Annual storage change was calculated for historical years, including from WY 2015 through the present.

Annual reported groundwater use for the CMA in the Buellton Aquifer is compared to cumulative groundwater in storage loss in **CMA Figure 5-2**. The Water Year classifications shown in this figure are consistent with the classification of water years shown in CMA Figure 2-4.

The top of CMA Figure 5-2 shows the annual reported groundwater use for the CMA Buellton Aquifer. The middle of CMA Figure 5-2 shows the annual change in storage, and the bottom of CMA Figure 5-2 set shows the cumulative change starting in March 2015.

2 23 CCR § 356.2(b)(5)(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.



Water Year type: Blue = Wet, Yellow = Dry / Critically Dry, White = Above / Below Normal

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COMPARISON OF WATER YEAR TYPE, GROUNDWATER USE, ANNUAL STORAGE, AND CUMULATIVE STORAGE RELATIVE TO MARCH 2015

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CMA CHAPTER 6: PROGRESS TOWARD GSP IMPLEMENTATION AND SUSTAINABILITY

The SGMA regulations (Joint Appendix A) require that the SGMA Annual Reports contain "*A description of progress towards implementing the [GSP], including achieving interim milestones, and implementation of projects or management actions since the previous annual report*."[1] As indicated by the previous chapters discussing groundwater levels, water use, and storage, groundwater conditions within the CMA remain sustainable with no undesirable results for the SGMA sustainability criteria. The conditions within the CMA for the additional SGMA indicators are summarized below.

Implementation of general projects and management actions identified in the CMA GSP has begun. The CMA is taking steps to ensure funding to complete the actions planned in the GSP.

6.1 SUSTAINABILITY INDICATORS

Analyses conducted for the CMA GSP indicate that Basin conditions are sustainable with no current undesirable results during WY 2025. This chapter discusses GSP-identified minimum thresholds, measurable objectives, and interim milestones[2] for both the previously discussed sustainability indicators (groundwater levels [Chapter 3], interconnected surface water [Chapter 3], and storage [Chapter 5]), as well as the remaining sustainability indicators (seawater intrusion, water quality, and land subsidence).

1 23 CCR § 356.2(a) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

2 23 CCR § 356.2(a) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

Groundwater Levels

Groundwater Storage

Seawater intrusion (not applicable to CMA)

Degraded water quality

Land subsidence

Interconnected surface water

6.1.1 Chronic Lowering of Groundwater Levels

Chapter 3 provided data and maps for the chronic lowering of groundwater levels sustainability indicator. The January 2022 CMA GSP (3B.2 Undesirable Results) states the following regarding monitoring groundwater levels for undesirable results:

> "Spring groundwater elevations that drop below the established groundwater elevation minimum thresholds in more than 50% of the representative monitoring wells for two consecutive, non-drought[3] years would correspond to an undesirable result associated with chronic lowering of groundwater elevations."

Similarly, for measurable objectives and interim milestones, the CMA GSP (3B.4 Measurable Objectives) states:

3 Two or more consecutive years that are classified as Dry or Critically Dry (Section 2b, GC) will be defined for this purpose as drought years. All other year types and combination of year types will be defined as non-drought years for the purpose of defining undesirable results under a groundwater sustainability plan.

"Measurable objectives are achieved when the 2011 groundwater elevation is reached in half of the representative monitoring wells (RMWs)."

The interim milestones were set to measurable objectives due to GSP's finding that the CMA conditions were sustainable with no current undesirable results. The measurable objectives and interim milestones will need to be re-evaluated when the CMA switches to using fall water levels

The CMA currently has four representative groundwater level monitoring wells in the Buellton Aquifer. **CMA Table 6-1** compares the groundwater level elevations to the sustainable management criteria for each of the four representative groundwater monitoring wells. The sustainable management criteria include Measurable Objectives, Early Warning, and Minimum Thresholds. This table shows all wells were above their Minimum Threshold levels for WY 2025. No undesirable results related to water levels occurred in WY 2025.

CMA Table 6-1
Groundwater Elevations for Groundwater Levels (feet in NAVD88)

Name	ID	Measuring Point	Reference Values			Water Year 2024		Water Year 2025	
			Measurable Objective	Early Warning	Minimum Threshold	Spring	Fall	Spring	Fall
7N/33W-36J1	82	504.54	379	362	357	373	369	372	369
7N/32W-31M1	75	452.60 (±20)	402	364	359	375	371	374	370
6N/32W-12K1, 12K2	909	352.56 (±5)	301	281	276	302	298	305	301
6N/31W – 7F1	90	382.81	307	297	292	307	n/a	306	305

n/a = No available data
NAVD88 = North American Vertical Datum of 1988

6.1.2 Reduction of Groundwater in Storage

Chapter 5 of this report addresses the reduction of groundwater in storage. In addition, progress towards sustainability for groundwater in storage is tracked along with groundwater levels, as discussed in CMA Section 6.1.1.

6.1.3 Water Quality

The CMA GSP found that "Groundwater quality in the CMA is currently suitable for agricultural, domestic, and municipal supply purposes." The SGMA statute and SGMA regulations on Annual Reports (23 CCR § 356.2) do not include a discussion of general water quality. The DWR in the acceptance of the Joint Annual Report for 2024 requested annual water quality data:

> "The Department noted that the annual report did not provide an update on all the applicable sustainable management criteria for the Basin, as required by GSP Regulations (23 CCR § 356.2). The Department will require that you include information on all applicable sustainable management criteria in your subsequent annual report, including a description of progress towards implementing the Plan for each of the applicable sustainability indicators."

To support the Central Coast Water Board's water quality mission[4] and to provide the requested information above, the CMA includes a water quality evaluation in this report as **CMA Appendix C**. Recent water quality data for the CMA indicate no undesirable results since the 2022 GSP. The Periodic Evaluation will detail any wells that are no longer viable and any shifts in monitoring wells.

6.1.4 Seawater Intrusion

The CMA is an inland management area of the Basin and is greater than 20 river miles[5] above the Pacific Ocean. Therefore, seawater intrusion is not an applicable sustainability indicator for the sustainable management of the CMA, and the CMA GSP did not set specific targets within the CMA. For the Santa Ynez River Valley Groundwater Basin as a whole, the WMA addresses the seawater intrusion sustainability indicator, which includes a portion of the coast.

4 Central Coast Regional Water Quality Control Board. Bishop, James. June 22, 2023. Public Comment Letter for The Santa Ynez River Valley Groundwater Basin – Annual Report Water Year 2022. 3 pg. https://sgma.water.ca.gov/portal/gspar/comments/214. Access date 2023-12-05.

5 River miles are distance that water flows along the river which accounts for the bends and meanders of the river.

6.1.5 Land Subsidence

Significant land subsidence due to groundwater withdrawal is not occurring in the CMA. Conditions in the CMA are considered to have dropped below the land subsidence minimum threshold when both (1) a decline of six inches (a half foot) from the 2015 land surface elevation because of groundwater extractions, and (2) that decline interferes with either land use or infrastructure.

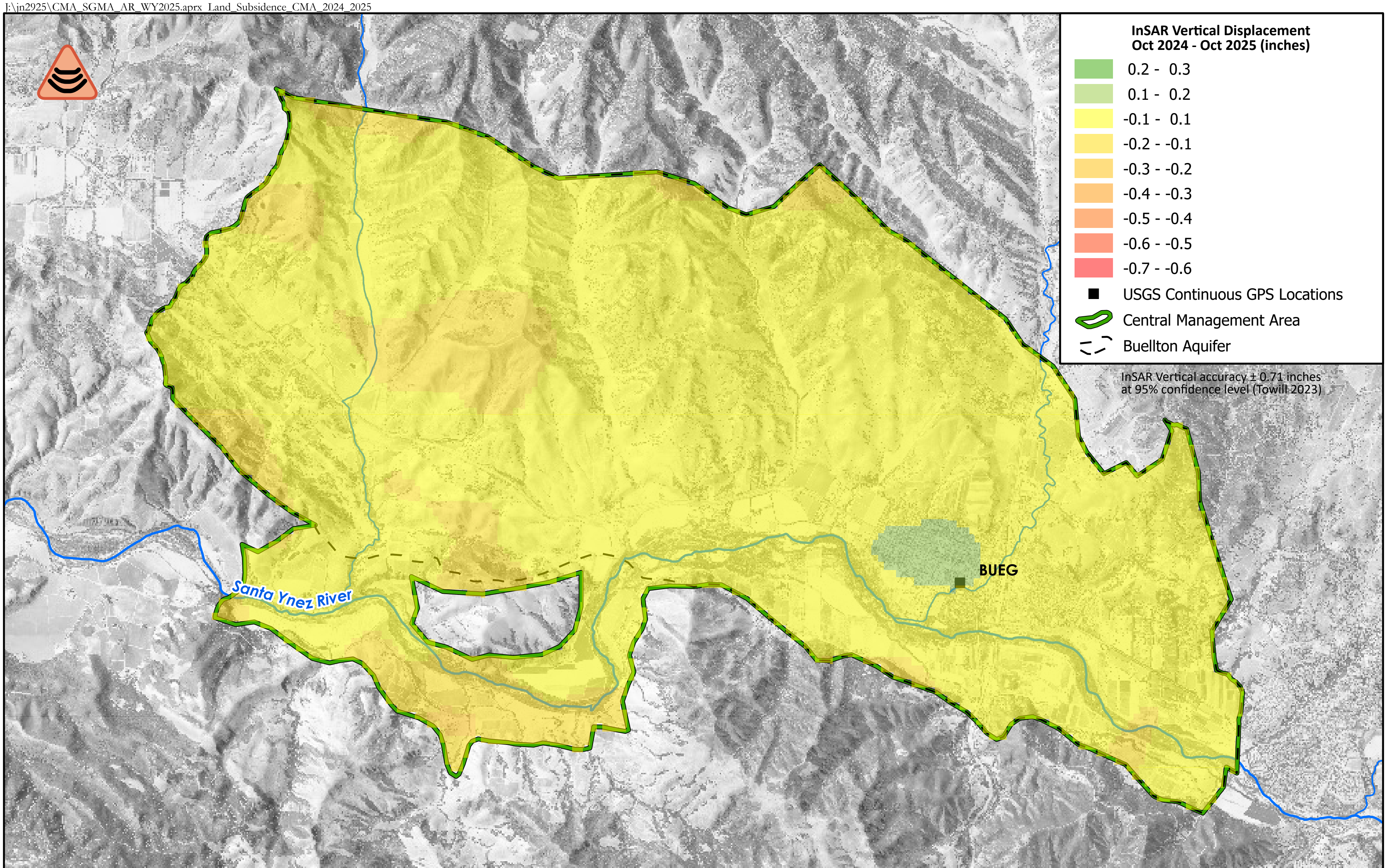
Two primary data sources are used to characterize the movement of the land surface: remote sensing area data from Interferometric Synthetic Aperture Radar (InSAR) and point data from the continuous global positioning system (CGPS). Both InSAR and CGPS methods provide absolute changes in elevation and do not differentiate between land subsidence resulting from excessive groundwater extraction and other sources of vertical movement, such as tectonic movement. Any significant lowering of ground levels indicated by these methods would need to be reviewed to identify the cause. The InSAR maps show the elevation change of the ground over a wide area between two points in time. **CMA Figure 6-1** is a map comparison of October 2024 and October 2025, showing change over WY 2025. **CMA Figure 6-2** is a map comparison of January 2015 and October 2025, which shows cumulative changes since 2015. These two figures show that the vertical change is less than the InSAR method accuracy for most of the CMA.[6]

CGPS collects very high-resolution three-dimensional movement of a sensor over time. The BUEG station, located near the City of Buellton (see CMA Figure 6-2), is a CGPS station that has been operating since January 2015. **CMA Figure 6-3** graphs the horizontal movement (north-south, east-west) and vertical movement (up-down) of the preliminary data from the USGS. Since 2015, the graph shows movement to the north of 14 inches and movement west of 12 inches. Vertical movement is down by less than an inch through 2025. Data shows a vertical jump of 6 inches in 2024, likely due to some instrument change. This lateral movement is aseismic tectonic movement, and not due to groundwater conditions.

Both InSAR and CGPS methods show no undesirable results related to land subsidence during WY 2025.

6 Reported as 18 mm (0.71 inches) vertical accuracy at 95% confidence level in Towill (2023).

J:\jn2925\CMA_SGMA_AR_WY2025.aprx Land_Subsidence_CMA_2024_2025



STETSON
ENGINEERS INC.

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

LAND SUBSIDENCE
OCTOBER 2024 TO OCTOBER 2025
INSAR DATA
WITHIN CENTRAL MANAGEMENT AREA

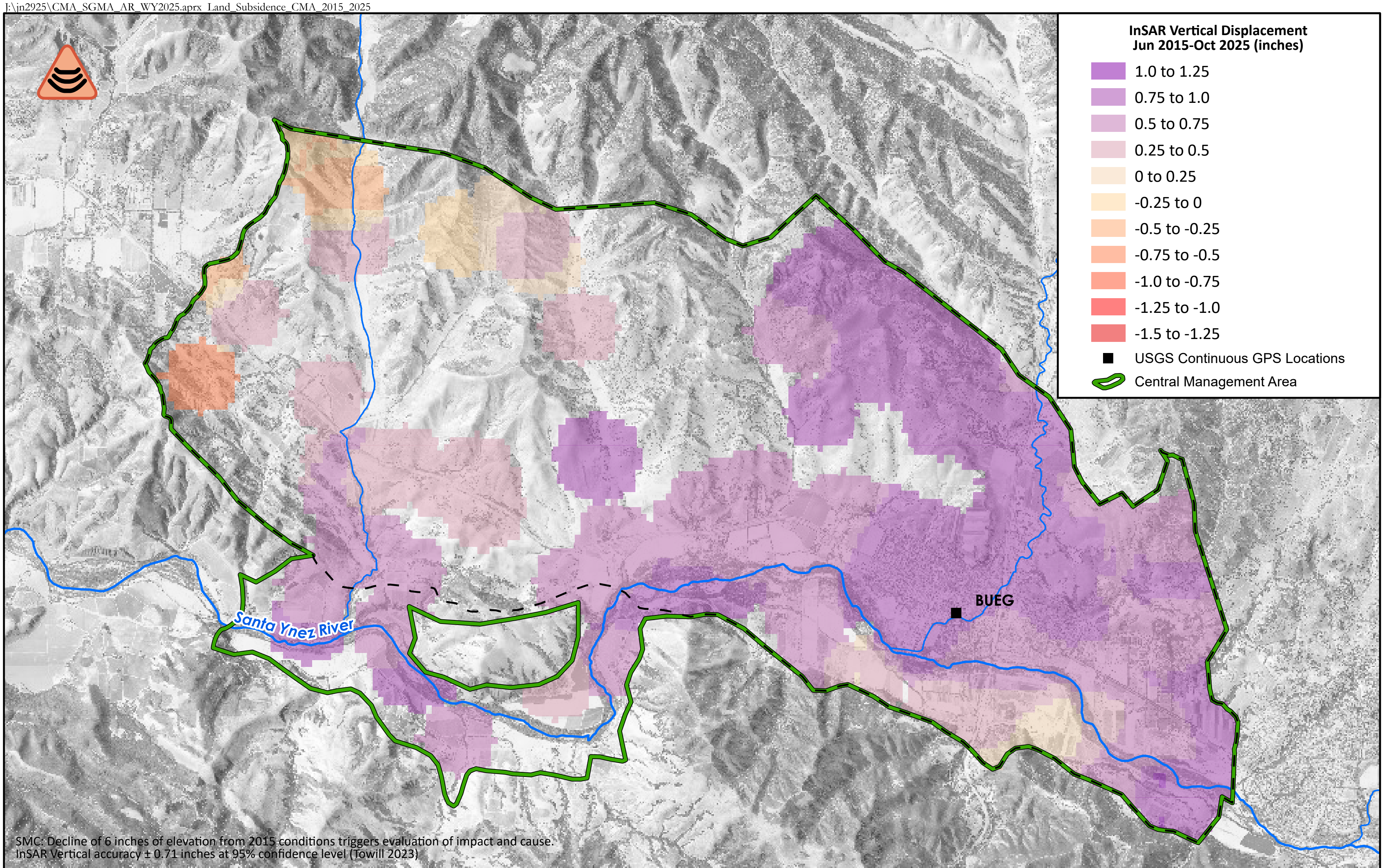
0 0.5 1
Miles

Sources:
USGS National Elevation Dataset, 2002
NAIP (2022), DWR (2025)

N

CMA FIGURE 6-1

J:\jn2925\CMA_SGMA_AR_WY2025.aprx Land_Subsidence_CMA_2015_2025



STETSON ENGINEERS INC.

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

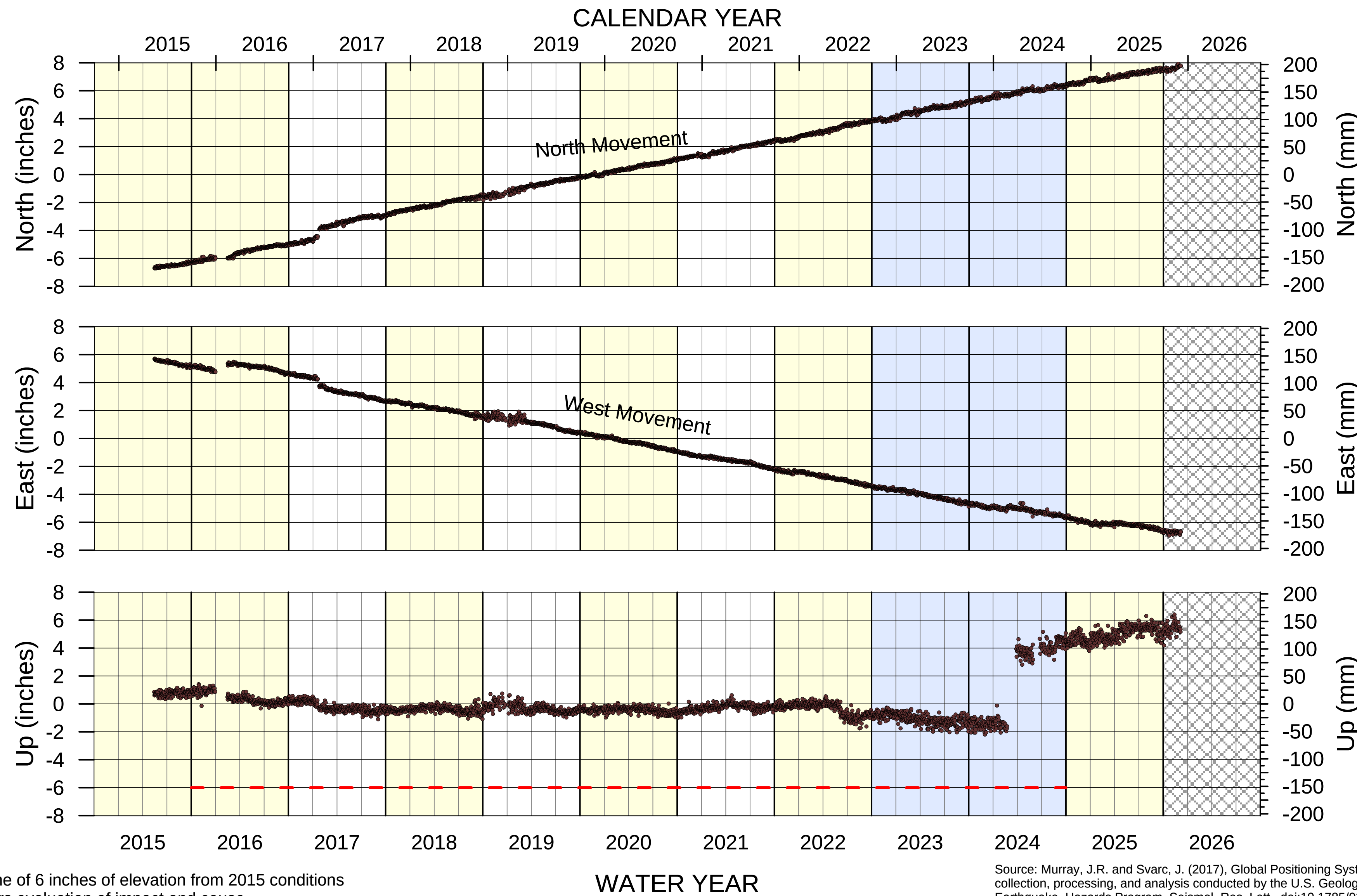
LAND SUBSIDENCE
JUNE 2015 TO OCTOBER 2025
INSAR DATA
WITHIN CENTRAL MANAGEMENT AREA

0 0.5 1 Miles

N

Sources:
USGS National Elevation Dataset, 2002
NAIP (2022), DWR (2025)

CMA FIGURE 6-2



Decline of 6 inches of elevation from 2015 conditions triggers evaluation of impact and cause.

Source: Murray, J.R. and Svarc, J. (2017), Global Positioning System data collection, processing, and analysis conducted by the U.S. Geological Survey Earthquake Hazards Program, Seismol. Res. Lett., doi:10.1785/022016020 .

STETSON ENGINEERS INC.

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

CONTINUOUS GLOBAL POSITIONING SYSTEM
BUEG STATION TRENDS
LAND SUBSIDENCE

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

CMA FIGURE 6-3

F:\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 CGPS Land Subsidence\Fig 6-03 CMA_CGPS WY2025_shift_scale.grf 12/9/2025 J. Baca

6.1.6 Interconnected Surface Water and Groundwater Dependent Ecosystem

The SGMA sustainability indicator “depletion of interconnected surface water,” is related to the effects of groundwater pumping on surface water flows. Under the SGMA statute, groundwater is water in the identified groundwater aquifers, “but does not include water that flows in known and definite channels”[7] such as the underflows of the Santa Ynez River through its alluvial sediments. The SWRCB, under Order WR 2019-0148 and earlier orders and decisions, regulates all flows of the Santa Ynez River. This regulation by the SWRCB extends to and includes the subsurface flows through the alluvial channel.

The groundwater level hydrographs presented in CMA Appendixes A and B further evaluate the potential for the depletion of interconnected surface water. As stated in the 2022 CMA GSP (Section 3b.2-6), groundwater elevations in the Santa Ynez River Alluvium that drop to fifteen feet below channel thalweg elevations in two out of the three representative monitoring wells for two consecutive non-drought[8] years would indicate significant and undesirable results for interconnected surface water and groundwater-dependent ecosystems. Similarly, the measurable objective and interim milestone (2022 GSP, Sections 3b.4-6 and 3b.5-6) established goals for the groundwater levels in the Santa Ynez River Alluvium underflow to rise to at least 5 feet below the channel thalweg elevation. **CMA Table 6-2** summarizes the groundwater elevations at the three wells used to measure potential impacts on surface water. The data presented on the table indicates that all wells measured had water levels above the minimum threshold during WY 2025.

7 CWC Section 10721 (g) “Groundwater” means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

8 For this purpose, a year is a drought if it is two or more consecutive years that are classified as Dry or Critically Dry (see Chapter 2 for year classifications). All other year types and combination of year types will be defined as non-drought years for the purpose of defining undesirable results under a groundwater sustainability plan.

CMA Table 6-2
Groundwater Elevations for Interconnected Surface Water (feet in NAVD88)

Name	ID	Reference Values		Water Year 2024		Water Year 2025	
		Measurable Objective	Minimum Threshold	Spring	Fall	Spring	Fall
6N/32W – 9G1	1120	267	257	264	270	264	260
6N/32W – 13G2	1115	304	294	311	305	307	301
6N/32W – 17R1	1111	332	322	341	338	337	335

NAVD88 = North American Vertical Datum of 1988.
The Measurable Objective is five feet below the Channel Thalweg.
The Minimum Threshold is fifteen feet below the Channel Thalweg.

On behalf of the US Bureau of Reclamation, the Cachuma Operation and Maintenance Board (COMB) Fisheries Division monitors the migration of the Southern California Steelhead/rainbow trout (*O. mykiss*) in the Santa Ynez River from Lake Cachuma to the Pacific Ocean. The COMB publishes the report concurrently or after this annual report,[9] conclusions from that report about WY 2025[10] are currently unavailable before the SGMA annual reporting deadline.

The most recent COMB report was on WY 2024 (COMB, 2025). Due to "high flows throughout the migration season" during WY 2024, no trapping was conducted at any traps along the Lower Santa Ynez River (LSYR) mainstem. The CMA boundaries include what COMB calls the "Avenue of the Flags Reach" and the CMA ends above the "Cadwell" property. The 2024 COMB snorkel surveys of the "Avenue of the Flags" reached identified one hundred and sixty-seven (167) *O. mykiss* in the July 2024 visit and sixty-nine (69) *O. mykiss* in the end of October 2024 visit. However, the COMB report indicated active beaver dams throughout the alluvial area upstream of the Lompoc Narrows. Thirty-seven beaver dams were observed in the LYSR mainstem in WY 2024, a decrease from the previous year.

9 The COMB Fisheries Division report on WY 2024 was published on March 4, 2025.
10 The COMB Water Year is the same as SGMA, running October 1st to September 30th.

6.2 IMPLEMENTATION OF PROJECT AND MANAGEMENT ACTIONS SINCE PREVIOUS ANNUAL REPORT

The CMA GSA continues to work on SGMA compliance and progress on projects and management actions identified in the GSP to improve sustainability (**CMA Table 6-3**). During WY 2025, the CMA made progress on nine (9) tasks in CMA Table 6-3.

CMA Table 6-3
Summary of CMA GSP Implementation Projects - WY 2025

Project Category	Task	Occurrence	Water Year 2025 Status
Completing Ongoing Field Investigations	Surveying Representative Wells	One Time	In Progress
	SkyTEM Airborne Geophysics	One Time	Completed
Monitoring Network Gaps	Video Logging and Sounding Wells	One Time	In Progress
	Add new GWL Monitoring	One Year	In Progress
	Dedicated GWL Monitoring Wells	One Time	Completed
	SW Gage Installation (planning)	One Time	In Progress
Projects and Management Actions	Water Conservation	Annual	-
	Groundwater Extraction Fee Study	5 Year	Completed
	Supplemental Imported Water Fund Reserve Options	One Time	-
	Feasibility Study for Bioswale Stormwater Retention	One Time	-
Improved Data Collection for Management	Well Registration Update	One Time	In Progress
	Well Metering Requirement	One Time	In Progress
Data Management	Data Updates	Annual	In Progress
Reporting and Plan Updates	SMGA WY Annual Reports	Annual	In Progress
	SGMA Five-Year Plan Assessment	5 Year	In Progress

6.2.1 Governance Update

The member agencies ratified the Joint Exercise of Powers Agreement (JPA) forming the GSA at the beginning of WY 2024. On March 3rd, 2025, a non-voting Agricultural Director and an Alternate Agricultural Director were appointed to the GSA's Board of Directors. The Board of Directors met ten times in WY 2025, including two joint meetings with the other two management area GSAs (WMA; EMA) in the SYRVGB.

6.2.2 Public Workshops

In September 2025, the WMA, CMA, and EMA held public workshops as part of DWR's required Action Plan for Management of All Well Production in Santa Ynez River Alluvium Area, Above the Lompoc Narrows. The GSAs held four community workshops across the basin. Three of the workshops were held on September 12, 2025, and an additional workshop was held on September 19, 2025. Participants could join all meetings via remote access. The GSAs issued a public notice inviting participants. The workshop was part of the GSAs' work to increase public awareness of reporting requirements and of groundwater versus surface water designation in the Santa Ynez River alluvium, in accordance with the provisions of the Action Plan. The workshop presentation can be found on https://www.santaynezwater.org/public-workshops-action-plan.

6.2.3 Grants Received

In WY2024, the CMA received a portion of a $5.5M grant from the California Department of Water Resources ("DWR") to benefit the Santa Ynez River Valley Basin GSAs and specific GSP Implementation projects. The grant agreement is between DWR and the SYRWCD on behalf of the management areas in the Basin. A Subgrant Agreement between the SYRWCD and the GSAs was executed to facilitate grant implementation and allow reimbursement to the CMA GSA. There are eight components of the grant work that began in WY2024, including:

9. Grant administration
10. Well Extraction Measurement and Reporting
11. Rate Study

12. Annual Report and Periodic GSP Evaluation
13. Monitoring Improvements
14. Storm Water Capture
15. Water Use Efficiency
16. Recycled Water Feasibility Study

The grant components are the Group 1 Projects and Management Actions identified in the CMA 2022 GSP. Components 1-5 are being planned directly for all management areas. Although Components 6-8 are being planned directly for the WMA, the CMA will leverage these studies to jump-start similar projects for the CMA. In WY 2024, the CMA chose a consultant, EKI Environment & Water, Inc. (EKI), to implement most of the grant components, including components 2 and 5-8 above. In WY, 2025, the CMA contracted with Geosyntec to support some of the grant components. The focus of the CMA GSA in WY 2025 was the Groundwater Extraction Fee Study, Well Registration and Extraction Measurement Program, and Periodic Evaluation.

The progress on these activities is described below.

6.2.4 Groundwater Extraction Fee Study

The CMA selected Raftelis to conduct a rate study to study mechanisms to fund the administration of the GSA including its implementation of the GSP. The work for this study is partially funded by Component 3 of the Prop 68 grant. The Central Management Area Groundwater Sustainability Fee Study Report was published on April 21, 2025. In Resolution No. 2025-01, the CMA GSA outlined the proposed fees and the public hearing process. The CMA adopted the groundwater extraction fee (consisting of an extraction charge and acreage charge) at the Public Hearing on June 23, 2025, in Resolution No. 2025-02. The CMA also adopted Resolution No. 2025-03 on June 23, 2025, directing the fee, with some exceptions, to be collected by the County of Santa Barbara through the property tax billing process. The fee will start in the 2025-26 fiscal year. The Groundwater Extraction Fee is primarily intended as a regular source of revenue for GSA administration and GSP implementation. The GSA will continue to work to ensure appropriate implementation.

6.2.5 Update Well Registration Program and Extraction Measurement Program

As part of implementing Component 2 of the Prop 68 Grant, Well Extraction Measurement and Reporting, work was continued in WY 2025 on the pilot tests to evaluate several well extraction measurement methods. Landowner outreach was conducted to identify CMA sites that meet the study's criteria. Land access agreements and Notices of Exemptions (NOEs) were drafted for each location in the study. EKI worked with AgMonitor to implement projects that measure or estimate extraction through meter and power consumption and LandIQ to install ET measurement stations to measure plant water consumption.

In WY 2025, the different well extraction methods (meter, power consumption, and crop consumptive use) were studied through monthly values measured daily to bi-weekly. Mechanical flow meters and meter calibrations were completed. Photo documentation of the ET stations and proof of equipment purchases have been completed. Data collection and assessment have continued, and the pilot tests are to be completed by December 2026. EKI is actively working on the technical memorandum, which will summarize pilot test site data, site characterization, and data evaluation. The findings of this project will inform the development of the Implementing Rules and Regulations Document to provide specific guidance to well owners on well registration, measurement method criteria, and reporting requirements.

The SYRWCD has concurrently worked to update its water production and well registration reporting system. The new system is expected to be operational in June/July 2026. This update is intended to streamline and ensure well registration and reporting.

6.2.6 Monitoring Improvements

In WY 2025, improvements were implemented to improve water level monitoring in the data gap areas identified in the GSP. New well sites in the Santa Rosa Creek drainage subarea were evaluated, and drilling is expected to begin in WY2026.

Monitoring improvements were also made with a streamflow gauge at the downstream end of the reach connected to the surface water, as identified in the 2022 GSP. A location downstream of Buellton was selected for the new stream gage. Preliminary data is being reviewed and will become available in

WY2026. Field verification of potential Groundwater Dependent Ecosystem (GDE) was conducted in WY 2025. A report to summarize the field assessment will become available in WY 2026.

6.2.7 Data Updates and Annual Reporting

The required water level, water quality, and water use data collection, processing, and Data Management System (DMS) maintenance was completed to support the preparation of the WY 2025 Annual Report and this WY 2025 Annual Report. The public may access the CMA DMS through the following web address: https://sywater.info/. During WY 2025, the CMA published its fourth annual report for the Water Year 2024 (October 2023-September 2024) as a sub-report in the Joint Annual Report to DWR. The Joint Annual Report includes annual reports from each of the GSAs (WMA, CMA, and EMA) under a single cover, and was submitted on March 28, 2025, before the April 1 deadline.[11] This WY 2025 report is the second Joint Annual Report.

6.2.8 5-Year Periodic Evaluation and Potential Plan Amendment

Under SGMA and GSP Regulations, a Periodic Evaluation of a Basin's GSP is due to the California Department of Water Resources (DWR) at least every five years after initial GSP submission for each basin with an approved GSP or any time the GSP is amended. The CMA GSA's initial GSP was adopted by the CMA GSA Board and submitted in January 2022. A periodic evaluation is due to DWR on or before January 18, 2027. The CMA GSA contracted Stetson Engineers to complete the Periodic Evaluation. Proposition 68 funding for the Periodic Evaluation, which was scheduled to cease in early 2026 received a funding extension from DWR on September 3, 2025, to complete the Periodic Evaluation by December 31, 2026. The GSAs requested an extension of funding, primarily due to the approval of the GSPs in January 2024. With the funding time extended, the GSAs will be able to provide a comprehensive report through WY 2025.

[11] CWC Section 10728 "On the April 1 following the adoption of a groundwater sustainability plan and annually thereafter, a groundwater sustainability agency shall submit a report to the department [..]"

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CMA CHAPTER 7: REFERENCES

CCRWQCB (Central Coast Regional Water Quality Control Board). 2023. GSP Annual Report Submittal Comments, Central Management Area, 2022 (OCT. 2021 - SEP. 2022). Bishop, James. June 22, 2023. Public Comment Letter for The Santa Ynez River Valley Groundwater Basin – Annual Report Water Year 2022. 3 pg. https://sgma.water.ca.gov/portal/gspar/comments/214. Access date 2025-01-26.

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SWRCB (State Water Resources Control Board). 1999. In the Matter of Application 29664, Garrapata Water Company: Extraction of Water by Garrapata Water Company from the Alluvium of the Valley of Garrapata Creek in Monterey County, California. 36 pg. SYWATER 508.

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Towill (2023) InSAR Data Accuracy for California Groundwater basins CGPS Data Comparative Analysis January 2015 to October 2022. Final Report. Towill, Inc. California Department of Water Resources. Contract 4600013876 TO#1. 131 pg. SYWATER 528.

EASTERN MANAGEMENT AREA

SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN
EASTERN MANAGEMENT AREA GSA

GSI
Water Solutions, Inc.

Santa Ynez River Valley Groundwater Basin

Eastern Management Area

Groundwater Sustainability Agency

Water Year 2025 (October 2024-September 2025)

Board of Directors*:*

City of Solvang

Elizabeth Orona, Director
Mark Infanti, Alternate Director

Santa Ynez River Water Conservation District

Brett Marymee, Director
Steve Jordan, Alternate Director

Santa Ynez River Water Conservation District, Improvement District No. 1

Brad Joos, Director
Mike Burchardi, Alternate Director

Santa Barbara County Water Agency

Joan Hartmann, Director
Meighan Dietenhofer, Alternate Director

Agricultural Director (Not a Public Agency)

Douglas Circle, Director

Mary Heyden, Alternate Director

Officers:

Brad Joos, Chair

Elizabeth Orona, Vice Chair

Douglas Circle, Secretary and Treasurer

Daniel Heimel, Executive Director

Aleshire & Wynder LLP, Legal Counsel

GSA Member Agency Staff Representatives:

Matthew Young
Santa Barbara County Water Agency

Kadie McShirley
Santa Barbara County Water Agency

William J. Buelow, PG
Santa Ynez River Water Conservation District

Paeter Garcia
Improvement District No. 1

Randy Murphy
City of Solvang

Italicized and gray indicates former Board members or staff representatives.

EMA CHAPTER 1: INTRODUCTION

The Eastern Management Area (EMA) Groundwater Sustainability Agency (GSA) is the exclusive agency responsible for complying with Sustainable Groundwater Management Act (SGMA)[1] requirements in the eastern portion of the Santa Ynez River Valley Groundwater Basin (SYRVGB). The EMA covers the easternmost 150 square miles, which geographically includes the Santa Ynez Upland and Santa Ynez River areas. The Santa Ynez Upland area includes the groundwater system that is subject to regulation under SGMA, as presented on **EMA Figure 1-1**.

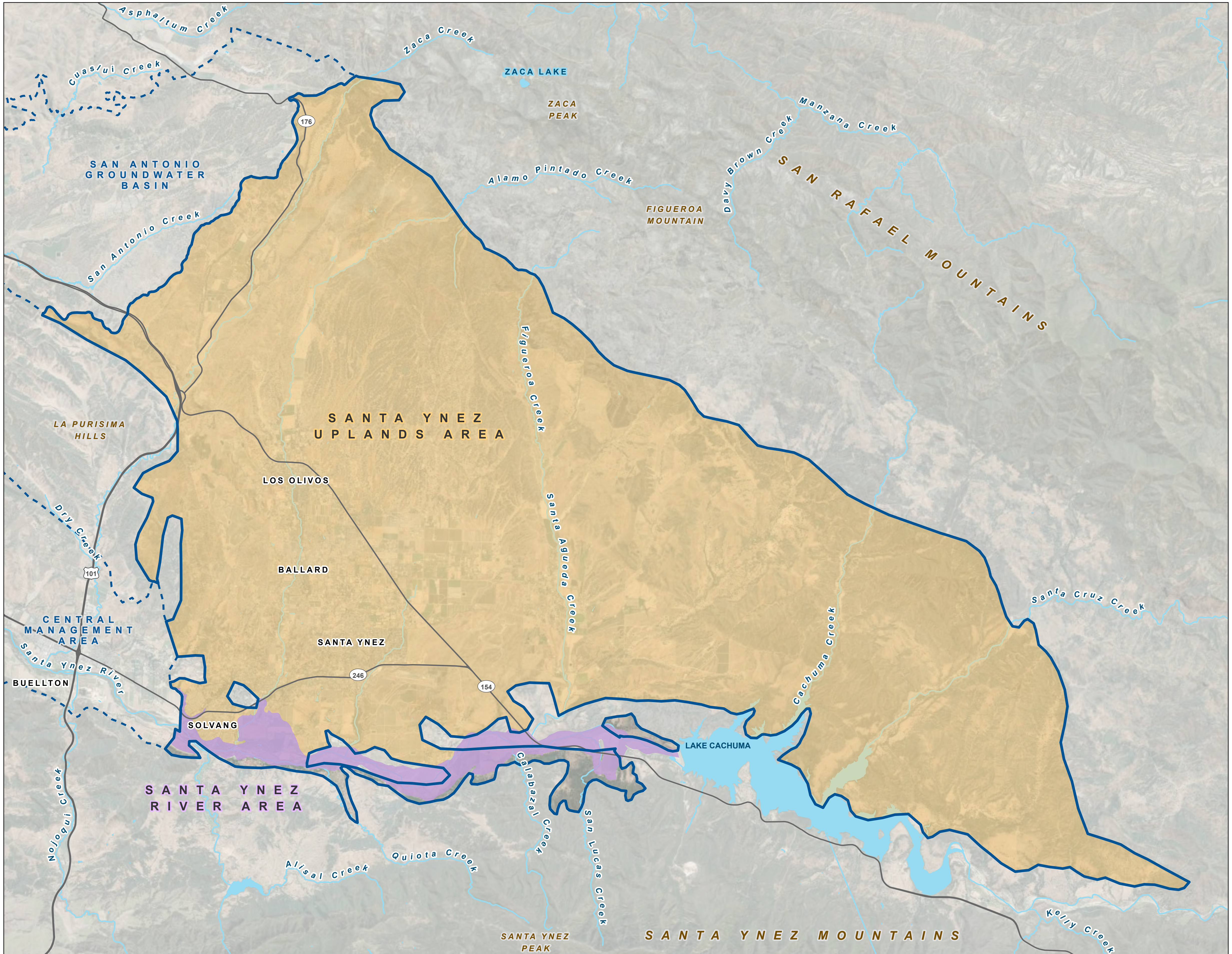
The EMA is bounded on the north and east by impermeable rocks of the San Rafael Mountains and on the northwest by the adjacent San Antonio Creek Valley Groundwater Basin (San Antonio Groundwater Basin). The entire Basin is bounded by the Santa Ynez Mountains on the south. Average precipitation ranges from 15 inches per year in the southern and central areas to about 24 inches per year in the higher elevations (Santa Barbara County, 2012). Several tributaries flow from the San Rafael Mountains and Santa Ynez mountains into the Santa Ynez River along the southern edge of the EMA. The Santa Ynez River flows west of Highway 154, past the communities of Solvang and Santa Ynez.

The EMA GSA consists of four member agencies:

- Santa Ynez River Water Conservation District (SYRWCD),
- Santa Barbara County Water Agency (County of Santa Barbara)
- City of Solvang
- Santa Ynez River Water Conservation District, Improvement District No. 1 (ID No. 1).

In the Santa Ynez Uplands, the principal aquifers are the Paso Robles Formation and Careaga Sand. The base of these water-bearing formations is an irregular surface formed as the result of folding, faulting, and erosion, which extends to a maximum depth of approximately 3,500 feet in some areas.

1 CWC Section 10720 et seq. and 23 CCR § 350 et seq.



Santa Ynez River Valley Groundwater Basin Eastern Management Area

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

- Santa Ynez Uplands Area (area covered by GSP)
- Santa Ynez River Area

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody

NOTE

GSP: Groundwater Sustainability Plan

N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar 2019

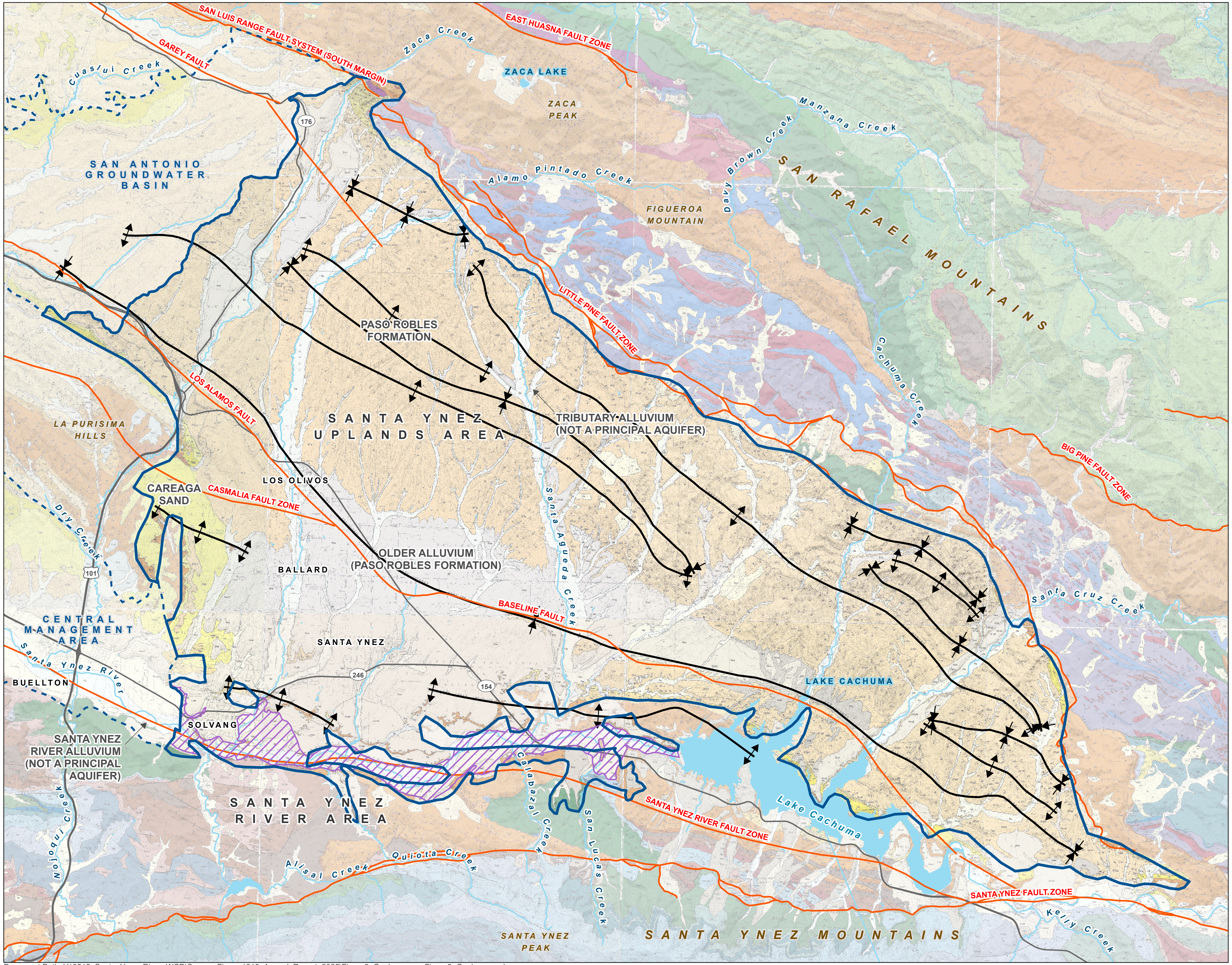
GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure1_GW_Basin_EMA.aprx, Figure1_GW_Basin_EMA, npalmer

The groundwater basin is generally bound by the mountains rimming the EMA as follows and presented on **EMA Figure 1-2**:

- The northern and eastern boundary of the EMA is defined by outcropping of impermeable bedrock of the San Rafael Mountains.
- The Santa Ynez Upland is separated from the Santa Ynez River area to the south by a ridge of impermeable bedrock. The Santa Ynez Mountains form the southern boundary of the entire EMA south of the Santa Ynez River.
- The boundary to the northwest is defined as the shared border with the San Antonio Groundwater Basin.
- The boundary to the west is formed in the Purisima Hills by impermeable consolidated bedrock underlying the Careaga Sand.

Two principal aquifers have been identified in the EMA: the Paso Robles Formation and the Careaga Sand, which are presented on **EMA Figure 1-3** and **EMA Figure 1-4**, respectively. The Paso Robles Formation and the Careaga Sand together extend to a depth of more than 1,500 feet below ground surface (bgs) on average in the EMA with a maximum thickness of up to 3,500 feet. Overlying these formations are the Quaternary-aged Older Alluvium (Qoa), which is derivative of the Paso Robles Formation, and is therefore composed of materials that are very similar to the Paso Robles Formation and extend to a thickness of as much as 150 feet. Because of this similarity, this Older Alluvium is managed as part of the Paso Robles Formation. Large exposures of the formation north and east of the valley receive direct infiltration of rainfall.



Geologic Map

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Santa Ynez River Area

Geology

- Tributary Alluvium, Qa
- Santa Ynez River Alluvium, Qg
- Older Alluvium, Qoa
- Paso Robles Formation QTp
- Careaga Sand, Tcag
- Monterey Formation, Tm

Geologic Structures

- Fault

Fold Axes

- Anticline
- Syncline

All Other Features

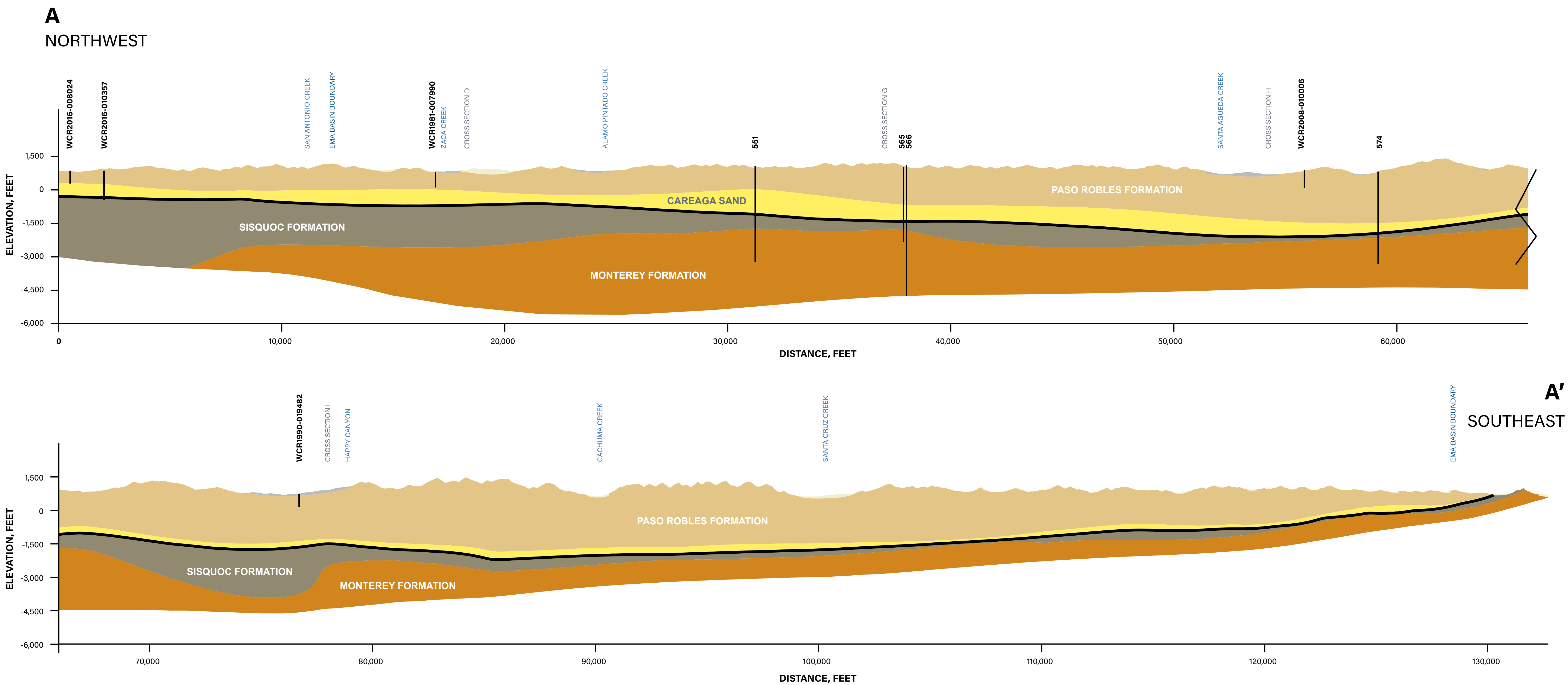
- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody

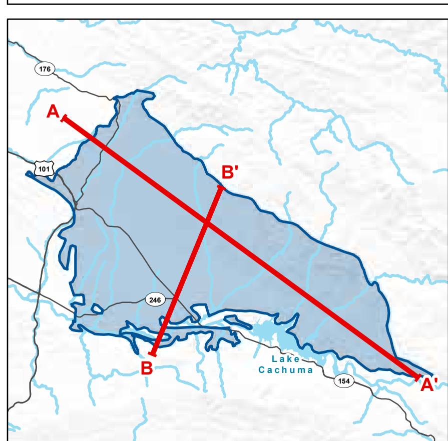
N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar 2019

GSI Water Solutions, Inc.





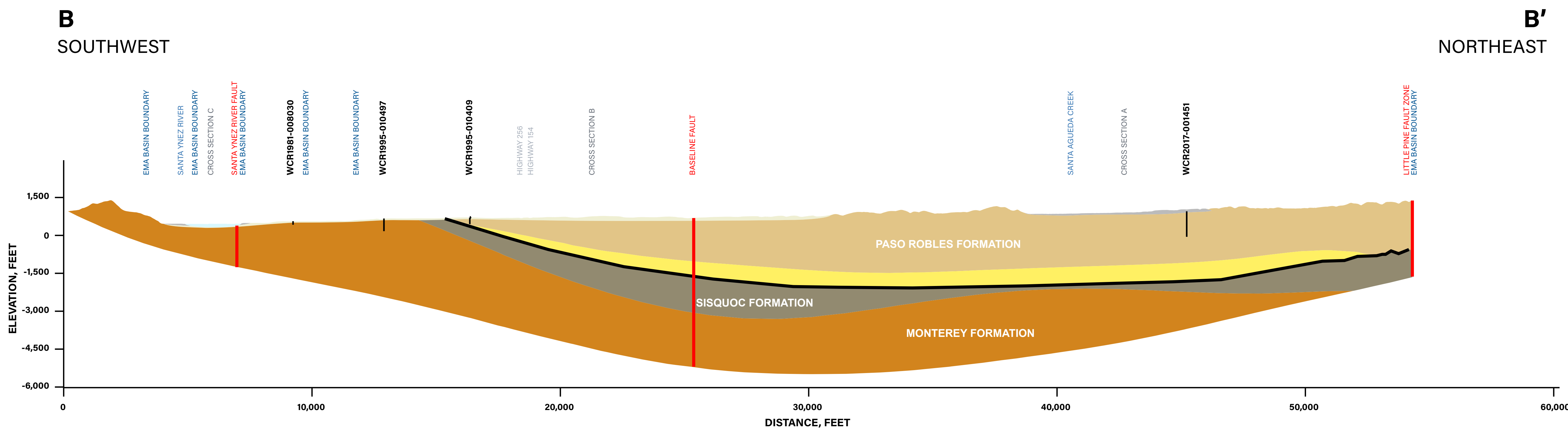
LEGEND

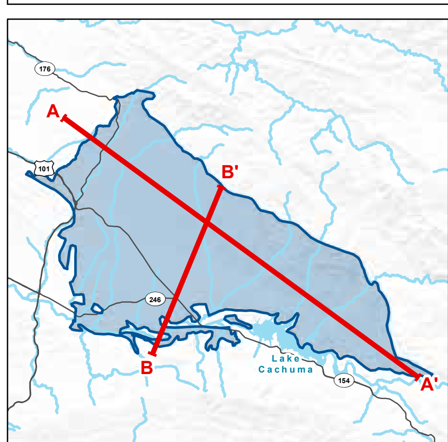
- Qa – Tributary Alluvium
- Qoa (Principal Aquifer) – Older Alluvium
- QTp (Principal Aquifer) – Paso Robles Formation
- Tca – Careaga Sand
- Basin Bottom
- Tsq (Principal Aquifer) – Sisquoc Formation
- Tm – Monterey Formation

Cross Section A

Water Year 2025 Annual Report for the
Santa Ynez River Valley Groundwater Basin, Eastern Management Area

GSI Water Solutions, Inc.





LEGEND

- Qa – Tributary Alluvium
- Qoa (Principal Aquifer) – Older Alluvium
- QTp (Principal Aquifer) – Paso Robles Formation
- Tca – Careaga Sand
- Basin Bottom
- Tsq (Principal Aquifer) – Sisquoc Formation
- Tm – Monterey Formation

Cross Section B

Water Year 2025 Annual Report for the
Santa Ynez River Valley Groundwater Basin, Eastern Management Area

GSI Water Solutions, Inc.

Vertical heterogeneity in the water-bearing properties of the Paso Robles Formation is the result of coarse-grained sediment beds that yield water freely to wells alternating with fine-grained beds that do not, where higher well yields are typically attributed to the wells that penetrate the coarse-grained lenses. Production from wells completed in this formation can range between less than 100 gallons per minute (gpm) to as much as 1,500 gpm depending largely on the length of the aquifer perforated by individual wells. With that, considerable variability is known to exist within the formation throughout the EMA. Whereas the upper part consists of relatively coarse-grained materials typical of alluvial fan deposits, the lower part of the complexly folded Paso Robles Formation is finer-grained. The coarser-grained upper portions of the Paso Robles Formation yield groundwater to wells at higher flow rates than the underlying portions. Fine-grained zones act as local confining beds and are likely the cause of the localized artesian conditions that were historically reported in some wells screened within the Paso Robles Formation in Happy Canyon and along Alamo Pintado Creek.

In the Santa Ynez Uplands, the Careaga Sand is approximately 800 feet thick on average and varies from 200 to 900 feet. There are large exposures of the formation in the Purisima Hills along the western edge of the EMA. However, because the lateral extent of the Careaga Sand aquifer is limited relative to that of the Paso Robles Formation, fewer wells are completed in the Careaga Sand than in the overlying Paso Robles Formation. In the EMA, wells completed in the Careaga Sand produce between 12 to 325 gpm.

The primary components of groundwater recharge to the aquifers are mountain front recharge, streamflow percolation, deep percolation of direct precipitation, and agricultural irrigation return flow.

Natural groundwater discharge areas in the EMA include springs and seeps, some groundwater discharge to surface water, and evapotranspiration (ET) by phreatophytes. The largest component of groundwater discharge is pumping of groundwater from wells. The regional direction of groundwater flow in both principal aquifers is generally from the north to the south-southwest.

1.1 MONITORING NETWORKS AND PROTOCOL

This section provides a brief description of the groundwater monitoring programs and monitoring results.

The EMA Plan summarized the existing groundwater monitoring network and protocol for including a subset of these wells into the Representative Monitoring Network. Under SGMA, monitoring networks are required to be developed to provide sufficient data quality, frequency, and spatial distribution to characterize groundwater and interconnected surface water, and to evaluate changing aquifer conditions in response to implementation of the EMA Plan. The monitoring networks developed in the EMA Plan support efforts to:

- Monitor changes in groundwater conditions and demonstrate progress toward achieving measurable objectives and avoiding undesirable results as defined in the EMA Plan.
- Quantify annual changes in groundwater storage.
- Monitor status of the beneficial uses and users of groundwater.

Monitoring networks have been developed for each of the five sustainability indicators applicable[2] to the EMA in relation to groundwater pumping and implementation of the EMA Plan:

Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning implementation horizon.

Significant and unreasonable reduction of groundwater storage.

Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.

Significant and unreasonable land subsidence that substantially interferes with surface land uses.

Depletion of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

Monitoring for the first two sustainability indicators (chronic lowering of water levels and reduction of groundwater in storage) is being implemented using the same representative monitoring well sites. The EMA Plan identifies a network of 24 representative wells for water level monitoring (GSI, 2022). Of these,

[2] The sixth and final indicator, seawater intrusion, is not applicable to the EMA as an inland management area. Seawater intrusion is applicable to the WMA, which is the sole coastal management area for the SYRWCB.

15 wells are screened solely in the Paso Robles Formation, and 9 wells are screened solely in the Careaga Sand.

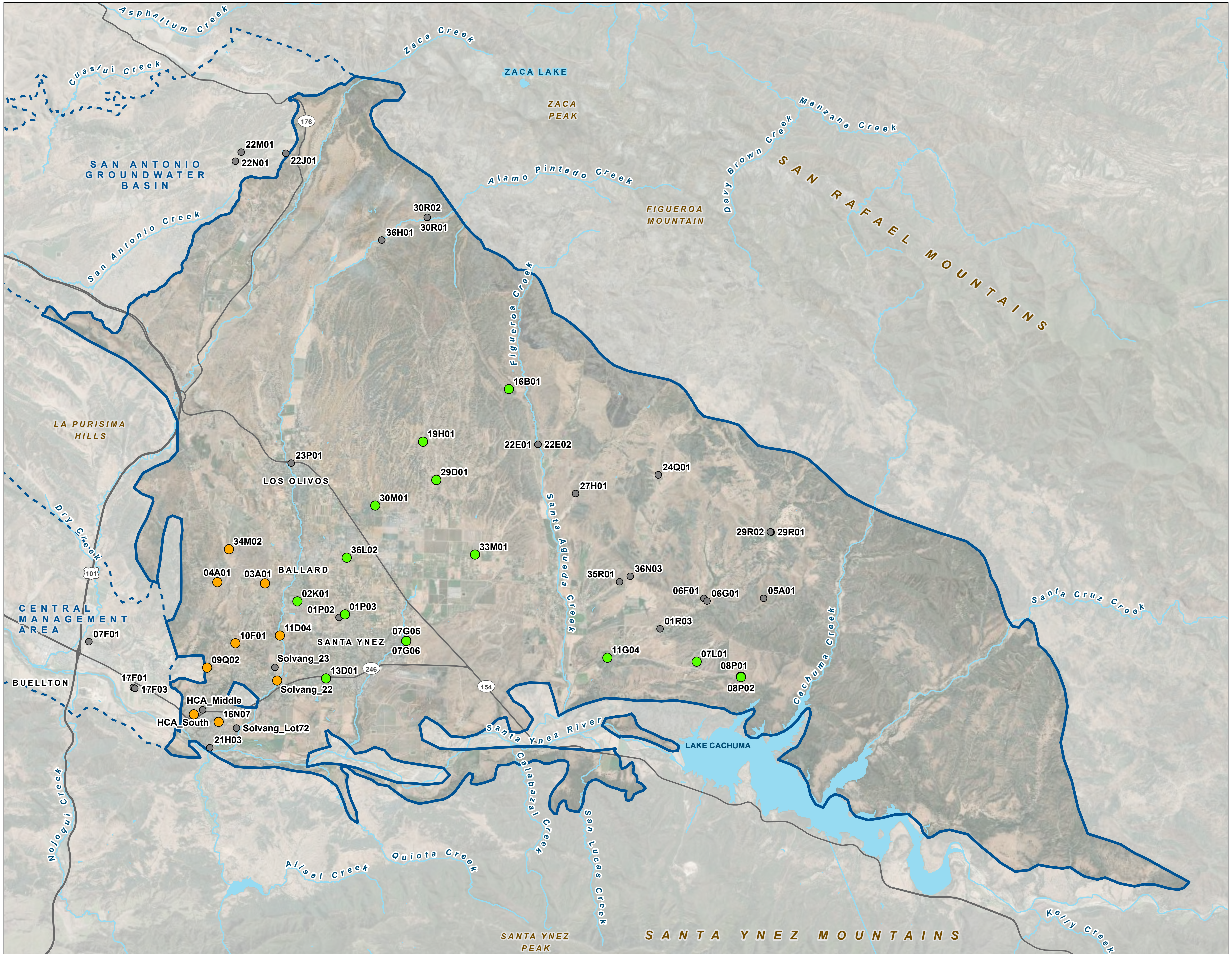
The wells included in the representative monitoring network documented in the EMA Plan are subject to change during the EMA Plan implementation period. Specifically, of the 15 representative Paso Robles Formation wells identified in the Plan two are being considered review for removal from the monitoring network, which will be addressed further in the periodic evaluation leaving 13 wells that are currently considered representative. For example, one of the representative Paso Robles formation wells (-08P01) has been dry since the issuance of the EMA Plan while an adjacent well completed in the same formation has not. Therefore, this well is no longer considered to be representative of the Paso Robles Formation and has been removed from the representative monitoring well network. Additional discussion of proposed changes to the monitoring network is provided in this section.

