

# WATER YEAR 2025 ANNUAL REPORT

## Cosumnes Groundwater Authority Cosumnes Subbasin

DRAFT | MARCH 2026  
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## Water Year 2025 Annual Report

Cosumnes Subbasin

**DRAFT | MARCH 2026**

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# Water Year 2025 Annual Report

## Cosumnes Subbasin

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## ABBREVIATIONS AND ACRONYMS

ACGMA	Amador County Groundwater Management Authority
AF	acre-feet
AFY	acre-feet per year
Ag-Res	Agricultural-Residential
ARSA	Amador Regional Sanitation Authority
AWA	Amador Water Agency
BMPs	Best Management Practices
CA	California
CAC	Citizen Advisory Committee
CASGEM	California Statewide Groundwater Elevation Monitoring
CCR	California Code of Regulations
CGA	Cosumnes Groundwater Authority
COC	Constituents of Concern
CWSRF	Clean Water State Revolving Fund
CoSANA	Cosumnes, South American, and North American model
DWR	California Department of Water Resources
ERM	Electrical Resistivity Methods
ET	Evapotranspiration
eWRIMS	Electronic Water Rights Information Management System
Flood-Mar	Flood Managed Aquifer Recharge
FSC	Folsom South Canal
ft	feet
ft NAVD88	feet above the North American Vertical Datum of 1988
GDE	Groundwater Dependent Ecosystem
GID	Galt Irrigation District
GPS	Global Positioning System
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWE	Groundwater Elevation
IDC	Irrigation Demand Calculator
IMs	Interim Milestones
ISW	Interconnected Surface Water
InSAR	Interferometric Synthetic Aperture Radar
IWFM	Integrated Water Flow Model
JPA	Joint Powers Agreement
MAR	Managed Aquifer Recharge
MCL	Maximum Contaminant Level

mg/L	milligrams per liter
MO	Measurable Objective
MT	Minimum Threshold
N	Nitrogen
NA	Not Applicable
NAVD88	North American Vertical Datum of 1988
ND	Not Detected
NMR	Nuclear Magnetic Resonance
NWIS	National Water Information System
OHWD	Omochumne-Hartnell Water District
PMA	Projects and Management Action
PWS	Public Water System
RMS	Representative Monitoring Site
RMW	Representative Monitoring Well
RMW-ISW	Representative Monitoring Well for Depletions of Interconnected Surface Water
RMW-WL	Representative Monitoring Well for Chronic Lowering of Groundwater Levels
RMW-WQ	Representative Monitoring Well for Degraded Water Quality
SAFCA	Sacramento Area Flood Control Agency
SGM	Sustainable Groundwater Management
SGMA	Sustainable Groundwater Management Act
SMC	Sustainable Management Criteria
SMUD	Sacramento Municipal Utility District
SRCD	Sloughhouse Resource Conservation District
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TT	Trigger Threshold
µg/L	micrograms per liter
UNAVCO	University NAVSTAR Consortium
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
WRFP	Water Recycling Facilities Planning
WWTP	Wastewater Treatment Plant
WY	Water Year



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## EXECUTIVE SUMMARY

The San Joaquin Valley Groundwater Basin – Cosumnes Subbasin (also referred to herein as “the Basin”), California Department of Water Resources (DWR) Basin No. 5-022.16, is classified as a “medium priority” basin (DWR, 2019) and therefore is subject to the Sustainable Groundwater Management Act (SGMA). To address the long-term sustainability of groundwater within the Basin and to comply with SGMA, the Basin’s seven Groundwater Sustainability Agencies (GSAs) developed a single Groundwater Sustainability Plan (GSP), which was adopted by the GSAs between 14 December 2021 and 12 January 2022, submitted to DWR on 27 January 2022, and approved by DWR on 26 October 2023. The GSAs are currently preparing the 2026 Periodic Evaluation of the GSP and have determined a GSP amendment is warranted. The GSAs are actively preparing a 2026 Amended GSP that will be adopted and submitted in January 2027, along with the 2026 Periodic Evaluation of the GSP.

The Basin is managed by seven GSAs (see **Figure AR-1**): Amador County Groundwater Management Authority (ACGMA), City of Galt, Clay Water District, Galt Irrigation District (GID), Omochumne-Hartnell Water District (OHWD), Sacramento County, and Sloughhouse Resource Conservation District (SRCD). In November 2021, the Cosumnes Groundwater Authority (CGA) was formed upon adoption of a Joint Powers Agreement (JPA) between the seven GSAs. The CGA enables the GSAs to collaboratively comply with the SGMA, implement the adopted GSP, seek and secure grants or other funding to support implementation, and work collaboratively to sustainably manage the Basin.

The CGA works collaboratively towards the Sustainability Goal of the Basin, as set forth in the GSP:

*“The Sustainability Goal of the Cosumnes Subbasin (Basin) is to ensure that groundwater in the Basin continues to be a long-term resource for beneficial users and uses including urban, domestic, agricultural, industrial, environmental and others. This goal will be achieved by managing groundwater within the Basin’s sustainable yield, as defined by sustainable groundwater conditions and the absence of undesirable results.”*

The Basin encompasses 210,300 acres at the northern end of the San Joaquin Valley Groundwater Basin within Sacramento and Amador Counties (see **Figure AR-1**). It is bordered on the north by the South American Subbasin (DWR Basin No. 5-021.65) and on the south by the Eastern San Joaquin Subbasin (DWR Basin No. 5-022.01). The Basin is bounded by surface water features to the north, south, and west, and the eastern Basin boundary is formed by low permeability metamorphic rocks in the Sierra Nevada foothills region. The Basin has a single Principal Aquifer which is comprised of six hydraulically connected sedimentary formations that include the Younger Alluvium, Victor, Laguna, Mehrten, Valley Springs, and Lone Formations.

This Water Year (WY) 2025<sup>1</sup> Annual Report for the Basin has been prepared by the CGA in compliance with California Code of Regulations (CCR) 23 § 356.2 and consistent with the DWR’s October 2023 *GSP Implementation: A Guide to Annual Reports, Periodic Evaluations, & Plan Amendments*<sup>2</sup>. The measured data from the monitoring programs are summarized in **Tables AR-6, AR-7** and **AR-8**. **Figure AR-2** and **Figure AR-3** show groundwater elevation contours inferred from water level data collected in Fall 2024 and Spring 2025, respectively. Groundwater elevations generally decrease in magnitude from east to west across the Basin, with the greatest elevations measured beneath the higher topographic areas in the east.

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<sup>1</sup> WY 2025 includes the period from 1 October 2024 through 30 September 2025.

<sup>2</sup> [Groundwater Sustainability Plan Implementation: A Guide to Annual Reports, Periodic Evaluations, & Plan Amendments \(ca.gov\)](https://www.water.ca.gov/groundwater-sustainability-plan-implementation-a-guide-to-annual-reports-periodic-evaluations-and-plan-amendments)

At lower topography, the western component of groundwater flow shifts towards the middle of the Basin, where extractions have created a groundwater low (i.e., a cone of depression).

Hydrographs for water levels measured in the Representative Monitoring Wells for Chronic Lowering of Groundwater Levels (RMW-WLs) and the Representative Monitoring Wells for Depletions of Interconnected Surface Water (RMW-ISWs) are shown on **Figure AR-4**. The Sustainable Management Criteria (SMCs), including Measurable Objectives (MOs), Minimum Thresholds (MTs), and Interim Milestones (IMs) established at the 19 RMW-WLs and the nine RMW-ISWs are also shown on the hydrographs in **Figure AR-4**.

**Table AR-3** summarizes the Basin’s total annual water use by source (Groundwater, Surface Water, and Recycled Water) and **Table AR-4** summarizes the Basin’s total annual water use by sector (Agricultural, Urban, and Industrial) for the period WY 2021 through WY 2025. Groundwater extractions are reported in **Table AR-1** and are illustrated in **Figure AR-5**; the total extractions in WY 2025 by water users in each GSA are mapped in **Figure AR-6**. The estimated WY 2025 groundwater extractions totaled 123,300 acre-feet (AF) after accounting for the 2,500 acres of field-verified vineyards removed prior to WY 2025. The estimated WY 2025 groundwater extractions (123,300 AF) therefore represent a 3,300 AF increase relative to WY 2024 (120,200 AF). The CGA is coordinating with the landowners to determine potential future changes in the current land uses on these parcels to assess their implications for estimated groundwater extractions in the Basin. The CGA is coordinating with the landowners to determine potential future changes in the land uses on these parcels. During WY 2025 87% of the groundwater use was by the Agricultural sector (which includes agricultural-residential use [Ag-Res]), 9.0% was by the Industrial sector (aquaculture), and 4.0% was by the Urban sector (public water systems [PWSs]). **Table AR-2** and **Figure AR-7** summarizes the Basin’s surface water supplies, which include stream diversions, imported surface water, and recycled water.

Changes in groundwater storage were estimated using the Cosumnes-South American-North American numerical groundwater model (CoSANA or model). **Figure AR-10** is a map showing the distribution of model-calculated changes in groundwater storage during WY 2025. Groundwater storage declined slightly across most of the Basin, with storage changes generally between 0 and -0.25 ft, with greatest declines (decreases of more than 0.25 ft) along Dry Creek. These conditions are consistent with the local climate during WY 2025, where precipitation was lower and temperatures higher compared to the previous two years. The net change in storage across the entire Basin was a decrease of 8,500 AF, which accounts for the 2,500 acres of field-verified vineyards removed prior to WY 2025 and associated 7,100 AF reduction in consumed groundwater. **Figure AR-11** shows the water year type, the annual groundwater extractions, the annual change in groundwater storage, and the cumulative change in groundwater storage for WY 2015 through WY 2025.

**Table AR-6** compares the WY 2025 measured groundwater levels to the SMCs for Chronic Lowering of Groundwater Levels, **Table AR-7** compares the Basin’s constituents of concern (Arsenic, Nitrate as N, and Total Dissolved Solids [TDS]) concentrations to their respective SMCs for Degradation of Groundwater Quality, and **Table AR-8** compares measured groundwater levels to the SMCs for the Depletions of Interconnected Surface Water.

In Fall 2024, groundwater levels declined below the MT in one of the 19 RMW-WLs (RMW-WL5). In Spring 2025, groundwater levels declined below the MT in a different RMW-WL (RMW-WL12) and one of the nine RMW-ISWs (RMW-ISW5). The GSP defines Undesirable Results when water levels decline below the MTs in 25% or more of the RMW-WLs (5 out of 19 RMW-WLs) for two (2) consecutive years. Water levels in both wells (RMW-WL5 and RMW-WL12) declined below the MT for only a single monitoring event, and accordingly these occurrences do not indicate Undesirable Results. The GSP defines Undesirable Results when the water levels decline below the MTs in one or more of the nine RMW-ISWs for two consecutive

years. Water levels in RMW-ISW5 declined below the MT for only one monitoring event, and accordingly this occurrence does not indicate Undesirable Results.

The concentrations were at or exceeded MTs in samples from three of the 14 Representative Monitoring Wells for Degradation of Groundwater Quality (RMW-WQs). The samples from three wells were at or exceeded the MTs for Arsenic (RMW-WQ2, RMW-WQ9, and RMW-WQ14); the samples from one well exceeded the MT for TDS (RMW-WQ9). The GSP defines Undesirable Results when the concentration of the constituents of concerns (Arsenic, Nitrate, and TDS) exceeds the MTs in samples from 25% or more of the 14 RMW-WQs (4 out of 14 RMW-WQs) for two consecutive years. In WY 2025, the water quality sampling results did not indicate Undesirable Results. The GSAs will continue to monitor water quality conditions in these wells to assess potential trends and correlation to groundwater management and water levels.

Best available data shows limited land subsidence (vertical displacement of the ground surface) throughout the Basin. **Figure AR-12** shows the vertical displacement trends for WY 2025. Continuous data at the University NAVSTAR Consortium (UNAVCO) Global Positioning System (GPS) station P275, located within the Basin in the vicinity of the groundwater cone of depression, indicates an average total displacement of -0.19 feet (ft). The TRE Altamira Interferometric Synthetic Aperture Radar (InSAR) data indicates the annual total vertical displacement rate for WY 2025 ranges from – 0.1 ft to 0.1 ft throughout the Basin.

As requested in DWR’s guidance document for Annual Reports, Section 7.3 to Section 7.5 summarize progress on the Basin’s Projects and Management Actions (PMAs; **Table AR-9**), the plan to address the Recommended Corrective Actions (RCAs; **Table AR-10**) identified in DWR’s October 2023 GSP Determination of the Basin, the progress made addressing the RCAs, stakeholder outreach activities, other CGA and GSA accomplishments, and public comments received during WY 2025.

## 1 GENERAL INFORMATION

### § 356.2 (a)

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

(a) General information, including an executive summary and a location map depicting the basin covered by the report.

On 16 September 2014, the California legislature enacted the Sustainable Groundwater Management Act (SGMA) – the primary purpose of which is to achieve and/or maintain sustainability within the state’s high and medium priority groundwater basins. The San Joaquin Valley Groundwater Basin – Cosumnes Subbasin (also referred to herein as “the Basin”), California Department of Water Resources (DWR) Basin No. 5-022.16, is classified as a “medium priority” basin (DWR, 2019). To address the long-term sustainability of groundwater within the Basin, the Basin’s seven Groundwater Sustainability Agencies (GSAs)<sup>3</sup> jointly developed a Groundwater Sustainability Plan (GSP), which was adopted by the GSAs between 14 December 2021 and 12 January 2022, submitted to DWR on 27 January 2022, and approved by DWR on 26 October 2023. The GSAs are preparing the 2026 Periodic Evaluation of the GSP and have determined a GSP amendment is warranted. Accordingly, the GSAs are actively preparing a 2026 Amended GSP, which will be adopted and submitted in January 2027 concurrent with the submittal of the 2026 Periodic Evaluation.

The Basin is managed by the seven GSAs: Amador County Groundwater Management Authority (ACGMA), City of Galt, Clay Water District, Galt Irrigation District (GID), Omochumne-Hartnell Water District (OHWD), Sacramento County, and Sloughhouse Resource Conservation District (SRCD). In November 2021, the Cosumnes Groundwater Authority (CGA) was formed upon adoption of a Joint Powers Agreement (JPA) between the seven GSAs. The CGA enables the GSAs to collaboratively comply with SGMA, implement the GSP, seek and secure grants or other funding to support implementation, and work collaboratively with the GSAs and other entities to sustainably manage the Basin.

The CGA works collaboratively towards the Sustainability Goal of the Basin, as set forth in the GSP:

*“The Sustainability Goal of the Cosumnes Subbasin (Basin) is to ensure that groundwater in the Basin continues to be a long-term resource for beneficial users and uses including urban, domestic, agricultural, industrial, environmental and others. This goal will be achieved by managing groundwater within the Basin’s sustainable yield, as defined by sustainable groundwater conditions and the absence of undesirable results.”*

This Water Year (WY) 2025 Annual Report for the Basin has been prepared in compliance with California Code of Regulations (CCR) 23 § 356.2 and consistent with the DWR’s October 2023 *GSP Implementation: A Guide to Annual Reports, Periodic Evaluations, & Plan Amendments* guidance document<sup>4</sup>. WY 2025 includes the period from 1 October 2024 through 30 September 2025. This Annual Report also contains available and appropriate historical information back to 2015, as required by CCR 23 §356.2 (b). The GSP

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<sup>3</sup> The Cosumnes Subbasin GSAs include Amador County Groundwater Management Authority (ACGMA) GSA, City of Galt GSA, Clay Water District GSA, Galt Irrigation District (GID) GSA, Omochumne-Hartnell Water District (OHWD) GSA, Sacramento County GSA, and Sloughhouse Resource Conservation District (SRCD) GSA.

<sup>4</sup> [Groundwater Sustainability Plan Implementation: A Guide to Annual Reports, Periodic Evaluations, & Plan Amendments \(ca.gov\)](https://www.water.ca.gov/groundwater/sustainability/implementation)

Annual Report Element check list from DWR's guide is included as **Appendix A** and identifies where in this report the elements are specifically addressed.

The Basin encompasses 210,300 acres at the northern end of the San Joaquin Valley Groundwater Basin within Sacramento and Amador Counties (see **Figure AR-1**)<sup>5</sup>. It is bordered on the north by the South American Subbasin (DWR Basin No. 5-021.65) and on the south by the Eastern San Joaquin Subbasin (DWR Basin No. 5-022.01). The Basin is bounded by surface water features to the north, south, and west, and the eastern Basin boundary is formed by low permeability metamorphic rocks in the Sierra Nevada foothills region. The Basin has a single Principal Aquifer which is comprised of six hydraulically connected sedimentary formations that include the Younger Alluvium, Victor, Laguna, Mehrten, Valley Springs, and Lone Formations. Hydraulic conditions in the Principal Aquifer range from unconfined to semi-confined, and its total thickness ranges from 810 to 1,750 feet (ft). Water inflows include rainfall infiltration, leakage from surface water features, percolation of relatively small quantities of imported surface water that originates outside the Basin, and subsurface flows from adjacent basins. Outflows include seepage to surface water features, subsurface flows to adjacent basins, evapotranspiration, and consumption of groundwater extracted by wells.

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<sup>5</sup> The Basin is delineated into two general subareas based on physiographic conditions: The Basin Plain (131,000 acres) and Foothill (79,300 acres) subareas.

## 2 GROUNDWATER ELEVATION DATA

### § 356.2 (b) (1)

*Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:*

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

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

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

*(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.*

As described further in Section 7.1, groundwater elevation data were collected from the Representative Monitoring Wells for the Chronic Lowering Groundwater Levels Sustainability Indicator (RMW-WLs) and the Representative Monitoring Wells for Depletions of Interconnected Surface Water Sustainability Indicator (RMW-ISWs). Additional groundwater elevation data were collected at supplemental sites by the Cosumnes Groundwater Authority (CGA) and downloaded from publicly available sources<sup>6</sup>.

During WY 2025, there was no additional information collected or changes made to the Basin's existing Representative Monitoring Networks. However, as part of data gap filling efforts, two additional wells were added to the supplemental monitoring network within the area experiencing the lowest groundwater levels (i.e., cone of depression). The CGA is actively addressing data gaps within the monitoring networks in response to DWR's Recommended Corrective Actions (RCAs; Section 7.4). These efforts include soliciting domestic well owner volunteers for incorporation into the supplemental monitoring network to ensure that domestic wells, which are typically shallower, are protected through implementation of the Groundwater Sustainability Plan (GSP).

### 2.1 Groundwater Elevation Contour Maps

Fall water levels were measured between 1 October and 31 October 2024, and Spring water levels were measured between 3 April and 9 May 2025. Available Fall 2024 and Spring 2025 groundwater elevation data, including publicly available data from other sources, were contoured (**Figure AR-2** and **Figure AR-3**, respectively). The groundwater elevation contours generally decrease in magnitude from east to west across the Basin, with the greatest elevations measured beneath the higher topographic areas in the east. At lower topography, the western component of groundwater flow shifts towards the middle of the Basin, where extractions have created a groundwater low (i.e., cone of depression). The Fall 2024 and Spring 2025 groundwater contours are generally similar in shape, as the measured water level changes in most wells were only a few feet. Inferred groundwater flow directions are like previous years.

