

**March
2026**



Water Year 2025 Groundwater Report

for the Santa Clara and Llagas Subbasins



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SANTA CLARA VALLEY WATER DISTRICT

WATER YEAR 2025 GROUNDWATER REPORT

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EXECUTIVE SUMMARY

The Santa Clara Valley Water District (Valley Water) is the Groundwater Sustainability Agency (GSA) for the Santa Clara and Llagas subbasins¹ in Santa Clara County, which are sustainably managed through the comprehensive activities described in Valley Water’s 2021 Groundwater Management Plan (GWMP).² This annual water year (WY) report is required under the Sustainable Groundwater Management Act (SGMA) and all data presented are for WY 2025 (October 1, 2024 to September 30, 2025), unless otherwise noted. Valley Water’s water supply operations, water shortage analysis, and related planning are based on calendar year (CY), so relevant CY 2025 data is also presented.

This report has been expanded to address Department of Water Resources (DWR) comments³ to incorporate more detailed information presented in CY groundwater reports, including performance against established metrics for applicable sustainability indicators. Since this report includes required SGMA content and more detailed information previously presented in CY reports, Valley Water is no longer producing a CY report. Valley Water will continue to submit annual reports to DWR by April 1.

This report describes groundwater use, levels, quality, storage, land subsidence, and the status of GWMP outcome measures and lower thresholds. These outcome measures are used to evaluate performance relative to Valley Water Board of Directors (Board) Water Supply Objectives 2.2.1 and 2.2.2: *“Manage groundwater to ensure sustainable supplies and avoid land subsidence”* and *“Aggressively protect groundwater from the threat of contamination.”*

In the Santa Clara and Llagas subbasins, groundwater pumping by water retailers and other well users was 130,000 acre-feet (AF)⁴, providing 45% of the total water used in the county. To sustain and protect groundwater supplies, in 2025 Valley Water:

- Recharged groundwater with 104,300 AF of local and imported surface water,
- Reduced groundwater demands by 157,800 AF through treated surface water deliveries and recycled water and water conservation programs, which collectively provide in-lieu recharge,
- Conducted monitoring and analysis of groundwater levels and quality, and land subsidence,
- Implemented the well ordinance program and activities to minimize groundwater quality threats, and
- Worked with basin interested parties, land use agencies, and regulatory agencies to protect groundwater.

Table ES-1 shows data for key indicators of groundwater supply and subsidence conditions in 2025 as compared to 2024 and prior periods. Groundwater conditions remain healthy throughout the county. The 2025 groundwater storage improved, up 2% compared to 2024. Groundwater levels in WY 2025 were lower than in 2024 but remained above the long-term average and the prior five-year average, and far above observed levels during the most recent drought periods (2012–2016 and 2020–2022).

¹ California Department of Water Resources (DWR) Basins 2-9.02 and 3-3.01, respectively. Valley Water identifies two groundwater management areas (Santa Clara Plain and Coyote Valley) within the Santa Clara Subbasin.

² This plan was submitted to DWR as an Alternative to a Groundwater Sustainability Plan in December 2016 and approved for SGMA compliance in July 2019. The first required periodic evaluation was adopted by the Board of Directors in November 2021 and approved by DWR in June 2024.

³ DWR’s reviews of Annual Report for the Santa Clara and Llagas subbasins, Water Year 2023, May 24, 2024.

⁴ All values presented in this report are based on best available data (measured or estimated) and may be refined as additional data becomes available.

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Due to healthy groundwater conditions heading into the recent (2020–2022) drought, a proactive drought response including the acquisition of emergency imported water supplies and mandatory water use reduction, and wet hydrologic conditions, groundwater storage was 386,600 AF in 2024. The slight increase in 2025 pumping reflects an increasing demand following the recent drought. However, above average hydrologic conditions and managed recharge continued in 2025, resulting in 393,700 AF end of year groundwater storage in the Santa Clara and Llagas subbasins (Table ES-1). This falls well within the normal stage (Stage 1) of Valley Water’s Water Shortage Contingency Plan, indicating good groundwater supply conditions.

Groundwater levels in the Santa Clara Plain were well above the minimum thresholds established to protect against land subsidence, and 2025 subsidence monitoring data indicates uplift in most areas (Table ES-1). The areas with compaction were less than the subsidence threshold of 0.01 feet per year, indicating a low risk of permanent land subsidence in 2025.

Table ES-1. Groundwater Supply and Subsidence Conditions Compared to Other Years

Subbasin	Condition Indicator	2025	Compared to 2024	Compared to 5-Year Average (2021–2025)
Groundwater Supply (AF)				
Santa Clara and Llagas	Managed Recharge	104,300	Down 5%	Up 7%
	Groundwater Pumping	130,000	Up 4%	Up 4%
	End of Year Groundwater Storage	393,700	Up 2%	Up 13%
Santa Clara	Managed Recharge	79,600	Down 5%	Up 5%
	Groundwater Pumping	85,300	Up 4%	Up 3%
	End of Year Groundwater Storage	369,600	Up 2%	Up 13%
Llagas	Managed Recharge	24,700	Down 4%	Up 14%
	Groundwater Pumping	44,700	Up 6%	Up 5%
	End of Year Groundwater Storage	24,100	Down 6%	Up 15%
Groundwater Elevations (feet, NAVD 88)¹				
Santa Clara	Santa Clara Plain index well	88.5	Down 10.7 feet	Up 4.7 feet
	Coyote Valley index well	267.7	Down 5.4 feet	Down 2.7 feet
Llagas	Llagas Subbasin index well	255.8	Down 3.7 feet	Up 12.4 feet
Subsidence (feet/year)				
Santa Clara	Land Subsidence ²	0.006 (Aquifer subsidence)	Aquifer subsidence in 2025	Aquifer uplift over 5-year average

Notes:

¹ Groundwater elevations represent the average of all readings at three regional groundwater level index wells for the period noted based on the North American Vertical Datum of 1988 (NAVD 88).

² Valley Water has established a tolerable compaction rate of 0.01 feet/year based on average measured subsidence at two extensometers over the most recent 11 years (Appendix A), which was -0.008 feet/year average from 2015 to 2025 indicating uplift and meeting the tolerable rate. Subsidence calculations are based on the calendar year.

Water Year 2025 Groundwater Report

Groundwater quality in 2025 remained generally good in principal aquifer zones, with median total dissolved solids (TDS) below the secondary drinking water standard of 500 milligrams per liter (mg/L) and median nitrate below the primary drinking water standard of 10 mg/L. Nitrate and TDS concentrations are generally stable or decreasing over time. Nitrate and PFAS (per- and polyfluoroalkyl substances) are the primary groundwater quality challenges as described in the outcome measures summary below.

Outcome Measure Summary

The 2021 GWMP identifies outcome measures to assess performance relative to Board policy and groundwater sustainability goals. All outcome measures related to groundwater storage, levels, and land subsidence were met in 2025 (Table ES-2). Continued sustainable groundwater supply conditions demonstrate the effectiveness of Valley Water’s significant investments in basin management facilities, diverse water supplies, and conjunctive water management, as well as close coordination with water retailers.

Table ES-2. Summary of 2025 Groundwater Supply Outcome Measure Performance

Sustainability Indicator	GWMP Outcome Measure	Outcome Measure – Lower Threshold
Groundwater Storage (Countywide)	Projected end of year groundwater storage is greater than 278,000 AF in the Santa Clara Plain, 5,000 AF in the Coyote Valley, and 17,000 AF in the Llagas Subbasin.	Projected end of year countywide groundwater storage is greater than Stage 5 (150,000 AF) of the Water Shortage Contingency Plan.
2025 Result	Outcome measure met: End of CY 2025 groundwater storage is 366,400 AF, 4,500 AF, and 23,900 AF in the Santa Clara Plain, Coyote Valley, and Llagas Subbasin, respectively. ¹ The outcome measure is met for the Santa Clara Plain and the Llagas Subbasin, except in Coyote Valley, where the end of year (EOY) 2025 storage level is slightly below the outcome measure.	Lower threshold not exceeded: Countywide groundwater storage at the end of CY 2025 was 394,800 AF, well above the lower threshold. ²
Subsidence (Santa Clara Subbasin only)	Groundwater levels are above subsidence thresholds at the Santa Clara Subbasin subsidence index wells.	Groundwater levels are above the historical low water levels at the majority of the Santa Clara Subbasin subsidence index wells.
2025 Result	Outcome measure met: Groundwater levels were far above subsidence thresholds at all ten subsidence index wells.	Lower threshold not exceeded: Groundwater levels were far above their historic lows at all ten subsidence index wells.

Notes:

¹ The groundwater storage outcome measure is based on the CY to align with Valley Water operations and planning. End of WY 2025 groundwater storage is 365,600 AF, 4,000 AF, and 24,100 AF in the Santa Clara Plain, Coyote Valley, and Llagas Subbasin, respectively.

² Countywide groundwater storage at the end of WY 2025 was 393,700 AF.

Water Year 2025 Groundwater Report

Groundwater quality outcome measures were only partially met in 2025 (Table ES-3). The outcome measure for seawater intrusion in the Santa Clara Subbasin was met, as was the TDS trend outcome measure for the Santa Clara Subbasin. These results indicate that seawater intrusion and groundwater quality trends are generally stable or improving countywide. However, the outcome measures for primary drinking water standards were not met in 2025 for the Santa Clara and Llagas subbasins due to nitrate and PFAS as described below. The TDS outcome measure for the Llagas subbasin was also not met.

For Santa Clara Subbasin water supply wells tested, 90% of all wells were below Maximum Contaminant Levels (MCLs)⁵. Most detections above MCLs were for PFOS (14 Santa Clara Plain wells) and nitrate (eight Coyote Valley wells, most of which are domestic wells). The PFOS detections were localized in two areas and the impacted water retailer is actively pursuing well head treatment.

For Llagas Subbasin water supply wells tested, 74% of all wells met primary drinking water standards. Nitrate was detected above the MCL in 60 wells (primarily domestic wells). One public water supply well had perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) above the MCL.

Elevated nitrate continues to be a primary groundwater protection challenge, especially in Coyote Valley and Llagas Subbasin. While long-term trends indicate stable or improving conditions, 25% of Llagas Subbasin wells tested have nitrate above the drinking water standard (primarily domestic wells). Valley Water does not control land use or have regulatory authority over activities with the most nitrate loading to groundwater, such as agriculture or septic systems. However, Valley Water continues to coordinate with land use and regulatory agencies to influence policies, regulations, and decisions related to nitrate management. More directly, Valley Water's managed recharge helps dilute nitrate in groundwater, and water quality testing helps to reduce well owner exposure.

With the April 2024 adoption of drinking water standards for six PFAS compounds (including PFOA and PFOS), public water systems will need to monitor their water supply for these chemicals within three years and include the results in their Annual Water Quality Reports to customers. Public water systems that detect PFAS above the drinking water limits will have up to five years to implement solutions, such as treatment or other actions, to ensure water delivered to customers does not exceed these limits. Water systems must also notify the public if levels of regulated PFAS exceed these new standards.

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⁵ For ease of reporting, any single result reported above an MCL is considered as an exceedance. However, based on drinking water regulations and follow-up sampling, a single detection above an MCL may not constitute a violation of drinking water standards. Public water systems are required to meet all drinking water standards for water delivered to customers.

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Table ES-3. Summary of 2025 Groundwater Quality Outcome Measure Performance

Sustainability Indicator	GWMP Outcome Measure	Outcome Measure – Lower Threshold
Groundwater Quality (Santa Clara Subbasin)	For Santa Clara Subbasin water supply wells, at least 95% meet primary drinking water standards, and at least 90% have stable or decreasing trends for TDS.	At least 70% of water supply wells have stable or decreasing trends for nitrate and TDS.
2025 Result	<p>Outcome measure partially met: 90% of wells tested met all primary drinking water standards (below 95% target).</p> <p>93% of wells had stable or decreasing trends for TDS (above 90% target).</p> <p>Action plan: Continue to monitor, assess potential causes, implement the Salt and Nutrient Management Plan, and engage with regulatory, land use, and retail water agencies as needed.</p>	Lower threshold not exceeded: Stable or decreasing nitrate and TDS trends were observed in 90% and 93% of water supply wells, respectively.
Groundwater Quality (Llagas Subbasin)	For Llagas Subbasin water supply wells, at least 95% meet primary drinking water standards, and at least 90% have stable or decreasing trends for TDS.	At least 70% of water supply wells have stable or decreasing trends for nitrate and TDS.
2025 Result	<p>Outcome measure not met: 74% of water supply wells tested met all primary drinking water standards (below 95% target).</p> <p>85% had stable or decreasing trends for TDS (below 90% target).</p> <p>Action plan: Continue to monitor, assess potential causes, implement the Salt and Nutrient Management Plan, and engage with regulatory, land use, and retail water agencies as needed.</p>	Lower threshold not exceeded: Stable or decreasing nitrate and TDS trends were observed in 90% and 85% of water supply wells, respectively.
Seawater Intrusion (Santa Clara Subbasin only)	In the Santa Clara Subbasin shallow aquifer, the 100 mg/L chloride isocontour area is less than the historical maximum extent area (57 square miles).	In the Santa Clara Subbasin shallow aquifer, the 100 mg/L chloride isocontour area is less than 81 square miles, which represents a one-mile radial buffer of the historical maximum extent area.
2025 Result	Outcome measure met: The 100 mg/L chloride isocontour area was 47 square miles in 2025.	Lower threshold not exceeded: The 100 mg/L chloride isocontour area was 47 square miles in 2025.

Notes: For ease of reporting, any single result reported above an MCL is considered as an exceedance. However, based on drinking water regulations and follow-up sampling, a single detection above an MCL may not constitute a violation of drinking water standards. Public water systems are required to meet all drinking water standards for water delivered to customers.

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SGMA Compliance and GWMP Implementation

On November 23, 2021, the Valley Water Board of Directors adopted the 2021 GWMP as the first required periodic evaluation to the approved Alternative to a Groundwater Sustainability Plan (GSP). DWR approved the 2021 GWMP in June 2024, determining it satisfies SGMA objectives and was responsive to comments on the 2016 GWMP. Including this WY 2025 report, Valley Water has submitted nine annual reports for these subbasins as required by SGMA.

To maintain sustainable groundwater conditions, Valley Water continues to implement the proactive groundwater management activities described in the GWMP. Chapter 5 of this report summarizes the status of the six major GWMP recommendations. Continued groundwater sustainability is central to the Valley Water mission to provide Silicon Valley safe, clean water for a healthy life, environment, and economy. As such, Valley Water will continue to “manage groundwater to ensure sustainable supplies and avoid land subsidence,” and “aggressively protect groundwater from the threat of contamination” in accordance with Board policy.

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CHAPTER 1 – INTRODUCTION

For over 95 years, the Santa Clara Valley Water District (Valley Water) has had the responsibility and authority to manage groundwater in Santa Clara County per the California legislature.⁶ Valley Water's groundwater management objectives and authority under the Santa Clara Valley Water District Act (District Act) are to recharge groundwater basins, conserve, manage and store water for beneficial and useful purposes, increase water supply, protect surface water and groundwater from contamination, prevent waste or diminution of the water supply, and do any and every lawful act necessary to ensure sufficient water is available for present and future beneficial uses.

Valley Water Board of Directors (Board) Water Supply Objectives 2.2.1 and 2.2.2 reflect the mission to protect groundwater resources: *“Manage groundwater to ensure sustainable supplies and avoid land subsidence”* and *“Aggressively protect groundwater from the threat of contamination.”* Pursuant to the District Act and Board policy, the 2021 GWMP identifies the following groundwater sustainability goals:

- Groundwater supplies are managed to optimize water supply reliability and minimize land subsidence.
- Groundwater is protected from contamination, including saltwater intrusion.

After the statewide implementation of the Sustainable Groundwater Management Act (SGMA) in 2015, Valley Water became the Groundwater Sustainability Agency (GSA) for the Santa Clara and Llagas subbasins in 2016⁷. In December 2016, Valley Water submitted its Board-adopted 2016 Groundwater Management Plan (GWMP) to the Department of Water Resources (DWR) as an Alternative to a Groundwater Sustainability Plan, and DWR approved the plan in July 2019.

SGMA requires GSAs to submit periodic evaluations of approved Alternatives at least once every five years. To meet this requirement, Valley Water prepared the 2021 GWMP⁸, which was adopted by Valley Water's Board on November 23, 2021, after a public hearing and submitted to DWR in December 2021. In June 2024, DWR approved the 2021 GWMP, confirming it satisfies the objectives of SGMA and complies with related regulations. Valley Water's comprehensive groundwater management programs and investments described in the GWMP have resulted in sustainable groundwater conditions for many decades and will ensure groundwater resources are sustainable into the future.

Purpose

Under the California Code of Regulations Title 23, Division 2, Chapter 1.5, Subchapter 2, Article 7, §356.2, each agency shall submit an annual report to DWR by April 1 of each year following adoption of the Plan. This water year (WY) 2025 groundwater report is the ninth annual report submitted to DWR. It covers the Santa Clara Subbasin (DWR Basin 2-9.02) and the Llagas Subbasin (Basin 3-3.01) (Figure 1), which are managed in their entirety by Valley Water. This report describes groundwater conditions in the Santa Clara and Llagas subbasins including groundwater use, recharge, water levels, water balance, storage, quality, and land subsidence. This report also assesses the outcome measures using 2025 data to evaluate performance in meeting GWMP sustainability goals.

⁶ Santa Clara Valley Water District Act, Water Code Appendix, Chapter 60.

⁷ Valley Water is also the GSA for the small portions of the North San Benito Subbasin (DWR Basin 3-3.05) in Santa Clara County. The annual report for that basin is prepared and submitted by the San Benito County Water District, the GSA for the majority of the basin.

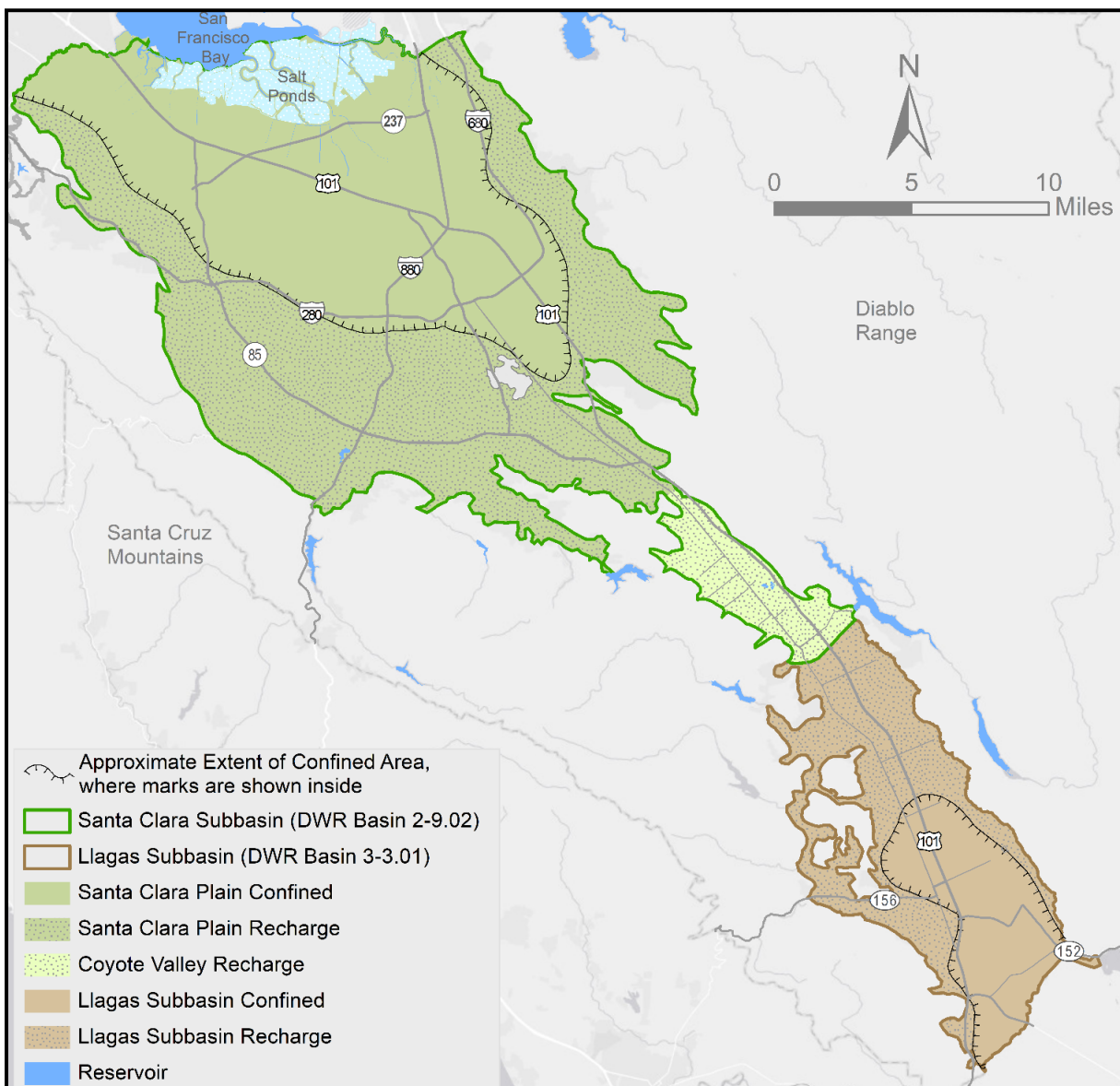
⁸ <https://www.valleywater.org/your-water/where-your-water-comes/groundwater/sustainable>

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Study Area

This report covers the Santa Clara and Llagas subbasins (Figure 1). Valley Water divides the Santa Clara Subbasin into two groundwater management areas, the Santa Clara Plain and the Coyote Valley, due to different land use and management characteristics. The Santa Clara and Llagas subbasins are separated by a groundwater divide near Cochrane Road in Morgan Hill. Groundwater in the Santa Clara Subbasin generally flows toward San Francisco Bay, while flow in the Llagas Subbasin is generally to the southeast toward the Pajaro River. The Santa Clara Plain and Llagas subbasins have both confined and recharge areas. Within the confined areas, low permeability clays and silts separate shallow and principal aquifers, with the latter defined as aquifer materials greater than 150 feet below ground surface. The recharge areas are unconfined as there are no laterally extensive aquitards forming distinct shallow and principal aquifer zones.

Figure 1. Santa Clara and Llagas Subbasins



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The information in this report is primarily summarized by groundwater management area or by groundwater benefit zone (Figure 2). Groundwater benefit zones are areas where Valley Water collects fees from groundwater users based on the benefits received from Valley Water groundwater management activities. Zone W-2 generally coincides with the Santa Clara Plain, Zone W-7 with the Coyote Valley, and Zones W-5 and W-8 with the Llagas Subbasin. The Santa Clara Subbasin north of Metcalf Road is also referred to as North County. The Coyote Valley and Llagas Subbasin are collectively referred to as South County.

Report Content

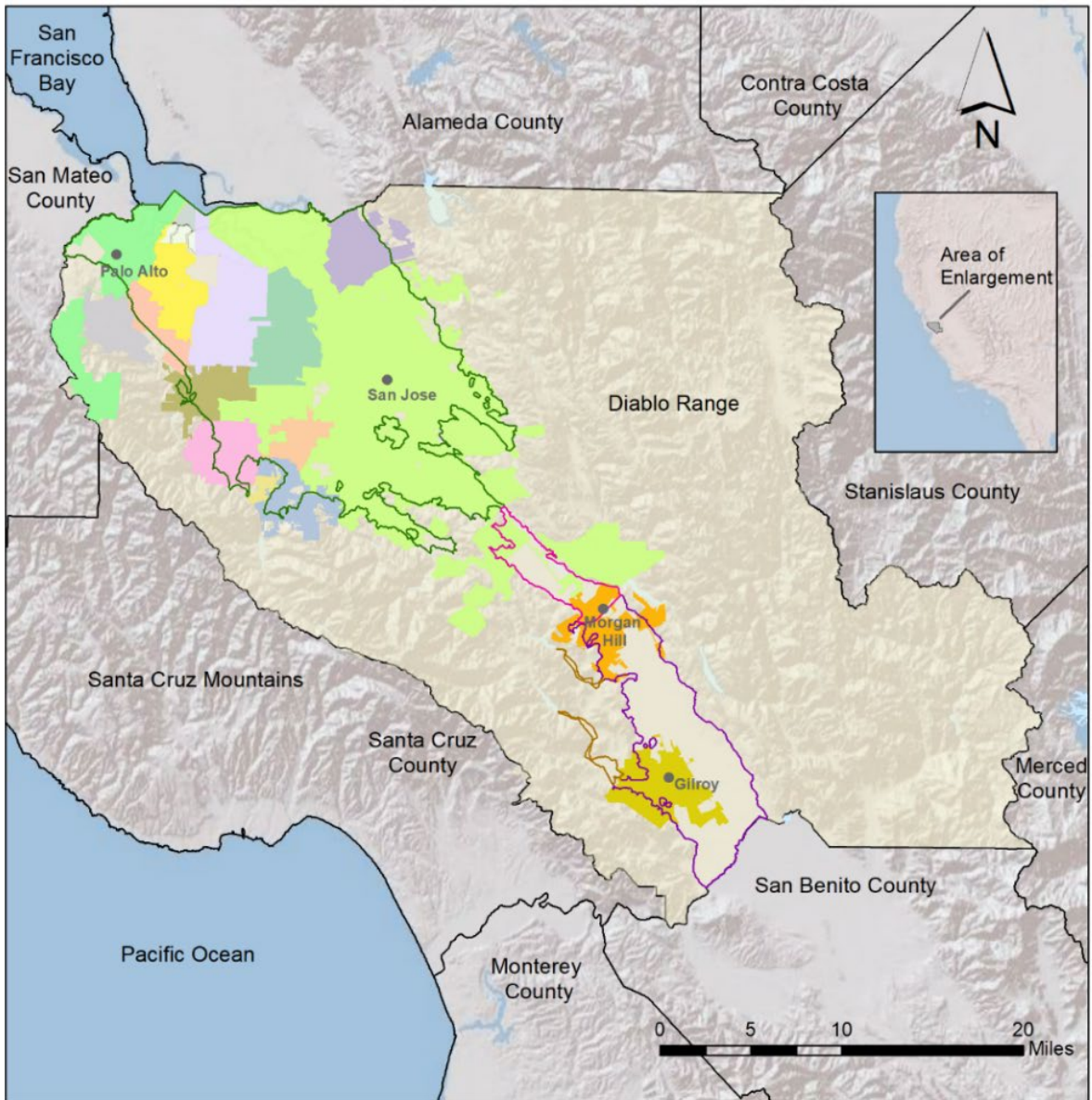
In addition to this Introduction, this report includes the following chapters:

- Chapter 2: Water Supply and Use
- Chapter 3: Groundwater Levels and Subsidence
- Chapter 4: Groundwater Quality
- Chapter 5: Groundwater Management Plan Implementation

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Figure 2. Groundwater Benefit Zones and Local Cities



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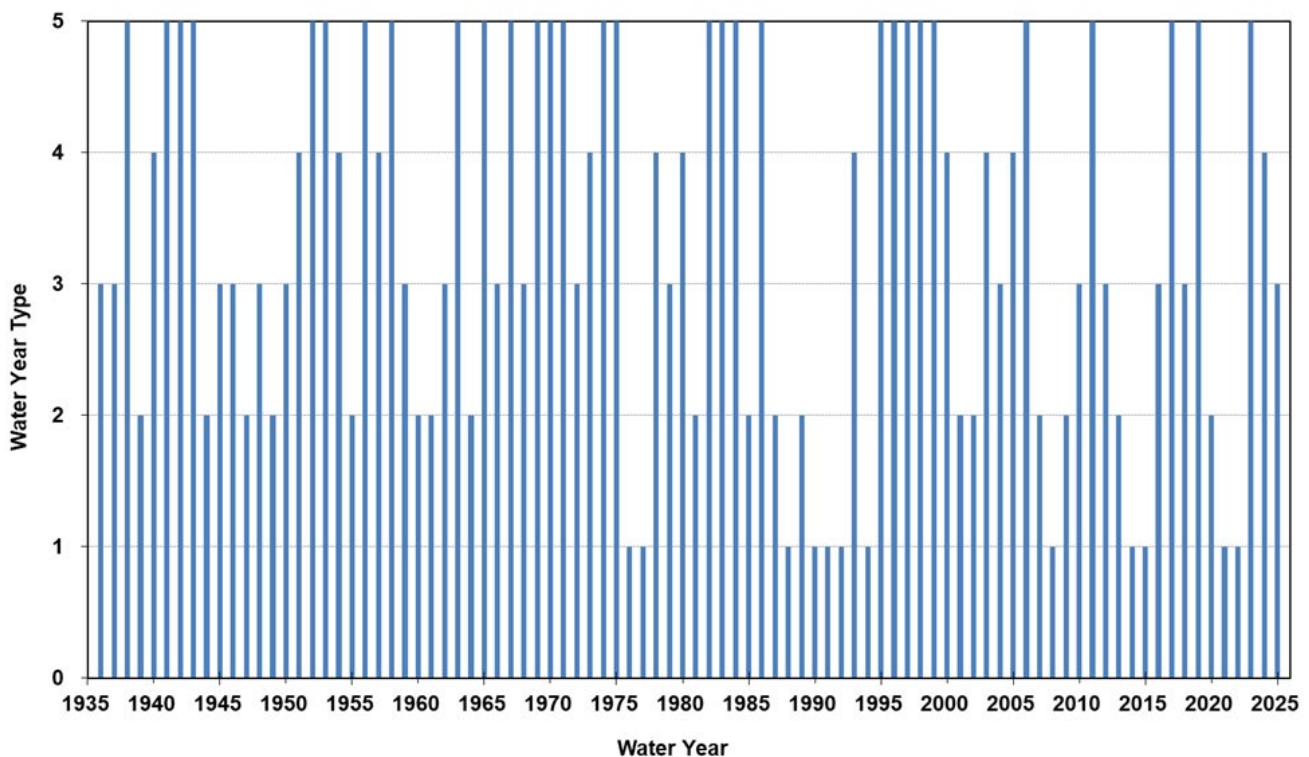
CHAPTER 2 – WATER SUPPLY AND USE

Chapter 2 summarizes 2025 water supply and use, including water year type, groundwater pumping, surface water supply for managed and natural recharge, in-lieu recharge, annual groundwater balance, and change in groundwater storage. Trends are presented for groundwater pumping, managed recharge, and other water supplies. All data in this chapter are for water year 2025 (October 1, 2024 to September 30, 2025), unless otherwise noted.

2.1 Water Year Type

According to DWR, statewide precipitation was below normal in water year 2025⁹. Valley Water uses the DWR Sacramento River Index (SRI) to help model hydrologic conditions in Santa Clara County because this index reflects conditions in the Sierra and the Sacramento-San Joaquin Delta that influence Valley Water’s imported water deliveries. The SRI is estimated to be below normal in 2025¹⁰, down from above normal in 2024 and wet in 2023 (Figure 3). Rainfall stations within Santa Clara County confirm that the rainfall in 2025 was below the historical average. For example, rainfall at the San Jose International Airport (Station ID SJC) was approximately 9.84 inches or 78% of average.

Figure 3. Water Year Types from 1936 to 2025 – Sacramento River Index (SRI)



Notes: Water year types per DWR SRI: 1 (critical); 2 (dry); 3 (below normal); 4 (above normal); 5 (wet)

⁹ Department of Water (DWR), California Hydrology Update conditions as of January 31, 2026. California Department of Water Resources, Sacramento, CA, 9 pages, Published February 17, 2026, available at: <https://cww.water.ca.gov/service/document/hydroreport>.

¹⁰ Sacramento River Index (SRI) data is published from water year 1906 to 2024, available at: <https://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST>. The 2025 estimate is based on below normal statewide precipitation in 2025, according to DWR⁹.

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2.2 Groundwater Pumping

Total groundwater pumping was 130,000 AF, providing 45% of the water used by county residents and businesses. Table 1 summarizes pumping by subbasin and water use category, and Table 2 summarizes the number of wells reporting groundwater use. Figures 4 and 5 show the location and volume of groundwater pumping. About 85,300 AF of groundwater was pumped in the Santa Clara Subbasin, with about 95% of that supporting municipal and industrial (M&I) uses (Table 1). Agricultural and domestic use totaling 4,000 AF was mostly in the more rural Coyote Valley in the southern Santa Clara Subbasin. A total of 1,064 wells reported groundwater use in the Santa Clara Subbasin (Table 2).

Total pumping in the Llagas Subbasin was 44,700 AF (Table 1). In this subbasin, agricultural use was more significant (25,200 AF), accounting for 56% of pumping. M&I groundwater use was 17,900 AF or 40% of subbasin pumping. While the quantity of groundwater used for domestic purposes was relatively small in the Llagas Subbasin (1,600 AF or 4%), 80% of the 2,734 individual wells reporting groundwater use in Llagas Subbasin were domestic wells (Table 2).

Groundwater pumped from the subbasins is recorded in accordance with the District Act. This act requires well owners and operators to register all wells within the county and to file monthly, semi-annual, or annual production statements for water-producing wells within Valley Water's groundwater benefit zones, with reporting frequency dependent on the amount of water produced.

By Board Resolution, meters are only installed at those sites determined to be economically feasible per approved criteria or as required to facilitate the complete and accurate collection of groundwater production revenue. In Zone W-2, which essentially overlaps the Santa Clara Plain groundwater management area, meters are required for facilities producing more than 20 AF of agricultural water or more than 1 AF of non-agricultural water annually. Within Zones W-5 and W-8 (Llagas Subbasin) and W-7 (Coyote Valley groundwater management area), meters are required for facilities producing more than 20 AF of agricultural water or more than 2 AF of non-agricultural water¹¹. As shown in Table 1, most groundwater pumping (87%) is metered. Smaller pumpers are required to report production semi-annually or annually on a fiscal year (July 1 – June 30) basis.

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¹¹ <https://www.valleywater.org/contractors/doing-businesses-with-the-district/wells-well-owners/reporting-methods-and-requirements>

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Table 1. 2025 Groundwater Pumping (AF) by Water Use

Water Use Sector	Measurement Method	Santa Clara Subbasin (Zones W-2 and W-7)	Llagas Subbasin (Zones W-5 and W-8)	Total Pumping
M&I	Metered ¹	74,200	17,000	91,200
	Estimated ²	7,100	900	8,000
Domestic	Metered	0	200	200
	Estimated	200	1,400	1,600
Agricultural	Metered	3,000	19,000	22,000
	Estimated	800	6,200	7,000
Total		85,300	44,700	130,000

Notes: All values are rounded to the nearest hundred.

¹ Metered groundwater pumping generally has an accuracy within 2%. For metered wells used for multiple purposes (especially agricultural and domestic), while the total volume pumped is within this accuracy, the allocation between various uses may be estimated.

² Non-metered pumpers report groundwater pumping based on crop factors (agricultural use) or table of average uses (domestic use). Estimated pumping shown for the water year is based on fiscal year reporting and typical pumping patterns. Reporting accuracy is not applicable for the estimated groundwater pumping.

Table 2. Number of Wells Reporting Groundwater Use in 2025

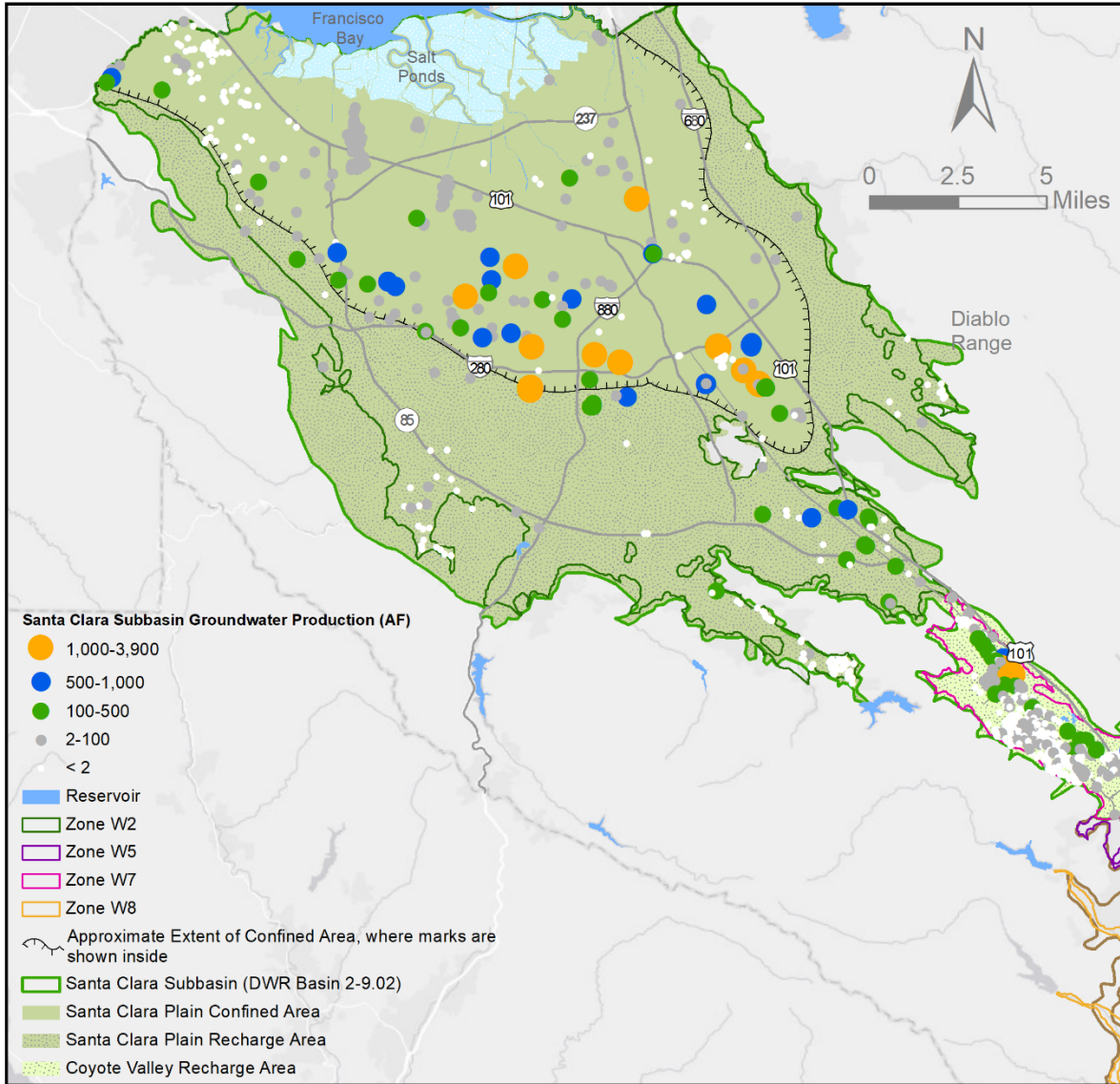
Water Use Sector	Santa Clara Subbasin		Llagas Subbasin (Zones W-5 and W-8)	Total
	Santa Clara Plain (Zone W-2)	Coyote Valley (Zone W-7)		
M&I	444	58	252	754
Domestic	176	332	2,207	2,715
Agricultural	26	92	520	638
Total	646	482	2,979	4,107

Notes: Some wells may report pumping for more than one use category (e.g., domestic and agricultural). Therefore, the total number of actual wells may be less than what is reported for each use category. For wells reporting semi-annually or annually (primarily agricultural and domestic), the number of wells in each sector was estimated based on the prior year since validated 2025 data was not available by the date of publication of this report.

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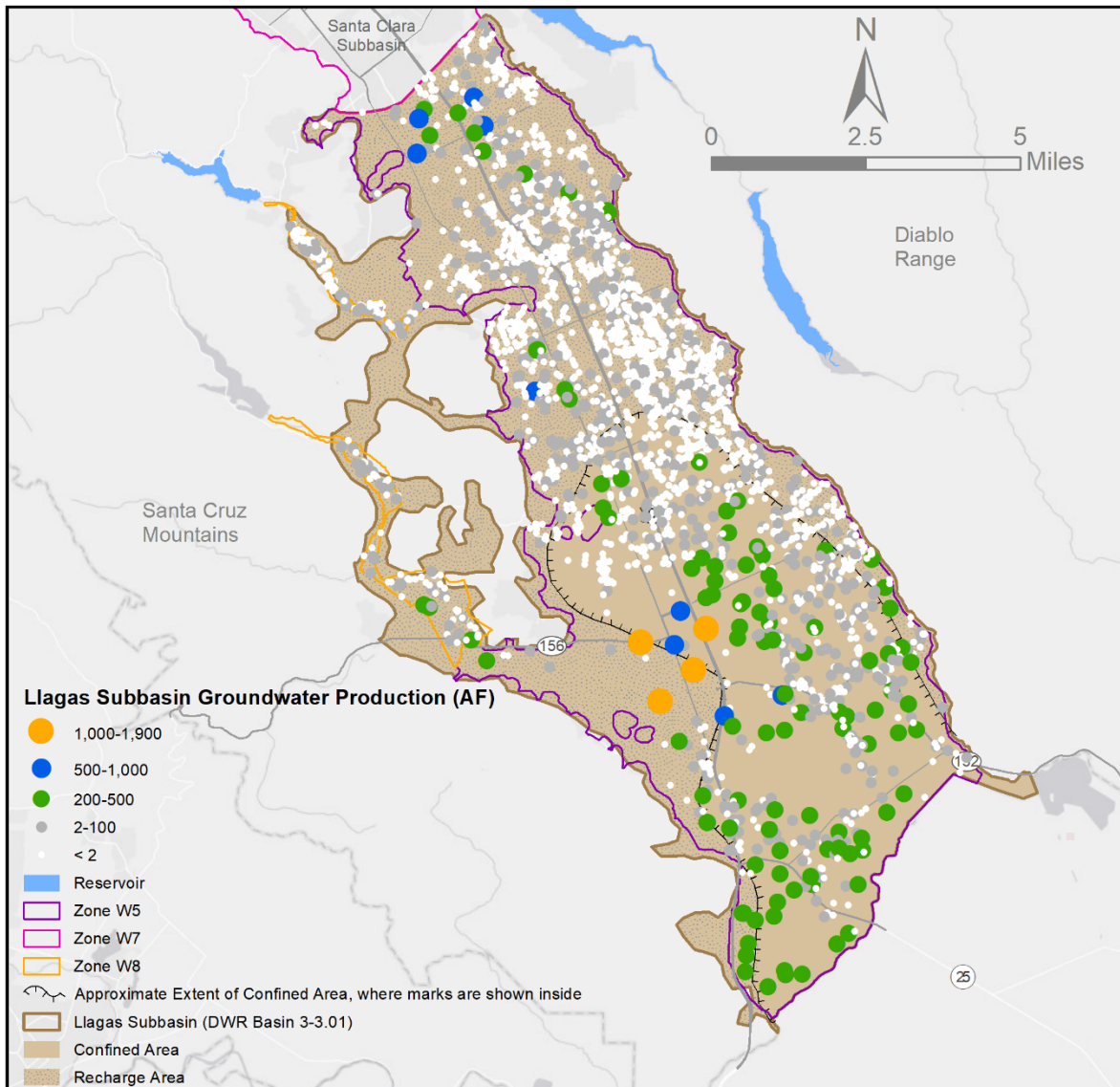
Figure 4. 2025 Santa Clara Subbasin Groundwater Pumping



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Figure 5. 2025 Llagas Subbasin Groundwater Pumping



Groundwater Pumping and Water Use Trends

Countywide, estimated total water use was 287,800 AF, a slight increase compared to 2024 (285,400 AF). Similarly, countywide groundwater pumping increased to 130,000 AF, up 4% from the previous year (124,700 AF) and 4% from the recent five-year average (125,200 AF), but 17% lower than the period of record (155,700 AF) (Table 3). Groundwater pumping was 85,300 AF in the Santa Clara Subbasin and 44,700 AF in the Llagas Subbasin, which are increases of 2,900 AF and 2,400 AF, respectively, compared to 2024. Compared to 2024, groundwater pumping increased about 3% in the Santa Clara Plain, 4% in the Coyote Valley, and 6% in the Llagas Subbasin. These increases in countywide water use and groundwater pumping reflect rebound in demand following the recent (2020–2022) drought.

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Table 3. 2025 Groundwater Pumping (AF) Compared to Other Periods

Period	Santa Clara Subbasin		Llagas Subbasin (Zones W-5 and W-8)	Total
	Santa Clara Plain (Zone W-2)	Coyote Valley (Zone W-7)		
2025	70,600	14,700	44,700	130,000
2024	68,300	14,100	42,300	124,700
5-Year Average (2021-2025)	68,900	13,700	42,700	125,200
Period of Record¹ (Average)	103,700	9,700	42,300	155,700

Notes:

¹ The period of record is 1981 to 2025 for Santa Clara Plain, 1988 to 2025 for Coyote Valley, and 1988 to 2025 for the Llagas Subbasin.

2.3 Surface Water Supply Used

Total water use and surface-water supplies are summarized in Table 4. Valley Water actively recharged 104,300 AF of imported and local surface water in the Santa Clara and Llagas subbasins. Equally as important to groundwater sustainability are in-lieu recharge activities, which included over 141,400 AF of surface water deliveries by Valley Water, San Francisco Public Utilities Commission (SFPUC), and San Jose Water Company (SJWC); 16,400 AF of recycled water deliveries; and 89,000 AF in savings from Valley Water’s long-term water conservation programs. Collectively these activities provide critical in-lieu recharge by reducing the demand on groundwater.

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Table 4. 2025 Santa Clara County Total Water Use (AF)

Water Use ¹	Santa Clara Subbasin	Llagas Subbasin	County-wide	Measurement Method	Accuracy	Source	Sector
Groundwater Pumped	85,300	44,700	130,000	Metered (87%) and estimated (13%) ²	Within 2% (metered)	Managed recharge of local runoff & imported water ³ , natural recharge	M&I, domestic, and agricultural ⁴
Valley Water Treated Surface Water Deliveries	84,300	0	84,300	Metered	Within 2%	Local runoff and imported water	M&I
Valley Water Raw Surface Water Deliveries	1,200	800	2,000	Metered (95%) and estimated	Within 2% (metered)	Local runoff and imported water	M&I, domestic, and agricultural
SFPUC Supplies to Local Retailers⁵	47,800	0	47,800	Metered	Within 1.5%	Surface water reservoirs ⁶	M&I
SJWC Surface Water Deliveries	7,300	0	7,300	Metered	Within 2% (metered)	Local surface water reservoirs	M&I
Recycled Water	14,100	2,300	16,400	Metered	Variable ⁷	Treated wastewater	M&I and agricultural
Total⁸	240,000	47,800	287,800				

Notes:

¹ All water use values are rounded to the nearest hundred.

² Production from some smaller wells and raw surface water users is estimated using a table of average uses or crop factors.

³ Valley Water's imported water supplies include the State Water Project (SWP) and the Central Valley Project (CVP).

⁴ Groundwater use by sector is shown in Table 1.

⁵ San Francisco Public Utilities Commission (SFPUC) supplies water to eight (8) retailers in Santa Clara County and NASA-AMES (<https://sfwater.org/index.aspx?page=355>).

⁶ SFPUC primary sources are surface water reservoirs with runoff mainly from the Hetch Hetchy watershed and also from the Alameda and Peninsula watersheds. More information is available at: <https://sfwater.org/index.aspx?page=355>.

⁷ Recycled water meter accuracy varies as each of the four producers within the county uses different methods to measure production and delivery of recycled water.

⁸ Local water rights used by Stanford within the Santa Clara Subbasin are not reflected in the total because their local water rights have historically amounted to <3% of the total for the Santa Clara Subbasin.

2.3.1 Managed Recharge

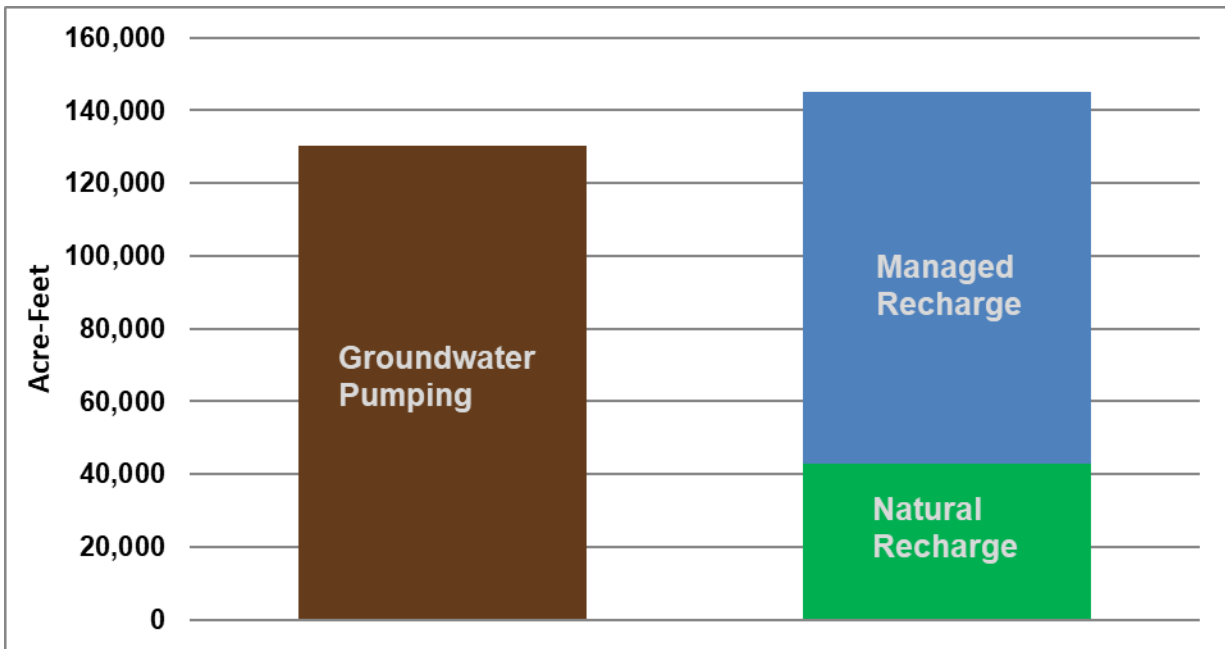
Since the 1930s, Valley Water's water supply strategy has been to maximize the conjunctive management of surface water and groundwater. Annual groundwater pumping far exceeds what is replenished naturally, so Valley Water ensures water supply reliability with its managed recharge and

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in-lieu recharge activities.

In 2025, countywide recharge (150,900 AF) exceeded groundwater pumping (130,000 AF) (Figure 6) due to the below long-term average pumping, near average rainfall, and availability of surface water for managed recharge. Countywide recharge includes 104,300 AF of managed recharge and 46,600 AF of natural recharge. Appendix B has details about historical trends in managed recharge.

Figure 6. 2025 Countywide Groundwater Pumping and Recharge



Valley Water’s managed recharge supplies include imported water and surface runoff captured in 10 local reservoirs. Recharge facilities include 285 acres of recharge ponds and about 98 miles of controlled in-stream recharge (Figure 7). Imported water sources include the Federal Central Valley Project (CVP) and the State Water Project (SWP).

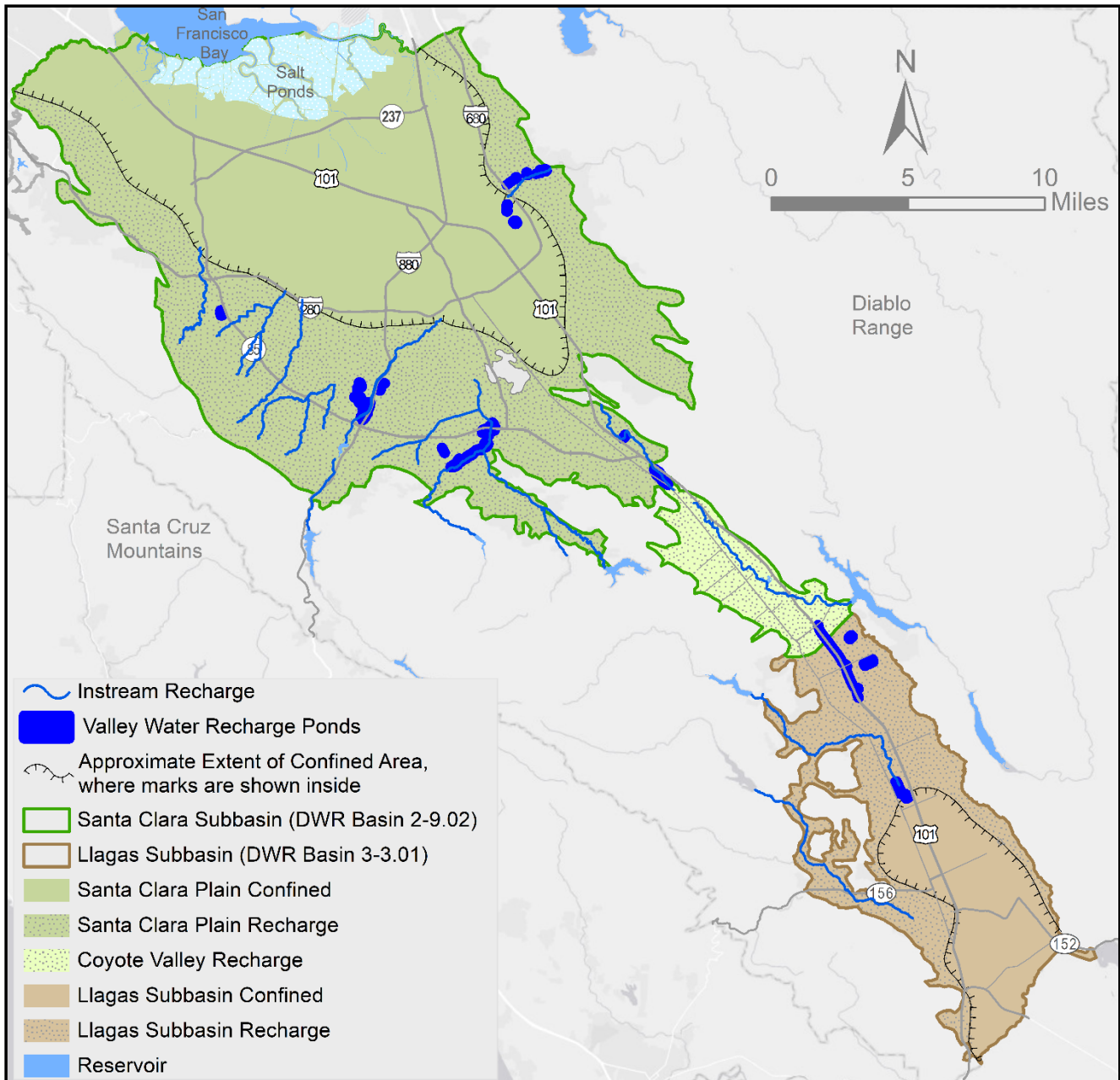
Valley Water’s 10 local reservoirs were constructed in the 1930s and 1950s. Operating restrictions have been imposed on five of the reservoirs (including Anderson Reservoir, the largest in the county) while seismic stability concerns are mitigated. These dam safety operating restrictions reduce the amount of water that can be stored for groundwater recharge by 103,000 AF but are needed for public safety. The restrictions result in a loss of 62% of the total surface storage capacity of Valley Water reservoirs, primarily due to the ability to store water in Anderson Reservoir. Current or upcoming Valley Water facility projects include seismic upgrades of Anderson, Calero, and Guadalupe dams¹². Valley Water’s website¹³ has details about the Anderson Dam Seismic Retrofit Project (ADSRP) and related Federal Energy Regulatory Committee (FERC) Order Compliance Project (FOCP).

¹² Additional details about the Capital Improvement Program are available on Valley Water’s website here: <https://www.valleywater.org/how-we-operate/five-year-capital-improvement-program>.

¹³ Additional details about the Anderson Dam seismic retrofit and FERC FOCP are available on Valley Water’s website here: <https://www.valleywater.org/project-updates/c1-anderson-dam-seismic-retrofit>.

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Figure 7. Valley Water Managed Recharge Facilities



The relative amounts of imported or local water Valley Water uses for managed recharge each year depend on many factors including hydrology, imported water allocations, treatment plant demands, and environmental needs. In general, a greater percentage of local water is used for recharge in wet years due to increased capture of storm runoff in local reservoirs. In 2025, Valley Water recharged 79,600 AF of local and imported water in the Santa Clara Subbasin and 24,700 AF in the Llagas Subbasin (Table 5). Countywide, most of the managed recharge (62%) occurred in-stream, with the remainder (38%) through off-stream recharge (percolation) ponds.

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Table 5. 2025 Managed Recharge (AF)

Period	Santa Clara Subbasin		Llagas Subbasin (Zones W-5 and W-8)	Total
	Santa Clara Plain (Zone W-2)	Coyote Valley (Zone W-7)		
In-Stream Recharge (Creeks)	25,400	17,900	21,600	64,900
Off-Stream Recharge (Recharge Ponds)	36,300	--	3,100	39,400
Total	61,700	17,900	24,700	104,300

2.3.2 Natural Recharge

In 2025, countywide natural recharge was 46,600 AF, including 25,700 AF in the Santa Clara Subbasin (23,500 AF in the Santa Clara Plain and 2,200 AF in Coyote Valley), and 20,800 AF in the Llagas Subbasin. Natural recharge is estimated from calibrated groundwater flow models, as described in Section 2.5 (Groundwater Balance).

