
Pleasant Valley Basin Groundwater Sustainability Plan

Water Year 2025 Annual Report

MARCH 2026

Prepared for:

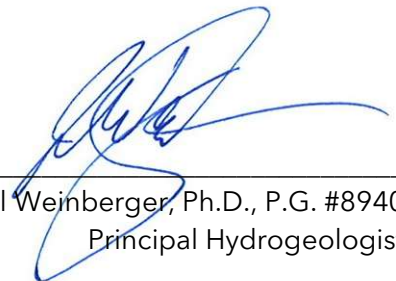
FOX CANYON GROUNDWATER MANAGEMENT AGENCY

800 South Victoria Avenue
Ventura, California 93009-1610
Contact: Farai Kaseke, Ph.D., PH, PMP, CSM

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024
Contact: Jill Weinberger, Ph. D., P.G.



Jill Weinberger, Ph.D., P.G. #8940
Principal Hydrogeologist



Table of Contents

SECTION	PAGE NO.
Executive Summary	v
1 Background	1-1
1.1 Pleasant Valley Basin Groundwater Sustainability Plan	1-1
1.2 OPV Water Rights Coalition, et al. v. Fox Canyon Groundwater Management Agency.....	1-2
1.3 Annual Report Organization	1-2
2 Data Analysis Summary	2-2
2.1 Groundwater Elevations.....	2-2
2.1.1 Groundwater Monitoring Network.....	2-2
2.1.2 Groundwater Elevation Contour Maps	2-3
2.1.3 Hydrologic Conditions and Water Year Type	2-4
2.2 Groundwater Extraction	2-4
2.2.1 New or Replacement Well Applications.....	2-6
2.2.2 New Use Applications	2-6
2.3 Surface Water Supply.....	2-6
2.4 Imported Water Supply	2-7
2.4.1 Recharge of Imported Water	2-7
2.5 Total Water Available.....	2-7
2.5.1 Change in Groundwater Storage.....	2-8
2.5.2 Older Alluvium	2-8
2.5.3 Fox Canyon Aquifer	2-8
2.5.4 Total Change in Storage in the PVB.....	2-8
3 Progress Toward Implementation of the GSP	3-1
3.1 Current Conditions for Each Sustainability Indicator	3-1
3.1.1 Groundwater Elevations	3-1
3.1.2 Groundwater in Storage	3-3
3.1.3 Groundwater Quality	3-3
3.1.4 Land Subsidence	3-4
3.2 Projects and Management Actions	3-4
3.3 Progress on Recommended Corrective Actions	3-4
3.4 Other Implementation Activities	3-5
4 References	4-1
5 Figures	5-1

TABLES

Table 2-1. Groundwater Extractions in the Pleasant Valley Basin by Aquifer System and Water Use Sector 2-5
 Table 2-2. Summary of Surface Water Deliveries to the Pleasant Valley Basin 2-6
 Table 2-3. Total Water Available in the Pleasant Valley Basin..... 2-7
 Table 2-4. Annual Change in Groundwater Storage in the Pleasant Valley Basin..... 2-9
 Table 3-1. Water Year 2025 Groundwater Elevations, Minimum Thresholds, Measurable Objectives, and Interim Milestones for Representative Monitoring Wells in the Pleasant Valley Basin 3-2

FIGURES

Figure 1-1 Vicinity Map for the Pleasant Valley Basin..... 5-3
 Figure 2-1 Pleasant Valley Basin Monitoring Network 5-4
 Figure 2-2 Groundwater Elevations Relative to the Sustainable Management Criteria in the Pleasant Valley Basin 5-5
 Figure 2-3 Groundwater Elevation Contours in the Older Alluvium (Oxnard Equivalent), October 1 to October 31, 2024..... 5-6
 Figure 2-4 Groundwater Elevation Contours in the Older Alluvium (Oxnard Equivalent), March 1 to March 31, 2025 5-7
 Figure 2-5 Groundwater Elevation Contours in the Older Alluvium (Mugu Equivalent), October 1 to October 31, 2024 5-8
 Figure 2-6 Groundwater Elevation Contours in the Older Alluvium (Mugu Equivalent), March 1 to March 31, 2025 5-9
 Figure 2-7 Older Alluvium (Oxnard Equivalent) – Groundwater Elevation Change from Fall 2023 to Fall 2024. 5-10
 Figure 2-8 Older Alluvium (Oxnard Equivalent) – Groundwater Elevation Change from Spring 2024 to Spring 2025 5-11
 Figure 2-9 Older Alluvium (Mugu Equivalent) – Groundwater Elevation Change from Fall 2023 to Fall 2024 5-12
 Figure 2-10 Older Alluvium (Mugu Equivalent) – Groundwater Elevation Change from Spring 2024 to Spring 2025 5-13
 Figure 2-11 Groundwater Elevation Contours in the Fox Canyon Aquifer, October 1 to October 31, 2024 ... 5-14
 Figure 2-12 Groundwater Elevation Contours in the Fox Canyon Aquifer, March 1 to March 31, 2025 5-15
 Figure 2-13 Fox Canyon Aquifer – Groundwater Elevation Change from Fall 2023 to Fall 2024..... 5-16
 Figure 2-14 Fox Canyon Aquifer – Groundwater Elevation Change from Spring 2024 to Spring 2025 5-17
 Figure 2-15 Pleasant Valley Basin Historical Water Year Precipitation..... 5-18
 Figure 2-16 Pleasant Valley Basin Stream Gauge Data: Gauge 805 5-19
 Figure 2-17 WY 2025 Groundwater Production in the Older Alluvium / UAS 5-20
 Figure 2-18 WY 2025 Groundwater Production in the LAS 5-21
 Figure 2-19 WY 2025 Groundwater Production in Multiple or Undetermined Aquifer Systems 5-22
 Figure 2-20 Pleasant Valley Basin Annual Water Sector Use 5-23

Figure 2-21	Water Year Type, Groundwater Use, and Annual Change in Storage in the Pleasant Valley Basin	5-24
Figure 2-22	Water Year Type, Groundwater Use, and Cumulative Change in Storage in the Pleasant Valley Basin	5-25
Figure 2-23	Change in Storage in the Older Alluvium (Oxnard Aquifer): Spring 2024 to Spring 2025	5-26
Figure 2-24	Change in Storage in the Older Alluvium (Mugu Aquifer): Spring 2024 to Spring 2025	5-27
Figure 2-25	Change in Storage in the Fox Canyon Aquifer: Spring 2024 to Spring 2025	5-28
Figure 3-1	Most Recent TDS (mg/L) Measured in WY 2025 and change in TDS since 2023	5-29
Figure 3-2	Most Recent Nitrate (mg/L) Measured in WY 2025 and change in Nitrate since 2023	5-30
Figure 3-3	Most Recent Chloride (mg/L) Measured in WY 2025 and change in Chloride since 2023	5-31
Figure 3-4	Most Recent Sulfate (mg/L) Measured in WY 2025 and change in Sulfate since 2023	5-32
Figure 3-5	Most Recent Boron (mg/L) Measured in WY 2025 and change in Boron since 2023	5-33
Figure 3-6	Change in Land Surface Elevation Between Spring 2024 and Spring 2025	5-34

APPENDICES

Appendix A	Key Well Hydrographs
------------	----------------------

INTENTIONALLY LEFT BLANK

Executive Summary

The Fox Canyon Groundwater Management Agency (FCGMA), the Groundwater Sustainability Agency (GSA) for the portions of the Pleasant Valley Basin (PVB) within its jurisdictional boundaries, in coordination with the other two GSAs in the PVB, has prepared this annual report covering groundwater conditions during the 2025 water year (October 1, 2024 through September 30, 2025). The PVB is divided into three management areas: the Pleasant Valley Pumping Depression Management Area, the East Pleasant Valley Management Area, and the North Pleasant Valley Management Area (Figure ES-1). Groundwater conditions within the management areas are monitored in two aquifer systems: the Upper Aquifer System (UAS), comprising the older alluvium, and the Lower Aquifer System (LAS), comprising the Hueneme, Fox Canyon, and Grimes Canyon aquifers.

As defined in the Groundwater Sustainability Plan (GSP) for the PVB:

The primary sustainability goal in the PVB is to maintain a sufficient volume of groundwater in storage in the older alluvium and the LAS so that there is no net decline in groundwater elevation or storage over wet and dry climatic cycles. Further, groundwater levels in the PVB should be maintained at elevations that are high enough to not inhibit the ability of the Oxnard Subbasin to prevent net landward migration of the saline water impact front after 2040 (FCGMA 2019).

Current Conditions

Water year 2025 was a critically dry water year¹, in which the PVB received 36% of the average annual rainfall. Reported groundwater production from the PVB was 8,674 AF in water year 2025, which is 2,011 AF greater than the reported groundwater production in water year 2024. For wells with known screen intervals in the UAS, groundwater production in water year 2025 was similar to that in water year 2024. For wells with known screen intervals in the LAS, groundwater production was approximately 1,800 AF greater in water year 2025 than it was in water year 2024. The overall groundwater production volume of 8,674 AF was lower than the estimated sustainable yield for the PVB.

Spring 2025 groundwater elevations were higher than spring 2024 groundwater elevations in all of the representative monitoring sites, or key wells, except in the northeastern portion of the basin in the older alluvium. In the UAS, spring groundwater elevations were higher than the minimum threshold at the two key wells measured (Figure ES-2). In the LAS, groundwater elevations were higher than the minimum threshold groundwater elevation at four of the five key well measured (Figure ES-2).

Groundwater in storage increased during water year 2025. Groundwater in storage changes are calculated for the Oxnard, Mugu, and Fox Canyon aquifers and summed to define the total storage change in the PVB. In water year 2025 the storage increased by approximately 2,960 AF.

Concentrations of total dissolved solids (TDS) generally remained stable or improved in the PVB during water year 2025. Concentrations of chloride generally remained stable in the PVB during water year 2025 with the exception near the northeastern boundary of the basin along the Arroyo Las Posas where concentration increased.

¹ Water year types were defined in the Groundwater Sustainability Plan for the Las Posas Valley Basin. Critical water years are ones in which the LPV receives less than 50% of the long-term average precipitation.

Additionally, land subsidence related to groundwater production was not observed in the PVB during water year 2025.

Progress Toward Implementation of the GSP

FCGMA continues to implement the GSP for sustainable management of the PVB. Specific steps taken during water year 2025 include:

- Installing dedicated nested monitoring wells at three locations in the PVB
- Ongoing review of well permit applications
- Submittal of the first Periodic Evaluation of the GSP for the Pleasant Valley Basin.

The PVB is also undergoing an adjudication of groundwater rights, which may influence long-term management of the groundwater resources.

1 Background

The Fox Canyon Groundwater Management Agency (FCGMA), the Groundwater Sustainability Agency (GSA) for the majority of the Pleasant Valley Basin (PVB; DWR Bulletin 118 Basin No. 4-006) which lies within its jurisdictional boundaries, has prepared, in coordination with the other two GSAs, this annual report for the Pleasant Valley Basin Groundwater Sustainability Plan (GSP) in compliance with the Sustainable Groundwater Management Act (SGMA; California Water Code, Section 10720 et seq.). SGMA requires that an annual report be submitted to DWR by April 1 of each year following the adoption of the GSP. FCGMA adopted a GSP for the PVB in December 2019 and submitted the GSP to DWR on January 13, 2020. DWR approved the GSP on November 18, 2021. FCGMA submitted its first Periodic Evaluation of the GSP to DWR on January 13, 2025.

FCGMA is one of three GSAs in the PVB. The other two GSAs are the Camrosa Water District (CWD) Pleasant Valley GSA and the Pleasant Valley Basin Outlying Areas GSA (County of Ventura). This annual report applies to the entirety of the PVB. To coordinate management and reporting in the PVB, FCGMA and CWD have executed a Memorandum of Understanding, and FCGMA and the County have formed a Joint Powers Authority.

1.1 Pleasant Valley Basin Groundwater Sustainability Plan

The GSP for the PVB defined the conditions under which the groundwater resources will be managed sustainably in the future (FCGMA 2019). The primary sustainability goal for the PVB, adopted in the GSP, is “to maintain a sufficient volume of groundwater in storage in the older alluvium and the Lower Aquifer System (LAS) so that there is no net decline in groundwater elevation or storage over wet and dry climatic cycles” (FCGMA 2019). Additionally, “groundwater levels in the PVB should be maintained at elevations that are high enough to not inhibit the ability of the Oxnard Subbasin to prevent net landward migration of the saline water impact front” after 2040 (FCGMA 2019). These goals were established based on both historical and potential future undesirable results to the groundwater resources of the PVB from six sustainability indicators: chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletions of interconnected surface water. The PVB was found not to experience direct impacts from seawater intrusion or depletion of interconnected surface water.

The GSP established minimum threshold and measurable objective groundwater elevations, which vary geographically within the three management areas (FCGMA 2019). These management areas are the Pumping Depression Management Area, the North Pleasant Valley Management Area, and the East Pleasant Valley Management Area. The minimum thresholds were selected to avoid undesirable results, and the measurable objectives were selected to allow for operational flexibility during drought periods (FCGMA 2019). This annual report documents the conditions in the PVB and the progress toward sustainability for water year 2025, based on a review of the groundwater conditions relative to the minimum thresholds and measurable objectives established in the GSP and reviewed in the First Periodic Evaluation of the GSP.

1.2 OPV Water Rights Coalition, et al. v. Fox Canyon Groundwater Management Agency

On June 15, 2021, a group of landowners and groundwater users in the PVB initiated a lawsuit in the Santa Barbara Superior Court requesting, among other things, a comprehensive adjudication of groundwater rights in the PVB. This lawsuit is ongoing. In the event the Superior Court comprehensively determines groundwater rights to the PVB, and the adjacent Oxnard Subbasin, adjustments to projects and management actions described in the First Periodic Evaluation of the GSP and needed for long-term sustainable management, may be required. Changes to PVB management, that result from a comprehensive adjudication of the groundwater rights will be described in future annual reports, after a final judgement has been entered.

1.3 Annual Report Organization

This is the seventh Annual Report prepared since the GSP for the PVB was submitted to DWR. This annual report is organized according to the DWR's Guide to Annual Reports, Periodic Evaluations, and Plan Amendments (DWR 2023). Chapter 1 provides background information on the GSP, the PVB, and FCGMA. Chapter 2 provides a data analysis summary of groundwater elevation, groundwater extraction, surface water supply, total water use, and change in storage. Chapter 3 provides an update on the GSP implementation including current conditions for each sustainability indicator, updates on projects and management actions, and progress on addressing recommended corrective actions.

2 Data Analysis Summary

2.1 Groundwater Elevations

2.1.1 Groundwater Monitoring Network

Groundwater conditions are measured at a network of both dedicated monitoring wells and groundwater production wells (Figure 2-1 Pleasant Valley Basin Monitoring Network; Appendix A). At the end of water year 2024, FCGMA installed five new monitoring wells at three locations in the PVB (01N21W11J02 through -04, 02N20W20D06, and 02N20W33E03). Groundwater elevation data from these wells was collected in water year 2025 and are included on the contour maps in Section 2.1.2. These data will be used to fill in geographic data gaps identified in the GSP as well as to better understand vertical gradients in the PVB.

All of the key wells were measured in both the fall and spring of water year 2025. FCGMA continues to collaborate with the agencies responsible for monitoring wells throughout the PVB to ensure more consistent water level measurement collection. Additionally, as funding becomes available, FCGMA will explore new areas of the PVB that will benefit from installation of dedicated monitoring wells.

2.1.2 Groundwater Elevation Contour Maps

Groundwater elevation contour maps showing the seasonal low (fall 2024²) and high (spring 2025³) groundwater elevations for the 2025 water year are discussed in the following subsections along with a discussion of recent groundwater elevation trends, a comparison to the previous water year's measured groundwater elevations.

2.1.2.1 Older Alluvium (Oxnard and Mugu Age Equivalent)

Current Conditions

Groundwater elevations in the older alluvium were measured at two key wells (02N21W34G05S and 02N21W34G04S). Spring 2025 groundwater elevations were above the minimum threshold, but below the measurable objective, in both wells (Figure 2-2; Appendix A). Fall 2024 groundwater elevations were above the minimum threshold in well 02N21W34G04S but were below the minimum threshold in well 02N21W34G05S. Consistent with previous years groundwater elevations were generally highest in the North Pleasant Valley Management Area and decreased to the west and south (Figures 2-3 through 2-6).

Recent Trends

Fall 2024 and spring 2025 groundwater elevations in the older alluvium were generally higher than those measured in the fall of 2023 and spring of 2024, respectively except for in northeastern portion of the North Pleasant Valley Management Area where groundwater elevation declined (Figures 2-7 through 2-10).

2.1.2.2 Fox Canyon Aquifer

Current Conditions

Groundwater elevations in the Fox Canyon aquifer were above the minimum threshold groundwater elevation in four of the five key wells in both the fall of 2024 and spring of 2025 (Figure 2-2; Appendix A). The only well in which groundwater elevations were below the minimum threshold was well 01N21W03C01S, located in the Pleasant Valley Pumping Depression Management Area. Groundwater elevations in this well were below the minimum threshold when the GSP was prepared and, as of spring 2025, were above the 2030 interim milestone. Consistent with previous years groundwater elevations were generally highest in the North Pleasant Valley Management Area and decreased to the west and south (Figures 2-11 and 2-12).

Recent Trends

Fall 2024 and spring 2025 groundwater elevations in the Fox Canyon aquifer were generally higher than those measured in the fall of 2023 and spring of 2024, respectively (Figures 2-13 and 2-14).

² Fall 2024 are defined as any groundwater elevation measured between October 1 and October 31, 2024. The GSP recommended collecting groundwater elevations within a two-week window. FCGMA is working to formalize agreements with partner agencies that monitor specific wells to help ensure that timely monitoring is conducted within the two-week window to reduce ongoing data gaps

³ Spring 2025 are defined as any groundwater elevation measured between March 1 and March 31, 2025.

2.1.3 Hydrologic Conditions and Water Year Type

In water year 2025, the PVB received 4.7 inches of precipitation, which is approximately 36% of the long-term average (Figure 2-15; PVB Historical Water Year Precipitation). As defined in the GSP, water year 2025 was a critical water year in which the precipitation received was less than 50% of the long-term average precipitation for the PVB.

Stream gauge 805, on Calleguas Creek, is maintained by the Ventura County Watershed Protection District (VCWPD). The historical surface water flow at this gauge is shown in Figure 2-16. The average daily flow in water year 2025 was 9.2 cubic feet per second, which is approximately 30% of the 20-year average flow at gauge 805.

2.2 Groundwater Extraction

FCGMA requires flow meters on extraction wells and semi-annual reporting of extractions. Groundwater extractions are reported on a water-year basis over two periods: October 1 through March 31 and April 1 through September 30. For this GSP annual report, FCGMA has received extraction reports from an estimated 70% of operators in the PVB. Water Year 2025 extractions will be updated upon receipt of additional reporting.

Prior to water year 2022⁴, groundwater extractions were reported semi-annually on a calendar-year basis. Starting October 1, 2021, groundwater extraction reporting transitioned to being reported semi-annually on a water-year basis. The groundwater extractions for 2016 through 2020 reported in Table 2-1 follow the historical precedent and represent calendar-year extractions. Due to the transition from calendar-year to water-year reporting, the water year 2021 groundwater extractions reported in Table 2-1 represent a combination of reported and estimated extractions for the period from October 1, 2020 through December 31, 2020, and a combination of reported and estimated extractions for the period from January 1, 2021 through September 30, 2021. Agricultural extractions between October and December 2020 were estimated using monthly advanced metering infrastructure (AMI) data that were validated against the 2020 calendar year extraction reports. Municipal and domestic extractions between October and December 2020 were estimated by assuming that 50% of the reported extraction between June and December occurred between October and December.

The water year 2025 extractions, presented in Table 2-1 and shown in Figures 2-17 through 2-21, represent the extractions reported to FCGMA over the 2025 reporting period as of February 2026, and do not include estimates of extractions from non-reporting wells based on AMI data. The water year 2025 extractions will be updated in the next annual report, upon receipt and incorporation of additional data into the FCGMA data management system.

Water use in the PVB is divided into three sectors: agricultural, domestic, and municipal and industrial. Of these, the agricultural sector used approximately 44% of the reported groundwater extractions, the municipal and industrial sector used approximately 56% of the reported groundwater extractions, and domestic use accounted for less than 1% of reported extractions. This is consistent with historical distribution of groundwater use in the PVB (Figure 2-20).

55% of the total groundwater pumped was from wells screened solely within the LAS. 45% was pumped from wells screened across both the older alluvium and the LAS. Groundwater production from wells screened solely within the older alluvium accounted for less than 1% of the reported groundwater production in water year 2025.

⁴ Water year 2022 covers the period from October 1, 2021 through September 30, 2022.

Table 2-1. Groundwater Extractions in the Pleasant Valley Basin by Aquifer System and Water Use Sector

Year	Extraction Reporting Complete / Estimated Percentage Complete (%) ^a	Older Alluvium (Acre-Feet)			Lower Aquifer System (Acre-Feet)				Wells in multiple or unassigned aquifer systems (Acre-Feet)				TOTAL (Acre-Feet)
		AG	Dom	Sub-Total	AG	Dom	M&I	Sub-Total	AG	Dom	M&I	Sub-Total	
CY 2016 ^b	Yes	1,578	5	1,583	3,874	2	4,098	7,973	6,028	42	380	6,450	16,007
CY 2017	Yes	1,165	5	1,170	3,397	2	3,928	7,327	6,831	10	628	7,469	15,966
CY 2018	Yes	1,226	5	1,231	3,383	2	4,154	7,538	4,618	34	180	4,832	13,602
CY 2019	Yes	821	6	826	2,787	2	3,421	6,209	3,261	26	825	4,112	11,149
2020 ^c	Yes	508	6	514	1,699	2	3,313	5,013	2,483	28	362	2,873	8,401
WY 2021	Yes	1,803	7	1,810	3,560	3	3,797	7,360	5,304	24	469	5,797	14,967
WY 2022	Yes	1,852	3	1,855	3,239	3	4,858	8,099	4,597	54	514	5,165	15,120
WY 2023	Yes	643	2	645	929	-	5,218	6,148	2,233	28	1,526	3,787	10,579
WY 2024 ^d	Yes	50	50	100	1,298	2	1,616	2,915	1,306	40	2,301	3,647	6,663
WY 2025 ^e	No/70%	36	4	40	2,724	2	2,012	4,738	1,086	3	2,807	3,895	8,674

Notes: CY = Calendar Year; WY = Water Year; AG = Agriculture; Dom = domestic; M&I = Municipal and Industrial

- ^a Qualifier indicates whether extraction reporting is complete for the given year. “Yes” indicates no additional reporting is anticipated. “No” indicates that additional reporting is anticipated. The percentage included after the “No” qualifier represents the estimated total percentage of operators who have reported extractions as of February 1, 2025.
- ^b Total pumping in 2016 includes 4 acre-feet of groundwater production from the semi-perched aquifer that were used by the M&I sector.
- ^c Groundwater extraction reporting is from January 1, 2020, through September 30, 2020, due to transition to water year reporting.
- ^d Groundwater extractions updated upon receipt of additional reporting.
- ^e Groundwater extractions are preliminary and will be updated during preparation of the Water Year 2026 GSP Annual report based on receipt of additional reporting.

The total groundwater production from the PVB in water year 2025 (8,674 AF, with 70% reporting) is less than the estimated sustainable yield for the PVB of 11,200 AFY ±1,200 AFY (FCGMA 2024).

2.2.1 New or Replacement Well Applications

One new well application was approved in the PVB by the County of Ventura in water year 2025. That proposed well was drilled and installed. One application for a new well was received by FCGMA in water year 2025 and was denied.

2.2.2 New Use Applications

FCGMA did not receive any new use applications in water year 2025.

2.3 Surface Water Supply

The primary surface water supplies to the PVB are from the Santa Clara River, via the UWCD Freeman Diversion and the Pleasant Valley Pipeline (PVP), and Conejo Creek, via a diversion operated by CWD⁵. Within the PVB, CWD supplies surface water to the Pleasant Valley County Water District (PVCWD) and distributes a portion of its diversions to other agricultural water users (FCGMA 2019). Surface water deliveries to the PVB for water years 2016 through 2025 are reported in Table 2-2. The total surface water available for use within the PVB in water year 2025 was 7,272 AF, which was approximately 27% higher than the 2016 through 2025 average.

Table 2-2. Summary of Surface Water Deliveries to the Pleasant Valley Basin

Water Year	CWD		PVCWD	United Water Conservation District		Total (acre-feet)
	Conejo Creek for M&I (acre-feet)	Conejo Creek for Agriculture (acre-feet)	Conejo Creek Flows Delivered to PVCWD for Agriculture (acre-feet)	PVP (Pleasant Valley Basin) (acre-feet)		
				Diversions of Santa Clara River Water Used for Agriculture (PVP)	Recharged Spreading Water Pumped and Used for Agriculture (Saticoy Wells)	
2016	740	2,804	816	0	0	4,360
2017	802	3,207	1,394	0	0	5,403
2018	777	3,107	1,456	0	0	5,340
2019	598	2,389	2,196	243	0	5,426
2020	541	2,099	1,815	759	0	5,214
2021	624	2,401	1,551	824	0	5,400
2022	557	2,199	1,880	334	0	4,970
2023	1,181	1,727	1,748	1,795	0	6,451
2024	673	1,617	2,132	2,330	470	7,222
2025	644	1,633	1,972	2,338	685	7,272

Notes: CWD = Camrosa Water District, PVCWD = Pleasant Valley County Water District; PVP = Pleasant Valley Pipeline

⁵ 44% of the total CWD deliveries to PVCWD, and 44% of the total PVP surface water deliveries from UWCD, were assigned to the PVB based on an analysis of the size of PVCWD's service area (FCGMA 2019).

2.4 Imported Water Supply

Calleguas Municipal Water District (CMWD) provides imported water to Camrosa Water District, the City of Camarillo, and Pleasant Valley Mutual Water Company. CMWD provided monthly delivery volumes to each customer but did not report “imported water use” by sector. Therefore, the total reported CMWD water use was divided among the water use sectors based on the average reported water use, by sector, in the PVB GSP since 2010 (FCGMA 2019).

2.4.1 Recharge of Imported Water

Imported water was not purchased for recharge in the PVB in water year 2025.

2.5 Total Water Available

Total water available was tabulated from the groundwater extractions reported in Table 2-1, the surface water supply reported in Table 2-2, and imported water and recycled water used in the PVB. The total water available is reported in Table 2-3 by water year. To convert the reported groundwater production from calendar year to water year prior to water year 2020, 25% of the groundwater production from a given calendar year was assigned to the following water year, and 75% of the calendar year production was assigned to the current water year. Similar to the division of surface water deliveries, this division is based on the monthly split between water year and calendar year, with January through September (75% of the calendar year) belonging to the current water year, and October through December (25% of the calendar year) belonging to the following water year. Because the reported 2020 groundwater extractions covered the period from January 1 through September 30, total water year extractions for 2020 were estimated by adding 25% of the 2019 calendar year extractions to the reported 2020 water year extractions.

Table 2-3. Total Water Available in the Pleasant Valley Basin

Water Year	Groundwater ^a (acre-feet)			Surface Water (acre-feet)	Recycled Water (acre-feet)		Imported Water (acre-feet)		Total (acre-feet)
	Ag	Dom	M&I	Ag	Ag	M&I	Ag	M&I	
2016	12,681	88	3,698	4,360	2,458	577	128	7,812	31,802
2017	11,415	24	4,536	5,403	2,637	650	152	8,241	33,058
2018	9,768	36	4,389	5,340	2,573	604	157	8,585	31,452
2019	7,457	36	4,268	5,426	2,583	411	146	7,987	28,314
2020	6,406	45	4,737	5,214	2,754	494	144	8,159	27,953
2021	10,666	34	4,266	5,400	2,384	411	127	8,421	31,709
2022	9,688	60	5,372	4,970	2,967	369	118	7,636	31,180
2023	3,805	30	6,744	6,451	2,167	269	113	5,069	24,649
2024 ^b	2,654	92	4,410	7,222	2,786	465	78	4,835	22,544
2025 ^c	3,846	9	4,819	7,272	2,854	465	78	5,303	24,646

Notes:

^a Groundwater production by water year (2016 through 2019) is estimated from groundwater production by calendar year. Water Year 2020 extractions represent groundwater extractions reported for the period from January 1, 2020, through September 30, 2020, plus 25% of the Calendar Year 2019 extractions.