EMA Figure 1-5 displays the locations of the representative monitoring wells, and **EMA Appendix A** includes a summary of information for each of the wells.

1.1.1 Monitoring Data Gaps

Although the existing groundwater level monitoring network presented in the Plan satisfied the well density guidelines cited in the DWR best management practice guidance for monitoring networks (DWR, 2016a and 2016b), two low-density areas were identified within the EMA where the addition of monitoring wells would improve the understanding of groundwater conditions discussed in this section (see Figure 4-2 in GSI, 2022). The first area includes northwestern portions of the Santa Ynez Uplands from Los Olivos to the northern boundary of the Basin and EMA, including the northern reaches of Zaca Creek and Alamo Pintado Creek. The second area is in the Paso Robles Formation in the central portion of the EMA, generally including the area surrounding Santa Agueda Creek and Happy Canyon.

Efforts are underway to install a monitoring well in the northwestern data gap area that will be incorporated into the monitoring network. Including this well into the groundwater level monitoring network will increase the accuracy of groundwater elevation throughout the EMA in that area, identify trends, and enhance efforts to sustainably manage the EMA.



Groundwater Level Monitoring Network

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Representative Well (by screened aquifer)

- Careaga Sand
- Paso Robles Formation
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody

N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

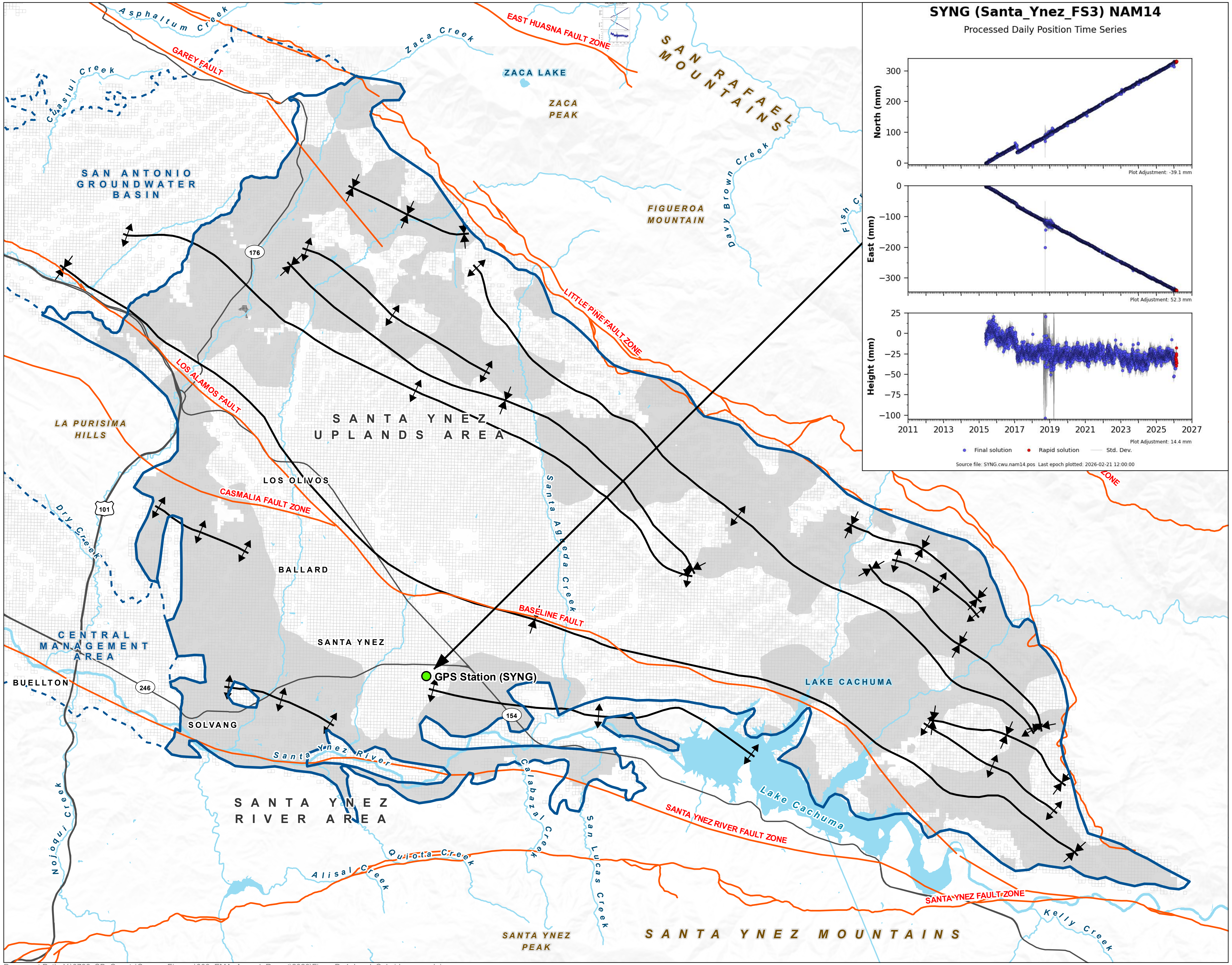
GSI Water Solutions, Inc.

1.1.2 Additional Monitoring

Potential land subsidence caused by groundwater extraction is monitored as part of implementation of the Plan. Land surface elevations in the EMA are measured using Interferometric Synthetic Aperture Radar (InSAR) data provided by DWR and by the University NAVSTAR Consortium (UNAVCO) Continuous Global Positioning System (CGPS) Station near the Santa Ynez Airport. InSAR measures ground elevation using microwave satellite imagery data. Any presence of subsidence is estimated using Interferometric Synthetic Aperture Radar (InSAR) data provided by DWR. The accuracy associated with the InSAR measurement and reporting methods is of 0.1 feet (or 1.2 inches). A land surface change of less than 0.1 feet is therefore within the noise of the data and is evidence that no subsidence has occurred. Examination of the data between June 2015 and October 2025 show that no measurable land subsidence has occurred. The EMA GSA will continue to monitor and report annually on any subsidence in the EMA.

Available data to date indicate that (1) land subsidence rates have not exceeded rates observed from 2015 through 2025 at the UNAVCO CGPS station near Santa Ynez and thus, the minimum threshold has not been exceeded; and (2) land subsidence that causes significant and unreasonable damage to groundwater supply or land uses (including agricultural, residential, rural residential, and town buildings), or infrastructure, and property interests has not been documented. The EMA will annually assess subsidence using the UNAVCO CGPS and InSAR data provided by DWR. UNAVCO CGPS and InSAR data are included shown on **EMA Figure 1-6**

The interconnected surface water monitoring network will consist of two piezometers in the potential groundwater-dependent ecosystem (GDE) areas identified in the Plan within the distal ends of Alamo Pintado Creek and Zanja de Cota Creek. The piezometers are scheduled to be installed this year using SGMA grant funds awarded to the Basin by DWR. These piezometers will be used to assess whether depletion of interconnected surface water is occurring and whether significant and unreasonable adverse impacts to GDEs or reductions in discharge of interconnected surface water may be occurring as a result of groundwater conditions. As described in the Plan, the EMA GSA will use groundwater levels within these forthcoming monitoring wells as a proxy for evaluating the minimum threshold in the Plan for depletion of interconnected surface waters.



Land Subsidence

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Vertical Displacement Point Data Location Q4 2025

GPS Station SYNG

Interpolated InSAR Raster of Cumulative Displacement, 6/13/2015 - 10/1/2025

Vertical Displacement (InSAR)

0.0 to 0.09

0.1 to 0.11 (max)

Geologic Structures

Fault

Fold Axes

Anticline

Syncline

All Other Features

Eastern Management Area Bulletin 118 Boundary

Other Bulletin 118 Groundwater Basin Boundary

Major Road

Watercourse

Waterbody

NOTES

InSAR accuracy for the period shown is 0.1 feet. InSAR results less than this value are not considered to be evidence of actual subsidence

Areas outside of the InSAR point data grid do not have raw data.

N

0 5,000 10,000 15,000

Feet

Date: March 4, 2024
Data Sources: ESRI, USGS, Maxar 2019

GSI Water Solutions, Inc.

1.1.3 Groundwater Quality

Evaluation of the water quality sustainability indicator will be achieved through existing groundwater quality monitoring networks, including the SWRCB Division of Drinking Water (DDW) public supply well water quality program and the SWRCB Irrigated Lands Regulatory Program (ILRP). The EMA GSA is not charged with managing groundwater quality unless it can be shown that water quality degradation is caused by groundwater pumping in the EMA, or the EMA GSA implements a project that degrades water quality.

There are 56 wells from the existing monitoring programs within the groundwater quality monitoring network, of which 26 are municipal and public water system drinking water supply wells from the SWRCB's Groundwater Ambient Monitoring and Assessment database. The remainder of the wells were either agricultural and/or domestic wells from the ILRP database. Well construction information is unknown for the ILRP wells.

Constituents of concern (COCs) identified in the Plan are based on existing regulatory standards (i.e., maximum contaminant levels [MCLs] and secondary MCLs [SMCLs]) for drinking water established by the SWRCB DDW and the U.S. Environmental Protection Agency[3]. For agricultural uses, COCs are based on basin water quality objectives presented in the Water Quality Control Plan for the Central Coastal Basin (RWQCB, 2019).

According to the California Department of Conservation, Geologic Energy Management Division's online Well Finder, or WellSTAR, tool, the Zaca Oil Field is the only oil and gas field located within or adjacent to the EMA. The U.S. Geological Survey, in cooperation with the SWRCB, initiated the California Oil, Gas, and Groundwater (COGG) Program in 2015[4]. The objective of the COGG Program is to determine whether groundwater quality may be adversely impacted by nearby oil and gas development activities (Davis et al., 2018). For the current water year, it was determined that reports are not yet available from the COGG

[3] The list of MCLs and SMCLs is available at https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chemicalcontaminants.html. (Accessed February 9, 2026.)

[4] Description available at https://webapps.usgs.gov/cogg/. (Accessed February 9, 2026.)

Program relevant to the EMA. When results from the COGG Program are available for review, the EMA GSA will consider these findings as part of the overall groundwater quality monitoring program.

According to the Plan, “significant and unreasonable degraded groundwater quality" has not occurred unless: “Concentrations of TDS, chloride, sulfate, boron, sodium, and nitrate are equal to or greater than WQOs in 50 percent of representative wells or are equal to concentrations in January 2015.” Furthermore, “the exceedance of WQOs in the RWQCB’s Basin Plan in 50 percent of the private wells will be the basis for minimum thresholds for degraded groundwater quality at private agricultural and domestic wells.”

Notably, SGMA regulations regarding preparation of Annual Reports (23 CCR § 356.2) do not require a discussion of degraded water quality. However, in response to the DWR’s request in their acceptance of the Basin’s previous annual report to “include information on all applicable sustainable management criteria in your subsequent annual report.” A summary of current water quality information for each of the wells is presented in EMA Appendix A.

Point sources causing potential groundwater quality degradation and associated waste discharge permits were reviewed using the SWRCB GeoTracker system, the results of which will be presented in the forthcoming periodic update.

EMA CHAPTER 2: BASIN CONDITIONS

During Water Year 2025, a total of 7 inches of precipitation was recorded at the Santa Ynez Fire Station #32 (Santa Barbara County Station No. 218 gauge). A graph of the cumulative departure from average annual precipitation, and water year type are presented in **EMA Figure 2-1**. The long-term average annual precipitation for water years 1951 through 2025 is 15.8 inches. Water year types were identified using DWR guidance (DWR, 2021), which principally considers the rainfall that fell during the current and prior water years. The water year index presented on **EMA Table 2-1** is calculated in accordance with DWR's guidance, which is based on precipitation during both the current prior water years.[1] Water years are categorized according to the following designations, which are determined in comparison to rank of each year to the preceding 29 years, as shown on **EMA Table 2-1**:

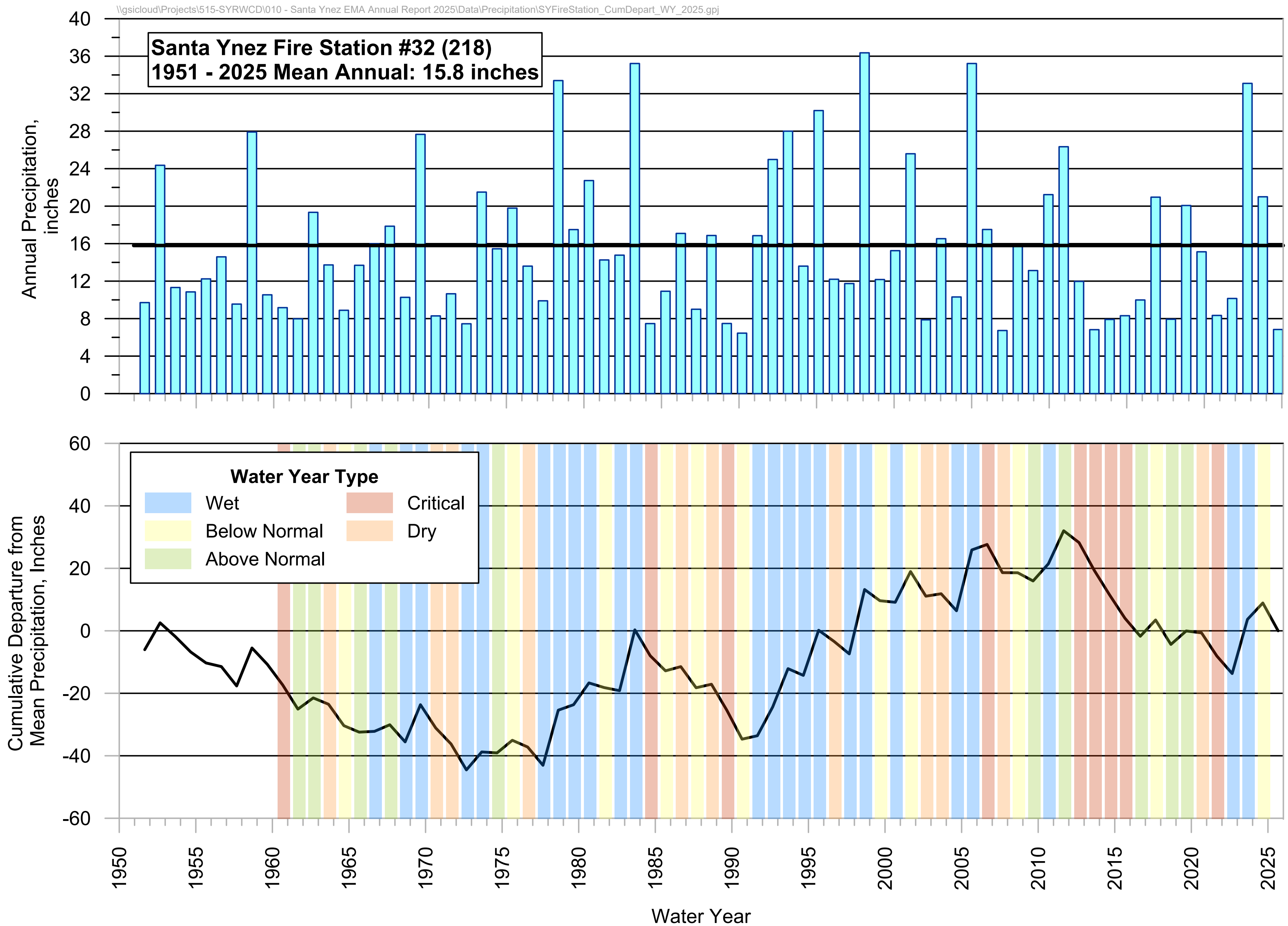
- Wet (greater than 70 percent)
- Above normal (50 to 70 percent)
- Below normal (30 to 50 percent)
- Dry (15 to 30 percent)
- Critical (less than 15 percent)

The period covered by the Plan included data through the end of water year 2018. Since that time, the six water years of 2019 through 2025 have included two wet years (2023 and 2024), two above normal years (2019 and 2020), one below average year (2025), one dry year (2021) and one critical year (2022) according to DWR water year calculations. Overall, rainfall during the period since 2018 has averaged 16.3 inches per year, which is approximately equal to the period of record of 15.8 inches.

During the current 2025 water year, the water year type was characterized as below normal in the EMA but characterized as dry within the other management areas. Notably, the water year types are calculated differently by the management areas in the Basin, such that the Western Management Area and Central Management Area use a method similar to the 2019 SWRCB Water Rights Order 2019-0148 for the Cachuma Project, which is based on surface flows within Salsipuedes Creek in accordance with the

[1] Index = (0.40 * Current Year's precipitation) + (0.60 * Previous Year's Precipitation)

management of the Santa Ynez River, while the EMA uses the SGMA Water Year Type Dataset method based on precipitation data (DWR, 2021). The water year types from the two methods exhibit a robust match, though, during some years, slight differences in water year type designation exist. Both methods were selected in coordination based on the management needs of each management area. Both methods are focused on the same basin-wide sustainability goal.



Annual Precipitation and Water Year Type
Santa Ynez Fire Station
Santa Ynez River Valley Groundwater Basin, Eastern Management Area

EMA FIGURE 2-1

EMA Table 2-1
Water Year Type in the EMAs for Recent Years,
Based on Precipitation at Santa Ynez Fire Station #32

Water Year	Annual Precipitation (in/year)	Water Year Index [A]	Water Year Type [A]
2011	16	24	Wet
2012	12	18	Above Normal
2013	7	9	Critical
2014	8	8	Critical
2015	8	8	Critical
2016	10	9	Critical
2017	21	17	Above Normal
2018	8	13	Below Normal
2019	20	15	Above Normal
2020	15	17	Above Normal
2021	8	11	Dry
2022	10	9	Critical
2023	33	24	Wet
2024	21	26	Wet
2025	7	13	Below Normal

Notes: The water years shaded according to the designations determined in comparison of each year to the preceding 29 years. Based on the below table:

Color	Year Type
Cyan	Wet
Green	Above Normal
Yellow	Below Normal
Tan	Dry
Red	Critical

[A] Defined in DWR, 2021 based on mean annual precipitation measured at the Santa Ynez Fire Station #32 (Santa Barbara County Station No. 218 gauge) (see Section 3.3 of the EMA Plan).

[A] Index = (0.40 * Current Year's precipitation) + (0.60 * Previous Year's Precipitation)
Notes: EMA = Eastern Management Area; in/year = inches per year.
Source: Precipitation from Santa Barbara County - Flood Control District station #218 - Santa Ynez Fire Station #32

EMA CHAPTER 3: GROUNDWATER HYDROGRAPHS AND CONTOURS

This section summarizes groundwater elevations in the EMA beginning in October 2024 (Water Year 2025) of the groundwater level monitoring network presented in EMA Figure 1-5. Groundwater elevation maps were prepared for the spring and fall of Water Years 2024 and 2025 for the two principal aquifers. **EMA Figure 3-1** through **EMA Figure 3-8**, present seasonal water levels in the Paso Robles Formation and the Careaga Sand. Timeframes were selected to represent spring and fall conditions for each year.

Groundwater conditions are based on the available groundwater elevation data for both aquifers, although well construction information is incomplete for some wells. These data were uploaded to DWR's Monitoring Network Module, which has replaced the California Statewide Groundwater Elevation Monitoring program.

The contour maps were developed using data collected by the Santa Barbara County Water Agency, ID No. 1, and City of Solvang staff. The number of wells in the Representative Monitoring Network has decreased since 2018. Monitoring of several Careaga Sand wells in the northwestern EMA ended after 2018 due to loss of access. Two Paso Robles Formation wells included in the Plan and monitored through 2018 are also no longer accessible and are being considered for removal from the monitoring network. This reduction in monitored wells limits the accuracy of groundwater condition assessments and estimates of changes in groundwater in storage. The EMA GSA is working to add new monitoring wells to address these data gaps.

3.1 SEASONAL HIGH AND LOW (SPRING AND FALL)

Groundwater elevation data from all available monitoring wells completed in the principal aquifers were used to develop contour maps to evaluate seasonal variability in each aquifer. To support year-to-year comparison and maintain consistency with the Plan, this Annual Report uses the same set of wells identified in the Plan's monitoring network whenever possible.

Santa Barbara County Water Agency staff measure approximately 35 wells on behalf of the GSA during the spring and fall, subject to site access. The City of Solvang also monitors additional wells. As Plan implementation continues, the GSA is evaluating opportunities to expand the monitoring network by considering well accessibility, geographic distribution, construction details, and hydrograph characteristics. Of the wells monitored, the locations of which are shown in EMA Figure 1-5, a total of 15 wells within the Paso Robles Formation (of which 13 are monitored) and 9 within the Careaga Sand have been identified as representative monitoring sites (RMSs) for the purpose of monitoring sustainability indicators.

In accordance with the SGMA regulations, the following information is presented in this report based on available data:

- Groundwater elevation contour maps are provided for the seasonal high and low conditions. The previous annual report presented conditions through Fall 2024, and this report includes maps for Spring and Fall of 2024 and 2025 for comparison.
- A map showing the change in groundwater elevation over the preceding water year is included. This report presents the change in groundwater elevations from Spring 2024 to Spring 2025.
- Seasonal variability in groundwater conditions is described based on the differences between the Spring and Fall 2025 groundwater elevation maps. Hydrographs for representative wells (RMSs) are presented in **EMA Appendix B**.

3.1.1 PASO ROBLES FORMATION GROUNDWATER ELEVATION CONTOURS

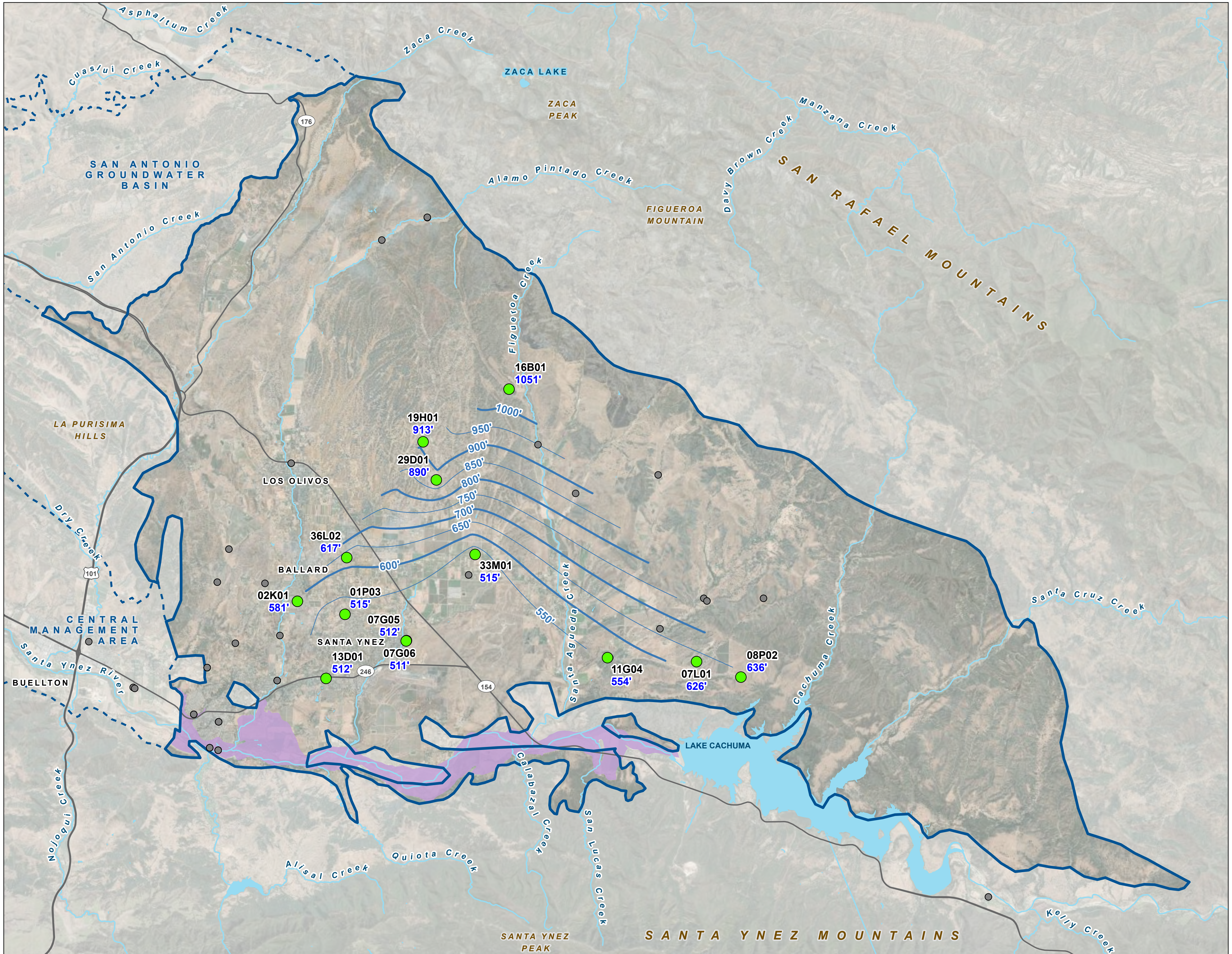
Groundwater elevation contour maps show the spatial distribution of groundwater conditions, as well as seasonal and annual fluctuations, long-term trends, flow directions, and horizontal gradients. Seasonal low groundwater elevations typically occur in the fall. Spring conditions are generally represented by measurements collected principally in March while fall conditions by measurements collected in October. To maintain consistency with the Plan, the same well data sets were used for contouring whenever possible. However, some wells included in the Plan are no longer accessible in the northwestern and eastern portions of the EMA, which limits contouring to areas with available groundwater elevation data, as shown on the figures.

Overall, groundwater in the Paso Robles Formation continues to flow towards the south and southwest from the San Rafael Mountains as presented on **EMA Figure 3-1** (Paso Robles Formation Groundwater Elevation Contours, Spring 2025) through **EMA Figure 3-4** (Paso Robles Formation Groundwater Elevation Contours, Fall), and which is consistent with the Plan. The horizontal groundwater gradients during these periods are relatively unchanged from year to year throughout most of the Santa Ynez Uplands.

Groundwater elevations within the Paso Robles Formation have generally declined during the Water Year 2025 relative to the previous spring in response to dry conditions. Specifically, the groundwater elevations in the Paso Robles Formation representative monitoring wells have declined by an average of 3 feet between the spring periods of 2024 and 2025. During this period, water elevations in 10 of 13 Paso Robles Formation representative wells with water level data declined.

Between the fall periods of 2024 and 2025, the water levels in the representative Paso Robles Formation wells declined by an average of 2 feet.

Groundwater elevations in California are typically lower in the fall than in the spring due to reduced precipitation and increased pumping to meet irrigation demand from groundwater pumping during the warmer months. Groundwater elevations in the Paso Robles Formation for the spring and fall of 2025 are shown in EMA Figure 3-3 and EMA Figure 3-4, respectively. A comparison of these water level contour maps, together with the groundwater elevation hydrographs in EMA Appendix B, illustrates the seasonal response of the aquifer to these conditions. These data indicate that a seasonal decline occurred between spring and fall periods in water year 2025 in the representative Paso Robles Formation wells of an average of 5 feet.



Paso Robles Formation Groundwater Elevation Contours, Spring 2024

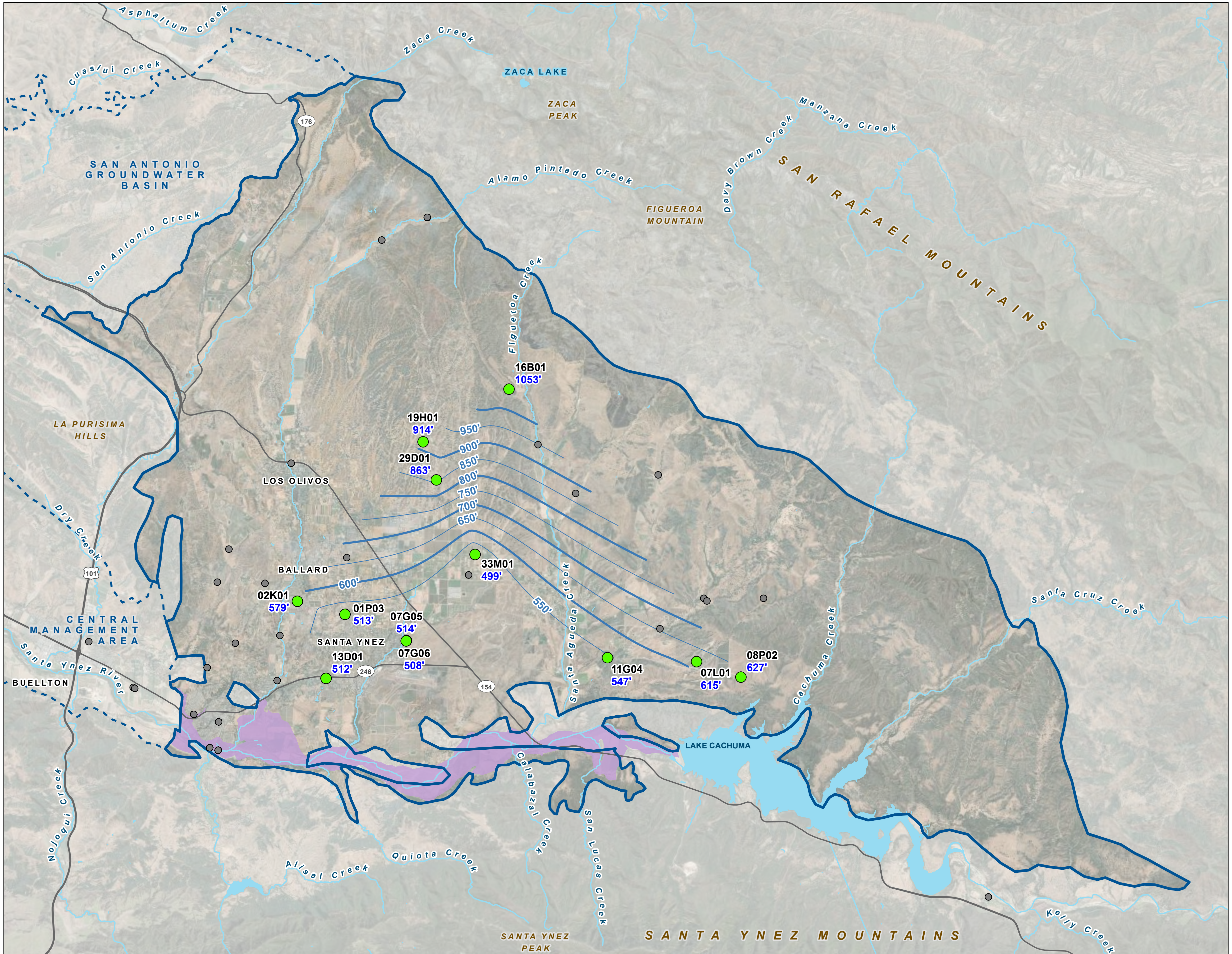
Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

Date: February 23, 2026

Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure7_Paso_GW_Contours_Spring2024.aprx, Figure7_Paso_GW_Contours_Spring2024, npalmer



Paso Robles Formation Groundwater Elevation Contours, Fall 2024

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Paso Formation Groundwater Elevation, Fall 2024

- Major
- Minor
- Santa Ynez River Area

Representative Well (by screened aquifer)

- Paso Formation Well
  Water Level Elevaton (feet NAVD 88)
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody

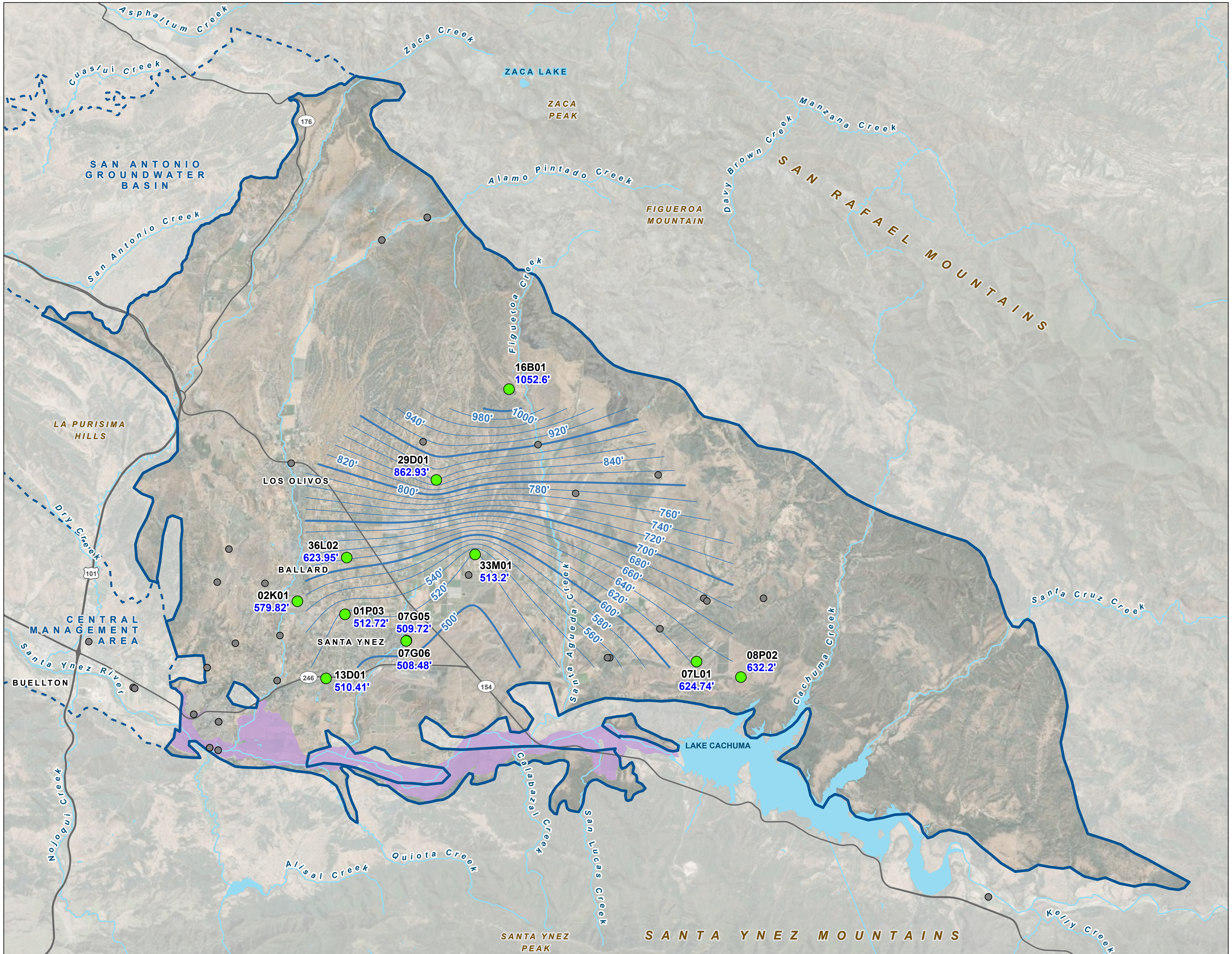
N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure8_Paso_GW_Contours_Fall2024.aprx, Figure8_Paso_GW_Contours_Fall2024, npalmer



Paso Robles Formation Groundwater Elevation Contours, Spring 2025

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Paso Formation Groundwater Elevation, Spring 2025

- Major
- Minor

Representative Well (by screened aquifer)

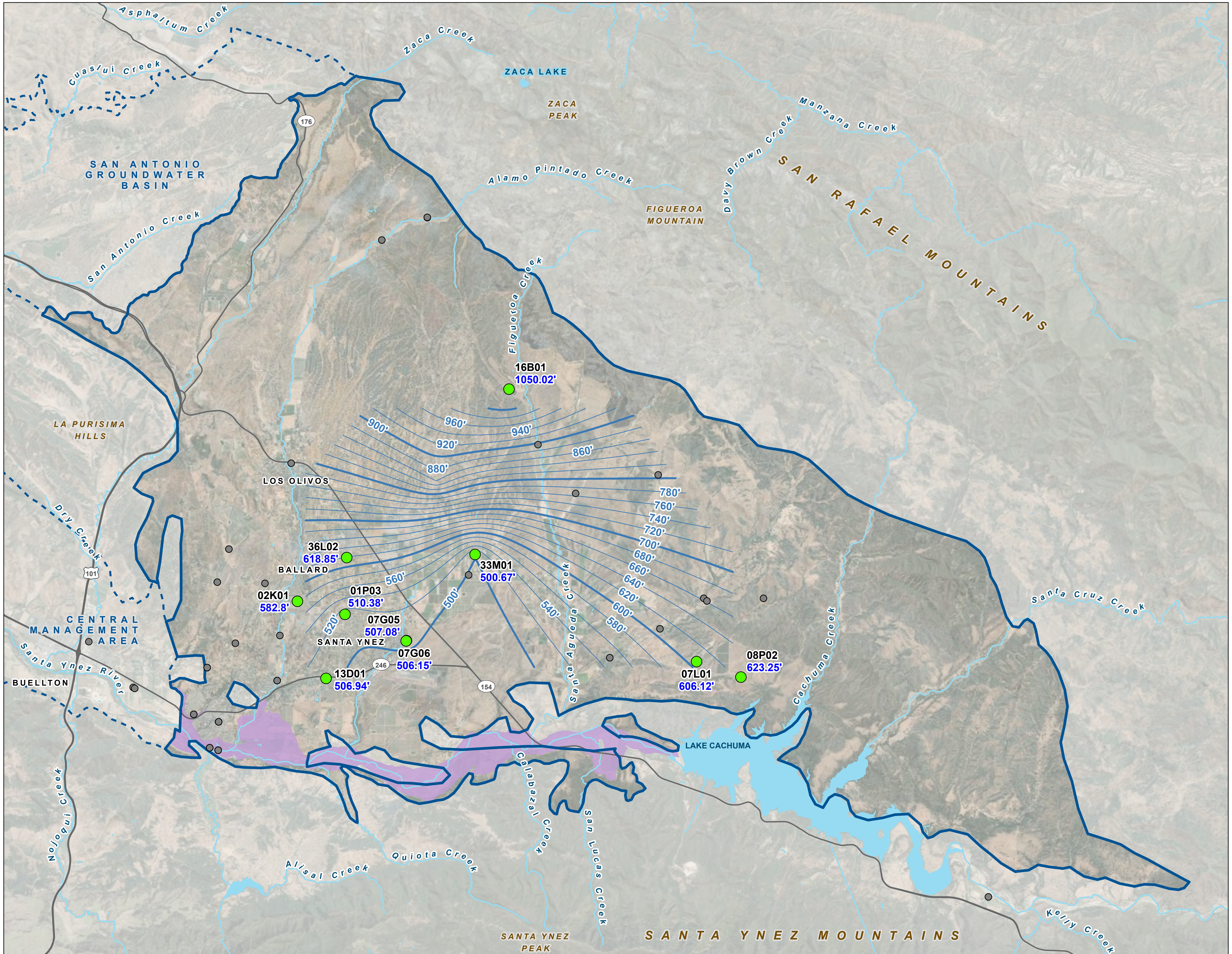
- Paso Robles Formation Water Level Elevaton (feet NAVD 88)
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Santa Ynez River Area
- Major Road
- Watercourse
- Waterbody

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.



Paso Robles Formation Groundwater Elevation Contours, Fall 2025

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Paso Formation Groundwater Elevation, Fall 2025

- Major
- Minor

Representative Well (by screened aquifer)

- Paso Robles Formation
  Water Level Elevaton (feet NAVD 88)
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Santa Ynez River Area
- Major Road
- Watercourse
- Waterbody

N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure10_Paso_GW_Contours_Fall2025.aprx, Figure10_Paso_GW_Contours_Fall2025, npalmer

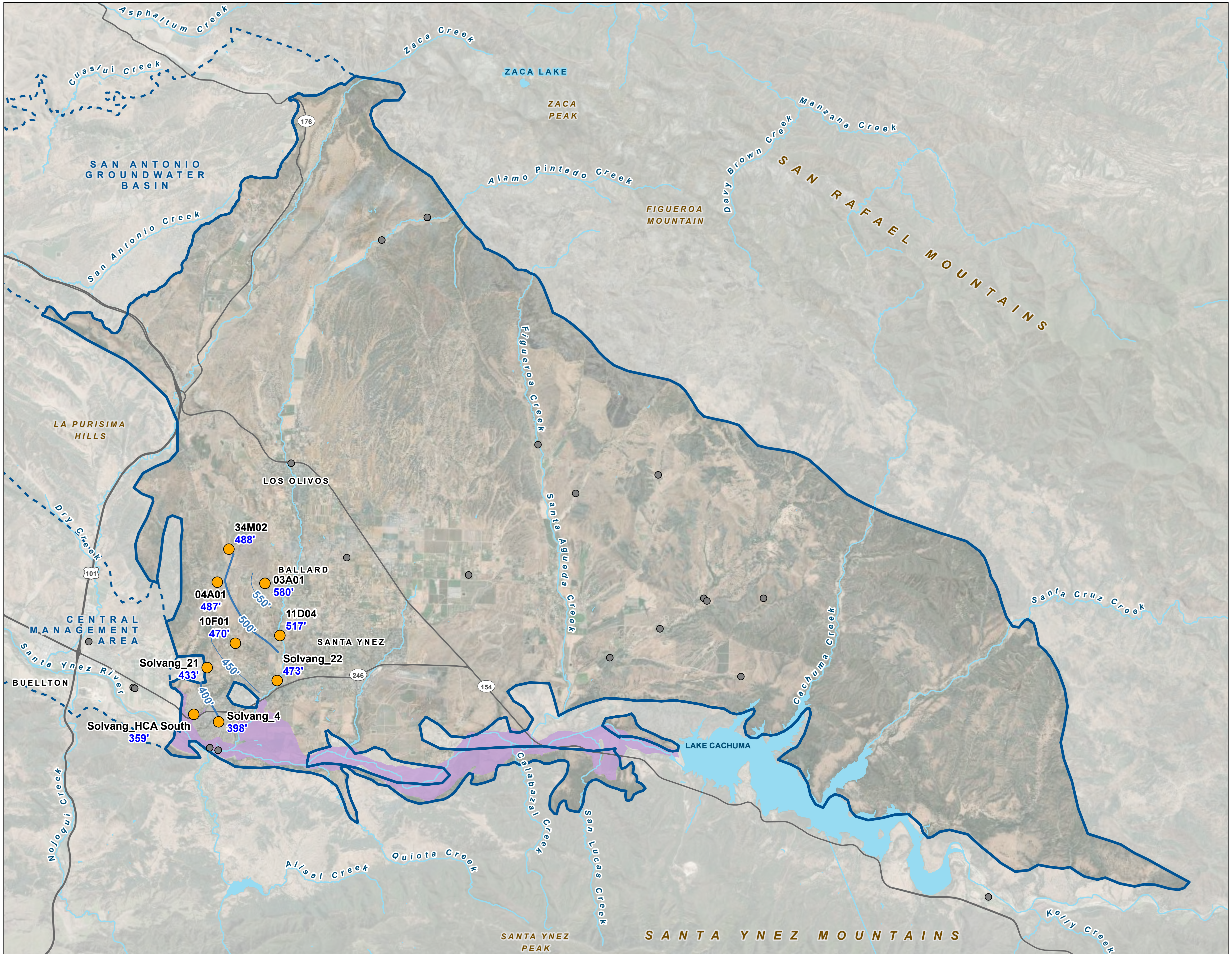
3.1.2 CAREAGA SAND AQUIFER GROUNDWATER ELEVATION CONTOURS

Contour maps were prepared for the groundwater elevations within the Careaga Sand for the spring and fall 2025 periods. These contour maps from the spring period represent the seasonal high groundwater levels. As in the Paso Robles Formation, the seasonal low groundwater elevations within the Careaga Sand aquifer typically occur in the fall, though to a lesser degree than within the Paso Robles Formation.

Overall, groundwater in the Careaga Sand continues to flow towards the southwest in the area below the communities of Ballard, Santa Ynez, and Solvang as presented on **EMA Figure 3-7** and **EMA Figure 3-8,** and consistent with contours presented in the Plan.

Groundwater elevations in the representative Careaga Sand wells have declined during Water Year 2025 relative to the previous spring by an average of approximately 1 foot, with a decline of as much as 36 feet in a single well. However, water levels in the other Careaga Sand wells rose during this period by an average of approximately 4 feet. Between the fall periods of 2024 and 2025, groundwater elevations declined by an average of 3 feet, with a limited rise of as much as 19 feet in a single well.

Groundwater elevations in the Caraga Sand during the Spring and Fall of 2025 are presented as EMA Figure 3-7 and EMA Figure 3-8, respectively. Groundwater elevation hydrographs of the wells presented on the map are included in EMA Appendix B, indicate that groundwater levels tend to be lower in the fall than in the spring, with a seasonal decline between these periods in Water Year 2025 in the representative Careaga Sand wells of approximately 3 feet (other than the rise of 39 feet in a single well).



Careaga Sand Groundwater Elevation Contours, Spring 2024

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Careaga Sand Groundwater Elevation, Spring 2024

- Major
- Minor
- Santa Ynez River Area

Representative Well (by screened aquifer)

- Careaga Sand
  Water Level Elevaton (feet NAVD 88)
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody

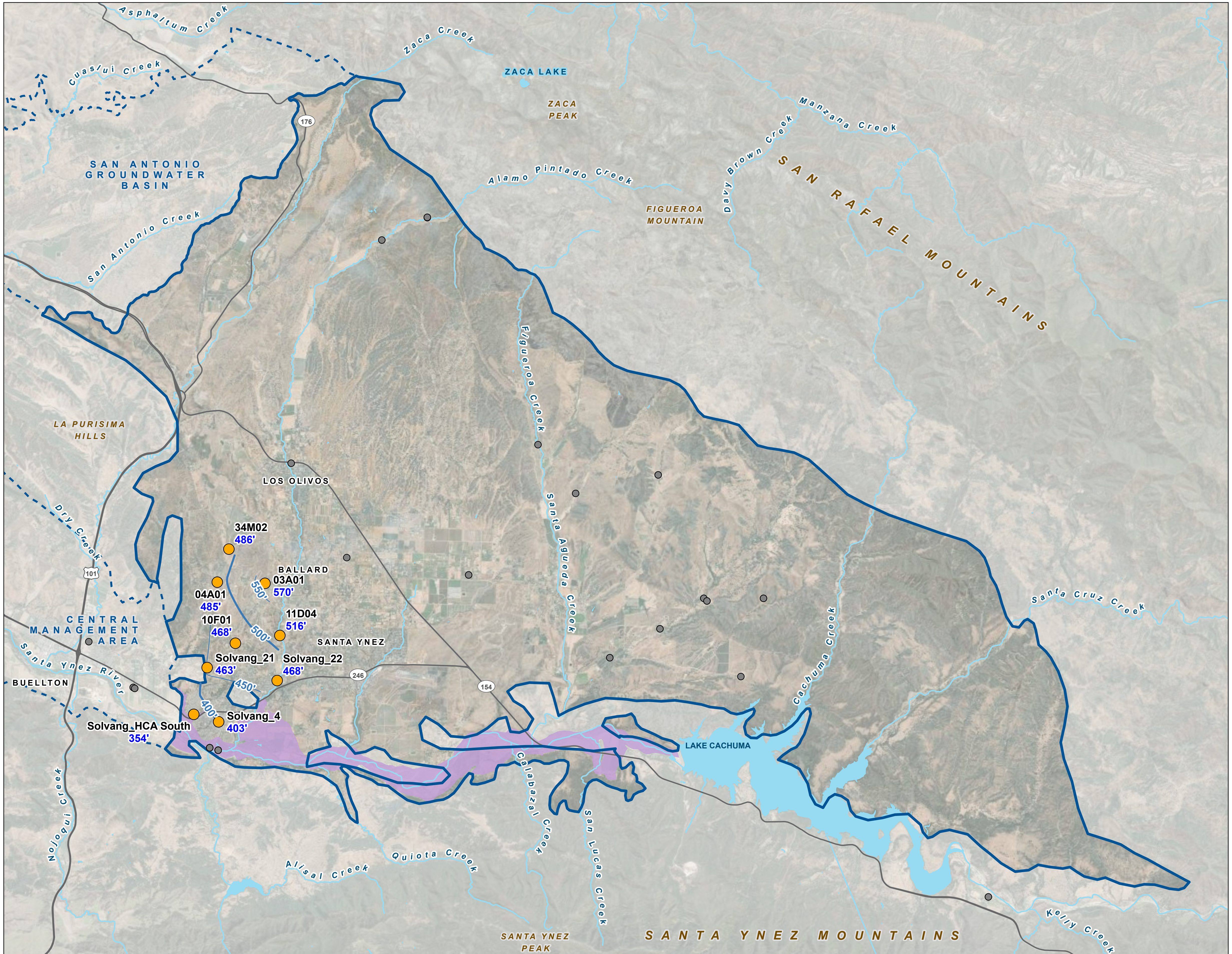
N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure11_Careaga_GW_Contours_Spring2024.aprx, Figure11_Careaga_GW_Contours_Spring2024, npalmer



Careaga Sand Groundwater Elevation Contours, Fall 2024

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Careaga Sand Groundwater Elevation, Fall 2024

- Major
- Minor
- Santa Ynez River Area

Representative Well (by screened aquifer)

- Careaga Sand
  Water Level Elevaton (feet NAVD 88)
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody

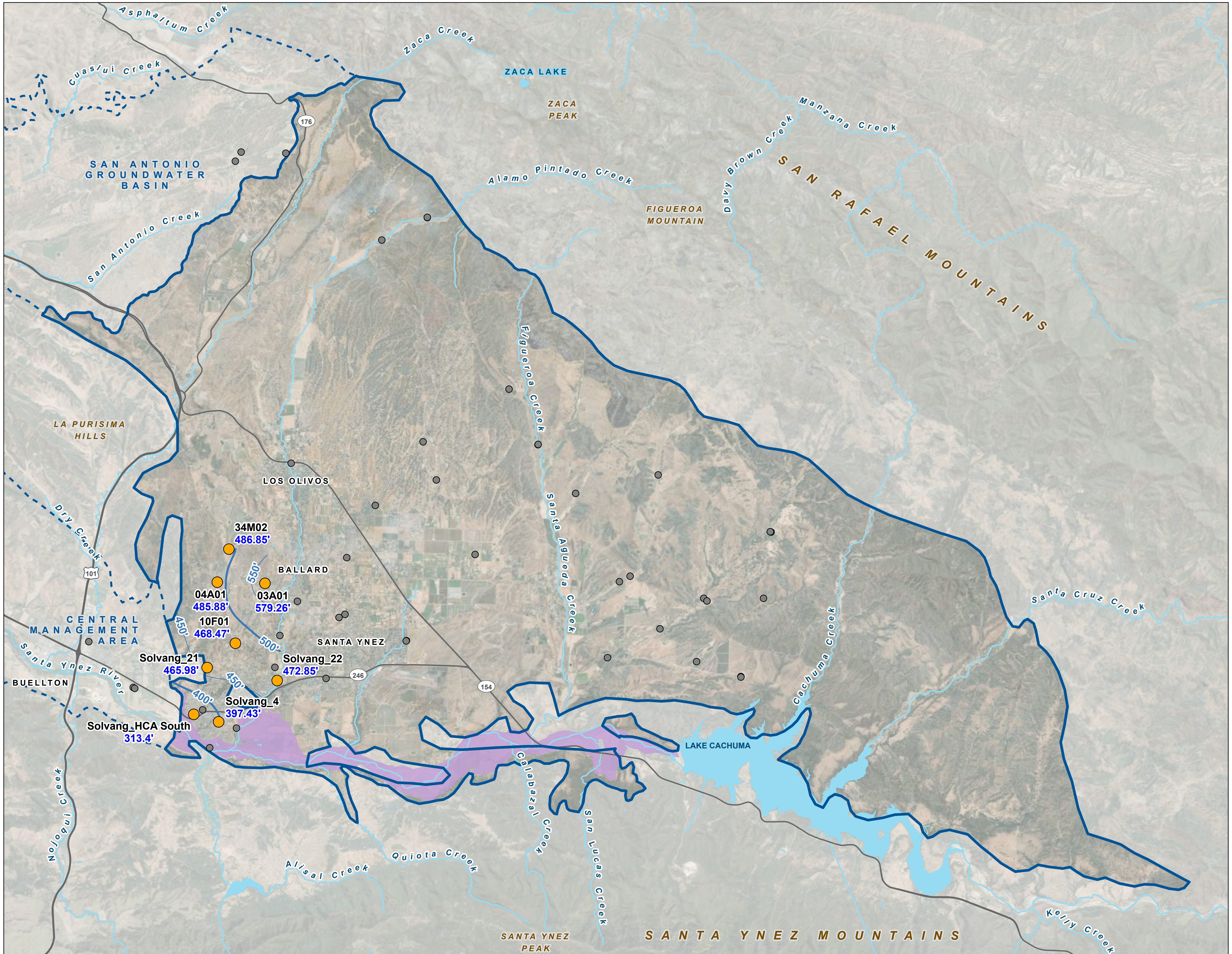
N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure12_Careaga_GW_Contours_Fall2024.aprx, Figure12_Careaga_GW_Contours_Fall2024, npalmer



Careaga Sand Groundwater Elevation Contours, Spring 2025

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Careaga Sand Groundwater Elevation, Spring 2025

- Major
- Minor

Representative Well (by screened aquifer)

- Paso Robles Formation
  Water Level Elevaton (feet NAVD 88)
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Santa Ynez River Area
- Major Road
- Watercourse
- Waterbody

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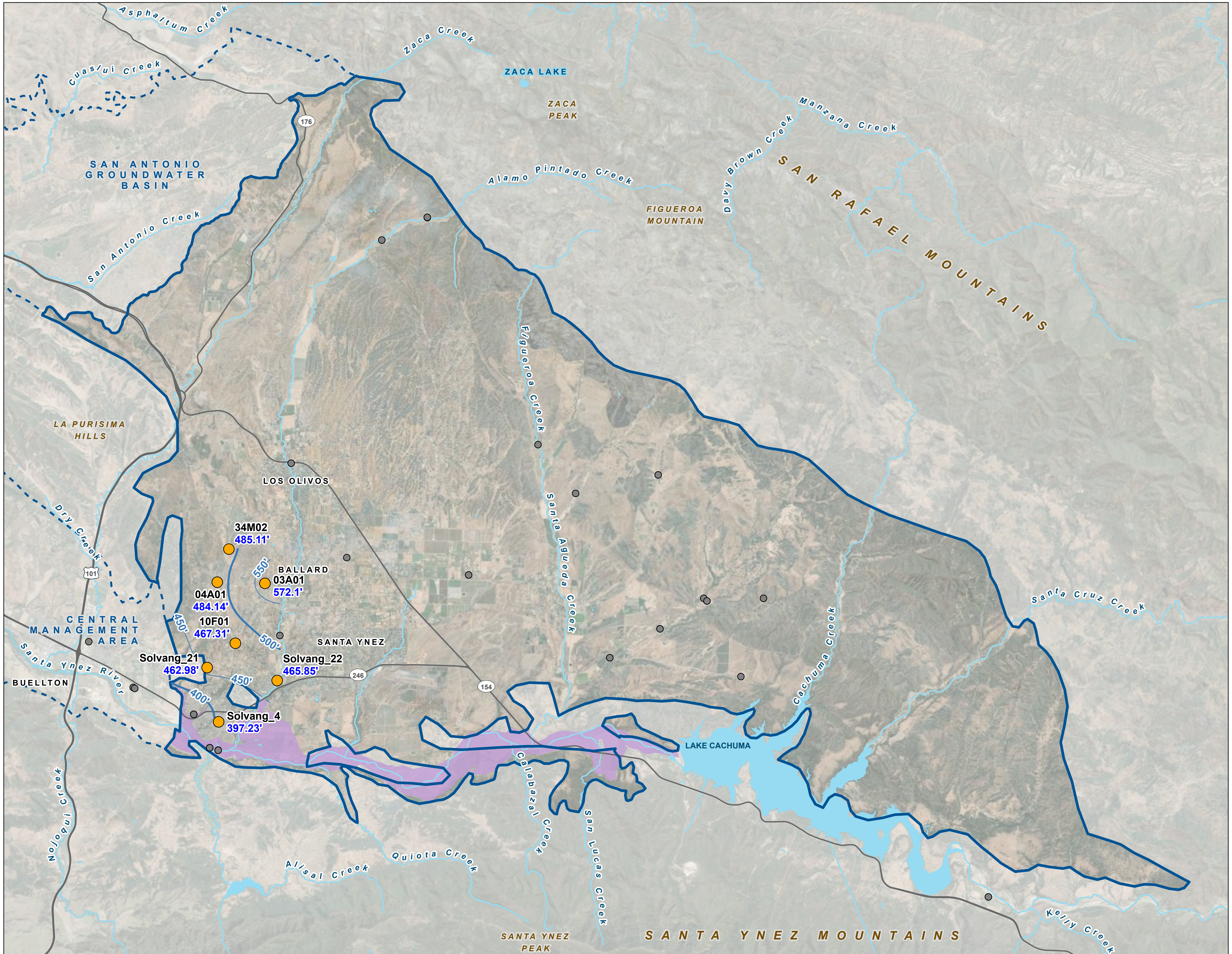
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.



Careaga Sand Groundwater Elevation Contours, Fall 2025

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Careaga Sand Groundwater Elevation, Fall 2025

- Major
- Minor

Representative Well (by screened aquifer)

- Paso Robles Formation
  Water Level Elevaton (feet NAVD 88)
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Santa Ynez River Area
- Major Road
- Watercourse
- Waterbody

N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.

3.2 HYDROGRAPHS

Groundwater elevation hydrographs are used to evaluate groundwater behavior in each principal aquifer. Changes in groundwater elevation in the EMA can result from many influencing factors, which may include changing hydrologic trends, seasonal variations in precipitation, varying groundwater extractions, and changing inflows and outflows. Climatic variation can be one of the most significant factors affecting groundwater elevations over time. For this reason, the hydrographs also display water year type categorized as wet, above normal, below normal, dry, or critical (**Error! Reference source not found.**).

Groundwater elevation hydrographs and an associated location map for all 15 representative wells completed in the Paso Robles Formation (including the two without recent data) and 9 wells completed within the Careaga Sand are presented in EMA Appendix B. The locations of the other wells that are monitored by Santa Barbara County Water Agency on behalf of the EMA, but not considered to be representative of a single principal aquifer, are presented in FigureB-1 at the beginning of EMA Appendix B. The hydrographs include available well construction data and measurable objectives and minimum thresholds for groundwater elevations that were developed during the preparation of the Plan.

As described in the Plan, the measurable objectives at the RMSs were selected as the groundwater levels measured during Spring 2012, and minimum thresholds were set relative to spring of 2018 groundwater elevations.

