Cosumnes Groundwater Authority
Meeting of the Board of Directors
Agenda

When: 8:30 am – 10:30 am, Wednesday, March 5, 2025

Where: Galt Police Department Community Room
455 Industrial Drive
Galt, CA 95632

Zoom: Via Zoom: https://us02web.zoom.us/j/82209445100
Meeting ID: 822 0944 5100
Call in Number: 1(669)-900-9128

PUBLIC COMMENT – Any member of the public may address the Board concerning any matter on the agenda before or during its consideration of the matter. Public comment is limited to three (3) minutes per person. For good cause, the Board Chair may waive these limitations.

ACCESSIBILITY - If you have a disability and require a reasonable accommodation to fully participate in this event, please contact CGA Staff before the day of the meeting via email [info@CosumnesGroundwater.org] or telephone [916-526-5447] to discuss your accessibility needs.

Call to Order *(10 minutes)*

1. Introductions
    a. Determine if Quorum is Present

Consent Calendar

2. Consent Items *(10 minutes)*
    a. Agenda – March 5, 2025
    b. Minutes - February 5, 2024
    c. Financial/Treasurer's Report – March 2025

Regular Business Action Items

3. Final Member Contribution Funding Agreement FY 24-25

4. Water Year 2024 Annual Report

Public Comment on Non-Agenda Items (*Limit of 3 minutes per speaker)*

5. Public Comment: *Comment will be received for items not on the agenda, but within the jurisdiction of the agency. The Board will hear comments but may not act on issues raised on non-agenda items*.

Identification of items for future meetings

The Board approved the following future agenda items by consensus:

-

Adjourn Meeting

Cosumnes Groundwater Authority
Board of Directors Meeting

Meeting Minutes
February 5, 2025 - 8:30am

*** A recording of this meeting can be found on the CGA website at:*
https://www.cosumnesgroundwater.org/meetings/

Call to Order: **8:37am**

1) Introductions / Determine if Quorum is Present

Directors in Attendance: Lindsay Carter, Rick Ferriera, Gary Silva, Russ Parker, John Griffin, Eric Wohle,Herb Garms, Mark Stretars, Chris Hunley, Leo VanWarmerdam, Pat Hume

Regular Business Action Items

2) Consent Items

a. Agenda – February 5, 2025
b. Minutes – December 4, 2024
c. Financial Report – February
*Treasurer's Report

Director Hunley moved to approve the consent calendar.
Director Sretars seconded the motion.
The motion passed with all in favor.

Treasurer Rick Ferriera discussed the current financial status of the CGA including recent invoices and the percentage of the CGA's budget that has been spent by this date. He noted that we are well under budget for the FY 24-25 but should expect some larger invoices in Spring relating to the Annual Report, groundwater monitoring and more frequent CGA meetings, as needed. It was suggested that the Board be able to view the staffing documentation that details the monthly tasks the Secretary tends to. Staff will share this with the Board at the next meeting.

Regular Business Action Items

3) Draft Member Contribution Funding Agreement FY2 4-25

Staff presented the latest, amended version of the Member Contribution Funding Agreement for the fiscal year 24-25. Treasurer Ferriera provided an overview on the document and tied it back to the budget adopted in June 2024, as well as to the Rate and Fee Study which outlines the amount GSA's should contribute and how much they will retain. It was suggested that the Rate and Fee Study table be added as Exhibit 3 to the Funding Agreement. There was a suggestion from legal to make this document a long-term agreement moving forward so the Board does not have to worry about passing a new agreement every year.
The Board discussed the Reserves for CGA and how much may be needed to cover the 5-Year GSP Evaluation as well as to cover GSA's if they fall short on their contribution amount due to

appeals. The 5% escalator written into the Rate and Fee Study was also discussed as GSA's may choose to increase their fees by 5% on a yearly basis for the next 5 years. It was made clear to the Board that no one is being asked to pay early, and that the fees in their totality, are due by June 30, 2025, but can be paid earlier if a GSA chooses to. Finally, it was recommended that staff look into creating a Reserve Policy.

Director Ferriera moved to approve the FY 24-25 Funding Agreement with the addition of the Exhibit 3 Table to the document.
Director Hunley seconded the motion.
The motion passed with all in favor.

4) Groundwater Sustainability Plan (GSP) 5-Year Evaluation

In reviewing the original GSP that was submitted, staff and Board members have acknowledged that adjustments and/or plan amendments may need to be made in terms of originally proposed actions, possible grant programs and overall financial proposals. It was decided at the December 2024 meeting that any plan amendments would be made after our submission of the evaluation. However, we do need to show progress made towards the Project and Management Actions (PMA's) laid out in the GSP. The Board discussed what is needed to move forward, current projects such as the Harvest Water Project and the County's Cosumnes Mult-Benefit Project, and the EKI updates received by GSA's. This was a discussion item and no action was taken.

5) Water Coalition and Home Buy-In Discussion

This item was tabled.

Informational Items

6) DWR North Central Regional Office Update

DWR update provided via a memo in the Agenda Packet.

7) SGMA/GSP Implementation Update

EKI provided a 3-month look ahead as well as the Recommended Corrective Actions (RCA's) which DWR requires the GSA's to address before the GSP evaluation. EKI provided an overview on the RCA's including an adjusted timeline for the Annual Report, to be presented at a Special March meeting. The Board discussed creating a RFP/RFQ for consultants who can assist us with the 5-year Evaluation preparation and completion/submission. The Board provided direction to EKI to put together a scope and price for the Recommended Corrective Actions as they relate to the GSP requirements and Annual Report needs.

8) Committee Reports

The Outreach and Engagement Committee Chair, Teresa Flewellyn, presented a report on the upcoming CGA luncheon to be held on February 20, 2025 at Herald Fire Hall. A flyer for the Luncheon was distributed and the Board was encouraged to share the invitation and RSVP by February 13th. There will be a taco bar, raffle prizes, a presentation from the Sloughhouse RCD Water Efficiency Technician and desserts/beverages. Graciously, Pat Hume/Sacramento County has donated $1,000 to the CGA for the Luncheon event. The updated 2024 Wrap Up CGA Newsletter was also shown and distributed to the Board.

9) CGA Staff Reports

Staff reported on the Special meeting to be held on March 5, 2025 which will be a shorter, condensed meeting to discuss the Annual Report and the Funding Agreement. The Board agreed that a special meeting should occur and staff sent out the official calendar invitation.

10) CGA Counsel Reports

None.

11) Director/Member GSA Comments

- Rick Ferriera reported that the Amador County GMA has a newly elected chair (Russ Parker) and that they will be looking to have discussions with local tribes and the City of Ione for potential partnerships/collaborations.
- Leo VanWarmerdam reported that he toured the sewer treatment plant and was interested in the two water tables and the Mehrten Foundation and how they impact or potentially do not impact shallow wells and flooding.
- Chris Hunley provided an overview of his position at the County which is the SCGSA Manager, working with all Sacramento County basins as needed and coordinating with the Planning Department and Emergency Management Department (well-permitting agency).

13) Upcoming Agenda Items

The following items were identified:

- Membership Contribution Agreement (March 5th Meeting)
- Annual Report (March 5th Meeting)
- Draft FY 25-26 Budget (April Meeting)
- City of Galt Presentation (April Meeting)
- RFI/RFQ for GSP Consultants (April Meeting)

Public Comment on Non-Agenda Items

14) Public Comment

Adjourn Meeting

Director Carter adjourned the meeting by consensus at 11:40 am.

REGULAR MEETINGS OF CGA ARE HELD ON THE 1ST WEDNESDAY OF EVERY OTHER MONTH. THE NEXT MEETING WILL BE HELD ON MARCH 5, 2025 AT 8:30AM.

Cosumnes Groundwater Authority

Bills to be paid

All Dates

TRANSACTION TYPE	AMOUNT	OPEN BALANCE
EKI Environment & Water (650) 292-9100		
Bill	13,473.72	13,473.72
Total for EKI Environment & Water	**$13,473.72**	**$13,473.72**
Sloughhouse Resource Conservation District (916) 526-5447		
Bill	3,750.00	3,750.00
Total for Sloughhouse Resource Conservation District	**$3,750.00**	**$3,750.00**
TOTAL	**$17,223.72**	**$17,223.72**

Cosumnes Groundwater Authority

Balance Sheet

As of February 27, 2025

	TOTAL
ASSETS	
Current Assets	
Bank Accounts	
Money Market	272,459.68
Public Checking (4246) - 1	112,426.32
Total Bank Accounts	**$384,886.00**
Accounts Receivable	
Accounts Receivable (A/R)	1,000.00
Total Accounts Receivable	**$1,000.00**
Total Current Assets	**$385,886.00**
TOTAL ASSETS	**$385,886.00**
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable (A/P)	17,223.72
Total Accounts Payable	**$17,223.72**
Total Current Liabilities	**$17,223.72**
Total Liabilities	**$17,223.72**
Equity	
Opening Balance Equity	0.00
Retained Earnings	420,927.65
Net Income	-52,265.37
Total Equity	**$368,662.28**
TOTAL LIABILITIES AND EQUITY	**$385,886.00**

