

**Groundwater Report Spring 2025** 

# San Joaquin County Flood Control and Water Conservation District



# San Joaquin County

#### Flood Control and Water Conservation District

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Copies of the 2025 Spring Groundwater Report may be available upon request from:

San Joaquin County Department of Public Works P.O. Box 1810, Stockton, California 95201

#### Acknowledgements

This Groundwater Report is a product of the commitment that the San Joaquin County Flood Control and Water Conservation District (District) together with many other interested agencies committed to sustain and enhance the groundwater resources of the Eastern San Joaquin Groundwater Subbasin and the Tracy Groundwater Subbasin. The District extends thanks to:

California Water Service

City of Lathrop

City of Lodi

City of Manteca

City of Stockton Municipal Utilities Department

East Bay Municipal Utility District

Morada Area Association

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San Joaquin County Department of Public Works

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Stockton East Water District

United States Bureau of Reclamation

United States Geological Survey

Most of all, we would like to thank all the individual well owners, who give us access to their wells and in some cases, their time.

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## 1 Introduction

Since the Fall of 1971, the San Joaquin County Flood Control and Water Conservation District (District) has monitored groundwater levels and groundwater quality and has published the data in semi-annual Groundwater Reports. This report utilizes data from federal, state, and local government agencies, as well as non-governmental sources.

This report represents data from the Eastern San Joaquin Groundwater Subbasin (5-022.01, ESJSb or Subbasin) and Tracy Groundwater Subbasin (5-022.15, TSb). The ESJSb includes portions of Calaveras County, Stanislaus County, and San Joaquin County east of the San Joaquin River. The TSb is located primarily in San Joaquin County west of the San Joaquin River and includes a small portion of Alameda County. Both ESJSb and TSb have Groundwater Sustainability Plans (GSP) for the neighboring, but separate basins, which are outlined on the map figures within this report and separated by the San Joaquin River, except for the City of Lathrop, which is included as part of the TSb. In addition to the subbasin boundaries, there are individual Groundwater Sustainability Agencies (GSAs) that represent portions of each subbasin for business or political reasons. Only GSAs in the ESJSb are delineated on the maps in this report, however, TSb has its own GSAs.

Water level data is collected on a semi-annual basis, during the months of March and October, to observe groundwater levels before and after peak groundwater pumping conditions. Over 200 wells, most of which are measured by County staff, are included in the Monitoring Program. The exact number of wells varies from year to year, depending on circumstances such as well destructions, new well construction, well accessibility, and well condition. The wells used in this report are reassessed year to year based on quality and comparability of the data and fluctuate occasionally.

## 1.1 Purpose

The purpose of the semi-annual Groundwater Reports is to provide information on groundwater conditions in San Joaquin County (County) and to publish the results of the groundwater monitoring program which consists of the following:

- 1. Measure groundwater levels on a County-wide basis.
- 2. Monitor groundwater quality in GSP representative monitoring wells.

In general, water quality data is more meaningful after peak production which usually occurs during the summer months. Therefore, groundwater quality data is only published for the fall months. The groundwater depth and elevation data are published for both spring and fall, typically in separate reports.

Saline intrusion from the west is a natural consequence of the delta potentially affecting the quality of groundwater in the San Joaquin County groundwater subbasins (ESJSb and TSb). Groundwater quality analysis is completed on an annual basis and this year, San Joaquin County

has decided to use the ESJSb GSP representative monitoring wells around the subbasin which are regularly sampled for total dissolved solids (TDS), chloride, nitrates, and arsenic.

#### 1.2 Procedure

Water level measurements are performed using either a steel tape or sounder. Data is then immediately recorded in field books and then stored in a database for accessibility and reporting requirements.

Groundwater quality sampling has been historically conducted on an annual basis during the month of October, along with the Fall groundwater well measurements.

## 2 Rainfall Distribution

The two groundwater basins in the County (ESJSb and TSb) respond in part to changes in annual precipitation. There are three precipitation stations throughout and adjacent to the County which have historically tracked rainfall.

Figure 2-1 shows the locations of the three active stations currently providing data. The precipitation records from west to east, are presented on Figures 2-2 through 2-7 for the entire water year. As shown, almost all of the precipitation fell during the winter and spring months. These graphs reflect areas located across the County and one area in neighboring Calaveras County. These stations have been collecting rainfall data since the 1950's. In the spring of water year 2025, rainfall was about 57 percent of the average in the Tracy region, 75 percent of the average in the Stockton area, and 51 percent of average northeast of the county. Rainfall typically increases from west to east across the county into the foothills. Rainfall was below average at all three stations as shown below.

Precipitation Station	Average (in)	WY 2025 (inches)	Note:
Tracy Carbona	9.85	5.59	Below Average
Stockton Airport	13.66	10.27	Below Average
Camp Pardee	21.21	10.94	Below Average

A Water Year (WY) is the period between October 1<sup>st</sup> and September 30<sup>th</sup>. The year in which the period ends denote the water year, e.g., September 30<sup>th</sup>, 2025, is the end of WY 2025. Based on the above precipitation data, Water Year 2025 is Below Average.

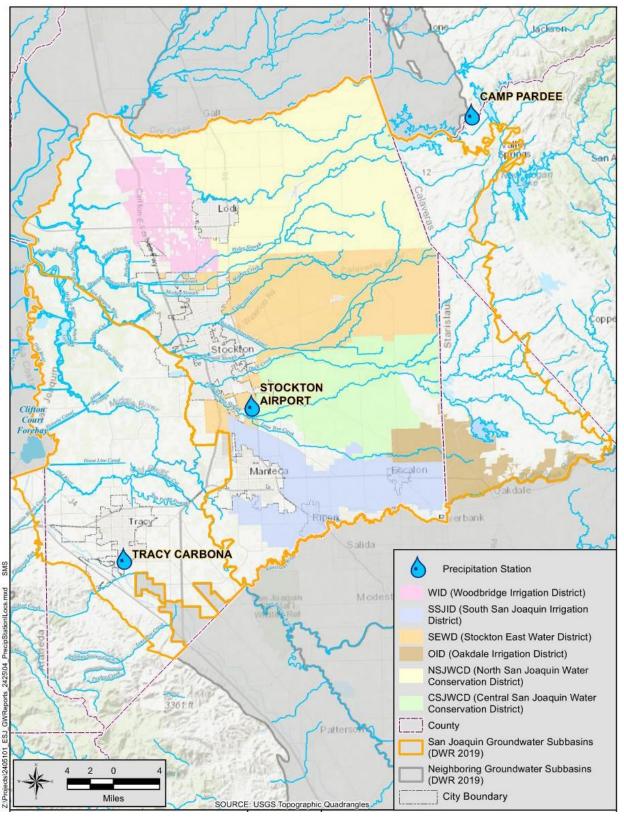


Figure 2-1 Precipitation Station Locations

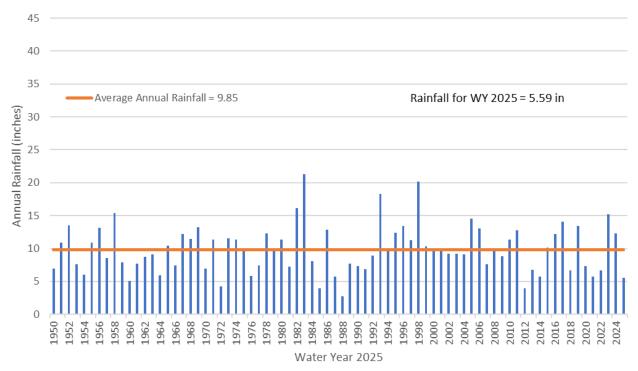


Figure 2-2 Total Annual Rainfall (Tracy Carbona Station)

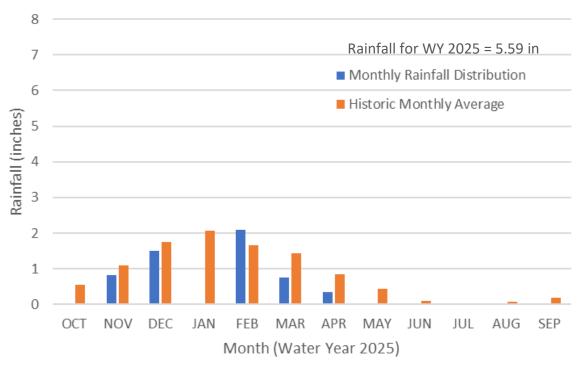


Figure 2-3 Monthly Rainfall Distribution (Tracy Carbona Station)