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<sup>6</sup> Publicly available sources include: The SGMA Data Viewer, DWR's Water Data Library, the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and the United States Geological Survey (USGS) National Water Information System (NWIS)



## 2.2 Groundwater Hydrographs

Hydrographs of groundwater levels in the RMW-WLs and the RMW-ISWs are shown on **Figure AR-4** and included in **Appendix B**. The Sustainable Management Criteria (SMCs) established in the GSP, including the Measurable Objectives (MOs), Minimum Thresholds (MTs), and Interim Milestones (IMs) are included on the hydrographs in **Figure AR-4** and reported with the monitoring data in **Table AR-5** and **Table AR-7**. These water level data are compared to the SMCs and discussed further in Section 7.

### 3 GROUNDWATER EXTRactions

§ 356.2 (b) (2)

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

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

(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.

Groundwater extractions from some wells are tracked using meters, but most wells in the Basin are unmetered and extraction values were estimated as described below.

- Urban groundwater users (municipal and public water systems [PWSs]) typically meter their wells, but for some wells where metered extractions were not available for Water Year (WY) 2025 (non-reporting small PWSs) the extractions were assumed to be the same as the previous year.
- The Agricultural sector includes extractions by agricultural-residential use (Ag-Res), and agricultural production. Most of the Agricultural sector is not metered, and extractions were therefore estimated.
  - The total extractions by Ag-Res were calculated for 3,200 occupied parcels based on an average estimated per-parcel water demand of 2.5 acre feet per year (AFY). The per-parcel demand is based on detailed inspection of random parcels in Google Earth and estimated indoor and outdoor water uses.
  - The extractions for agricultural production were calculated by the Cosumnes, South American, and North American numerical model (CoSANA or model)<sup>7</sup>, which was prepared to support the Basin’s GSP development and implementation. CoSANA calculates agricultural production extractions from reported land use (i.e., crop types), climate data, and irrigation demands.

Groundwater extractions during WY 2025 are summarized in **Table AR-1** and illustrated in **Figure AR-5** by water use sector (Agricultural, Industrial and Urban); the total extractions for the year by water users in each Groundwater Sustainability Agency (GSA) are mapped in **Figure AR-6**. The estimated WY 2025 groundwater extractions totaled 123,300 acre-feet (AF) after accounting for the 2,500 acres of field-verified vineyards removed prior to WY 2025<sup>8</sup>. The estimated WY 2025 groundwater extractions (123,300 AF) therefore represent a 3,300 AF increase relative to WY 2024 (120,200 AF). The CGA is coordinating

<sup>7</sup> “CoSANA – An Integrated Water Resources Model of the Cosumnes, South American, and North American Groundwater Subbasins, November 2021” in Appendix M of “Groundwater Sustainability Plan for the Cosumnes Subbasin”, December 2021.

<sup>8</sup> Estimated groundwater extractions for agriculture were reduced by 8,400 AF based on the field verified 2,500 acres of vineyards removed prior to WY 2025, the WY 2025 modeled calculated ET value for vineyards (2.85 AF/acre/yr), and assumed irrigation efficiency of 85%.

with the landowners to determine potential future changes in the current land uses on these parcels to assess their implications for estimated groundwater extractions in the Basin.

During WY 2025, 87% of the groundwater use was by the Agricultural sector (which includes agricultural production and Ag-Res), 9.0% was used by the Industrial sector (aquaculture), and 4.0% was used by the Urban sector (municipal and PWSs).

**Table AR-1 Summary of Groundwater Extraction Data by Sector (AF) <sup>(a)</sup>**

Water Year	Agricultural <sup>(b)</sup>	Industrial <sup>(d)</sup>	Urban <sup>(f)</sup>	Total
	Estimated <sup>(c)</sup>	Estimated <sup>(e)</sup>	Metered <sup>(g)</sup> and Estimated <sup>(h)</sup>	
2021 <sup>(i)</sup>	134,100	11,000	5,200	<b>150,300</b>
2022 <sup>(i)</sup>	124,800	11,000	4,700	<b>140,500</b>
2023	105,900	11,000	4,700	<b>121,600</b>
2024	104,400	11,000	4,800	<b>120,200</b>
2025 <sup>(j)</sup>	107,300 <sup>(k)</sup>	11,000	5,000	<b>123,300</b>

**Abbreviations:**

AF = acre-feet

**Notes:**

- (a) Values are rounded to the nearest 100 AF.
- (b) Agricultural extractions include agricultural and Ag-Res water uses.
- (c) Agricultural extractions were estimated from land use and climate data using the Irrigation Demand Calculator (IDC) within the Cosumnes, South American, and North American model (CoSANA). Domestic (i.e., Ag-Res) extractions were estimated based on representative indoor and outdoor water use and the estimated number of residential parcels in the Basin.
- (d) Industrial extractions include aquaculture uses.
- (e) Industrial extractions are estimated using the best available data for aquaculture usage.
- (f) Urban extractions include PWSs and non-reporting small PWSs uses.
- (g) Metered Urban extractions were reported by the City of Galt GSA, ACGMA GSA, and available small PWSs.
- (h) Estimated Urban extractions include non-reporting small PWSs.
- (i) WY 2021 and WY 2022 data were updated with historical data records made available for the WY 2024 Annual Report. Hence, in some circumstances previously estimated data has been updated with the more reliable reported values.
- (j) WY 2025 values were estimated using the updated CoSANA model released on 2 February 2026.
- (k) WY 2025 Agricultural groundwater extraction estimate includes the reduction in demand attributed to the removal of 2,500 acres of vineyards.

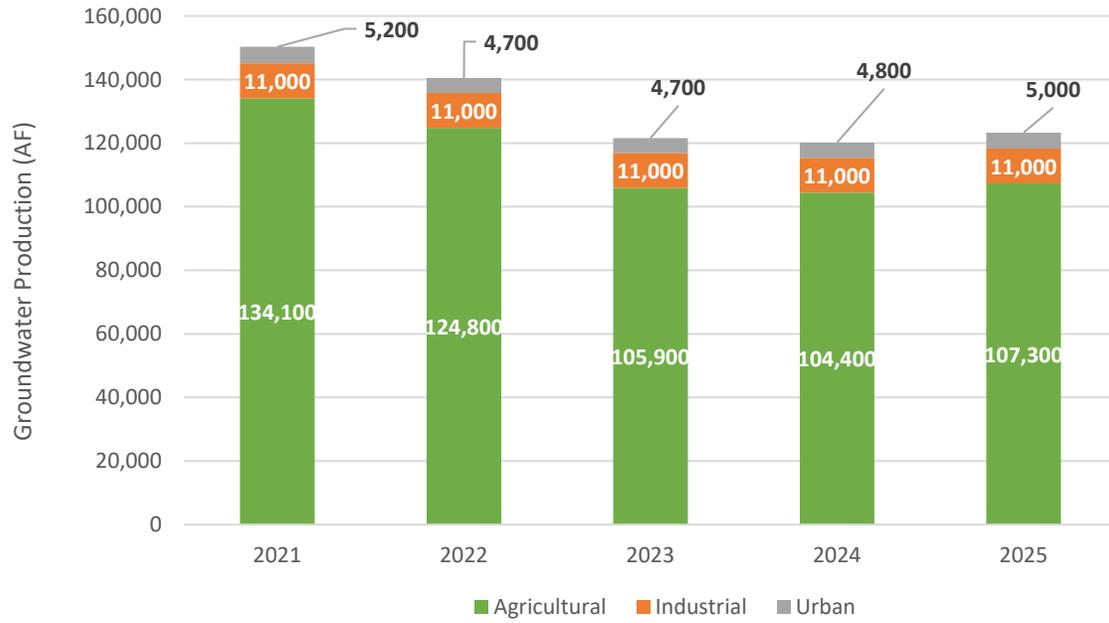


Figure AR-5. Groundwater Extraction by Sector Over Time

## 4 SURFACE WATER SUPPLY

§ 356.2 (b) (3)

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

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

(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.

The surface water supply in the Basin is comprised of recycled water, imported water and stream diversions. The supply data are comprised of reported and estimated values and are summarized in **Table AR-2** and illustrated in **Figure AR-7**.

### Recycled Water:

- Wastewater produced by the City of Galt is treated at the City of Galt Wastewater Treatment Plant (WWTP) and delivered to nearby fields for agricultural irrigation. The deliveries are measured using meters that record in gallons (600 AF in Water Year [WY] 2025).
- Treated wastewater originating outside the Basin is delivered by the Amador Regional Sanitation Authority (ARSA) to the Castle Oaks Water Reclamation Plant, which supplies tertiary treated wastewater for irrigation to the Castle Oaks Golf Course. Estimated annual deliveries in WY 2025 were 600 AF based on irrigation demand<sup>9</sup>.

### Imported Water:

- Amador Water Agency (AWA) provided imported surface water to the City of Lone from Lake Tableaud. From 1998 onward, these imports have been estimated from the total water treated at the wastewater treatment plant, as provided by AWA. Estimated deliveries in WY 2025 were 1,900 AF.
- Surface water is delivered by the United States Bureau of Reclamation (USBR) to the decommissioned Rancho Seco nuclear power facility using the Folsom South Canal (FSC). The water is owned by Sacramento Municipal Utility District (SMUD) and used for cooling the Cosumnes Power Plant and maintaining water levels in the Rancho Seco Lake. SMUD reported that 2,000 AF were delivered during WY 2025.

### Stream Diversions:

- Available data for most diversions, but not all, consists of monthly reported stream diversions uploaded to the Electronic Water Rights Information Management System (eWRIMS). These monthly diversions are reported by the permit holder, but the reports do not include measurement methods. The diversions from surface drainages in the Basin (e.g., the Cosumnes River and Dry Creek) to supply the Agricultural sector in WY 2025 were estimated, from the reported values in eWRIMS and CoSANA calculations, to be approximately 12,900 AF.

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<sup>9</sup> Irrigation demand was based on ET, golf course acreage and assumed irrigation efficiency of 85%.



- Monthly Cosumnes River diversions by Rancho Murieta were estimated by monthly demand per capita and estimated population and reported to the CGA (1,800 AF). The estimated portion of these diversions to the Basin is 500 AF based on the distribution of meters north and south of the Cosumnes River and demand calculations by the CoSANA.

**Table AR-2 Summary of Surface Water Supply by Sector (AF) <sup>(a)</sup>**

Water Year	City of Galt Recycled Water	ARSA Imported Recycled Water <sup>(b)</sup>	TOTAL Recycled Water	AWA Imported Surface Water <sup>(c)</sup>	SMUD Imported Surface Water	TOTAL Imported Surface Water Supplies	Stream Diversions (Surface Water)		TOTAL Local Surface Water Supplies
	Urban	Urban		Urban	Industrial		Agricultural <sup>(e)</sup>	Urban <sup>(f)</sup>	
2021 <sup>(g)</sup>	600	600	<b>1,200</b>	1,700	100 <sup>(d)</sup>	<b>1,800</b>	12,900	600	<b>13,500</b>
2022 <sup>(g)</sup>	600	600	<b>1,200</b>	1,600	4,200	<b>5,800</b>	13,200	600	<b>13,800</b>
2023	600	600	<b>1,200</b>	1,500	3,000	<b>4,500</b>	16,200	600	<b>16,800</b>
2024	600	600	<b>1,200</b>	1,700	2,800	<b>4,500</b>	16,000	600	<b>16,600</b>
2025 <sup>(h)</sup>	600	600	<b>1,200</b>	1,900	2,000	<b>3,900</b>	12,900	500	<b>13,400</b>

**Abbreviations:**

AF = Acre-feet

ARSA = Amador Regional Sanitation Authority

AWA = Amador Water Agency

SMUD = Sacramento Municipal Utilities District

**Notes:**

(a) Values are rounded to the nearest 100 AF.

(b) Recycled water is imported by the ARSA and delivered to the Castle Oaks Water Reclamation Plant, which supplies recycled water for irrigation to the Castle Oaks Golf Course.

(c) AWA imported surface water is from Lake Tableaud and is used to meet urban demand in the City of Ione.

(d) Imported Surface Water was not available from SMUD for WY 2021, and this value was a minimum estimate based on irrigation demand only and does not include power plant cooling and lake level maintenance.

(e) Agricultural stream diversions are estimated by CoSANA based on agricultural production demand.

(f) Cosumnes River diversions by Rancho Murieta were estimated by monthly demand per capita and estimated population. The estimated portion of these diversions to the Basin is 500 AF.

(g) WY 2021 and WY 2022 data were updated with historical data records made available for the WY 2024 Annual Report. Hence, in some circumstances previously estimated data has been updated with the more reliable reported values.

(h) WY 2025 data was estimated using the updated CoSANA model released on 2 February 2026.

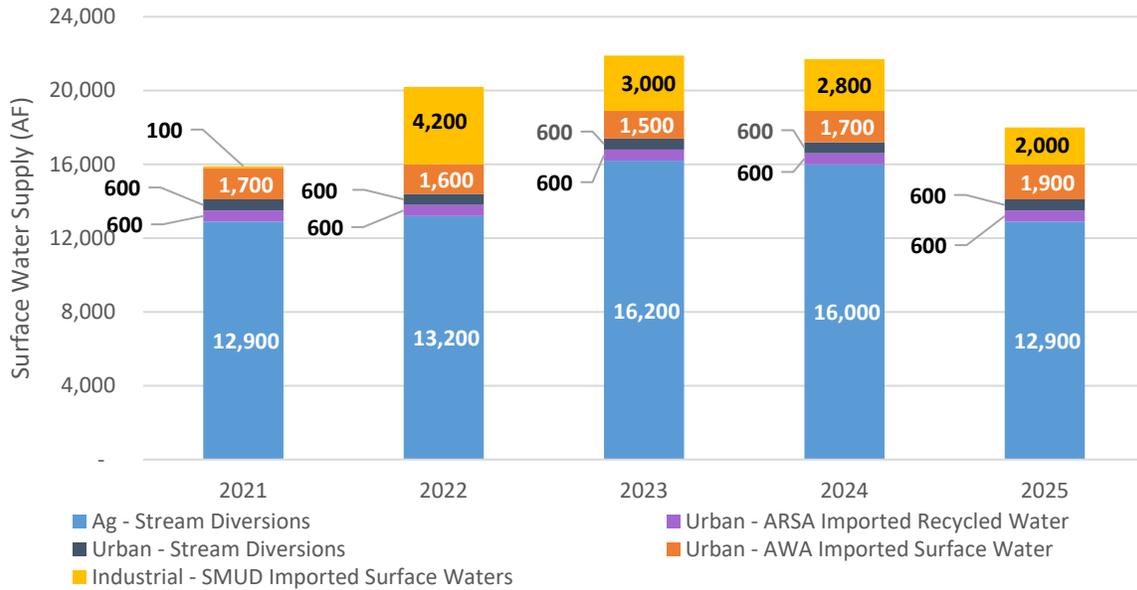


Figure AR-7. Surface Water Supply by Sector Over Time



## 5 TOTAL WATER USE

§ 356.2 (b) (4)

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

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

(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.

**Table AR-3** summarizes total water use by source type (Groundwater [**Table AR-1**], Surface Water [**Table AR-2**], and Recycled Water [**Table AR-2**]), and the totals are illustrated on **Figure AR-8**. As described above, groundwater extractions, recycled water, and surface water comprise the total water use in the Basin.

**Table AR-3 Total Water Use by Source Type (AF)** <sup>(a)</sup>

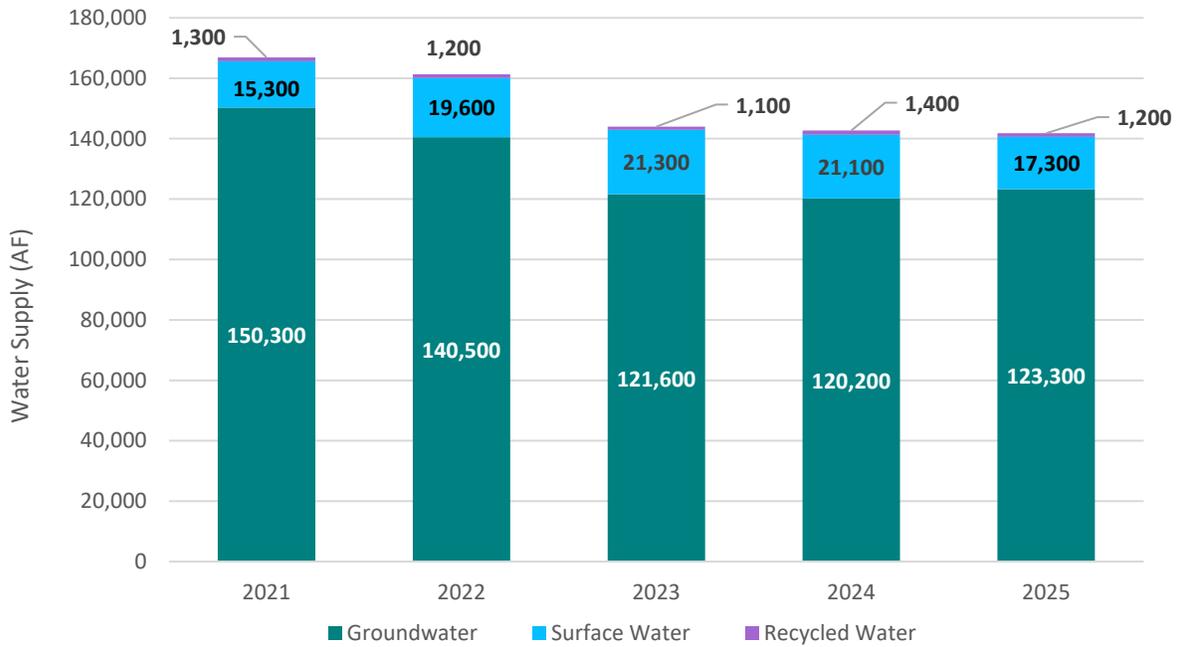
Water Year	Groundwater <sup>(b)</sup>	Surface Water <sup>(c)</sup>	Recycled Water <sup>(d)</sup>	TOTAL
2021 <sup>(e)</sup>	150,300	15,300	1,300	<b>166,900</b>
2022 <sup>(e)</sup>	140,500	19,600	1,200	<b>161,300</b>
2023	121,600	21,300	1,100	<b>144,000</b>
2024	120,200	21,100	1,400	<b>142,700</b>
2025 <sup>(g)</sup>	123,300 <sup>(f)</sup>	17,300	1,200	<b>141,800</b>

**Abbreviations:**

AF = acre-feet

**Notes:**

- (a) Values are rounded to the nearest 100 AF.
- (b) See **Table AR-1** for groundwater extractions.
- (c) See **Table AR-2** for surface water supplies.
- (d) Recycled water includes City of Galt WWTP deliveries to nearby agricultural fields and imported deliveries to irrigate turf at the Castle Oaks Golf Course.
- (e) WY 2021 and WY 2022 data were updated with historical data records made available for the WY 2024 Annual Report. Hence, in some circumstances previously estimated data have been updated with the more reliable reported values.
- (f) WY 2025 estimated Groundwater use includes a pumping reduction due to the field-verified removal of 2,500 acres of vineyards prior to Water Year 2025.
- (g) WY 2025 values estimated by the updated CoSANA model released on 2 February 2026.