Cosumnes Groundwater Authority

Budget vs. Actuals: Budget_FY25_P&L - FY25 P&L

July 2024 - June 2025

	TOTAL			
	ACTUAL	BUDGET	OVER BUDGET	REMAINING
Income				
Interest Income	1,898.49		1,898.49	-1,898.49
Services	29,028.00		29,028.00	-29,028.00
Total Income	**$30,926.49**	**$0.00**	**$30,926.49**	**$ -30,926.49**
GROSS PROFIT	**$30,926.49**	**$0.00**	**$30,926.49**	**$ -30,926.49**
Expenses				
5000 Staff Personnel Expenses (Contract)				
Personnel - SRCD	33,750.00	70,000.00	-36,250.00	36,250.00
Total 5000 Staff Personnel Expenses (Contract)	**33,750.00**	**70,000.00**	**-36,250.00**	**36,250.00**
5100 Legal Services	3,678.00	15,000.00	-11,322.00	11,322.00
5200 Public Outreach	452.34	10,000.00	-9,547.66	9,547.66
5400 Annual Report Technical Support	17,649.58	33,000.00	-15,350.42	15,350.42
5410 Data Management System		4,000.00	-4,000.00	4,000.00
5420 Other Technical Support	14,812.72	50,000.00	-35,187.28	35,187.28
5430 Monitoring	2,127.58	4,500.00	-2,372.42	2,372.42
5600 Financial Audit and Accounting Services	8,925.00	10,000.00	-1,075.00	1,075.00
5640 Funding Exploration		5,000.00	-5,000.00	5,000.00
5700 Data Gaps		30,000.00	-30,000.00	30,000.00
5800 Office Supplies & Software	1,796.64	5,000.00	-3,203.36	3,203.36
5900 Folsom Water Application		5,000.00	-5,000.00	5,000.00
Total Expenses	**$83,191.86**	**$241,500.00**	**$ -158,308.14**	**$158,308.14**
NET OPERATING INCOME	**$ -52,265.37**	**$ -241,500.00**	**$189,234.63**	**$ -189,234.63**
NET INCOME	**$ -52,265.37**	**$ -241,500.00**	**$189,234.63**	**$ -189,234.63**

Cosumnes Groundwater Authority
Board of Directors Meeting

Agenda Date:	March 5, 2025
Agenda Item #:	1
Agenda Item Subject:	Updated Member Contribution Funding Agreement FY 24-25

To:	CGA Board of Directors
From:	CGA Staff

Background

In June 2024, the CGA Board adopted the Fiscal Year 2024-2025 Budget. CGA staff, along with assistance from legal, based on past direct from the Board, is presenting to the Board the updated Member Contribution Funding Agreement for FY 24 – 25. This Agreement has been established based on the updated fee study that was implemented this fiscal year.

A draft of this agreement was given to all Board members for consideration at their respective GSA meetings in February.

Galt Irrigation District, Clay Irrigation District and Sloughhouse RCD requested language changes to Terms #2 and #3, including potential reductions in contributions and clarity on in-kind contributions for FY 24/25. Omochumne Hartnell Water District requested changes to the Exhibit 1 to denote that the overage of collected funds be dedicated to restricted reserve for the 5-year plan in the budget, and to add a percentage column to Exhibit 2, and to eliminate Exhibit 3 to avoid confusion on the fee collection and budget. These changes are reflected in this new version of the document for discussion by the Board.

Attachment: Member Contribution Funding Agreement FY 24-25

Recommendations

- Adopt the Fiscal Year 2024-2025 Member Contribution Agreement.

COSUMNES GROUNDWATER AUTHORITY MEMBER AGENCY CONTRIBUTION AGREEMENT

THIS AGREEMENT is made this_____, 2025 between COSUMNES GROUNDWATER AUTHORITY ("CGA"), a California Joint Powers Authority, by and through its Board of Directors, and the seven Groundwater Sustainability Agencies ("GSAs") of the Cosumnes Subbasin, which are: Amador County Groundwater Management Authority ("Amador"), City of Galt ("City"), Clay Water District ("Clay"), Sacramento County Groundwater Sustainability Agency ("County"), Galt Irrigation District ("Ga1t ID"), Omochumne-Hartnell Water District ("OHWD"), and Sloughhouse Resource Conservation District ("Sloughhouse RCD"), each of which is a "Party" to or a "Member" of this Agreement.. Each of the parties to this Agreement shall individually be referred to as the "Party," or collectively, as the "Parties." This Agreement is effective as of the date the last Party signs the Agreement.

RECITALS:

WHEREAS, the CGA was formed to implement certain aspects of the Sustainable Groundwater Management Act ("SGMA") and the Cosumnes Groundwater Sustainability Plan ("GSP"); and

WHEREAS, Section 5.2 of the Joint Powers Agreement forming CGA directs that members "shall share in the general operating and administrative and project costs of operating the Authority, as outlined in the annual budget documents;" and

WHEREAS, the JPA Agreement further provides that each Member will be responsible for contributing its share of such costs through an agreed upon contribution; the implementation of a groundwater fee program; or other written agreements; and

WHEREAS, consistent with that direction, the Members entered into an Initial Funding and Revenue Agreement for Implementation of a Groundwater Sustainability Plan in 2021, and have provided annual contributions under that structure since that time, based on a cost allocation of roughly $10/irrigated acre per member; and

WHEREAS, each Member's share of costs of the Authority, not otherwise covered by fees directly collected by the Authority, shall be assessed twice yearly pursuant to Section 5.2(f) of the JPA; and

WHEREAS, CGA approved its Cosumnes Groundwater Authority Rate and Fee Study in April 2024 ("2024 Fee Study"), expanding upon the prior irrigated acreage to provide specific consideration for residential, commercial, and public water system use in calculating groundwater related fees.

WHEREAS, the CGA Board of Directors adopted its Fiscal Year 2024-2025 budget in June 2024; a summary of that budget is attached hereto as Exhibit 1.

NOW THEREFORE, the Parties, on the terms and conditions herein set forth, hereby agree as follows:

TERMS:

1. **Member FY 2024-2025 Contributions:** The Members' 2024-2025 budgeted contributions are set forth in Exhibit 2 ("2024-2025 Cosumnes Groundwater Authority Income"). CGA will issue invoices for each Party's 2024-2025 member contributions based on the amounts identified in Exhibit 2. Invoices will be issued in February 2025 and June 2025, with final payment due in full on or before July 1, 2025.

2. **Adjustments to FY 2024-2025 Member Contribution Obligation:** The Member contributions set out in Exhibit 2 are based on Members' allocated collections under the 2024 Fee Study, adjusted based on feedback from the Members during the 2024-2025 Budget development process.

    a. Excess Contributions: Exhibit 2 anticipates Member contributions in excess of the 2024-2025 budgeted CGA expenses. Each Member's contribution will be applied first to the proportionate share of budget attributable to that member. Collections in excess of actual expenses will be deposited into a restricted reserve, for use in the preparation of the GSP 5-year Update.
    b. Reductions in Contributions: In the event that any Member is unable to collect its budgeted contribution, that Member must provide the Board with justification for the reduced contribution including documentation to support the reduction, including, but not limited to landowner groundwater fee appeals.

3. **In-Kind Contributions:** No in-kind contributions will be collected for Fiscal Year 2024-2025.

4. **Agreement Term:** This Agreement sets out Members' FY 2024-2025 Member contributions. It may be modified, amended, or extended by written agreement of the Parties.

SIGNED:

Lindsey Carter, President **Cosumnes Groundwater Authority**	**Date:**

President **Amador County Groundwater** **Management Authority**	**Date:**
Director of Public Works **City of Galt**	**Date:**
President **Clay Water District**	**Date:**
Representative **Sacramento County Groundwater** **Sustainability Agency**	**Date:**
President **Galt Irrigation District**	**Date:**
President **Omochumne-Hartnell Water District**	**Date:**

President
Sloughhouse Resource Conservation District

Date:

EXHIBIT 1

FY 2024-2025 Cosumnes Groundwater Authority Budget

Adopted June 2024

Regulatory and Operational Budget

Activity	FY 24-25
Personnel	$70,000
Legal	$15,000
Public Outreach Supplies	$10,000
Annual Report	$33,000
Data Management System	$4,000
EKI GSP Technical Support	$50,000
Groundwater Monitoring	$4,500
Office Supplies, Subscriptions & Miscellaneous	$5,000
Financial Audit	$10,000
Grant Funding Exploration	$5,000
Data Gaps	$30,000
Folsom Water Application	$5,000
Reserves	$50,000
Restricted Reserves – 5 year GSP	$185,430
Totals	**$476,930**

EXHIBIT 2

FY 2024-2025 Cosumnes Groundwater Authority Income

Revenue - Member Contributions

GSA	FY 24-25 Contributions	Percentage
City of Galt	**$20,376**	**4.19%**
Amador CGMA	**$10,558**	**2.17%**
Galt Irrigation District	**$191,677**	**39.36%**
Clay Water District	**$15,003**	**3.08%**
OH Water District	**$31,352**	**6.44%**
Sloughhouse RCD	**$166,194**	**34.13%**
County of Sacramento	**$51,770**	**10.63%**
Total	**$486,930**	**100%**

Cosumnes Groundwater Authority
Board of Directors Meeting

Agenda Date:	March 5, 2025
Agenda Item #:	2
Agenda Item Subject:	Water Year 2024 Draft Annual Report
To:	CGA Board of Directors
From:	EKI

Background

EKI Environment & Water has worked to complete Water Year 2024 (October 1, 2023 – September 30, 2024) Annual Report as required by SGMA. The Annual Report shall be submitted to DWR before April 1st of each year. GSA's are encouraged to provide comments and submit questions regarding the draft Annual Report to CGA Staff and EKI up until Friday, March 14. EKI will then finalize the report during the week of 3/17 - 3/21 to prepare it for submission.

