Santa Barbara County 2025 Groundwater Basins Summary Report

Cattle at windmill-fed stock tank in the Cuyama Valley Groundwater Basin

Public Works Department
Water Resources Division, Water Agency
October 2025

SANTA BARBARA COUNTY

Public Works Department

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Copies of this report can be located online at:
http://www.countyofsb.org/pwd/SBCoGroundwater.sbc

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ACRONYMS:

AF	Acre Feet
AFY	Acre Feet/Year
CASGEM	California Statewide Groundwater Elevation Monitoring
DWR	California Department of Water Resources
ENSO	El Niño-Southern Oscillation
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
SBCWA	Santa Barbara County Water Agency
MSL	Mean Sea Level
NOAA	National Oceanic and Atmospheric Association
NWIS	National Water Information System
SBCWA	Santa Barbara County Water Agency
SGMA	Sustainable Groundwater Management Act
SMVWCD	Santa Maria Valley Water Conservation District
SYRWCD	Santa Ynez River Water Conservation District
TMA	Twitchell Management Authority
USGS	United States Geological Survey
USBR	United States Bureau of Reclamation
VSFB	Vandenberg Space Force Base
WSEL	Water Surface Elevation
WY	Water Year

EXECUTIVE SUMMARY

Climate data analyses indicate a warming trend in the western United States with a 10% overall decrease in precipitation[1]. Santa Barbara County had been experiencing an extended dry climate cycle, where nine of the last fifteen years brought below-average precipitation totals. However, Water Years (WY)[2] 2023 and 2024 were the wettest of the past 13 years, with proportionally more rain accumulation (vs normal) along the south-coast in 2024. WY2025 precipitation was 51% of normal across the county, with dry conditions through January and average rainfall in February and March. The El Niño-Southern Oscillation (ENSO) phase for this season was classified as a weak La Niña, in contrast to the previous season which was a moderate to strong El Niño.

Many local agencies, including the Santa Barbara County Water Agency (SBCWA), monitor changing trends in groundwater storage with annual discrete measurements of water level elevations. Groundwater levels serve as a fundamental gauge of sustainability within a groundwater basin. These measurements are completed each spring (hydrologic maximum) and compared to previous years' levels. Results of recent measurements indicate that many of the groundwater basins within the county showed signs of recovery and stabilization following above-average precipitation in Water Year 2019 (128%), near-average precipitation in WY2020 (92%), and well above-average precipitation in WYs 2023 (202%) and 2024 (143%). Water levels in a majority of basins at varying depths show stability or considerable improvement in WY2024, as a result of two consecutive wet years and a reduction in groundwater pumping. Agricultural pumping tends to be reduced during wet years due to higher soil moisture levels, which decreases the need for additional irrigation. Despite below average precipitation in WY2025, groundwater levels increased in most South Coast basins. In contrast, other basins show mixed trends, with water levels varying based on factors such as subbasin location and well depth. These variations reflect the complex hydrogeologic conditions and uneven distribution of recharge across the region. Overall, most water levels remain above 2022 levels measured prior to two years of above-average precipitation.

The following charts illustrate the recent changes and effect of precipitation on groundwater recharge. These charts show water level elevations below land surface for selected wells for the last eleven years (represented by blue line) along with total precipitation within the basin (represented by gray bars). Additionally, water level trends may react differently between wells and can be highly variable throughout a basin. These graphs therefore do not represent trends observed in all monitoring wells within the basin, but should be considered a general representation of overall trends. Additional details are in the main body of this report.

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[1] National Oceanic and Atmospheric Administration. (2021, August 10). U.S. Climate Normals. https://www.ncei.noaa.gov/products/land-based-station/us-climate-normals

[2] Each Water Year runs from September 1 through August 31 and is designated by the calendar year in which it ends

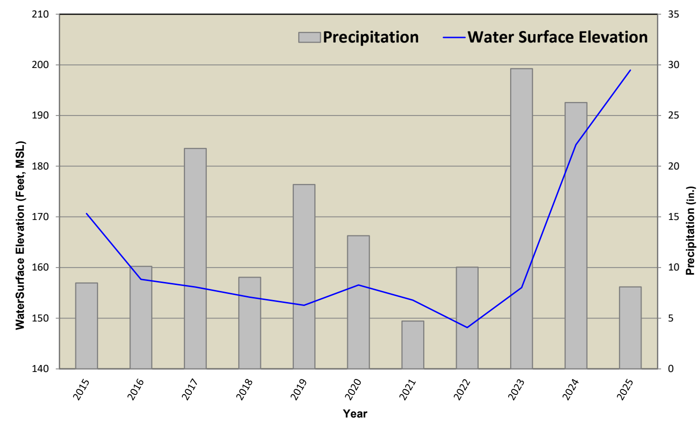
SOUTH COAST GROUNDWATER BASINS

CARPINTERIA GROUNDWATER BASIN

<u>Carpinteria</u>: State Well 4N/25W-26A1
Land Surface Elevation 425'
Well Depth 480'

SUMMARY: Water levels approached historic lows during the 2012–2018 drought, then rose following above-average precipitation in 2017 and 2019. In 2025, data show continued water level increases in the basin center, with declines along the western and eastern margins. Despite recent decreases in some areas, groundwater levels remain above 2022 levels due to two consecutive years of above-average precipitation in 2023 and 2024.

A 2024 Annual Report show an estimated 5,839 AF increase in basin groundwater storage in Storage Unit No. 1[3].

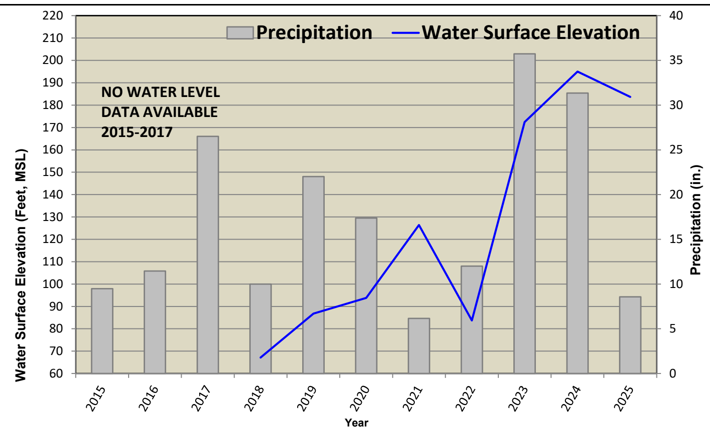


MONTECITO GROUNDWATER BASIN

<u>Montecito</u>: Site Code 344389N1196326W002
Land Surface Elevation 220'
Well Depth 400'

SUMMARY: Water levels remained stable or increased after above-average precipitation in 2017 and 2019, but 2025 data show most wells declined after a dry year.

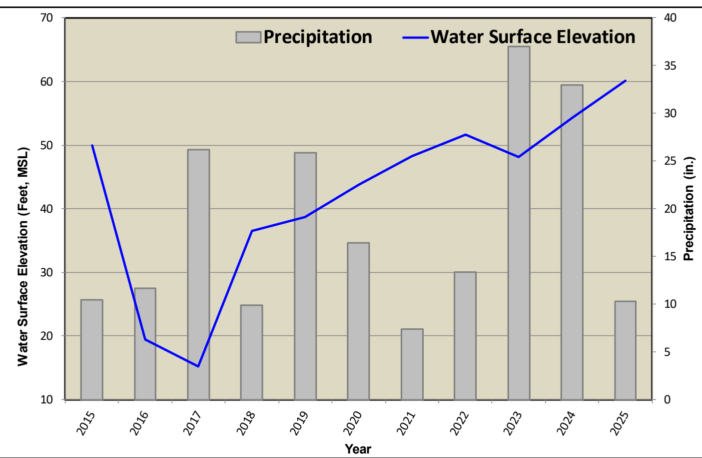
A 2024 Annual Report shows an estimated 434 AF increase in basin groundwater storage[4]. This value may change due to ongoing model updates.



SANTA BARBARA GROUNDWATER BASIN

<u>Santa Barbara</u>: State Well 4N/27W-15E1
Land Surface Elevation 145'
Well Depth N/A

SUMMARY: Recent water level trends show a steady increase starting in 2017 after above-average precipitation. Data from 2025 indicates rising water levels throughout the basin. Water levels in the basin rose most in the north, with smaller increases and some declines toward the coast.



[3] GSI Water Solutions Inc., "Carpinteria Groundwater Basin Water Year 2024 Annual Report" accessed June 26, 2025, https://sgma.water.ca.gov/portal/gspar/preview/474

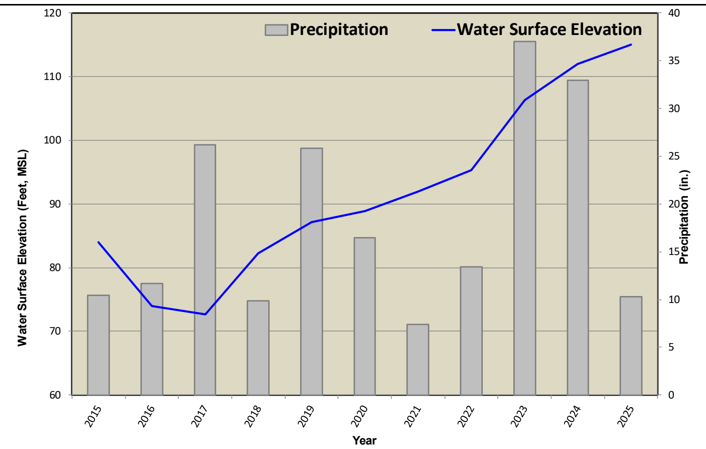
[4] DUDEK, "2025 Annual Report, Montecito Groundwater Basin Groundwater Sustainability Plan" accessed June 26, 2025, https://sgma.water.ca.gov/portal/gspar/preview/402

FOOTHILL GROUNDWATER BASIN

<u>Foothill</u>: State Well 4N/28W-12H4
Land Surface Elevation 176'
Well Depth 290'

SUMMARY:

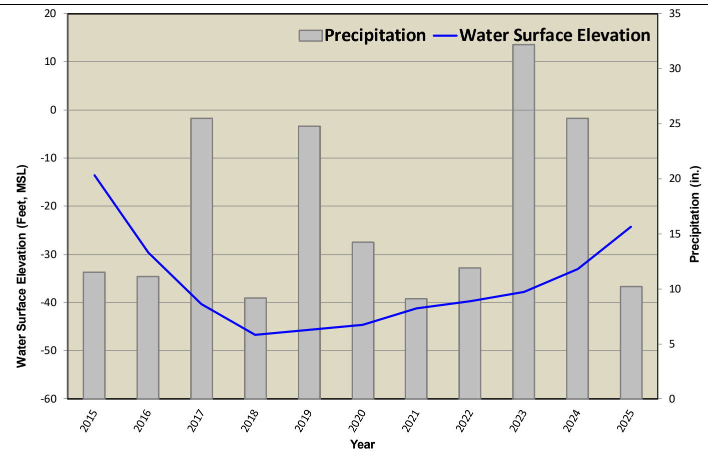
Recent water level trends show a steady increase starting in 2017 after above-average precipitation. Data from 2025 indicates rising water levels throughout the basin.



GOLETA GROUNDWATER BASIN

<u>Goleta</u>: State Well 4N/28W-9J2
Land Surface Elevation 67'
Well Depth 400'

SUMMARY: Water level trends began to stabilize starting in 2018 after significant declines. Recent data from 2025 indicate a large majority of water levels throughout the basin have remained stable or increased during the past year.



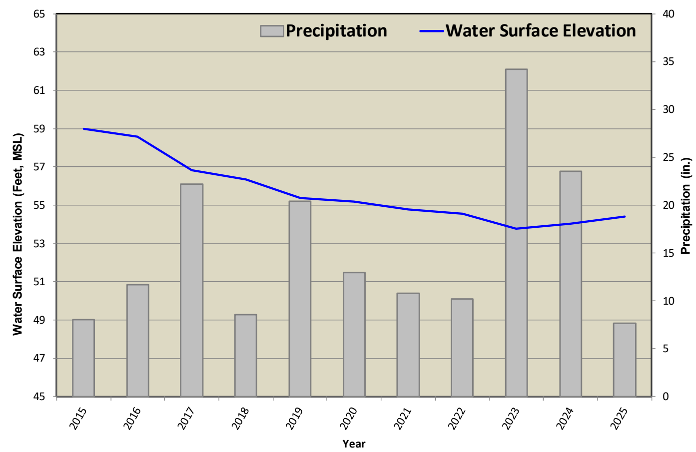
SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN

WESTERN MANAGEMENT AREA (WMA)

<u>Lompoc Uplands</u>: State Well 7N/34W-12E1
Land Surface Elevation 386'
Well Depth 385'

SUMMARY: The Lompoc Terrace and western Lompoc Plain show little long-term change, with seasonal fluctuations tied to climate. The Lower Aquifer in the Lompoc Plain and Santa Rita Uplands continues to show long-term declines, while the Upper Aquifer remains relatively stable. Water levels in the Santa Ynez River Alluvium remain mostly stable, with seasonal variation influenced by surface water flows. Water level data from 62 wells in the WMA between spring 2024 and spring 2025 show that 56% of wells experienced declines, while 44% remained stable or increased. Most increases occurred in the Lompoc Uplands, eastern Lompoc Plain, and coastal areas. Despite some recent declines, groundwater levels in many areas remain above 2022 levels, following two years of above-average precipitation.

A 2024 Annual Report shows an estimated 600 AF increase in basin groundwater storage[5].

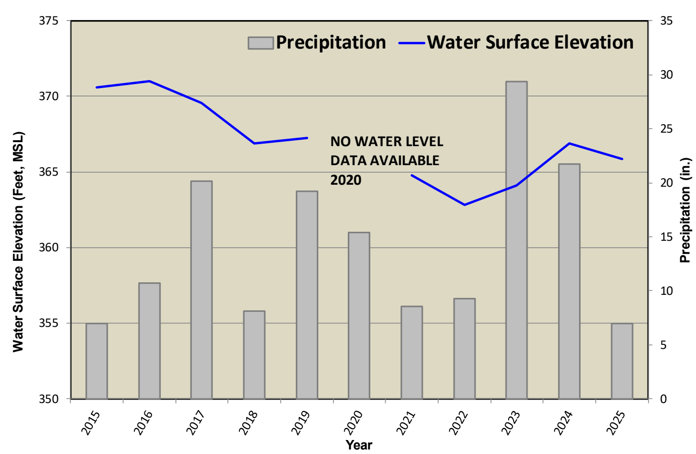


CENTRAL MANAGEMENT AREA (CMA)

<u>Buellton Uplands</u>: State Well 7N/33W-36J1
Land Surface Elevation 453'
Well Depth 190'

SUMMARY: Water levels in shallow alluvial wells have remained stable over time, while other wells in the area show fluctuations tied to precipitation. During the recent drought, both shallow and deep wells north of the river alluvium experienced declines, with partial recovery after above-average precipitation. In Water Year 2025, most monitored wells show renewed declines. Of the 12 wells with comparable data, 11 declined by 0.5 to 9.0 feet, while one well at the east end of the alluvium rose by 3.7 feet. Despite recent declines, most wells remain above 2022 levels.

A 2024 Annual Report shows an estimated 1,000 AF increase in basin groundwater storage[6].



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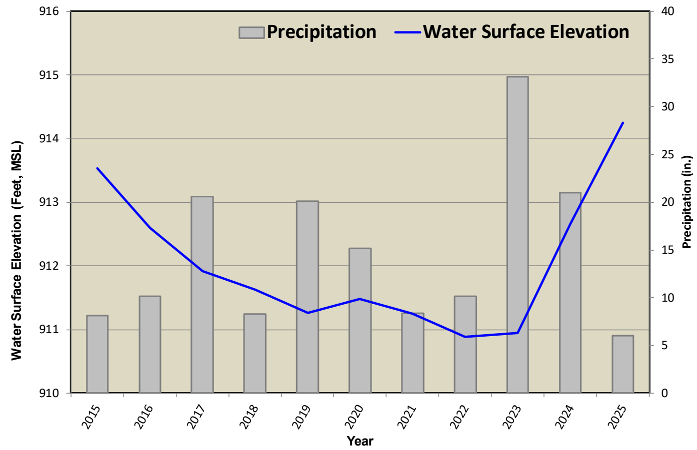
[5] Stetson Engineers Inc., "Annual Report Water Year 2024 for the Santa Ynez River Valley Groundwater Basin Bulletin 118 Basin No. 3-15 Joint Report of the Groundwater Sustainability Agencies", accessed July 26, 2025, https://www.cma-santaynezwater.org/files/4d46e5087/Basin_3-015_WY_2024_AR-submitted2025-03-19.pdf

[6] Stetson Engineers Inc., "Annual Report Water Year 2024 for the Santa Ynez River Valley Groundwater Basin Bulletin 118 Basin No. 3-15 Joint Report of the Groundwater Sustainability Agencies", accessed July 26, 2025, https://www.cma-santaynezwater.org/files/4d46e5087/Basin_3-015_WY_2024_AR-submitted2025-03-19.pdf

EASTERN MANAGEMENT AREA (EMA)
Santa Ynez Uplands: State Well 7N/30W-19H1
Land Surface Elevation 1090'
Well Depth N/A

SUMMARY: Groundwater levels in the Paso Robles Formation are generally stable but decline during droughts, with some wells dropping over 100 feet before recovering in wetter years. The Careaga Sand shows long-term stability, likely due to low pumping and limited well yields. Water levels across the region vary with land use and recharge, with recent declines in the west and gradual drops in the eastern uplands and foothills. In spring 2025, 77% of wells showed declines ranging from 0.7 to 45.4 feet, while the rest remained stable or increased—one by 33.0 feet. Despite these declines, most wells remain above 2022 levels due to earlier above-average precipitation.

A 2024 Annual Report shows an estimated 6,114 AF increase in basin groundwater storage[7].

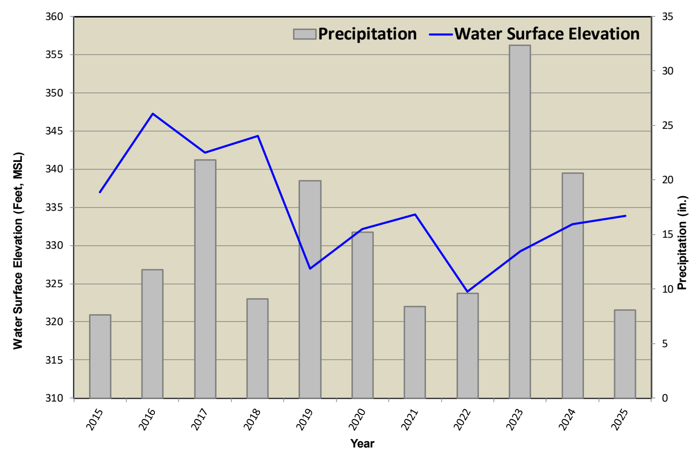


SAN ANTONIO CREEK VALLEY GROUNDWATER BASIN

San Antonio Valley: State Well 8N/33W-20Q2
Land Surface Elevation 408'
Well Depth 260'

SUMMARY: Water levels have declined throughout the basin since the 1950s, with more rapid declines starting around 2000. Spring 2025 data show mixed groundwater trends in the Paso Robles and Careaga Formations. In the Paso Robles Formation, 12 of 16 wells declined, mainly near San Antonio Creek, while 4 rose. Careaga data show 12 of 23 wells declined slightly; others remained stable or increased.

A 2024 Annual Report show an estimated 30,340 AF increase in basin groundwater storage[8].