**Figure AR-8. Total Water Use by Source Over Time**

**Table AR-4** summarizes total water use by sector (Agricultural, Industrial, and Urban), and the totals are illustrated on **Figure AR-9**. In WY 2025, the Agricultural sector accounted for 85% of the Basin’s total water use (120,800 AF), the Industrial sector used 9% (13,000 AF), and the Urban sector used 6% (8,000 AF).



**Table AR-4 Summary of Total Water Use by Sector (AF) <sup>(a)</sup>**

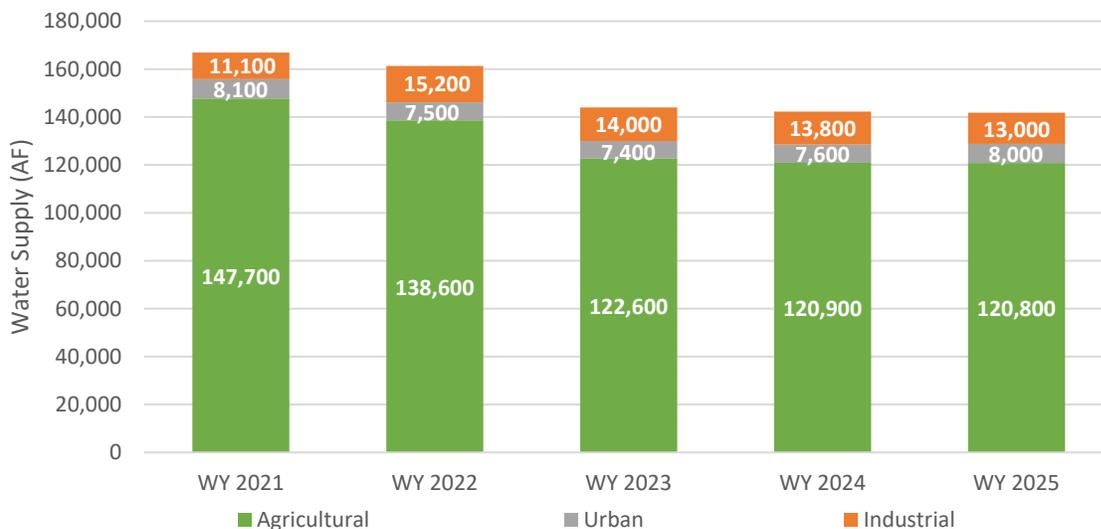
Water Year	Agricultural <sup>(b)</sup>	Industrial <sup>(c)</sup>	Urban <sup>(d)</sup>	TOTAL
2021 <sup>(e)</sup>	147,700	11,100	8,100	<b>166,900</b>
2022 <sup>(e)</sup>	138,600	15,200	7,500	<b>161,300</b>
2023	122,600	14,000	7,400	<b>144,000</b>
2024	120,900	13,800	7,600	<b>142,300</b>
2025 <sup>(f)</sup>	120,800 <sup>(g)</sup>	13,000	8,000	<b>141,800</b>

**Abbreviations:**

AF = acre-feet

**Notes:**

- (a) Values are rounded to the nearest 100 AF.
- (b) The Agricultural Sector includes groundwater extractions (**Table AR-1**), stream diversions (**Table AR-2**), and recycled water (**Table AR-2**) from the City of Galt WWTP used at nearby agricultural fields.
- (c) The Industrial Sector includes groundwater extractions used for aquaculture and imported surface water used by SMUD for power plant cooling and lake level maintenance.
- (d) The Urban Sector includes groundwater extractions used by PWSs, imported surface water used by the City of Lone, imported recycled water used for golf course irrigation, and stream diversions used by Rancho Murieta
- (e) WY 2021 and WY 2022 data have been updated with historical data records made available for the WY 2024 Annual Report. Hence, in some circumstances previously estimated data has been updated with more reliable reported values.
- (f) WY 2025 value was estimated using the updated CoSANA model released on 2 February 2026.
- (g) WY 2025 estimated Agricultural use include the reduction of pumpage due to the field verified removal of 2,500 acres of vineyards.



**Figure AR-9. Total Water Use by Sector Over Time**

## 6 CHANGE IN GROUNDWATER STORAGE

§ 356.2 (b) (4)

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

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

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

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

(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.

Changes in groundwater storage were estimated using CoSANA which calculates the volume of storage change within each model element. The Basin includes 5,307 elements of the 24,171 elements that make up the entire CoSANA model. The element-by-element change is then normalized by dividing the volumetric change in storage by the area of each respective element and the results are mapped in units of feet.

**Figure AR-10** shows the distribution of model-calculated changes in groundwater storage during Water Year (W)Y 2025. The total calculated net change in storage across the Basin was a decrease of 8,500 acre feet (AF)<sup>10</sup> (**Figure AR-11**).

Groundwater storage declined slightly across most of the Basin, with storage changes generally between 0 and -0.25 feet (ft), with greater declines (less than -0.25 ft) along Dry Creek. These conditions are consistent with WY 2025, where precipitation equaled the long-term average and groundwater extractions increased compared to previous years (**Table AR-1**). The Fair Oaks CIMIS station (Station ID 131; located 12 miles north of the Basin) measured 17.9 inches of precipitation in WY 2025 and the long-term average precipitation for the Basin used for the Groundwater Sustainability Plan (GSP) was 17.9 inches per year (EKI, 2021). Despite the overall net decrease in storage, localized groundwater storage increases were observed in the upper portions of the Basin near the eastern Basin boundary within Amador County and along a portion of the Cosumnes River boundary.

The annual changes in storage since WY 2015 are summarized in **Table AR-5** and show both positive and negative changes in annual storage. The net change in Basin storage since WY 2015 is -52,600 AF<sup>11</sup> (i.e., annual average decline over the past 10 Years is -5,260 acre-feet per year [AFY]).

**Figure AR-11** shows water year types, annual groundwater extractions, annual change in groundwater storage, and the cumulative change in groundwater storage for WY 2015 through WY 2025. The greatest

<sup>10</sup> The model-calculated storage change is most sensitive to the consumption of groundwater pumped from wells, which is determined primarily by land use and climate. In WY 2025, the model-calculated storage change is conservative because it did not consider the field verified reduction in vineyard acreage prior to WY 2025. In WY 2025, the model calculated consumption rate of pumped groundwater to irrigate these fields if still in place would have been 2.85 AF/ac/yr. Removing the fields therefore saved 7,100 AF of stored groundwater.

<sup>11</sup> Ibid.



increase in storage was experienced in WY 2017, a wet year, with an increase of 55,700 AF in storage, whereas the biggest decrease in storage occurred in WY 2021, a critically dry year, with a decrease of 69,200 AF. Annual extraction rates of 124,600 AFY or greater resulted in storage declines, whereas annual extraction rates of 121,300 AFY or less resulted in storage accretion. The estimated sustainable yield for the Basin reported in the GSP ranges from 119,000 AFY to 125,700 AFY.

**Table AR-5 Annual Change in Storage by DWR Water Year Type**

Water Year	Water Year Type	Change in Storage (AF)
2015	Critical	-38,700
2016	Dry	-15,600
2017	Wet	55,700
2018	Below Normal	-30,200
2019	Wet	35,800
2020	Dry	-44,100
2021	Critical	-69,200
2022	Critical	-28,800
2023	Wet	40,000
2024	Above Normal	12,300
2025	TBD	-8,500

**Abbreviations**

AFY = acre-feet per year  
DWR = California Department of Water Resources  
TBD = To be determined

**Notes**

1) DWR has not released the WY 2025 water year type; this classification will be updated in the next Annual Report.

## 7 PLAN IMPLEMENTATION

### § 356.2 (b) (4)

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

### 7.1 Semi-Annual Monitoring

The Water (WY) 2025 semi-annual monitoring occurred in Fall 2024 and Spring 2025. Water level data were collected following the protocols for data collection described in the Groundwater Sustainability Plan (GSP).

Some wells were not accessible during the monitoring events. During both monitoring events, water levels were not measured in two monitoring wells (RMW-WL16 and RMW-ISW8). Amador County Groundwater Management Authority (ACGMA) Groundwater Sustainability Agency (GSA) currently does not have access to RMW-WL16 and is actively working on developing an access agreement with the RMW-WL16 well owner (as of February 2026, ACGMA received verbal agreement for access to the well and the historical data). RMW-ISW8 was previously monitored under the CASGEM program with water level data publicly available through Spring 2023. The Cosumnes Groundwater Authority (CGA) was unable to access RMW-ISW8 during the Fall 2024 monitoring event but successfully accessed the well during the Spring 2025 monitoring event. At that time, the well was found to be in poor condition, with questionable water levels at the top of the casing (above ground surface). The CGA is continuing to investigate the condition of the well and is considering incorporating a nearby supplemental well for groundwater level monitoring, as RMW-ISW8 is currently out of commission. Any monitoring network changes will be described in the 2026 Periodic Evaluation and implemented as part of the 2026 Amended GSP.

All water quality samples were collected following the protocols in the GSP for data collection. Complete water quality data (i.e., Arsenic, Nitrate and TDS) were not collected for two of the Representative Monitoring Wells for Degradation of Groundwater Quality monitoring wells (RMW-WQ; RMW-WQ1 and RMW-WQ11). Both wells are public water system (PWS) wells with data publicly available, however PWS wells are not required to sample for all constituents every year. To resolve these issues the CGA will work with the PWSs to ensure the necessary constituents are sampled for or find replacement wells that are currently sampled for the necessary constituents. Any monitoring network changes will be described in the 2026 Periodic Evaluation and implemented as part of the 2026 Amended GSP.

### 7.2 Current Conditions – Sustainability Indicators

The following sections describe how current sustainability indicator conditions compare to the Sustainable Management Criteria (SMCs; e.g., minimum thresholds [MTs], measurable objectives [MOs], and interim milestones [IMs]) as established in the GSP.

#### 7.2.1 Chronic Lowering of Groundwater Levels

The GSP utilizes 19 wells to monitor for Chronic Lowering of Groundwater Levels (RMW-WLs). Long-term hydrographs for water levels measured in the wells are provided in **Figure AR-4a** and **Figure AR-4b**. In WY 2025, water levels were measured in 18 of the 19 RMW-WLs. **Table AR-6** compares the WY 2025 groundwater elevations to their respective SMCs. In Fall 2024, the water level was below the MT in one

well (RMW-WL5), and greater than or equal to the MOs in 11 wells. In Spring 2025, the water level was below the MT in one well (RMW-WL12), and greater than or equal to the MOs in 11 wells. There are no IMs for WY 2025.

The GSP defines Undesirable Results when water levels decline below the MTs in 25% or more of the RMW-WLs (5 out of 19 RMW-WLs) for two consecutive years. Water levels in both wells (RMW-WL5 and RMW-WL12) declined below the MT for only a single monitoring event, and accordingly these occurrences do not indicate Undesirable Results. Water level in RMW-WL5 was below the MT in Fall 2024 but increased to above the MT in Spring 2025. Water level in RMW-WL12 was above the MT in Fall 2024 but declined below the MT in Spring 2025. The Spring 2025 water level measurement in RMW-WL12 was approximately 15 feet lower than the Fall 2024 measurement, which is atypical and suggests the measurement may be anomalous or indicate an influence from recent pumping of the well.

### 7.2.2 Groundwater Storage

There are no groundwater storage IMs for WY 2025. As explained in the GSP, groundwater levels are a reasonable proxy for groundwater storage. Progress made during the reporting period is therefore represented by the discussion of water levels in Section 7.2.1.

### 7.2.3 Seawater Intrusion

Because significant and unreasonable effects from seawater intrusion are not present in the Basin and are not likely to occur, SMCs were not set for the Seawater Intrusion Sustainability Indicator. The Seawater Intrusion Sustainability Indicator is therefore not discussed herein.

### 7.2.4 Degraded Water Quality

The GSP utilizes 14 wells to monitor for potential significant and unreasonable Degradation of Water Quality (RMW-WQs). **Table AR-7** compares the WY 2025 water quality concentrations for the Basin's Constituents of Concern (Arsenic, Nitrate as N, and TDS) to their respective SMCs at the RMW-WQs. At the time of GSP development, concentrations of all constituents in all wells were below the MOs and therefore IMs would in effect promote increasing concentrations causing water quality degradation. Therefore, Trigger Thresholds (TTs) were established at the RMW-WQs whereby if the concentration in a sample reaches 50% of its Maximum Contaminant Level (MCL), the GSAs will consider whether additional action is necessary.

Arsenic concentrations were at or exceeded the MT in three wells (RMW-WQ2, RMW-WQ9 and RMW-WQ14):

- RMW-WQ2: Arsenic concentrations were sampled and measured four times during WY 2025 and ranged from 9 to 11 micrograms per liter ( $\mu\text{g/L}$ ), with a median value of 10.5  $\mu\text{g/L}$ . Arsenic concentrations have been variable and have intermittently exceeded the MT since sampling began in 2020.
- RMW-WQ9: Arsenic concentration was sampled and measured once during WY 2025 and was at the MT of 10  $\mu\text{g/L}$ . Arsenic concentrations have been variable and have intermittently exceeded the MT since sampling began in 2020.
- RMW-WQ14: Arsenic concentration was sampled and measured once during WY 2025 and exceeded the MT at 11  $\mu\text{g/L}$ . Arsenic concentrations in well RMW-WQ14 have increased by 1  $\mu\text{g/L}$  per year since WY 2023.

Additionally, RMW-WQ5 had Arsenic concentrations sampled and measured eight times during WY 2025 and ranged from non-detected (ND) to 11  $\mu\text{g/L}$ , with a median value of 8  $\mu\text{g/L}$ , and with the most recent

## Section 7 Plan Implementation

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measurement of 8 µg/L. Arsenic concentrations have been variable and have intermittently exceeded the MT since sampling began in 2020.

The sample from RMW-WQ9 was the only well to exceed the MT for TDS, however TDS concentrations have historically been elevated in this well.

The Nitrate concentrations in samples from all wells were below the MT.

The GSP defines Undesirable Results as when the concentration of the constituent exceeds the MTs in samples from 25% or more of the 14 RMW-WQs (4 out of 14 RMW-WQs) for two consecutive years. In WY 2025, the water quality sampling results did not indicate Undesirable Results.

For the wells with MT exceedances the CGA will follow the GSP defined Action Plan Related to Minimum Threshold Exceedances by: (1) investigating the area around the well to evaluate whether the exceedances are localized issues associated with the affected area, or indicates a potential regional issue; (2) evaluating the potential for outside contributing factors; and (3) considering the need for increased or expanded monitoring.



**Table AR-6 Groundwater Elevations and Relevant Sustainable Management Criteria for Chronic Lowering of Groundwater Levels Sustainability Indicator**

Well Name	Fall 2024 Date	Fall 2024 GWE (ft NAVD88)	Spring 2025 Date	Spring 2025 GWE (ft NAVD88)	MO (ft NAVD88)	MT (ft NAVD88)	IM 2027 (ft NAVD88)	IM 2032 (ft NAVD88)	IM 2037 (ft NAVD88)
RMW-WL1	10/4/2024	-46	4/18/2025	-36	-55	-65	-56	-57	-56
RMW-WL2	10/31/2024	-65	5/7/2025	-55	-59	-69	-62	-64	-61
RMW-WL3	10/8/2024	-35	4/28/2025	-32	-46	-56	-49	-50	-48
RMW-WL4	10/1/2024	-20	4/7/2025	-3	-24	-39	-30	-33	-29
<b>RMW-WL5</b>	<b>10/10/2024</b>	<b>-90</b>	4/9/2025	-83	-70	-84	-73	-77	-73
RMW-WL6	10/4/2024	-75	5/9/2025	-69	-51	-78	-63	-68	-59
RMW-WL7	10/18/2024	-26	5/9/2025	-23	-28	-38	-32	-33	-30
RMW-WL8	10/10/2024	-34	4/9/2025	-29	-36	-48	-39	-43	-39
RMW-WL9	10/10/2024	-78	4/9/2025	-78	-75	-89	-78	-82	-78
RMW-WL10	10/10/2024	-30	4/27/2025	-24	-22	-32	-25	-28	-25
RMW-WL11	10/10/2024	-36	4/9/2025	-30	-28	-38	-31	-33	-30
<b>RMW-WL12</b>	10/10/2024	97	<b>4/9/2025</b>	<b>82</b>	106	85	97	93	100
RMW-WL13	11/1/2024	-42	4/11/2025	-29	-36	-46	-39	-41	-39
RMW-WL14	10/10/2024	251	4/3/2025	251	250	232	243	239	245
RMW-WL15	10/10/2024	126	4/3/2025	126	141	119	133	129	135
RMW-WL16	--	--	--	--	269	259	265	263	266
RMW-WL17	10/10/2024	195	4/3/2025	196	116	89	105	100	108
RMW-WL18	10/10/2024	198	4/3/2025	214	195	185	192	190	192
RMW-WL19	10/10/2024	172	4/3/2025	172	171	161	168	167	169

**Abbreviations:**

ft NAVD88 = feet above the North American Vertical Datum of 1988  
 GWE = groundwater elevation  
 IM = interim milestone  
 MO = measurable objective  
 MT = minimum threshold  
 RMW-WL = Representative Monitoring Well for Chronic Lowering of Groundwater Levels  
 "--" = not collected

**Notes:**

(a) **Bold** values are at or below the MT.