The WY 2024 report is summarized below:

Lowering Groundwater Levels: No Undesirable Results are reported. Undesirable Result is defined when minimum thresholds are exceeded in 25% or more of the RMW-WLs (5 out of 19) for two consecutive years. Minimum Thresholds (MT's) declined in one well in the Fall but increased to above the MTs in the Spring.

Land Subsidence: No Undesirable Results reported. Estimated subsidence was between –0.1 ft and 0.1 ft and remains a low concern for the Basin.

Degraded Water Quality: No Undesirable Results reported. Undesirable Result is defined when MTs are exceeded 25% or more of the RMW-WQ (4 out of 14) for two consecutive years. One well exceeded the MT for Arsenic and one other well exceeded the MT for Arsenic and TDS. The Nitrate concentration in samples from all wells were below the MT.

Interconnected Surface Waters: No Undesirable Results reported. Undesirable Result is defined when water levels decline below the MTs in or more of the nine RMW-ISWs for two consecutive years. Water levels in one well was below the MT's in the Fall for the fifth consecutive year and was not measured in the Spring.

Attachment: Draft 2024 Water Year Annual Report
Draft Figures for WY 2024 Annual Report

WATER YEAR 2024 ANNUAL REPORT

Cosumnes Groundwater Authority
Cosumnes Subbasin

DRAFT | February 2025
EKI C20149.02

EKI ENVIRONMENT & WATER, INC.
www.ekiconsult.com
2001 Junipero Serra Blvd, Suite 300 • Daly City, CA 94014

Water Year 2024 Annual Report

Cosumnes Subbasin

DRAFT | February 2025

Prepared for:

Cosumnes Groundwater Authority
8970 Elk Grove Blvd.
Elk Grove, CA 95624

Prepared by:

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Anona Dutton, P.G. (#7683), C.Hg. (#841)
Vice President

John Fio
Principal Hydrogeologist

Kristyn Lindhart
Hydrogeologist

Water Year 2024 Annual Report
Cosumnes Subbasin

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TABLES

FIGURES

APPENDICES

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

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 Basin is managed by seven GSAs: 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 (see **Figure AR-1**). 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 with the GSAs and other entities to sustainably manage the Basin.

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 Ione Formations.

This Water Year (WY) 2024[1] 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*[2]. The measured data from the monitoring program 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 2023 and Spring 2024, 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. 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).

[1] WY 2024 includes the period from 1 October 2023 through 30 September 2024.

[2] Groundwater Sustainability Plan Implementation: A Guide to Annual Reports, Periodic Evaluations, & Plan Amendments (ca.gov)

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), were established at the 19 RMW-WLs and the nine RMW-ISWs and are also shown on the hydrographs in **Figure AR-4**.

Table AR-3 summarizes total annual water use by source (Groundwater, Surface Water, and Recycled Water) and **Table AR-4** summarizes total annual water use by sector (Agricultural, Urban, and Industrial) for the period WY 2021 through WY 2024. Groundwater extractions are reported in **Table AR-1** and are illustrated in **Figure AR-5**; the total extractions in WY 2024 by water users in each GSA are mapped in **Figure AR-6**. The WY 2024 groundwater extractions totaled 120,200 acre-feet (AF), representing a decrease of approximately 1,400 AF relative to WY 2023 where 121,600 AF was pumped. During WY 2024 almost 87% of the groundwater use was by the Agricultural sector (which includes agricultural-residential use [Ag-Res]), 9% was by the Industrial sector (aquaculture), and 4% was by the Urban sector (public water systems [PWS]). **Table AR-2** and **Figure AR-7** report surface water supplies, which include stream diversions, imported surface water, and imported recycled water.

Changes in groundwater storage were estimated using the Cosumnes-South American-North American numerical groundwater model (CoSANA). **Figure AR-10** is a map showing the distribution of model-calculated change in groundwater storage during WY 2024. Groundwater storage increased across most of the Basin, as would be expected given that WY 2024 experienced more precipitation than the long-term average; however, storage decreased in the mid- to upper portions of the Basin near the boundary between the Basin Plain and Basin Foothill subareas, along most of the Dry Creek boundary and small portions along the Cosumnes River boundary. The net change in storage across the entire Basin was an increase of 13,500 AF. **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 2024.

Table AR-6 compares the WY 2024 measured groundwater levels to the SMCs for Chronic Lowering of Groundwater Levels, **Table AR-7** compares Arsenic, Nitrate, 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 2023, groundwater levels declined below the MT in one of the 19 RMW-WLs (RMW-WL5) and one of the nine RMW-ISWs (RMW-ISW5). Water levels in RMW-WL5 then increased to above the MT in Spring 2024. The samplers were unable to access RMW-ISW5 and measure water levels during the Spring 2024 monitoring event.

The concentrations exceeded MTs in three of the 14 Representative Monitoring Wells for Degradation of Groundwater Quality (RMW-WQs). Two wells exceeded the MTs for Arsenic (RMW-WQ2 and RMW-WQ14) and the other well exceeded the MT for TDS (RMW-WQ9). The GSAs will continue to monitor water quality conditions in these wells to assess potential trends and correlation to groundwater management and water levels.

Land subsidence is of low concern in the Basin. **Figure AR-12** shows the vertical displacement trends for WY 2024. 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 displacement of -0.18 feet (ft). The TRE Altamira Interferometric Synthetic Aperture Radar (InSAR) data indicates the annual vertical displacement rate for WY 2024 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** summarizes 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 Determinization of the Basin, the progress made addressing the RCAs, stakeholder outreach activities, other CGA and GSA accomplishments, and public comments received during WY 2024**.**

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)[3] 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 Basin is managed by the seven GSAs: 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. 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) 2024 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[4]. WY 2024 includes the period from 1 October 2023 through 30 September 2024. This Annual Report also contains available and appropriate historical information back to 2015, as required by CCR 23 §356.2 (b). The GSP 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.

[3] 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.

[4] Groundwater Sustainability Plan Implementation: A Guide to Annual Reports, Periodic Evaluations, & Plan Amendments (ca.gov)

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 Ione 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.

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 CGA and downloaded from publicly available sources[5].

During WY 2024, 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).

2.1 Groundwater Elevation Contour Maps

Fall water levels were measured between 1 October and 30 November 2023, and Spring water levels were measured between 15 March and 13 May 2024. Available Fall 2023 and Spring 2024 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 2023 and Spring 2024 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 similar to previous years.

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

[5] 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)

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 WY 2024 (non-reporting small PWSs) the extractions were assumed 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 extractions by Ag-Res were calculated based on representative indoor and outdoor water use and the estimated number of residential parcels in the Basin.
    - The extractions for agricultural production were calculated by the Cosumnes, South American, and North American numerical model (CoSANA)[6], 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 2024 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 GSA are mapped in **Figure AR-6.** The WY 2024 extractions totaled 120,200 acre-feet (AF), representing a decrease of approximately 1,400 AF relative to WY 2023 where 121,600 AF was pumped. During WY 2024, almost 87% of the groundwater use was by the Agricultural sector (which includes agricultural production and Ag-Res), 9% was by the Industrial sector (aquaculture), and 4% was by the Urban sector (municipal and PWSs).

[6] "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.

Table AR-1 Summary of Groundwater Extraction Data by Sector (AF) [a]

Water Year	Agricultural[b]	Industrial[d]	Urban[f]	Total
	Estimated[c]	Estimated[e]	Metered[g] and Estimated[h]	
2021[i]	134,100	11,000	5,200	**150,300**
2022[i]	124,800	11,000	4,700	**140,500**
2023	105,900	11,000	4,700	**121,600**
2024	104,400	11,000	4,800	**120,200**

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 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 the more reliable reported values.