^b Groundwater production was updated from WY 2024.

^c Groundwater production is preliminary and expected to change. Additional extraction reporting is anticipated.

As in Table 2-1, the groundwater extractions for water year 2025 presented in Table 2-3 represent extractions reported to FCGMA as of February 1, 2026. The reported extraction volumes are preliminary and anticipated to change based on receipt of additional data.

2.5.1 Change in Groundwater Storage

Since adoption of the GSP, FCGMA has estimated the change in groundwater in storage in the PVB annually using a series of linear regressions that relate measured groundwater elevations to simulated values of change in storage extracted from the Ventura Regional Groundwater Flow Model (VRGWFM; UWCD 2018). As part of the 2025 Periodic Evaluation of the Pleasant Valley Basin GSP, UWCD updated the VRGWFM to improve the hydrogeologic conceptual model and simulate groundwater conditions in the Pleasant Valley Basin, Oxnard Subbasin, and WLPMA through September 30, 2022 (FCGMA 2024). Accordingly, the estimates of change in groundwater in storage in the PVB were updated through water year 2022 using the updated modeling results (Table 2-4; Figures 2-21 through 2-25).

Because the model simulation ended in water years 2022, the change in storage for water years 2023 through 2025 was calculated using the series of linear regressions used in previous annual reports (FCGMA 2022, 2023, 2024a). The estimated change in storage calculated using this method differs from the estimates presented in the Periodic Evaluation, which were based on measured groundwater elevation changes from a smaller subset of wells. The series of linear regressions employed here better capture the spatial variability in storage change (Table 2-4; Figures 2-21 through 2-25).

2.5.2 Older Alluvium

Groundwater in storage increased by approximately 2,210 AF in the older alluvium between spring 2024 and 2025 (Table 2-4). This increase occurred in the age-equivalent stratigraphic unit to the Oxnard aquifer (Figures 2-23 and 2-24). Storage change within this part of the older alluvium is estimated using a single well, O2N21W34G05S, which is located in the Pumping Depression Management Area, near the boundary with the Oxnard Subbasin. Between spring 2024 and 2025, the groundwater elevation at this well increased by approximately 6 feet (Figure 2-22). This is consistent with reported groundwater production being below the estimated sustainable yield of the PVB during water year 2025. Since 2015, groundwater in storage in the older alluvium has increased by a total of approximately 9,166 AF (Table 2-4).

2.5.3 Fox Canyon Aquifer

Groundwater in storage in the Fox Canyon aquifer increased by approximately 750 AF between spring 2024 and 2025 (Table 2-4). This is consistent with reported groundwater production being below the estimated sustainable yield of the PVB during water year 2025. Since 2015, groundwater in storage has declined by an estimated 960 AF in the Fox Canyon aquifer (Table 2-4).

2.5.4 Total Change in Storage in the PVB

The total change in groundwater in storage was calculated by summing the changes calculated for the individual aquifers (Table 2-4). Between spring 2024 and spring 2025, groundwater in storage increased by approximately 2,960 AF, which resulted in a cumulative increase in storage in the PVB since spring 2015 of approximately 8,200 AF (Table 2-4).

Table 2-4. Annual Change in Groundwater Storage in the Pleasant Valley Basin

Water Year	Water Year Type	Method	Pleasant Valley Basin (Acre-Feet) ^a							
			Older Alluvium				Fox Canyon Aquifer Annual	Fox Canyon Aquifer Cumulative	Combined Annual	Combined Cumulative
			Oxnard Equivalent	Mugu Equivalent	Older Alluvium Annual	Older Alluvium Cumulative				
2016	Critical	VRGWFM	-3,460		-3,460	-3,365	-1,078	-1,078	-4,443	-4,443
2017	Above Normal	VRGWFM	-895		-895	-587	153	-925	2,931	-1,512
2018	Critical	VRGWFM	-3,439		-3,439	-5,529	-866	-1,791	-5,808	-7,320
2019	Above Normal	VRGWFM	704		704	-3,064	233	-1,558	2,698	-4,622
2020	Below Normal	VRGWFM	-126		-126	-1,902	90	-1,468	1,252	-3,370
2021	Critical	VRGWFM	-1,332		-1,332	-5,019	-166	-1,634	-3,283	-6,653
2022	Below Normal	VRGWFM	-790		-790	-7,058	-73	-1,707	-2,112	-8,765
2023	Wet	System of Linear Regressions	6,393	7	6,400	-658	-244	-1,951	6,156	-2,609
2024	Above Normal	System of Linear Regressions	7,580	32	7,612	6,954	245	-1,706	7,857	5,248
2025	Critical	System of Linear Regressions	2,210	0	2,210	9,164	748	-958	2958	8,206

^a Change in storage for water years 2016 through 2022 were updated based on numerical modeling results from the VRGWFM.

3 Progress Toward Implementation of the GSP

3.1 Current Conditions for Each Sustainability Indicator

3.1.1 Groundwater Elevations

Sustainable Management Criteria

As defined in the GSP, groundwater production from the PVB would result in significant and unreasonable lowering of groundwater levels if there is a net decline in groundwater elevation or storage over wet and dry climatic cycles. Further, the GSP found that groundwater levels in the PVB should be maintained at elevations that are high enough to not inhibit the ability of the Oxnard Subbasin to prevent net landward migration of the saline water impact front after 2040 (FCGMA 2019).

The GSP defined minimum threshold, measurable objective, and interim milestone groundwater elevations at representative monitoring points, or key wells, throughout the PVB (Table 3-1). The minimum threshold groundwater elevations were selected based on the lowest groundwater elevation from which the PVB could recover over a climatic cycle to prevent net declines in groundwater in storage and not inhibit the ability of the Oxnard Subbasin to prevent net landward migration of the 2015 saline water impact front. The measurable objective groundwater elevations were selected as the set of groundwater elevations across the PVB at which there is sufficient groundwater in storage to allow for operational flexibility during periods of drought (FCGMA 2019). The measurable objective groundwater elevations represent the theoretical ideal water level, around which groundwater elevations vary depending on climate and groundwater demand. Because groundwater elevations at several key wells were lower than the minimum threshold groundwater elevations at the time the GSP was prepared, each key well that had groundwater elevations below the minimum threshold was assigned a set of interim milestone groundwater elevations. The interim milestone groundwater elevations were assigned every five years between 2020 and 2040 to evaluate progress toward sustainability. The minimum threshold, measurable objective, and 2030 interim milestone groundwater elevations are shown in Table 3-1, along with the fall and spring groundwater elevations for the 2025 water year.

Representative Monitoring Sites

Representative monitoring sites, or key wells, selected for groundwater elevation monitoring, in the PVB are shown in Figure 2-1 and listed in Table 3-1. Groundwater elevations are measured using pressure transducers, electronic sounding tape, or sonic water level sounder.

Current Conditions

In the fall of 2024, groundwater elevations were below the minimum thresholds at two of the eight key wells measured (Table 3-1; Figure 2-2; Appendix A). Spring groundwater elevations were above the minimum thresholds at seven of the eight key wells (Table 3-1; Figure 2-2; Appendix A). The only well in which spring groundwater elevations were lower than the minimum threshold (01N21W03C01S) is located in the Pleasant Valley Pumping

Table 3-1. Water Year 2025 Groundwater Elevations, Minimum Thresholds, Measurable Objectives, and Interim Milestones for Representative Monitoring Wells in the Pleasant Valley Basin

Well Number	Management Area	Aquifer	Fall Groundwater Conditions			Spring Groundwater Conditions			Minimum Threshold (ft. msl)	Measurable Objective (ft. msl)	2030 Interim Milestone (ft. msl)
			Groundwater Elevation (ft. msl)	Change from Previous Year (feet) ^a	Groundwater Elevation Relative to the Minimum Threshold (feet) ^b	Groundwater Elevation (ft. msl)	Change from Previous Year (feet) ^a	Groundwater Elevation Relative to the Minimum Threshold (feet) ^b			
02N21W34G05S	Older Alluvium (Oxnard)	PVPDMA	30.05	9.47	-1.95	36.85	6.44	4.85	32	40	15
01N21W03K01S	Older Alluvium (Mugu)	PVPDMA	-37.98	-2	15.02	-15.98	-2	37.02	-53	5	-38
02N21W34G04S	Older Alluvium (Mugu)	PVPDMA	-16.49	11.5	31.51	-7.10	5.78	40.9	-48	5	-38
01N21W03C01S	FCA	PVPDMA	-68.99	-5.73	-20.99	-50.49	3.9	-2.49	-48	0	-59
02N20W19M05S	FCA	NPVMA	2.73	6.96	137.73	3.91	11.1	138.91	-135	65	—
02N21W34G02S	FCA	PVPDMA	-50.91	10.32	2.09	-40.87	6.95	12.13	-53	0	-59
02N21W34G03S	FCA	PVPDMA	-50.91	10.23	2.09	-40.99	6.64	12.01	-53	0	-60
01N21W04K01S	Multiple	PVPDMA	-36.68	12.46	11.32	-16.9	7.18	31.1	-48	0	-67

ft. msl = feet mean sea level

NM = not measured

Bold - Groundwater elevation is below the minimum threshold.

^a Positive (+) values indicate that seasonal high or low groundwater elevations are higher than the previous year. Negative (-) values indicate that seasonal high or low groundwater elevations are lower than the previous year. Blank cells in this column indicate that data was not measured in the current, or previous, water year.

^b Positive (+) values indicate that seasonal high or low groundwater elevations are higher than the minimum threshold. Negative (-) values indicate that seasonal high or low groundwater elevations are lower than the minimum threshold.

Depression Management Area. The groundwater elevation in this well has risen since 2015 and is currently above the 2030 interim milestone groundwater elevation. This suggests that the PVB is currently on track to meet the sustainability goal and bring the basin into sustainable management by 2040.

Impacts to Beneficial Users

Impacts to beneficial users of groundwater in the PVB could include dry wells, subsidence-related infrastructure damage, decreased water availability, and changes in water quality. None of these impacts have been reported in water year 2025. Groundwater users in the PVB and adjacent Oxnard Subbasin have begun an adjudication of groundwater rights that will inform future management scenarios to prevent long-term landward migration of the saline water impact front.

3.1.2 Groundwater in Storage

Groundwater elevations are used as a proxy for groundwater in storage in the GSP (FCGMA 2019). Groundwater elevation sustainable management criteria, representative monitoring points, and current conditions are discussed in Section 3.1.1. Overall groundwater in storage increased in the PVB in water year 2025 (Section 2.5; Table 2-4).

3.1.3 Groundwater Quality

Concentrations of TDS, nitrate, chloride, sulfate, and boron are discussed below. The GSP for the PVB ties groundwater quality changes to groundwater elevations (FCGMA 2019). Fall 2024 groundwater elevations were lower than the minimum threshold at two key wells, but rose significantly during the water year, such that spring 2025 groundwater elevations were above the minimum thresholds at all but one well. Furthermore, spring 2025 groundwater elevations are higher, in all but one well, than they were at the time the GSP was prepared (Section 3.1.1).

Total Dissolved Solids

Concentrations of TDS remain high in the Pleasant Valley Pumping Depression and North Pleasant Valley management areas (Figure 3-1). Concentrations of TDS generally decreased throughout the PVB, where measured, between water years 2023 and 2025, except in the North Pleasant Valley Management Area, adjacent to the boundary with the Las Posas Valley Basin, where concentrations increased at wells O2N20W20D02 and O2N20W19L05 (Figure 3-1).

Nitrate

As discussed in the GSP, nitrate concentrations are above the basin plan Water Quality Objectives in some wells in the PVB. These concentrations reflect the influence of past land use practices in both the PVB and adjacent basins, as well as surface water flows to Arroyo Simi–Las Posas and Conejo Creek upstream of the PVB boundary (Figure 3-2). Where measured (at 15 wells) and comparison data are available (at 6 wells), nitrate concentration generally decreased in the PVB between water year 2023 and 2025 (Figure 3-2).

Chloride

Similar to TDS, concentrations of chloride remain high in the Pleasant Valley Pumping Depression and North Pleasant Valley management areas (Figure 3-3). Where measured, concentrations of chloride generally remained

stable in the PVB, except in the North Pleasant Valley Management Area, adjacent to the boundary with the Las Posas Valley Basin (Figure 3-3). In this area, the concentration of chloride increased at wells O2N20W20D01 and -02 (Figure 3-3).

Sulfate

Concentrations of sulfide that exceed the basin plan Water Quality Objective (300 mg/L) were measured in the Pleasant Valley Pumping Depression and North Pleasant Valley management areas (Figure 3-4). These concentrations reflect the influence of past land use practices in both the PVB and adjacent basins, as well as surface water flows to Arroyo Simi–Las Posas and Conejo Creek upstream of the PVB boundary

Boron

Concentrations of boron were below the basin plan Water Quality Objective (1 mg/L) in all but one well in the PVB (Figure 3-5). Concentrations measured in 2025 were similar to those measured in 2023 (Figure 3-5).

3.1.4 Land Subsidence

Historical records of land subsidence in the PVB do not indicate that land subsidence as a result of past groundwater production has caused, or is likely to result in, substantial interference with surface land uses (FCGMA 2019). Between the spring of 2024 and the spring of 2025, the change in land surface elevation ranged from +0.5 to -0.5 inches (Figure 3-6).

3.2 Projects and Management Actions

No new projects or management actions were implemented in the PVB during water year 2025.

3.3 Progress on Recommended Corrective Actions

DWR's assessment and approval of the GSP included four recommended corrective actions (RCAs) that were considered in the First Periodic Evaluation of the GSP (FCGMA 2024).

RECOMMENDED CORRECTIVE ACTION 1

This RCA focused on further investigating the Grimes Canyon aquifer (GCA) in the PVB. In 2020, the City of Camarillo, constructed well O2N20W30L01S, in the GCA. Data collected from this well was reported on in the First Periodic Evaluation of the GSP (FCGMA 2024). These data indicated that there is a downward vertical gradient between the Fox Canyon and Grimes Canyon aquifers in this area of the PVB.

RECOMMENDED CORRECTIVE ACTION 2

This RCA focused on further investigating the hydraulic connectivity between the surface water bodies, shallow aquifers, and principal aquifers in the PVB. FCGMA installed shallow and multi-depth monitoring wells in the PVB to address groundwater elevation data gaps identified in the GSP. At the end of water year 2024, two shallow monitoring wells were installed along Arroyo Las Posas and Conejo Creek, within the North Pleasant Valley Management Area, and one was installed along the southern boundary of the PVB, adjacent to the Bailey Fault (Section 2.1.1). Data collected

from these wells is included in this annual report and is being used to improve the understanding of the connectivity between the shallow and principal aquifers in the PVB.

RECOMMENDED CORRECTIVE ACTION 3

This RCA focused on how the sustainability goals of the PVB established in the dry climatic conditions may affect the sustainability goals of the Oxnard Subbasin. This was addressed in the First Periodic Evaluation of the GSP (FCGMA 2024).

RECOMMENDED CORRECTIVE ACTION 4

This RCA requested additional discussion of the relationship between groundwater level thresholds and groundwater quality. This discussion was added to the First Periodic Evaluation of the GSP (FCGMA 2024).

RECOMMENDED CORRECTIVE ACTION 5

This RCA focused on additional subsidence monitoring. A subsidence map and land subsidence discussion was included in the First Periodic Evaluation of the GSP (FCGMA 2024). A discussion of land subsidence included in this GSP annual report, in Section 3.1.4.

3.4 Other Implementation Activities

Outreach and Engagement Activities

FCGMA held regular Board meetings at which stakeholders were provided opportunities to submit feedback on GSP implementation activities. Additionally, FCGMA was finalizing the First Periodic Evaluation of the GSP at the beginning of water year 2025. As part of this process water stakeholder comments were reviewed and addressed. Those comments and responses were included in Appendix B of the First Periodic Evaluation of the GSP (FCGMA 2024).

In 2025, the Fox Canyon Groundwater Management Agency expanded its stakeholder engagement efforts with the hiring of Executive Officer John Demers. This appointment represents a significant milestone for the Agency, as it is the first time FCGMA has had a dedicated full-time Executive Officer responsible for overseeing agency operations and SGMA implementation. Since joining the Agency, Mr. Demers has actively engaged with stakeholders throughout the basin, including agricultural producers, water suppliers, municipalities, and other groundwater users. A key focus of this outreach has been coordinating with stakeholders on updates to the Oxnard–Pleasant Valley groundwater allocation system, including discussions with pumpers and basin representatives to gather input and improve transparency regarding allocation administration and long-term groundwater sustainability. These efforts have included direct meetings with basin stakeholders, participation in public board and committee meetings, and ongoing coordination with partner agencies to support SGMA implementation and basin management objectives

Accomplishments Not Previously Discussed

- FCGMA continued to collaborate with other agencies in the PVB.

Planned Activities for the Upcoming Water Year

In water year 2026, FCGMA plans to:

- Assess funding opportunities to reduce data gaps.
- Continue working with local agencies and interested parties.

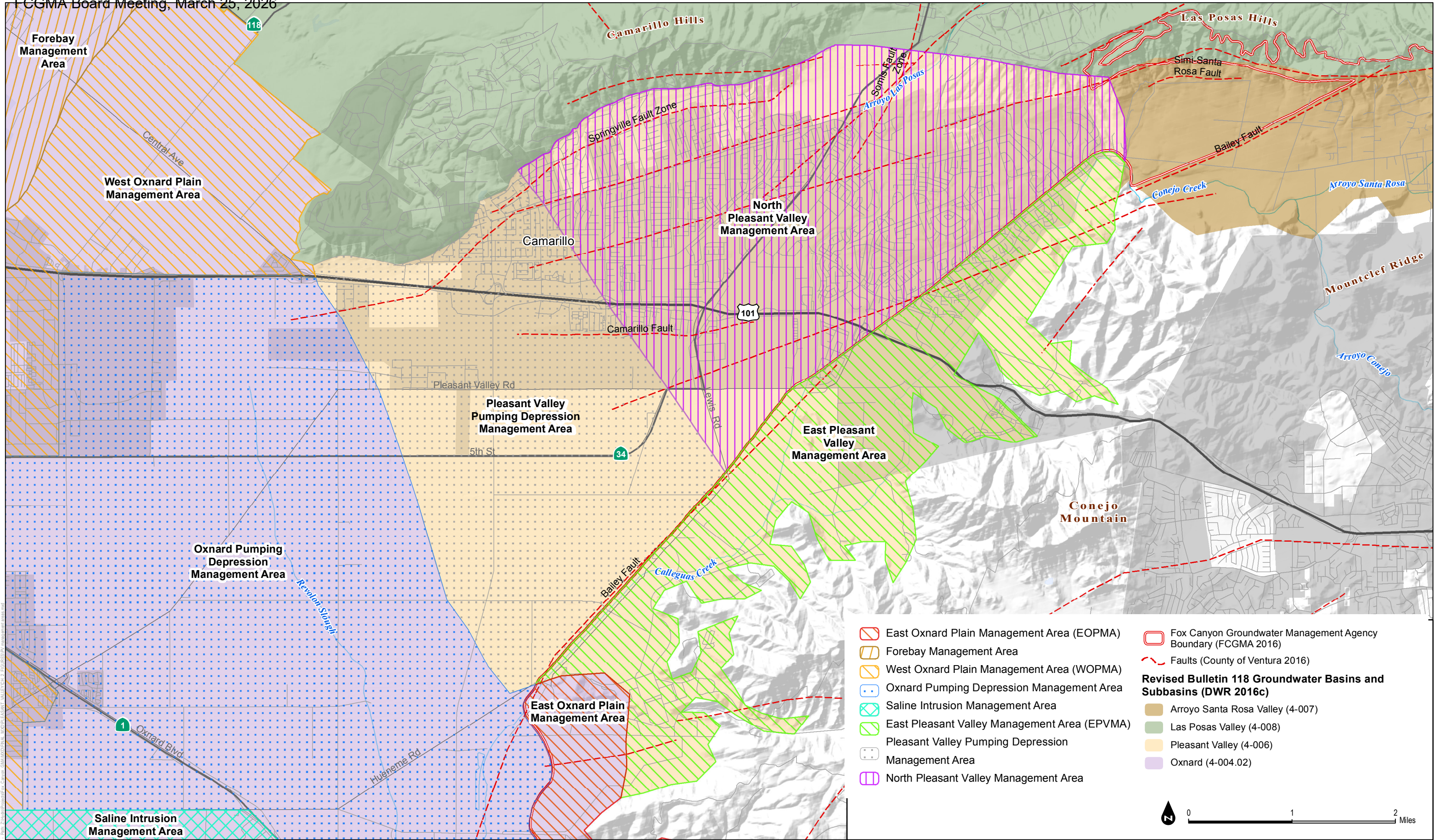
4 References

- DWR (California Department of Water Resources). 2023. Groundwater Sustainability Plan Implementation: A Guide to Annual Reports, Periodic Evaluations, & Plan Amendments. Available online: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/GSP-Implementation-Guidance-Report.pdf>. Accessed December 11, 2025.
- FCGMA (Fox Canyon Groundwater Management Agency). 2019. Groundwater Sustainability Plan for the Pleasant Valley Basin. Available online: <https://fcgma.org/pleasant-valley-gsp-files/>. Accessed February 1, 2026.
- FCGMA (Fox Canyon Groundwater Management Agency). 2024. Pleasant Valley Basin Groundwater Sustainability Plan: First Periodic Evaluation. December 2024. Available online: <https://fcgma.org/pleasant-valley-gsp-files/>. Accessed February 1, 2026.

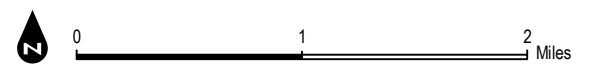
INTENTIONALLY LEFT BLANK

5 Figures

INTENTIONALLY LEFT BLANK



- East Oxnard Plain Management Area (EOPMA)
- Forebay Management Area
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- East Pleasant Valley Management Area (EPVMA)
- Pleasant Valley Pumping Depression Management Area
- North Pleasant Valley Management Area
- Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016)
- Faults (County of Ventura 2016)
- Revised Bulletin 118 Groundwater Basins and Subbasins (DWR 2016c)**
- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)



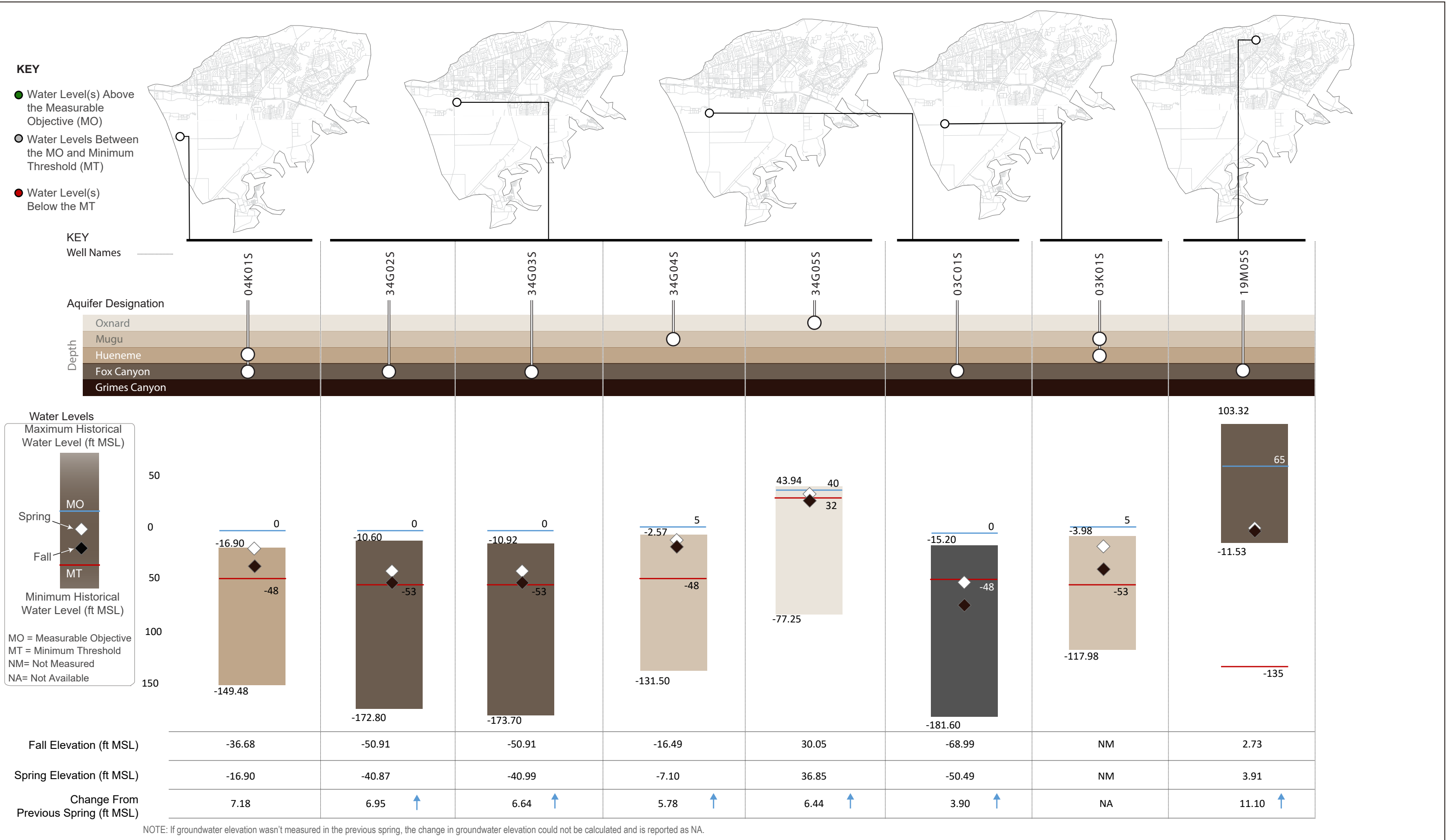
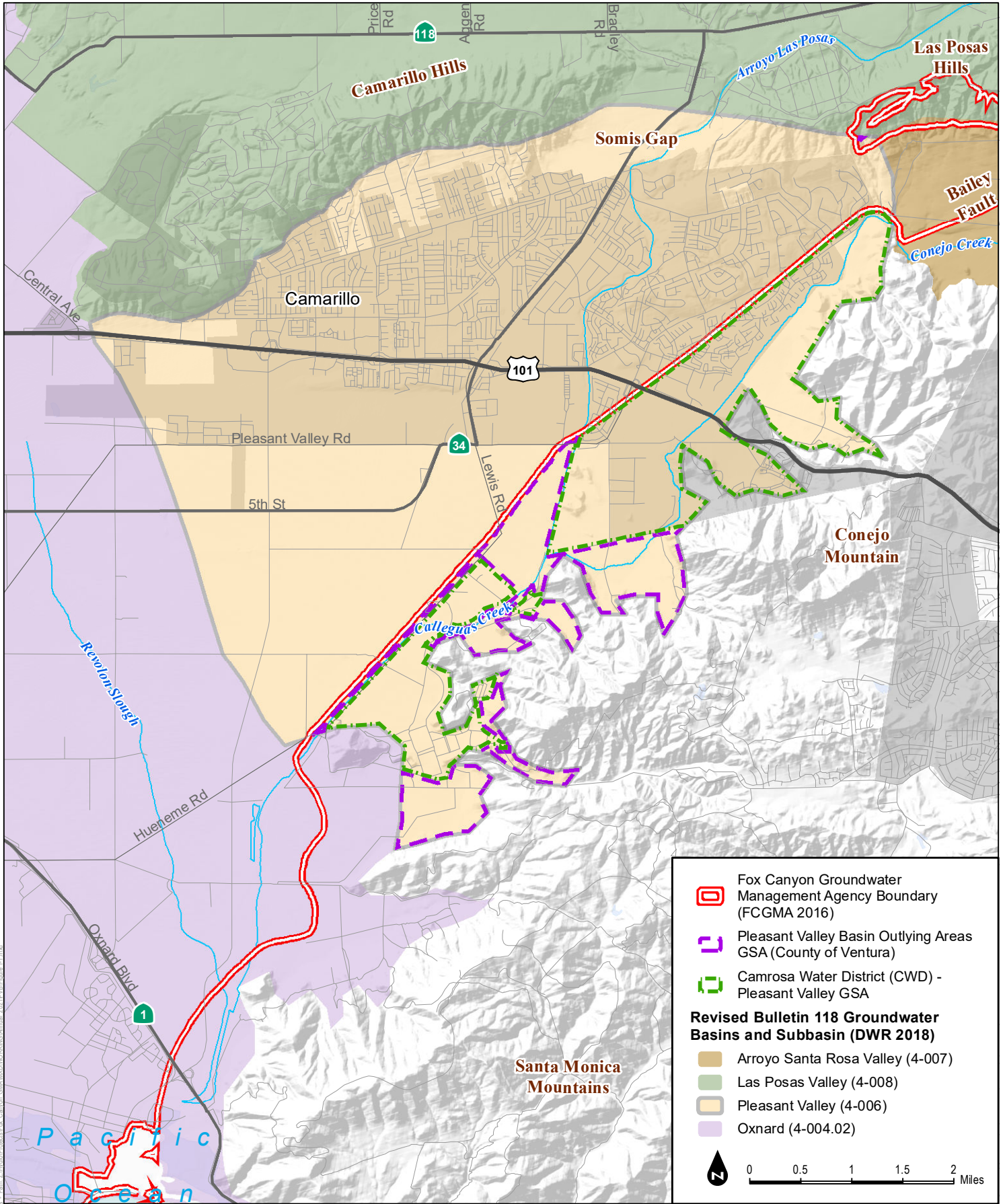