Of the 15 representative wells in the Paso Robles Formation presented in EMA Appendix B, water levels were able to be measured in 13 wells. A total of 6 of the 13 wells with water level data, or 46 percent, exhibited groundwater elevations during the spring of 2025 below the minimum threshold in the Paso Robles Formation as of Spring 2025.

Two of the nine wells completed in the Careaga Sand, or 22%, exhibited groundwater elevations during the spring of 2025 below the minimum threshold in Spring 2025 (**EMA Table 3-1**).

Because these values did not exceed 50% of the representative wells in each principal aquifer, no undesirable results associated with declining water levels have occurred during Water Year 2025.

EMA Table 3-1
Proportion of Representative Wells With
Groundwater Levels Below the Minimum Threshold,
Eastern Management Area

Water Year	Period	Paso Robles Formation Wells	Careaga Sand Wells
2019	Spring	0%	0%
2020	Spring	20%	0%
	Fall	**55%**	N/A
2021	Spring	13%	11%
	Fall	50%	22%
2022	Spring	46%	11%
	Fall	**62%**	33%
2023	Spring	**62%**	0%
	Fall	50%	22%
2024	Spring	31%	11%
	Fall	38%	11%
2025	Fall	46%	22%
	Spring	46%	33%

Values represent percentage of representative wells below the minimum threshold

The individual wells included in the representative monitoring network presented in the Plan are subject to change during the Plan's implementation period (see **EMA Table 3-2)**. Specifically, one of the representative Paso Robles formation wells (-08P01) is no longer considered to be representative of the Paso Robles Formation and has been removed from the representative monitoring network. Likewise, another well (-30M01) is no longer able to be measured and has been removed from the representative monitoring network. Additional wells have been identified and are being considered for incorporation into the monitoring network, and at least one additional monitoring well will be installed within one of the data gap areas as part of the SGMA implementation grant.

EMA Table 3-2
Summary of Water Levels in Representative Wells, Eastern Management Area

All elevations are in feet, North American Vertical Datum of 1988 (NAVD 88)

Well ID	Principal Aquifer	Minimum Threshold	Spring 2024	Fall 2024	Spring 2025	Fall 2025
7N/31W-34M02	Careaga Sand	482	488	486	487	485
6N/31W-03A01	Careaga Sand	573	580	**570**	579	**572**
6N/31W-04A01	Careaga Sand	481	487	485	486	484
6N/31W-09Q02	Careaga Sand	446	**433**	463	463	463
6N/31W-10F01	Careaga Sand	463	470	468	468	467
6N/31W-11D04	Careaga Sand	502	517	516	516	515
6N/31W-16N07	Careaga Sand	377	398	403	**330**	**325**
6N/31W-xxxx	Careaga Sand	467	473	468	473	**466**
Solvang HCA	Careaga Sand	320	359	352	**313**	352
6N/29W-07L01	Paso Robles Formation	637	**626**	**615**	**625**	**606**
6N/29W-08P01 A	Paso Robles Formation	676	Dry	Dry	Dry	Dry
6N/29W-08P02	Paso Robles Formation	653	**636**	**627**	**632**	**623**
6N/30W-07G05	Paso Robles Formation	513	**512**	514	**510**	**507**
NN/30W-07G06	Paso Robles Formation	511	511	**508**	**508**	**506**
6N/30W-11G04	Paso Robles Formation	510	554	547	553	547
6N/31W-01P03	Paso Robles Formation	514	515	**513**	**513**	**510**
6N/31W-02K01	Paso Robles Formation	556	581	579	580	583
6N/31W-13D01	Paso Robles Formation	494	512	512	510	507
6N/31W-16B01	Paso Robles Formation	1,018	1,051	1,053	1,053	1,050
7N/30W-19H01	Paso Robles Formation	896	913	914	914	914
7N/30W-29D01	Paso Robles Formation	849	890	863	863	863
7N/30W-30M01 B	Paso Robles Formation	559	NM	NM	NM	NM
7N/30W-33M01	Paso Robles Formation	514	515	**499**	**513**	**501**
7N/31W-36L02	Paso Robles Formation	615	617	616	624	619

Notes:
Bolded values shaded in tan are below the minimum threshold value.
NM = Not Measured
A: Well -08P01 has been dry since the issuance of the EMA Plan and is not considered to be representative of the Paso Robles Formation. It has therefore been removed from the representative monitoring well network for water levels within this principal aquifer.
B: Water level data in Well -30M01 has been difficult to measure for many years. As shown, water level measurements have not been available for any period during water years 2024 and 2025.

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EMA CHAPTER 4: WATER USE AND AVAILABLE SURFACE WATERS

4.1 GROUNDWATER USE

This section presents the metered and estimated groundwater extractions from the EMA for Water Year 2025. The metered and estimated groundwater extractions from the EMA for the last few water years are included in the tables for comparison. The types of groundwater extraction described in this section include municipal (**EMA Table 4-1**), agricultural (**EMA Table 4-2**), and rural domestic (**EMA Table 4-4**) Each of the following subsections includes a description of the method of measurement and a qualitative level of accuracy for each estimate. The level of accuracy is rated on a qualitative scale of low, medium, and high. The annual groundwater extraction volumes for all water use sectors are shown in **EMA Table 4-5**.

4.1.1 Municipal Metered and Other Self-Reported Well Production Data

Metered groundwater pumping extraction data are from the City of Solvang and ID No. 1. EMA Table 4-1 presents these metered data, the self-reported data provided by pumpers within the SYRWCD and estimated extraction data for mutual water companies. As shown, a total of approximately 3,200 afy of municipal and other self-reported pumping occurred during Water Year 2025. The accuracy rating of the metered production data from Solvang and ID No. 1 is high. The accuracy rating of the self-reported production data from pumpers within SYRWCD and from mutual water companies is considered medium due to the lack of quantified production data (flow meters) for some of these entities. As with many of the tables, data from the prior several water years are included for comparison.

EMA Table 4-1
Municipal and Other Self-Reported Groundwater Extractions
In the Eastern Management Area for Recent Water Years

Water Year	Water Year Type	ID No. 1	Self-Reported to SYRWCD	City of Solvang	Mutual Water Companies	Total
2020	Above Normal	1,163	970	289	957	3,379
2021	Dry	1,446	1,069	456	963	3,934
2022	Critical	1,776	1,046	430	969	4,260
2023	Wet	948	1,298	270	975	3,491
2024	Wet	887	1,366	182	981	3,416
2025	Below Normal	751	1,243	286	927	3,207

Values in acre-feet, past years shown in gray.
Notes:
ID No. 1 = Santa Ynez River Water Conservation District, Improvement District No. 1
SYRWCD = Santa Ynez River Water Conservation District

4.1.2 Estimate of Agricultural Extraction

During Water Year 2025, approximately 74 percent of the estimated total groundwater extraction was used to supply agriculture in the EMA. Agricultural water demand for the areas both inside and outside of the SYRWCD boundaries was estimated based the OpenET ensemble methods[1]. Within the SYRWCD boundaries, agricultural water demand by self-reported pumping volumes provided by SYRWCD were considered but the presented data were estimated this year. Notably, the self-reported data are provided by landowners based primarily on estimates of planted acreages and crop-specific water duty factors provided by SYRWCD in their Groundwater Production Information and Instructions pamphlet (SYRWCD, 2010).

[1] OpenET uses reference ET data calculated using the American Society of Civil Engineers (ASCE) Standardized Penman-Monteith equation for a grass reference surface, and usually notated as 'ETo'. For California, OpenET uses Spatial CIMIS meteorological datasets generated by the California DWR to compute ASCE grass reference ET. OpenET provides ET data from multiple satellite-driven models, and also calculates a single "ensemble value" from those models. The models currently included are ALEXI/DisALEXI, eeMETRIC, geeSEBAL, PT-JPL, SIMS, and SSEBop. The models included in the OpenET ensemble have been used by government agencies with responsibility for water use reporting and management in the western U.S., and some models are widely used internationally (OpenET, 2023).

Agricultural groundwater extraction was estimated with the use of satellite-based estimates of the total amount of water that is transferred from the land surface to the atmosphere through the process of evapotranspiration (ET). The OpenET method of this technology uses an "ensemble model" derived from Landsat satellite data to produce ET data and ultimately field-scale water use at a spatial resolution of 30 meters by 30 meters (0.22 acres per pixel). Additional inputs include gridded weather variables such as solar radiation, air temperature, humidity, wind speed, and precipitation (OpenET, 2023).

Crop water demands that are met from precipitation were considered in the analysis by subtracting the volume of rain received on a monthly time-step. Monthly and annual applied irrigation volumes were estimated based on crop-specific irrigation efficiency factors. Groundwater extractions for frost protection are captured to the extent that the produced water results in increased ET. It is assumed that the remainder of the water produced for frost protection remains within the EMA and a portion of this water percolates back to groundwater.

The method provides monthly crop water use for a defined area at the field scale and is being used where calibrated flow meters are not widely available as part of an open-source groundwater accounting platform, freely available, to help GSAs manage the transition to sustainable supplies. The accuracy of these OpenET data is considered to be medium. The use of calibrated flow meters from each well completed in a principal aquifer to each irrigated field or landowner parcel would provide higher quality data than the OpenET method.

Based on these methods the estimated agricultural groundwater production for Water Year 2025 is approximately 9,700 afy, as presented in EMA Table 4-2. Note that the EMA developed GSA Ordinance No. 2025-03, which requires that all wells in the EMA (with exceptions) have a calibrated flow meter installed by June 2027, and all metered production will be reported to the EMA GSA.

The analysis methods for using OpenET data have been refined in the past several years. For this water year, these refinements, which improved the accuracy of the agricultural irrigation estimates, included:

- the use of OpenET crop water use estimates both outside and inside of the SYRWCD boundaries,

- adjustments to the assumed irrigation efficiencies for several crops based on local understanding and discussions with agricultural users (Alfalfa and Alfalfa Mixtures, Miscellaneous Grasses, and Mixed Pasture), and
- reclassification of miscellaneous grain and hay as an unirrigated crop type.

Together, these adjustments to the use of the OpenET analysis methods were introduced during the rate study that the GSA conducted during Water Year 2025. These adjustments may help address concerns about potential errors in agricultural water use estimation that could occur. Some uncertainty remains regarding the variability of actual water use during variable hydrology (water year types), and any water applied outside of the typical crop need or for frost control.

Based on these methods the estimated agricultural groundwater production for Water Year 2025 is approximately 9,700 afy, as presented in EMA Table 4-2.

EMA Table 4-2
Agricultural Irrigation Groundwater Extractions
In the Eastern Management Area

Water Year	Water Year Type	Agricultural Demand (acre-feet)
2020	Above Normal	11,812
2021	Dry	13,379
2022	Critical	13,264
2023	Wet	9,099
2024	Wet	9,436
2025	Below Normal	9,662

Past years shown in gray.

4.1.3 Rural Domestic Groundwater Extraction

Rural domestic pumping within the EMA is defined as all domestic pumping occurring outside of SYRWCD not associated with a small public water system. Rural domestic pumping was calculated by conducting an aerial survey to identify land parcels with home sites in the area outside the SYRWCD in 2018 based on domestic demand for each of these parcels estimated using variable demand factors based on parcel acreage, as specified in Tetra Tech 2010 (EMA Table 4-3). The rural domestic demand was then further adjusted using a compilation of census data and analysis conducted by the GSA during the rate study during 2025.

EMA Table 4-3
Rural Domestic Demand Factors Based on Lot Size

Lot Size (acres)	Annual Water Use (acre-feet per year per lot)
0.16	0.14
0.5	0.52
1	0.82
5	0.98
10	1.15

Source: Tetra Tech, 2010

The accuracy of this groundwater budget component is considered medium because these groundwater extraction components were estimated based on an aerial survey and published estimated water demand based on parcel size. **EMA Table 4-4** presents the calculated rural domestic groundwater demand for Water Year 2025.

EMA Table 4-4
Rural Domestic Groundwater Extractions
In the Eastern Management Area

Water Year	Water Year Type	Rural Domestic (acre-feet)
2020	Above Normal	307
2021	Dry	309
2022	Critical	311
2023	Wet	313
2024	Wet	315
2025	Below Normal	394

Past years shown in gray.

4.1.4 Total Groundwater Extraction Summary

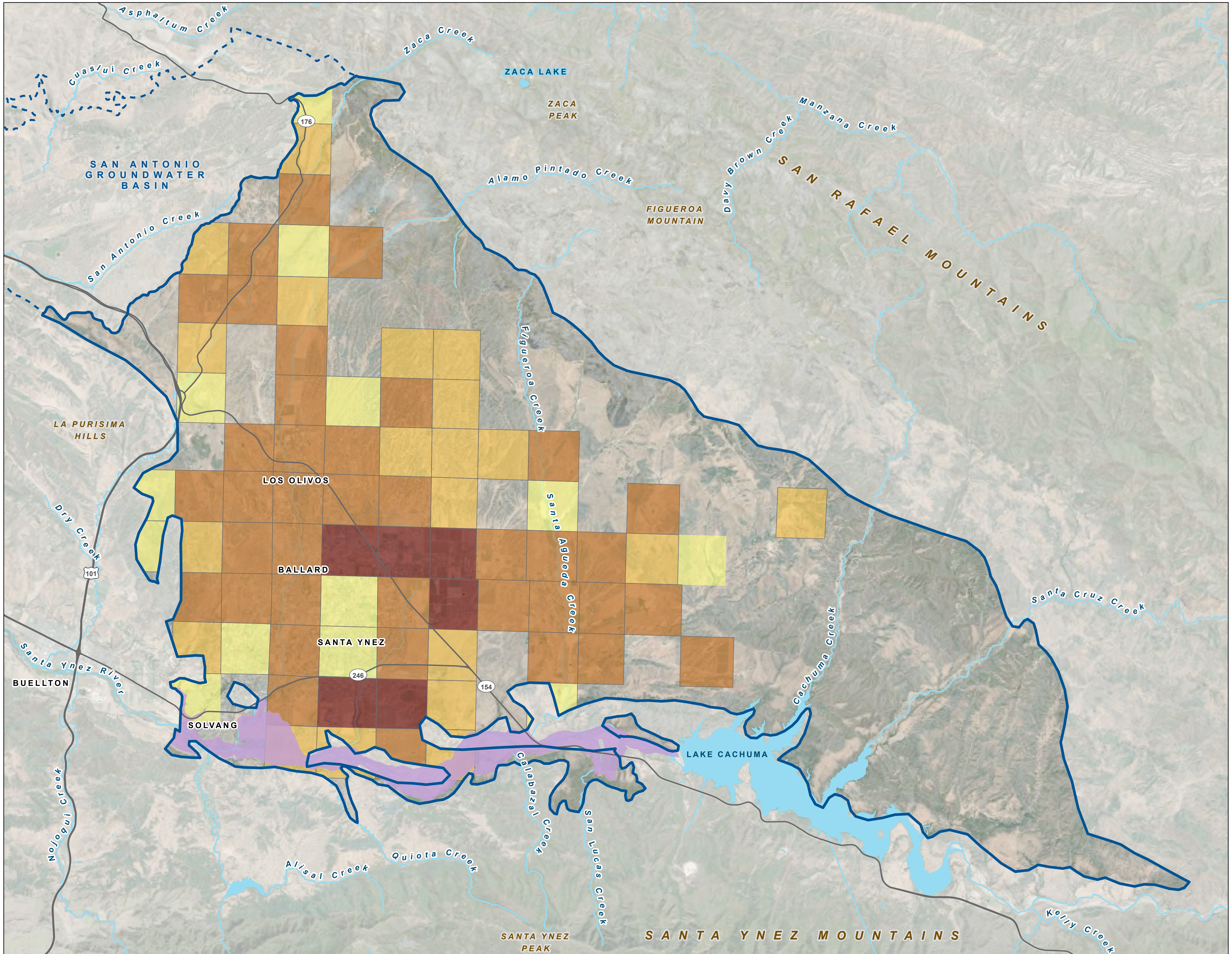
The total estimated volume of groundwater extracted in the EMA during Water Year 2025 was approximately 13,000 acre-feet (AF), as shown **EMA Table 4-5**. As required, the table presents the total metered and estimated water use by sector and indicates the method of measure and associated level of accuracy.

EMA Table 4-5
Groundwater Extractions by Water Use Sector in Acre-Feet,
In the Eastern Management Area

Water Year	Water Year Type	Municipal and Self-Reported Domestic	Mutual Water Companies	Rural Domestic	Agricultural	EMA Total
2020	Above Normal	1,880	957	307	11,812	14,956
2021	Dry	2,320	963	309	13,379	16,971
2022	Critical	2,516	969	311	13,264	17,060
2023	Wet	1,946	975	313	9,099	12,333
2024	Wet	2,100	981	315	9,436	12,832
2025	Below Normal	1,999	927	394	9,662	12,982
Method of Measure	N/A	Provided by ID No. 1 (metered), City of Solvang (metered), and SYRWCD (user reported)	Estimated based on population data	Estimated based on population data	OpenET	N/A
Level of Accuracy	N/A	High (metered) / Low (user reported)	Medium	Medium	Medium (OpenET)	N/A

Past years shown in gray.
Notes:
NA = not applicable
ID No. 1 = Santa Ynez River Water Conservation District, Improvement District No. 1
SYRWCD = Santa Ynez River Water Conservation District

The locations of these extractions were based on the known locations of metered pumping from the municipal users, estimates of pumping from rural domestic users, and agricultural land use spatial data. Together, the spatial distribution of these extractions during the most recent water year in 2025 are presented on **EMA Figure 4-1**, in terms of acre-feet per square mile.



Location and Volume of Groundwater Extractions, Water Year 2025

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Santa Ynez River Area

Groundwater Extraction by Section (Acre-Feet Per Square Mile)

- 25 - 50
- 50 - 100
- 100 - 500
- 500 - 1555

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody

N

0 5,000 10,000 15,000
FEET

Date: February 18, 2025
Data Sources: ESRI, USGS, Maxar 2019

GSI Water Solutions, Inc.

4.2 SURFACE WATER USE

This section provides a summary of the surface water supplies used within the EMA during Water Year 2025. ID No. 1 imports water into the EMA via the Cachuma Project and the State Water Project (SWP). ID No. 1 does not receive its Cachuma Project water directly; instead, in addition to its own entitlement of SWP supplies, it also receives an amount of SWP water through an Exchange Agreement with the South Coast members of the Cachuma Project, whereby ID No.1 provides its Cachuma Project water to the South Coast in exchange for an equivalent amount of SWP water from the South Coast agencies. As a member agency of the Central Coast Water Authority (CCWA), ID No. 1 has a Table A allocation of 2,000 acre-feet per year (AFY) and a 200 AF drought buffer of imported SWP water. Of that amount, 1,500 AFY are contractually committed for use by the City of Solvang. As documented by DWR, the availability of Table A supplies is highly variable and projected to decrease over time. The drought buffer effectively increases the amount of water to be delivered in the event that overall deliveries are reduced by a given percentage. ID No.1 and the City of Solvang also produce surface water from the Santa Ynez River underflow for use in the Santa Ynez Uplands.

In addition to imported water sources, users within the EMA extract water within the Santa Ynez River Area from the Santa Ynez River Alluvium for municipal, domestic, industrial, and agricultural uses. Pumping data from this area of the EMA are provided by the City of Solvang, ID No. 1, and from SYRWCD as "self-reported" pumping data from well owners within SYRWCD. The river well production data from ID No. 1, Solvang, and the other self-reported pumping records aggregate uses together into the SYRWCD categories of (1) agricultural; (2) "other" water, which includes municipal, industrial, small public water systems, and domestic use; and (3) "special" irrigation water, which refers to urban landscape and golf course irrigation. These pumping volumes have been compiled on a water year basis and are reported annually on a July-through-June fiscal year basis in SYRWCD's annual reports, which have been prepared for 47 years.

Pumping volumes provided by the City of Solvang and ID No. 1 are from metered volumes and are considered exceptionally reliable and accurate. Likewise, some of the self-reported pumping data provided by SYRWCD annual reports are also from metered pumping records and are similarly accurate. A large portion of the self-reported SYRWCD pumping data is estimated from self-reported records using crop-specific water duty factors provided by SYRWCD for its water use estimates and annual reports. These pumping estimates based on self-reported records are of medium accuracy, due to the uncertainty of standardized crop water duty factors and reliability of self-reporting. The total annual volume of surface water used in the EMA for Water Year 2025 was approximately 5,851 acre-feet (AF), as presented on **EMA Table 4-6**

EMA Table 4-6
Surface Water Use in Acre-Feet,
In the Eastern Management Area

Water Year	City of Solvang Table A	ID No. 1 Imported	Solvang River Wells	ID No. 1 River Wells	Other Reported River Wells [A]	Total Reported River Wells	Total
2020	745	2,100	148	567	1,566	2,281	5,126
2021	612	1,439	240	1,142	1,775	3,157	5,208
2022	590	544	270	1,632	1,478	3,380	4,514
2023	495	1,241	316	939	2,245	3,500	5,236
2024	808	1,753	166	557	2,734	3,457	6,018
2025	571	2,259	606	538	1,877	3,021	5,851
Method of Measure	Metered	Metered	Metered	Metered	User Reported	Metered/Reported	NA
Level of Accuracy	High	High	High	High	Medium	High/Medium	NA

Past years shown in gray.
Notes:
[A] Includes wells within Santa Ynez River Water Conservation District Zone A.
NA = not applicable
ID No. 1 = Santa Ynez River Water Conservation District, Improvement District No. 1

4.3 TOTAL WATER USE

This section summarizes the total estimated annual groundwater and surface water used to meet municipal, agricultural, and rural domestic demands within the EMA. For the Water Year 2025, the quantification of estimated total water use was completed from reported metered municipal water production and metered surface water delivery, SYRWCD reported groundwater and river well pumping within its boundaries and estimates of agricultural and rural water demand outside of SYRWCD**. EMA Table 4-7** presents the total metered and estimated water use in the EMA was approximately 18,833 AFY. The method of measurement and a qualitative level of accuracy for each estimate is rated on a scale of low, medium, and high.

EMA Table 4-7
Total Water Use in Acre-Feet,
In the Eastern Management Area

Water Year	Water Year Type	Groundwater Use	Surface Water Use	Total
2020	Above Normal	14,956	5,081	20,037
2021	Dry	16,971	5,208	22,179
2022	Critical	17,060	4,514	21,574
2023	Wet	12,333	5,236	17,569
2024	Wet	12,832	6,018	18,850
2025	Below Normal	12,982	5,851	18,833
Method of Measure	NA	Metered, User Reported, and Estimated	Metered/User Reported	NA
Level of Accuracy	NA	High (metered) to Low (user reported)	High to Medium	NA

Past years shown in gray.
Notes:
NA = not applicable

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EMA CHAPTER 5: GROUNDWATER STORAGE

This section presents an overview of the estimated change in groundwater storage within the two principal aquifers in the EMA. The annual changes in groundwater in storage have been estimated using two methods based on the availability of data. Where groundwater elevation data are sufficient and spatially distributed from year to year, the change in storage estimate relied on these data. However, because these data are lacking in a portion of the Santa Ynez Uplands, the change in groundwater in storage was estimated using the inflow and outflow components from the water budget described in the Plan.

5.1 ANNUAL CHANGES IN GROUNDWATER IN STORAGE

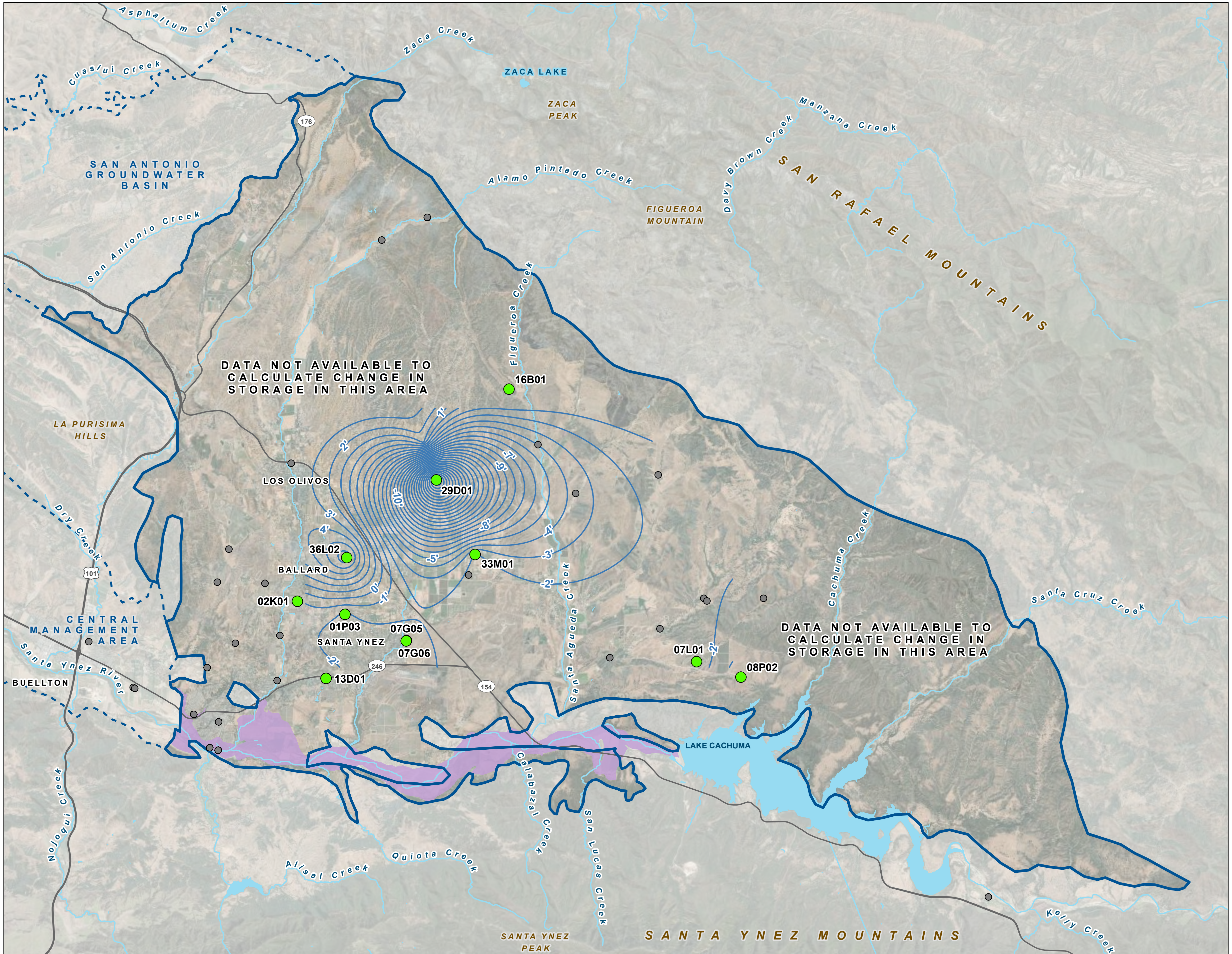
As discussed in Section 1.1.1and Section 3.1 above, the current groundwater monitoring network for the Paso Robles Formation would benefit from additional spatial distribution to adequately represent groundwater conditions for the entire aquifer throughout the Santa Ynez Uplands. While the groundwater elevation monitoring network used for contouring groundwater elevations for water year 2018 for both principal aquifers provided sufficient spatial coverage of the EMA at that time, the monitoring network used for Water Year 2025 is now smaller by two wells in the Paso Robles Formation, as explained above.

The groundwater elevation changes depicted on the maps presented in this section are used, along with the storage coefficient, to calculate the proportion of that change that is due to groundwater in storage. The portion of void space in the aquifer that can be utilized for groundwater storage is represented by an aquifer storage coefficient, which is similar to porosity and is a unitless factor that is multiplied by the total volume change between water years.

5.1.1 Paso Robles Formation

The extent of the groundwater monitoring network that is used to prepare groundwater elevation contours within the Paso Robles Formation is evident in spring 2025 (EMA Figure 3-3) and fall 2025 (EMA Figure 3-4). Although the existing groundwater level monitoring network satisfies the DWR's well density guidance in the portion of the basin that wells are currently accessible, there are two areas identified within the EMA both in the northwest and the eastern portion of the EMA, where the addition of monitoring wells would improve the hydrogeologic conceptual model (HCM) as discussed in the Plan. Because the accuracy of using this method is dependent on the lateral extent of the water level data, the accuracy associated with using this method for the Paso Robles Formation is considered low. Since 2018, a robust understanding of water level conditions in the EMA's principal aquifers have been affected by the loss of access to wells, including the two representative wells for the Paso Robles Formation, one within Los Olivos, and one near Happy Canyon. The EMA GSA is currently working to address these identified data gaps with the installation of a dedicated monitoring well in the northwestern portion of the EMA.

The change in groundwater in storage can be estimated for a portion of the Paso Robles Formation using the change in groundwater elevation map between the spring 2024 and spring 2025 for the central area of the EMA as presented on **EMA Figure 5-1**.The change in storage map generated by this method is not considered representative of groundwater conditions throughout the entire EMA and therefore was not used to calculate the total change in groundwater in storage. The change in storage within the Paso Robles Formation was estimated based on both the overall water budget (for both aquifers) and also based on the change in groundwater in storage in the Careaga Sand principal aquifer, described below. The remainder of the change in groundwater in storage outside of the Careaga Sand occurred in the largest principal aquifer in the EMA of the Paso Robles Formation. The data available indicate that groundwater levels within the Paso Robles Formation declined by an average of 3 feet on average between the spring of 2024 and spring of 2025.



Paso Robles Formation Change of Groundwater Elevation, Spring 2024 to Spring 2025

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

Change in Groundwater Elevation

Santa Ynez River Area

Representative Well (by screened aquifer)

Paso Robles Formation

Monitored by Santa Barbara County Water Agency

All Other Features

Eastern Management Area Bulletin 118 Boundary

Other Bulletin 118 Groundwater Basin Boundary

Major Road

Watercourse

Waterbody

N

0 5,000 10,000 15,000

FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

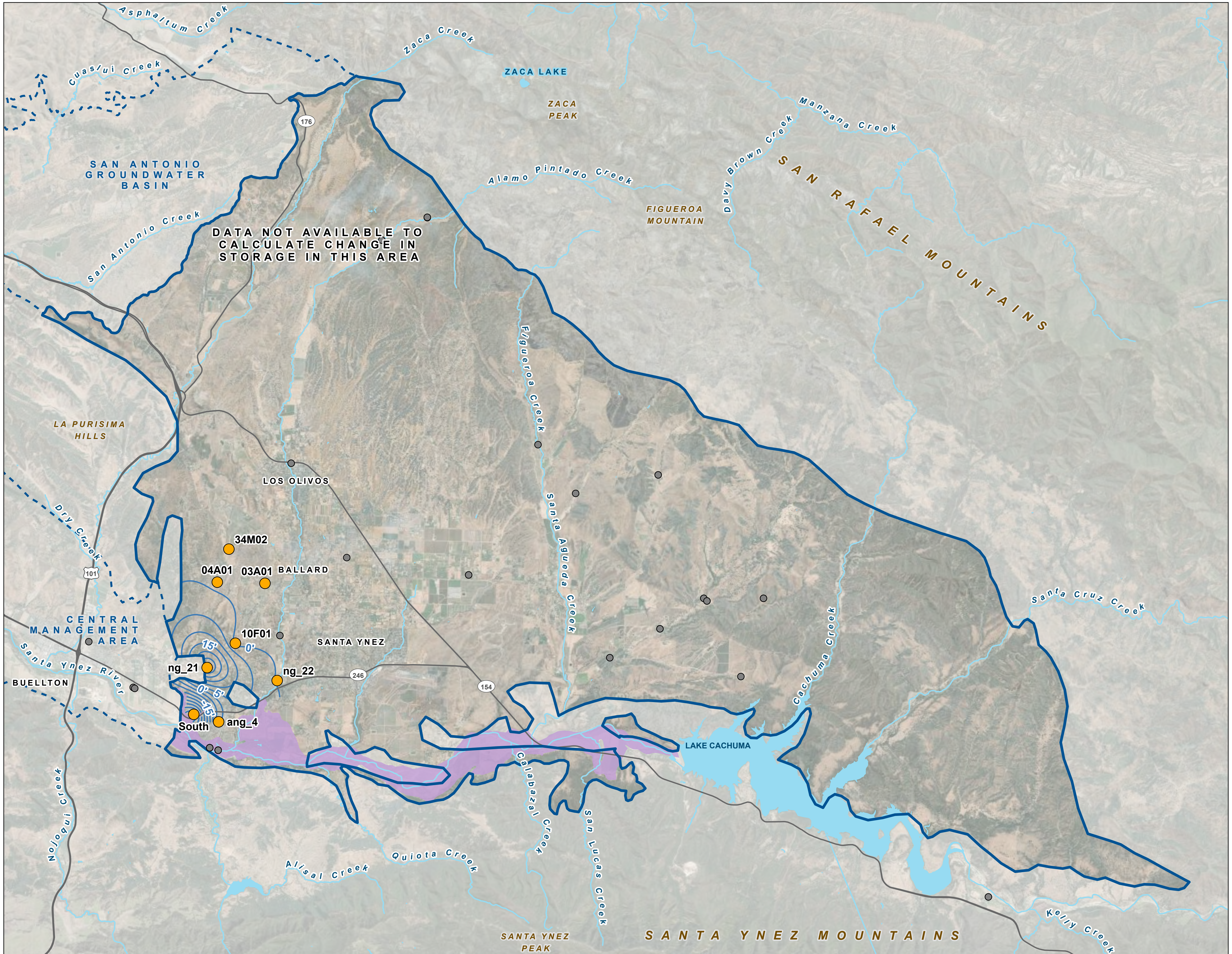
GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure16_Paso_GW_Contours_Change.aprx, Figure16_Paso_WLE_Change_Spring24-23, npalmer

5.1.2 Careaga Sand

The change in groundwater in storage within the Careaga Sand for Water Year 2025 was derived by comparing spring groundwater elevation contour maps from one year to the next. Specifically, spring 2025 groundwater elevations for the Careaga Sand (EMA Figure 3-7) were subtracted from Spring 2024 groundwater elevations (EMA Figure 3-5), resulting in a map depicting the changes in groundwater elevations that occurred during the 2025 water year.

The change in groundwater elevation map for Water Year 2025 within the Careaga Sand (**EMA Figure 5-2**), shows areas of decline and fall throughout the area, with a limited area of significant changes in both directions of greater than 30 feet.



Careaga Sand Change of Groundwater Elevation, Spring 2024 to Spring 2025

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area

LEGEND

- Change in Groundwater Elevation
- Santa Ynez River Area

Representative Well (by screened aquifer)

- Careaga Sand
- Monitored by Santa Barbara County Water Agency

All Other Features

- Eastern Management Area Bulletin 118 Boundary
- Other Bulletin 118 Groundwater Basin Boundary
- Major Road
- Watercourse
- Waterbody
- Central Management Area Basin Boundary
- Waterbody
- Mask

Layers

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

N

0 5,000 10,000 15,000
FEET

Date: February 23, 2026
Data Sources: ESRI, USGS, Maxar Imagery (2020)

GSI Water Solutions, Inc.

Document Path: Y:\0515_Santa_Ynez_River_WCD\Source_Figures\010_Annual_Report_2025\Figure17_Careaga_GW_Contours_Change.aprx, Figure17_Careaga_WLE_Change_Spring_24-23, npalmer

5.2 ANNUAL AND CUMULATIVE CHANGE IN GROUNDWATER IN STORAGE

Together with the change in storage for the Paso Robles Formation calculated by the water budget method and the change in storage calculation for the Careaga Sand based on changes in groundwater elevations, the EMA-wide annual change of groundwater in storage for both principal aquifers for Water Year 2025 are presented in **EMA Table 5-1**.

The volume of groundwater in storage decreased by approximately 12,500 AFY during the below normal Water Year 2025, when rainfall totaled 42 percent of the long-term average. The average decline in groundwater in storage during this below normal water year approximated the similar relatively dry water year 2021, when groundwater in storage decreased by approximately 13,600 AFY. The decline that occurred during the water year represents an EMA-wide decline of groundwater elevation of approximately 3 feet on average.

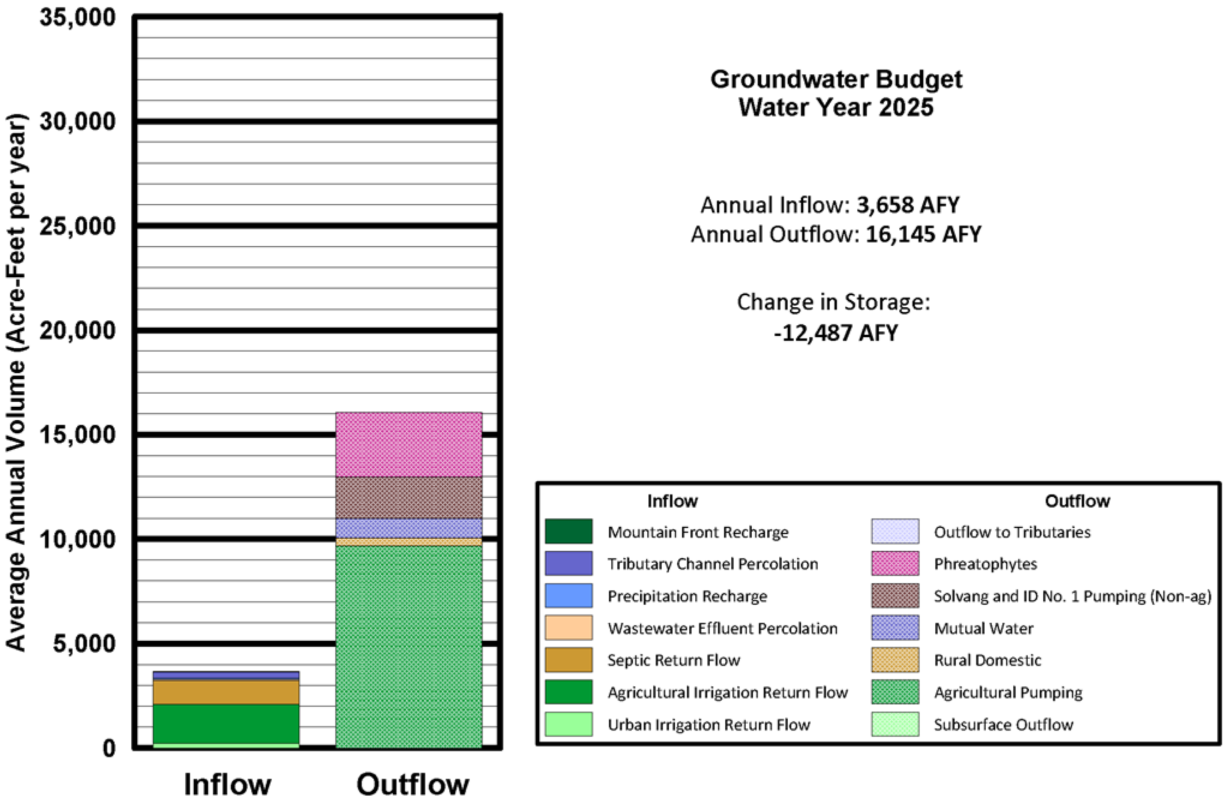
EMA Table 5-1
Annual Estimated Change in Groundwater in Storage,
In the Eastern Management Area

Water Year	Water Year Type	Chage in Storage (Paso Robles Formation)	Change in Storage (Careaga Sand)	Total Annual Change in Storage
2020	Above Normal	-1,662	-477	-2,139
2021	Dry	-12,737	-825	-13,562
2022	Critical	-10,983	-495	-11,478
2023	Wet	17,677	307	17,984
2024	Wet	6,737	-623	6,114
2025	Below Normal	-12,795	308	-12,487

Values in acre-feet, past years shown in gray.

A summary of the average inflows and outflows associated with each component of the water budget within the EMA during Water Year 2025 is presented graphically on **EMA Figure 5-3**.

EMA Figure 5-3
Groundwater Budget Volumes,
Water Year 2024
Eastern Management Area

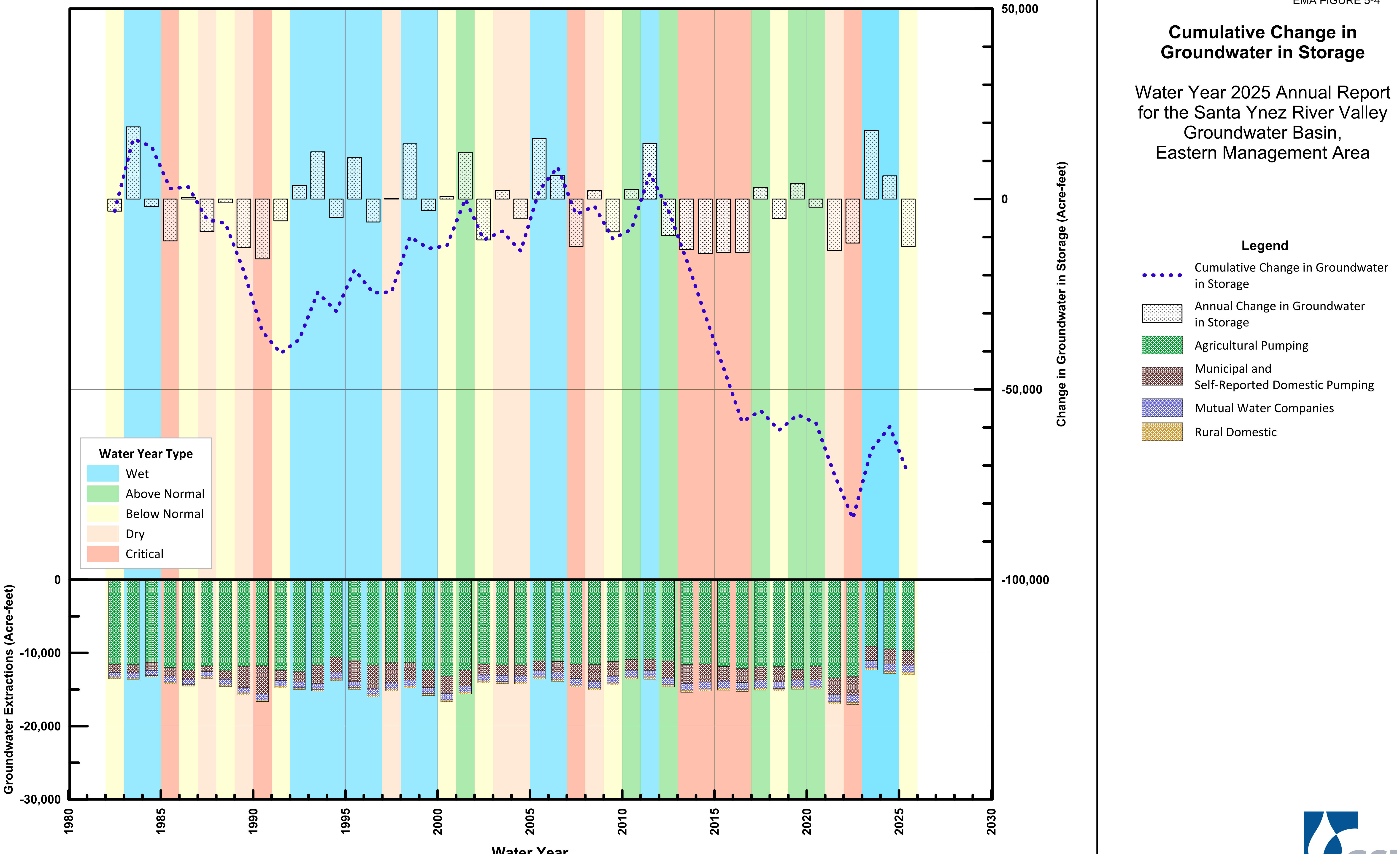


The overall volume of groundwater in storage is estimated to have declined during Water Year 2025. Likewise, the net volume of groundwater in storage is estimated to have declined by approximately 27,800 AF since water year 2015. The estimated annual and cumulative changes in groundwater in storage since water year 1981 is presented on **EMA Figure 5-4**, which includes the period since January of 2015.

EMA FIGURE 5-4

Cumulative Change in Groundwater in Storage

Water Year 2025 Annual Report for the Santa Ynez River Valley Groundwater Basin, Eastern Management Area



GSI Water Solutions, Inc.

EMA CHAPTER 6: PROGRESS TOWARD GSP IMPLEMENTATION AND SUSTAINABILITY

This section summarizes activities that are underway to implement the Groundwater Sustainability Plans for the three management areas within the Basin. These activities relate to the planning, development, and construction efforts required to carry out the Plans, which across the Basin include:

- Well Extraction Measurement Demonstration Projects and Basin Reporting Program,
- Rate Studies,
- Basin Plan 5-Year Periodic Updates,
- Monitoring Improvement and Expansion,
- Stormwater Capture and Infiltration Project Designs (WMA),
- Water Use Efficiency Strategic Plan, and
- Recycled Water Feasibility Study.

Together, these efforts support management actions within the EMA aimed at maintaining sustainability and preventing undesirable results. Within the EMA portion of the Basin, these actions are primarily focused on implementing a series of EMA GSA initiatives that address:

- Expanding groundwater monitoring network,
- Expanding groundwater monitoring network for potential GDEs,
- Filling identified data gaps,
- Registering and metering wells,
- Reporting metered production,
- Implementing a revenue-generating fee program,
- Planning GDE surveys,
- and developing new and expanding existing water use efficiency programs for implementation within the EMA.

As described in the Plan (GSI, 2022), the need for projects and management actions is based on groundwater conditions, including the following:

- Groundwater pumping in the EMA has exceeded the estimated sustainable yield, and a general trend of declining groundwater levels has been observed.
- Water budgets prepared for each annual report indicate that groundwater storage is generally declining and may continue to decrease under dry and critical conditions due to pumping in the EMA.

To mitigate ongoing declines in groundwater levels in the EMA, achieve and maintain sustainability over the implementation period and planning horizon, and prevent undesirable results as required by SGMA, the EMA will rely on long-term planning strategies set forth in the EMA GSP, including but not limited to improved water use efficiency, and resulting reductions in aggregate groundwater pumping, and/or expanded water supply. The following section describes actions that have been initiated since the Plan was submitted to and approved by DWR.

Potential management actions and potential future projects are categorized into three groups as documented in the Plan:

- The management actions included in Group 1 will be initiated following adoption of the Plan by the EMA GSA.
- The Group 2 management actions and Group 3 projects may be considered for implementation as conditions dictate and the effectiveness of the management actions are assessed.

6.1 GROUP 1 MANAGEMENT ACTIONS BEING IMPLEMENTED

Group 1 management actions that are being implemented, partially or wholly funded by a Proposition 68 SGMA implementation grant for the entire Basin include the following:

1. Address Data Gaps

- Expand Monitoring well network in the EMA to increase spatial coverage and well density, including siting and design of a deep monitoring well in data gap area and two piezometers within potential GDE areas,
- Perform video surveys in representative wells that currently do not have adequate construction records to confirm well construction
- Review/update water usage factors and crop acreages

2. Groundwater Pumping Fee Program– Resolution and ordinance adopting an EMA-wide 5-year schedule for groundwater production charges, with successful implementation for first half of FY 2025-26.
3. Well Registration Program (Well Registration Ordinance No. 2025-01)
4. Well Meter Installation Program (Metering and Production Reporting Ordinance No. 2025-03)
5. Water use efficiency programs

6.2 SUMMARY OF PROGRESS TOWARD MEETING BASIN SUSTAINABILITY

During water year 2025 within the EMA:

1. groundwater production was within approximately 100 AF of the calculated long-term sustainable yield in the GSP.
2. This amount of production occurred during a dry (below normal) year when production typically is higher than normal,
3. The moderate average groundwater level declines discussed below are common within the EMA commensurate with below normal precipitation and reduced groundwater recharge as described in the Plan, and
4. The EMA GSA is implementing management actions to address the groundwater conditions including successfully implementing programs such as adopting a pump charge, well registration ordinance, well metering and reporting ordinance, all of which implement sustainability programs as described in the Plan.

Relative to the conditions reported in the Plan, this Annual Report for 2025 indicates that groundwater levels in the Paso Robles Formation have generally declined during Water Year 2025 relative to the previous spring in response to reduced precipitation and, on average, remain below the elevations of the Spring 2018 period as presented in the Plan. However, undesirable results have not occurred in the EMA.

During the spring of Water Year 2025 46% of the representative wells within the Paso Robles Formation wells (6 of 13 with water level data) remained below the minimum threshold values, as shown on EMA Table 3-1. In the Careaga Sand, the water elevations in 22% of the representative Careaga Sand wells (2 of 9) were below the minimum threshold values in Spring 2025. Because these values did not exceed 50% of the representative wells in each principal aquifer, no undesirable results associated with declining water levels have occurred during Water Year 2025.

Based on the rainfall conditions over the past 20 years, drought is the predominant factor leading to groundwater elevation declines. Group 1 management actions are being implemented to address data gaps through improvement of monitoring and data-collection networks, as well as program implementation for better measurement of groundwater pumping and promotion of water use efficiency and sustainable groundwater use.

While groundwater elevations continue to remain below the minimum thresholds in a few of the representative wells, the number of wells with water levels falling below the minimum thresholds has not resulted in the observation of any undesirable results described in the Plan. Group 1 management actions (as outlined in Section 6 of the Plan) are being implemented, and implementation is projected to result in improved conditions. If these do not improve groundwater conditions, and it is determined that groundwater pumping is contributing to cause undesirable results, additional management actions described in the Plan (e.g., Group 2 and 3) may be warranted. The effect of the management actions in being reviewed periodically as part of the Periodic Evaluation that is being prepared at this time, and additional Group 2 management actions and Group 3 projects may be considered and implemented as necessary to avoid undesirable results, as warranted to ensure sustainable groundwater management.

The EMA GSA is not charged with managing groundwater quality unless it can be shown that water quality degradation is caused by groundwater pumping in the EMA, or the EMA GSA implements a project that degrades water quality. As described in the Plan, groundwater quality in the EMA is generally suitable for both drinking water and agricultural purposes (GSI, 2022). Potential degradation of groundwater quality caused by groundwater pumping or implementation of projects and management actions is being monitored as part of the EMA's water quality monitoring network. This annual report presents water quality for the current water.

Land subsidence caused by groundwater extraction is being monitored as part of the Plan. Subsidence can be estimated using InSAR data provided by DWR. Minor subsidence has been observed in the EMA using InSAR data provided by DWR for June 2015 through October 2025. This data shows that an average subsidence of approximately 0.018 feet per year has occurred in certain parts of the Basin over the period of record. This is a minor rate of subsidence that does not exceed the minimum threshold value and is relatively insignificant and not a major concern for the EMA. The EMA GSA will continue to monitor and report annually on any subsidence.

Potential GDEs associated with one of the principal aquifers were identified on the downstream ends of Alamo Pintado Creek and Zanja de Cota Creek where groundwater may be interconnected with surface water. As described in the Plan, the EMA GSA is planning to install piezometers in the GDE areas as presented in the plan (Section 4) to assess whether depletion of interconnected surface water is occurring and whether significant and unreasonable adverse impacts to GDEs or reductions in discharge of interconnected surface water to the Santa Ynez River may be occurring as a result of groundwater conditions. Planning for installation of the proposed piezometers is underway and should be completed this calendar year.

Planning is underway to implement projects and management actions and to evaluate their effectiveness. It is anticipated that the projects and management actions will enable the EMA to sustainably manage groundwater and achieve sustainability goals as defined in the Plan.

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EMA CHAPTER 7: REFERENCES

Davis, T., M. Landon, and G. Bennett. 2018. Prioritization of Oil and Gas Fields for Regional Groundwater Monitoring Based on Preliminary Assessment of Petroleum Resource Development and Proximity to California's Groundwater Resources. Scientific Investigation Report 2018-5065.

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APPENDICES

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Joint Appendix A:

Portions of Sustainable Groundwater Management Act Statute and Regulations Specific to Annual Report Requirements Effective August 15, 2016

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Portions of Sustainable Groundwater Management Act Statute and Regulations Specific to Annual Report Requirements

CALIFORNIA WATER CODE
DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES
PART 2.74. SUSTAINABLE GROUNDWATER MANAGEMENT
CHAPTER 6. GROUNDWATER SUSTAINABILITY PLANS

Section 10728. Annual Reporting By Groundwater Sustainability Agency To Department

On the April 1 following the adoption of a groundwater sustainability plan and annually thereafter, a groundwater sustainability agency shall submit a report to the department containing the following information about the basin managed in the groundwater sustainability plan:

(a) Groundwater elevation data.
(b) Annual aggregated data identifying groundwater extraction for the preceding water year.
(c) Surface water supply used for or available for use for groundwater recharge or in-lieu use.
(d) Total water use.
(e) Change in groundwater storage.

CALIFORNIA CODE OF REGULATIONS
TITLE 23. WATERS
DIVISION 2. DEPARTMENT OF WATER RESOURCES
CHAPTER 1.5. GROUNDWATER MANAGEMENT
SUBCHAPTER 2. GROUNDWATER SUSTAINABILITY PLANS

ARTICLE 2. Definitions

§ 351. Definitions

The definitions in the Sustainable Groundwater Management Act, Bulletin 118, and Subchapter 1 of this Chapter, shall apply to these regulations. In the event of conflicting definitions, the definitions in the Act govern the meanings in this Subchapter. In addition, the following terms used in this Subchapter have the following meanings:
[...]

(d) "Annual report" refers to the report required by Water Code Section 10728

[..]

(am) "Water year" refers to the period from October 1 through the following September 30, inclusive, as defined in the Act.

ARTICLE 4. Procedures

§ 353.4. Reporting Provisions

Information required by the Act or this Subchapter, including Plans, Plan amendments, annual reports, and five-year assessments, shall be submitted by each Agency to the Department as follows:

(a) Materials shall be submitted electronically to the Department through an online reporting system, in a format provided by the Department as described in Section 353.2.

(b) Submitted materials shall be accompanied by a transmittal letter signed by the plan manager or other duly authorized person.

ARTICLE 5. Plan Contents

SUBARTICLE 4. Monitoring Networks

§ 354.40. Reporting Monitoring Data to the Department

Monitoring data shall be stored in the data management system developed pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department.

ARTICLE 6. Department Evaluation and Assessment

§ 355.6. Periodic Review of Plan by Department

[...]

(b) The Department shall evaluate approved Plans and issue an assessment at least every five years. The Department review shall be based on information provided in the annual reports and the periodic evaluation of the Plan prepared and submitted by the Agency.

§ 355.8. Department Review of Annual Reports

The Department shall review annual reports as follows:

(a) The Department shall acknowledge the receipt of annual reports by written notice and post the report and related materials on the Department's website within 20 days of receipt.

(b) The Department shall provide written notice to the Agency if additional information is required.

(c) The Department shall review information contained in the annual report to determine whether the Plan is being implemented in a manner that will likely achieve the sustainability goal for the basin, pursuant to Section 355.6.

ARTICLE 7. Annual Reports and Periodic Evaluations by the Agency

§ 356. Introduction to Annual Reports and Periodic Evaluations by the Agency

This Article describes the procedural and substantive requirements for the annual reports and periodic evaluation of Plans prepared by an 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.

(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:

(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:

(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.

(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.

(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.

(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.

(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.

(5) Change in groundwater in storage shall include the following:

(A) Change in groundwater in storage maps for each principal aquifer in the basin.

(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.

(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.

ARTICLE 8. Interagency Agreements

§ 357.4. Coordination Agreements

[…]

(d) The coordination agreement shall describe a process for submitting all Plans, Plan amendments, supporting information, all monitoring data and other pertinent information, along with annual reports and periodic evaluations.

WMA Appendix A:

Groundwater Level Hydrographs for Assessing Chronic Decline in Groundwater Levels, Western Management Area

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WMA APPENDIX A:
GROUNDWATER LEVEL HYDROGRAPHS
FOR ASSESSING
CHRONIC DECLINE IN GROUNDWATER LEVELS,
WESTERN MANAGEMENT AREA

WATER YEAR 2025

This appendix includes hydrographs, which are graphs of water levels in wells. These are the representative wells for monitoring groundwater level decline. As per the SGMA regulations, this includes the period from January 1, 2015 through the end of the Water Year 2025. Shown on these graphs are key SGMA criteria: measurable objective, early warning, and minimum threshold. The Appendix is organized into two sections: Upper Aquifer and Lower Aquifer.

The Groundwater Sustainability Plan (GSP) includes hydrographs of the long-term period of record. A copy of the GSP, water level data, and hydrographs are available at https://sywater.info .