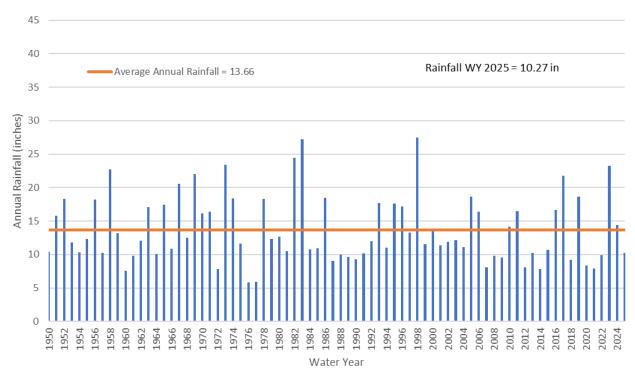


Figure 2-4 Total Annual Rainfall (Stockton Metro AP)

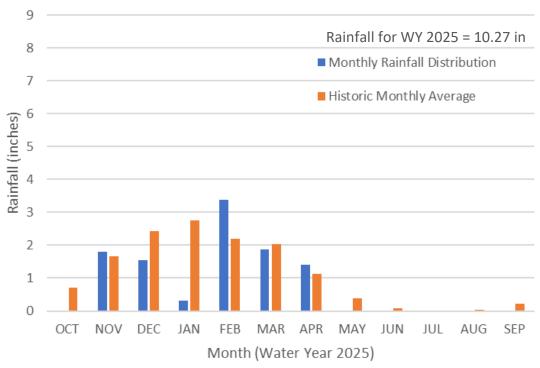


Figure 2-5 Monthly Rainfall Distribution (Stockton Metro AP)

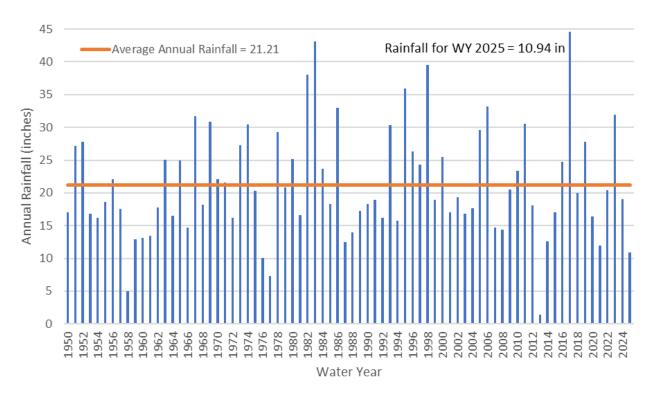


Figure 2-6 Total Annual Rainfall (Camp Pardee Station)

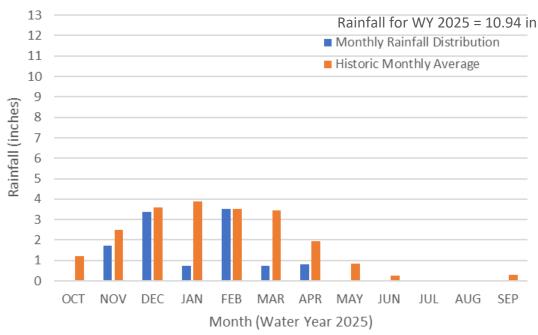


Figure 2-7 Monthly Rainfall Distribution (Camp Pardee Station)

# 3 Surface Water Levels and Storage

The groundwater levels in the County respond to not only changes in annual precipitation, but also to the amount of surface water in storage and flow in the rivers. Typically, lower amounts of surface water in storage indicates higher amounts of groundwater pumping. Three river gaging stations were selected along the rivers and three reservoir storage stations to represent these conditions.

Figure 3-1 shows the location of these gages and Figures 3-2 through 3-5 provide the recorded reservoir storage and outflows, and river stages for WY 2025. Rain events are shown in the high river flow spikes and reservoir increases, while lower river flow spikes represent the decreases in reservoir levels due to managed outflow. Monthly average river flow data for Mokelumne River at Woodbridge Station is not yet available for WY 2025.

Tables 3-1 and 3-2 detail the station info for each of the flow gages and reservoir storage totals used for Figures 3-1 through 3-5.

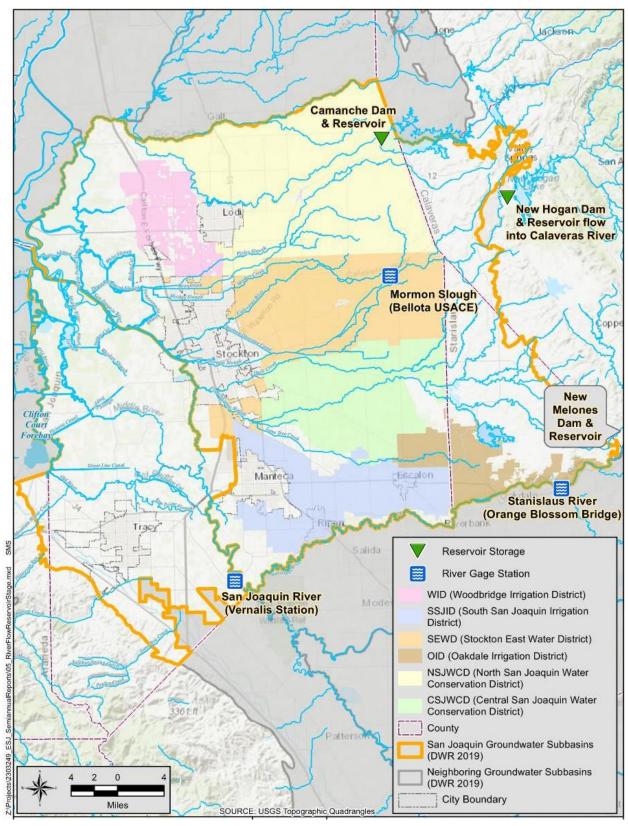


Figure 3-1 Reservoir Storage and River Gage Station Locations

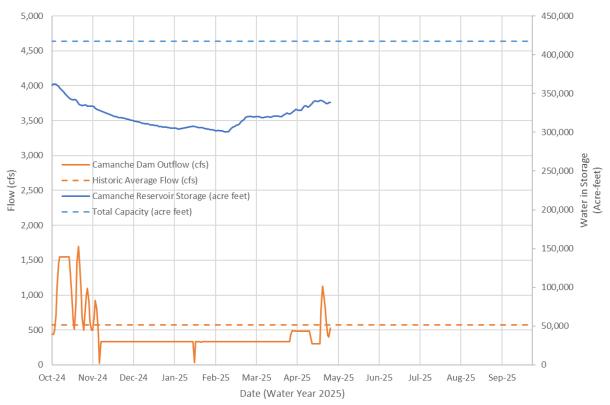


Figure 3-2 Camanche Reservoir

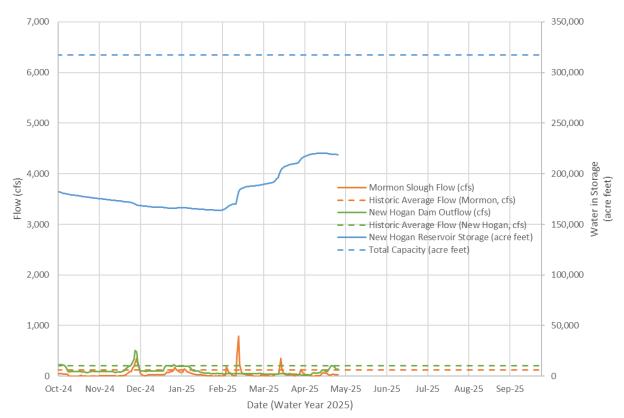


Figure 3-3 New Hogan Dam and Calaveras River (Mormon Slough at Bellota)