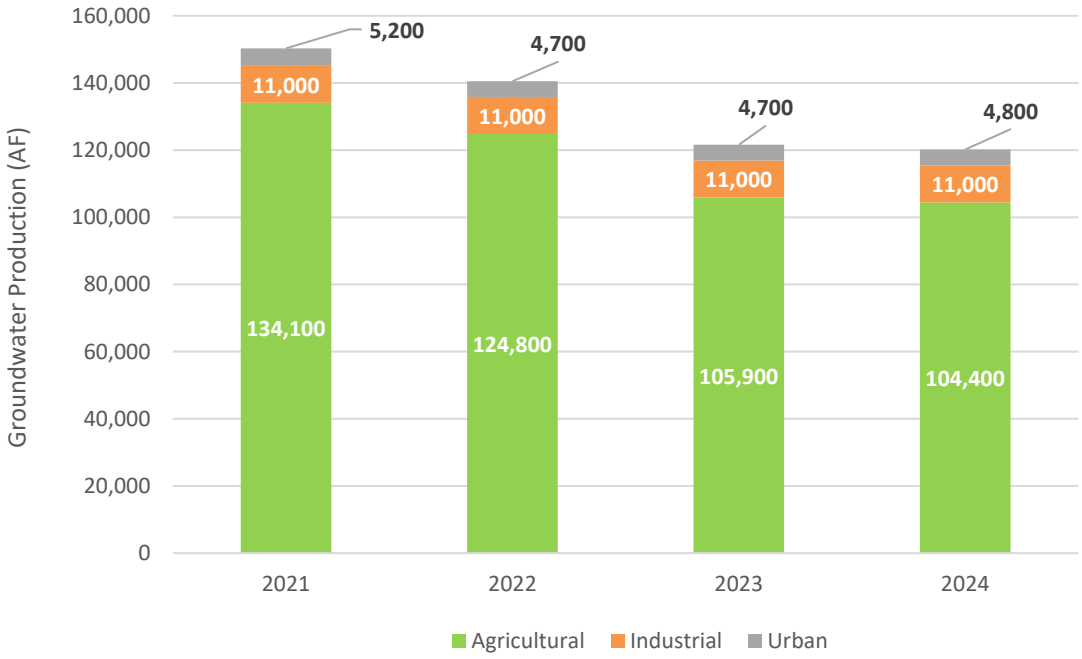

Figure AR-5. Groundwater Extraction by Sector Over Time

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 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**.

Imported Water:

- Amador Water Agency (AWA) provided imported surface water to the City of Ione 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 2024 were 1,700 AF.
- 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 2024 were 600 AF based on irrigation demand[7].
- 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 2,800 AF was delivered during WY 2024.

Stream Diversions:

- Available data for most, but not all diversions, 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 (16,000 AF) were estimated from the eWRIMS data and CoSANA calculations.
- Monthly Cosumnes River diversions by Rancho Murieta were estimated by monthly demand per capita and estimated population and reported to the CGA (1,600 AF). The estimated portion of these diversions to the Basin is 600 AF based on the distribution of meters north and south of the Cosumnes River and demand calculations by the CoSANA.

[7] Irrigation demand was based on ET, golf course acreage and assumed irrigation efficiency of 85%.

Table AR-2 Summary of Surface Water Supply by Sector (AF) [a]

Water Year	ARSA Imported Recycled Water[b]	TOTAL Recycled Water	AWA Imported Surface Water[c]	SMUD Imported Surface Water	TOTAL Imported Supplies	Stream Diversions (Surface Water)		TOTAL Local Supplies
	Urban		*Urban*	*Industrial*		*Agricultural[e]*	*Urban[f]*	
2021[g]	600	**600**	1,700	100[d]	**1,800**	12,900	600	**13,500**
2022[g]	600	**600**	1,600	4,200	**5,800**	13,200	600	**13,800**
2023	600	**600**	1,500	3,000	**4,500**	16,200	600	**16,800**
2024	600	**600**	1,700	2,800	**4,500**	16,000	600	**16,600**

Abbreviations:
AF = Acre-feet
AWA = Amador Water Agency
ARSA = Amador Regional Sanitation Authority
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 600 AF.
(g) 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 the more reliable reported values.

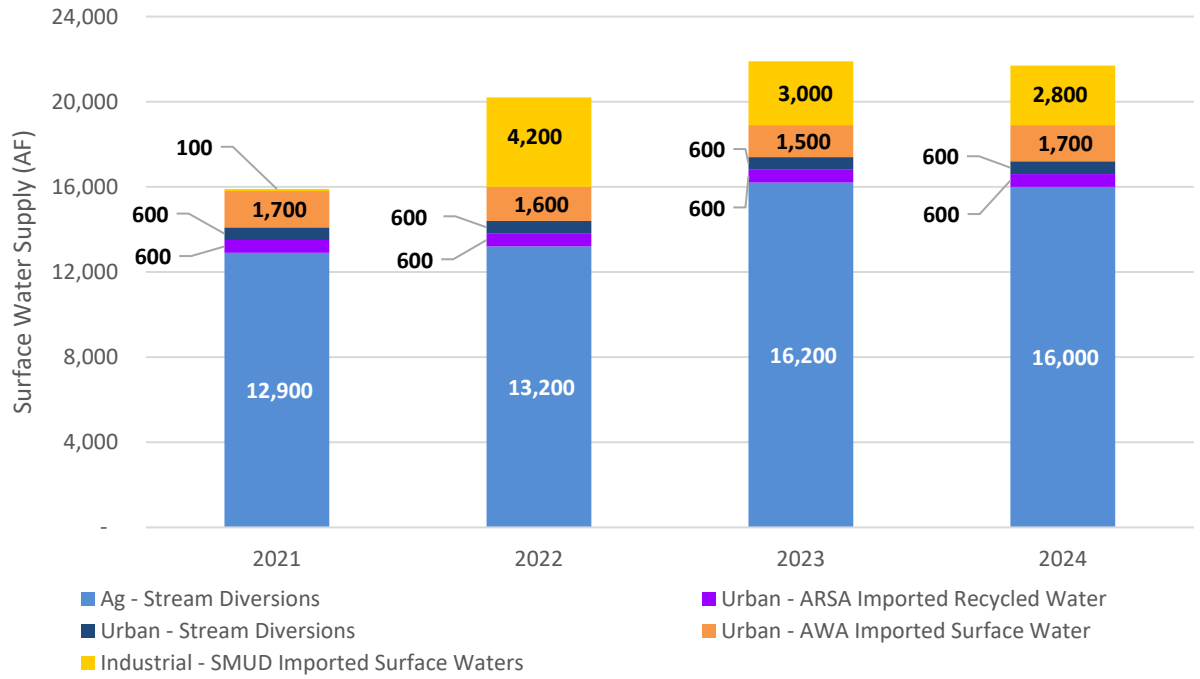

Figure AR-7. Surface Water Supply by Sector Over Time

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), and the totals are illustrated on **Figure AR-8**. As described above, groundwater extractions and surface water diversions comprise most of the water use in the Basin, but recycled water is another component included in the Basins' total water use.

Recycled water is used for irrigation by both the Agricultural and Urban sectors.

- 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 (800 AF in WY 2024).
- Secondary treated water is imported into the Basin and treated to tertiary standards to irrigate turf at the Castle Oaks Golf Course. The quantity of water is based on estimated irrigation demand (600 AF).

Table AR-3 Total Water Use by Source Type (AF) [a]

Water Year	Groundwater[b]	Surface Water[c]	Recycled Water[d]	TOTAL
2021[e]	150,300	15,300	1,300	**166,900**
2022[e]	140,500	19,600	1,200	**161,300**
2023	121,600	21,300	1,100	**144,000**
2024	120,200	21,100	1,400	**142,700**

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 have been 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.

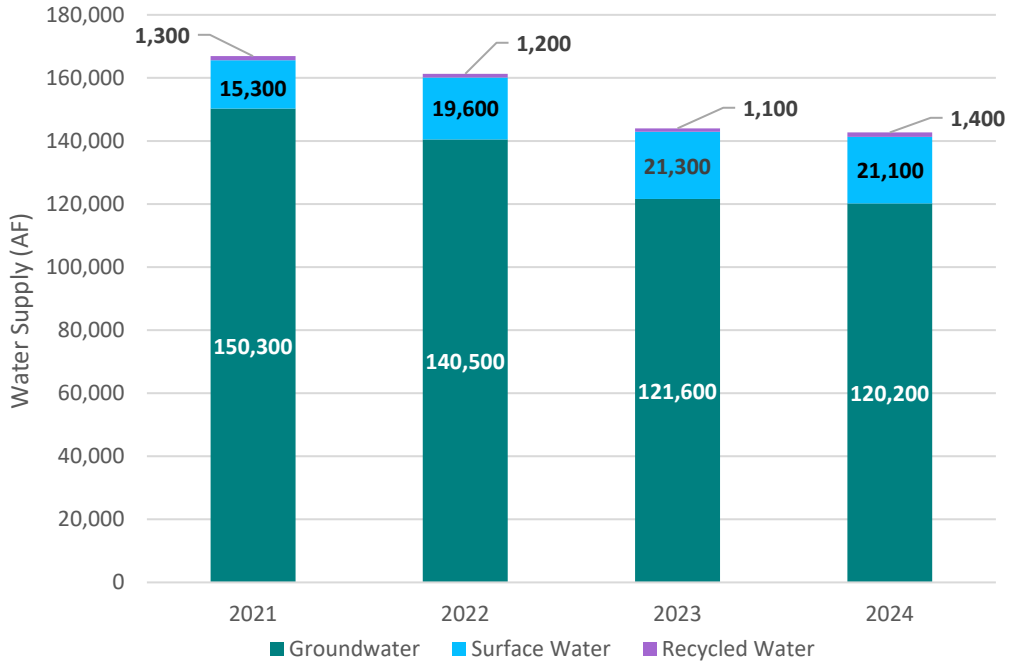

Figure AR-8. Total Water Use by Source Over Time

Table AR-4 summarizes total water use by sector (Agricultural, Industrial, and Urban), and the totals are illustrated on **Figure AR-9**. In WY 2024, the Agricultural sector accounted for 85% of the Basin's total water use (120,900 AF), the Industrial sector used 10% (13,800 AF), and the Urban sector used 5% (7,600 AF).