LIST OF ACRONYMS AND ABBREVIATIONS

BGS	below ground surface
CASGEM	California Statewide Groundwater Elevation Monitoring
FT	feet
NAVD88	North American Vertical Datum of 1988
USBR	United States Bureau of Reclamation
USGS	United States Geologic Survey
WL	Water Level
WMA	Western Management Area

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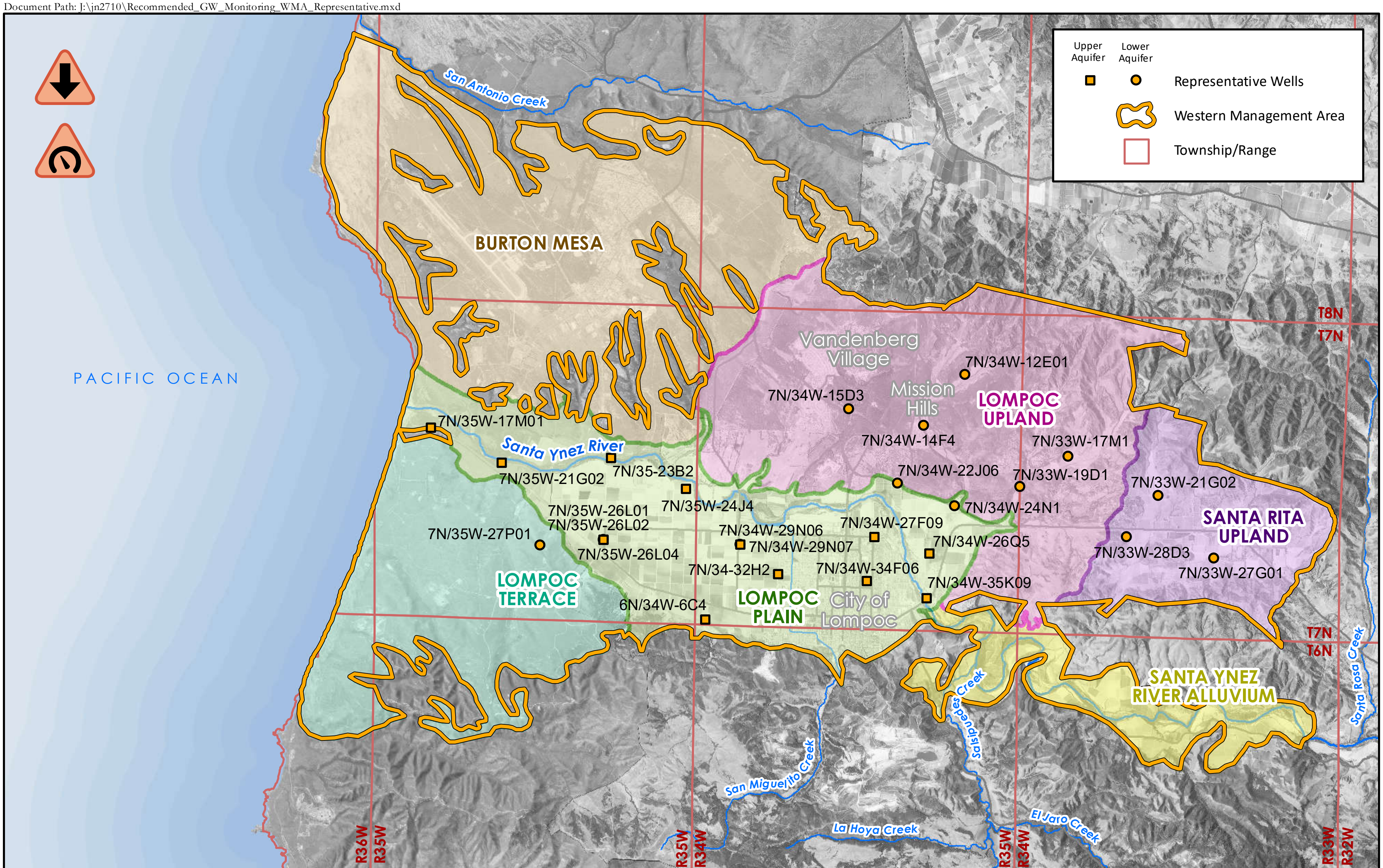
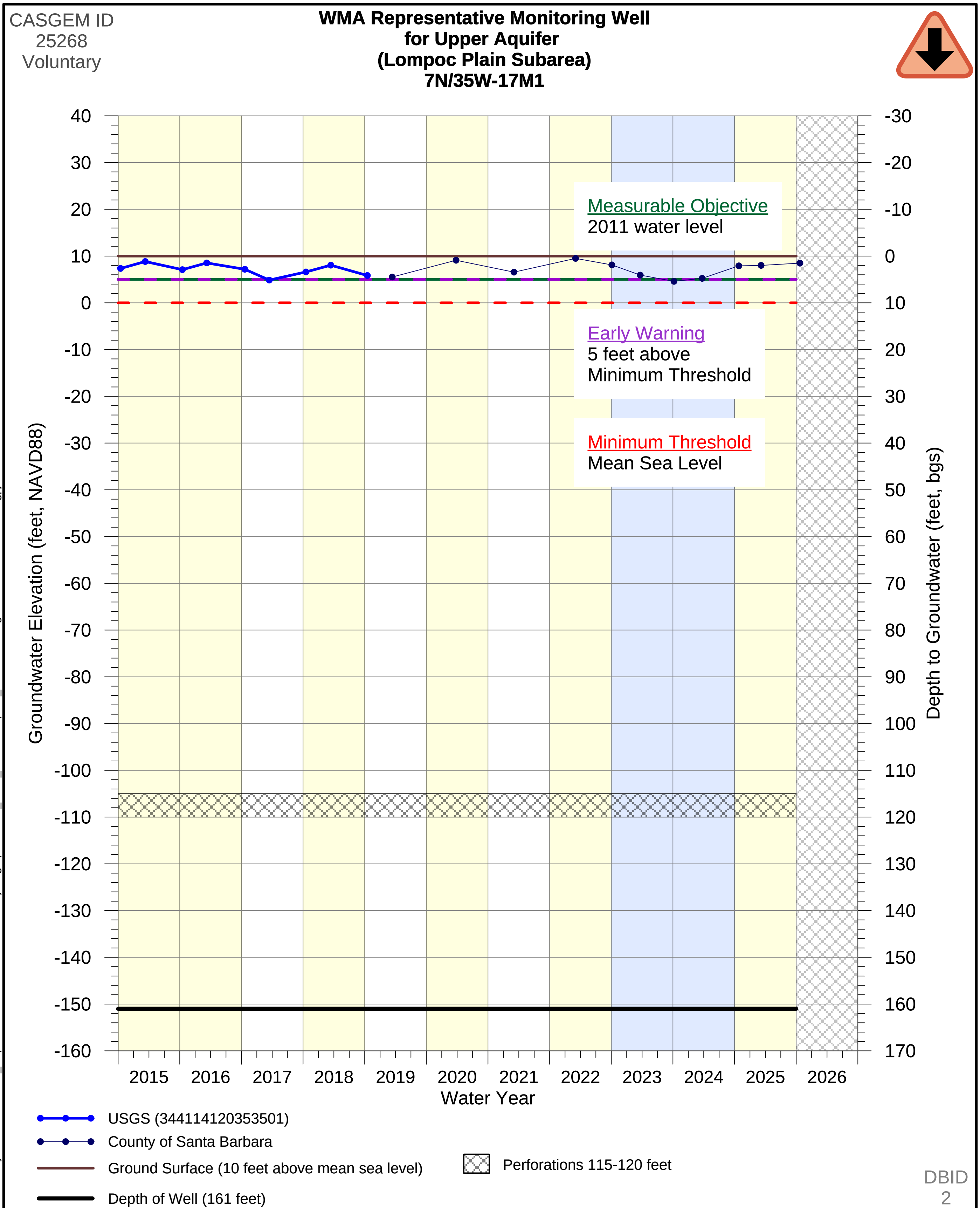


STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

WMA REPRESENTATIVE MONITORING WELLS FOR GROUNDWATER LEVELS AND GROUNDWATER STORAGE

FIGURE A1-01



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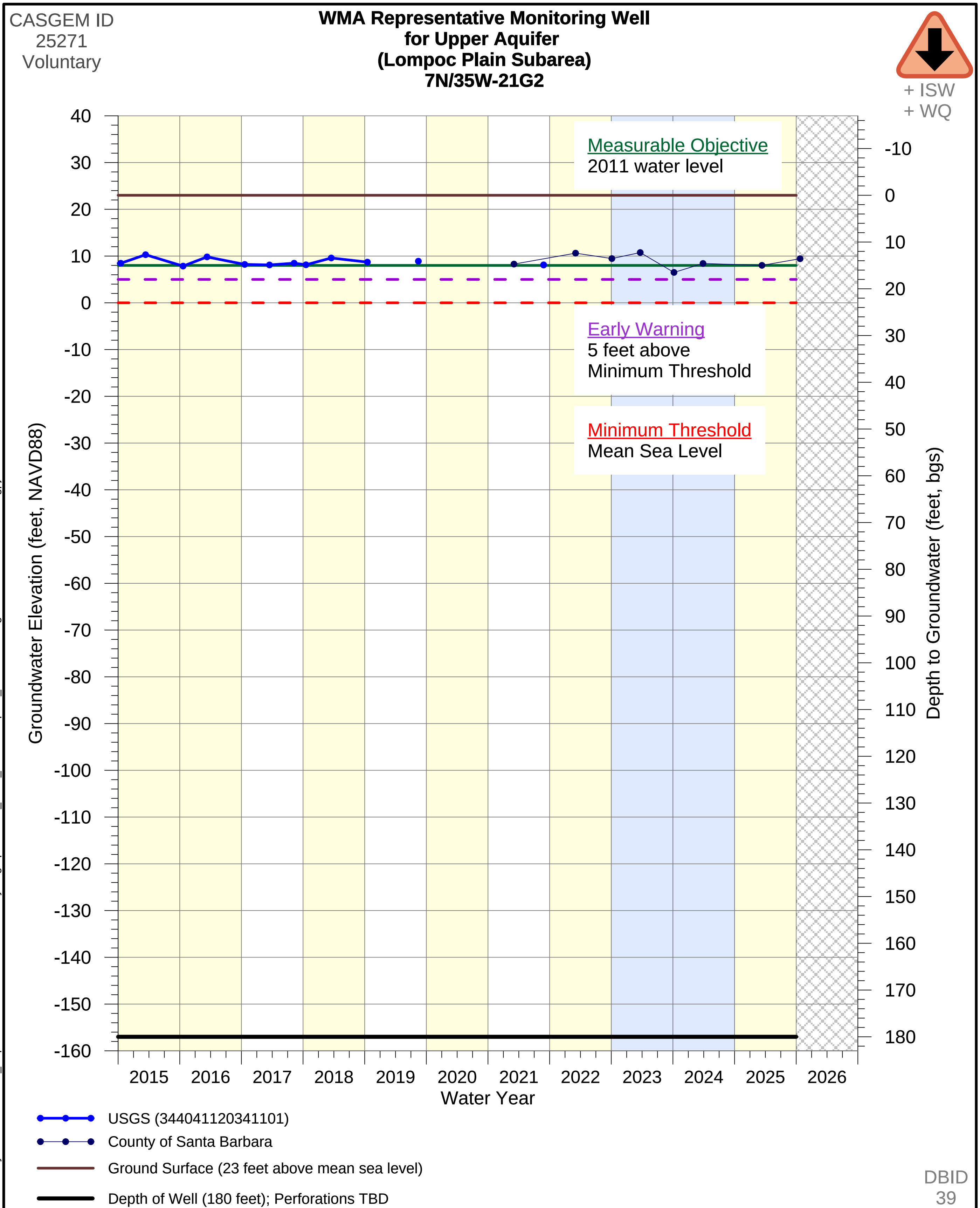
STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A1-02



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STETSON ENGINEERS INC.

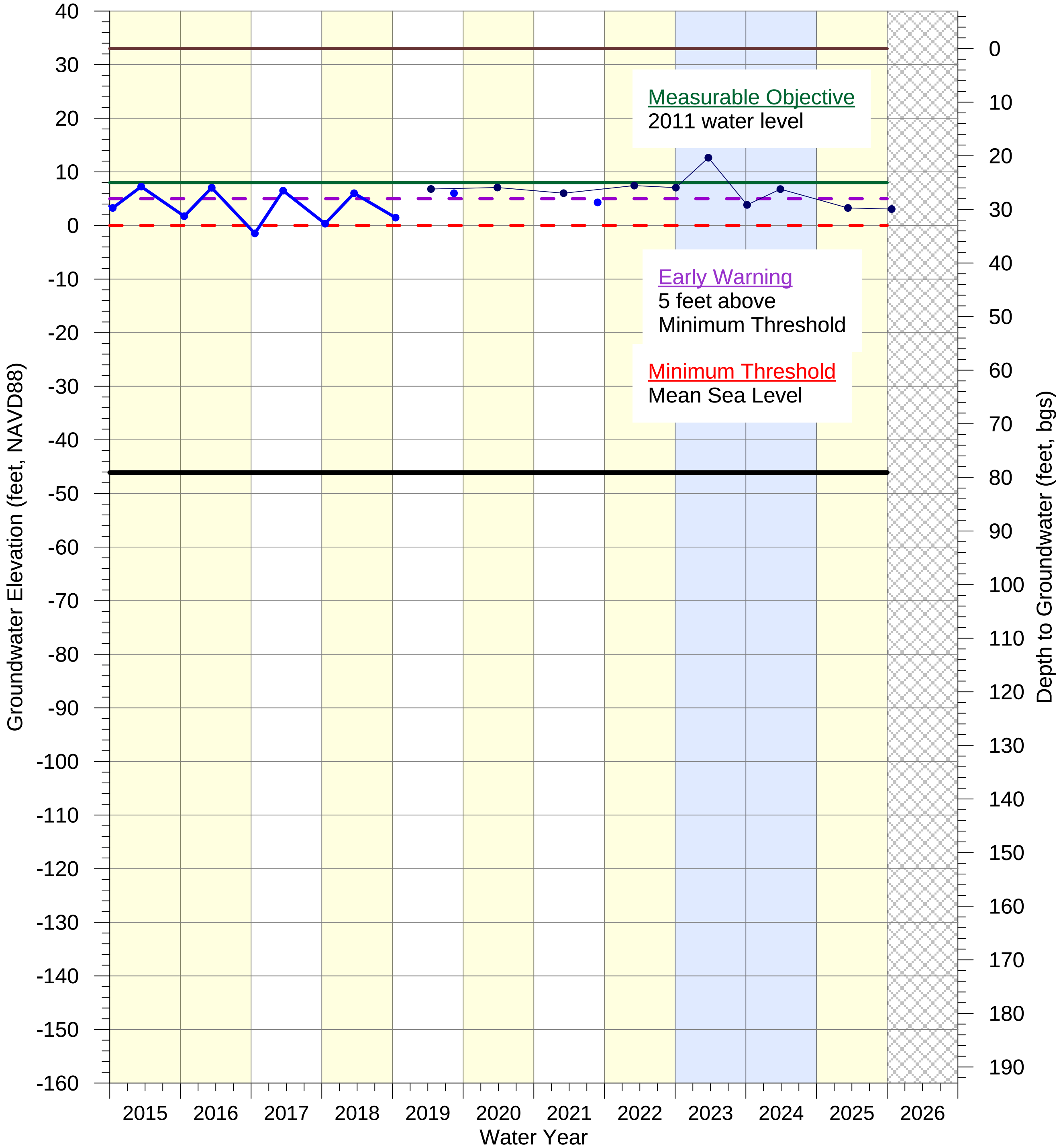
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

FIGURE A1-03

CASGEM ID
49171
Voluntary

WMA Representative Monitoring Well
for Upper Aquifer
(Lompoc Plain Subarea)
7N/35W-23B2



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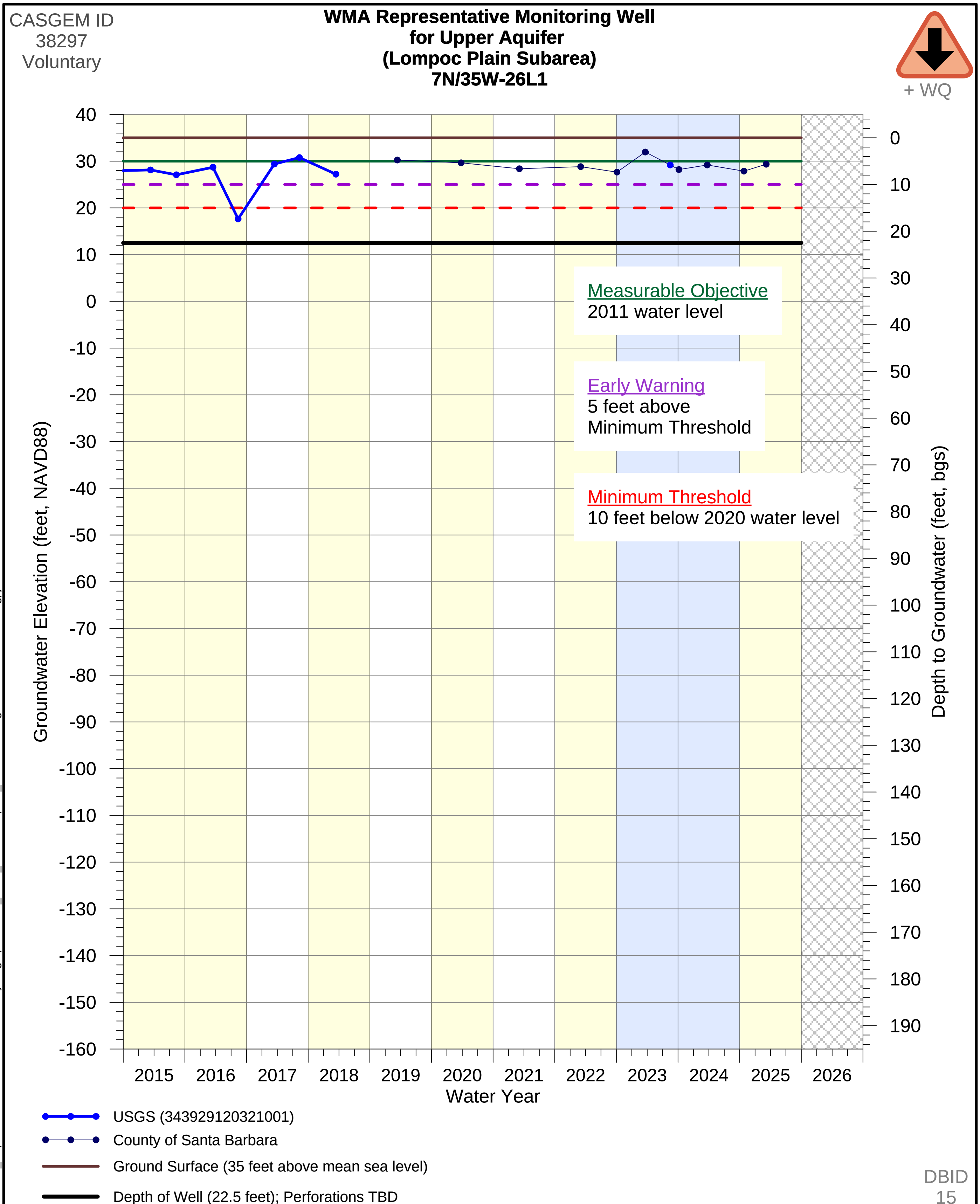
STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)
Wet
No Data
Above/Below Normal
Dry / Critically Dry

FIGURE A1-04



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STETSON ENGINEERS INC.

WMA Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

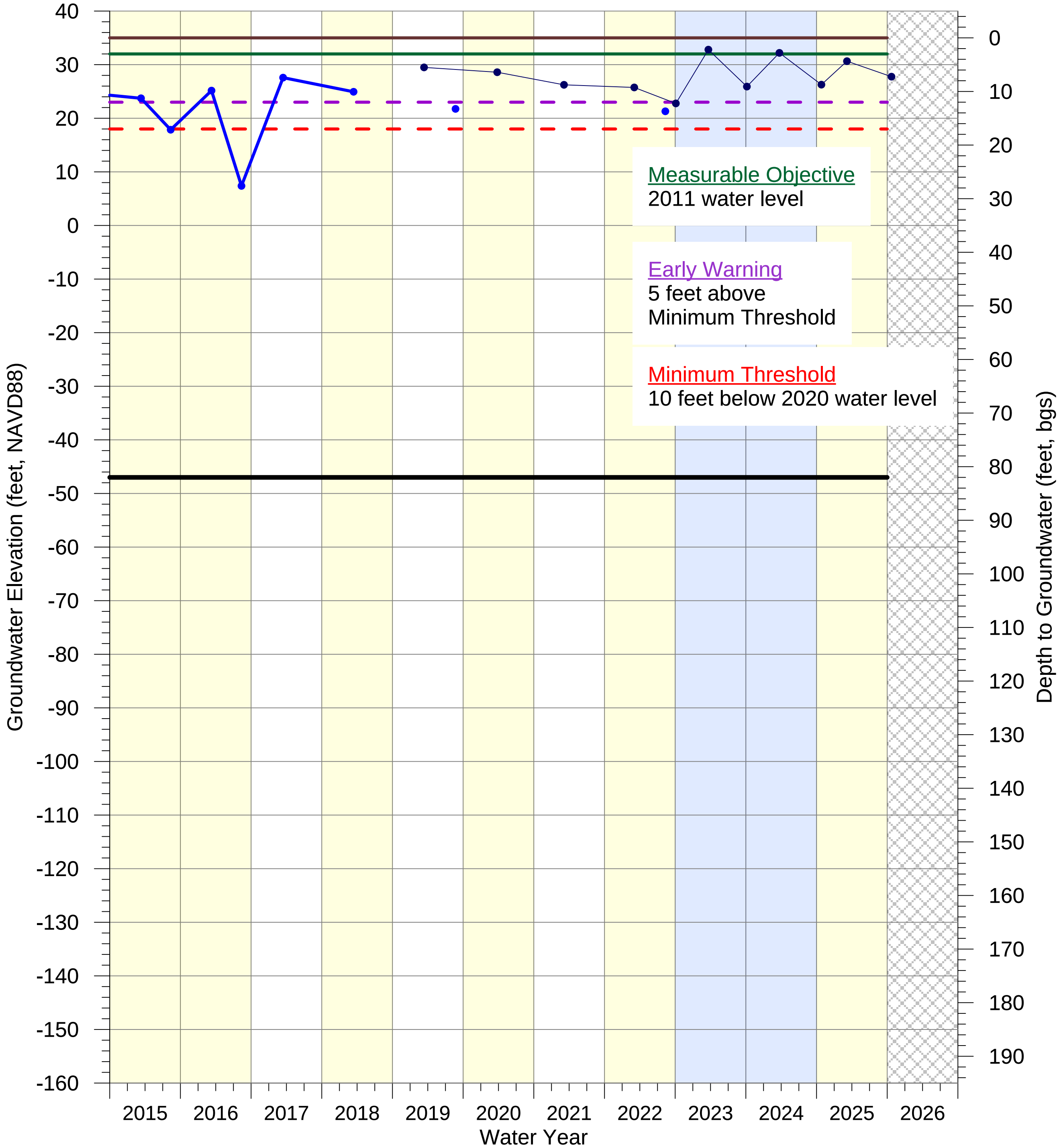
Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A1-05

CASGEM ID
49162
Voluntary

WMA Representative Monitoring Well
for Upper Aquifer
(Lompoc Plain Subarea)
7N/35W-26L2

+ WQ



USGS (343929120321002)

County of Santa Barbara

Ground Surface (35 feet above mean sea level)

Depth of Well (82 feet); Perforations TBD

DBID
16

STETSON
ENGINEERS INC.

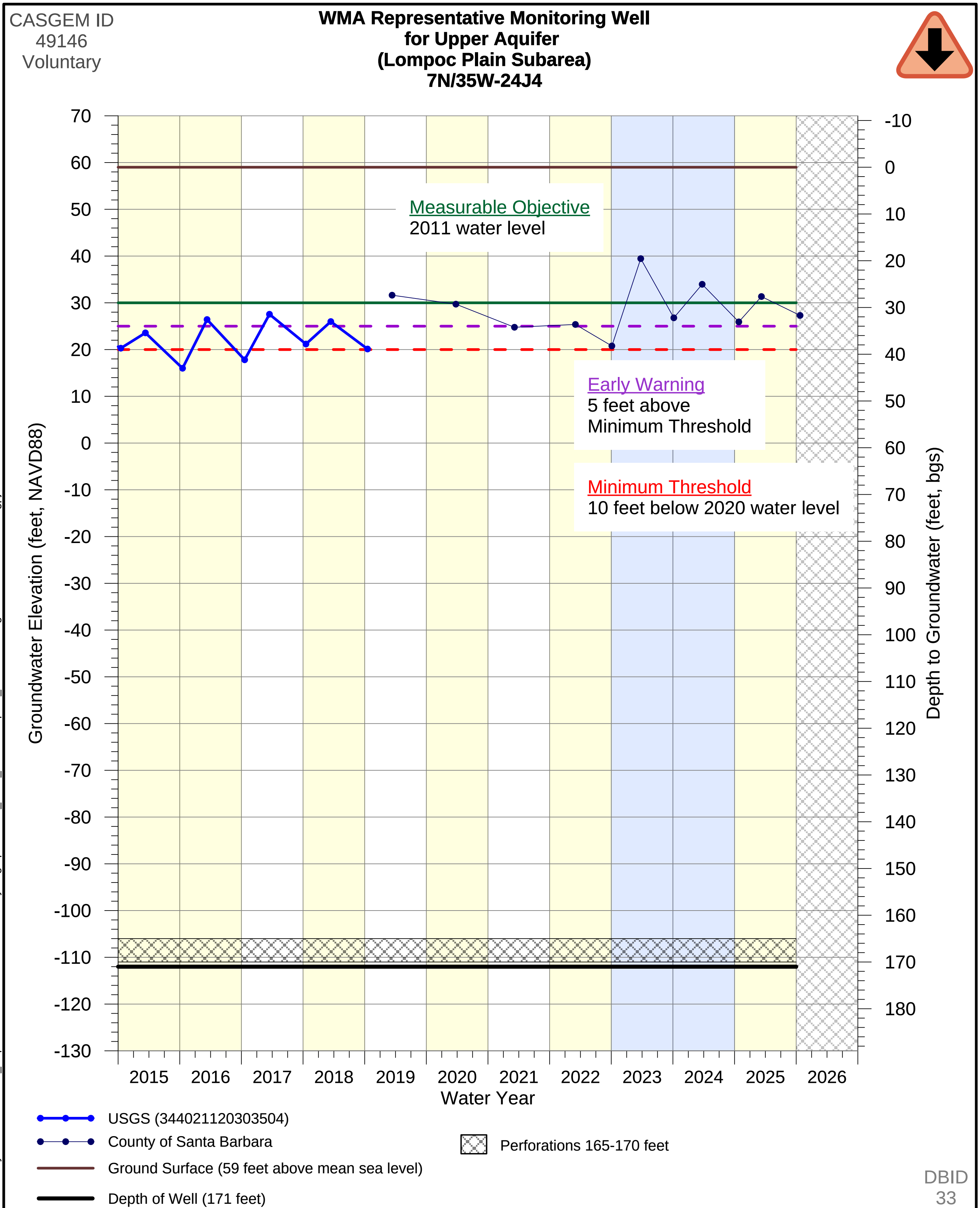
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE
MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)

Wet
No Data
Above/Below Normal
Dry / Critically Dry

FIGURE A1-06



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STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

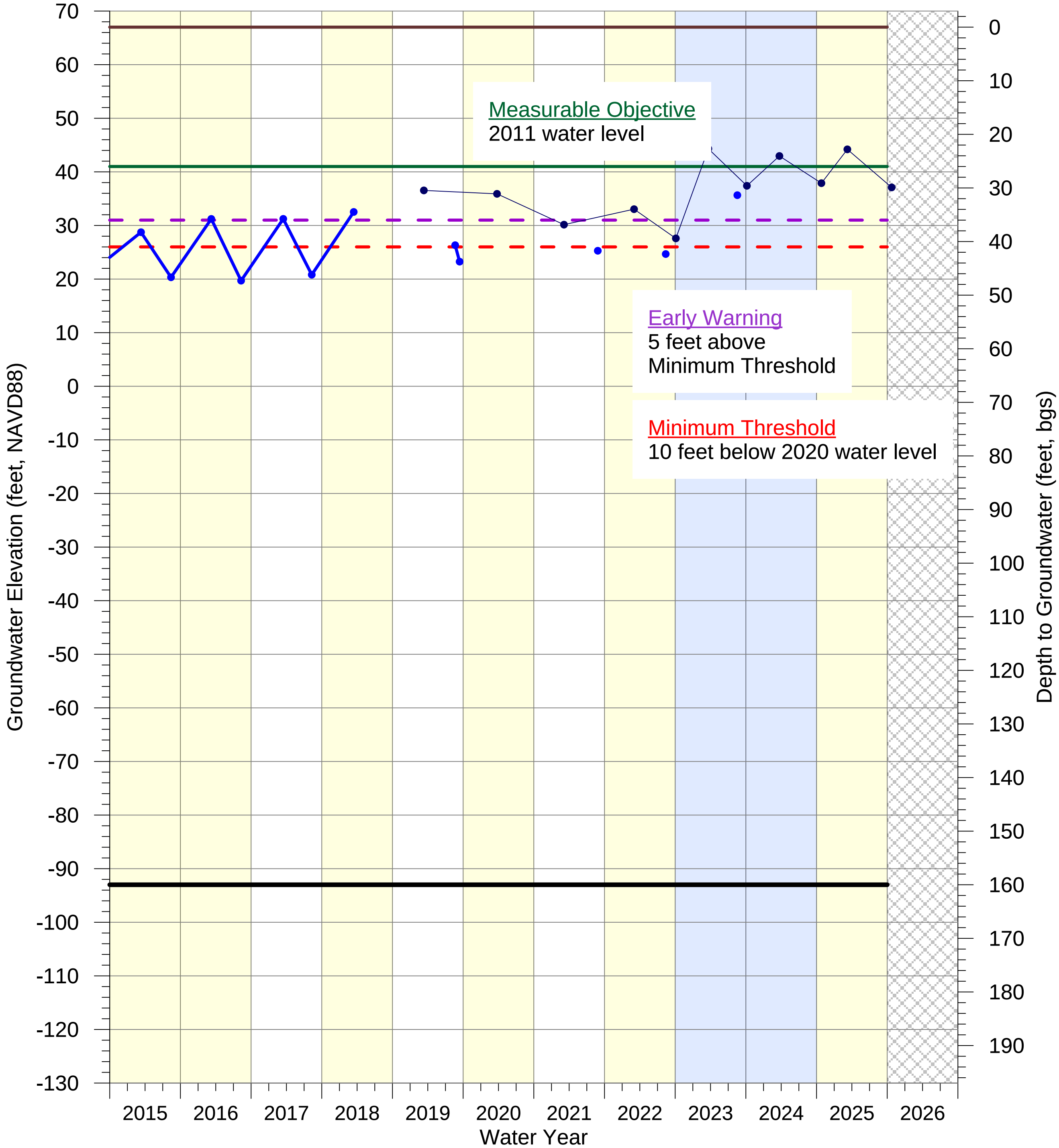
Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A1-07

CASGEM ID
49148
Voluntary

WMA Representative Monitoring Well
for Upper Aquifer
(Lompoc Plain Subarea)
7N/34W-29N6

+ WQ



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STETSON ENGINEERS INC.

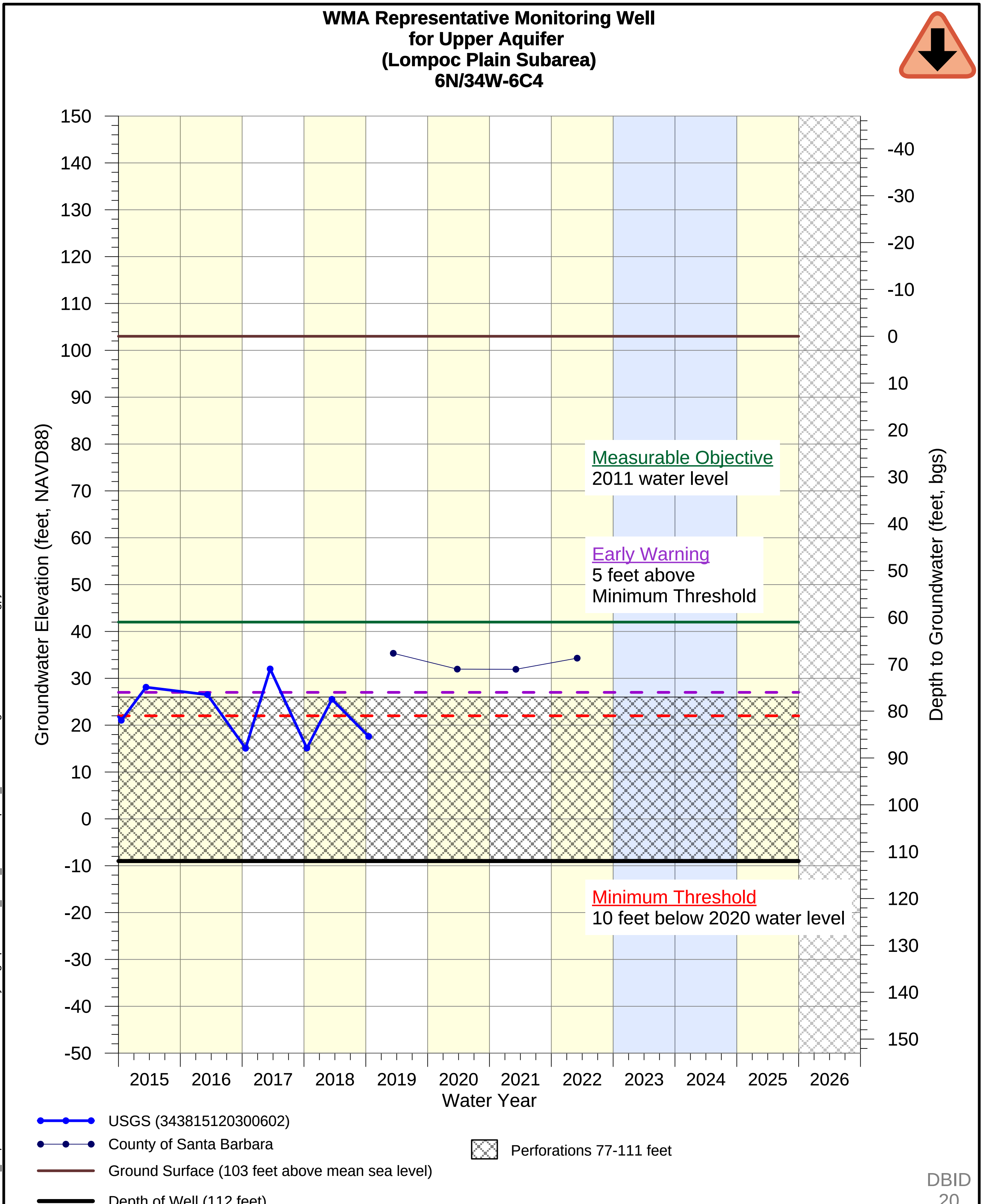
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A1-08



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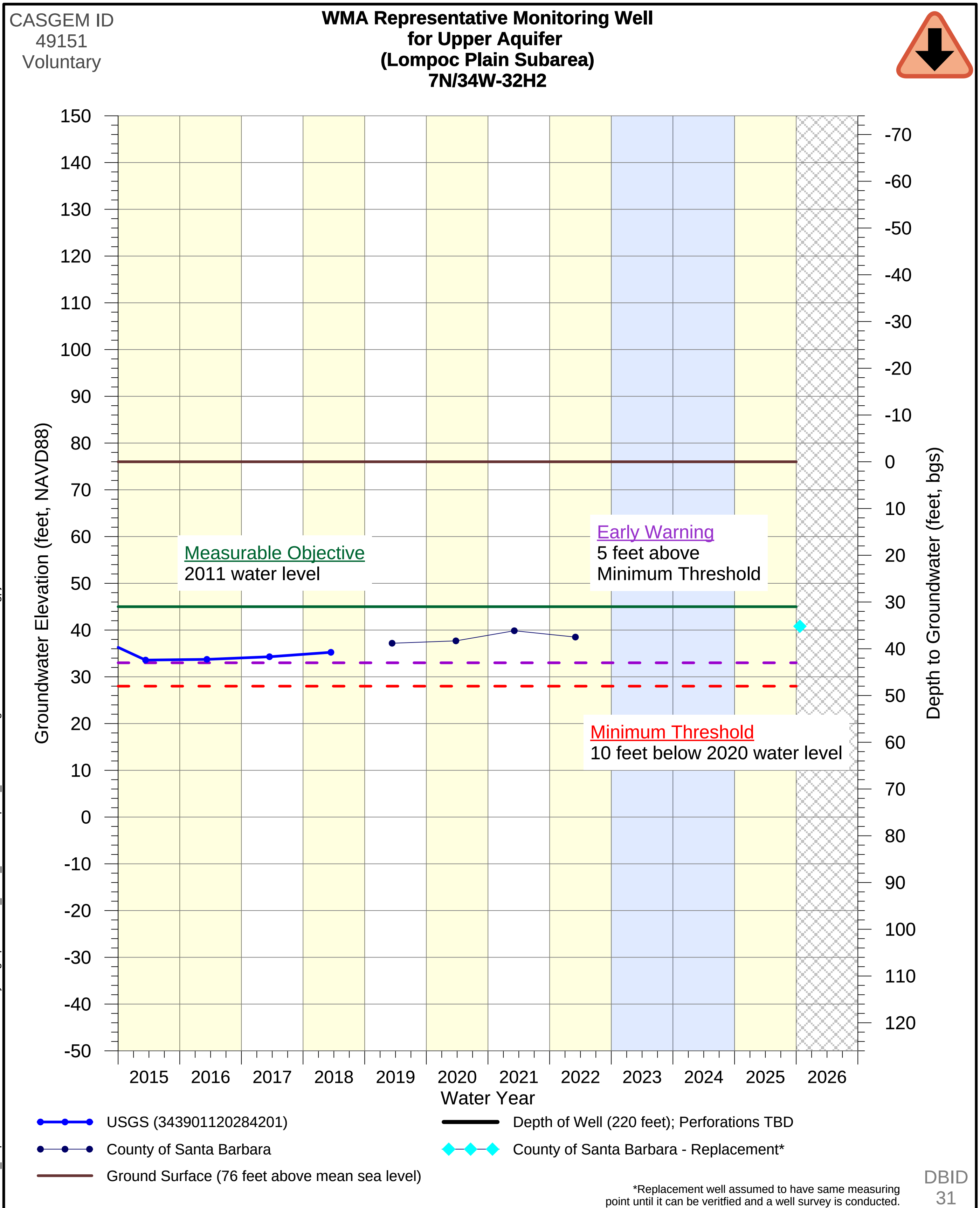
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)
Wet
No Data
Above/Below Normal
Dry / Critically Dry

FIGURE A1-09



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STETSON ENGINEERS INC.

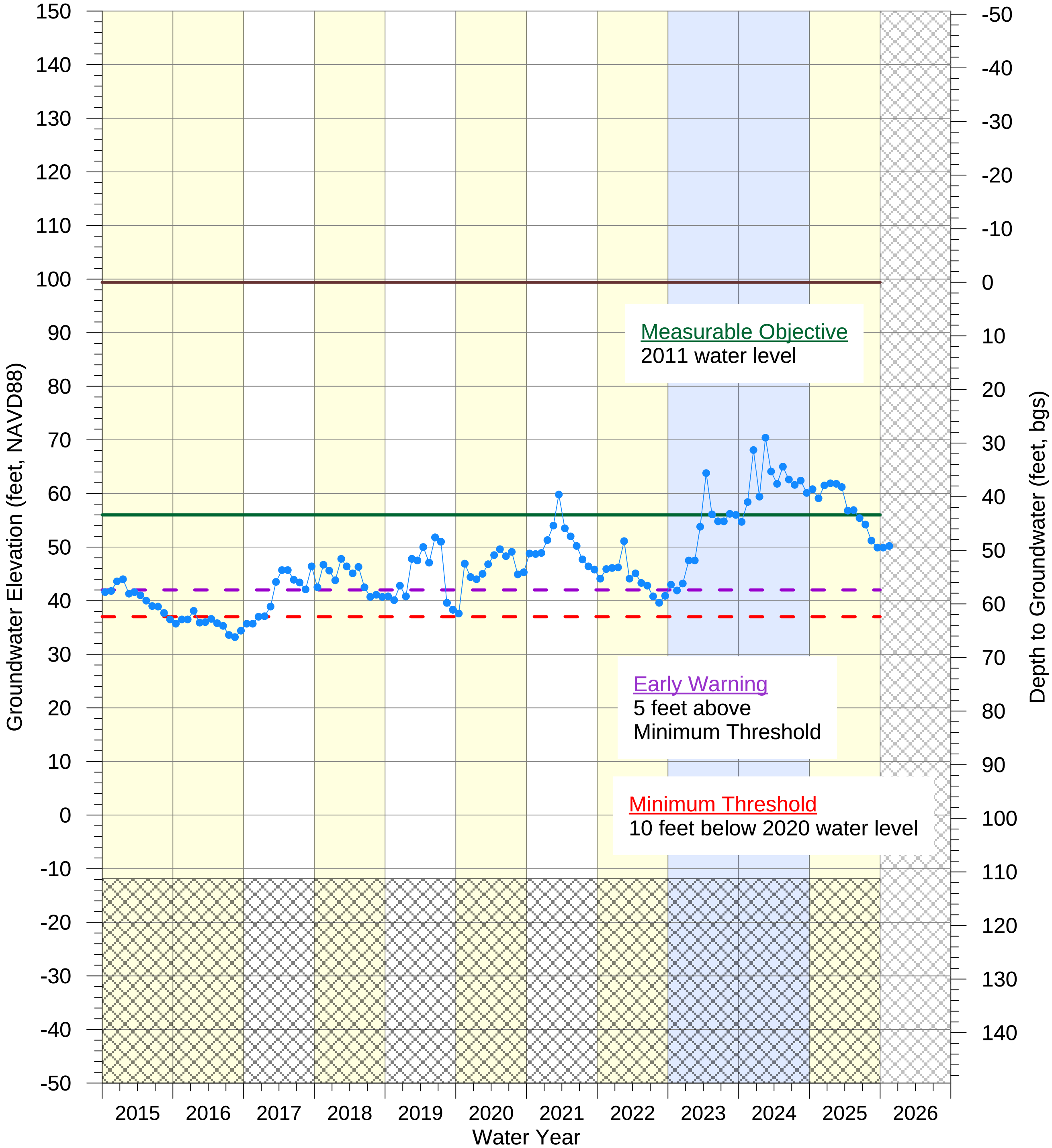
WMA Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

WMA Representative Monitoring Well for Upper Aquifer (Lompoc Plain Subarea) 7N/34W-27F9



US Bureau of Reclamation data includes estimates.

DBID 1162

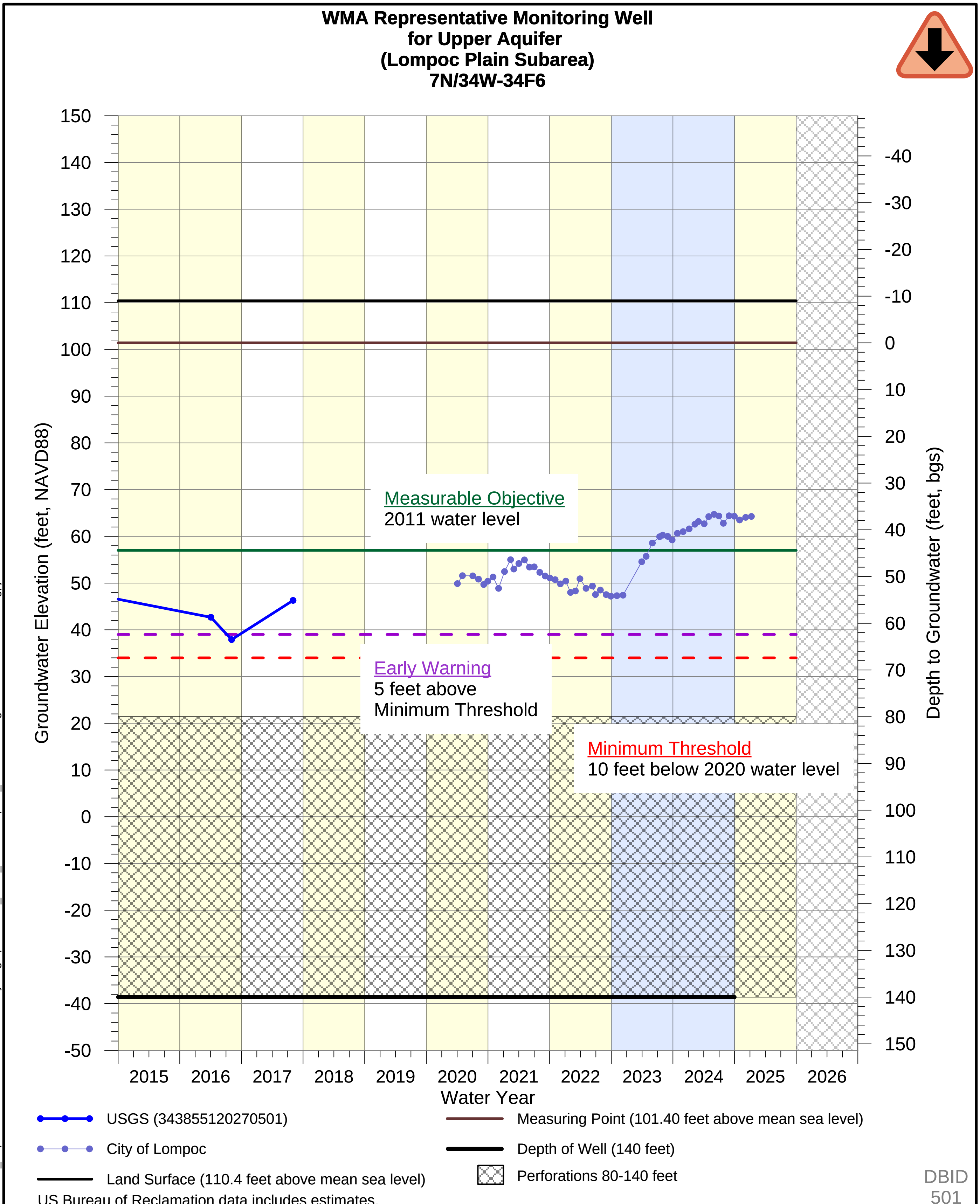
STETSON ENGINEERS INC.

WMA Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A1-11



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REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

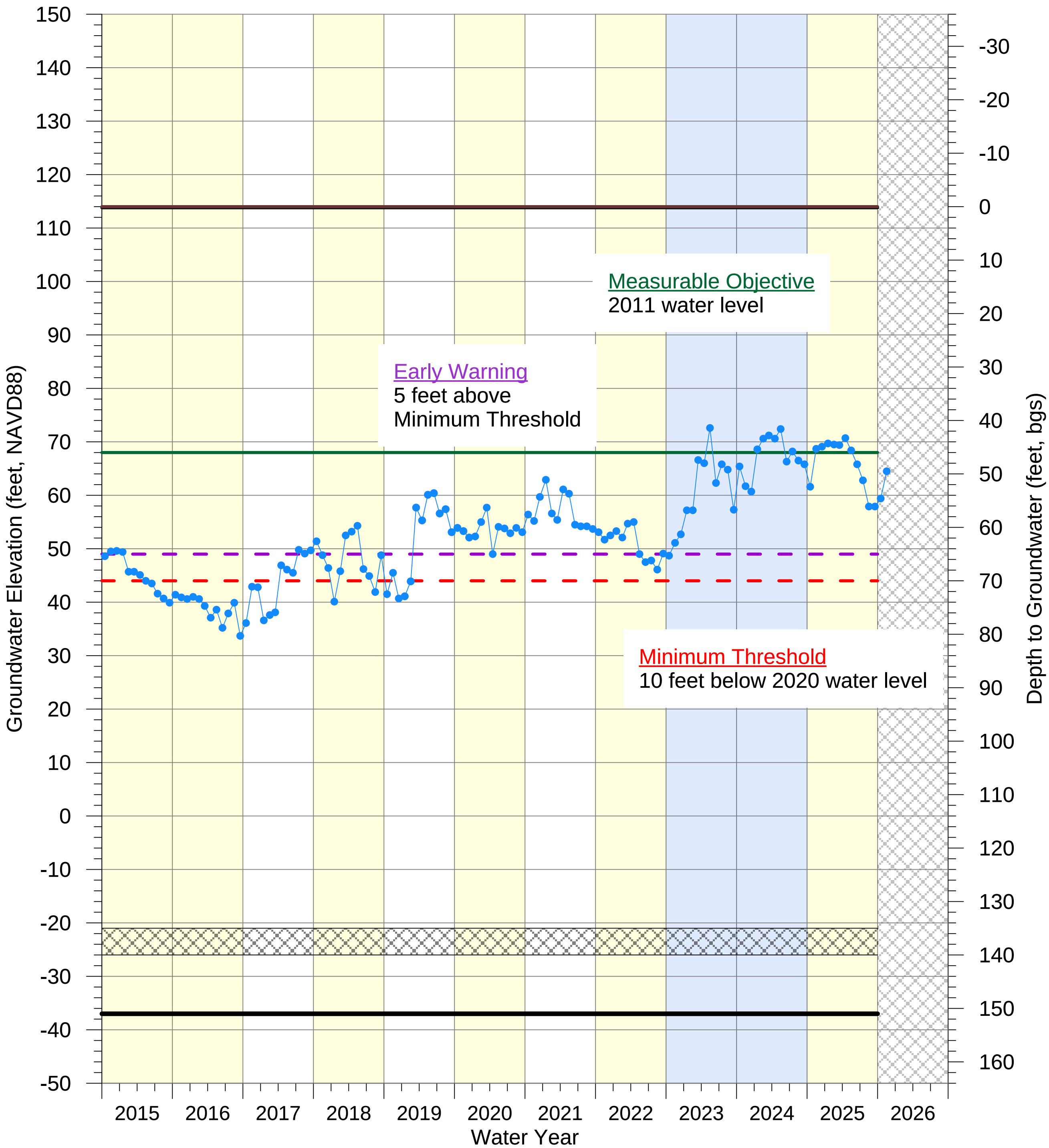
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

STETSON ENGINEERS INC.

Water Year Type (1942-2025)
Wet
No Data
Above/Below Normal
Dry / Critically Dry

FIGURE A1-12

WMA Representative Monitoring Well
for Upper Aquifer
(Lompoc Plain Subarea)
7N/34W-26Q5



USGS (343924120254501)

US Bureau of Reclamation

Measuring Point (114.0 feet above mean sea level)

Land Surface (113.8 feet above mean sea level)

Depth of Well (151 feet)

Perforations 135-140 feet

DBID
60

US Bureau of Reclamation data includes estimates.

\\192.168.16.33\main\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 WL GWL Hydrographs\WMA_GWL_SMCs\Grapher_Files\WMA Fig A1-12 LP-U 60 26Q5.grf 1/7/2026 J. Baca

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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

Water Year Type (1942-2025)

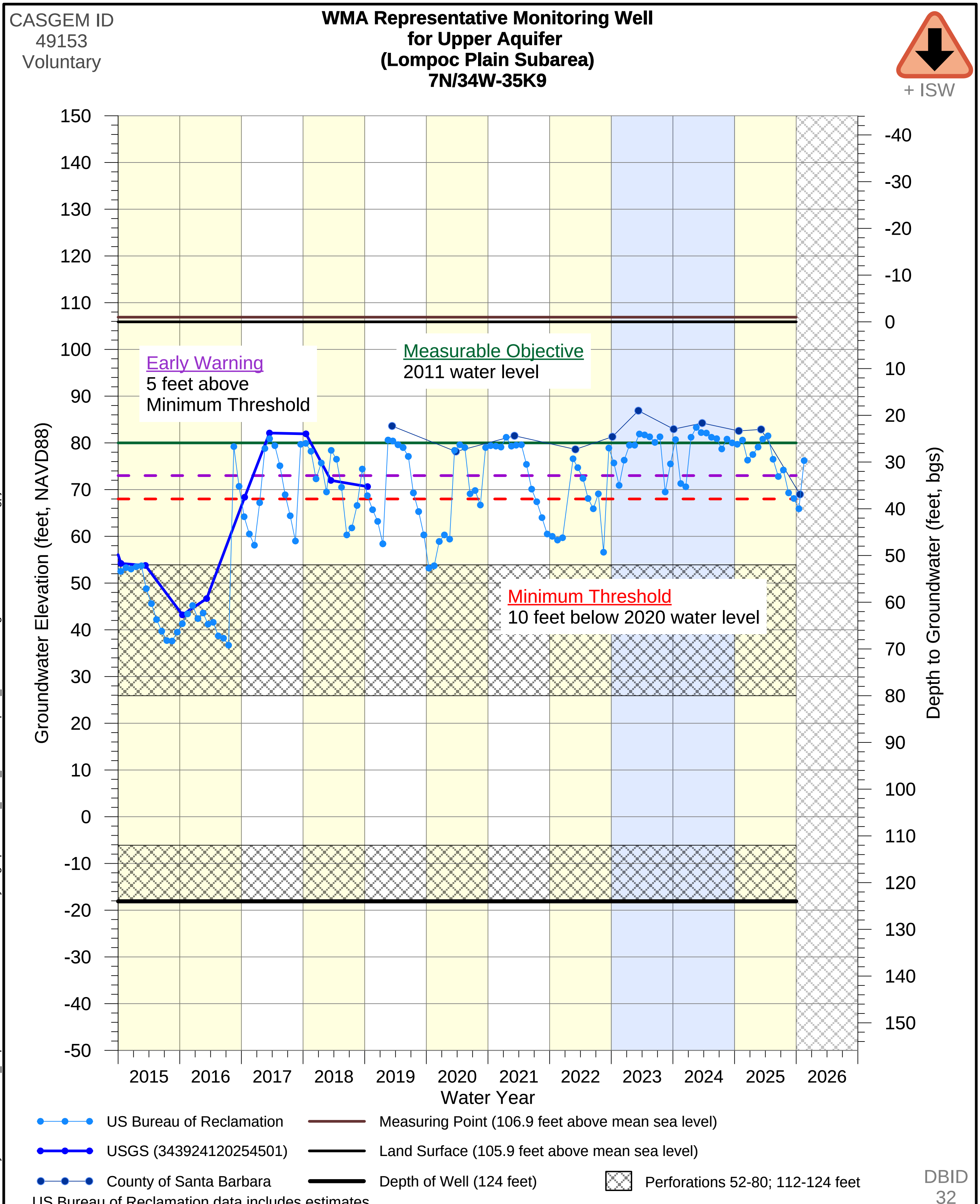
Wet

No Data

Above/Below Normal

Dry / Critically Dry

FIGURE A1-13



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WMA — Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Upper Aquifer - Lompoc Plain

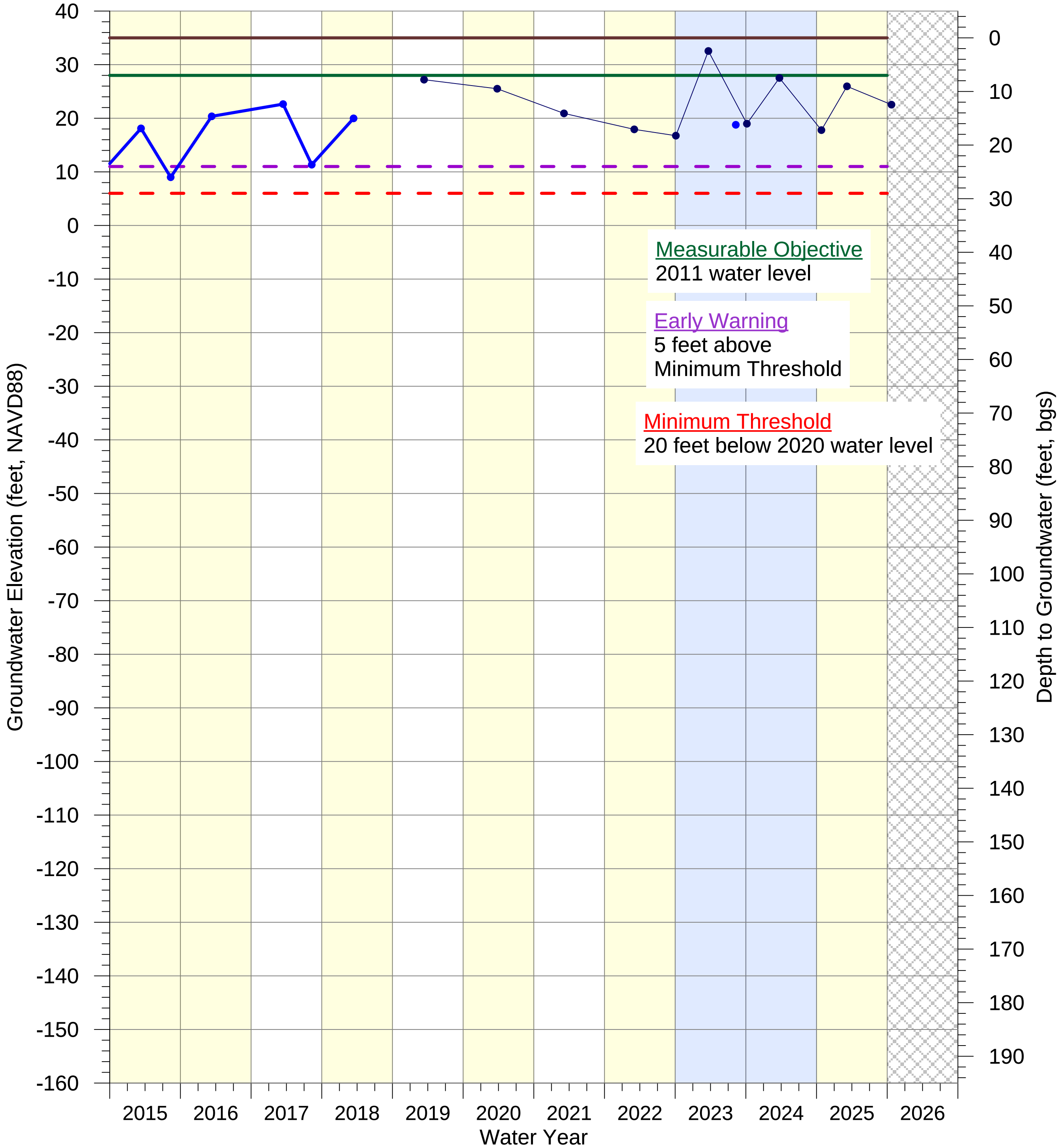
Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-01

CASGEM ID
38298
Voluntary

WMA Representative Monitoring Well for Lower Aquifer (Lompoc Plain Subarea) 7N/35W-26L4

+ WQ



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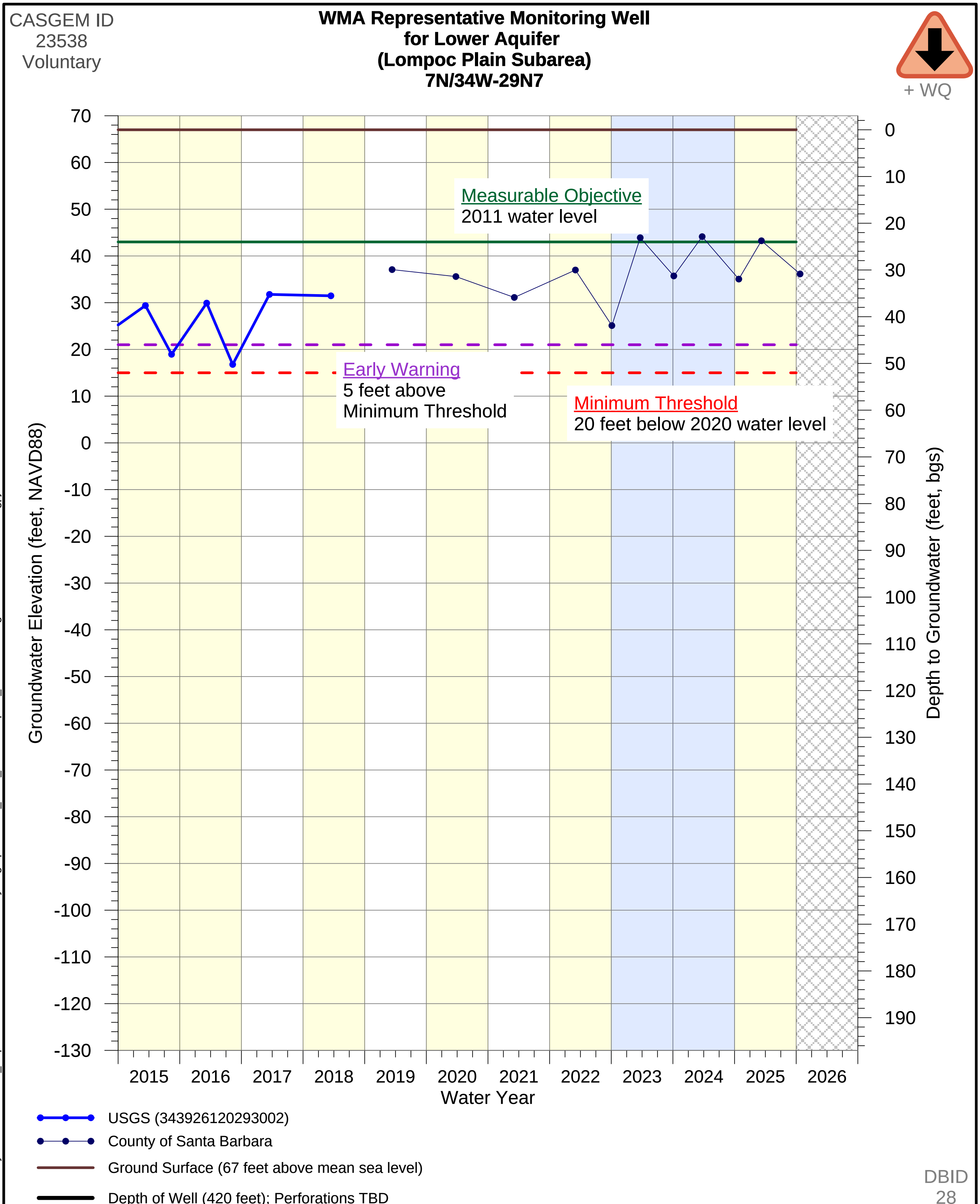
STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Plain

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-02



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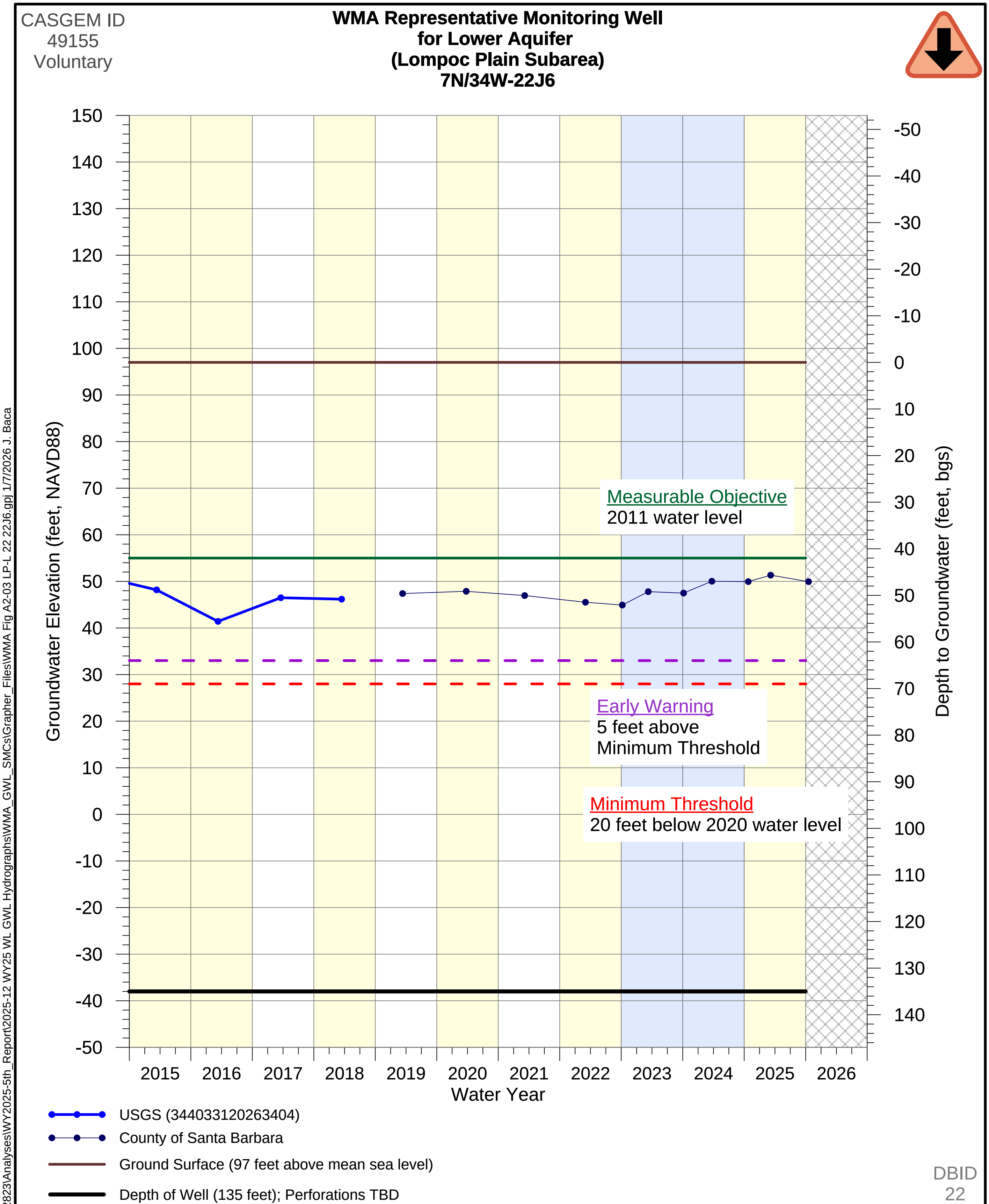
STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Plain

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-03



REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Plain

Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

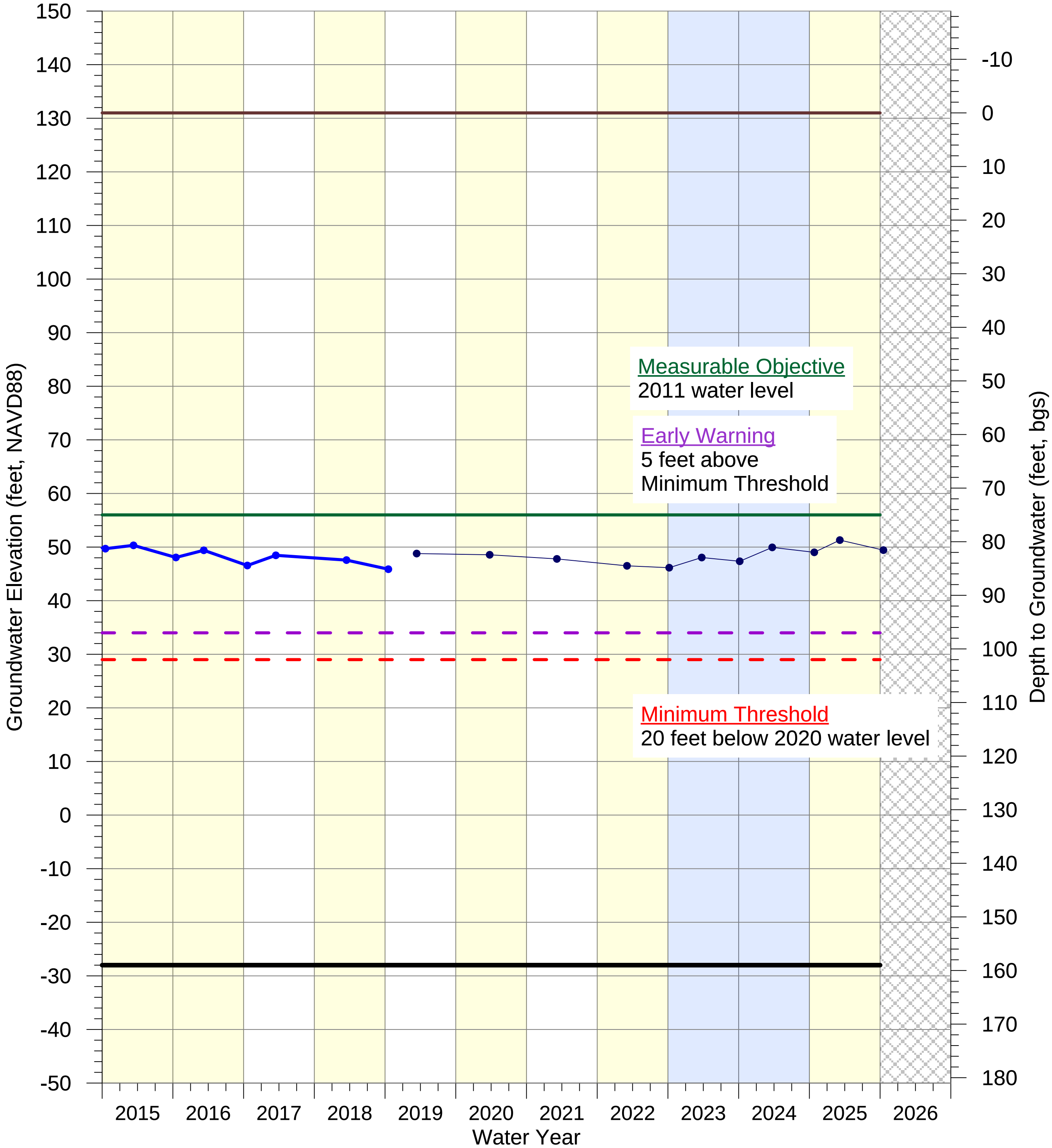
STETSON ENGINEERS INC.