2.3.3 In-Lieu Recharge

Valley Water’s treated and raw surface water deliveries, SJWC surface water deliveries, SFPUC supplies to local retailers, and recycled water play a critical role in maintaining groundwater elevations and storage by reducing demands on groundwater. Table 4 summarizes the supplies from these categories in areas that were historically primarily or solely served by groundwater. In 2025, these supplies totaled 157,800 AF. Valley Water’s long-term water conservation programs also saved 89,000 AF, further reducing the need for groundwater pumping.¹⁴

Valley Water is committed to advancing purified and recycled water use in the county. Valley Water’s Silicon Valley Advanced Water Purification Center in San Jose is a state-of-the-art facility producing up to 8 million gallons per day (9,000 AF per year) of purified water by treating recycled water using microfiltration, reverse osmosis, and ultraviolet light. This purified water is blended with tertiary-treated recycled water to improve the quality for landscape irrigation and industrial uses. This facility supports Valley Water’s goal of expanding the use of recycled and purified water, which reduces the demand on groundwater and increases supply reliability. Valley Water is collaborating with the cities of San Jose and Santa Clara to explore a direct potable reuse facility at the Silicon Valley Advanced Water Purification Center.

2.4 Total Water Use

Total estimated water use in Santa Clara County in 2025 was 287,800 AF as shown in Table 4 with water use categories, measurement methods and accuracy, water sources, and use sectors. While the county boundary extends beyond the subbasins, the vast majority of the county’s population resides in the valley floor, which essentially coincides with the subbasins.

¹⁴ Santa Clara Valley Water District, FY 2026-27 Protection and Augmentation of Water Supplies (PAWS), 55th Annual Report, February 2026, available at: <https://www.valleywater.org/your-water/current-water-charges/proposed-water-charges>.

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2.5 Groundwater Balance

While groundwater storage may increase or decrease each year, Valley Water's comprehensive managed and in-lieu recharge programs ensure long-term balance. The annual groundwater balance presented in Figure 8 evaluates annual inflows and outflows for the Santa Clara Plain, Coyote Valley, and Llagas Subbasin. It should be noted that some terms presented in the groundwater balance cannot be directly measured and represent estimated values from Valley Water's calibrated groundwater flow models.

Most values in this report are presented for the water year to comply with SGMA reporting requirements. However, the groundwater balance in Figure 8 is presented for the calendar year to align with and support Valley Water operations and related planning. Change in groundwater storage based on the water year is also presented in Table 6 to comply with SGMA annual reporting requirements.

Inflows

Major inflows to the subbasins are primarily from:

- Managed recharge by Valley Water, using local and imported surface water; and
- Natural recharge, which includes deep percolation of rainfall, natural seepage through creeks, subsurface inflow from adjacent aquifers, water loss from transmission and distribution lines, mountain front recharge, and return flows from septic systems and irrigation.

Valley Water quantifies managed recharge using streamflow measurements and measured releases from reservoirs and raw water pipelines. Rainfall is measured at precipitation gage stations in San Jose (NOAA¹⁵ Station USW00023293), Los Gatos (NOAA Station USC00045123), and Morgan Hill (Valley Water Station 41). These stations provide rainfall data used in Valley Water's three calibrated numerical groundwater flow models (MODFLOW) for the Santa Clara Plain, Coyote Valley, and Llagas Subbasin. Subsurface inflows and outflows to and from adjacent aquifer systems and mountain front recharge are derived from the groundwater flow models.

Total inflow to both subbasins was 151,800 AF in CY 2025, with managed recharge providing 67% of total inflows (Figure 8). Local precipitation was slightly above average but lower than 2024. This explains why CY 2025 natural recharge and other inflows (49,600 AF) were slightly above average but about 20% lower than the prior year.

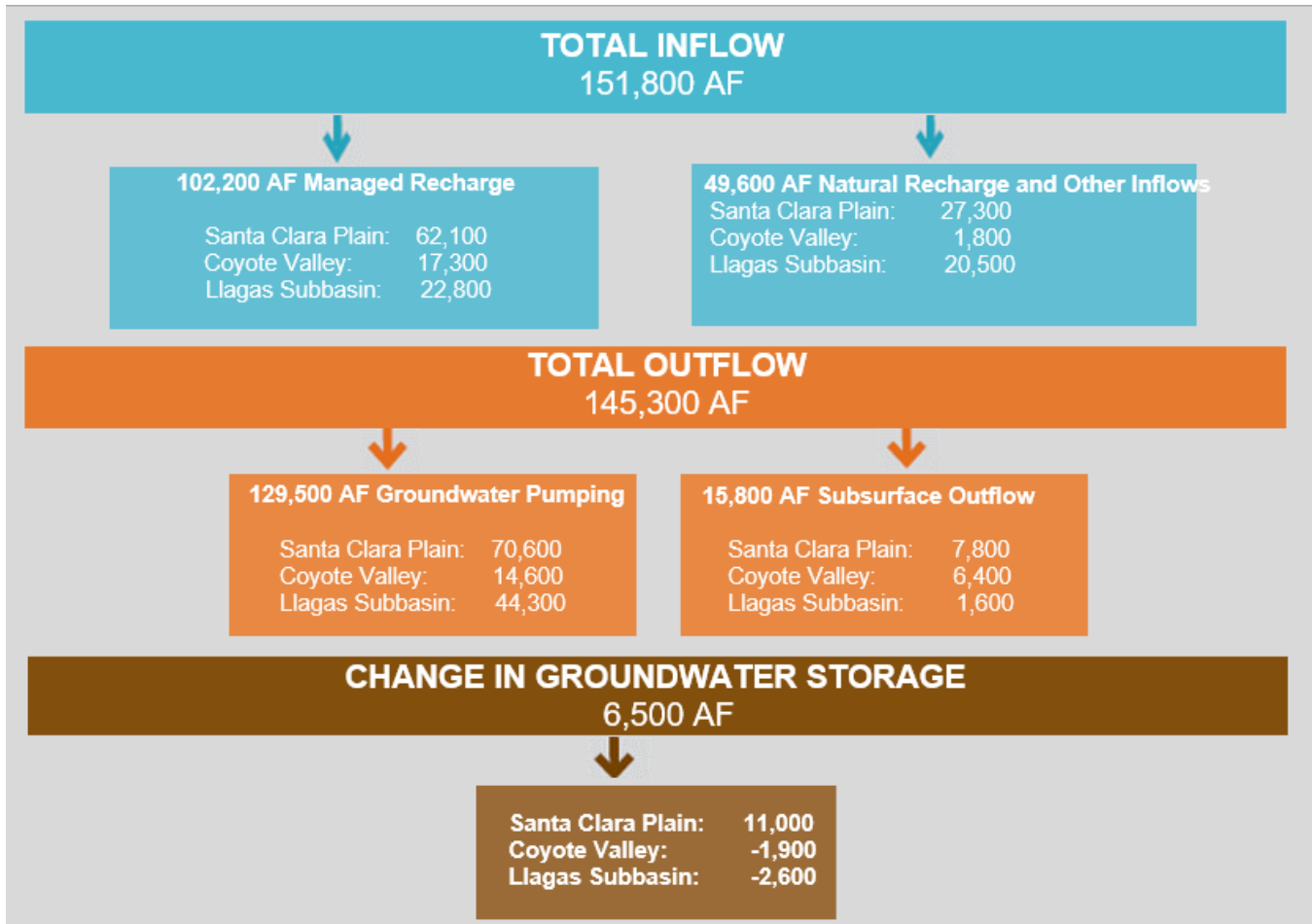
Outflows

The primary outflow of groundwater is pumping, which was 129,500 AF and accounted for 89% of the total outflow of 145,800 AF in CY 2025 (Figure 8). Most groundwater pumped is metered. In Zone W-2, meters are required for wells pumping more than 1 AFY of non-agricultural water or 20 AFY of agricultural water. In Zones W-5, W-7, and W-8, meters are required for wells producing more than 2 AFY of non-agricultural water or 20 AFY of agricultural water. Where meters are not installed, crop factors are used to estimate agricultural water use, whereas domestic use is estimated from a table of average uses. Subsurface outflow to adjacent aquifer systems, creeks, storm and sewer systems, and plant uptake was 15,800 AF, or 11% of the total outflow in CY 2025.

¹⁵ U.S. Department of Commerce National Oceanic and Atmospheric Administration (NOAA).

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Figure 8. CY 2025 Groundwater Balance



Notes:

- Groundwater balance terms presented are estimates as of December 2025. These estimates are refined as additional data becomes available. Values shown are based on measured quantities or calibrated groundwater flow models, with all values rounded to the nearest 100 AF.
- Managed recharge represents direct replenishment by Valley Water using local and imported water. Estimates from the groundwater models (shown here) may differ slightly from surface water accounting estimates.
- Natural recharge and other inflows include the deep percolation of rainfall, septic system and/or irrigation return flows, natural seepage through creeks, storm and sewer system seepage, and inflow from adjacent aquifer systems.
- The groundwater pumping estimate is based on pumping metered by Valley Water or reported by low volume groundwater users.
- Subsurface outflow represents outflow to adjacent aquifer systems. In the Santa Clara Plain, this includes outflows to San Francisco Bay; in the Coyote Valley, this includes outflow to the Santa Clara Plain; and in the Llagas Subbasin, this includes outflows to the North San Benito Subbasin in San Benito County.

2.6 Change in Storage

Table 6 summarizes estimated end of year groundwater storage. Valley Water’s groundwater storage outcome measure is based on the calendar year to align with water supply operations, planning, and shortage response. WY values are also reported to align with SGMA annual reporting requirements.

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Countywide groundwater storage increased by 6,500 AF in CY 2025 because the groundwater inflows exceeded the outflows (Figure 8). Compared to 2024, storage in the Santa Clara Plain increased by 11,000 AF and decreased by 1,900 AF and 2,600 AF in the Coyote Valley, and Llagas Subbasin, respectively (Table 6, Figure 8).

Estimated countywide groundwater storage at the end of WY 2025 was 393,700 AF, which is 7,100 AF higher than 2024 (Table 6). End of 2025 groundwater storage under both year types is greater than 300,000 AF, within the normal stage (Stage 1) of Valley Water’s Water Shortage Contingency Plan and indicating good water supply conditions.

Table 6. Estimated End of Year Groundwater Storage (AF)

Period	Santa Clara Subbasin		Llagas Subbasin (Zones W-5 and W-8)	Total
	Santa Clara Plain (Zone W-2)	Coyote Valley (Zone W-7)		
Outcome Measure	278,000	5,000	17,000	300,000
Water Year (WY)				
End of Year 2024	352,800	8,200	25,600	386,600
End of Year 2025	365,600	4,000	24,100	393,700
Change in Storage	12,800	-4,200	-1,500	7,100
Calendar Year (CY)				
End of Year 2024	355,400	6,400	26,500	388,300
End of Year 2025	366,400	4,500	23,900	394,800
Change in Storage	11,000	-1,900	-2,600	6,500

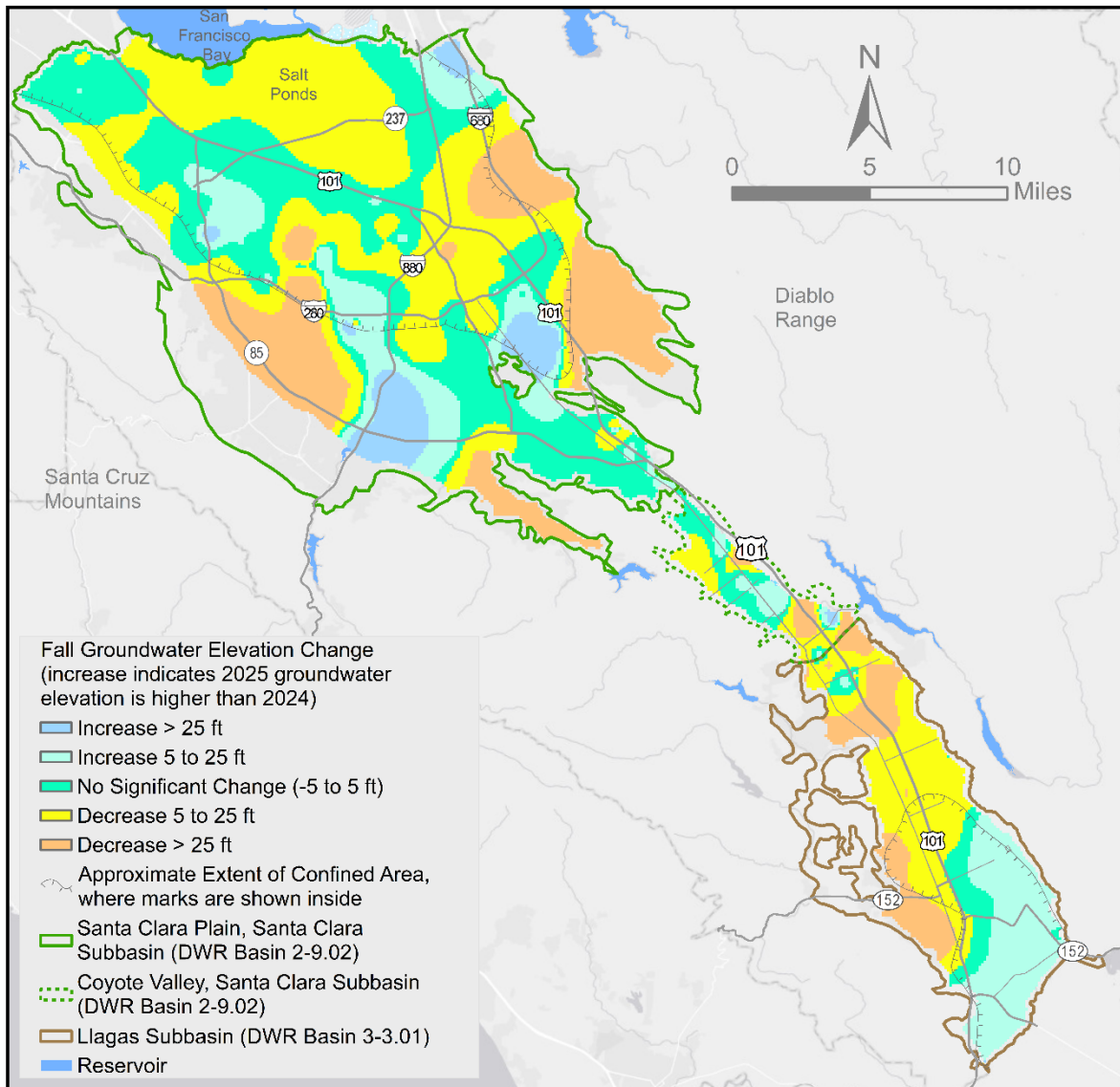
Notes: Groundwater storage estimates are as of December 2025, and are based on accumulated storage since 1970, 1991, and 1990 for the Santa Clara Plain, Coyote Valley, and Llagas Subbasin, respectively. These estimates are refined as additional pumping and managed recharge data become available.

While groundwater conditions remain sustainable, the ten-year loss of storage in Valley Water’s largest reservoir (Anderson) due to seismic retrofit poses significant near-term risks to local water supplies. During the recent 2020–2022 drought, Valley Water asked the community to reduce water use and secured emergency imported water supplies to support managed recharge and treated water deliveries. These actions to maintain healthy groundwater conditions in WY 2022 and two subsequent wet winters enabled groundwater storage to remain in the Normal stage in 2024 and 2025.

Figure 9 depicts the change in groundwater elevation from October 2024 to September 2025 at more than 188 principal aquifer water level wells in the Santa Clara Subbasin and more than 61 wells in the Llagas Subbasin. The corresponding change in groundwater storage of 8,600 AF and -1,500 AF for the Santa Clara and Llagas subbasins, respectively, (Figure 9) is estimated from Valley Water’s calibrated groundwater flow models.

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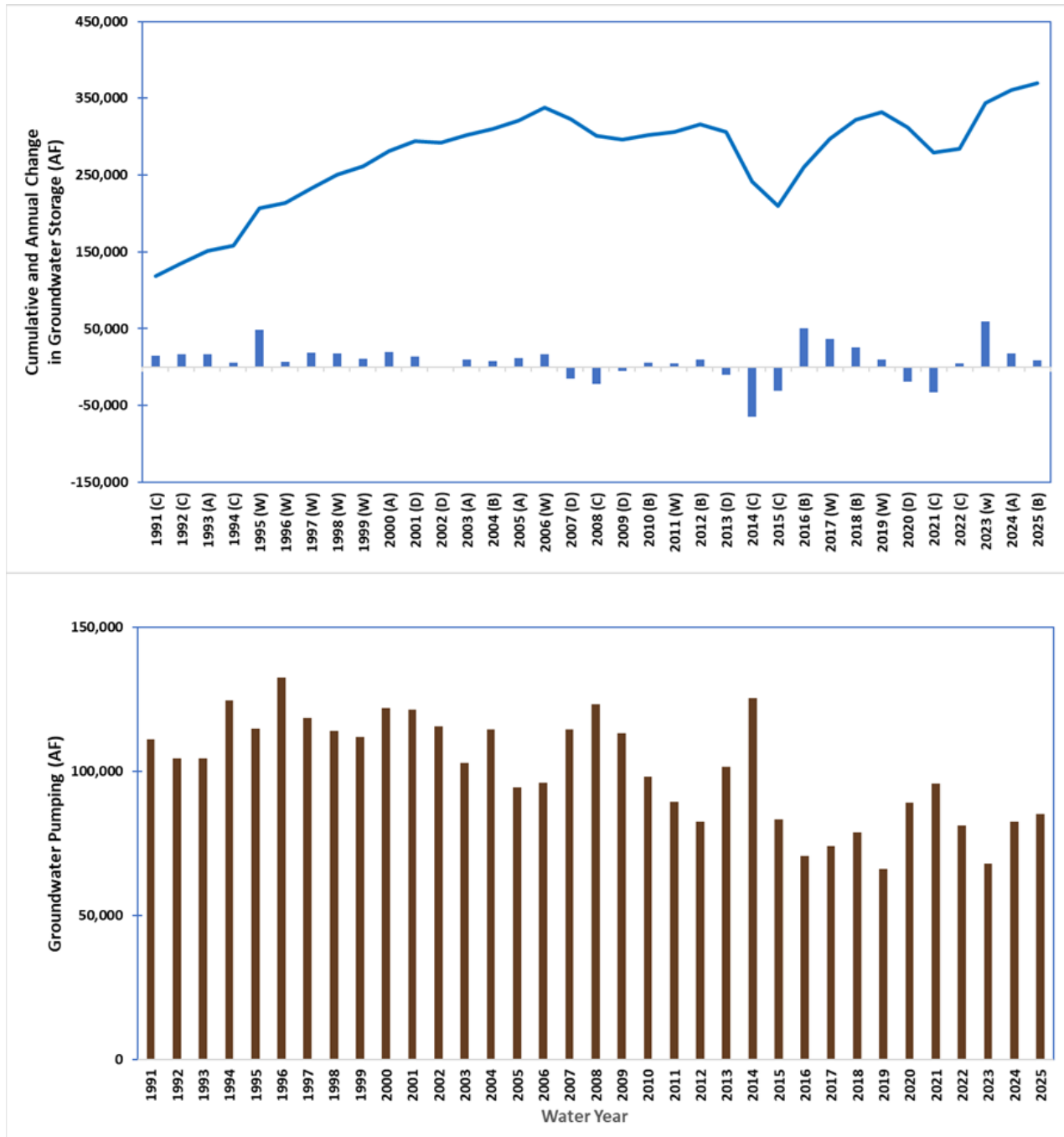
Figure 9. Change in Groundwater Elevation from October 2024 to September 2025



Figures 10 and 11 present the water year type, groundwater use, annual change in groundwater storage, and cumulative change in groundwater storage for the Santa Clara and Llagas subbasins, respectively, from 1991 through 2025. These figures show that over this period, the annual change within each basin has most frequently been an increase in groundwater storage. The most notable exceptions, also evident in hydrographs, occur during droughts as expected. However, Valley Water programs to recharge and manage groundwater support rapid recovery of water levels and storage after droughts, helping ensure long-term sustainability. As mentioned previously, groundwater levels and storage in the Santa Clara and Llagas subbasins quickly recovered from the recent droughts (2012–2016 and 2020–2022).

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Figure 10. Groundwater Use and Change in Storage in the Santa Clara Subbasin

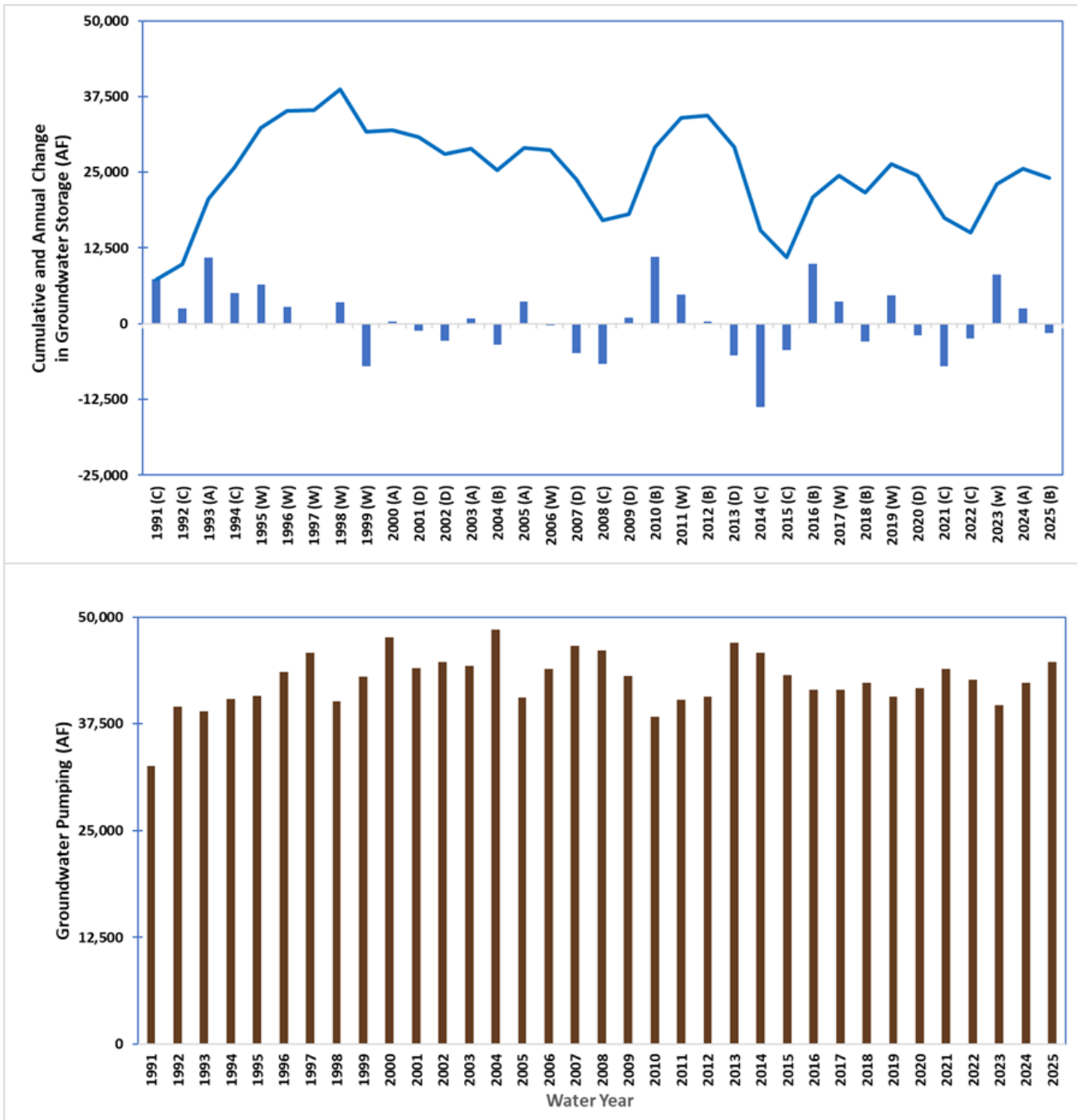


Notes:

- DWR SRI water year types are: Critical (C), Dry (D), Below Normal (B), Above Normal (A), and Wet (W).
- The storage graph begins in 1991 because Valley Water estimates Santa Clara Subbasin storage using two numerical models. The Santa Clara Plain model begins in 1970 while the Coyote Valley model begins in 1991 as Valley Water did not begin managing that area until the late 1980s.
- Most groundwater pumping is reported monthly and is shown here by water year. However, pumpers that report semi-annually or annually provide data based on the fiscal year (July 1 to June 30). For these reporters, groundwater pumping shown represents the fiscal year, which is presumed to be similar to the water year.

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Figure 11. Groundwater Use and Change in Storage in the Llagas Subbasin



Notes:

- DWR SRI water year types are: Critical (C), Dry (D), Below Normal (B), Above Normal (A), and Wet (W).
- The storage graph begins in 1991 because Valley Water estimates Llagas Subbasin storage using a numerical model that begins in 1991 as Valley Water did not begin managing that area until the late 1980s.
- Most groundwater pumping is reported monthly and is reported here by water year. However, pumpers that report semi-annually or annually provide data based on the fiscal year (July 1 to June 30). For these reporters, groundwater pumping shown represents the fiscal year, which is presumed to be similar to the water year.

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CHAPTER 3 – GROUNDWATER LEVELS AND SUBSIDENCE

Chapter 3 summarizes 2025 groundwater levels, including hydrographs from key regional monitoring wells and water level contour maps. Subsidence monitoring results are also summarized here and detailed in Appendix A. All data in this chapter are for water year 2025 (October 1, 2024 to September 30, 2025), unless otherwise noted.

3.1 Groundwater Levels

Valley Water tracks groundwater elevations, groundwater quality, and land subsidence through comprehensive groundwater monitoring programs. In 2025, Valley Water collected monthly groundwater elevation readings at 168 wells in the Santa Clara Subbasin and 61 wells in the Llagas Subbasin. Furthermore, local water retailers shared groundwater elevation data at 218 wells (Appendix B, Figure B-7). While this report provides a summary of groundwater elevations based on 11 regional wells, all available countywide groundwater elevation data are accessible through the Monitoring Network Module within DWR's SGMA portal¹⁶ and the Valley Water website.¹⁷ All well information in the Monitoring Network Module was recently updated.

Groundwater elevation data from 11 regional wells in the Santa Clara and Llagas subbasins are shown in Figure 12; these wells are spatially distributed within the two subbasins and various cities in the county. Hydrographs for these regional wells show the static water level trend over the period of record, which varies by well (Figure 13).

While 2025 was a below-average to average water year statewide, local rainfall data indicate that conditions were below average and that precipitation was lower than both WY 2024 and the 10-year average. As a result of these recent hydrologic trends, i.e., decreased managed recharge and increased groundwater pumping, groundwater elevations in many regional wells ended WY 2025 lower than in WY 2024 but remained well above average levels. Groundwater elevations in 2025 remain far above the historical minima and the levels observed during the major drought periods of 1987–1992, as well as the most recent drought periods of 2012–2016 and 2020–2022. Artesian pressures were observed at many locations in the northern Santa Clara Subbasin. Groundwater elevations in 2025 were also well above Valley Water thresholds established to minimize the risk of land subsidence in the Santa Clara Subbasin.¹⁸

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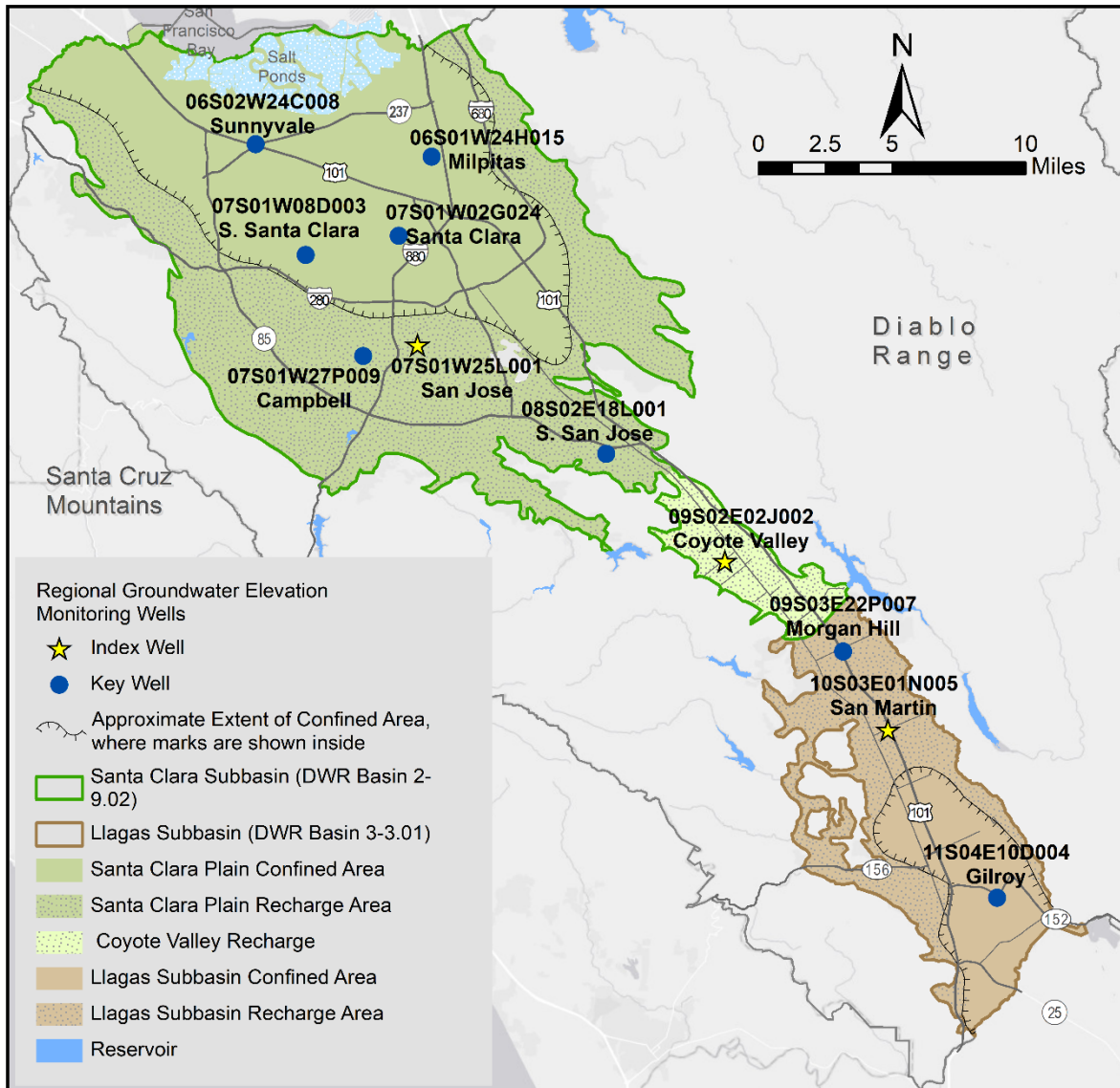
¹⁶ <https://sgma.water.ca.gov/portal/>

¹⁷ <https://gis.valleywater.org/GroundwaterElevations> The water level data uploaded to DWR's Monitoring Network Module are from wells monitored by Valley Water and are a subset of the wells available on Valley Water website that includes water level data from Valley Water and Retailers.

¹⁸ See Section 3.2 and Appendix A for additional information.

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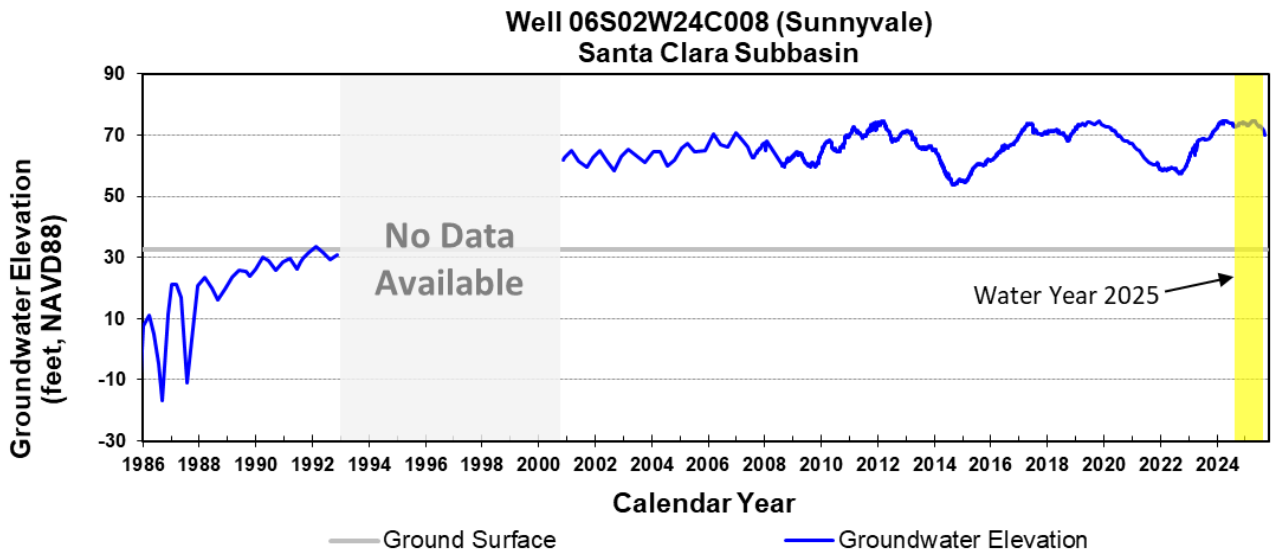
Figure 12. Regional Groundwater Elevation Monitoring Wells



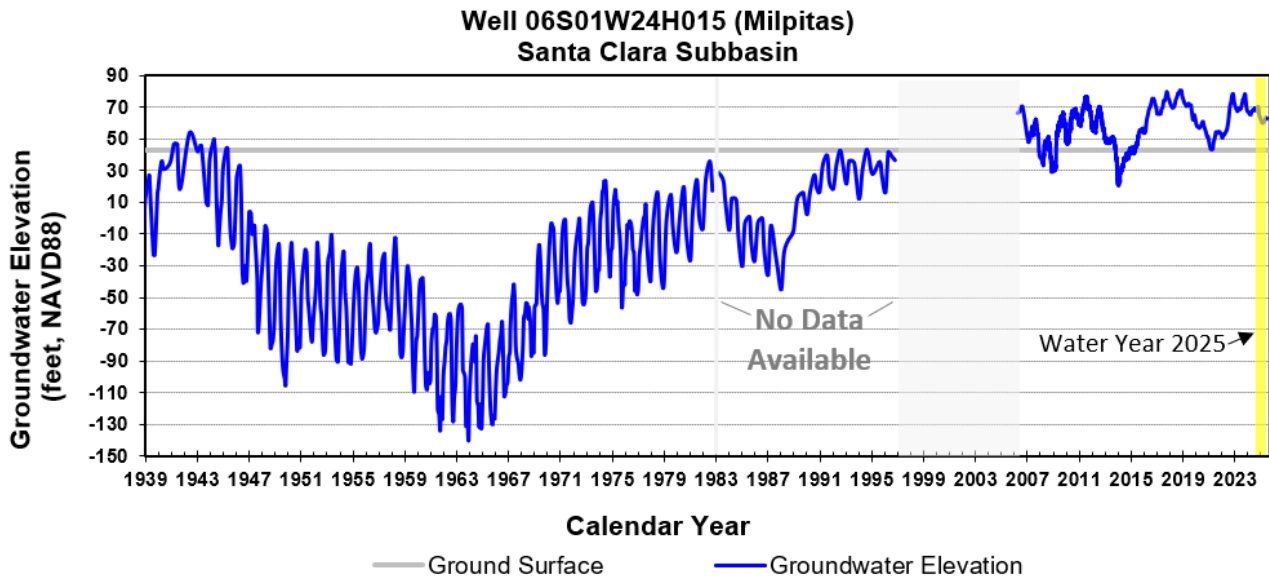
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Figure 13. Hydrographs at Regional Groundwater Elevation Monitoring Wells



During period with no data available, well was observed to be artesian but there was no pressure gauge installed.

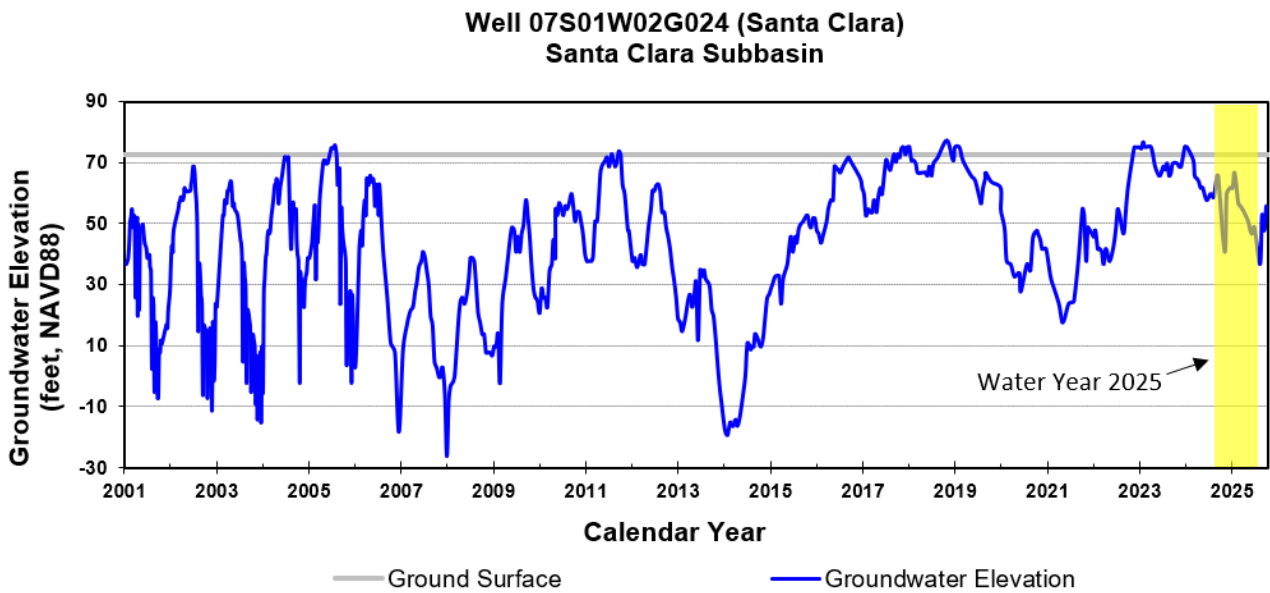
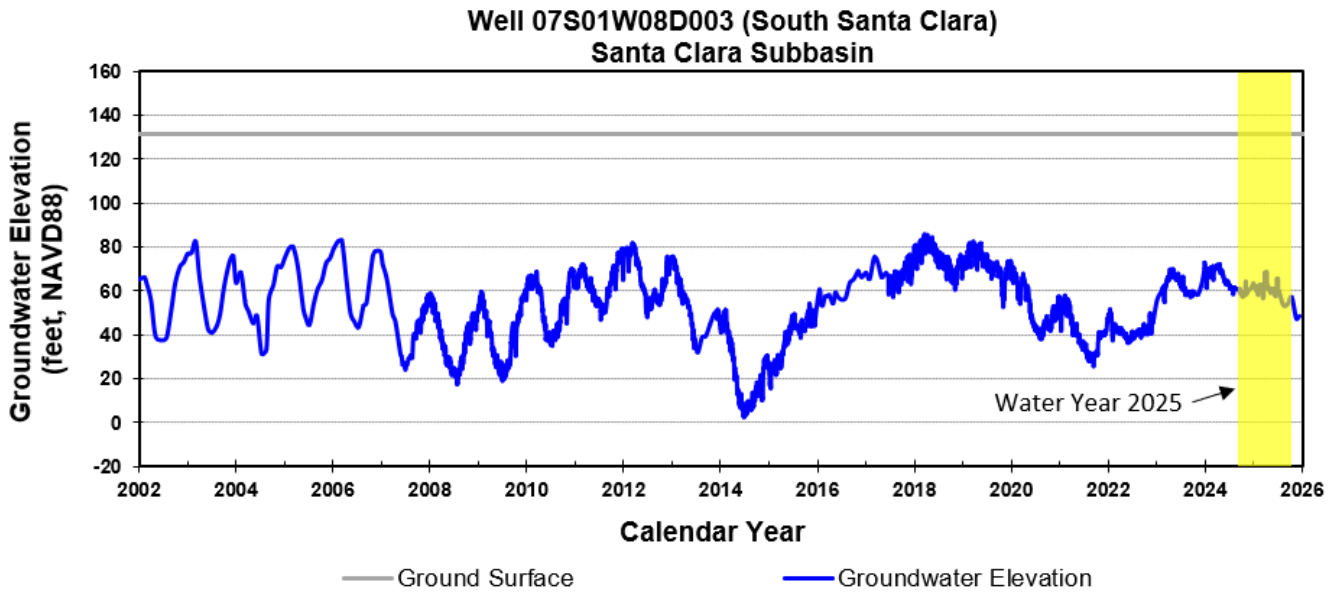


During second period with no data available, well was observed to be artesian but there was no pressure gauge installed.

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Figure 13. Hydrographs at Regional Groundwater Elevation Monitoring Wells (continued)

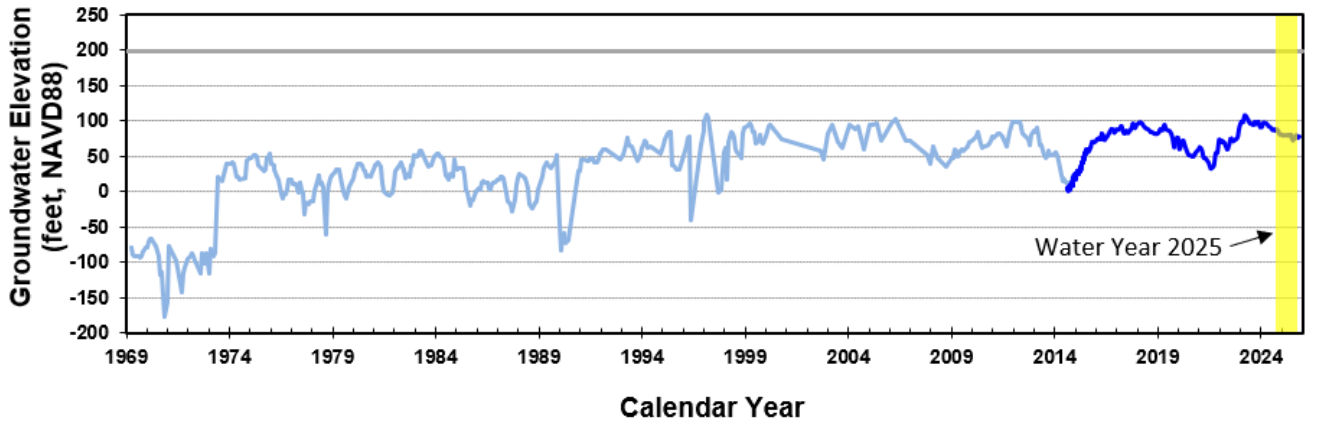


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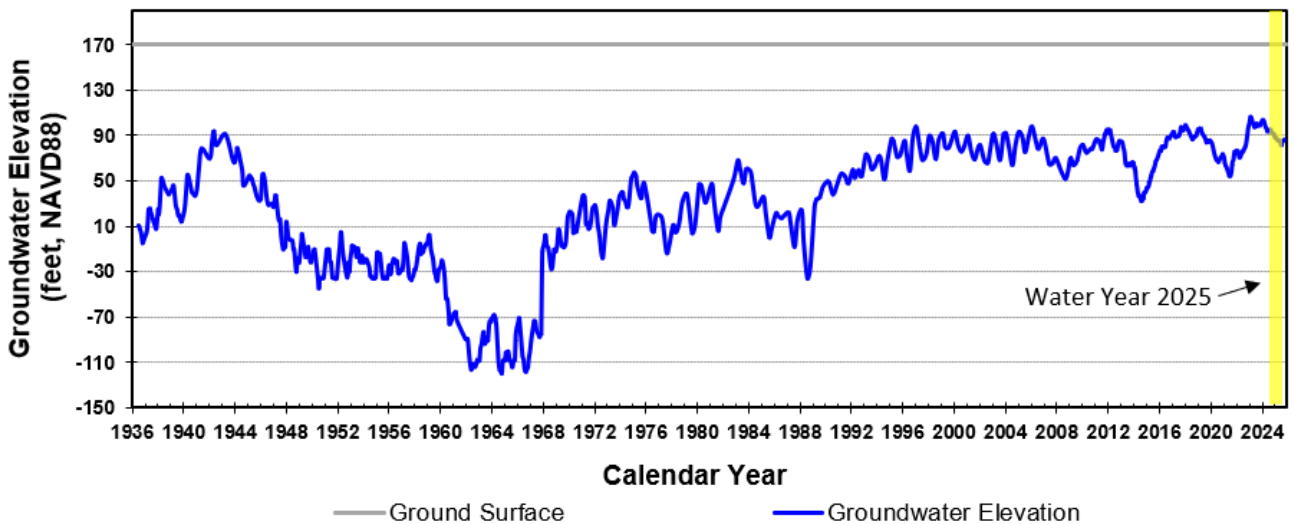
Figure 13. Hydrographs at Regional Groundwater Elevation Monitoring Wells (continued)

Well 07S01W27P009 (Campbell)
Santa Clara Subbasin



— Ground Surface — Groundwater Elevation (07S01W34F001) — Groundwater Elevation (07S01W27P009)
The Campbell well was replaced in August 2015 with a nearby well with similar water level history.

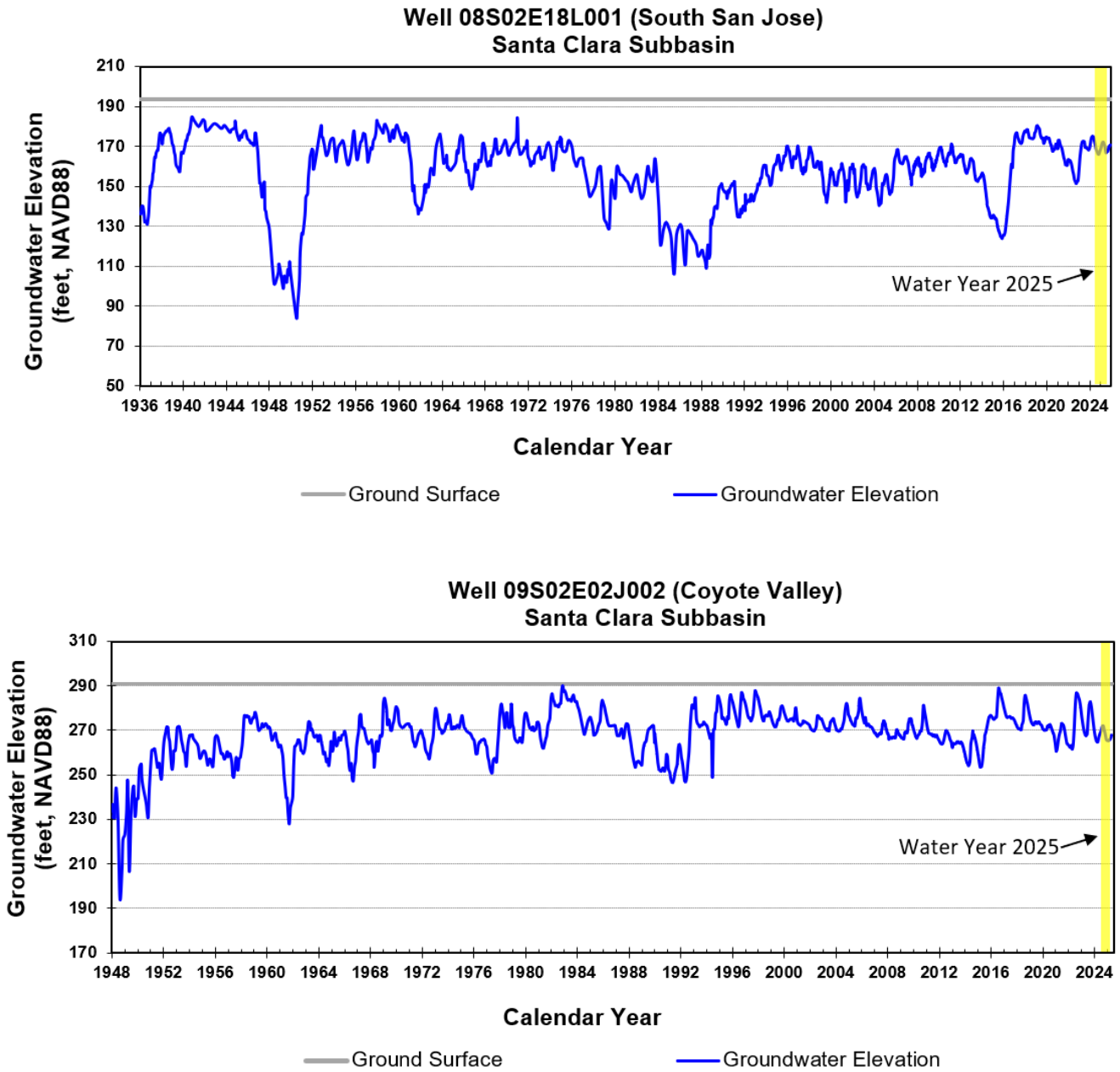
Well 07S01W25L001 (San Jose)
Santa Clara Subbasin



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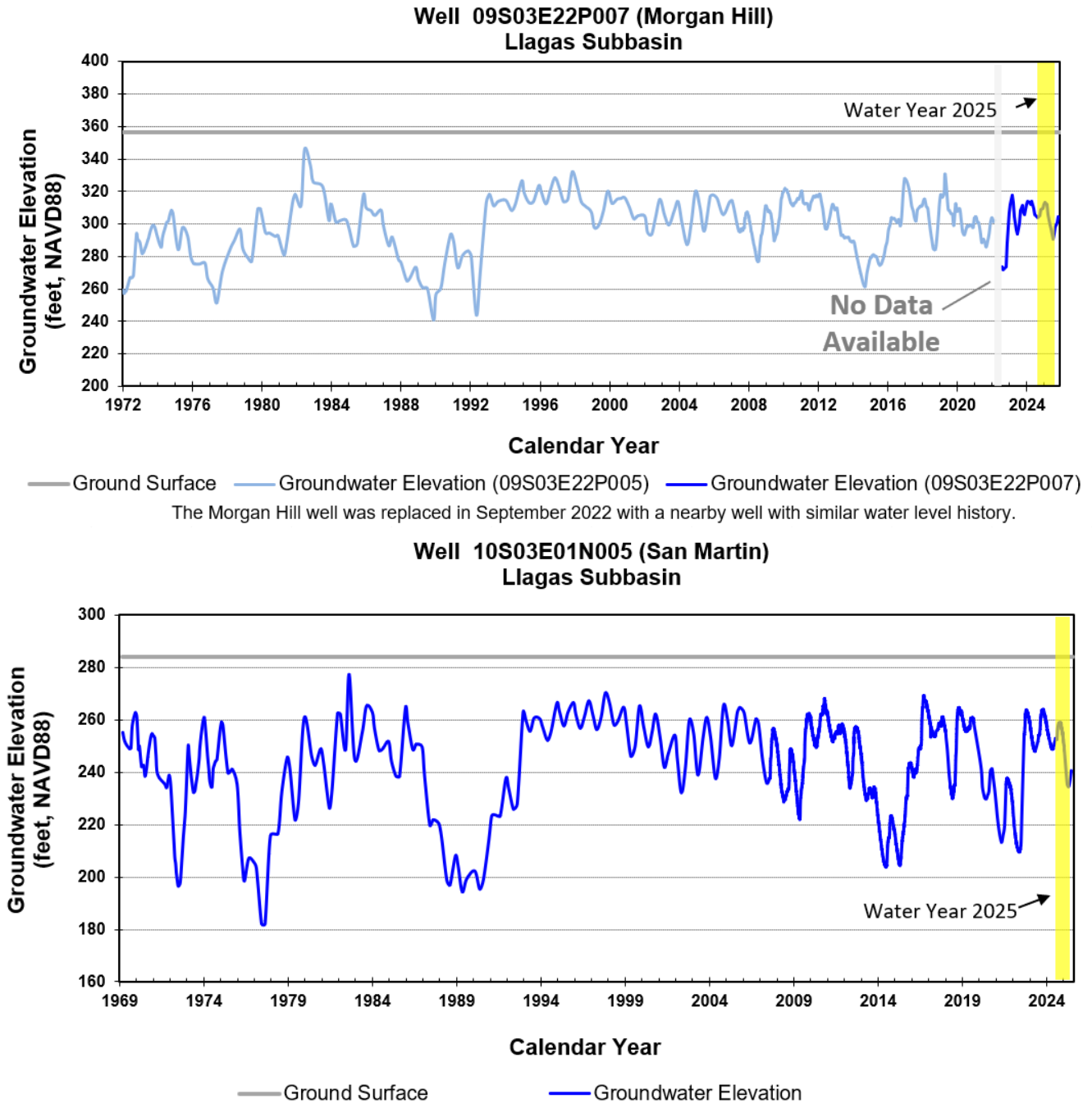
Figure 13. Hydrographs at Regional Groundwater Elevation Monitoring Wells (continued)



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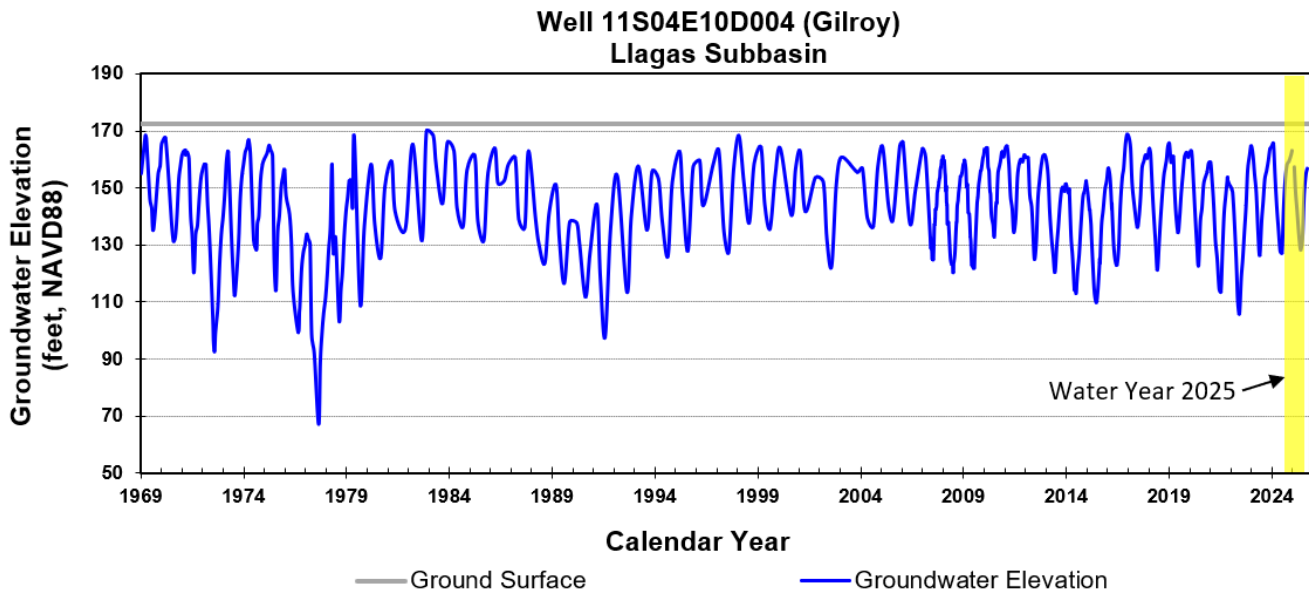
Figure 13. Hydrographs at Regional Groundwater Elevation Monitoring Wells (continued)



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Figure 13. Hydrographs at Regional Groundwater Elevation Monitoring Wells (continued)



Valley Water uses three groundwater level index wells (Figures 12 and 13) to represent broad regional conditions in the Santa Clara Plain (well 07S01W25L001), Coyote Valley (well 09S02E02J002), and Llagas Subbasin (well 10S03E01N005). Table 7 shows March and September 2025 groundwater elevations for the three index wells since these months typically represent the seasonal high and low groundwater elevations, respectively. Compared to 2024, the 2025 average groundwater elevation was 10.7 feet lower in the Santa Clara Plain, 5.4 feet lower in the Coyote Valley, and 3.7 feet lower in the Llagas Subbasin. Groundwater elevations remained above the 5-year average and period of record average, except Coyote Valley which was 2.7 feet lower than the 5-year average. All available groundwater elevation and depth-to-water data can be accessed on Valley Water’s website at <https://gis.valleywater.org/Wells.html>.

Table 7. Groundwater Elevations at Regional Index Wells (feet, NAVD88)

Period	Santa Clara Subbasin		Llagas Subbasin (10S03E01N005)
	Santa Clara Plain (07S01W25L001)	Coyote Valley (09S02E02J002)	
March 2025	88.1	271.3	258.8
September 2025	81.4	265.2	235.1
2025 Average	88.5	267.7	252.1
2024 Average	99.2	273.1	255.8
5-Year Average (2021-2025)	83.8	270.4	239.7
Period of Record Average ¹	23.6	267.3	242.6

Notes:

¹ The period of record for the index wells begins in 1936 for the Santa Clara Plain, 1948 for the Coyote Valley, and 1969 for the Llagas Subbasin.