FIGURE ES-2

Water Year 2025 Groundwater Levels Relative to the Minimum Thresholds and Measurable Objectives



Legend

- Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016)
- Pleasant Valley Basin Outlying Areas GSA (County of Ventura)
- Camrosa Water District (CWD) - Pleasant Valley GSA

Revised Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Scale: 0 0.5 1 1.5 2 Miles

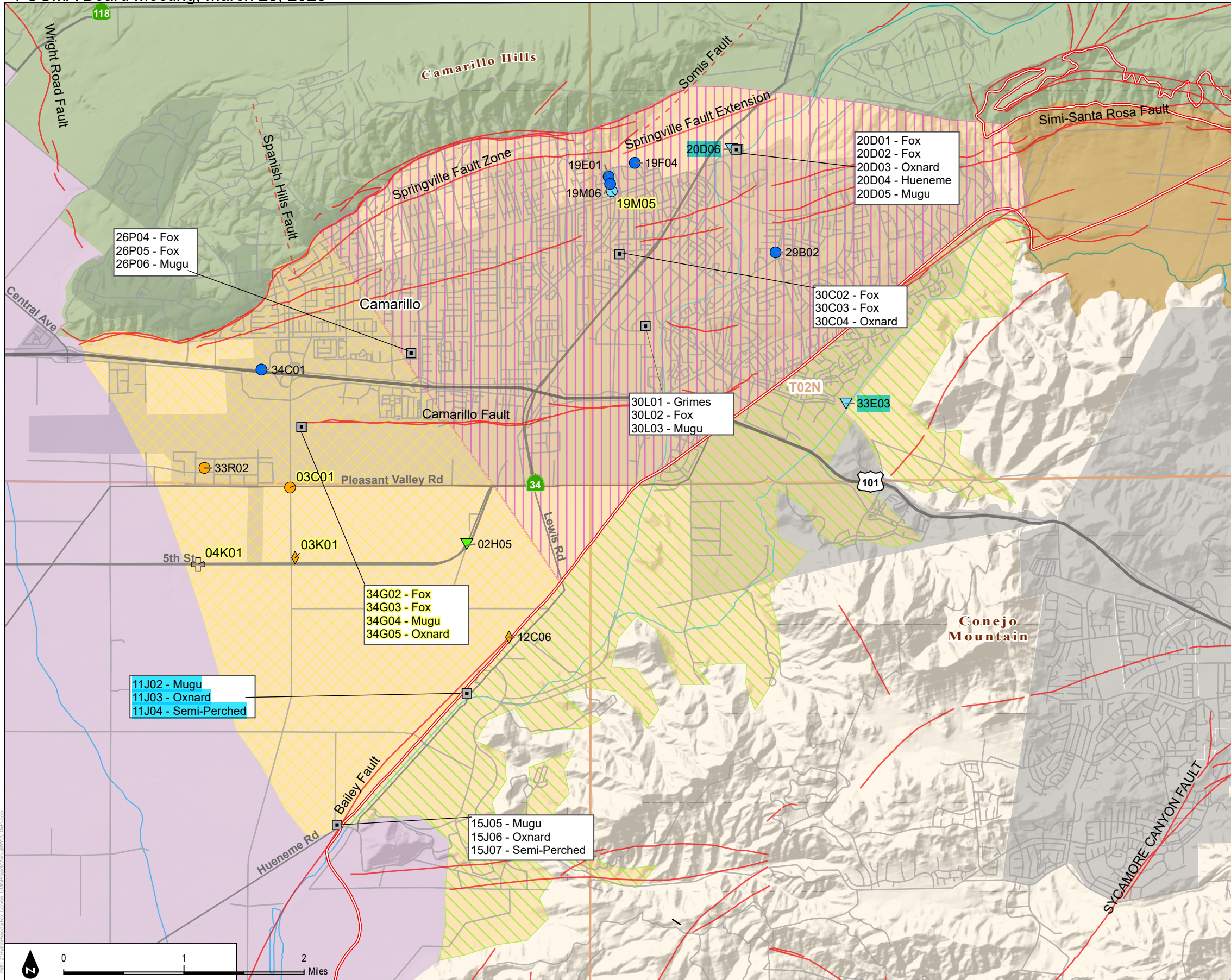
North Arrow: N

SOURCE: DWR; Ventura County; FCGMA

FIGURE 1-1

Vicinity Map for the Pleasant Valley Basin





Legend

Aquifer	Main Use
○ Fox Canyon	● Unknown
◇ Grimes Canyon	● Agricultural
△ Hueneme	● Domestic
◇ Mugu	● Industrial
□ Oxnard	● Monitoring
▽ Semi-perched	● Municipal

36E03 Abbreviated State Well Number (see notes)

36E03 Key Well 36E03 New Monitoring Well

- Faults (Dashed Where Inferred)
- ▭ Fox Canyon Groundwater Management Agency Boundary
- ▨ East Pleasant Valley Management Area (EPVMA)
- ▨ North Pleasant Valley Management Area
- ▨ Pleasant Valley Pumping Depression Management Area
- ▭ Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

- Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-1
 Pleasant Valley Basin Monitoring Network

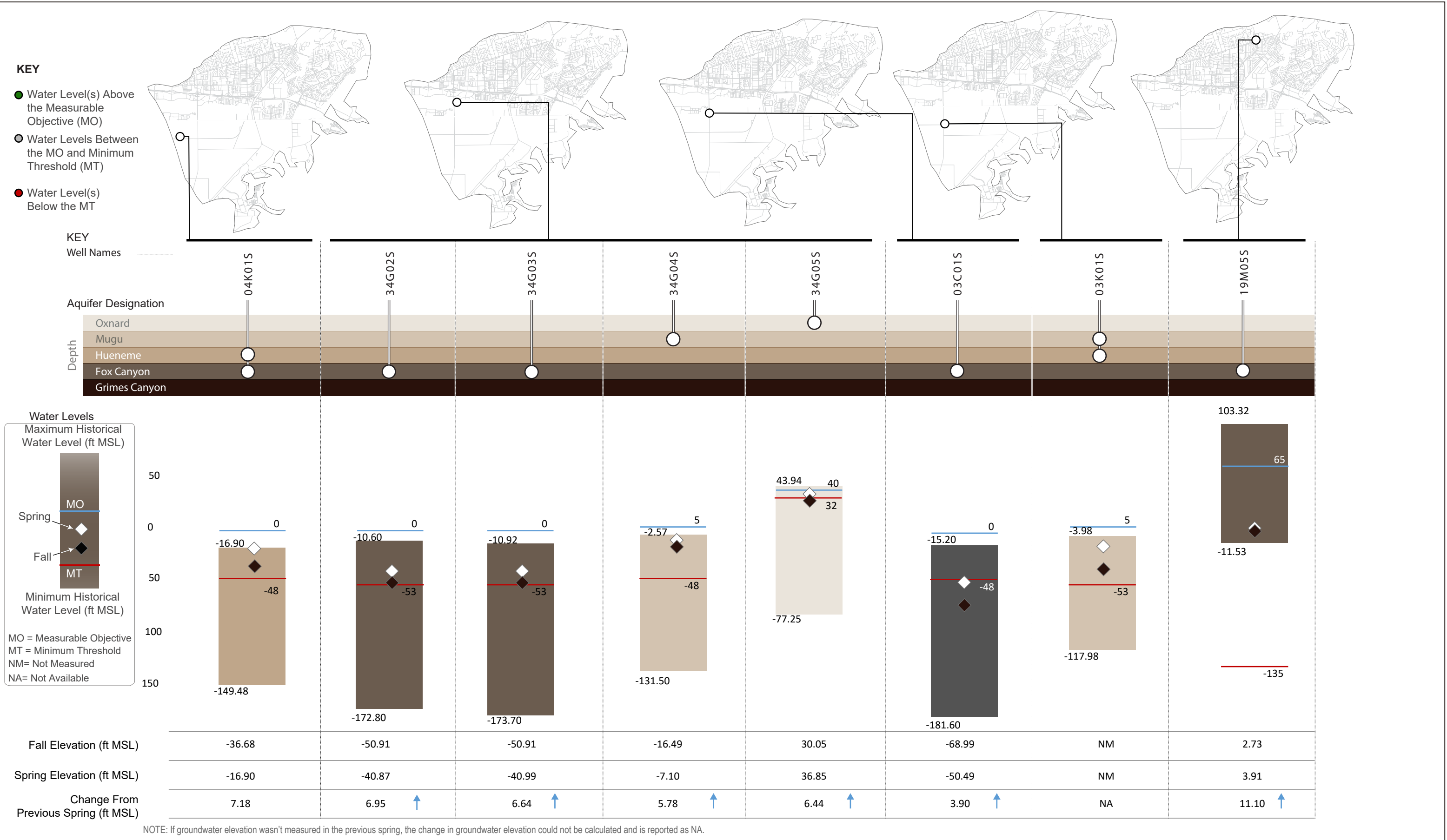
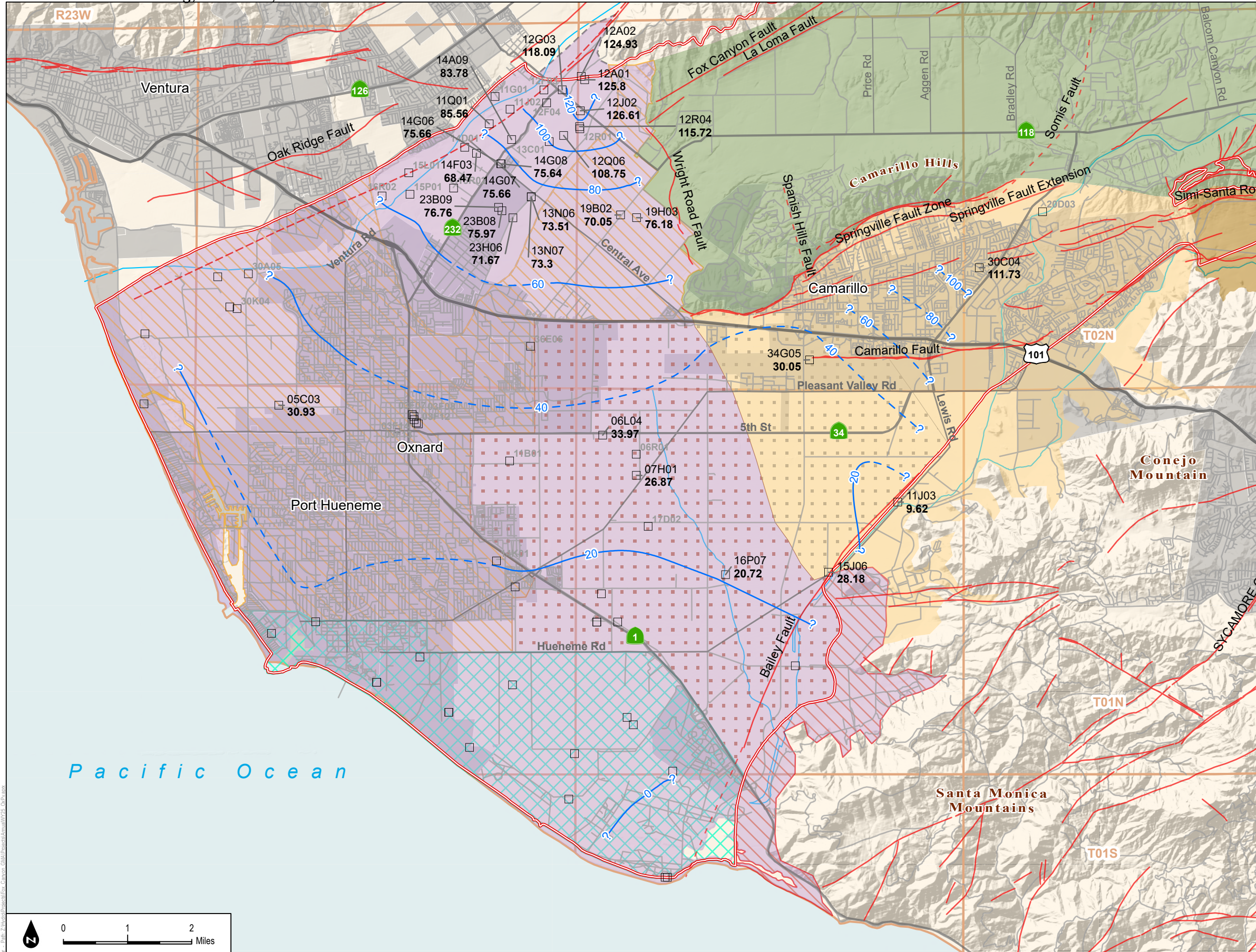


FIGURE 2-2

Water Year 2025 Groundwater Levels Relative to the Minimum Thresholds and Measurable Objectives



Legend

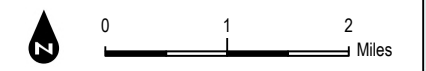
- - - Contour of equal groundwater elevation (feet). Dashed where approximate; queried where inferred. See Note 3.
- Wells screened in the Oxnard Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 14.7** Groundwater Elevations (ft msl)
- (-14.7) Groundwater elevations not used for contouring
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

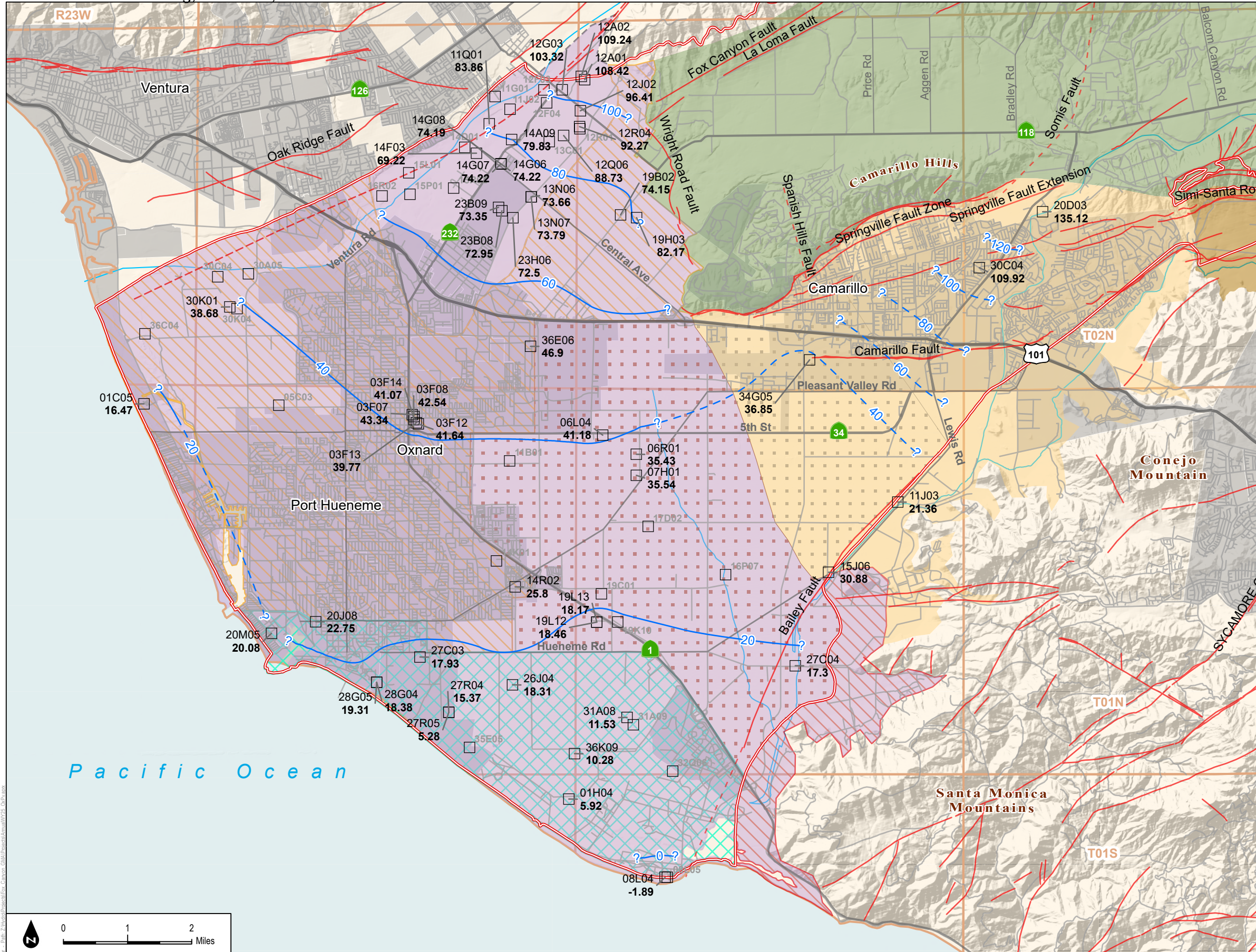
- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window.
- 3) Groundwater elevations not used to create contours are shown in parentheses.
- 4) All elevation values are in feet mean sea level (ft msl).
- 5) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-3
 Groundwater Elevation Contours in the Oxnard Aquifer, October 1 to October 31, 2024



Legend

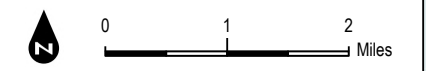
- Contour of equal groundwater elevation elevation (feet). Dashed where approximate; queried where inferred. See Note 3.
- Wells screened in the Oxnard Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 14.7 Groundwater Elevations (ft msl)
- (-14.7) Groundwater elevations not used for contouring
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window.
- 3) Groundwater elevations not used to create contours are shown in parentheses.
- 4) All elevation values are in feet mean sea level (ft msl).
- 5) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD

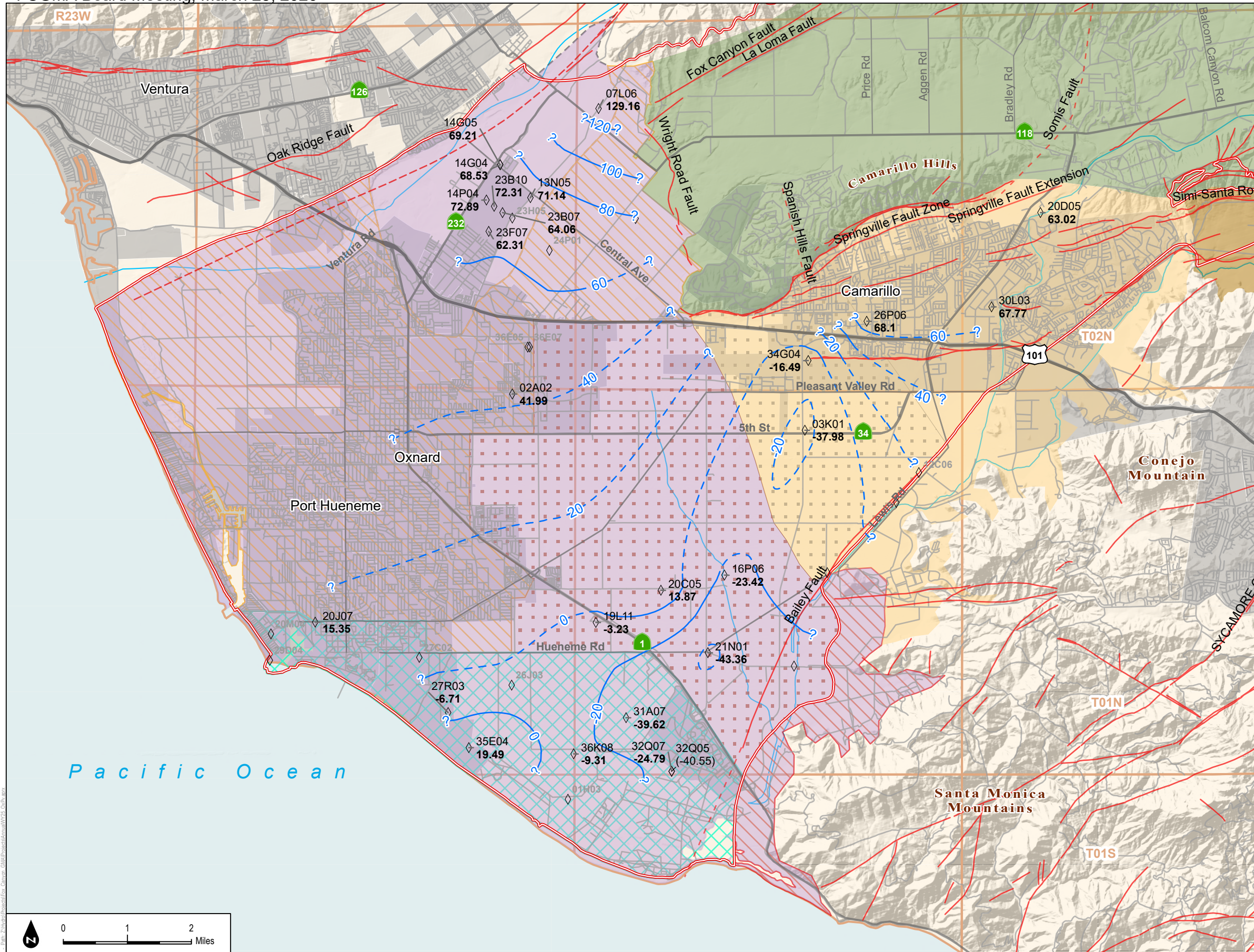


SOURCE: DWR; Ventura County; UWCD; CMWD



Pleasant Valley Basin Groundwater Sustainability Plan WY2025 Annual Report

FIGURE 2-4
 Groundwater Elevation Contours in the Oxnard Aquifer, March 1 to March 31, 2025



Legend

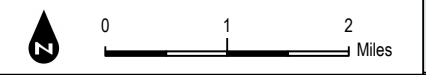
- Contour of equal groundwater elevation (feet). Dashed where approximate; queried where inferred. See Note 3.
- ◇ Wells screened in the Mugu Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 14.7 Groundwater Elevations (ft msl)
- (-14.7) Groundwater elevations not used for contouring
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window.
- 3) Groundwater elevations not used to create contours are shown in parentheses.
- 4) All elevation values are in feet mean sea level (ft msl).
- 5) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD

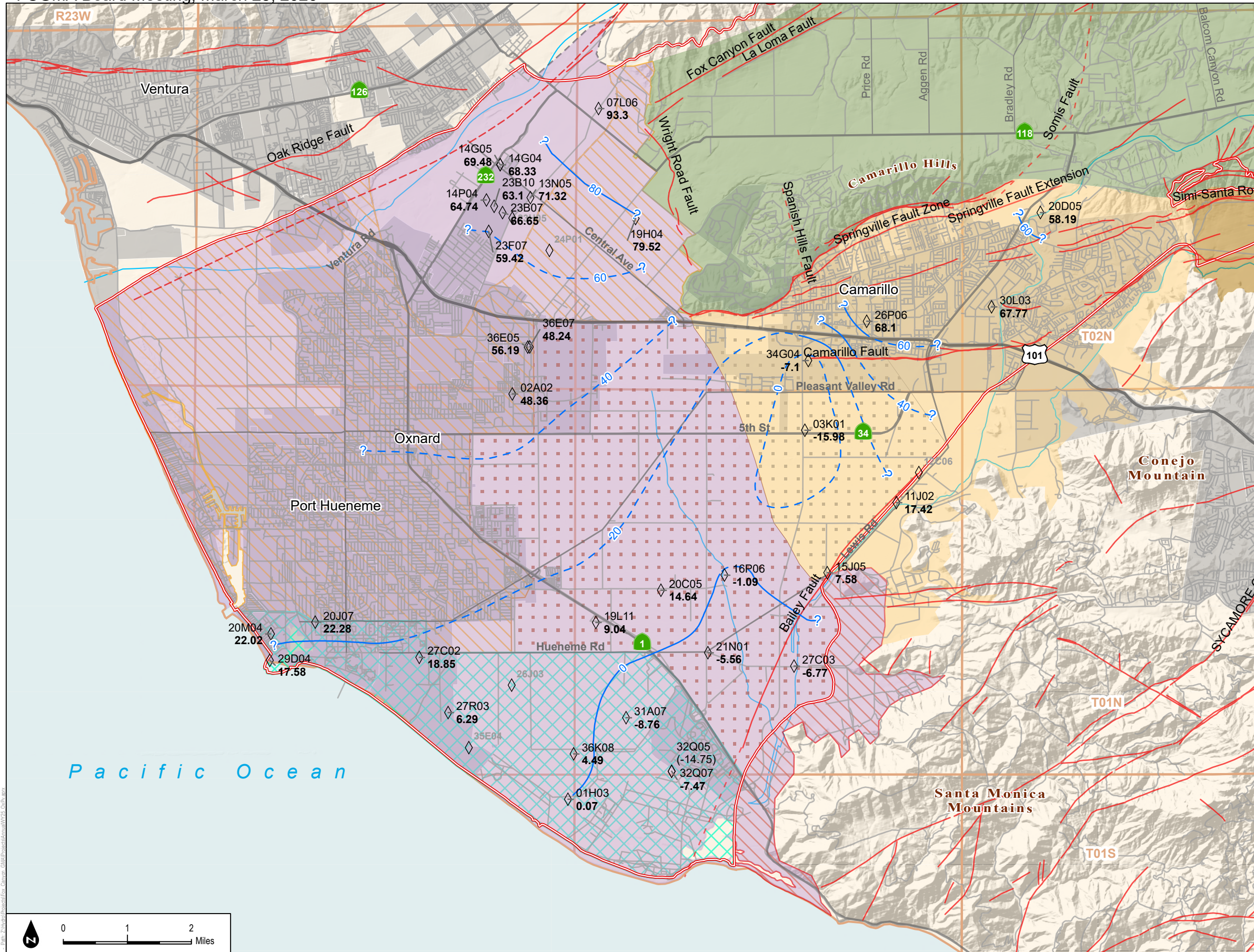


SOURCE: DWR; Ventura County; UWCD; CMWD



Pleasant Valley Basin Groundwater Sustainability Plan WY2025 Annual Report

FIGURE 2-5
 Groundwater Elevation Contours in the Mugu Aquifer, October 1 to October 31, 2024



Legend

- Contour of equal groundwater elevation elevation (feet). Dashed where approximate; queried where inferred. See Note 3.
- ◇ Wells screened in the Mugu Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 14.7 Groundwater Elevations (ft msl)
- (-14.7) Groundwater elevations not used for contouring
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window.
- 3) Groundwater elevations not used to create contours are shown in parentheses.
- 4) All elevation values are in feet mean sea level (ft msl).
- 5) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD