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[7] GSI Water Solutions Inc., "Annual Report Water Year 2024 for the Santa Ynez River Valley Groundwater Basin Bulletin 118 Basin No. 3-15 Joint Report of the Groundwater Sustainability Agencies", accessed July 26, 2025, https://www.cma-santaynezwater.org/files/4d46e5087/Basin_3-015_WY_2024_AR-submitted2025-03-19.pdf

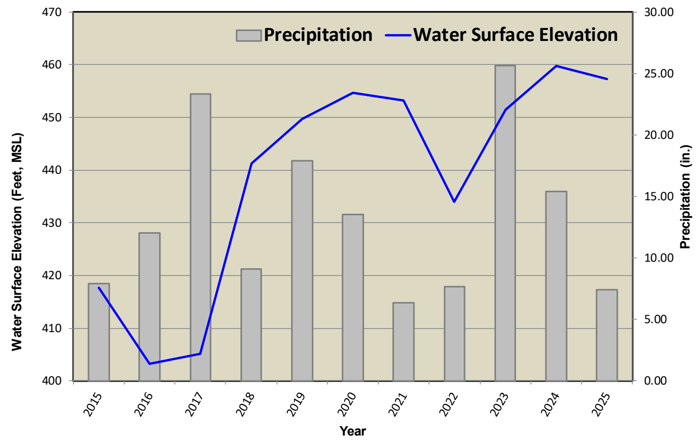
[8] GSI Water Solutions Inc., "DRAFT San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan Water Year 2024 Annual Report", accessed June 26, 2025, https://sanantoniobasingsa.org/wp-content/uploads/SACVB_2024-Annual-Report_DRAFT_v2.pdf

SANTA MARIA RIVER VALLEY GROUNDWATER BASIN

SHALLOW AQUIFER

Sisquoc Valley: State Well 10N/32W-22D1
Land Surface Elevation 495'
Well Depth 203'

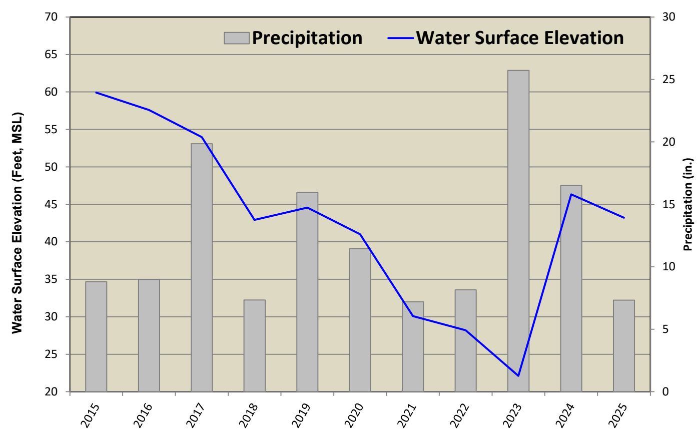
SUMMARY: Water levels in the shallow aquifer have shown long-term fluctuations influenced by land use, climate, and river discharge, with historic lows reached in the late 1960s. While levels generally stabilized after that, they began steadily declining again after 2002, with sharper drops during the 2012 drought. Recent above-average precipitation has led to noticeable improvements, though declines were still observed in many wells between spring 2024 and spring 2025. Of 18 wells with comparable data, 66% showed declines ranging from 2.2 to 26.5 feet, mainly near the Santa Maria River, while increases ranged from 2.6 to 13.6 feet. Overall, shallow aquifer levels remain significantly above spring 2022 measurements and historic lows.



DEEP AQUIFER

Twitchell Recharge: State Well 10N/33W-30G1
Land Surface Elevation 320'
Well Depth 662'

SUMMARY: The deep aquifer has followed similar long-term trends, with major declines starting in 1945 and reaching lows in the 1960s, followed by partial recovery through the early 2000s. Since 2002, levels have steadily declined, particularly during the 2012 drought. Between spring 2024 and spring 2025, 50% of the 12 monitored wells showed declines of 3.1 to 23.5 feet, while the remainder showed little change or increases up to 12.3 feet. These changes reflect continued sensitivity to recharge conditions despite recent wet years. However, deep aquifer water levels remain above 2022 levels and historic lows.



State Well 10N/34W-14E5 (2016-2019)

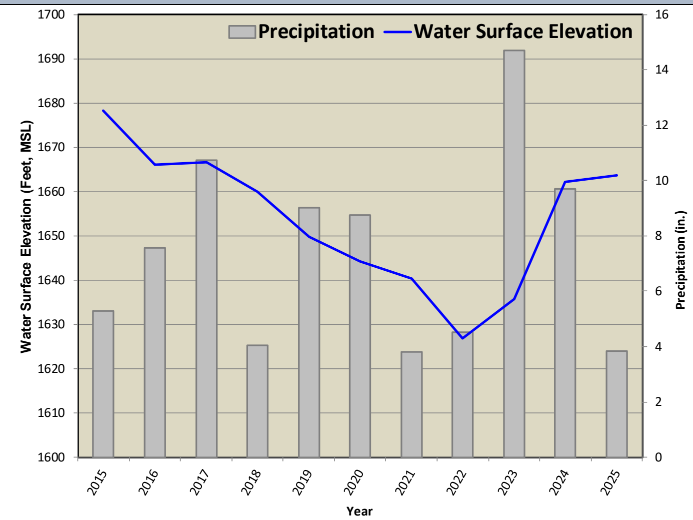
CUYAMA VALLEY GROUNDWATER BASIN

NORTHWESTERN THRESHOLD REGION

Northwestern: OPTI 841
Land Surface Elevation 1,762'
Well Depth 600'

SUMMARY: Water levels in shallow wells have historically remained stable. They continue to remain stable in the western portion of this region. However, deep wells along the river to the east have experienced continued declines with drought and agricultural development since 2016. From spring 2024 to spring 2025, water levels in most wells increased, with one small decline in the west.

A 2024 Annual Report shows an estimated 2,058 AF decrease in total basin groundwater storage[9].

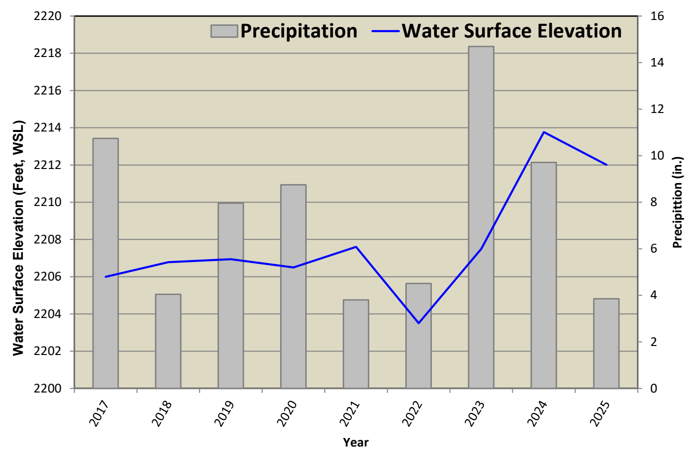


WESTERN THRESHOLD REGION

Sierra Madre Foothill: State Well 10N/26W-4M2 (OPTI 118)
Land Surface Elevation 2,264'
Well Depth 500'

SUMMARY: Water levels in shallow wells are close to the land surface and have generally remained stable for many decades. Recent levels indicate an upward trend. From spring 2024 to spring 2025, most wells declined slightly, while a few near the Central Threshold rose or stayed stable.

2024 results show an estimated 2,058 AF decrease in total basin groundwater storage.

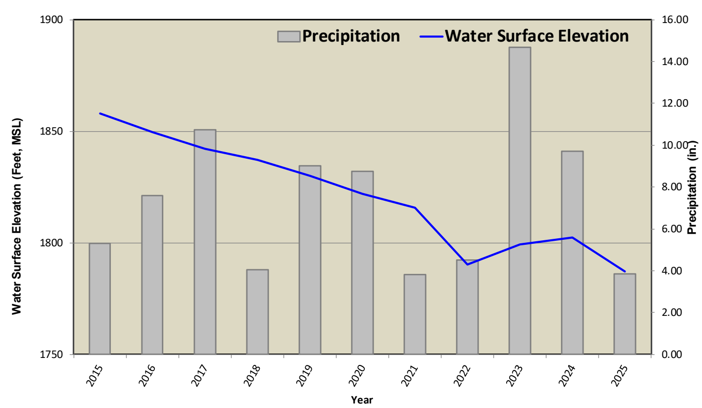


CENTRAL THRESHOLD REGION

Central: State Well 10N/25W-19P4 (OPTI 421)
Land Surface Elevation 2,284''
Well Depth 620'

SUMMARY: Water levels have steadily declined since the late 1940s, with drops nearing 300 feet long-term. From spring 2024 to 2025, most wells showed declines, especially in eastern and southern areas. Some wells remained stable or increased slightly.

A 2024 Annual Report shows an estimated 2,058 AF decrease in total basin groundwater storage.



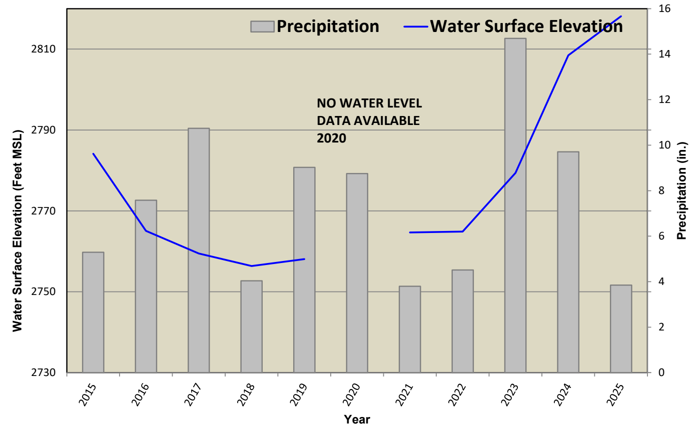
[9] Woodard & Curran, "Cuyama Basin Groundwater Sustainability Plan-Annual Report for 2023-2024 Water Year", accessed June 26, 2025, https://cuyamabasin.org/assets/pdf/WY-2023-24-Cuyama_GSP_Annual_Report_Compiled.pdf

EASTERN THRESHOLD REGION

Ventucopa Uplands: State Well 9N/24W-32C1 (OPTI 62)
Land Surface Elevation 2,920’
Well Depth 212’

SUMMARY: This region has historically remained stable, but the levels declined rapidly during the 2012-2018 drought. In recent years, water level data indicate that the aquifer has stabilized and storage has improved following above-average precipitation in 2017 and 2019 and near-average precipitation in 2020. Water level data from 2025 measurements indicate an increase in levels.

A 2024 Annual Report shows an estimated 2,058 AF decrease in total basin groundwater storage.



INTRODUCTION

This report summarizes current water level conditions and trends in Santa Barbara County's nine major groundwater basins (Figure 1) and provides resources for where to locate these data. The long-term trends of groundwater levels within a network illustrate how stresses on the aquifer system affect storage through time. Groundwater recharge is complex and can vary between and within each groundwater basin as a result of different aquifer materials, local geology, physical barriers, hydrology, evapotranspiration, and human activity. Water levels may rise quickly in shallow wells when these wells are in alluvium along flowing rivers and creeks. However, deeper wells may not show signs of recharge for many months or years following wet seasons. Tracking long-term water level trends and observing the localized responses to these variables allows us to develop a better understanding of our groundwater systems.

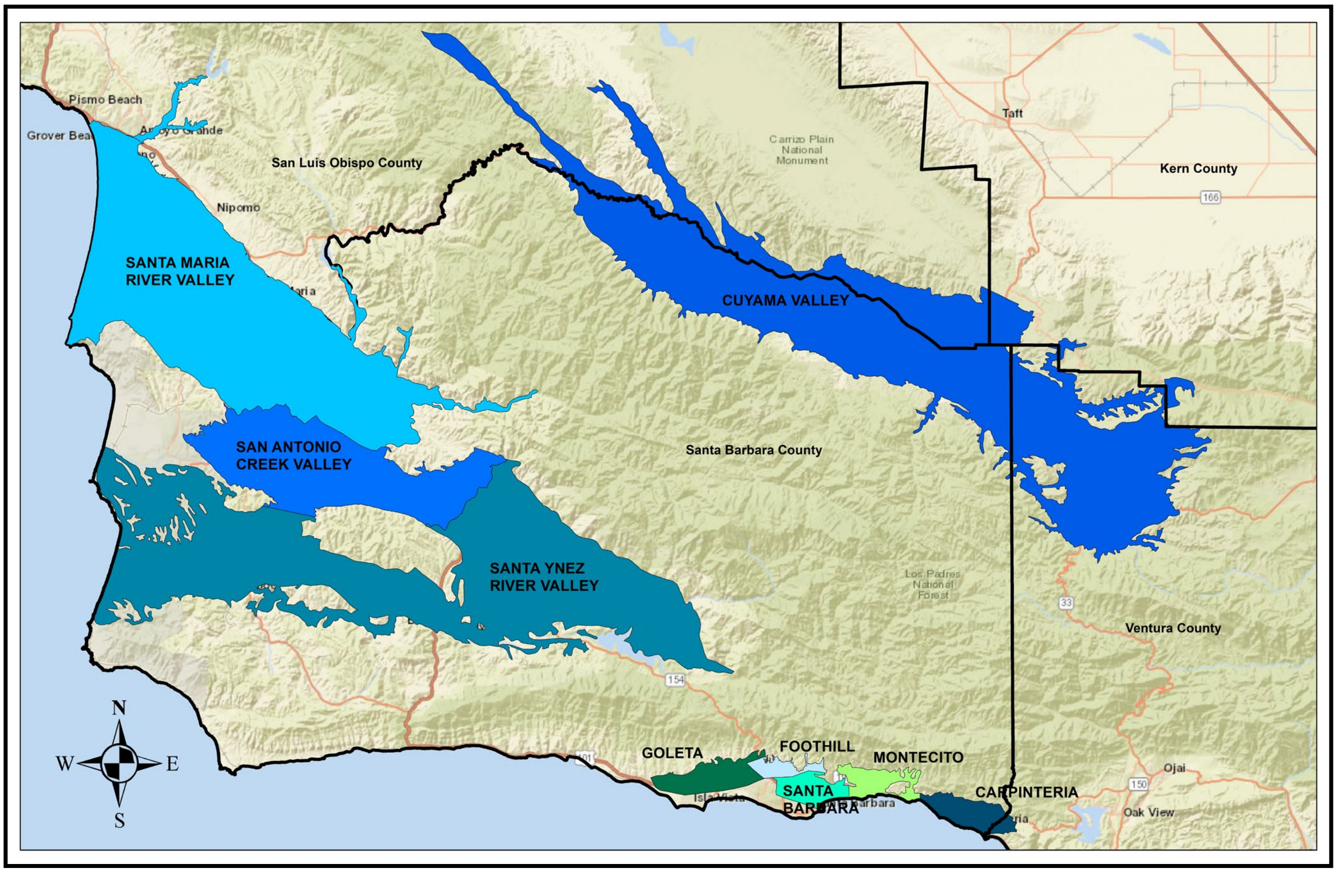


Figure 1: Major groundwater basins of Santa Barbara County

In 2019, the Board of Supervisors directed the Santa Barbara County Water Agency (SBCWA) to prepare an annual report which illustrates groundwater conditions, summarizes the various monitoring programs throughout the County, and provides the resources available for locating groundwater data. Hyperlinked within this report are online data resources available to the public. A variety of public online data resources are also provided in Attachment F. This report only includes groundwater basins defined by the Department of Water Resources (DWR) in Buellton 118. Data within this report is only from areas within the County and excludes any parts of basins outside of Santa Barbara County. Sub-basins within the larger groundwater basins are differentiated as determined by jurisdictional boundaries or natural barriers to groundwater movement. Also included are plotted hydrographs of water surface elevation (WSEL) above mean sea level (MSL) for representative monitoring wells within each basin. Yearly precipitation totals within each basin are plotted with WSEL to illustrate long-term trends and seasonal recharge response. Discrete water level values illustrated in these hydrographs represent yearly maximum aquifer levels[10] during early spring (usually March) and before significant agricultural pumping resumes.

CLIMATE, PRECIPITATION, AND RESERVOIR RELEASES

An important consideration in groundwater trend analysis is surface water storage. Climate, temperature, annual precipitation, and reservoir storage are directly related to groundwater pumping for domestic and agricultural use. The 2025 ENSO phase was classified by the National Oceanic and Atmospheric Administration Climate Prediction Center as a weak La Niña. In Santa Barbara County, nine of the past fifteen years had precipitation below normal averages, six years of which were near 50% or less of normal averages (Table 1). Please refer to the Santa Barbara County Flood Control Hydrology webpage for more detailed information on county precipitation, and the Countywide Percent-of-Normal graph illustrating trends from 1968 to the current water year. The California Drought Monitor indicates that as of mid-August 2025, about 40% of California is experiencing moderate to exceptional drought, with the most severe conditions concentrated in Southern California.

[10] Without the continuous monitoring of water level changes, it is impossible to determine with certainty the yearly maximum water level which will vary between wells as a result of location, depth, and aquifer formation.

Table 1: Countywide average precipitation and classification. Wet years in green (>120% normal), average years in blue (within 20% normal), dry years in red (<80% normal)

WATER YEAR	COUNTYWIDE AVERAGE		HYDROLOGIC WATER YEAR TYPE
	PRECIPITATION (in/year)	% OF NORMAL	CLASSIFICATION
2011	28.2	154%	**Wet**
2012	12.1	66%	**Dry**
2013	8.4	46%	**Dry**
2014	7.3	40%	**Dry**
2015	9.9	54%	**Dry**
2016	12.6	69%	**Dry**
2017	24.9	136%	**Wet**
2018	9.9	54%	**Dry**
2019	23.4	128%	**Wet**
2020	16.8	92%	**Average**
2021	8.8	48%	**Dry**
2022	11.7	64%	**Dry**
2023	37.0	202%	**Wet**
2024	26.2	143%	**Wet**
2025	9.3	51%	**Dry**

Due to exceptional precipitation in Water Years 2023 and 2024, storage at Lake Cachuma reached maximum capacity in both years—an event that had not occurred since 2011. In WY2023, the reservoir received an estimated 492,900 acre-feet (AF) of inflow. Of this, 203.4 AF was released to satisfy downstream water rights, while approximately 345,000 AF was spilled via valves and the spillway. In WY2024, estimated inflow was approximately 240,000 AF, with no releases for downstream water rights and 206,000 AF spilled. Preliminary data for WY2025 indicate an estimated inflow of 8,150 AF, with no downstream water rights releases.

In WY2023, Twitchell Reservoir increased to 60.2% capacity to approximately 117,500 AF, filling the conservation pool and entering the flood control pool. Storage was not permitted in the flood control pool, and following the quick evacuation of flood control storage, water within the conservation pool was slowly released for groundwater recharge of the Santa Maria Groundwater Basin. In WY2024, approximately 32,000 AF of water was captured, and 30,100 AF was slowly released from the conservation pool for groundwater recharge. In WY2025, about 1,500 AF was released from Twitchell Reservoir for basin recharge. Refer to Table 2 for a summary of estimated releases from Twitchell Reservoir over the past decade.

Table 2: Yearly estimated release from Twitchell Reservoir.

CALENDAR YEAR	RELEASE (AF)
2015	0
2016	0
2017	52,641
2018	12,143
2019	48,188
2020	0
2021	0
2022	0
2023	171,483
2024	30,101
2025	0

GROUNDWATER MONITORING PROGRAMS

Water level data, measured as depth to water below land surface, have been collected consistently from groundwater monitoring networks throughout Santa Barbara County since the 1970s. However, infrequent measurements within many basins started decades earlier. Data from these networks are representative of the major aquifers and help to clarify the role of local variables such as geology, topography, land use on recharge, sub-surface flow, and distribution. These data also illustrate temporal variability in groundwater levels and are shown with meteorological data to assist in interpreting ambient water level changes. The temporal and spatial distribution of the monitoring network has changed over time and is dependent on many factors, including funding, local groundwater study objectives, legislative requirements, and willing landowners. Some networks have developed to track long-term trends, while others are more specific to modeling goals or local water distribution objectives.