Water Year Type (1942-2025)

Wet | No Data | Above/Below Normal | Dry / Critically Dry

CASGEM ID
49156
Voluntary

**WMA Representative Monitoring Well
for Lower Aquifer
(Lompoc Plain Subarea)
7N/34W-24N1**



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STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

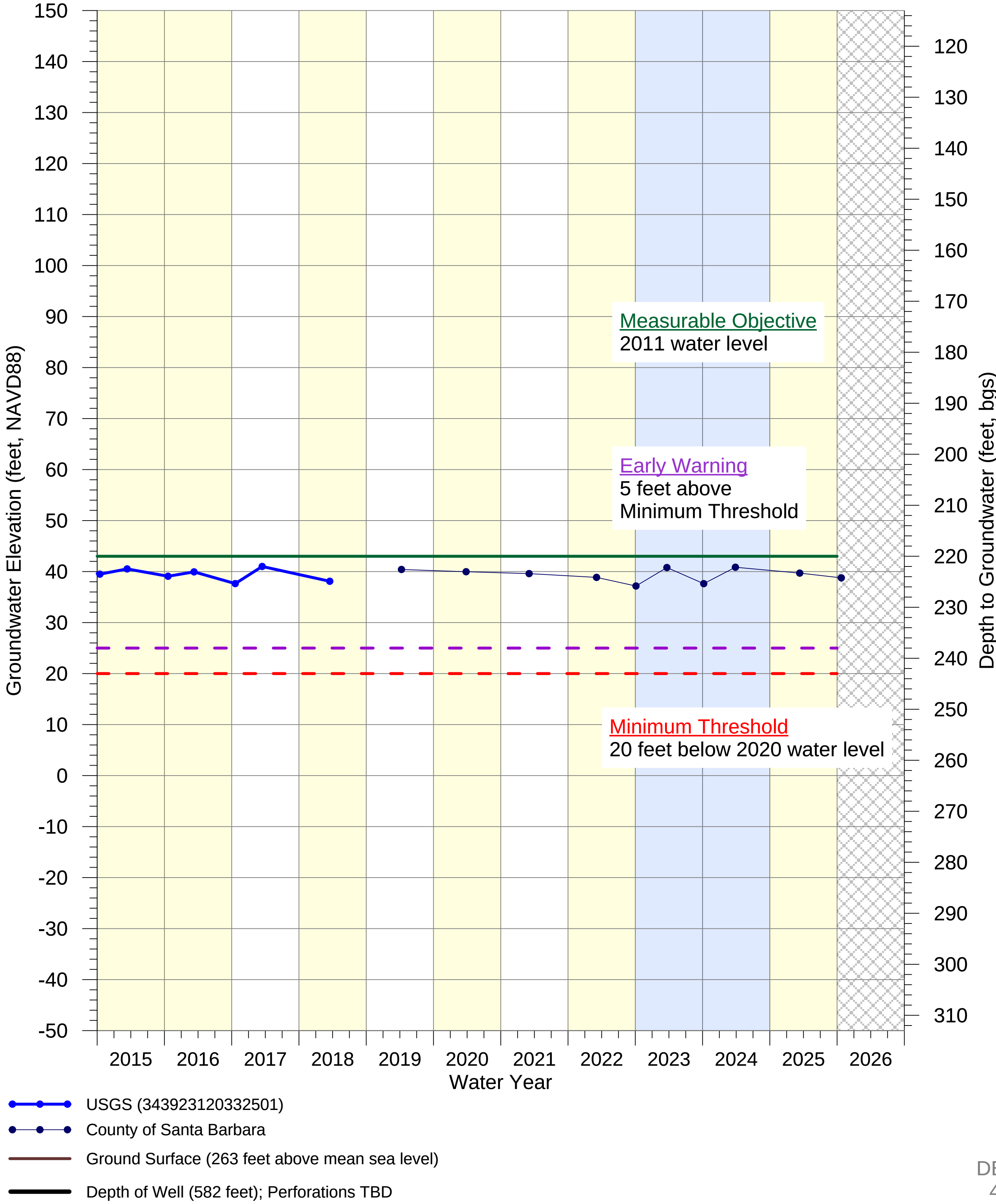
**REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Plain**

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-05

CASGEM ID
49168
Voluntary

WMA Representative Monitoring Well for Lower Aquifer (Lompoc Terrace Subarea) 7N/35W-27P1



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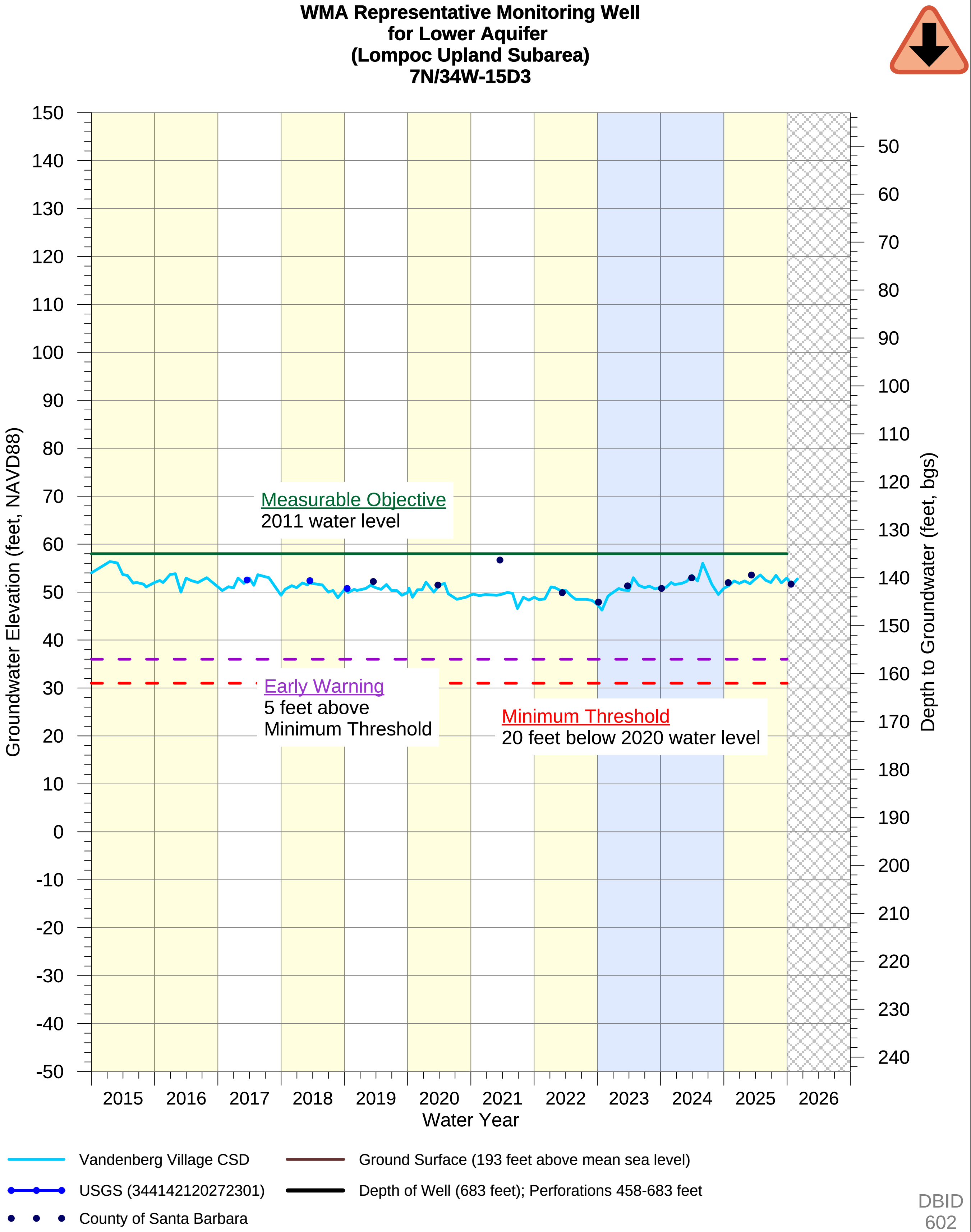
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Terrace

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-06



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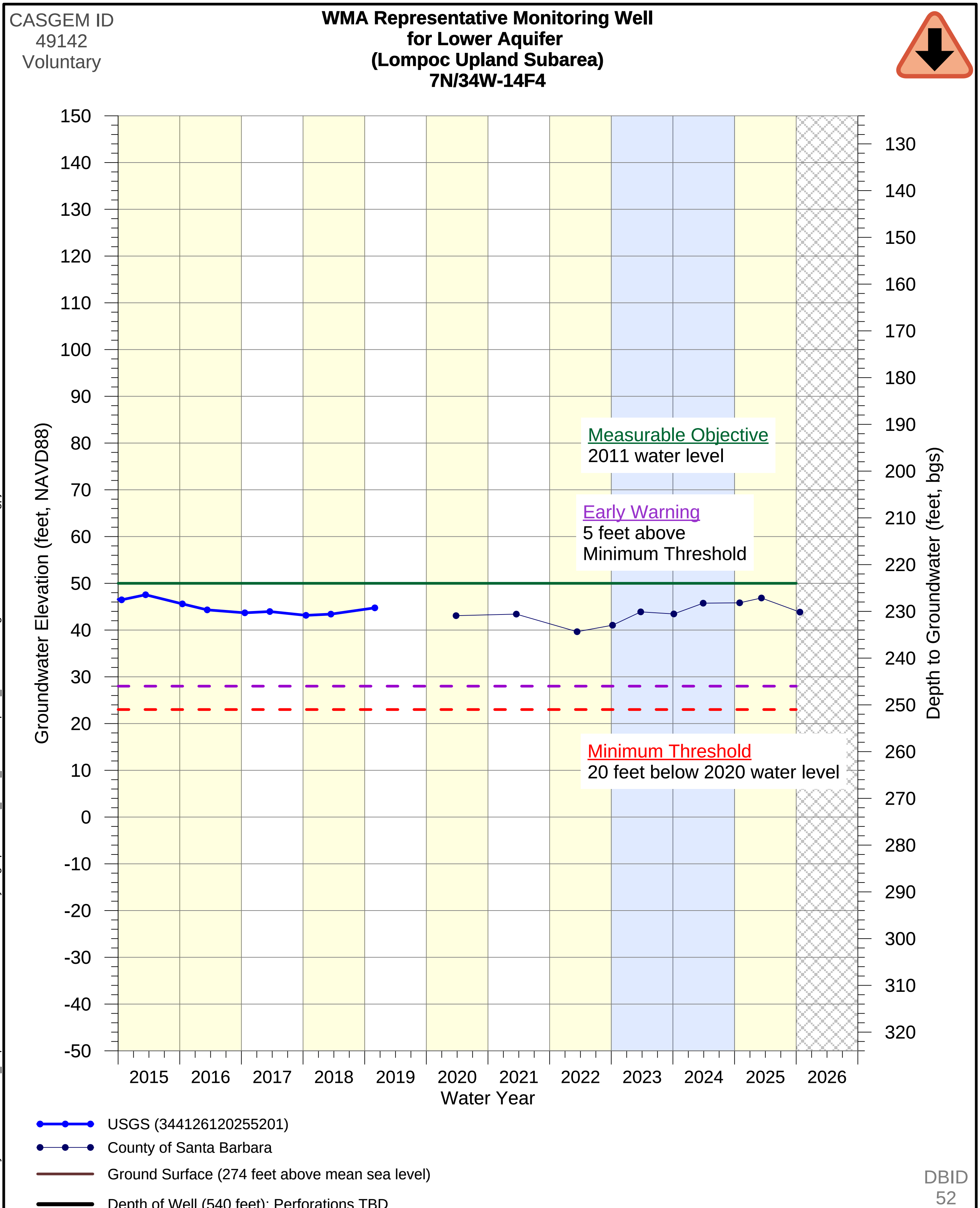
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Upland

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry



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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

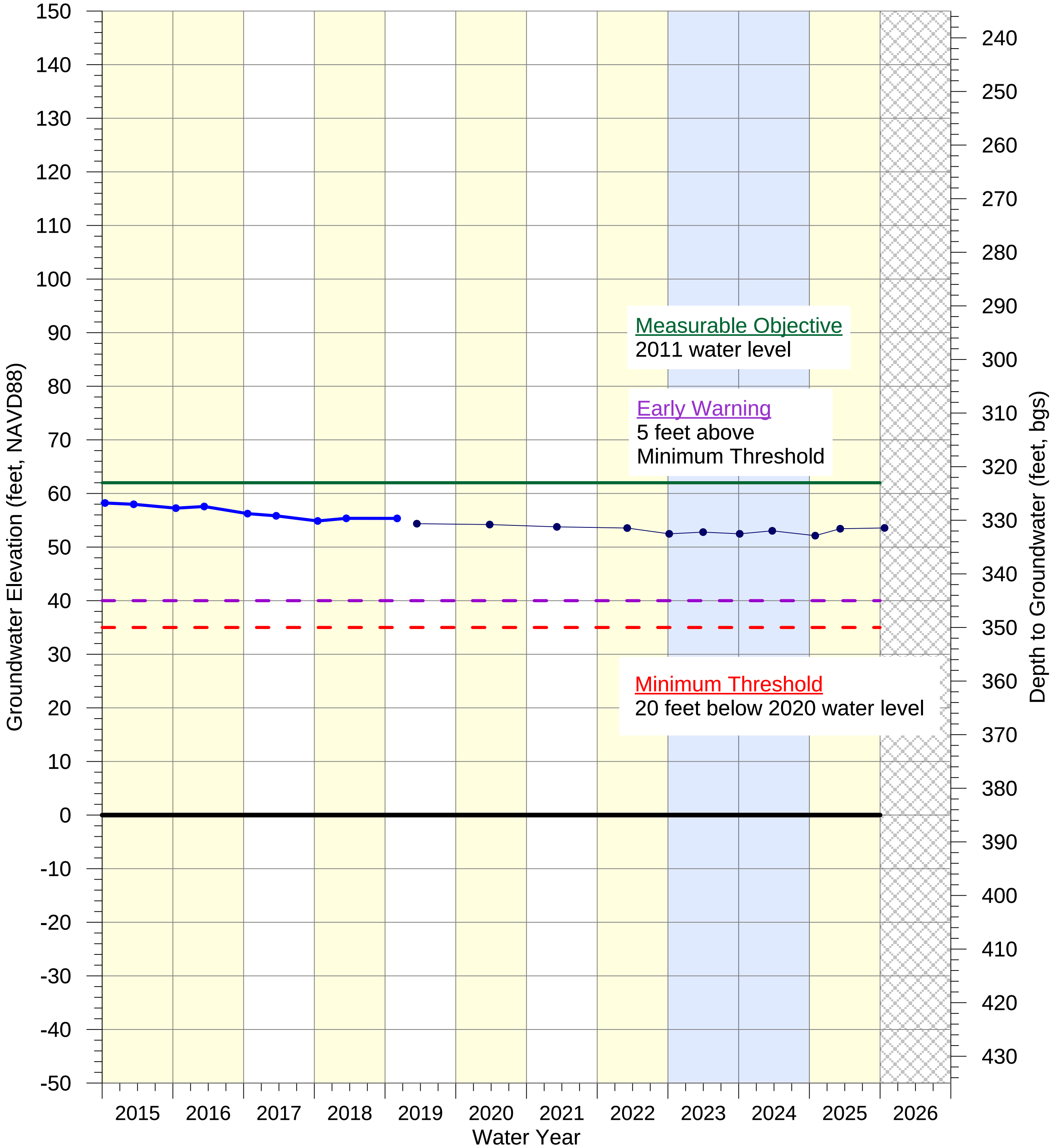
REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Upland

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-08

CASGEM ID
49139
CASGEM

WMA Representative Monitoring Well
for Lower Aquifer
(Lompoc Upland Subarea)
7N/34W-12E1



USGS (344219120250601)
County of Santa Barbara
Ground Surface (386 feet above mean sea level)
Depth of Well (385 feet); Perforations TBD

DBID
51

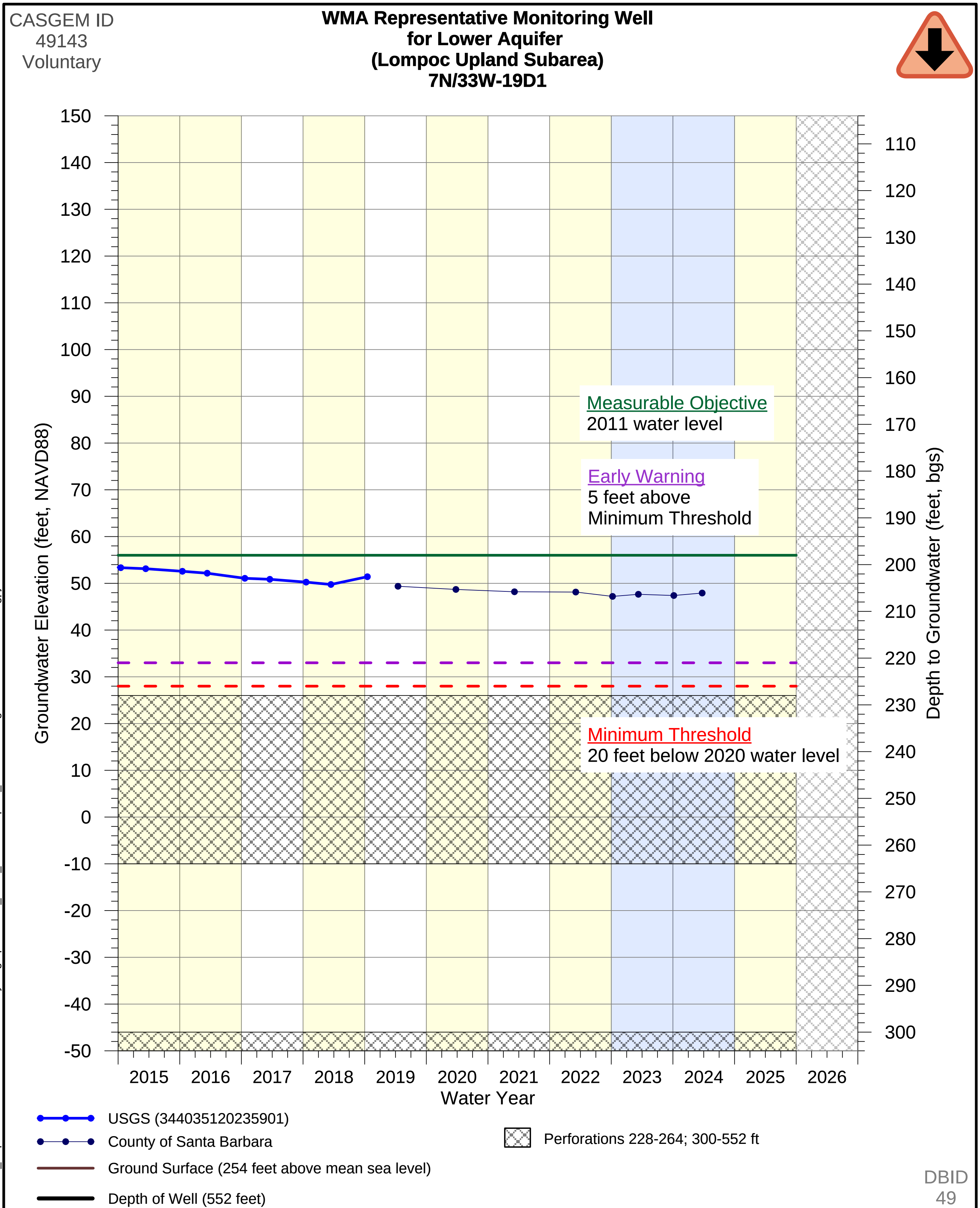
STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Upland

Water Year Type (1942-2025)
Wet
No Data
Above/Below Normal
Dry / Critically Dry

\\192.168.16.33\main\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 WL GWL Hydrographs\WMA_GWL_SMCs\Grapher_Files\WMA Fig A2-08 LU-L 51 12E1.gpj 1/7/2026 J. Baca



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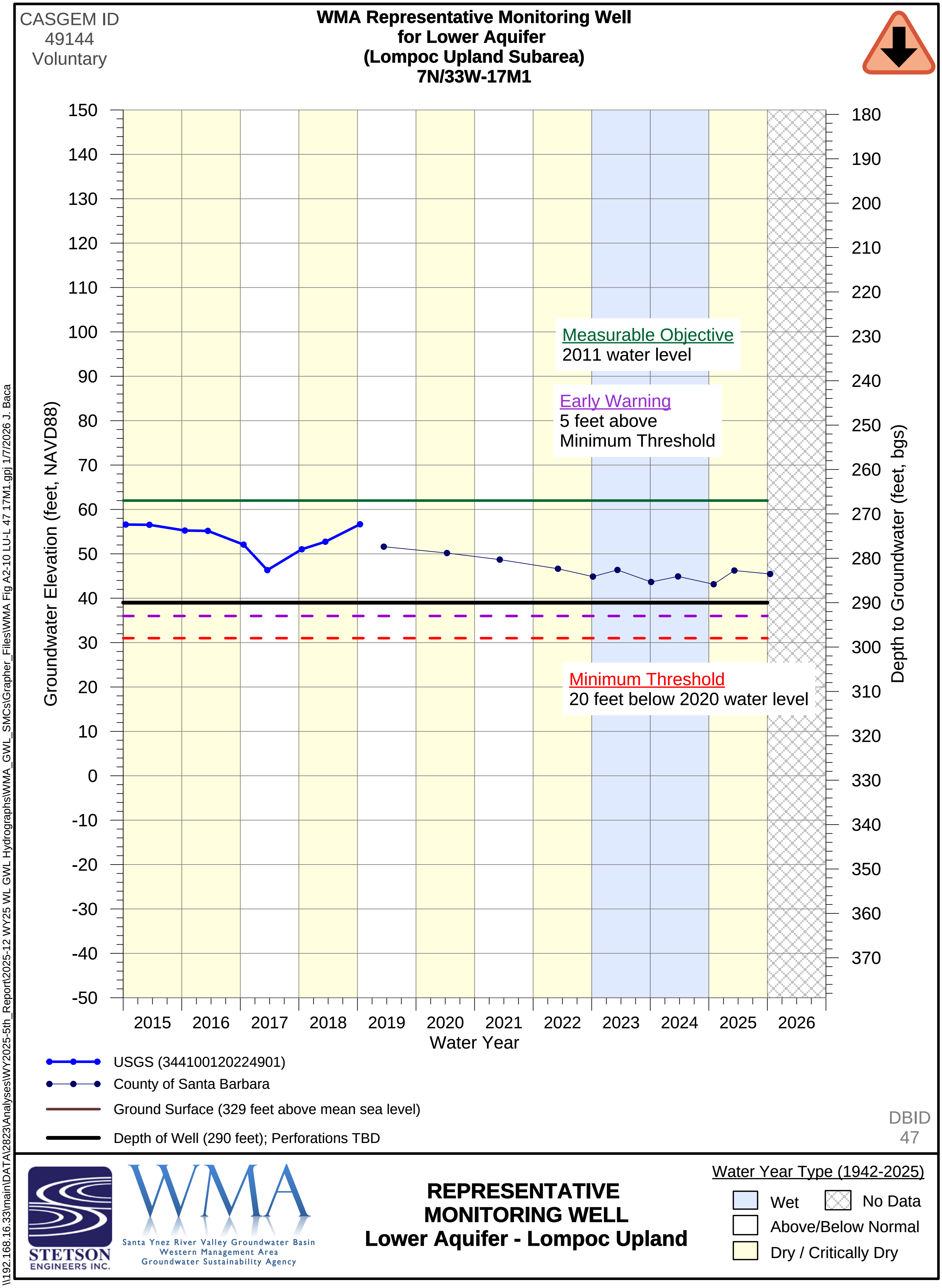
WMA Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Upland

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-10



STETSON ENGINEERS INC.

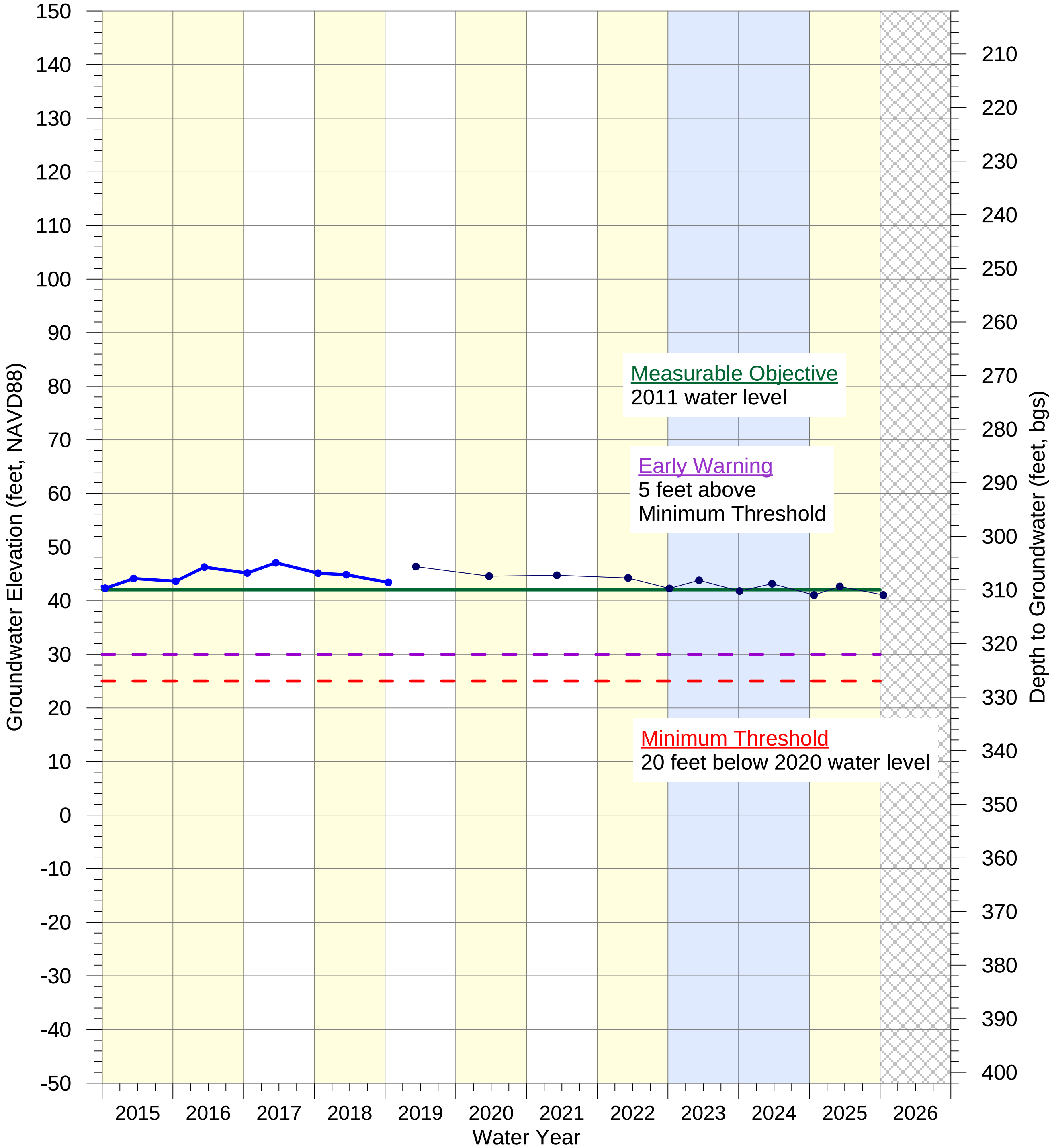
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Lompoc Upland

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

CASGEM ID
49129
Voluntary

WMA Representative Monitoring Well
for Lower Aquifer
(Santa Rita Upland Subarea)
7N/33W-28D3



- USGS (343946120215301)
- County of Santa Barbara
- Ground Surface (352 feet above mean sea level)
- Depth of Well (600 feet); Perforations TBD

DBID
81

\\192.168.16.33\main\DATA\2823\Analyses\WY2025-5th_Report\2025-12 WY25 WL GWL Hydrographs\WMA_GWL_SMCs\Grapher_Files\WMA Fig A2-11 SR-L 81 28D3.gpj 1/7/2026 J. Baca

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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

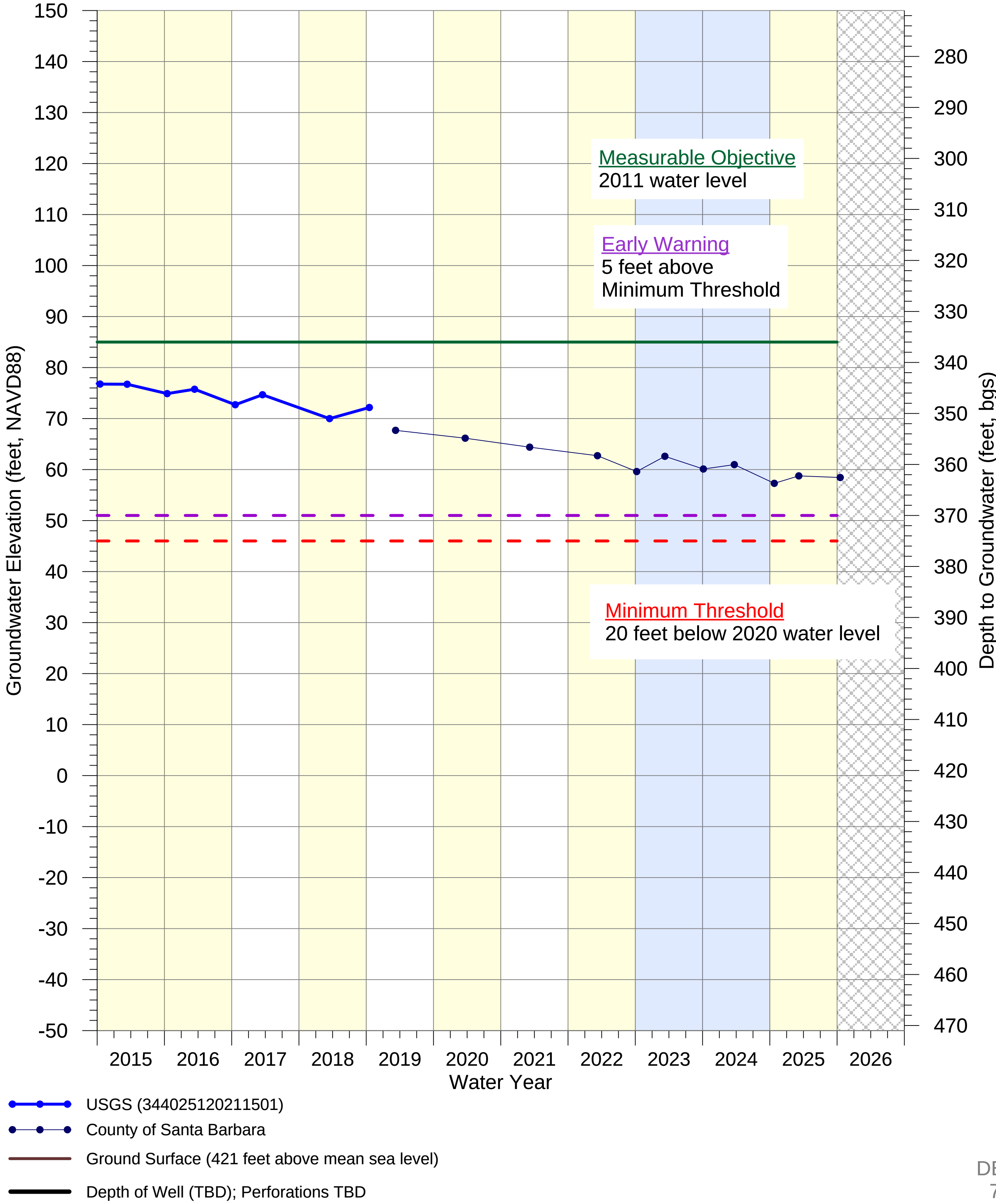
REPRESENTATIVE MONITORING WELL
Lower Aquifer - Santa Rita Upland

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-12

CASGEM ID
23686
Voluntary

WMA Representative Monitoring Well
for Lower Aquifer
(Santa Rita Upland Subarea)
7N/33W-21G2



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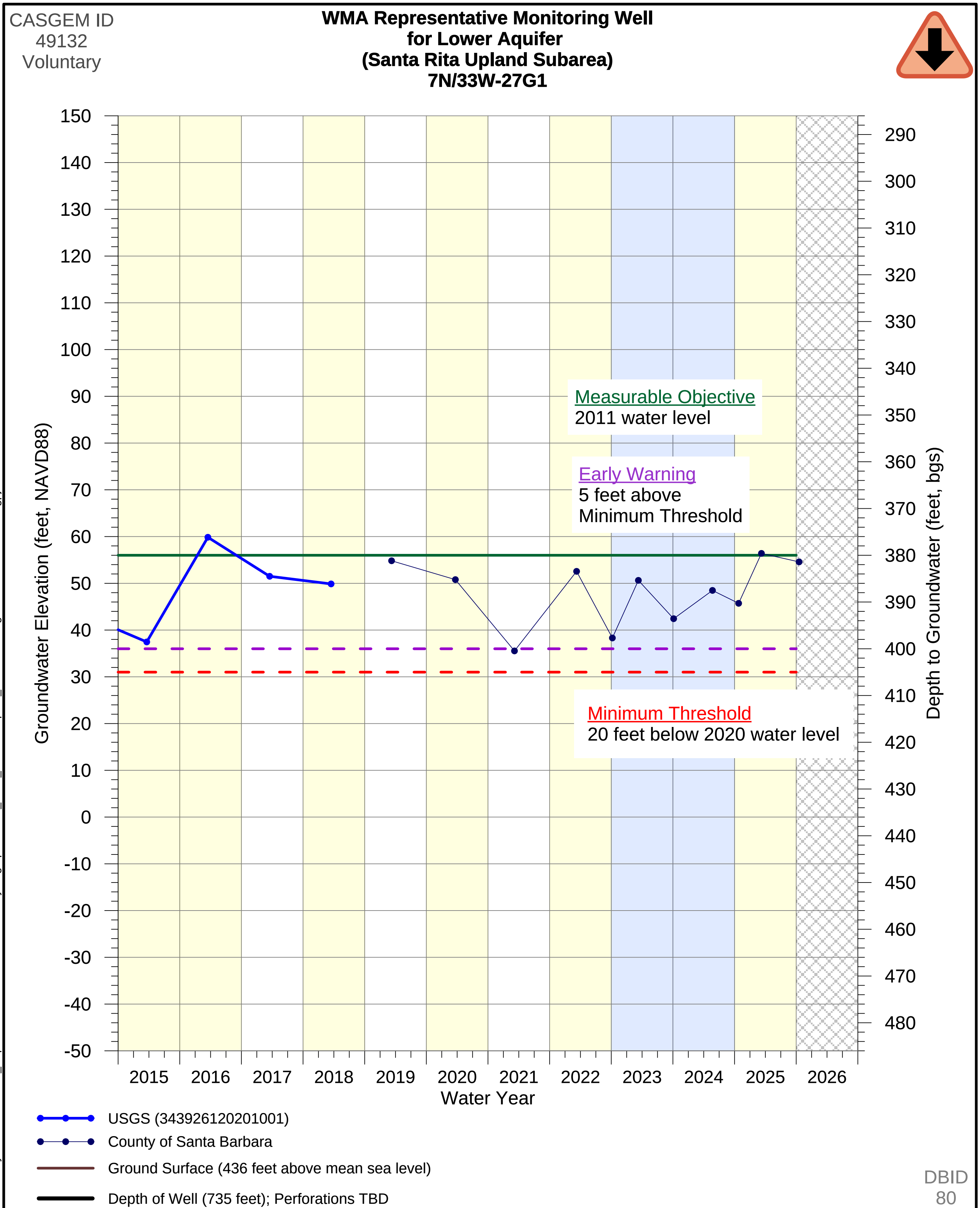
WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Santa Rita Upland

Water Year Type (1942-2025)
Wet
No Data
Above/Below Normal
Dry / Critically Dry



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WMA

Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Lower Aquifer - Santa Rita Upland

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

WMA Appendix B:

Groundwater Level Hydrographs for Assessing Surface Water Depletion, Western Management Area

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WMA APPENDIX B:

GROUNDWATER LEVEL HYDROGRAPHS FOR ASSESSING SURFACE WATER DEPLETION, WESTERN MANAGEMENT AREA

WATER YEAR 2025

This appendix includes hydrographs, which are graphs of water levels in wells. These are the representative wells for monitoring potential surface water depletion. As per the SGMA regulations, this includes the period from January 1, 2015 through the end of the Water Year 2025. Shown on these graphs are key SGMA criteria: measurable objective, early warning, and minimum threshold.

The Groundwater Sustainability Plan (GSP) includes hydrographs of the long-term period of record. A copy of the GSP, water level data and hydrographs are available at https://sywater.info.

LIST OF ACRONYMS AND ABBREVIATIONS

BGS	below-ground surface
CASGEM	California Statewide Groundwater Elevation Monitoring
FT	feet
NAVD88	North American Vertical Datum of 1988
USBR	United States Bureau of Reclamation
USGS	United States Geologic Survey
WL	Water Level
WMA	Western Management Area

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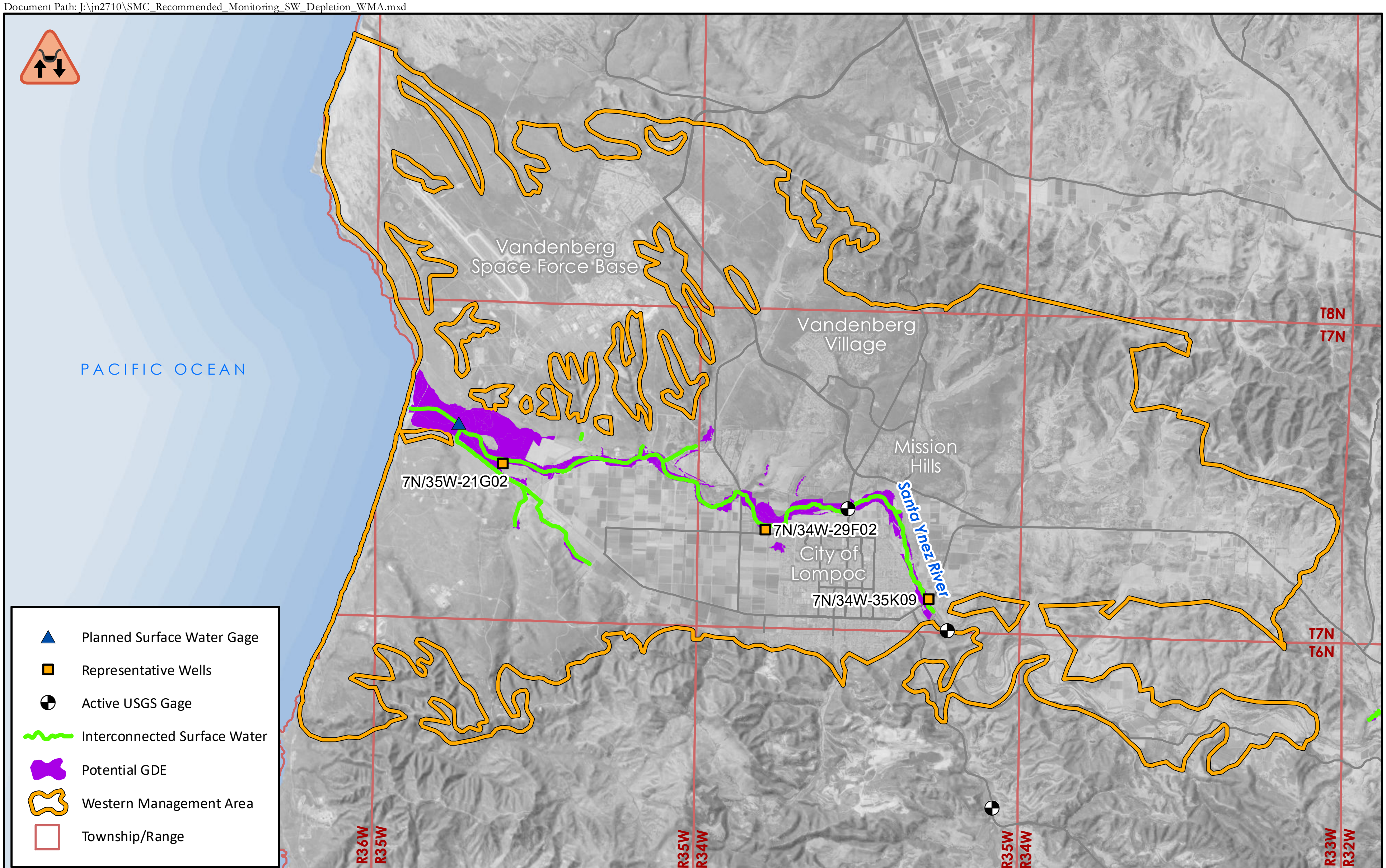

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WMA

Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

WMA REPRESENTATIVE MONITORING FOR INTERCONNECTED SURFACE WATER AND GROUNDWATER DEPENDENT ECOSYSTEMS

0 1 2 Miles

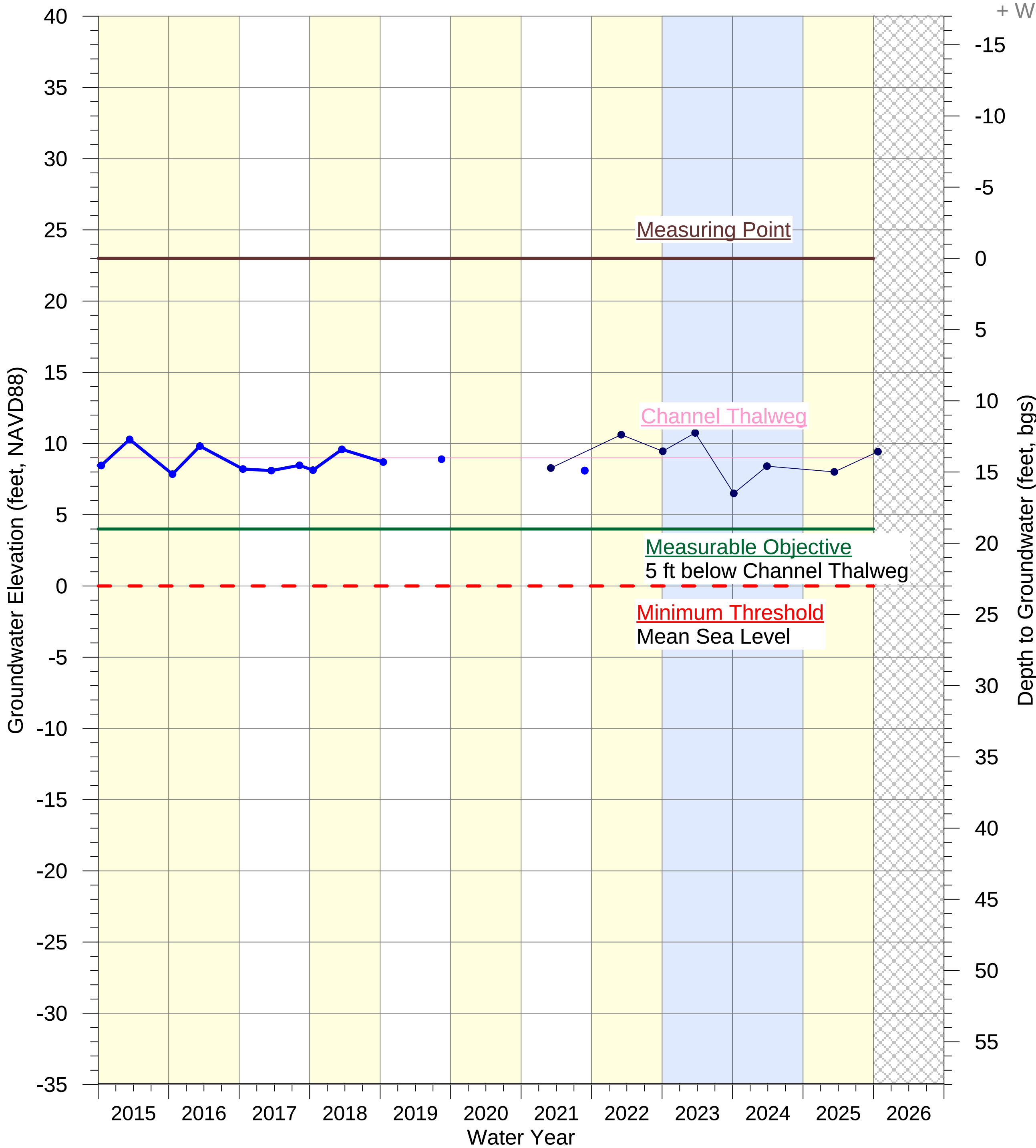
N

FIGURE B-01

CASGEM ID
25271
Voluntary

WMA Representative Monitoring Well for
Interconnected Surface Water and Groundwater Dependent Ecosystems
(Lompoc Plain Subarea)
7N/35W-21G2

+ GWL
+ WQ



USGS (344041120341101)
County of Santa Barbara
Ground Surface (23 feet above mean sea level)
Depth of Well (180 feet); Perforations TBD

DBID
39

STETSON ENGINEERS INC.

WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL ASSESSING SURFACE WATER DEPLETION

Water Year Type (1942-2025)
Wet
No Data
Above/Below Normal
Dry / Critically Dry

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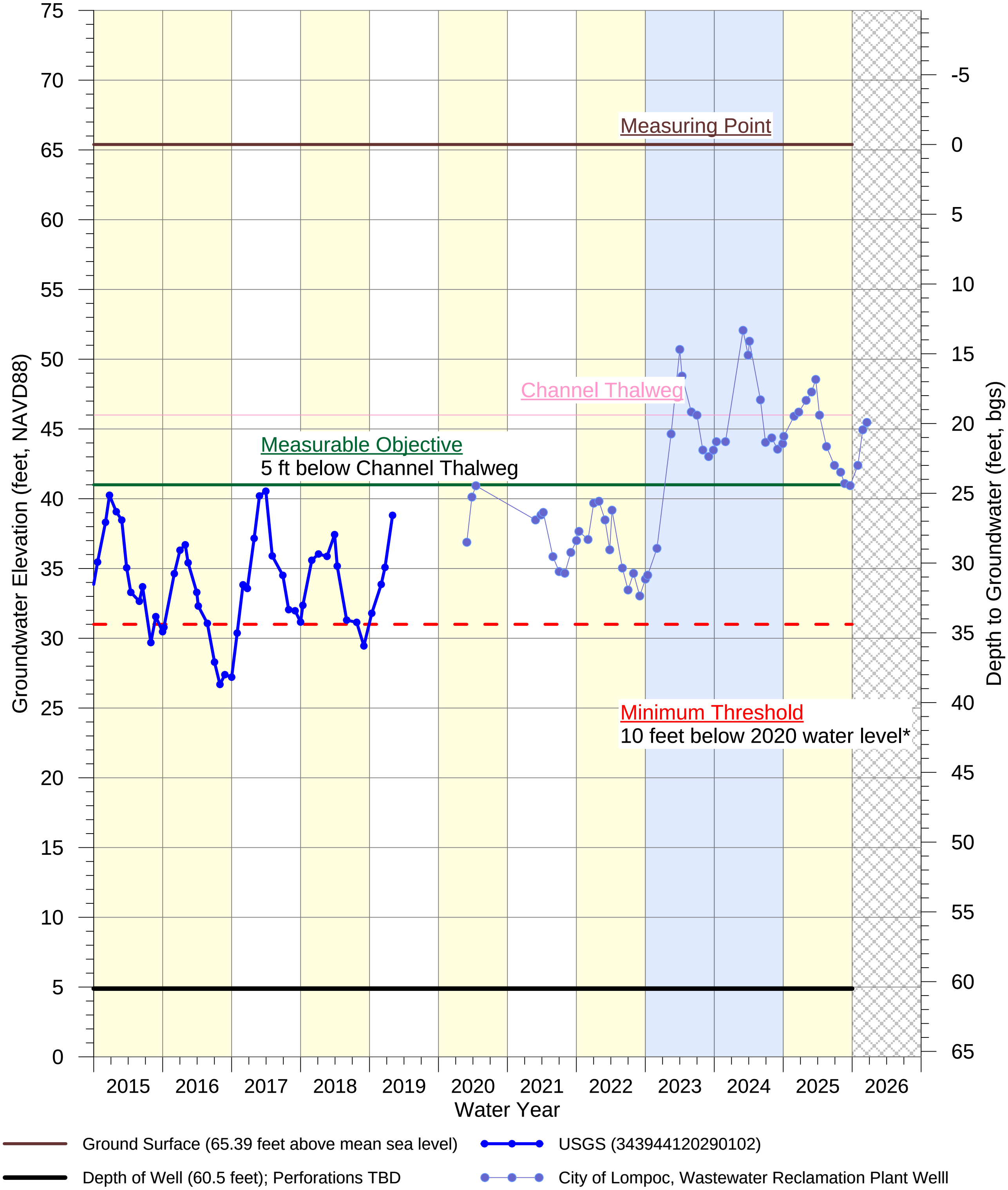
CASGEM ID
36328
Voluntary

WMA Representative Monitoring Well for
Interconnected Surface Water and Groundwater Dependent Ecosystems
(Lompoc Plain Subarea)
7N/34W-29F2



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WMA
Santa Ynez River Valley Groundwater Basin
Western Management Area
Groundwater Sustainability Agency

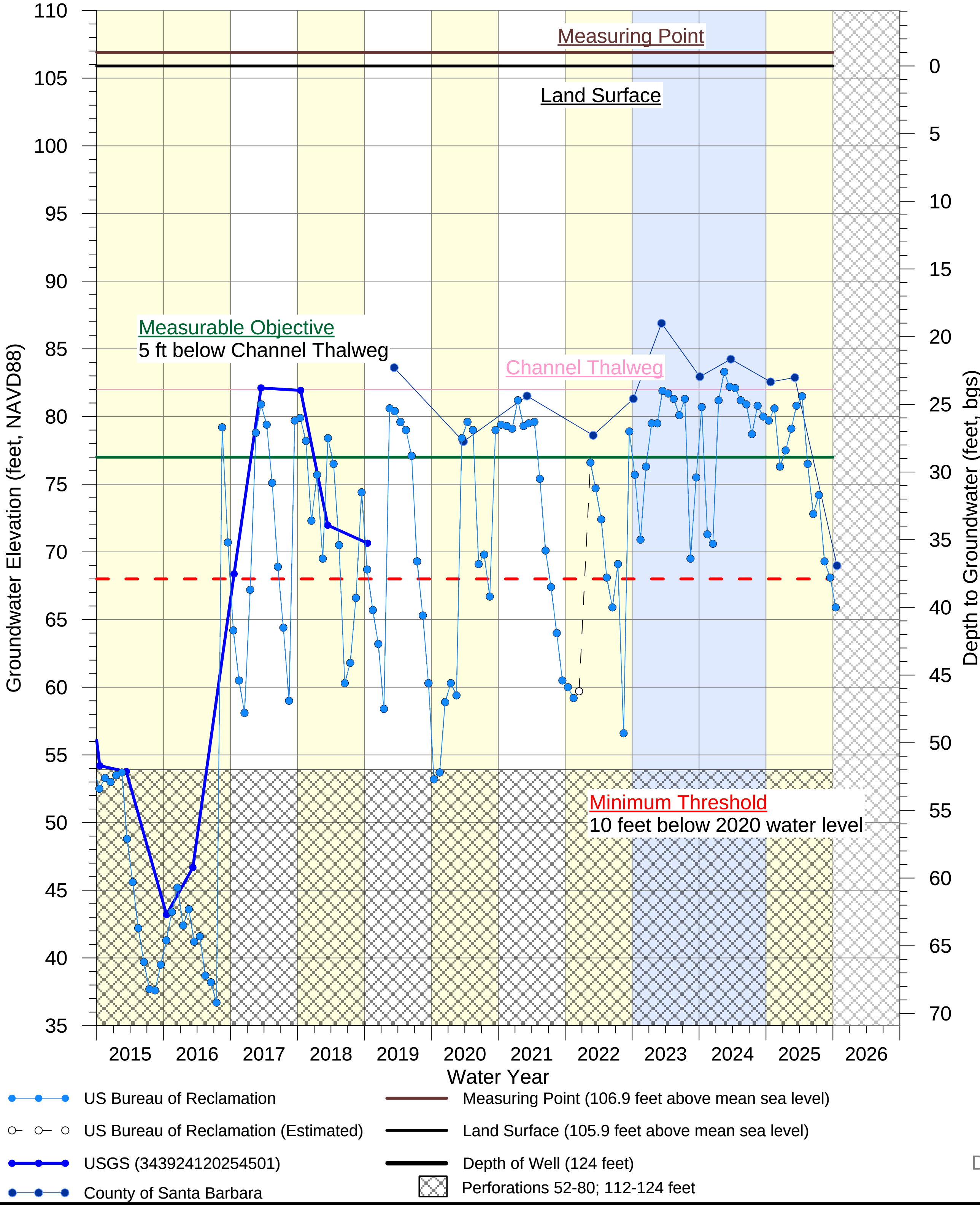
REPRESENTATIVE MONITORING WELL ASSESSING SURFACE WATER DEPLETION

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

CASGEM ID 49153 Voluntary

WMA Representative Monitoring Well for Interconnected Surface Water and Groundwater Dependent Ecosystems (Lompoc Plain Subarea) 7N/34W-35K9

+ GWL



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STETSON ENGINEERS INC.

WMA Santa Ynez River Valley Groundwater Basin Western Management Area Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL ASSESSING SURFACE WATER DEPLETION

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

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WMA Appendix C:

Groundwater Quality, Western Management Area

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WMA APPENDIX C:
GROUNDWATER QUALITY,
WESTERN MANAGEMENT AREA

WATER YEAR 2025

This appendix includes a discussion of groundwater quality. Sustainable Groundwater Management Act (SGMA) statute and SGMA regulations on Annual Reports do not include discussion of general water quality (see Joint Appendix A). To support the Central Coast Water Board's water quality mission, the Western Management Area (WMA) has included the following periodic evaluation of water quality in the Water Year 2025 Annual Report.

LIST OF ACRONYMS AND ABBREVIATIONS

B	Boron
Cl	Chloride
DWR	Department of Water Resources
GSP	Groundwater Sustainability Plan
ILRP	Irrigated Lands Reporting Program
mg/L	milligrams per Liter
MO	Measurable Objective
MT	Minimum Thresholds
N	Nitrogen
Na	Sodium
NO_3	Nitrate
TDS	Total Dissolved Solids
SGMA	Sustainable Groundwater Management Act
SO_4	Sulfate
µg/L	micrograms per Liter (1 mg/L = 1000 µg/L)
WMA	Western Management Area

The Western Management Area (WMA) Groundwater Sustainability Plan (GSP) identified minimum thresholds (MT), measurable objectives (MO), and interim milestones (at 5 years (2027), 10 years (2032), and 15 years (2037)) for the assessment of groundwater quality. The GSP set the water quality interim milestones for all three planning periods as the same as the MO. The GSP set MTs and MOs values on a per well basis. **Table C-1** identifies the wells used to assess water quality and the MTs and MOs for each water quality constituent.