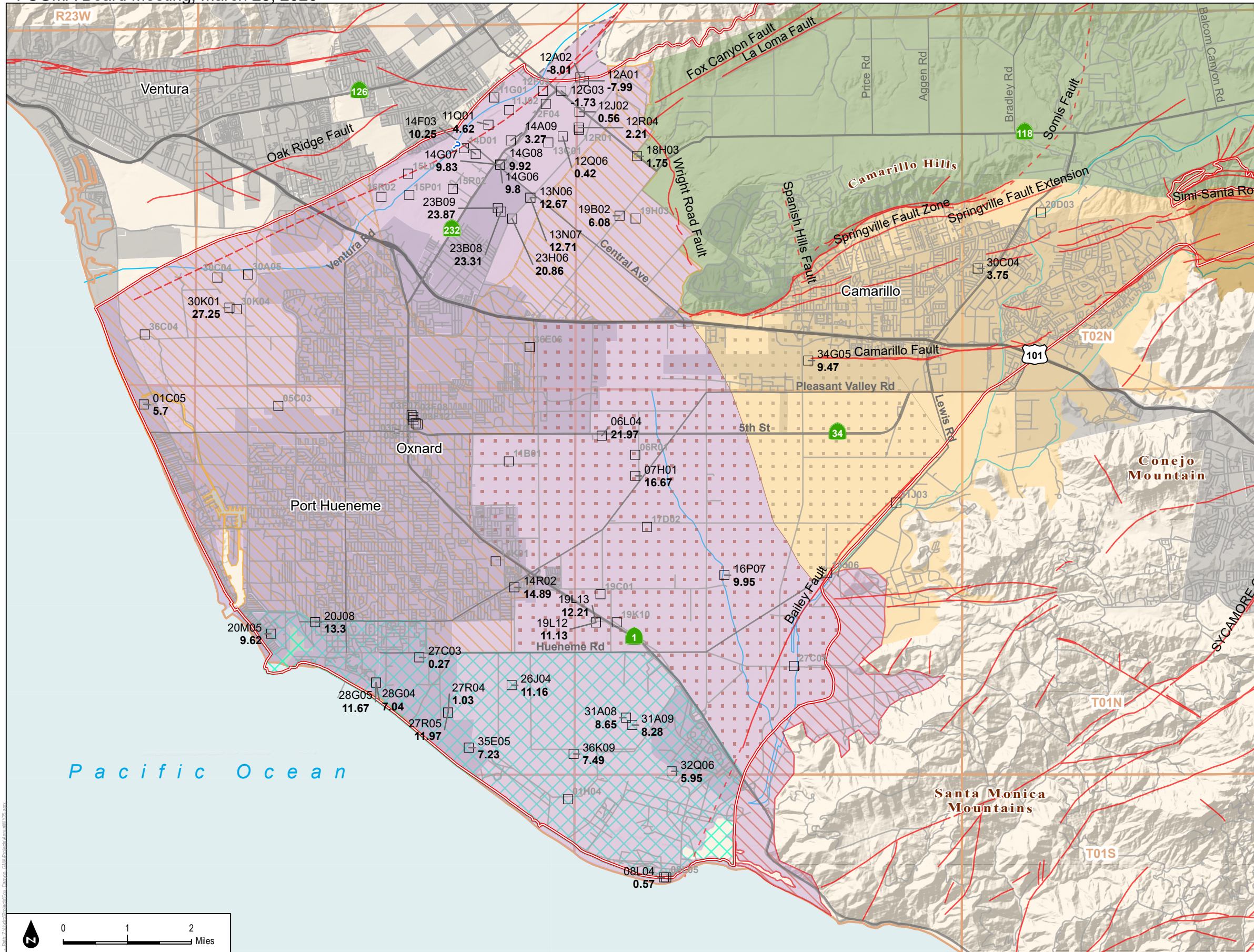


SOURCE: DWR; Ventura County; UWCD; CMWD



Pleasant Valley Basin Groundwater Sustainability Plan WY2025 Annual Report

FIGURE 2-6
 Groundwater Elevation Contours in the Mugu Aquifer, March 1 to March 31, 2025



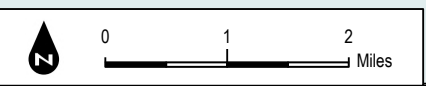
- ### Legend
- Wells screened in the Oxnard Aquifer
 - 15P01 Abbreviated State Well Number (see notes)
 - 2.14 Change in Groundwater Elevation in feet
 - Fox Canyon Groundwater Management Agency Boundary
 - Faults (Dashed Where Inferred)
 - Forebay Management Area
 - East Oxnard Plain Management Area (EOPMA)
 - West Oxnard Plain Management Area (WOPMA)
 - Oxnard Pumping Depression Management Area
 - Saline Intrusion Management Area
 - Pleasant Valley Pumping Depression Management Area
 - Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

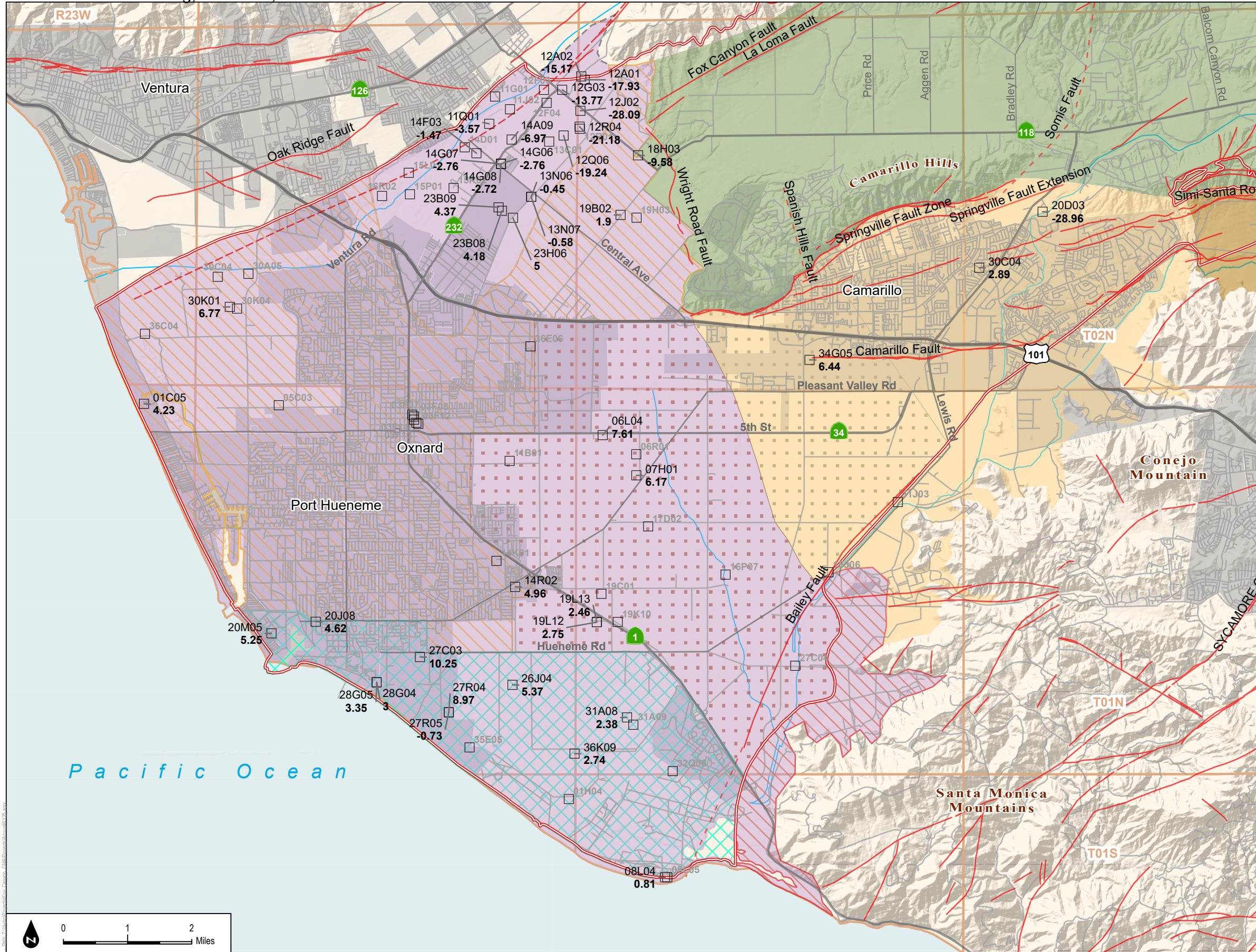
- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window for one or both years.
- 3) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-7
 Older Alluvium (Oxnard Equivalent) - Groundwater Elevation Changes from Fall 2023 to Fall 2024



Legend

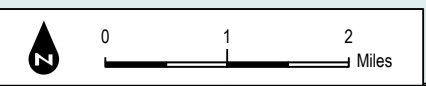
- Wells screened in the Oxnard Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 2.14 Change in Groundwater Elevation in feet
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

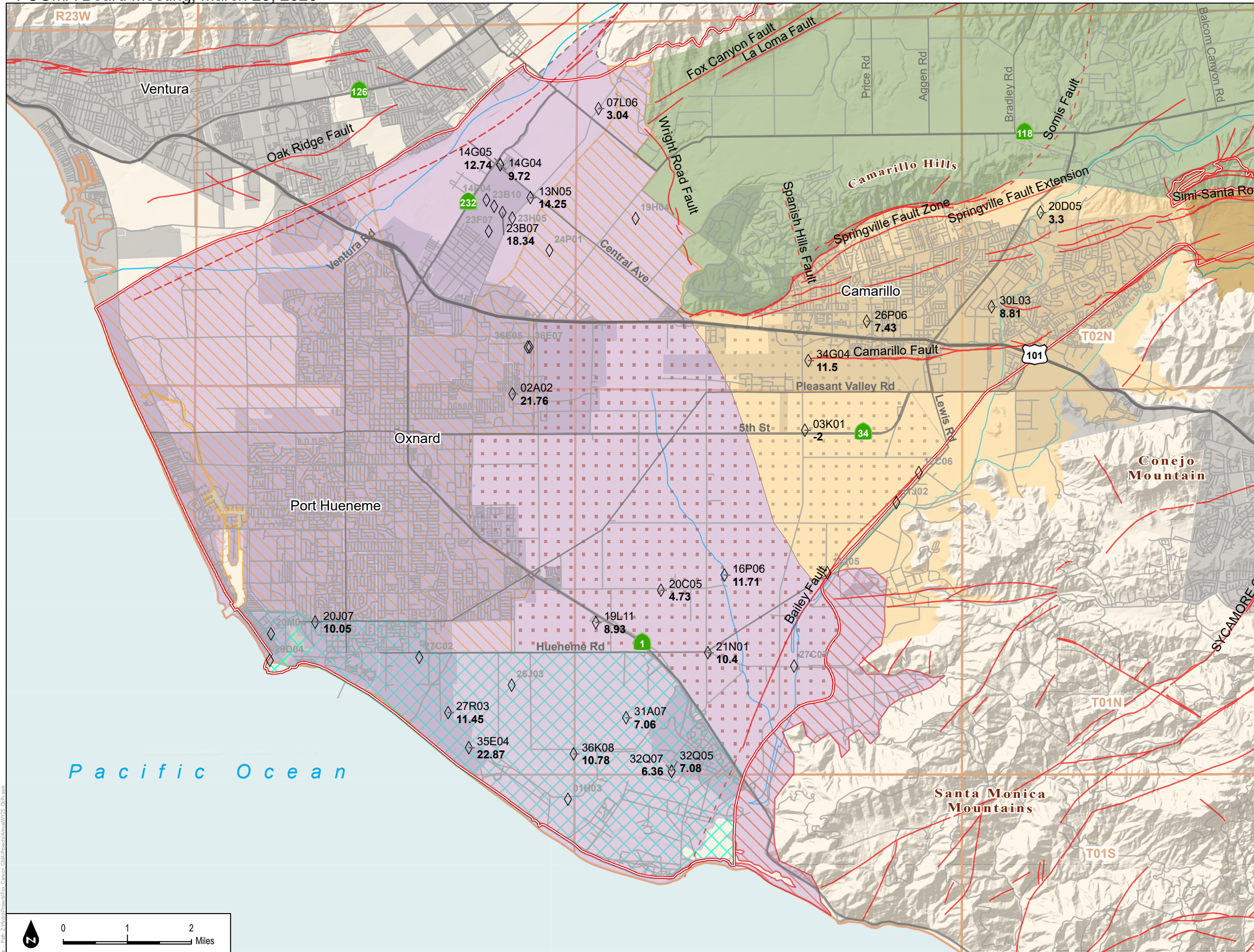
- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window for one or both years.
- 3) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-8
 Older Alluvium (Oxnard Equivalent) - Groundwater Elevation Changes from Spring 2024 to Spring 2025



Legend

- ◇ Wells screened in the Mugu Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 2.14 Change in Groundwater Elevation in feet
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

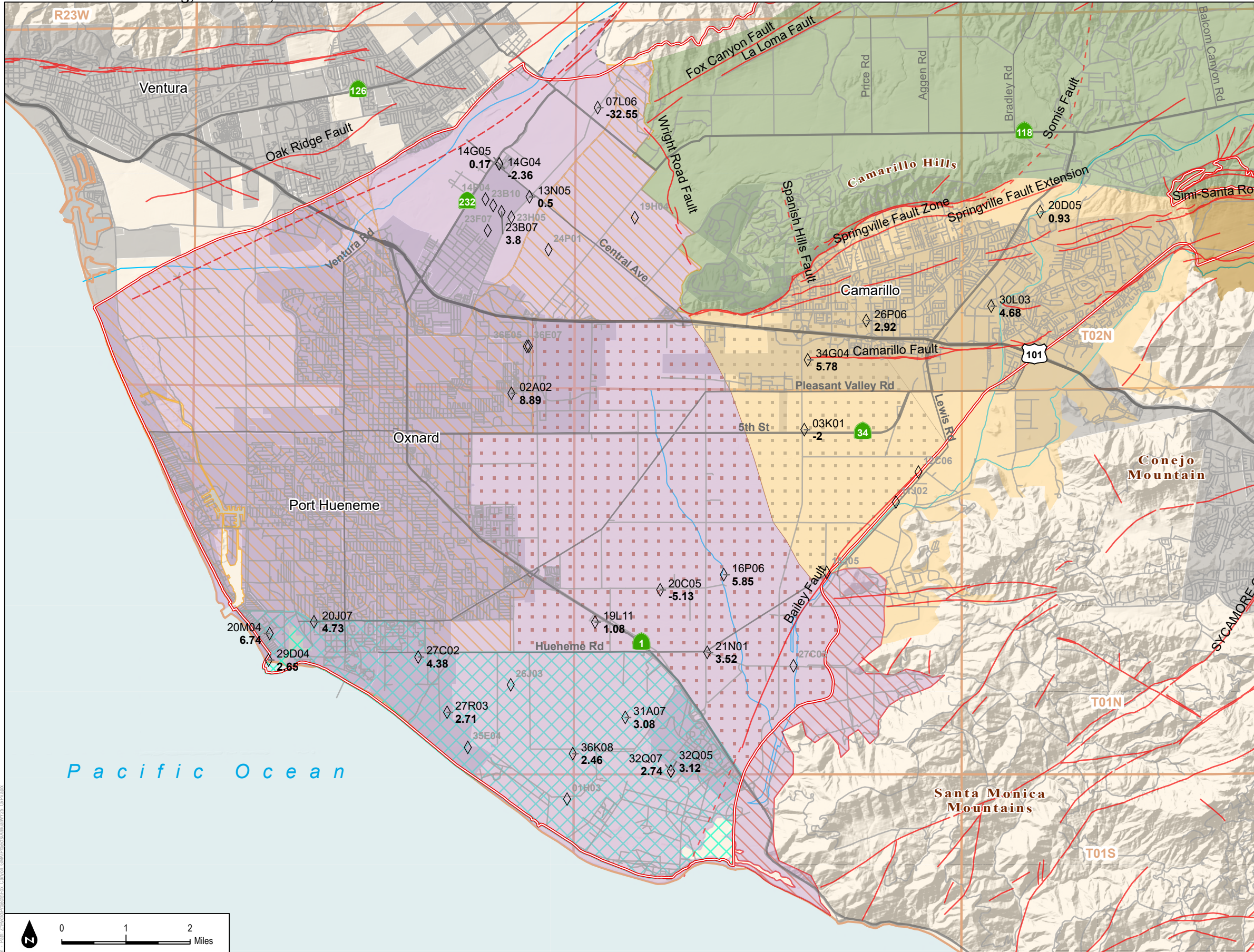
Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window for one or both years.
- 3) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD





Legend

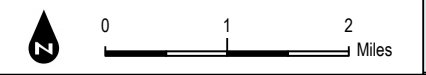
- ◇ Wells screened in the Mugu Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 2.14 Change in Groundwater Elevation in feet
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

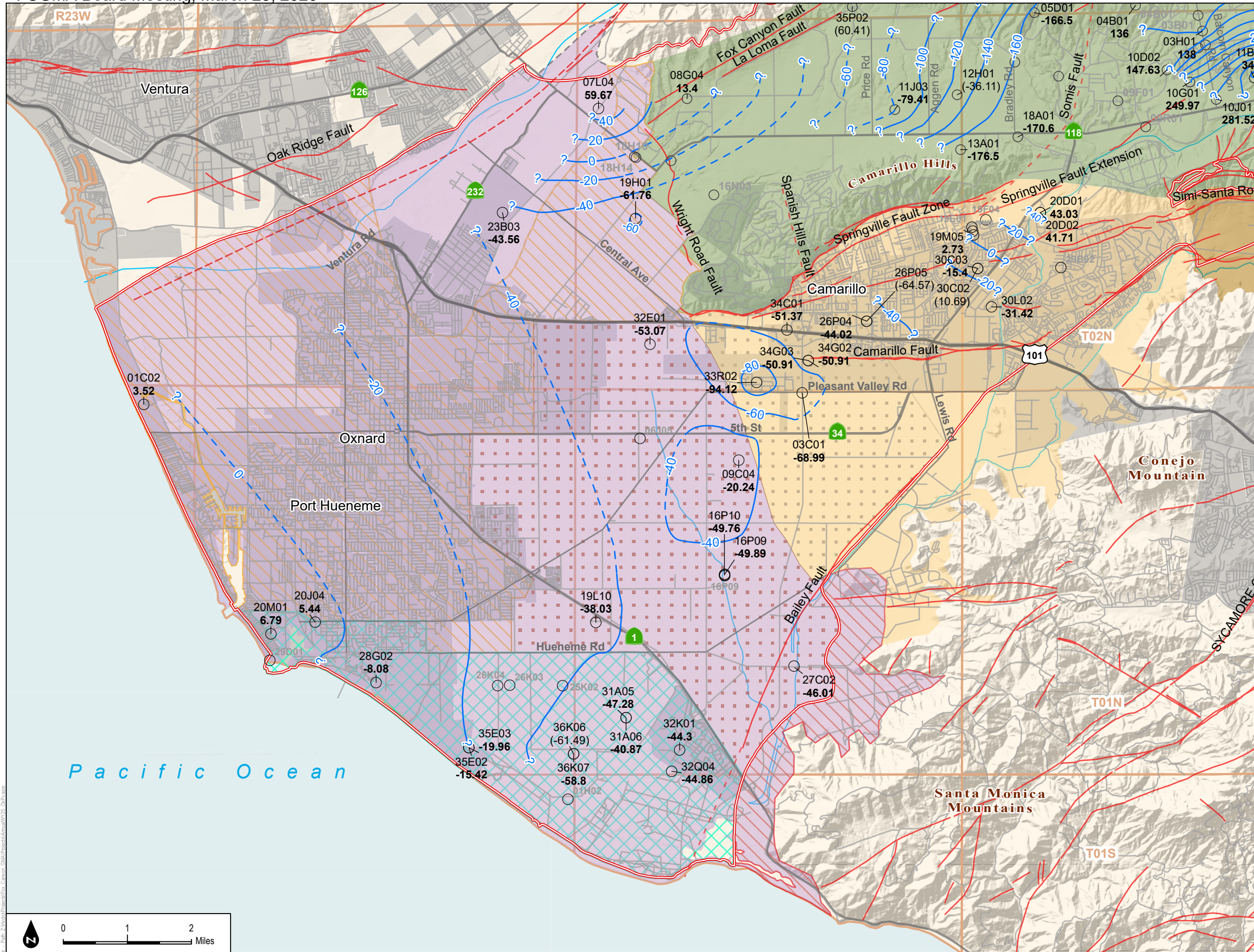
- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window for one or both years.
- 3) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-10
 Mugu Aquifer - Groundwater Elevation Changes from Spring 2024 to Spring 2025



Legend

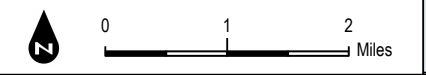
- Contour of equal groundwater elevation elevation (feet). Dashed where approximate; queried where inferred. See Note 3.
- Wells screened in the Fox Canyon Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 14.7 Groundwater Elevations (ft msl)
- (-14.7) Groundwater elevations not used for contouring
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

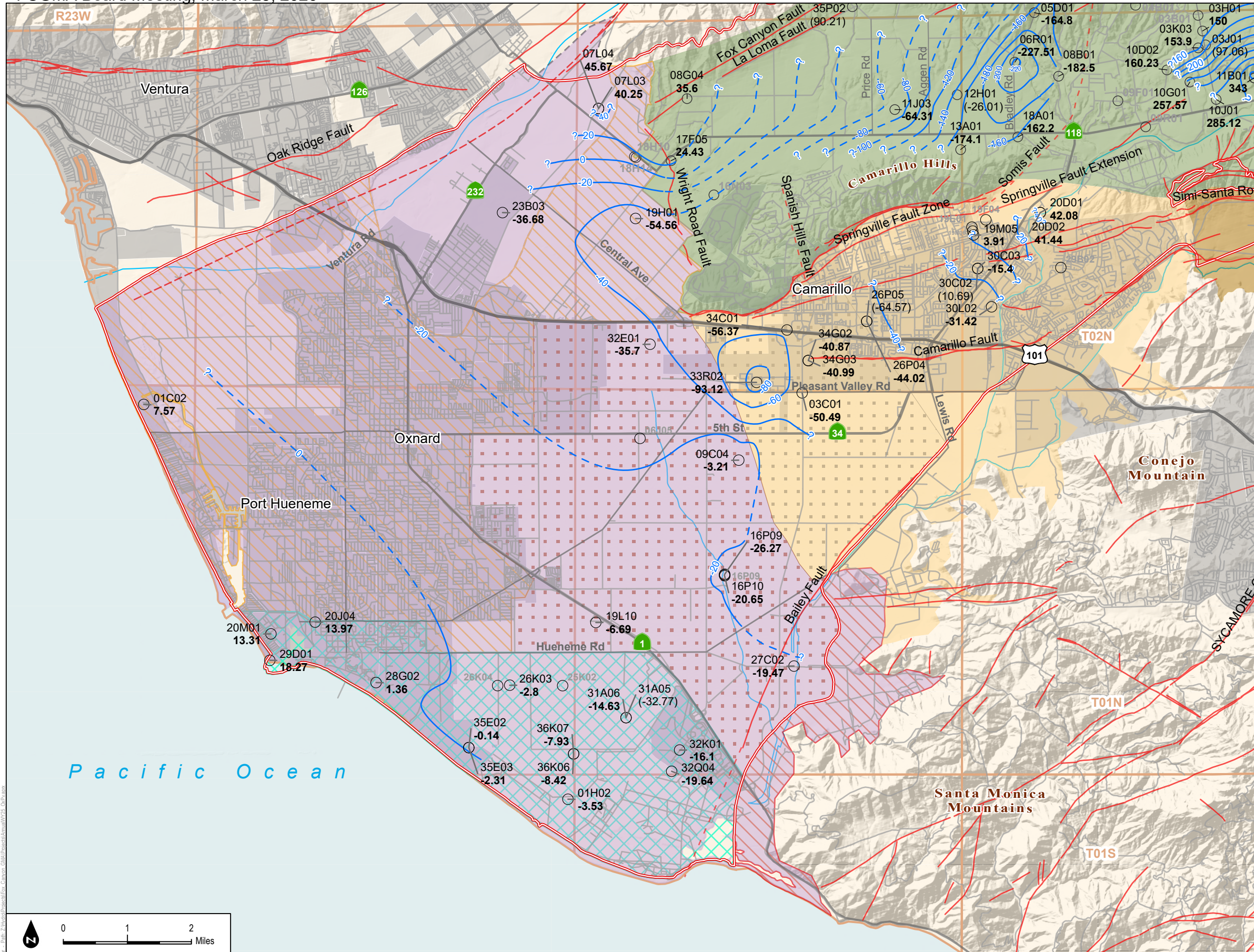
- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window.
- 3) Groundwater elevations not used to create contours are shown in parentheses.
- 4) All elevation values are in feet mean sea level (ft msl).
- 5) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-11
 Groundwater Elevation Contours in the Fox Canyon Aquifer, October 1 to October 31, 2024



Legend

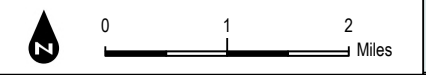
- Contour of equal groundwater elevation elevation (feet). Dashed where approximate; queried where inferred. See Note 3.
- Wells screened in the Fox Canyon Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 14.7 Groundwater Elevations (ft msl)
- (-14.7) Groundwater elevations not used for contouring
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- East Oxnard Plain Management Area (EOPMA)
- West Oxnard Plain Management Area (WOPMA)
- Oxnard Pumping Depression Management Area
- Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window.
- 3) Groundwater elevations not used to create contours are shown in parentheses.
- 4) All elevation values are in feet mean sea level (ft msl).
- 5) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD

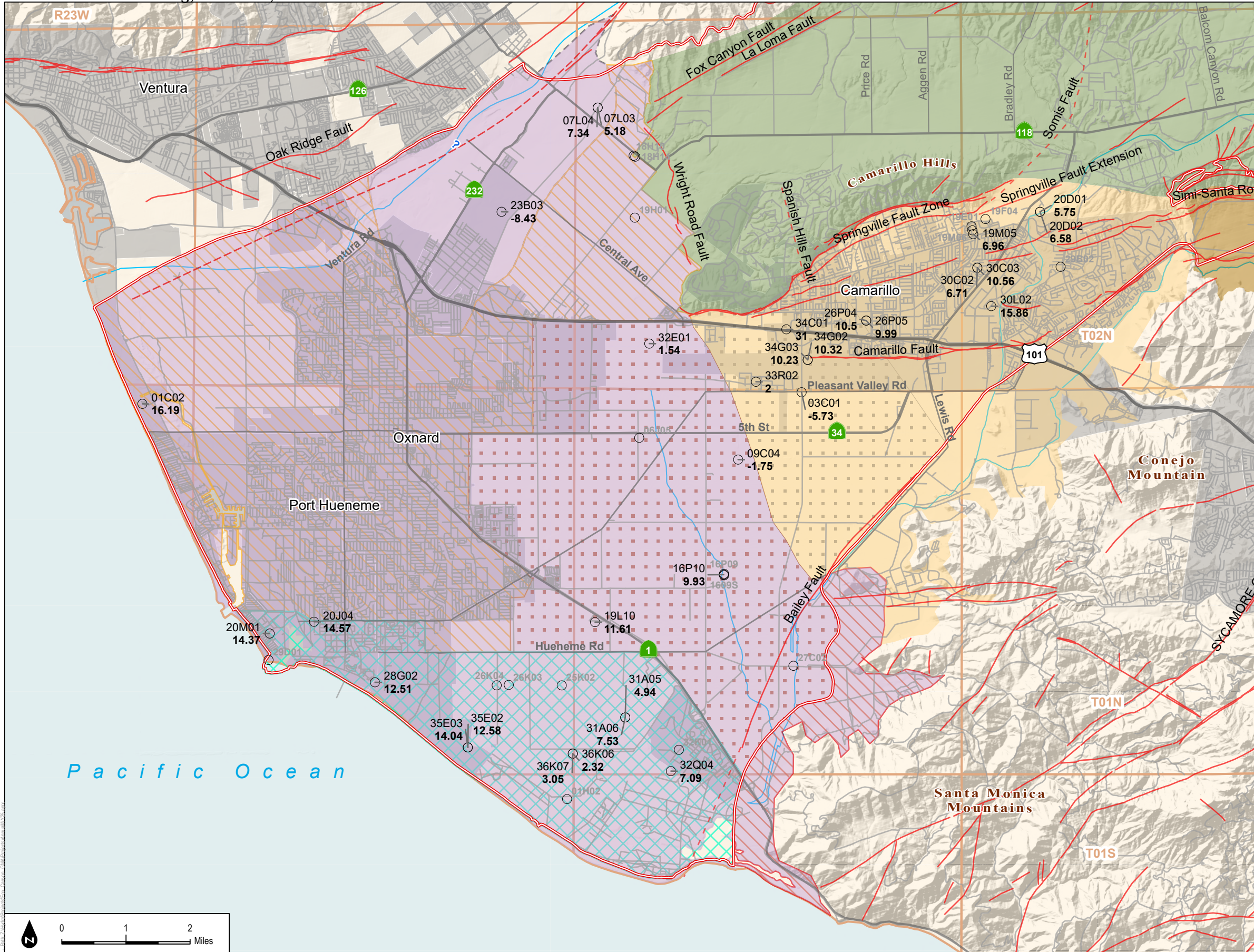


SOURCE: DWR; Ventura County; UWCD; CMWD



Pleasant Valley Basin Groundwater Sustainability Plan WY2025 Annual Report

FIGURE 2-12
 Groundwater Elevation Contours in the Fox Canyon Aquifer, March 1 to March 31, 2025