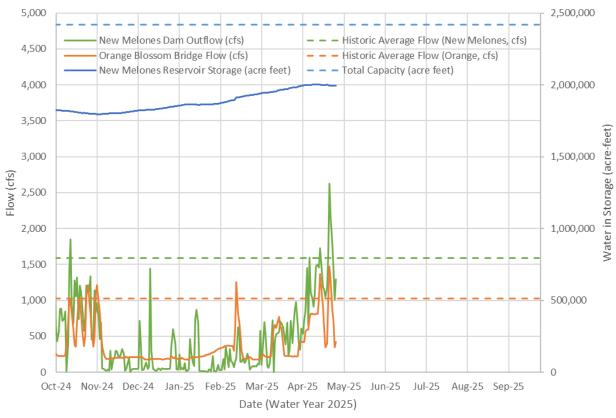


Figure 3-4 New Melones Dam at Stanislaus River (Orange Blossom Bridge)

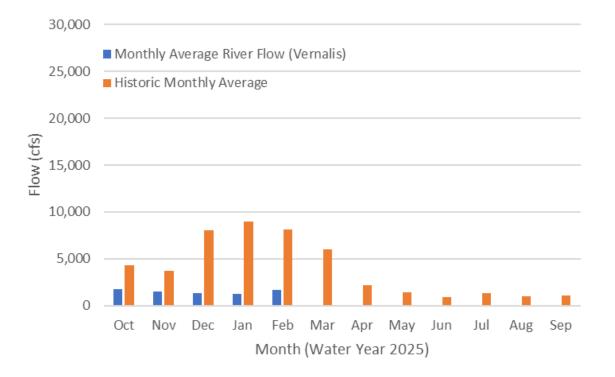


Figure 3-5 San Joaquin River Flow (Vernalis Station) Monthly Average

**Table 3-1 Flow Gages** 

Station Name	River Basin	Station Code	Station Type	WY 2025, Monthly Average Flow <sup>3</sup>	Unit of Measurement	Historic Average Yearly Total Flow <sup>1</sup>	WY 2025, % of Historic Average
Camanche Reservoir Releases	Mokelumne River	CMN	USACE Outflow, Discharge	474	cubic feet per second	800	59%
Mokelumne River at Woodbridge	Mokelumne River	11325500	USGS River flow, Discharge 00060	No Data²	cubic feet per second	500	
New Hogan Dam Releases	T I NHG		USACE Outflow, Discharge	122	cubic feet per second	236	52%
Calaveras River Bellota at Mormon Slough	Calaveras River	NHG	USACE River flow, Discharge	46	cubic feet per second	159	29%
New Melones Dam Releases	Stanislaus River	NML	USACE Outflow, Discharge	942	cubic feet per second	1235	76%
Stanislaus River at Orange Blossom Bridge	Stanislaus River	NML	USACE River flow, Discharge	567	cubic feet per second	696	81%
San Joaquin River near Vernalis	San Joaquin	11303500	USGS River flow, Discharge 00060	1499	cubic feet per second	3919	38%

#### Notes:

<sup>&</sup>lt;sup>1</sup> Historic Yearly Average Flow data for USACE (United States Army Corp of Engineers) gages is not available, averages are derived from previous 4 years of data and are the mean daily flow measured.

<sup>&</sup>lt;sup>2</sup> Data not yet available for WY 2025.

<sup>&</sup>lt;sup>3</sup> First six months.

Table 3-2 Reservoir Storage

Station Name	River Basin	Station Code	Station Type	Total Capacity	Unit of Measurement	Total Storage Start of WY 2025	_	Peak Storage WY 2025
Camanche Reservoir	Mokelumne River	CMN	USACE Storage	417 Thousand	Acre-feet	361 Thousand AF 86% Capacity	339 Thousand AF 81% Capacity	362 Thousand AF 87% Capacity
New Hogan Dam & Reservoir	Calaveras River	NHG	USACE Storage	317 Thousand	Acre-feet	182 Thousand AF 57% Capacity	219 Thousand AF 69% Capacity	220 Thousand AF 69% Capacity
New Melones Dam & Reservoir	Stanislaus River	NML	USACE Storage	2.5 Million	Acre-feet	1.82 Million AF 75% Capacity	1.99 Million AF 82% Capacity	2 Million AF 83% Capacity

# 4 Groundwater Elevation Monitoring

Groundwater level data was provided by the County and supplemented with data available through the Department of Water Resources California Statewide Groundwater Elevation Monitoring (CASGEM) program. Groundwater levels were gathered by the County for the ESJSb while portions of the data for the TSb, Calaveras and Stanislaus County were sourced from the CASGEM or Sustainable Groundwater Management Act, Monitoring Network Module (SGMA Data Viewer, or MNM) website.

## 4.1 Groundwater Levels in San Joaquin County

Over two hundred (200) wells measured in Spring 2025. Wells with comparable data are those wells with groundwater level measurements in both Spring 2024 and Spring 2025. Figure 4-1 shows locations of wells with symbols representing increases, decreases, no change, or no data. Wells included in previous reports that had no available construction details, or discontinued measurements have been removed from Tables A-1 to A-9 (located in Appendix A).

Measurements included in the tables are from two sources; County collected, and DWR CASGEM collected. When data is available from both sources, County collected data is prioritized over CASGEM data for consistency. CASGEM data may not be measured within the same timeframe. If County data is not available or the well could not be monitored, CASGEM data was used. If a well was not measured by the County, it is reported as no measurement (NM). If comparable measurements were not available or other entity, it is reported as "--."

Due to well access issues; several monitoring well sites were monitored but were not able to be measured in Spring 2025, which affects the total amount of comparable wells for this report. Wells with 'NM' for this water year were still 'monitored' by County or DWR staff attempting to 'measure' the water levels at the site and are kept in the comparison tables due to the measurement history collected previously.

Improvements to the quality of groundwater level measurements were incorporated in WY 2025. This includes the use of questionable measurement codes (QM) to identify if the well had been recently pumped, purged, sampled, etc. Wells with QMs were not used in contouring or comparison analyses.

The information gathered is summarized as follows:

<u>Central San Joaquin Water Conservation District (CSJWCD)</u> – Thirty-three (33) wells were monitored in the Spring of 2025, but groundwater levels were measured at eighteen (18) wells. One groundwater level may have been affected by recent pumping (questionable measurements). Sixteen (16) wells have comparable measurements (Table A-1). In the Spring, twelve (12) wells decreased in groundwater levels, while only four (4) increased. Average groundwater levels dropped less than three (2.7) feet across the district.

North San Joaquin Water Conservation District (NSJWCD) – Thirty-three (33) wells were monitored in the Spring of 2025, but groundwater levels were measured at nineteen (19) wells. Twelve (12) wells have comparable measurements (Table A-2). In the Spring, nine (9) wells decreased in groundwater levels, while three (3) increased. Average groundwater levels dropped about three feet (3.2 feet) across the district.

Oakdale Irrigation District (OID) – Two (2) wells were monitored in the Spring of 2025, but only one measurement was able to be obtained (Table A-3). When compared to the measurement from Spring 2024 there was a 6 foot decrease in groundwater levels.

Stockton East Water District (SEWD) – Seventy-eight (78) wells were monitored in the Spring of 2025, but groundwater levels could only be measured at fifty-one (51) wells. Groundwater levels in three (3) wells were affected by recent pumping (questionable measurements) Forty-one (41) wells have measurements that could be compared to measurements taken in the Spring of 2024 (Table A-4). Twenty-nine (29) wells decreased in groundwater levels; twelve (12) wells increased. Average groundwater levels declined by about two and a half (2.5) feet across the district.

South San Joaquin Irrigation District (SSJID) – Twenty-six (26) wells were monitored in the Spring of 2025, but groundwater levels could only be measured at nineteen (19) wells. Seventeen (17) wells have comparable measurements (Table A-5). Groundwater levels in fourteen (14) wells decreased, while three (3) well increased. Average groundwater levels dropped by about one and a half (1.4) feet across the district.

Southwest County Area in the Tracy Subbasin – Twenty-five (25) wells were monitored in the Spring of 2025, and twenty-four (24) groundwater levels were obtained. All twenty-four (24) wells have comparable measurements (Table A-6). Nine (9) wells decreased in groundwater levels, and fifteen (15) increased. Average groundwater levels increased by less than one (0.3) foot in the TSb.