Monitoring Entities

The SBCWA has historically maintained a comprehensive groundwater monitoring network within unincorporated areas of Santa Barbara County in cooperation with the United States Geological Survey (USGS). In recent years, the monitoring and maintenance of these networks has become the responsibility of the local Groundwater Sustainability Agencies (GSA) and, therefore, is an integral part of their Groundwater Sustainability Plans (GSP). SBCWA currently monitors groundwater level elevations throughout the Santa Ynez River Valley Groundwater Basin. Additional groundwater data collection efforts are completed or sponsored by local water districts, municipalities, and GSAs throughout the County. Agencies such as the City of Santa Barbara and Goleta Water District maintain monitoring networks in cooperation with the USGS. The Santa Maria Valley Water Conservation District (SMVWCD) collects water level trend data in collaboration with the Twitchell Management Authority (TMA). The San Antonio Basin GSA and Cuyama Basin GSA monitor water levels within their respective basins. Other local water districts and municipalities support collecting water level data, and the information is often used for internal tracking within the district's or municipality's production well network or to meet requirements set by the California Statewide Groundwater Elevation Monitoring (CASGEM) program. Some data are available to the public through the Internet, while other data must be obtained directly from the monitoring agency. The following agencies conduct groundwater monitoring within Santa Barbara County:

- Carpinteria Valley Water District
- City of Buellton
- City of Guadalupe
- City of Lompoc
- City of Santa Barbara
- City of Santa Maria
- City of Solvang
- Cuyama Community Services District
- Golden State Water Company
- Goleta Water District
- Los Alamos Community Services District
- Mission Hills Community Services District
- Montecito Water District
- San Antonio Groundwater Sustainability Agency
- Santa Maria Valley Water Conservation District
- Santa Ynez River Water Conservation District
- Santa Ynez River Water Conservation District Improvement District #1
- United States Bureau of Reclamation
- Vandenberg Space Force Base
- Vandenberg Village Community Services District

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) was passed in 2014 to create a framework for groundwater sustainability throughout California. Groundwater basins designated as high- or medium-priority by the DWR must form a GSA. Each GSA is responsible for the development and implementation of a GSP. GSPs must achieve groundwater sustainability within 20 years of GSP adoption. GSP objectives require that future groundwater use does not cause undesirable results, which include the following: chronically declining water levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletion of interconnected surface water. Table 3 shows the status of GSP preparation for each groundwater basin within Santa Barbara County.

GSAs have formed for all high- and medium-priority basins in the County. Because, the DWR categorized the Cuyama Valley Water Groundwater Basin as critically over-drafted, the Cuyama Basin GSA completed a GSP by 2020. DWR approved the GSP in 2023. The Cuyama Basin is also currently undergoing the legal process of a comprehensive adjudication of groundwater rights. GSPs for the San

Antonio Basin and three Santa Ynez Basin Management Areas were approved by the DWR in 2024. Montecito and Carpinteria GSAs submitted their GSPs to the DWR which were approved in 2025. One requirement of a GSP is to establish a monitoring network to track water level changes and groundwater storage and also monitor pre-determined water level thresholds within each basin. Water level data for these basins are available to the public through online portals or upon request from the GSA.

Table 3: SGMA basin prioritization and GSP status

GROUNDWATER BASIN	SGMA BASIN PRIORITIZATION	GSP STATUS	DWR BULLETIN 118 BASIN
Carpinteria	High	Approved on 2/27/25	3-018
Montecito	Medium	Approved on 2/27/25	3-049
Santa Barbara	Very Low	N/A	3-017
Foothill	Very Low	N/A	3-053
Goleta	Very Low	N/A - Adjudicated	3-016
Santa Ynez River Valley	Medium	Approved on 1/18/2024	3-015
San Antonio Creek Valley	Medium	Approved on 1/18/2024	3-014
Santa Maria Valley	Very Low	N/A - Adjudicated	3-012
Cuyama Valley	High (critically overdrafted)	Approved on 5/23/2023	3-013

GROUNDWATER BASINS

South Coast Groundwater Basins

South Coast groundwater basins include Carpinteria, Montecito, Santa Barbara, Foothill, and Goleta. Designated boundaries for the five major south coast groundwater basins are geologic features such as fault barriers to groundwater movement and impermeable bedrock or inferred geologic features indicated by water level or water quality changes. Primary water supply sources for South Coast water purveyors consist of groundwater, surface water, imported state water, recycled water, and desalination. Seasonal precipitation and storage determine the available quantity of surface and imported water. These factors directly affect groundwater extraction.

Historical hydrographs of annual maximum water level trends for all South Coast basins display yearly fluctuations, with significant declines (reduced storage) during years of extended drought (1947-1950, 1959-1962, 1987-1992, and 2012-2022). Recent water level measurements indicate that starting in 2018, the rate of decline has decreased or water levels have increased in most basins. Water levels in all south coast basins remain above historic lows and are above WY2022 levels seen prior to two above average years of precipitation.

Attachment A illustrates the active monitoring network and shows representative hydrographs for wells within South Coast aquifers.

Carpinteria Groundwater Basin

The Carpinteria Groundwater Basin was reprioritized to high priority by DWR in 2019. Carpinteria Valley Water District is leading the GSA in cooperation with the City of Carpinteria, County of Ventura, and SBCWA. The Carpinteria Groundwater Basin GSP was approved by DWR in February 2025. Carpinteria Valley Water District monitors water levels in 35 wells every other month as part of the SGMA program. Table 4 provides links to locate discrete water level data. Additional data is available in Carpinteria Valley Water District files and may be available upon request.

The primary water-bearing unit in the basin is the Casitas Formation, with limited groundwater production from alluvial deposits along creeks. The basin consists of two groundwater storage units, with most extraction occurring from Storage Unit No. 1, located north of the Rincon Fault. Groundwater levels closely track precipitation patterns, showing declines during extended drought periods (1950, 1986–1992, 2012–2016) and partial recoveries during wetter intervals, particularly in 1993 and after 2017. Water levels reached historic lows around 1950, followed by a steady increase through approximately 1980. A notable decline occurred during the 1986–1992 drought, with levels rebounding to near-historic highs in 1993. After 1993, groundwater levels gradually declined again, with an accelerated drop during the 2012–2016 drought. Above-average precipitation in 2017 sparked a recovery trend that has persisted in subsequent years.

In spring 2025, water level measurements from 25 monitoring wells with comparable spring 2024 data indicated that 15 wells exhibited increases ranging from 0.5 to 14.7 feet, one well remained unchanged, and nine wells recorded declines between 1.0 and 8.4 feet (Figure 2). All measured water levels remain above spring 2022 elevations, following two years of above-average precipitation.

A comprehensive basin study evaluating the historical water budget from 1985 through 2020 was completed and summarized in the GSP. Results of this study showed an average annual depletion in water storage of 1,324 AFY during the 36-year analysis period. The depletion rate increased significantly during dry climate conditions (1985-1991, 2012-2020). Results of the Carpinteria Groundwater Basin Water Year 2024 Annual Report indicate that total estimated groundwater extractions from the basin during WY 2024 were 4,547 AF. The estimated change in groundwater storage for WY2024 was a gain of 5,839 AF.

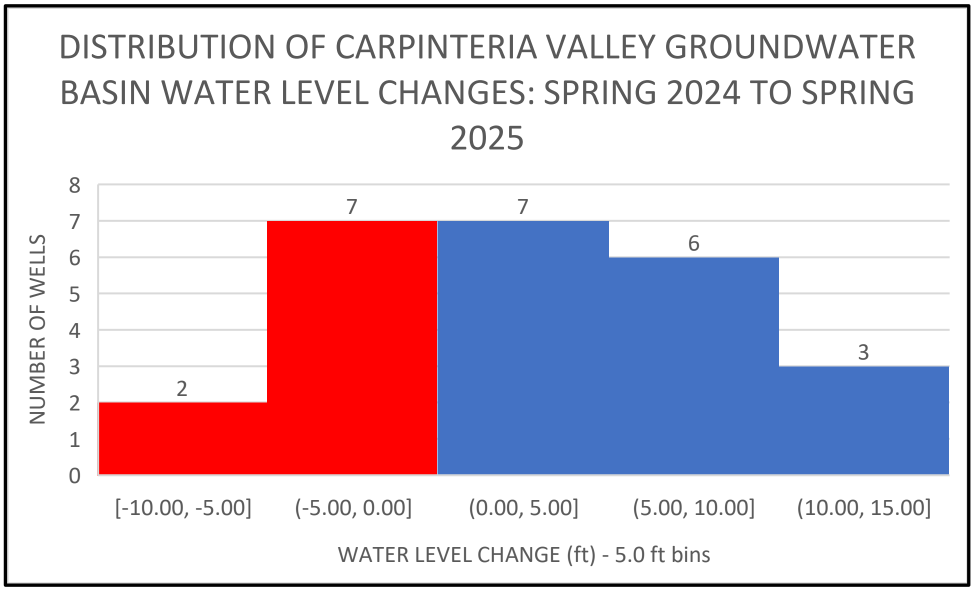


Figure 2: Annual distribution of Carpinteria Groundwater Basin water level changes

Figure 3 provides a decadal summary of groundwater storage variations in the Carpinteria Groundwater Basin. Changes in storage through 2020 were determined from water budget analysis whereas changes after 2020 are determined by fluctuations in the seasonal water levels occurring in the fall.

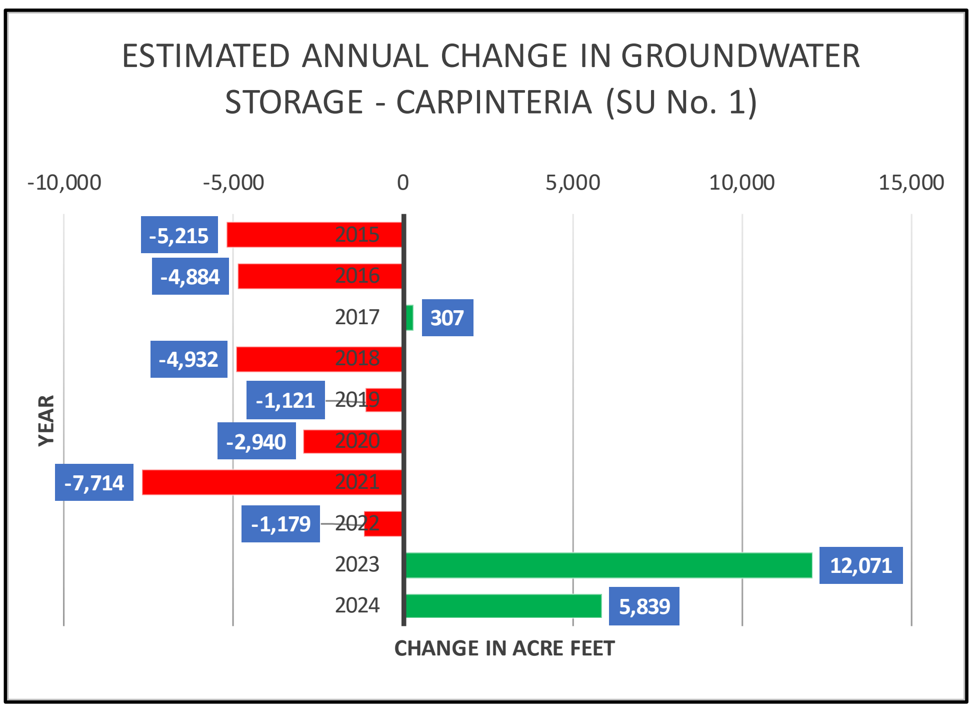


Figure 3: 10-year trend of annual storage changes in Storage Unit No. 1 in the Carpinteria Groundwater Basin

Table 4: General Carpinteria Groundwater Basin information and associated links

CARPINTERIA GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	12.7
DWR Basin Population Projection in 2030:	14,300
Irrigated acres	2,867
GW Percent of Supply	69%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-018 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060013 Santa Barbara Coastal	
• Santa Barbara County Water Agency - South Coast Basins	
• Carpinteria Basin Groundwater Sustainability Agency (GSA)	
• Carpinteria Groundwater Sustainability Plan (GSP)	
• Carpinteria Groundwater Basin Water Year 2024 Annual Report	

Montecito Groundwater Basin

The Montecito Groundwater Basin was reprioritized to medium-priority by DWR in 2019. The GSP was approved by DWR in February 2025. Montecito Water District monitors water levels as part of its SGMA program. Discrete data are collected twice annually in the spring and fall. Table 5 provides links to locate water level data, and additional data may be available in the files of Montecito Water District upon request.

The primary water-bearing hydrogeologic units consist of the Casitas and Santa Barbara Formations. Additionally, the alluvium and terrace deposits yield groundwater. The groundwater basin's four divided storage units include Units 1-3 and Toro Canyon. Groundwater elevations have ranged from over 600 feet MSL in the northern part of Storage Unit 1 to lows below sea level in Storage Unit 3, especially during drought years. Significant drops were observed near faults like the Montecito and Arroyo Parida Faults, though more recent data show less variation across these boundaries. Data from spring 1995 (a wet year) and fall 2015 (a dry year) show large contrasts in groundwater levels, with the 2015 data indicating possible seawater intrusion. Measurements from 2019 show similar patterns, with the highest levels in Storage Unit 1 and the lowest, around −12 feet MSL, in Storage Unit 3. Pumping-related depressions were observed in both Storage Units 1 and 3 in 2019. Overall, groundwater levels in the basin have remained relatively stable in recent years, though variations due to precipitation, drought, and pumping persist.

Groundwater level data for the Montecito Groundwater Basin date back to the 1940s, with low levels observed basin-wide from the late 1940s to mid-1960s. Levels slightly rebounded and stabilized through the mid-1980s before sharply declining in the late 1980s to record lows by

1991 due to drought and peak groundwater production. A recovery followed in the mid-1990s with increased precipitation and reduced pumping, but another prolonged decline began around 2007. Between 2007 and 2019, groundwater levels in Storage Unit 1 fell by about 70 feet, while declines in other units were less severe.

The monitoring network includes about 60 wells. Of the 52 wells with comparable Spring 2025 data, 19 remained stable or rose by up to 15.1 feet while 33 declined between 1.5 and 40.4 feet (Figure 4). Data from 11 wells with records from WY2022 show significantly higher levels than in 2022, prior to two consecutive years of above-average precipitation.

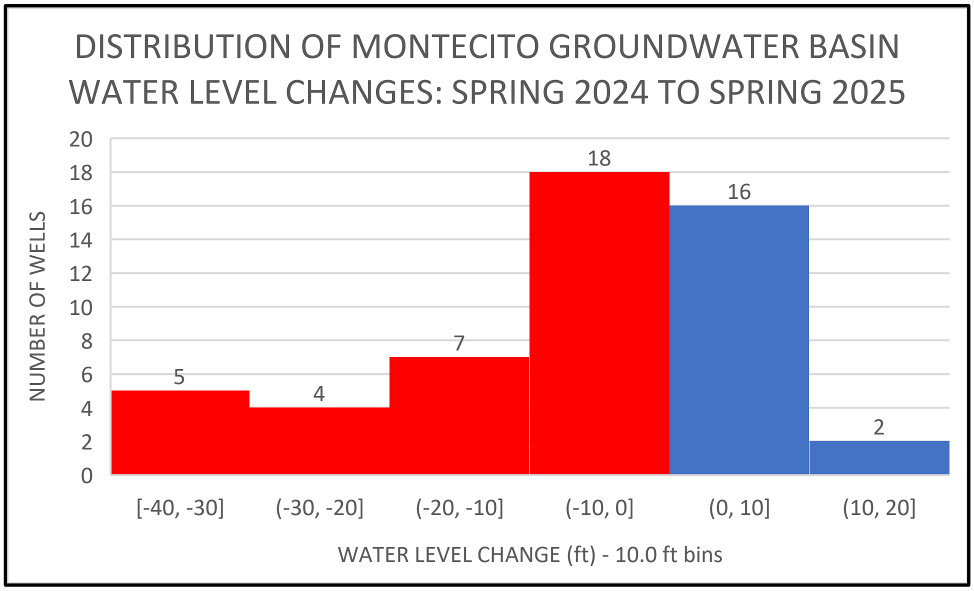


Figure 4: Annual distribution of Montecito Groundwater Basin water level changes

A comprehensive basin study was completed and summarized in the GSP. The study evaluated the historical water budget from 1970 through 2014 and the current water budget from 2015 through 2019. Results of this study for the historical period showed climate-dependent fluctuations between surplus and deficit, and an overall average annual depletion in storage of 130 AFY. In the 45-year historical analysis there was an average loss of storage of 5,900 AF. Results of the Annual Report Water Year 2025 indicate that total groundwater extractions from the basin during WY2024 were 934 AF. The estimated change in groundwater storage from spring 2023 to spring 2024 was a gain of 434 AF.

Figure 5 provides a decadal summary of groundwater storage variations in the Montecito Groundwater Basin. Changes in storage are determined by Montecito Basin Numerical Model. **Please note that the Montecito Basin Numerical Model is currently being revised. The updated model will enhance the accuracy of groundwater storage change calculations. Consequently, the values shown in the figure may change.**

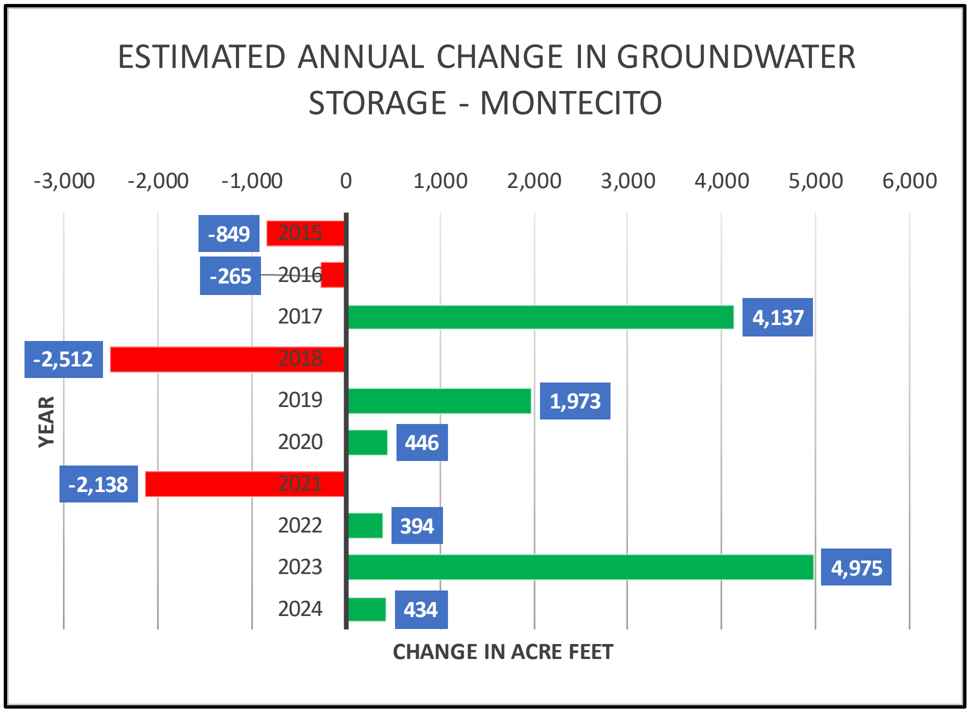


Figure 5: 10-year trend of annual storage changes in the Montecito Groundwater Basin

Table 5: General Montecito Groundwater Basin information and associated lin

MONTECITO GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	9.8
DWR Basin Population Projection in 2030:	9,100
Irrigated acres	706
GW Percent of Supply	45%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-049 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060013 Santa Barbara Coastal	
• Santa Barbara County Water Agency - South Coast Basins	
• Montecito Basin Groundwater Sustainability Agency (GSA)	
• Montecito Basin Groundwater Sustainability Plan (GSP)	
• 2025 Annual Report	

Santa Barbara Groundwater Basin

The Santa Barbara Groundwater Basin is designated very low priority and is not currently subject to SGMA. The City of Santa Barbara works in cooperation with the USGS to monitor water levels at 27 wells. Table 6 provides links to locate discrete water level data collected at monthly intervals. Additional data may be available from the City of Santa Barbara Public Works upon request.