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Groundwater elevation contour maps for the Santa Clara and Llagas subbasins with related measurement locations are presented in Figures 14 and 15 for Spring 2025 and Fall 2025, respectively. These contours represent the principal aquifer within each subbasin because those aquifers support the majority of pumping. Seasonal lows generally occur in September or October after dry summer conditions and increased pumping. Groundwater levels usually rise with the late fall and winter rains and reduced demands leading to seasonal high groundwater levels, which typically occur in March or April. The spring and fall maps (Figures 14 and 15) were created using the water level readings measured closest to March 31, 2025 and September 30, 2025, respectively.

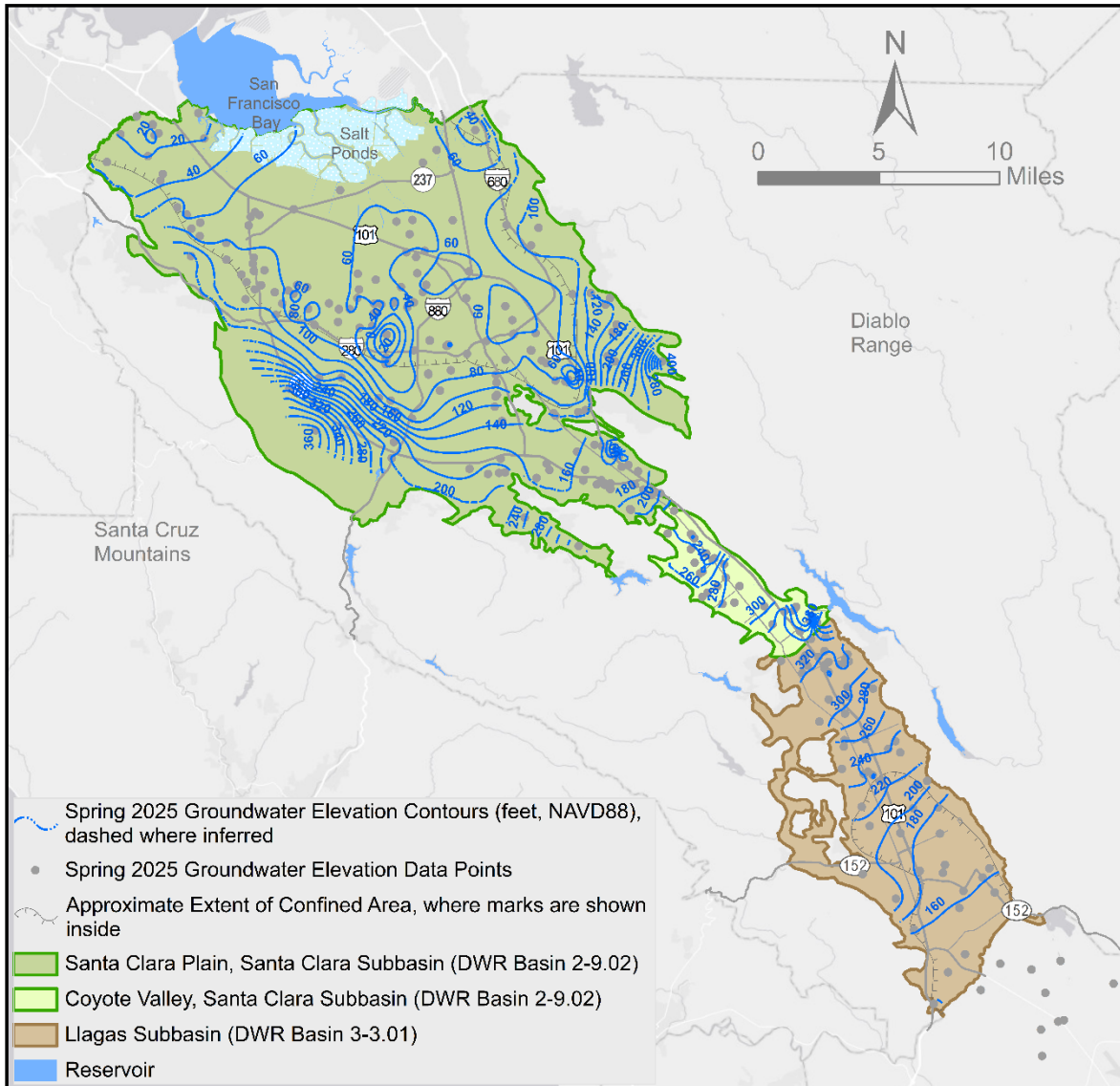
In the Santa Clara Subbasin, the general groundwater flow direction is northwest from the Coyote Valley toward San Francisco Bay (Figures 14 and 15). Valley Water's managed recharge helps maintain adequate pressures in the principal aquifer zone such that groundwater flows toward the bay and maintains an upward vertical gradient near the bay. The upward gradient minimizes the potential for seawater intrusion into the principal aquifers. Artesian conditions occurred in some wells in the confined area of the Santa Clara Plain in 2025.

The highest groundwater elevations in the Llagas Subbasin are in the recharge area in Morgan Hill near Cochrane Road, and groundwater generally flows southeast toward the Pajaro River and San Benito County. Managed and natural recharge within the recharge area maintain groundwater pressures within the southern confined area in the Llagas Subbasin, where deeper groundwater occurs in partially to fully confined (artesian) conditions. Similar to the Santa Clara Plain, artesian pressures in the Llagas Subbasin were maintained during 2025 in wells that historically have artesian conditions.

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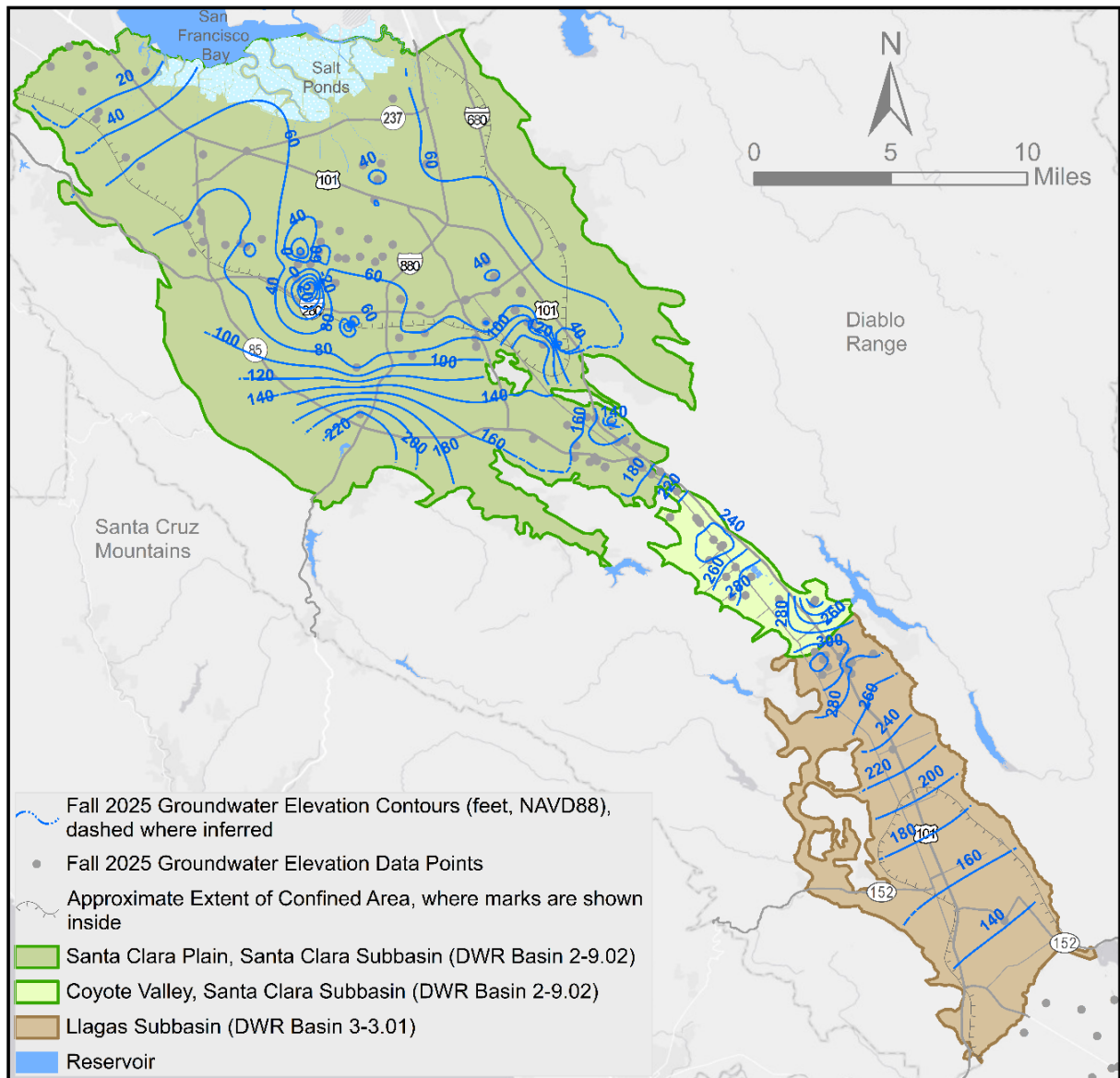
Figure 14. Spring 2025 Groundwater Elevation Contours in the Principal Aquifers



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Figure 15. Fall 2025 Groundwater Elevation Contours in the Principal Aquifers



Note: Fall groundwater elevation contours may appear slightly different compared to previous years for the same season. These differences are attributed to limitations in the water-level data collected during the current fall season.

3.2 Subsidence

Subsidence is a concern in the Santa Clara Plain due to historical occurrence that caused an increased risk of flooding, seawater intrusion, and damage to settlement-sensitive infrastructure and utilities. Between 1915 and 1969, land subsidence occurred due to groundwater overdraft, with up to 14 feet of permanent (inelastic) land subsidence observed in San Jose. Permanent subsidence was halted by about 1970 through Valley Water's expanded conjunctive water management programs that enabled the return of groundwater to levels above subsidence thresholds. Preventing resumed permanent subsidence is a key Valley Water focus.

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In 2025, Valley Water monitored subsidence at 142 benchmarks along three cross valley land surface level circuits and at two extensometers. Groundwater levels at ten subsidence index wells were also monitored and compared to thresholds established at each well to minimize the risk of permanent land subsidence.

Elastic (non-permanent) subsidence and recovery occurs annually in response to seasonal pumping and recharge as indicated by satellite studies and extensometer measurements (Appendix A).¹⁹ To avoid resumption of permanent subsidence, Valley Water has established subsidence thresholds at ten index wells in the Santa Clara Plain²⁰ based on a tolerable rate of 0.01 feet per year of subsidence.²¹ Groundwater levels must be maintained above these thresholds to ensure a low risk of permanent land subsidence. Subsidence has not been observed in the Coyote Valley or the Llagas Subbasin, so there is no related outcome measure in those areas.

Valley Water conducts ongoing monitoring of benchmarks, extensometers, and subsidence index wells to determine if land subsidence is occurring or threatening to exceed established thresholds. Recent monitoring data indicate the subsidence outcome measure was met in 2025 and that there is a low risk of subsidence as described further below and in more detail in Appendix A.

3.2.1 Extensometer Monitoring

Valley Water monitors two 1,000-foot deep extensometers that measure aquifer compaction or expansion, respectively associated with subsidence or uplift, by comparing vertical ground elevation relative to a central, isolated pipe set beneath the water-bearing units. The extensometers, located in Sunnyvale near Moffett Field (“Sunny”) and near downtown San Jose (“Martha”), are equipped with data loggers to provide hourly aquifer compaction/expansion and water level readings. Valley Water evaluates the average land subsidence measured during the last 11 years at two extensometers to determine if it meets the tolerable rate of land subsidence of 0.01 feet per year.

The 2025 subsidence values at Sunny and Martha are 0.005 feet (subsidence) and 0.008 feet (subsidence), respectively. Over the last 11 years (2015 to 2025), an average annual rate of -0.008 feet per year was measured at the extensometers, which is indicative of land uplift (or aquifer expansion)²².

3.2.2 Benchmark Elevation Surveys

Periodic benchmark surveys of land surface elevation have been conducted in Santa Clara County since 1912.²³ Valley Water’s current benchmark leveling program consists of annual surveys along three cross valley level circuits in the Santa Clara Plain. In 2025, Valley Water analyzed land surface elevation data from 142 benchmarks to evaluate the spatial variability of land subsidence.

¹⁹ Schmidt, D. A., and R. Bürgmann, 2003, Time-dependent land uplift and subsidence in the Santa Clara valley, California, from a large interferometric synthetic aperture radar data set, *J. Geophysical Res.*, 108 (B9), 2003.

²⁰ Geoscience Support Services Inc. for Santa Clara Valley Water District, Subsidence Thresholds in the North County Area of Santa Clara Valley, 1991.

²¹ The tolerable subsidence rate of no more than 0.01 feet per year on average was endorsed by Valley Water’s Water Retailer Groundwater Subcommittee.

²² Unlike benchmarks (which have an opposite sign convention), negative values for extensometer measurements indicate aquifer expansion and positive values indicate aquifer compaction.

²³ USGS, Land Subsidence in the Santa Clara Valley, California as of 1982, Professional Paper 497-F, 1988.

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The 2025 survey data showed a trend of negative land surface elevation change (land subsidence) from 2024 at most benchmarks. Based on the average annual land surface elevation change along the three circuits over the last 11 years (2015 to 2025), most locations had uplift. All benchmarks had average annual change less than -0.01 feet/year²⁴.

3.2.3 Subsidence Index Wells

Groundwater level measurements are an integral part of land subsidence monitoring because declining water levels due to long-term overdraft were the driving force of historical subsidence in the Santa Clara Plain. Valley Water measures water levels at ten subsidence index wells on a daily to monthly basis. If water levels stay near or drop below subsidence thresholds for extended periods, permanent subsidence may resume, resulting in an increased risk of flooding, seawater intrusion, and damage to infrastructure and utilities.

The lowest historical water levels at the ten subsidence index wells were generally observed in the 1960s and 1970s. Since then, groundwater levels have recovered substantially to sustainable levels, primarily due to Valley Water's managed and in-lieu recharge programs. While groundwater levels generally decline during droughts, Valley Water has strong groundwater management programs in place to make sure water levels recover quickly after droughts.

The 2025 average groundwater elevation among the ten subsidence index wells was about 6 feet lower than 2024 (ranging from 30 feet lower to 1 foot higher) and about 109 feet higher than subsidence thresholds (ranging from 53 to 227 feet higher). Three subsidence index wells near the Baylands continue to have upward vertical gradients and artesian conditions. In addition to keeping water levels above subsidence thresholds, maintaining an upward hydraulic gradient in the principal aquifer zone is critical for preventing shallow groundwater with elevated salts from entering the principal aquifer through abandoned wells and other vertical conduits. Valley Water will continue to frequently track data from the subsidence index wells to support water supply operations and planning.

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²⁴ While the tolerable rate of 0.01 feet/year was used to establish the subsidence threshold water levels at the ten index wells and does not directly apply to benchmarks, the average change in benchmark land surface elevation is compared to the tolerable rate here to provide context.

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CHAPTER 4 – GROUNDWATER QUALITY

This chapter presents water quality analysis for data collected from regional monitoring wells, domestic wells, public water systems, recycled water irrigation sites, and recharge monitoring sites. Data analysis includes evaluating long term water quality trends, drinking water and salt/nutrient management comparisons, extent of seawater intrusion, and Well Ordinance Program activities. All data in this chapter are for water year (WY) 2025 (October 1, 2024 to September 30, 2025) unless otherwise noted.

4.1 Regional Groundwater Quality Summary

Valley Water’s regional groundwater quality monitoring network includes 70 monitoring wells and 21 domestic, municipal, and agricultural wells. These wells are sampled annually for 46 water quality parameters including major and minor ions, nutrients, and trace metals. Data from this consistent well network is supplemented with data from Valley Water’s voluntary domestic well testing program (206 wells in WY 2025) and public water supply wells (250 wells in WY 2025). Data for the latter are collected by public water systems and reported to the State Water Resources Control Board Division of Drinking Water (DDW). All wells used to analyze regional groundwater quality in 2025 are shown in Figure 16.

Water quality results for water supply and monitoring wells with the median and range for each subbasin and aquifer zone²⁵ are summarized in Appendix C, with applicable drinking water standards provided for context²⁶. Sample results indicate that groundwater in the Santa Clara and Llagas subbasins is generally of high quality, with the primary exceptions being nitrate and PFAS as discussed in subsequent sections.

Water quality indicators, ions, and trace elements were within the normal range expected in groundwater, except for nitrate. Elevated nitrate concentrations are primarily an issue in the Coyote Valley and Llagas Subbasin due to historic and ongoing sources including natural and/or synthetic fertilizers, septic systems, and animal enclosures. Median and trend information for nitrate and TDS, common water quality indicators, are discussed in Section 4.3

Five volatile organic compounds (VOCs) were detected in groundwater in 2025. However, none were confirmed to be present above drinking water standards, and maximum concentrations were typically well below the MCLs. VOCs occur primarily from industrial use of solvents and from leaking underground fuel tanks. No pesticides were detected in 2025 and there were no radioactive parameters analyzed in the Llagas Subbasin. Detailed results can be found in Appendix C.

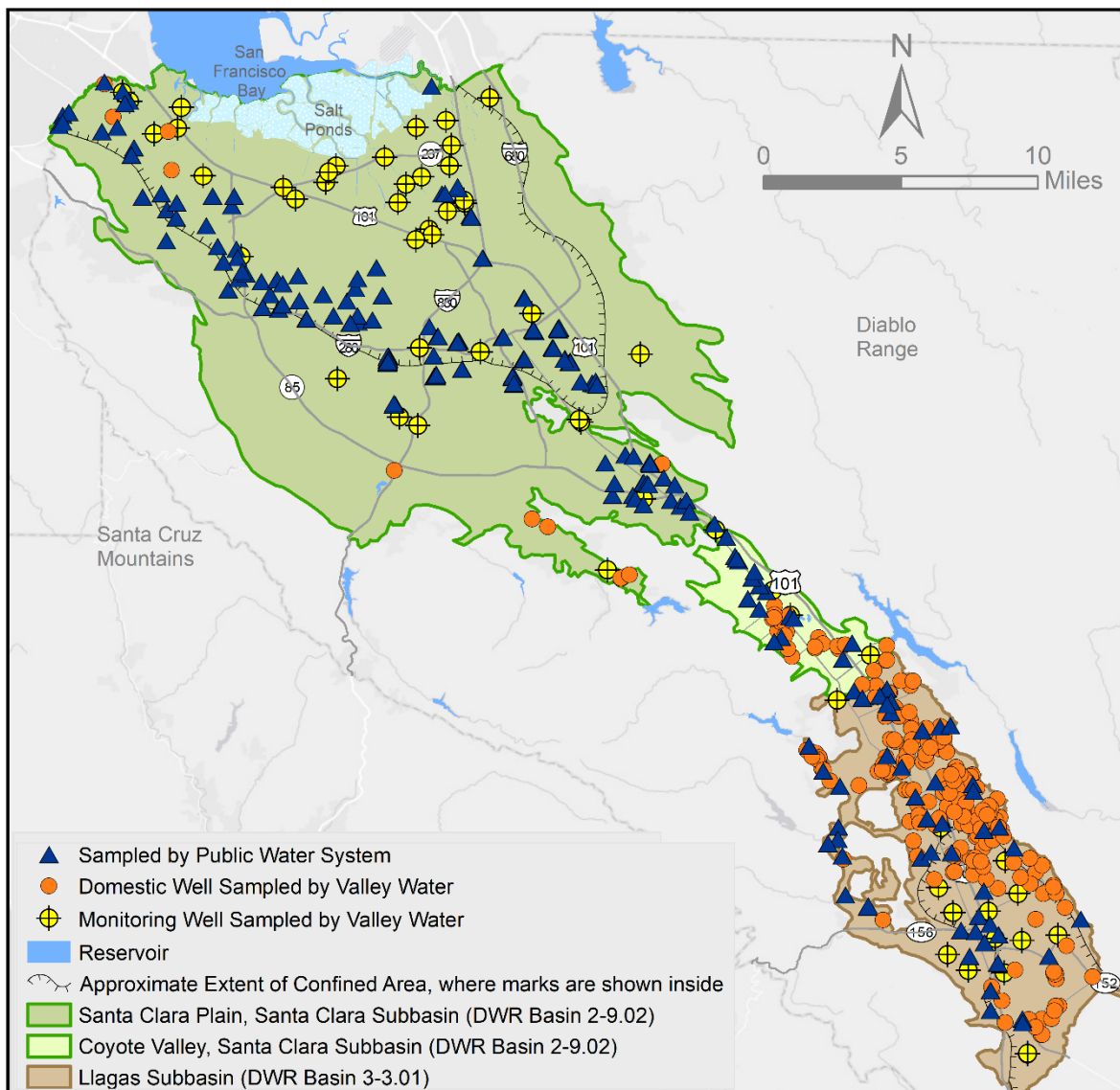
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²⁵ Public water supply wells were assumed to represent the principal aquifer if no construction information was available, as these are typically deep wells.

²⁶ Note: these summary tables do not include data from wells with elevated influence from San Francisco Bay water and that Table C-7 only includes data from water supply wells.

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Figure 16. 2025 Groundwater Quality Wells



In 2025, several local water retailers tested their wells for PFAS: San Jose Water Company (SJWC) sampled 81 wells, the City of San Jose sampled five wells, California Water Service Company sampled 19 wells, the City of Palo Alto sampled seven wells, and the City of Gilroy sampled two wells. Valley Water continued to sample Campbell Well Field²⁷ Well C under a DDW PFAS Order. Valley Water also sampled PFAS at 28 domestic wells. Appendix C shows the locations of water supply wells sampled for PFAS in 2025 and includes related results, which are summarized in Section 4.2.

Valley Water continues to evaluate and analyze PFAS data from all sources including public water supply wells and Valley Water’s voluntary sampling programs. Since October 2020, staff from Valley

²⁷ The Campbell Well Field is a backup supply source and has never been used to deliver water to customers.

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Water, San Jose Water Company, the San Francisco Bay Regional Water Quality Control Board, and DDW have met regularly to discuss regional PFAS conditions, including impacted water supply wells. Valley Water will continue to collaborate with water retailers and regulatory agencies to better understand PFAS occurrence, evaluate potential sources, and identify any actions that may be needed to protect local water supplies.

4.2 Water Supply Well Results Compared to Drinking Water Standards

Public water systems are required to meet all drinking water standards for water delivered to customers. While domestic wells are not subject to federal or state drinking water standards, related results are compared to those standards to provide a summary of groundwater quality in all water supply wells tested. For ease of reporting, any single result reported above an MCL is considered as an exceedance (i.e., not meeting drinking water standards). However, it is important to note that based on drinking water regulations and follow-up sampling, a single detection above an MCL in a public water system may not constitute a violation of a drinking water standard.

In 2025, 82% of all water supply wells tested, including public and private domestic wells, met all MCLs for all parameters tested. Parameters detected above MCLs include nitrate, PFOS, PFOA, PFHxS, PFNA, and HFPO-DA. Figure 17 shows the locations of water supply wells tested in 2025 with sample results above an MCL.

For Santa Clara Subbasin water supply wells, the primary parameters detected above MCLs were nitrate, PFOS, PFOA, PFHxS, PFNA, and HFPO-DA. PFOS and PFOA were detected above the MCL in 14 and two Santa Clara Plain wells, respectively. PFHxS, PFNA, and HFPO-DA were detected above the MCL in one Santa Clara Plain well (Figure 17). Nitrate was present above the MCL in seven Coyote Valley wells and one Santa Clara Plain well. For Llagas Subbasin water supply wells, nitrate was above the MCL in 60 wells (25% of water supply wells tested). PFOS and PFOA were also detected above the MCL in eight and seven wells in the Llagas Subbasin, respectively. PFHxS, PFNA, and HFPO-DA were not detected above the MCL in any Llagas Subbasin wells.

Nitrate continues to be the parameter most frequently detected above the MCL; in 2025, nitrate was present above the MCL in 15% of water supply wells tested countywide. Most detections were from private domestic wells sampled in Coyote Valley and the Llagas Subbasin that are not regulated by the state, but five wells were part of public water systems that must comply with all drinking water standards through further sampling, blending, and/or treatment. Based on communication with private well owners participating in Valley Water sampling programs, many use bottled water for drinking and cooking, or reverse osmosis treatment to reduce nitrate exposure. As described in section 4.3, nitrate trends in groundwater are generally stable or decreasing.

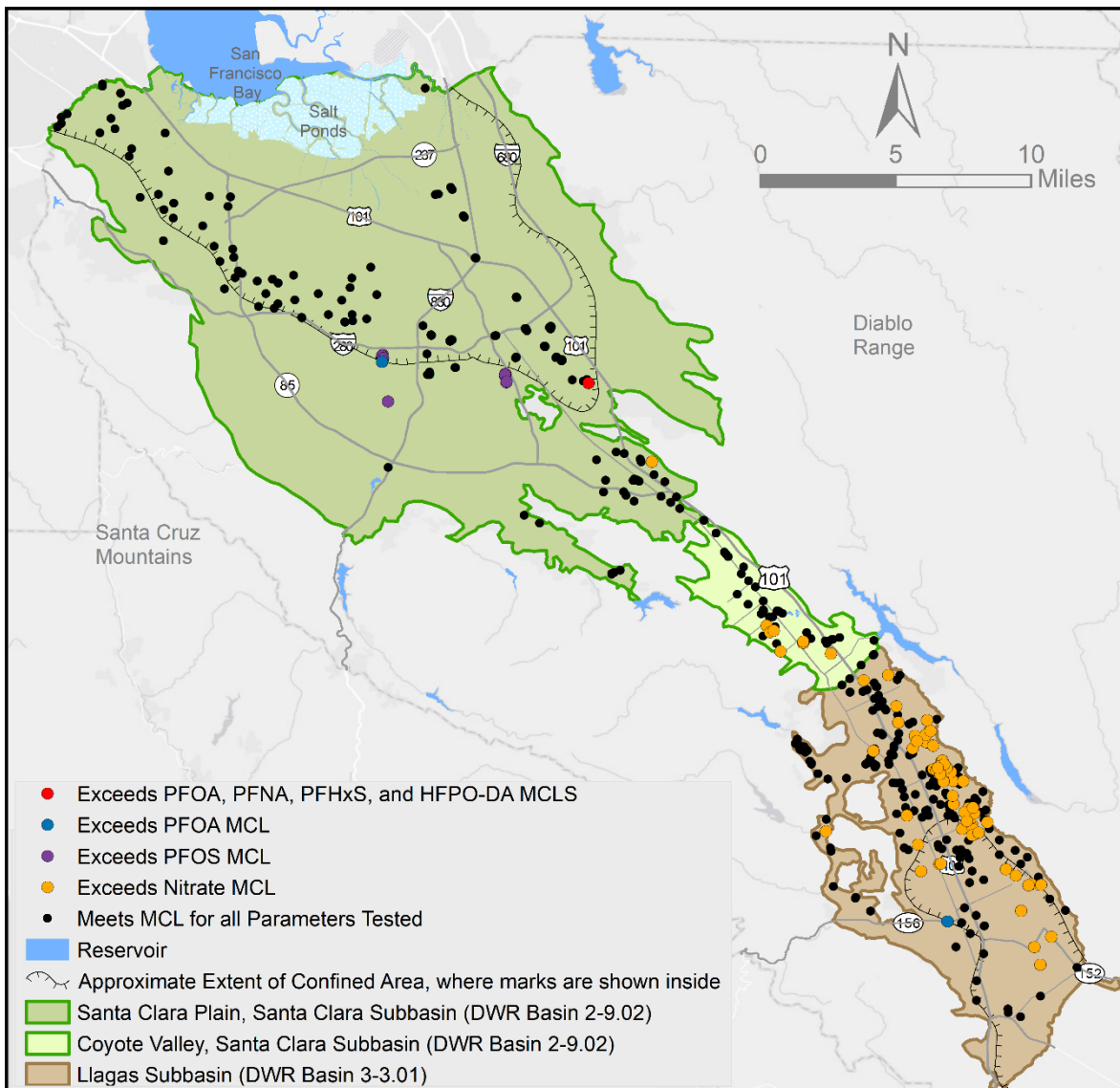
Most PFAS compounds analyzed were not detected in most water supply wells. Notable findings for PFAS with drinking water standards are summarized below, with detailed information in Appendix C.

- Perfluorohexane sulfonic acid (PFHxS) was detected at low levels in a number of wells, though only one well exceeded the 10 parts per trillion (ppt) MCL.
- Perfluorooctanoic acid (PFOA) was detected above the 4 ppt MCL in three retailer wells and six domestic wells.
- Perfluorooctane sulfonic acid (PFOS) was detected above the 4 ppt MCL in 15 retailer wells. Twelve of these wells are owned by a single retailer that has taken wells offline, notified customers, and is actively pursuing well head treatment. PFOS was detected above the MCL in seven domestic wells.

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- Perfluorononanoic acid (PFNA) was detected at low levels in a few wells, but only one supply well exceeded the 10 ppt MCL.
- Hexafluoropropylene oxide dimer acid (HFPO-DA), or GenX, was detected in one supply well at a value (11 ppt) slightly exceeding the 10 ppt MCL.

Figure 17. 2025 Water Supply Well Detections Above MCLs



Notes: For ease of reporting, any single result reported above an MCL is shown as an exceedance. However, based on drinking water regulations and follow-up sampling, a single detection above an MCL may not constitute a violation of a drinking water standard. Public water systems are required to meet all drinking water standards for water delivered to customers.

4.3 Nitrate and TDS Trends

To assess changes in groundwater quality over time, Valley Water evaluated nitrate and TDS concentrations for water supply wells in the Santa Clara and Llagas subbasins over a 15-year period (October 2011 – September 2025). Statistical trend tests were conducted for individual wells with at

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least five sample results for each parameter. Across Santa Clara and Llagas subbasins, a total of 90% and 89% of the wells evaluated have stable or decreasing concentrations of nitrate and TDS, respectively (Table 8). Figures 18 and 19 also present information on nitrate and TDS trends.

In the Santa Clara Subbasin, stable or decreasing concentrations were observed in 90% and 93% of the water supply wells evaluated for nitrate and TDS, respectively. In the Llagas Subbasin, stable or decreasing nitrate and TDS concentrations were noted in 90% and 85% of water supply wells, respectively (Table 8).

While most wells have stable or decreasing long-term nitrate and TDS concentration trends, some increasing trends were observed and warrant further evaluation. Valley Water will assess the potential cause, continue to implement the Salt and Nutrient Management Plans, and engage with regulatory and/or land use agencies as needed.

Table 8. Nitrate and TDS Concentration Trends in Water Supply Wells (October 2011 – September 2025)

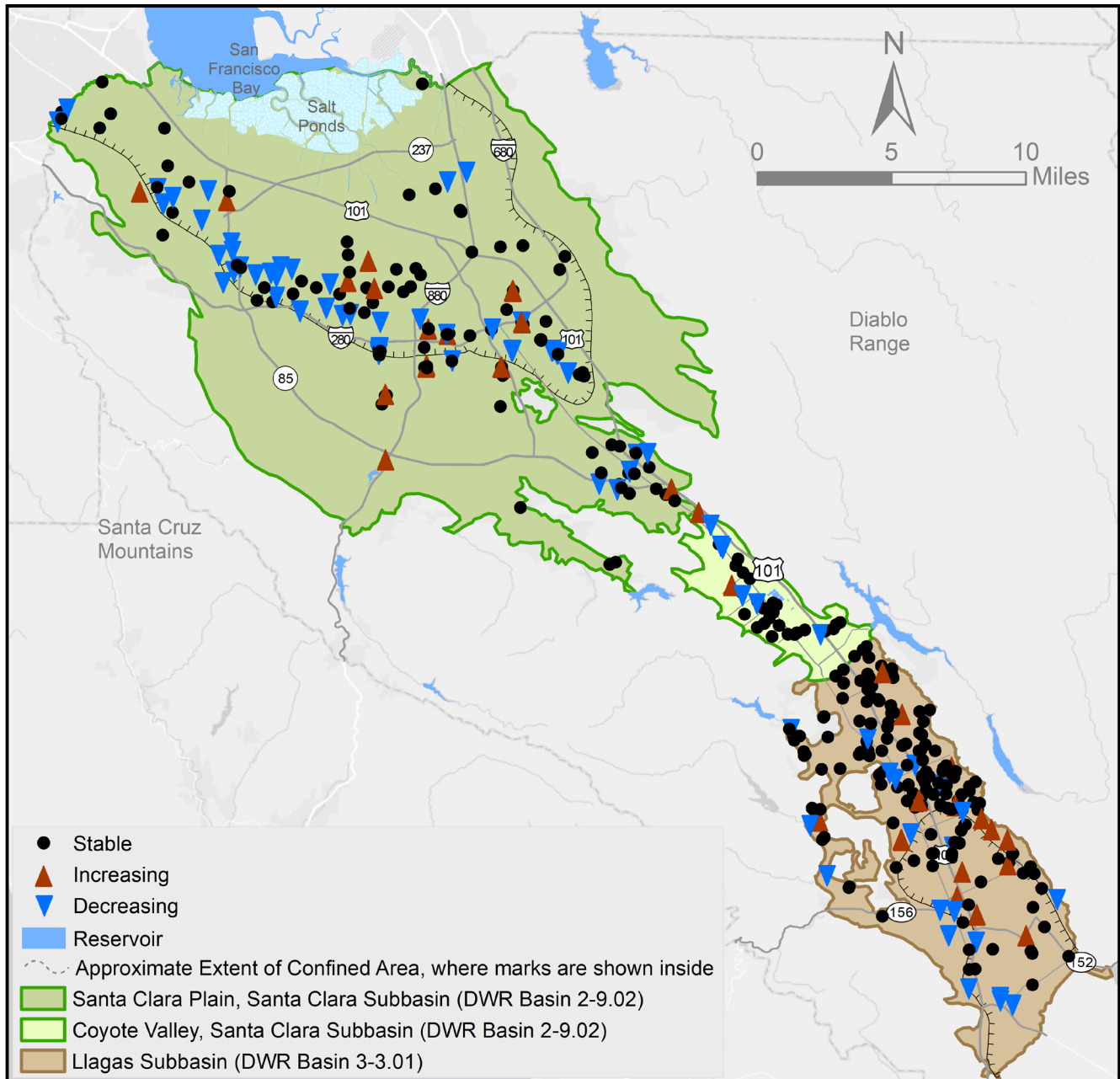
Subbasin	Parameter	WY 2025 Median Concentration (mg/L)	Number of Wells Evaluated	Percent of Wells with Stable or Decreasing Concentrations	Percent of Wells with Increasing Concentrations
Santa Clara	Nitrate (as N)	2.8	232	90%	10%
	TDS	409	107	93%	7%
Llagas	Nitrate (as N)	5.3	187	90%	10%
	TDS	395	78	85%	15%
Santa Clara and Llagas	Nitrate (as N)	--	419	90%	10%
	TDS	--	185	89%	11%

Notes: The median concentrations are from water supply wells screened in the principal aquifers of the Santa Clara and Llagas subbasins.

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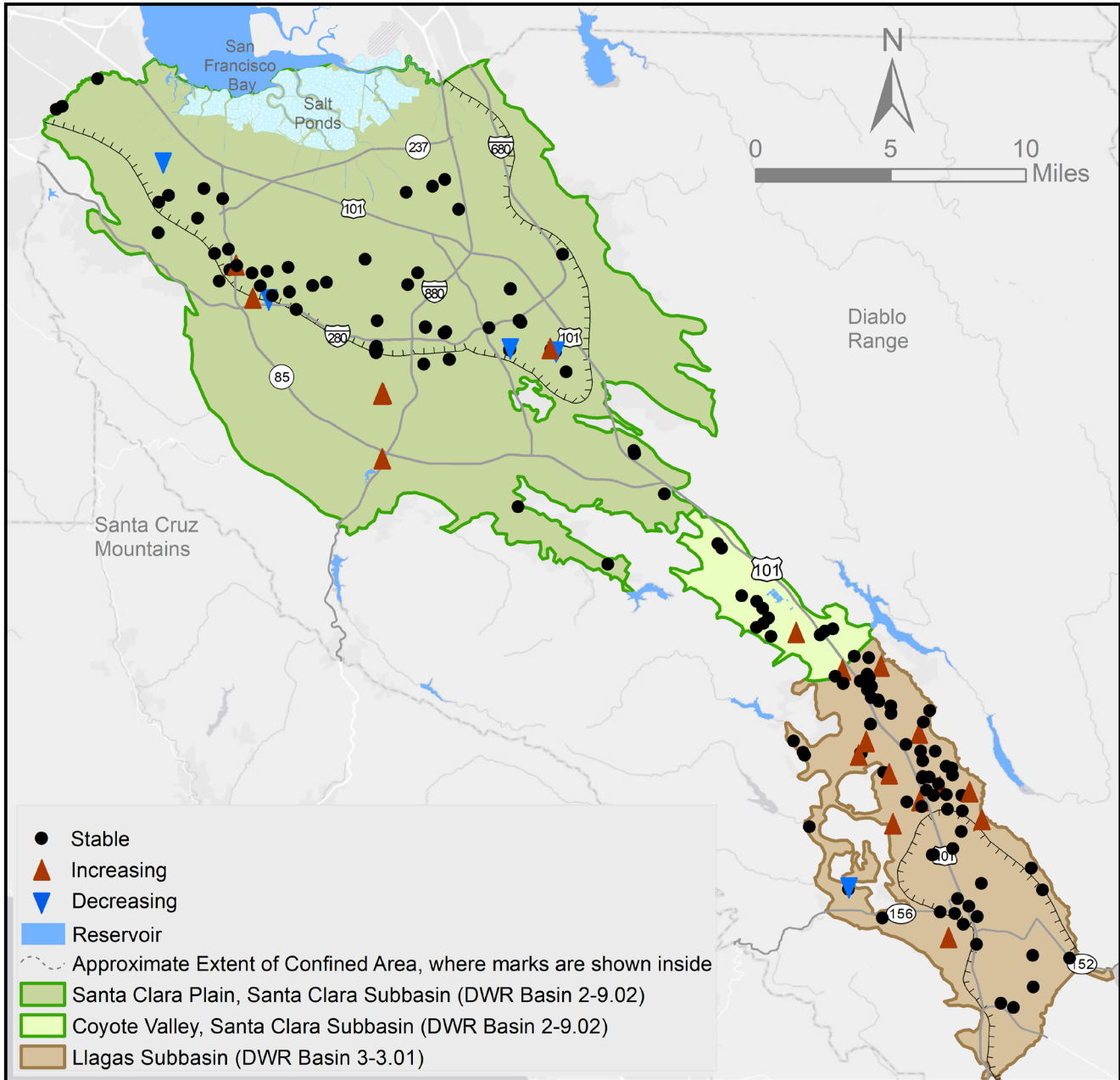
Figure 18. Nitrate Trends in Water Supply Wells (October 2011 – September 2025)



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Figure 19. TDS Trends in Water Supply Wells (October 2011 – September 2025)



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4.4 Salt and Nutrient Management Plans

The State Board’s 2009 Recycled Water Policy required the development of regional Salt and Nutrient Management Plans (SNMPs) to address current and future regional salt and nutrient loading to groundwater from all sources, including recycled water and agriculture. Valley Water completed separate SNMPs for the Santa Clara and Llagas subbasins by working with local interested parties and regulators. The plans²⁸ include salt and nutrient source identification, loading, assimilative capacity estimates, recycled water projections, implementation measures, groundwater monitoring provisions, and an anti-degradation analysis. The San Francisco Bay Regional Water Quality Control Board adopted resolution R2-2016-0046 approving the Santa Clara Subbasin SNMP in November 2016. The Central Coast Regional Water Quality Control Board does not plan to endorse specific SNMPs. Both agencies will use these plans to evaluate future recycled water projects.

The SNMPs estimate and project long-term trends in concentrations of salts (using TDS) and nutrients (using nitrate) in groundwater through 2035. In general, the main sources for salt loading in the Santa Clara Plain by volume are landscape irrigation and managed recharge, followed by recycled water, whereas agricultural irrigation and managed recharge are the main contributors for the Llagas Subbasin. Table 9 compares the SNMP 2025 projections with the actual concentrations from samples collected in 2025.

Table 9. Comparison of 2025 Actual and Projected SNMP Median Concentrations

Subbasin	Groundwater Management Area or Aquifer Zone	2025 SNMP Projected Median ¹	2025 Actual Median ²	2025 SNMP Projected Median	2025 Actual Median
		TDS (mg/L)		Nitrate as N (mg/L)	
Santa Clara ³	Santa Clara Plain	443	390	2.1	2.7
	Coyote Valley	305	406	2.4	3.2
Llagas ⁴	Shallow Zone	396	420	6.9	5.5
	Principal Zone	376	395	6.5	5.4

Notes:

¹ The projected medians for both subbasins are based on CY 2025 estimates from the SNMPs.

² The actual medians for both subbasins are based on WY 2025.

³ The Santa Clara Subbasin SNMP does not project median concentrations separately for shallow and principal aquifer zones; the principal aquifer actual median is shown.

⁴ The Llagas Subbasin SNMP projects separate medians for the northern and southern portions of the subbasin. The projected SNMP median shown is the average of these medians.

Measured median concentrations of TDS and nitrate generally correspond with SNMP projections except for TDS in Coyote Valley that is notably higher than projected and the Llagas shallow and principal aquifer zones that are only slightly higher than projected (Table 9). Also, the actual median concentration of nitrate in Coyote Valley is slightly higher than the projected median but is considerably lower than the WY 2024 actual median (5.3 mg/L). Discrepancies may be attributed to water quality changes due to recent land-use changes, interannual hydrologic variability between drought and wet years, and changes in the number of results or wells sampled.

²⁸ <https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater/groundwater-studies>

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Both projected and actual medians remain below water quality thresholds established in the Regional Water Quality Control Board's Basin Plans that cover the Santa Clara and Llagas subbasins. As shown in Table 8 and Figures 18 and 19, regional long-term trends for TDS and nitrate are generally stable or decreasing in both subbasins. Valley Water will continue to evaluate measured and projected TDS and nitrate concentrations to better understand the causes of fluctuations and effects on shallow and principal groundwater aquifers.

4.5 Seawater Intrusion

Seawater intrusion refers to the temporary or permanent flux of seawater into coastal freshwater aquifers. Seawater intrusion is a groundwater management concern because it can degrade groundwater quality and, if severe enough, could limit groundwater as a water supply for beneficial uses, or degrade groundwater dependent ecosystems or infrastructure.

Seawater intrusion in the shallow aquifer zone of the Santa Clara Plain is largely attributed to flow of water from San Francisco Bay (Bay) into the tidal reaches of creeks and subsequent transport to shallow groundwater through streambed percolation. Historical land subsidence exacerbated seawater intrusion by decreasing the land surface elevation adjacent to the Bay, causing further inland movement of bay water along tidal creeks. The degree of seawater intrusion in the shallow aquifer zone is assessed by the chloride concentration in groundwater monitoring wells within the Baylands area surrounding the southern Bay. Valley Water uses a chloride concentration of 100 mg/L to indicate the first sign of influence from seawater (Figure 20). This is a conservative threshold, since the aesthetic-based secondary MCL for chloride is 250 mg/L.

Wells with chloride over 100 mg/L are in a relatively narrow band adjacent to the former salt evaporation ponds and bordering Guadalupe River, Coyote Creek, and other streams where inland tidal flow occurs (Figure 20). Some localized areas immediately adjacent to the Bay may have a direct subsurface connection with Bay water. However, the leakance of seawater beneath tidal stream flow has a greater influence on the spatial extent of the 100 mg/L chloride isocontour and is likely the source for elevated chloride concentrations at many wells shown in Figure 20. However, the well with a chloride concentration of 26,500 mg/L is likely from connate water trapped from the geologic past or an evapoconcentrated source of chloride.

Few wells in the principal aquifer zone have highly elevated TDS or chloride concentrations. Historically, the classic case of seawater intrusion has affected only localized areas of the shallow aquifer zone beneath and immediately adjacent to the Bay and salt ponds, and thus is a minimal threat to the principal aquifer zone, which is protected by the regional aquitard²⁹. Beneath most areas where the shallow aquifer zone 100 mg/L chloride isocontour is mapped, chloride in the principal aquifer zone is relatively low at depth. The relatively minor intrusion into the deeper, principal aquifer zone is believed to be due to some classic seawater intrusion and inter-aquifer transfer through improperly destroyed wells when the vertical hydraulic gradient is downward.³⁰ At isolated locations in Palo Alto and southeast San Jose, the source of elevated TDS and chloride in deeper wells has been attributed to connate water (Figure 20), rather than recent seawater intrusion. Presently, the monitoring network in the Baylands area has limited coverage of the principal aquifer zone. As recommended in the 2021 GWMP, Valley Water is exploring new monitoring sites in the shallow and principal aquifer zones to improve monitoring of seawater intrusion and vertical gradients across aquifer systems. Additional

²⁹ Described in Valley Water's 2021 Groundwater Management Plan, Appendix H.

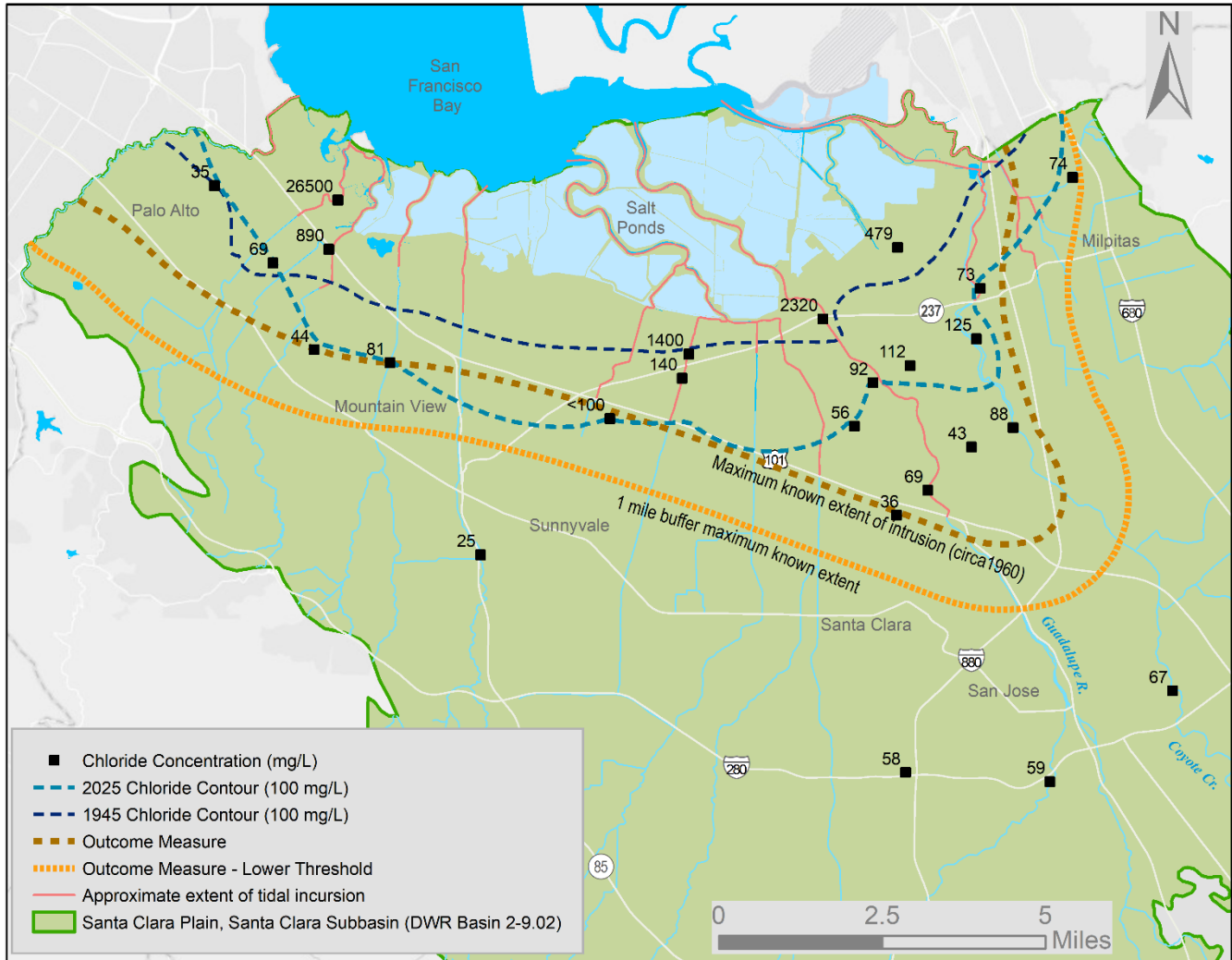
³⁰ Vertical gradients in the Baylands area where seawater interaction occurs have been upward for the last 20 years (approximately).

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details about seawater intrusion processes in the Santa Clara Plain are described in Valley Water's 2025 study report on seawater intrusion and groundwater rise and emergence³¹.

There are no seawater bodies near the Llagas Subbasin. Therefore, the subbasin is not vulnerable to seawater intrusion and no seawater intrusion has been observed.

Figure 20. Groundwater and Seawater Interaction in the Santa Clara Plain Shallow Aquifer



Notes: The well with connate water (trapped from the geologic past) and chloride concentration of 26,500 mg/L is included in the figure but omitted from isocontour calculations.

4.6 Recharge Water Quality

In accordance with the 2021 GWMP, Valley Water samples facilities within each managed recharge system approximately every three years (depending on Valley Water recharge operations). Most recharge facilities (percolation ponds and managed reaches of creeks) can receive a combination of local and imported surface water, with the proportion varying depending on hydrologic conditions and

³¹ Valley Water's 2025 report *Groundwater Response to Tides, Seawater Intrusion, and Sea-Level Rise in Santa Clara County, California* is available at: <https://www.valleywater.org/your-water/groundwater/groundwater-studies>

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recharge operations. Recharge monitoring typically occurs in the summer to best characterize the water quality of water used for managed recharge operations and minimize effects from natural winter flows. In 2025, Valley Water monitored 10 recharge facilities in the Los Gatos and Upper Llagas recharge systems (Table 10 and Figure 21).

Basic water quality parameters were analyzed, including major and minor inorganics, anions, nutrients, TDS, total alkalinity, and field parameters (e.g., pH, dissolved oxygen, temperature). Organic parameters (e.g., herbicides, pesticides, and disinfection byproducts) were monitored at recharge facilities located near potentially contaminating activities such as industrial areas and highways. PFAS were also analyzed as Valley Water works to complete reconnaissance sampling of all recharge systems. Summary statistics are presented in Appendix D.

Although managed recharge water is not used for direct consumption, comparing it to drinking water standards provides context for results. No parameters were detected above health-based drinking water standards in any sample. Five PFAS were detected at low levels (all detections less than 4 ppt) and in various combinations in five different facilities in the Los Gatos Recharge system (four sites in Los Gatos Creek plus one pond; Appendix D, Table D-3). No organic parameters were detected at any of the facilities tested (Table D-4). As shown in Appendix D, for the parameters tested, recharge water quality is generally of equal or better quality than receiving water (local groundwater).

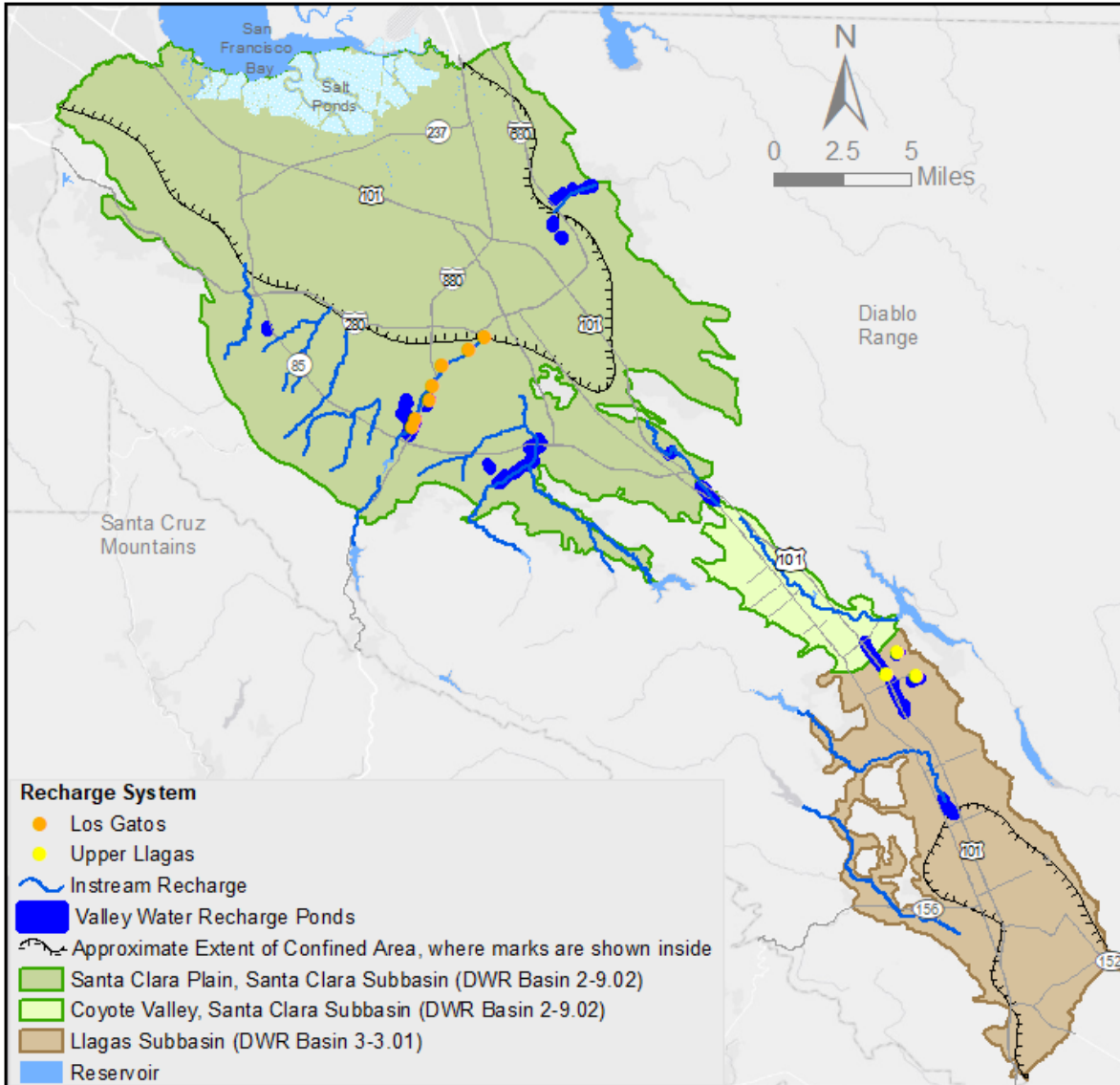
Table 10. 2025 Recharge Water Quality Sampling Locations

Recharge System	Facilities Sampled in 2025
Los Gatos Recharge System (Sampled in July)	<ul style="list-style-type: none"> Camden Ponds (2 locations): near San Tomas Expwy and Hwy 17 in San Jose McGlincy Pond 5: near E. McGlincy Ln and Campbell Technology Pkwy in San Jose Los Gatos Creek (247): near Campbell Ave and Hwy 17 in San Jose Los Gatos Creek (198): near Bascom Ave and Southwest Expwy in San Jose Los Gatos Creek (133): near Meridian Ave and Willow St in San Jose Lost Gatos Creek (90): near Lincoln Ave and Glen Eyrie Ave in San Jose
Upper Llagas (Sampled in July and August*)	<ul style="list-style-type: none"> San Pedro Pond 1: near Hill Rd and San Pedro Ave in Morgan Hill Madrone Channel (140): near Highway 101 and Diana Ave in Morgan Hill *Main Avenue Pond 2: near Hill Rd and Main Ave in Morgan Hill

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Figure 21. Location of 2025 Sampling Sites in the Coyote and West Side Recharge Systems



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4.7 Monitoring Near Recycled Water Irrigation Sites

To ensure groundwater resources remain protected as recycled water use expands, Valley Water samples 20 monitoring wells and two turnouts at several irrigation sites in the Llagas Subbasin where recycled water is provided by the South County Regional Wastewater Authority (SCRWA). Valley Water also receives groundwater data from South Bay Water Recycling (SBWR), which monitors groundwater at up to 11 wells near sites irrigated with recycled water in the Santa Clara Plain.

In general, low concentrations of several water quality parameters related to recycled water have been detected near recycled water irrigation sites but not at levels that warrant a recommendation to modify recycled water use.³² Summary statistics are presented in Appendix C.

For the Santa Clara Plain wells (Figure 22), past analyses show that most parameters have stable or decreasing trends over time.³³ It is unclear whether recycled water irrigation is the cause of the increasing trends for chloride seen in a few wells because historical data indicate the changes pre-date recycled water irrigation in the area.³⁴ Previous geochemical analyses indicate most of the deep wells have an ionic composition more similar to ambient groundwater than to recycled water. Additionally, the previous geochemical analyses of the shallow wells are inconclusive and suggest that multiple geochemical processes are in place, including the possibility of recycled water mixing with groundwater.³⁵

In the Llagas Subbasin wells (Figure 23), previous analyses show that most parameters have stable or decreasing long-term concentration trends for the majority of the wells sampled.³⁶ Some wells with increasing trends are located at the SCRWA facility and may be influenced by secondary effluent from the settling ponds, recycled water irrigation, or both. The remainder of the wells with increasing trends are mostly newer wells that may need time to reach steady-state concentrations. Additionally, some of these wells have been dry at times during the droughts of the past five to seven years and the role of flushing after periods of drought may have influenced concentration trends. Past geochemical analyses indicate that, except for the three shallow wells at the SCRWA facility³⁷, groundwater from all other wells (including the deep well at the SCRWA facility) has an ionic composition more like ambient groundwater than recycled water.³⁸

³² These results are correlative and not necessarily causative. Other sources besides recycled water may play a role in the detection of these parameters.