<u>Woodbridge Irrigation District (WID)</u> – Eighteen (18) total wells were monitored in the Spring of 2025, and measurements were obtained at sixteen (16) wells. Sixteen (16) wells have comparable measurements (Table A-7). Fifteen (15) wells decreased in groundwater levels and one (1) wells increased. Average groundwater levels dropped by over two (2.2) feet across the district.

<u>Calaveras County</u> – Groundwater measurements for 2025 have not been uploaded to the CASGEM or MNM websites and therefore were not able to be compared at the time of this report (Table A-8).

Stanislaus County – Eight (8) total wells were monitored in the Spring of 2025, and measurements were obtained at three (3) wells. Three (3) wells have comparable measurements. One (1) well decreased in groundwater level and two (2) wells increased. Average groundwater levels dropped by over a foot (1.1) across the district (Table A-9).

Changes in groundwater levels from Spring 2024 through to Spring 2025 throughout the County are summarized on Figure 4-1 with the well location symbol indicating the type and significance of change in groundwater levels.

## 4.2 Hydrographs

Twenty-six (26) wells were selected to represent groundwater conditions throughout the subbasins (A through Z). These wells have historical spring and fall groundwater level measurements. The location and long-term trends of these wells are shown on Figure 4-2. Hydrographs of these selected wells within the County are provided on Figures 4-3 through 4-8 to illustrate the changes in groundwater levels with time in areas across the two subbasins. These hydrographs are grouped based primarily on GSA boundaries but include nearby County GSA wells where located in close proximity.

Hydrographs for Wells A, D, H, T, V, and Z are provided but monitoring at these wells has been prevented this period due to well access issues. Work is being done to resolve access.

#### 4.3 Groundwater Level Profiles

Groundwater level profiles were developed to illustrate the relationship of where groundwater levels were increasing or decreasing in relationship to Spring 1986, the historic high groundwater levels, and Fall 1992, the historic low groundwater levels. Spring groundwater levels from WY2024 are also shown for reference to illustrate whether levels are increasing, decreasing, or are stable. Figure 4-9 shows the location of the profiles and Figures 4-10 through 4-12 provide the profiles.

Figure 4-10 follows Highway 99 from the south County limit to the North County limit. Generally, the water levels show little change from the previous year. Generally, there were decreases with the most significant drop up to ten (10) feet in groundwater levels near the Mokelumne River and Hammer Lane.

Figure 4-11 trends west to east along Highway 4 and Highway 26. Groundwater levels changed very little on the west portion of the cross section, while a slight increase was observed towards the east, with the eastern county boundary not having any data due to lack of monitoring well data in 2025.

Figure 4-12 trends south to north from Highway 99 to Brant Road. Groundwater levels are observed below the historic low across the section except for Copperopolis Road. Overall groundwater levels have dropped by up to ten (10) feet compared to Spring 2024 except for near Eight Mile Road.

## 4.4 Groundwater Level Changes

Figure 4-13 shows the contours for depth to groundwater levels from ground surface in Spring WY 2025. Generally, depth to water increases further from the San Joaquin River and its tributaries. Groundwater between the rivers and in areas of agricultural production are deeper and depth increases towards the foothills. Recharge to these areas occurs during the excess surface runoff and reservoir releases from the foothills during wet years.

Figure 4-14 shows a groundwater elevation map that was used to develop Figures 4-10 through 4-12. Groundwater elevations decrease from the basin boundaries towards the center with the deepest point reaching just below 100 feet mean sea level in three general locations.

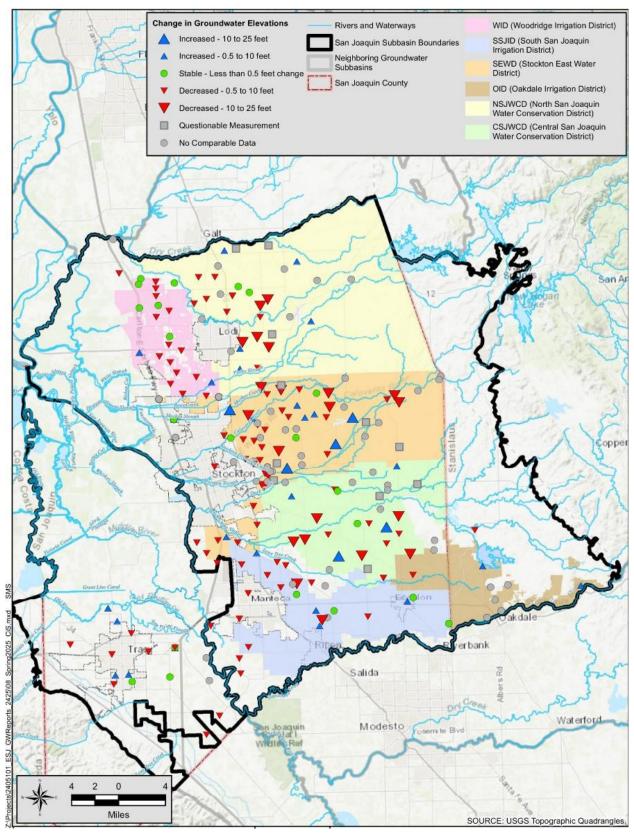


Figure 4-1 Change in Groundwater Elevation – Spring 2024 to Spring 2025

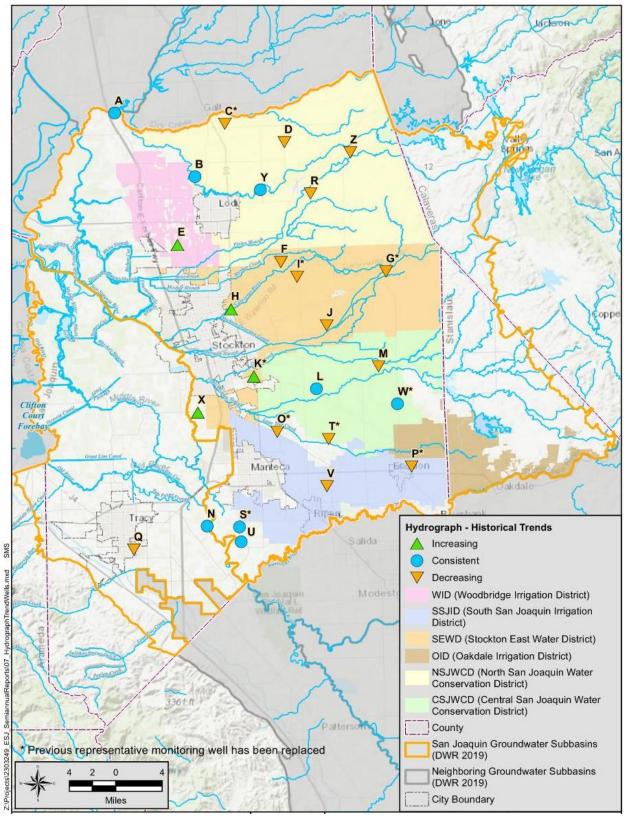


Figure 4-2 Selected Hydrograph Well Historic Trends

Note: Trends are overall historic data averages, not current WY increases or decreases.