Groundwater quality data collection is currently through multiple programs including by the United States Geological Survey (USGS), and two programs of the State Water Resources Control Board: Public Water System Reporting in the Safe Drinking Water Information System (SDWIS) and the California Irrigated Lands Reporting Program (ILRP). ILRP data is accessed through the GeoTracker GAMA website.

C-1 SALINITY - TOTAL DISSOLVED SOLIDS (TDS)

Salinity, as measured by total dissolved solids (TDS), is the dry mass of constituents dissolved in each volume of water. There are two measurements of salinity: TDS, which is a measurement of the total mass of the mineral constituents dissolved in the water, and electrical conductivity, which is a measurement of the conductivity of the solution of water and dissolved minerals. **Table C-2** identifies the results of total dissolved solids at the identified wells.

C-2 CHLORIDE

Chloride (Cl^-) is a mineral anion and a major water-quality constituent in natural systems. Chloride is characteristically retained in solution through most of the processes that tend to separate other ions. The circulation of chloride ions in the hydrologic cycle is through physical processes. **Table C-3** identifies the results for chloride at the identified wells.

Table C-1
Representative Monitoring Wells for Water Quality

DMS ID	RMW Name	Principal Aquifer	Subarea	Water Quality MT (mg/L) (TDS/Cl/SO_4/B/Na/NO_3)	Water Quality MO (mg/L) (TDS/Cl/SO_4/B/Na/NO_3)
Upper Aquifer – Lompoc Plain Subarea					
511	Lompoc 11 (7N/34W-35)	UA	Lompoc Plain	1200/150/450/0.55/130/1	1000/100/400/0.4/90/1
27	7N/34W-29N6	UA	Lompoc Plain	3000/275/1250/1.1/275/ -	1500/250/600/1/225/ -
15	7N/35W-26L01	UA	Lompoc Plain	3000/550/1100/0.75/300/60	1500/250/600/0.5/200/10
16	7N/35W-26L02	UA	Lompoc Plain	800/175/150/0.2/90/1	500/125/110/0.1/60/1
39	7N/35W-21G2	UA	Lompoc Plain	2000/500/500/0.5/300/1	1500/450/400/0.4/225/1
3150	AGL020004874	UA	Lompoc Plain	2400/300/600/ - /150/3	1500/200/500/ - /100/2
506	Lompoc 6 (7N/34W-27K07)	UA	Lompoc Plain	1100/100/400/0.5/90/1	1000/75/250/0.4/70/1
139	7N/34W-27K05	UA	Lompoc Plain	1180/125/450/0.5/100/ -	1000/80/250/0.4/75/ -
170	7N/34W-27K04	UA	Lompoc Plain	1100/100/400/0.45/90/2	1000/90/250/0.4/80/1
Lower Aquifer – Lompoc Plain Subarea					
17	7N/35W-26L04	LA	Lompoc Plain	1000/200/200/0.2/80/1	500/150/150/0.125/70/1
28	7N/34W-29N7	LA	Lompoc Plain	1200/175/350/0.65/130/1	1000/150/250/0.5/110/1
171	7N/34W-27K06	LA	Lompoc Plain	1250/150/350/0.45/130/ -	1000/125/250/0.4/110/ -
Lower Aquifer – Lompoc Upland Subarea					
608	VVCSD 3B (7N/34W-15E3)	LA	Lompoc Upland	600/175/125/0.175/100/1	500/150/100/0.1/90/1
706	MH CSD 7	LA	Lompoc Upland	550/125/125/0.2/70/1	500/100/100/0.1/50/1
Lower Aquifer – Santa Rita Upland Subarea					
3172	AGL020021642	LA	Santa Rita Upland	800/125/250/ - /100/ -	500/75/100/ - /60/ -
3223	AGL020035942	LA	Santa Rita Upland	- /- /- /- /- / -	- /- /- /- /- / -
1304	Vista Hills MWC #4	LA	Santa Rita Upland	550/75/150/0.35/60/3	450/40/125/0.2/50/2
1305	Vista Hills MWC #5	LA	Santa Rita Upland	- /- /- /- /- / -	- /- /- /- /- / -

Note: Data unavailable at the Vista Hills MWC #4 data, nearby well Vista Hills MWC #5 included in following tables,

DMS = Data Management System, RMW = Representative Monitoring Well

Table C-2
Salinity as Total Dissolved Solids (TDS) in mg/L,
Representative Monitoring Wells for Water Quality

Well Information		Criteria		Recent Data			
DMS ID	RMW Name	MT	MO	Concentration	Date	Source	Currently Exceeds MT?
Upper Aquifer – Lompoc Plain Subarea							
511	Lompoc 11 (7N/34W-35)	1,200	1,000	900	2025-02-26	SDWIS	No
27	7N/34W-29N6	3,000	1,500	2,770	2024-08-19	USGS	No
15	7N/35W-26L01	3,000	1,500	2,680	2018-08-23	USGS	-
16	7N/35W-26L02	800	500	677	2022-08-09	USGS	No
39	7N/35W-21G2	2,000	1,500	1,900	2024-08-07	USGS	No
3150	AGL020004874	2,400	1,500	1,200	2017-09-26	ILRP	-
506	Lompoc 6 (7N/34W-27K07)	1,100	1,000	900	2025-03-05	SDIWS	No
139	7N/34W-27K05	1,180	1,000	1,020	2022-08-15	USGS	No
170	7N/34W-27K04	1,100	1,000	1,050	2019-08-19	USGS	No
Lower Aquifer – Lompoc Plain Subarea							
17	7N/35W-26L04	1,000	500	846	2023-08-08	USGS	No
28	7N/34W-29N7	1,200	1,000	1,010	2024-08-19	USGS	No
171	7N/34W-27K06	1,250	1,000	1,090	2024-08-20	USGS	No
Lower Aquifer – Lompoc Upland Subarea							
608	VVCSD 3B (7N/34W-15E3)	600	500	510	2023-02-21	SDWIS	No
706	MH CSD 7	550	500	490	2025-07-23	SDWIS	No
Lower Aquifer – Santa Rita Upland Subarea							
3172	AGL020021642	800	500	557	2024-03-12	ILRP	No
3223	AGL020035942	-	-	590	2024-04-03	ILRP	-
1304	Vista Hills MWC #4	550	450	-	-	SDWIS	n/a
1305	Vista Hills MWC #5	n/a	n/a	1,100	2025-04-15	SDWIS	n/a

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
TDS = Total Dissolved Solids

Table C-3
Chloride (Cl) in mg/L,
Representative Monitoring Wells for Water Quality

Well Information		Criteria		Recent Data			
DMS ID	RMW Name	MT	MO	Concentration	Date	Source	Currently Exceeds MT?
Upper Aquifer – Lompoc Plain Subarea							
511	Lompoc 11 (7N/34W-35)	150	100	87	2025-02-26	SDWIS	No
27	7N/34W-29N6	275	250	235	2024-08-19	USGS	No
15	7N/35W-26L01	550	250	478	2018-08-23	USGS	-
16	7N/35W-26L02	175	125	158	2022-08-09	USGS	No
39	7N/35W-21G2	500	450	520	2024-08-07	USGS	Yes
3150	AGL020004874	300	200	200	2017-09-26	ILRP	-
506	Lompoc 6 (7N/34W-27K07)	100	75	79	2025-03-05	SDWIS	No
139	7N/34W-27K05	125	80	76.9	2022-08-15	USGS	No
170	7N/34W-27K04	100	90	71.4	2019-08-19	USGS	No
Lower Aquifer – Lompoc Plain Subarea							
17	7N/35W-26L04	200	150	168	2023-08-08	USGS	No
28	7N/34W-29N7	175	150	123	2024-08-19	USGS	No
171	7N/34W-27K06	150	125	156	2024-08-20	USGS	Yes
Lower Aquifer – Lompoc Upland Subarea							
608	VVCSD 3B (7N/34W-15E3)	175	150	150	2023-02-21	SDWIS	No
706	MH CSD 7	125	100	110	2025-07-23	SDWIS	No
Lower Aquifer – Santa Rita Upland Subarea							
3172	AGL020021642	125	75	79	2017-11-15	ILRP	-
3223	AGL020035942	-	-	57.6	2019-12-09	ILRP	-
1304	Vista Hills MWC #4	75	40	-	-	SDWIS	n/a
1305	Vista Hills MWC #5	n/a	n/a	100	2025-04-15	SDWIS	n/a

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective, Cl = Chloride

C-3 Sulfate

Sulfate (SO_4^{2-}) is a naturally occurring anion and a major water quality constituent. **Table C-4** identifies the results for sulfate at the identified wells.

C-4 Boron

Boron (B) is a trace water quality constituent, and plants have specific tolerance limits for boron concentrations in irrigation water. **Table C-5** identifies the results for boron at the identified wells.

C-5 Sodium

Sodium (Na^+) is a mineral cation and a major water-quality constituent in natural systems. The 2019 Central Coast Basin Plan indicates the primary concern for sodium in irrigation water is the sodium absorption ratio (SAR). The sodium absorption ratio is the relative concentration of sodium to calcium and magnesium and is managed to maintain soil permeability. **Table C-6** identifies the results for this sodium at the identified wells.

C-6 Nitrate

Nitrogen is the primary atmospheric gas, however, its presence in water is related to the breakdown of organic waste. Total nitrogen in groundwater is the sum of organic nitrogen and the three inorganic forms: nitrate (NO_3^-), nitrite (NO_2^-), and ammonia (NH_3). Nitrate concentrations are reported either as nitrate (the full mass of the nitrate anion) or as nitrogen (the mass of the Nitrogen). In some cases, a combined nitrate-nitrite as nitrogen is reported. **Table C-7** identifies the results for nitrate at the identified wells.

Table C-4
Sulfate (SO_4) in mg/L,
Representative Monitoring Wells for Water Quality

Well Information		Criteria		Recent Data			
DMS ID	**RMW Name**	**MT**	**MO**	**Concentration**	**Date**	**Source**	**Currently Exceeds MT?**
Upper Aquifer – Lompoc Plain Subarea							
511	Lompoc 11 (7N/34W-35)	450	400	357	2025-02-26	SDWIS	No
27	7N/34W-29N6	1,250	600	1,260	2024-08-19	USGS	Yes
15	7N/35W-26L01	1,100	600	953	2018-08-23	USGS	-
16	7N/35W-26L02	150	110	105	2022-08-09	USGS	No
39	7N/35W-21G2	500	400	420	2024-08-07	USGS	No
3150	AGL020004874	600	500	480	2017-09-26	ILRP	-
506	Lompoc 6 (7N/34W-27K07)	400	250	337	2025-03-05	SDWIS	No
139	7N/34W-27K05	450	250	350	2022-08-15	USGS	No
170	7N/34W-27K04	400	250	358	2019-08-19	USGS	No
Lower Aquifer – Lompoc Plain Subarea							
17	7N/35W-26L04	200	150	180	2023-08-08	USGS	No
28	7N/34W-29N7	350	250	297	2024-08-19	USGS	No
171	7N/34W-27K06	350	250	313	2024-08-20	USGS	No
Lower Aquifer – Lompoc Upland Subarea							
608	VVCSD 3B (7N/34W-15E3)	125	100	110	2023-02-21	SDWIS	No
706	MH CSD 7	125	100	86	2025-04-17	SDWIS	No
Lower Aquifer – Santa Rita Upland Subarea							
3172	AGL020021642	250	100	239	2017-11-15	ILRP	-
3223	AGL020035942	-	-	226	2019-12-09	ILRP	-
1304	Vista Hills MWC #4	150	125	-	-	SDWIS	n/a
1305	Vista Hills MWC #5	n/a	n/a	510	2025-04-15	SDWIS	n/a

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
SO_4 = Sulfate

Table C-5
Boron (B) in µg/L,
Representative Monitoring Wells for Water Quality

Well Information		Criteria		Recent Data			
DMS ID	RMW Name	MT	MO	Concentration	Date	Source	Currently Exceeds MT?
Upper Aquifer – Lompoc Plain Subarea							
511	Lompoc 11 (7N/34W-35)	550	400	400	2025-02-26	SDWIS	No
27	7N/34W-29N6	1,100	1,000	1,220	2024-08-19	USGS	Yes
15	7N/35W-26L01	750	500	584	2018-08-23	USGS	-
16	7N/35W-26L02	200	100	121	2022-08-09	USGS	No
39	7N/35W-21G2	500	400	440	2024-08-07	USGS	No
3150	AGL020004874	-	-	-	-	-	-
506	Lompoc 6 (7N/34W-27K07)	500	400	Less than 100	2023-01-02	SDWIS	No
139	7N/34W-27K05	500	400	488	2022-08-15	USGS	No
170	7N/34W-27K04	450	400	416	2019-08-19	USGS	No
Lower Aquifer – Lompoc Plain Subarea							
17	7N/35W-26L04	200	125	118	2023-08-08	USGS	No
28	7N/34W-29N7	650	500	567	2024-08-19	USGS	No
171	7N/34W-27K06	450	400	502	2024-08-20	USGS	Yes
Lower Aquifer – Lompoc Upland Subarea							
608	VVCSD 3B (7N/34W-15E3)	175	100	Less than 100	2023-02-21	SDWIS	No
706	MH CSD 7	200	100	100	2025-04-17	SDWIS	No
Lower Aquifer – Santa Rita Upland Subarea							
3172	AGL020021642	-	-	-	-	-	-
3223	AGL020035942	-	-	-	-	-	-
1304	Vista Hills MWC #4	350	200	-	-	SDWIS	-
1305	Vista Hills MWC #5	n/a	n/a	530	2025-04-15	SDWIS	n/a

Notes: All concentrations are µg/L, 1 mg/L = 1000 µg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective, B = Boron

Table C-6
Sodium (Na) in mg/L,
Representative Monitoring Wells for Water Quality

Well Information		Criteria		Recent Data			
DMS ID	**RMW Name**	**MT**	**MO**	**Concentration**	**Date**	**Source**	**Currently Exceeds MT?**
Upper Aquifer – Lompoc Plain Subarea							
511	Lompoc 11 (7N/34W-35)	130	90	84	2025-02-26	SDWIS	No
27	7N/34W-29N6	275	225	278	2024-08-19	USGS	Yes
15	7N/35W-26L01	300	200	237	2018-08-23	USGS	-
16	7N/35W-26L02	90	60	80.9	2022-08-09	USGS	No
39	7N/35W-21G2	300	225	280	2024-08-07	USGS	No
3150	AGL020004874	150	100	120	2017-09-26	ILRP	-
506	Lompoc 6 (7N/34W-27K07)	90	70	75	2025-03-05	SDWIS	No
139	7N/34W-27K05	100	75	82.6	2022-08-15	USGS	No
170	7N/34W-27K04	90	80	84.4	2019-08-19	USGS	No
Lower Aquifer – Lompoc Plain Subarea							
17	7N/35W-26L04	80	70	76.7	2023-08-08	USGS	No
28	7N/34W-29N7	130	110	114	2024-08-19	USGS	No
171	7N/34W-27K06	130	110	137	2024-08-20	USGS	Yes
Lower Aquifer – Lompoc Upland Subarea							
608	VVCSD 3B (7N/34W-15E3)	100	90	89	2023-02-21	SDWIS	No
706	MH CSD 7	70	50	64	2023-07-26	SDWIS	No
Lower Aquifer – Santa Rita Upland Subarea							
3172	AGL020021642	100	60	100	2017-11-15	ILRP	-
3223	AGL020035942	-	-	56	2019-12-09	ILRP	n/a
1304	Vista Hills MWC #4	60	50	-	-	SDWIS	n/a
1305	Vista Hills MWC #5	n/a	n/a	110	2025-04-15	SDWIS	n/a

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective, Na = Sodium

Table C-7
Nitrate as Nitrogen (NO_3 as N) in mg/L,
Representative Monitoring Wells for Water Quality

Well Information		Criteria		Recent Data			
DMS ID	RMW Name	MT	MO	Concentration	Date	Source	Currently Exceeds MT?
Upper Aquifer – Lompoc Plain Subarea							
511	Lompoc 11 (7N/34W-35)	1	1	Less than 0.09	2023-01-11	SDWIS (as NO_3)	No
27	7N/34W-29N6	-	-	Less than 0.04	2022-08-11	USGS (as NO_3)	No
15	7N/35W-26L01	60	10	45.40	2018-08-23	USGS (as NO_3)	-
16	7N/35W-26L02	1	1	Less than 0.04	2025-08-12	USGS (as NO_3)	No
39	7N/35W-21G2	1	1	Not detected	2024-08-07	USGS (as NO_3)	No
3150	AGL020004874	3	2	1.7	2017-09-26	ILRP	-
506	Lompoc 6 (7N/34W-27K07)	1	1	Less than 0.09	2023-01-02	SDWIS (as NO_3)	No
139	7N/34W-27K05	-	-	Less than 0.04	2025-08-05	USGS (as NO_3)	No
170	7N/34W-27K04	2	1	Less than 0.04	2025-08-05	USGS (as NO_3)	No
Lower Aquifer – Lompoc Plain Subarea							
17	7N/35W-26L04	1	1	Less than 0.04	2023-08-08	USGS (as NO_3)	No
28	7N/34W-29N7	1	1	Less than 0.04	2024-08-19	USGS (as NO_3)	No
171	7N/34W-27K06	-	-	Less than 0.04	2024-08-20	USGS (as NO_3)	No
Lower Aquifer – Lompoc Upland Subarea							
608	VVCSD 3B (7N/34W-15E3)	1	1	0.10	2023-02-21	SDWIS (as NO_3)	No
706	MH CSD 7	1	1	Less than 0.09	2023-07-26	SDWIS (as NO_3)	No
Lower Aquifer – Santa Rita Upland Subarea							
3172	AGL020021642	-	-	Not Detected	2024-03-12	ILRP (NO_3 + NO_2)	No
3223	AGL020035942	-	-	Less than 0.1	2024-04-03	ILRP (NO_3 + NO_2)	n/a
1304	Vista Hills MWC #4	3	2	-	-	SDWIS	n/a
1305	Vista Hills MWC #5	n/a	n/a	Less than 0.09	2022-09-29	SDWIS (as NO_3)	n/a

Notes: All concentrations are mg/L, values reported as NO_3 converted to NO_3 as N, values NO_3 + NO_2 as N as reported,
n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
NO_3 = Nitrate, NO_2 = Nitrite, N = Nitrogen

CMA Appendix A:

Groundwater Level Hydrographs for Assessing Chronic Decline in Groundwater Levels, Central Management Area

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CMA APPENDIX A:
GROUNDWATER LEVEL HYDROGRAPHS
FOR ASSESSING
CHRONIC DECLINE IN GROUNDWATER LEVELS,
CENTRAL MANAGEMENT AREA

WATER YEAR 2025

This appendix includes hydrographs, which are graphs of water levels in wells. These are the representative wells for monitoring groundwater level decline. As per the SGMA regulations, this includes the period from January 1, 2015 through the end of the Water Year 2025. Shown on these graphs are key SGMA criteria: measurable objective, early warning, and minimum threshold. All included wells are in the Buellton Aquifer.

The Groundwater Sustainability Plan (GSP) includes hydrographs of the long-term period of record. A copy of the GSP, water level data, and hydrographs are available at https://sywater.info .

LIST OF ACRONYMS AND ABBREVIATIONS

BGS	below ground surface
CASGEM	California Statewide Groundwater Elevation Monitoring
CMA	Central Management Area
FT	feet
NAVD88	North American Vertical Datum of 1988
USBR	United States Bureau of Reclamation
USGS	United States Geologic Survey
WL	Water Level

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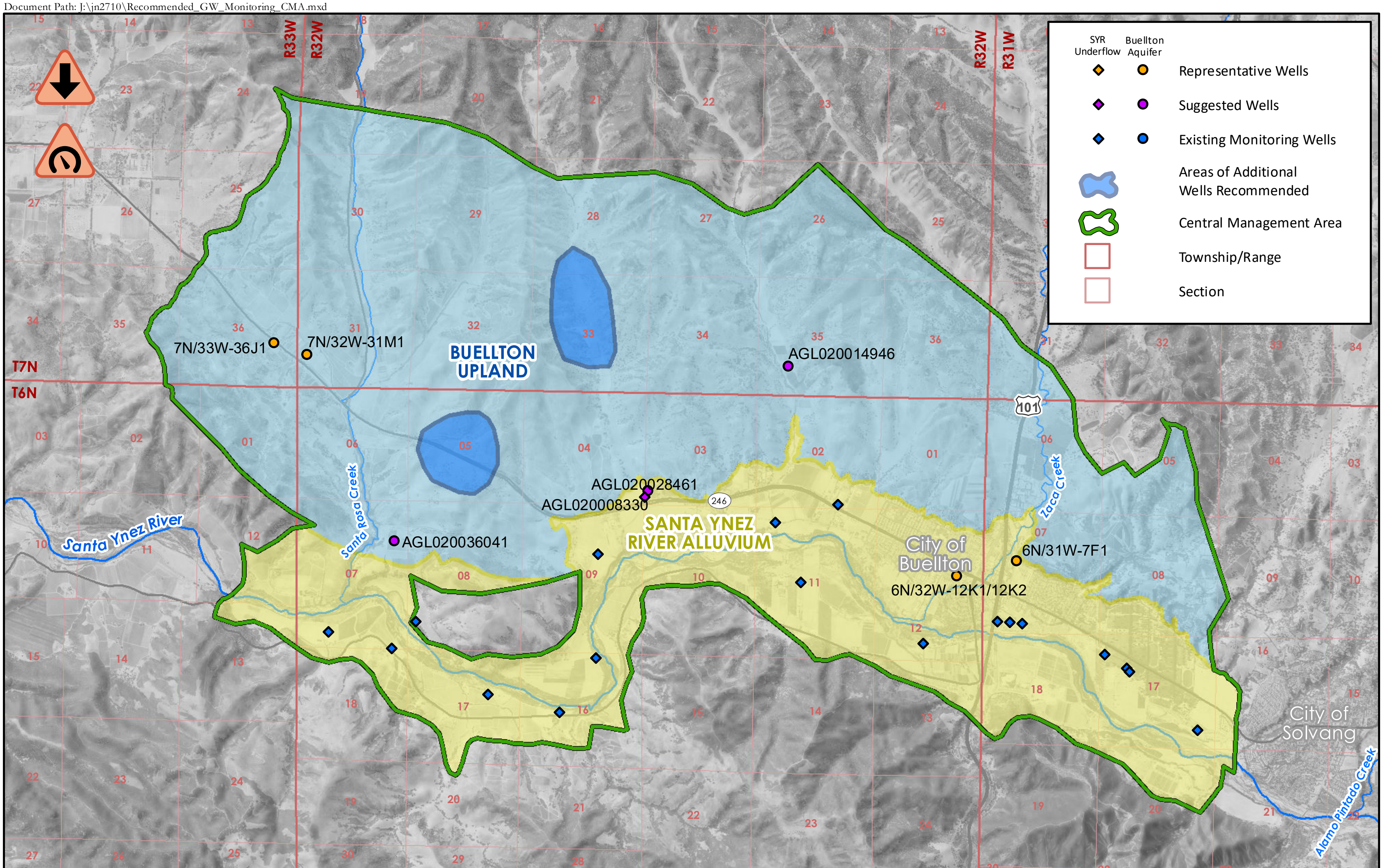


Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

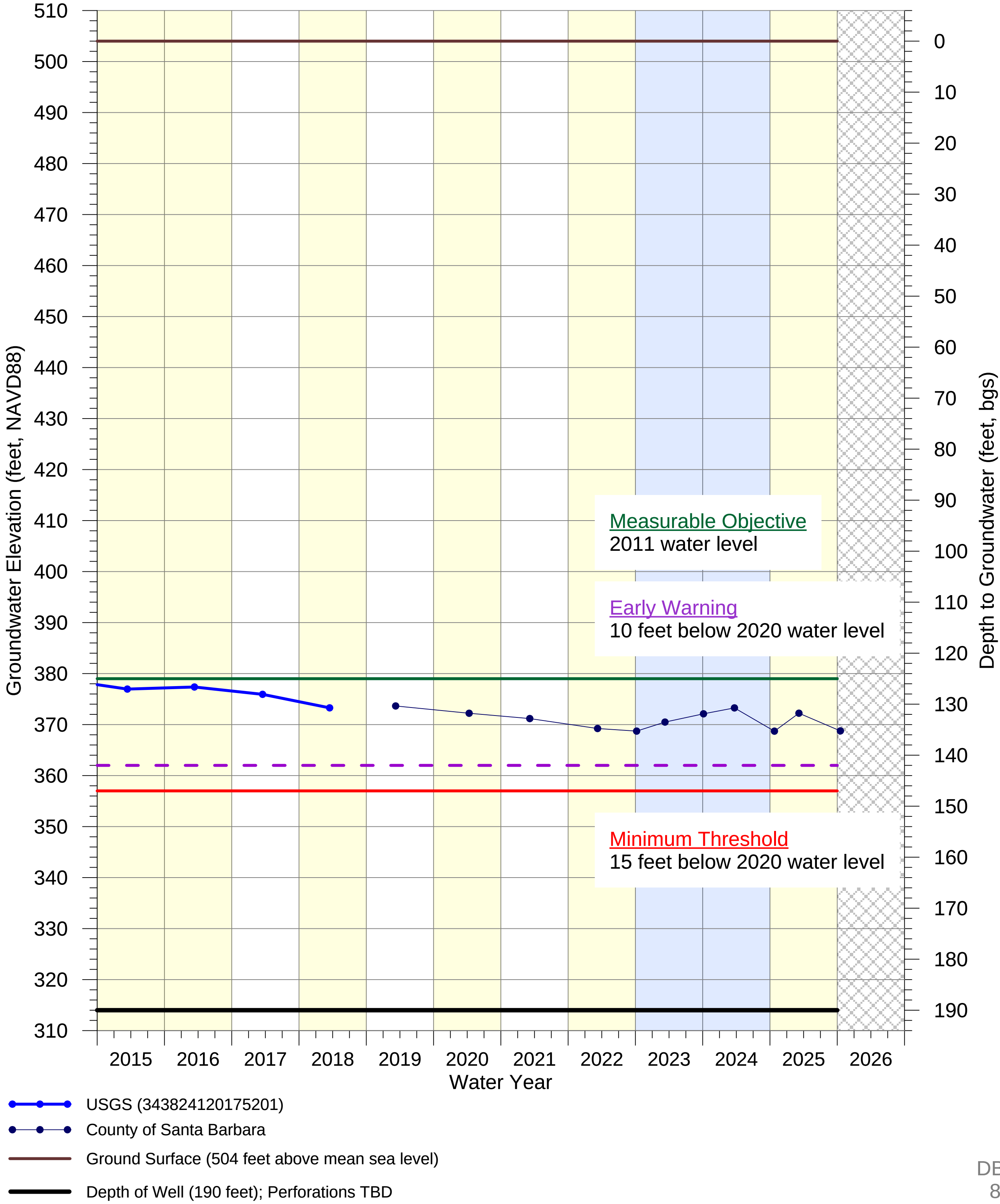
STETSON ENGINEERS INC.

CMA MONITORING NETWORK AND REPRESENTATIVE MONITORING WELLS FOR GROUNDWATER LEVELS AND GROUNDWATER STORAGE

FIGURE A1-01

CASGEM ID
25268
Voluntary

CMA Representative Monitoring Well for Buellton Aquifer (Buellton Upland Subarea) 7N/33W-36J1



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STETSON ENGINEERS INC.

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

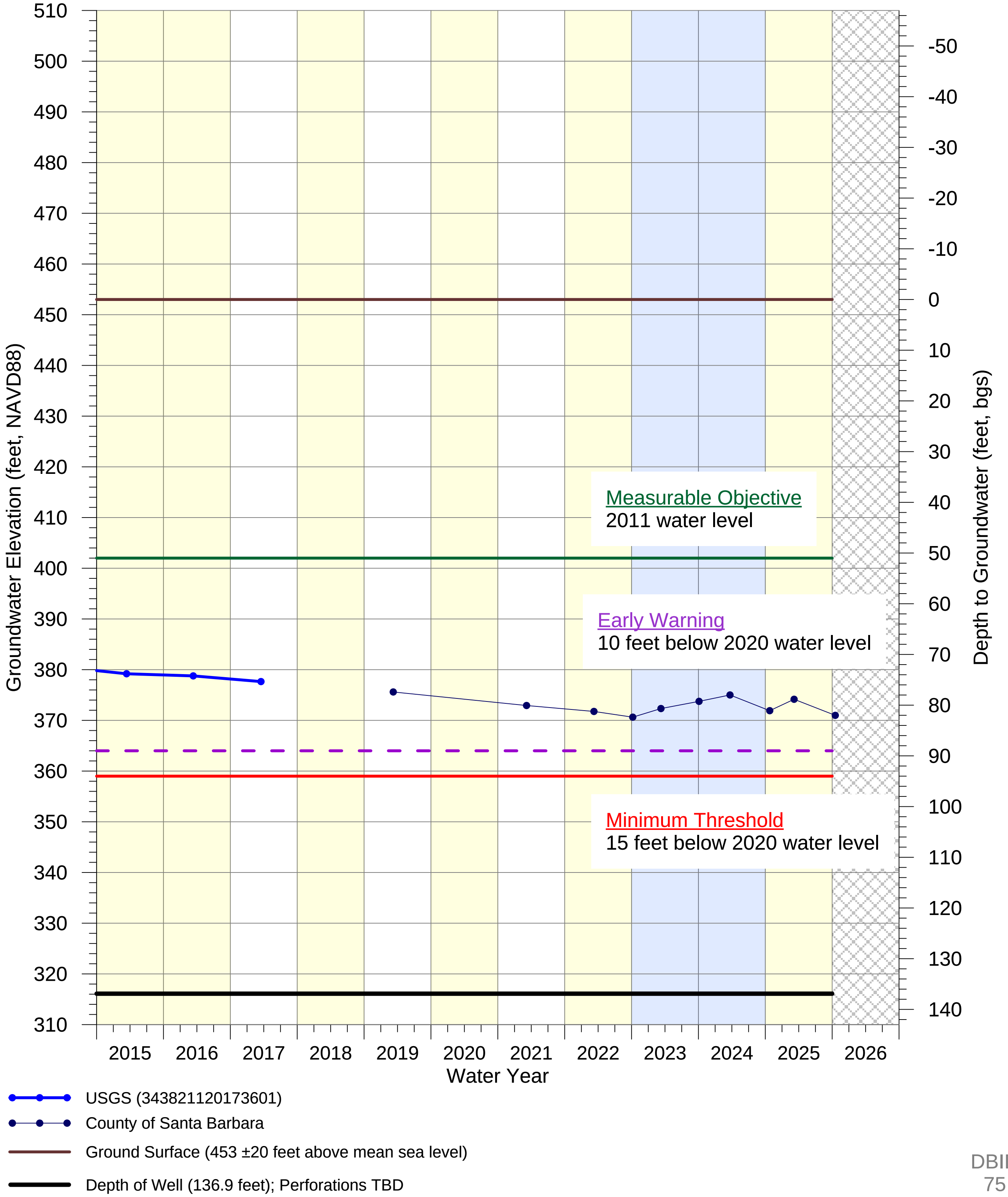
REPRESENTATIVE MONITORING WELL
Buellton Aquifer
Buellton Upland

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A1-02

CASGEM ID
23681
Voluntary

CMA Representative Monitoring Well
for Buellton Aquifer
(Buellton Upland Subarea)
7N/32W-31M1



DBID
75

STETSON ENGINEERS INC.

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Buellton Aquifer
Buellton Upland

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

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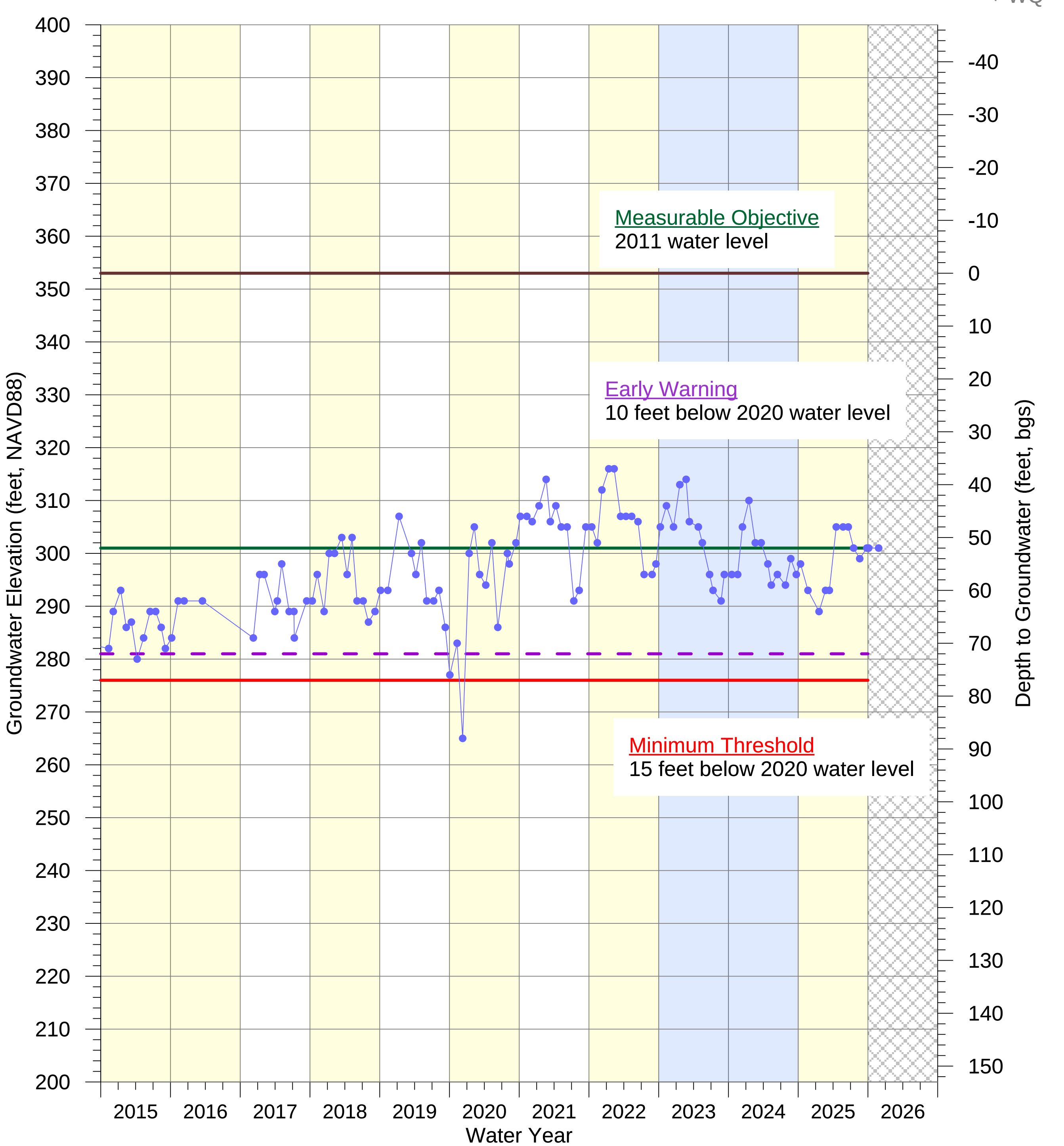
FIGURE A2-01

CMA Representative Monitoring Well for Buellton Aquifer (Santa Ynez River Alluvium Subarea) 6N/32W-12K2



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STETSON ENGINEERS INC.

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

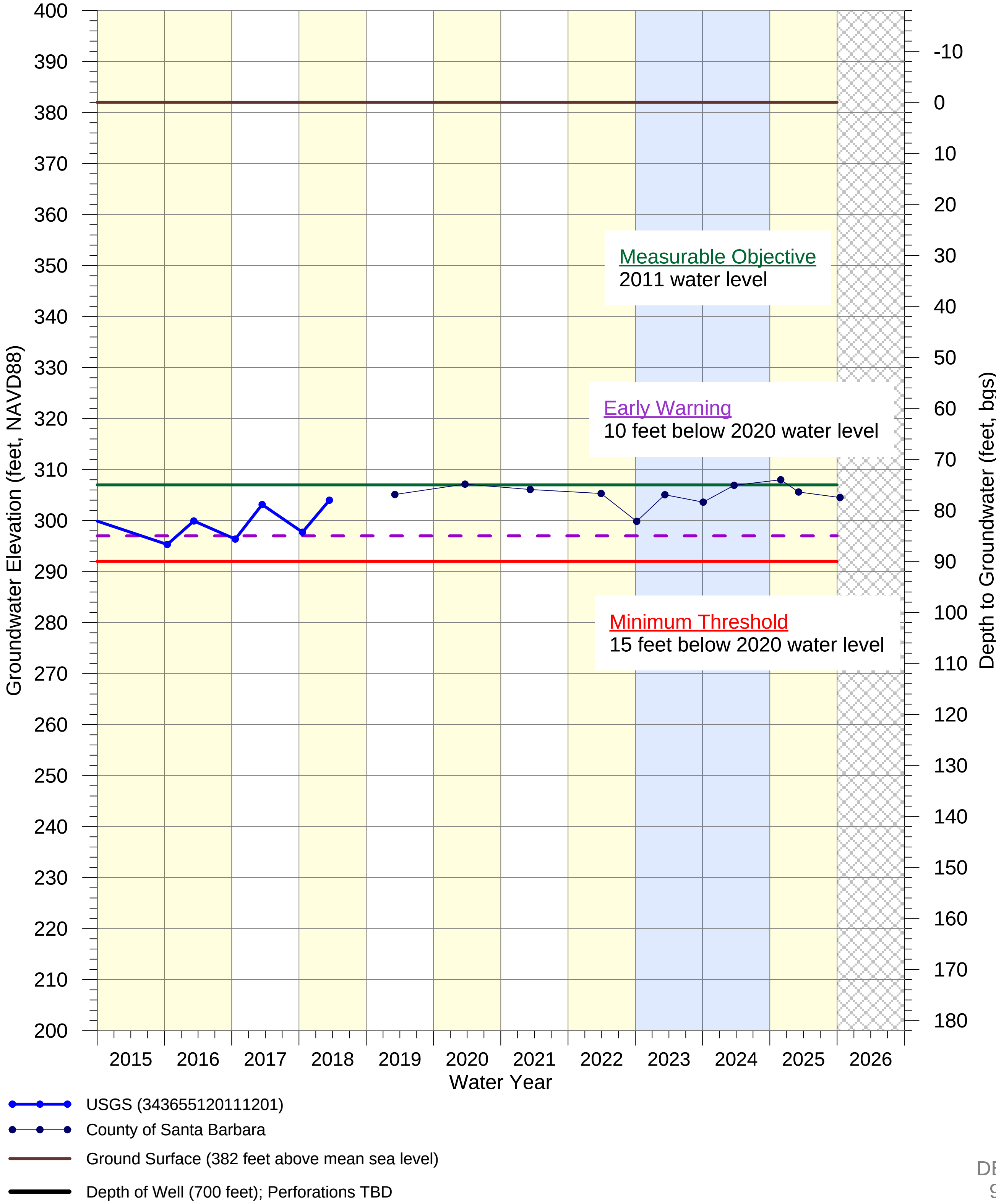
REPRESENTATIVE MONITORING WELL
Buellton Aquifer
Santa Ynez River Alluvium

Water Year Type (1942-2025)
- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE A2-02

CASGEM ID 49120 CASGEM

CMA Representative Monitoring Well for Buellton Aquifer (Santa Ynez River Alluvium Subarea) 6N/31W-7F1



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STETSON ENGINEERS INC.

CMA Santa Ynez River Valley Groundwater Basin Central Management Area Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL
Buellton Aquifer
Santa Ynez River Alluvium

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

CMA Appendix B:

Groundwater Level Hydrographs for Assessing Surface Water Depletion, Central Management Area

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CMA APPENDIX B:

GROUNDWATER LEVEL HYDROGRAPHS FOR ASSESSING SURFACE WATER DEPLETION, CENTRAL MANAGEMENT AREA

WATER YEAR 2025

This appendix includes hydrographs, which are graphs of water levels in wells. These are the representative wells for monitoring potential surface water depletion. As per the SGMA regulations, this includes the period from January 1, 2015 through the end of the Water Year 2025. Shown on these graphs are key SGMA criteria: measurable objective, early warning, and minimum threshold.

The Groundwater Sustainability Plan (GSP) includes hydrographs of the long-term period of record. A copy of the GSP, water level data and hydrographs are available at https://sywater.info.

LIST OF ACRONYMS AND ABBREVIATIONS

BGS	below-ground surface
CASGEM	California Statewide Groundwater Elevation Monitoring
CMA	Central Management Area
FT	feet
NAVD88	North American Vertical Datum of 1988
USBR	United States Bureau of Reclamation
USGS	United States Geologic Survey
WL	Water Level

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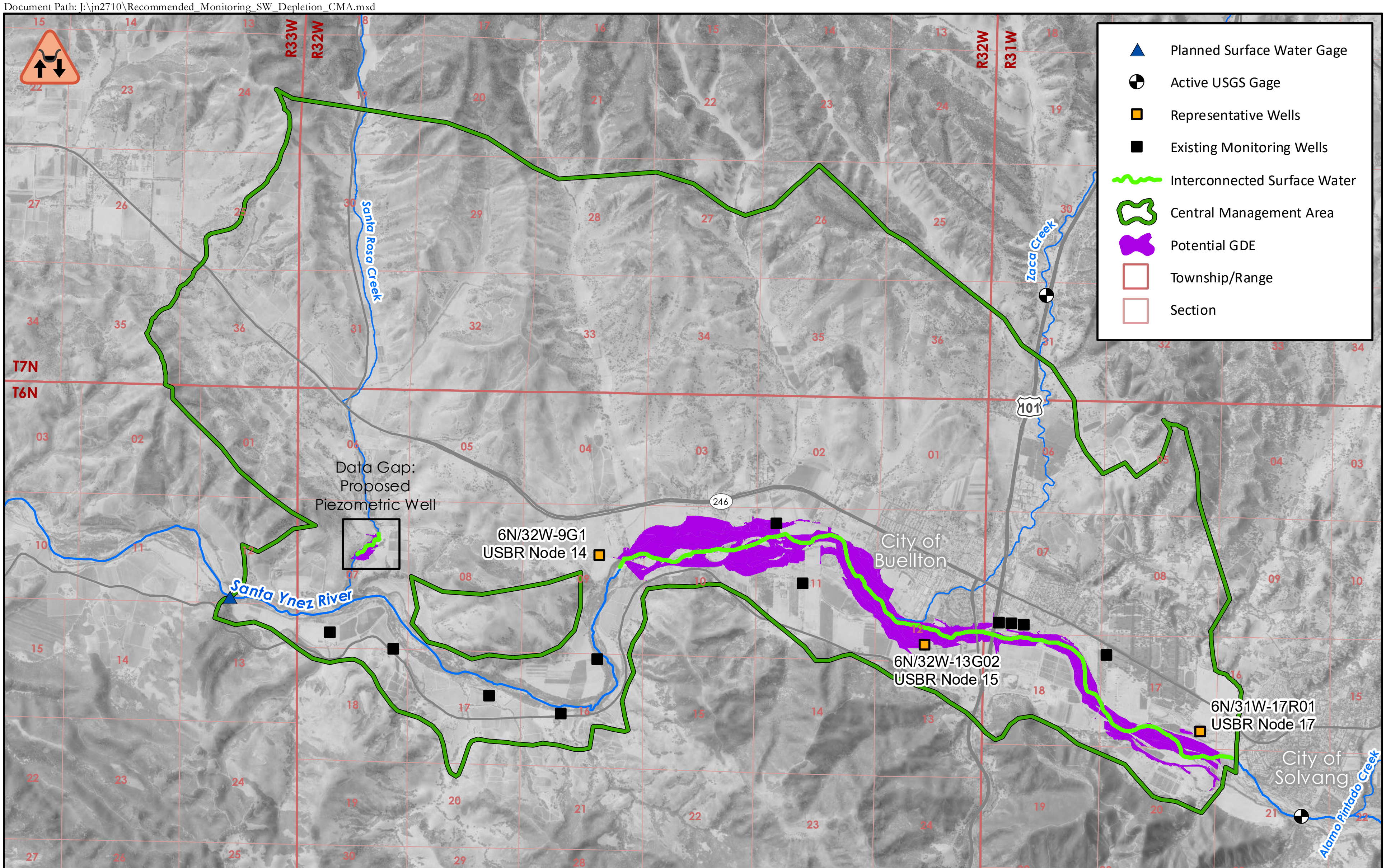

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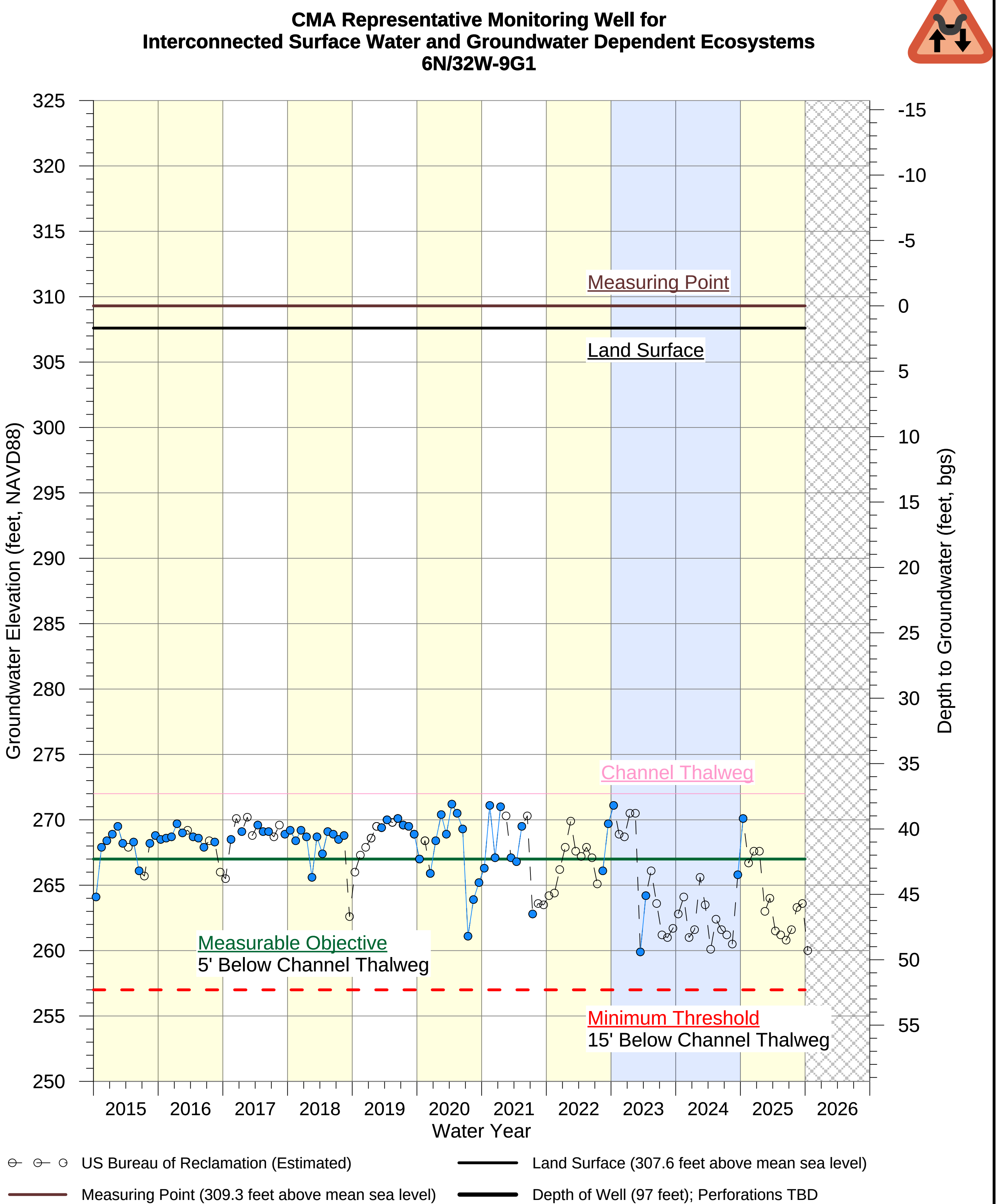
CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

CMA MONITORING NETWORK AND REPRESENTATIVE MONITORING FOR INTERCONNECTED SURFACE WATER AND GROUNDWATER DEPENDENT ECOSYSTEMS

0 0.5 1
Miles

N

FIGURE B-01



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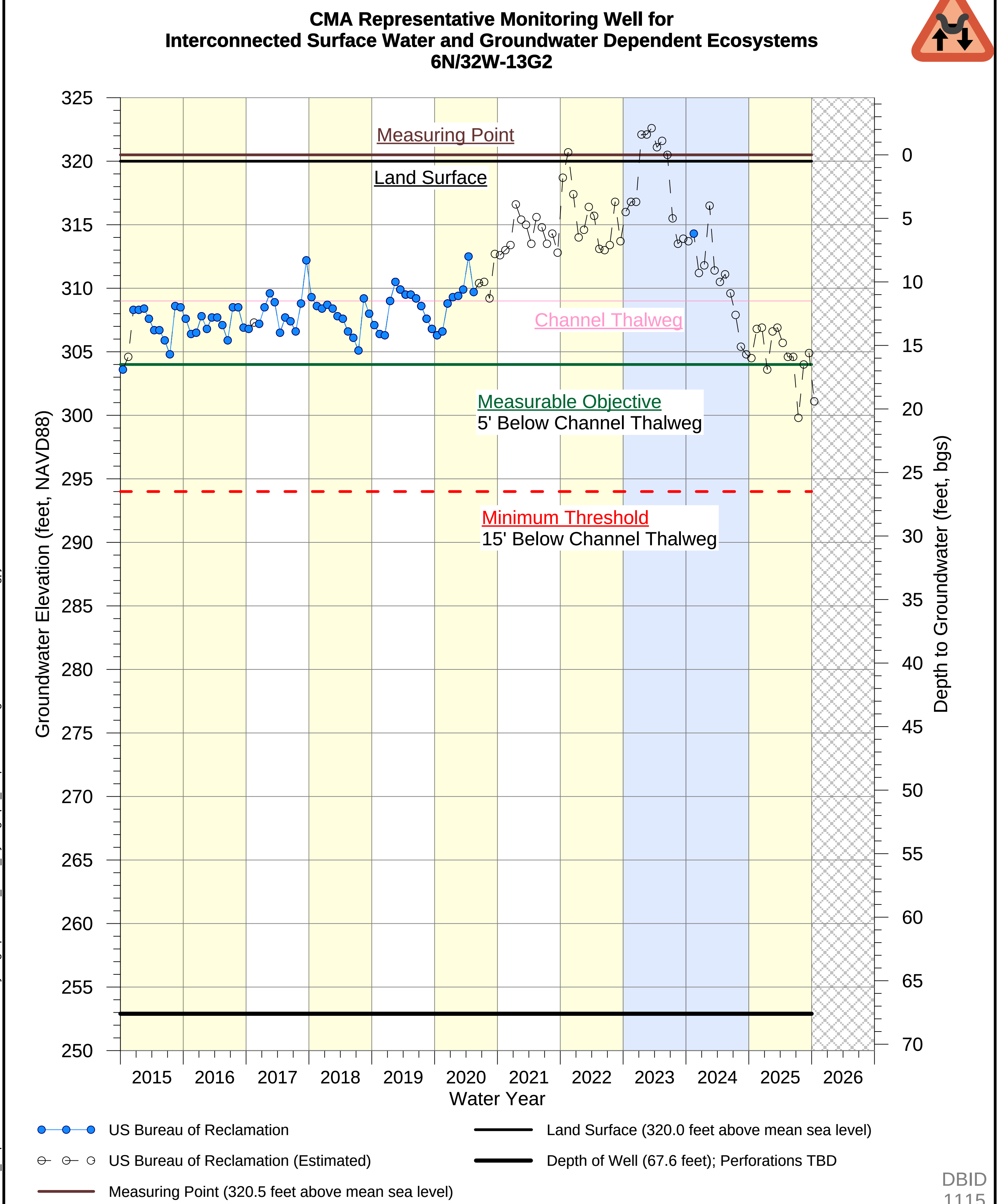
CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL ASSESSING SURFACE WATER DEPLETION

Water Year Type (1942-2025)

- Wet
- Above/Below Normal
- Dry / Critically Dry

FIGURE B-02



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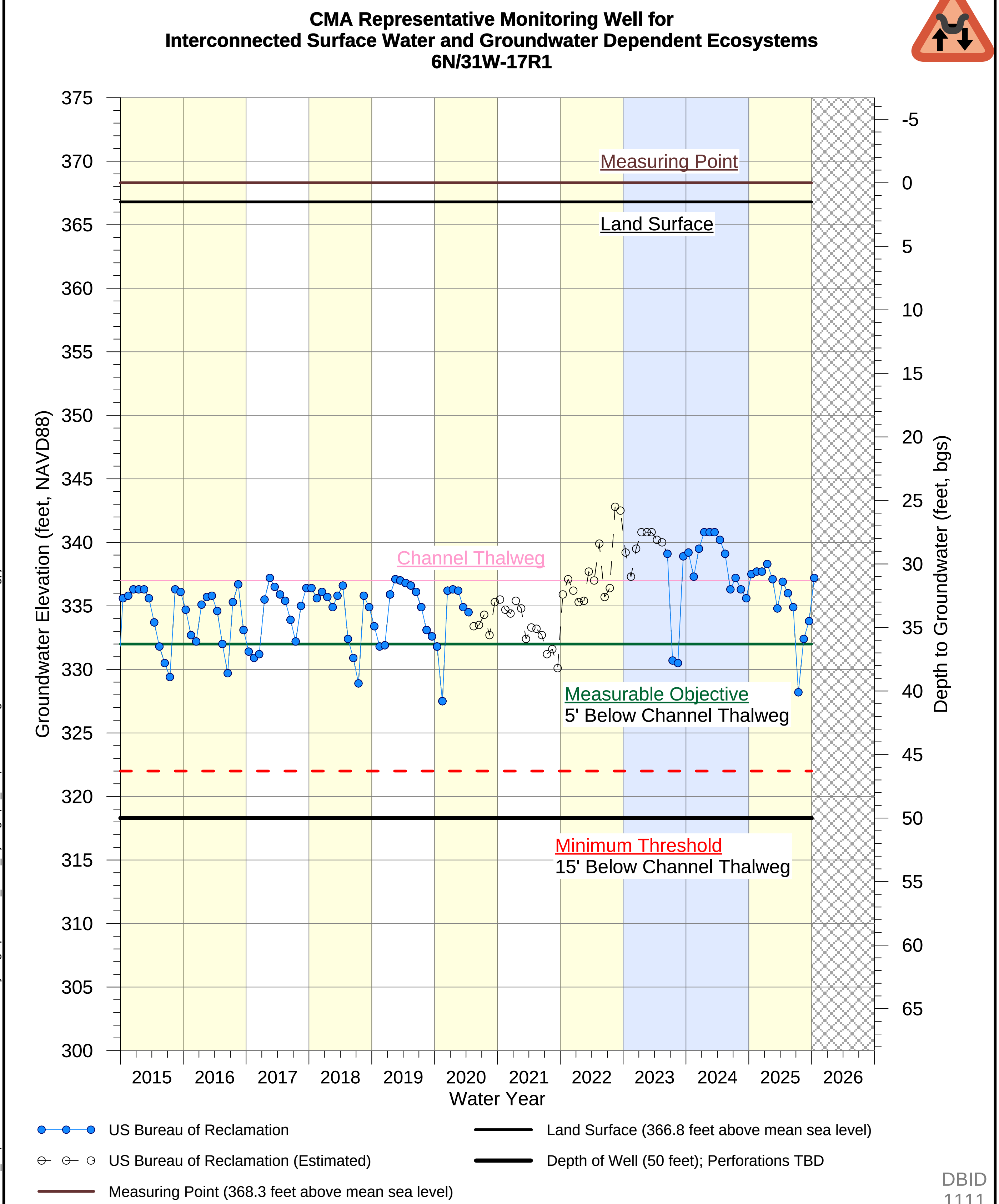
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL ASSESSING SURFACE WATER DEPLETION

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

FIGURE B-03



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STETSON ENGINEERS INC.

CMA
Santa Ynez River Valley Groundwater Basin
Central Management Area
Groundwater Sustainability Agency

REPRESENTATIVE MONITORING WELL ASSESSING SURFACE WATER DEPLETION

Water Year Type (1942-2025)

- Wet
- No Data
- Above/Below Normal
- Dry / Critically Dry

CMA Appendix C:

Groundwater Quality,
Central Management Area

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CMA APPENDIX C:

GROUNDWATER QUALITY,

CENTRAL MANAGEMENT AREA

WATER YEAR 2025

This appendix includes a discussion of groundwater quality. Sustainable Groundwater Management Act (SGMA) statute and SGMA regulations on Annual Reports do not include discussion of general water quality (see Joint Appendix A). To support the Central Coast Water Board's water quality mission, the Central Management Area (CMA) has included the following periodic evaluation of water quality with this Water Year 2025 Annual Report.

LIST OF ACRONYMS AND ABBREVIATIONS

Cl	Chloride
CMA	Central Management Area
DWR	Department of Water Resources
GSP	Groundwater Sustainability Plan
ILRP	Irrigated Lands Reporting Program
mg/L	milligrams per Liter
MO	Measurable Objective
MT	Minimum Thresholds
N	Nitrogen
Na	Sodium
NO_3	Nitrate
TDS	Total Dissolved Solids
SGMA	Sustainable Groundwater Management Act
SO_4	Sulfate
µg/L	micrograms per Liter (1 mg/L = 1000 µg/L)

The Central Management Area (CMA) Groundwater Sustainability Plan (GSP) identified minimum thresholds (MT), measurable objectives (MO), and interim milestones (at 5 years (2027), 10 years (2032), and 15 years (2037)) for the assessment of groundwater quality. **Table C-1** summarizes the constituents and concentrations identified for the CMA to assess water quality sustainability. **Table C-2** identifies the wells used to assess water quality. Groundwater quality data collection is currently through two programs of the State Water Resources Control Board: Public Water System Reporting in the Safe Drinking Water Information System (SDWIS) and the California Irrigated Lands Reporting Program (ILRP). ILRP data is accessed through the GeoTracker GAMA website.

Table C-1
SGMA Assessment Criteria for Water Quality in the CMA

Constituent	Minimum Thresholds (mg/L)	Measurable Objectives (mg/L)	Interim Milestones (mg/L)		
			5-year (2027)	10-year (2032)	15-year (2037)
Salinity as Total Dissolved Solids (TDS)	1,000	1,000	1,000	1,000	1,000
Chloride (Cl)	150	150	150	150	150
Sulfate (SO_4)	700	700	700	700	700
Sodium (Na)	100	100	100	100	100
Nitrate (N)	10	10	10	10	10

Table C-2
Representative Monitoring Wells for Water Quality

DMS ID	RMW Name	WQ Well ID	Principal Aquifer	Subarea
Buellton Aquifer – Buellton Upland Subarea				
3337	7N/32W-35	AGL020014946	Buellton Aquifer	Buellton Upland
3220	6N/32W - 7	AGL020036041	Buellton Aquifer	Buellton Upland
3173	7N/33W-36	AGL020021622	Buellton Aquifer	Buellton Upland
3137	7N/32W-31	AGL020001355	Buellton Aquifer	Buellton Upland
3139	6N/31W-8	AGL020028450	Buellton Aquifer	Buellton Upland
Buellton Aquifer – Santa Ynez River Alluvium Subarea				
909	6N/32W-12K1, 12K2	Buellton Well 09	Buellton Aquifer	Santa Ynez River Alluvium
3076	6N/32W-3	AGL020008330	Buellton Aquifer	Santa Ynez River Alluvium

DMS = Data Management System, RMW = Representative Monitoring Well

C-1 SALINITY - TOTAL DISSOLVED SOLIDS (TDS)

Salinity, as measured by total dissolved solids (TDS), is the dry mass of constituents dissolved in each volume of water. There are two measurements of salinity: TDS, which is a measurement of the total mass of the mineral constituents dissolved in the water, and electrical conductivity, which is a measurement of the conductivity of the solution of water and dissolved minerals. **Table C-3** identifies the results of total dissolved solids at the identified wells.