³³ Although trends were not calculated for this WY 2025 Report, 2014 to 2023 annual analyses consistently showed that most parameters had stable or decreasing long-term concentration trends for the majority of wells sampled. For example, see the 2023 Annual Groundwater Report (Appendix E).

³⁴ Based on historical data from SBWR, summarized in the 2018 Annual Groundwater Report.

³⁵ Although geochemical analyses were not conducted for this WY 2025 Report, 2014 to 2023 annual analyses consistently showed that most wells have compositions similar to ambient groundwater and that recycled water mixing is a possibility. For example, see the 2023 Annual Groundwater Report (Appendix E).

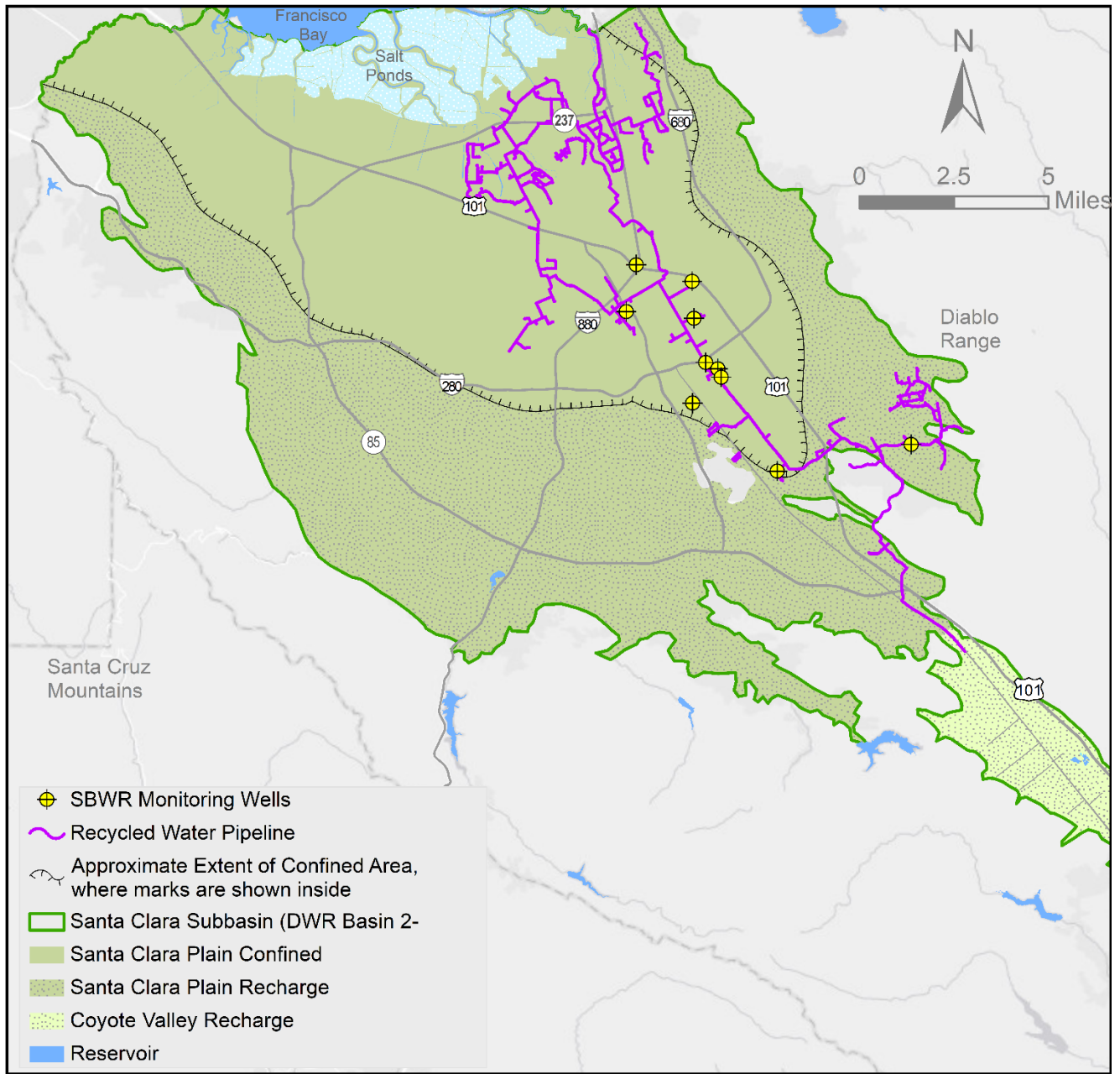
³⁶ Although trends were not calculated for this WY 2025 Report, 2014 to 2023 annual analyses consistently showed that most parameters had stable or decreasing long-term concentration trends for the majority of wells sampled. For example, see the 2023 Annual Groundwater Report (Appendix E).

³⁷ The three shallow wells at SCRWA have an ionic composition more like recycled water than ambient groundwater.

³⁸ Although trends were not calculated for this WY 2025 Report, 2014 to 2023 annual analyses consistently showed that most wells have compositions similar to ambient groundwater. For example, see the 2023 Annual Groundwater Report (Appendix E).

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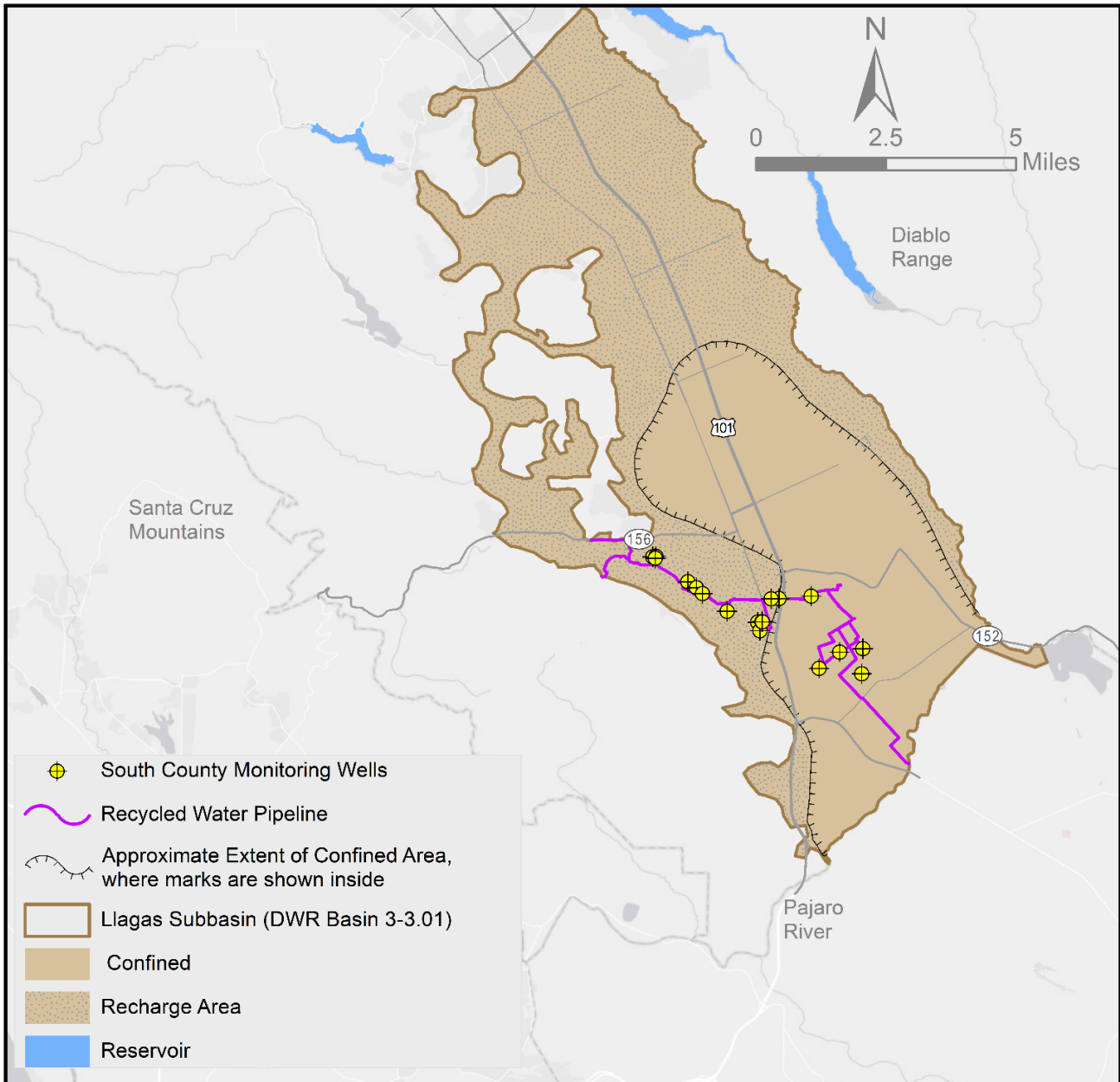
Figure 22. Groundwater Monitoring Near Santa Clara Plain Recycled Water Irrigation Sites



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Figure 23. Groundwater Monitoring Near Llagas Subbasin Recycled Water Irrigation Sites



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4.8 Contaminant Release Sites

There are 449 open cases in Santa Clara County where non-fuel contaminants have been released to soil and groundwater. Nearly 300 of these sites are in the site assessment or remediation phase overseen by the Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), and the Central Coast and San Francisco Bay Regional Water Quality Control Boards (Water Boards). There are 41 open fuel leak cases overseen by the Santa Clara County Department of Environmental Health (DEH), and 21 active Superfund sites overseen by the EPA.

Valley Water engages with regulatory agencies on certain contaminant release cases based on groundwater vulnerability, proximity or impacts to water supply wells or surface water, and contaminant concentration by reviewing monitoring and progress reports, regulatory orders, and correspondences submitted to regulatory agencies. Valley Water engages in various meetings for these higher threat cases, advocates for expedited cleanup through collaboration with regulatory agencies, provides technical reviews of other contaminant release sites when requested by regulatory agencies, and shares groundwater data to support their work.

4.9 Well Ordinance Program

Valley Water’s well ordinance program helps ensure wells and other deep excavations are properly constructed, maintained, and destroyed to prevent vertical transport of contaminants into deep drinking water aquifers. Over 800 permits were issued in 2025 for well construction, well destruction, and exploratory borings (Table 12).

Table 11. 2025 Valley Water Well Permit Summary

Permit Type	Number Processed		
	Santa Clara Subbasin		Llagas Subbasin
	Santa Clara Plain	Coyote Valley	
Well Construction - Water Producing Wells	8	5	24
Well Construction – Other Wells ¹	336	1	5
Well Destruction	226	2	16
Exploratory Boring ²	169	6	11
Total	739	14	56

Notes:

¹ Includes all forms of environmental monitoring and remediation wells, such as geotechnical wells and inclinometers, cathodic protection wells, and heat exchange wells. Excludes groundwater extraction wells.

² Multiple exploratory borings may be advanced under one exploratory boring permit.

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CHAPTER 5 – GROUNDWATER MANAGEMENT PLAN IMPLEMENTATION

This chapter summarizes the status of Valley Water’s GWMP implementation, including outcome measure performance, recommendations, and SGMA compliance.

5.1 Outcome Measure Performance and Action Plan

The GWMP identifies outcome measures to assess performance relative to Board policy and groundwater sustainability goals. The status based on 2025 data is shown below (Tables 13 and 14), with related actions to address measures not being met. Tables 13 and 14 are presented for WY 2025, unless otherwise noted. For example, water supply operational decisions and planning by Valley Water are done on a calendar year basis so related storage metrics are presented on that basis.

Table 12. Summary of 2025 Groundwater Supply Outcome Measure Performance

Sustainability Indicator	GWMP Outcome Measure	Outcome Measure – Lower Threshold
Groundwater Storage (Countywide)	Projected end of year groundwater storage is greater than 278,000 AF in the Santa Clara Plain, 5,000 AF in the Coyote Valley, and 17,000 AF in the Llagas Subbasin.	Projected end of year countywide groundwater storage is greater than Stage 5 (150,000 AF) of the Water Shortage Contingency Plan.
2025 Result	Outcome measure met: End of CY 2025 groundwater storage is 366,400 AF, 4,500 AF, and 23,900 AF in the Santa Clara Plain, Coyote Valley, and Llagas Subbasin, respectively. ¹ The outcome measure is met for the Santa Clara Plain and the Llagas Subbasin, except in Coyote Valley, where the end of year (EOY) 2025 storage level is slightly below the outcome measure.	Lower threshold not exceeded: Countywide groundwater storage at the end of CY 2025 was 394,800 AF, well above the lower threshold. ²
Subsidence (Santa Clara Subbasin only)	Groundwater levels are above subsidence thresholds at the Santa Clara Subbasin subsidence index wells.	Groundwater levels are above the historical low water levels at the majority of the Santa Clara Subbasin subsidence index wells.
2025 Result	Outcome measure met: Groundwater levels were far above subsidence thresholds at all ten subsidence index wells.	Lower threshold not exceeded: Groundwater levels were far above their historic lows at all ten subsidence index wells.

Notes:

¹ End of WY 2025 groundwater storage is 365,600 AF, 4,000 AF, and 24,100 AF in the Santa Clara Plain, Coyote Valley, and Llagas Subbasin, respectively.

² Countywide groundwater storage at the end of WY 2025 was 393,700 AF.

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Table 13. Summary of 2025 Groundwater Quality Outcome Measure Performance

Sustainability Indicator	GWMP Outcome Measure	Outcome Measure – Lower Threshold
Groundwater Quality (Santa Clara Subbasin)	For Santa Clara Subbasin water supply wells, at least 95% meet primary drinking water standards, and at least 90% have stable or decreasing trends for TDS.	At least 70% of water supply wells have stable or decreasing trends for nitrate and TDS.
2025 Result	<p>Outcome measure partially met: 90% of wells tested met all primary drinking water standards (below 95% target).</p> <p>93% of wells had stable or decreasing trends for TDS (above 90% target).</p> <p>Action plan: Continue to monitor, assess potential causes, implement the Salt and Nutrient Management Plan, and engage with regulatory, land use, and retail water agencies as needed.</p>	Lower threshold not exceeded: Stable or decreasing nitrate and TDS trends were observed in 90% and 93% of water supply wells, respectively.
Groundwater Quality (Llagas Subbasin)	For Llagas Subbasin water supply wells, at least 95% meet primary drinking water standards, and at least 90% have stable or decreasing trends for TDS.	At least 70% of water supply wells have stable or decreasing trends for nitrate and TDS.
2025 Result	<p>Outcome measure not met: 74% of water supply wells tested met all primary drinking water standards (below 95% target).</p> <p>85% had stable or decreasing trends for TDS (below 90% target).</p> <p>Action plan: Continue to monitor, assess potential causes, implement the Salt and Nutrient Management Plan, and engage with regulatory, land use, and retail water agencies as needed.</p>	Lower threshold not exceeded: Stable or decreasing nitrate and TDS trends were observed in 90% and 85% of water supply wells, respectively.
Seawater Intrusion (Santa Clara Subbasin only)	In the Santa Clara Subbasin shallow aquifer, the 100 mg/L chloride isocontour area is less than the historical maximum extent area (57 square miles).	In the Santa Clara Subbasin shallow aquifer, the 100 mg/L chloride isocontour area is less than 81 square miles, which represents a one-mile radial buffer of the historical maximum extent area.
2025 Result	Outcome measure met: The 100 mg/L chloride isocontour area was 47 square miles in 2025.	Lower threshold not exceeded: The 100 mg/L chloride isocontour area was 47 square miles in 2025.

Notes: For ease of reporting, any single result reported above an MCL is considered as an exceedance. However, based on drinking water regulations and follow-up sampling, a single detection above an MCL may not constitute a violation of drinking water standards. Public water systems are required to meet all drinking water standards for water delivered to customers.

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As shown in Table 13, all outcome measures related to groundwater storage and land subsidence were met in 2025, except for Coyote Valley end-of-year storage that is slightly below the outcome measure. However, because Coyote Valley is part of the Santa Clara Subbasin, the combined groundwater storage of the Santa Clara Plain and Coyote Valley meets or exceeds the outcome measure for the Santa Clara Subbasin. Valley Water's response and groundwater management actions during the recent (2020–2022) drought were effective in ensuring quick recovery of groundwater levels and storage as shown by outcome measure performance in 2025. Table 14 shows that the groundwater quality outcome measures were only partially met in 2025. The outcome measure for seawater intrusion in the Santa Clara Subbasin was met, as was TDS trend outcome measure for the Santa Clara Subbasin. These results indicate that seawater intrusion and groundwater quality trends are generally stable or improving countywide. However, the outcome measures for primary drinking water standards were not met in 2025 for the Santa Clara and Llagas subbasins due to nitrate and PFAS as described below. The TDS outcome measure for the Llagas Subbasin was also not met.

For the 227 Santa Clara Subbasin water supply wells tested, 90% met primary drinking water standards. As described in Chapter 4, most detections above MCLs were for PFOS (14 Santa Clara Plain wells) and nitrate (8 Coyote Valley wells, most of which are domestic wells). The PFOS detections were localized in two areas and the impacted water retailer is actively pursuing well head treatment.

For the 238 Llagas Subbasin water supply wells tested, 74% met primary drinking water standards. As described in Chapter 4, nitrate was detected above the MCL in 60 wells (primarily domestic wells). One public water supply well had PFOA and PFOS above the MCL.

Elevated nitrate continues to be a primary groundwater protection challenge, especially in South County. This is not unique to Santa Clara County as nitrate contamination is an issue in agricultural and rural areas throughout California and the United States. Long-term nitrate trends in Santa Clara County indicate stable or improving conditions. However, a significant number of Coyote Valley and Llagas Subbasin wells (primarily domestic wells) have nitrate above the drinking water standard. Valley Water does not control land use or have regulatory authority over activities with the most nitrate loading to groundwater, such as agriculture or septic systems. However, Valley Water continues to coordinate with land use and regulatory agencies to influence policies, regulations, and decisions related to nitrate management. More directly, Valley Water's managed recharge programs help dilute nitrate in groundwater, and water quality testing helps to reduce well owner exposure.

With the April 2024 adoption of drinking water standards for six PFAS compounds (including PFOA and PFOS), public water systems will need to monitor their water supply for these chemicals within three years and include the results in their Annual Water Quality Reports to customers. Public water systems that detect PFAS above the drinking water limits will have up to five years to implement solutions, such as treatment or other actions, to ensure water delivered to customers does not exceed these limits. Water systems must also notify their customers if levels of regulated PFAS exceed these standards.

The 2021 GWMP outcome measure for seawater intrusion is based on the area of the historical maximum extent of the 100 mg/L chloride isocontour (57 square miles), as observed circa 1960 (Figure 20). The outcome measure-lower threshold is defined as the area of a 1 mile (5,280 ft) radial buffer inland from the historical maximum extent of seawater intrusion (81 square miles) (Figure 20). In 2025, both outcome measures were met because the 100 mg/L chloride isocontour covered 47 mi², which is about 82% of the outcome measure area and 58% of the outcome measure-lower threshold area.

No outcome measure lower thresholds were exceeded for any of the groundwater supply or quality sustainability indicators, indicating continued sustainable conditions in 2025.

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5.2 Status of Groundwater Management Plan Recommendations

As described in the GWMP and demonstrated in this report, Valley Water's proactive groundwater management programs and activities have maintained sustainable groundwater levels and storage, minimized land subsidence, and improved groundwater protection. The GWMP presents five major recommendations to maintain the long-term sustainability of groundwater resources. A summary of the status of each recommendation is below.

1. **Maintain existing conjunctive water management programs and evaluate opportunities for enhancement or increased efficiency.**

This GWMP recommendation has several sub-recommendations, including items related to infrastructure reliability, high-priority capital project implementation, and securing imported water sources, among others. Valley Water continues to focus on extensive groundwater recharge through direct replenishment and in-lieu recharge.

Capital Projects Supporting Conjunctive Management

Valley Water's Fiscal Year 2026-30 Five-Year Capital Improvement Program (CIP) was approved by the Board of Directors on May 27, 2025.³⁹ With a significant portion of Valley Water's water supply infrastructure approaching fifty to sixty years of age, maintaining and upgrading the existing infrastructure to ensure each facility functions as intended for its useful life became the focus of the Water Supply CIP in recent years. Other CIP projects focus on expanding in-lieu and direct recharge through recycled and purified water projects. Major water supply capital improvements identified in the CIP include:

Storage:

- Almaden Dam Improvements
- Almaden Calero-Canal Rehabilitation
- Anderson Dam Seismic Retrofit (C1)
- Anderson Dam Tunnel
- Coyote Creek Flood Management Measure
- Coyote Creek Chillers
- Coyote Percolation Dam Replacement
- Cross Valley Pipeline Extension
- Calero and Guadalupe Dam Seismic Retrofit
- Coyote Dam Seismic Stability
- Coyote Pumping Plan ASD Replacement
- Dam Seismic Stability Evaluation
- Small Capital Improvements, San Felipe Reaches 1-3
- Pacheco Reservoir Expansion

³⁹ The 2026-30 CIP is available at: <https://www.valleywater.org/how-we-operate/five-year-capital-improvement-program>.

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Transmission:

- 10-Year Pipeline Inspection and Rehabilitation
- Pipeline Maintenance Program
- East Pipeline Inspection and Rehabilitation
- Penitencia Delivery Main and Force Main Inspection and Rehabilitation
- Santa Teresa Force Main Inspection and Rehabilitation
- Milpitas Pipeline Inspection and Rehabilitation
- Santa Clara and Campbell Distributary Inspection and Rehabilitation
- Almaden Valley Pipeline Replacement
- Distribution System Master Plan Implementation
- FAHCE Implementation
- IRP2 Additional Line Valves (A3)
- Pacheco/Santa Clara Conduit Right of Way Acquisition
- SCADA Master Plan Implementation
- SMPPIP Upgrades - Phase 1
- Small Capital Improvements, Treated Water Transmission
- Small Capital Improvements, Raw Water Transmission
- Treated Water Isolation Valves
- Vasona Pump Station Upgrade

Water Treatment Plants (WTP):

- Penitencia Water Treatment Plant Residuals Management
- Rinconada Water Treatment Plant Residuals Remediation
- Rinconada Water Treatment Plant Reliability Improvement
- Rinconada Ammonia Storage and Metering Facility Upgrade
- Small Capital Improvements, Water Treatment
- Santa Teresa Water Treatment Plant Filter Media Replacement Project
- Water Treatment Plant Electrical Improvement Project
- Water Treatment Plant Master Plan Implementation

Recycled Water:

- San Jose Purified Water Project (SJPWP) – Phase 1
- Land Rights – South County Recycled Water Pipeline
- South County Recycled Water Pipeline

Detailed information on each of these water supply capital projects, including related description, costs, and schedule, is available in the CIP.

2. Continue to aggressively protect groundwater quality through Valley Water programs and collaboration with land use agencies, regulatory agencies, and basin interested parties.

A reliable water supply depends not only on quantity, but on quality. Sub-recommendations from the GWMP include continued groundwater quality monitoring, including PFAS and other emerging contaminants, action when potentially adverse trends are identified, and continued

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and enhanced collaboration with local partners and interested parties.

Groundwater quality is typically very good in the county, with no treatment beyond disinfection required at most water retailer wells. However, nitrate remains an ongoing groundwater protection challenge, particularly in the more rural Coyote Valley and Llagas Subbasin. Valley Water continues to conduct extensive groundwater quality monitoring, evaluate long-term trends, and compare current conditions against regulatory standards and projected concentrations (such as from Salt and Nutrient Management Plans).

Long-term trends in the Llagas Subbasin are favorable for nitrate, with 90% of water supply wells tested showing stable or decreasing concentrations. However, since a significant number of domestic wells in the Llagas Subbasin still contain nitrate above the drinking water standard, more work remains to be done. Valley Water will continue to engage with regulatory and land use agencies to address existing nitrate contamination. For nitrate and other water quality issues, Valley Water will work to build and enhance this collaboration to protect high-quality groundwater and expedite the restoration of impacted groundwater.

Valley Water has been proactive in evaluating the potential threat posed by PFAS. Voluntary sampling by Valley Water does not indicate the widespread presence of PFAS in groundwater, but some water retailer wells have been impacted and one retailer is actively pursuing treatment. The presence of PFAS in local groundwater is concerning, and Valley Water is coordinating closely with local water retailers and regulatory agencies on this evolving issue.

Valley Water is working with municipalities to implement a Stormwater Resources Plan⁴⁰ that will increase infiltration while ensuring pollutants from urban runoff do not impact groundwater quality. Similarly, Valley Water continues to engage with various entities to ensure that recycled water expansion or the use of purified water for recharge will protect groundwater quality.

Engaging with land use and regulatory agencies on proposed policy, legislation, and projects that may impact groundwater remains a key strategy for protecting groundwater. For example, Valley Water tracks the progress of major contaminant release sites, interacting with regulatory agencies to promote expedited and thorough cleanup. Valley Water also engages with land use agencies on relevant projects and policies such as development, stormwater infiltration devices, septic systems, and small water systems.

Public outreach continues to be an important component of Valley Water's groundwater protection efforts. To provide information on well sampling by Valley Water and local water suppliers, each summer Valley Water sends an annual Groundwater Quality Summary⁴¹ to well owners in the groundwater benefit zones. Although not required, this is similar to water retailer consumer confidence reports and provides basic groundwater quality information to domestic well owners who do not typically receive water from a water retailer.

Other groundwater-related public outreach conducted by Valley Water in 2025 included:

- Interaction with students through the Education Outreach program.

⁴⁰ Santa Clara Basin Stormwater Resource Plan, Final August 2019 is available at <https://scvurppp.org/swrp/docs-maps/>

⁴¹ The annual Groundwater Quality Summary Report is available at <https://www.valleywater.org/your-water/groundwater/groundwater-quality>

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- Direct communication with well owners on groundwater quality, well maintenance, and treatment systems under the Domestic Well Testing program.
- Blog and social media posts related to groundwater, such as during Groundwater Awareness Week.
- Presenting information on sustainable groundwater management practices during the annual UC Davis short course “Introduction to Groundwater, Watersheds, and Groundwater Sustainability Plans.”
- Presenting and sharing up-to-date information on groundwater conditions, water supply, and sustainable groundwater management practices, including Groundwater Sustainability Agency (GSA) plans to various Valley Water Board advisory committees such as the Agricultural Water Advisory Committee, Water Supply and Demand Management Committee, and Retailers Groundwater Subcommittee.
- Presenting and sharing up-to-date information on groundwater quality conditions and issues, including evolving regulatory requirements, emerging contaminants of concern, monitoring results, and best management practices to various board advisory committees such as the San Francisco Bay Regional Water Quality Control Board PFAS Task Force Subcommittee, Joint Treated Water and Water Quality Subcommittee, Joint Water Supply and Groundwater Subcommittee, and Water Retailer Groundwater Subcommittee.
- Valley Water has started a study to evaluate the feasibility of a new off-stream managed recharge facility in Coyote Valley. This project is one of the South County Recharge Projects identified in the Water Supply Master Plan 2050.

3. Continue to incorporate groundwater sustainability in Valley Water planning efforts.

This recommendation focuses on continued sustainable groundwater management with thoughtful water supply planning and investments. Through its Water Supply Master Plan, Valley Water evaluates the county’s future needs and develops strategy for providing a reliable and sustainable water supply into the future.

In November 2025, Valley Water completed the Water Supply Master Plan 2050 in responding to changing conditions such as severe drought, reductions in imported water supplies, shifting water demands, and concerns about affordability. The Water Supply Master Plan 2050 addresses both existing and emerging challenges and identify projects and programs to maintain the reliable water supply system for Santa Clara County through 2050. Projects recommended by the Water Supply Master Plan 2050 for planning or implementation include pipeline maintenance, local dam retrofit, water treatment plant improvements, water conservation and demand management measures, Pure Water Silicon Valley, Delta Conveyance Project, B.F. Sisk Dam Raise, Groundwater Banking, and South County Recharge Projects. In light of uncertainty with future conditions and project implementation, Valley Water will also continue to evaluate other projects such as local Sea Water Desalination and Site Reservoir through adaptive management. Details about each of these projects can be found in the Water Supply Master Plan 2050.

The South County Recharge Projects identified in the Water Supply Master Plan 2050 include four managed recharge projects to enhance groundwater recharge capacity and strengthen the region’s long-term water supply reliability - Madrone Channel Expansion, Coyote Valley

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Recharge Pond, Butterfield Channel, and San Pedro Ponds Improvement projects. The ongoing evaluation process will determine which of these projects can most effectively and efficiently support South County's future water supply needs. Currently, Valley Water is assessing the feasibility of the Coyote Valley Recharge Pond project, which would provide new off-stream managed recharge in Coyote Valley to enhance operational flexibility by reducing reliance on in-stream recharge from Coyote Creek, support increasing groundwater demand, and improve overall water supply reliability in South County.

Groundwater sustainability also remains an important factor during the planning and implementation of multi-benefit projects under Valley Water's Watershed Master Plan⁴². The Sustainable Groundwater and Water Quality objectives of the Watershed Master Plan align with the GWMP outcome measures and include a process for identifying priority actions to sustain and improve groundwater on a watershed scale.

To support a proactive managed response to climate change, the Valley Water Board adopted the Climate Change Action Plan (CCAP)⁴³ on July 13, 2021, following input from both internal and external interested parties. The CCAP is a comprehensive guide to Valley Water's current and future climate mitigation and adaptations efforts. The CCAP framework includes goals, strategies, and actions to both mitigate Valley Water's contribution to climate change through reducing greenhouse gas emissions, and to adapt to climate change impacts that will affect Valley Water's mission areas. Valley Water is implementing an ongoing and adaptive program to implement the CCAP, which includes prioritizing, monitoring, and reporting progress on actions, developing a greenhouse gas reduction plan, and coordinating with local and regional partners' climate plans. The strategies of the CCAP are being incorporated into existing Valley Water plans, budgets, and long-term financial forecasts as appropriate.

4. Maintain adequate monitoring programs and modeling tools.

This GWMP recommendation focuses on improving monitoring networks by identifying and addressing gaps, redundancies, and access issues; identifying and implementing improvements to the numerical groundwater flow models; and improving Valley Water's understanding of surface water/groundwater interaction, groundwater dependent ecosystems (GDEs), and seawater intrusion.

The GWMP included a monitoring gap analysis for both the water level and water quality monitoring programs. Valley Water continually evaluates access to wells, redundancies and gaps, and acquires and/or installs new monitoring wells to fill those gaps in the existing monitoring networks. As part of this process, changes to the groundwater elevation monitoring network are subsequently updated by Valley Water in DWR's Monitoring Network Module, as described in Chapter 3.

Valley Water uses three calibrated groundwater flow models – one for each groundwater management area: the Santa Clara Plain, Coyote Valley, and the Llagas Subbasin. These models are used to evaluate groundwater storage and levels to inform operational decisions and long-term planning efforts. Staff are assessing each model to identify related improvements or enhancements that may be needed or desired to improve the use of these tools.

Regarding surface water/groundwater interaction, Valley Water staff is working on expanding the 2018 differential gauging study to include additional time periods, hydrologic conditions, and

⁴² <https://www.valleywater.org/project-updates/one-water-plan>

⁴³ <https://www.valleywater.org/your-water/water-supply-planning/climate-change-action-plan>

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methods, as necessary. Valley Water has updated the GDE mapping process and will track new information on GDEs in preparation for updating that information in the next periodic evaluation of the GWMP.

Valley Water continues to evaluate the seawater intrusion monitoring network in the Baylands area of the Santa Clara Plain. As of 2025, Valley Water has installed 20 multi-parameter sensors in monitoring wells and one sensor at a surface water station on the Guadalupe River. Valley Water is using the network to better characterize seawater intrusion mechanisms and continue to meet the seawater intrusion outcome measure. In 2025, Valley Water published a detailed report about seawater intrusion and groundwater rise and emergence in the Santa Clara Plain⁴⁴, sharing major findings with interested parties.

5. Continue and enhance groundwater management partnerships with water retailers and land use agencies.

This GWMP recommendation focuses on continued collaboration and strong partnerships with water retailers and land use agencies. Valley Water continues to interact regularly with water retailers through quarterly Water Retailer meetings, including the Groundwater Subcommittee. In addition to these regular meetings, Valley Water and water retailers collaborate on various issues that arise regarding groundwater, treated water, wells, and water measurement.

Valley Water also continues to coordinate with local land use agencies on General Plans, water supply assessments, Urban Water Management Plans, stormwater management, and various individual land use projects. Land use decisions fall under the authority of the local cities and the County of Santa Clara. Valley Water reviews land use and development plans related to Valley Water facilities and watercourses under Valley Water jurisdiction and provides technical review for other land use proposals as requested by the local agency. When provided by land use agencies, water supply assessments for new developments are also reviewed and evaluated in the context of Valley Water's long-term water supply plans. For all reviews, Valley Water's groundwater-related comments focus on potential impacts to groundwater quality and sustainability.

5.3 Status of Sustainable Groundwater Management Act Compliance

In December 2016, Valley Water submitted the GWMP for the Santa Clara and Llagas subbasins to DWR as an Alternative to a GSP. In July 2019, DWR issued an assessment, finding the Valley Water Plan satisfies the objectives of SGMA and is an acceptable Alternative. Under SGMA, periodic evaluations of approved plans are required at least every five years. The first periodic evaluation was approved by the Valley Water Board in November 2021 and was submitted to DWR before the statutory deadline of January 1, 2022. The 2021 GWMP updated and expanded technical information in the 2016 GWMP and addressed related recommendations from DWR and basin interested parties. Basin management goals, strategies, programs, and outcome measures in the 2021 GWMP are very similar to the 2016 GWMP because they have been effective in ensuring sustainable conditions. DWR approved the periodic evaluation in June 2024, confirming the Alternative satisfies the objectives of SGMA, complies with related regulations, and was responsive to DWR comments on the 2016 GWMP. Valley Water is currently working on the second periodic evaluate of the approved Alternative that is due to DWR in December 2026. Additional information is available on Valley Water's Sustainable

⁴⁴ Valley Water's 2025 report *Groundwater Response to Tides, Seawater Intrusion, and Sea-Level Rise in Santa Clara County, California* is available at: <https://www.valleywater.org/your-water/groundwater/groundwater-studies>

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Groundwater Management webpage⁴⁵.

Continued groundwater sustainability is central to the Valley Water mission to provide Silicon Valley safe, clean water for a healthy life, environment, and economy. As such, Valley Water will continue to “manage groundwater to ensure sustainable supplies and avoid land subsidence” and “aggressively protect groundwater from the threat of contamination” in accordance with Board Ends policy. Valley Water’s approach to groundwater management has evolved over many decades to address numerous challenges, and this adaptive approach will help ensure continued sustainability.

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⁴⁵ <https://www.valleywater.org/your-water/where-your-water-comes/groundwater/sustainable>

APPENDICES

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APPENDIX A

2025 SUBSIDENCE DATA ANALYSIS

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APPENDIX A – 2025 SUBSIDENCE DATA ANALYSIS

EXECUTIVE SUMMARY

This appendix presents land subsidence data analysis for calendar year (CY) 2025. Throughout the first two thirds of the 20th century, land subsidence occurred in the Santa Clara Plain in northern Santa Clara County due to groundwater overdraft causing declining groundwater elevations and pressures. Permanent (inelastic) subsidence was essentially halted in the 1970s through Valley Water’s conjunctive management programs and investments (Valley Water, 2021). Today in the Santa Clara Plain, non-permanent (elastic) land subsidence and recovery (uplift) are observed that are caused by seasonal and drought variability in groundwater levels. Unlike permanent subsidence, elastic subsidence and uplift are recoverable and typically small-scale (millimeter to centimeter) changes to the land surface elevation. Unless otherwise noted, land compaction and uplift discussed in this appendix refer to elastic subsidence and uplift.

Ongoing monitoring is critical to fulfilling Valley Water’s mission of managing groundwater to ensure sustainable supplies and avoid land subsidence, and to aggressively protect groundwater from the threat of contamination (Board Ends Policy E-2). Monitoring extensometers, benchmarks, and monitoring wells provides data to evaluate current conditions and for early detection of the potential resumption of permanent subsidence⁴⁶. Annually, Valley Water analyzes land subsidence monitoring data, evaluates subsidence conditions, and recommends improvements to the subsidence monitoring network. This analysis uses data collected mainly from 2015 to 2025 in the Santa Clara Plain and is based on the calendar year to align with Valley Water operations, shortage response, and planning. The CY 2025 annual precipitation was 12.91 inches at the City of San Jose (City of San Jose 6131 station), in comparison to the long-term average annual precipitation of 14.5 inches in the Santa Clara Plain. In CY 2025, the annual estimated groundwater pumping in the Santa Clara Plain was 70,600 acre feet (AF)⁴⁷. In CY 2025, the Santa Clara Plain received an estimated 89,400 AF groundwater recharge, including 62,100 AF from managed recharge and 27,300 AF from natural recharge and other inflows. Groundwater pumping increased in CY 2025 compared to 2024, while recharge declined. However, the total recharge still exceeded groundwater pumping, resulting in an overall increase in groundwater storage in the Santa Clara Plain in CY 2025 (see Chapter 2).

The data measured in 2025 from Valley Water’s subsidence monitoring network shows that:

- Average annual groundwater elevations were higher at two subsidence index wells and lower at eight subsidence index wells compared to 2024.
- Groundwater elevations were above subsidence thresholds at all ten index wells for the entire year.
- Aquifer compaction (elastic subsidence) was measured at Valley Water’s two extensometer sites. However, the 11-year average annual subsidence rate from 2015 to 2025 at the San Jose (Martha) and Sunnyvale (Sunny) sites is -0.008 feet/year (indicating aquifer expansion), which meets Valley Water’s established tolerable subsidence rate of not more than 0.01 feet/year.

⁴⁶ DWR serves a statewide coverage of land surface change based on Interferometric Synthetic Aperture Radar (InSAR) data (<https://data.cnra.ca.gov/dataset/tre-altamira-insar-subsidence>). However, the DWR InSAR dataset has an 18 mm (0.06 ft) vertical accuracy at the 95% confidence level, which is greater than the annual compaction and uplift measured by Valley Water’s Martha and Sunny extensometers and survey benchmarks. Therefore, the DWR InSAR data is not reported here.

⁴⁷ Groundwater balance terms for the Santa Clara Plain, including pumping and recharge, are in Chapter 2 (Figure 8).

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- The average land surface elevation change at the survey benchmarks indicated subsidence throughout much of the Santa Clara Plain in 2025. However, from 2015 to 2025 the 11-year average annual change in land surface elevations was 0.01 ft/year (land expansion or uplift) at all survey benchmarks.
- Stress-strain analysis indicates that the compaction⁴⁸ observed in 2025 remains in the elastic range.

The analysis of the data collected through Valley Water's subsidence monitoring network indicates a low risk of permanent land subsidence in 2025. Monitoring of the subsidence network will continue as it is needed to detect early signs of permanent land subsidence and to ensure a sustainable groundwater supply.

BACKGROUND

The Santa Clara Plain is a groundwater management area occupying the northwestern and largest part of the Santa Clara Subbasin (Figure A-1). The Santa Clara Plain extends from Santa Clara County's northern boundary to approximately Metcalf Road in the Coyote Valley and is bounded on the west by the Santa Cruz Mountains and the east by the Diablo Range. Land subsidence has caused serious problems in the Santa Clara Plain prior to about the 1970s, including up to 14 feet of permanent subsidence in downtown San Jose and more than a foot of permanent subsidence over 100 square miles (Valley Water, 2021).

Ongoing monitoring provides data for current land subsidence evaluation and early detection of potential permanent subsidence. The Valley Water land subsidence monitoring network (Figure A-1) includes:

- Two extensometers (approximately 1,000 feet deep): one in Sunnyvale (Sunny) and one in San Jose (Martha), both are monitored continuously by telemetry systems;
- Approximately 142 elevation benchmarks along three Cross Valley Level Circuits (CVLCs) that are surveyed in the fall of every year; and
- Ten subsidence index wells throughout the Santa Clara Plain with groundwater elevations monitored at least monthly.

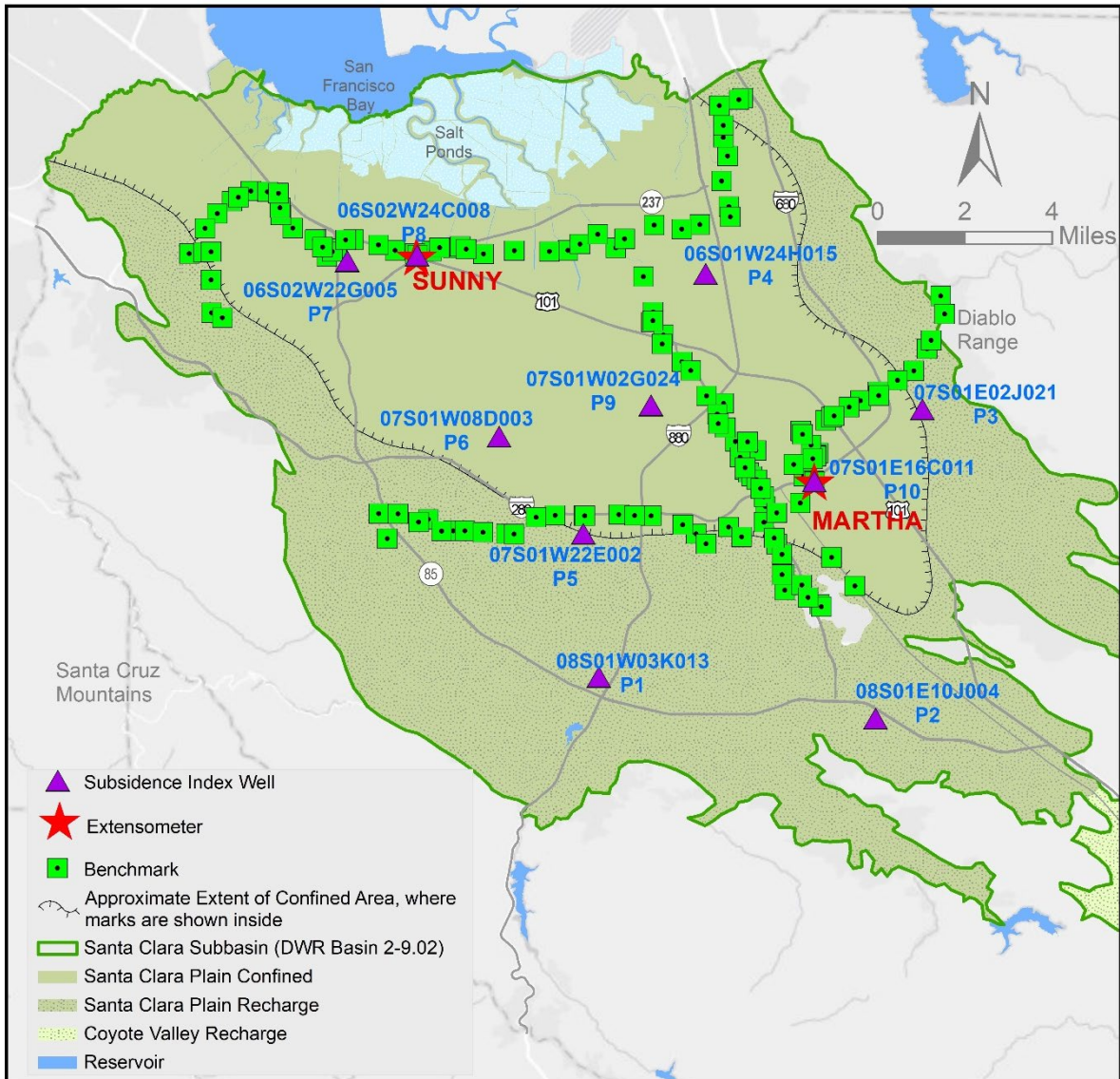
Figure A-1 shows a map of the Valley Water subsidence monitoring network in the Santa Clara Plain. Two extensometers are in the confined area of the Santa Clara Plain. Benchmarks are grouped into three CVLCs: Guadalupe (northwest-trending circuit along the axis of the valley), Los Altos (west-east trending circuit to the north), and Alum Rock circuit (west-east trending circuit to the south). The ten subsidence index wells are located throughout the Santa Clara Plain.

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⁴⁸ The Sunny and Martha extensometers measured uplift from January to the end of March 2025. With the start of the dry season in April 2025, compaction was measured by both extensometers. This compaction was within the track of the previous stress-strain loop, indicating the compaction in 2025 remains in the elastic range. The net land surface elevation change in 2025 was negative (land subsidence) at both extensometers.

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Figure A-1. Valley Water Subsidence Monitoring Network



EVALUATION

The evaluation of 2025 subsidence data from Valley Water’s groundwater monitoring wells, benchmarks, and extensometers is presented below.

Groundwater elevation analysis

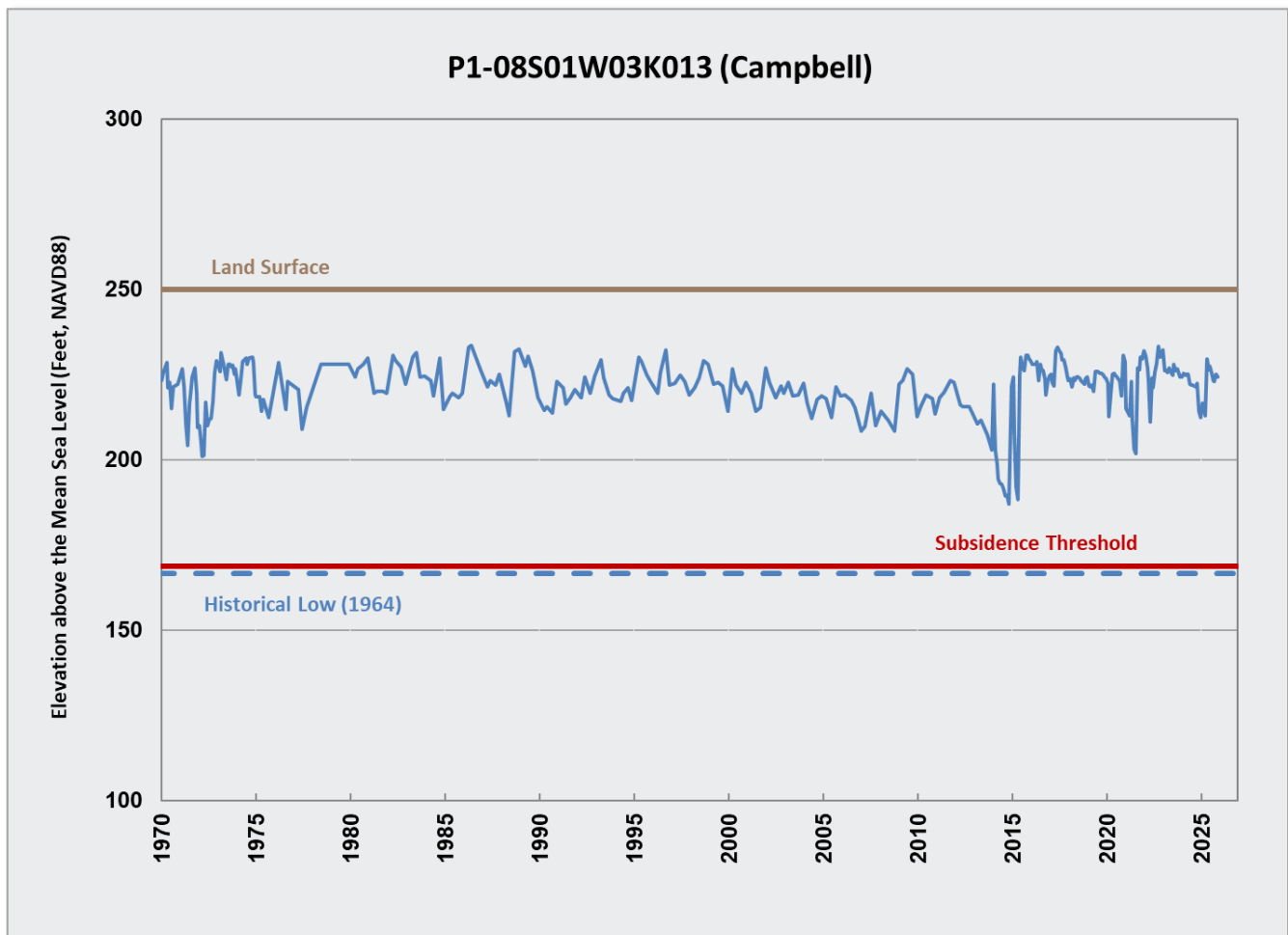
Groundwater elevation monitoring is an integral part of the subsidence monitoring since the decrease in water elevation is the driving force of land subsidence in the Santa Clara Plain. The current frequency of groundwater elevation monitoring at the ten subsidence index wells varies from daily to monthly. Water elevation hydrographs at the ten index wells are presented in Figure A-2, along with land surface elevations, historical low water levels, and subsidence groundwater elevation thresholds determined for each well (Geoscience, 1991). The North American Vertical Datum of 1988 (NAVD88) is used for the groundwater elevation values in this document. The ten index wells are identified using the State well

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ID and the PRESS 1 to PRESS 10 (or P1 to P10) naming convention, which was first used in the Geoscience Support Services (1991) report. PRESS stands for Predictions Relating Effective Stress and Subsidence model, which is a numerical model that is based on sediment consolidation theory and can be used to simulate and predict subsidence caused by groundwater level decline (Geoscience Support Services, 1991).

A subsidence threshold is a recommended groundwater elevation; maintaining groundwater at elevations near or below the threshold for extended periods of time increases the risk of subsidence resumption and potential damage to facilities and infrastructure. Historically, permanent land subsidence was observed mainly in the confined area of the Santa Clara Plain. Accordingly, most index wells (eight out of ten) are in or near the confined area (Figure A-1). Valley Water's groundwater management outcome measure is to maintain groundwater elevations in the Santa Clara Plain above subsidence thresholds to minimize the risk of resuming permanent land subsidence (Valley Water, 2021).

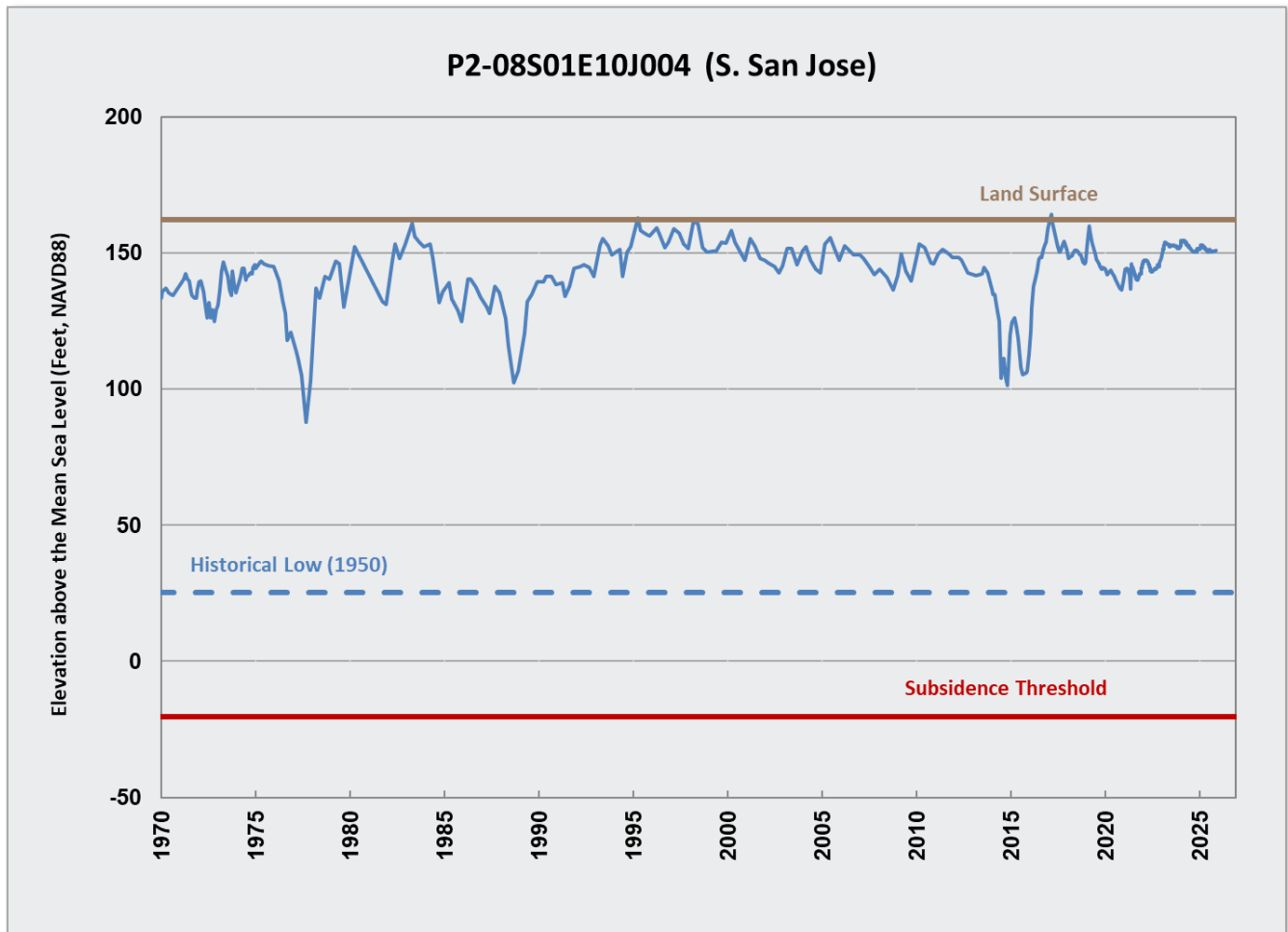
Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells



Notes: This hydrograph for 08S01W03K013 contains primarily static water level readings and some pumping water level readings.

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Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)

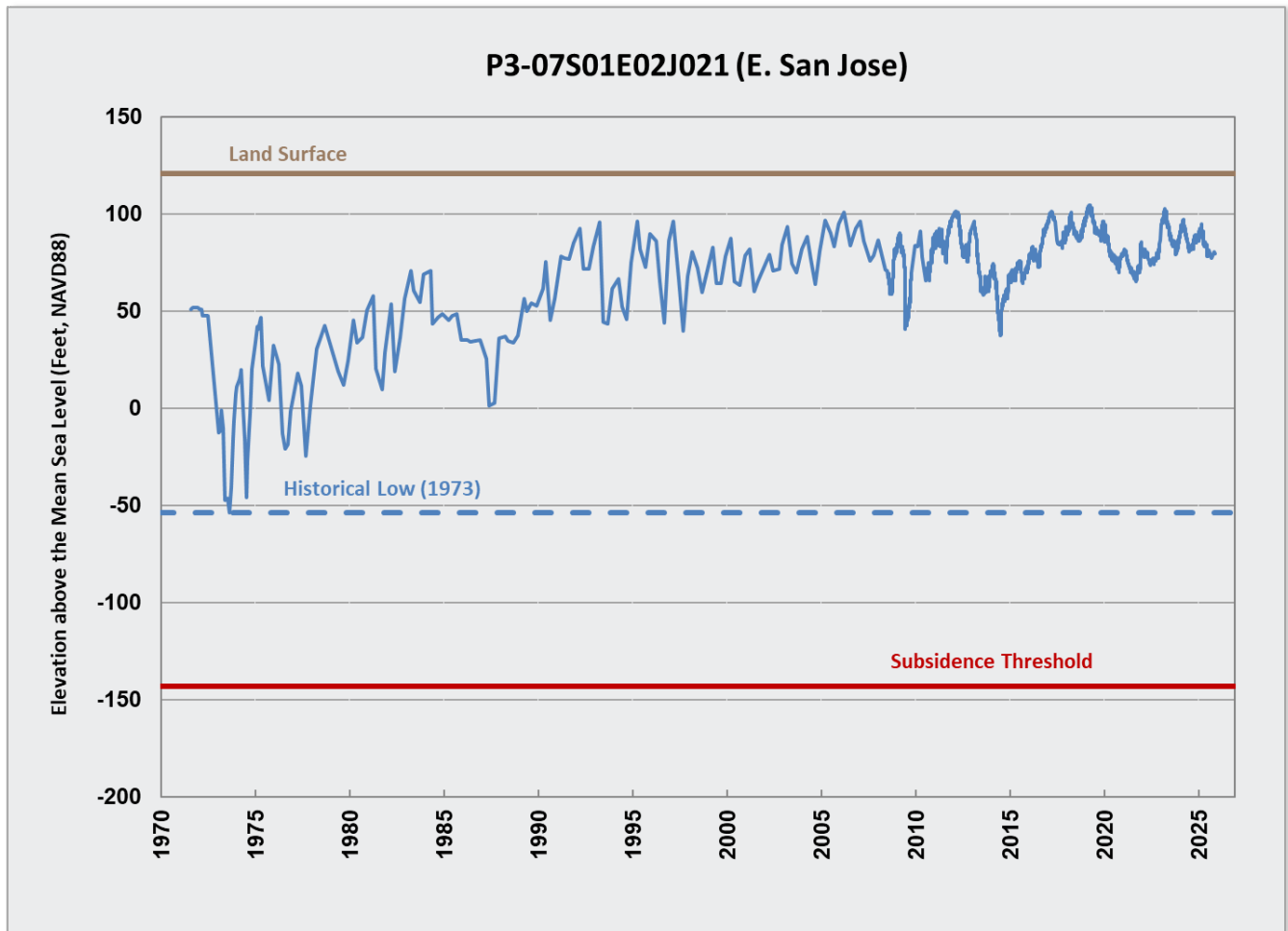


Notes: Valley Water lost access to the former PRESS well 2 (well 08S01E05N002) in June 2021. A replacement well with similar water level history and period of record (08S01E10J004) was implemented as the new PRESS well 2 beginning in June 2021. Therefore, this hydrograph reflects data from well 08S01E05N002 prior to June 2021 and data from well 08S01E10J004 since June 2021. The land surface elevation is from well 08S01E10J004.