Legend

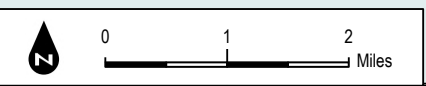
- Wells screened in the Fox Canyon Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 2.14 Change in Groundwater Elevation in feet
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- ▨ East Oxnard Plain Management Area (EOPMA)
- ▧ West Oxnard Plain Management Area (WOPMA)
- ▩ Oxnard Pumping Depression Management Area
- ▤ Saline Intrusion Management Area
- Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

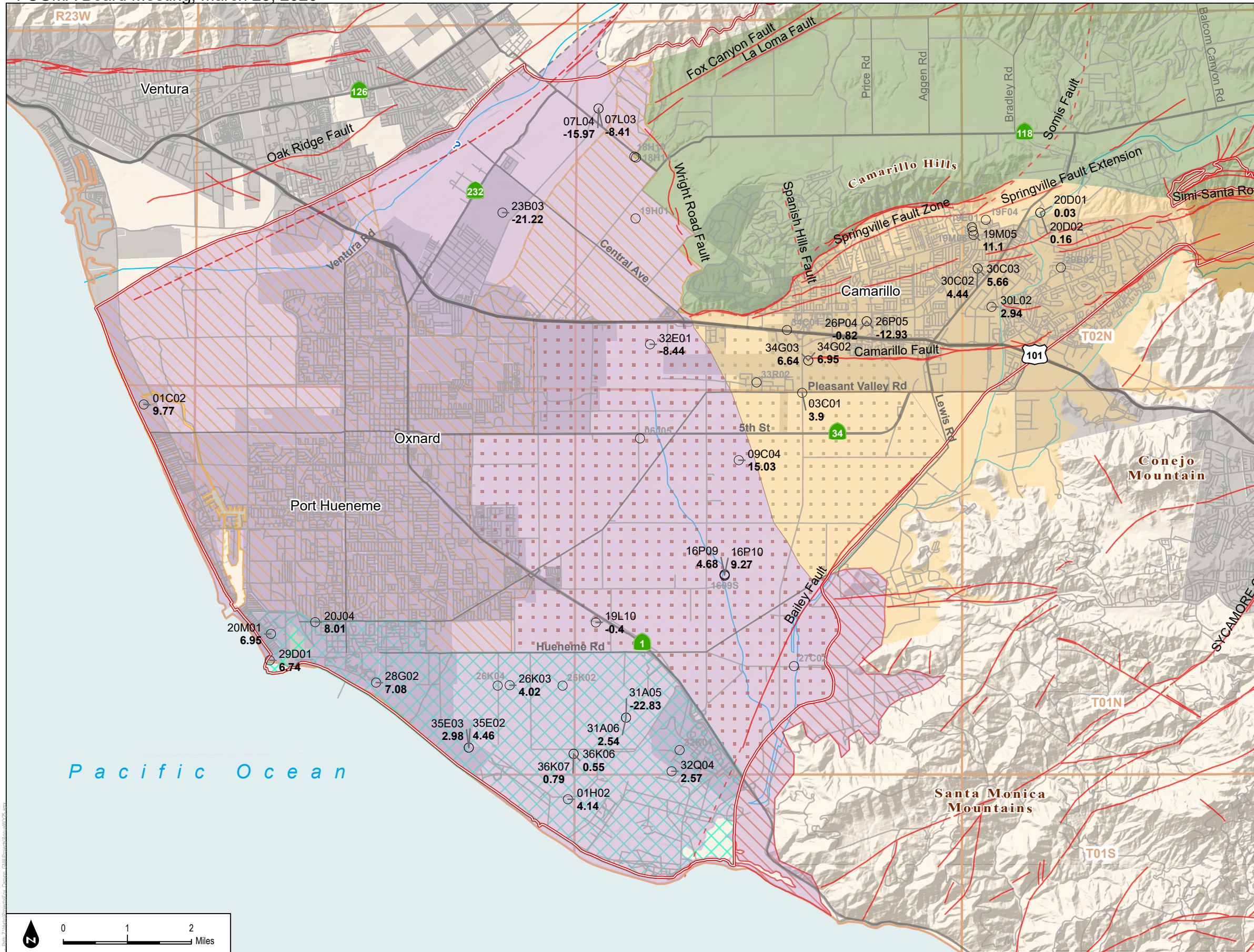
- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window for one or both years.
- 3) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-13
 Fox Canyon Aquifer - Groundwater Elevation Changes from Fall 2023 to Fall 2024



Legend

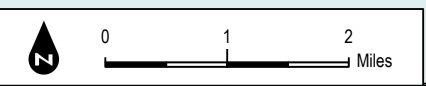
- Wells screened in the Fox Canyon Aquifer
- 15P01 Abbreviated State Well Number (see notes)
- 2.14 Change in Groundwater Elevation in feet
- Fox Canyon Groundwater Management Agency Boundary
- Faults (Dashed Where Inferred)
- Forebay Management Area
- ▨ East Oxnard Plain Management Area (EOPMA)
- ▧ West Oxnard Plain Management Area (WOPMA)
- ▩ Oxnard Pumping Depression Management Area
- ▤ Saline Intrusion Management Area
- ▨ Pleasant Valley Pumping Depression Management Area
- Township (North-South) and Range (East-West)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Notes:

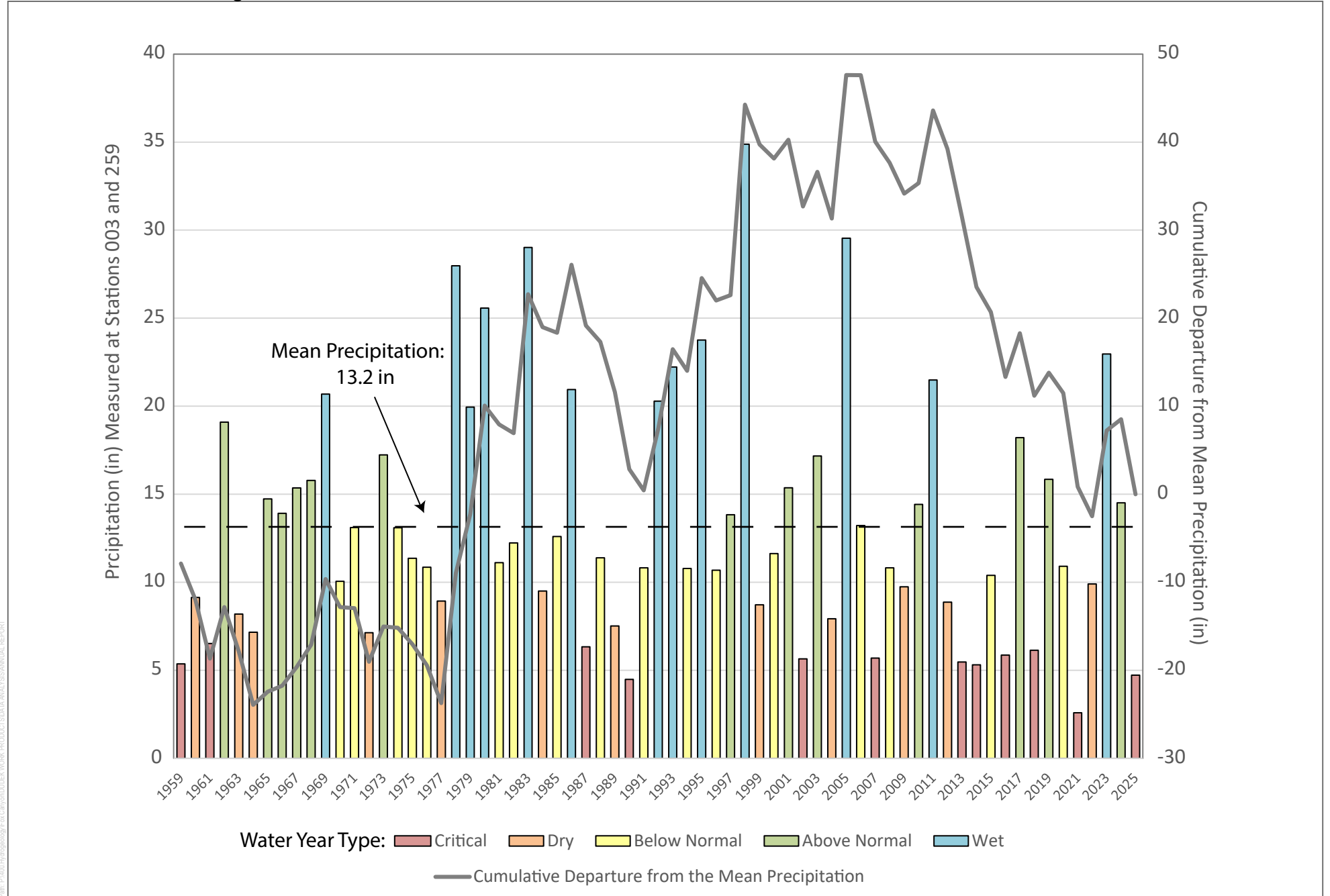
- 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a groundwater elevation beneath it. SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.
- 2) Gray SWN abbreviation with no water level indicates no water level measurement was collected within the specified time window for one or both years.
- 3) Aquifer designation information for individual wells was provided by FCGMA, CMWD and UWCD



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 2-14
 Fox Canyon Aquifer - Groundwater Elevation Changes from Spring 2024 to Spring 2025

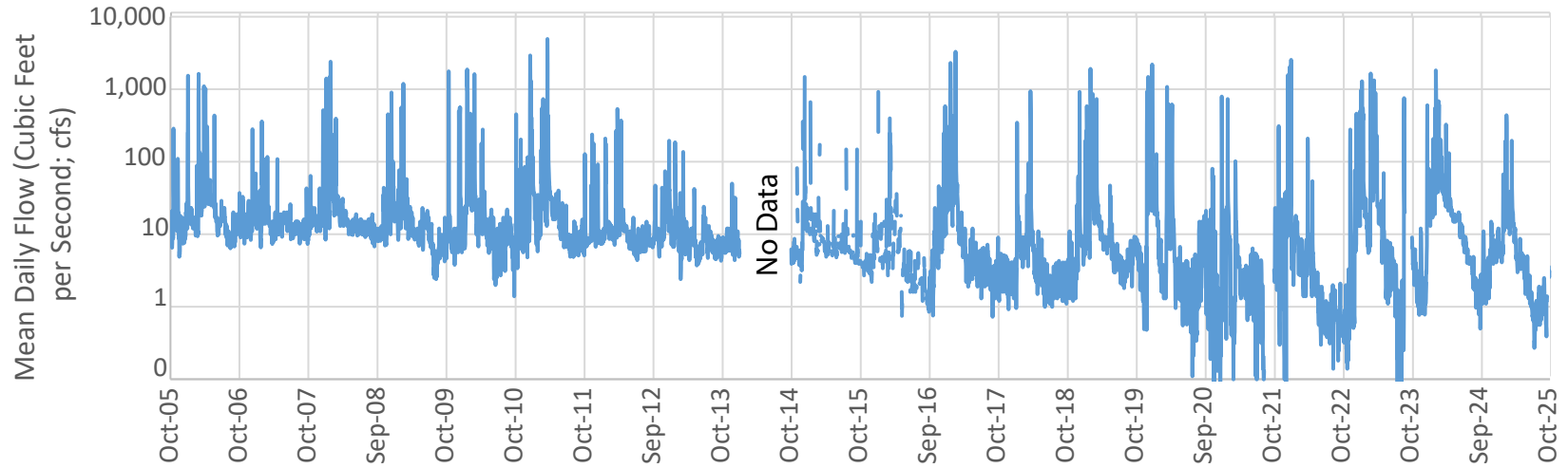


Note: Water year is from October 1 through September 30. Water year type is based on the percentage of the water year precipitation compared to the mean precipitation. Precipitation records prior to 1992 were adjusted from Station 003 based on a linear regression analysis between Stations 003 and 259. Since 1992, precipitation records are from Station 259. Types are defined as: Critical (<50% of mean), Dry (≥50% to <75% of average), Below Normal (≥75% to <100% of mean), Above Normal (≥100% to <150% of mean), and Wet (≥150% of mean).

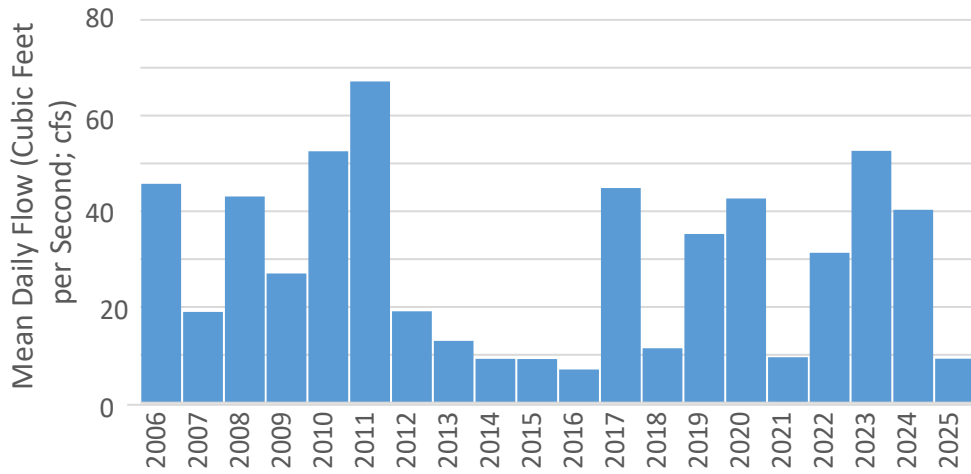
FIGURE 2-15

Pleasant Valley Basin Historical Water Year Precipitation

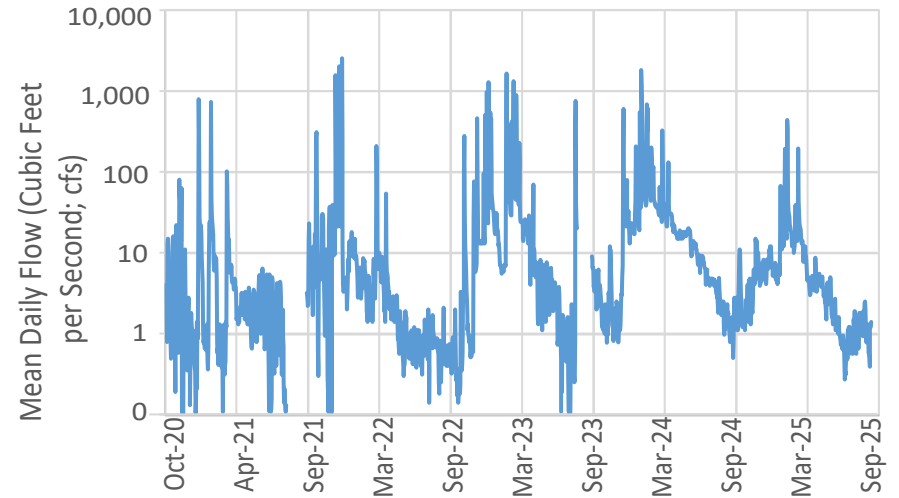
Station 805: Calleguas Creek at CSUCI



Average Daily Flow by Water Year



Daily Flow: Last 5 Water Years



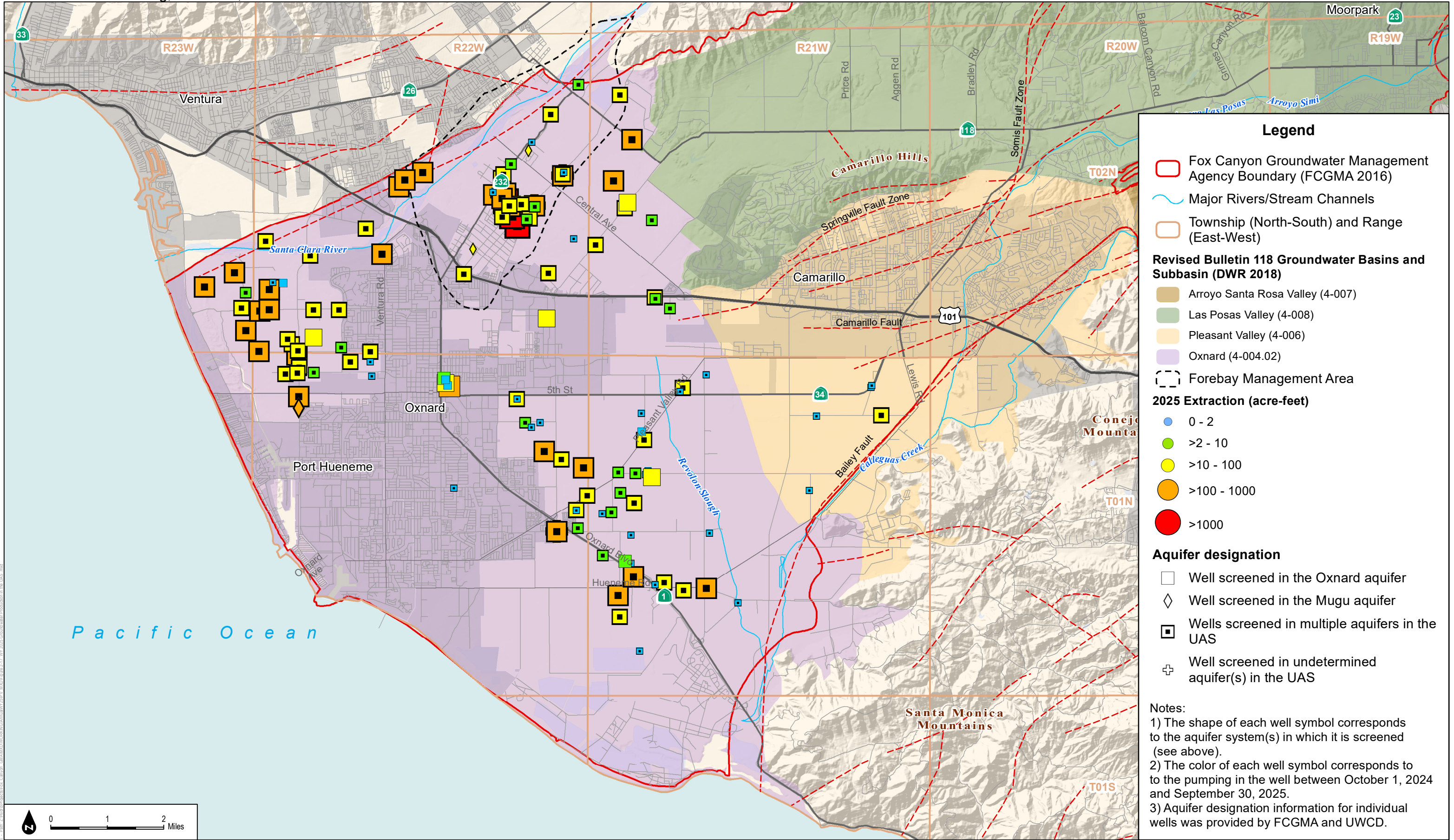
SOURCE: VCWPD



FIGURE 2-16

Pleasant Valley Stream Gauge Data: Gauge 805

Pleasant Valley Basin Groundwater Sustainability Plan WY 2025 Annual Report



Legend

- Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016)
- ~ Major Rivers/Stream Channels
- Township (North-South) and Range (East-West)

Revised Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)
- Forebay Management Area

2025 Extraction (acre-feet)

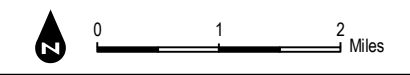
- 0 - 2
- >2 - 10
- >10 - 100
- >100 - 1000
- >1000

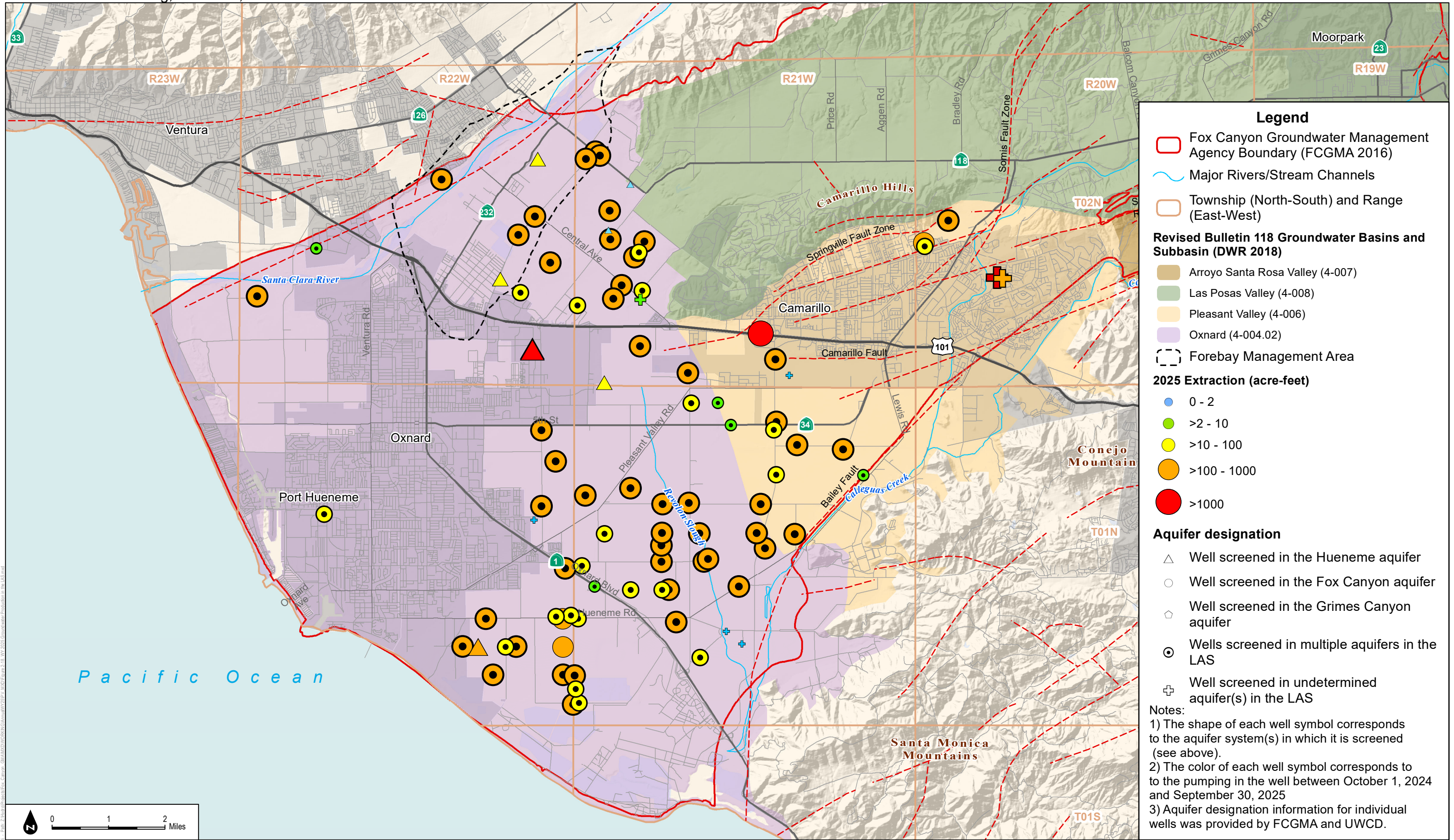
Aquifer designation

- Well screened in the Oxnard aquifer
- ◇ Well screened in the Mugu aquifer
- Wells screened in multiple aquifers in the UAS
- + Well screened in undetermined aquifer(s) in the UAS

Notes:

- 1) The shape of each well symbol corresponds to the aquifer system(s) in which it is screened (see above).
- 2) The color of each well symbol corresponds to the pumping in the well between October 1, 2024 and September 30, 2025.
- 3) Aquifer designation information for individual wells was provided by FCGMA and UWCD.





Legend

- Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016)
- ~ Major Rivers/Stream Channels
- Township (North-South) and Range (East-West)

Revised Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)
- Forebay Management Area

2025 Extraction (acre-feet)

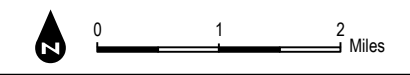
- 0 - 2
- >2 - 10
- >10 - 100
- >100 - 1000
- >1000

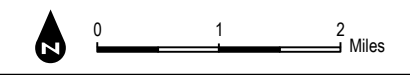
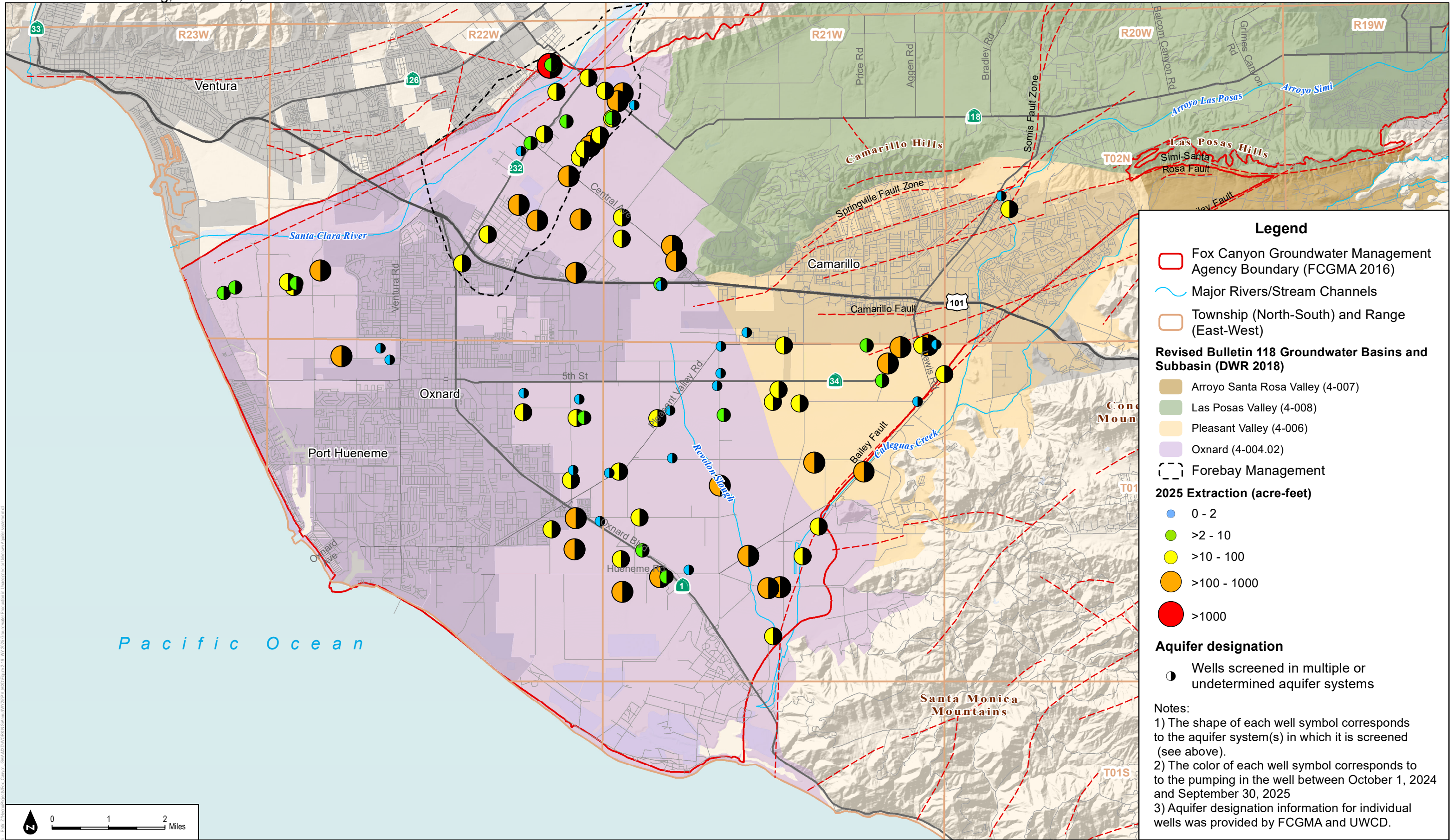
Aquifer designation

- △ Well screened in the Hueneme aquifer
- Well screened in the Fox Canyon aquifer
- ◇ Well screened in the Grimes Canyon aquifer
- ⊙ Wells screened in multiple aquifers in the LAS
- + Well screened in undetermined aquifer(s) in the LAS

Notes:

- 1) The shape of each well symbol corresponds to the aquifer system(s) in which it is screened (see above).
- 2) The color of each well symbol corresponds to the pumping in the well between October 1, 2024 and September 30, 2025
- 3) Aquifer designation information for individual wells was provided by FCGMA and UWCD.