Table C-3
Salinity as Total Dissolved Solids (TDS) in mg/L,
Historical Water Quality Summary, Representative Monitoring Wells

Well Information		Criteria		Recent Data			
DMS ID	**Well ID**	**MT**	**MO**	**Concentration**	**Date**	**Source**	**Currently Exceeds MT?**
Buellton Aquifer – Buellton Upland Subarea							
3337	AGL020014946	1,000	1,000	440	2018-04-05	ILRP	No
3220	AGL020036041	1,000	1,000	1,120	2019-12-09	ILRP	Yes
3173	AGL020021622	1,000	1,000	362	2024-03-12	ILRP	No
3137	AGL020001355	1,000	1,000	178	2024-03-05	ILRP	No
3139	AGL020028450	1,000	1,000	530	2017-10-24	ILRP	-
Buellton Aquifer – Santa Ynez River Alluvium Subarea							
909	Buellton Well 09	1,000	1,000	840	2025-09-09	SDWIS	No
3076	AGL020008330	1,000	1,000	970	2017-03-20	ILRP	-

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
TDS = Total Dissolved Solids

C-2 Chloride

Chloride (Cl^-) is a mineral anion and a major water-quality constituent in natural systems. Chloride is characteristically retained in solution through most of the processes that tend to separate other ions. The circulation of chloride ions in the hydrologic cycle is through physical processes. **Table C-4** identifies the results for chloride at the identified wells.

Table C-4
Chloride (Cl) in mg/L,
Historical Water Quality Summary, Representative Monitoring Wells

Well Information		Criteria		Recent Data			
DMS ID	**Well ID**	**MT**	**MO**	**Concentration**	**Date**	**Source**	**Currently Exceeds MT?**
Buellton Aquifer – Buellton Upland Subarea							
3337	AGL020014946	150	150	43	2018-04-05	ILRP	No
3220	AGL020036041	150	150	127	2019-12-09	ILRP	No
3173	AGL020021622	150	150	31	2017-11-15	ILRP	-
3137	AGL020001355	150	150	32	2017-12-26	ILRP	-
3139	AGL020028450	150	150	82	2017-10-24	ILRP	-
Buellton Aquifer – Santa Ynez River Alluvium Subarea							
909	Buellton Well 09	150	150	56	2025-09-09	SDWIS	No
3076	AGL020008330	150	150	132	2017-03-20	ILRP	-

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
Cl = Chloride

C-3 Sulfate

Sulfate (SO_4^{2-}) is a naturally occurring anion and a major water quality constituent. **Table C-5** identifies the results for sulfate at the identified wells.

Table C-5
Sulfate (SO_4) in mg/L,
Historical Water Quality Summary, Representative Monitoring Wells

Well Information		Criteria		Recent Data			
DMS ID	Well ID	MT	MO	Concentration	Date	Source	Currently Exceeds MT?
Buellton Aquifer – Buellton Upland Subarea							
3337	AGL020014946	700	700	120	2018-04-05	ILRP	No
3220	AGL020036041	700	700	405	2019-12-09	ILRP	No
3173	AGL020021622	700	700	19.6	2017-11-15	ILRP	-
3137	AGL020001355	700	700	14	2017-12-26	ILRP	-
3139	AGL020028450	700	700	94.1	2017-10-24	ILRP	-
Buellton Aquifer – Santa Ynez River Alluvium Subarea							
909	Buellton Well 09	700	700	357	2025-02-26	SDWIS	No
3076	AGL020008330	700	700	210	2017-06-20	ILRP	-

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
SO_4 = Sulfate

C-4 SODIUM

Sodium (Na^+) is a mineral cation and a major water-quality constituent in natural systems. The 2019 Central Coast Basin Plan indicates the primary concern for sodium in irrigation water is the sodium absorption ratio (SAR). The sodium absorption ratio is the relative concentration of sodium to calcium and magnesium and is managed to maintain soil permeability. **Table C-6** identifies the results for sodium at the identified wells.

Table C-6
Sodium (Na) in mg/L,
Historical Water Quality Summary, Representative Monitoring Wells

Well Information		Criteria		Recent Data			
DMS ID	Well ID	MT	MO	Concentration	Date	Source	Currently Exceeds MT?
Buellton Aquifer – Buellton Upland Subarea							
3337	AGL020014946	100	100	35	2018-04-05	ILRP	No
3220	AGL020036041	100	100	115	2019-12-09	ILRP	Yes
3173	AGL020021622	100	100	27.6	2017-11-15	ILRP	-
3137	AGL020001355	100	100	31	2017-12-26	ILRP	-
3139	AGL020028450	100	100	54.5	2017-10-24	ILRP	-
Buellton Aquifer – Santa Ynez River Alluvium Subarea							
909	Buellton Well 09	100	100	64	2023-08-23	SDWIS	No
3076	AGL020008330	100	100	79.4	2017-03-20	ILRP	-

Notes: All concentrations are mg/L, n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
Na = Sodium

C-5 NITRATE

Nitrogen is the primary atmospheric gas, however, its presence in water is related to the breakdown of organic waste. Total nitrogen in groundwater is the sum of organic nitrogen and the three inorganic forms: nitrate (NO_3^-), nitrite (NO_2^-), and ammonia (NH_3). Nitrate concentrations are reported either as nitrate (the full mass of the nitrate anion) or as nitrogen (the mass of the Nitrogen). In some cases, a combined nitrate-nitrite as nitrogen is reported. **Table C-7** identifies the results for nitrate at the identified wells.

Table C-7
Nitrate as Nitrogen (NO_3 as N) in mg/L,
Historical Water Quality Summary, Representative Monitoring Wells

Well Information		Criteria		Recent Data			
DMS ID	Well ID	MT	MO	Concentration	Date	Source	Currently Exceeds MT?
Buellton Aquifer – Buellton Upland Subarea							
3337	AGL020014946	10	10	0.6	2018-04-05	ILRP	No
3220	AGL020036041	10	10	Less than 0.1	2019-12-09	ILRP	No
3173	AGL020021622	10	10	1.85	2024-03-12	ILRP (NO_3 + NO_2)	No
3137	AGL020001355	10	10	2.19	2024-03-05	ILRP (NO_3 + NO_2)	No
3139	AGL020028450	10	10	0.9	2017-10-24	ILRP (NO_3 + NO_2)	-
Buellton Aquifer – Santa Ynez River Alluvium Subarea							
909	Buellton Well 09	10	10	0.13	2023-12-12	SDWIS (as NO_3)	No
3076	AGL020008330	10	10	1.9	2018-11-14	ILRP (NO_3 + NO_2)	No

Notes: All concentrations are mg/L, values reported as NO_3 converted to NO_3 as N, values NO_3 + NO_2 as N as reported,
n/a = not assessed, MT = Minimum Threshold, MO = Measurable Objective,
NO_3 = Nitrate, NO_2 = Nitrite, N = Nitrogen

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EMA Appendix A:

Summary of Representative Well Data, Eastern Management Area

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APPENDIX A

Summary of Representative Well Data

EMA Table A-1. Representative Groundwater Level Monitoring Network – Paso Robles Formation Wells

Representative Well ID	Well Use	Well Depth (ft)	Screen Interval(s) (ft bgs)	Ground Elevation (ft NAVD 88)	Reference Point Elevation (ft NAVD 88)	First Date Measured	Last Date Measured	Years
6N/29W-07L01	Agricultural	—	—	869	871	1960	2025	65
6N/29W-08P01	Domestic	—	210 (top)	896	897	1934	2024	90
6N/29W-08P02	Domestic	—	—	896	897	1966	2025	59
6N/30W-07G05	Municipal	166	—	604	607	1962	2025	63
6N/30W-07G06	Municipal	566	305 to 410	602	604	1962	2025	63
6N/30W-11G04	Agricultural	400	130 to 390	681	683	2010	2024	14
6N/31W-01P03	Municipal	505	195 to 490	633	635	1967	2025	58
6N/31W-02K01	Domestic	—	—	620	621	1942	2025	83
6N/31W-13D01	Domestic	152	—	625	627	1941	2025	84
7N/30W-16B01	Agricultural	—	—	1,066	1,090	1950	2025	75
7N/30W-19H01	Agricultural	—	—	1,090	1,106	1954	2025	71
7N/30W-29D01	Agricultural	—	—	918	919	1905	2025	120
7N/30W-30M01	Agricultural	—	—	807	808	1905	2022	117
7N/30W-33M01	Agricultural	349	150 to 340	764	765	1954	2025	71
7N/31W-36L02	Domestic	—	—	723	724	1942	2025	83

Notes
— = no data available
? = Unknown
bgs = below ground surface
ft = foot or feet
NAVD 88 = North American Vertical Datum of 1988

EMA Table A-2. Representative Groundwater Level Monitoring Network – Careaga Sand Wells

Representative Well ID	Well Use	Well Depth (ft)	Screen Interval(s) (ft bgs)	Ground Elevation (ft NAVD 88)	Reference Point Elevation (ft NAVD 88)	First Date Measured	Last Date Measured	Years
7N/31W-34M02	Agricultural	—	—	671	673	2014	2025	11
6N/31W-03A01	Domestic	—	—	739	740	1963	2025	62
6N/31W-04A01	Domestic	259	—	601	603	1956	2025	69
6N/31W-09Q02	Municipal	550	250 to 540	757	754	2011	2025	14
6N/31W-10F01	Agricultural	265	—	556	557	1966	2025	59
6N/31W-11D04	Agricultural	447	93 (top)	565	567	1955	2025	70
6N/31W-16N07	Municipal	145	99 to 127	479	478	2011	2025	14
6N/31W-xxxx[1]	Municipal	329	190 to 325	503	501	2011	2025	14
Solvang HCA[1]	Municipal	490	180 to 470	398	403	2011	2025	14

Notes

[1] The State Well Number for these wells is not known at this time.

— = no data available

? = Unknown

bgs = below ground surface

ft = foot or feet

NAVD 88 = North American Vertical Datum of 1988

EMA Table A-3. Representative Well Water Elevations – Paso Robles Formation Wells

(All elevations are in feet NAVD 88)

Representative Well ID	Minimum Threshold	Spring 2024	Fall 2024	Spring 2025	Fall 2025
6N/29W-07L01	637	**626**	**615**	**625**	**606**
6N/29W-08P01	676	Dry	Dry	Dry	Dry
6N/29W-08P02	653	**636**	**627**	**632**	**623**
6N/30W-07G05	513	**512**	514	**510**	**507**
6N/30W-07G06	511	511	**508**	**508**	**506**
6N/30W-11G04	510	554	547	553	547
6N/31W-01P03	514	515	**513**	**513**	**510**
6N/31W-02K01	556	581	579	580	583
6N/31W-13D01	494	512	512	510	507
7N/30W-16B01	1,018	1,051	1,053	1,053	1,050
7N/30W-19H01	896	913	914	914	914
7N/30W-29D01	849	890	863	863	863
7N/30W-30M01	559	NM	NM	NM	NM
7N/30W-33M01	514	515	**499**	**513**	**501**
7N/31W-36L02	615	617	616	624	619

Notes

Bolded values are below the minimum threshold value.

[1] Nearby Pumping

[2] Replacement well nearby measured

— = no data available

NAVD 88 = North American Vertical Datum of 1988

NM = Not measured

EMA Table A-4. Representative Well Water Elevations – Careaga Sand Wells

(All elevations are in feet NAVD 88)

Representative Well ID	Minimum Threshold	Spring 2024	Fall 2024	Spring 2025	Fall 2025
7N/31W-34M02	482	488	486	487	485
6N/31W-03A01	573	580	**570**	579	**572**
6N/31W-04A01	481	487	485	486	484
6N/31W-09Q02	446	**433**	463	NM	NM
6N/31W-10F01	463	470	468	468	467
6N/31W-11D04	502	517	516	516	515
6N/31W-16N07	377	398	403	330	325
6N/31W-xxxx	467	473	468	473	466
Solvang HCA	320	359	352	313	354

Notes

Bolded values are below the minimum threshold value.

NM = Not Measured

NAVD 88 = North American Vertical Datum of 1989

EMA Table A-5. Current Groundwater Quality (2025)

Well ID	TDS (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Boron (mg/L)	Sodium (mg/L)	Nitrate (mg/L)
Relevant Water Quality Limit	600	50	10	0.5	20	10
Total Number of Exceedances	22	9	30	0	33	0
Percentage of Exceedances	36%	27%	91%	0%	100%	0%
AGL020027634-IRRIGATION WELL	500	54	87	—	35	—
AGL020027994-SYV#1	373	29	6	—	23	—
AGL020027994-SYV#2	410	39	51	—	76	—
AGL020028004-AG WELL 1	395	40	26	0	30	2.75
AGL020028294-PEGASUS DOM	—	—	—	—	—	—
AGL020028294-PEGASUS IRR	635	44	173	—	45	—
AGL020028389-VINE WELL	404	52	29	—	30	—
AGL020028425-RODNEYSVYD	437	26	140	—	39	0
AGL020004012-ESTELLE 8 & 9	456	39	23	—	25	—
AGL020004012-ESTELLE VINEYAR	—	—	—	—	—	—
AGL020004744-PRIMARY	**725**	35	191	—	41	6.45
AGL020006120-COGVIN_D/I	**769**	—	—	—	—	—
AGL020007172-VINEYARD WELL	—	—	—	—	—	—
AGL020007556-WDVINEYARD	—	—	—	—	—	—
AGL020007594-MIDDLE WELL	**625**	48	148	—	157	—
AGL020012025-CAMP4_DOM	—	—	—	—	—	—
AGL020012025-CAMP4_IRR	—	—	—	—	—	—
AGL020012025-CMP4NEW_I	438	**69**	20	—	24	—
AGL020014886-SANGER RANCH A	495	37	29	—	29	—
AGL020023842-CCGC_0520	**611**	—	—	—	—	—
AGL020027368-WELL	—	—	—	—	—	—
AGL020027634-EDISON WELL	—	—	—	—	—	—
4210020-027	—	—	—	—	—	—
4210020-031	—	—	—	—	—	—
AGL020000786-ROBLAR_D/I	—	—	—	—	—	—
AGL020000888-CLMWC	395	50	14	—	36	—
AGL020000888-FAITH WELL	405	44	42	—	37	—
AGL020001203-BW DOM	—	—	—	—	—	—
AGL020001203-WELL BW1	—	—	—	—	—	—
AGL020002508-WELL	—	—	—	—	—	—
AGL020003217-J BLOCK	543	40	174	—	33	—
AGL020003217-WINERY	—	—	—	—	—	—
AGL020003217-XRDS	—	—	—	—	—	—
AGL020003684-TIERRA ALTA AG	566	**51**	131	—	69	—
AGL020003684-TIERRA ALTA DOM	529	—	—	—	—	0.1

Well ID	TDS (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Boron (mg/L)	Sodium (mg/L)	Nitrate (mg/L)
AGL020003688-FOX AG/DOMESTIC	442	46	71	—	72	2.3
AGL020003701-STAG CANYON DOM	—	—	—	—	—	—
AGL020016182-HAPCANY2_I	**668**	—	—	—	—	—
AGL020016182-IRR_2	541	—	—	—	—	—
AGL020016182-IRRIGATION	**624**	—	—	—	—	—
AGL020020422-DOM/IRR	383	—	—	—	—	—
AGL020020482-TTT_IRR	459	—	—	—	—	—
AGL020023842-CCGC_0520	**611**	—	—	—	—	—
AGL020026222-COQ#1	475	29	151	—	42	—
AGL020027634-IRRIGATION WELL	500	**54**	87	—	35	—
AGL020027994-SYV#1	373	29	6	—	23	—
AGL020027994-SYV#2	410	39	51	—	76	—
AGL020028004-AG WELL 1	395	40	26	0	30	2.75
AGL020028294-PEGASUS IRR	**635**	44	173	—	45	—
AGL020028389-VINE WELL	404	**52**	29	—	30	—
AGL020028425-28425-2303	440	—	—	—	—	—
AGL020028425-RODNEYSVYD	437	26	140	—	39	0.00
AGL020030217-RL_IRR	**752**	—	—	—	—	—
AGL020035735-IRRIGATION	476	45	244	—	31	—
AGL020035740-EMILYS_IRR	**704**	**61**	198	—	43	—
AGL020036025-C5_IRR	**700**	—	—	—		—
AGL020036038-MERZ_IRR	504	45	40	—	71	—
AGL020036238-CANADA_IRR1	394	42	9	—	23	—
AGL020036239-DAIRY_IRR	423	37	22	—	25	—
AGL020036469-IRRIGATION	**621**	**90**	120	—	36	—
AGL020036597-36597-2401	486	—	—	—	—	—
AGL020036620-BASELINE_IRR	343	—	—	—	—	—
AGL020036725-IRRIGATION	**619**	—	—	—	—	—
AGL020036919-36919-2301	541	—	—	—	—	—
AGL020036919-ECR_IRR	**612**	—	—	—	—	—
AGL020037049-37049-6223	**600**	—	—	—	—	—
AGL020037049-GRIMM_IRR	**658**	—	—	—	—	—
AGL020037622-AG WELL 1	**647**	—	—	—	—	—
AGL020037622-AG WELL 2	**651**	—	—	—	—	—
AGL020040056-40056-2401	508	—	—	—	—	—
AGL020040109-40109-2401	**960**	—	—	—	—	0.87
AGL020040111-40111-2402	455	—	—	—	—	—
AGL020040118-40118-2401	568	—	—	—	—	—

Well ID	TDS (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Boron (mg/L)	Sodium (mg/L)	Nitrate (mg/L)
AGL020040121-40121-2401	577	—	—	—	—	—
AGL020040205-40205-2402	**715**	—	—	—	—	—
AGL020040253-40253-2402	510	—	—	—	—	0.89
AGL020040327-40327-2401	**637**	—	—	—	—	—
USGS-343830120065001	**820**	**55**	219	0.1856	54	1.79
USGS-343833120030901	466	46	24	0.10025	26	5.05

Notes

Bolded values indicate that the concentration exceeds minimum threshold.

EMA Appendix B:

Representative Monitoring Site Hydrographs, Eastern Management Area

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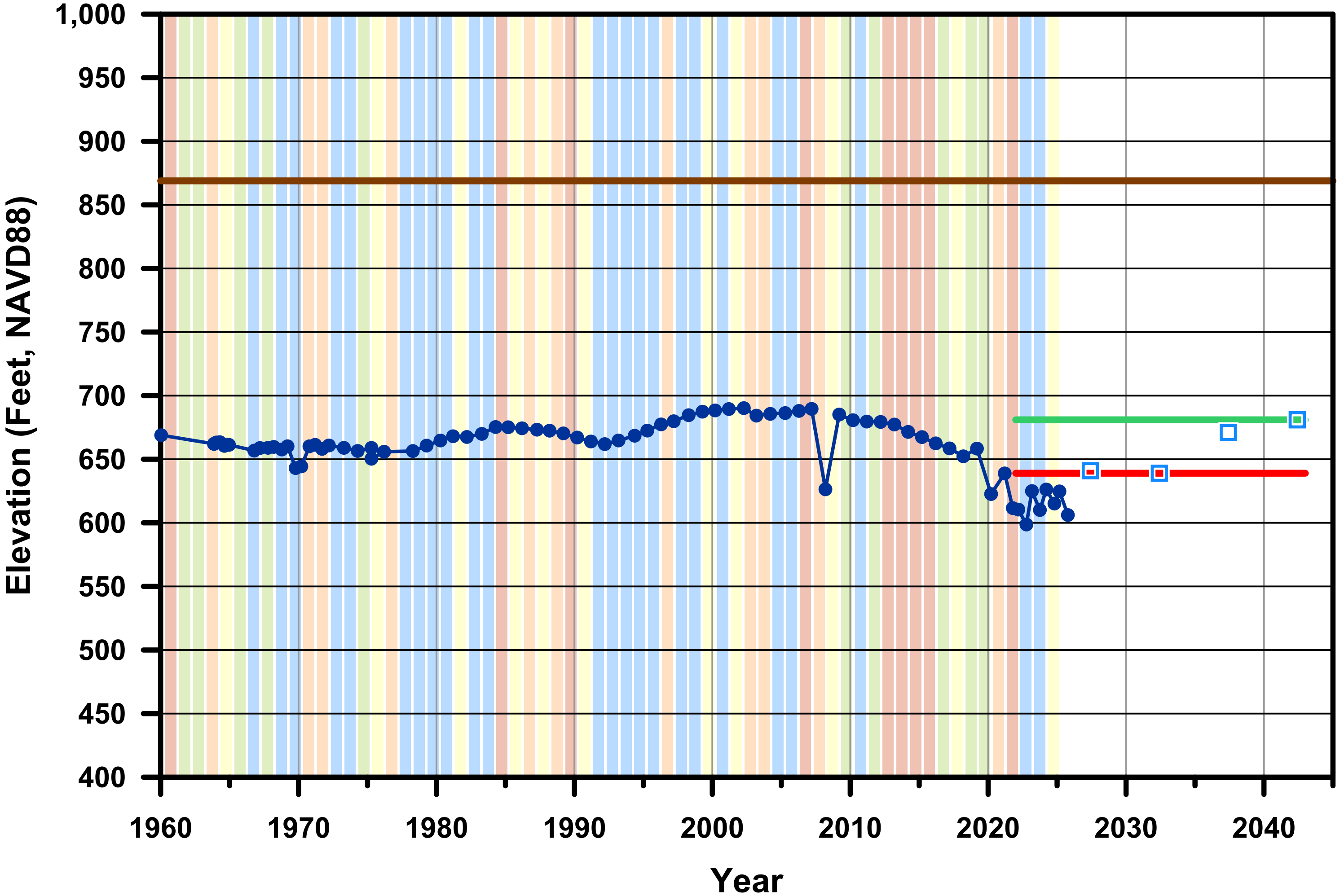
APPENDIX B

6N/29W-07L01

Paso Robles Formation

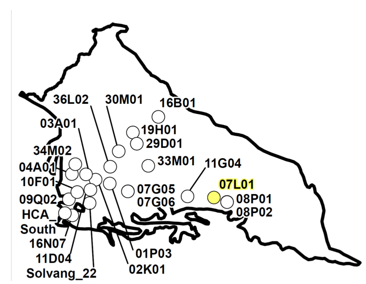


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



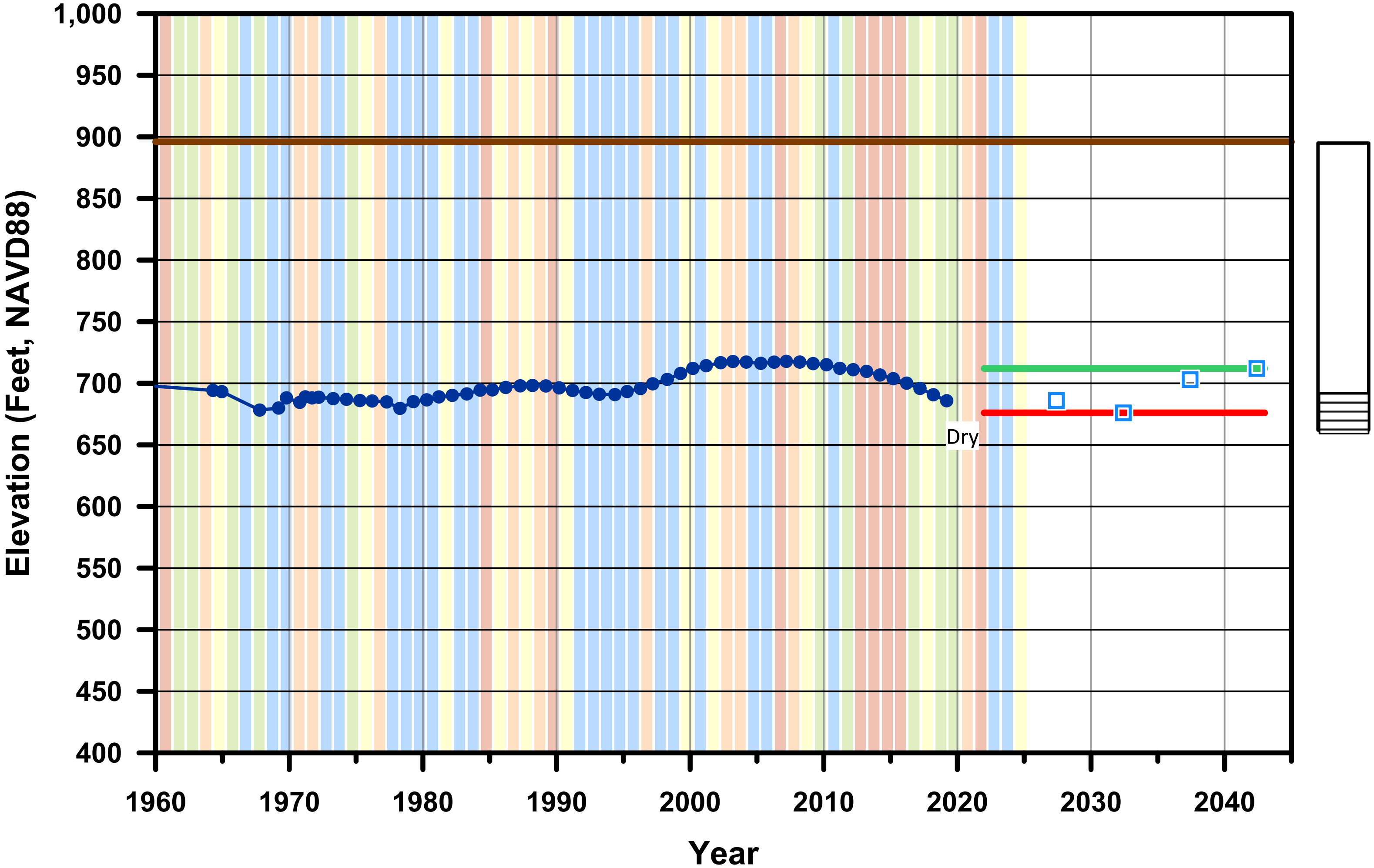
NOTE(S)

Agricultural Well
Unknown Depth

Water Solutions, Inc.

\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 6N29W07L01 SMC

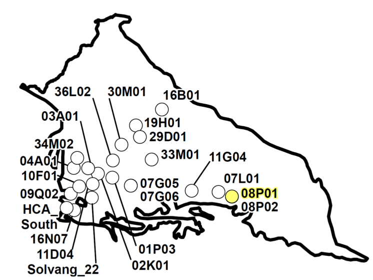
APPENDIX B
6N/29W-08P01
Paso Robles Formation



LEGEND
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type
- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Well Details
- Screen Interval

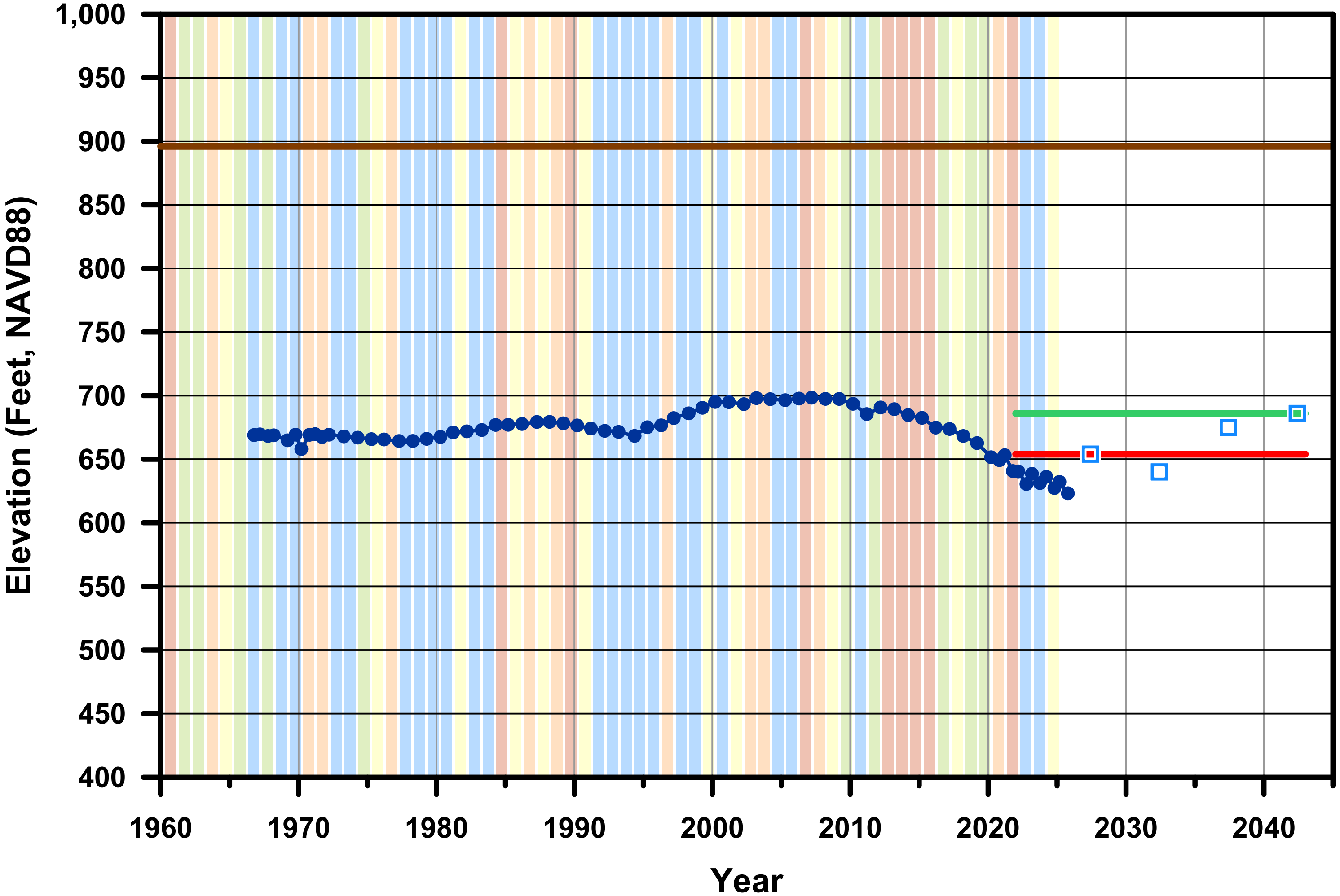


NOTE(S)
Domestic Well
Depth = 237 ft bgs

GSI Water Solutions, Inc.

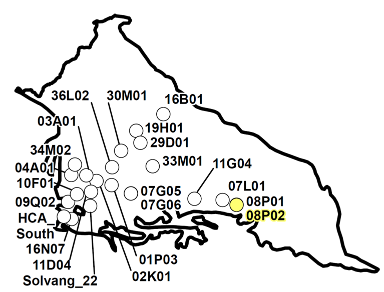
\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 6N29W08P01 SMC

APPENDIX B
6N/29W-08P02
Paso Robles Formation



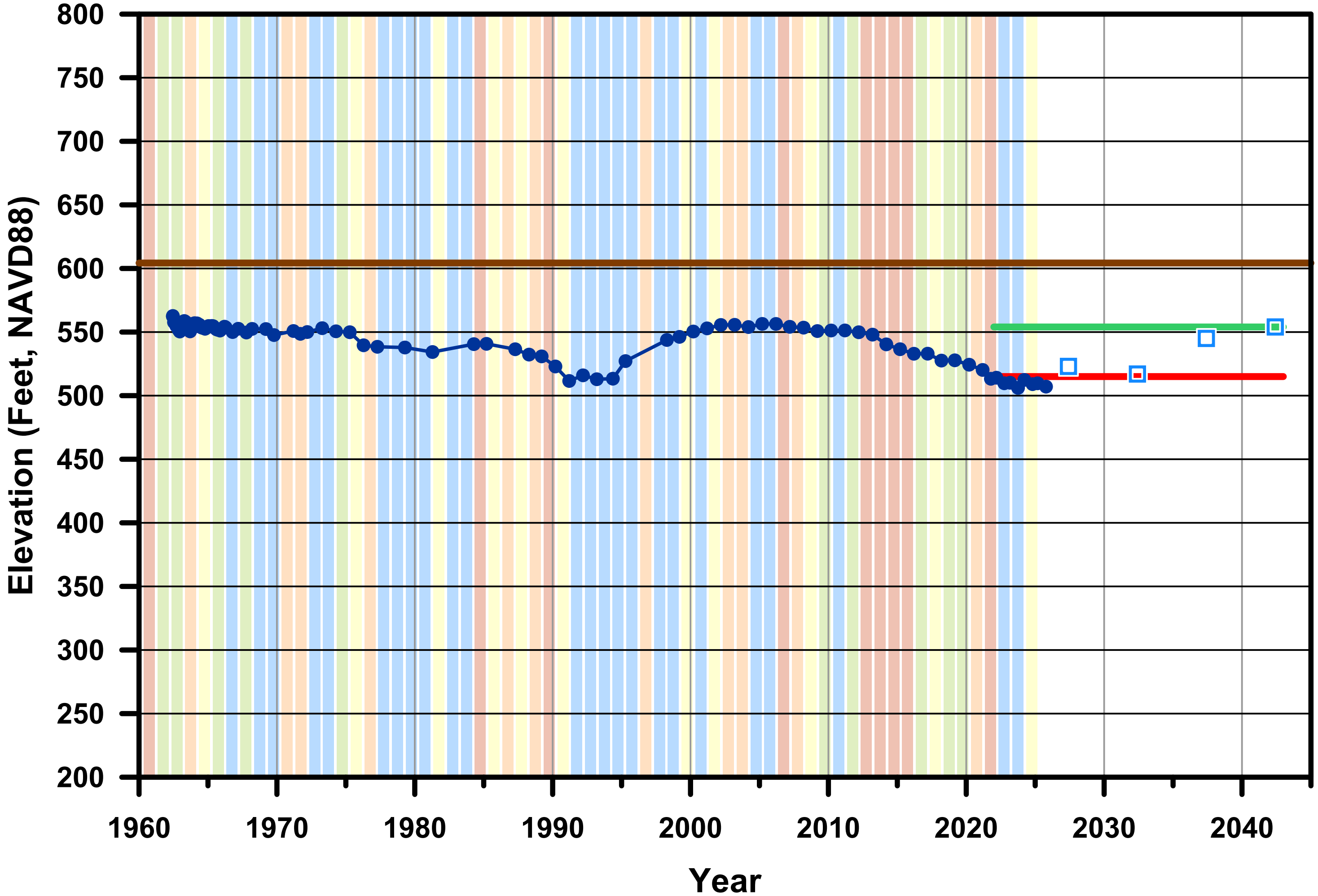
LEGEND
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type
- Wet
- Above Normal
- Below Normal
- Dry
- Critical



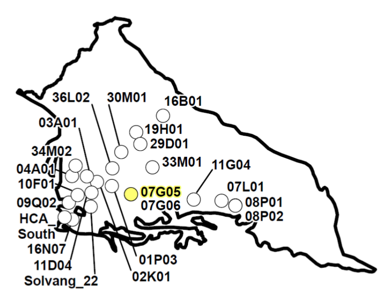
NOTE(S)
Domestic Well
Unknown Depth

APPENDIX B
6N/30W-07G05
Paso Robles Formation



LEGEND
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type
- Wet
- Above Normal
- Below Normal
- Dry
- Critical



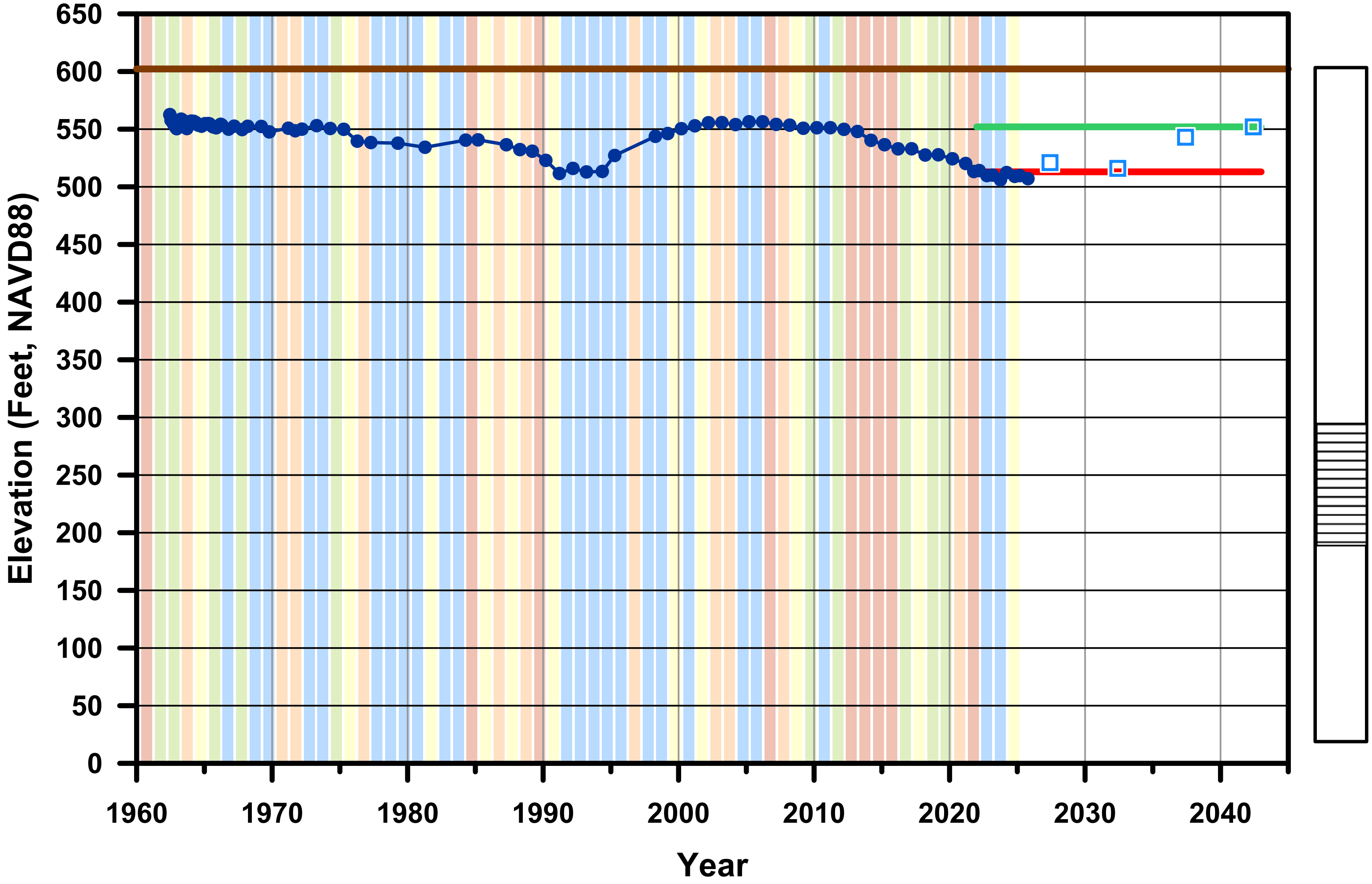
NOTE(S)
Municipal Well
Depth = 166 ft bgs

GSI Water Solutions, Inc.

APPENDIX B

6N/30W-07G06

Paso Robles Formation



LEGEND

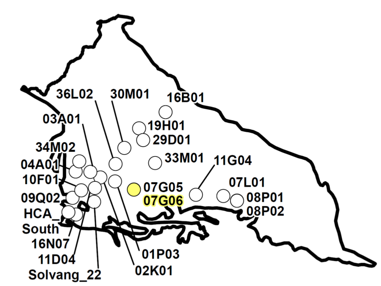
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Well Specifications

Screen Interval



NOTE(S)

Municipal Well

Depth = 566 ft bgs

GSI Water Solutions, Inc.

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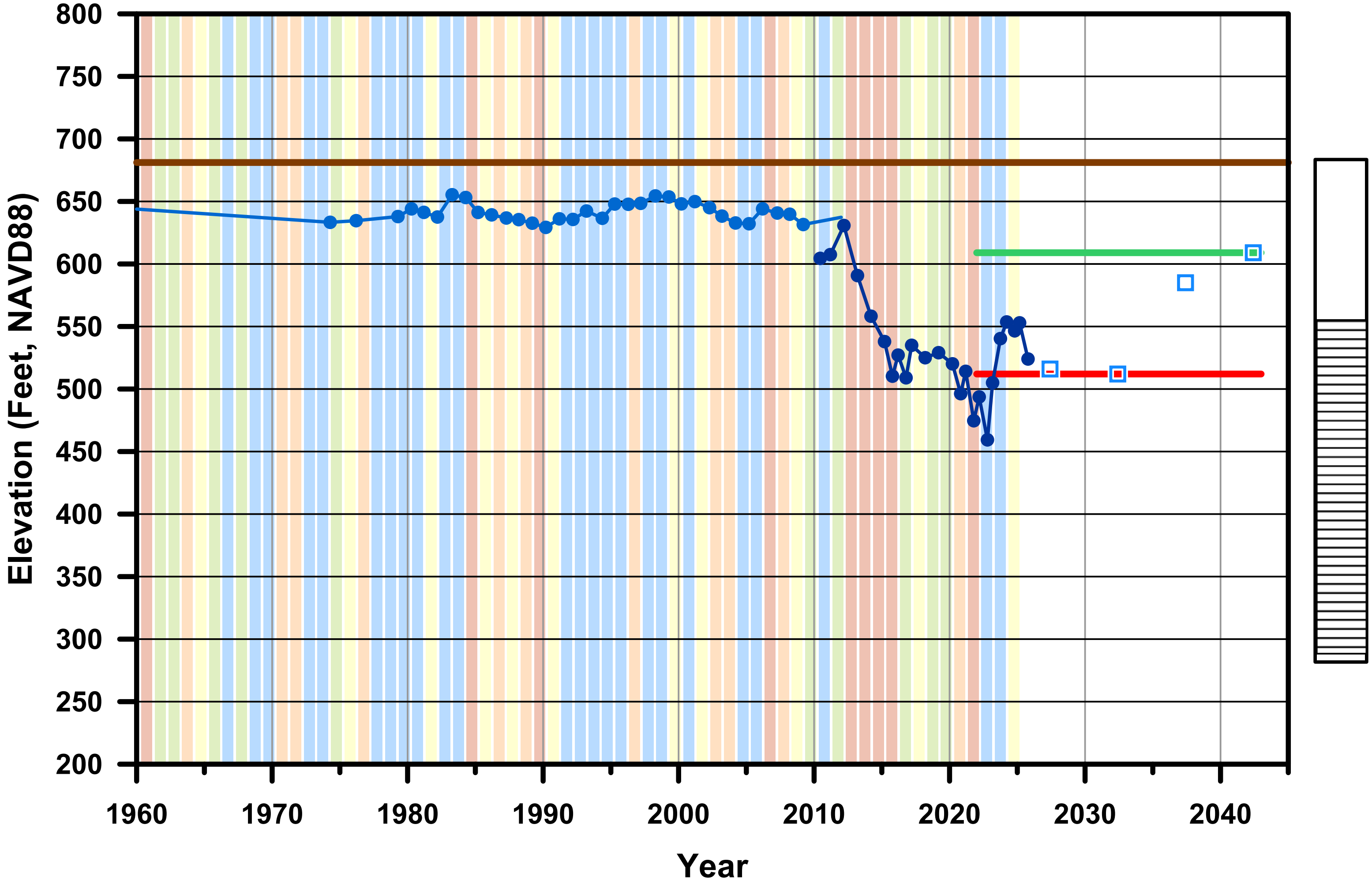
APPENDIX B
6N/30W-11G04
Paso Robles Formation



LEGEND

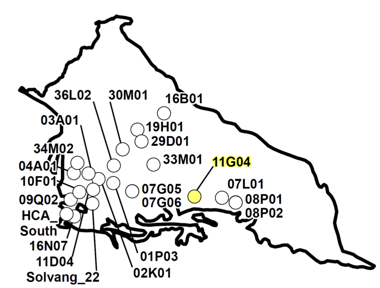
- Ground Surface Elevation
- Groundwater Elevation
- Groundwater Elevation - 11G01
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Well Details

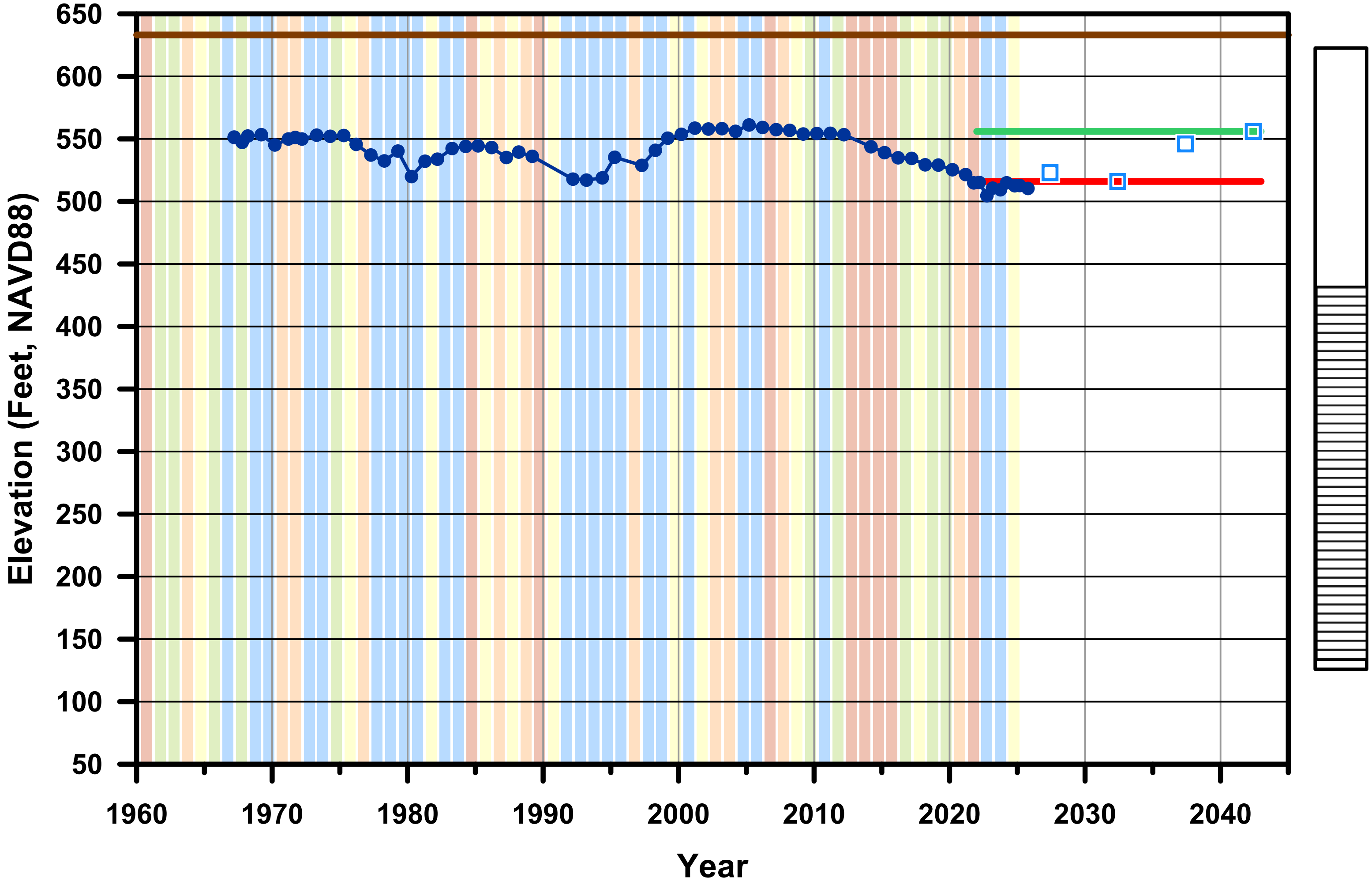
Screen Interval



NOTE(S)
Agricultural Well
Depth 400 ft bgs

GSI Water Solutions, Inc.

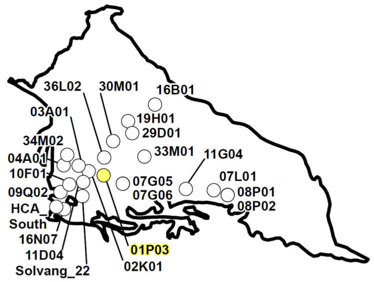
APPENDIX B
6N/31W-01P03
Paso Robles Formation



LEGEND
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type
- Wet
- Above Normal
- Below Normal
- Dry
- Critical

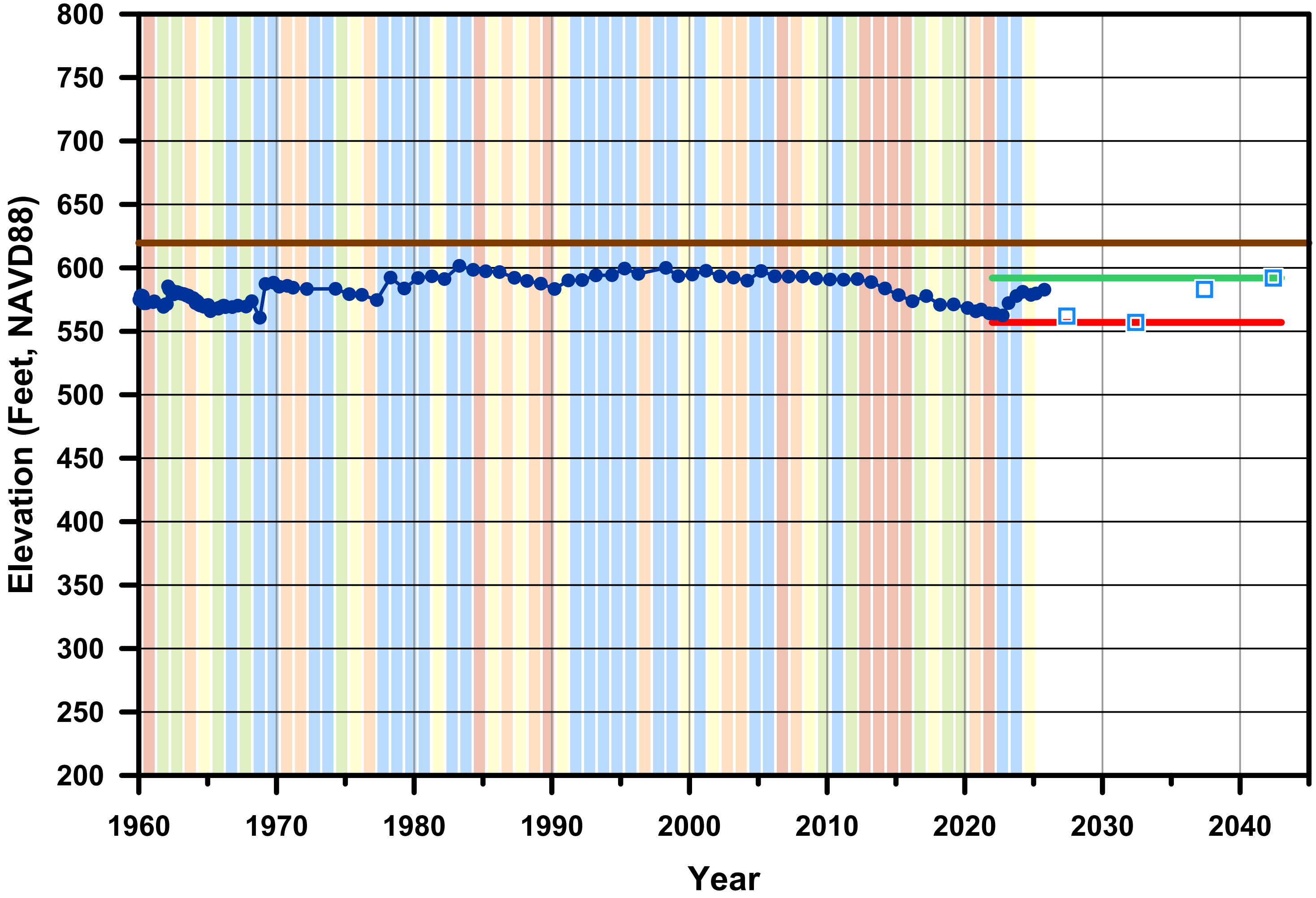
Well Details
- Screen Interval



NOTE(S)
Municipal Well
Depth = 505 ft bgs

\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 6N31W01P03 SMC

APPENDIX B
6N/31W-02K01
Paso Robles Formation

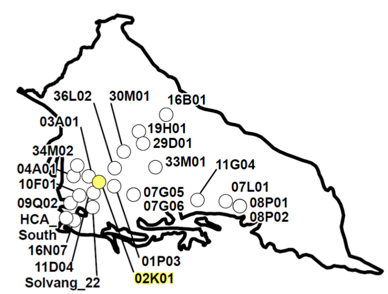


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

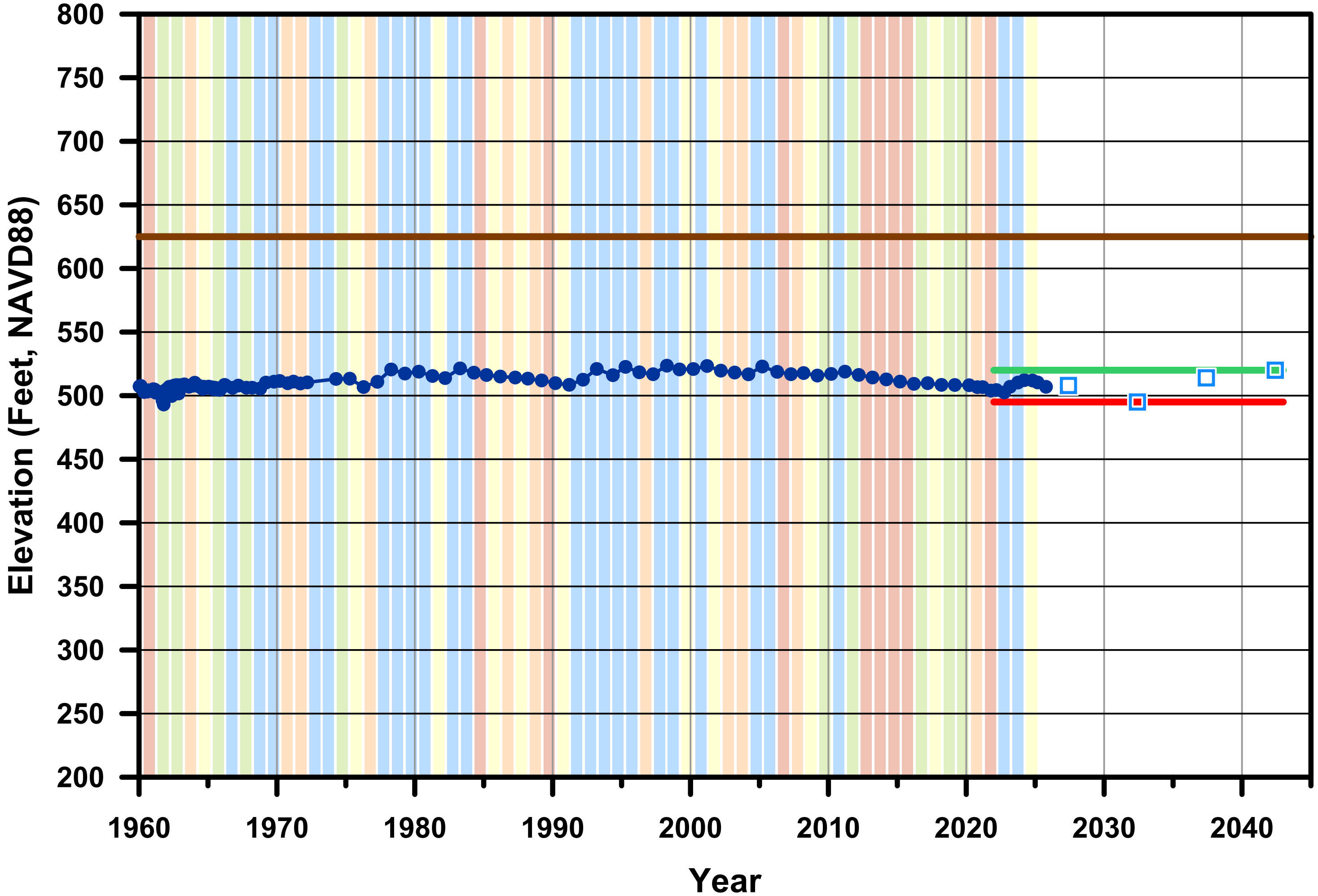
- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)
Domestic Well
Unknown Depth

GSI Water Solutions, Inc.

APPENDIX B
6N/31W-13D01
Paso Robles Formation



LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

NOTE(S)
Domestic Well
Depth = 152 ft bgs

GSI Water Solutions, Inc.

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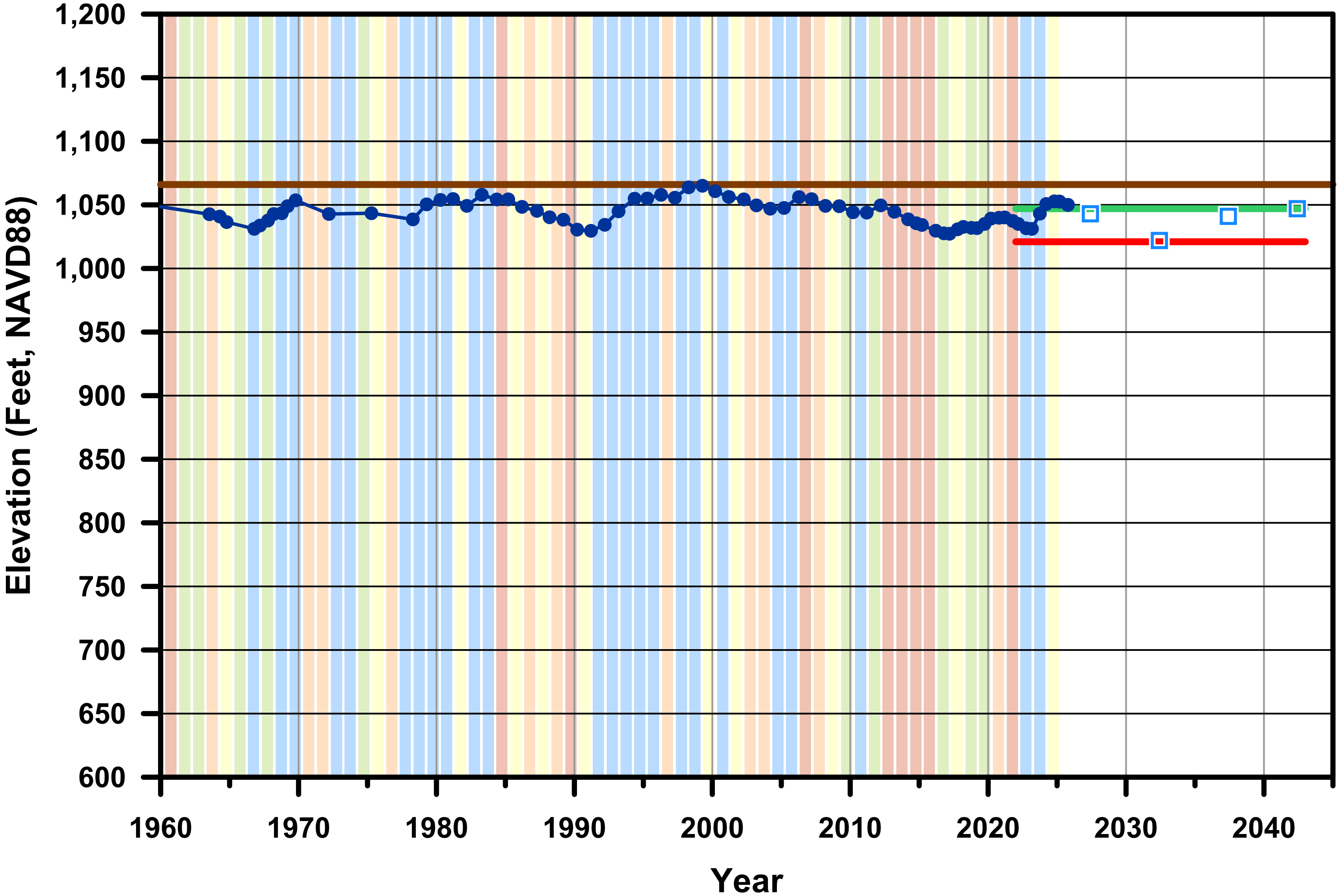
APPENDIX B
7N/30W-16B01
Paso Robles Formation

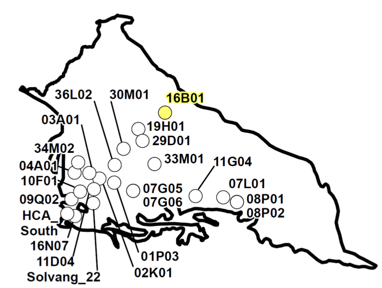


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

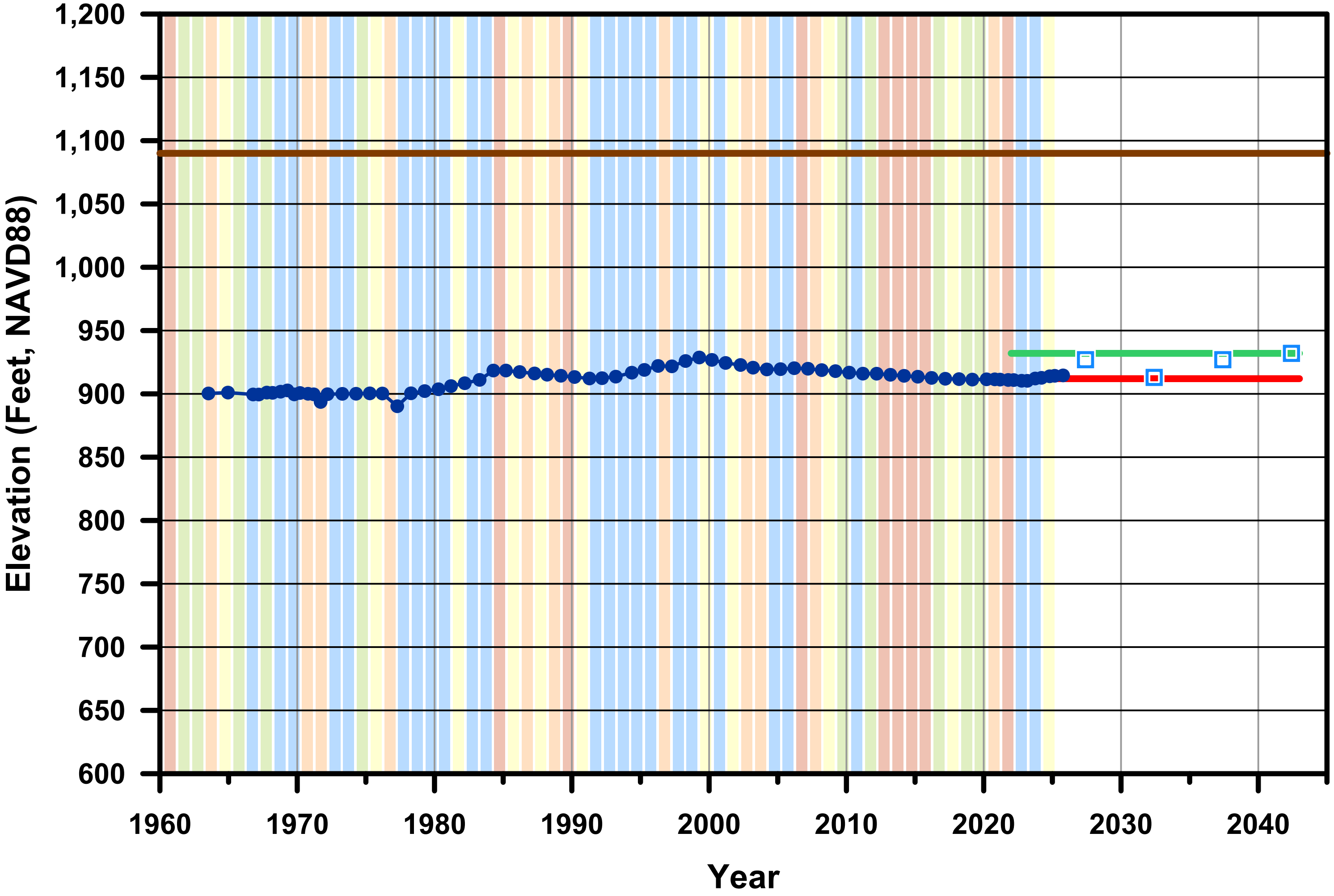


NOTE(S)
Agricultural Well
Unknown Depth

GSI Water Solutions, Inc.