Table AR-4 Summary of Total Water Use by Sector (AF) [a]

Water Year	Agricultural [b]	Industrial [c]	Urban [d]	TOTAL
2021[e]	147,700	11,100	8,100	**166,900**
2022[e]	138,600	15,200	7,500	**161,300**
2023	122,600	14,000	7,400	**144,000**
2024	120,900	13,800	7,600	**142,300**

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 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 Ione, 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.

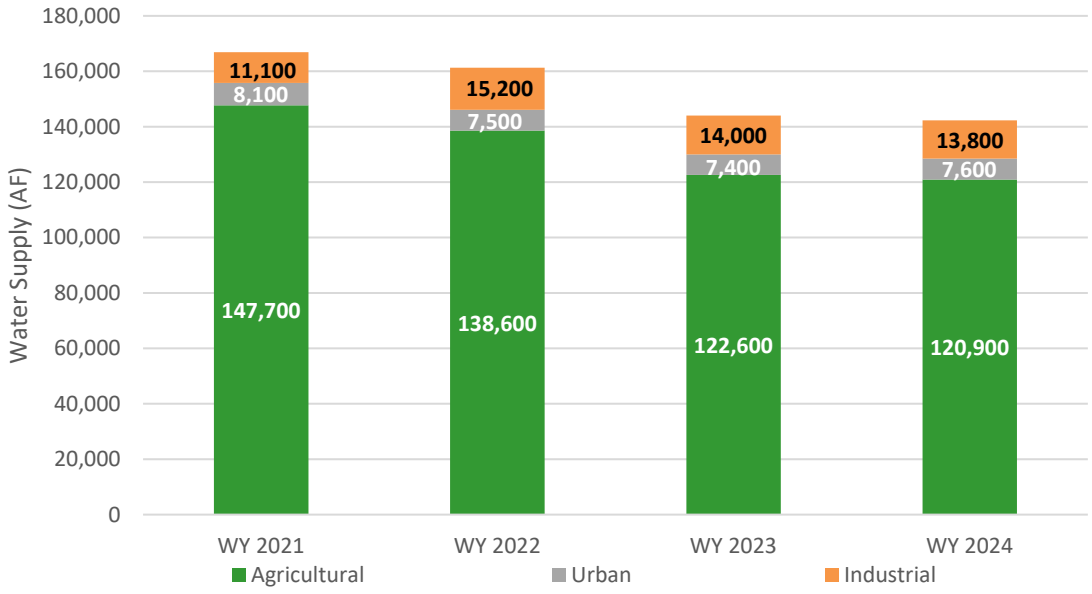

Figure AR-9. Total Water Use by Sector Over Time

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 Cosumnes Subbasin 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 WY 2024. Groundwater storage increased across most of the Basin, as would be expected given that WY 2024 experienced more precipitation than the long-term average for the Basin and a decrease in groundwater extractions compared to previous years (**Table AR-1**). The Fair Oaks CIMIS station (Station ID 131; located 12 miles north of the Basin) measured 19.4 inches of precipitation in WY 2024 and the long-term average precipitation for the Basin is 17.9 inches per year (EKI, 2021).

In WY 2024, the calculated net change in storage across the entire Basin was an increase of 13,500 AF (**Figure AR-11**). Despite the overall storage gains, some groundwater storage decreases were observed in the mid- to upper portions of the Basin near the boundary between the Basin Plain and Basin Foothill subareas, along most of the Dry Creek boundary and smaller reaches 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 -40,900 AF (i.e., annual average decline of -4,500 acre-feet per year [AFY]).

Figure AR-11 shows water year type, annual groundwater extractions, annual change in groundwater storage, and the cumulative change in groundwater storage for WY 2015 through WY 2024. The greatest increase in storage was experienced in WY 2017, a wet year, with an increase of 54,600 AF in storage, whereas the biggest decrease in storage occurred in WY 2021, a critically dry year, with a decrease of 68,100 AF. Annual extraction rates of 135,200 AFY or greater resulted in storage declines, whereas annual extraction rates of 121,800 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 (AFY)
2015	Critical	-38,300
2016	Dry	-15,700
2017	Wet	54,600
2018	Below Normal	-30,600
2019	Wet	34,800
2020	Dry	-43,100
2021	Critical	-68,100
2022	Critical	-28,700
2023	Wet	41,800
2024	TBD	13,500

Abbreviations
AFY = acre-feet per year
DWR = California Department of Water Resources
TBD = To be determined
Notes
1) DWR has not released the WY 2024 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 WY 2024 semi-annual monitoring occurred in Fall 2023 and Spring 2024. Water level data were collected following the protocols for data collection described in the GSP.

Some wells were not accessible during the monitoring events. During the Fall 2023 monitoring event, water levels were not measured in six monitoring wells (RMW-WL9, RMW-WL16, RMW-ISW1, RMW-ISW2, RMW-ISW4 and RMW-ISW8), and during the Spring 2024 monitoring event water levels were not measured in four monitoring wells (RMW-WL16, RMW-ISW4, RMW-ISW5, and RMW-ISW8). Two wells had obstructions which CGA worked with the landowners to resolve by the Spring monitoring event, another well ACGMA GSA is actively working on developing an access agreement with the well owner, and the other wells were previously monitored under the CASGEM program and CGA has taken over the monitoring as of the Fall 2024 monitoring event. The CGA is currently updating all agreements to ensure access to collect manual measurements in the future.

All water quality samples were collected following the protocols in the GSP for data collection. Complete water quality data (i.e., Arsenic, Nitrate as N and TDS) were not collected for three of the Representative Monitoring Wells for Degradation of Groundwater Quality monitoring wells (RMW-WQ; RMW-WQ1, RMW-WQ2, and RMW-WQ7). Two of the wells are PWS wells (RMW-WQ1 and RMW-WQ2) with data publicly available, however PWS wells are not required to sample for all constituents every year. One well (RMW-WQ7) was not accessible at the time of sampling. 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, and ensure the samplers have access to all wells at the time of sampling.

7.2 Current Conditions – Sustainability Indicators

The following sections describe how current sustainability indicator conditions compare to the SMCs (MTs, MOs, and IMs) as established in the GSP.

7.2.1 Chronic Lowering of Groundwater Levels

The GSP utilizes nineteen (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 2024, Fall 2023 water levels were measured in seventeen of the nineteen RMW-WLs (17 of 19) and Spring 2024 water levels were measured in eighteen of the nineteen RMW-WLs (18 of 19). **Table AR-6** compares the WY 2024 groundwater elevations to their respective SMCs. The water level was below the MT in one (1) well in Fall 2023 only (RMW-WL5), and greater than or equal to the MOs in eleven (11) wells. There are no IMs for WY 2024.

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 one (1) well declined below the MT for only part of Water Year 2024 (RMW-WL5), and accordingly this occurrence did not indicate an Undesirable Result; especially given that the water level in RMW-WL5 increased above the MT in Spring 2024.

7.2.2 Groundwater Storage

There are no groundwater storage IMs for WY 2024. 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 2024 water quality concentrations for 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.

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 2024, the water quality sampling results did not indicate Undesirable Results. Arsenic concentrations exceeded the MT in two wells (RMW-WQ2 and RMW-WQ14). In well RMW-WQ2, Arsenic concentrations have been variable and have intermittently exceeded the MT since sampling began in 2020. In well RMW-WQ14, this was the first MT exceedance. 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.