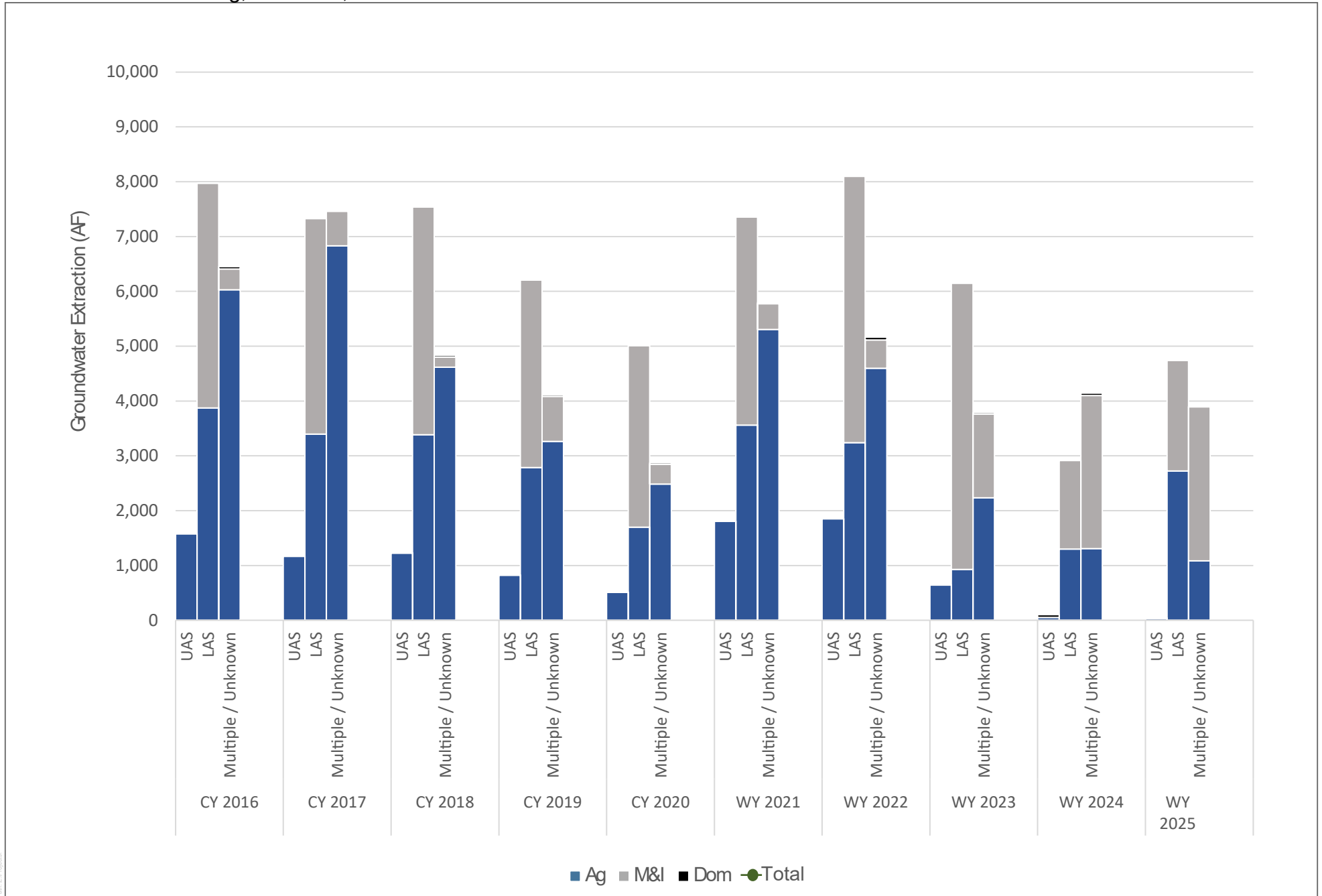




SOURCE: DWR, FCGMA, VCWPD, UWCD



FIGURE 2-19
 WY 2025 Groundwater Production in Multiple or Undetermined Aquifer Systems



SOURCE:



FIGURE 2-20
 Annual Groundwater Extraction by Water Sector and Aquifer System

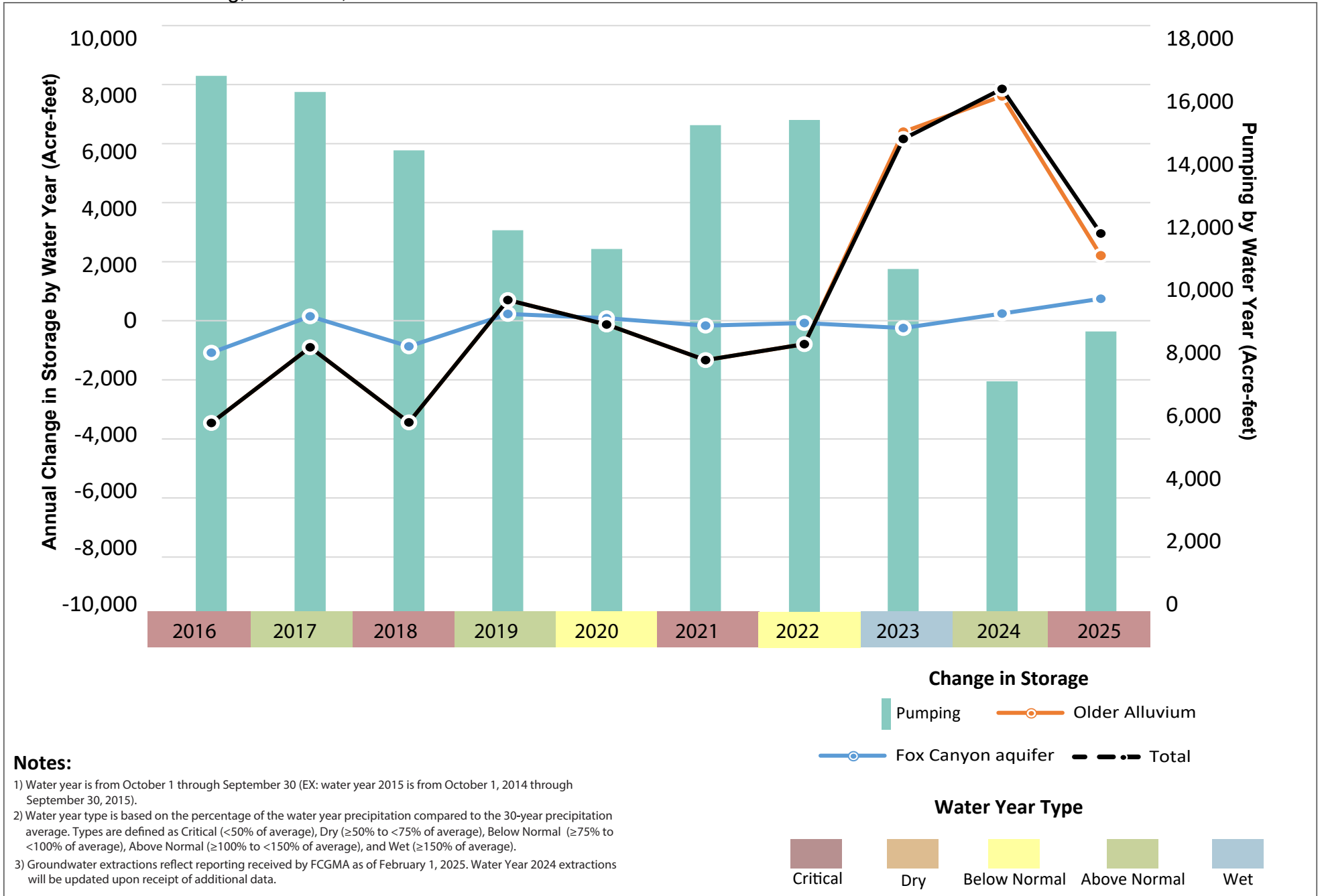


FIGURE 2-21
 Water Year Type, Groundwater Use, and Annual Change in Storage in the Pleasant Valley Basin

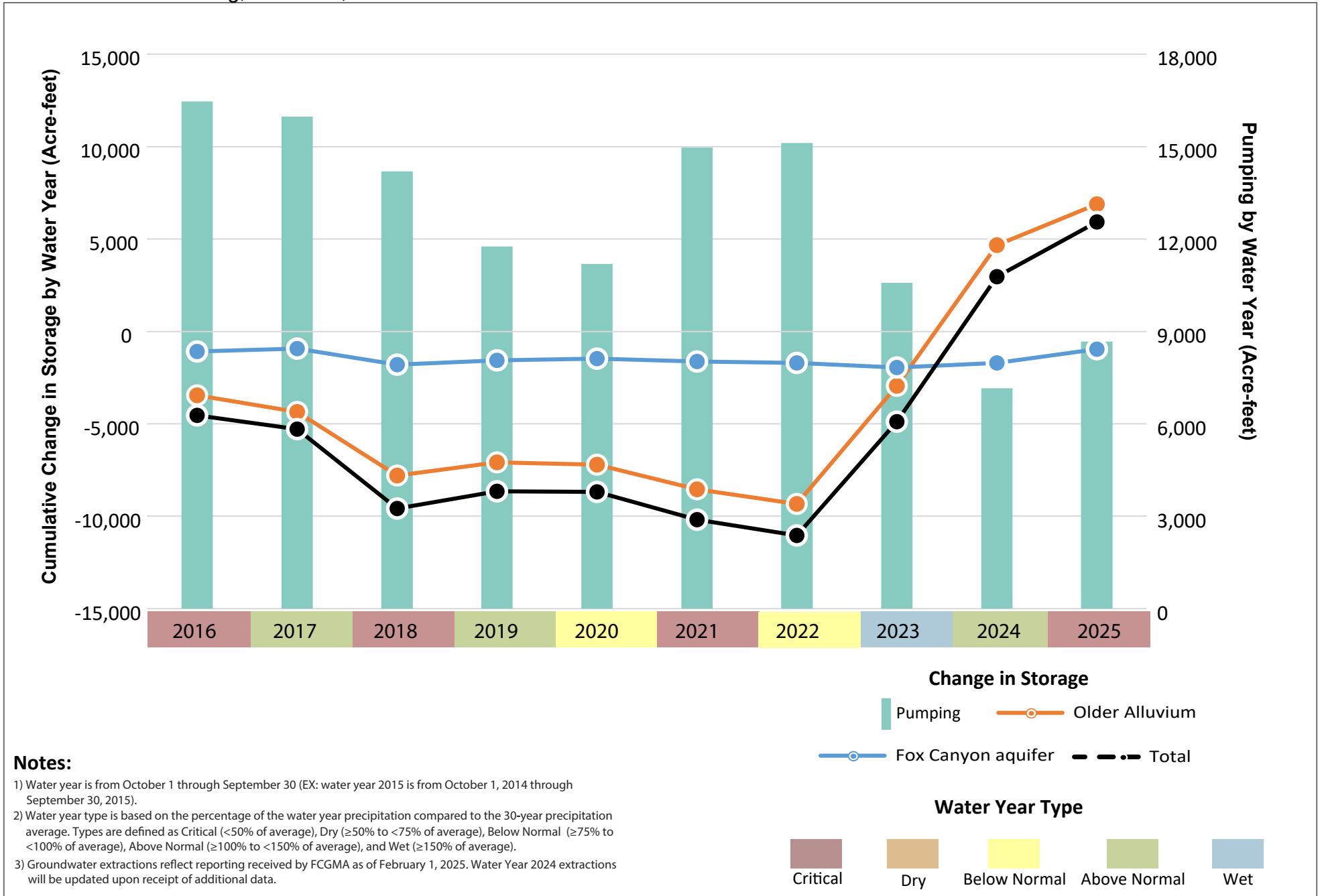
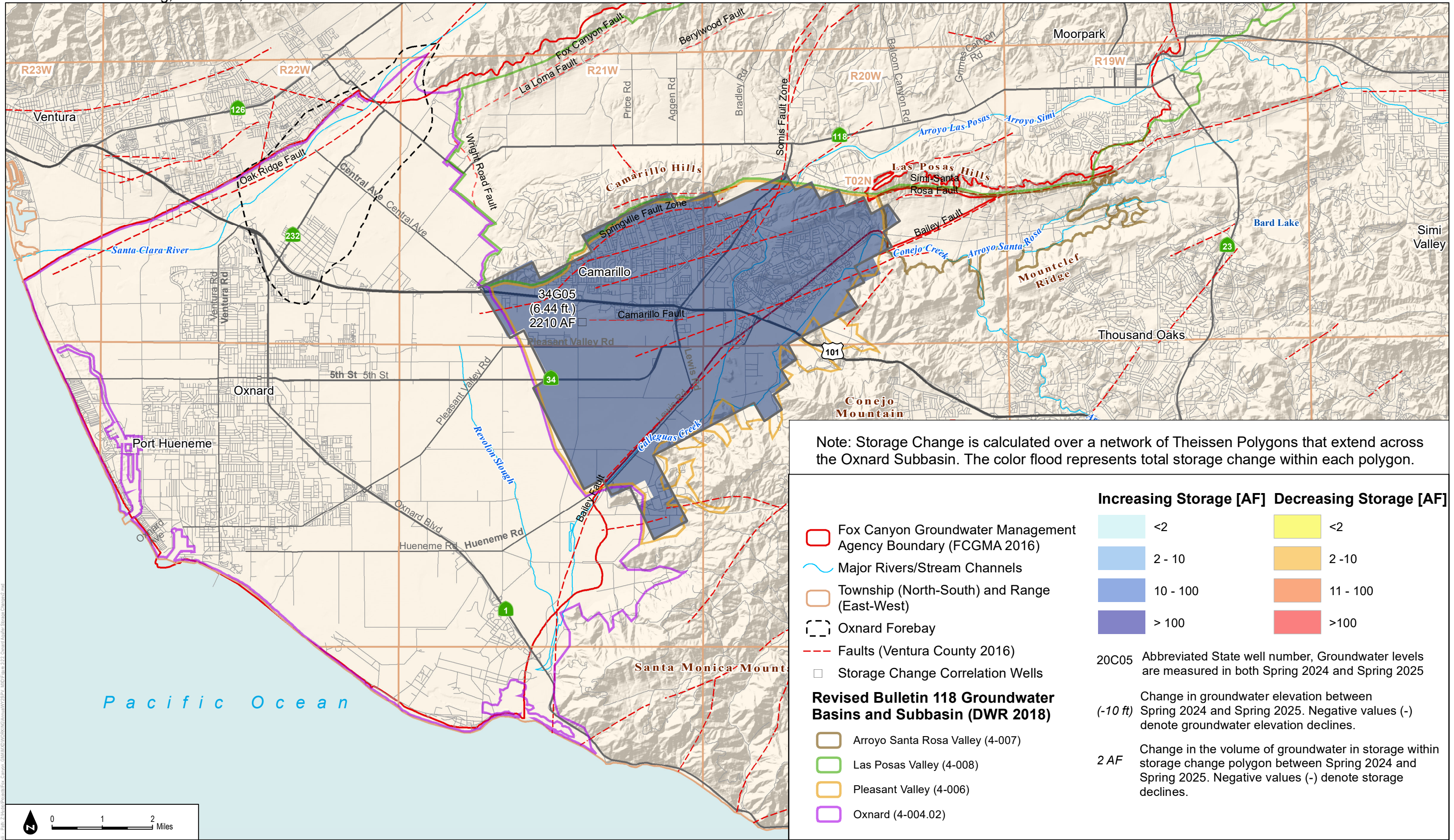


FIGURE 2-22
 Water Year Type, Groundwater Use, and Cumulative Change in Storage in the Pleasant Valley Basin



Note: Storage Change is calculated over a network of Thiessen Polygons that extend across the Oxnard Subbasin. The color flood represents total storage change within each polygon.

<ul style="list-style-type: none"> Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016) ~ Major Rivers/Stream Channels Township (North-South) and Range (East-West) Oxnard Forebay Faults (Ventura County 2016) Storage Change Correlation Wells 	Increasing Storage [AF]		Decreasing Storage [AF]	
		<2		<2
		2 - 10		2 - 10
		10 - 100		11 - 100
		> 100		>100

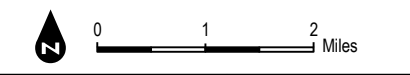
20C05 Abbreviated State well number, Groundwater levels are measured in both Spring 2024 and Spring 2025

(-10 ft) Change in groundwater elevation between Spring 2024 and Spring 2025. Negative values (-) denote groundwater elevation declines.

2 AF Change in the volume of groundwater in storage within storage change polygon between Spring 2024 and Spring 2025. Negative values (-) denote storage declines.

Revised Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

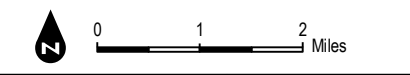
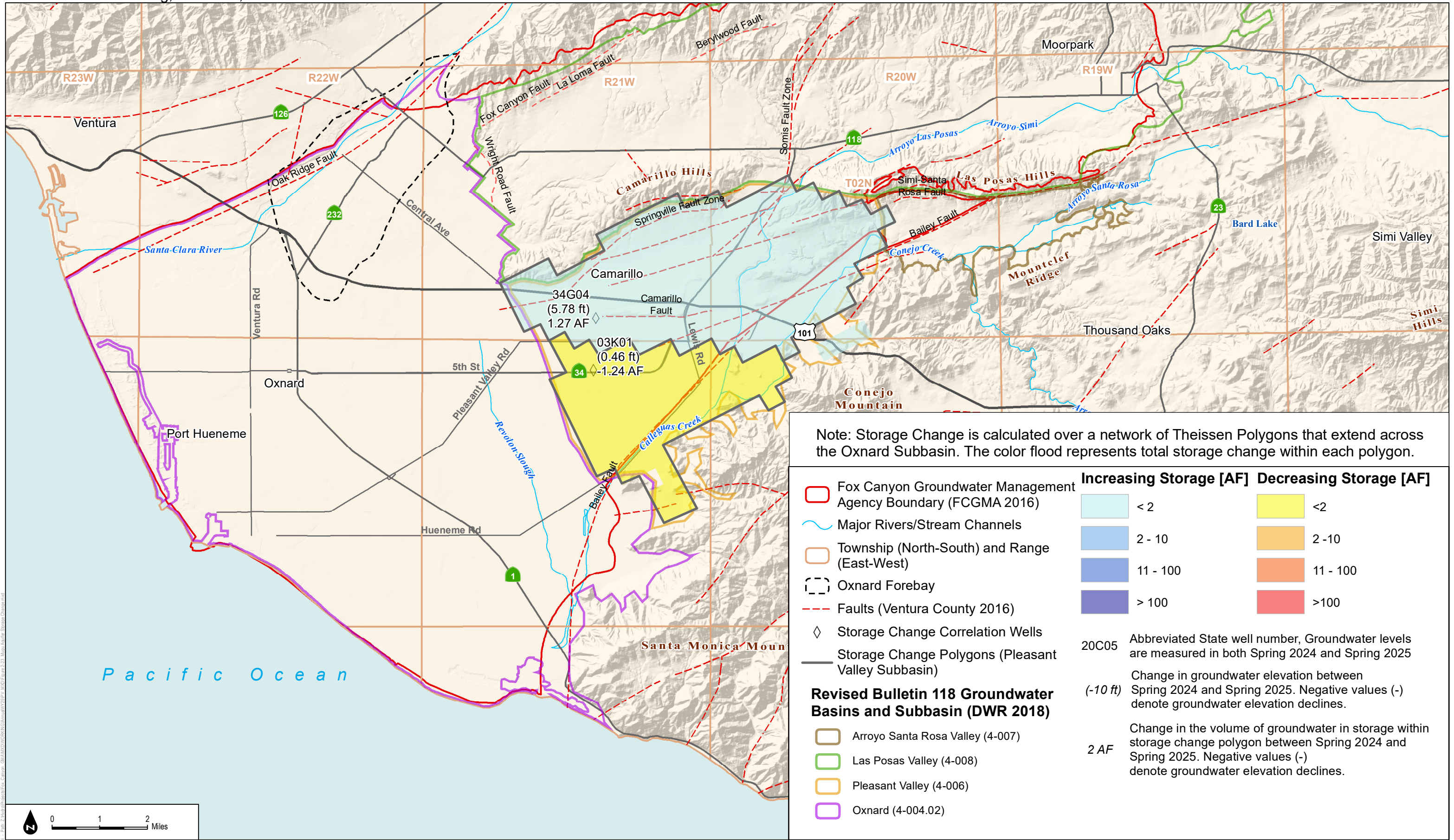
- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)



SOURCE: DWR, FCGMA, VCWPD, CMWD, UWCD

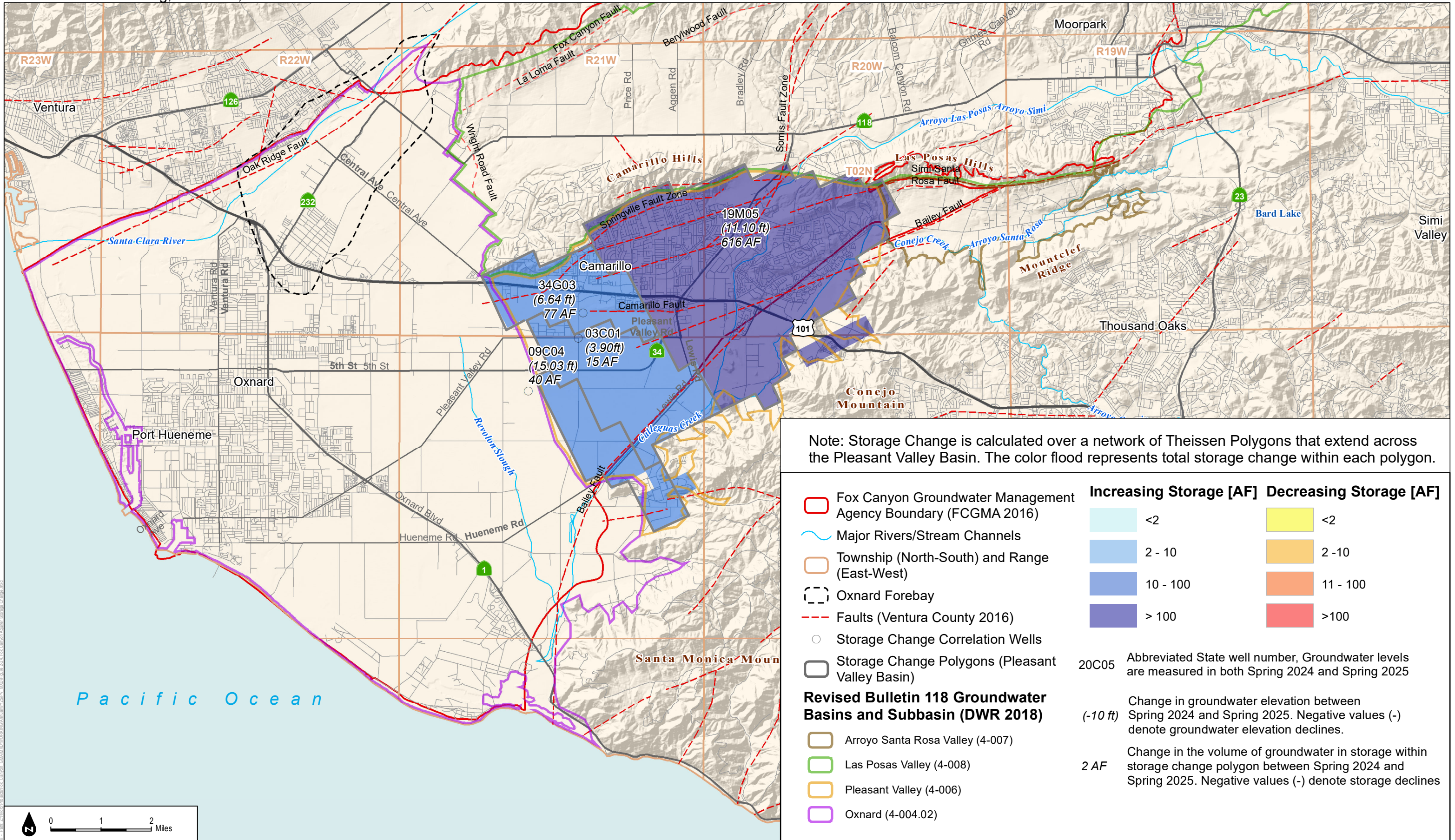


FIGURE 2-23
 Change in Storage in the Oxnard Aquifer: Spring 2024 to Spring 2025



SOURCE: DWR, FCGMA, VCWPD, CMWD, UWCD
 Pleasant Valley Basin Groundwater Sustainability Plan WY 2025 Annual Report

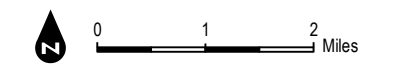
FIGURE 2-24
 Change in Storage in the Mugu Aquifer: Spring 2024 to Spring 2025



Note: Storage Change is calculated over a network of Thiessen Polygons that extend across the Pleasant Valley Basin. The color flood represents total storage change within each polygon.