\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 7N30W16B01 SMC

APPENDIX B
7N/30W-19H01
Paso Robles Formation

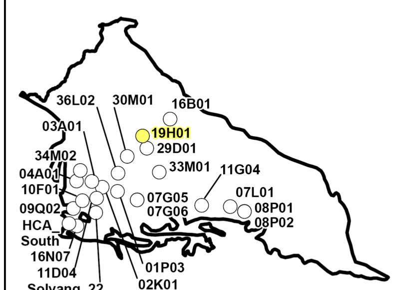


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

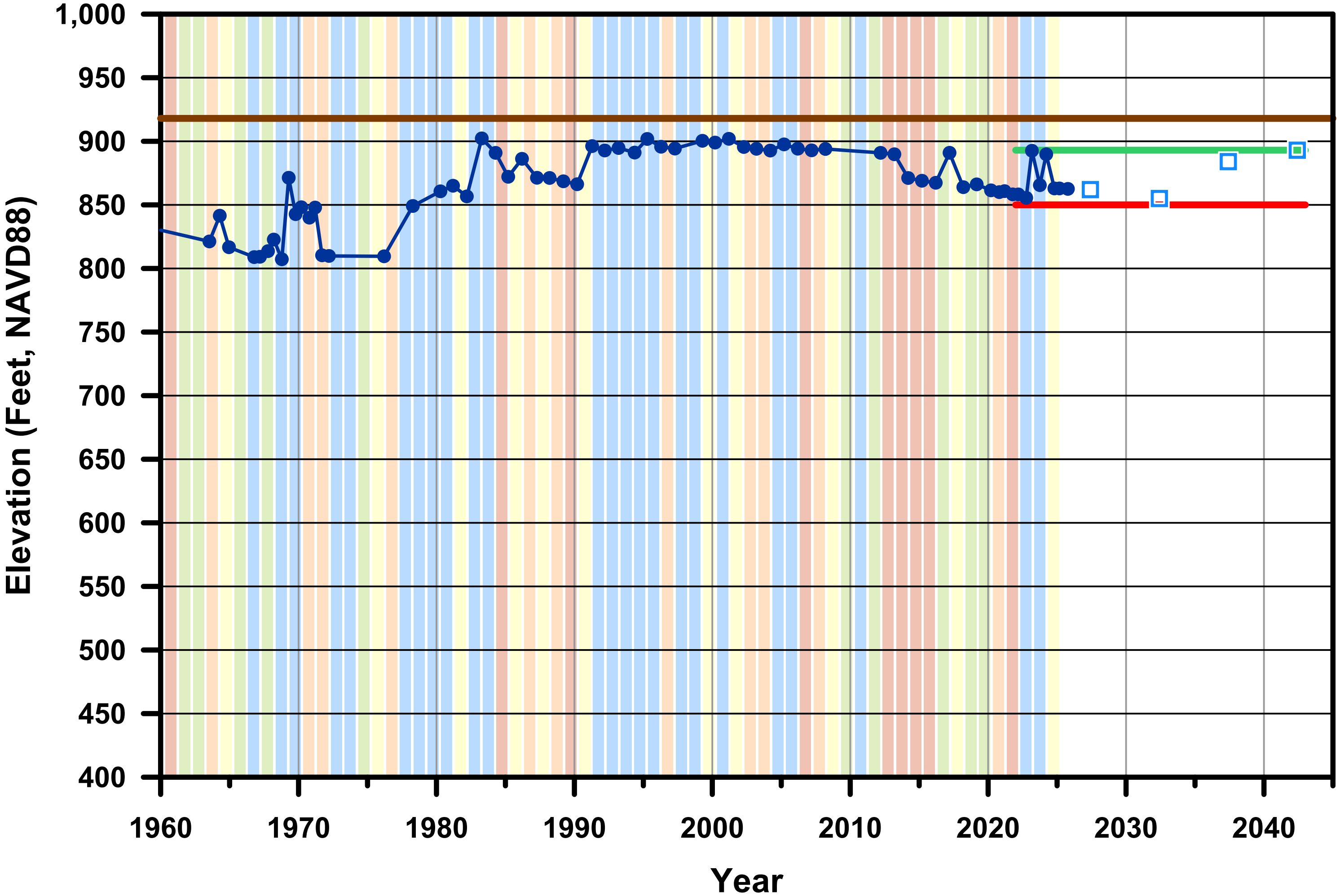


NOTE(S)
Agricultural Well
Unknown Depth

GSI Water Solutions, Inc.

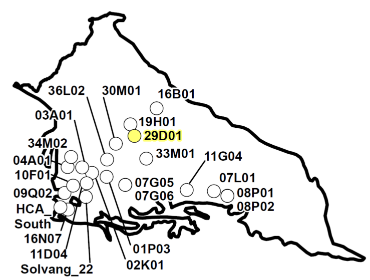
\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 7N30W19H01 SMC

APPENDIX B
7N/30W-29D01
Paso Robles Formation



LEGEND
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

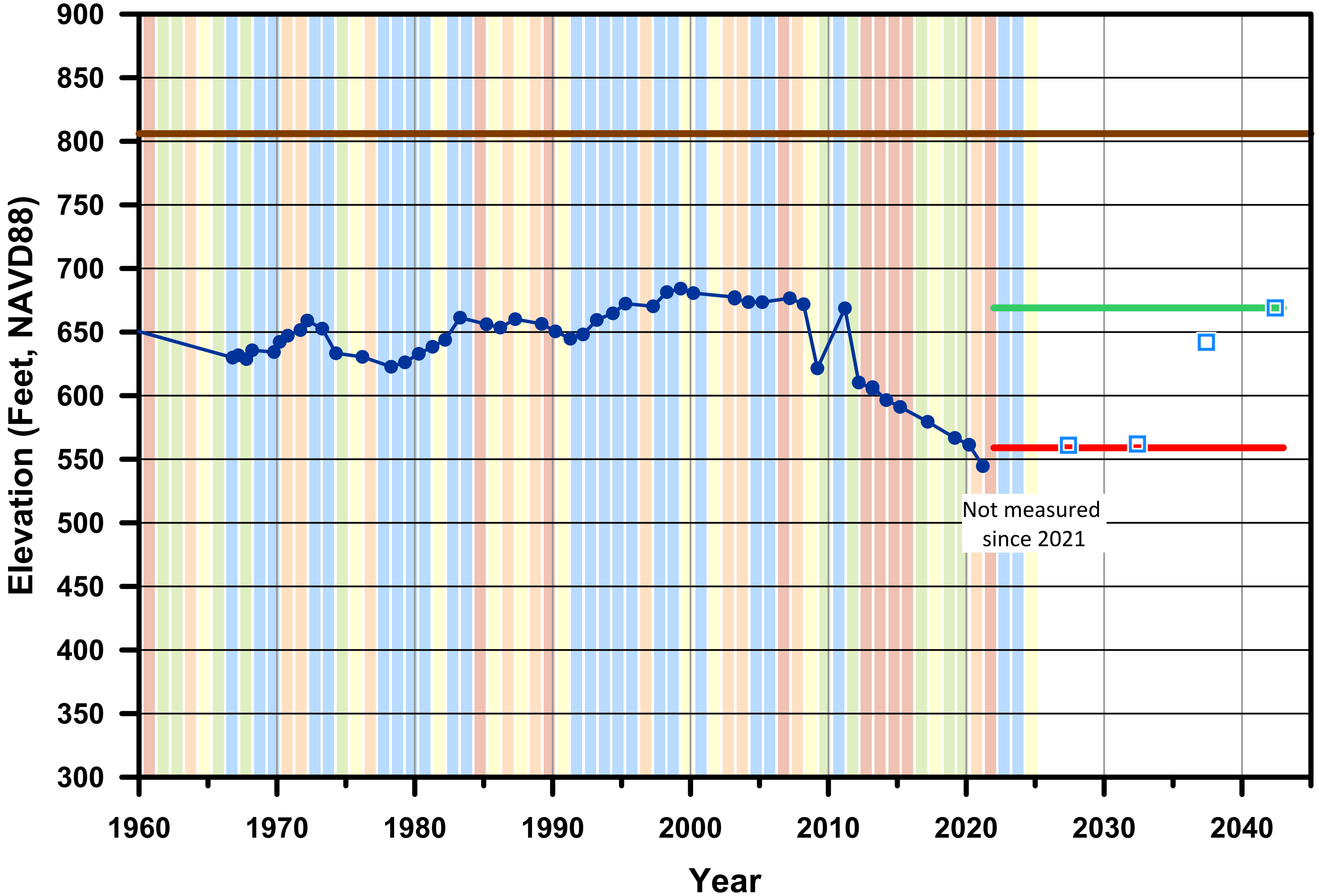
Water Year Type
- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)
Agricultural Well
Unknown Depth

GSI Water Solutions, Inc.

\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 7N30W29D01 SMC



APPENDIX B

7N/30W-30M01

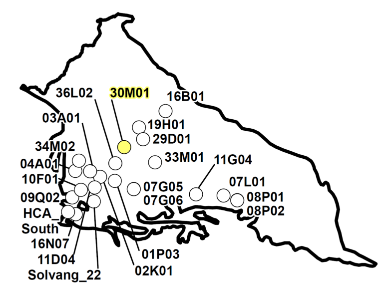
Paso Robles Formation

LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)

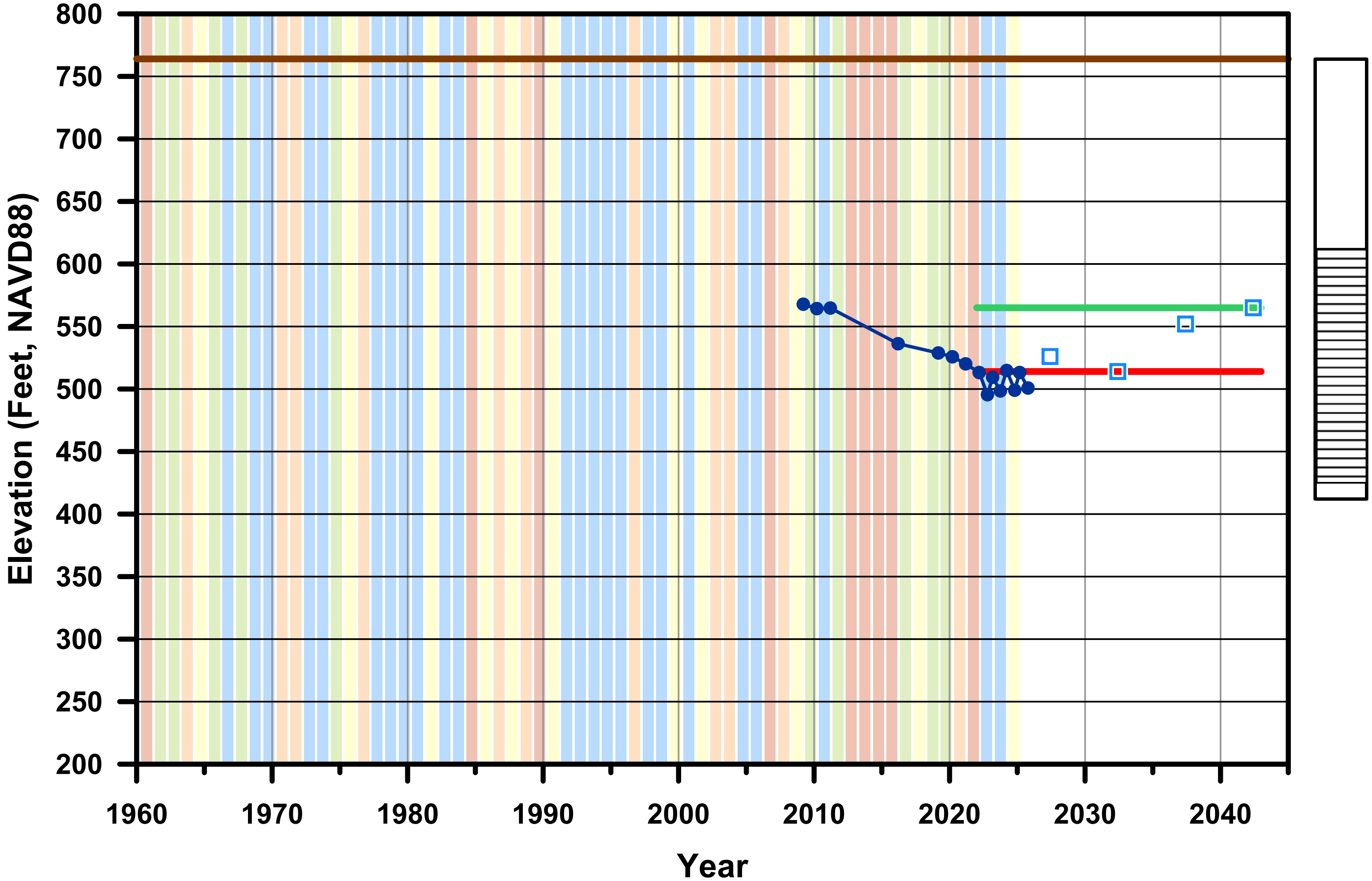
Agricultural Well

Unknown Depth

APPENDIX B

7N/30W-33M01

Paso Robles Formation



LEGEND

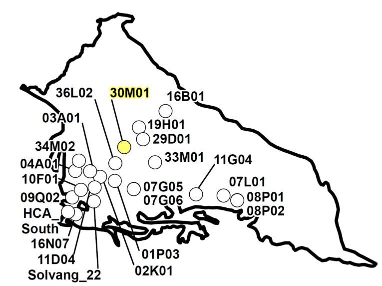
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Well Details

- Screen Interval



NOTE(S)

Agricultural Well

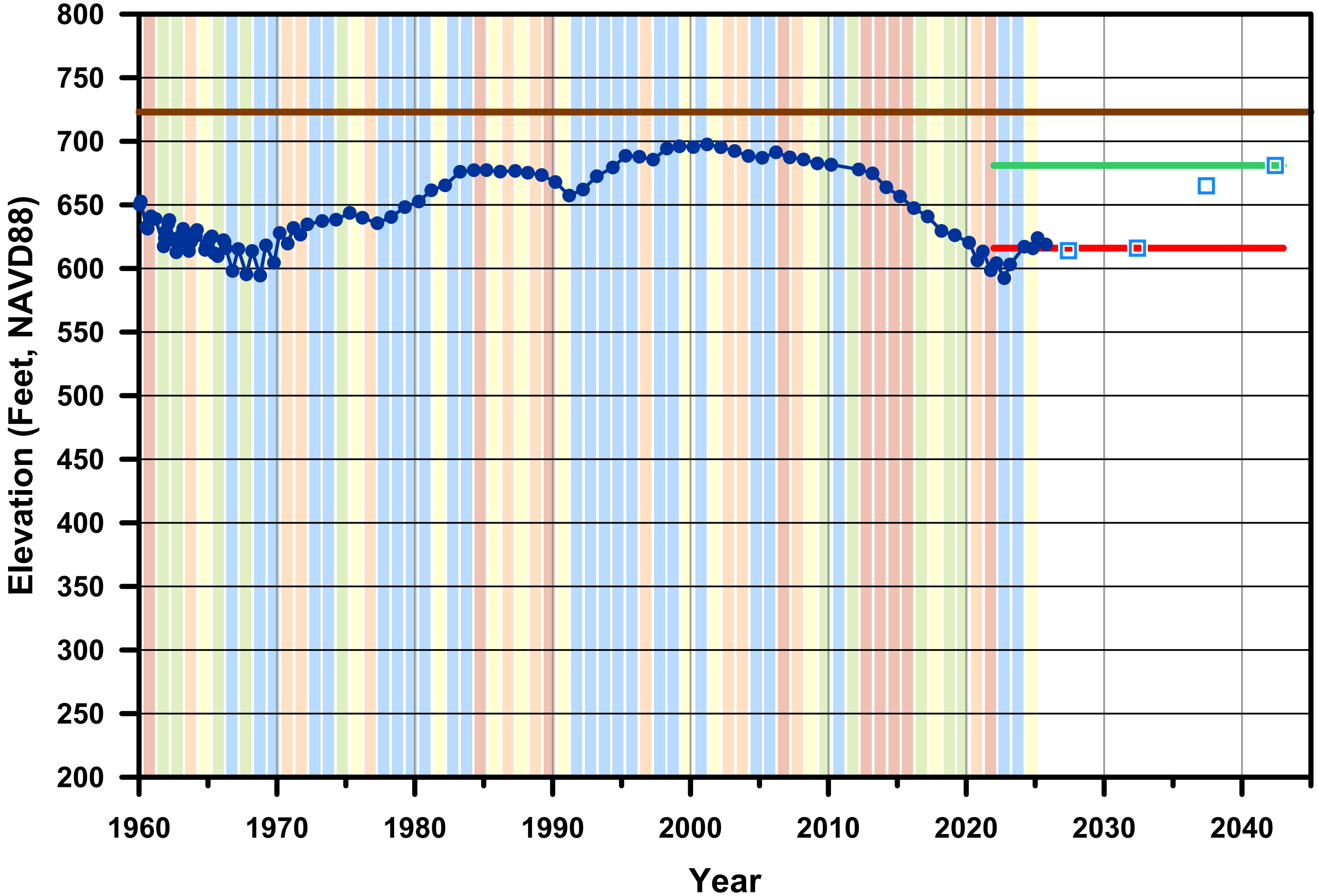
Depth = 349 ft bgs

GSI Water Solutions, Inc.

APPENDIX B

7N/31W-36L02

Paso Robles Formation

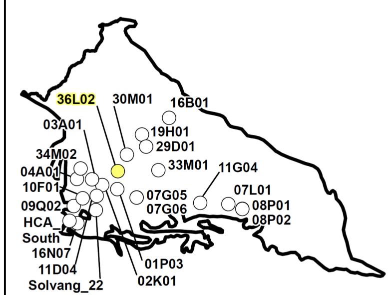


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)

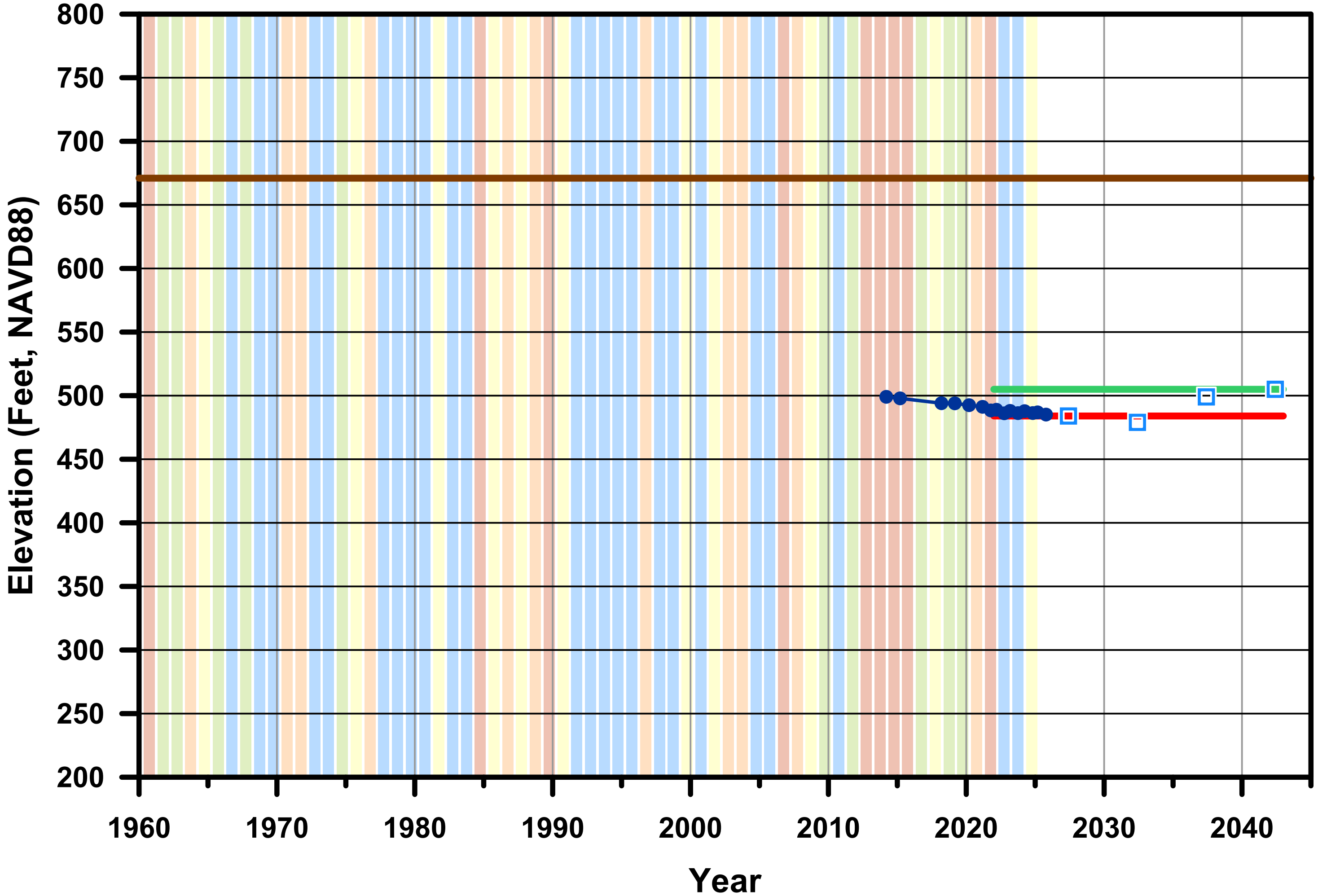
Domestic Well

Unknown Depth

GSI Water Solutions, Inc.

\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 7N31W36L02 SMC

APPENDIX B
7N/31W-34M02
Careaga Sand

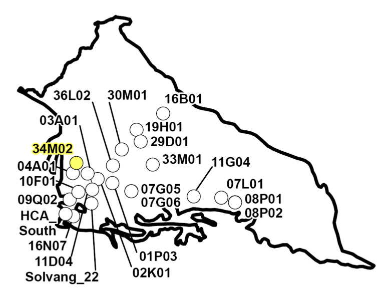


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

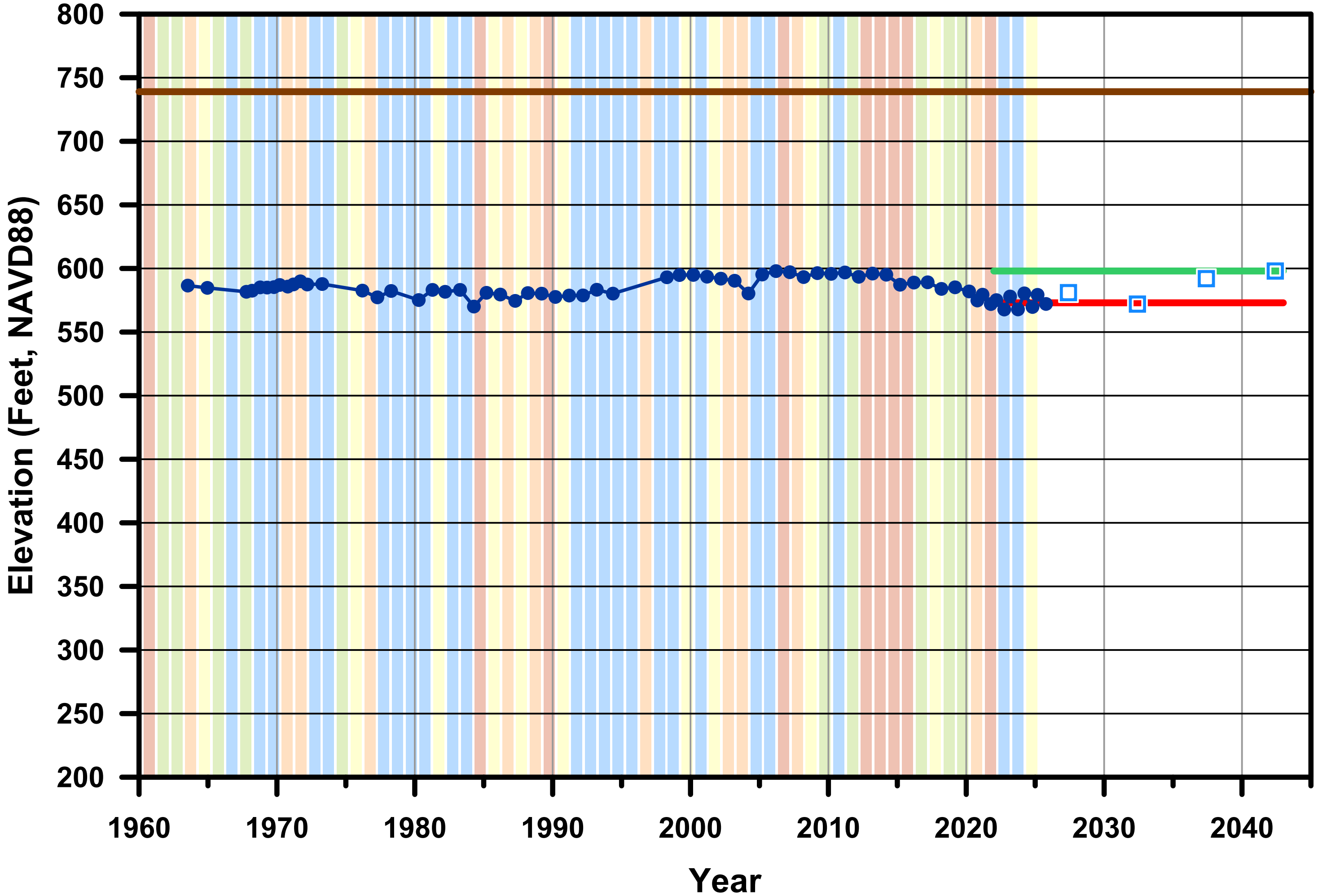
- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)
Agricultural Well
Unknown Depth

\\GSICLOUD\Projects\515-SYRWCD\010 - Santa Ynez EMA Annual Report 2025\Data\Water Levels\Grapher SantaYnezEMA_Hydrograph 7N31W34M02 SMC

APPENDIX B
6N/31W-03A01
Careaga Sand

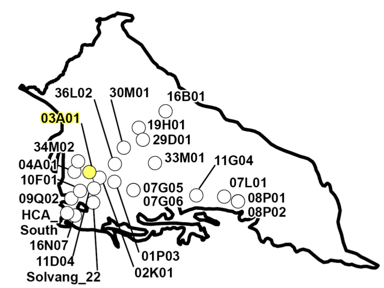


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

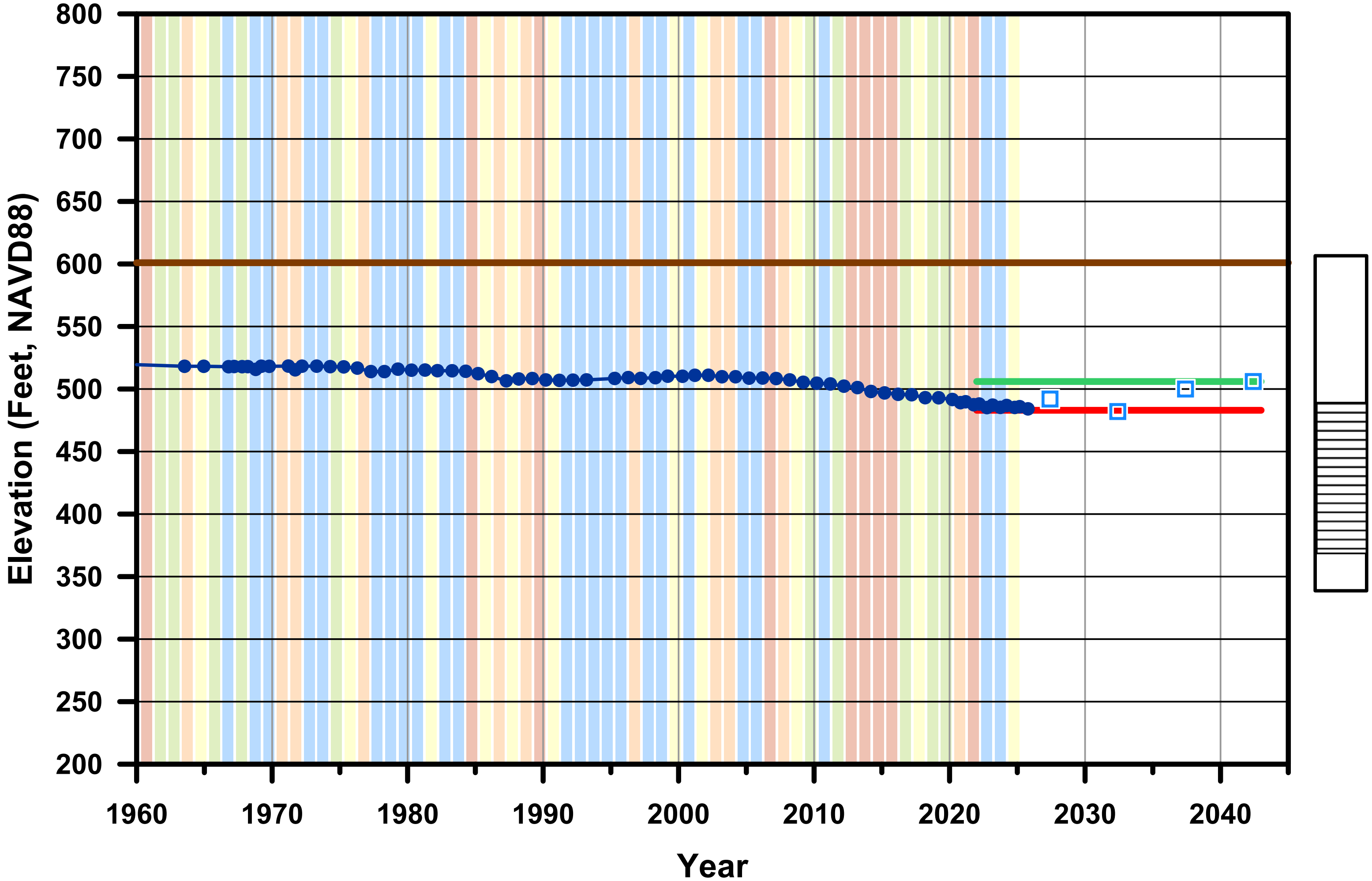
- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)
Domestic Well
Unknown Depth

GSI Water Solutions, Inc.

APPENDIX B
6N/31W-04A01
Careaga Sand



LEGEND

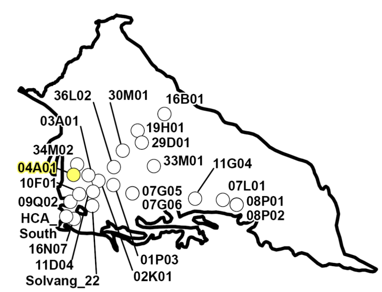
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

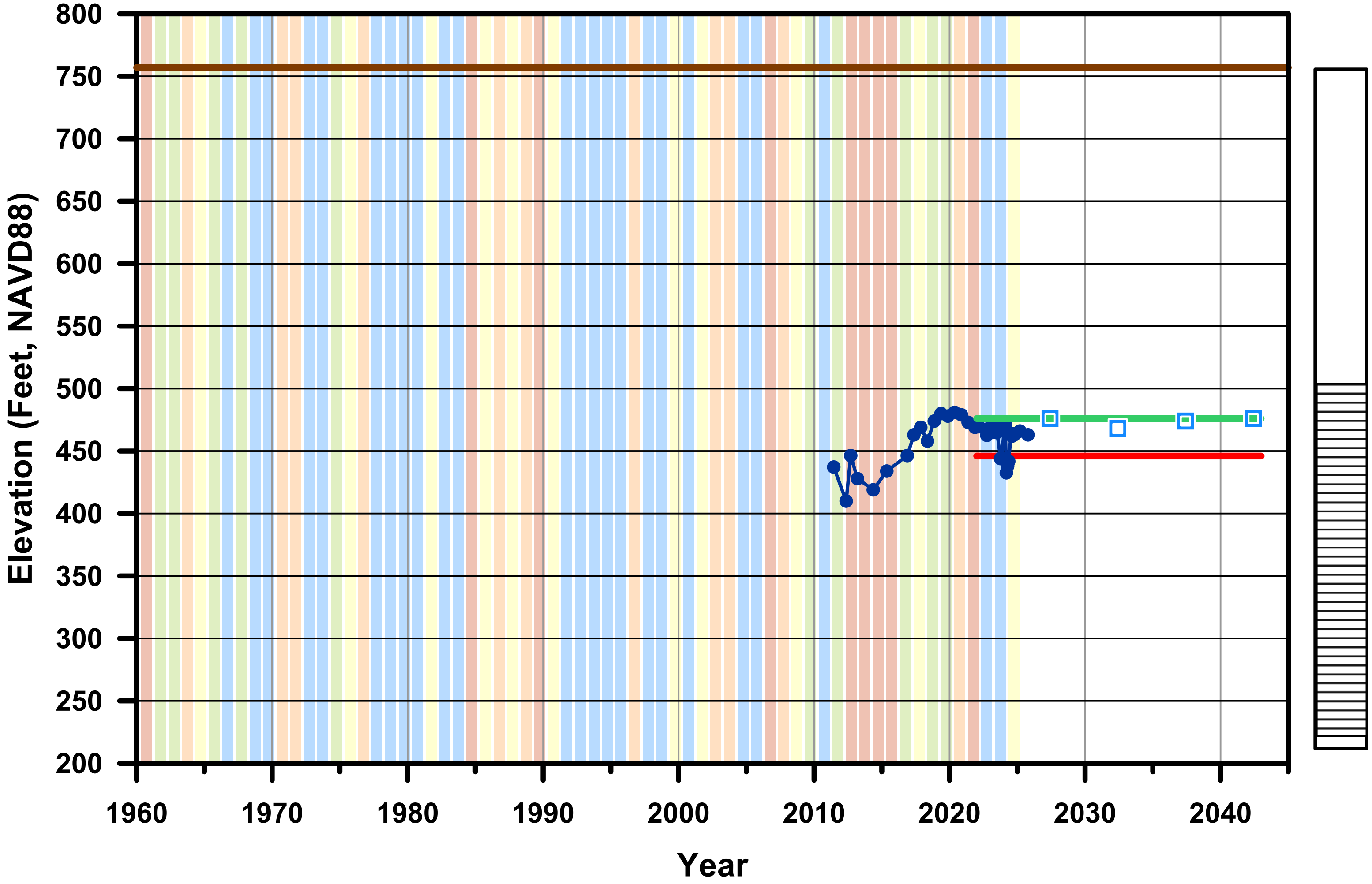
Well Details

- Screen Interval



NOTE(S)
Domestic Well
Depth = 259ft bgs

APPENDIX B
6N/31W-09Q02
Careaga Sand



LEGEND

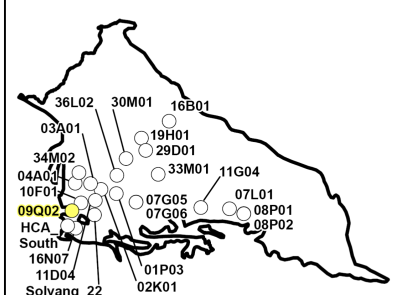
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Well Details

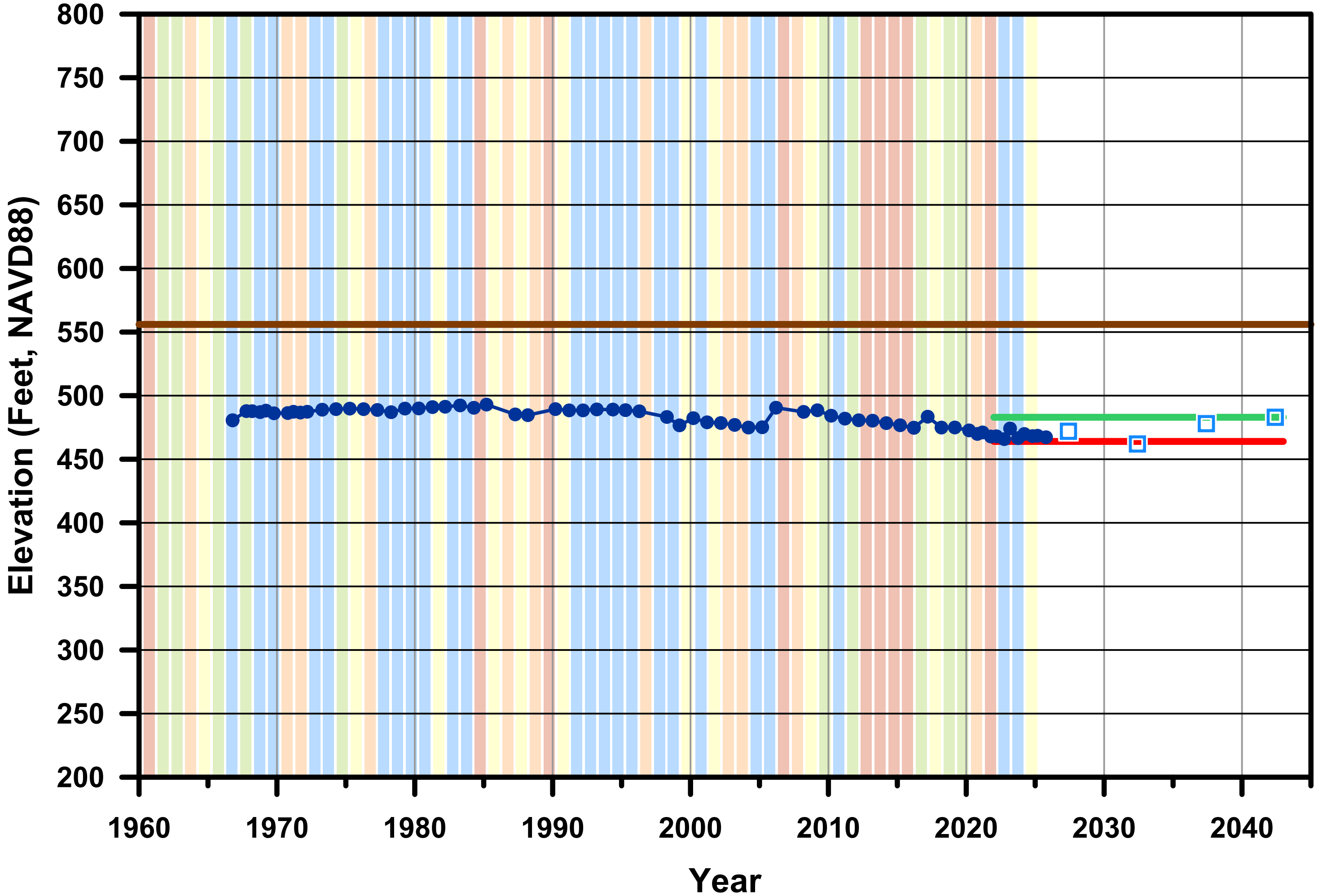
Screen Interval



NOTE(S)
Municipal Well
Depth = 550 ft bgs

GSI Water Solutions, Inc.

APPENDIX B
6N/31W-10F01
Careaga Sand

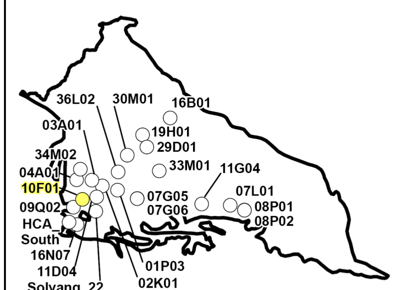


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

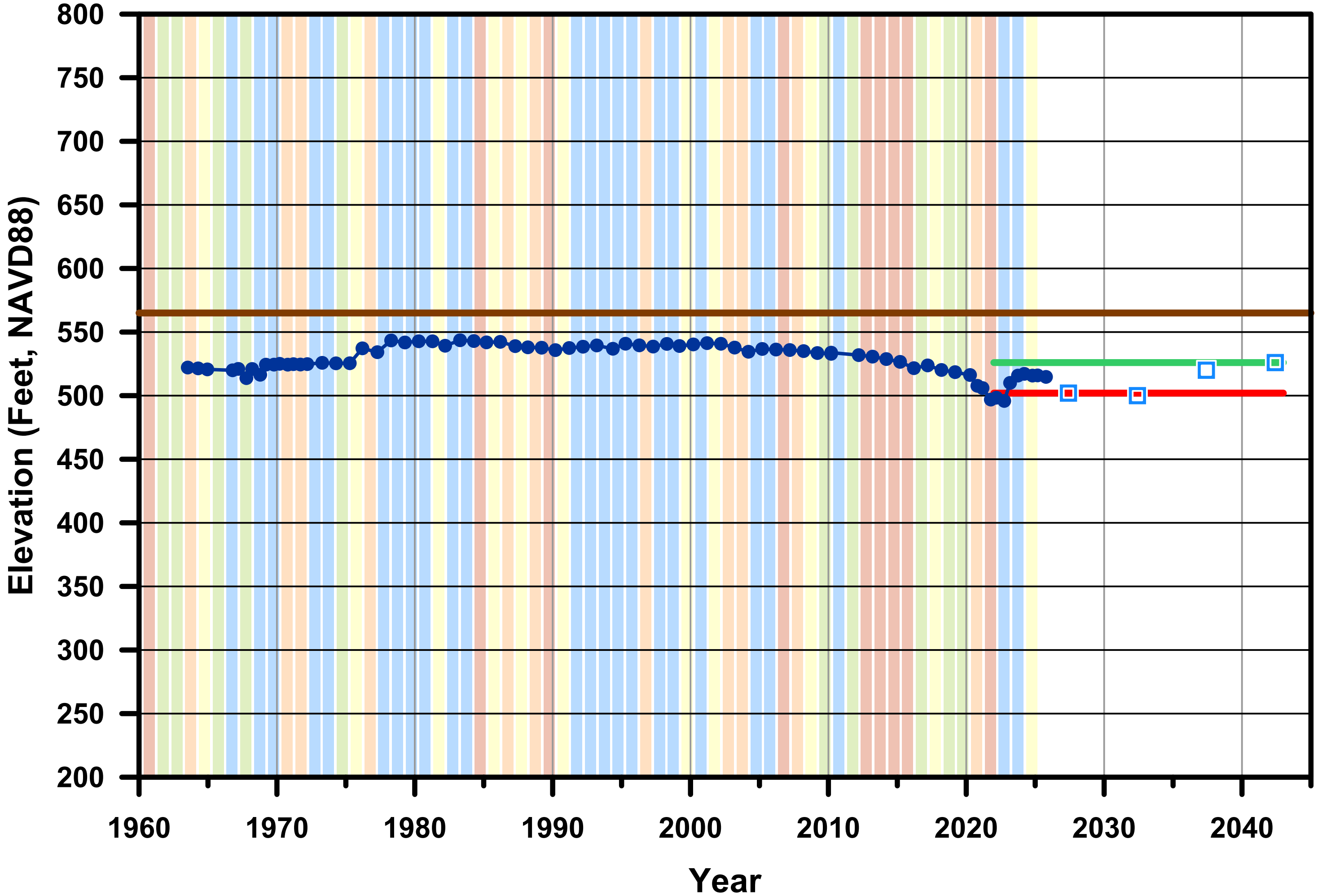
Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)
Agricultural Well
Depth = 265 ft bgs

APPENDIX B
6N/31W-11D04
Careaga Sand

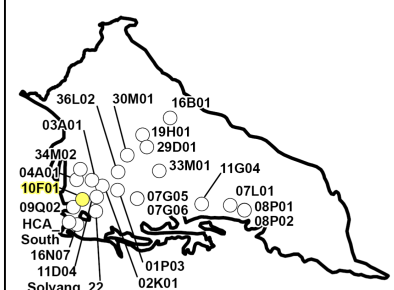


LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



NOTE(S)
Agricultural Well
Depth = 447 ft bgs

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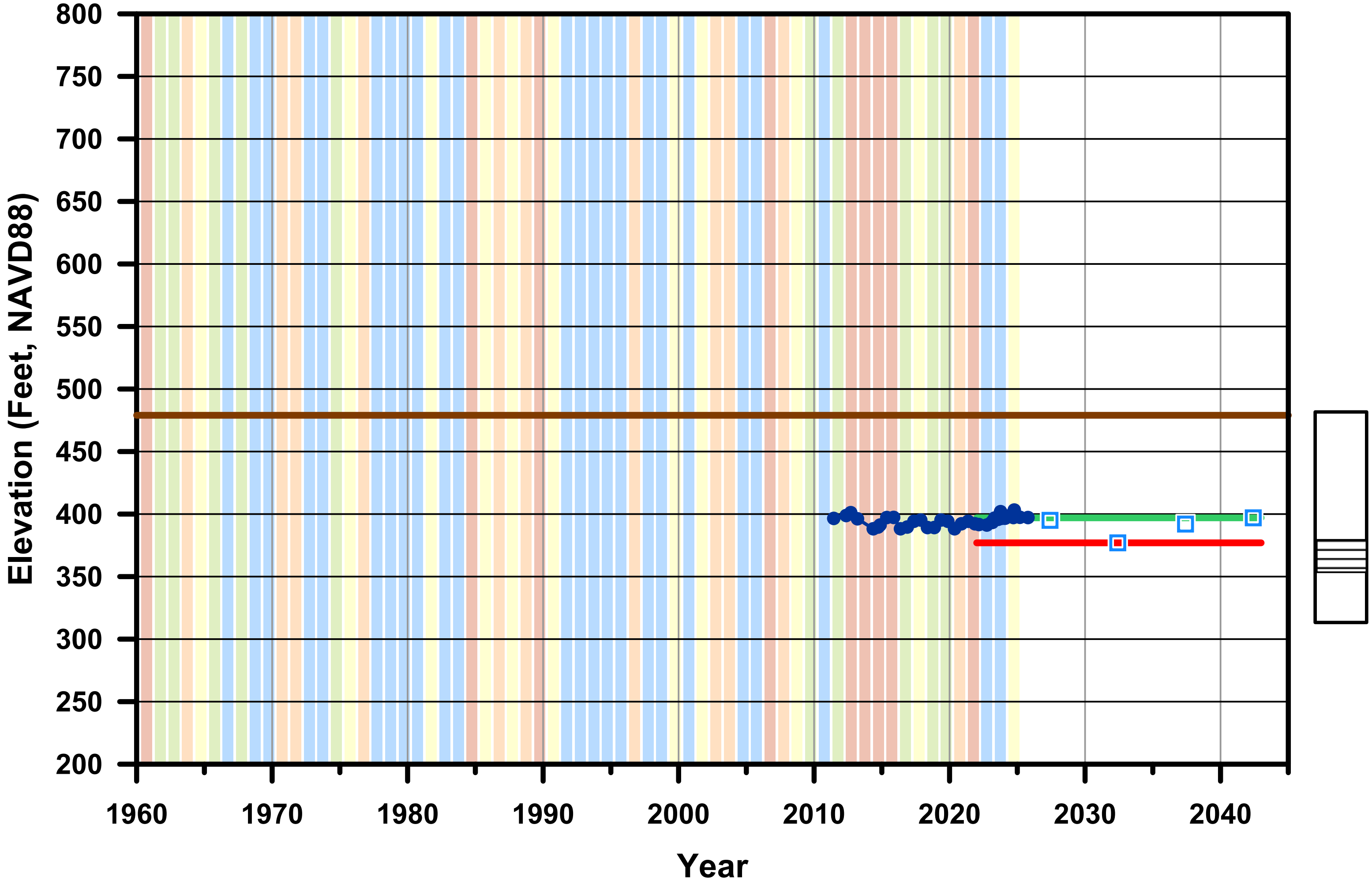
APPENDIX B
6N/31W-16N07
Careaga Sand



LEGEND

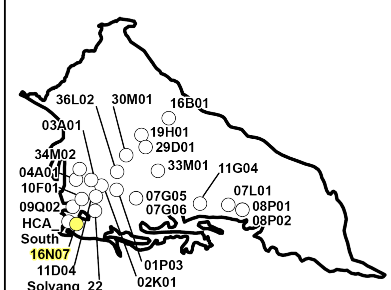
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

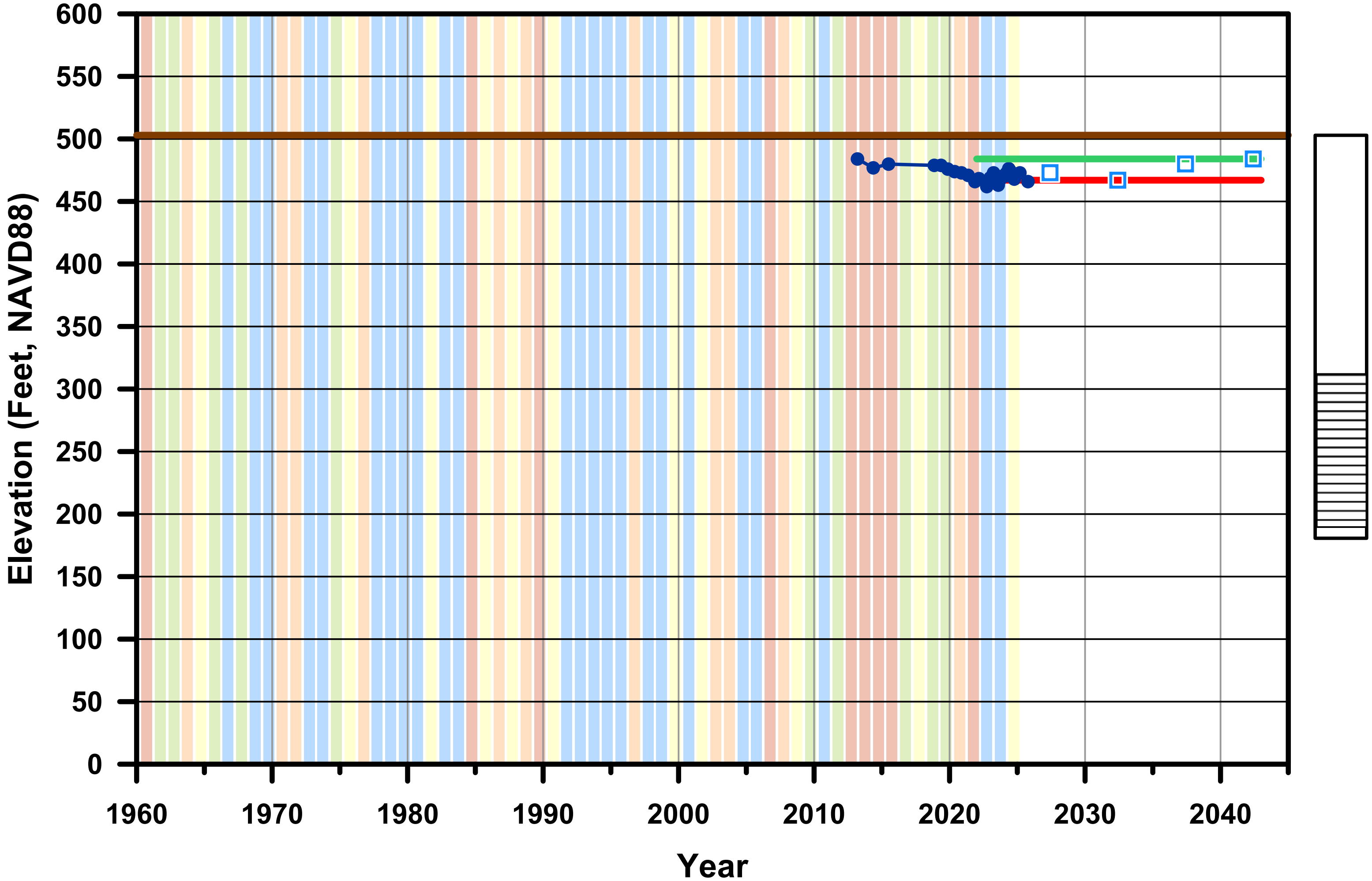
Well Details

Screen Interval



NOTE(S)
Municipal Well
Depth = 145 ft bgs

APPENDIX B
6N/31W-___ Solvang 22
Careaga Sand



LEGEND

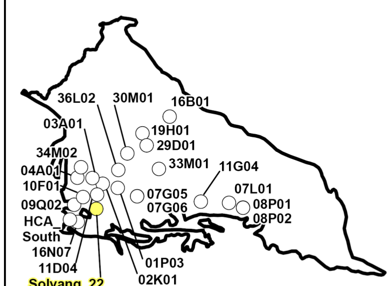
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Well Details

- Screen Interval



NOTE(S)
Municipal Well
Depth = 392 ft bgs

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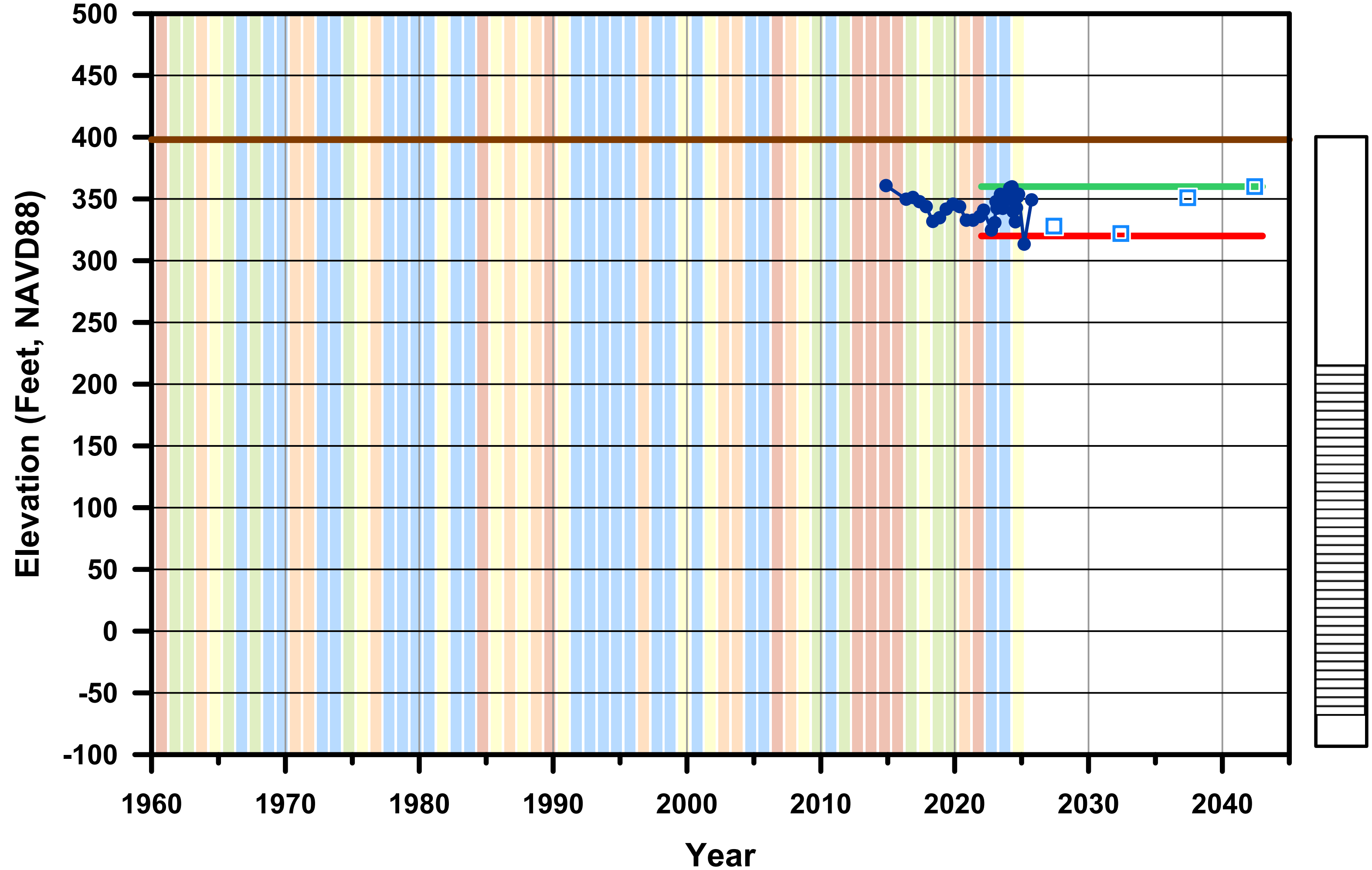
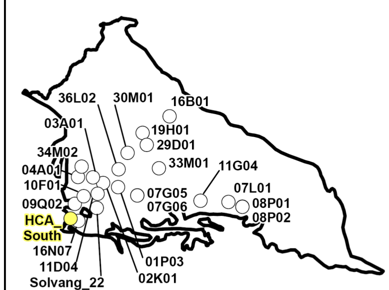
APPENDIX B
HCA Solvang
Careaga Sand



LEGEND
- Ground Surface Elevation
- Groundwater Elevation
- Measurable Objective
- Minimum Threshold
- Interim Milestone

Water Year Type
- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Well Details
- Screen Interval



NOTE(S)
Municipal Well
Depth = 490 ft bgs

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WATER YEAR 2025
JOINT REPORT

STETSON
ENGINEERS INC.

GSI
Water Solutions, Inc.