The Santa Barbara Formation and Holocene alluvium are the primary water-bearing hydrogeologic units of the basin and they are divided into two storage units. Following minimal levels from 1986 and 1990, long-term water level trends indicate a rapid increase from 1990 to 2014. Levels remained stable until 2015 and quickly declined to near-historic lows in 2017. Water levels have steadily increased since WY2017.

Spring 2025 data indicate a water level increase of about 3 feet over the past year. Of the 27 wells with comparison data, 23 remained stable or showed increases of up to 6.8 feet while 4 wells showed declines between 0.4 and 0.7 feet (Figure 6). The northern part of the basin experienced the largest increases, with a north-to-south trend showing smaller increases and some declines near the coast. Most water levels remain about 5 feet above 2022 levels, measured prior to two years of above-average precipitation.

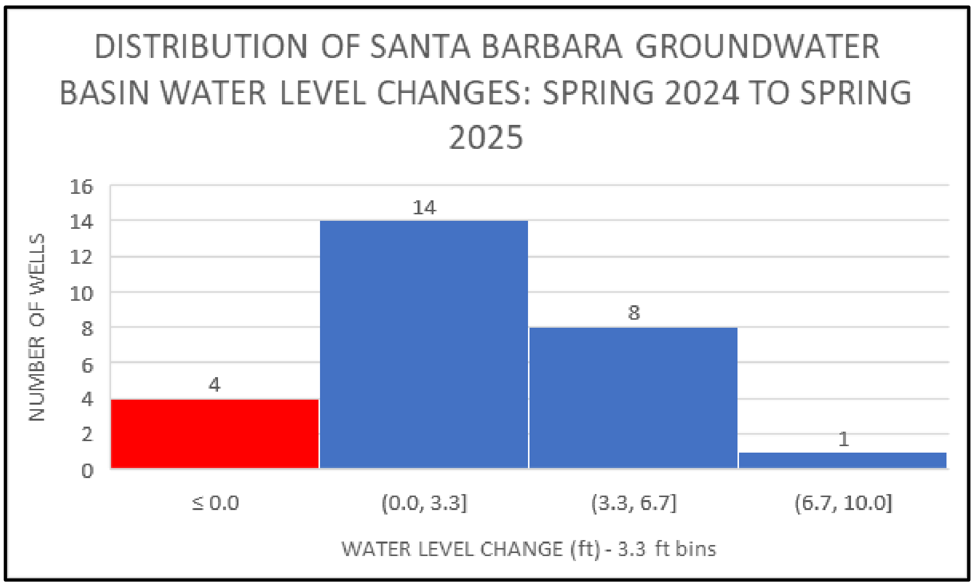


Figure 6: Annual distribution of Santa Barbara Groundwater Basin water level changes

Table 6: General Santa Barbara Groundwater Basin information and associated links

SANTA BARBARA GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	9.6
DWR Basin Population Projection in 2030:	64,100
Irrigated acres	1
GW Percent of Supply	3%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-017 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060013 Santa Barbara Coastal	
• Santa Barbara County Water Agency - South Coast Basins	
• City of Santa Barbara	

Foothill Groundwater Basin

The Foothill Groundwater Basin is designated very low priority by DWR and is not currently subject to SGMA. The City of Santa Barbara works in cooperation with the USGS to monitor water levels at six wells. Table 7 provides links to locate the discrete water level data collected at monthly intervals. Additional data may be available from the City of Santa Barbara Public Works upon request.

The Santa Barbara Formation and unconsolidated alluvial sediments are the primary water-bearing hydrogeologic units of the basin. Long-term water level trends indicate rapid declines in levels starting in 2006 followed by a significant increase in 2017 after above-average precipitation. Levels remain higher than the historic lows observed in the early 1950s and have continued to increase in recent years. This increase in water levels has been more dramatic starting in WY2023.

Spring 2025 data indicate about a 5-foot increase in water levels during the past year. Compared to spring 2024 data, the spring 2025 data from the five measured wells with comparison data showed that all wells had annual increases ranging from 0.7 to 8.4 feet (Figure 7). Data from four wells indicate that levels are about 20-feet above those measured in 2022, prior to two consecutive years of above average precipitation.

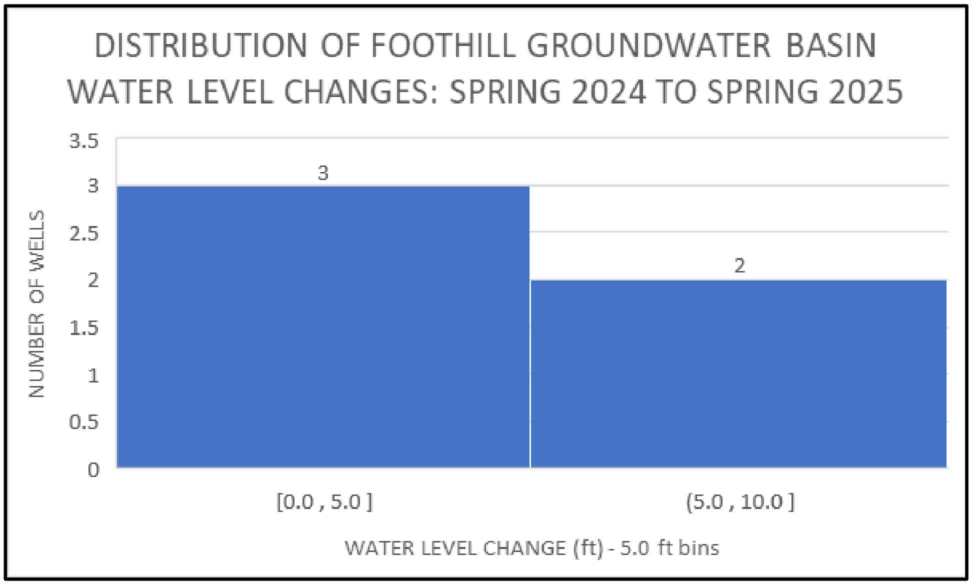


Figure 7: Annual distribution of Foothill Groundwater Basin water level changes.

Table 7: General Foothill Groundwater Basin information and associated links

FOOTHILL GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	4.9
DWR Basin Population Projection in 2030:	18,300
Irrigated acres	5
GW Percent of Supply	8%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-053 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060013 Santa Barbara Coastal	
• Santa Barbara County Water Agency - South Coast Basins	
• City of Santa Barbara	

Goleta Groundwater Basin

The Goleta Groundwater Basin is designated very low priority by DWR and was adjudicated in 1994. Goleta Water District (GWD) works in cooperation with the USGS to monitor water levels at approximately 40 wells. Table 8 provides links to discrete water level data, typically collected twice annually in the spring and fall. Additional data may be available from GWD upon request.

GWD can use nine injection wells to recharge the groundwater basin during Lake Cachuma spill events. Surplus water injected totaled 814 AF in WY2023, 626 AF in WY2024, and 213 AF in WY2025.

The basin's primary water-bearing units are the Santa Barbara Formation and unconsolidated alluvial sediments. There are three sub-basins: North, Central, and West. Long-term water level trends indicate a recorded maximum low in the early 1950s with a steady increase through the 1970s. A steady decrease in water levels has been observed from the early 1980s, followed by rapid increases starting in 1990 through about 2007. In 2012, levels began to decline followed by a general steady increase since 2018, with more pronounced increases beginning in WY2023.

Recent data from 2025 indicate that a significant majority of water levels throughout the basin have remained stable or increased during the past year. Of 39 wells with comparative data, 33 showed stability or gains up to 12.0 feet, while 6 wells in the western area showed declines of 0.90 to 4.1 feet (Figure 8). All levels remain above 2022 measurements, prior to two consecutive years of above average precipitation.

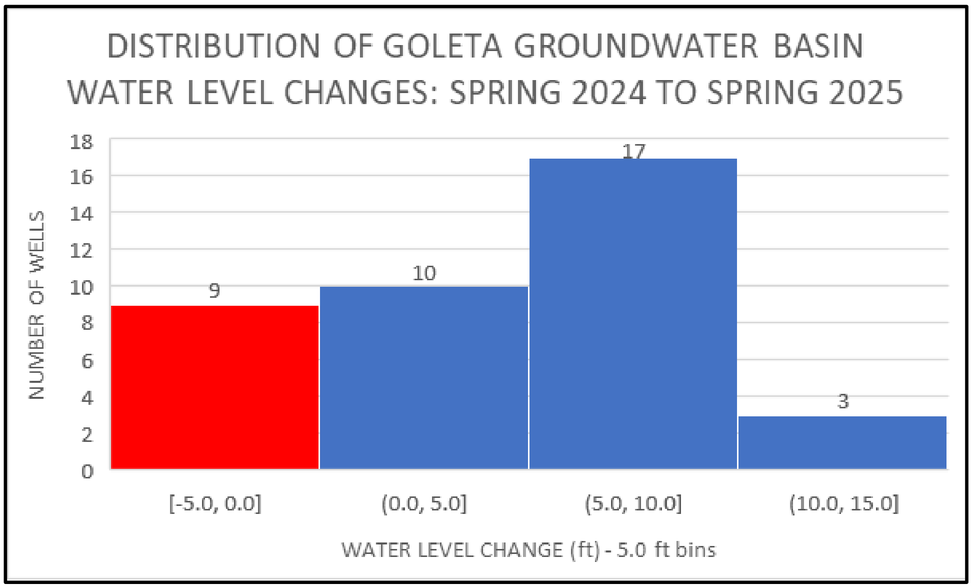


Figure 8: Annual distribution of Goleta Groundwater Basin water level changes.

Table 8: General Goleta Groundwater Basin information and associated links

GOLETA GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	14.4
DWR Basin Population Projection in 2030	52,200
Irrigated acres	575
GW Percent of Supply	34%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-016 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060013 Santa Barbara Coastal	
• Santa Barbara County Water Agency - South Coast Basins	
• Goleta Water District	
• Groundwater Management Plan Goleta Groundwater Basin	

Santa Ynez River Valley Groundwater Basin

The SBCWA and the USGS have historically monitored the groundwater in the Santa Ynez River Valley Groundwater Basin. In 2021, the three GSAs (Western, Central, and Eastern) became the designated SGMA monitoring entities, although SBCWA continues to collect water level data twice annually throughout the basin. In addition, the U.S. Bureau of Reclamation (USBR) collects water level data monthly along the Santa Ynez River and numerous municipalities monitor water levels at their facilities. Water supply sources in the Santa Ynez River Valley Groundwater Basin consist of groundwater, local surface water, and imported state water. Seasonal precipitation and storage determine the available quantity of surface and imported water and directly affect groundwater extraction.

The Santa Ynez River Valley Basin is defined by DWR as a medium-priority basin. The SBCWA and other local agenciesformed three separate GSAs to represent three Management Areas. Hydrogeologic and jurisdictional boundaries that are hydraulically interconnected define these management areas. Within the Basin as a whole, there are eight sub-basins (Burton Mesa, Lompoc Terrace, Lompoc Plain, Lompoc Upland, Santa Rita Upland, Buellton Upland, Santa Ynez Upland, and Santa Ynez River Alluvium) with differing hydrogeological characteristics (Figure 9). The Santa Ynez River Alluvium is a layer of alluvial material that follows the course of the Santa Ynez River through all three Management Areas, and long-term trends are directly affected by managed releases from Cachuma Reservoir. Subsurface flows through the Santa Ynez River Alluvium are not managed by the GSAs.

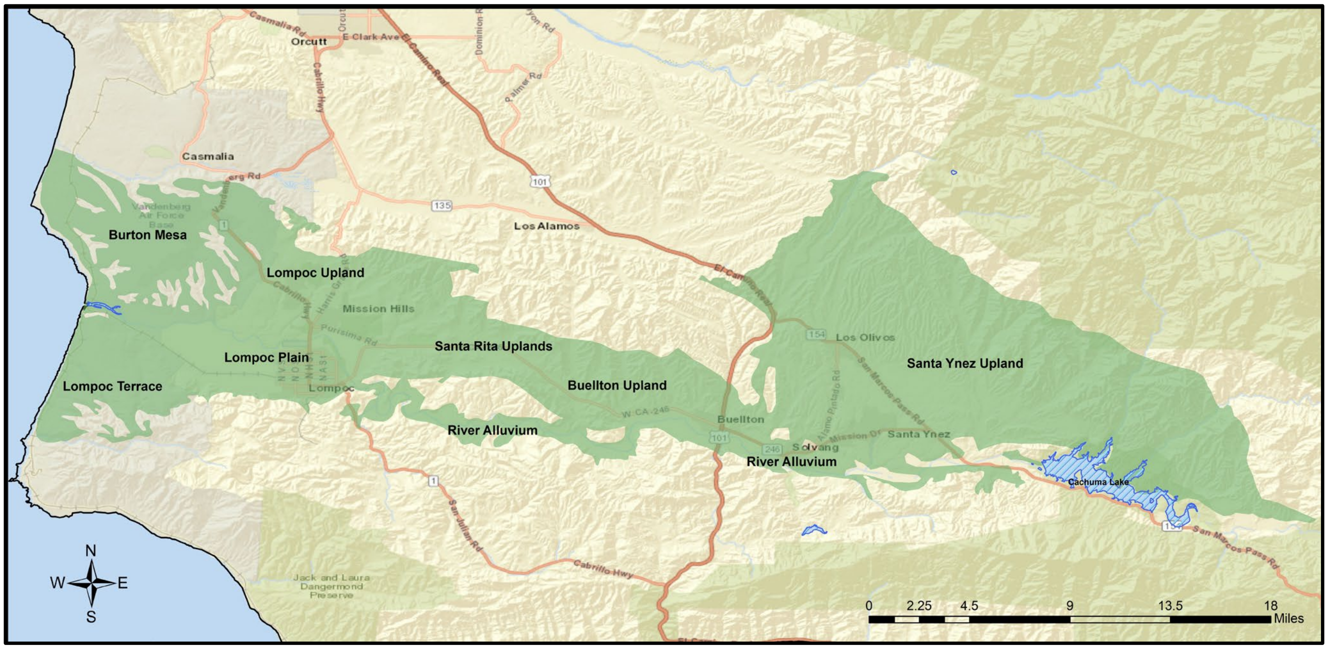


Figure 9: Groundwater recharge zones of Santa Ynez River Valley Basin.

The unconsolidated alluvial and terrace deposits, including the Paso Robles, and Careaga Formations are the primary water-bearing hydrological units in the basin. In general, water levels have been steadily declining since approximately 1945. Historical hydrographs of annual maximum water level trends for the Santa Ynez River Valley display yearly fluctuations, with some areas responding rapidly to precipitation and infiltration. However, following the recent years of drought, water levels in all sub-basins within each management area continued to decline, and storage was at or near historic lows throughout the entire basin. Water levels have generally responded well to two consecutive years of above-average precipitation, with most WY2025 levels remaining above 2022 levels.

Attachment B illustrates the active County monitoring network to include SGMA representative wells and representative hydrographs for wells within the basin. Table 9 provides links to locate water level data.

Table 9: General Santa Ynez River Valley Groundwater Basin information and associated links

SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	319.0
DWR Basin Population Projection in 2030:	77,900
Irrigated acres	20,485
GW Percent of Supply	94%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-015 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060010 Santa Ynez	
• Santa Barbara County Water Agency - Santa Ynez River Valley	
• Santa Ynez River Valley Groundwater Sustainability Agencies (GSA)	
• 47th Annual Engineering and Survey Report on Water Supply Conditions of the Santa Ynez River Water Conservation District	

Additional data may be available in the files of the following agencies upon request:

- American Water (VSFB)
- City of Buellton
- City of Lompoc
- City of Solvang
- Mission Hills Community Services District
- Santa Barbara County Water Agency
- Santa Rita Water Company
- Santa Ynez River Water Conservation District
- Santa Ynez River Water Conservation District ID#1
- Vista Hills Mutual Water District
- Tularosa Mutual Water Company
- United States Bureau of Reclamation
- Vandenberg Space Force Base
- Vandenberg Village Community Services District

Western Management Area

There are six sub-basins within the Western Management Area: Burton Mesa, Lompoc Terrace, Lompoc Plains, Lompoc Uplands, Santa Rita Uplands, and a portion of the Santa Ynez River Alluvium. The alluvial sediments of the upper aquifer overlie the Paso Robles and Careaga Sand Formations, which comprise the lower aquifer, and serve as the primary water-bearing hydrogeologic units within the basin. Water level trends vary significantly between, and at times within, each sub-basin.

A total of 66 wells are monitored in the WMA for groundwater levels. Of the 62 with comparable data from spring 2024 to spring 2025, 56% showed declines averaging 2.0 feet, ranging from 0.2 to 4.5 feet (Figure 10). Most increases occurred in the Lompoc Uplands, eastern Lompoc Plain, and along the coast, ranging from no change to 7.9 feet. Overall, most water levels remain above 2022 levels, prior to two years of above-average precipitation, particularly in the Lompoc Plain and western Lompoc Uplands.

Historic and current groundwater level trends by Management Area are summarized below:

- **Burton Mesa**
  The Burton Mesa contains perched groundwater within the Orcutt Sand, which overlies the non-water-bearing Monterey Formation. It is not hydrogeologically connected to the Upper Aquifer. Groundwater presence is limited and perched, with no significant groundwater use reported.

- **Lompoc Terrace**
  Groundwater in the Lompoc Terrace shows limited long-term change due to its geologic and hydrogeologic conditions. Seasonal variations are minor, with no significant net change in groundwater elevations since the late 1960s. Water levels respond to climatic conditions, with slight increases during wetter periods (1990–2000) and declines during droughts (2010–2019).

  Of the three wells monitored, the coastal well rose by 6.7 feet, while the two inland wells declined by 0.4 and 1.2 feet.

- **Lompoc Plain**
  Groundwater levels in the western Lompoc Plain show typical seasonal variations influenced by agricultural pumping and climate. While some wells indicate moderate long-term declines since the 1950s, others show no significant trends. Groundwater levels generally decrease during dry periods and recover in wetter years. Overall, there has been little net change in groundwater elevations since the late 1980s.

  Groundwater levels in the east-central Lompoc Plain show distinct patterns between the Upper and Lower Aquifers. The Upper Aquifer generally exhibits seasonal fluctuations and short-term declines during droughts, with no significant net change since the mid-1960s. In contrast, the Lower Aquifer shows a consistent long-term decline since the 1920s, with only temporary recoveries during wetter periods. Seasonal variations are generally less pronounced in the Lower Aquifer.

  Sixteen of the 41 wells showed stable levels or increases up to 4.6 feet, while the remaining 25 recorded declines between 0.2 and 4.5 feet.

- **Lompoc Uplands**

In the Lompoc Uplands, groundwater is extracted primarily from the Lower Aquifer for municipal and agricultural use. Groundwater levels were relatively stable from the 1970s through the early 1990s, followed by slight increases during wetter periods around the 1990s. However, levels have declined since the mid-2000s, particularly during recent droughts. One area shows a long-term decline of about 30 feet since 1950, with most of the decrease occurring after 2010.

Eight of eleven wells showed water level increases between 0.4 and 1.5 feet. Of the two adjacent to the Santa Rita Uplands, one showed no significant change and the other declined by 0.2 feet.

- **Santa Rita Uplands**
  In the Santa Rita Upland, groundwater is used for agricultural and domestic needs, with most monitoring focused on the Lower Aquifer. Groundwater levels in some areas declined significantly—by 20 to 50 feet—between the 1970s and 1990s, with little recovery since. Seasonal fluctuations are present but do not reverse long-term declines. Upper Aquifer data is limited but shows much higher water levels than the Lower Aquifer in some locations, indicating potential separation between the aquifers.