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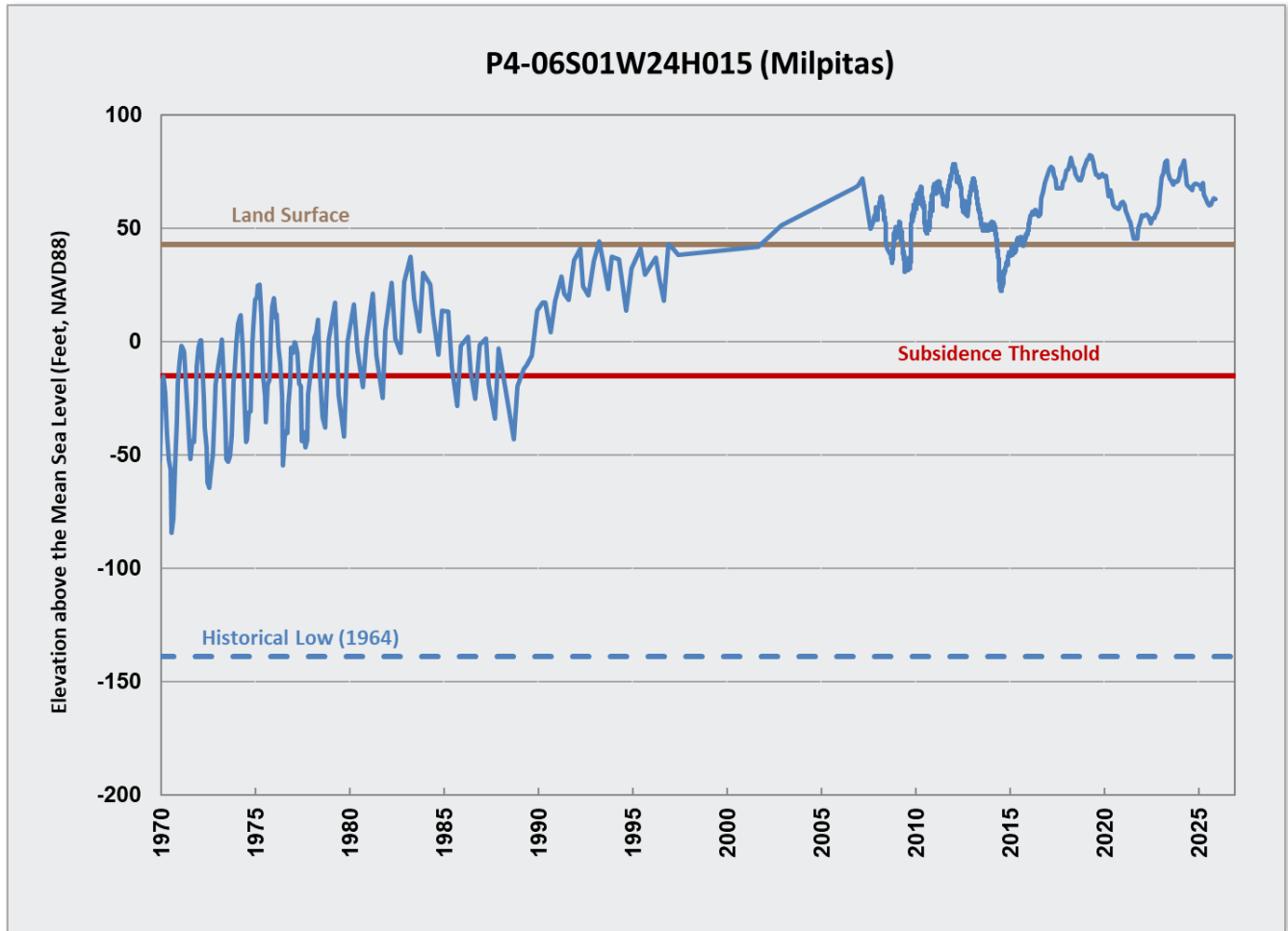
Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)



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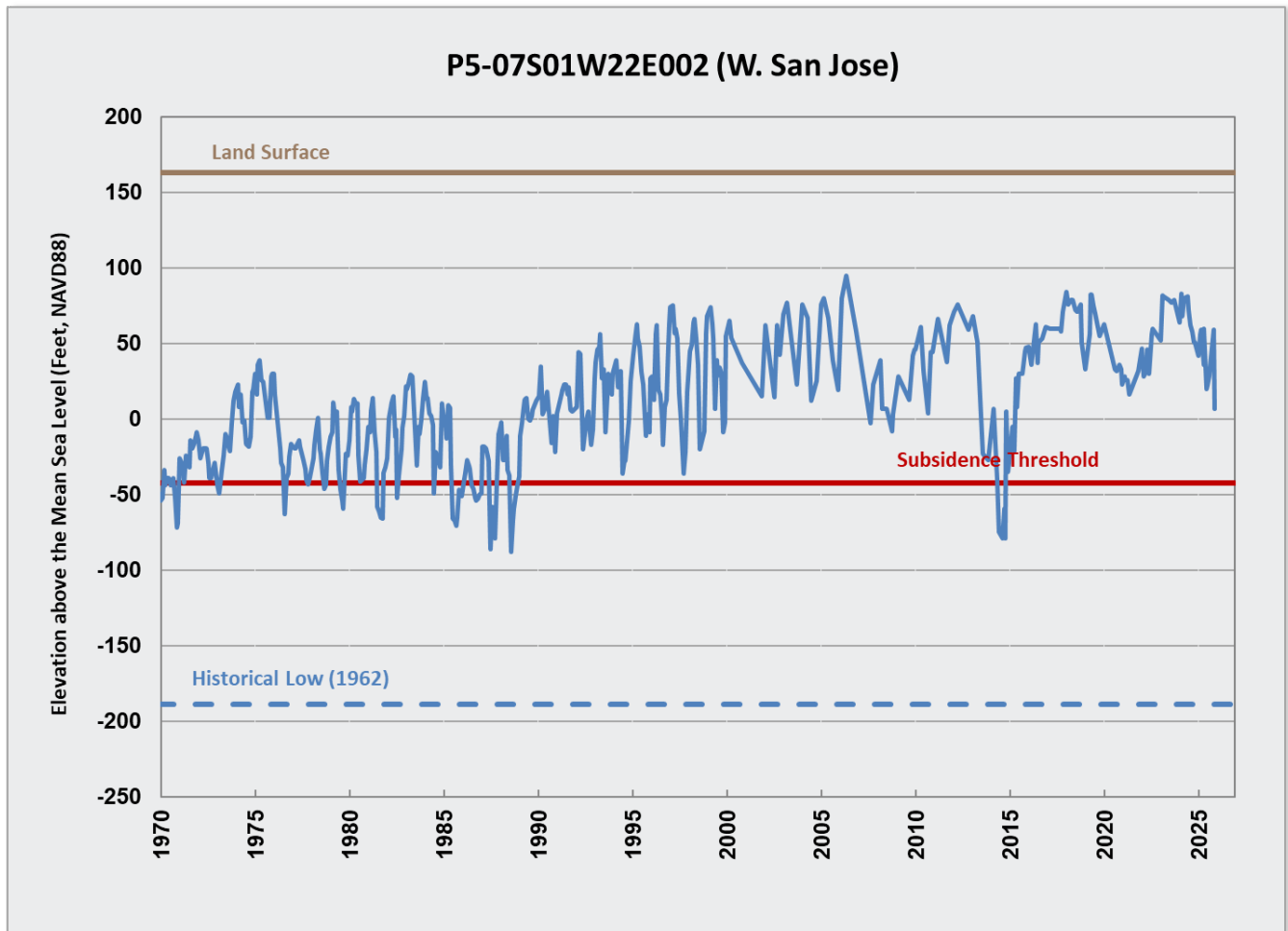
Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)



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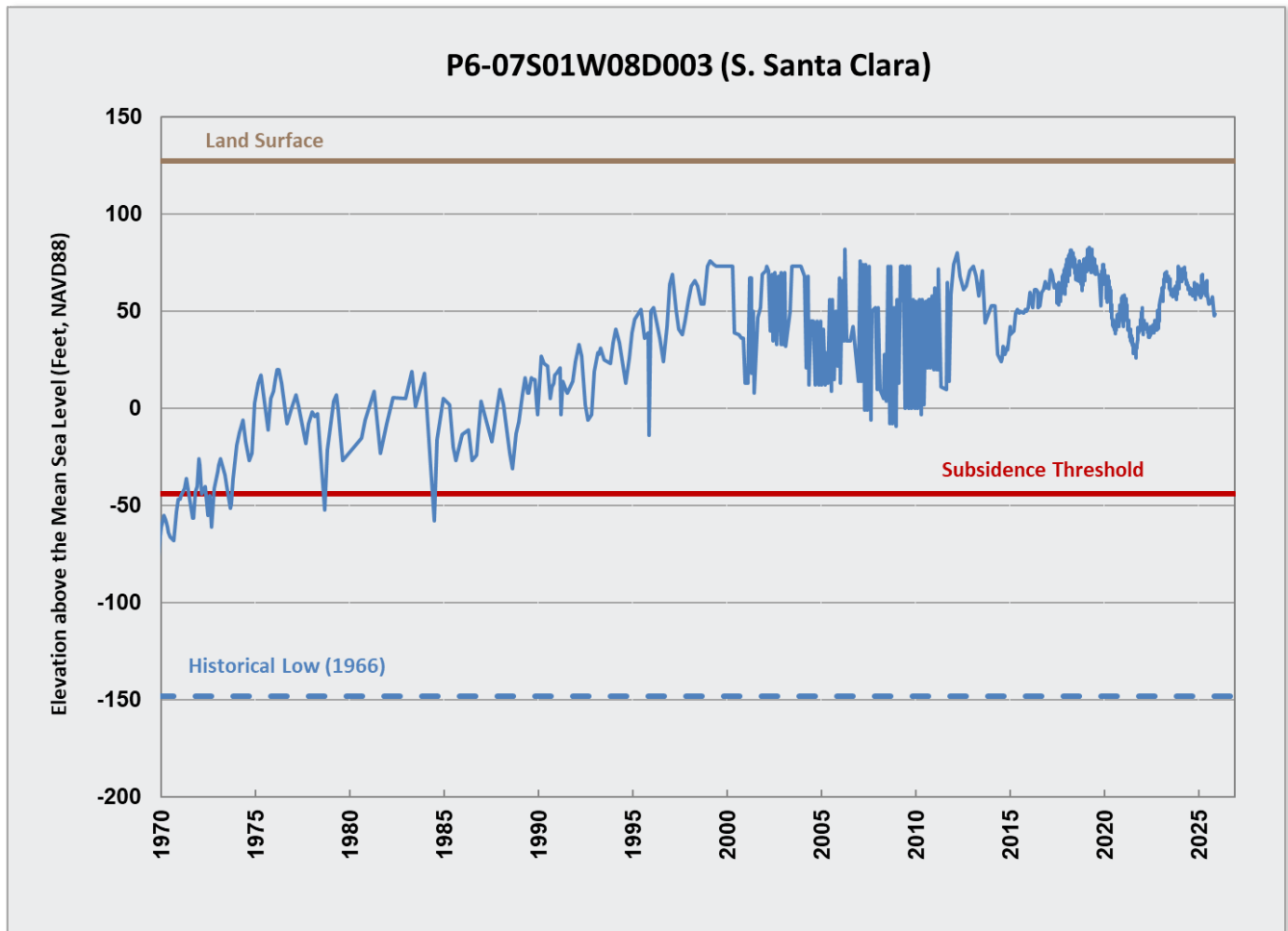
Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)



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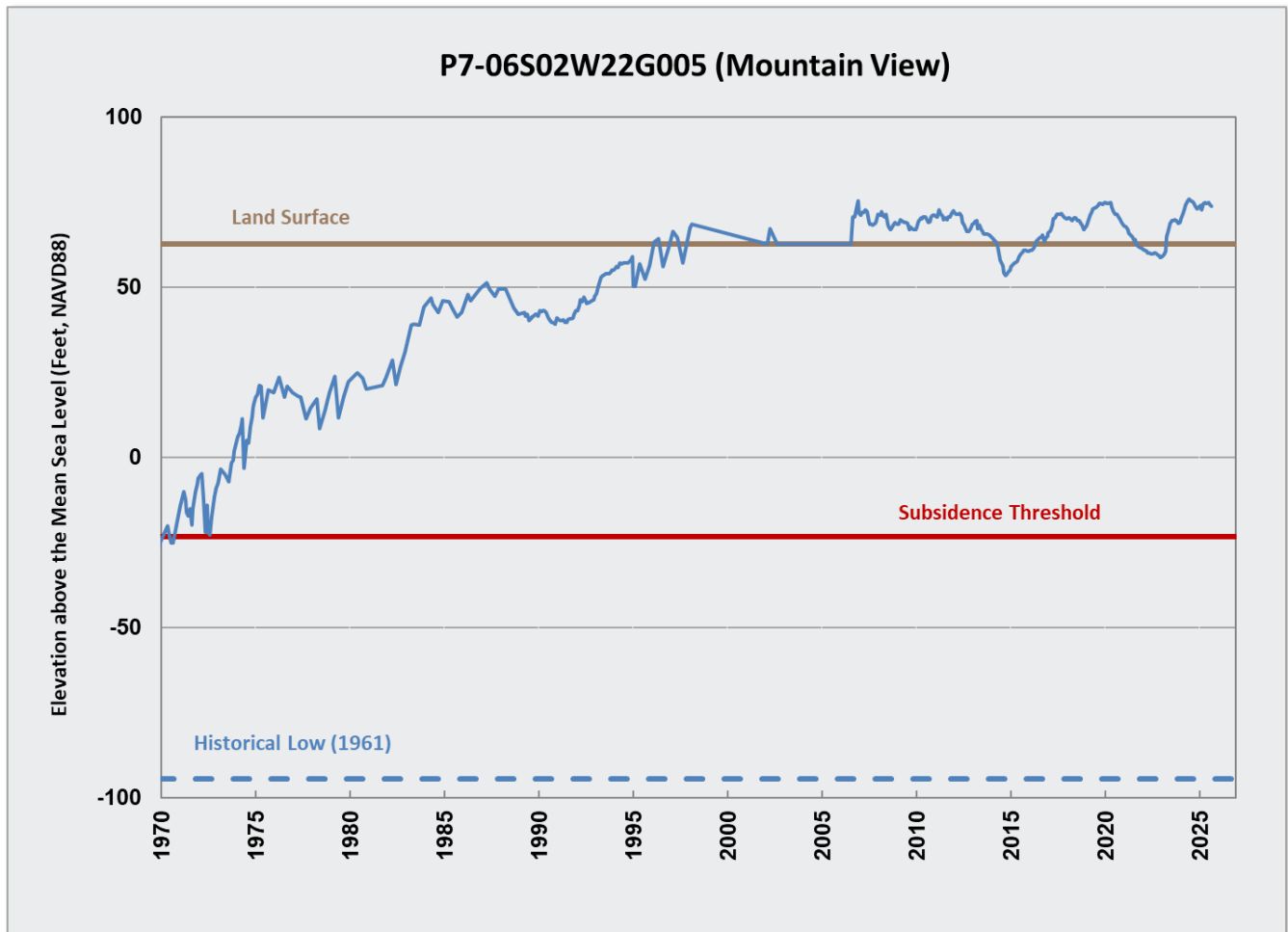
Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)



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Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)

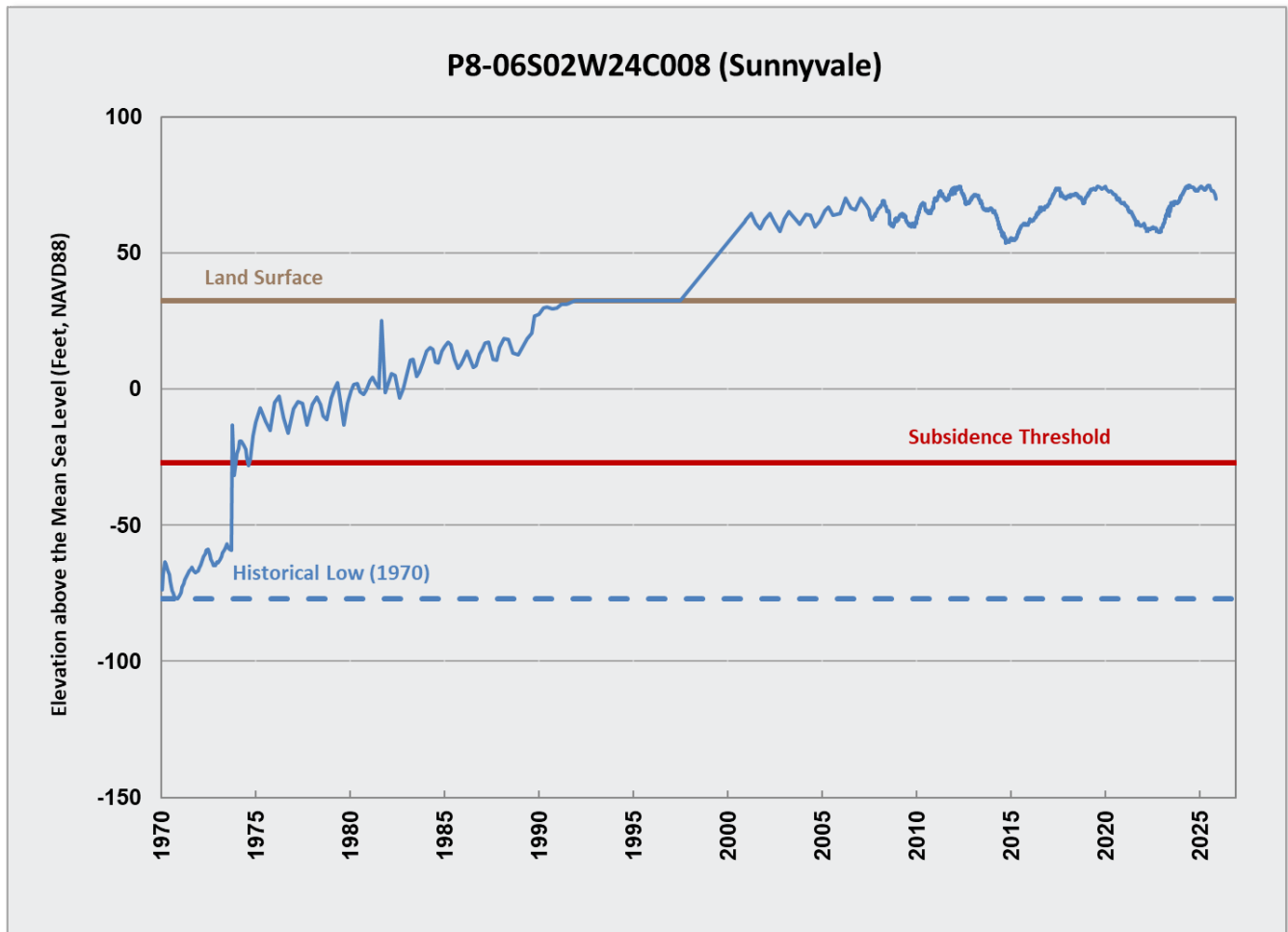


Notes: The flat line at land surface from approximately 2002 to 2006 represents the period when the well was under artesian conditions and prior to the installation of a pressure gauge.

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Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)

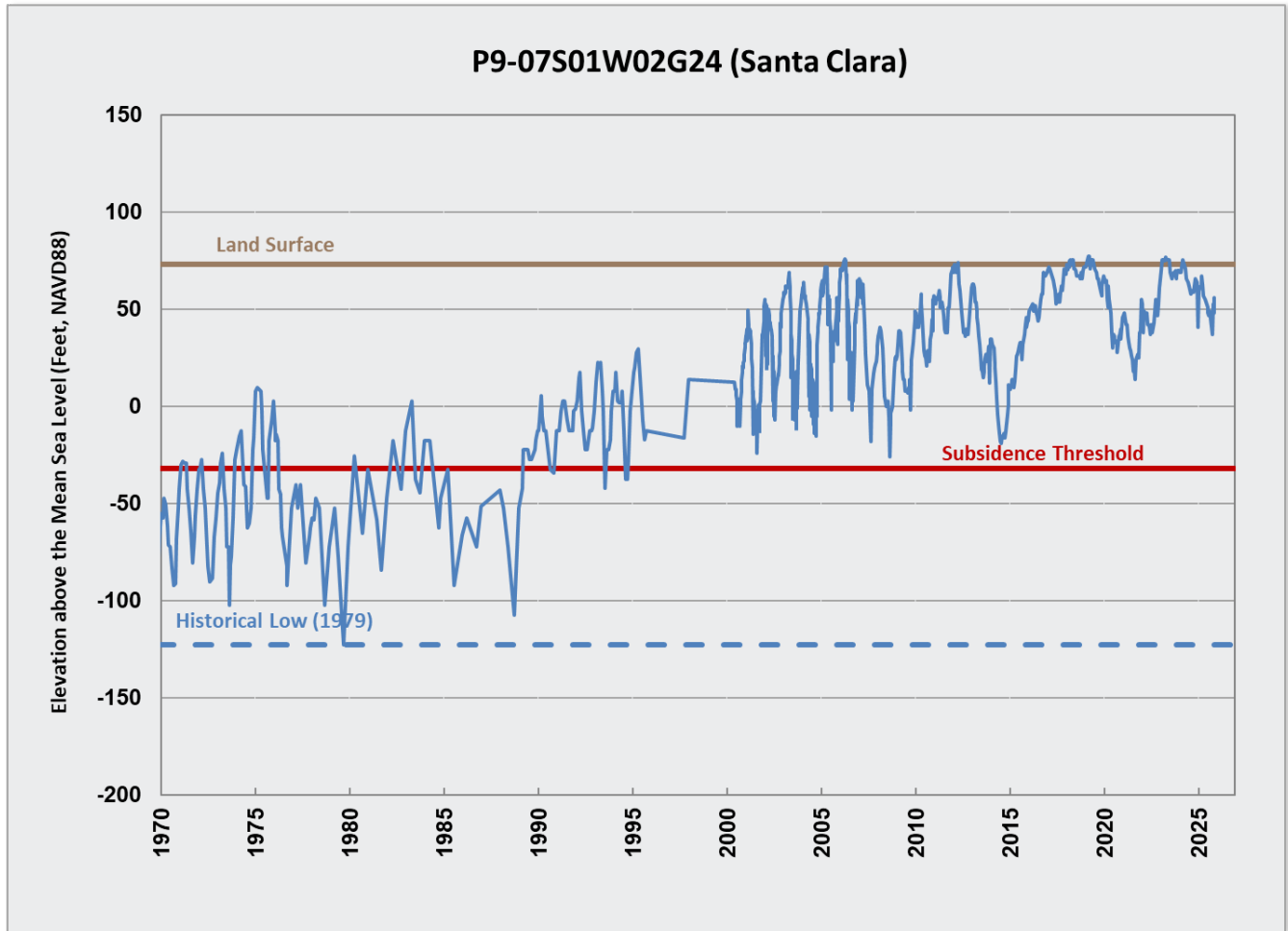


Notes: The flat line at land surface from approximately 1991 to 1997 represents the period when the well was under artesian conditions and prior to the installation of a pressure gauge.

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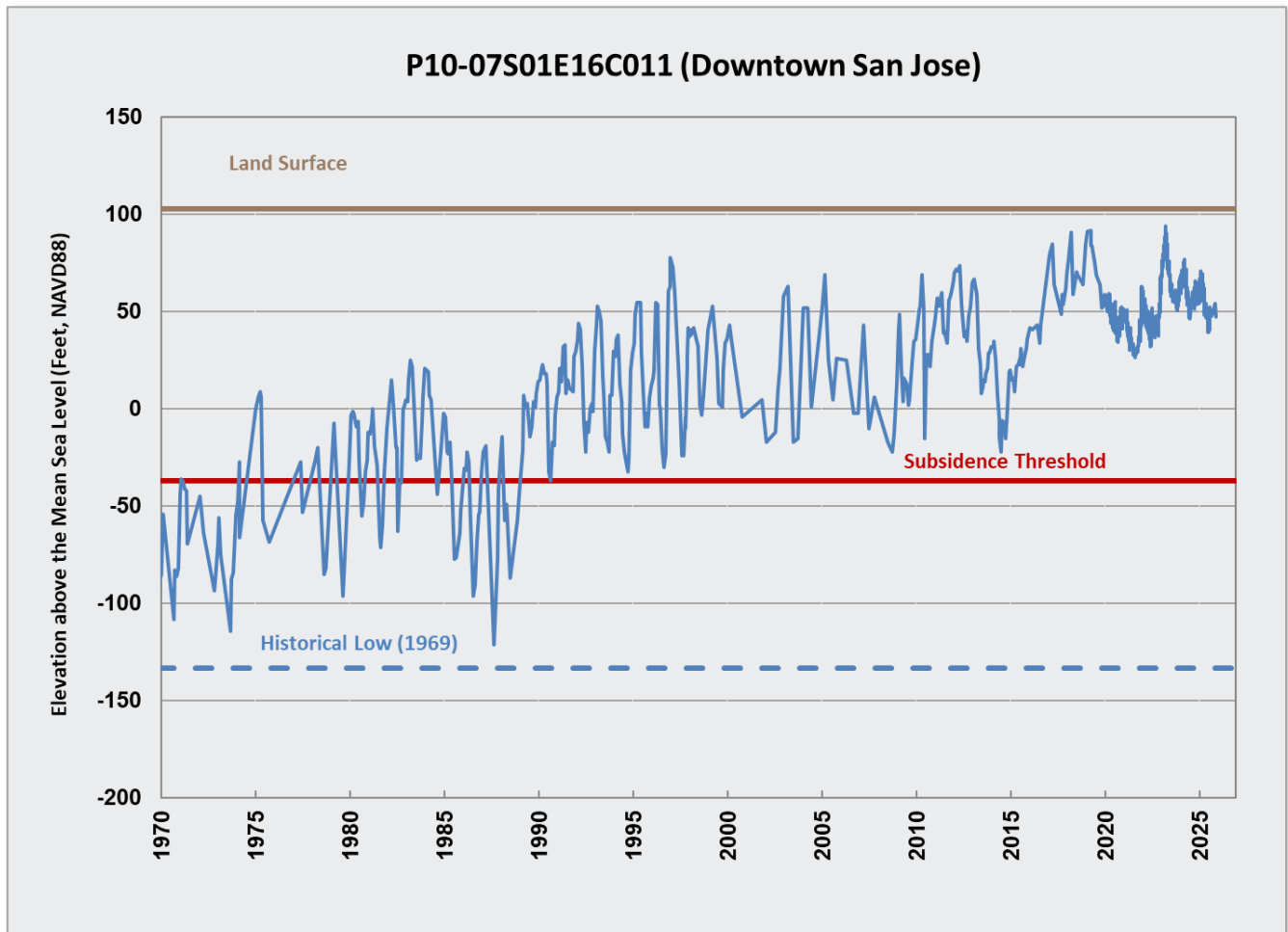
Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)



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Figure A-2. Measured Groundwater Elevation at Subsidence Index Wells (continued)



Notes: In November 2022, PRESS well 10 (07S01E16C006) was replaced with 07S01E16C011 for all subsequent subsidence monitoring and analysis. Well 07S01E16C011 is also located at the same 12th Street Station well field but has several advantages, including being Valley Water’s primary extensometer at the 12th Street Station, improved well access, and an increased (daily) monitoring frequency with telemetry.

Historically low groundwater elevations at most wells in Santa Clara Plain were observed in the 1960s and 1970s (Figure A-2). Since then, the groundwater elevations have been generally in recovery due to the importation of surface water from the Delta and related increased managed recharge and reduced groundwater pumping. Although groundwater elevations decline during drought, they generally recover quickly post-drought due to Valley Water’s groundwater management activities.

The recent (2020-2022) statewide drought ended in 2023 because it was a wet year with annual precipitation of 16.08 inches⁴⁹. The wet conditions continued in 2024 with annual precipitation of 16.64 inches⁵⁰. The 2025 average groundwater elevation among the ten subsidence index wells was about 7 feet lower than 2024 (ranging from 30 feet lower to 1 foot higher) and about 109 feet higher than land subsidence thresholds (ranging from 53 to 227 feet higher).

⁴⁹ Valley Water hydrology data interface available at <https://alert.valleywater.org/>

⁵⁰ Valley Water hydrology data interface available at <https://alert.valleywater.org/>

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The 2025 average groundwater elevations were higher than 2024 in two index wells including PRESS well 7 (06S02W22G005), and PRESS well 8 (06S02W24C008). At PRESS wells 7 and 8, the groundwater elevations were higher in 2025 than the last wet period from 2017 to 2019. The 2025 average groundwater elevation in PRESS well 7 (06S02W22G005) was 1 foot higher than 2024 based on monthly data collected in January to September and November. The 2025 average groundwater elevation in PRESS well 8 (06S02W24C008) was 0.4 feet higher than 2024. For the other eight index wells where the 2025 average groundwater elevations were lower than 2024, on average there was a decline of 8 feet (ranging from 1 to 30 feet) in the groundwater elevations. The 2025 average groundwater elevation in PRESS well 5 (07S01W22E002) was 30 feet lower than 2024 based on monthly data collected in January to April, June to August and November⁵¹.

It is critically important to manage the Santa Clara Plain in a manner that maintains a groundwater gradient towards the San Francisco Bay to keep seawater from entering the groundwater aquifer. There are three index wells along the bay front: PRESS well 7 (06S02W22G005), PRESS well 8 (06S02W24C008), and PRESS well 4 (06S01W24H015) (Figure A-1). In 2025, all three wells along the bay front remained under artesian condition (i.e., water levels would rise above land surface if the well was uncapped), which reduces the risk of seawater intrusion.

In summary, 2025 groundwater elevations at the ten subsidence index wells were maintained well above subsidence thresholds. Two index wells had higher groundwater elevations compared to 2024, while eight index wells had lower elevations compared to 2024. Additionally, groundwater flow gradients toward the San Francisco Bay were maintained in 2025, which help to prevent seawater intrusion into the aquifer. Measured groundwater elevations indicate a low risk of land subsidence resumption and seawater intrusion in 2025.

Extensometer data analysis

Daily aquifer compaction/expansion data measured at two extensometers and depth to water (DTW) measured at or near the extensometers were used for this analysis. An extensometer is a device used to continuously monitor aquifer compaction (subsidence) and expansion (uplift). The extensometers were installed in the early 1960s in Sunnyvale (Sunny) and San Jose (Martha) to measure the compaction or expansion of the first 1,000 feet of the aquifer system. The extensometer sites were selected in areas with high land subsidence between the 1930s and 1960s. These areas were also pumping centers during that period. Valley Water's goal is that the average value of subsidence measured at these two sites over the last 11 years does not exceed a tolerable subsidence rate of 0.01 feet/year (Geoscience, 1991).

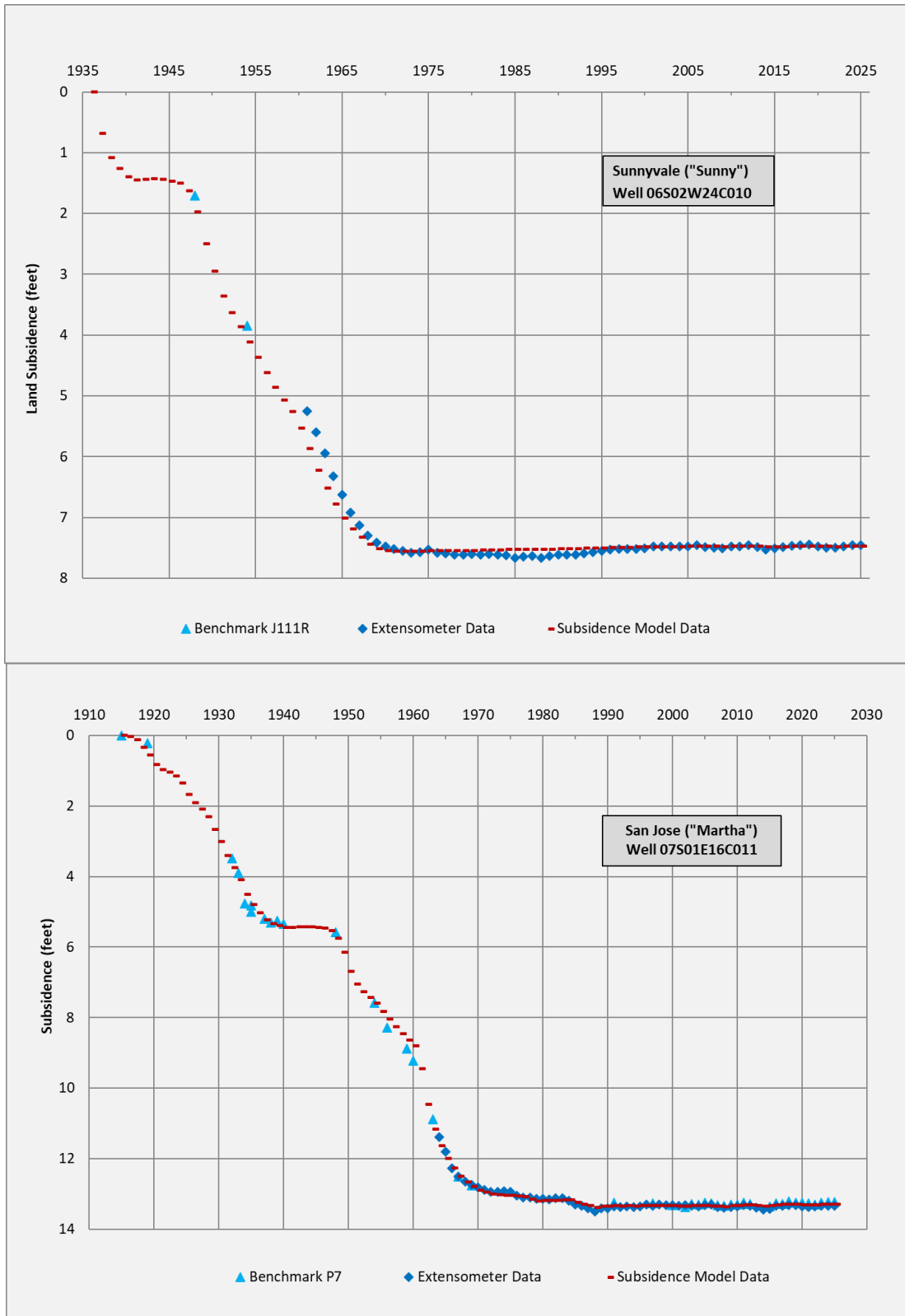
Long-term extensometer data

Figure A-3 shows cumulative compaction measured at the extensometers for the period of record supplemented with nearby benchmark data, along with numerical model simulated results. Permanent (inelastic) land subsidence occurred mostly prior to the 1970s and has been negligible over the last several decades. There is close correlation between Valley Water's land subsidence model (PRESS model) output and observed compaction as shown in Figure A-3.

⁵¹ Water level data is not available from other months in 2024.

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Figure A-3. Cumulative Compaction at Extensometers



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Permanent (inelastic) subsidence was essentially halted in the 1970s in the Santa Clara Plain (Figure A-3). Figure A-4 presents the cumulative aquifer compaction/expansion and DTW measured from 1970 to 2025 for the Sunny and Martha extensometers. In general, there was very little land subsidence at the extensometers between 1970 and 2025, with about 0.06 feet and 0.61 feet of residual compaction⁵² at the Sunny and Martha extensometer, respectively (Figure A-4).

To better characterize periods of permanent (inelastic) versus elastic subsidence at the Sunny and Martha sites, stress-strain (i.e., depth to water and compaction) analyses (Figures A-4 to A-6) were conducted using measured depth to water and extensometer data from the late-1960s (1969 for Sunny and 1968 for Martha) to 2025, which was sub-divided based on depth to water data for historical wet and dry periods. Each sub-period extends from the end of the last wet period to the end of the current or more recent wet period and is defined based on the highest groundwater level (Figure A-4) and minimum compaction (Figure A-5). Although these sub-periods are a function of groundwater pumping and rainfall variability, each sub-period generally corresponds to full wet and dry (drought) interannual hydrologic cycle. For example, the 2012-2019 sub-period includes the 2012-2016 drought and the subsequent wet hydrologic years of 2017-2019. The next sub-period begins at the end of 2019 and includes the 2020-2022 drought and the wet hydrologic years of 2023-2025. The stress-strain analysis is based on evaluation of the hysteresis loop during each time sub-period, as shown in Figures A-5 and A-6.

At the Sunny extensometer, groundwater levels have recovered since the 1960s, but land subsidence continued until around the mid-1980s, indicated as 9/30/1985 in Figure A-4. Over that same time for each hysteresis loop (Figure A-5a), strain (compaction) increase/decrease with increasing/decreasing stress (depth to water level). However, the stress-strain hysteresis loops from 1969 to 1985 generally move towards lower stress (depth to water) and greater strain (compaction) direction. This indicates that even though elastic land subsidence and uplift cycles occurred in each corresponding dry and wet period, delayed inelastic land subsidence was the dominant land deformation type at Sunny between 1969 and 1985 (Figures A-4 and A-5a).

After 9/30/1985 at Sunny, groundwater levels continued to recover and land uplift started to occur (Figure A-4). Figure A-5a shows that between 1985 and 2000, the hysteresis loops generally move toward lower stress (depth to water) and lower strain (compaction), which indicate elastic land uplift cycles are the dominant land deformation type. It should also be noted there is a data gap from 1993 to 2000 at Sunny (Figure A-4). Between 2000 and 2025, the long-term groundwater level trend at Sunny is relatively flat, with only seasonal and multiple-year wet-dry (drought) fluctuations (Figure A-4). Figures A-5a-c show that from 2000 to 2025, the hysteresis loops repeat increased/decreased strain (compaction) with increasing/decreasing stress (depth to water level) cycles, with no global movement in the hysteresis loops, which indicates that the deformation is elastic at Sunny since 2000 (Figures A-4 and A-5). Figure A-5c shows that the hysteresis loops for 2019 to 2025 are within the tracks of the hysteresis loops for the previous hydrologic period from 2012 to 2019, which indicates that the land deformation is elastic at Sunny from 2019 to 2025.

Somewhat similar to the Sunny site, groundwater levels at the Martha extensometer have recovered since 1960s but residual land subsidence continued until around the late-1980s, indicated as 9/8/1988 in Figure A-4. Over that same time for each hysteresis loop at Martha (Figure A-6a), strain (compaction) increase/decrease with increasing/decreasing stress (depth to water level). However, the stress-strain hysteresis loops from 1968 to 1983 generally move towards lower stress (depth to water) and greater strain (compaction) direction, while the stress-strain hysteresis loops from 1983 to 1988

⁵² Residual compaction is calculated here from 1970 to 2025.

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move towards higher stress (depth to water) and greater strain (compaction) direction. This indicates that even though elastic land subsidence and uplift cycles occurred in corresponding dry and wet periods, delayed inelastic land subsidence is the dominant land deformation type at Martha from 1968 to 1983 and a small amount of residual inelastic land subsidence exists from 1983 to 1988 (Figures A-4 and A-6a).

After 9/8/1988 at Martha, groundwater levels continued to recover⁵³ and land uplift started to occur (Figure A-4). Figures A-6a-b shows that between 1988 and 1995, the hysteresis loops generally move toward lower stress (depth to water) and lower strain (compaction), which indicate elastic land uplift cycles are the dominant land deformation type. From 1995 to 2025, the general long-term groundwater level trend is relatively flat, with only seasonal and multiple-year wet-dry (drought) fluctuations (Figure A-4). Figures A-6a,c-e show that the hysteresis loops repeat increased/decreased strain (compaction) with increasing/decreasing stress (depth to water level) cycles, with essentially no global movement in the hysteresis loops, which means that the dominant deformation is elastic at Martha since 1995 (Figures A-4 and A-6). Figure A-6d-e shows that the hysteresis loops for 2019 to 2023 and 2023 to 2025 are within the tracks of the hysteresis loops for the previous hydrologic period from 2012 to 2019, which indicates that the land deformation is elastic at Martha from 2019 to 2025.

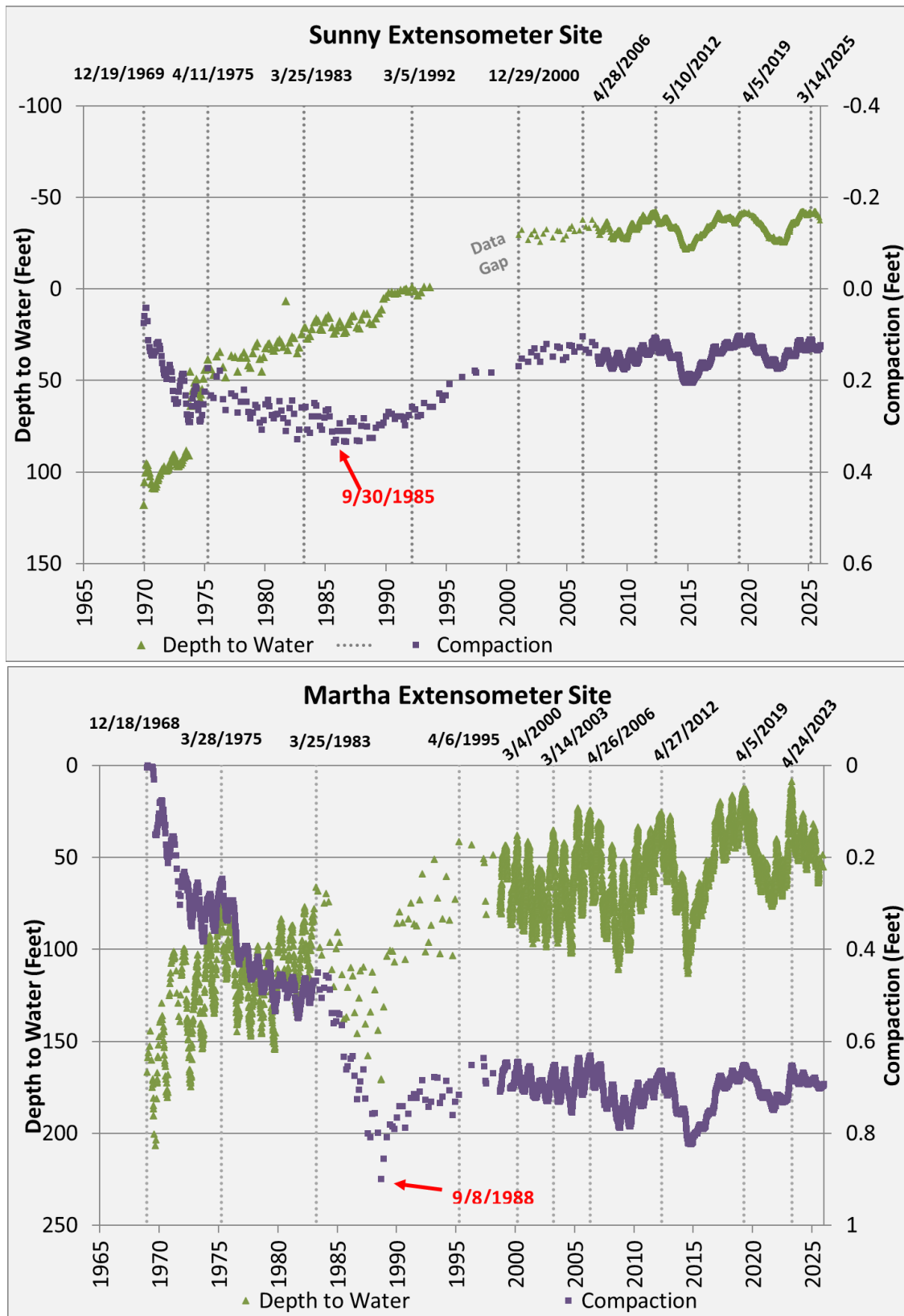
Although both extensometers recorded little permanent subsidence between 1970 and 2025, there are some notable differences in compaction/expansion and DTW at the two sites. First, the maximum compaction from 1970 to 1988 was 0.819 feet at Martha and 25% of it was recovered between 1988 and the end of 2025 (Figure A-4). In comparison, the maximum compaction from 1970 to 1985 was only 0.276 feet at Sunny and 77% of it was recovered between 1985 and the end of 2025 (Figure A-4). Second, the groundwater elevation at Sunny has been above the land surface (negative DTW) since 1993, while the groundwater elevation at Martha has consistently been below the land surface (positive DTW) (Figure A-4). Finally, the seasonal variability in water elevations at Sunny is relatively small compared to the seasonal variability in water elevations at Martha (Figure A-4). The dampened seasonal signal in the water elevations at Sunny indicates pumping activities nearby have decreased during the last forty years. The greater recovery of compaction at Sunny is attributed to relatively less pumping and associated greater artesian pressure at the Sunny site compared to Martha site from 1970 to 2025.

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⁵³ Groundwater pumping in the Santa Clara Plain decreased substantially after the Santa Teresa Water Treatment Plant came online in 1989, which helped contribute to the recovery of groundwater levels and subsequent land uplift in the Santa Clara Plain.

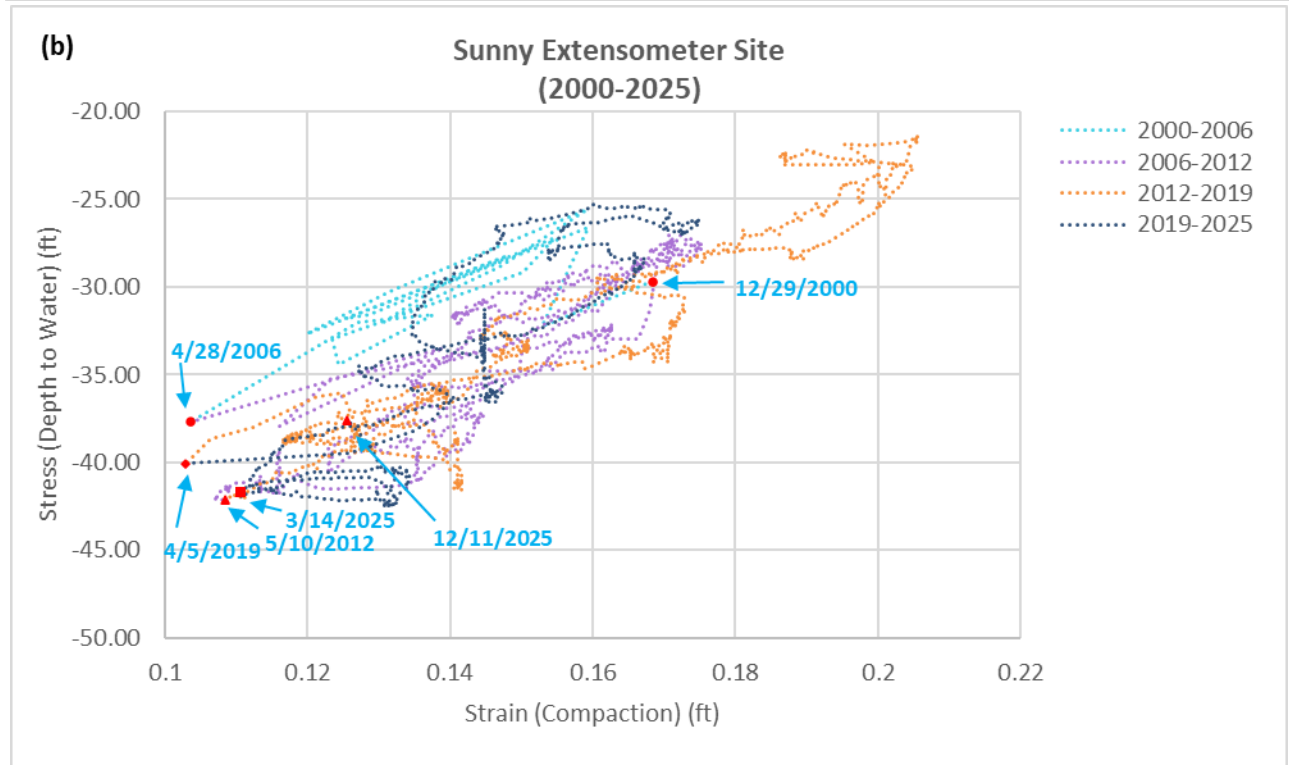
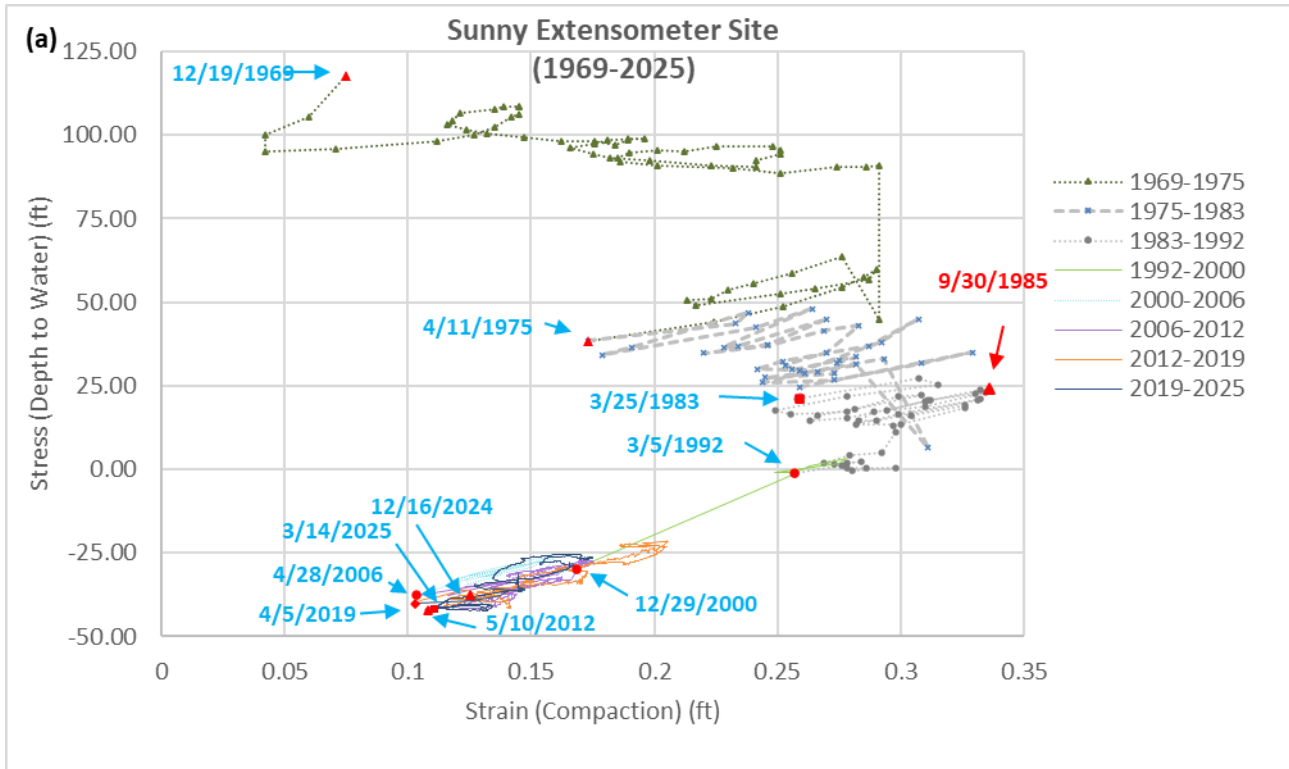
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Figure A-4. Measured Depth to Water and Cumulative Compaction at Extensometers



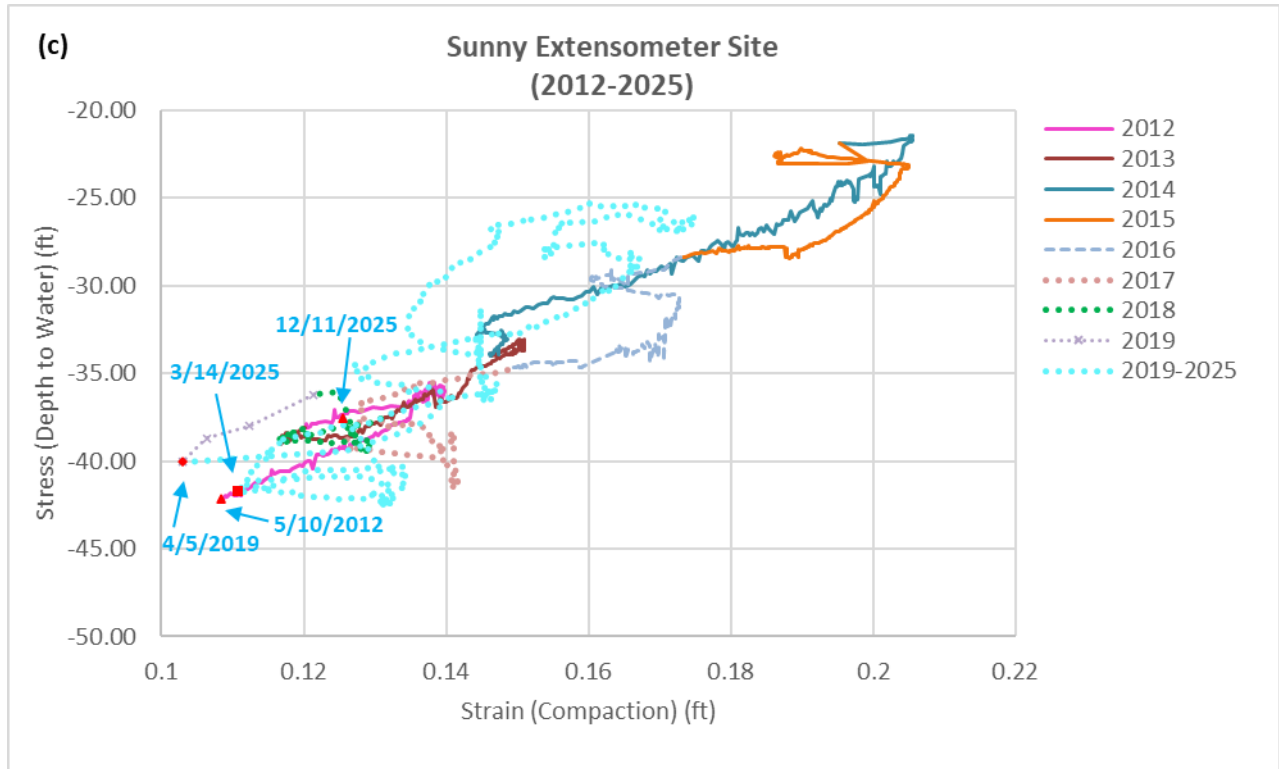
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Figure A-5. Stress-strain (Depth to Water-compaction) Analysis at Sunny for (a) 1969-2025, (b) 2000-2025, and (c) 2012-2025