<ul style="list-style-type: none"> Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016) ~ Major Rivers/Stream Channels Township (North-South) and Range (East-West) Oxnard Forebay Faults (Ventura County 2016) Storage Change Correlation Wells Storage Change Polygons (Pleasant Valley Basin) 	Increasing Storage [AF]		Decreasing Storage [AF]	
		<2		<2
		2 - 10		2 - 10
		10 - 100		11 - 100
		> 100		>100

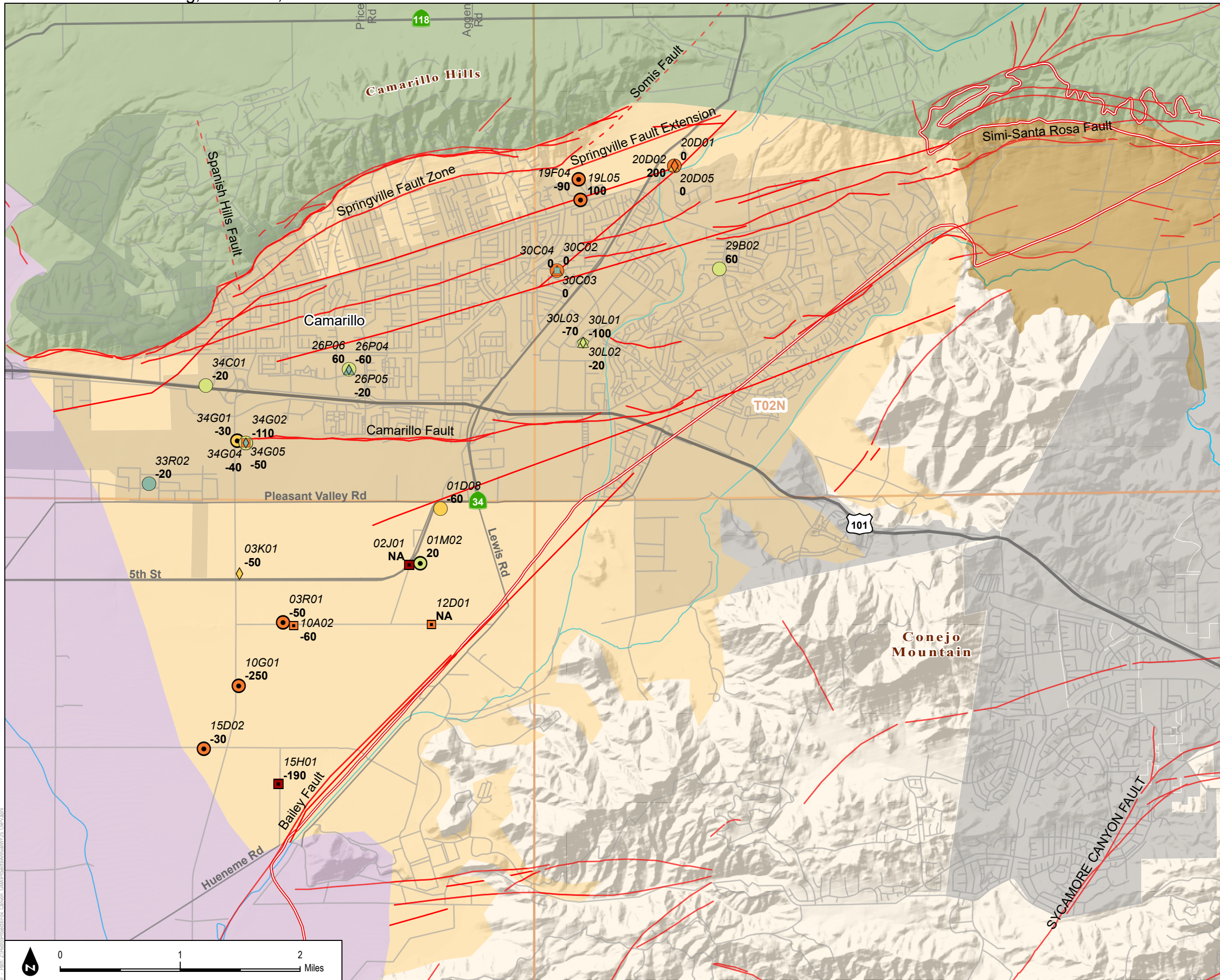
<p>Revised Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)</p> <ul style="list-style-type: none"> Arroyo Santa Rosa Valley (4-007) Las Posas Valley (4-008) Pleasant Valley (4-006) Oxnard (4-004.02) 	<p>20C05 Abbreviated State well number, Groundwater levels are measured in both Spring 2024 and Spring 2025</p> <p>(-10 ft) Change in groundwater elevation between Spring 2024 and Spring 2025. Negative values (-) denote groundwater elevation declines.</p> <p>2 AF Change in the volume of groundwater in storage within storage change polygon between Spring 2024 and Spring 2025. Negative values (-) denote storage declines</p>
---	--



SOURCE: DWR, FCGMA, VCWPD, CMWD, UWCD



FIGURE 2-25
 Change in Storage in the Fox Canyon Aquifer: Spring 2024 to Spring 2025



Legend

- Fox Canyon Groundwater Management Agency Boundary
- Township (North-South) and Range (East-West)
- ~ Major Rivers/Stream Channels
- Faults (Dashed Where Inferred)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

TDS concentration (mg/L), 2025

- 290 - 500
- >500 - 750
- >750 - 1000
- >1000 - 1200
- >1200 - 2500
- >2500 - 49800

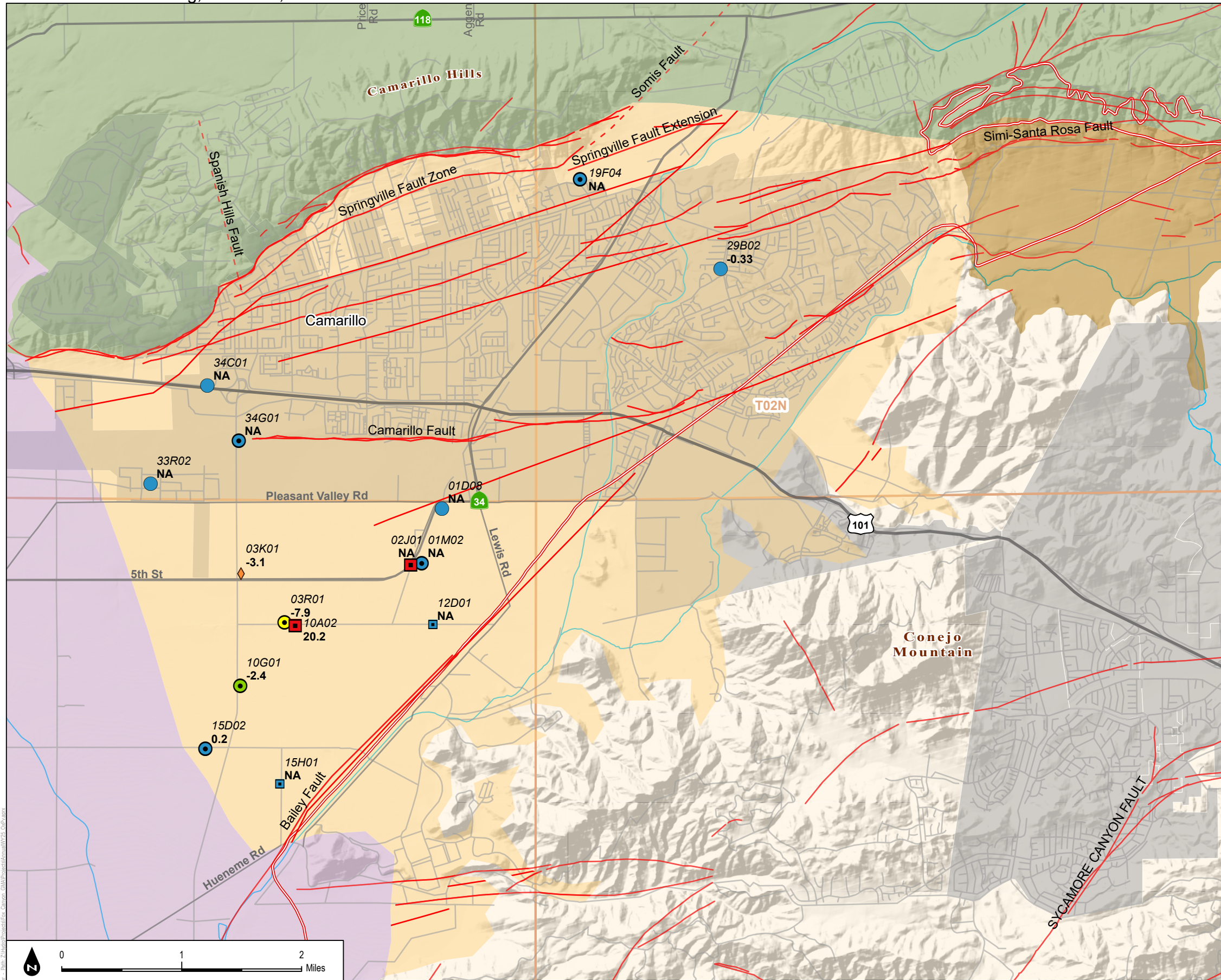
Aquifer designation

- Well screened in the Oxnard aquifer
- Well screened in the Mugu aquifer
- Wells screened in multiple aquifers in the UAS
- Well screened in the Hueneme aquifer
- Well screened in the Fox Canyon aquifer
- Well screened in the Grimes Canyon aquifer
- Wells screened in multiple aquifers in the LAS

15P01 Abbreviated State Well Number (see notes)
 -10 Change in Concentration (mg/L)
 NA Not Available

Notes:
 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a concentration value beneath it. The concentration is the most recent concentration measured in water quality samples collected at that well in the two years, WY 2024 and 2025.
 2) SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.





Legend

- Fox Canyon Groundwater Management Agency Boundary
- Township (North-South) and Range (East-West)
- ~ Major Rivers/Stream Channels
- Faults (Dashed Where Inferred)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Nitrate concentration (mg/L as Nitrate), 2025

- 0 - 10
- 11 - 23
- 23 - 45
- 46 - 90
- >90

Aquifer designation

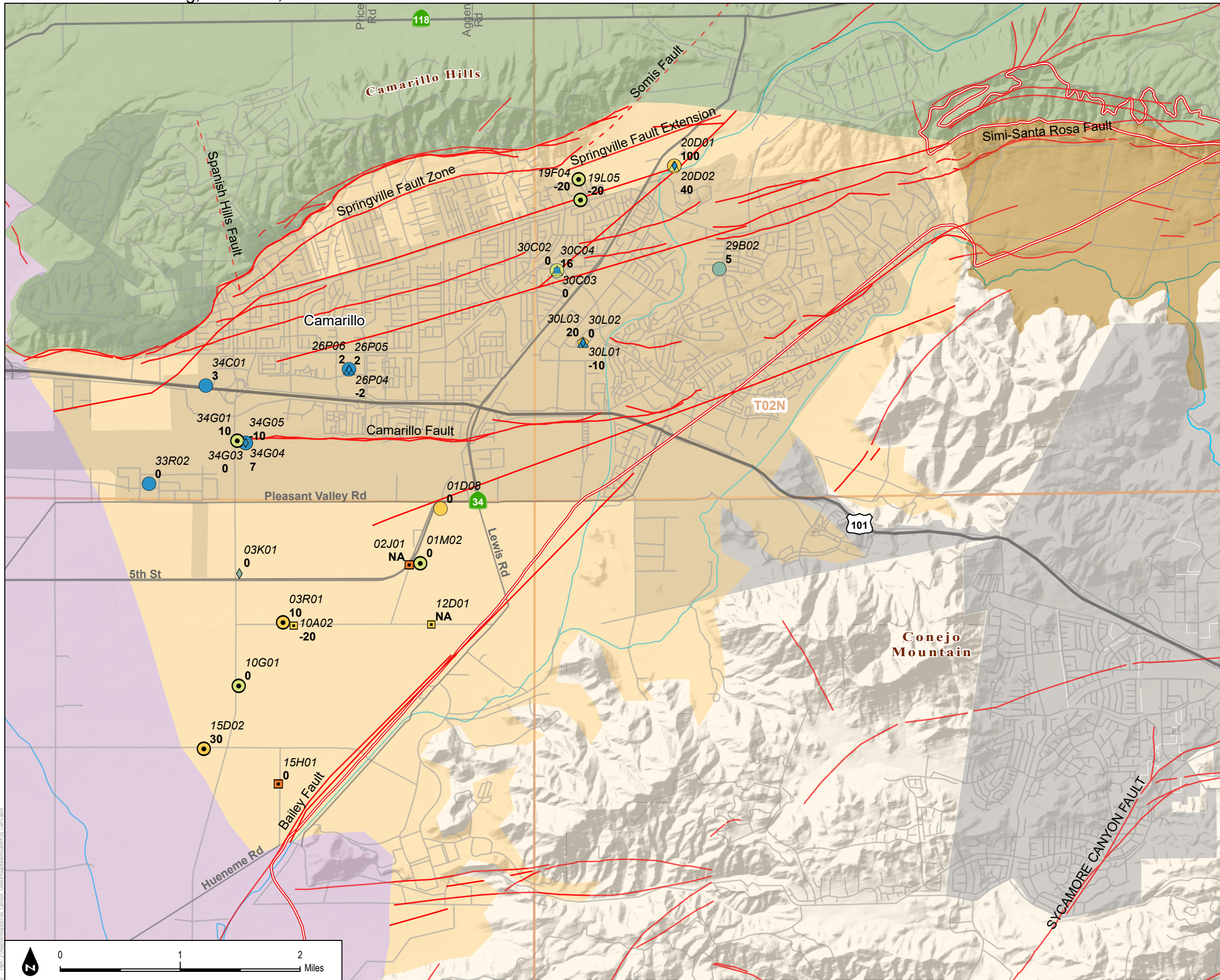
- Well screened in the Oxnard aquifer
- Well screened in the Mugu aquifer
- Wells screened in multiple aquifers in the UAS
- Well screened in the Hueneme aquifer
- Well screened in the Fox Canyon aquifer
- Well screened in the Grimes Canyon aquifer
- Wells screened in multiple aquifers in the LAS

15P01 Abbreviated State Well Number (see notes)
 -10 Change in Concentration (mg/L)
 NA Not Available

Notes:
 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a concentration value beneath it. The concentration is the most recent concentration measured in water quality samples collected at that well in the two years, WY 2024 and 2025.
 2) SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.



FIGURE 3-2
 Most Recent Nitrate (mg/L) Measured in WY 2025 and change in Nitrate since 2023



Legend

- Fox Canyon Groundwater Management Agency Boundary
- Township (North-South) and Range (East-West)
- ~ Major Rivers/Stream Channels
- Faults (Dashed Where Inferred)

Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Chloride concentration (mg/L), 2025

- < 100
- 100 - 150
- 150 - 200
- 200 - 500
- 500 - 1000
- >1000

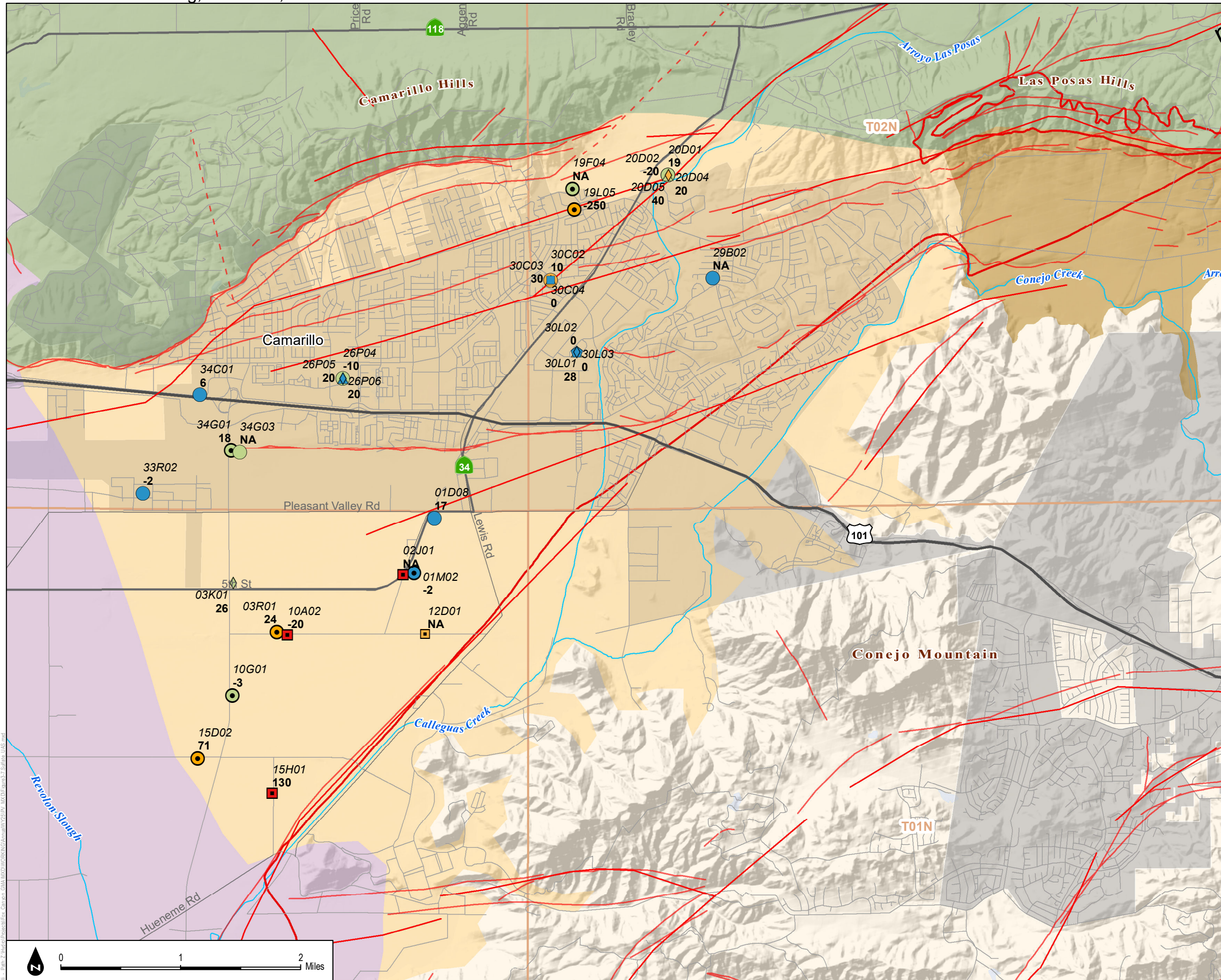
Aquifer designation

- Well screened in the Oxnard aquifer
- Well screened in the Mugu aquifer
- Wells screened in multiple aquifers in the UAS
- △ Well screened in the Hueneme aquifer
- Well screened in the Fox Canyon aquifer
- ◇ Well screened in the Grimes Canyon aquifer
- ◎ Wells screened in multiple aquifers in the LAS

15P01 Abbreviated State Well Number (see notes)
 -10 Change in Concentration (mg/L)
 NA Not Available

Notes:
 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a concentration value beneath it. The concentration is the most recent concentration measured in water quality samples collected at that well in the two years, WY 2024 and 2025.
 2) SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.





Legend

- Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016)
- ~ Major Rivers/Stream Channels
- Township (North-South) and Range (East-West)
- Faults (Dashed Where Inferred)

Revised Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Sulfate concentration (mg/L), 2025

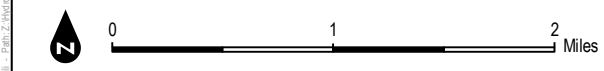
- 29 - 300
- 301 - 600
- 601 - 1000
- 1001 - 5740

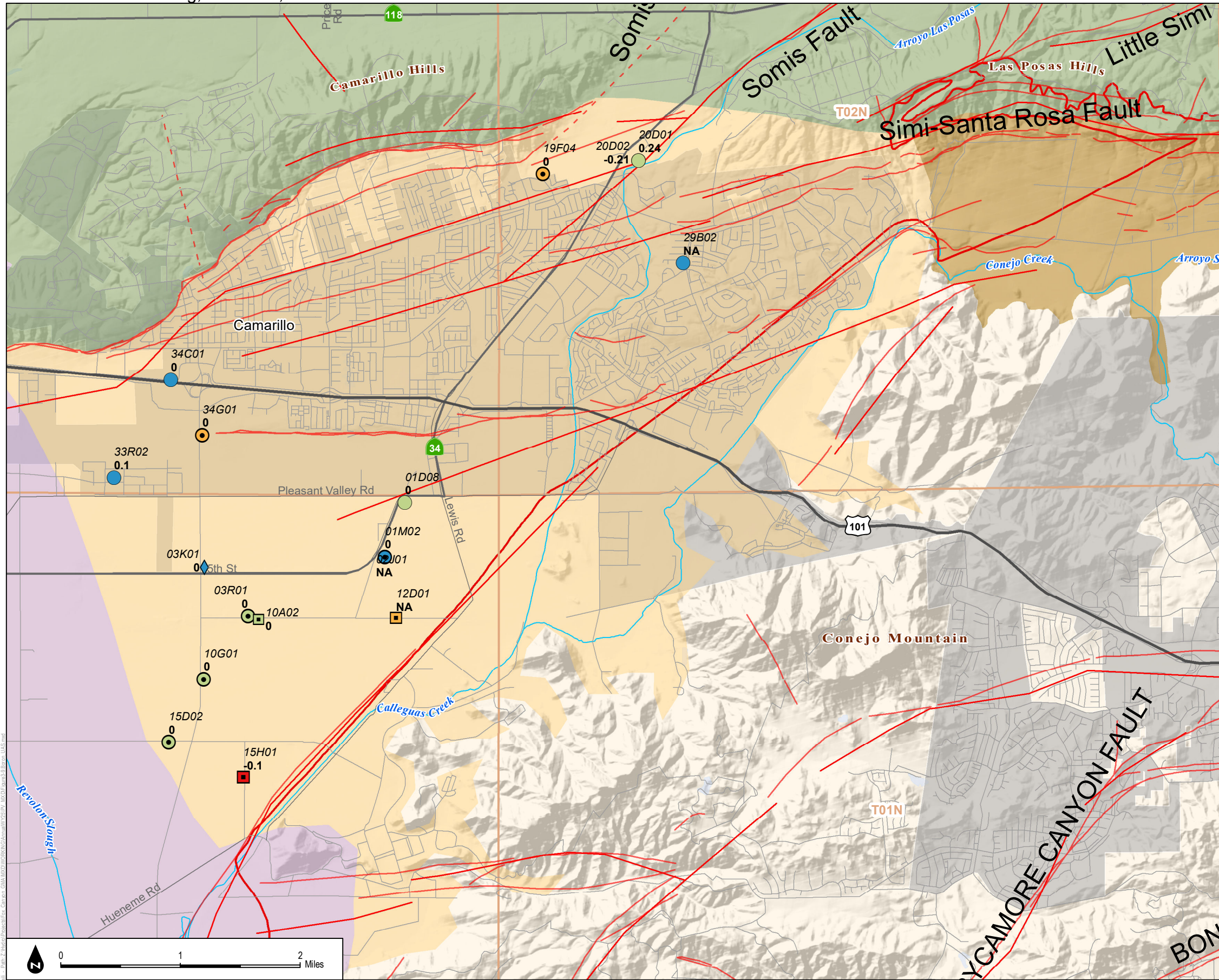
Aquifer designation

- Well screened in the Oxnard aquifer
- ◇ Well screened in the Mugu aquifer
- Wells screened in multiple aquifers in the UAS
- △ Well screened in the Hueneme aquifer
- Well screened in the Fox Canyon aquifer
- ◇ Well screened in the Grimes Canyon aquifer
- ⊙ Wells screened in multiple aquifers in the LAS

15P01 Abbreviated State Well Number (see notes)
 0 Change in Concentration (mg/L)
 NA Not Available

Notes:
 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a concentration value beneath it. The concentration is the most recent concentration measured in water quality samples collected at that well in the two years, WY 2024 and 2025.
 2) SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.





Legend

- Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016)
- ~ Major Rivers/Stream Channels
- Township (North-South) and Range (East-West)
- Faults (Dashed Where Inferred)

Revised Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

- Arroyo Santa Rosa Valley (4-007)
- Las Posas Valley (4-008)
- Pleasant Valley (4-006)
- Oxnard (4-004.02)

Boron concentration (mg/L), 2025

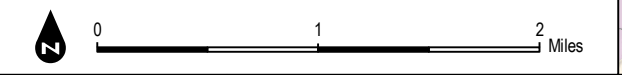
- 0- 0.4
- >0.4 - 0.6
- >0.6 - 1.0
- >1.0 - 2.0

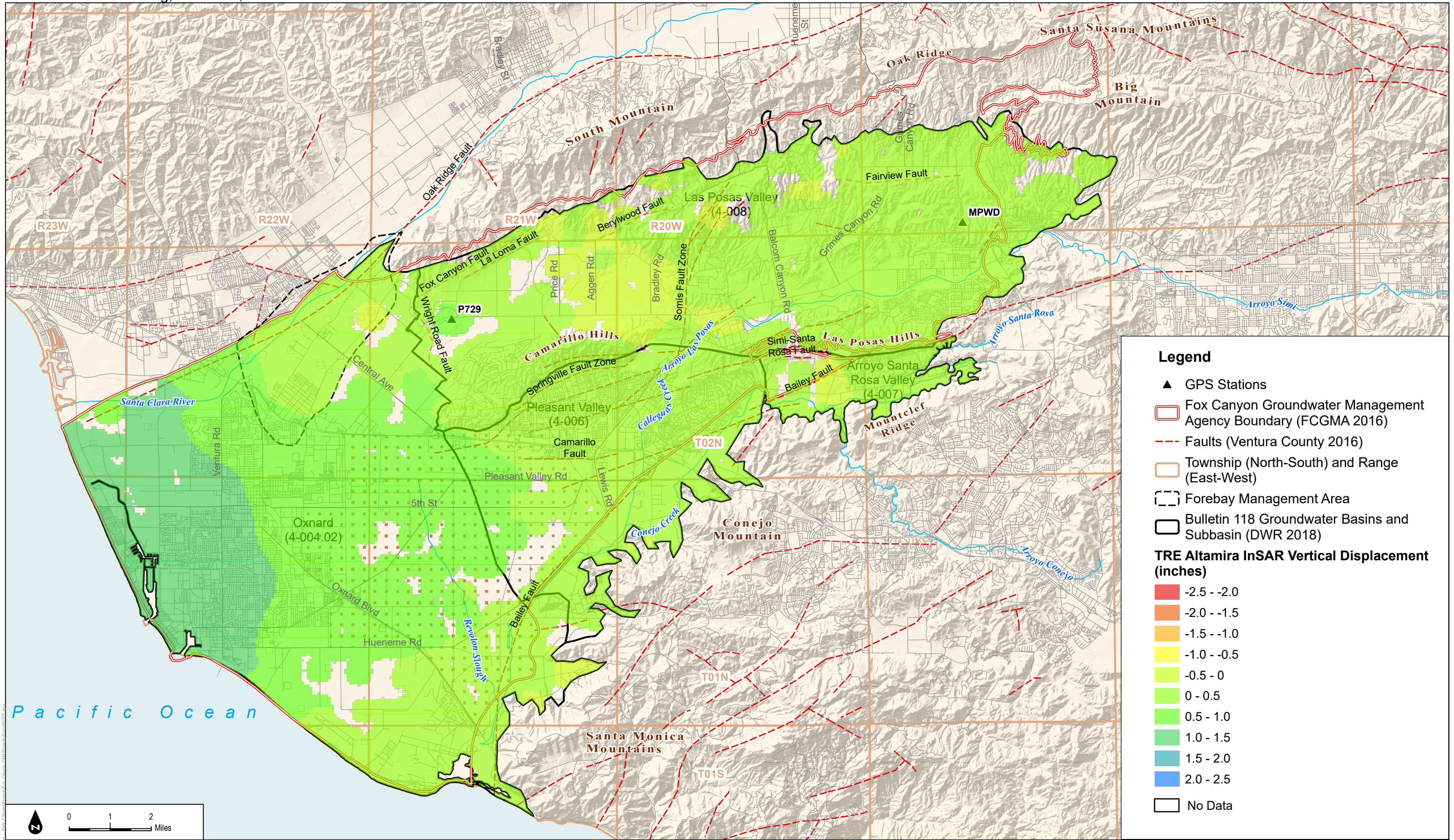
Aquifer designation

- Well screened in the Oxnard aquifer
- ◇ Well screened in the Mugu aquifer
- Wells screened in multiple aquifers in the UAS
- △ Well screened in the Hueneme aquifer
- Well screened in the Fox Canyon aquifer
- ◇ Well screened in the Grimes Canyon aquifer
- Wells screened in multiple aquifers in the LAS

15P01 Abbreviated State Well Number (see notes)
 0 Change in Concentration (mg/L)
 NA Not Available

Notes:
 1) Well labels consist of an italicized abbreviated State Well Number (SWN) and a concentration value beneath it. The concentration is the most recent concentration measured in water quality samples collected at that well in the two years, WY 2024 and 2025.
 2) SWNs are based on Township and Range in the Public Land Survey System. To construct a full SWN from the abbreviation shown on the map, concatenate the Township, Range, abbreviation, and the letter "S". Example: the SWN for the well labeled "15L01" located in Township 02N (T02N) and Range 22W (R22W) is 02N22W15L01S.