**Table AR-7 Groundwater Quality and Relevant Sustainable Management Criteria for Degraded Water Quality Sustainability Indicator**

Well Name	Arsenic (µg/L)			Nitrate as N (mg/L)				TDS (mg/L)				
	Sample Date	MO = 8	TT = 9	MT = 10	Sample Date	MO = 8	TT = 9	MT = 10	Sample Date	MO= 500	TT=500	MT=1,000
RMW-WQ1	--	--	--	--	--	--	--	--	--	--	--	--
<b>RMW-WQ2</b>	<b>7/10/2025</b>	<b>11<sup>(c)</sup></b>			8/7/2025	ND			5/20/2025		200	
RMW-WQ3	10/11/2024	3			4/9/2025	2.5			4/9/2025		180	
RMW-WQ4	4/9/2025	3			4/9/2025	1.9			4/9/2025		180	
RMW-WQ5	12/6/2024	8 <sup>(d)</sup>			4/9/2025	0.7			4/9/2025		180	
RMW-WQ6	4/9/2025	2			4/9/2025	1.3			4/9/2025		220	
RMW-WQ7	5/22/2025	ND			5/22/2025	1.5			5/22/2025		200	
RMW-WQ8	5/22/2025	3.6			5/22/2025	ND			5/22/2025		190	
<b>RMW-WQ9</b>	<b>10/9/2024</b>	<b>10</b>			10/9/2024	1.6			<b>10/9/2024</b>		<b>1,600</b>	
RMW-WQ10	10/9/2024	ND			10/9/2024	ND			10/9/2024		540	
RMW-WQ11	--	--			4/15/2025	ND			--		--	
RMW-WQ12	10/9/2024	3.4			10/9/2024	ND			10/9/2024		140	
RMW-WQ13	4/9/2025	4			4/9/2025	1.5			4/9/2025		140	
<b>RMW-WQ14</b>	<b>4/9/2025</b>	<b>12</b>			4/9/2025	ND			4/9/2025		160	

**Abbreviations:**

mg/L = milligrams per liter  
 MO = Measurable Objective  
 MT = Minimum Threshold  
 N = Nitrogen  
 ND= Not Detected

RMW-WQ = Representative Monitoring Well for Degraded Water Quality  
 TDS = Total Dissolved Solids  
 TT = Trigger Threshold  
 µg/L = micrograms per liter  
 "--" = not collected

**Notes:**

- (a) For all RMW-WQs, SMCs were set at the same level based on state and federal standards.
- (b) **Bold** values are at or exceed the MT.
- (c) RMW-WQ2: Arsenic concentrations were measured four times during WY 2025 and ranged from 9 to 11 µg/L, with a median value of 10.5 µg/L.
- (d) RMW-WQ5: Arsenic concentrations were measured eight times during WY 2025 and ranged from non-detected (ND) to 11 µg/L, with a median value of 8 µg/L.

### 7.2.5 Land Subsidence

Best available data shows limited land subsidence (vertical displacement of the ground surface) throughout the Basin. The following describes the measured vertical displacement (subsidence) trends for WY 2025 (see **Figure AR-12**):

- Continuous vertical displacement data has been collected since July 2006 at a University NAVSTAR Consortium (UNAVCO) Global Positioning System (GPS) station (P275). The site overlays the cone of depression and measured -0.19 ft of average total vertical displacement during WY 2025.
- The TRE Altamira Interferometric Synthetic Aperture Radar (InSAR) data indicates the annual total vertical displacement rate for the period 1 October 2025 through 1 October 2026 ranged from - 0.1 ft to 0.1 ft throughout the Basin.

As part of addressing DWR's Recommended Corrective Actions (RCAs), the GSAs are working on: (1) establishing SMCs for land subsidence based on direct measurements of land elevation changes to assess and confirm that no significant and unreasonable land subsidence is occurring; and (2) expanding the land subsidence monitoring network to provide sufficient coverage of the Basin. These data revisions to the subsidence monitoring network and SMCs will be included in the 2026 Periodic Evaluation and 2026 Amended GSP.

### 7.2.6 Depletions of Interconnected Surface Water

The GSAs utilize nine wells to monitor the Depletion of Interconnected Surface Water (RMW-ISWs). Long-term hydrographs for water levels measured in the wells are provided in **Figure AR-4c**. In WY 2025, water levels were measured in eight of the nine RMW-ISWs. **Table AR-8** compares the WY 2025 groundwater elevations to the SMCs at the RMW-ISWs. In Spring 2025, the water level was below the MT in one well (RMW-ISW5), and greater than or equal to the MOs in six wells. There are no IMs for WY 2025.

The GSP defines Undesirable Results when the water levels decline below the MTs in one or more of the nine RMW-ISWs for two consecutive years. Water levels in RMW-ISW5 declined below the MT for only a single monitoring event, and accordingly these occurrences do not indicate Undesirable Results. In RMW-ISW5, measured groundwater levels were above the MT in the Fall 2024 but declined below the MT in Spring 2025. Measured water levels were not available to calculate the SMCs for RMW-ISW5 during GSP development (i.e., placeholder values were estimated and used as a starting point with the intent to revise the SMCs once actual data became available). Water levels collected as part of GSP implementation confirm that the SMCs for RMW-ISW5 should in fact be revised to reflect observed conditions in this portion of the Basin. The SMCs will be updated as part of the 2026 Periodic Evaluation and the 2026 Amended GSP.

Furthermore, DWR released a series of guidance documents for estimating interconnected surface water depletions caused by groundwater use and plan to release the remaining guidance document on managing interconnected surface water depletions in WY 2026. Based on the guidance documents, and the monitoring and data gap filling activities conducted by the GSAs, the SMCs and Undesirable Results definition for the depletion of interconnected surface water will be re-evaluated.

**Table AR-8 Groundwater Elevations and Relevant Sustainable Management Criteria for Depletions of Interconnected Surface Water Sustainability Indicator**

Well Name	Fall 2024 Date	Fall 2024 GWE (ft NAVD88)	Spring 2025 Date	Spring 2025 GWE (ft NAVD88)	MO (ft NAVD88)	MT (ft NAVD88)	Trigger Threshold (ft NAVD88)	IM 2027 (ft NAVD88)	IM 2032 (ft NAVD88)	IM 2037 (ft NAVD88)
RMW-ISW1	10/1/2024	-10	4/7/2025	-5	-18	-23	-21	N/A	N/A	N/A
RMW-ISW2	10/8/2024	-6	4/29/2025	9	-3	-6	-4.5	N/A	N/A	N/A
RMW-ISW3	10/8/2024	-1	4/29/2025	12	-4	-10	-7.0	N/A	N/A	N/A
RMW-ISW4	10/10/2024	-18	4/9/2025	-12	-14	-19	N/A	-14	-15	-14
<b>RMW-ISW5</b>	11/22/2024	79	<b>4/22/2025</b>	<b>76</b>	83	78	N/A	85	86	85
RMW-ISW6	10/10/2024	-30	4/15/2024	-23	-26	-31	N/A	-26	-28	-27
RMW-ISW7	10/10/2024	255	4/3/2025	256	257	247	252	N/A	N/A	N/A
RMW-ISW8	--	--	--	--	179	172	176	N/A	N/A	N/A
RMW-ISW9	10/10/2024	172	4/3/2025	172	171	164	167	N/A	N/A	N/A

**Abbreviations:**

ft NAVD88 = feet above the North American Vertical Datum of 1988  
 GWE = groundwater elevation  
 IM = Interim Milestone  
 MO = Measurable Objective  
 MT = Minimum Threshold

RMW-ISW = Representative Monitoring Well for the Depletions of Interconnected Surface Water  
 N/A = not applicable  
 "--" = not collected

**Notes:**

(a) **Bold** values are below the MT.



### 7.3 Implementation of Projects and Management Actions

The GSP outlined six Projects and Management Actions (PMAs), and implementation progress during WY 2025 is summarized below in **Table AR-9**. Moreover, the CGA continues to pursue funding opportunities to support PMA implementation.

Table AR-9 Implementation of Projects and Management Actions

Project and Management Action	Status	Progress during Water Year	Observed Benefits	Observed adverse impacts to the various sustainability indicators, adjacent groundwater basins, or beneficial uses and users	Public Notice / Engagement	Anticipated Schedule	Description of Anticipated Benefits Within Next Water Year
#1 - OHWD Agricultural Flood Managed Aquifer Recharge (Flood-MAR)	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Pre planning <input type="checkbox"/> Conceptual <input type="checkbox"/> Inactive	<p>In WY 2025, approximately 330 AF of water was diverted from the Cosumnes River to fields on the north side of the river for aquifer recharge and subsequent recovery for irrigation.</p> <p>OHWD holds a 5-year temporary water right (Temporary Permit 21438) to divert up to 2,444 AF from the Cosumnes River during high flow events, from two points of diversion. Diversions can occur between December 1, 2022, through March 15, 2027, at two diversion points. Diverted water can be applied to 1,118 acres of dormant vineyards adjacent to the Cosumnes River.</p> <p>While infiltration occurs within the South American Subbasin, changes in cross-boundary underground flow in response to the recharge provides a significant groundwater storage benefit in the Cosumnes Subbasin in the proximity of the Cosumnes River.</p>	To be determined. Monitoring efforts are being conducted to further understand the transboundary flow of water. Soil moisture meters, monitoring wells, and geologic exploration continue to be used to assess water infiltration and flow.	None	Updates, reports, and data are regularly presented by OHWD staff and consultants during monthly Board of Directors meetings.	Diversions will continue under the 5-year temporary water right. A permanent water right is being pursued.	Anticipated benefits may include groundwater recharge resulting in benefits in aquifer capacity and groundwater levels.
#2 - Sacramento Area Flood Control Agency (SAFCA) Flood-MAR	<input type="checkbox"/> Active <input checked="" type="checkbox"/> Pre planning <input type="checkbox"/> Conceptual <input type="checkbox"/> Inactive	SAFCA initiated development of a white paper describing benefits to the agencies using American River water and outlining next steps.	N/A	N/A	None	In development	Coordinate with SAFCA, RWA, and SASb GSAs to determine approvals needed to develop a pilot program. Consider options for recharge near the Folsom South Canal. Options include area assessed with exploratory borings and tTem, OHWD area near Folsom South Canal and gravel pit.
#3 - OHWD Cosumnes River Flow Augmentation	<input type="checkbox"/> Active <input type="checkbox"/> Pre planning <input type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Inactive	No progress has been made on PMA #3. CGA will be replacing this PMA in the 2026 Amended GSP.	N/A	N/A	None	None	None

Project and Management Action	Status	Progress during Water Year	Observed Benefits	Observed adverse impacts to the various sustainability indicators, adjacent groundwater basins, or beneficial uses and users	Public Notice / Engagement	Anticipated Schedule	Description of Anticipated Benefits Within Next Water Year
#4 - City of Galt Recycled Water Project	<input type="checkbox"/> Active <input checked="" type="checkbox"/> Pre planning <input type="checkbox"/> Conceptual <input type="checkbox"/> Inactive	<p>The City of Galt GSA executed a Water Recycling Facilities Planning (WRFP) Grant agreement through the California State Water Resources Control Board (SWCRB) Clean Water Revolving Fund Water Recycling Funding (CWSRF) Program to complete a feasibility study to evaluate the extent of which the City of Galt can expand recycled water use within and near the City of Galt's service area.</p> <p>The feasibility study was initiated in August 2025 and will be completed in the latter part of 2026.</p>	N/A	N/A	Public engagement was conducted during grant application development at the City of Galt Council meetings.	Pre-planning and conceptual planning, which will include conducting feasibility study, is anticipated to take place during WY 2025 & WY 2026.	None
#5 - Voluntary Land Repurposing	<input type="checkbox"/> Active <input checked="" type="checkbox"/> Pre planning <input type="checkbox"/> Conceptual <input type="checkbox"/> Inactive	<p>This PMA has evolved since the initial submittal of the GSP. Now relied upon for encompassing all water conservation efforts and market demand land use changes within the basin.</p> <p>Continuing to respond to changes in current market conditions, agricultural crop producers within the basin have made the difficult decision to discontinue farming large parcels of land, most notably winegrapes. The basin has seen 3150 acres either sit fallow for this water year, or have the winegrape vines completely removed. This acreage has been verified through aerial imagery, parcel surveying and with subsequent Land IQ data. This transition away from an irrigated crop, promotes the reduction in water use of approximately 2-acre feet per acre of planted irrigated vines, per year. This voluntary removal of irrigated crops is having a direct impact on groundwater supplies within the basin through a decrease in groundwater pumping and loss of that water through evapotranspiration.</p> <p>SRCD GSA has continued to implement the Conservation Agriculture Planning Grant Program (CAPGP), offering free conservation plans prepared by technical service providers. These plans included: soil health, grazing management, water irrigation management, carbon sequestration and carbon farming. SRCD has successfully completed 24 conservation plans. This grant will conclude in June 2026.</p> <p>SRCD GSA has also implemented the Water Efficiency Technical Assistance (WETA) grant programming in the form of a Mobile Irrigation Lab that offers free water efficiency consultations and written reports, free pump testing and nutrient management. Over the course of Water Year 2025 there were 36 tests performed, with 47 tests completed in total, the Lab will seek to conduct at least 80 free efficiency tests for farmers/ranchers in total by the grants end in 2027.</p>	To be determined.	None	<p>Public engagement was conducted in a series of community events in 2025, including targeted agricultural irrigator events.</p> <p>Grower to grower outreach was also conducted via mailings, cold calls, farm visits and direct engagement with potential participants.</p> <p>Outreach and engagement continued at monthly board meetings for both CGA and the individual GSAs.</p> <p>These outreach efforts will continue in 2026.</p>	<p>CAPGP technical assistance will conclude in June 2026.</p> <p>WETA technical assistance will continue throughout WY 2026.</p> <p>Land surveying efforts will remain ongoing by all GSAs throughout WY 2026.</p>	To be determined.

Project and Management Action	Status	Progress during Water Year	Observed Benefits	Observed <u>adverse</u> impacts to the various sustainability indicators, adjacent groundwater basins, or beneficial uses and users	Public Notice / Engagement	Anticipated Schedule	Description of Anticipated Benefits Within Next Water Year
#6 - Groundwater Banking and Sale	<input type="checkbox"/> Active <input type="checkbox"/> Pre planning <input type="checkbox"/> Conceptual <input checked="" type="checkbox"/> Inactive	No progress has been made on PMA #6. CGA will be re-prioritizing this PMA in the 2026 Amended GSP.	N/A	N/A	None	None	None

**Abbreviations:**

- AF = acre-feet
- CGA = Cosumnes Groundwater Authority
- CWSRF = Clean Water State Revolving Fund
- Flood-Mar = Flood Managed Aquifer Recharge
- GSA = Groundwater Sustainability Agency
- N/A = not applicable
- OHWD = Omochumne-Hartnell Water District
- PMA = Projects and Management Actions
- SAFCA = Sacramento Area Flood Control Agency
- SRCD = Sloughhouse Resource Conservation District
- SWCRB = State Water Resources Control Board
- USDA = United States Department of Agriculture
- WRFP = Water Recycling Facilities Planning
- WY = Water Year



#### 7.4 Progress Made on Addressing Recommended Corrective Actions in the Department's GSP Determination

The CGA received DWR's GSP determination on 26 October 2023 which included in the approval letter were six Recommended Corrective Actions (RCAs). **Table AR-10** summarizes the RCAs, identifies the relevant GSP sections, summarizes CGA's approach and timeline to address the RCAs, and summarizes progress made on addressing the RCAs during WY 2025.

**Table AR-10. Progress Towards Addressing DWR’s Recommended Corrective Actions**

Recommended Corrective Action	Related GSP Section	Approach	Progress in WY 2025	Timeline for Completion
1 - Further assess potential impact of the established minimum thresholds for chronic lowering of groundwater levels on domestic wells as related data gaps are filled and provide supporting documentation of the assessment.	Section 15.1.1 & Section 17.1.1	Conduct well census, reconnaissance, and inventory projects to locate wells and verify use, status, and construction.  Update and document domestic well impact analysis after well census is completed.	Desktop verified domestic well inventory. Developed approach to update domestic well impact analysis with the verified domestic well inventory dataset.	To be completed in WY 2026 and included in the 2026 Amended GSP.
2 - Revise the undesirable results definition for chronic lowering of groundwater levels to be based on impacts due to lowering of groundwater levels (i.e., the number or percentage of wells that the GSAs deem acceptable to impact due to lowering of groundwater levels) and update the minimum thresholds for chronic lowering of groundwater levels, as necessary, to be tied to the undesirable result definition.	Section 14.1.3	Revise definition of significant and unreasonable to a verified number or percentage of impacted wells over the 20-year implementation period with justification for selected values.  GSAs develop program to inspect problem wells, validate impacts, and mitigate as appropriate	Reviewed metrics to define significant and unreasonable using well impacts in other GSPs.  Conceptualized a voluntary domestic well registration program.	To be completed in WY 2026 and included in the 2026 Amended GSP.
3 - Conduct the necessary investigations or studies to better understand the relationship between groundwater levels and degraded water quality. Based on the results of the investigations/studies, describe in the GSP, the relationship between the minimum thresholds established for chronic lowering of groundwater levels and degraded water quality.	Section 15.7 & Section 17.1.4	Update analysis using new data from the Monitoring Program and other sources.  Establish protocols that ensure required water quality data is collected from all RMW-WQs.  Establish protocols that ensure water levels are measured in the RMW-WQ at the time of sampling.  Establish protocols that record water production (pumpage) from RMW-WQs.  Update “Trigger Thresholds” in the GSP’s Periodic Evaluation and include GSA response plan if thresholds are reached. For example, increase the frequency of water quality sampling at the well when Trigger Threshold is reached.	Compiled data for wells with water level, pumpage, and water quality data.  Improved water quality sampling protocols for existing RMW-WQs.  Compiled list of supplemental wells to be monitored for water quality.	To be completed in WY 2026 and included in the 2026 Amended GSP.
4 - Establish sustainable management criteria for land subsidence based on direct measurements of land elevation changes to assess and confirm that no significant and unreasonable land subsidence is occurring.	Section 12	Investigate if other entities are already periodically monitoring land surface elevations at monuments as part of other programs (USBR, City of Galt, Cal Trans, etc.).  Identify or establish monument survey network and define SMCs based on actual land surface elevation changes (rate and extent) based on potential impacts to land uses and infrastructure.	Conducted outreach to regional entities that may monitor land surface elevations.  Compiled and analyzed land subsidence data.  Compiled preliminary list of critical infrastructure.  Prepared draft SMC approaches.	To be completed in WY 2026 and included in the 2026 Amended GSP.