  Of the four wells monitored, two showed water level increases of 0.6 and 7.9 feet—the latter possibly unreliable due to slow recharge. The other two wells recorded declines of 1.6 and 4.0 feet.

- **Santa Ynez River Alluvium**
  In the area upstream of the Lompoc Narrows, groundwater in the Santa Ynez River Alluvium is considered surface water under state regulation and is not managed under SGMA. Water levels in this zone have remained relatively stable with slight declines during prolonged droughts in the late 1990s and 2010s. Seasonal fluctuations of up to 10 feet are observed, influenced by Cachuma Reservoir releases and underflow extractions.

  Four wells showed declines averaging 3.0 feet.

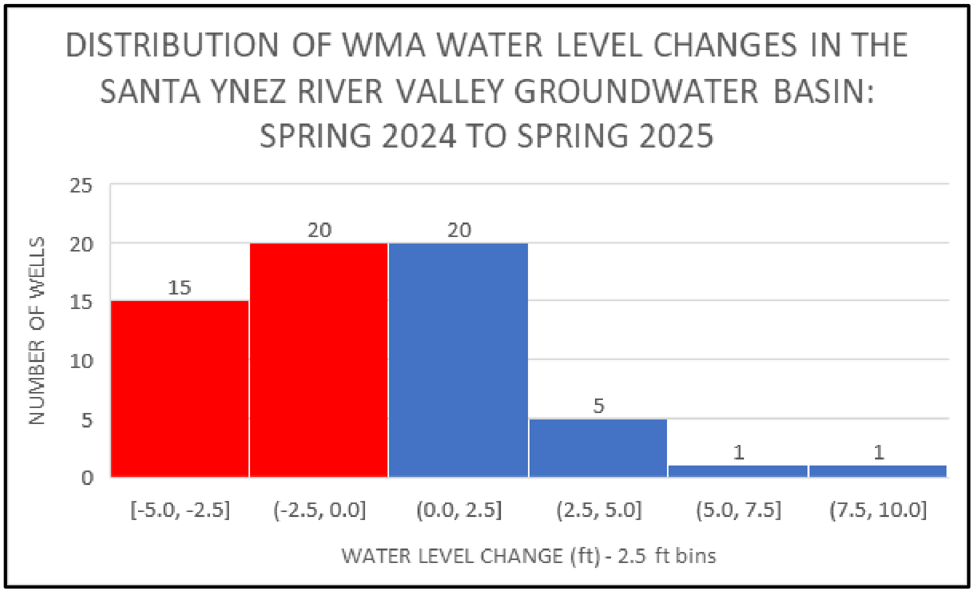


Figure 10: Annual distribution of WMA water level changes.

A comprehensive basin study was completed in 2021 as part of GSP preparation, evaluating the historical water budget from 1982 through 2018. Results of this study showed an average annual depletion in storage of 1,000 acre-feet/year (AFY). The depletion rate increased over time, with a total cumulative loss of storage of 37,000 acre-feet (AF) during the 37-year analysis period. Results of the Annual Report Water Year 2024 for the WMA indicate that total groundwater extractions from the basin during WY2024 were 21,830 AF. The estimated change in groundwater storage from spring 2023 to spring 2024 was a gain of 600 AF, with an 800 AF increase in the upper aquifer and a 200 AF decrease in the lower aquifer.

Figure 11 provides a decadal summary of groundwater storage variations in the Western Management Area of the Santa Ynez River Valley Groundwater Basin. Changes in storage are determined by fluctuations in the seasonal maximum water levels, typically occurring in spring.

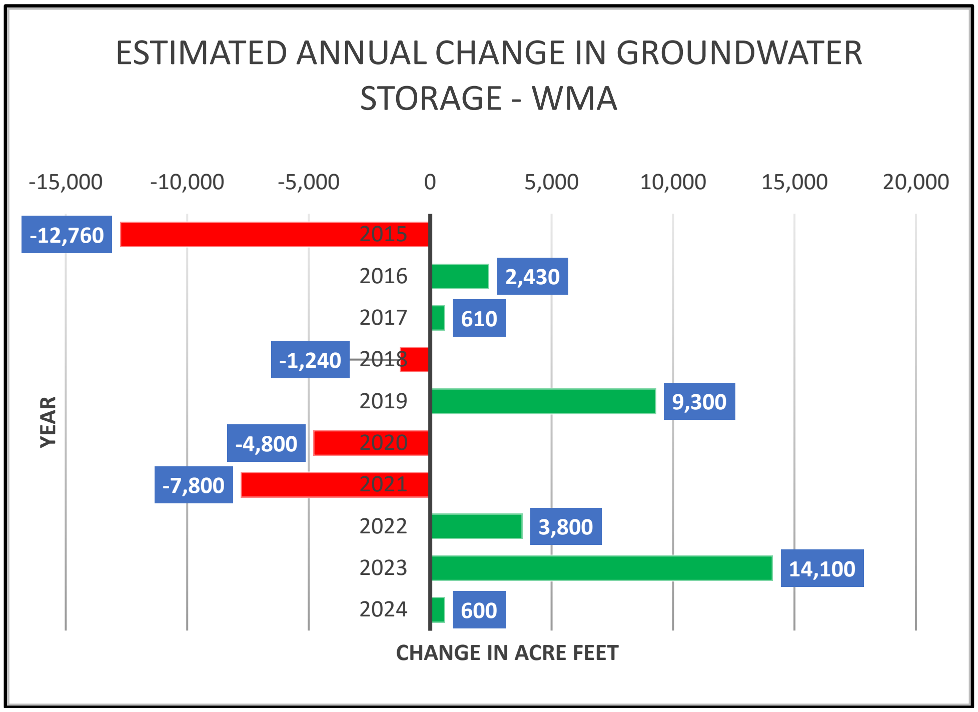


Figure 11: 10-year trend of annual storage changes in the Western Management Area

Table 11 provides links to locate water level data for the WMA.

Table 10: Santa Ynez River Valley Groundwater Basin Western Management Area links

LINKS TO AVAILABLE BASIN INFORMATION - WESTERN MANAGEMENT AREA
• Western Management Area Groundwater Sustainability Agency (GSA)
• Western Management Area Groundwater Sustainability Plan (GSP)
• Joint Basin Annual Report Water Year 2024
• Santa Ynez River Valley Groundwater Basin SGMA DMS – Western and Central Management Areas

Central Management Area

The Central Management Area includes the Buellton Uplands sub-basin and part of the Santa Ynez River Alluvium. The primary water-bearing units are alluvial sediments of the upper aquifer overlying the lower Paso Robles and Careaga Sand Formations. Water levels in shallow alluvial wells have remained stable over the period of record. Elsewhere in the area, levels have historically been stable but fluctuate with precipitation. During the recent drought, levels declined in both shallow and deep wells north of the river alluvium, with some recovery following recent above-average precipitation. However, most wells monitored in WY2025 show renewed declines.

Fifteen wells are monitored in the CMA for water level changes, with eleven located in the Santa Ynez Alluvium. Of the twelve wells with comparable data from spring 2024 to spring 2025, eleven showed declines ranging from 0.5 to 9.0 feet (Figure 12). The remaining well, at the east end of the alluvium, recorded a 3.7-foot increase. Most network wells remain above 2022 levels, prior to two years of above-average precipitation.

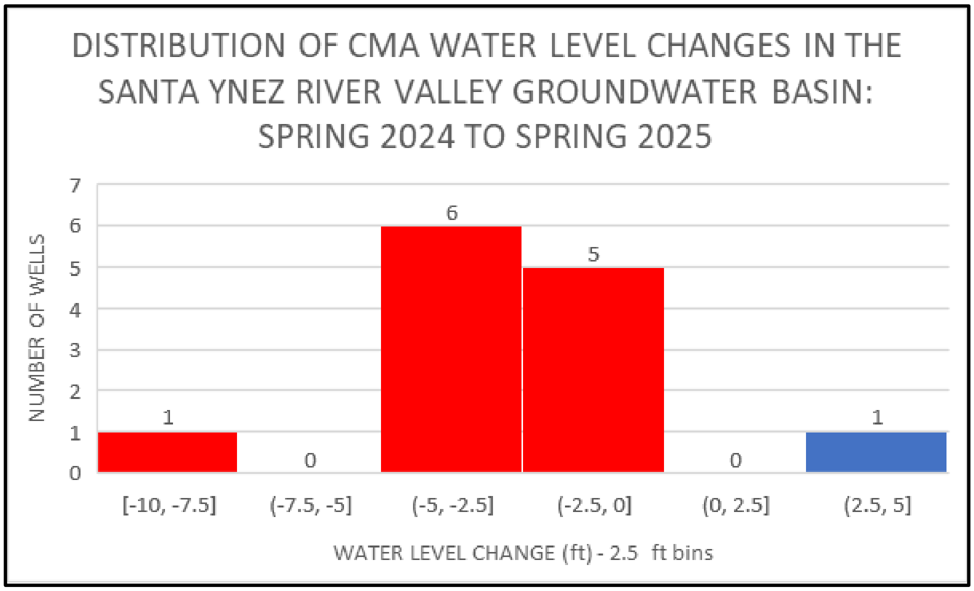


Figure 12: Annual distribution of CMA water level changes.

A comprehensive basin study was completed in 2021 as part of GSP preparation, evaluating the historical water budget from 1982 through 2018. Results of this study showed no net change in storage during the 37-year analysis period. Results of the Annual Report Water Year 2024 for the CMA indicate that total groundwater extractions from the basin during WY2024 were 4,820 AF. The estimated change in groundwater storage from spring 2023 to spring 2024 was a gain of 1000 AF, with a decrease noted in the eastern portion of the sub-basin (-900 AF) and an increase in the western portion (1,900 AF).

Figure 13 provides a decadal summary of groundwater storage variations in the Central Management Area of the Santa Ynez River Valley Groundwater Basin. Changes in storage are determined by fluctuations in the seasonal maximum water levels, typically occurring in spring.

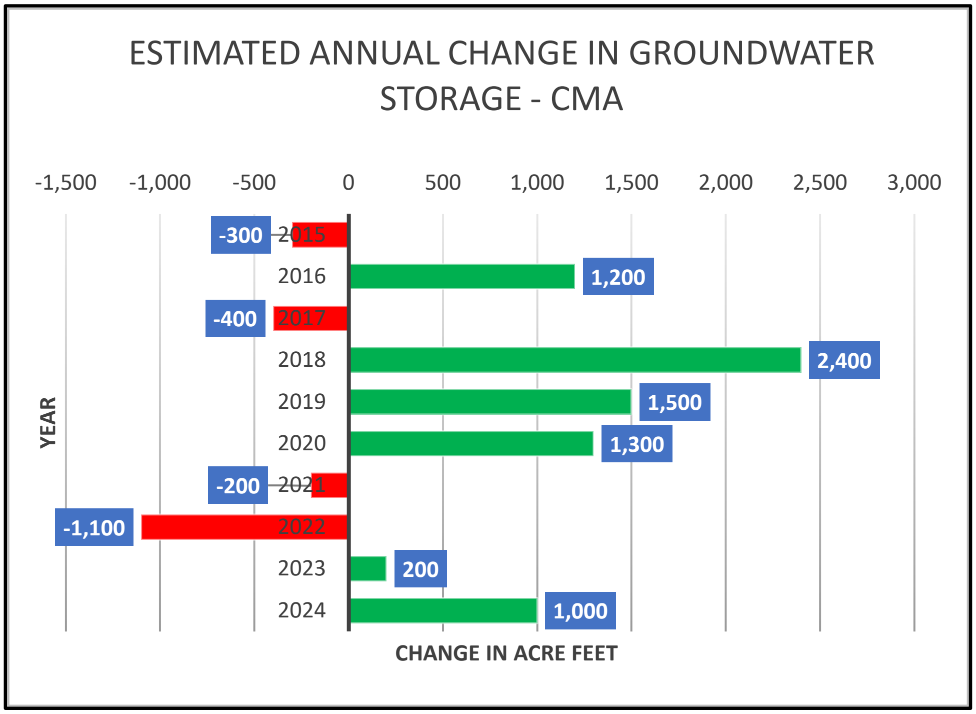


Figure 13: 10-year trend of annual storage changes in the Central Management Area

Table 11 provides links to locate water level data for the CMA.

Table 11: Santa Ynez River Valley Groundwater Basin Central Management Area links

LINKS TO AVAILABLE BASIN INFORMATION - CENTRAL MANAGEMENT AREA
• Central Management Area Groundwater Sustainability Agency (GSA)
• Central Management Area Groundwater Sustainability Plan (GSP)
• Joint Basin Annual Report Water Year 2024
• Santa Ynez River Valley Groundwater Basin SGMA DMS – Western and Central Management Areas

Eastern Management Area

The Eastern Management Area contains the Santa Ynez Uplands sub-basin and a portion of the Santa Ynez River Alluvium. The alluvial sediments overlay the Paso Robles and Careaga Sand Formations are the primary hydrogeologic units in the basin. Groundwater levels in the Paso Robles Formation are generally stable but decline significantly during droughts due to reduced recharge and increased pumping. While some wells show drops of over 100 feet, most recover within a few years once wetter conditions return. Water levels in the Careaga Sand have remained largely stable since the mid-1960s, showing only minor fluctuations in response to drought or wet periods. This stability is likely due to limited groundwater pumping and low well yields, which place minimal stress on the aquifer. Water levels throughout this management region react differently to land use and recharge. Generally, water levels in the western portion have declined in recent years and are similar to those observed following the drought of 1984 to 1990. Water levels within the uplands and foothills to the east have historically remained stable, though in recent years have shown gradual declines. Most of the wells in this management area have had declining water levels over the past 10 years, with minor improvement following recent above-average precipitation in WY's 2023 and 2024. However, most wells monitored in WY2025 show renewed declines.

Thirty-five wells are monitored in the EMA for changes in water level. Compared to spring 2024, the spring 2025 water levels have declined in 77% of the network, in both the Paso Robles and Careaga Formations. Declines ranged from 0.7 to 45.4 feet. The remaining wells have remained stable or increased, with the largest increase of 33.0 feet (Figure 14). Water levels in a majority of the network wells are higher than those observed in 2022, measured prior to two consecutive years of above-average precipitation.

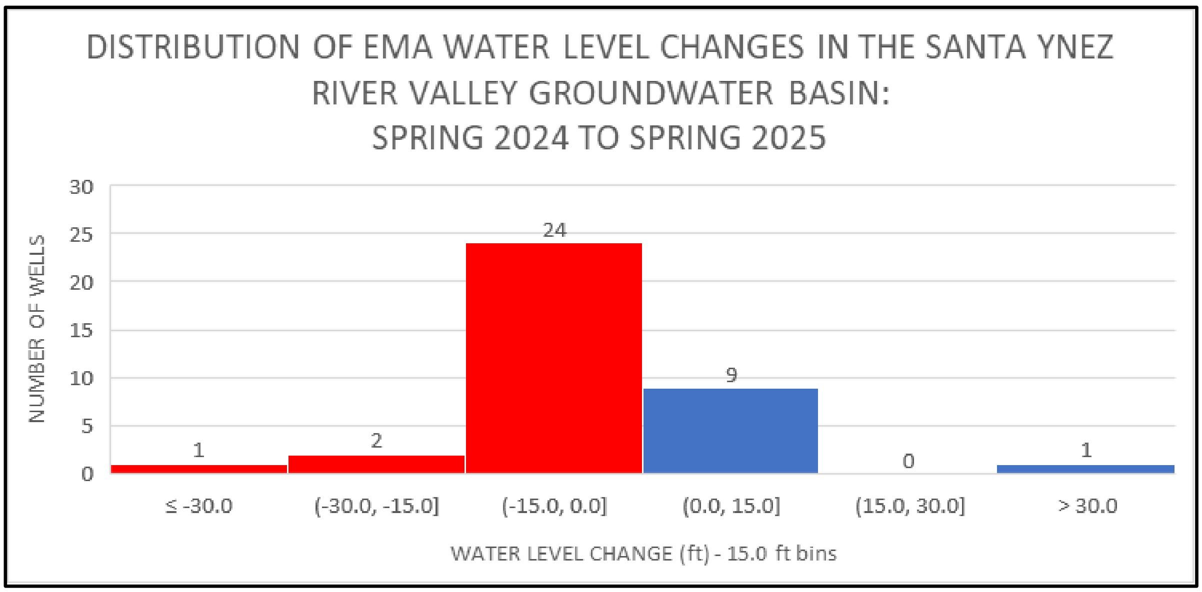


Figure 14: Annual distribution of EMA water level changes.

A comprehensive basin study was completed in 2022 as part of GSP preparation, evaluating the historical water budget from 1982 through 2018. Results of this study showed a net decline in storage of 62,100 AF and an average annual depletion in storage of 1,830 AFY during the 37-year analysis period. Results of the Annual Report Water Year 2024 for the EMA indicate that total groundwater extractions from the basin during WY2024 were 12,808 AF. The estimated change in groundwater storage from spring 2023 to spring 2024 was a gain of 6,114 AF, with 6,737 AF added to the Paso Robles Formation and a reduction of 623 AF in the Careaga Sand Formation.

Figure 15 provides a decadal summary of groundwater storage variations in the Eastern Management Area of the Santa Ynez River Valley Groundwater Basin. Changes in storage are determined by fluctuations in the seasonal maximum water levels, typically occurring in spring.

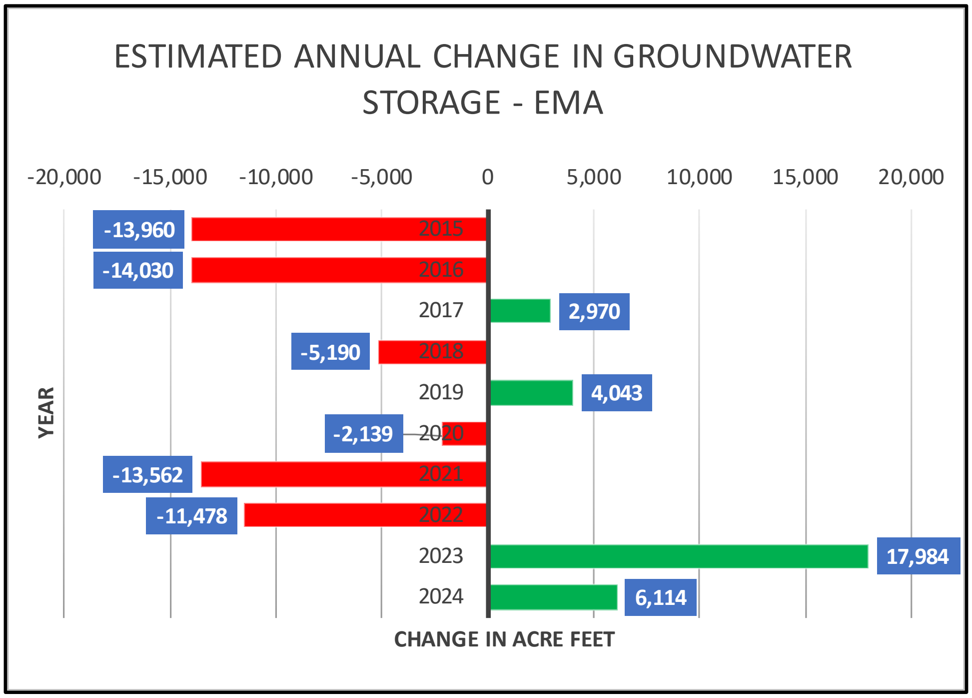


Figure 15: 10-year trend of annual storage changes in the Eastern Management Area

Table 12 provides links to locate water level data for the EMA.