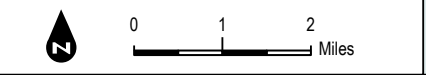


Legend

- ▲ GPS Stations
- Fox Canyon Groundwater Management Agency Boundary (FCGMA 2016)
- - - Faults (Ventura County 2016)
- Township (North-South) and Range (East-West)
- Forebay Management Area
- Bulletin 118 Groundwater Basins and Subbasin (DWR 2018)

TRE Altamira InSAR Vertical Displacement (inches)

- -2.5 - -2.0
- -2.0 - -1.5
- -1.5 - -1.0
- -1.0 - -0.5
- -0.5 - 0
- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- No Data



SOURCE: DWR; Ventura County; UWCD; CMWD



FIGURE 3-6
 Change in Land Surface Elevation Between Spring 2024 and Spring 2025

Appendix A

Key Well Hydrographs

INTENTIONALLY LEFT BLANK

Local Well Name: 01N21W03C01

Management Area: Pleasant Valley Pumping Depression

Aquifer: Fox Canyon

Station ID: 26150

Lat/Long: 34.2055/ -119.07

Well Depth (ft bgs): 1254.0

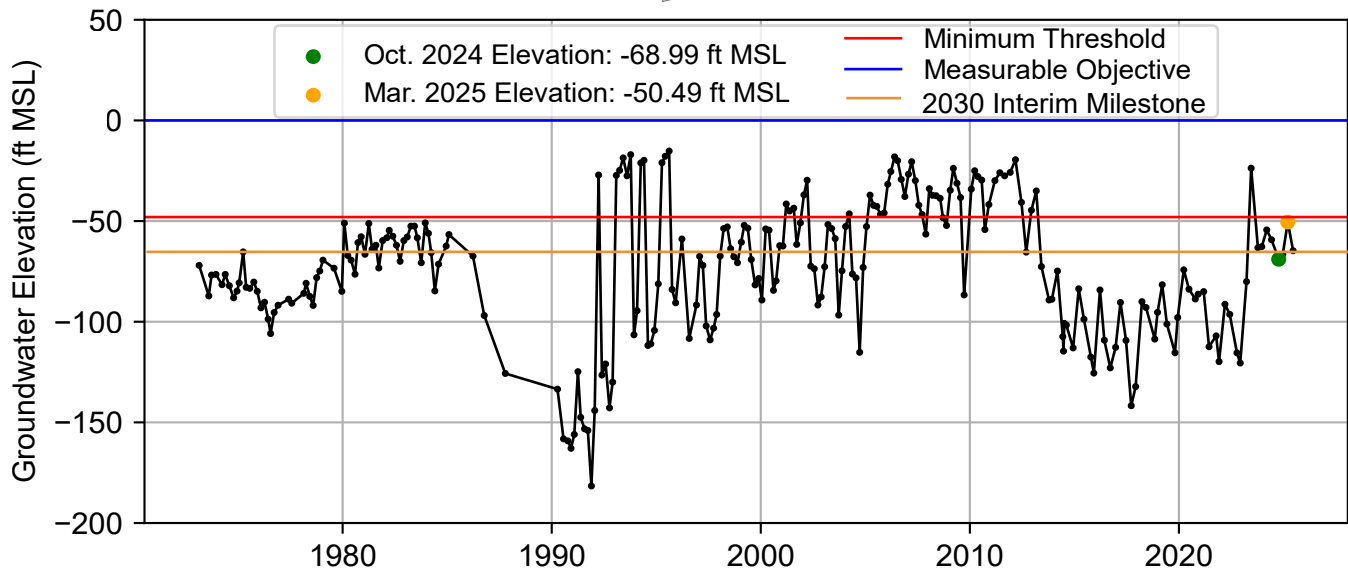
Top Perforation (ft bgs): 956.0

Bottom Perforation (ft bgs): 1216.0

Ground Surface Elevation: 74.275

Reference Point Elevation: 74.655

Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Water Quality,
 Seawater Intrusion, Land Subsidence



Appendix A

Groundwater Elevation Hydrographs

Pleasant Valley Basin Groundwater Sustainability Plan WY 2025 Annual Report

Local Well Name: 01N21W03K01

Management Area: Pleasant Valley Pumping Depression

Aquifer: Hueneme and Fox Canyon

Station ID: 53395

Lat/Long: 34.197/ -119.069

Well Depth (ft bgs): 1453.0

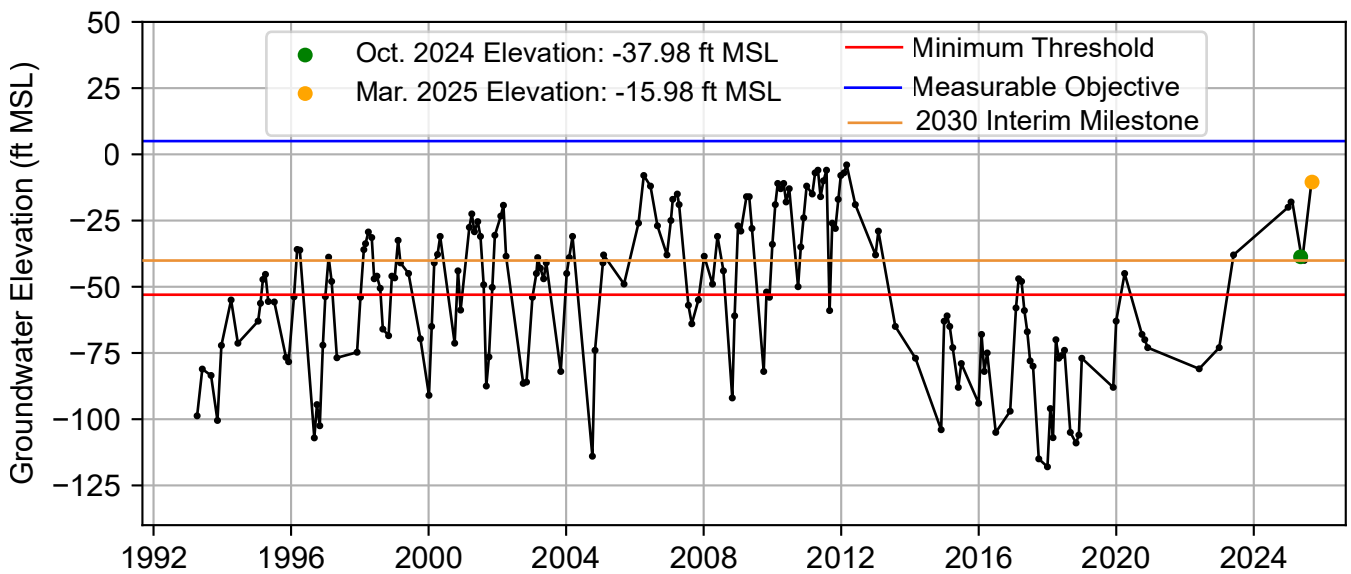
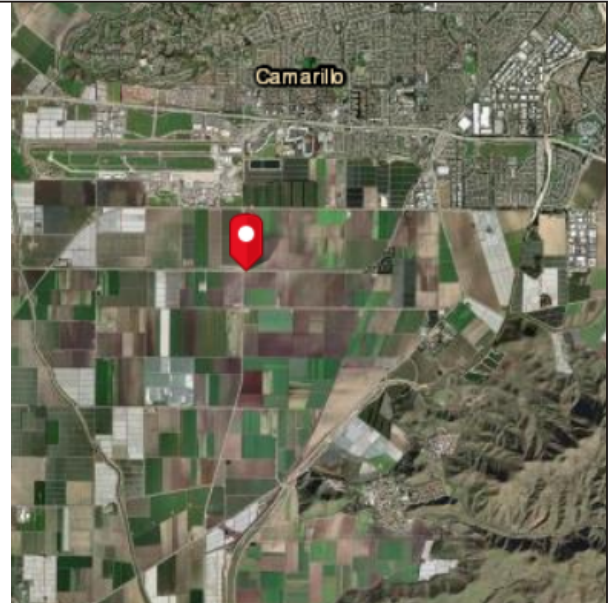
Top Perforation (ft bgs): 403.0

Bottom Perforation (ft bgs): 1433.0

Ground Surface Elevation: 59.383

Reference Point Elevation: 62.083

Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Seawater Intrusion
 Water Quality, Land Subsidence



Local Well Name: 01N21W04K01

Management Area: Pleasant Valley Pumping Depression

Aquifer: Hueneme and Fox Canyon

Station ID: 26152

Lat/Long: 34.1963/ -119.083

Well Depth (ft bgs): 1240.0

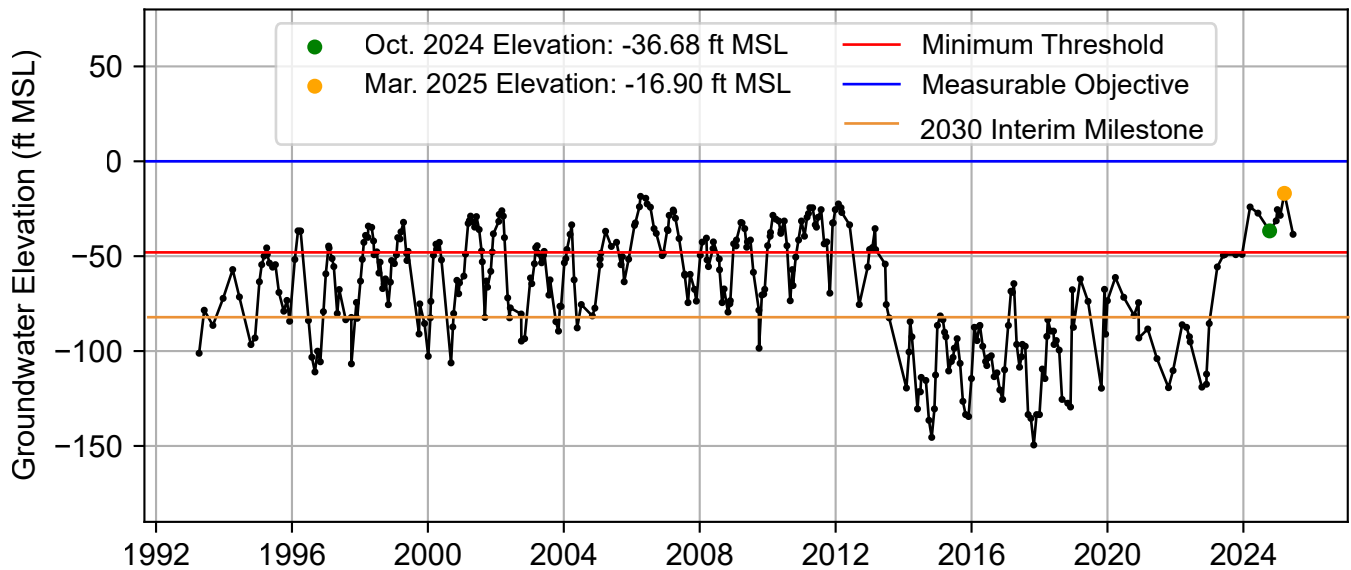
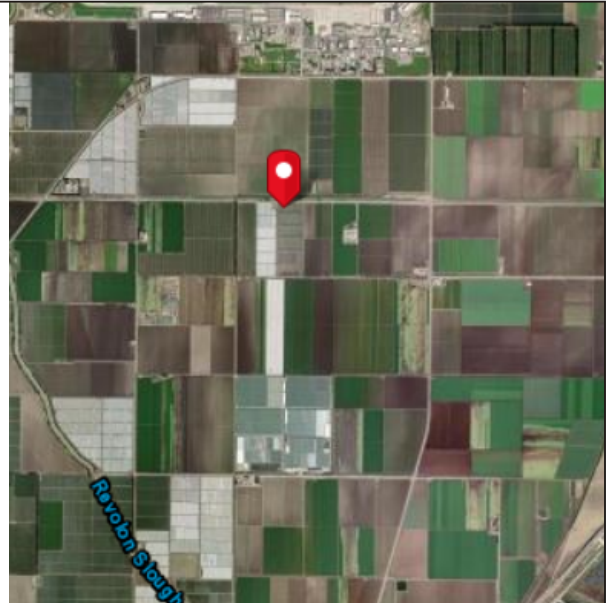
Top Perforation (ft bgs): 400.0

Bottom Perforation (ft bgs): 1220.0

Ground Surface Elevation: 49.875

Reference Point Elevation: 52.275

Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Seawater Intrusion,
 Water Quality, Land Subsidence



Local Well Name: 02N20W19M05

Management Area: North Pleasant Valley

Aquifer: Fox Canyon

Station ID: 46135

Lat/Long: 34.2409/ -119.023

Well Depth (ft bgs): 1055.0

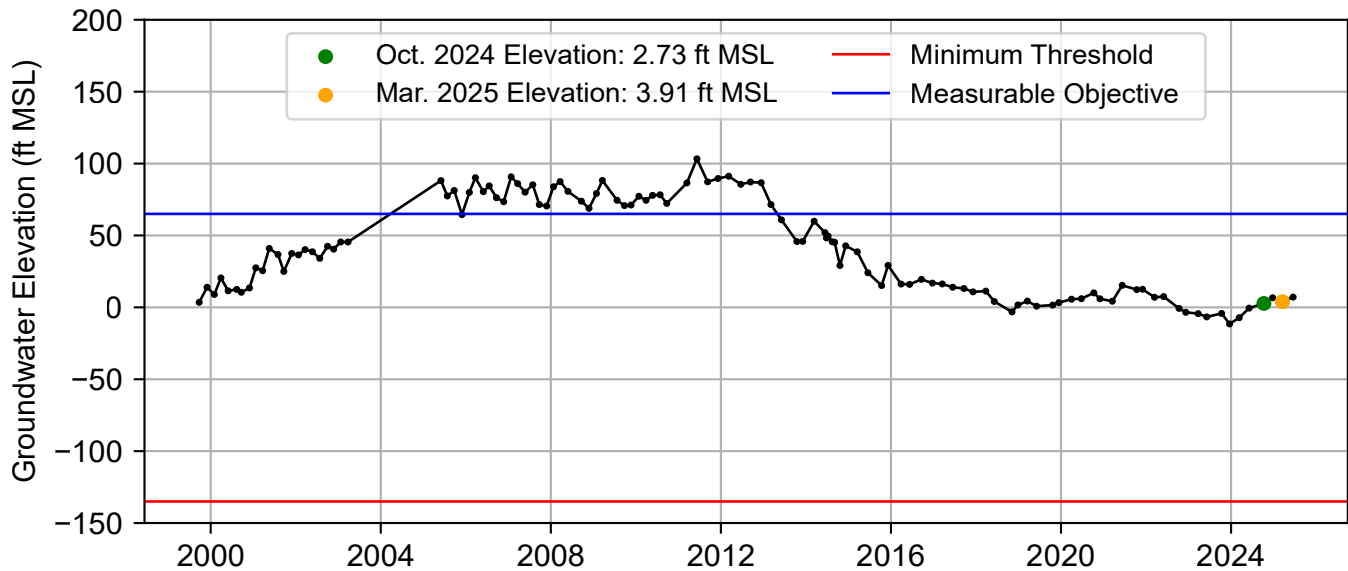
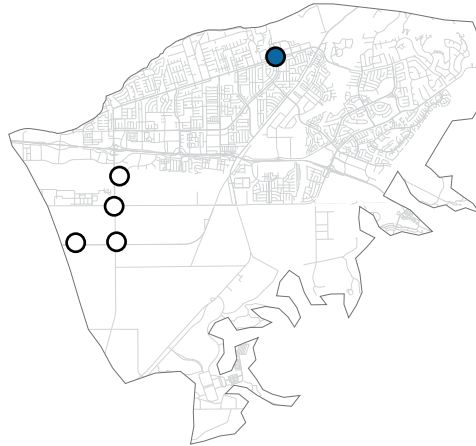
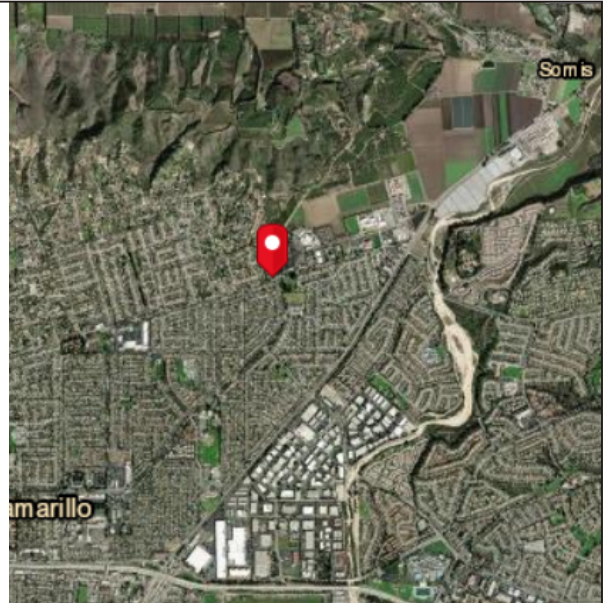
Top Perforation (ft bgs): 654.0

Bottom Perforation (ft bgs): 990.0

Ground Surface Elevation: 201.944

Reference Point Elevation: 202.944

Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Water Quality, Land Subsidence



Local Well Name: 02N21W34G02

Management Area: Pleasant Valley Pumping Depression

Aquifer: Fox Canyon

Station ID: 3832

Lat/Long: 34.21289/ -119.0681

Well Depth (ft bgs): 998

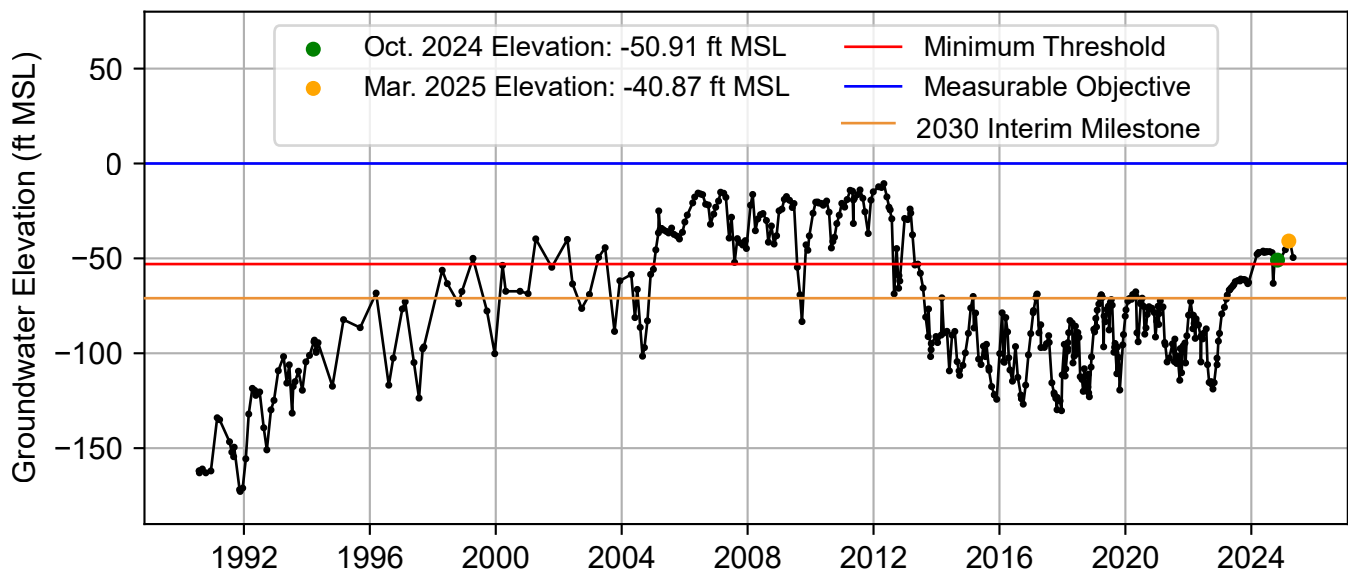
Top Perforation (ft bgs): 938

Bottom Perforation (ft bgs): 998

Ground Surface Elevation: 93.588

Reference Point Elevation: 94.838

Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Water Quality, Land Subsidence



SOURCE:

Appendix A

Groundwater Elevation Hydrographs

Pleasant Valley Basin Groundwater Sustainability Plan WY 2025 Annual Report

Local Well Name: 02N21W34G03

Management Area: Pleasant Valley Pumping Depression

Aquifer: Fox Canyon

Station ID: 3833

Lat/Long: 34.21289/ -119.0681

Well Depth (ft bgs): 860

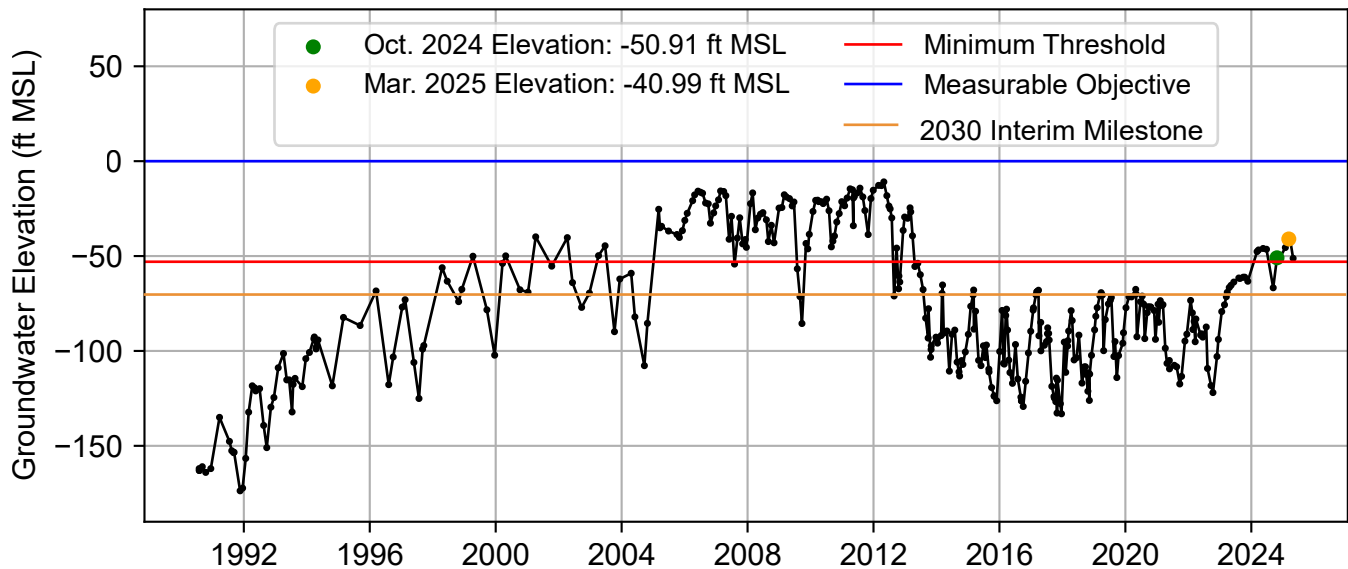
Top Perforation (ft bgs): 800

Bottom Perforation (ft bgs): 860

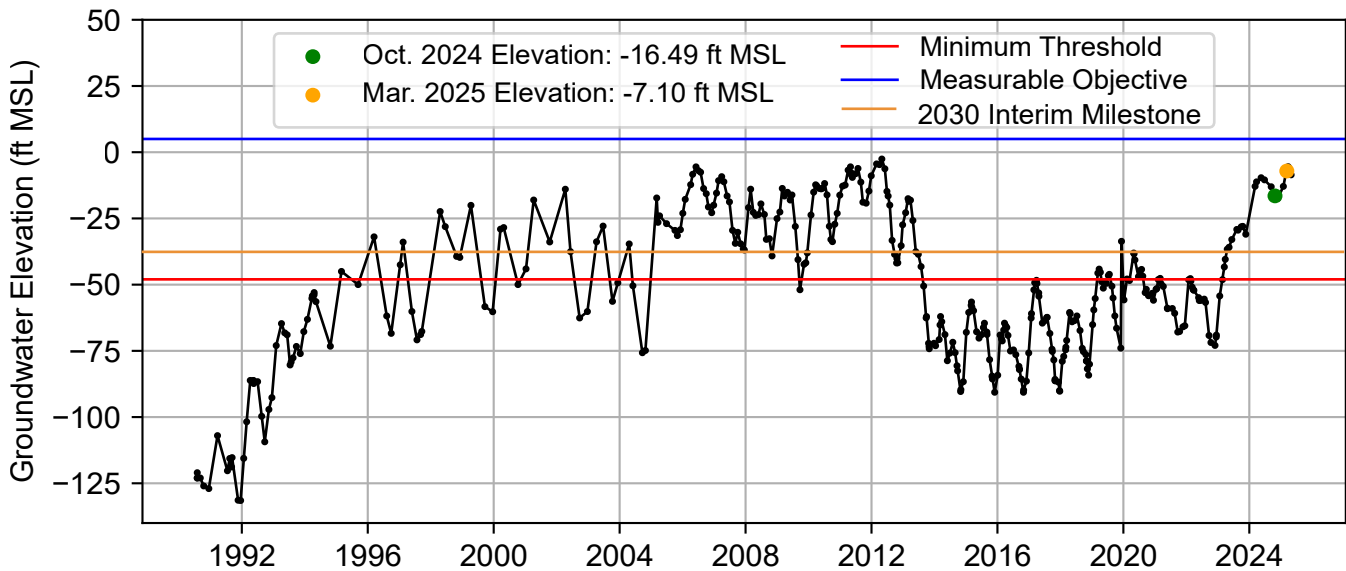
Ground Surface Elevation: 93.588

Reference Point Elevation: 94.838

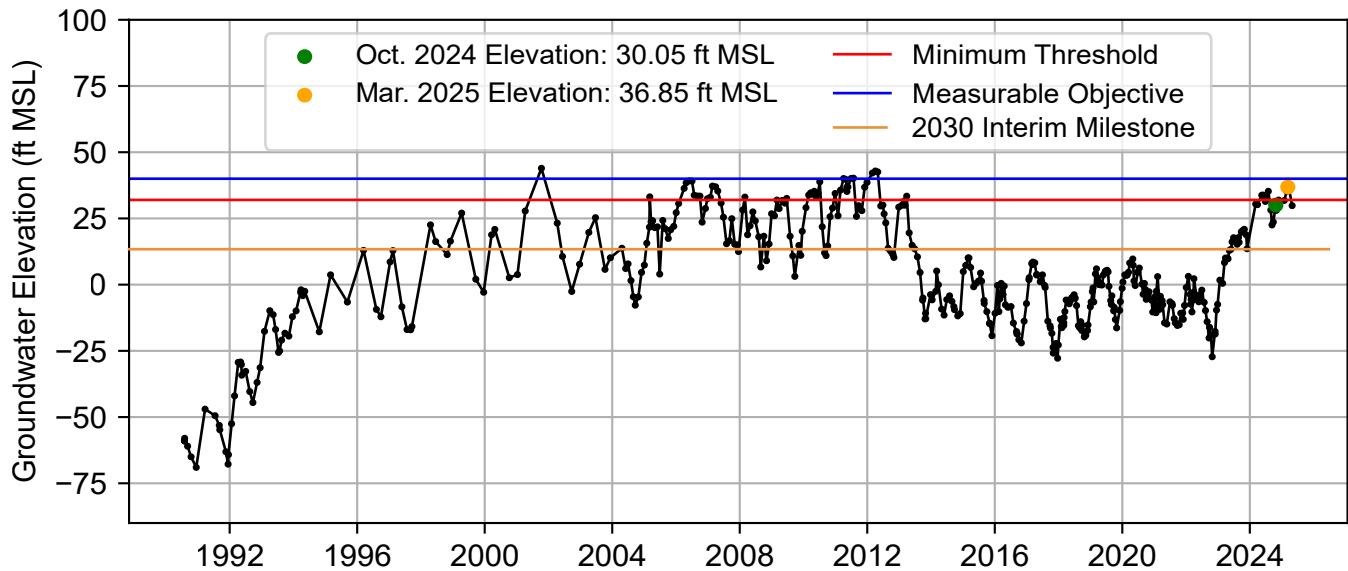
Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Water Quality, Land Subsidence



Local Well Name: 02N21W34G04
Management Area: Pleasant Valley Pumping Depression
Aquifer: Mugu
Station ID: 26348
Lat/Long: 34.21289/ -119.0681
Well Depth (ft bgs): 380
Top Perforation (ft bgs): 360
Bottom Perforation (ft bgs): 380
Ground Surface Elevation: 93.588
Reference Point Elevation: 94.838
Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Water Quality, Land Subsidence



Local Well Name: 02N21W34G05
Management Area: Pleasant Valley Pumping Depression
Aquifer: Oxnard
Station ID: 3834
Lat/Long: 34.21289/ -119.0681
Well Depth (ft bgs): 190
Top Perforation (ft bgs): 170
Bottom Perforation (ft bgs): 190
Ground Surface Elevation: 93.588
Reference Point Elevation: 94.838
Sustainability Indicators: Groundwater Levels,
 Groundwater Storage,
 Water Quality, Land Subsidence



SOURCE:

Appendix A

Groundwater Elevation Hydrographs

Pleasant Valley Basin Groundwater Sustainability Plan WY 2025 Annual Report