Recommended Corrective Action	Related GSP Section	Approach	Progress in WY 2025	Timeline for Completion
<p>5 - Department staff understand that estimating the location, quantity, and timing of stream depletion due to ongoing, Subbasin-wide pumping is a complex task and that developing suitable tools may take additional time; however, it is critical for the Department's ongoing and future evaluations of whether GSP implementation is on track to achieve sustainable groundwater management. The Department plans to provide guidance on methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected surface water and support for establishing specific sustainable management criteria in the near future. This guidance is intended to assist GSAs to sustainably manage depletions of interconnected surface water.</p> <p>A) Consider utilizing the interconnected surface water guidance, as appropriate, when issued by the Department to establish quantifiable minimum thresholds, measurable objectives, and management actions.</p> <p>B) Continue to fill data gaps, collect additional monitoring data, and implement the current strategy to manage depletions of interconnected surface water and define segments of interconnectivity and timing.</p> <p>C) Prioritize collaborating and coordinating with local, state, and federal regulatory agencies as well as interested parties to better understand the full suite of beneficial uses and users that may be impacted by pumping induced surface water depletion within the GSA's jurisdictional area.</p>	<p>Section 15.6, Section 17.1.6, Section 5.5 &amp; Section 12.</p>	<p>Utilize interconnected surface water guidance, as appropriate, when issued by DWR, to establish/refine quantifiable MTs, MOs, and management actions (MAs).</p> <p>Data Gap filling including additional monitoring data, monitor and identify timing and extent of interconnectivity.</p> <p>Refine CoSANA-calculated surface water depletions consistent with DWR guidelines.</p> <p>Prioritize collaborating and coordinating with local, state, and federal regulatory agencies and other interested stakeholders to better understand the beneficial uses and users potentially impacted by pumping induced surface water depletions within the GSA's jurisdictional area (for example, reactivate the Surface Water Advisory Group [SWAG]).</p>	<p>Utilizing CalSIP funding, SRCD and GID GSAs finalized stream gage site locations that will aid in expanding the monitoring network and filling data gaps.</p> <p>Identified additional shallow wells to potentially incorporate into the monitoring network.</p> <p>Utilized CoSANA to estimate surface water depletions</p>	<p>A) will be addressed in a Future Plan Amendment, once the final set of DWR guidelines are released.</p> <p>B) and C) will be completed in WY 2026 and included in the 2026 Amended GSP.</p>
<p>6 - Expand the land subsidence monitoring network to provide sufficient coverage of the Subbasin. The GSAs may consider the use of additional GPS stations, extensometers, or publicly available remote sensing data (e.g., InSAR) to expand the land subsidence monitoring network in the Subbasin.</p>	<p>Section 17.1.5</p>	<p>Report InSAR data in the Annual Monitoring Reports.</p> <p>Investigate if other entities are already periodically monitoring land surface elevations as part of other programs (USBR, City of Galt, Cal Trans, etc.).</p> <p>Establish monument survey network and monitoring program (see Recommended Corrective Action 4).</p>	<p>Included InSAR data in the Annual Monitoring Reports.</p> <p>Conducted outreach to regional entities that may monitor land surface elevations.</p> <p>Identified potential monitoring sites.</p>	<p>To be completed in WY 2026 and included in the 2026 Amended GSP.</p>

**Abbreviations:**

- CGA = Cosumnes Groundwater Authority
- GPS = Global Positioning System
- GSA = Groundwater Sustainability Agency
- GSP = Groundwater Sustainability Plan
- InSAR = Interferometric Synthetic Aperture Radar
- WY = Water Year

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## 7.5 Other Information on Implementation Progress

### 7.5.1 Stakeholder Outreach and Engagement

Dates of the various stakeholder outreach activities during WY 2025 are included in **Appendix C**. During WY 2025, the CGA continued to conduct outreach on a variety of platforms as summarized below.

- Monthly CGA Board of Directors meetings provided updates on GSP implementation activities. The meetings are open to the public and have time allotted for public comment.
- CGA hosted an Irrigator Luncheon to educate farmers and ranchers in the Basin about SRCD’s mobile irrigation lab, to provide the public an opportunity to meet their GSA representatives, and to learn more about CGA.
- CGA staff and the Outreach and Engagement (O&E) Committee prepared a 2024 CGA Wrap Up Newsletter, providing background on CGA, reporting out on recent CGA events and groundwater conditions within the Basin, providing conservation Best Management Practices (BMPs) and conservation opportunities (i.e., Conservation Plans through the CAPGP funding and/or the Sloughhouse Mobile Irrigation Lab conservation assessments through the CDFA Water Efficiency funding), and notifying the public of upcoming CGA events and meetings.
- The O&E Committee serves an advisory role to the CGA Board of Directors, to inform the Board of outreach activities. The O&E Committee continued to implement the Cosumnes Subbasin Outreach and Engagement Plan, and attended multiple local events, including the SCRCD Water Workshop, Wilton Chili Cook-off and Car Show, and the Galt Cemetery Dia de Los Muertos, to educate local stakeholders about CGA.
- Other outreach and engagement activities that continued during WY 2025 were website maintenance, expansion of the list of interested parties, distribution of farmer surveys, and public presentations made by GSA members to their local governing bodies as part of regular Public City Council or Board of Director meetings.

### 7.5.2 Public Comments Received

During WY 2025, public comments were recorded as part of the Board of Directors meeting recordings and are available on the CGA website<sup>12</sup>. No significant public comments were identified in the WY 2025 CGA Board of Directors meeting minutes.

### 7.5.3 Additional Information or Accomplishments

The following describes additional information and/or accomplishments the GSAs and/or CGA have made related to implementation efforts that are being used to achieve the Basin’s sustainability goal.

- As part of data gap filling efforts, two additional wells were added to the supplemental monitoring network within the area experiencing the lowest groundwater levels (i.e., cone of depression).
- The SRCD GSA installed Wildeye remote monitoring devices to collect real-time water level data on multiple wells throughout the SRCD GSA boundary. GID is currently selecting well sites to install additional Wildeye monitoring devices within their GSA boundary.

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<sup>12</sup> <https://www.cosumnesgroundwater.org/meetings/>

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- Local stakeholders (including GSAs, public agencies, non-governmental organizations, and local landowners) have been working collaboratively to advance projects to improve the Cosumnes River Watershed’s health. In 2023 DWR initiated a Cosumnes River Pilot Study effort which employed a decision support toolset to identify project concepts and locations with the best opportunities to reduce flood risk, increase groundwater recharge, and to restore and expand floodplains to enhance habitat. The County of Sacramento, and other local partner agencies, nonprofits, private businesses, the Wilton Rancheria, and other interests have been engaged in the development of this toolset which identified the initial project concepts.
    - Approximately six project concepts, north of the Cosumnes River within the South American Subbasin, have been identified and are in the early stages of discussion among landowners and partners. Sacramento County is committed to advancing projects that address flood risk, encourage groundwater recharge, and expand floodplains to enhance habitat. Multiple funding sources are being explored to advance these projects. Sacramento County DWR staff and local partners are actively exploring Federal, State, Local, and private funding sources. If additional funding is secured projects will be explored within the Cosumnes Subbasin. With a patchwork of project concepts, partners and stakeholders, funding opportunities, and regulatory limitations/requirements, an agile project management approach will be required to advance projects that make meaningful impacts on the Cosumnes River Watershed.
  - The South American Subbasin initiated the Flood Diversions for Groundwater Recharge PMA north of the Cosumnes River near Rancho Murieta, which has a positive impact on the Cosumnes Basin. Flood water was diverted in February and March resulting in 224 AF conveyed through an existing ditch system and then applied to agricultural fields for recharge. The County of Sacramento will continue working with Rancho Murieta Community Service District to divert flood flows from the Cosumnes River for recharge under State Water Code 1242.1 during WY 2026.

#### 7.5.4 Anticipated WY 2026 Implementation Activities

The CGA developed a Work Plan of activities for Fiscal Year 25/26 (July 2025 to June 2026; **Appendix D**). The Work Plan includes operations, outreach and engagement, SGMA and GSP implementation, and other/PMA related activities. In addition to the tasks specified in the Work Plan, the CGA plans the following additional activities.

- Address DWR’s recommended corrective actions;
- Prepare the 2026 Amended GSP;
- Prepare the 2026 Periodic Evaluation of the GSP;
- PMA coordination with the South American Subbasin;
- Revise monitoring networks and continue updating access agreements, as needed;
- Continue filling monitoring data gaps; and
- Explore available grants and other funding opportunities.

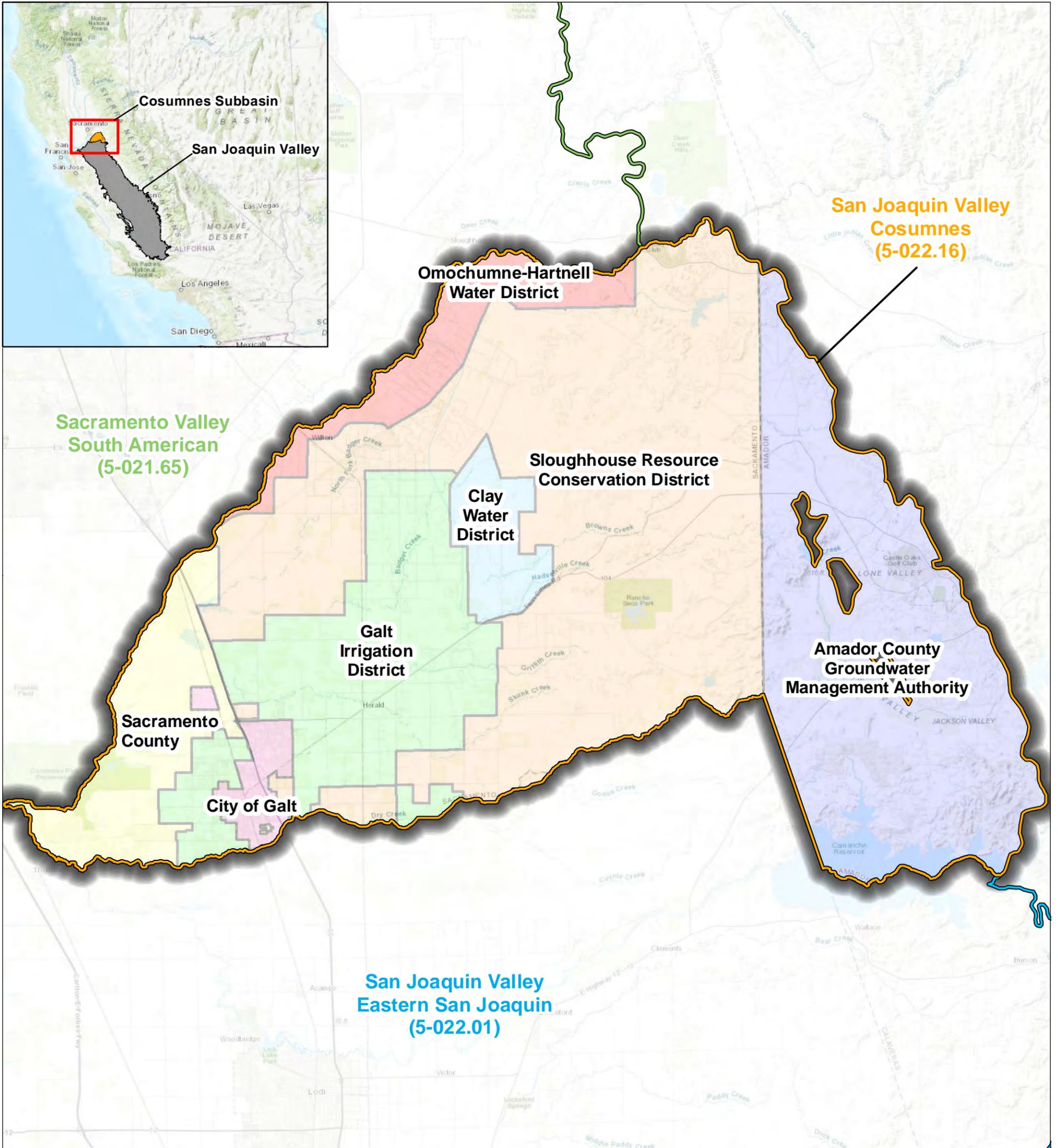
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## 8 REFERENCES

DWR, 2019. *Sustainable Groundwater Management Act 2018 Basin Prioritization Process and Results*. California Department of Water Resources, April 2019.

EKI Environment & Water, Inc. 2021, *Groundwater Sustainability Plan for the Cosumnes Subbasin*, Prepared for Cosumnes Subbasin SGMA Working Group, dated December 2021.

Robertson-Bryan, Inc. and WRIME, 2011, *South Basin Groundwater Management Plan*, Prepared for South Area Water Council, dated October 2011.



- Legend**
- Groundwater Subbasin**
- Cosumnes Subbasin (5-022.16)
  - South American Subbasin (5-021.65)
  - Eastern San Joaquin Subbasin (5-022.01)

- Groundwater Sustainability Agency**
- Amador County Groundwater Management Authority
  - City of Galt
  - Clay Water District
  - Galt Irrigation District
  - Omochumne-Hartnell Water District
  - Sacramento County
  - Sloughouse Resource Conservation District

**Abbreviations**  
DWR = California Department of Water Resources

**Notes**  
1. All locations are approximate.

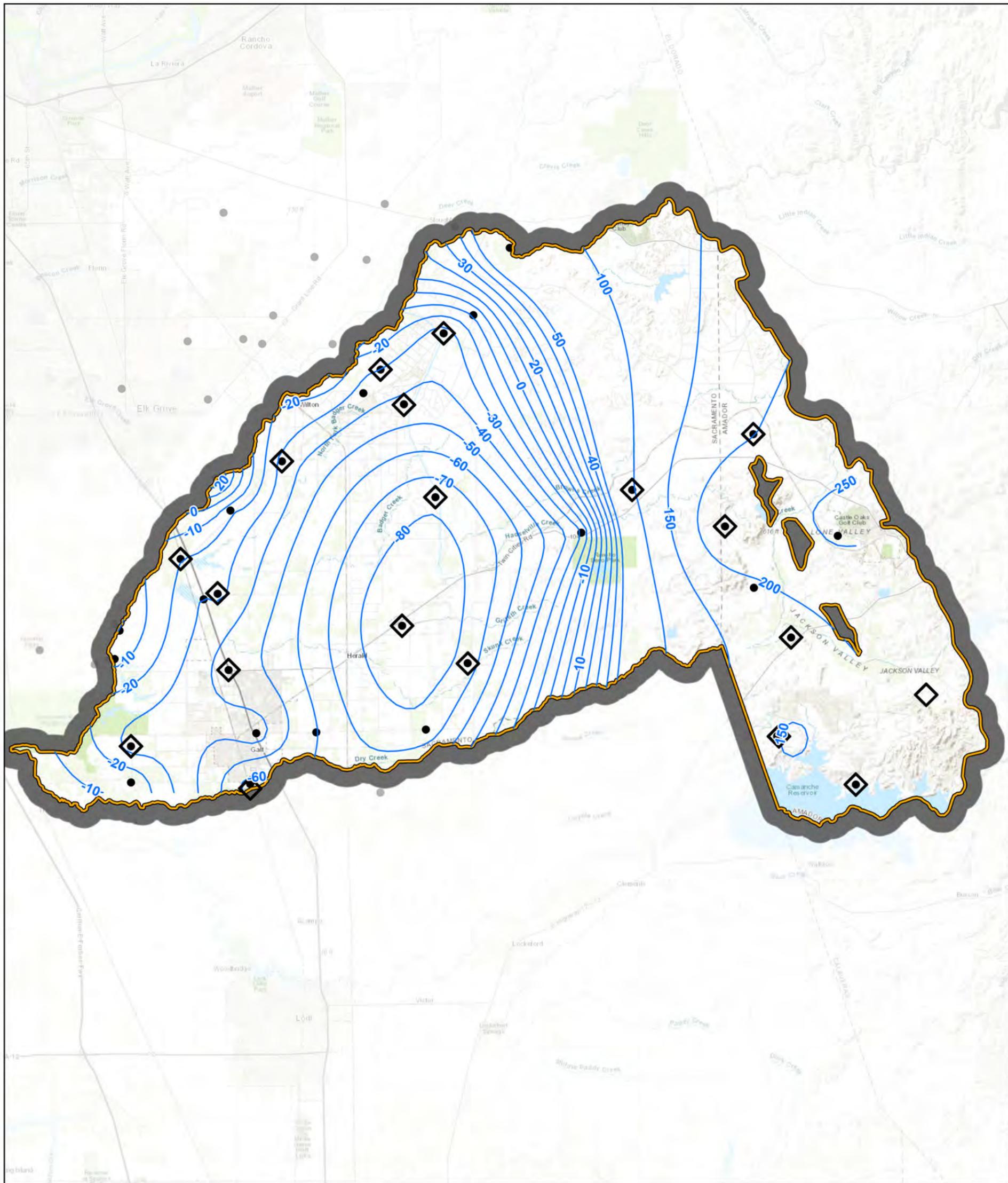
**Sources**  
1. Basemap is ESRI's ArcGIS Online world topographic map, obtained 21 March 2024.  
2. DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - Final Prioritization, dated February 2019.



**DRAFT Cosumnes Groundwater Subbasin**



Cosumnes Groundwater Authority  
Cosumnes Subbasin  
March 2026  
C20149.02  
**Figure AR-1**



**Legend**

- Fall 2024 Wells Measured
- Fall 2024 GWE (ft NAVD 88)
- ◇ RMW-WL

**Groundwater Subbasin**

- ▭ Cosumnes Subbasin (5-022.16)

**Abbreviations**

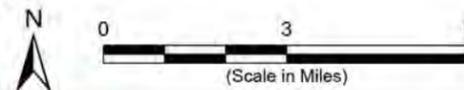
- DWR = California Department of Water Resources
- ft NAVD 88 = feet above the North American Vertical Datum of 1988
- GWE = Groundwater Elevation
- RMW-WL = Representative Monitoring Well for Chronic Lowering of Groundwater Levels

**Notes**

1. All locations are approximate.

**Sources**

1. Basemap is ESRI's ArcGIS Online world topographic map, obtained 13 November 2025.
2. DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - Final Prioritization, dated February 2019.