Table 12: Santa Ynez River Valley Groundwater Basin Eastern Management Area links

LINKS TO AVAILABLE BASIN INFORMATION – EASTERN MANGEMENT AREA
• Eastern Management Area Groundwater Sustainability Agency (GSA)
• Eastern Management Area Groundwater Sustainability Plan (GSP)
• Joint Basin Annual Report Water Year 2024

San Antonio Creek Valley Groundwater Basin

The SBCWA and the USGS have historically conducted groundwater monitoring throughout the San Antonio Creek Groundwater Basin which is categorized as medium priority. As of 2021, the San Antonio GSA is the designated SGMA monitoring entity and has assumed responsibility for maintaining a water level network of about 60 wells within this basin. Groundwater is the only water supply source within the basin, although State Water Project deliveries can offset the need for Vandenberg Space Force Base to pump from Barka Slough.

The unconfined Paso Robles Formation and the lower Careaga Sandstone are the primary water-bearing hydrogeologic units in the basin. Land use within the valley is predominantly agricultural. Since the 1980s, agricultural practices have shifted from non-irrigated pastureland to irrigated crops and vineyards, leading to increased groundwater extraction. These withdrawals have exceeded natural recharge rates, resulting in decreased aquifer storage. In some areas, groundwater levels have declined by more than 100 feet since the 1950s. Water levels have generally declined steadily over several decades, with the most significant drops beginning around 2000. Long-term data show that declines are occurring more rapidly in the Paso Robles Formation than in the Careaga Sandstone Formation.

In spring 2025, 41 wells were measured. There are currently no monitoring wells east of Los Alamos or in the north-central basin area between Harris Canyon and Careaga Canyon. The Groundwater Sustainability Agency (GSA) is addressing these monitoring gaps. Monitoring wells in the Paso Robles Formation are primarily located along the basin axis, while those in the Careaga Sandstone Formation are concentrated in Barka Slough and the north-central basin.

Comparison of spring 2024 and spring 2025 data for 16 Paso Robles Formation wells with available records shows that 12 wells declined by 0.4 to 11.8 feet, primarily along San Antonio Creek. The remaining four wells recorded increases between 1.1 and 7.7 feet (Figure 16). Of the 23 Careaga Formation wells with comparable data, 12 recorded declines between 0.5 and 3.4 feet. The remaining 10 wells remained stable or showed increases up to 2.9 feet (Figure 17).

Most wells in the Paso Robles Formation remain above 2022 levels measured prior to two years of above-average precipitation, with increases ranging from 1.0 to 11.4 feet. In the Careaga Formation, 10 wells in the basin center recorded declines of 0.3 to 8.6 feet, while 12 wells showed increases of 0.3 to 6.9 feet.

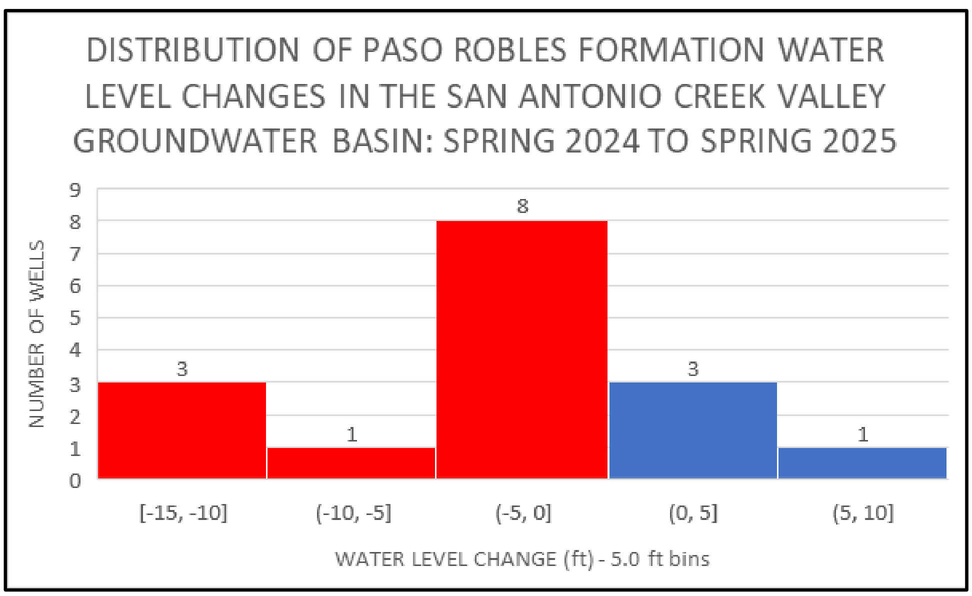


Figure 16: Annual distribution of Paso Robles Formation water level changes in the San Antonio Creek Valley Groundwater Basin.

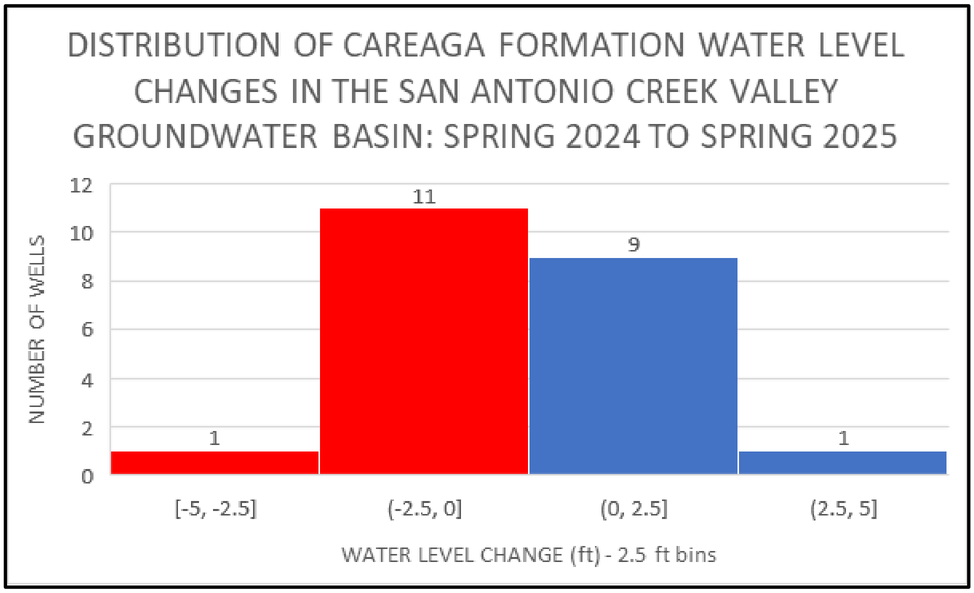


Figure 17: Annual distribution of Careaga Formation water level changes in the San Antonio Creek Valley Groundwater Basin.

The USGS completed a comprehensive basin study in 2022 that evaluated groundwater availability and use from 1948 through 2018. Results of this study showed an average annual depletion in storage of 6,430 AFY. The depletion rate increased over time, with an average loss of storage of 17,017 AFY through the 2013 - 2018 Water Years and a net loss of storage of 453,000 AF for the 71-year analysis period. An additional study completed in tandem by GSI Water Solutions Inc. in 2021 as part of GSP preparation indicates a loss of groundwater storage totaling 400,100 AF during a 38-year analysis period from 1981 through 2018. Using additional data from recent reports to expand on this analysis, the total loss of groundwater storage totals 383,800 AF for the 44-year period from 1981 through 2024. This is an average yearly loss of storage of 8,700 AF. Results of the San Antonio Creek Valley Groundwater Basin Sustainability Plan 2024 Annual Report indicate that total groundwater extractions during Water Year 2024 were 14,000 AF. The change in storage was 30,340 AF, with an increase of 30,300 AF and 40 AF to the Paso Robles and Careaga Sandstone formations respectively.

Figure 18 provides a decadal summary of groundwater storage variations in the San Antonio Creek Groundwater Basin. Changes in storage are determined by fluctuations in the seasonal maximum water levels, typically occurring in spring.

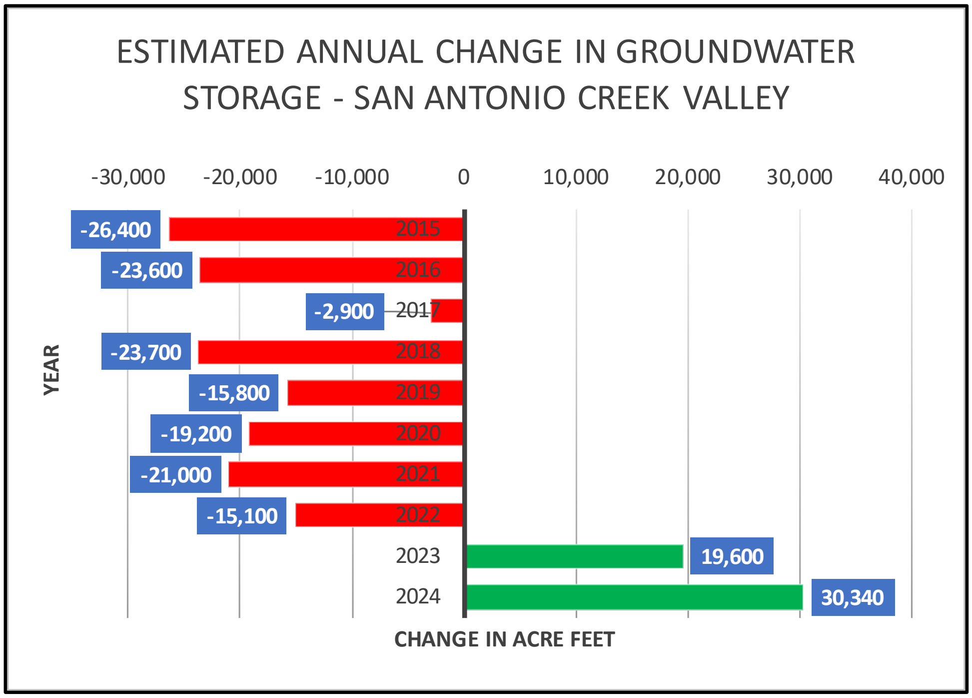


Figure 18: 10-year trend of annual storage changes in the San Antonio Creek Valley Groundwater Basin

SBCWA, in cooperation with the USGS, evaluated the effect of groundwater level declines on Barka Slough located on the western end of the basin. Barka Slough, a perennial wetland, has seen a significant drop in water levels. The study titled Simulated Effects of Future Water Availability and Protected Species Habitat in a Perennial Wetland, Santa Barbara County, California evaluates the potential impacts of future climatic conditions on water availability and habitats of protected species in Barka Slough. Using extended hydrologic models for 2022–2051 under two climate scenarios—repeated historical climate and a 2070-centered Drier Extreme Warming (DEW) climate—the research indicates that both scenarios could lead to cumulative groundwater storage depletion, seasonal stream disconnection, and groundwater-level declines in Barka Slough. Barka Slough may transition from a perennial to an ephemeral wetland. Such changes are likely to adversely affect habitats of federally listed species, including the unarmored threespine stickleback, tidewater goby, Gambel's watercress, and La Graciosa thistle.

Attachment C illustrates the active monitoring network to include SGMA representative wells and representative hydrographs for wells within the basin. The GSA is currently addressing the data gaps in the monitoring network. Table 13 provides links to locate water level data.

Table 13: General San Antonio Creek Valley Groundwater Basin information and associated links

SAN ANTONIO CREEK VALLEY GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	128.0
DWR Basin Population Projection in 2030:	2,700
Irrigated acres	12
GW Percent of Supply	97%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-014 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060009 San Antonio	
• Santa Barbara County Water Agency - San Antonio Creek Valley	
• San Antonio Basin Groundwater Sustainability Agency (GSA)	
• San Antonio Basin Groundwater Sustainability Plan (GSP)	
• Simulated Effects of Future Water Availability and Protected Species Habitat in a Perennial Wetland, Santa Barbara County, California	
• DRAFT San Antonio Creek Valley Groundwater Basin Sustainability Plan 2024 Annual Report	
• 2025 Quarter 1 Monitoring Report	

Additional data may be available in the files of the following agencies upon request:

- Los Alamos Community Services District
- Santa Barbara County Water Agency
- Vandenberg Space Force Base

Santa Maria River Valley Groundwater Basin

The Santa Maria River Valley Groundwater Basin resides in Santa Barbara and San Luis Obispo Counties. The SBCWA, USGS, Santa Maria Valley Water Conservation District (SMVWCD), and Twitchell Management Authority (TMA) have historically conducted groundwater monitoring within the basin. The DWR has defined the groundwater basin as very low-priority. The basin underwent a lengthy process of adjudication (Santa Maria Valley Water Conservation District vs. City of Santa Maria et al.), with an original Judgment issued in 2008 and an amended Judgment issued in 2014.

Water supply sources for water users in the Santa Maria River Valley Groundwater Basin within Santa Barbara County include groundwater and imported state water. When available, surface water stored in Twitchell Reservoir supplements groundwater recharge to the basin. From 1967 through 2024, the average annual release was 46,520 AFY[11]. About 1,500 AF was released in WY2025. Table 2 provides estimated Twitchell Reservoir releases over the past ten years.

[11] 2023 Annual Report of Hydrologic Conditions, Water Requirements, Supplies and Disposition, Santa Maria Valley Management Area. https://content.civicplus.com/api/assets/df3b54dd-2725-4f80-b881-284f7776ad78

The unconfined alluvium and the Paso Robles, Careaga, and Orcutt Formations are the primary water-bearing hydrogeologic units in the basin. As a result of aquifer system variations, the basin is separated into shallow and deep zones for analysis. Designated management areas within the basin include the Oso Flaco, Coastal, Municipal Wellfield, Central Agriculture, Twitchell Recharge, and Sisquoc Valley. Water levels in the basin began to noticeably decline in 1945, coinciding with an increase in agricultural acreage and urban population, and reached historical lows in the late 1960s. Climatic fluctuations, land use changes, discharge from the Sisquoc River, and Twitchell Reservoir storage availability have resulted in significantly fluctuating levels throughout the basin. Although highly variable, water levels maintained general stability following the 1960s and reached near-historic highs in 2002. Water levels have steadily declined since 2002, with more rapid drops starting at the beginning of the most recent drought in 2012. Most areas throughout the basin were at or near historic lows in WY2022, but are now showing noticeable improvement.

Compared to the spring 2024 data, the spring 2025 data indicates that many wells within the shallow and deep aquifer have decreased. Of the 12 shallow aquifer wells with comparable data from spring 2024 and spring 2025, 50% recorded declines ranging from 3.1 to 23.5 feet. Increases ranged from no change to 12.3 feet (Figure 19). Of the 18 shallow aquifer wells with comparable data from spring 2024 and spring 2025, 66% recorded declines ranging from 2.2 to 26.5 feet. These decreases are located along the Santa Maria River. Increases ranged from 2.6 to 13.6 feet (Figure 20).

It should be noted that all water levels within both the shallow and deep aquifer are significantly above spring 2022 levels measured prior to two consecutive above-average years of precipitation and are above historic lows.

The 2025 Annual Report of Hydrogeologic Conditions, prepared by Ludorff & Scalmanini, is anticipated to be published in June 2026. This report will contain a more comprehensive selection of water levels for a more detailed analysis of basin changes.

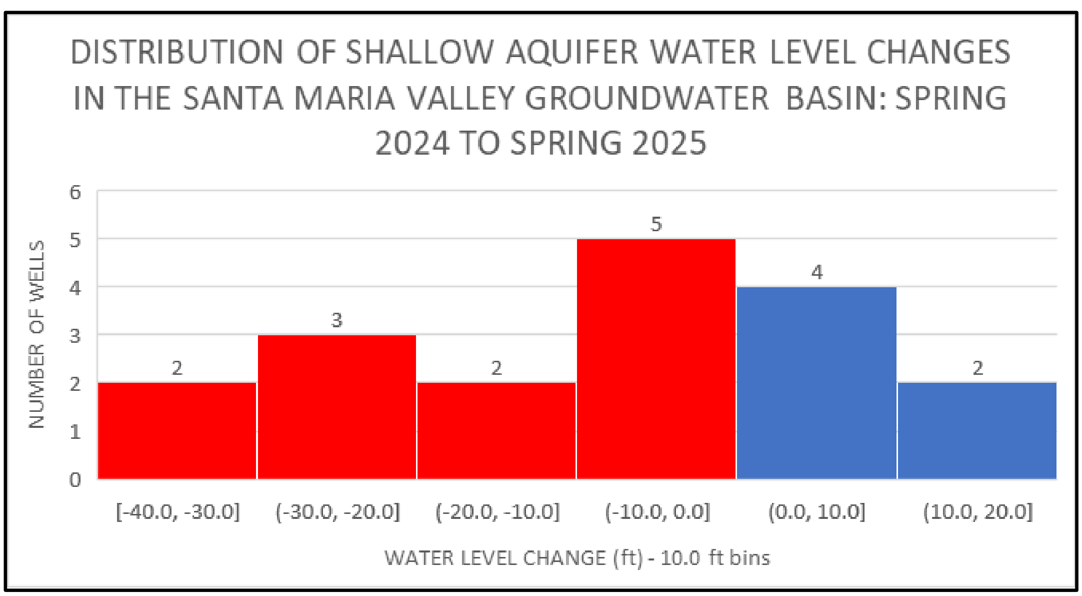


Figure 19: Annual distribution of shallow aquifer water level changes in the Santa Maria Valley Groundwater Basin.

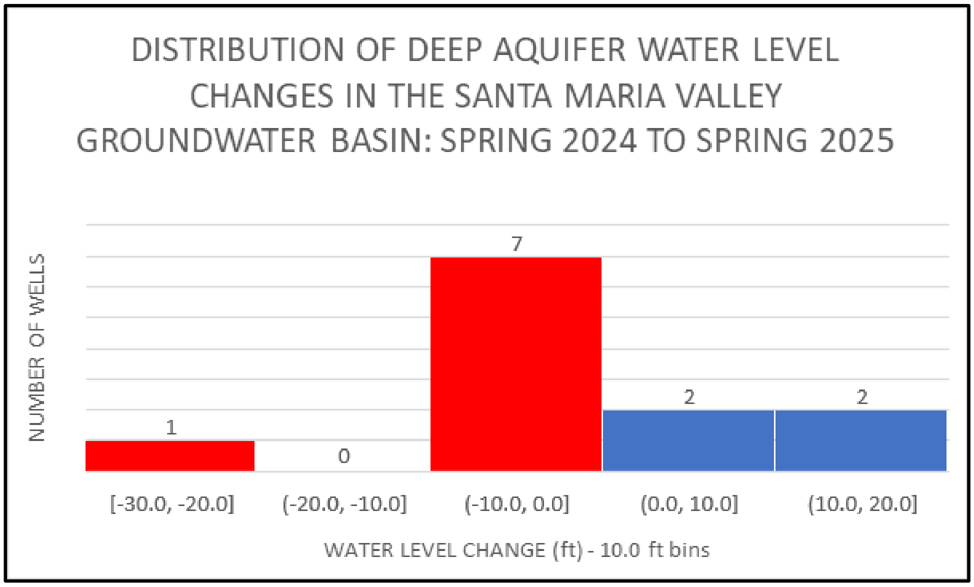


Figure 20: Annual distribution of deep aquifer water level changes in the Santa Maria Valley Groundwater Basin.

The 2024 Annual Report of Hydrogeologic Conditions estimates total groundwater extractions from the adjudicated basin at 103,459 AF for Water Year 2024, including 89,319 AF for agricultural use and 14,139 AF for municipal supply. This represents a 2,204 AF (2.2%) increase from the previous water year.

Attachment D illustrates the original network monitored by the USGS until 2020. According to the 2024 Annual Report, the current network consists of 28 deep wells, 42 shallow wells, and 21 unclassified wells. Not all are actively monitored. Representative hydrographs for wells within the basin are illustrated. Table 14 provides links to located water level data.