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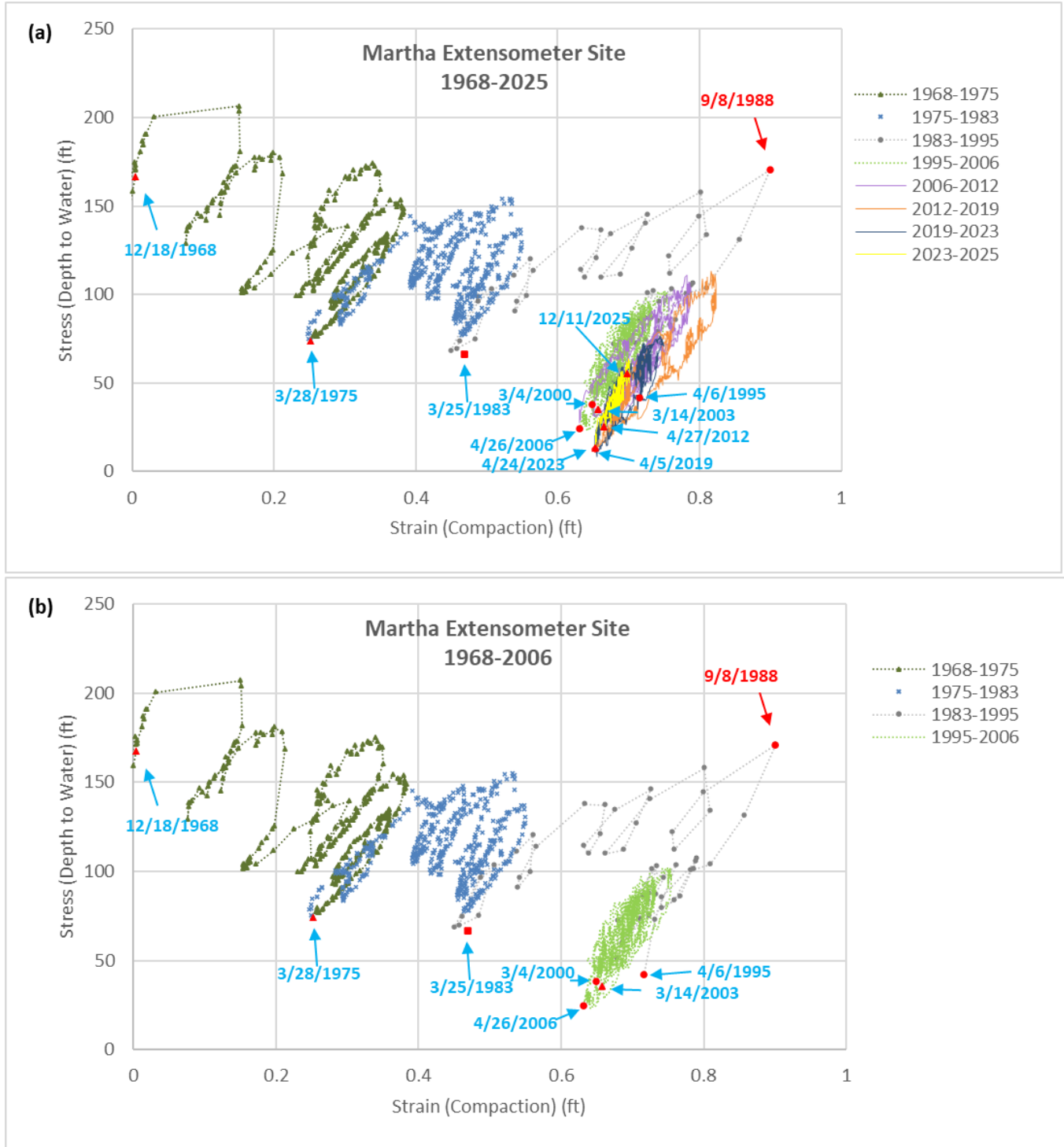
Figure A-5. Stress-strain (Depth to Water-compaction) Analysis at Sunny for (a) 1969-2025, (b) 2000-2025, and (c) 2012-2025 (continued)



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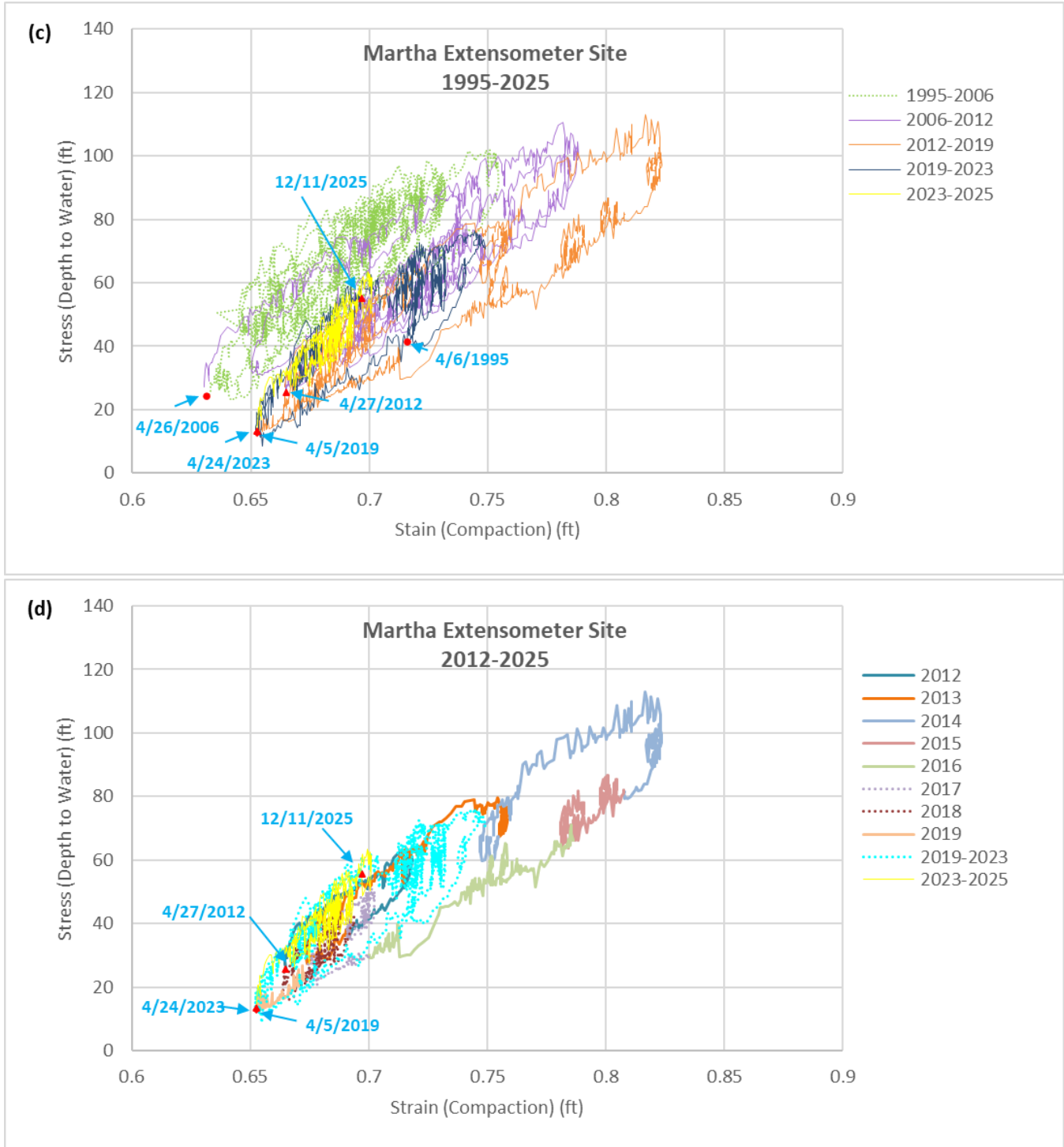
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Figure A-6. Stress-strain (Depth to Water-compaction) Analysis at Martha for (a) 1968-2025, (b) 1968-2006, (c) 1995-2025, (d) 2012-2025, and (e) 2019-2025



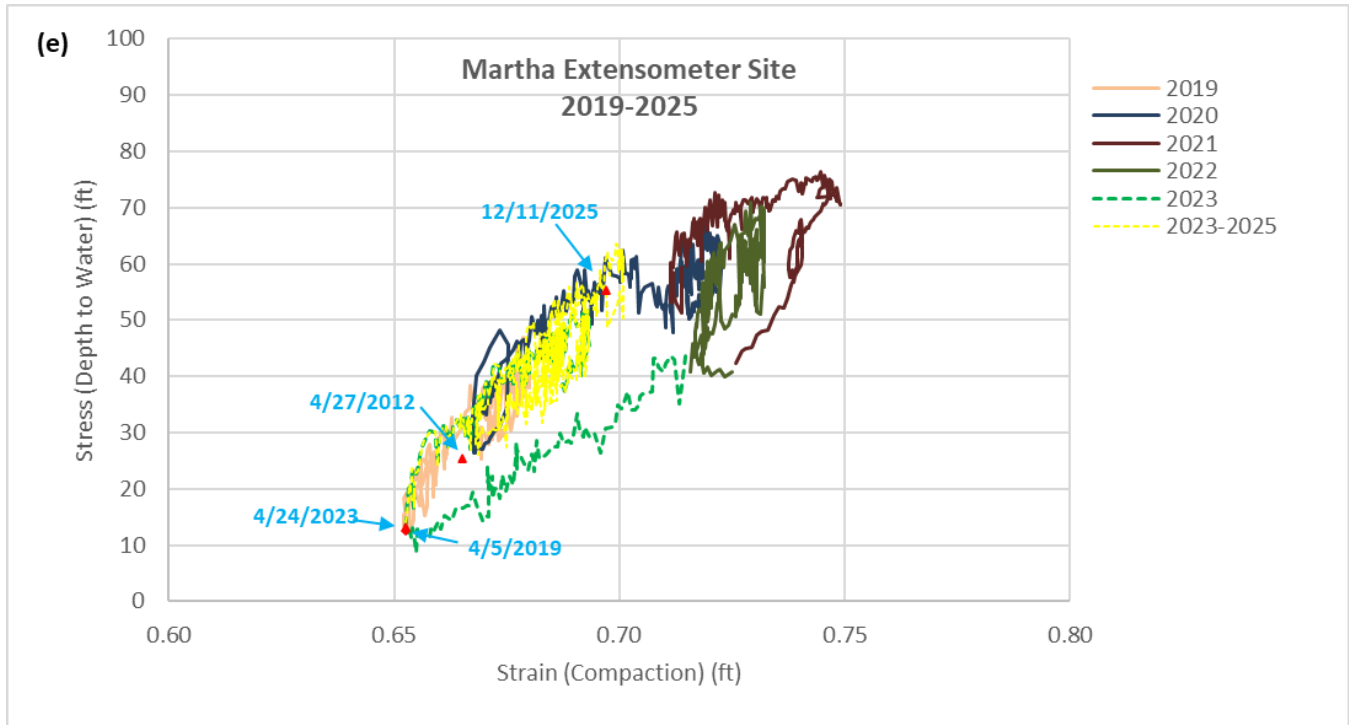
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Figure A-6. Stress-strain (Depth to Water-compaction) Analysis at Martha for (a) 1968-2025, (b) 1968-2006, (c) 1995-2025, (d) 2012-2025, and (e) 2019-2025 (continued)



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Figure A-6. Stress-strain (Depth to Water-compaction) Analysis at Martha for (a) 1968-2025, (b) 1968-2006, (c) 1995-2025, (d) 2012-2025, and (e) 2019-2025 (continued)



Current extensometer data

Measured extensometer data are used to evaluate recent and current land subsidence conditions (Table A-1). The 2025 subsidence at Sunny and Martha are 0.005 feet (subsidence) and 0.008 feet (subsidence) respectively. The 11-year average of annual subsidence rate is -0.008 feet/year, with the negative value of extensometer data indicating aquifer expansion (or uplift). This value meets the Valley Water tolerable subsidence rate goal of not exceeding 0.01 feet/year over the last 11 years. The 11-year average value improved compared to what was reported in 2024 (-0.004 feet/year).

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Table A-1. Measured Annual Land Subsidence at the San Jose (Martha) and Sunnyvale (Sunny) Extensometers from 2015 to 2025

Year	Martha (feet/year)	Sunny (feet/year)	Average at Two Sites (feet/year)
2015	-0.021	-0.022	-0.021
2016	-0.087	-0.025	-0.056
2017	-0.007	-0.018	-0.012
2018	-0.020	-0.013	-0.017
2019	-0.005	-0.009	-0.007
2020	0.046	0.028	0.037
2021	0.011	0.017	0.014
2022	-0.009	0.003	-0.003
2023	-0.027	-0.020	-0.024
2024	-0.002	-0.018	-0.010
2025	0.008	0.005	0.006
Average	-0.010	-0.007	-0.008

Note: Negative extensometer values indicate aquifer expansion and positive values indicate aquifer compaction.

Benchmark survey data analysis

The benchmark survey data along the Los Altos, Alum Rock, and Guadalupe CVLCs are used to study spatial land subsidence conditions and annual changes throughout the Santa Clara Plain. The benchmark survey is conducted in the fall of each year. Figure A-1 shows benchmark locations along the three CVLCs. Related analysis is summarized below.

Change in land surface elevation from 2024 to 2025

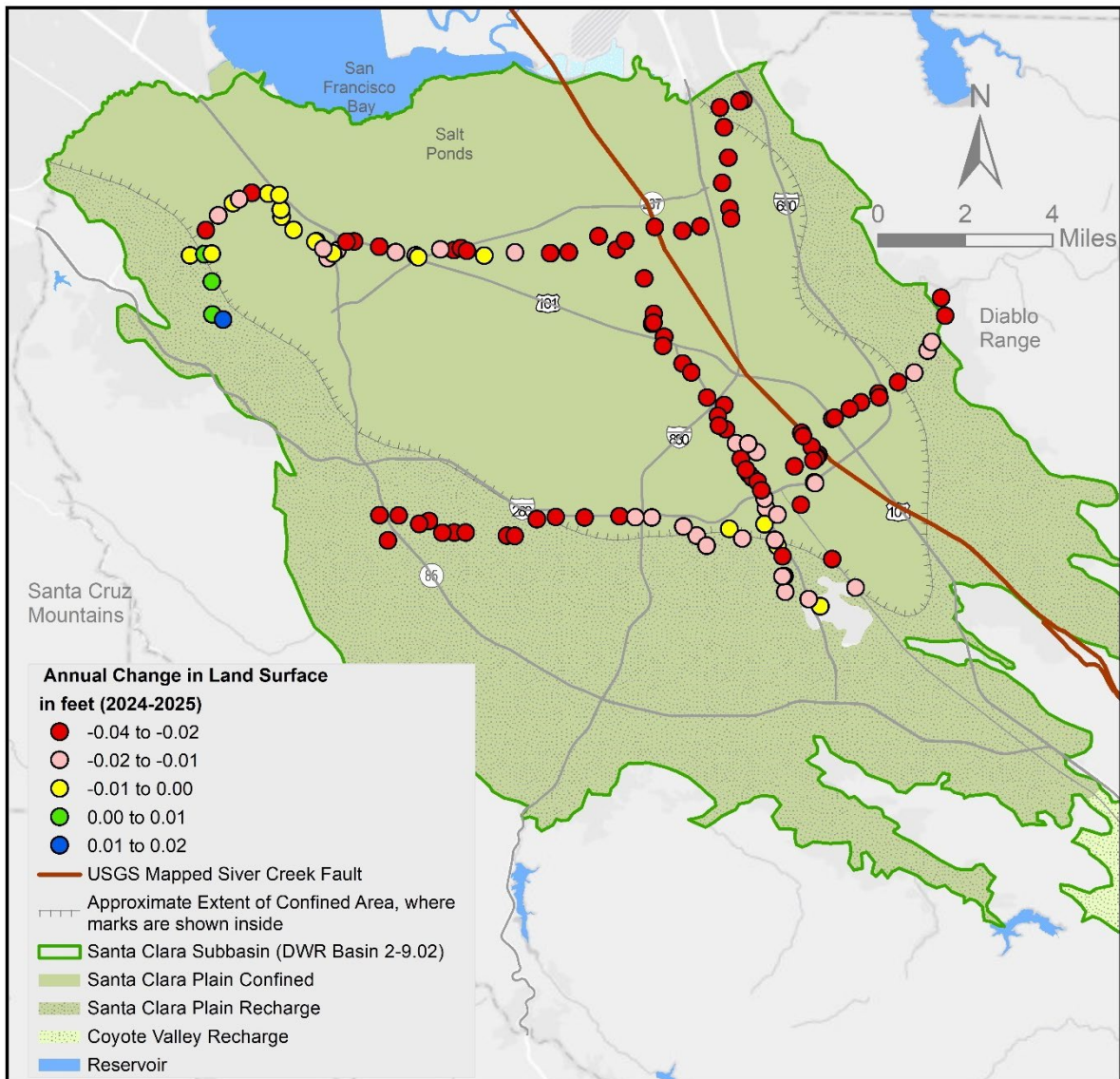
As discussed above, groundwater elevations in 2025 were higher than 2024 at two of the ten subsidence index wells, but lower at the other eight subsidence index wells. Figure A-7 shows the annual change in land surface elevation from 2024 to 2025 at benchmarks along the Los Altos, Alum Rock, and Guadalupe circuits. For benchmark survey data, a positive value indicates an increase in land surface elevation (uplift) and a negative value indicates a decrease in land surface elevation (subsidence); this is the opposite of the extensometer data (Table A-1).

The 2025 survey data showed a trend of negative land surface elevation change (land subsidence) from 2024 at most benchmarks (Figure A-7). In general, the 2024 to 2025 land surface elevation change pattern is negative on both sides of the Silver Creek fault (Figure A-7).

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Figure A-7. Land Surface Elevation Change at Benchmarks Between 2024 and 2025



Note: Positive benchmark values indicate land surface uplift and negative values indicate land surface subsidence in Figure A-7.

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Table A-2 summarizes the average and range of annual change of land surface elevation from 2024 to 2025. The average annual change of land surface elevation of all benchmarks in 2025 is -0.02 feet/year (subsidence).

Table A-2. Fall 2025 Change in Land Surface Elevation for Benchmark Circuits Compared to Fall 2024

Survey Circuit	Average Change (feet)	Range (feet)	Number of Benchmarks
Los Altos	-0.01	-0.03 to 0.02	39
Alum Rock	-0.02	-0.04 to 0.00	52
Guadalupe	-0.02	-0.04 to 0.00	49

Long-term change in land surface elevation

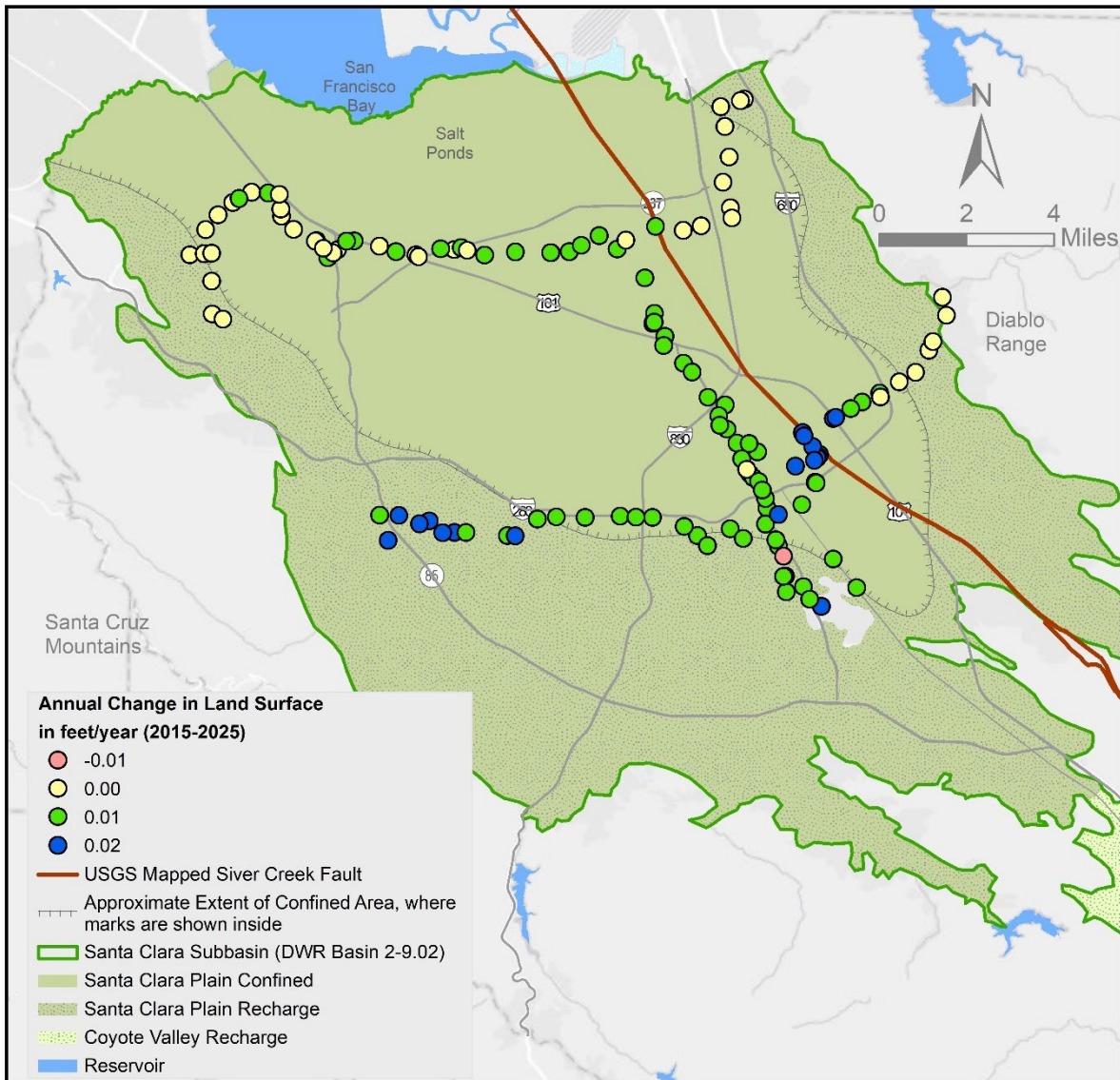
The average annual change of land surface elevation over the last 11 years from 2015 to 2025 at individual benchmarks is presented in Figure A-8. Although land surface elevations at some benchmarks may increase or decrease at higher values in some years, all benchmarks had an average annual change less than -0.01 feet/year (Figure A-8)⁵⁴ from 2015 to 2025.

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⁵⁴ The tolerable rate of 0.01 feet/year was used to establish the subsidence threshold water levels at the 10 PRESS index wells, including the two extensometers (Geoscience Support Services, 1991). While the rate applies to water levels, the average change in the benchmark land surface elevation is compared to this rate to provide context about basin-wide conditions.

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Figure A-8. Average Annual Change in Land Surface Elevation at Benchmarks Between 2015 and 2025



Note: Positive benchmark values indicate land surface uplift and negative values indicate land surface subsidence.

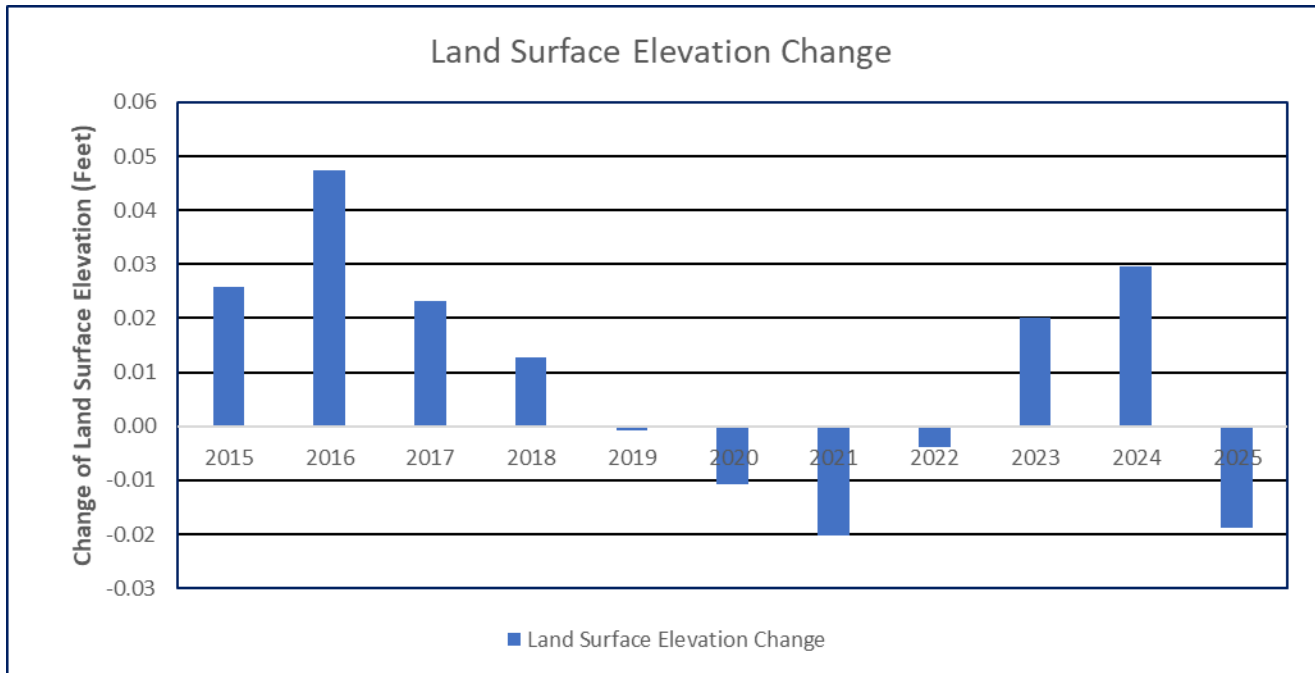
Figure A-9 shows the average annual change in land surface elevation at all benchmarks over the last 11 years from 2015 to 2025. During this 11-year period, there were six years with positive average values (uplift) and five years with negative average values (subsidence). The highest annual average subsidence was in 2021 and the highest annual average uplift was in 2016, prior to the drought-busting wet conditions in 2017. Uplift occurred in 2016 as a response to rising groundwater levels caused by large increases in Valley Water’s managed recharge operations to recover groundwater conditions, reductions in groundwater pumping by retailers as they shifted sources, and conservation by the community. The average annual ground surface elevation change for all benchmarks over the last 11 years is 0.01 feet, indicating land uplift.

In summary, the benchmark survey data show land surface subsidence in most benchmarks along the

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three CVLCs between 2024 and 2025, and net land uplift over the last 11 years. There remains a low risk of permanent land subsidence in 2025.

Figure A-9. Average Annual Change of Land Surface Elevation of All Benchmarks from 2015 to 2025



Note: Although 2015 and 2016 were drought years, positive average annual change in land surface (uplift) occurred as a response to rising groundwater levels caused by Valley Water’s drought response. This included increases in Valley Water’s managed recharge operations to recover groundwater conditions, reductions in groundwater pumping by retailers as they shifted sources, and substantial water use reduction by the community. Change of land surface elevation in 2019 was -0.001 feet.

DISCUSSION

Valley Water’s comprehensive land subsidence monitoring network consists of two extensometers, about 142 benchmarks along three CVLCs, and ten subsidence groundwater monitoring wells covering most of the Santa Clara Plain. The extensometers monitor subsidence conditions at two sites with high-quality subsidence and water elevation data. The annual survey provides data representing the subsidence condition at benchmarks along three CVLCs. The monitoring of water elevations at subsidence index wells does not provide data to quantify the subsidence condition directly, but the monitoring is straightforward and related data can be used as an indicator for subsidence condition. Since the index wells are located across the Santa Clara Plain, the monitoring data reflects regional conditions.

The current Valley Water practice of evaluating the land subsidence condition in the Santa Clara Plain is to calculate the average over an 11-year period using subsidence data collected at two extensometers (Sunny and Martha) and compare it with the established, tolerable rate of land subsidence. The tolerable subsidence rate of 0.01 feet/year is based on the arithmetic average of historic subsidence and rebound measured in the Sunny and Martha extensometers for the 11-year period from 1980 to 1990 (Geoscience, 1991).

The subsidence thresholds established at ten index wells are used as the minimum water elevations

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that should be maintained to avoid further permanent land subsidence. Although the thresholds were established over thirty years ago, they were based on a thorough study of historical data, subsidence modeling, and previous studies. It is recommended to continue to use these thresholds for groundwater operations and early indication of potential concerns. Because these thresholds are based on the 0.01 feet/year tolerable subsidence rate, they should be re-evaluated if the tolerable subsidence rate changes or if other information indicates a change is warranted.

The annual survey at benchmarks provides direct measurement of land surface changes along three CVLCs in the Santa Clara Plain. Valley Water will consider whether specific criteria should be developed to analyze survey data.

CONCLUSIONS

In summary, the data measured by each component of the subsidence monitoring network shows that:

- Groundwater elevations were higher than the subsidence thresholds at all ten index wells throughout 2025 in the Santa Clara Plain.
- In general, the 2025 average groundwater elevations were higher than 2024 in two index wells (P7, and P8). The 2025 average groundwater elevation in well P5 was 30 feet lower than 2024. For the other seven index wells there was only a less than 5 feet decline in the groundwater elevations from 2024 to 2025.
- Net aquifer subsidence was measured at both extensometer sites in 2025. The average annual subsidence rate over the last 11 years at the Martha and Sunny sites is -0.008 feet/year (net aquifer expansion or uplift), which meets Valley Water's tolerable rate of 0.01 feet/year.
- The benchmark survey data showed that the average land surface elevation of most benchmarks in 2025 was lower than 2024, and the average annual change of land surface elevation over last 11 years was 0.01 feet (net uplift).
- Stress-strain analysis indicated that the compaction observed in 2025 remains in the elastic range.

The analysis of the data from the Valley Water subsidence monitoring network indicates that the risk of permanent (inelastic) land subsidence in 2025 remains low. Continued monitoring of the subsidence network is recommended to detect early signs of inelastic land subsidence and to support continued sustainable groundwater supplies.

REFERENCES

1. Geoscience Support Services Incorporated, 1991, Subsidence Threshold in the North County Area of Santa Clara Valley.
2. Santa Clara Valley Water District (SCVWD), 2016, Groundwater Management Plan for the Santa Clara and Llagas Subbasins.
3. Valley Water, 2020, 2019 Subsidence Data Analysis, Technical Memorandum (Memo).
4. Valley Water, 2021, Groundwater Management Plan for the Santa Clara and Llagas Subbasins, Santa Clara Valley Water District, San Jose, CA.
5. Chaussard, E., Bürgmann, R., Shirzaei, M., Fielding, E. J., & Baker, B. (2014). Predictability of hydraulic head changes and characterization of aquifer-system and fault properties from InSAR-derived ground deformation. *Journal of Geophysical Research: Solid Earth*, 119(8), 6572-6590.

APPENDIX B CY 2025 GROUNDWATER SUPPLY

Water Year 2025 Groundwater Report

APPENDIX B – CY 2025 GROUNDWATER SUPPLY

This appendix summarizes calendar year (CY) 2025 groundwater supply conditions and trends, including groundwater pumping, countywide water use, managed and natural recharge, and groundwater level monitoring locations in the Santa Clara and Llagas subbasins. These CY 2025 data help support Valley Water’s water supply operations and related planning that are done on a calendar year basis.

Groundwater Pumping – CY 2025

Approximately 129,700 AF of groundwater was pumped in CY 2025 (Table B-1). The locations and volumes of groundwater pumping in the Santa Clara and Llagas subbasins, respectively, are shown in Figures 4 and 5 (Chapter 2). While those figures are based on water year, the locations and volumes remain largely consistent for either year type.

Table B-1. CY 2025 Groundwater Pumping by Use (AF)

Water Use Sector	Santa Clara Subbasin		Llagas Subbasin (Zones W-5 & W-8)	Total
	Santa Clara Plain (Zone W-2)	Coyote Valley (Zone W-7)		
M&I	70,200	11,000	17,700	98,900
Domestic	100	200	1,600	1,900
Agricultural	400	3,400	25,100	28,900
Total	70,700	14,600	44,400	129,700

Notes:

1. M&I, municipal and industrial
2. Large volume pumpers are metered and report groundwater production to Valley Water monthly. Pumping for wells reporting semi-annually or annually (primarily agricultural and domestic) was estimated based on available and/or prior year data as validated data was not available by the date of publication of this report.
3. Valley Water’s groundwater benefit zones largely align with the groundwater subbasins as shown above. Additional information about the groundwater benefit zones can be found here: <https://www.valleywater.org/your-water/groundwater/groundwater-benefit-zones>
4. All values are rounded to the nearest hundred.

Groundwater Pumping Trends – CY 2025

Groundwater pumping is largely offset by Valley Water’s managed recharge of local and imported surface water. In most years, managed recharge typically averages about two-thirds of the pumping (Figure B-1), with natural recharge balancing the remaining pumping. However, in 2023, Valley Water’s managed recharge was greater than pumping to help recover groundwater following the recent (2020–2022) drought. This groundwater management operation was similar to 2016 when managed recharge was greater than pumping to help recover groundwater from the 2012–2016 drought (Figure B-1).

Groundwater pumping in CY 2025 increased compared to the previous three years (2022–2024) (Figure B-1). CY 2025 pumping was slightly higher than in 2024 and reflects increased countywide water use and rising demand following the 2020–2022 drought. Because groundwater conditions generally recovered in 2023, managed recharge was reduced in 2024 and 2025 but remained at a relatively high level compared to groundwater pumping (Figure B-1) to maintain healthy groundwater supply conditions.

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Figure B-1. Countywide Groundwater Pumping and Managed Recharge

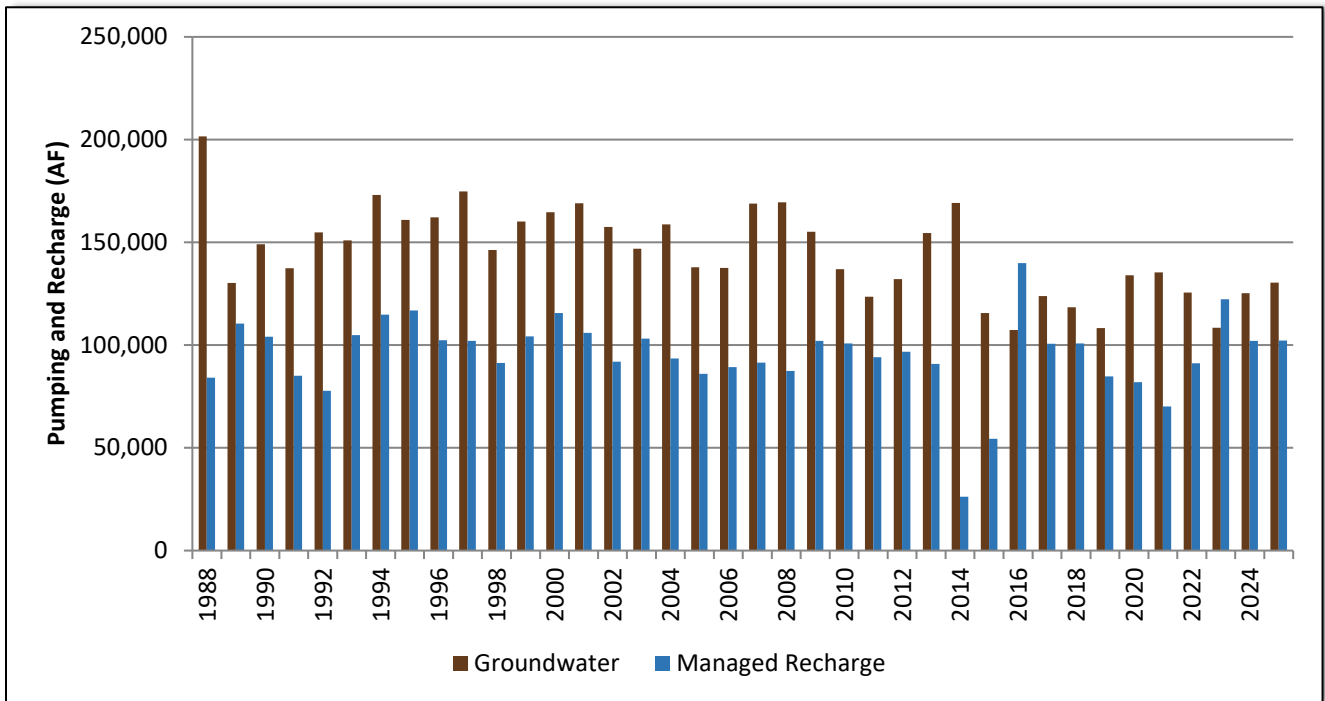
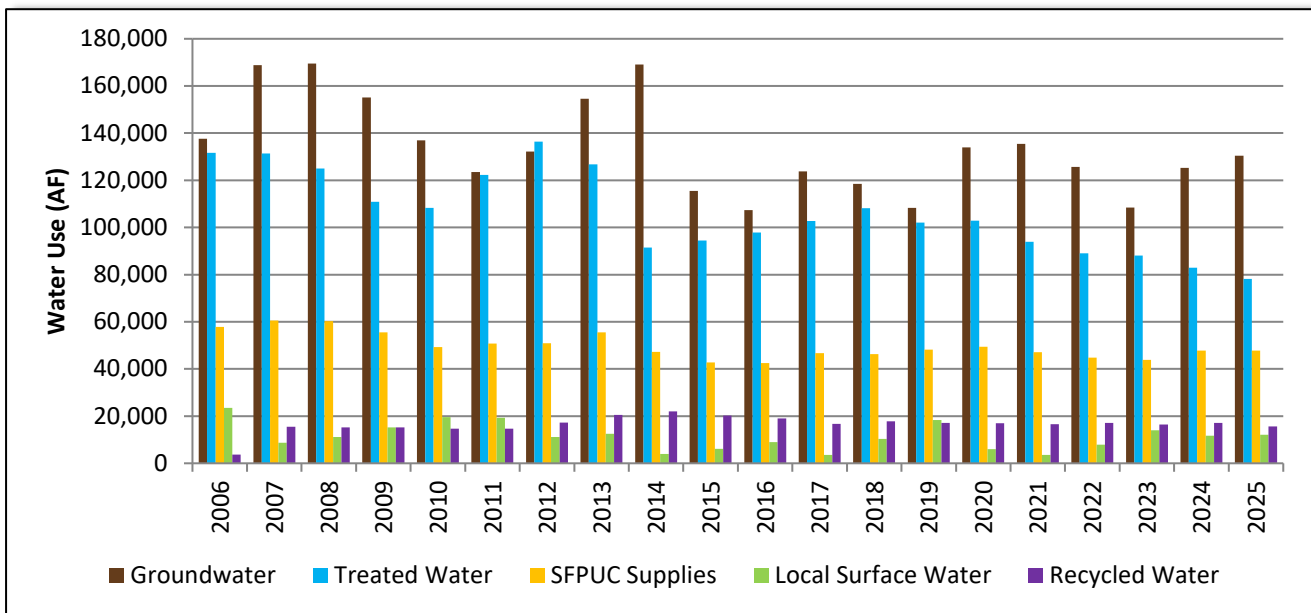


Figure B-2 shows the countywide water use by source, including groundwater, Valley Water treated water, San Francisco Public Utility Commission (SFPUC) supplies, local surface water, and recycled water. Groundwater provided about 46% of the total water used countywide in 2025.

Figure B-2. Countywide Water Use



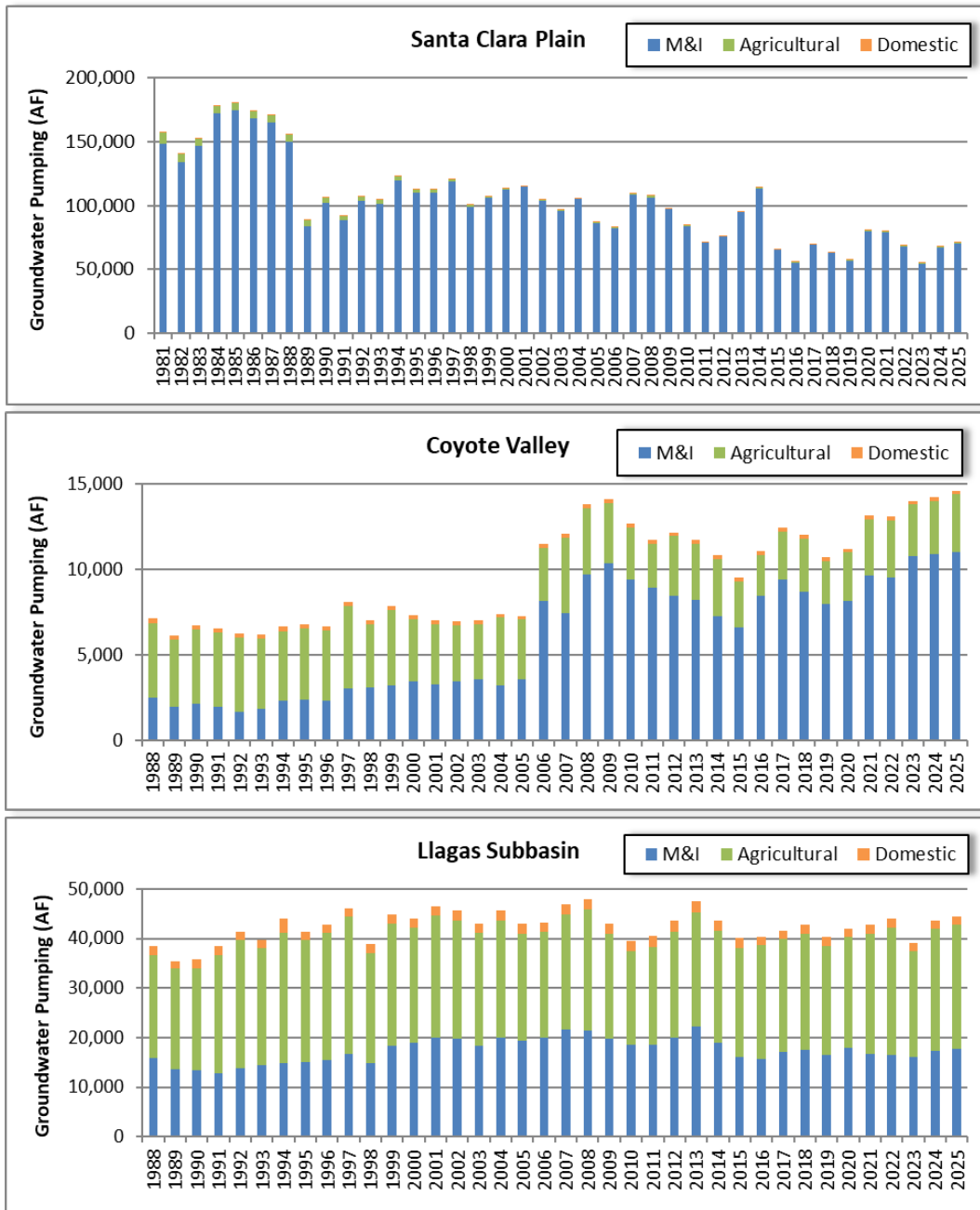
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Groundwater pumping and use patterns over time are shown in Figure B-3 for each groundwater management area. In the Santa Clara Plain, pumping dropped significantly in the late 1980s following completion of Valley Water's Santa Teresa Water Treatment Plant (WTP). Since then, pumping has averaged 94,000 AF per year but with significant variation based on hydrology and demands. Pumping spiked in the middle of the 2012–2016 drought to 115,000 AF in 2014. However, the water retailers and community responded to the Valley Water Board's calls for water use reduction, and pumping decreased significantly during the past nine years, averaging 66,100 AF per year. A notable increase in pumping in the Coyote Valley occurred in 2006 when a water retailer installed new wells and began extracting water to serve customers in the Santa Clara Plain. This increased the average annual pumping volume in Coyote Valley after 2006 by about 4,800 AF (Figure B-3). Since 2019, there has been a notable increasing pumping trend in Coyote Valley (Figure B-3). Pumping in the Llagas Subbasin has remained relatively stable over the period of record (Figure B-3).

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Figure B-3. Groundwater Pumping by Use Category

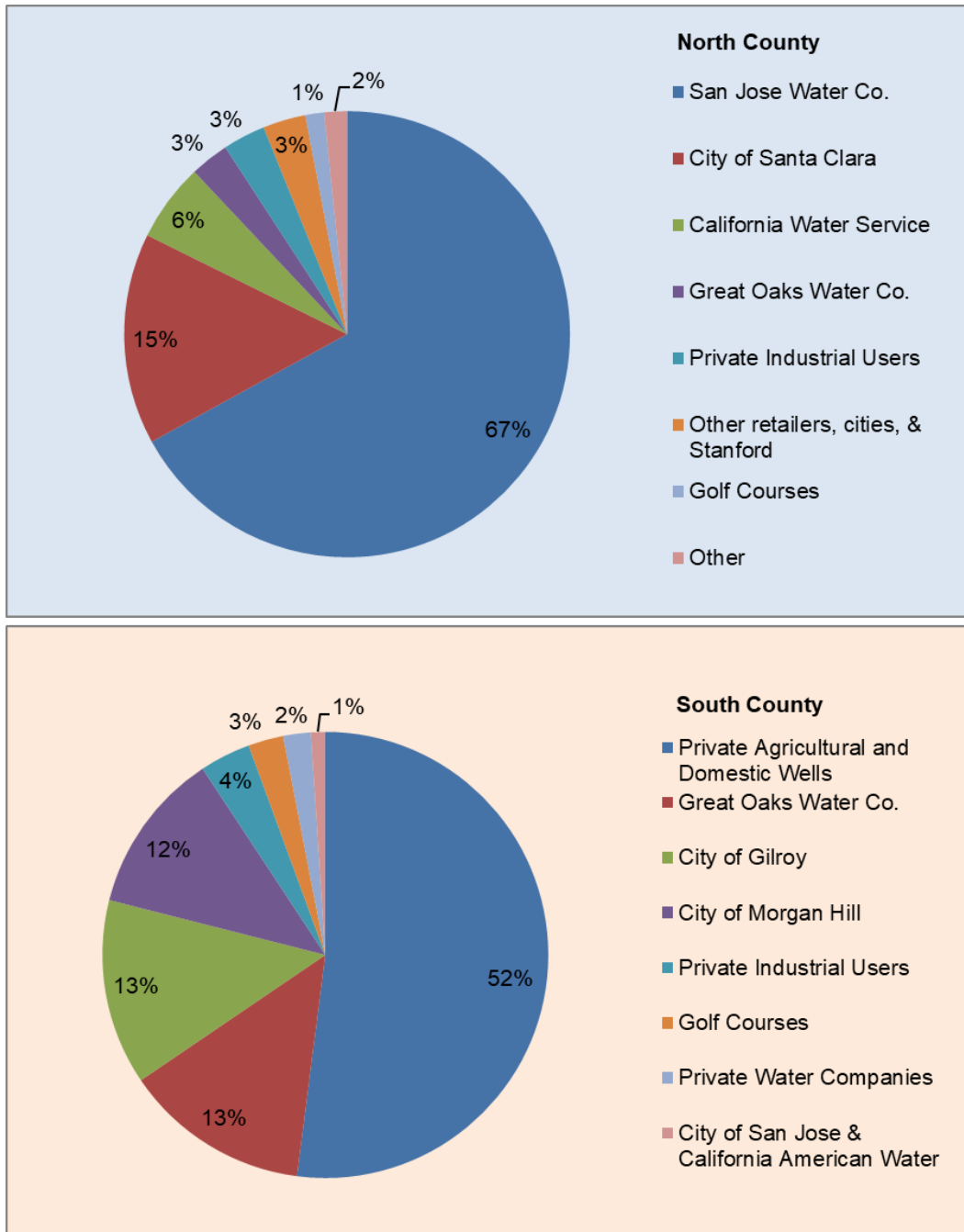


Major Groundwater Users – CY 2025

The largest groundwater users in North and South County are shown in Figure B-4. Water retailers are the primary users in North County, accounting for over 94% of all pumping in 2025. San Jose Water Company is the largest individual user, accounting for 67% of total North County pumping, followed by other retailers and a few large industrial users. Unlike North County, about 52% of pumping in South County was from thousands of individual pumpers including agricultural and domestic users. In South County, pumping by water retailers and water companies accounted for about 41% of groundwater use. Other large users include golf courses and industrial facilities.

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Figure B-4. Percent of Total Pumping by Major Groundwater Users in 2025



Notes: North County includes the Santa Clara Plain and South County includes Coyote Valley and the Llagas Subbasin.

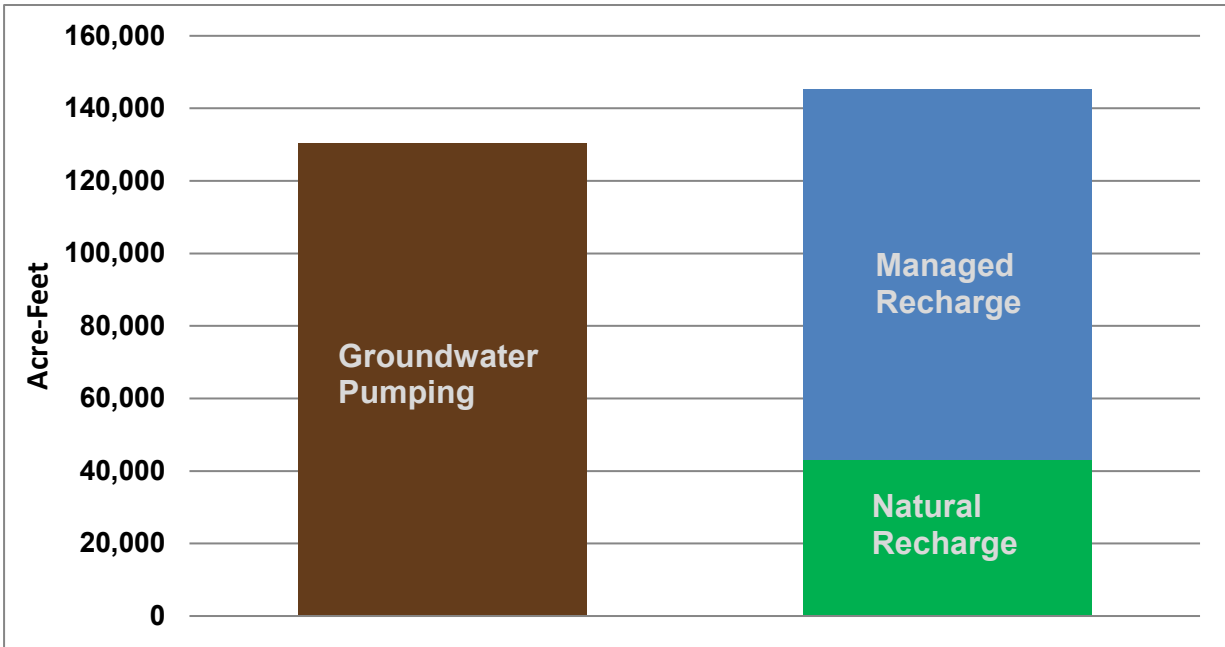
Managed Recharge – CY 2025

Total recharge exceeded groundwater pumping in CY 2025 (Figure B-5) due to the recent below average pumping, above average rainfall, and availability of surface water for managed recharge. Managed recharge is greater than natural recharge to compensate for groundwater pumping exceeding

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natural recharge on an annual basis.

Figure B-5. Countywide Groundwater Pumping and Recharge in CY 2025



Valley Water recharged 102,200 AF of local and imported surface water in 2025 (Table B-2), which is about the same as 2024 (102,100 AF), 5% more than the five-year (2021-2025) average (97,600 AF), and 9% more than the long-term average (1988-2025) of 93,600 AF. Valley Water operated an above-average managed recharge program in 2025 to help maintain healthy groundwater storage. Robust recharge was possible because of the above normal hydrologic conditions resulting in availability of substantial local surface water and imported water supplies⁵⁵. Countywide, most of the managed recharge (62%) occurred in-stream, with the remainder (38%) through percolation ponds (Table B-2).

Table B-2. CY 2025 Managed Recharge (AF)

Zone	In-Stream Recharge (Creeks/Coyote Pond)	Off-Stream Recharge (Recharge Ponds)	Total
North County	26,900	35,200	62,100
South County	36,900	3,200	40,100
Total	63,800	38,400	102,200

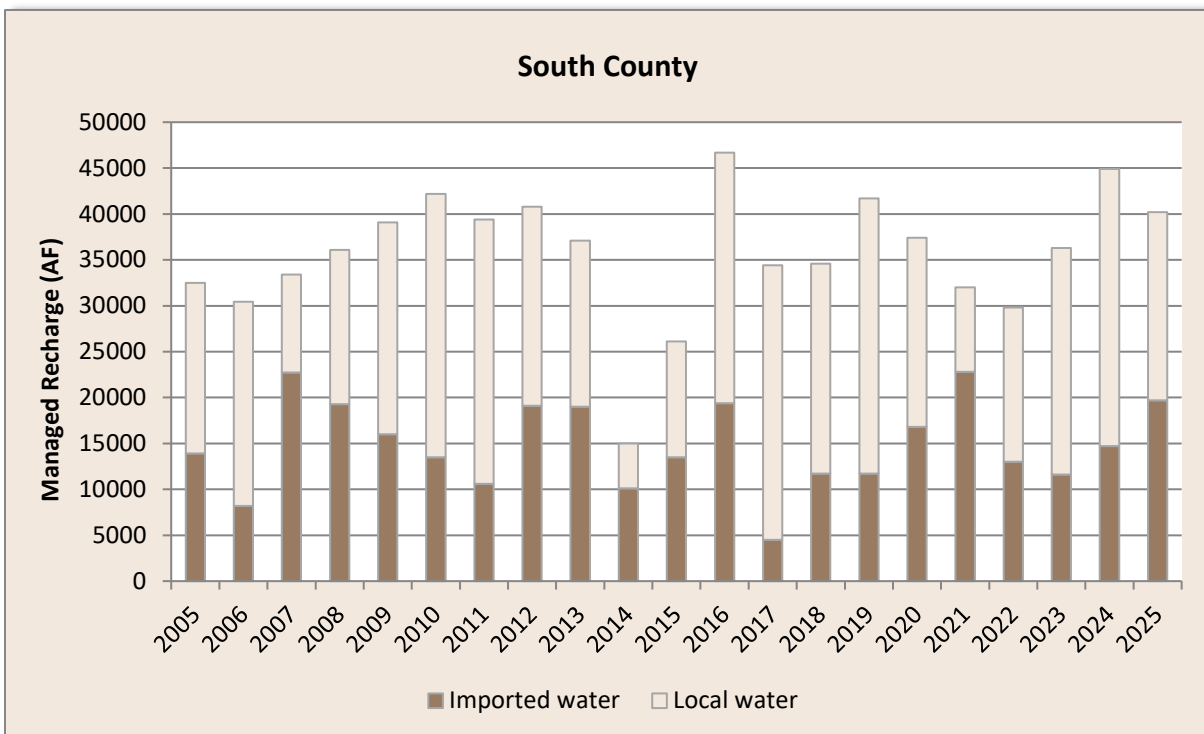
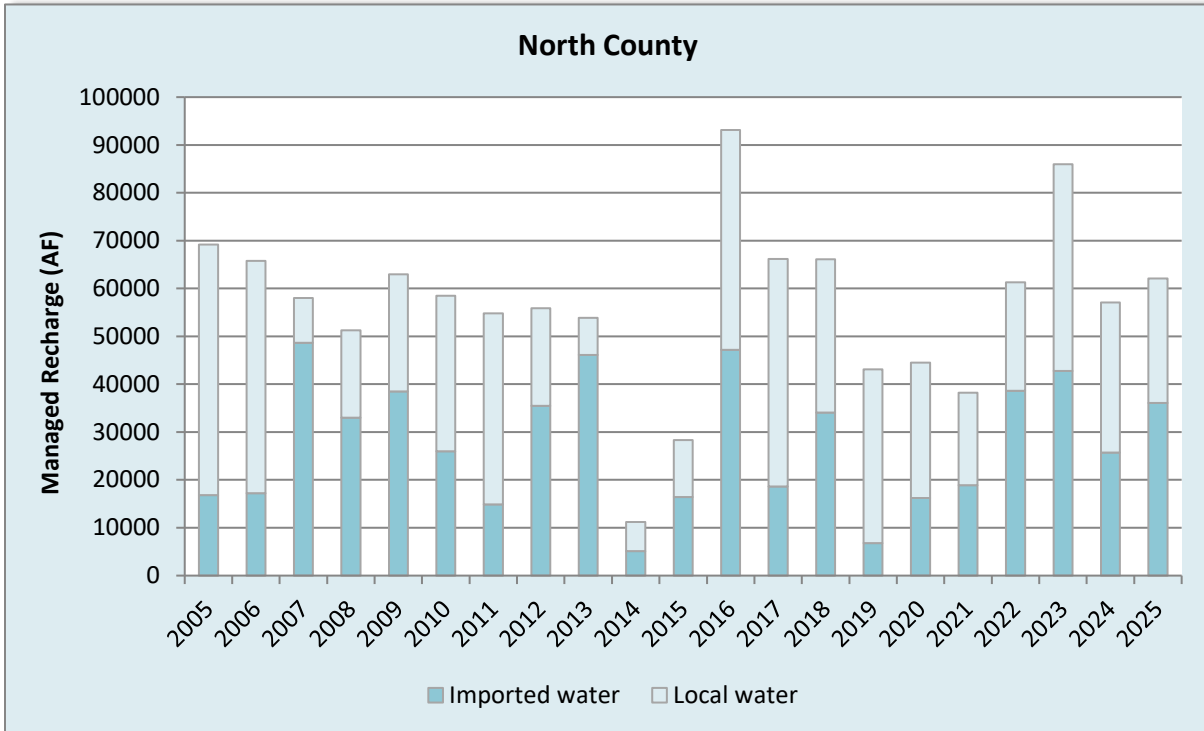
Notes: North County includes the Santa Clara Plain and South County includes Coyote Valley and the Llagas Subbasin.

⁵⁵ The final CY 2025 allocations to Valley Water as percentage of contract amounts were 80% Municipal & Industrial and 55% Agricultural from CVP and 50% from SWP.

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Countywide, imported water contributed 55% and local sources contributed 45% to total managed recharge in CY 2025 (Figure B-6). Local water sources account for 42% of managed recharge in North County and 51% of managed recharge in South County (Figure B-6).