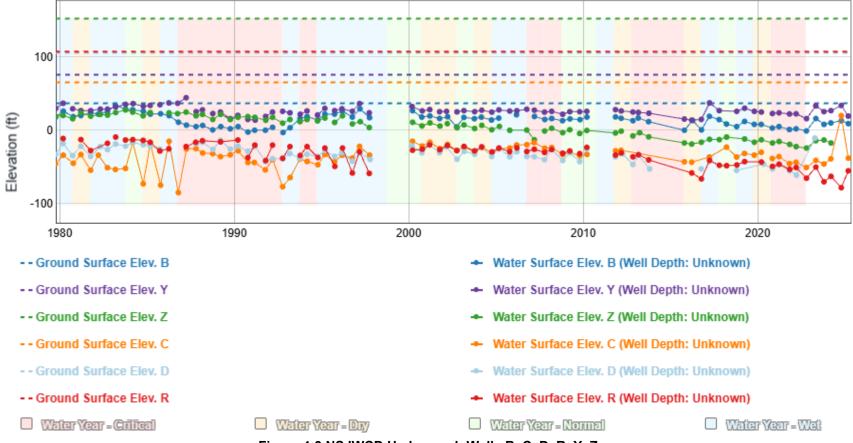


Figure 4-3 NSJWCD Hydrograph Wells B, C, D, R, Y, Z

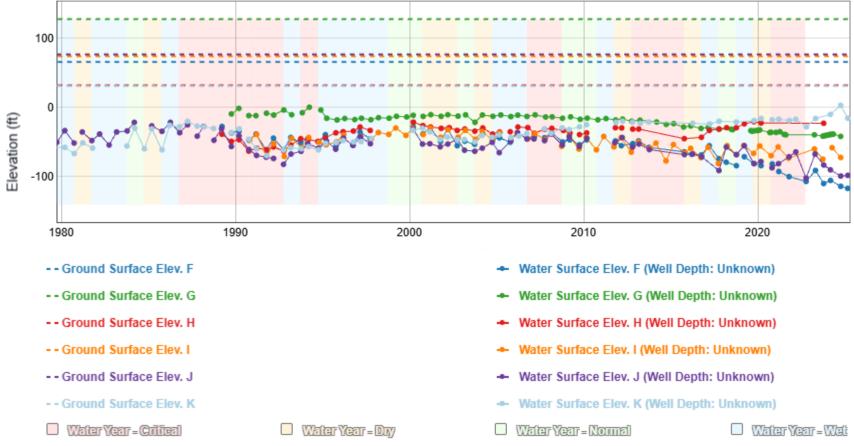


Figure 4-4 SEWD Hydrograph Wells F, G, H, I, J, K

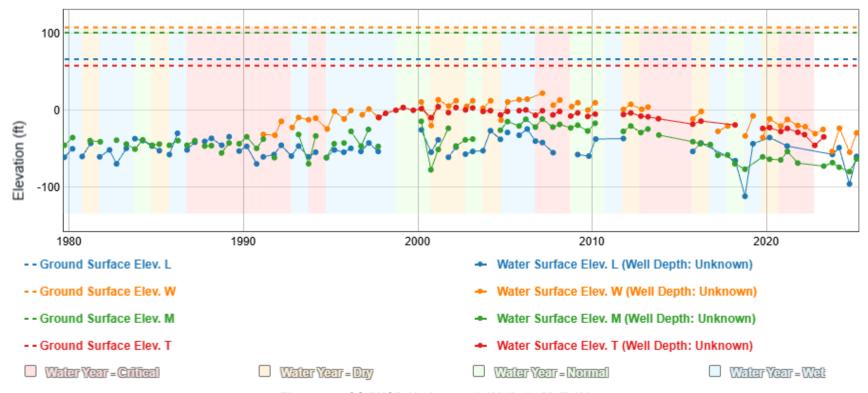
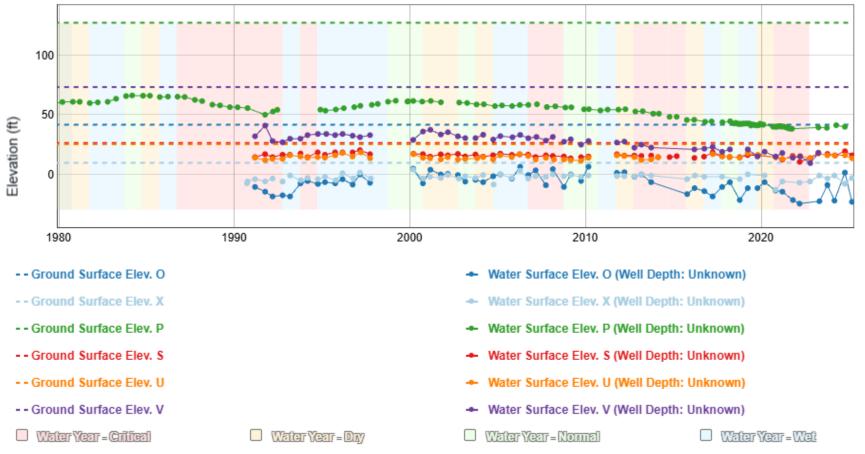
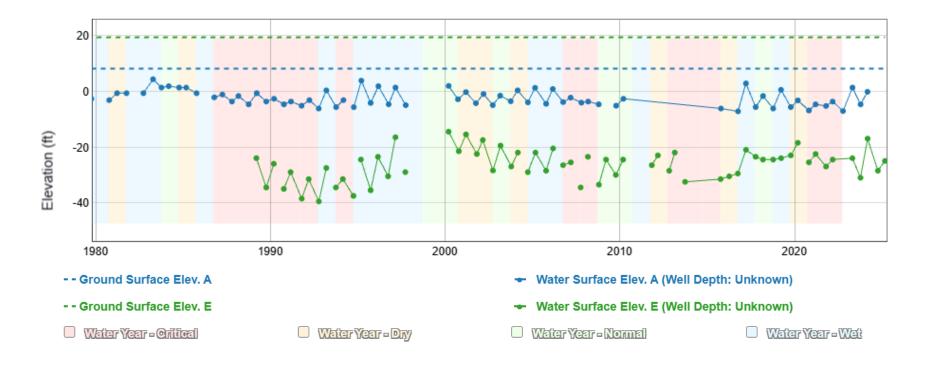


Figure 4-5 CSJWCD Hydrograph Wells L, M, T, W



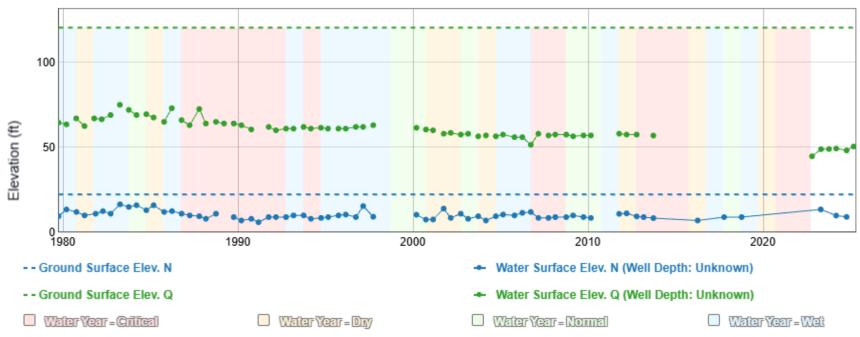
Note: Wells S, X, and U are in the San Joaquin County GSA area but were included in the SSJID area due to their proximity to the District.

Figure 4-6 SSJID Hydrograph Wells O, P, V, X



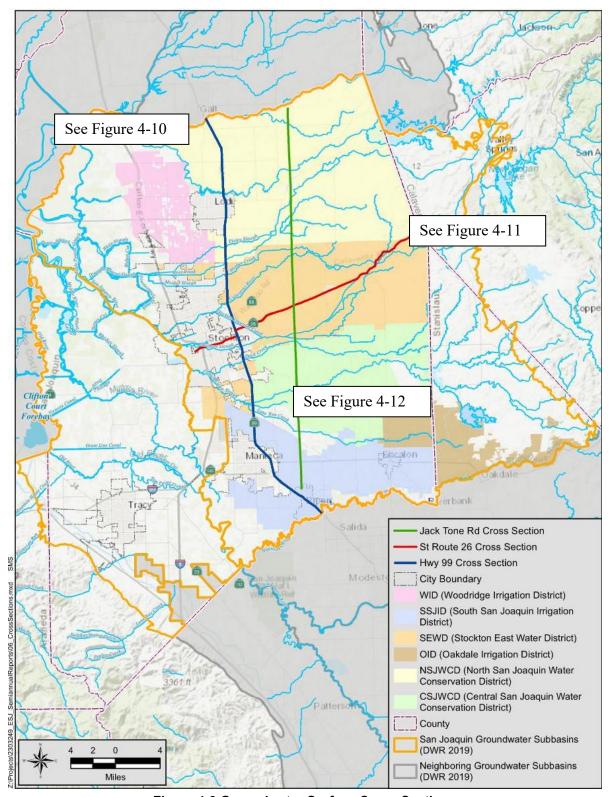
Note: Well A is in the San Joaquin County GSA area but was included in the WID due to its proximity to the District.

Figure 4-7 WID Area Hydrograph Wells E, A



Note: Wells S, X, and U are in the San Joaquin County GSA area but were included in the Southwest County area due to their proximity to the District.