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

Well Name	Fall 2023 Date	Fall 2023 GWE (ft NAVD88)	Spring 2024 Date	Spring 2024 GWE (ft NAVD88)	MO (ft NAVD88)	MT (ft NAVD88)	IM 2027 (ft NAVD88)	IM 2032 (ft NAVD88)	IM 2037 (ft NAVD88)
RMW-WL1	10/11/2023	-47	3/15/2024	-38	-55	-65	-56	-57	-56
RMW-WL2	10/1/2023	-68	4/23/2024	-52	-59	-69	-62	-64	-61
RMW-WL3	10/2/2023	-25	5/13/2024	-18	-46	-56	-49	-50	-48
RMW-WL4	11/10/2023	-20	5/1/2024	-2	-24	-39	-30	-33	-29
RMW-WL5	10/2/2023	**-92**	4/17/2024	-82	-70	-84	-73	-77	-73
RMW-WL6	10/11/2023	-73	4/11/2024	-68	-51	-78	-63	-68	-59
RMW-WL7	10/11/2023	-26	4/17/2025	-24	-28	-38	-32	-33	-30
RMW-WL8	10/2/2023	-34	4/17/2024	-28	-36	-48	-39	-43	-39
RMW-WL9	--	--	4/17/2024	-64	-75	-89	-78	-82	-78
RMW-WL10	10/2/2023	-30	4/17/2024	-23	-22	-32	-25	-28	-25
RMW-WL11	10/2/2023	-35	4/17/2024	-31	-28	-38	-31	-33	-30
RMW-WL12	10/2/2023	96	4/17/2024	105	106	85	97	93	100
RMW-WL13	10/6/2023	-43	4/19/2024	-37	-36	-46	-39	-41	-39
RMW-WL14	11/30/2023	251	4/3/2024	251	250	232	243	239	245
RMW-WL15	11/30/2023	124	4/3/2024	126	141	119	133	129	135
RMW-WL16	--	--	--	--	269	259	265	263	266
RMW-WL17	11/30/2023	194	4/3/2024	194	116	89	105	100	108
RMW-WL18	11/30/2023	198	4/3/2024	198	195	185	192	190	192
RMW-WL19	11/30/2023	172	4/3/2024	173	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 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	--	--			--	--			--	--		
RMW-WQ2	**10/5/20230**	**11**			8/10/2023	ND			--	--		
RMW-WQ3	10/2/2023	ND			10/2/2023	2.7			10/2/2023	200		
RMW-WQ4	10/2/2023	3.2			10/2/2023	2.2			10/2/2023	180		
RMW-WQ5	10/2/2023	7.3			10/2/2023	ND			10/2/2023	170		
RMW-WQ6	10/2/2023	ND			10/2/2023	1.4			10/2/2023	210		
RMW-WQ7	--	--			--	--			--	--		
RMW-WQ8	10/2/2023	2.5			10/2/2023	ND			10/2/2023	190		
RMW-WQ9	10/25/2023	9.4			10/25/2023	1.1			**10/25/2023**	**1,500**		
RMW-WQ10	10/25/2023	ND			10/25/2023	ND			10/25/2023	470		
RMW-WQ11	10/25/2023	9.1			10/25/2023	ND			10/25/2023	190		
RMW-WQ12	10/25/2023	3.2			10/25/2023	ND			10/25/2023	150		
RMW-WQ13	10/2/2023	4.1			10/2/2023	1.6			10/2/2023	190		
RMW-WQ14	**10/2/2023**	**11**			10/2/2023	ND			10/2/2023	190		

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 exceed the MT.

7.2.5 Land Subsidence

Land subsidence is of low concern in the Basin. The following describes the measured vertical displacement (subsidence) trends for WY 2024 (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 -0.18 ft of average vertical displacement during WY 2024.
- The TRE Altamira Interferometric Synthetic Aperture Radar (InSAR) data indicates the annual vertical displacement rate for the period 1 October 2023 through 1 October 2024 ranged from - 0.1 ft to 0.1 ft throughout the Basin.

As explained in the GSP, groundwater levels are a reasonable proxy for land subsidence, and progress made during the reporting period is therefore represented by the discussion of water levels in **Section 7.2.1**.

7.2.6 Depletions of Interconnected Surface Water

The GSP utilizes nine wells to monitor the Depletion of Interconnected Surface Water (RMW-ISWs). **Table AR-8** compares the WY 2024 groundwater elevations to the SMCs at the RMW-ISWs. There are no IMs for WY 2024.

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. Measured groundwater levels in one RMW-ISW was below its MT for part of WY 2024. In RMW-ISW5, measured groundwater levels were below the MT in Fall 2023, for the fifth consecutive quarter, and was not measured in Spring 2024.

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 have been different to reflect observed conditions in this portion of the Basin.

During WY2024, 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 2025. Based on the guidance documents and the SMCs and Undesirable Results definitions for the depletion of interconnected surface water will be revised and implemented as part of a future GSP amendment.

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

Well Name	Fall 2023 Date	Fall 2023 GWE (ft NAVD88)	Spring 2024 Date	Spring 2024 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	--	--	5/7/2024	-2	-18	-23	-21	N/A	N/A	N/A
RMW-ISW2	--	--	4/30/2024	10	-3	-6	-4.5	N/A	N/A	N/A
RMW-ISW3	10/2/2023	-1	4/30/2024	15	-4	-10	-7.0	N/A	N/A	N/A
RMW-ISW4	--	--	--	--	-14	-19	N/A	-14	-15	-14
RMW-ISW5	**10/2/2023**	**76**	--	--	83	78	N/A	85	86	85
RMW-ISW6	10/2/2023	-31	4/30/2024	-23	-26	-31	N/A	-26	-28	-27
RMW-ISW7	11/30/2023	252	4/3/2024	258	257	247	252	N/A	N/A	N/A
RMW-ISW8	--	--	--	--	179	172	176	N/A	N/A	N/A
RMW-ISW9	11/30/2023	172	4/3/2024	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 exceed the MT.

7.3 Implementation of Projects and Management Actions

The GSP outlined six Projects and Management Actions (PMAs), and implementation progress during WY 2024 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)	☐ Active ☒ Pre planning ☒ Conceptual ☐ Inactive	In WY 2024, 347.1 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. 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. 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.	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	☐ Active ☒ Pre planning ☒ Conceptual ☐ Inactive	No progress has been made on PMA#2.	N/A	N/A	None	None	None
#3 - OHWD Cosumnes River Flow Augmentation	☐ Active ☐ Pre planning ☐ Conceptual ☒ Inactive	No progress has been made on PMA#3.	N/A	N/A	None	None	None
#4 - City of Galt Recycled Water Project	☐ Active ☒ Pre planning ☐ Conceptual ☐ Inactive	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. The feasibility study is expected to be conducted during 2025/2026.	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 2024 & WY 2025.	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
#5 - Voluntary Land Repurposing	☐ Active ☒ Pre planning ☐ Conceptual ☐ Inactive	Commonly referenced as the "Conservation PMA", this effort has evolved into a broader groundwater conservation program, including improving water use efficiency throughout the Basin in addition to demand reduction due to repurposing lands. Responding to changes in current market conditions, agricultural crop producers within SRCD GSA boundaries have made the difficult decision to discontinue farming large parcels of land. Notably, the crops that are being removed, and subsequent acres fallowed, are winegrapes, and nut crop trees. This transition away from an irrigated crop, promotes the reduction in water use of approximately 2-acre feet per acre of planted irrigated trees, 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. SRCD GSA has implemented 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 13 conservation plans. 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 2024 and 2025, the Lab will seek to conduct at least 80 free efficiency tests for farmers/ranchers.	To be determined.	None	Public engagement was conducted during grant application development at the CGA and GSA monthly Board of Director meetings. Once the grant agreements are finalized during WY 2024, public engagement related to water efficiency projects will take place.	CAPGP and WETA technical assistance will continue throughout WY 2025.	To be determined.
#6 - Groundwater Banking and Sale	☐ Active ☐ Pre planning ☐ Conceptual ☒ Inactive	No progress has been made on PMA#6.	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 at the start of WY 2024. 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 2024.

The CGA plans to address the RCAs that include data gap filling efforts (RCA-3 & -6) and further assessments (RCA 1) by the Periodic Evaluation in January 2027. RCA-2, -4 & -5, which include revising SMCs and UR definitions, will be addressed two years later with a plan amendment (preliminarily planned for January 2029).

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

Recommended Corrective Action	Related GSP Section	Approach	Progress in WY 2024	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.	None.	Completed by November 2026.
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	None.	Future Plan Amendment.
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.	None.	Completed by November 2026.
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.	None.	Future Plan Amendment.

Recommended Corrective Action	Related GSP Section	Approach	Progress in WY 2024	Timeline for Completion
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. 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. 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. 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.	Section 15.6, Section 17.1.6, Section 5.5 & Section 12.	Utilize interconnected surface water guidance, as appropriate, when issued by DWR, to establish/refine quantifiable MTs, MOs, and management actions (MAs). Data Gap filling including additional monitoring data, monitor and identify timing and extent of interconnectivity. Refine CoSANA-calculated surface water depletions consistent with DWR guidelines. 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]).	GID GSA received approval for multiple stream gages as a part of CalSIP, that will aid in expanding the monitoring network and telemetered devices, filling data gaps covering flood flows, and groundwater recharge through surface water percolation SRCD has also applied for the CalSIP DWR grant to potentially reactivate and maintain 3-4 stream gages in the Cosumnes and South American Subbasins. This will expand the monitoring network and telemetry, filling data gaps, and monitoring flood/water levels.	A) will be addressed in a Future Plan Amendment. B) and C) will be addressed by November 2026.
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.	Section 17.1.5	Report InSAR data in the Annual Monitoring Reports. Investigate if other entities are already periodically monitoring land surface elevations as part of other programs (USBR, City of Galt, Cal Trans, etc.). Establish monument survey network and monitoring program (see Recommended Corrective Action 4).	None.	Completed by November 2026.