Table 14: General Santa Maria River Valley Groundwater Basin information and associated links

SANTA MARIA RIVER VALLEY GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	288.0
DWR Basin Population Projection in 2030:	251,000
Irrigated acres	53,430
GW Percent of Supply	83%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-012 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060008 Santa Maria	
• Santa Barbara County Water Agency - Santa Maria River Valley	
• 2024 Annual Groundwater Report	

Additional data may be available in the files of the following agencies upon request:

- City of Guadalupe
- City of Santa Maria
- Golden State Water Company
- Santa Barbara County Water Agency
- Santa Maria Valley Water Conservation District

Cuyama Valley Groundwater Basin

The Cuyama Valley Groundwater Basin spans four counties: Santa Barbara, San Luis Obispo, Kern, and Ventura. Historically, the Santa Barbara County Water Agency (SBCWA) and the U.S. Geological Survey (USGS) conducted groundwater monitoring in the Santa Barbara portion. As of January 2020, all CASGEM wells previously monitored by SBCWA were transferred to the Cuyama Basin Groundwater Sustainability Agency (GSA) for SGMA compliance. The GSA now oversees all water level data collection in this area.

Designated by DWR as a high-priority, critically overdrafted basin, the Cuyama Basin's Groundwater Sustainability Plan (GSP) was approved in 2023. In parallel with GSA efforts, local landowners are engaged in a basin-wide adjudication process concerning groundwater extraction and storage rights.

The basin's primary aquifers are the alluvium and Morales Formation. Groundwater is the sole water supply source. Land use has shifted markedly over the past century—from dryland pasture and farming to irrigated agriculture following petroleum development in the 1940s. By the 1970s and 1980s, crop patterns had expanded to include carrots, grains, orchards, and vineyards. Groundwater withdrawals over the last 80 years have exceeded recharge in many areas, leading to substantial aquifer storage loss. Hydrographs show declines exceeding 300 feet in the Central Threshold Region since the 1950s. In contrast, water levels have remained relatively stable in the Ventucopa Uplands, and western Northwestern regions.

Following two consecutive years of above-average precipitation, most wells in the basin have shown water level improvements, particularly in the Eastern Threshold Region. However, recent measurements indicate declines in the Central, Southeastern, and Western Threshold Regions.

The GSA monitors groundwater levels at 49 representative wells. The Groundwater Conditions Report – Cuyama Valley Groundwater Basin presents April 2025 data. Of the 42 wells with spring 2025 comparison data, 62% showed declines ranging from 0.5 to 64.1 feet, mainly in the Central, Western, and Southeastern Threshold Regions. The remaining wells were stable or showed increases up to 49.8 feet.

A USGS study (2014) assessed groundwater conditions from 1950 to 2010, estimating a storage loss of 2.1 million acre-feet in the Main-zone subregions. This analysis excluded the Northwestern and Western Threshold Regions. A subsequent GSA study (2019) covering the entire basin from 1998 to 2017 found an average annual storage deficit of 23,076 acre-feet, with losses in 18 of the 20 years. The

Annual Report 2023-2024 indicates 33,700 acre-feet of groundwater extraction in Water Year 2024, with a net storage loss of 2,100 acre-feet.

Figure 21 provides a decadal summary of groundwater storage variations in the Cuyama Valley Groundwater Basin. Changes in storage are determined by fluctuations in the seasonal maximum water levels, typically occurring in spring.

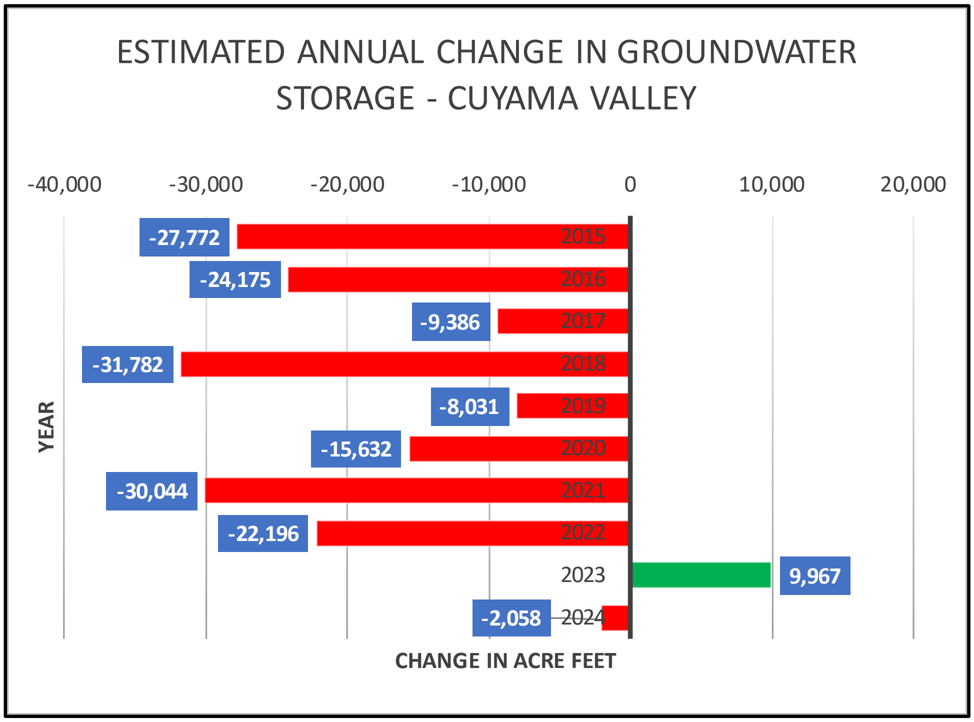


Figure 21: 10-year trend of annual storage changes in the Cuyama Valley Groundwater Basin

As part of GSP development, six “threshold regions”, illustrated in Attachment E, were defined within the basin based on geology, land use, and groundwater conditions to set minimum water level thresholds. The hydraulic response within each region to natural and anthropogenic activity varies, although each region may be at least partially connected hydraulically.

Attachment E illustrates the active monitoring network to include SGMA representative wells and representative hydrographs for wells within the Cuyama Valley aquifer system. Table 15 provides links to locate water level data.

Table 15: General Cuyama Valley Groundwater Basin information and associated links

CUYAMA VALLEY GROUNDWATER BASIN INFORMATION:	
Groundwater Basin Surface Area (m^2)	230.0
DWR Basin Population Projection in 2030:	1,300
Irrigated acres	15,279
GW Percent of Supply	100%
LINKS TO AVAILABLE BASIN INFORMATION AND WATER LEVEL DATA:	
• DWR Basin ID No. 3-013 Information	
• CASGEM Water Data Library	
• SGMA Data Viewer	
• National Water Information System (NWIS) interactive map for Hydrologic Unit 18060007 Cuyama	
• Santa Barbara County Water Agency - Cuyama Valley	
• Cuyama Valley Basin Data Management System	
• Cuyama Basin Groundwater Sustainability Agency (GSA)	
• Cuyama Basin Groundwater Sustainability Plan (GSP)	
• Cuyama Basin - Annual Report for 2023-2024 Water Year	
• Groundwater Conditions Report - Cuyama Valley Groundwater Basin (April 2025)	

Additional data may be available in the files of the following agencies upon request:

- Cuyama Community Services District
- Santa Barbara County Water Agency

Northwestern Threshold Region

The Northwestern Threshold Region has historically been dominated by rangeland with minimal development. Historical data from shallow wells show generally stable water levels, especially in the far west portion of this region. A vineyard was established in 2015 along the Cuyama River in the eastern portion of this basin on land that was not previously irrigated. From spring 2024 to spring 2025, one well in the western portion of this region declined 1.9 feet, while four others rose 1.2 to 6.0 feet (Figure 22). All 2025 levels are above those measured in WY2022, prior to two consecutive years of above average precipitation, with increases ranging from 2.8 to 36.9 feet.

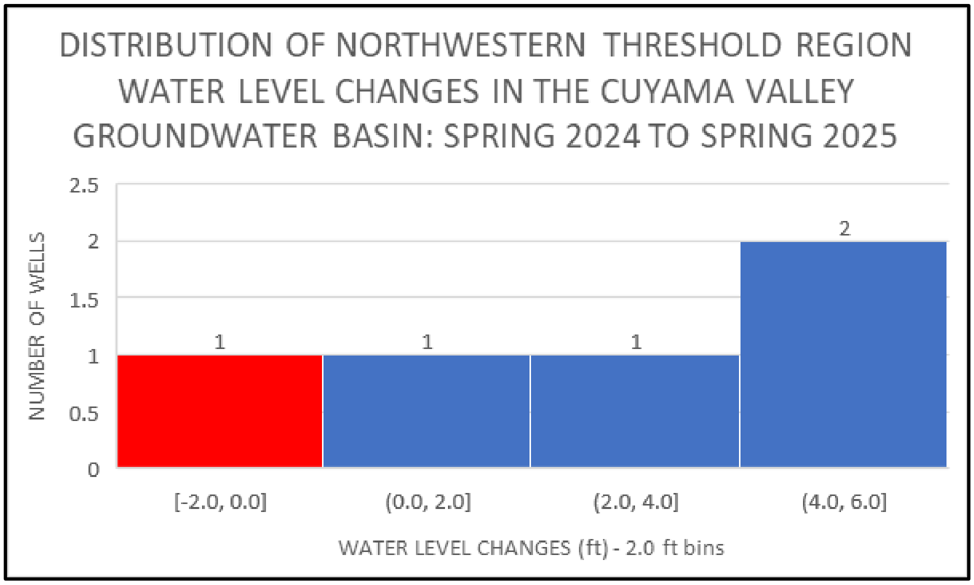


Figure 22: Annual distribution of Northwestern Threshold Region water level changes in the Cuyama Valley Groundwater Basin.

Western Threshold Region

Agricultural use and groundwater extraction in the Western Threshold Region are minimal. Shallow well levels are near the surface and have remained generally stable for decades, based on limited data. From spring 2024 to spring 2025, 4 of 6 wells declined by 1.8 to 12.4 feet, while 2 bordering the Central Threshold Region remained stable or rose by 2.2 feet (Figure 23). Most wells remain above 2022 levels, measured before two consecutive wet years.

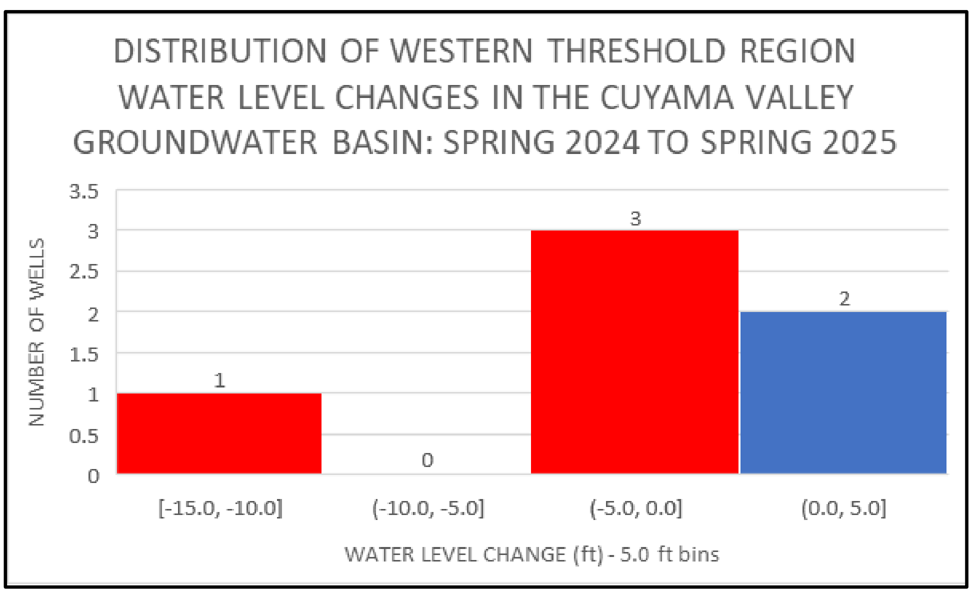


Figure 23: Annual distribution of Western Threshold Region water level changes in the Cuyama Valley Groundwater Basin.

Central Threshold Region

The Central Threshold Region contains most of the basin's agricultural activity. Water levels have steadily declined since the late 1940s, with long-term drops nearing 300 feet. From spring 2024 to spring 2025, 18 of 26 wells showed declines of 0.5 to 64.1 feet, mostly in the eastern and southern areas. The other eight wells remained stable or increased, with gains up to 17.7 feet (Figure 24). Many wells with recent declines are also below 2022 levels, measured before two consecutive wet years.

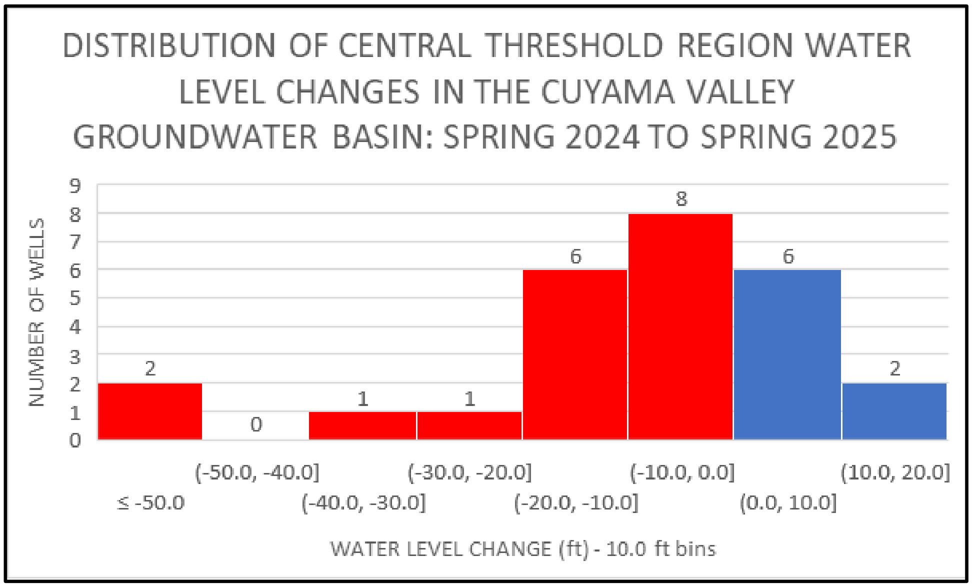


Figure 24: Annual distribution of Central Threshold Region water level changes in the Cuyama Valley Groundwater Basin.

Eastern Threshold Region

The Eastern Threshold Region sees moderate agricultural groundwater use. Water levels respond quickly to precipitation, with rapid recharge during wet years. Groundwater storage has improved with recent rainfall and is above historic lows. From spring 2024 to spring 2025, three wells rose 9.2 to 17.9 feet, while one declined 12.8 feet (Figure 25). Two wells with comparison data remain significantly above 2022 levels, with increases of 53.5 and 74.2 feet.

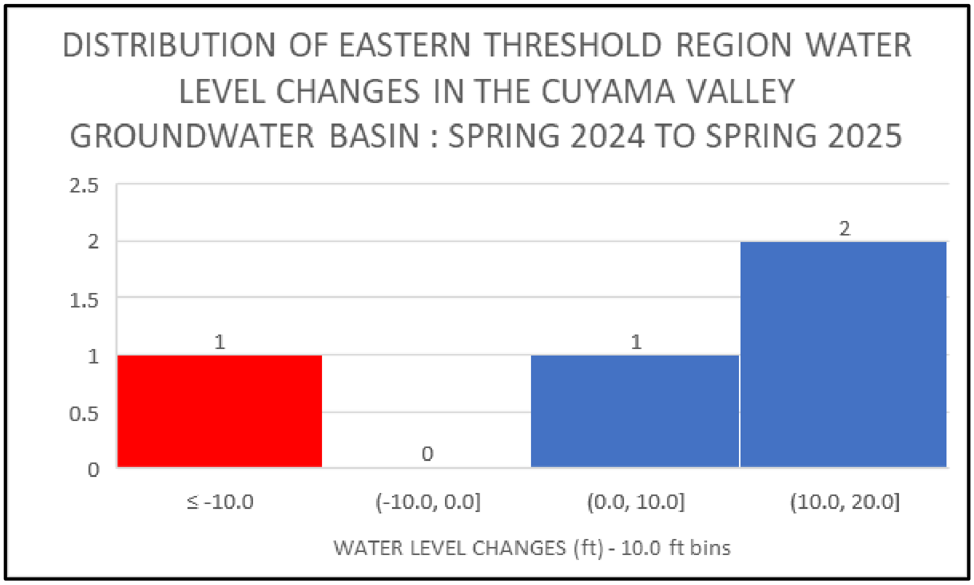


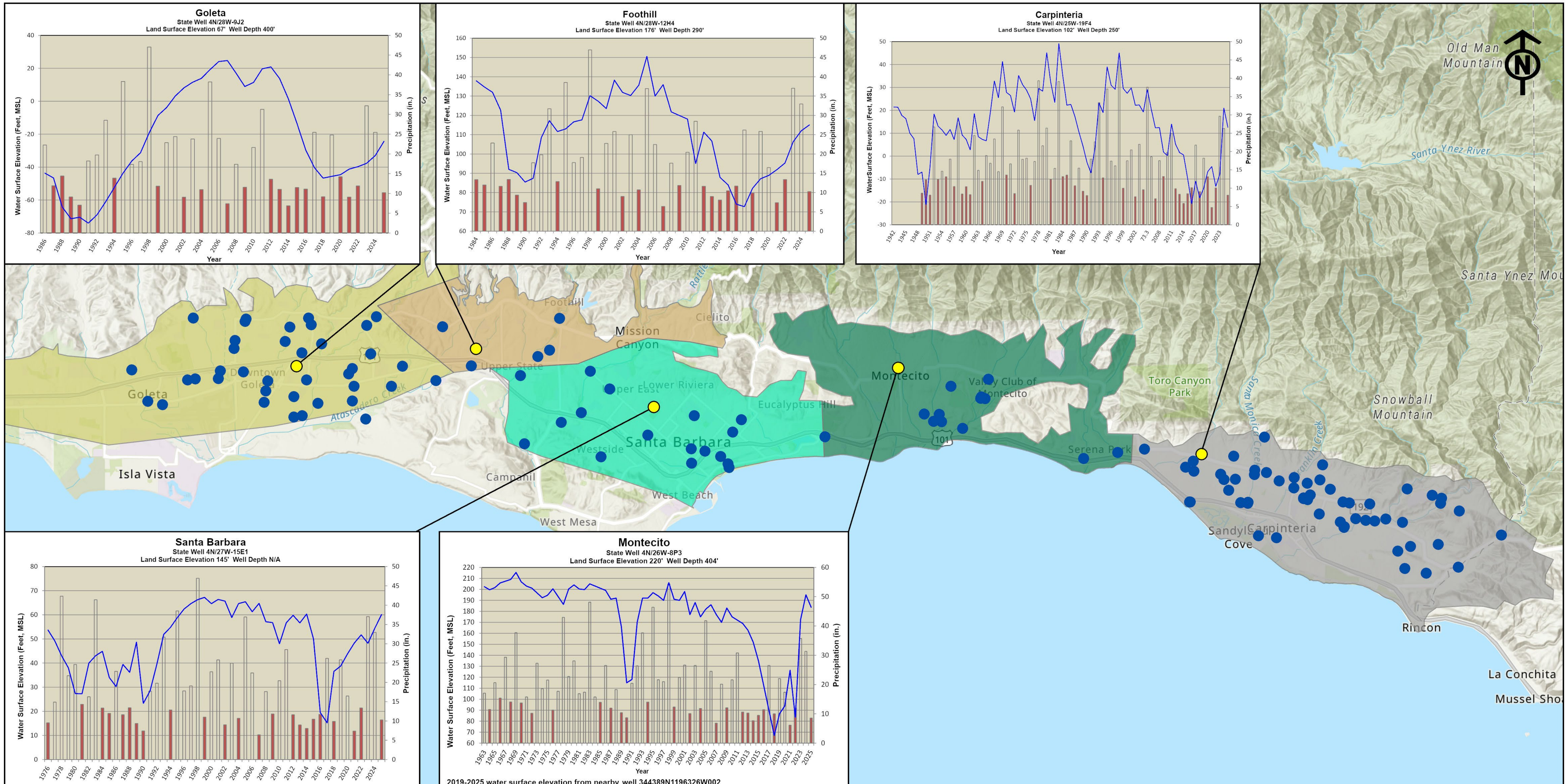
Figure 25: Annual distribution of Eastern Threshold Region water level changes in the Cuyama Valley Groundwater Basin.