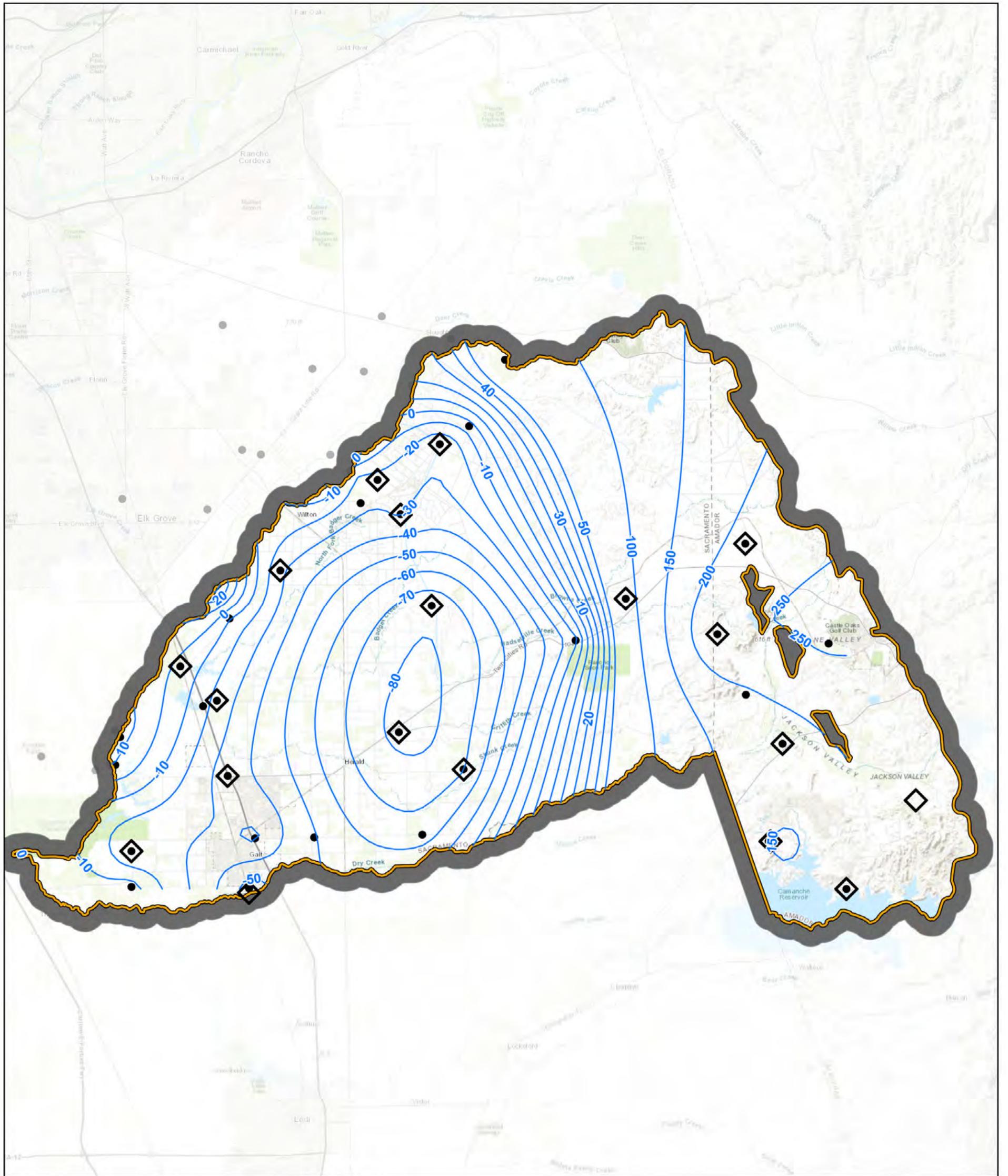


**DRAFT** Groundwater Elevation - Fall 2024



Cosumnes Groundwater Authority  
Cosumnes Subbasin  
March 2026  
C20149.02

**Figure AR-2**



- Legend**
- Spring 2025 Wells Measured
  - Spring 2025 GWE (ft NAVD 88)
  - ◊ RMW-WL
  - Groundwater Subbasin
  - ▭ Cosumnes Subbasin (5-022.16)

**Abbreviations**

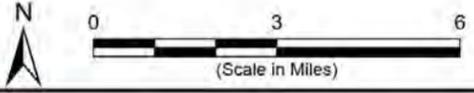
DWR = California Department of Water Resources  
 ft NAVD 88 = feet above the North American Vertical Datum of 1988  
 GWE = Groundwater Elevation  
 RMW-WL = Representative Monitoring Well for Chronic Lowering of Groundwater Levels

**Notes**

1. All locations are approximate.

**Sources**

1. Basemap is ESRI's ArcGIS Online world topographic map, obtained 9 February 2026.  
 2. DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - Final Prioritization, dated February 2019.



**DRAFT**

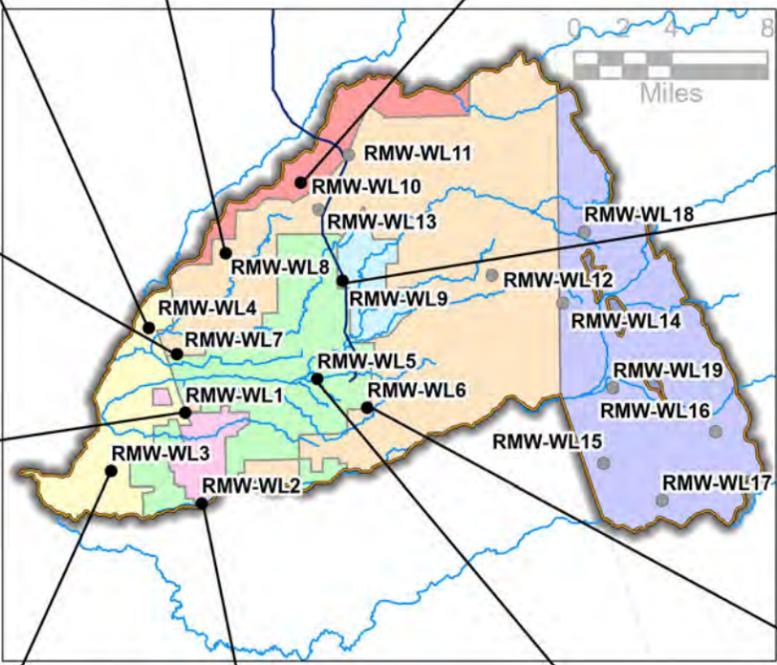
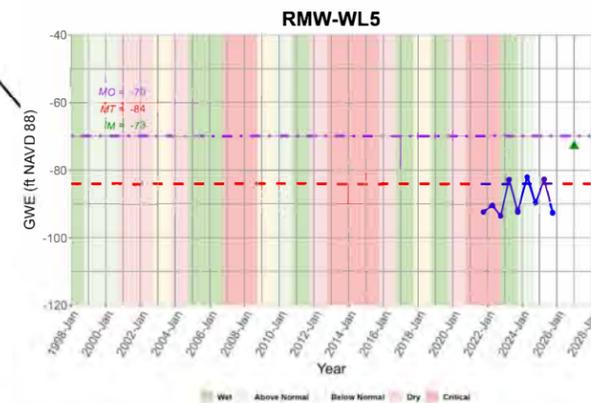
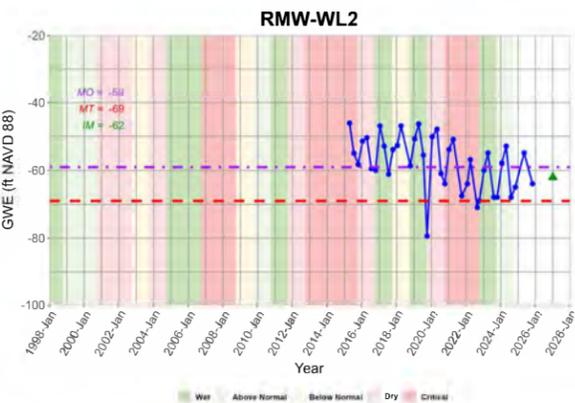
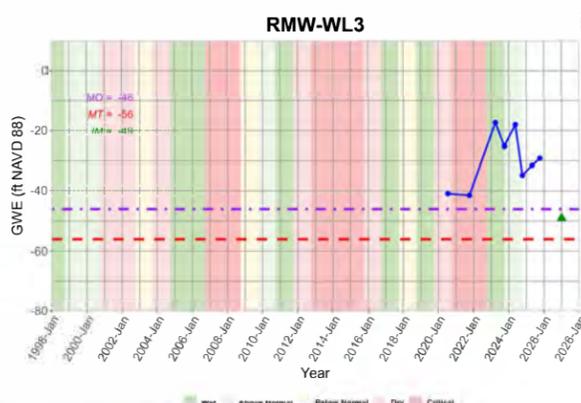
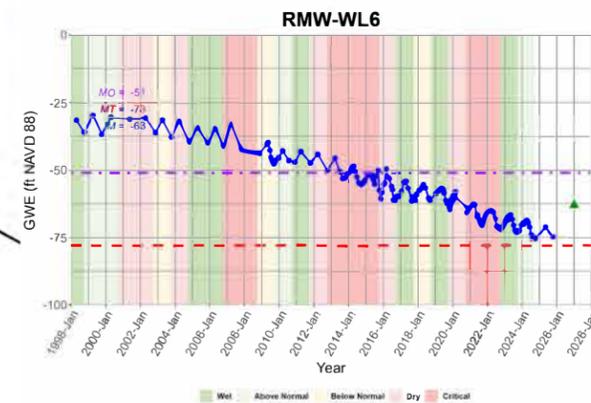
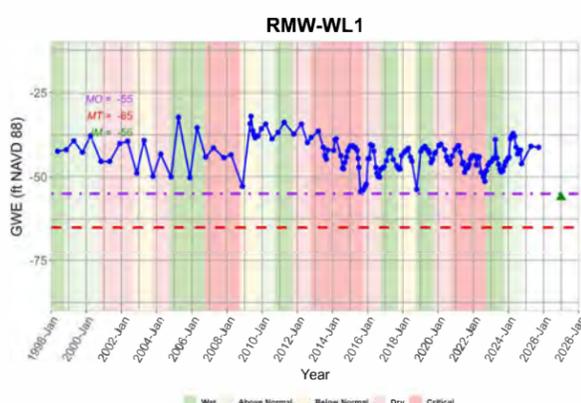
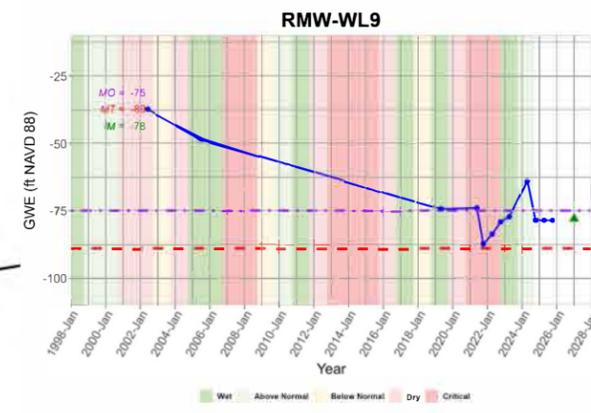
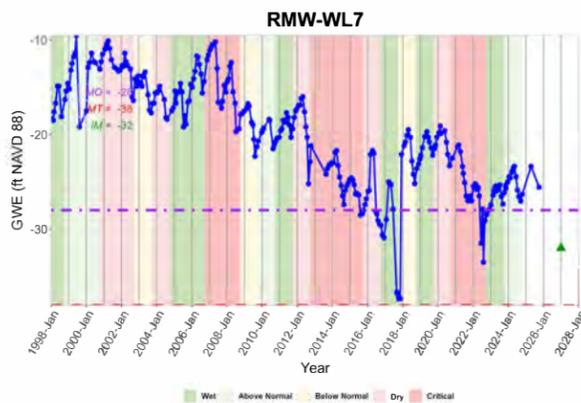
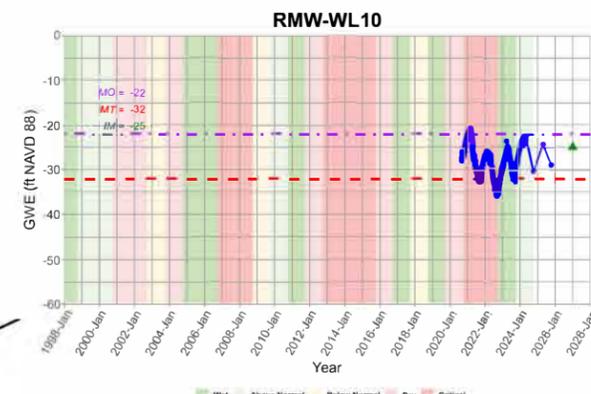
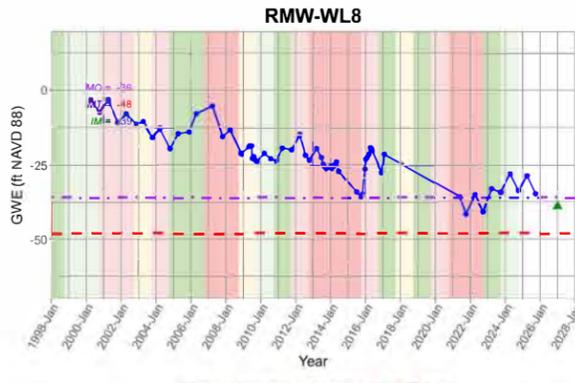
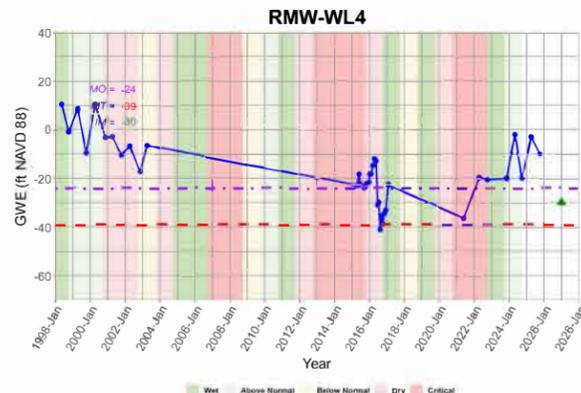
**Groundwater Elevation - Spring 2025**

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Cosumnes Groundwater Authority  
 Cosumnes Subbasin  
 March 2026  
 C20149.02

**Figure AR-3**

Path: X:\C20149\Map\_01\2025\11\ReportFigs.aprx



**Legend**

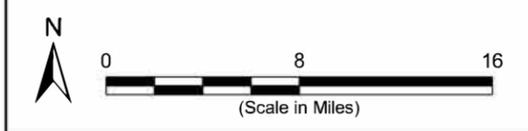
- Cosumnes Subbasin (5-022.16)
- Groundwater Sustainability Agency
  - Amador County Groundwater Management Authority
  - City of Galt
  - Clay Water District
  - Galt Irrigation District
  - Omochumne-Hartnell Water District
  - Sacramento County
  - Sloughouse Resource Conservation District
- County Line
- Major Stream
- Folsom South Canal
- RMW-WL with hydrograph shown
- RMW-WL with hydrograph shown on Figure 4b
- Groundwater Elevation
- MT
- MO
- IM
- Water Year Type
  - Wet
  - Above Normal
  - Below Normal
  - Dry
  - Critical

**Abbreviations**

ft NAVD 88 = feet above the North American Vertical Datum of 1988  
 GWE = Groundwater Elevation  
 IM = Interim Milestone  
 MO = Measurable Objective  
 MT = Minimum Threshold  
 RMW-WL = Representative Monitoring Well for Chronic Lowering of Water Levels

**Notes**

- All locations are approximate.
- See Figure AR-4b for RMW-WL11 through RMW-WL19.

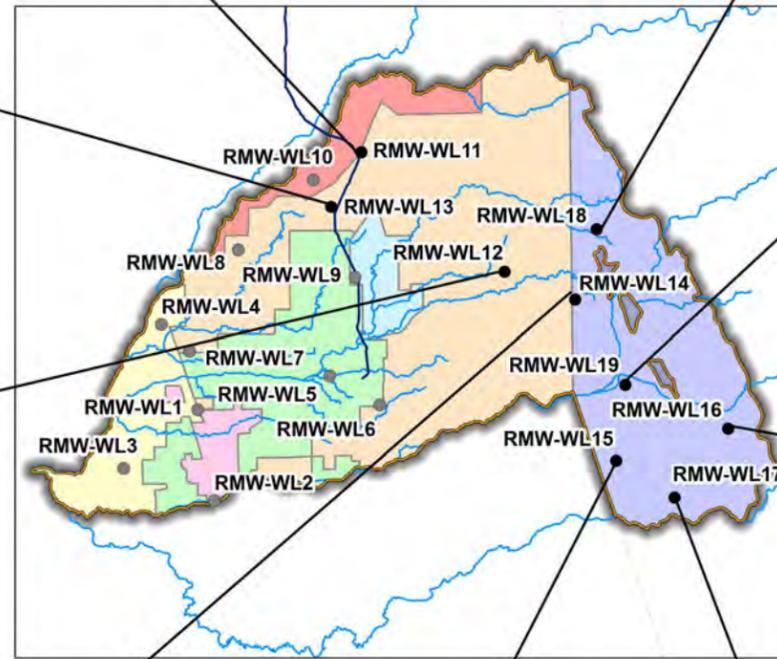
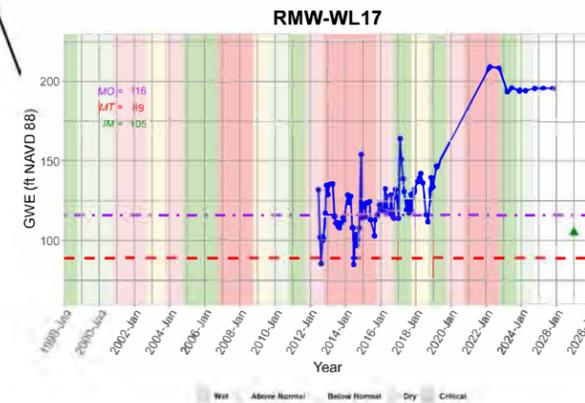
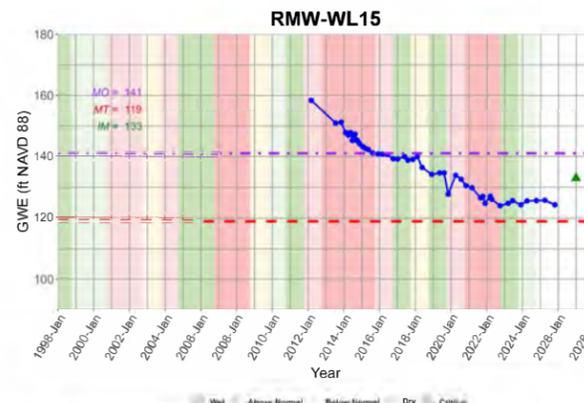
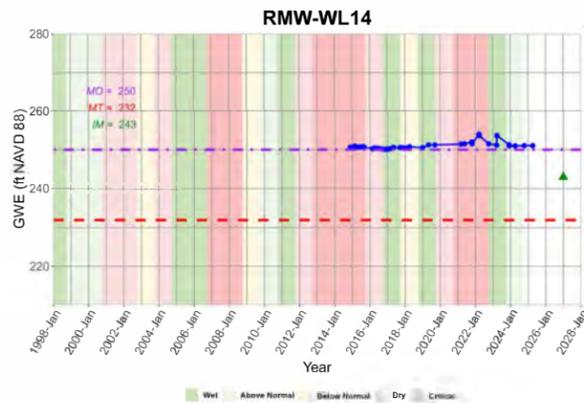
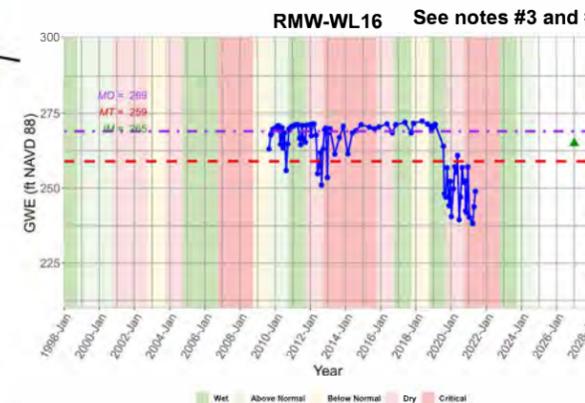
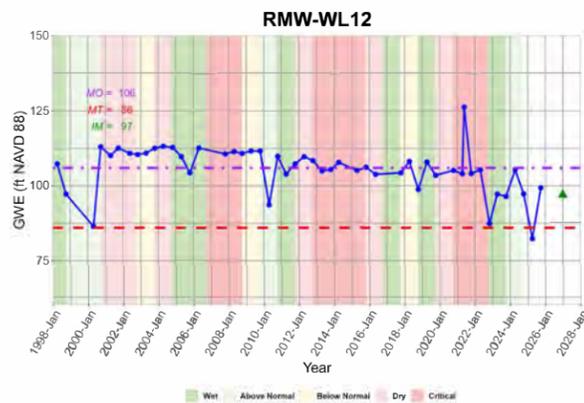
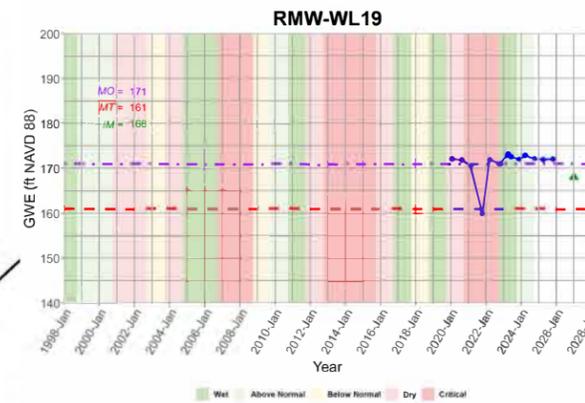
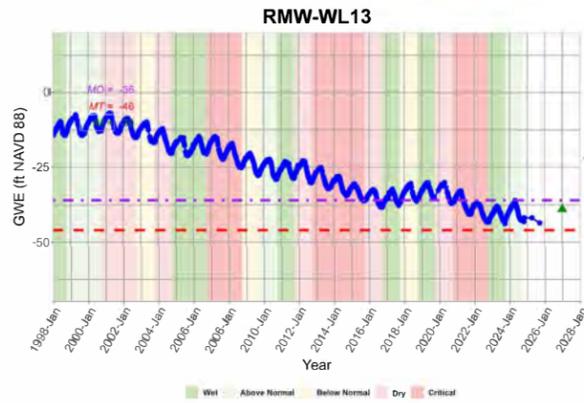
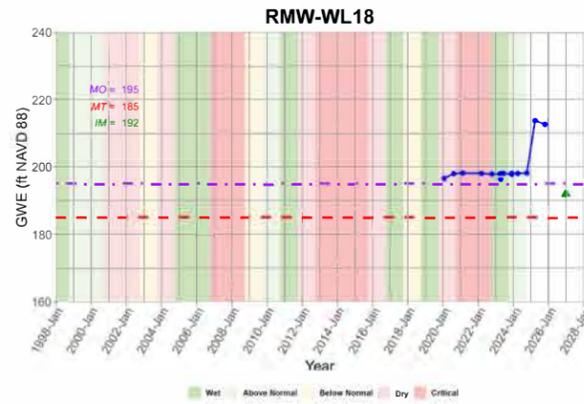
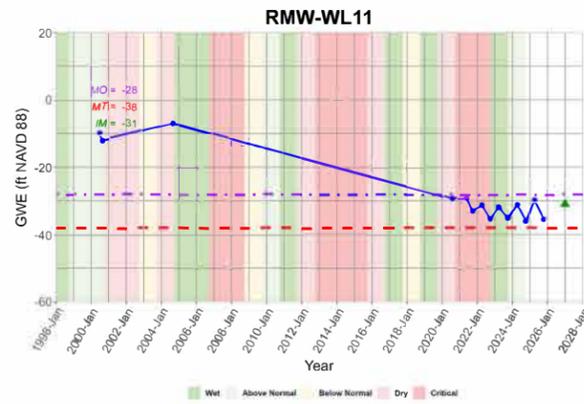