Figure 4-8 Southwest County Hydrograph Wells N, Q, S, U



**Figure 4-9 Groundwater Surface Cross Sections** 

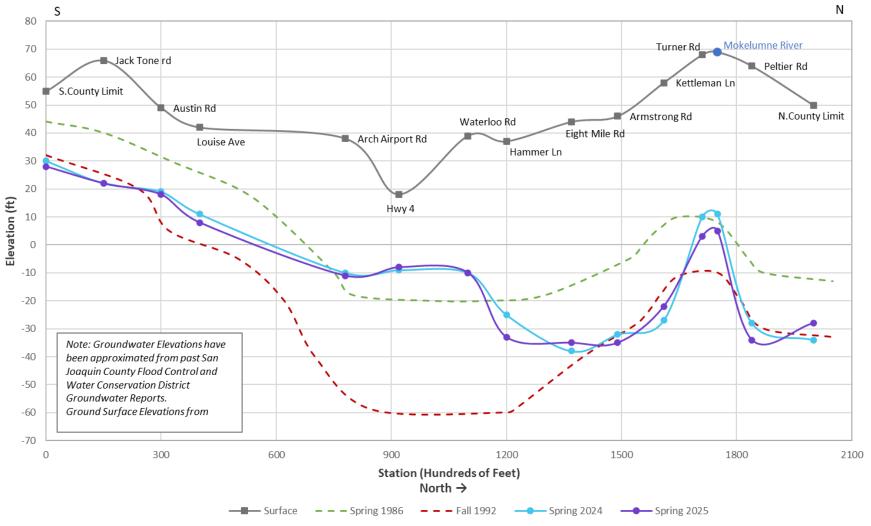


Figure 4-10 Highway 99 Cross Section Spring 2025

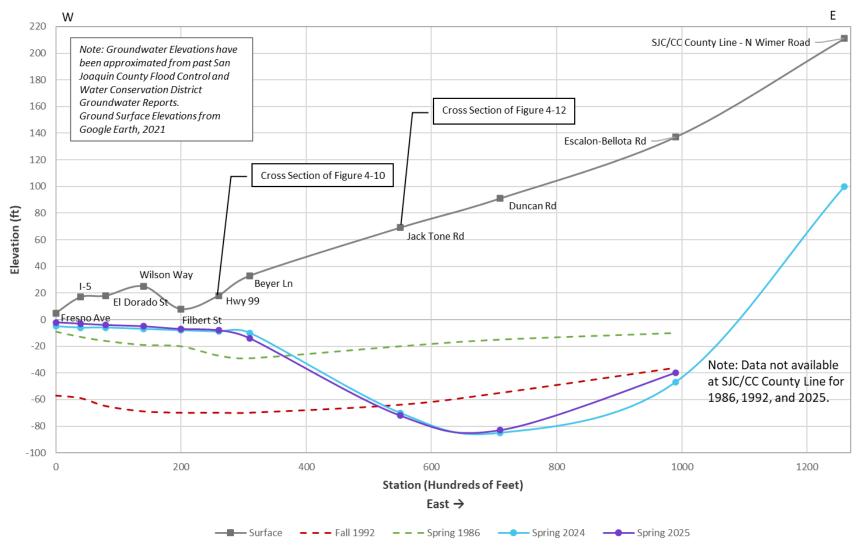


Figure 4-11 Highway 4 & Highway 26 Cross Section Spring 2025

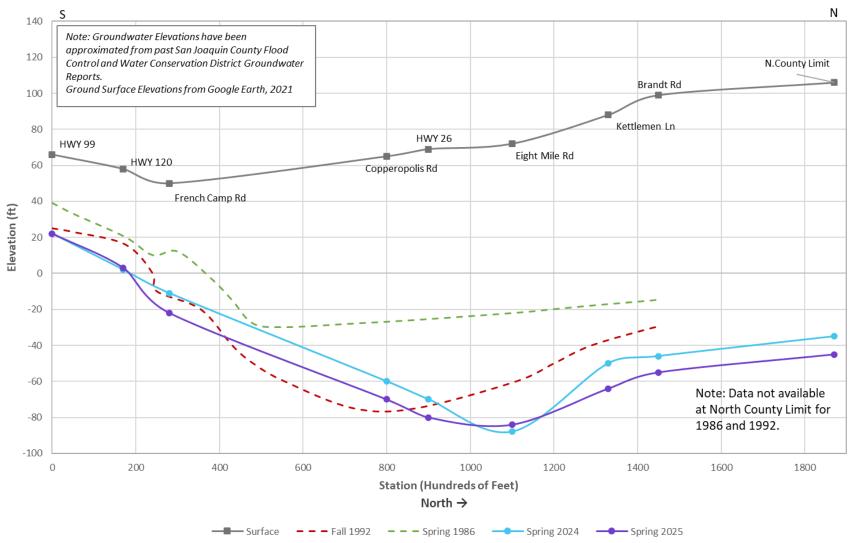


Figure 4-12 Jack Tone Rd Cross Section Spring 2025

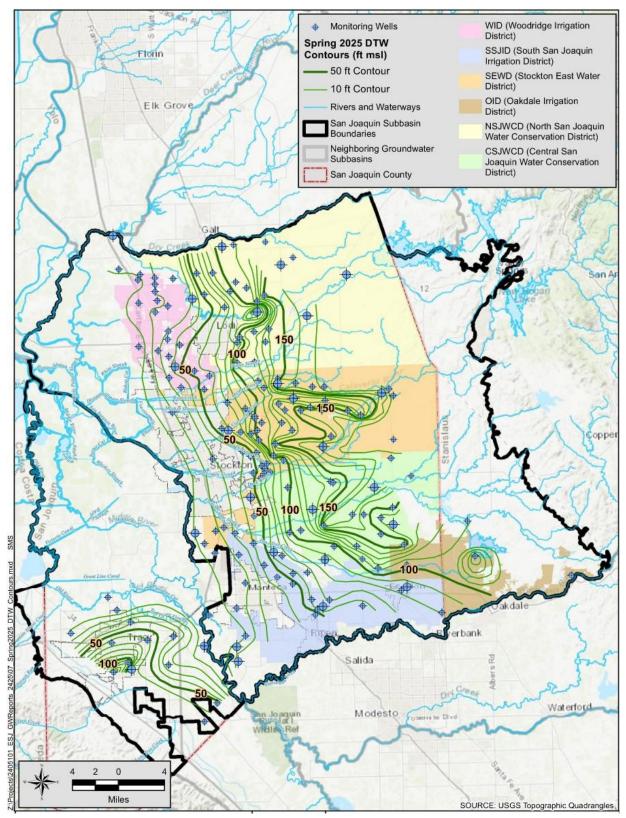


Figure 4-13 Depth to Groundwater - Spring 2025

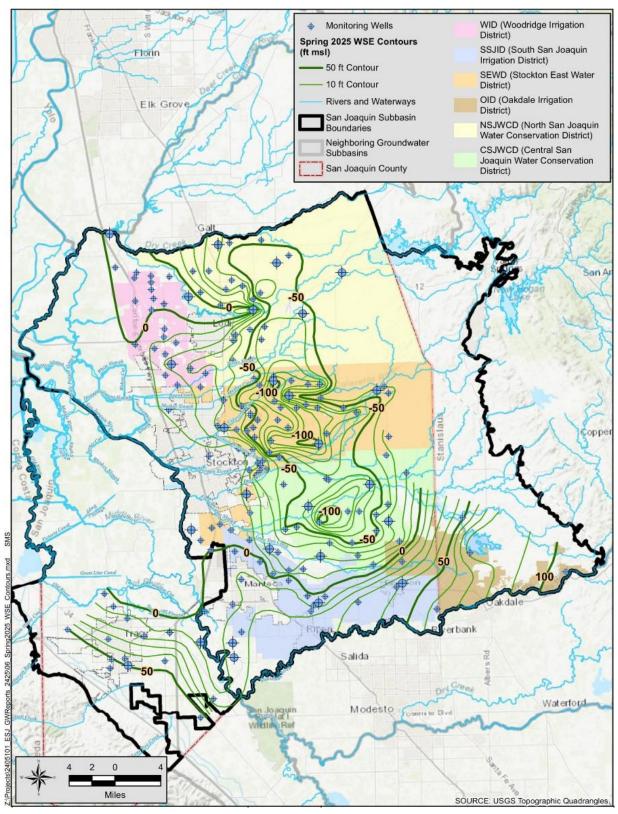


Figure 4-14 Groundwater Surface Elevation – Spring 2025

Note: Tracy Subbasin, only wells above the Corcoran Clay were used for contouring

# **5 Summary**

WY 2025 is preliminarily classified as a below normal water year and has so far received about half to three-quarters of the average precipitation by the end of Spring 2025, with most of the typical rainfall months receiving less than average or no rain at all. January, a typical peak rainfall month, received no rainfall across the county. Combined, surface water storage in Camanche, New Melones and New Hogan reservoirs showed no large increases during the winter months but slowly started to increase as spring continued, with no large outflows except in April at New Melones.