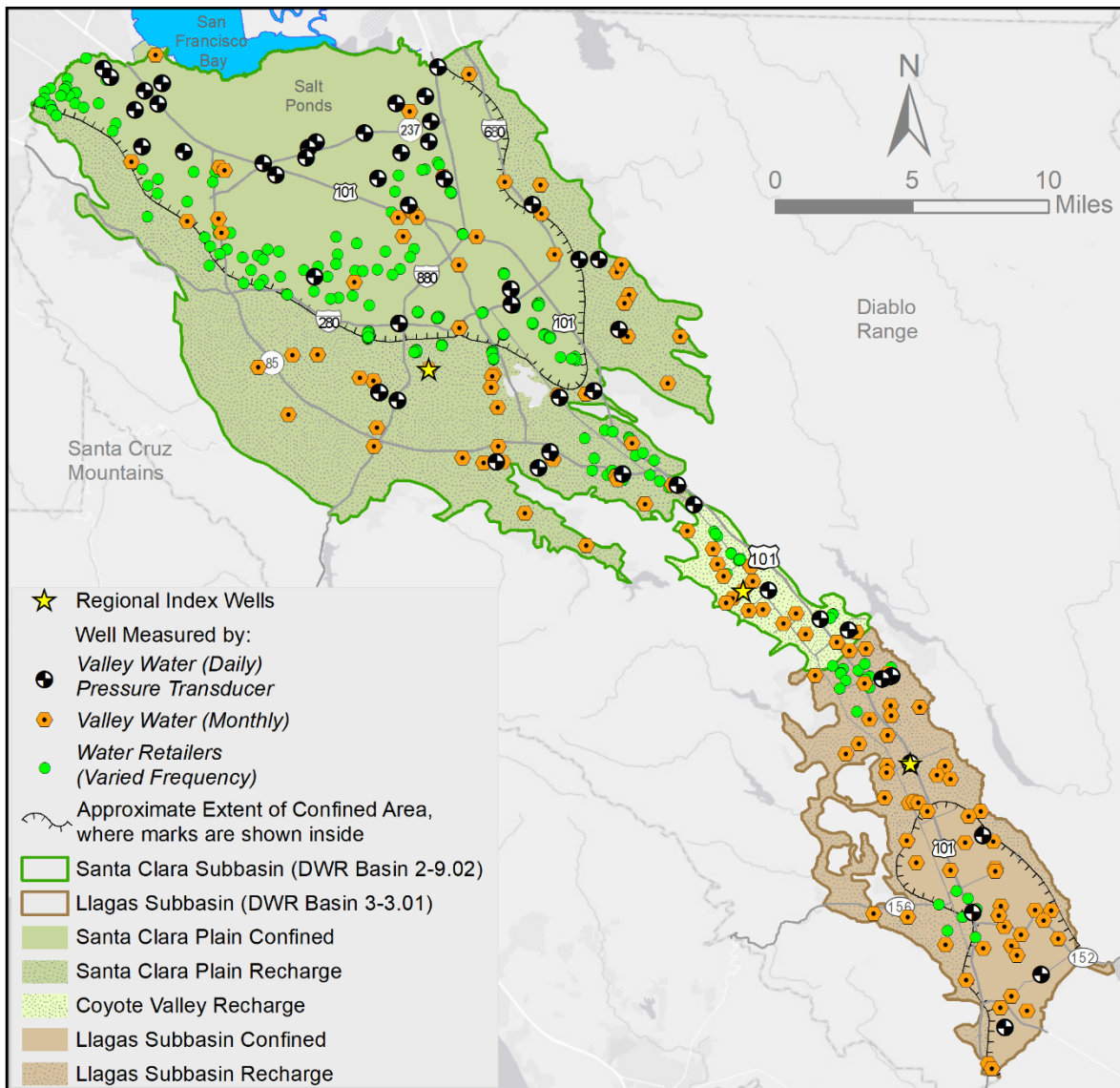
Figure B-6. Managed Recharge by Source – North County and South County



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Comprehensive and accurate groundwater level data allows Valley Water to evaluate storage conditions and supports sound operational decisions and water supply planning. In 2025, Valley Water measured depth to water at 231 wells on a daily to monthly basis and obtained similar data from 234 water retailer wells (Figure B-7). The wells that Valley Water monitors represent all critical areas and aquifers in each of the two subbasins. As the GSA for the Santa Clara and Llagas subbasins under SGMA, Valley Water has transferred all historical groundwater elevation data from the California Statewide Groundwater Elevation Monitoring (CASGEM) website to the Monitoring Network Module (MNM) on the DWR SGMA portal⁵⁶, including uploading 2025 groundwater elevation measurements to MNM.

Figure B-7. CY 2025 Groundwater Level Monitoring



⁵⁶ <https://sgma.water.ca.gov/portal/>

APPENDIX C

WY 2025 REGIONAL
GROUNDWATER QUALITY RESULTS

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APPENDIX C – WY 2025 REGIONAL GROUNDWATER QUALITY RESULTS

Table C-1a Summary of WY 2025 Water Quality Indicator Data for the Santa Clara Subbasin

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain								Santa Clara Subbasin, Coyote Valley				Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³				n	Min	Median	Max	MCL ⁷	SMCL ⁸
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max						
Aggressive Index (Corrosivity)	INDEX	--	--	--	--	48	11.34	12	12.48	2	12.5	12.5	12.5	--	--
Bicarbonate (as HCO ₃)	mg/L	19	140	328	724	70	130	240	435	7	181	234	357	--	--
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	19	115	269	594	18	138	213	357	5	148	193	292	--	--
Carbonate (as CO ₃)	mg/L	19	<10	<10	<10	70	<3	<5	<20	7	<3	<5	<20	--	--
Carbonate Alkalinity (as CaCO ₃)	mg/L	19	<10	<10	<10	18	<10	<10	<10	5	<10	<10	<10	--	--
Color	Color Units	--	--	--	--	53	<5	<5	5	2	<5	<5	<5	--	15
Dissolved Oxygen	mg/L	18	1.7	5.1	8.9	16	2.2	5.6	8.5	5	1.2	4.5	7.9	--	--
E. Coli (MPN)	MPN/100 ml	1	<1	<1	<1	1	<1	<1	<1	--	--	--	--	--	--
Foaming Agents (MBAS)	µg/L	1	<100	<100	<100	53	<50	<50	<50	2	<50	<50	<50	--	500
Hardness, Total (as CaCO ₃)	mg/L	24	117	334	659	73	<10	276	485	29	<10	268	337	--	--
Heterotrophic Plate Count	CFU/ml	1	1,400	1,400	1,400	1	840	840	840	--	--	--	--	--	--
Hydroxide (as OH)	mg/L	19	<10	<10	<10	70	<3	<5	<20	7	<3	<5	<20	--	--
Hydroxide Alkalinity (as CaCO ₃)	mg/L	19	<10	<10	<10	18	<10	<10	<10	5	<10	<10	<10	--	--
Langelier Index @ 60 C	INDEX	--	--	--	--	5	<0.08	<0.18	0.20	2	0.38	0.38	0.38	--	--
Langelier Index at Source Temp	INDEX	--	--	--	--	42	<0.03	0.06	0.40	--	--	--	--	--	--
Odor Threshold @ 60 C	TON	--	--	--	--	54	<1	<1	1	2	<1	<1	<1	--	3
Oxidation Reduction Potential (ORP)	mV	19	<22	71	178	18	<79	67	268	5	27	193	195	--	--
Source Temperature	C	19	16.0	19.7	22.1	18	17.4	19.7	23.4	5	18.6	20.1	22.1	--	--
Specific Conductance	µS/cm	39	366.2	727	1,490	106	45	655	1,190	24	502	664	1,430	--	(900)
Total Alkalinity (as CaCO ₃)	mg/L	19	115	269	594	70	130	210	380	7	148	207	292	--	--
Total Coliform (MPN)	MPN/100 ml	1	<1	<1	<1	1	<1	<1	<1	--	--	--	--	--	--
Turbidity	NTU	37	0.02	0.48	10.6	88	<0.1	0.37	13.1	12	<0.1	0.16	3.36	--	5
pH	pH Units	19	6.8	7.4	7.9	26	6.9	7.5	8.2	7	7.2	7.5	7.9	--	--
E. Coli (P/A)	P/A 100 ml	6		0 Present	6 Absent	3		0 Present	3 Absent	23		1 Present	22 Absent	--	--
Total Coliform (P/A) ⁹	P/A 100 ml	6		3 Present	3 Absent	3		0 Present	3 Absent	23		7 Present	16 Absent	--	--

Table C-1a Summary of WY 2025 Water Quality Indicator Data (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. CFU/ml = colony-forming unit per milliliter; µg/L = micrograms per liter; mg/L = milligrams per liter; P/A = present/absent per 100 ml; µS/cm = microSiemens per centimeter; MPN/100 ml = most probable number per 100 milliliters; NTU = Nephelometric Turbidity Units; TON = Threshold Odor Number.

2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.

3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.

4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.

5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <5) is shown when there are no quantified values at the lowest reporting limit.

6. For parameters with results reported at multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.

7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.

8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA. For SMCLs having a range, the lower, recommended threshold is listed in parentheses.

9. Total coliform and e. coli bacteria are regulated under the US EPA Total Coliform Rule, which identifies sampling requirements and compliance criteria based on the type of public water system. All wells with data in bacteria results in this table are private, domestic wells that are not subject to federal or state drinking water requirements.

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Table C-1b Summary of WY 2025 Water Quality Indicator Data for the Llagas Subbasin

Parameter	Units ¹	Llagas Subbasin								Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³				MCL ⁷	SMCL ⁸
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max		
Aggressive Index (Corrosivity)	INDEX	3	11.9	12	12.1	16	11.4	12	12.6	--	--
Bicarbonate (as HCO ₃)	mg/L	21	124	273.5	418	32	110	228	414.0	--	--
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	18	102	229	343	16	100	233.5	339	--	--
Carbonate (as CO ₃)	mg/L	21	<3	<10	<10	32	<3	<10	<10	--	--
Carbonate Alkalinity (as CaCO ₃)	mg/L	18	<10	<10	<10	16	<10	<10	<10	--	--
Color	Color Units	3	<5	<5	<5	17	<5	<5	7	--	15
Dissolved Oxygen	mg/L	18	2.3	6.8	9.7	15	3.5	6.6	9.0	--	--
E. Coli (MPN)	MPN/100 ml	1	<1	<1	<1	1	<1	<1	<1	--	--
Foaming Agents (MBAS)	µg/L	4	<50	<50	<50	17	<50	<50	<50	--	500
Hardness, Total (as CaCO ₃)	mg/L	47	153	282	535	88	<10	271	572	--	--
Heterotrophic Plate Count	CFU/ml	1	200	200	200	1	830	830	830	--	--
Hydroxide (as OH)	mg/L	21	<3	<10	<10	32	<3	<10	<10	--	--
Hydroxide Alkalinity (as CaCO ₃)	mg/L	18	<10	<10	<10	16	<10	<10	<10	--	--
Langelier Index @ 60 C	INDEX	3	<0.11	0.04	0.04	9	<0.015	0.56	0.79	--	--
Langelier Index at Source Temp	INDEX	--	--	--	--	2	<0.03	<0.04	<0.05	--	--
Odor Threshold @ 60 C	TON	3	<1	<1	<1	17	<1	<1	<1	--	3
Oxidation Reduction Potential (ORP)	mV	18	82	167	296	18	<17	224	301	--	--
Source Temperature	C	18	17.1	19.9	24.9	20	18.2	21.5	23.9	--	--
Specific Conductance	µS/cm	60	374	623	1,110	103	350	675	1,350	--	(900)
Total Alkalinity (as CaCO ₃)	mg/L	21	102	229	343	32	100	187	370	--	--
Total Coliform (MPN)	MPN/100 ml	1	1	1	1	1	<1	<1	<1	--	--
Turbidity	NTU	38	<0.1	0.44	22	49	<0.1	0.48	6.3	--	5
pH	pH Units	21	6.5	7.0	7.7	39	6.4	7.4	8.2	--	--
E. Coli (P/A)	P/A 100 ml	31	1 Present	30 Absent		68	1 Present	67 Absent		--	--
Total Coliform (P/A) ⁹	P/A 100 ml	31	10 Present	21 Absent		68	16 Present	52 Absent		--	--

Tables C-1b Summary of WY 2025 Water Quality Indicator Data (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. CFU/ml = colony-forming unit per milliliter; µg/L = micrograms per liter; mg/L = milligrams per liter; P/A = present/absent per 100 ml; µS/cm = microSiemens per centimeter; MPN/100 ml = most probable number per 100 milliliters; NTU = Nephelometric Turbidity Units; TON = Threshold Odor Number.

2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.

3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.

4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.

5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <5) is shown when there are no quantified values at the lowest reporting limit.

6. For parameters with results reported at multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.

7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.

8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA. For SMCLs having a range, the lower, recommended threshold is listed in parentheses.

9. Total coliform and e. coli bacteria are regulated under the US EPA Total Coliform Rule, which identifies sampling requirements and compliance criteria based on the type of public water system. All wells with data in bacteria results in this table are private, domestic wells that are not subject to federal or state drinking water requirements.

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Table C-2a Summary of WY 2025 Inorganic Data for the Santa Clara Subbasin

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain								Santa Clara Subbasin, Coyote Valley				Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³				n	Min	Median	Max	MCL ⁷	SMCL ⁸
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max						
Major and Minor Ions															
Bromide	mg/L	24	<0.1	0.16	0.55	21	<0.1	0.15	0.41	27	<0.1	0.14	0.32	--	--
Calcium	mg/L	19	27.5	73.4	149	85	16	64	122	7	7.3	56.25	77	--	--
Calcium (as CaCO ₃)	mg/L	19	69	183	373	18	40	145	303	5	18	129	154	--	--
Carbon Dioxide	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	mg/L	24	21	49	121	73	5	47	204	29	15	46	192	--	(250)
Cyanide	µg/L	2	<5	<5	<100	67	<1	<1	6	2	<4	<4	<4	150	--
Fluoride (natural source)	mg/L	24	0.11	0.17	0.47	175	<0.1	0.12	1.81	29	<0.1	0.17	0.26	2	--
Magnesium	mg/L	19	12	36	71	85	7	27	64	7	29	33	62	--	--
Perchlorate	µg/L	19	<1	<1	<1	96	<1	<1	3.9	9	<0.5	<1	2	6	--
Potassium	mg/L	19	<1	1.1	2.0	85	<1	1.3	4.0	7	<1	1.3	1.5	--	--
Sodium	mg/L	19	24	39	162	85	14	31	108	7	27	30	103	--	--
Sulfate	mg/L	24	28	55	159	82	1.1	41	84	29	2	50	89	--	(250)
Total Dissolved Solids (TDS)	mg/L	23	222	480	936	70	232	390	598	25	280	406	2,900	--	(500)
Nutrients															
Nitrate (as N)	mg/L	25	<0.1	1.7	15	377	<0.1	2.7	8.6	63	<0.1	3.2	24	10	--
Nitrate + Nitrite (as N)	mg/L	--	--	--	--	64	0.62	2.4	4.9	3	0.44	0.5	0.5	10	--
Nitrite (as N)	mg/L	24	<1	<1	<1	173	<0.05	<0.1	0.3	30	<0.05	<0.1	<0.1	1	--
Orthophosphate (as PO ₄)	mg/L	24	<0.1	0.08	1.3	105	<0.1	0.07	1.8	27	<0.1	<0.1	0.42	--	--
Trace Elements															
Aluminum	µg/L	19	<20	<20	47	90	<20	<50	91	7	<15	<20	<20	1,000	200
Antimony	µg/L	19	<1	<1	<1	90	<0.5	<6	<10	7	<0.5	<1	<1	6	--
Arsenic	µg/L	19	<2	<2	10	106	<0.5	<2	<20	7	<2	<2	2	10	--
Asbestos	MFL	--	--	--	--	10	<0.2	<0.2	<0.2	--	--	--	--	7	--
Barium	µg/L	19	32	120	330	97	<50	105	290	7	78	98	250	1,000	--
Beryllium	µg/L	19	<1	<1	<1	90	<0.5	<1	<10	7	<0.5	<1	<1	4	--
Boron	µg/L	19	100	163	1,230	38	<50	110	299	5	<100	122	145	--	--
Cadmium	µg/L	19	<1	<1	<1	90	<0.5	<1	<10	7	<0.25	<1	<1	5	--
Chromium	µg/L	19	<1	<1	3.9	90	<1	1.4	9.6	7	<1	1.6	2.5	50	--
Chromium 6 (Hexavalent)	µg/L	22	<0.1	0.4	5.6	252	<0.02	1.2	11	29	<0.1	1.8	7.6	10	--
Copper ¹⁰	µg/L	19	<1	<1	2	89	<1	<1	8	9	<1	<1	3	1,300	1,000
Iron	µg/L	19	<20	<20	230	116	<8	8	3,300	7	<20	<20	45	--	300
Lead ¹⁰	µg/L	19	<1	<1	<1	77	<1	<5	11	7	<1	<1	<1	15	--
Lithium	µg/L	--	--	--	--	5	<9	<9	<10	--	--	--	--	--	--
Manganese	µg/L	19	<1	3.2	1,080	90	<1	1.5	142	7	<1	<1	98	--	50
Mercury	µg/L	--	--	--	--	--	--	--	--	7	<0.3	<1	<1	2	--
Nickel	µg/L	19	<1	<1	2.1	90	<0.5	<10	79	7	<1	<1	1	100	--
Selenium	µg/L	19	<5	<5	<5	90	<0.5	<0.5	0.52	7	<5	<5	<5	50	--
Silica	mg/L	19	19	24	31	18	19	28	34	5	21	24	40	--	--
Silicon	mg/L	19	8.8	11	15	18	8.6	13	16	5	9.9	11	19	--	--
Silver	µg/L	19	<1	<1	<1	70	<1	<10	<10	7	<1	<1	<10	--	100
Strontium	µg/L	--	--	--	--	5	330	360	360	--	--	--	--	--	--
Thallium, Total	µg/L	19	<1	<1	<1	90	<0.5	<1	<1	7	<0.5	<1	<1	2	--
Vanadium, Total	µg/L	19	<1	1.8	4.8	27	<1	2.1	9.5	5	1.0	1.4	9.7	--	--
Zinc	µg/L	19	<10	<10	68	88	<10	<50	110	7	<10	<10	12	--	5,000

See summary notes and descriptions at the end of Table C-2.

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Table C-2b Summary of WY 2025 Inorganic Data for the Llagas Subbasin

Parameter	Units ¹	Llagas Subbasin								Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³				MCL ⁷	SMCL ⁸
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max		
Major and Minor Ions											
Bromide	mg/L	44	<0.1	0.14	0.31	72	<0.1	0.22	0.71	--	--
Calcium	mg/L	21	37	60	96	34	14	52	106	--	--
Calcium (as CaCO ₃)	mg/L	18	92	152	239	16	88	169	266	--	--
Chloride	mg/L	47	12	39	158	93	5.9	68	266	--	(250)
Cyanide	µg/L	4	<5	<5	<5	22	<4	<5	<100	150	--
Fluoride (natural source)	mg/L	47	<0.1	0.14	0.26	92	<0.1	0.15	0.37	2	--
Magnesium	mg/L	21	21	39	72	34	17	31	64	--	--
Perchlorate	µg/L	23	<1	<1	3.3	80	<0.5	0.74	4.7	6	--
Potassium	mg/L	21	<1	<1	1.5	34	<1	1.3	2.2	--	--
Sodium	mg/L	21	12	25	73	37	12	33	110	--	--
Sulfate	mg/L	47	12	34	148	93	4.4	36	110	--	(250)
Total Dissolved Solids (TDS)	mg/L	30	246	420	872	59	200	395	896	--	(500)
Nutrients											
Nitrate (as N)	mg/L	55	<0.1	5.5	33	265	<0.1	5.4	44	10	--
Nitrate + Nitrite (as N)	mg/L	3	0.69	2.6	4.5	22	<0.23	3.9	8	10	--
Nitrite (as N)	mg/L	47	<0.05	<0.1	<0.1	105	<0.05	<0.1	<0.4	1	--
Orthophosphate (as PO ₄)	mg/L	44	<0.1	<0.1	0.13	72	<0.1	<0.1	0.46	--	--
Total Kjeldahl Nitrogen (as N)	mg/L	--	--	--	--	7	<0.5	<1.5	<1.5	--	--
Total Nitrogen (as N)	mg/L	--	--	--	--	7	<0.5	<1.5	<1.5	--	--
Trace Elements											
Aluminum	µg/L	21	<20	<20	45	38	<20	<20	91	1,000	200
Antimony	µg/L	21	<1	<1	<2	36	<1	<2	<6	6	--
Arsenic	µg/L	21	<2	<2	<2	36	<2	<2	3	10	--
Asbestos	MFL	--	--	--	--	4	2.03	2.03	2.03	7	--
Barium	µg/L	21	12	110	300	36	15	99	470	1,000	--
Beryllium	µg/L	21	<1	<1	<1	36	<1	<1	<1	4	--
Boron	µg/L	18	<100	122	192	25	<30	77	3,000	--	--
Cadmium	µg/L	21	<1	<1	<1	36	<1	<1	<1	5	--
Chromium	µg/L	21	<1	1.4	4.8	36	<1	1.1	3.2	50	--
Chromium 6 (Hexavalent)	µg/L	21	<0.05	0.84	4.9	84	<0.05	1.2	7.1	10	--
Copper ¹⁰	µg/L	21	<1	0.51	9.6	34	<1	1.9	39	1,300	1,000
Iron	µg/L	21	<20	14	71	40	<1	0.6	270	--	300
Lead ¹⁰	µg/L	21	<1	<1	2.3	36	<1	<1	4.0	15	--
Manganese	µg/L	21	<1	0.26	18	34	<1	0.20	36	--	50
Mercury	µg/L	21	<0.2	<1	<1	36	<0.2	<1	<1	2	--
Nickel	µg/L	21	<1	<1	2.7	36	<1	<1	5.7	100	--
Selenium	µg/L	21	<2	<5	<5	36	<2	<5	9	50	--

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Table C-2b Summary of WY 2025 Inorganic Data for the Llagas Subbasin (Cont.)

Parameter	Units ¹	Llagas Subbasin								Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³				MCL ⁷	SMCL ⁸
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max		
Silica	mg/L	18	21	30	42	18	23	28.9	46.5	--	--
Silicon	mg/L	18	9.9	14	20	16	11	14	22	--	--
Silver	µg/L	21	<1	<1	<10	34	<1	<1	<10	--	100
Thallium, Total	µg/L	21	<1	<1	<1	36	<1	<1	<1	2	--
Vanadium, Total	µg/L	18	<1	2.2	14	16	<1	2.2	13	--	--
Zinc	µg/L	21	<10	3.1	150	34	<10	3.8	500	--	5,000

Table C-2 Summary of WY 2025 Inorganic Data (Notes)

Table includes data for wells monitored by the Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. mg/L = milligrams per liter; µg/L = micrograms per liter; MFL = million fibers per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <5) is shown when there are no quantified values at the lowest reporting limit.
6. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA. For SMCLs having a range, the lower, recommended threshold is listed in parentheses.
9. In October 2024, an MCL of 10 parts per billion (ppb) (equivalent to 10 µg/L) for hexavalent chromium (chromium-6) in drinking water took effect.
10. Lead and copper do not have primary MCLs but have "action levels" of 15 and 1,300 µg/L, respectively. These substances are regulated by the state for public water systems since they can adversely affect public health.

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Table C-3a Summary of WY 2025 Volatile Organic Compound (VOC) Data (Detect/Non-Detect) for the Santa Clara Subbasin

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain						Santa Clara Subbasin, Coyote Valley			Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			n	Result	RL	MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL					
1,1,1,2-Tetrachloroethane	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
1,1,1-Trichloroethane	µg/L	1	ND	0.5	110	D	0.5	4	ND	0.5	200	--
1,1,2,2-Tetrachloroethane	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	1	--
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	µg/L	1	ND	2	110	ND	10	4	ND	2	1,200	--
1,1,2-Trichloroethane	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	5	--
1,1-Dichloroethane	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	5	--
1,1-Dichloroethene	µg/L	1	ND	1	110	D	0.5	4	ND	1	6	--
1,1-Dichloropropene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
1,2,3-Trichlorobenzene	µg/L	1	ND	0.50	33	ND	0.5	--	--	--	--	--
1,2,3-Trichloropropane	µg/L	3	ND	0.005	40	ND	0.005	11	ND	0.01	0.005	--
1,2,4-Trichlorobenzene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	5	--
1,2,4-Trimethylbenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
1,2-Dichlorobenzene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	600	--
1,2-Dichloroethane	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	0.5	--
1,2-Dichloropropane	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	5	--
1,3,5-Trimethylbenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
1,3-Dichlorobenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
1,3-Dichloropropane	µg/L	1	ND	0.5	25	ND	0.5	--	--	--	--	--
1,3-Dichloropropene (Total)	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	0.5	--
1,4-Dichlorobenzene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	5	--
1-Phenylpropane (n-Propylbenzene)	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
2,2-Dichloropropane	µg/L	1	ND	0.5	22	ND	0.5	--	--	--	--	--
2-Chlorotoluene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
4-Chlorotoluene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
4-Methyl-2-Pentanone	µg/L	--	--	--	24	ND	5	--	--	--	--	--
Acetone	µg/L	--	--	--	13	ND	40	--	--	--	--	--
Benzene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	1	--
Benzo (a) Pyrene	µg/L	2	ND	0.01	35	ND	0.1	1	ND	0.01	0	--
Bromobenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
Bromochloromethane	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
Bromodichloromethane (THM)	µg/L	1	ND	0.5	33	ND	1	--	--	--	--	--
Bromoform (THM)	µg/L	1	ND	0.5	33	ND	1	--	--	--	--	--
Bromomethane	µg/L	1	ND	0.5	24	ND	0.5	--	--	--	--	--
Carbon Disulfide	µg/L	--	--	--	14	ND	0.5	--	--	--	--	--
Carbon Tetrachloride	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	0.5	--
Chlorobenzene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	70	--
Chloroethane	µg/L	1	ND	0.5	22	ND	0.5	--	--	--	--	--
Chloroform (THM)	µg/L	1	ND	0.5	33	ND	1	--	--	--	--	--
Chloromethane	µg/L	1	ND	0.5	24	ND	0.5	--	--	--	--	--
cis-1,2-Dichloroethene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	6	--
cis-1,3-Dichloropropene	µg/L	1	ND	0.5	24	ND	0.5	4	ND	0.5	--	--
Di(2-Ethylhexyl) Adipate	µg/L	2	ND	1	35	ND	5	1	ND	1	400	--
Di(2-Ethylhexyl) Phthalate	µg/L	2	ND	0.5	35	ND	3	1	ND	0.5	4	--
Dibromoacetic Acid (DBAA)	µg/L	1	ND	1	--	--	--	--	--	--	--	--
Dibromochloromethane (THM)	µg/L	1	ND	0.5	33	ND	1	--	--	--	--	--
Dibromochloropropane (DBCP)	µg/L	3	ND	0.01	20	ND	0.01	1	ND	0.01	0	--
Dibromomethane	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--

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Table C-3a Summary of WY 2025 Volatile Organic Compound (VOC) Data (Detect/Non-Detect) for the Santa Clara Subbasin (Cont.)

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain						Santa Clara Subbasin, Coyote Valley			Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			n	Result	RL	MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL					
Dichloroacetic Acid (DCAA)	µg/L	1	ND	1	--	--	--	--	--	--	--	--
Dichlorodifluoromethane (Freon 12)	µg/L	1	ND	0.5	33	D	0.5	--	--	--	--	--
Diisopropyl Ether	µg/L	1	ND	2	32	ND	2	--	--	--	--	--
Ethylbenzene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	300	--
Ethylene Dibromide (EDB)	µg/L	3	ND	0.02	23	ND	0.02	1	ND	0.02	0	--
Ethylenediamine Tetra-Acetic Acid (EDTA)	mg/L	1	ND	0.1	1	ND	0.1	--	--	--	--	--
Ethyl-Tert-Butyl Ether	µg/L	1	ND	2	33	ND	2	--	--	--	--	--
Haloacetic Acids (HAAS)	µg/L	1	ND	1	--	--	--	--	--	--	60	--
Hexachlorobutadiene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
Isopropylbenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
m,p-Xylene	µg/L	1	ND	0.5	33	ND	0.5	4	ND	0.5	--	--
Methyl Ethyl Ketone (MEK, Butanone)	µg/L	--	--	--	15	ND	5	--	--	--	--	--
Methyl Tert-Butyl Ether (MTBE)	µg/L	1	ND	2	116	ND	3	4	ND	0.5	13	5
Methylene Chloride	µg/L	1	ND	0.5	110	ND	1	4	ND	0.5	5	--
Monobromoacetic Acid (MBAA)	µg/L	1	ND	1	--	--	--	--	--	--	--	--
Monochloroacetic Acid (MCAA)	µg/L	1	ND	2	--	--	--	--	--	--	--	--
Naphthalene	µg/L	1	ND	0.5	33	ND	1	--	--	--	--	--
n-Butylbenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
Nitritotriacetic Acid (NTA)	mg/L	1	ND	0.1	1	ND	0.1	--	--	--	--	--
n-Nitrosodiethylamine (NDEA)	ng/L	1	ND	2	1	ND	2	--	--	--	--	--
n-Nitrosodimethylamine (NDMA)	ng/L	1	ND	2	1	ND	2	--	--	--	--	--
n-Nitrosodi-n-Butylamine (NDBA)	ng/L	1	ND	2	1	ND	2	--	--	--	--	--
n-Nitrosodi-n-Propylamine (NDPA)	ng/L	1	ND	2	1	ND	2	--	--	--	--	--
n-Nitrosomethylethylamine (NMEA)	ng/L	1	ND	2	1	ND	2	--	--	--	--	--
n-Nitrosopiperidine (NPIP)	ng/L	1	ND	2	1	ND	2	--	--	--	--	--
n-Nitrosopyrrolidine (NPYR)	ng/L	1	D	2.5	1	ND	2	--	--	--	--	--
o-Xylene	µg/L	1	ND	0.5	33	ND	0.5	4	ND	0.5	--	--
PCB-1016	µg/L	--	--	--	5	ND	0.1	--	--	--	--	--
PCB-1221	µg/L	--	--	--	5	ND	0.1	--	--	--	--	--
PCB-1232	µg/L	--	--	--	5	ND	0.1	--	--	--	--	--
PCB-1242	µg/L	--	--	--	5	ND	0.1	--	--	--	--	--
PCB-1248	µg/L	--	--	--	5	ND	0.1	--	--	--	--	--
PCB-1254	µg/L	--	--	--	5	ND	0.1	--	--	--	--	--
PCB-1260	µg/L	--	--	--	5	ND	0.1	--	--	--	--	--
p-Isopropyltoluene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
sec-Butylbenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
Styrene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	100	--
Tert-Amyl Methyl Ether (TAME)	µg/L	1	ND	2	33	ND	3	--	--	--	--	--
Tert-Butylbenzene	µg/L	1	ND	0.5	33	ND	0.5	--	--	--	--	--
Tertiary Butyl Alcohol (TBA)	µg/L	1	ND	2	23	ND	4	--	--	--	--	--
Tetrachloroethene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	5	--
Toluene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	150	--
Total polychlorinated biphenyls (PCB)	µg/L	2	ND	0.01	22	ND	0.5	1	ND	0.01	0.5	--
Total Trihalomethanes	µg/L	1	ND	0.5	21	ND	4	--	--	--	80	--
trans-1,2-Dichloroethene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	10	--
trans-1,3-Dichloropropene	µg/L	1	ND	0.5	24	ND	0.5	4	ND	0.5	--	--
Trichloroacetic Acid (TCAA)	µg/L	1	ND	1	--	--	--	--	--	--	--	--
Trichloroethene	µg/L	1	ND	0.5	110	ND	0.5	4	ND	0.5	5	--
Trichlorofluoromethane (Freon 11)	µg/L	1	ND	2.5	110	ND	5	4	ND	5	150	--
Vinyl Chloride	µg/L	1	ND	0.5	--	--	--	4	ND	0.5	0.5	--
Xylenes, Total	µg/L	1	ND	0.5	--	--	--	4	ND	0.5	1,750	--

See summary notes and descriptions at the end of Table C-3.

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Table C-3b Summary of WY 2025 Volatile Organic Compound (VOC) Data (Detect/Non-Detect) for the Llagas Subbasin

Parameter	Units ¹	Llagas Subbasin						Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL		
1,1,1,2-Tetrachloroethane	µg/L	1	ND	0.5	1	ND	0.5	--	--
1,1,1-Trichloroethane	µg/L	1	ND	0.5	52	ND	0.5	200	--
1,1,2,2-Tetrachloroethane	µg/L	1	ND	0.5	52	ND	0.5	1	--
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	µg/L	1	ND	2	52	ND	10	1,200	--
1,1,2-Trichloroethane	µg/L	1	ND	0.5	52	ND	0.5	5	--
1,1-Dichloroethane	µg/L	1	ND	0.5	52	ND	0.5	5	--
1,1-Dichloroethene	µg/L	1	ND	1	52	ND	1	6	--
1,1-Dichloropropene	µg/L	1	ND	0.5	1	ND	0.5	--	--
1,2,3-Trichlorobenzene	µg/L	1	ND	0.5	3	ND	0.5	--	--
1,2,3-Trichloropropane	µg/L	4	ND	0.005	39	ND	0.005	0.005	--
1,2,4-Trichlorobenzene	µg/L	1	ND	0.5	52	ND	0.5	5	--
1,2,4-Trimethylbenzene	µg/L	1	ND	0.5	3	ND	0.5	--	--
1,2-Dichlorobenzene	µg/L	1	ND	0.5	52	ND	0.5	600	--
1,2-Dichloroethane	µg/L	1	ND	0.5	52	ND	0.5	0.5	--
1,2-Dichloropropane	µg/L	1	ND	0.5	52	ND	0.5	5	--
1,3,5-Trimethylbenzene	µg/L	1	ND	0.5	1	ND	0.5	--	--
1,3-Dichlorobenzene	µg/L	1	ND	0.5	1	ND	0.5	--	--
1,3-Dichloropropane	µg/L	1	ND	0.5	1	ND	0.5	--	--
1,3-Dichloropropene (Total)	µg/L	1	ND	0.5	52	ND	0.5	0.5	--
1,4-Dichlorobenzene	µg/L	1	ND	0.5	52	ND	0.5	5	--
1-Phenylpropane (n-Propylbenzene)	µg/L	1	ND	0.5	3	ND	0.5	--	--
2,2-Dichloropropane	µg/L	1	ND	0.5	1	ND	0.5	--	--
2-Chlorotoluene	µg/L	1	ND	0.5	1	ND	0.5	--	--
4-Chlorotoluene	µg/L	1	ND	0.5	1	ND	0.5	--	--
Acetaldehyde	µg/L	--	--	--	1	ND	5.2	--	--
Benzene	µg/L	1	ND	0.5	52	ND	0.5	1	--
Benzo (a) Pyrene	µg/L	--	--	--	14	ND	0.1	0	--
Bromobenzene	µg/L	1	ND	0.5	1	ND	0.5	--	--
Bromochloromethane	µg/L	1	ND	0.5	1	ND	0.5	--	--
Bromodichloromethane (THM)	µg/L	1	ND	0.5	3	ND	1	--	--
Bromoform (THM)	µg/L	1	ND	0.5	3	ND	1	--	--
Bromomethane	µg/L	1	ND	0.5	1	ND	0.5	--	--
Carbon Tetrachloride	µg/L	1	ND	0.5	52	ND	0.5	1	--
Chlorobenzene	µg/L	1	ND	0.5	52	ND	0.5	70	--
Chloroethane	µg/L	1	ND	0.5	1	ND	0.5	--	--
Chloroform (THM)	µg/L	1	ND	0.5	3	ND	1	--	--
Chloromethane	µg/L	1	ND	0.5	3	ND	0.5	--	--
cis-1,2-Dichloroethene	µg/L	1	ND	0.5	52	ND	0.5	6	--
cis-1,3-Dichloropropene	µg/L	1	ND	0.5	41	ND	0.5	--	--

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Table C-3b Summary of WY 2025 Volatile Organic Compound (VOC) Data (Detect/Non-Detect) for the Llagas Subbasin (Cont.)

Parameter	Units ¹	Llagas Subbasin						Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL		
Di(2-Ethylhexyl) Adipate	µg/L	--	--	--	14	ND	5	400	--
Di(2-Ethylhexyl) Phthalate	µg/L	--	--	--	14	ND	3	4	--
Dibromoacetic Acid (DBAA)	µg/L	1	ND	1	3	ND	1	--	--
Dibromochloromethane (THM)	µg/L	1	ND	0.5	3	ND	1	--	--
Dibromochloropropane (DBCP)	µg/L	--	--	--	13	ND	0.01	0.2	--
Dibromomethane	µg/L	1	ND	0.5	1	ND	0.5	--	--
Dichloroacetic Acid (DCAA)	µg/L	1	ND	1	3	ND	1	--	--
Dichlorodifluoromethane (Freon 12)	µg/L	1	ND	0.5	3	ND	0.5	--	--
Diisopropyl Ether	µg/L	1	ND	2	1	ND	2	--	--
Ethylbenzene	µg/L	1	ND	0.5	52	ND	0.5	300	--
Ethylene Dibromide (EDB)	µg/L	--	--	--	13	ND	0.02	0	--
Ethylenediamine Tetra-Acetic Acid (EDTA)	mg/L	1	ND	0.1	1	ND	0.1	--	--
Ethyl-Tert-Butyl Ether	µg/L	1	ND	2	3	ND	3	--	--
Formaldehyde	mg/L	--	--	--	3	ND	0.0052	--	--
Glyoxal	µg/L	--	--	--	1	ND	5.2	--	--
Haloacetic Acids (HAA5)	µg/L	1	ND	1	3	ND	6	60	--
Hexachlorobutadiene	µg/L	1	ND	0.5	1	ND	0.5	--	--
Isopropylbenzene	µg/L	1	ND	0.5	3	ND	0.5	--	--
m,p-Xylene	µg/L	1	ND	0.5	41	ND	0.5	--	--
Methyl Tert-Butyl Ether (MTBE)	µg/L	1	ND	2	52	ND	3	13	5
Methylene Chloride	µg/L	1	ND	0.5	52	ND	0.5	5	--
Monobromoacetic Acid (MBAA)	µg/L	1	ND	1	3	ND	1	--	--
Monochloroacetic Acid (MCAA)	µg/L	1	ND	2	3	ND	2	--	--
Naphthalene	µg/L	1	ND	0.5	1	ND	0.5	--	--
n-Butylbenzene	µg/L	1	ND	0.5	3	ND	0.5	--	--
Nitrilotriacetic Acid (NTA)	mg/L	1	ND	0.1	1	ND	0.1	--	--
n-Nitrosodiethylamine (NDEA)	ng/L	1	ND	2	1	ND	2	--	--
n-Nitrosodimethylamine (NDMA)	ng/L	1	ND	2	1	ND	2	--	--
n-Nitrosodi-n-Butylamine (NDBA)	ng/L	1	ND	2	1	ND	2	--	--
n-Nitrosodi-n-Propylamine (NDPA)	ng/L	1	ND	2	1	ND	2	--	--
n-Nitrosomethylethylamine (NMEA)	ng/L	1	ND	2	1	ND	2	--	--
n-Nitrosopiperidine (NPIP)	ng/L	1	ND	2	1	ND	2	--	--
n-Nitrosopyrrolidine (NPYR)	ng/L	1	ND	2	1	ND	2	--	--
o-Xylene	µg/L	1	ND	1	41	ND	1	--	--
p-Isopropyltoluene	µg/L	1	ND	0.5	3	ND	0.5	--	--
sec-Butylbenzene	µg/L	1	ND	0.5	3	ND	0.5	--	--
Styrene	µg/L	1	ND	0.5	52	ND	0.5	100	--
Tert-Amyl Methyl Ether (TAME)	µg/L	1	ND	2	3	ND	3	--	--
Tert-Butylbenzene	µg/L	1	ND	0.5	3	ND	0.5	--	--

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Table C-3b Summary of WY 2025 Volatile Organic Compound (VOC) Data (Detect/Non-Detect) for the Llagas Subbasin (Cont.)

Parameter	Units ¹	Llagas Subbasin						Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL		
Tertiary Butyl Alcohol (TBA)	µg/L	1	ND	2	1	ND	2	--	--
Tetrachloroethene	µg/L	1	ND	0.5	52	D	0.5	5	--
Toluene	µg/L	1	ND	0.5	52	ND	0.5	150	--
Total polychlorinated biphenyls (PCB)	µg/L	--	--	--	14	ND	0.5	1	--
Total Trihalomethanes	µg/L	1	ND	0.5	1	ND	0.5	80	--
trans-1,2-Dichloroethene	µg/L	1	ND	0.5	52	ND	0.5	10	--
trans-1,3-Dichloropropene	µg/L	1	ND	0.5	41	ND	0.5	--	--
Trichloroacetic Acid (TCAA)	µg/L	1	ND	1	3	ND	1	--	--
Trichloroethene	µg/L	1	ND	0.5	52	ND	0.5	5	--
Trichlorofluoromethane (Freon 11)	µg/L	1	ND	2.5	52	ND	5	150	--
Vinyl Chloride	µg/L	1	ND	1	52	ND	1	1	--
Xylenes, Total	µg/L	1	ND	0.5	52	ND	0.5	1,750	--

Table C-3 Summary of WY 2025 Volatile Organic Compound (VOC) Data (Detect/Non-Detect) (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented. Unless construction is known, public water system wells are assumed to represent the principal zone, as these are typically deep wells.

1. µg/L = micrograms per liter; mg/L = milligrams per liter; ng/L = nanograms per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. ND= not detected above laboratory reporting limit in any samples. D = detection above reporting limit in one or more samples (see Table C-4 for detection results).
6. RL = Laboratory reporting limit. In the case of multiple reporting limits, the highest limit is shown. NA is shown if the reporting limit is not available.
7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA.

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Table C-4a Summary of WY 2025 Volatile Organic Compounds (VOCs) Detections for the Santa Clara Subbasin

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain								Santa Clara Subbasin, Coyote Valley				Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³				n	Min	Median	Max	MCL ⁷	SMCL ⁸
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max						
1,1,1-Trichloroethane	µg/L	--	--	--	--	110	<0.4	<0.5	2.7	--	--	--	--	200	--
1,1-Dichloroethene	µg/L	--	--	--	--	110	<0.4	<0.5	3.7	--	--	--	--	6	--
Dichlorodifluoromethane (Freon 12)	µg/L	--	--	--	--	33	<0.4	<0.5	2.6	--	--	--	--	--	--
n-Nitrosopyrrolidine (NPYR)	ng/L	1	2.5	2.5	2.5	--	--	--	--	--	--	--	--	--	--

Table C-4a Summary of WY 2025 Volatile Organic Compounds (VOCs) Detections (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. µg/L = micrograms per liter; mg/L = milligrams per liter; ng/L = nanograms per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <5) is shown when there are no quantified values at the lowest reporting limit.
6. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate method.
7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA.

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Table C-4b Summary of WY 2025 Volatile Organic Compounds (VOCs) Detections for the Llagas Subbasin

Parameter	Units ¹	Llagas Subbasin								Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³					
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max	MCL ⁷	SMCL ⁸
Tetrachloroethene	µg/L	--	--	--	--	52	<0.33	<0.5	1.5	5	--

Table C-4b Summary of WY 2025 Volatile Organic Compounds (VOCs) Detections (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. µg/L = micrograms per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <5) is shown when there are no quantified values at the lowest reporting limit.
6. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate method.
7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA.

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Table C-5a Summary of WY 2025 Pesticide Data (Detect/Non-Detect) for the Santa Clara Subbasin

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain						Santa Clara Subbasin, Coyote Valley			Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			n	Result	RL	MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL					
2,3,7,8-TCDD (Dioxin)	µg/L	2	ND	0.000005	24	ND	0.000005	1	ND	0.000005	0.00003	--
2,4,5-T	µg/L	--	--	--	7	ND	1	2	ND	1	--	--
2,4,5-TP (Silvex)	µg/L	3	ND	1	31	ND	1	3	ND	1	50	--
2,4-D	µg/L	3	ND	10	31	ND	10	4	ND	10	70	--
2,4-DB	µg/L	--	--	--	2	ND	1	--	--	--	--	--
3-Hydroxycarbofuran	µg/L	2	ND	2	21	ND	3	1	ND	2	--	--
4,4-DDD	µg/L	--	--	--	2	ND	0.005	--	--	--	--	--
4,4-DDE	µg/L	--	--	--	2	ND	0.0051	--	--	--	--	--
4,4-DDT	µg/L	--	--	--	2	ND	0.005	--	--	--	--	--
Alachlor	µg/L	2	ND	0.05	37	ND	1	3	ND	1	2	--
Aldicarb	µg/L	2	ND	2	21	ND	3	1	ND	2	--	--
Aldicarb Sulfone	µg/L	2	ND	2	21	ND	2	1	ND	2	--	--
Aldicarb Sulfoxide	µg/L	2	ND	2	21	ND	3	1	ND	2	--	--
Aldrin	µg/L	2	ND	0.01	19	ND	0.075	1	ND	0.01	--	--
alpha-BHC	µg/L	--	--	--	2	ND	0.005	--	--	--	--	--
Atrazine	µg/L	2	ND	0.05	37	ND	0.5	3	ND	0.5	1	--
Bentazon	µg/L	3	ND	2	31	ND	2	3	ND	2	18	--
Beta-BHC	µg/L	--	--	--	2	ND	0.0051	--	--	--	--	--
Bromacil	µg/L	--	--	--	26	ND	10	--	--	--	--	--
Butachlor	µg/L	--	--	--	28	ND	0.38	--	--	--	--	--
Carbaryl	µg/L	2	ND	2	21	ND	5	1	ND	2	--	--
Carbofuran	µg/L	2	ND	2	24	ND	5	1	ND	2	18	--
Chlordane	µg/L	2	ND	0.1	22	ND	0.1	1	ND	0.1	0.1	--
Dalapon	µg/L	3	ND	10	31	ND	100	3	ND	10	200	--
DCPA (Total Di & Mono Acid Degradates)	µg/L	--	--	--	2	ND	1	--	--	--	--	--
Delta-BHC	µg/L	--	--	--	2	ND	0.0051	--	--	--	--	--
Diazinon	µg/L	--	--	--	26	ND	0.3	--	--	--	--	--
Dicamba	µg/L	--	--	--	9	ND	1.5	2	ND	1.50	--	--
Dieldrin	µg/L	--	--	--	14	ND	0.02	--	--	--	--	--
Dimethoate	µg/L	--	--	--	20	ND	10	--	--	--	--	--
Dinoseb	µg/L	3	ND	2	31	ND	2	3	ND	2	7	--
Diquat	µg/L	3	ND	4	27	ND	4	1	ND	4	20	--
Endosulfan I	µg/L	--	--	--	2	ND	0.005	--	--	--	--	--
Endosulfan II	µg/L	--	--	--	2	ND	0.0051	--	--	--	--	--
Endosulfan Sulfate	µg/L	--	--	--	2	ND	0.005	--	--	--	--	--
Endothall	µg/L	3	ND	45	27	ND	45	1	ND	45	100	--
Endrin	µg/L	2	ND	0.05	22	ND	0.1	1	ND	0.05	2	--
Endrin Aldehyde	µg/L	--	--	--	2	ND	0.0051	--	--	--	--	--
gamma-BHC (lindane)	µg/L	2	ND	0.01	22	ND	0.2	1	ND	0.01	0.2	--
Glyphosate	µg/L	3	ND	25	30	ND	25	1	ND	25	700	--
Heptachlor	µg/L	2	ND	0.01	22	ND	0.01	1	ND	0.01	0.01	--
Heptachlor Epoxide	µg/L	2	ND	0.01	22	ND	0.01	1	ND	0.01	0.01	--
Hexachlorobenzene	µg/L	2	ND	0.01	22	ND	0.5	1	ND	0.01	1	--
Hexachlorocyclopentadiene	µg/L	2	ND	0.5	22	ND	1	1	ND	0.50	50	--
Methiocarb	µg/L	2	ND	2	14	ND	2	1	ND	2	--	--
Methomyl	µg/L	2	ND	2	21	ND	2	1	ND	2	--	--
Methoxychlor	µg/L	2	ND	0.1	22	ND	10	1	ND	0.1	30	--
Metolachlor	µg/L	--	--	--	28	ND	1	--	--	--	--	--
Metribuzin	µg/L	--	--	--	26	ND	0.5	--	--	--	--	--
Molinate	µg/L	2	ND	0.05	37	ND	2	1	ND	0.05	20	--
Oxamyl	µg/L	2	ND	2	24	ND	20	1	ND	2	50	--
Pentachlorophenol	µg/L	3	ND	0.2	35	ND	0.2	3	ND	0.2	1	--
Picloram	µg/L	3	ND	1	31	ND	1	3	ND	1	500	--

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Table C-5a Summary of WY 2025 Pesticide Data (Detect/Non-Detect) for the Santa Clara Subbasin (Cont.)

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain						Santa Clara Subbasin, Coyote Valley			Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			n	Result	RL	MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL					
Prometryn	µg/L	--	--	--	2	ND	2	--	--	--	--	--
Propachlor	µg/L	--	--	--	26	ND	0.5	--	--	--	--	--
Propoxur	µg/L	2	ND	2	14	ND	2	1	ND	2	--	--
Simazine	µg/L	2	ND	0.05	37	ND	1	3	ND	1	4	--
Terbutylazine	µg/L	1	ND	0.1	1	ND	0.1	--	--	--	--	--
Thiobencarb (BOLERO)	µg/L	2	ND	0.05	35	ND	1	1	ND	0.05	70	1
Toxaphene	µg/L	2	ND	0.955	22	ND	1	1	ND	0.962	3	--

Table C-5a Summary of WY 2025 Pesticide Data (Detect/Non-Detect) (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. µg/L = micrograms per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. ND= not detected above laboratory reporting limit in any samples.
6. RL = Laboratory reporting limit. In the case of multiple reporting limits, the highest limit is shown. NA is shown if the reporting limit is not available.
7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA.

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Table C-5b Summary of WY 2025 Pesticide Data (Detect/Non-Detect) for the Llagas Subbasin

Parameter	Units ¹	Llagas Subbasin						Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL		
2,3,7,8-TCDD (Dioxin)	µg/L	--	--	--	14	ND	0.000005	0.00003	--
2,4,5-T	µg/L	--	--	--	3	ND	1	--	--
2,4,5-TP (Silvex)	µg/L	--	--	--	14	ND	1	50	--
2,4-D	µg/L	1	ND	10	20	ND	10	70	--
3-Hydroxycarbofuran	µg/L	--	--	--	6	ND	3	--	--
Alachlor	µg/L	1	ND	1	21	ND	1	2	--
Aldicarb	µg/L	--	--	--	6	ND	3	--	--
Aldicarb Sulfone	µg/L	--	--	--	6	ND	2	--	--
Aldicarb Sulfoxide	µg/L	--	--	--	6	ND	3	--	--
Aldrin	µg/L	--	--	--	14	ND	0.075	--	--
Atrazine	µg/L	1	ND	0.5	21	ND	0.5	1	--
Bentazon	µg/L	--	--	--	14	ND	2	18	--
Bromacil	µg/L	--	--	--	2	ND	10	--	--
Butachlor	µg/L	--	--	--	2	ND	0.38	--	--
Carbaryl	µg/L	--	--	--	6	ND	5	--	--
Carbofuran	µg/L	--	--	--	13	ND	5	18	--
Chlordane	µg/L	--	--	--	14	ND	0.1	0.1	--
Dalapon	µg/L	--	--	--	14	ND	10	200	--
Diazinon	µg/L	--	--	--	2	ND	0.25	--	--
Dicamba	µg/L	--	--	--	3	ND	1.5	--	--
Dieldrin	µg/L	--	--	--	2	ND	0.02	--	--
Dimethoate	µg/L	--	--	--	2	ND	10	--	--
Dinoseb	µg/L	--	--	--	14	ND	2	7	--
Diquat	µg/L	--	--	--	13	ND	4	20	--
Endothall	µg/L	--	--	--	13	ND	45	100	--
Endrin	µg/L	--	--	--	14	ND	0.1	2	--
gamma-BHC (lindane)	µg/L	--	--	--	14	ND	0.2	0.2	--
Glyphosate	µg/L	--	--	--	13	ND	25	700	--
Heptachlor	µg/L	--	--	--	14	ND	0.01	0.01	--
Heptachlor Epoxide	µg/L	--	--	--	14	ND	0.01	0.01	--
Hexachlorobenzene	µg/L	--	--	--	14	ND	0.5	1	--
Hexachlorocyclopentadiene	µg/L	--	--	--	14	ND	1	50	--
Methiocarb	µg/L	--	--	--	4	ND	2	--	--
Methomyl	µg/L	--	--	--	6	ND	2	--	--
Methoxychlor	µg/L	--	--	--	14	ND	10	30	--

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Table C-5b Summary of WY 2025 Pesticide Data (Detect/Non-Detect) for the Llagas Subbasin (Cont.)

Parameter	Units ¹	Llagas Subbasin						Maximum Contaminant Level	
		Shallow Zone ²			Principal Zone ³			MCL ⁷	SMCL ⁸
		n ⁴	Result ⁵	RL ⁶	n	Result	RL		
Metolachlor	µg/L	--	--	--	2	ND	0.5	--	--
Metribuzin	µg/L	--	--	--	2	ND	0.5	--	--
Molinate	µg/L	--	--	--	14	ND	2	20	--
Oxamyl	µg/L	--	--	--	13	ND	20	50	--
Pentachlorophenol	µg/L	--	--	--	14	ND	0.2	1	--
Picloram	µg/L	--	--	--	14	ND	1	500	--
Propachlor	µg/L	--	--	--	2	ND	0.5	--	--
Propoxur	µg/L	--	--	--	4	ND	2	--	--
Simazine	µg/L	1	ND	1	21	ND	1	4	--
Terbutylazine	µg/L	1	ND	0.1	1	ND	0.1	--	--
Thiobencarb (BOLERO)	µg/L	--	--	--	14	ND	1	70	1
Toxaphene	µg/L	--	--	--	14	ND	1	3	--

Table C-5b Summary of WY 2025 Pesticide Data (Detect/Non-Detect) (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. µg/L = micrograms per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. ND= not detected above laboratory reporting limit in any samples.
6. RL = Laboratory reporting limit. In the case of multiple reporting limits, the highest limit is shown. NA is shown if the reporting limit is not available.
7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA.

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Table C-6a Summary of WY 2025 Radioactive Data for the Santa Clara Subbasin

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain								Santa Clara Subbasin, Coyote Valley				Maximum Contaminant Level	
		Shallow Zone ²				Principal Zone ³				n	Min	Median	Max	MCL ⁷	SMCL ⁸
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max						
Combined Radium (-226 & -228)	pCi/L	--	--	--	--	14	<0.607	<0.714	<0.816	--	--	--	--	--	--
Combined Uranium	pCi/L	--	--	--	--	17	<1	<1	1.1	--	--	--	--	20	--
Gross Alpha Particle Activity	pCi/L	3	<2.71	<2.71	2.5	57	<0.175	<0.175	0.593	--	--	--	--	15	--
Radium-226	pCi/L	--	--	--	--	14	<0.0693	<0.0693	<0.14	--	--	--	--	--	--
Radium-228	pCi/L	--	--	--	--	14	<0.607	<0.607	<0.714	--	--	--	--	--	--

Table C-6a Summary of WY 2025 Radioactive Data (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

Only wells with known construction information are presented in this table. Public water system wells are assumed to represent the principal zone if no construction information is available, as these are typically deep wells.

1. pCi/L = picocuries per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <5) is shown when there are no quantified values at the lowest reporting limit.
6. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
7. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
8. SMCL = Secondary Maximum Contaminant Level, or aesthetic-based standard, per DDW or US EPA.