**DRAFT**

**Representative Monitoring Well - Hydrographs**

Cosumnes Groundwater Authority  
 Cosumnes Subbasin  
 March 2026  
 C20149.02

**Figure AR-4a**



**Legend**

- Cosumnes Subbasin (5-022.16)
- Groundwater Sustainability Agency**
- Amador County Groundwater Management Authority
- City of Galt
- Clay Water District
- Galt Irrigation District
- Omochumne-Hartnell Water District
- Sacramento County
- Sloughouse Resource Conservation District
- County Line
- Major Stream
- Folsom South Canal
- RMW-WL with hydrograph shown
- RMW-WL with hydrograph on Figure 4a
- Groundwater Elevation
- MT
- MO
- IM

**Water Year Type**

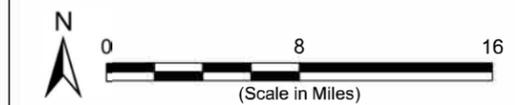
- Wet
- Above Normal
- Below Normal
- Dry
- Critical

**Abbreviations**

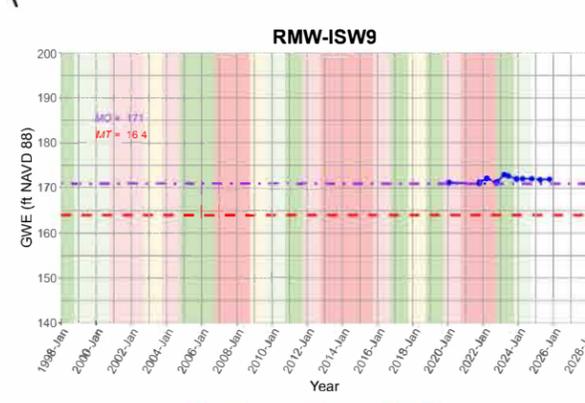
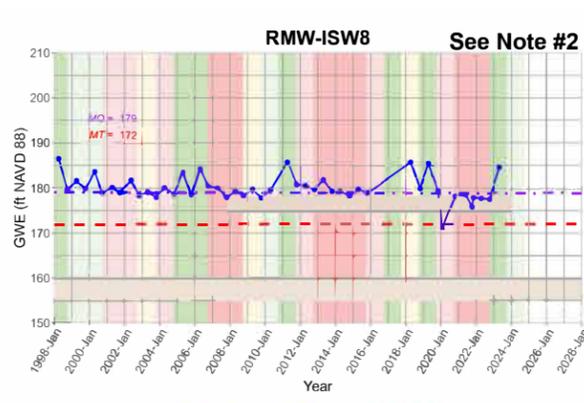
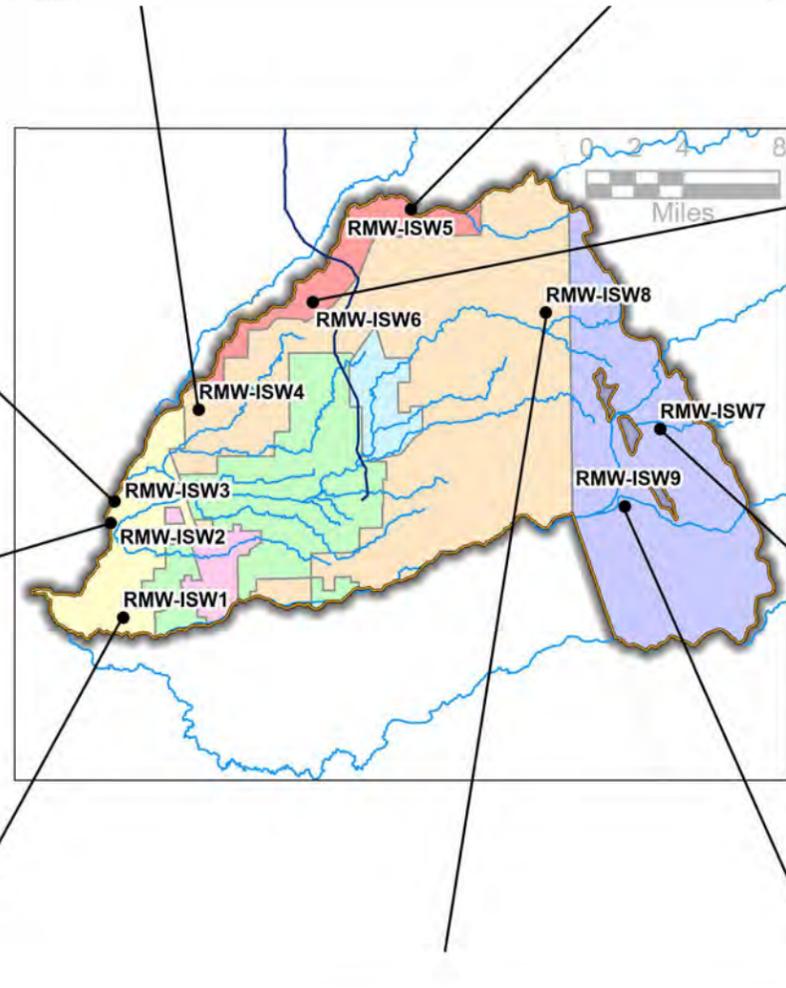
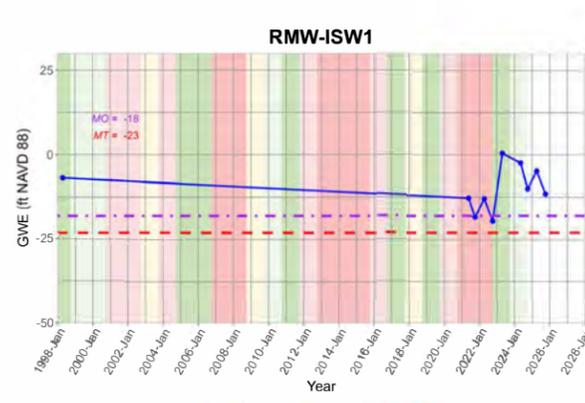
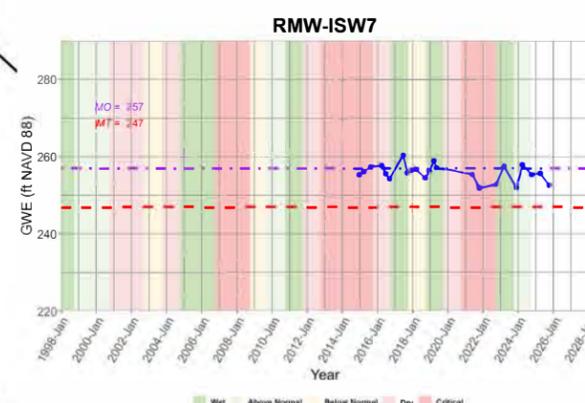
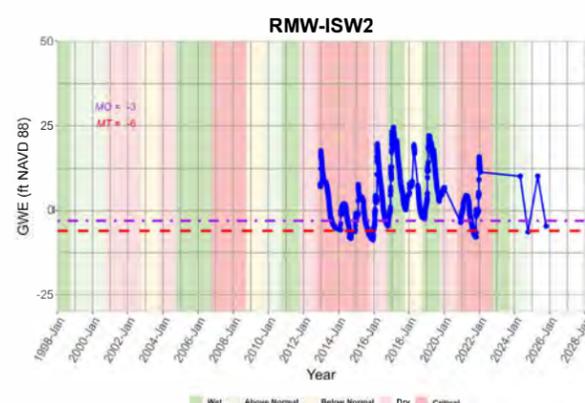
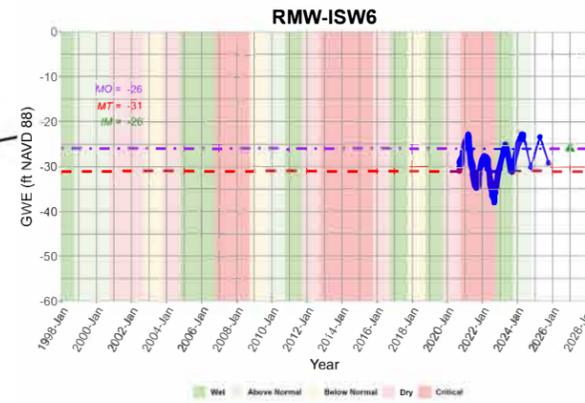
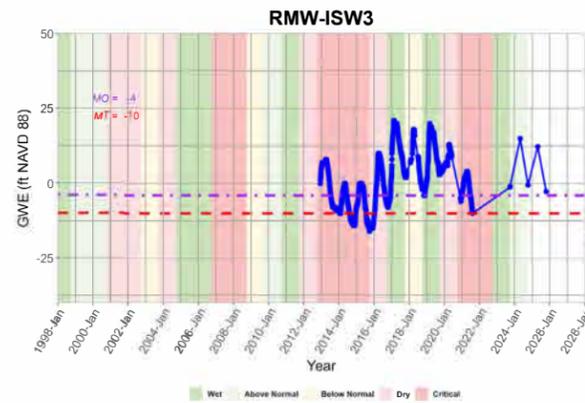
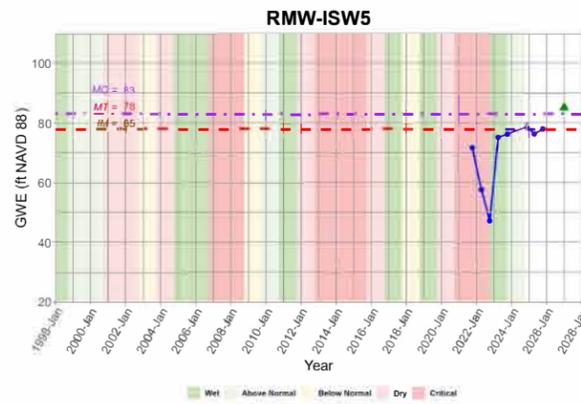
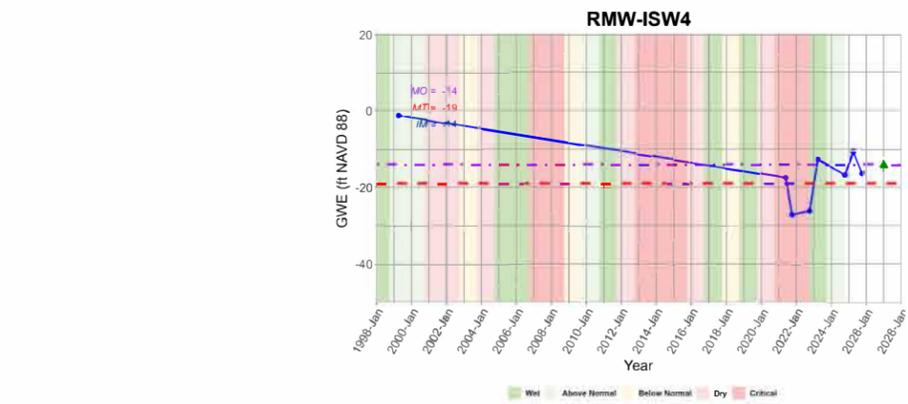
- ft NAVD88 = feet above the North American Datum of 1988
- GWE = Groundwater Elevation
- IM = Interim Milestone
- MO = Measurable Objective
- MT = Minimum Threshold
- RMW-WL = Representative Monitoring Well for Chronic Lowering of Water Levels

**Notes**

1. All locations are approximate.
2. See Figure AR-4a for RMW-WL1 through RMW-WL10.
3. Water levels were not measured in RMW-WL16 during Water Year 2025.
4. Change in water level trends starting in WY 2020.



**DRAFT** Representative Monitoring Well - Hydrographs



**Legend**

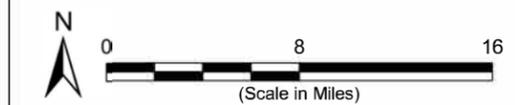
- RMW- ISW with hydrograph shown
- ▭ Cosumnes Subbasin (5-022.16)
- Groundwater Sustainability Agency
  - ▭ Amador County Groundwater Management Authority
  - ▭ City of Galt
  - ▭ Clay Water District
  - ▭ Galt Irrigation District
  - ▭ Omochumne-Hartnell Water District
  - ▭ Sacramento County
  - ▭ Sloughouse Resource Conservation District
- ▭ County Line
- Major Stream
- Folsom South Canal
- Groundwater Elevation
- - - MT
- - - MO
- ▲ IM
- Water Year Type
  - ▭ Wet
  - ▭ Above Normal
  - ▭ Below Normal
  - ▭ Dry
  - ▭ Critical

**Abbreviations**

- ft NAVD 88 = feet above the North American Datum of 1988
- GWE = Groundwater Elevation
- IM = Interim Milestone
- MO = Measurable Objective
- MT = Minimum Threshold
- RMW-ISW = Representative Monitoring Well for Interconnected Surface Water

**Notes**

1. All locations are approximate.
2. Water levels were not measured in RMW-ISW8 in Water Year 2025.

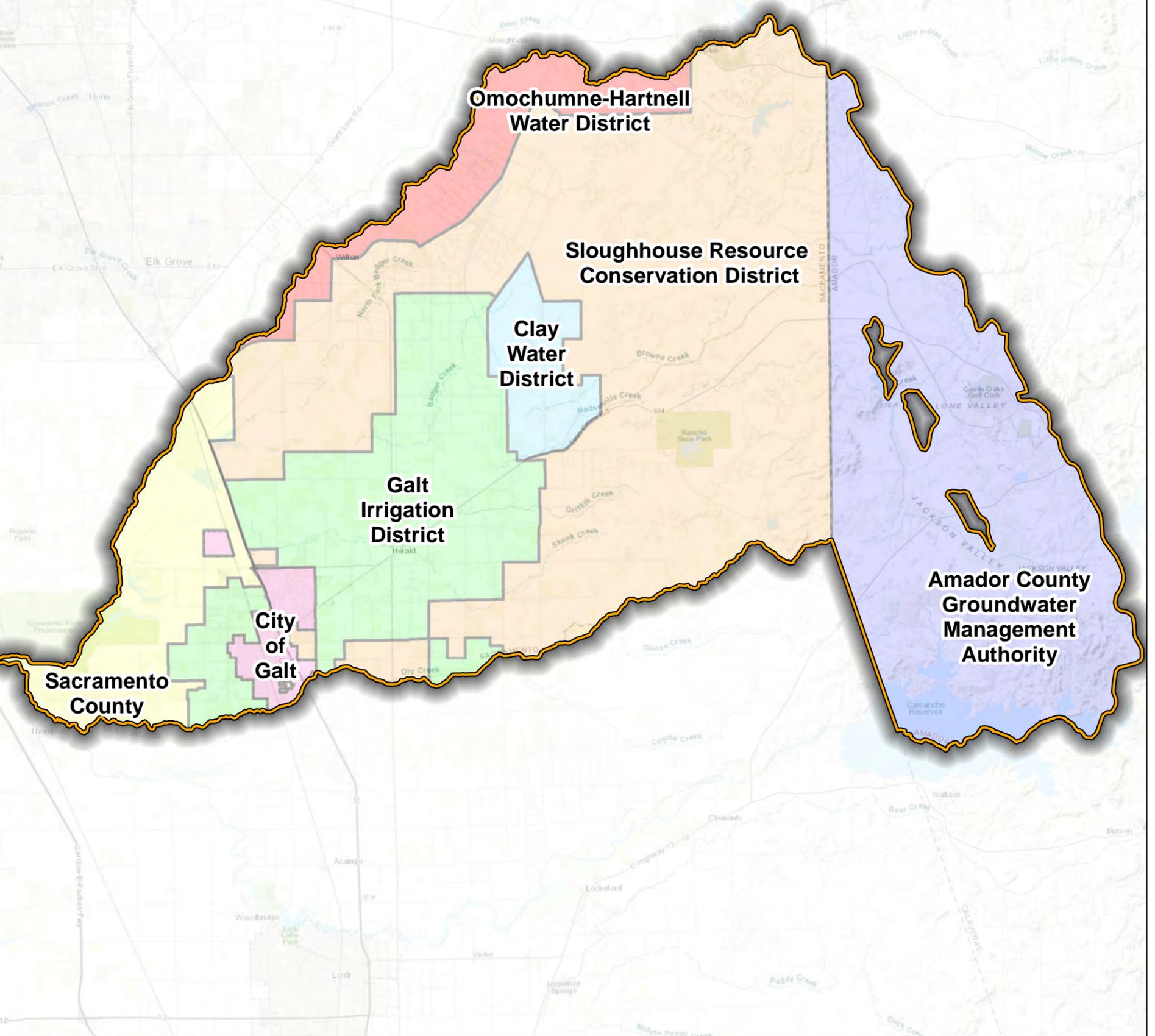


**DRAFT**

**Representative Monitoring Well - Hydrographs**

Groundwater Sustainability Agency	Total Estimated Extractions (AF)
Amador County Groundwater Management Authority	1,500
City of Galt <sup>(a)</sup>	4,900
Clay Water District	7,400
Galt Irrigation District	51,000
Omochumne-Hartnell Water District	6,600
Sacramento County	14,400
Sloughouse Resource Conservation District	38,800
<b>Total</b>	<b>124,600</b>

**Notes**  
(a) City of Galt GSA includes 4,400 AF of metered extractions and about 300 AF of estimated extractions.



- Legend**
- Groundwater Subbasin**
- Cosumnes Subbasin (5-022.16)
- Groundwater Sustainability Agency**
- Amador County GMA
  - City of Galt
  - Clay WD
  - Galt ID
  - Omochumne-Hartnell WD
  - Sacramento County
  - Sloughouse RCD

- Abbreviations**
- AF = acre feet
  - DWR = California Department of Water Resources
  - GMA = Groundwater Management Authority
  - ID = Irrigation District
  - RCD = Resource Conservation District
  - WD = Water District

**Notes**  
1. All locations are approximate.

- Sources**
- Basemap is ESRI's ArcGIS Online world topographic map, obtained 14 February 2024.
  - DWR groundwater basins are based on the boundaries defined in California's Groundwater, Bulletin 118 - 2018.