Groundwater levels declined in about 60 percent of the wells measured in comparison to Spring 2024 levels. Only about 26 percent of wells increased in groundwater levels, mostly near rivers and streams.

The pumping depression in the central portion of the County continued to be present and the areas surrounding have seen drops in groundwater levels, however the bottom of the depression remained constant from Spring 2024 to Spring 2025, with the shape and depth of the depression changing due to loss of monitoring data locations. The lack of comparable wells located in the depression is altering the size and shape of the contours. Construction of new dedicated monitoring wells is the long-term solution to data gaps caused by lack or loss of access to existing monitoring wells.

## **Appendix A – Water Level Data**

**Table A-1 Comparison of CSJWCD Groundwater Elevations** 

	· · · · · · · · · · · · · · · · · · ·		
State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (Feet)
01N07E11L001	45.3	NM	
01N07E14J002	-48.6	-44.3	4.3
01N07E24R001	NM	-51.0	
01N07E26H003	NM	NM	
01N07E32A001	-10.0	-11.3	-1.3
01N08E11L001	-57.6	NM	
01N08E13J001	NM	NM	
01N08E16G001	-55.9	-58.5	-2.6
01N08E16H002	-54.4	-54.5	-0.1
01N08E27R002	NM	NM	
01N08E29M002	-48.0	-60.4	-12.4
01N08E35F001	-87.4	-87.2	0.2
01N08E36F001	-61.0	-62.0	-1.0
01N09E13D001	NM	NM	
01N09E17D001	-41.5	NM	
01N09E17M001	-42.7	NM	
01N09E19C001	-73.5	-63.0	10.5
01N09E22G002	NM	NM	
01N09E29R001	-31.5	-44.0	-12.5
01N09E30C005	-42.7	NM	
01S07E01J001	-36.1	-48.1	-12.0
01S08E04R001	NM	NM	
01S08E05A001	-102.4	-109.9	-7.5
01S08E05R001	NM	NM	
01S08E06D001	NM	NM	
01S08E09Q001	-51.9	-30.9	21.0
01S08E11F001	NM	NM	
01S08E14B001	-29.7	-51.9	-22.2*
01S09E05H002	-23.0	-30.0	-7.0
01S09E07A001	NM	NM	
01S09E07N001	-47.3	-52.3	-5.0
01S09E09R001	-10.7	-24.5	-13.8
01S09E19Q002	-9.0	-11.5	-2.5

<sup>\*</sup>Questionable measurement potentially influenced by recent pumping not included in contours or statistical analysis below.

Number of Wells Spring 2024-2025				Change in	Elevation	
Total	Total Comparable Decrease WSE Increase WSE No Change				Range	Average
33	16	11	4	0	-13.8 to 21.0	-2.6

NM = Measurement not able to be taken --

= Not comparable

**Table A-2 Comparison of NSJWCD Groundwater Elevations** 

State Well ID		Spring 2025 (WSE. ft)	Change Spring (Feet)
03N06E04C001	NM	NM	
03N07E02G003	NM	NM	
03N07E03R001	-32.8	-62.7*	-29.9*
03N07E08E002	-24.0	-38.5	-14.5
03N07E09C001	-28.2	-45.2*	-17.0*
03N07E15C004	-46.5	-64.7*	-18.2*
03N07E17D004	-32.4	-23.9	8.5
03N07E18D012	-27.0	NM	==
03N07E19J004	-70.5	-68.5	2.0
03N07E23C002	NM	NM	
03N08E07D002	NM	NM	
03N08E22A001	NM	NM	
04N06E12C004	-37.0	NM	
04N06E12N002	NM	-36.5	
04N06E15B002	-11.7	-17.5	-5.8
04N06E23K00	-1.0	-7.0	-6.0
04N06E24F001	NM	NM	=-
04N06E25R001	-1.0	-9.0	-8.0
04N06E27D002	10.2	6.5	-3.7
04N07E12E001	NM	NM	
04N07E17N001	-36.0	-36.3	-0.3
04N07E19K001	-24.1	-32.6	-8.5
04N07E20H003	-29.3	-29.6	-0.4
04N07E21F001	NM	NM	
04N07E27C002	-49.5	-68*	-18.5*
04N07E28J002	-24.7	-44.2*	-19.5*
04N07E33H001	27.0	18.9	-8.1
04N07E36L001	NM	NM	
04N08E14K001	-17.1	NM	
04N08E17J001	-44.5	NM	
04N08E21M001	NM	NM	
04N08E32N001	-62.6	-56.0	6.6
05N07E34G001	NM	-86.7	

<sup>\*</sup>Questionable measurement potentially influenced by recent pumping not included in contours or statistical analysis below.

Number of Wells Spring 2024-2025				Change in	Elevation	
Total	Total Comparable Decrease WSE Increase WSE No Change				Range	Average
33	12	9	3	0	-14.5 to 8.5	-3.2

NM = Measurement not able to be taken

-- = Not comparable

**Table A-3 Comparison of OID Groundwater Elevations** 

State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)
01S09E21J002	21.5	15.5	-6.0
01S09E24R001	NM	NM	

Number of Wells Spring 2024-2025				Change in	Elevation	
Total Comparable Decrease WSE Increase WSE		No Change	Range	Average		
2	1	1	0	0		-6.0

**Table A-4 Comparison of SEWD Groundwater Elevations** 

State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	
01N06E02C001	-6.9	-8.3	-1.4
01N06E04J003	-7.4	NM	
01N06E04J004	-4.0	NM	
01N06E04J005	0.9	NM	
01N06E05M004	NM	NM	
01N06E36C003	-7.1	NM	
01N06E36C004	-2.3	NM	
01N06E36C005	0.1	NM	
01N07E01M002	NM	NM	
01N07E02G001	-60.5	-47.1	13.4
01N07E04R001	-16.0	-20.0	-4.0
01N07E09E004	NM	-15.0	
01N07E09H001	NM	-21.2	
01N07E09Q003	-26.0	-36.0	-10.0
01N07E10D001	-19.0	-22.0	-3.0
01N07E20G001	-10.0	-16.5	-6.5
01S06E01C002	-2.5	-1.0	1.5
01S06E02G002	1.2	-1.5	-2.7
01S06E10G001	-2.8	-6.5	-3.7
01S07E06M002	-2.5	-5.5	-3.0
01S07E08J002	-11.0	-7.1	3.9
02N06E01A001	NM	NM	
02N06E08N001	-19.8	-18.3	1.5
02N06E08N002	-17.7	-16.4	1.3
02N06E08N003	-15.0	-14.1	0.9
02N06E12H001	NM		

**Comparison of SEWD Groundwater Elevations (continued)** 

Comparison of SEWD Groundwater Elevations (continued)						
State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)			
02N06E20E001	-11.5	NM				
02N06E24F001	-27.5	-32.0	-4.5			
02N06E24J002	NM	NM				
02N06E24J003	NM	NM				
02N07E03D001	-53.5	-60.0	-6.5			
02N07E08D001	NM	NM				
02N07E08K003	-50.9	-66.5	-15.6			
02N07E08R002	-45.6	-43.5	2.0			
02N07E11F001	-77.0	-86.5	-9.5			
02N07E11R002	-74.5	-77.0	-2.5			
02N07E16F002	NM	-65.6				
02N07E16L001	-45.8	-47.8	-2.0			
02N07E20N002	-26.5	-31.0	-4.5			
02N07E21A002	-53.3	-54.6	-1.3			
02N07E21K002	NM	-58.5				
02N07E21N001	-42.5	-52.0	-9.5			
02N07E23B001	NM	-64.8				
02N07E24Q001	-66.6	-66.3	0.3			
02N07E26N001	-84.2	-95.7	-11.5			
02N07E28K002	-55.0	-58.5	-3.5			
02N07E28N004	NM	NM				
02N07E28P001	NM	NM				
02N07E29B001	NM	NM				
02N07E29M002	NM	NM				
02N07E30H001	NM	NM				
02N07E31M001	0.2	NM				