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Table C-7a Summary of WY 2025 Per- and Polyfluoroalkyl Substances (PFAS) Data in Santa Clara Subbasin Water Supply Wells

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain								Santa Clara Subbasin, Coyote Valley				Maximum Contaminant Level ⁷
		Shallow Zone ²				Principal Zone ³								
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max	n	Min	Median	Max	
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ng/L	--	--	--	--	373	<1.6	<2	20	--	--	--	--	--
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	ng/L	--	--	--	--	373	<1.6	<2	16	--	--	--	--	--
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ng/L	--	--	--	--	373	<1.6	<2	21	--	--	--	--	--
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	--	--	--	--	373	<1.6	<2	11	--	--	--	--	10
N-ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ng/L	--	--	--	--	84	<3	<3	<3	--	--	--	--	--
N-methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ng/L	--	--	--	--	84	<3	<3	<3	--	--	--	--	--
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ng/L	--	--	--	--	289	<1.6	<2	8.3	--	--	--	--	--
Perfluoro (2-ethoxyethane) Sulfonic Acid (PFEESA)	ng/L	--	--	--	--	289	<1.6	<1.8	13	--	--	--	--	--
Perfluoro Butanoic Acid (PFBA)	ng/L	--	--	--	--	288	<1.7	<1.8	13	--	--	--	--	--
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ng/L	--	--	--	--	289	<1.6	<2	11	--	--	--	--	--
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ng/L	--	--	--	--	289	<1.6	<1.8	12	--	--	--	--	--
Perfluorobutanesulfonic Acid (PFBS)	ng/L	--	--	--	--	373	<1.7	<1.7	13	--	--	--	--	--
Perfluorodecane Sulfonic Acid 8:2 FTS	ng/L	--	--	--	--	289	<2	<4.4	16	--	--	--	--	--
Perfluorodecanoic Acid (PFDA)	ng/L	--	--	--	--	373	<1.6	<2	13	--	--	--	--	--
Perfluorododecanoic Acid (PFDoA)	ng/L	--	--	--	--	373	<1.6	<2	12	--	--	--	--	--
Perfluoroheptanesulfonic Acid (PFHPS)	ng/L	--	--	--	--	289	<1.6	<2	14	--	--	--	--	--
Perfluoroheptanoic Acid (PFHPA)	ng/L	--	--	--	--	373	<1.6	<2	14	--	--	--	--	--
Perfluorohexane Sulfonic Acid (PFHxS)	ng/L	--	--	--	--	373	<1.7	<1.7	14	--	--	--	--	10
Perfluorohexane Sulfonic Acid 4:2 FTS	ng/L	--	--	--	--	289	<1.6	<2	11	--	--	--	--	--
Perfluorohexanoic Acid (PFHxA)	ng/L	--	--	--	--	372	<1.6	<1.8	11	--	--	--	--	--
Perfluorononanoic Acid (PFNA)	ng/L	--	--	--	--	373	<1.6	<2	15	--	--	--	--	10
Perfluorooctane Sulfonic Acid (PFOS)	ng/L	--	--	--	--	372	<1.7	<1.8	16	--	--	--	--	4
Perfluorooctane Sulfonic Acid 6:2 FTS	ng/L	--	--	--	--	289	<2	<4.4	13	--	--	--	--	--
Perfluorooctanoic Acid (PFOA)	ng/L	--	--	--	--	373	<1.7	<2	21	--	--	--	--	4
Perfluoropentanesulfonic Acid (PFPEs)	ng/L	--	--	--	--	289	<1.6	<2	9.7	--	--	--	--	--
Perfluoropentanoic Acid (PFPEA)	ng/L	--	--	--	--	289	<1.7	<1.9	11	--	--	--	--	--
Perfluorotetradecanoic Acid (PFTA,PFTeDA)	ng/L	--	--	--	--	84	<2	<2	<2	--	--	--	--	--
Perfluorotridecanoic Acid (PFTrDA)	ng/L	--	--	--	--	84	<2	<2	<2	--	--	--	--	--
Perfluoroundecanoic Acid (PFUnA)	ng/L	--	--	--	--	373	<1.6	<2	13	--	--	--	--	--

Table C-7a Summary of WY 2025 Per- and Polyfluoroalkyl Substances (PFAS) Data in Santa Clara Subbasin Water Supply Wells (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

1. ng/L = nanograms per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <2) is shown when there are no quantified values at the lowest reporting limit.
6. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
7. MCL = Maximum Contaminant Level specified in Title 22 of the California Code of Regulations or US EPA. The MCL is a health-based drinking water standard. In April 2024, the US EPA established MCLs for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA as shown, as well as a hazard index of 1.0 for the mixture of two or more of PFHxS, HFPO-DA, PFBS, and PFNA. Public water systems have three years to complete initial PFAS monitoring and up to five years to implement solutions (if needed) to ensure water delivered to customers does not exceed these limits. Currently, there are no state MCLs for any PFAS.

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Table C-7b Summary of WY 2025 Per- and Polyfluoroalkyl Substances (PFAS) Data in Llagas Subbasin Water Supply Wells

Parameter	Units ¹	Llagas Subbasin								Maximum Contaminant Level ⁷
		Shallow Zone ²				Principal Zone ³				
		n ⁴	Min ⁵	Median ⁶	Max	n	Min	Median	Max	
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ng/L	--	--	--	--	9	<2	<2	<5.7	--
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	ng/L	--	--	--	--	9	<2	<2	<3.1	--
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ng/L	--	--	--	--	9	<2	<2	<3.7	--
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	--	--	--	--	9	<2	<2	<2.7	10
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ng/L	--	--	--	--	9	<2	<2	<3.3	--
Perfluoro (2-ethoxyethane) Sulfonic Acid (PFEEESA)	ng/L	--	--	--	--	9	<2	<2	<2.5	--
Perfluoro Butanoic Acid (PFBA)	ng/L	--	--	--	--	9	<2	4.3	4.5	--
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ng/L	--	--	--	--	9	<2	<2	<2.7	--
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ng/L	--	--	--	--	9	<2	<2	<2.4	--
Perfluorobutanesulfonic Acid (PFBS)	ng/L	--	--	--	--	9	<2	3.2	6.4	--
Perfluorodecane Sulfonic Acid 8:2 FTS	ng/L	--	--	--	--	9	<2	<2	<4.6	--
Perfluorodecanoic Acid (PFDA)	ng/L	--	--	--	--	9	<2	<3	<5	--
Perfluorododecanoic Acid (PFDoA)	ng/L	--	--	--	--	9	<2	<2	<4.2	--
Perfluoroheptanesulfonic Acid (PFHPS)	ng/L	--	--	--	--	9	<2	<2	<3.2	--
Perfluoroheptanoic Acid (PFHPA)	ng/L	--	--	--	--	9	<2	<2	3.2	--
Perfluorohexane Sulfonic Acid (PFHxS)	ng/L	--	--	--	--	9	<2	<2	7.6	10
Perfluorohexane Sulfonic Acid 4:2 FTS	ng/L	--	--	--	--	9	<2	<2	<2.7	--
Perfluorohexanoic Acid (PFHxA)	ng/L	--	--	--	--	9	<2	<2	5.7	--
Perfluorononanoic Acid (PFNA)	ng/L	--	--	--	--	9	<2	<2	<4.4	10
Perfluorooctane Sulfonic Acid (PFOS)	ng/L	--	--	--	--	9	<2	4.5	11	4
Perfluorooctane Sulfonic Acid 6:2 FTS	ng/L	--	--	--	--	9	<2	<2	<3.2	--
Perfluorooctanoic Acid (PFOA)	ng/L	--	--	--	--	9	<2	<2	6.9	4
Perfluoropentanesulfonic Acid (PFPEs)	ng/L	--	--	--	--	9	<2	<2	<2.9	--
Perfluoropentanoic Acid (PFPEA)	ng/L	--	--	--	--	9	<2	<2	7	--
Perfluoroundecanoic Acid (PFUnA)	ng/L	--	--	--	--	9	<2	<2	<4.9	--

Table C-7b Summary of WY 2025 Per- and Polyfluoroalkyl Substances (PFAS) Data in Llagas Subbasin Water Supply Wells (Notes)

Table includes data for wells monitored by Valley Water (annual monitoring network wells and water supply wells) and public water system data reported to the CA Division of Drinking Water (DDW).

1. ng/L = nanograms per liter.
2. The shallow aquifer zone is represented by wells primarily drawing water from depths less than 150 feet.
3. The principal aquifer zone is represented by wells primarily drawing water from depths greater than 150 feet.
4. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
5. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <2) is shown when there are no quantified values at the lowest reporting limit.
6. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
7. MCL = Maximum Contaminant Level specified in Title 22 of the California Code of Regulations or US EPA. The MCL is a health-based drinking water standard. In April 2024, the US EPA established MCLs for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA as shown, as well as a hazard index of 1.0 for the mixture of two or more of PFHxS, HFPO-DA, PFBS, and PFNA. Public water systems have three years to complete initial PFAS monitoring and up to five years to implement solutions (if needed) to ensure water delivered to customers does not exceed these limits. Currently, there are no state MCLs for any PFAS.

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Table C-7c Summary of WY 2025 Per- and Polyfluoroalkyl Substances (PFAS) Data for Private Domestic Wells Sampled in September 2025

Parameter	Units ¹	n ²	Min ³	Median ⁴	Max	Maximum Contaminant Level ⁵
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ng/L	17	<2	<2	<2	--
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	ng/L	17	<2	<2	<2	--
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ng/L	17	<2	<2	<2	--
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	17	<2	<2	<2	10
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ng/L	17	<2	<2	<2	--
Perfluoro (2-ethoxyethane) Sulfonic Acid (PFEEESA)	ng/L	17	<2	<2	<2	--
Perfluoro Butanoic Acid (PFBA)	ng/L	17	<2	2.5	22	--
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ng/L	17	<2	<2	<2	--
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ng/L	17	<2	<2	<2	--
Perfluorobutanesulfonic Acid (PFBS)	ng/L	17	<2	2.6	19	--
Perfluorodecane Sulfonic Acid 8:2 FTS	ng/L	17	<2	<2	<2	--
Perfluorodecanoic Acid (PFDA)	ng/L	17	<2	<2	<2	--
Perfluorododecanoic Acid (PFDoA)	ng/L	17	<2	<2	<2	--
Perfluoroheptanesulfonic Acid (PFHPS)	ng/L	17	<2	<2	<2	--
Perfluoroheptanoic Acid (PFHPA)	ng/L	17	<2	<2	5.3	--
Perfluorohexane Sulfonic Acid (PFHxS)	ng/L	17	<2	<2	8.6	10
Perfluorohexane Sulfonic Acid 4:2 FTS	ng/L	17	<2	<2	<2	--
Perfluorohexanoic Acid (PFHxA)	ng/L	17	<2	<2	31	--
Perfluorononanoic Acid (PFNA)	ng/L	17	<2	<2	4.5	10
Perfluorooctane Sulfonic Acid (PFOS)	ng/L	17	<2	2.4	49	4
Perfluorooctane Sulfonic Acid 6:2 FTS	ng/L	17	<2	<2	<2	--
Perfluorooctanoic Acid (PFOA)	ng/L	17	<2	<2	34	4
Perfluoropentanesulfonic Acid (PFPEs)	ng/L	17	<2	<2	<2	--
Perfluoropentanoic Acid (PFPEA)	ng/L	17	<2	<2	46	--
Perfluoroundecanoic Acid (PFUnA)	ng/L	17	<2	<2	<2	--

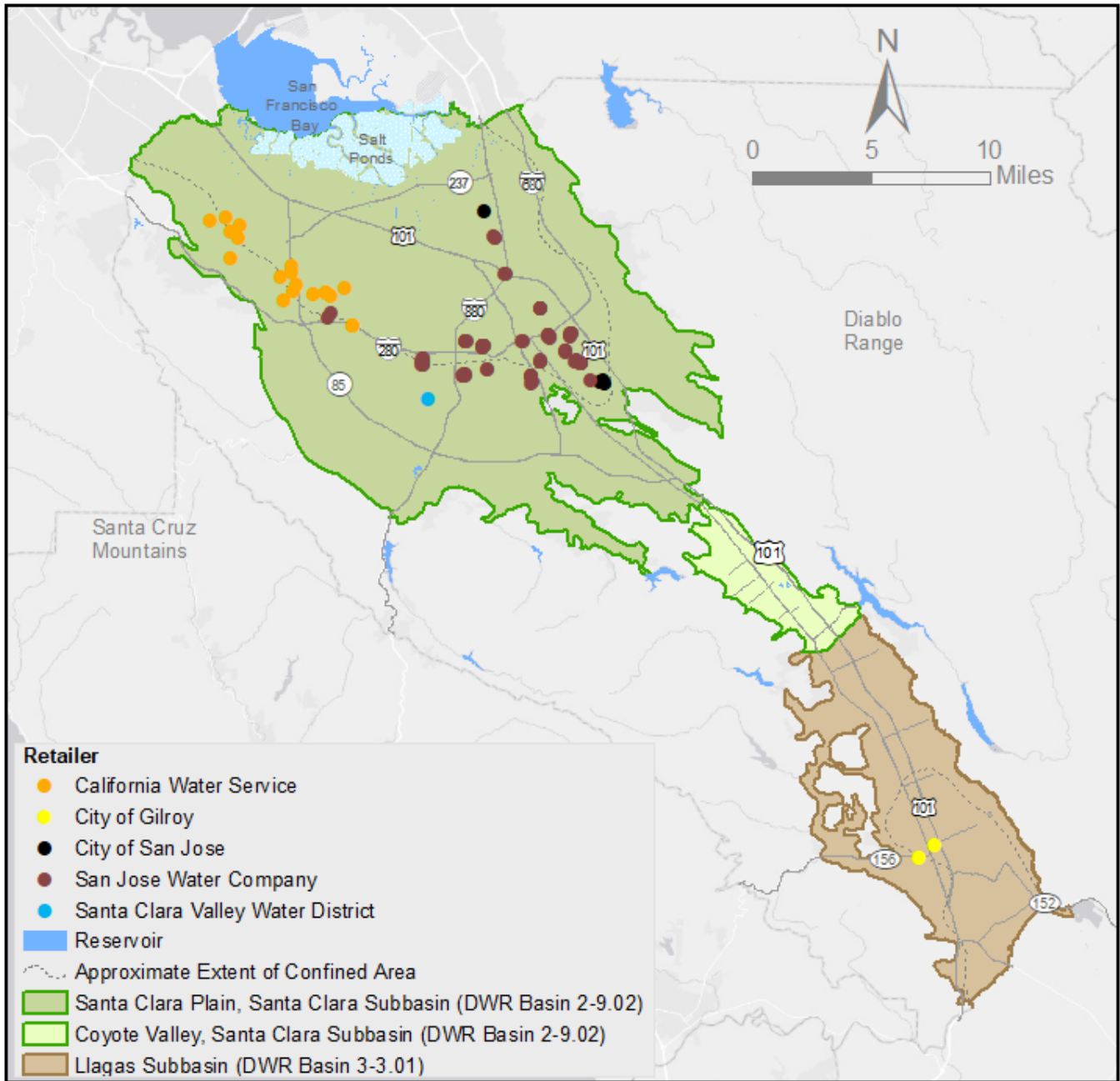
Table C-7c Summary of WY 2025 Per- and Polyfluoroalkyl Substances (PFAS) Data for Private Domestic Wells Sampled in September 2025 (Notes)

Table includes results from private domestic wells sampled by Valley Water during a PFAS sampling event conducted in South County on September 2025. The majority of the wells sampled do not have sufficient well construction information to designate an aquifer zone.

1. ng/L = nanograms per liter.
2. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
3. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <2) is shown when there are no quantified values at the lowest reporting limit.
4. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
5. MCL = Maximum Contaminant Level specified in Title 22 of the California Code of Regulations or US EPA. The MCL is a health-based drinking water standard. In April 2024, the US EPA established MCLs for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA as shown, as well as a hazard index of 1.0 for the mixture of two or more of PFHxS, HFPO-DA, PFBS, and PFNA. Public water systems have three years to complete initial PFAS monitoring and up to five years to implement solutions (if needed) to ensure water delivered to customers does not exceed these limits. Currently, there are no state MCLs for any PFAS.

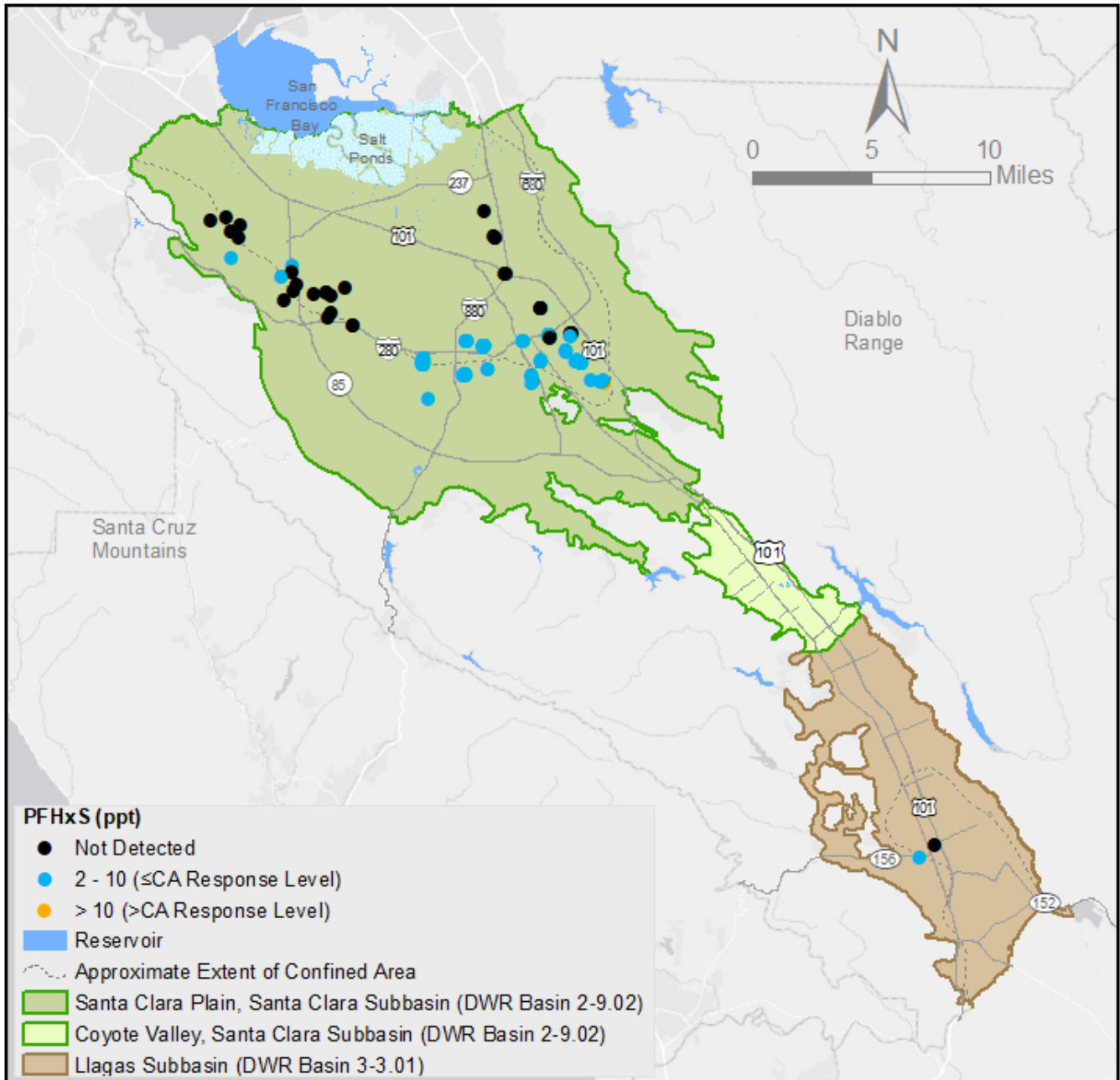
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Figure C-1. WY 2025 Water Supply (Non-Domestic) Wells Sampled for PFAS



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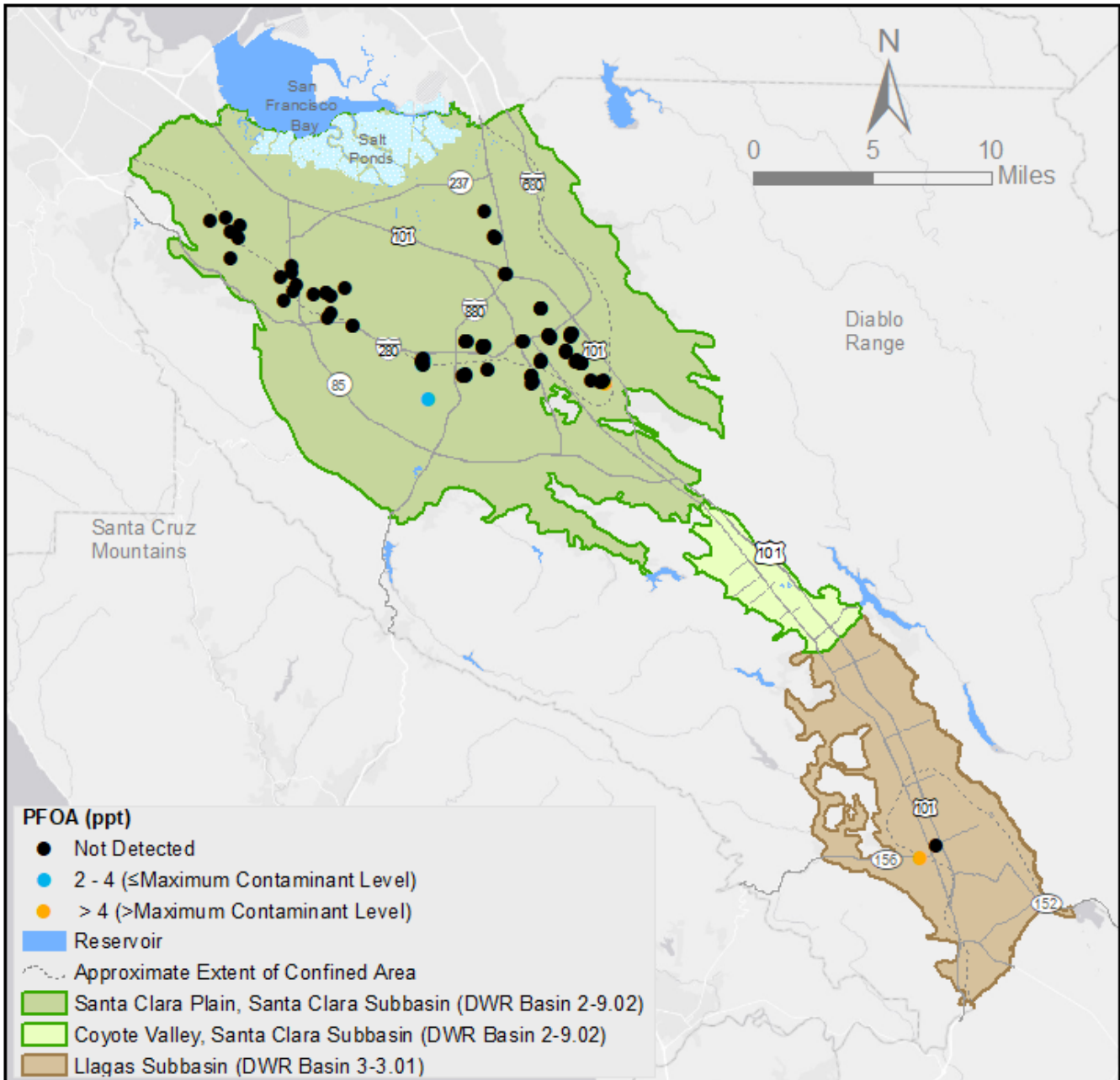
Figure C-2. WY 2025 PFHxS Results in Water Supply (Non-Domestic) Wells



Note: For wells with more than one result, the maximum value is shown. Based on drinking water regulations and follow-up sampling, a single detection above an MCL may not constitute a violation of a drinking water standard. Public water systems are required to meet all drinking water standards for water delivered to customers.

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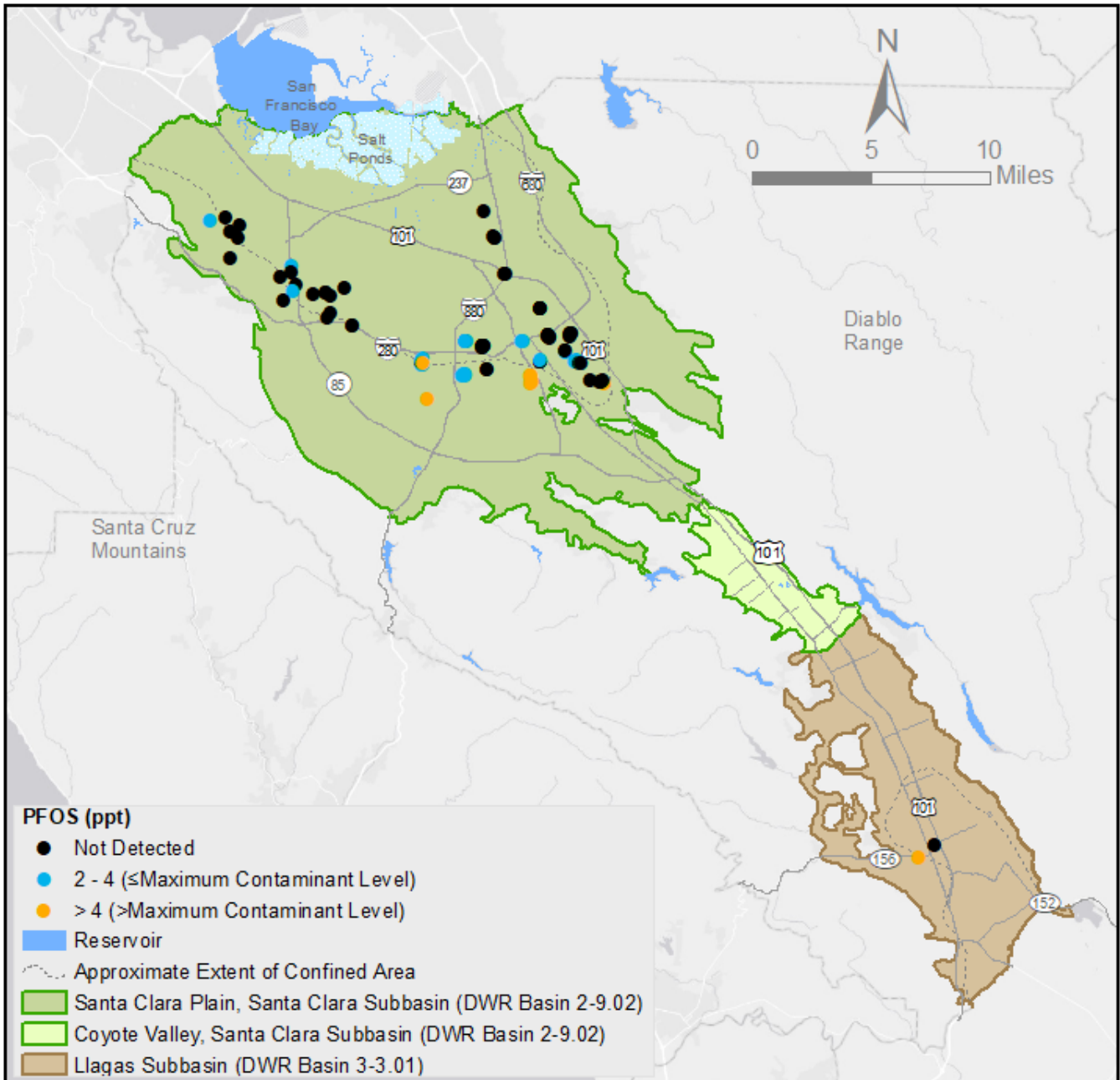
Figure C-3. WY 2025 PFOA Results in Water Supply (Non-Domestic) Wells



Note: For wells with more than one result, the maximum value is shown. Based on drinking water regulations and follow-up sampling, a single detection above an MCL may not constitute a violation of a drinking water standard. Public water systems are required to meet all drinking water standards for water delivered to customers.

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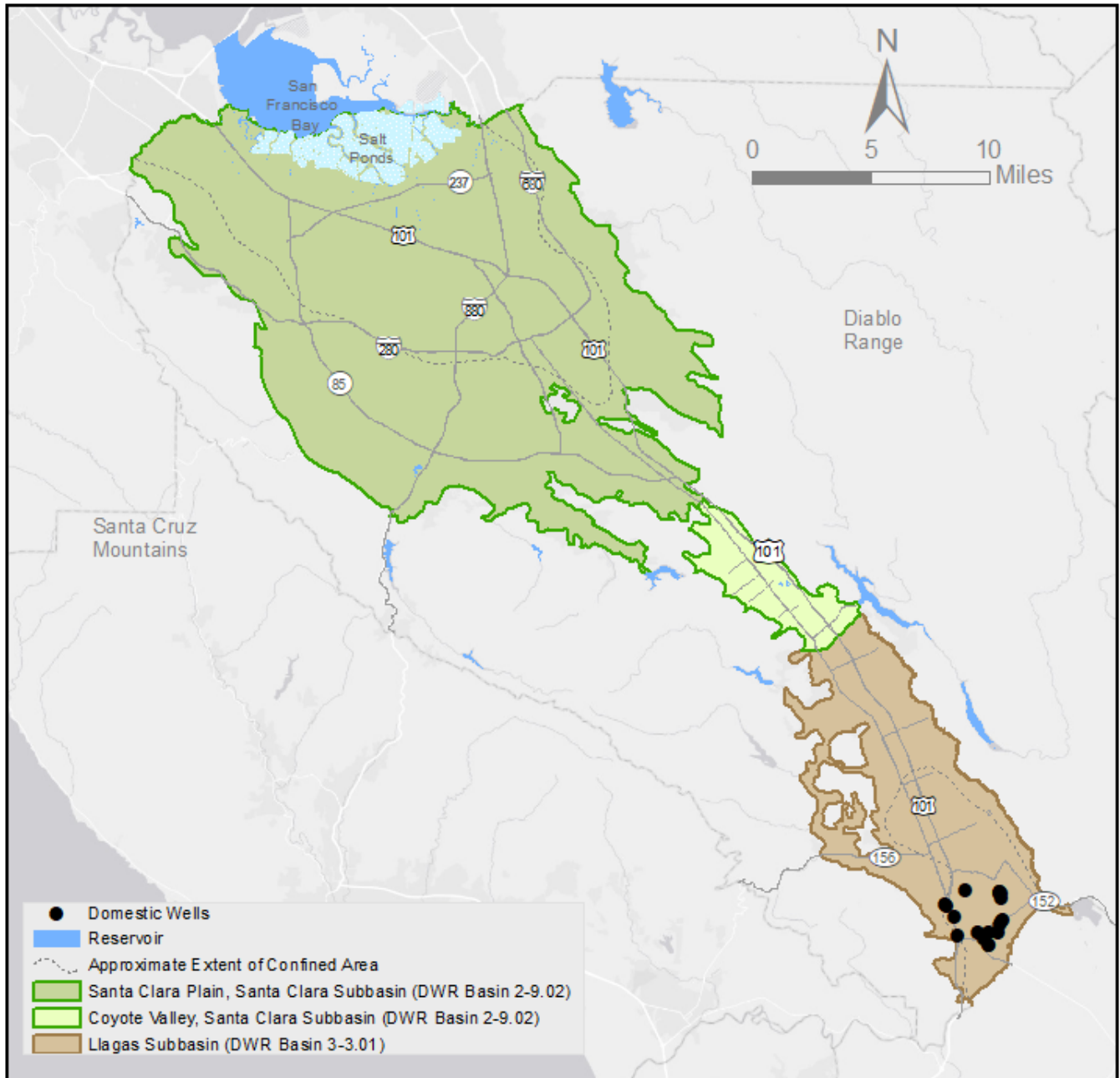
Figure C-4. WY 2025 PFOS Results in Water Supply (Non-Domestic) Wells



Note: For wells with more than one result, the maximum value is shown. Based on drinking water regulations and follow-up sampling, a single detection above an MCL may not constitute a violation of a drinking water standard. Public water systems are required to meet all drinking water standards for water delivered to customers.

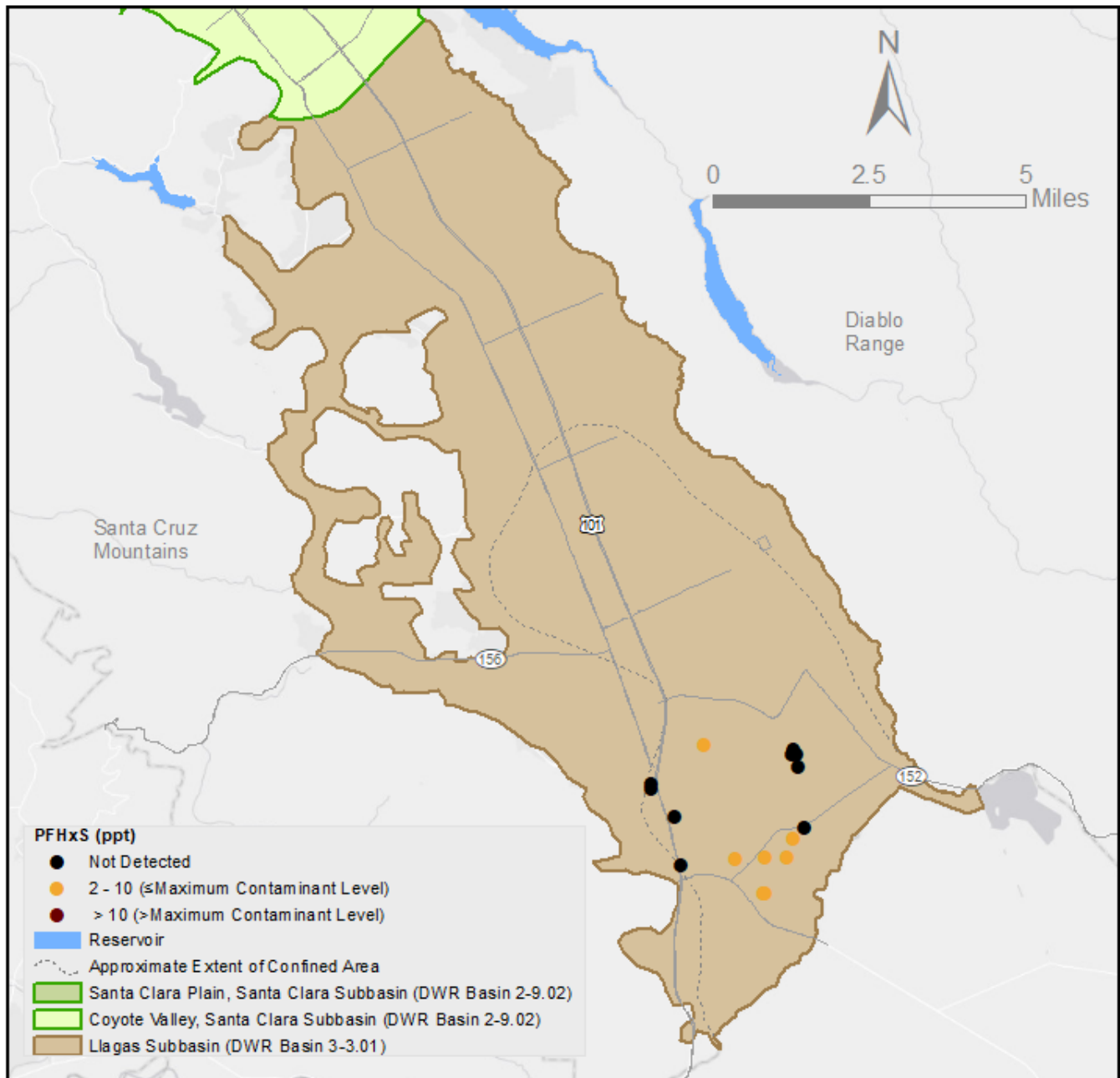
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Figure C-5. WY 2025 Domestic Water Supply Wells Sampled for PFAS



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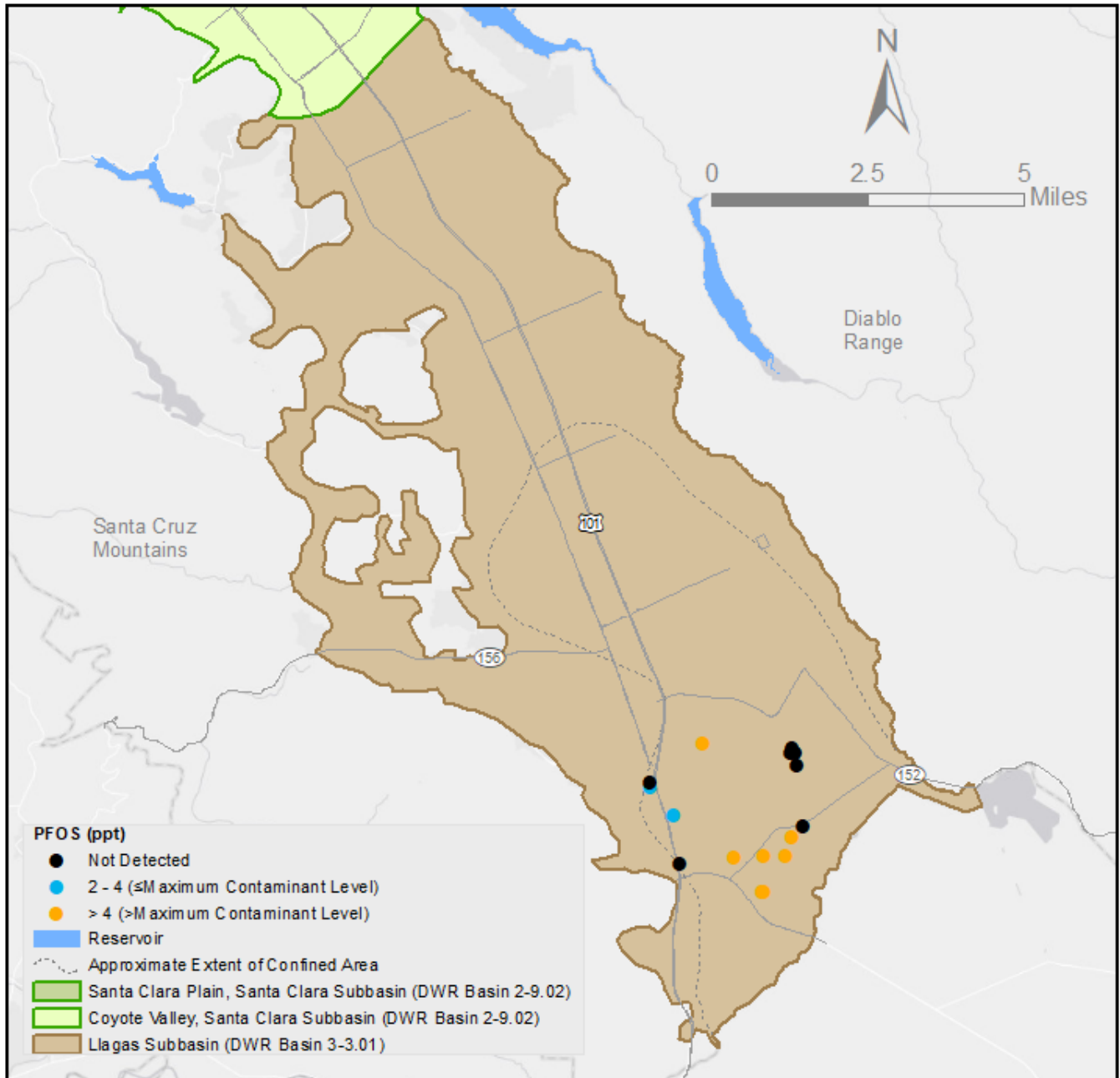
Figure C-6. WY 2025 PFHxS Results in Domestic Water Supply Wells



Note: For wells with more than one result, the maximum value is shown. Domestic wells are not subject to state or federal drinking water standards and, thus, well owners are responsible for ensuring the quality of their own well water. The maximum contaminant level (MCL) is shown for comparison purposes to health-based drinking water standards.

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Figure C-8. WY 2025 PFOS Results in Domestic Water Supply Wells



Note: For wells with more than one result, the maximum value is shown. Domestic wells are not subject to state or federal drinking water standards and, thus, well owners are responsible for ensuring the quality of their own well water. The maximum contaminant level (MCL) is shown for comparison purposes to health-based drinking water standards.

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Table C-8a Summary of WY 2025 Recycled Water Irrigation Site Monitoring Data for the Santa Clara Subbasin

Parameter	Units ¹	Santa Clara Subbasin, Santa Clara Plain				Maximum Contaminant Level	
		n ²	Min ³	Median ⁴	Max	MCL ⁵	SMCL ⁶
Major and Minor Ions							
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	9	160	290	800	--	--
Calcium	mg/L	11	35	78	320	--	--
Chloride	mg/L	11	22	59	370	--	(250)
Magnesium	mg/L	11	11	52	150	--	--
Potassium	mg/L	11	1	1.4	4.3	--	--
Sodium	mg/L	11	31	41	320	--	--
Sulfate	mg/L	11	34	63	770	--	(250)
Total Dissolved Solids (TDS)	mg/L	11	280	540	1,900	--	(500)
Trace Elements							
Boron	mg/L	9	<0.2	<0.2	0.82	--	--

Table C-8a Summary of WY 2025 Recycled Water Irrigation Site Monitoring Data (Notes)

Table includes data for wells sampled by South Bay Water Recycling (SBWR) near areas irrigated with water from (SBWR).

1. mg/L = milligrams per liter
2. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
3. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <0.2) is shown when there are no quantified values at the lowest reporting limit.
4. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
5. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
6. SMCL = Secondary Maximum Contaminant Level or aesthetic-based standard per DDW or US EPA. For SMCLs having a range, the lower, recommended threshold is listed in parentheses.

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Table C-8b Summary of WY 2025 Recycled Water Irrigation Site Monitoring Data for the Llagas Subbasin

Parameter	Units ¹	Llagas Subbasin				Maximum Contaminant Level	
		n ²	Min ³	Median ⁴	Max	MCL ⁵	SMCL ⁶
Major and Minor Ions							
Bromide	mg/L	22	<0.1	<0.1	0.43	--	--
Calcium	mg/L	22	9.3	48	102	--	--
Calcium (as CaCO ₃)	mg/L	22	23.1	120	255	--	--
Chloride	mg/L	22	6	30	240	--	(250)
Cyanide	mg/L	22	<0.005	<0.005	0.031	0.15	--
Fluoride (natural source)	mg/L	22	<0.1	<0.1	0.39	2	--
Magnesium	mg/L	22	3.6	26.2	67.7	--	--
Perchlorate	µg/L	22	<1	<1	1.07	6	--
Potassium	mg/L	22	<1	1.1	19.7	--	--
Silica	mg/L	22	11.5	25.2	34.6	--	--
Sodium	mg/L	22	3.9	30.2	194	--	--
Sulfate	mg/L	22	3.4	39.4	128	--	(250)
Total Dissolved Solids (TDS)	mg/L	22	72	322	880	--	(500)
Nutrients							
Nitrate (as N)	mg/L	22	<0.1	1.59	24.5	10	--
Orthophosphate (as PO ₄)	mg/L	22	<0.1	<0.1	1.07	--	--
Trace Elements							
Aluminum	µg/L	22	<20	<20	110	1,000	200
Antimony	µg/L	22	<1	<1	<1	6	--
Arsenic	µg/L	22	<2	<2	<2	10	--
Barium	µg/L	22	20	86.5	470	1,000	--
Beryllium	µg/L	22	<1	<1	<1	4	--
Boron	µg/L	22	<100	102	362	--	--
Cadmium	µg/L	22	<1	<1	<1	5	--
Chromium	µg/L	22	<1	<1	2.4	50	--
Copper ⁷	µg/L	22	<1	<1	3.5	1,300	1,000
Iron	µg/L	22	<20	<20	270	--	300
Lead ⁷	µg/L	22	<1	<1	<1	15	--
Manganese	µg/L	22	<1	<1	908	--	50
Mercury	µg/L	22	<1	<1	<1	2	--
Nickel	µg/L	22	<1	1.6	15.6	100	--
Selenium	µg/L	22	<5	<5	<5	50	--
Silver	µg/L	22	<1	<1	<1	--	100
Thallium	µg/L	22	<1	<1	<1	2	--
Vanadium	µg/L	22	<1	1.1	4.6	--	--
Zinc	µg/L	22	<10	<10	40	--	5,000
Organics							
11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ng/L	22	<2	<2	<2	--	--
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ng/L	22	<2	<2	<2	--	--
9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ng/L	22	<2	<2	<2	--	--
Bromochloroacetic Acid (BCAA)	µg/L	--	--	--	--	--	--
Bromochloromethane	µg/L	22	<0.5	<0.5	<0.5	--	--
Bromodichloroacetic Acid (BDCAA)	µg/L	--	--	--	--	--	--
Bromodichloromethane (THM)	µg/L	22	<0.5	<0.5	28	--	--
Bromoform (THM)	µg/L	22	<0.5	<0.5	<0.5	--	--
Bromomethane	µg/L	22	<0.5	<0.5	<0.5	--	--
Chloroform (THM)	µg/L	22	<0.5	<0.5	86	--	--

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Table C-8b Summary of WY 2025 Recycled Water Irrigation Site Monitoring Data for the Llagas Subbasin (Cont.)

Parameter	Units ¹	Llagas Subbasin				Maximum Contaminant Level	
		n ²	Min ³	Median ⁴	Max	MCL ⁵	SMCL ⁶
Dibromoacetic Acid (DBAA)	µg/L	22	<0.1	<0.1	2.2	--	--
Dibromochloromethane (THM)	µg/L	22	<0.5	<0.5	6.3	--	--
Dibromomethane	µg/L	22	<0.5	<0.5	<0.5	--	--
Dichloroacetic Acid (DCAA)	µg/L	22	<1	<1	66.2	--	--
Haloacetic Acids (HAA5)	µg/L	22	<1	<1	184	60	--
Monobromoacetic Acid (MBAA)	µg/L	22	<1	<1	4.4	--	--
Monochloroacetic Acid (MCAA)	µg/L	22	<2	<2	53.7	--	--
n-Nitrosodiethylamine (NDEA)	ng/L	22	<2	<2	<2	--	--
n-Nitrosodimethylamine (NDMA)	ng/L	22	<2	<2	2.7	--	--
n-Nitrosodi-n-Butylamine (NDBA)	ng/L	22	<2	<2	2.6	--	--
n-Nitrosodi-n-Propylamine (NDPA)	ng/L	22	<2	<2	<2	--	--
n-Nitrosomethylethylamine (NMEA)	ng/L	22	<2	<2	<2	--	--
n-Nitrosopyrrolidine (NPYR)	ng/L	22	<2	<2	3.6	--	--
Perfluorobutanesulfonic acid (PFBS)	ng/L	22	<2	3.2	19.4	--	--
Perfluorodecanoic acid (PFDA)	ng/L	22	<2	<2	7.2	--	--
Perfluorododecanoic acid (PFDoA)	ng/L	22	<2	<2	<2	--	--
Perfluoroheptanoic acid (PFHPA)	ng/L	22	<2	<2	7.7	--	--
Perfluorohexane Sulfonic Acid (PFHxS)	ng/L	22	<2	<2	5	10	--
Perfluorohexanoic Acid (PFHxA)	ng/L	22	<2	6.9	29.3	--	--
Perfluorononanoic acid (PFNA)	ng/L	22	<2	<2	4.4	10	--
Perfluorooctanoic Acid (PFOA)	ng/L	22	<2	4.4	23.8	4	--
Perfluorooctyl Sulfonate (PFOS)	ng/L	22	<2	2.6	85.7	4	--
Perfluoroundecanoic acid (PFUnA)	ng/L	22	<2	<2	<2	--	--
Tribromoacetic Acid (TBAA)	µg/L	22	<1	<1	34	--	--
Trichloroacetic Acid (TCAA)	µg/L	22	<1	<1	58	--	--

Table C-8b Summary of WY 2025 Recycled Water Irrigation Site Monitoring Data (Notes)

Table includes data for wells near areas irrigated with water from South County Regional Wastewater Authority (SCRWA).

1. mg/L = milligrams per liter; µg/L = micrograms per liter; ng/L = nanograms per liter.
2. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
3. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <0.1) is shown when there are no quantified values at the lowest reporting limit.
4. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
5. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
6. MCL = Maximum Contaminant Level specified in the Code of Federal Regulations 40CFR141 and/or Title 22 of the California Code of Regulations. The MCL is a health-based drinking water standard.
7. Lead and copper do not have primary MCLs but have "action levels" of 15 and 1,300 µg/L, respectively. These substances are regulated by the state for public water systems since they can adversely affect public health.

APPENDIX D

WY 2025 RECHARGE WATER QUALITY RESULTS

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APPENDIX D – WY 2025 RECHARGE WATER QUALITY RESULTS

Table D-1 Summary of 2025 Recharge Water Quality Indicator Data

Parameter	Units ¹	Recharge System							
		Los Gatos				Upper Llagas			
		n ²	Min ³	Median ⁴	Max	n	Min	Median	Max
Water Quality Indicators									
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	7	42	127	129	2	79	80	80
Oxidation Reduction Potential (ORP)	mV	7	-6.8	84.1	127	3	75.1	97.5	146
pH, Field	pH Units	7	8.11	8.51	9.79	3	7.88	8.67	8.92
Source Temperature	C	7	22.2	23	30.1	3	19.1	20.3	23
Specific Conductance, Field	µS/cm	7	189	282	306	3	320	329	333
Turbidity, Field	NTU	7	2.03	3.25	24.6	3	1.83	2.59	3.2
Total Alkalinity (as CaCO ₃)	mg/L	7	84	127	129	2	79	80	80
Major and Minor Ions									
Bicarbonate (as HCO ₃)	mg/L	7	51	155	157	2	97	98	98
Boron	µg/L	7	<100	<100	<100	2	134	136	136
Bromide	mg/L	7	<0.1	<0.1	<0.1	2	0.17	0.18	0.18
Calcium (Dissolved)	mg/L	7	18.9	35.4	35.9	2	21	21.1	21.1
Chloride	mg/L	7	17	17	29	2	59	60	60
Fluoride (natural source)	mg/L	7	<0.1	0.17	0.18	2	<0.1	<0.1	<0.1
Magnesium (Dissolved)	mg/L	7	10.6	14.5	14.7	2	11.8	12	12.0
Nitrate	mg/L	7	<0.1	<0.1	<0.1	2	<0.1	0.39	0.39
Potassium (Dissolved)	mg/L	7	1.5	1.6	2.1	2	3	3.2	3.2
Silica	mg/L	7	6.4	12.9	13.5	2	11.4	13.3	13.3
Sodium (Dissolved)	mg/L	7	18.8	19.6	25.7	2	44.4	44.8	44.8
Sulfate	mg/L	7	21.0	36.9	39.4	2	33.7	34.1	34.1
Total Dissolved Solids (TDS)	mg/L	7	156	222	244	2	244	248	248

Table D-1 Summary of 2025 Recharge Water Quality Indicator Data (Notes)

1. mg/L = milligrams per liter; µg/L = micrograms per liter; ng/L = nanograms per liter.
2. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
3. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <0.2) is shown when there are no quantified values at the lowest reporting limit.
4. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.

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Table D-2 Summary of 2025 Recharge Water Quality Trace Metals Data

Parameter	Units ¹	Recharge System							
		Los Gatos				Upper Llagas			
		n ²	Min ³	Median ⁴	Max	n	Min	Median	Max
Aluminum (Dissolved)	µg/L	7	<20	<20	37	2	<20	<20	<20
Antimony (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Arsenic (Dissolved)	µg/L	7	<2	<2	2	2	2	2	2
Barium (Dissolved)	µg/L	7	29.5	40.1	51.6	2	32.3	34.1	34.1
Beryllium (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Cadmium (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Chromium (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Copper (Dissolved)	µg/L	7	1.1	1.3	3	2	1.5	1.6	1.6
Iron (Dissolved)	µg/L	7	<20	<20	25	2	<20	<20	<20
Lead (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Manganese (Dissolved)	µg/L	7	<1	2.3	13.4	2	<1	1.2	1.2
Mercury (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Nickel (Dissolved)	µg/L	7	<1	1.1	1.3	2	1	1	1
Selenium (Dissolved)	µg/L	7	<5	<5	<5	2	<5	<5	<5
Silver (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Thallium (Dissolved)	µg/L	7	<1	<1	<1	2	<1	<1	<1
Vanadium (Dissolved)	µg/L	7	1.6	2.2	6.5	2	2.5	3	3
Zinc (Dissolved)	µg/L	7	<10	<10	<10	2	<10	<10	<10

Table D-2 Summary of 2025 Recharge Water Quality Trace Metals Data (Notes)

1. mg/L = milligrams per liter; µg/L = micrograms per liter; ng/L = nanograms per liter.
2. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
3. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <0.2) is shown when there are no quantified values at the lowest reporting limit.
4. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.

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Table D-3 Summary of 2025 Recharge Water Quality PFAS Data

Parameter	Units ¹	Recharge System							
		Los Gatos				Upper Llagas			
		n ²	Min ³	Median ⁴	Max	n	Min	Median	Max
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
4,8-Dioxa-3H-Perfluorononanoic Acid (ADONA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	7	<1.1	<1.1	<1.1	2	<1.3	<1.3	<1.3
N-ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
N-methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluoro (2-ethoxyethane) Sulfonic Acid (PFEESA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluoro Butanoic Acid (PFBA)	ng/L	7	<3	<3	3.4	2	<3.4	<3.4	<3.4
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluorobutanesulfonic Acid (PFBS)	ng/L	7	<1.5	1.5	1.7	2	<1.7	<1.7	<1.7
Perfluorodecane Sulfonic Acid 8:2 FTS	ng/L	7	<3	<3	<3	2	<3.4	<3.4	<3.4
Perfluorodecanoic Acid (PFDA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluorododecanoic Acid (PFDoA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluoroheptanesulfonic Acid (PFHPS)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluoroheptanoic Acid (PFHPA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluorohexane Sulfonic Acid (PFHxS)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluorohexane Sulfonic Acid 4:2 FTS	ng/L	7	<3	<3	<3	2	<3.4	<3.4	<3.4
Perfluorohexanoic Acid (PFHxA)	ng/L	7	<1.5	2.3	2.4	2	<1.7	<1.7	<1.7
Perfluorononanoic Acid (PFNA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluorooctane Sulfonic Acid 6:2 FTS	ng/L	7	<3	<3	<3	2	<3.4	<3.4	<3.4
Perfluorooctane Sulfonic Acid (PFOS)	ng/L	7	<1.5	2	2.4	2	<1.7	<1.7	<1.7
Perfluorooctanoic Acid (PFOA)	ng/L	7	<1.5	2.1	2.4	2	<1.7	<5.5	<5.5
Perfluoropentanesulfonic Acid (PFPES)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluoropentanoic Acid (PFPEA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluorotetradecanoic Acid (PFTA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluorotridecanoic Acid (PFTrDA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7
Perfluoroundecanoic Acid (PFUnA)	ng/L	7	<1.5	<1.5	<1.5	2	<1.7	<1.7	<1.7

Table D-3 Summary of 2025 Recharge Water Quality PFAS Data (Notes)

1. mg/L = milligrams per liter; µg/L = micrograms per liter; ng/L = nanograms per liter.
2. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
3. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <0.2) is shown when there are no quantified values at the lowest reporting limit.
4. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.

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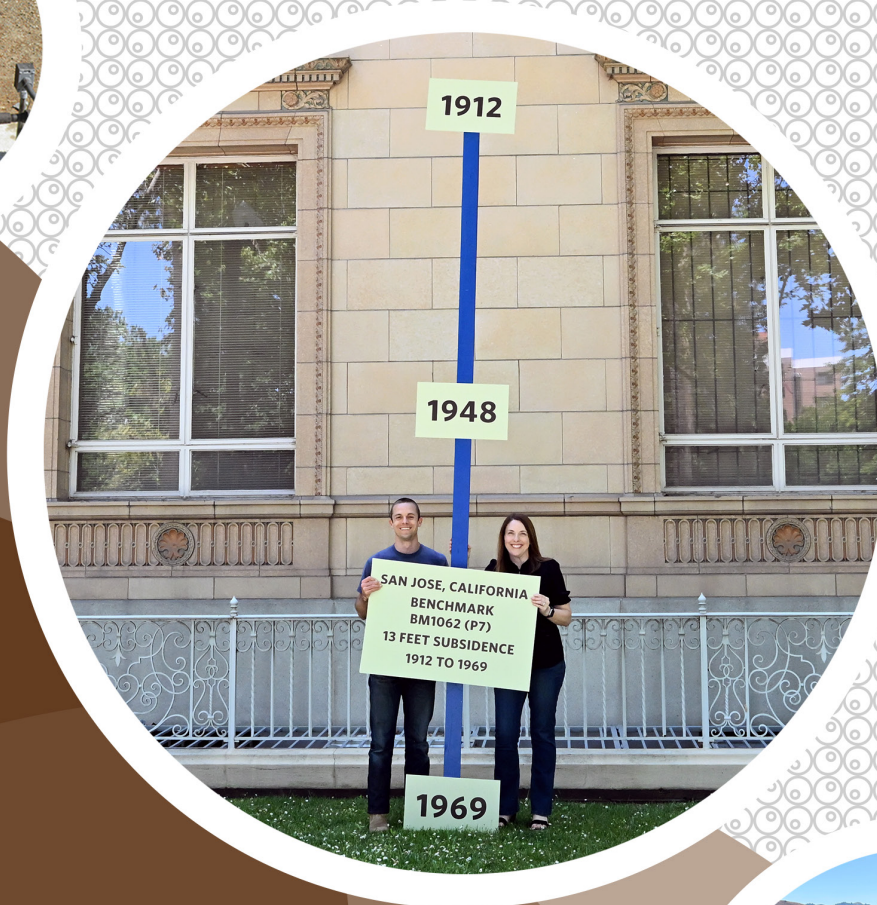
Table D-4 Summary of 2025 Recharge Water Quality Pesticide Data

Parameter	Units ¹	Recharge System							
		Los Gatos				Upper Llagas			
		n ²	Min ³	Median ⁴	Max	n	Min	Median	Max
Alachlor	µg/L	2	<0.25	<0.25	<0.25	-	-	-	-
Atrazine	µg/L	2	<0.25	<0.25	<0.25	-	-	-	-
gamma-BHC (lindane)	µg/L	2	<0.2	<0.2	<0.2	-	-	-	-
Hexachlorobenzene	µg/L	2	<0.25	<0.25	<0.25	-	-	-	-
Hexachlorocyclopentadiene	µg/L	2	<0.5	<0.5	<0.5	-	-	-	-
Methoxychlor	µg/L	2	<0.5	<0.5	<0.5	-	-	-	-
Molinate	µg/L	2	<0.5	<0.5	<0.5	-	-	-	-
Simazine	µg/L	2	<0.25	<0.25	<0.25	-	-	-	-
Thiobencarb	µg/L	2	<0.25	<0.25	<0.25	-	-	-	-

Table D-4 Summary of 2025 Recharge Water Quality Pesticide Data (Notes)

1. mg/L = milligrams per liter; µg/L = micrograms per liter; ng/L = nanograms per liter.
2. n = number of results for each parameter. Some parameters may have been analyzed more than once at a particular well.
3. The minimum shown is the lowest detected value. The lowest reporting limit (e.g., <0.2) is shown when there are no quantified values at the lowest reporting limit.
4. For parameters with results with multiple reporting limits, the median was computed using the Maximum Likelihood Estimate (MLE) method.
5. Pesticides were not analyzed for the Penitencia Recharge System.

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