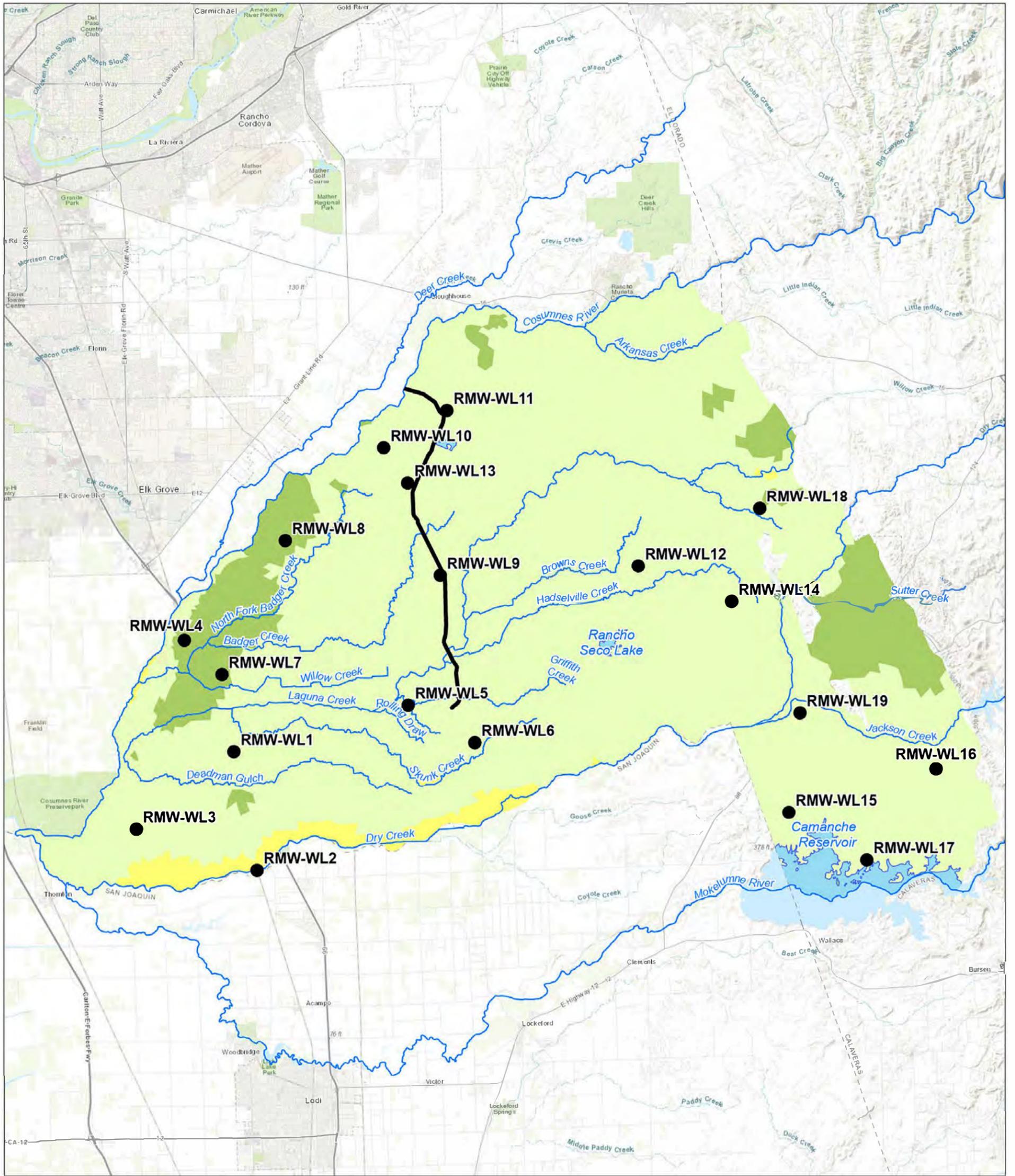
**DRAFT** **General Locations and Volumes of Annual Extractions Water Year 2025**



Cosumnes Groundwater Authority  
Cosumnes Subbasin  
March 2026  
C20149.02

**Figure AR-6**

Path: X:\C20149.01\Map\2024\01\Figure AR-6\_Location and Groundwater Production Supply Wells\_WY 2023.mxd



**Legend**

- RMW-WL
- Major Stream
- Folsom South Canal
- Lake and Reservoir

**Storage Change (ft)**

- < -0.25
- 0.25 - 0.00
- 0.00 - 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- > 1.0

**Abbreviations**

- CoSANA = Cosumnes, South American, and North American model
- DWR = California Department of Water Resources
- ft/yr = feet per year
- RMW-WL = Representative Monitoring Well for Chronic Lowering of Water Levels

**Notes**

1. All locations are approximate.
2. CoSANA calculates the volume of storage change within model element, and the element-by-element change was normalized by dividing the volumetric change in storage by the area of each respective model element and the results mapped in units of feet.

**Sources**

1. Basemap is ESRI's ArcGIS Online world topographic map, obtained 11 February 2026.
2. DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - Final Prioritization, dated February 2019.
3. Storage change calculated by the updated numerical model (Appendix M "CoSANA - An Integrated Water Resources Model of the Cosumnes, South American, and North American Groundwater Subbasins, November 2021" in "Groundwater Sustainability Plan for the Cosumnes Subbasin, December 2021").

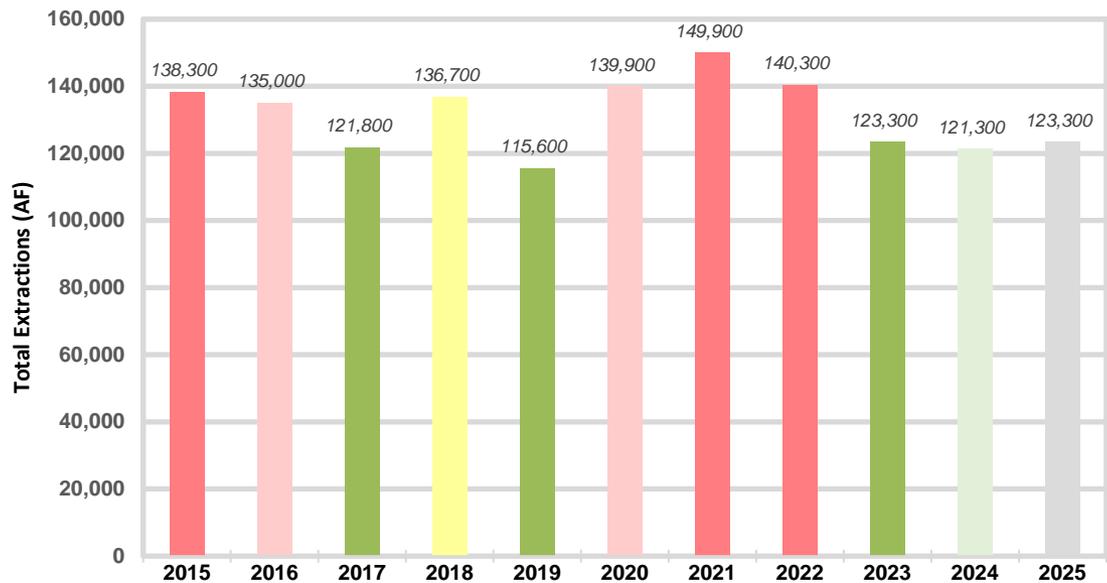
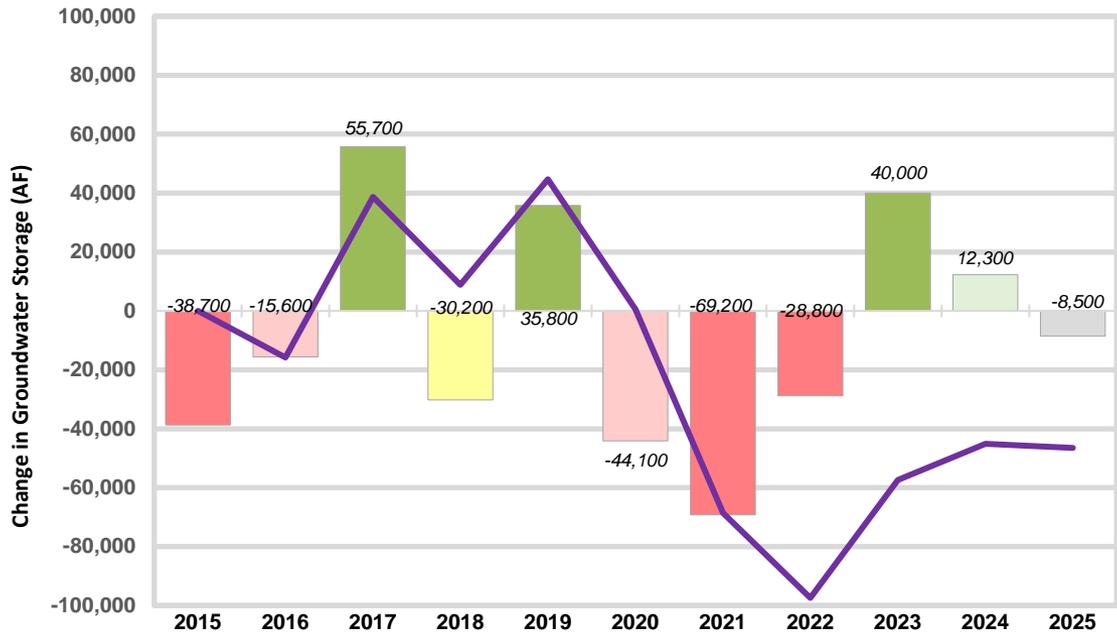


**DRAFT**

Map Showing the Distribution of Model-Calculated Changes in Groundwater Storage between October 1, 2024 through September 30, 2025 (Water Year 2025), Normalized by Model Element Area and Reported in feet  
Cosumnes Groundwater Authority  
Cosumnes Subbasin  
March 2026  
C20149.02

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**Figure AR-10**



**Legend**

**DWR Water Year Type and Annual Groundwater Storage (AF)**

- Wet
- Above Normal
- Below Normal
- Dry
- Critical
- Unclassified
- Cumulative Storage Change Since 2015 (AFY)
- Estimated Extractions (AFY)

**Abbreviations**

AFY = acre-feet per year  
 DWR = California Department of Water Resources  
 WY = Water Year

**Notes**

1. Water Year is defined as the October of the previous year through September of the Current year.
2. All values are rounded to the nearest 100 AF.

**Sources**

1. DWR Water Year type for 2015-2024 is from DWR’s Water Year Hydrologic Classification Indices For the San Joaquin Valley
2. DWR has not released the Water Year 2025 year type; this classification will be updated in the next Annual Report.

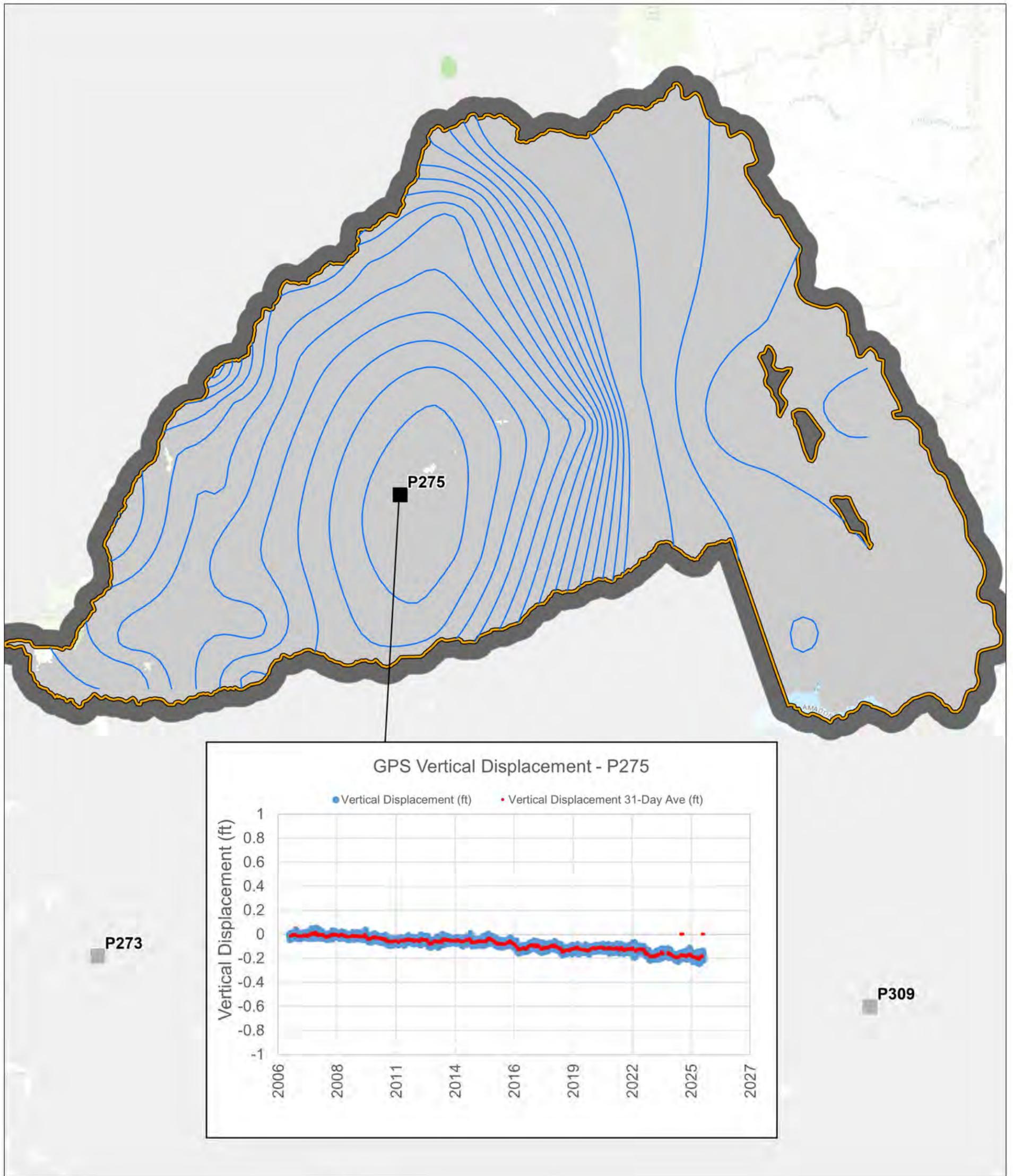
**Annual Change in Groundwater Storage, Groundwater Use, and DWR Water Year Type**

**DRAFT**



Cosumnes Groundwater Authority  
 Cosumnes Subbasin  
 March 2025  
 C20149.02

**Figure AR-10**



**Legend**

- Subsidence Monitoring Station
- Fall 2024 GWE (ft NAVD 88)

**Groundwater Subbasin**

- ▭ Cosumnes Subbasin (5-022.16)

**TRE Altamira InSAR Vertical Displacement WY 2025**

- < - 1 ft
- - 1.0 to - 0.8 ft
- - 0.8 to - 0.6 ft
- - 0.6 to - 0.4 ft
- - 0.4 to - 0.2 ft
- - 0.2 to - 0.1 ft
- - 0.1 to 0.1 ft
- > 0.1 ft

**Abbreviations**

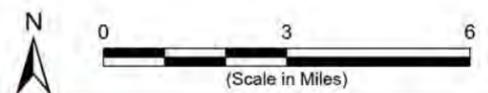
- DWR = California Department of Water Resources
- ft = feet
- ft NAVD 88 = feet above the North American Vertical Datum of 1988
- GPS = Global Positioning System
- GWE = Groundwater Elevation
- InSAR = Interferometric Synthetic Aperture Radar
- SGMA = Sustainable Groundwater Management Act

**Notes**

1. All locations are approximate.
2. TRE Altamira InSAR data displayed shows October 2024 through October 2025.

**Sources**

1. Basemap is ESRI's ArcGIS Online world topographic map, obtained 27 February 2026.
2. DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - Final Prioritization, dated February 2019.
3. GPS subsidence monitoring data and Vertical Displacement data are from the SGMA Data Viewer: <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#andsub>
4. GWE contours from Figure AR-2.



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**Subsidence Monitoring WY 2025**

Cosumnes Groundwater Authority  
Cosumnes Subbasin  
March 2026  
C20149.02

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**Figure AR-12**