Southeastern Threshold Region

Most of the Southeastern Threshold Region lies in Ventura County, with a small portion in Santa Barbara County. Water levels are shallow, around 25 feet deep. From spring 2024 to spring 2025, both monitoring wells showed declines—one by 2.7 feet, the other by 8.8 feet. One well with comparison data remains 14.5 feet above 2022 levels, measured before two consecutive years of above-average precipitation.

Badlands Threshold Region

The Badlands Threshold Region is not located within Santa Barbara County. There is little agriculture or development in this area and groundwater use is minimal. No water level data are available for this region.



Spring water surface elevation

Yearly total precipitation <80% average

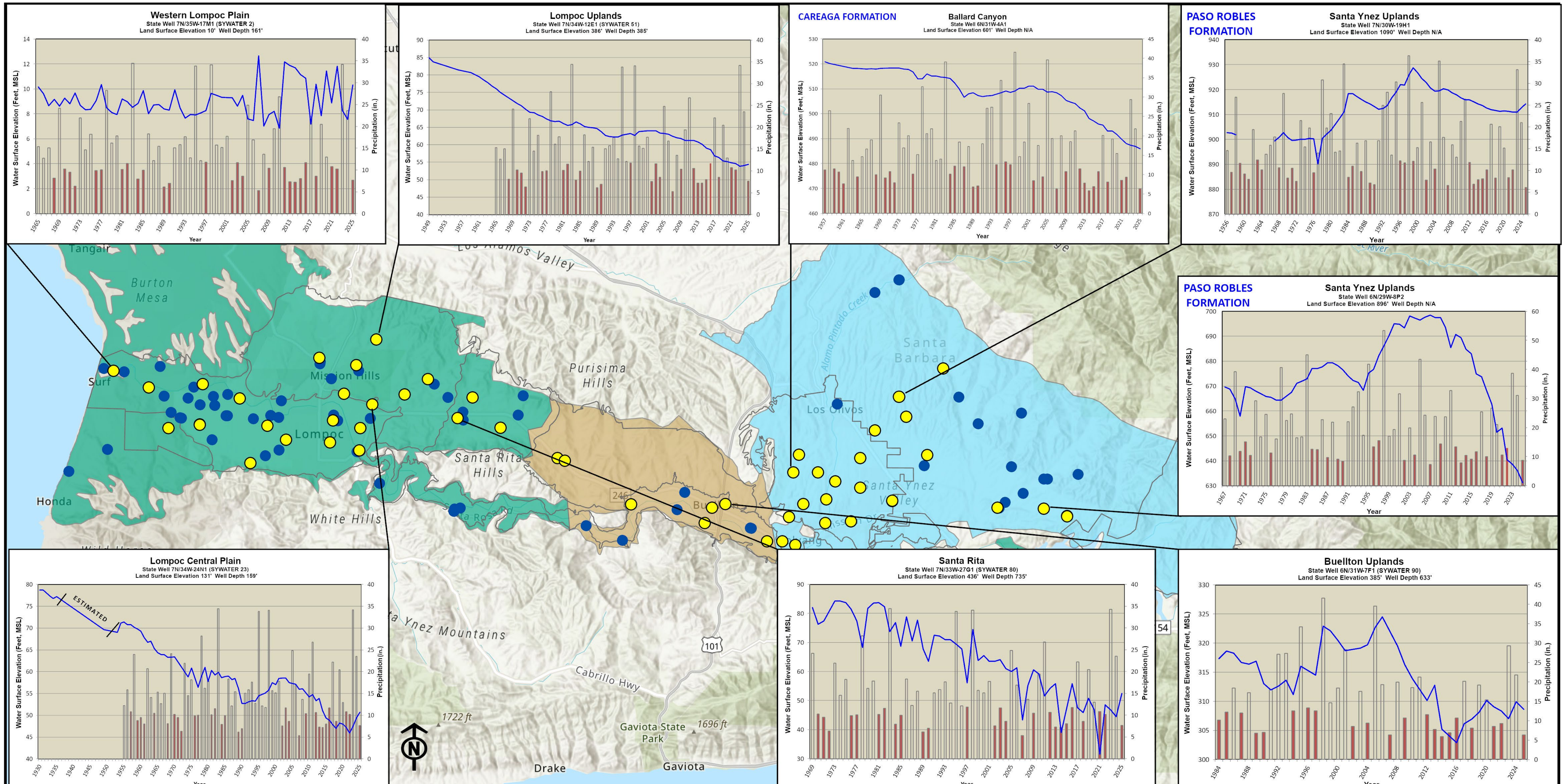
Yearly total precipitation >80% average

ATTACHMENT A

South Coast Groundwater Basins

SOUTH COAST MONITORING NETWORK

- Indicator Wells
- Observation Wells
- Santa Barbara
- Montecito
- Goleta
- Foothill
- Carpinteria



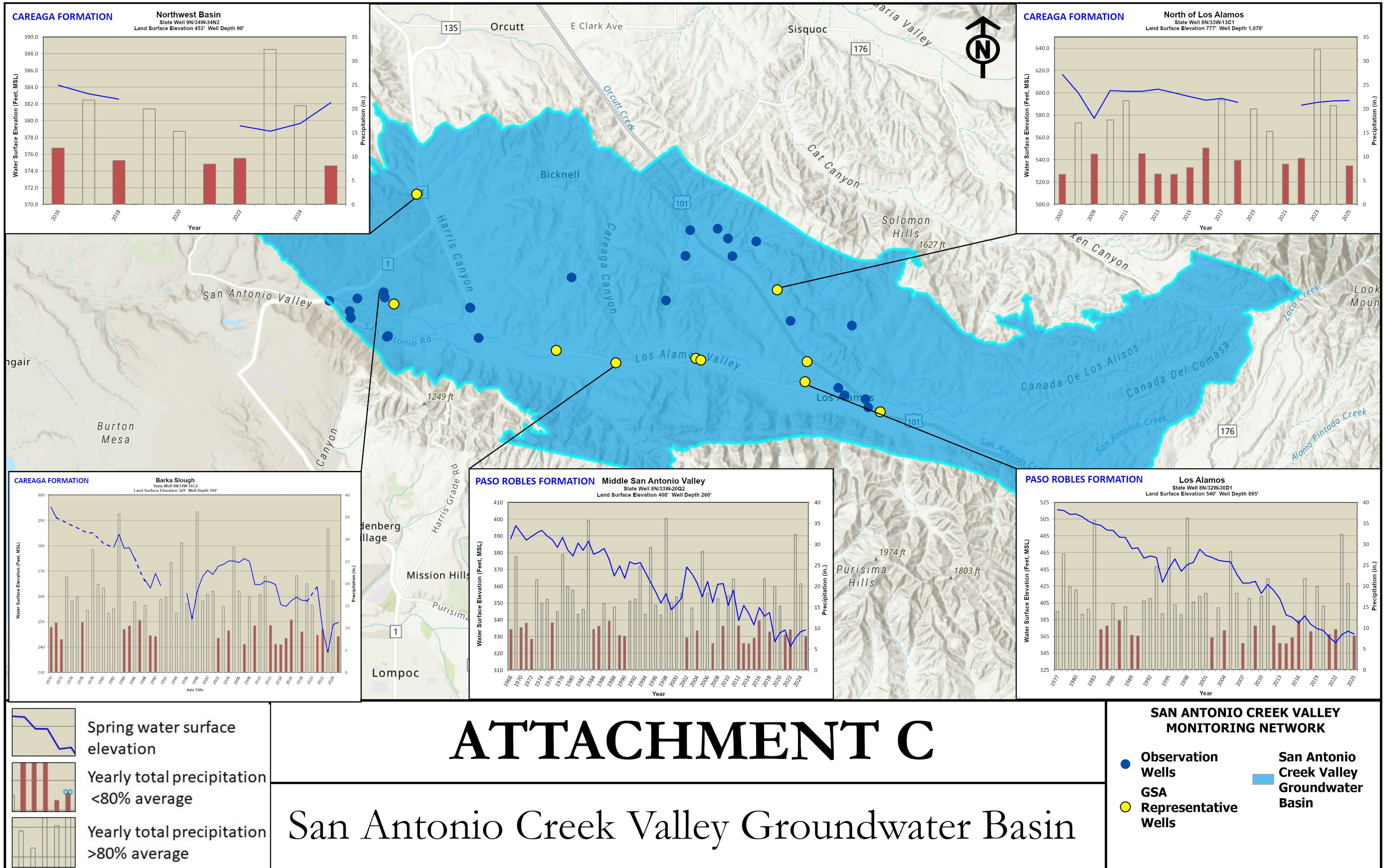
Spring water surface elevation	
Yearly total precipitation <80% average	
Yearly total precipitation >80% average	

ATTACHMENT B

Santa Ynez River Valley Groundwater Basin

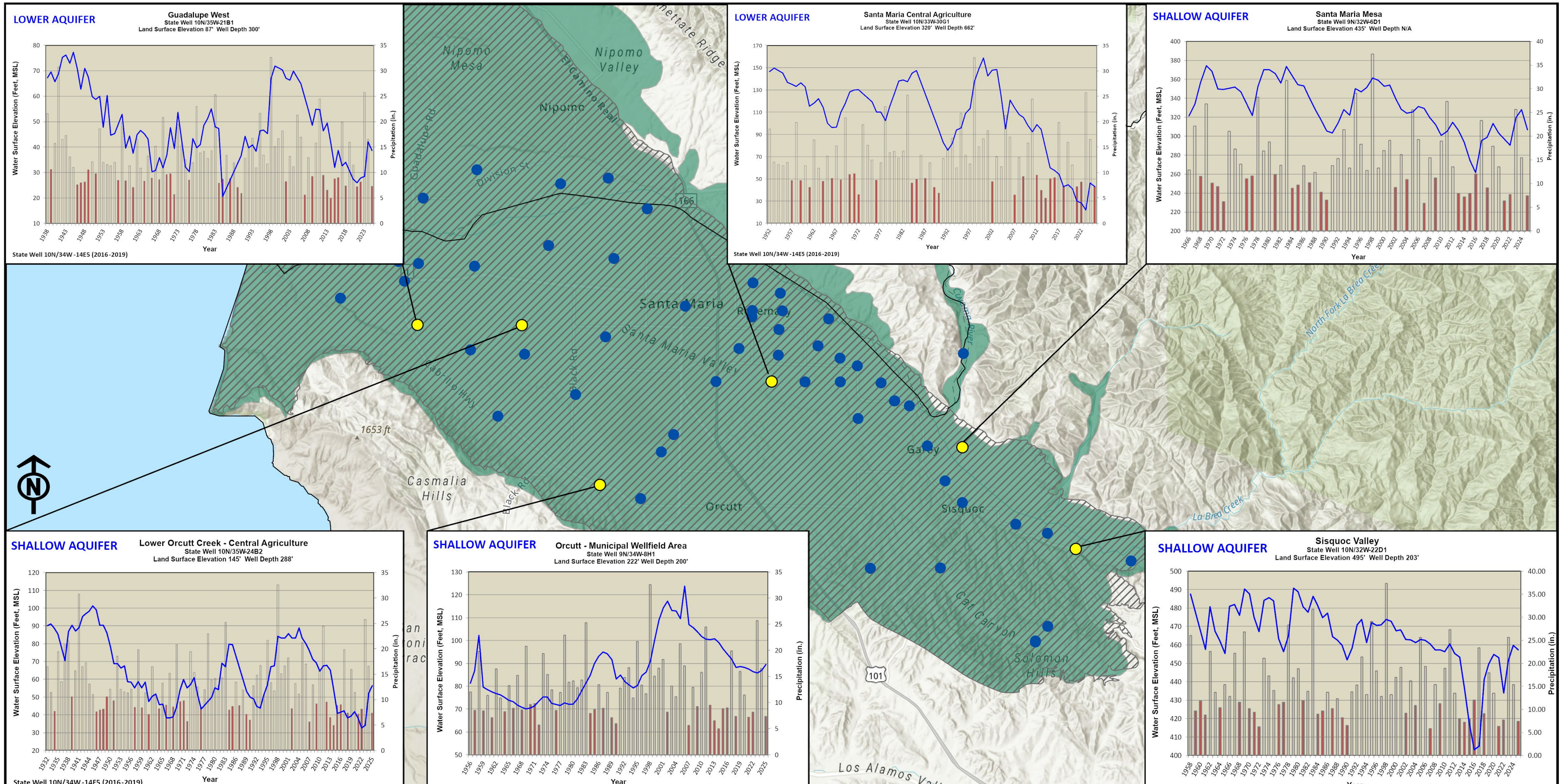
SANTA YNEZ RIVER VALLEY MONITORING NETWORK

- **Observation Wells**
- **GSA Representative Wells**
- **Western Management Area**
- **Eastern Management Area**
- **Central Management Area**



ATTACHMENT C

San Antonio Creek Valley Groundwater Basin



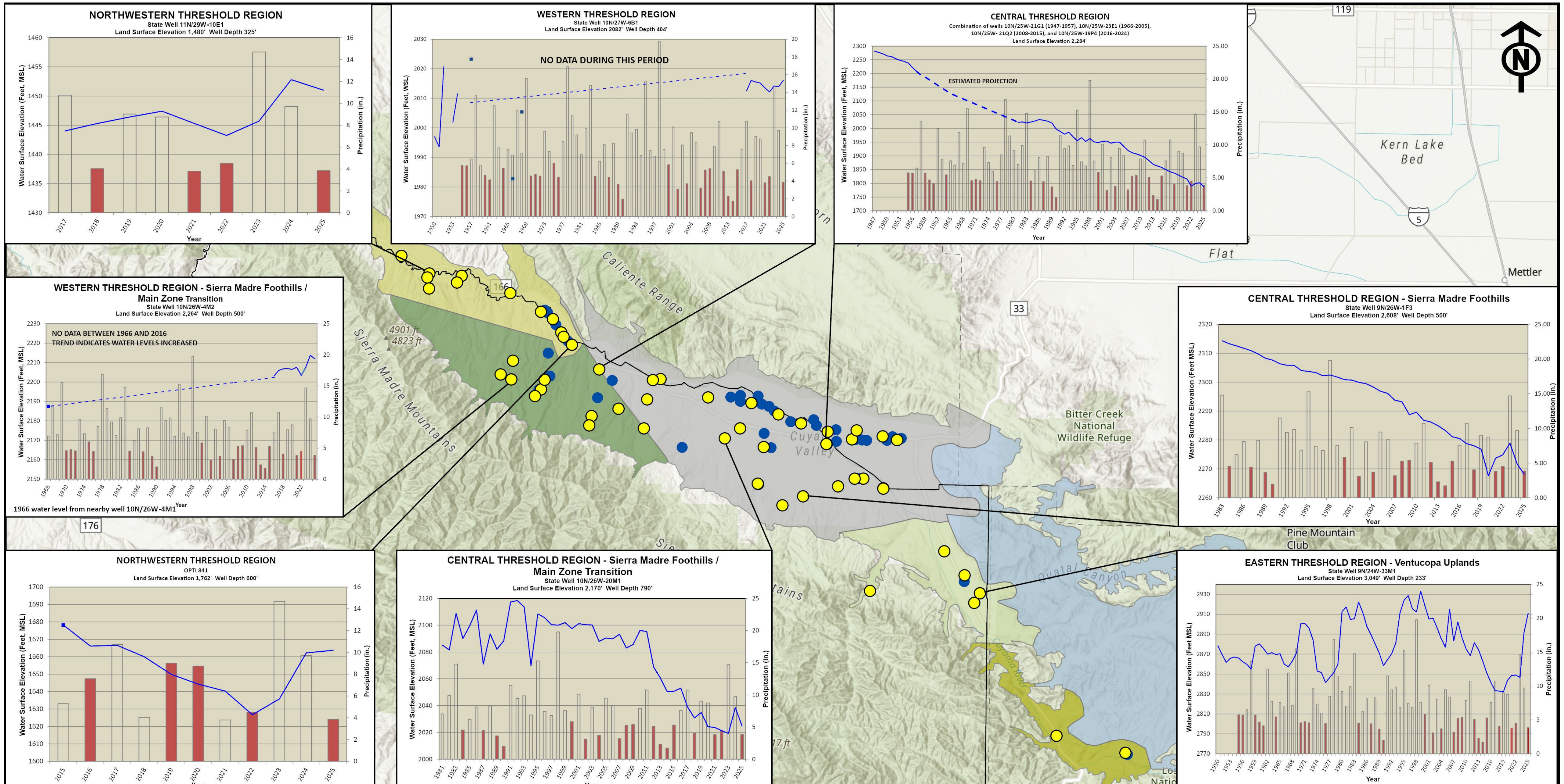
Spring water surface elevation	
Yearly total precipitation <80% average	
Yearly total precipitation >80% average	

ATTACHMENT D

Santa Maria River Valley Groundwater Basin

SANTA MARIA RIVER VALLEY MONITORING NETWORK

- **Indicator Wells**
- **Observation Wells**
- **Santa Maria**
- **Adjudicated Boundary**
- **Santa Barbara County Boundary**



Spring water surface elevation

Yearly total precipitation <80% average

Yearly total precipitation >80% average

ATTACHMENT E

Cuyama Valley Groundwater Basin

CUYAMA VALLEY MONITORING NETWORK

- Observation Wells
- GSA Representative Wells
- Western Threshold Region
- Eastern Threshold Region
- Southeastern Threshold Region
- Northwestern Threshold Region
- Badlands Threshold Region
- Central Threshold Region
- Santa Barbara County Boundary

Attachment F - PUBLIC ONLINE GROUNDWATER DATA RESOURCES

California Statewide Groundwater Elevation Monitoring

The California Statewide Groundwater Elevation Monitoring (CASGEM) program was developed in 2009 by the Department of Water Resources to track and record groundwater level data and trends in basins throughout California. Designated monitoring entities are responsible for data collection and submittal within each of these basins. Groundwater level data used to populate the *Historical Groundwater Level Data* portion of this dataset was extracted from other resources such as the National Water Information System. The following web addresses will provide access to water level data in Santa Barbara County through the use of interactive maps and direct query:

- Interactive map illustrating groundwater basins and monitoring entities throughout California.
- CASGEM Water Data Library to find monitoring stations for a specific area.
- Select groundwater station retrieval parameters within the County of Santa Barbara by well name, well number, or basin.

Sustainable Groundwater Management Act (SGMA) Data Viewer

- Interactive map illustrating groundwater basins and monitoring entities throughout California.

Groundwater Station Enterprise Water Management (EWM)

- Interactive point feature class map of all groundwater elevation monitoring stations maintained in the DWT Enterprise Water Management database.

California Natural Resources Agency Open Data

- The DWR Periodic Groundwater Levels dataset contains seasonal and long-term groundwater level measurements collected by the Department of Water Resources and cooperating agencies in groundwater basins statewide.

California Groundwater Live

- Groundwater tool which features the latest groundwater information, live statistics and a series of interactive dashboards.

National Water Information System

The National Water Information System is hosted by the USGS and contains an extensive database of USGS approved water level data. These data were collected by USGS personnel or by cooperative agencies familiar with the protocols and techniques used by the USGS.

- NWIS - USGS Groundwater Data for California