## **Comparison of SEWD Groundwater Elevations (continued)**

State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)
02N07E32J002	NM	NM	
02N07E32M002	-3.2	-8.0	-4.8
02N07E32R001	NM	-14.5	
02N07E33L001	-15.5	-20.0	-4.5
02N07E34R001	-33.0	-69.5*	-36.5*
02N08E03G002	NM	NM	
02N08E04C001	-65.5	-84.5	-19.0
02N08E05C001	-80.5	-81.0	-0.5
02N08E08N001	-68.0	-63.3	4.7
02N08E09G002	-17.0	-39.0*	-22.0*
02N08E10H002	-63.1	NM	
02N08E14C001	-74.0	-50.5	23.5
02N08E16D001	-74.6	-79.0	-4.4
02N08E18C001	-98.2	-93.1	5.1
02N08E20F001	-66.3	NM	
02N08E24J001	-72.1	NM	
02N08E28H002	-93.6	-71.1	22.5
02N08E33E001	-90.6	-100.0	-9.4
02N09E05N001	-38.8	-40.5	-1.7
02N09E09D001	-29.8	-46.2	-16.4
02N09E28N001	NM	-12.0	
03N06E35P002	NM	NM	
03N07E35C002	-57.8	-85.8*	-28.0*
03N07E35L001	-106.0	-118.0	-12.0
03N07E36J001	-81.8	-86.5	-4.7
03N09E25R001	NM	NM	

<sup>\*</sup>Questionable measurement potentially influenced by recent pumping not included in contours or statistical analysis below.

Number of Wells Spring 2024-2025				Change in	Elevation	
Total Comparable Decrease WSE Increase WSE No Change				Range	Average	
78	41	29	12	0	-19.0 to 23.5	-2.5

**Table A-5 Comparison of SSJID Groundwater Elevations** 

State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)
01S07E14M001	-18.6	-23.6	-5.0
01S07E14P003	-24.8	NM	
01S07E15F002	-23.0	-24.1	-1.1
01S07E18L001	7.3	3.5	-3.8
01S07E21G001	5.5	3.8	-1.7
01S07E25E001	-8.0	-23.0	-15*
01S07E26G001	11.3	NM	
01S07E27K001	0.0	-5.5	-5.5
01S07E30R001	12.6	11.2	-1.4
01S07E36D001	7.0	6.8	-0.3
01S08E30C002	-10.5	-14.0	-3.5
01S09E29M002	NM	NM	
01S09E33J002	41.3	41.2	-0.1
01S09E33P001	37.9	38.6	0.7
02S07E07D002	12.0	6.0	-6.0
02S07E11N002	24.7	NM	
02S07E19H001	21.0	17.5	-3.5
02S08E04M001	3.5	3.0	-0.5
02S08E06J001	-2.0	2.0	4.0
02S08E07R001	13.5	19.5	6.0
02S08E08A001	20.7	NM	
02S08E08E001	16.2	4.5	-11.7*
02S08E09J001	NM	NM	
02S08E12D001	33.1	32.0	-1.1
02S08E14E001	NM	NM	
02S09E12R001	67.1	66.9	-0.3

<sup>\*</sup>Questionable measurement potentially influenced by recent pumping not included in contours or statistical analysis below.

Number of Wells Spring 2024-2025				Change in I	Elevation	
Total	Total Comparable Decrease WSE Increase WSE No Change				Range	Average
26	17	14	3	0	-6.0 to 6.0	-1.4

Table A-6 Comparison of Southwest County Area in Tracy Subbasin Groundwater Elevations

State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)
01S05E31R002	0.6	1.5	0.9
02S04E15R001	52.0	50.0	-2.0
02S05E08B001	-0.2	1.0	1.2
02S06E25J001	15.9	14.5	-1.4
02S06E31N001	45.5	45.0	-0.5
03S06E27N001	55.9	54.7	-1.2
03S07E06Q001	NM	NM	
MW-1A	-12.6	-10.8	1.8
MW-1B	-10.1	-17.6	-7.5
MW-1C	-20.0	-18.0	2.0
MW-2A	-17.2	-15.0	2.2
MW-2B	-21.0	-17.8	3.1
MW-2C	-21.0	-18.0	3.0
MW-3A	-16.7	-13.6	3.1
MW-3B	-14.4	-17.6	-3.2
MW-3C	-21.8	-18.0	3.8
MW-4A	-16.6	-14.7	1.9
MW-4B	-19.9	-16.8	3.0
MW-4C	-19.7	-16.6	3.1
MW-5A	-13.6	-11.8	1.9
MW-5B	-9.2	-13.8	-4.6
MW-5C	-10.4	-13.2	-2.8
MW-6A	-14.6	-12.0	2.6
MW-6B	-8.8	-15.5	-6.7
MW-6C	-16.8	-14.2	2.7

Number of Wells Spring 2024-2025					Change in I	levation
Total	Range	Average				
25	24	9	15	0	-7.5 to 3.8	0.3

Note: Monitoring wells MW-1 through MW-6 are measured by City of Tracy. Monitoring wells MW-1 through MW-6 monitor the lower aquifer, with similar conditions to the aquifer in East San Juaquin Subbasin, below the Corcoran Clay confining layer.

**Table A-7 Comparison of WID Groundwater Elevations** 

State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)
03N05E14C001	-1.8	-0.3	1.5
03N06E05N003	-3.0	-3.5	-0.5
03N06E07H003	-7.0	-8.6	-1.6
03N06E17A004	-13.2	-14.9	-1.7
03N06E18M003	-8.1	-12.0	-3.9
03N06E20D002	-6.0	-12.0	-6.0
03N06E32R001	-15.5	-17.5	-2.0
04N05E10K001	-0.5	-3.9	-3.4
04N05E13H001	4.0	1.1	-2.9
04N05E13R004	4.5	1.5	-3.0
04N05E14B002	3.1	2.6	-0.5
04N05E24J004	6.0	2.0	-4.0
04N05E36H003	3.8	0.2	-3.6
04N06E17G004	6.0	5.5	-0.5
04N06E29N002	3.6	2.0	-1.6
04N06E30E001	8.7	8.0	-0.7
04N06E34J002	23.9	NM	
05N05E28L003	0.0	NM	

Number of Wells Spring 2024-2025				Change in Ele	evation	
Total	Comparable	Range	Average			
18	16	15	1	0	-6.0 to 1.5	-2.1

**Table A-8 Comparison of Calaveras County Groundwater Elevations** 

Local Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)
CCWD 001	NM	NM	
CCWD 002	67.5	NM	
CCWD 003	NM	NM	
CCWD 004	NM	NM	
CCWD 005	NM	NM	
CCWD 006	NM	NM	
CCWD 007	NM	NM	
CCWD 008	72.35	NM	
CCWD 009	NM	NM	
CCWD 010	95.75	NM	
CCWD 011	88.9	NM	
CCWD 012	146.49	NM	
CCWD 014	128.71	NM	
CCWD 015	NM	NM	

Number of Wells Spring 2024-2025					Change in Elevation	
Total	Range	Average				
14	0	0	0	0		

\*Calaveras County 2025 data has not been uploaded to DWR databases at this time.

**Table A-9 Comparison of Stanislaus Groundwater Elevations** 

State Well ID	Spring 2024 (WSE, ft)	Spring 2025 (WSE, ft)	Change Spring (feet)
01S10E04C001	57.8	49.0	-8.8
01S10E21A001	81.3	83.4	2.1
01S10E26J001	78.6	NM	
01S10E27Q001	69.4	NM	
01S10E34R001	72.5	NM	
01S11E25N001	104.0	107.4	3.4
02S10E02P001	85.9	NM	
02S10E10M002	73.3	NM	

Number of Wells Spring 2024-2025				Change in Elevation	n	
Total	Comparable	rable Decrease WSE Increase WSE No Change Range Aver			Average	
8	3	1	2	0	-8.8 to 3.4	-1.1