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

7.5 Other Information on Implementation Progress

7.5.1 Stakeholder Outreach and Engagement

Dates of the various stakeholder outreach activities during WY 2024 are included in **Appendix C**. During WY 2024, 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.
- Two CGA Fall Public Workshops were held to provide the public with updates on GSP implementation activities, funding, monitoring, and projects.
- CGA hosted a Farmers Appreciation BBQ to thank the farmers and ranchers in the Cosumnes Basin who continue to support the CGA, 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 Fall and Spring CGA Newsletter, providing background on CGA, reporting out on recent CGA events, reporting out on 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 convened five times during WY 2024 to develop and discuss CGA's outreach efforts and implementation of the Cosumnes Subbasin Outreach and Engagement Plan. The O&E Committee serves an advisory role to the CGA Board of Directors, to inform the Board of outreach activities.
- Other outreach and engagement activities that continued during WY 2024 were Stakeholder/Technical Workshops, 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 2024, public comments were recorded as part of the Board of Directors meeting recordings and are available on the CGA website[8]. No significant public comments were identified in the WY 2024 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.

- During WY2024 CGA worked with SCI Consulting Group, along with Larry Walker Associates, to explore long-term funding strategies for CGA to support GSP implementation within the Basin which was summarized into the Cosumnes Groundwater Authority Rate and Fee Study (**Appendix D**). During the development of the fee study CGA revised their budget, reprioritized

[8] https://www.cosumnesgroundwater.org/meetings/

implementation tasks and began filling data gaps in identifying irrigated and non-irrigated parcels throughout the Basin, specifically near the City of Galt and Amador County.

- 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).
- GID GSA and SRCD GSA applied for the CalSIP DWR grants to reactivate stream gages that will aid in expanding the monitoring network and telemetered devices, filling data gaps covering flood flows, and groundwater recharge through surface water percolation.
- GID GSA requested a Letter of Agreement (LOA) from the USBR to draft a temporary water supply contract from the American River Division of the Central Valley Project which will potentially allow access to an expanded surface water supply. CGA provided the deposit to the USBR as the agreement would benefit the entire Basin.
- 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 August 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 6 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.

7.5.4 Anticipated WY 2025 Implementation Activities

The CGA developed a Work Plan of activities for Fiscal Year 24/25 (July 2024 to June 2025; **Appendix E**). The Work Plan includes operations, outreach and engagement, SGMA and GSP implementation, and other/PMAs related activities. In addition to the tasks specified in the Work Plan, the CGA plans the following additional activities.

- Implement approaches to respond to DWR's recommended corrective actions;
- Revise monitoring networks and continue updating access agreements, as needed;
- Continue filling monitoring data gaps;
- Explore available grants and other funding opportunities; and
- Prepare for the five-year Periodic Evaluation.

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.

San Joaquin Valley
Cosumnes
(5-022.16)

Omochumne-Hartnell
Water District

Sacramento Valley
South American
(5-021.65)

Sloughhouse Resource
Conservation District

Clay
Water
District

Galt
Irrigation
District

Amador County
Groundwater
Management Authority

Sacramento
County

City of Galt

San Joaquin Valley
Eastern San Joaquin
(5-022.01)

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
- Sloughhouse 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.

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(Scale in Miles)

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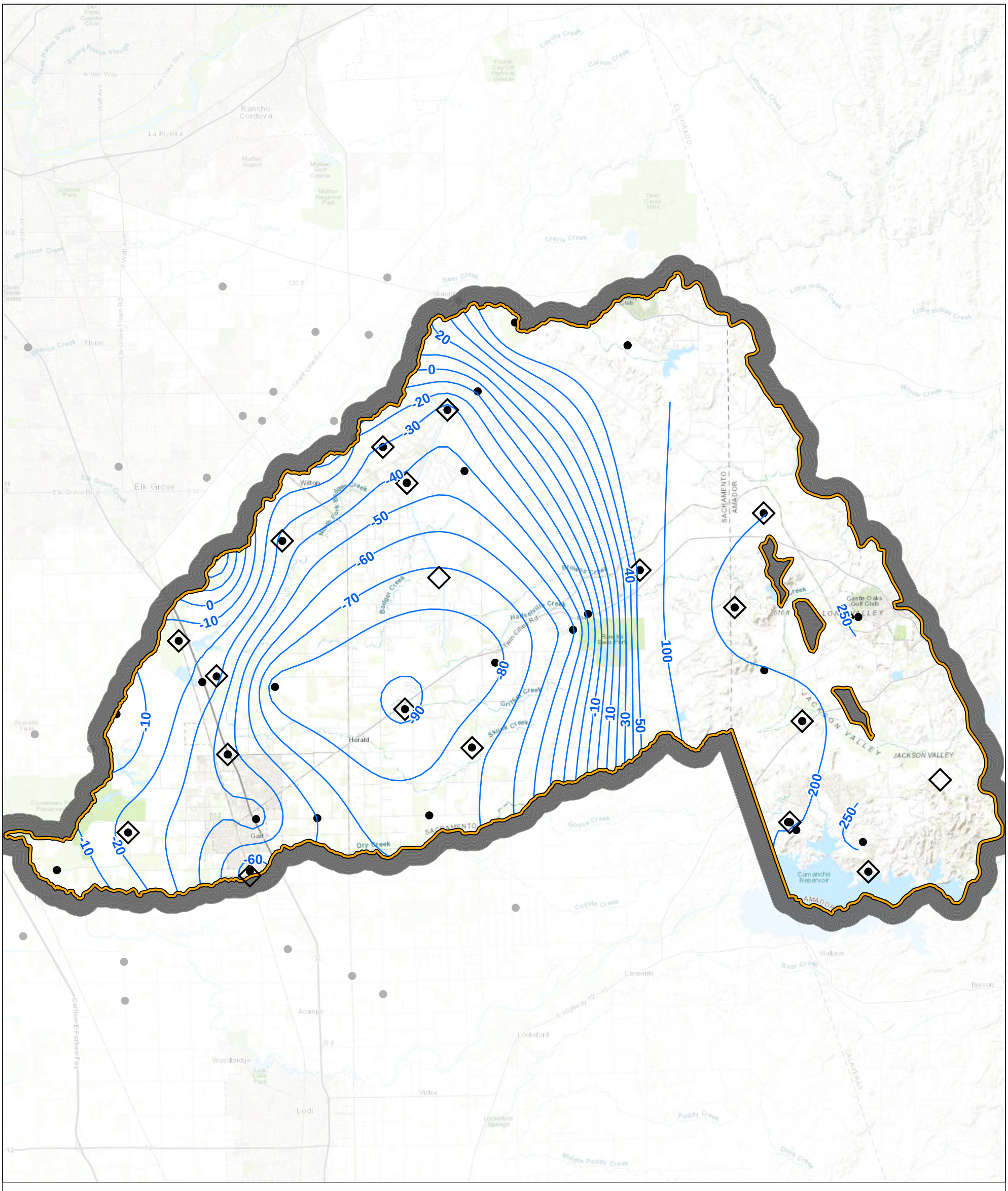
Cosumnes Groundwater Subbasin

Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2024
C20149.02

Figure AR-1

Path: X:\C20149.01\Map\2024\01\Figure AR-1. Cosumnes Groundwater Basin.mxd



Legend

- Fall 2023 Well Sampled
- Well with Fall 2023 measurement outside of the Cosumnes Subbasin
- RMW-WL
- Fall 2023 GWE (ft NAVD 88)

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 20 February 2025.
2. DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - Final Prioritization, dated February 2019.

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(Scale in Miles)

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Groundwater Elevation - Fall 2023

Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2025
C20149.02

Figure AR-2

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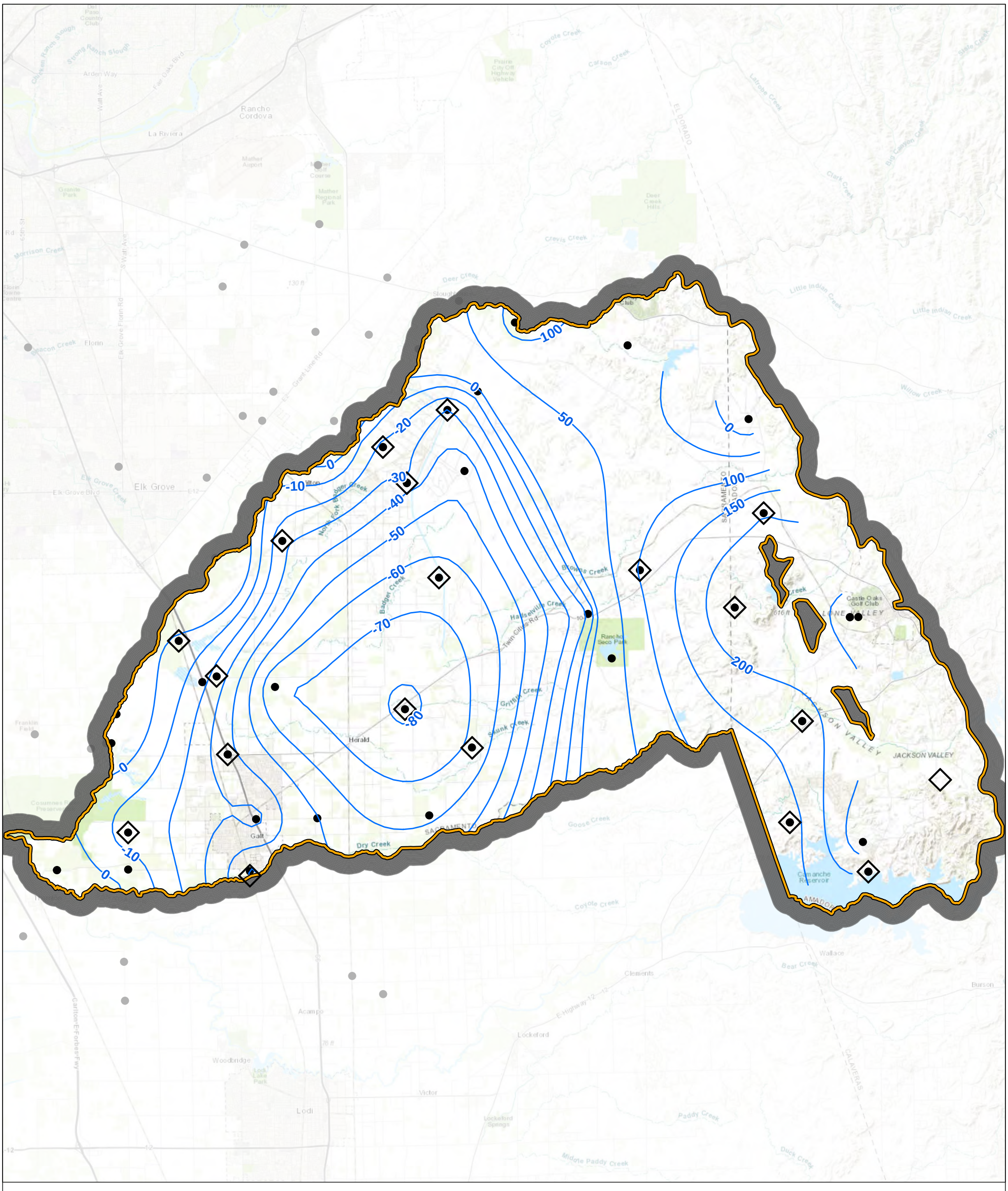

Legend

- Spring 2024 Well Sampled
- Well with Spring 2024 measurement outside of the Cosumnes Subbasin
- Spring 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 11 February 2025.
2. DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - Final Prioritization, dated February 2019.

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(Scale in Miles)

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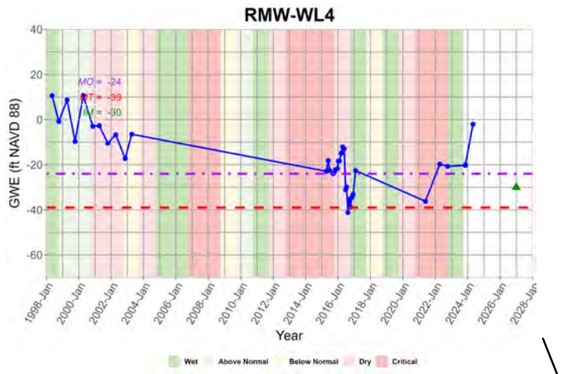
Groundwater Elevation - Spring 2024

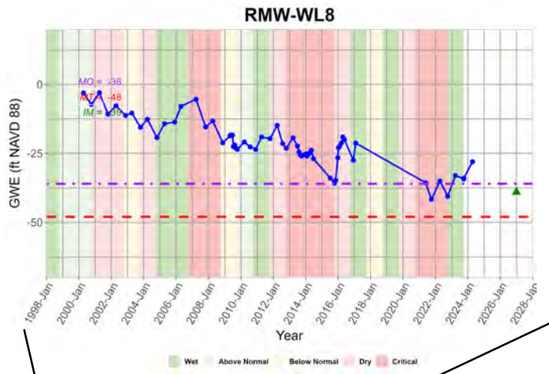
Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2025
C20149.02

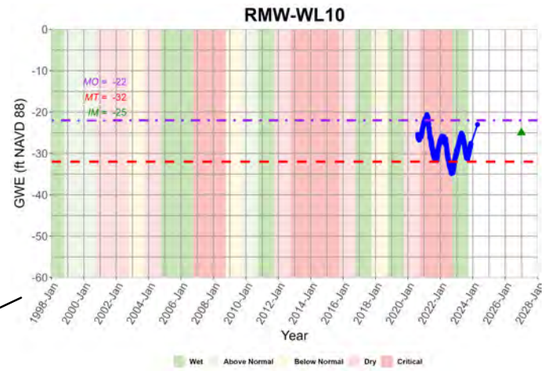
Figure AR-3

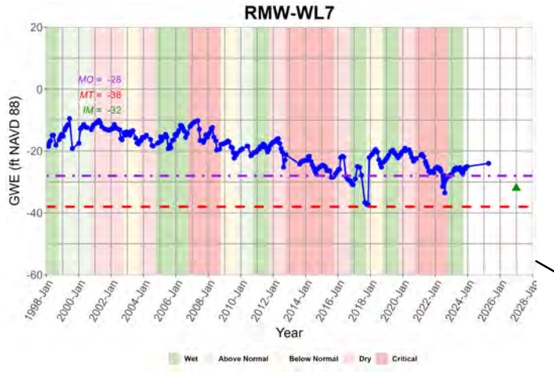
eki environment & water

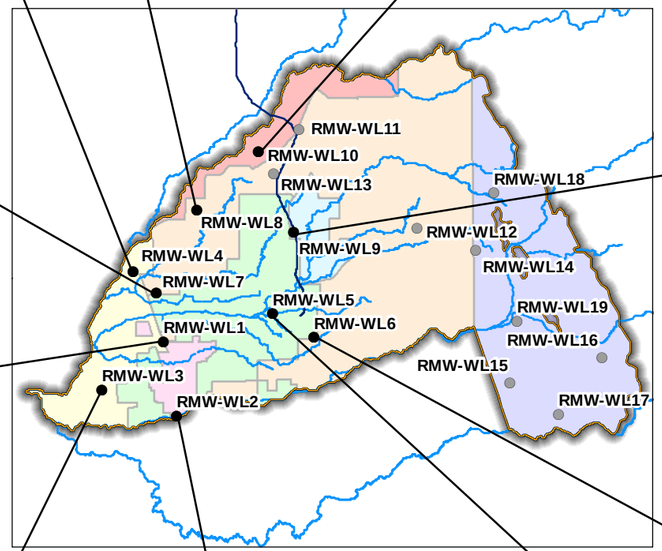
Path: X:\C20149.01\Map\2025\02\COSb_AR_WY2024\COSb_AR_WY2024.aprx

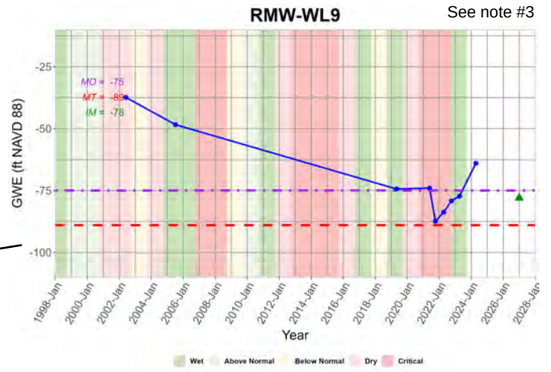


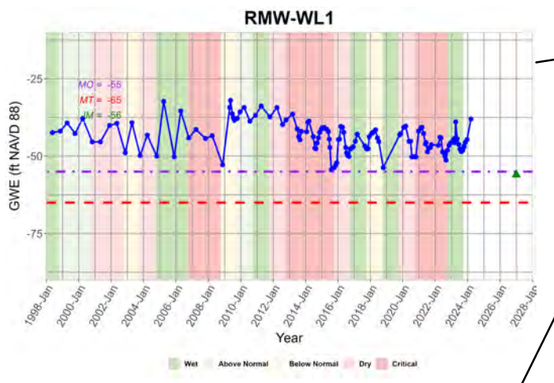


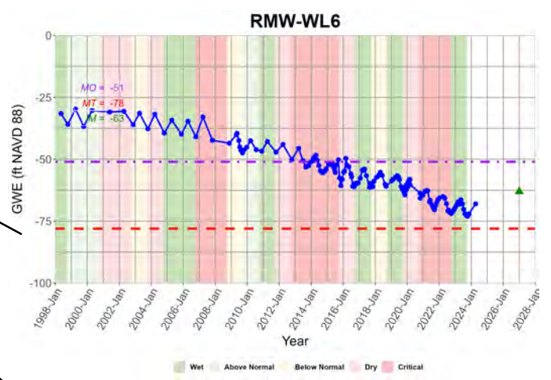


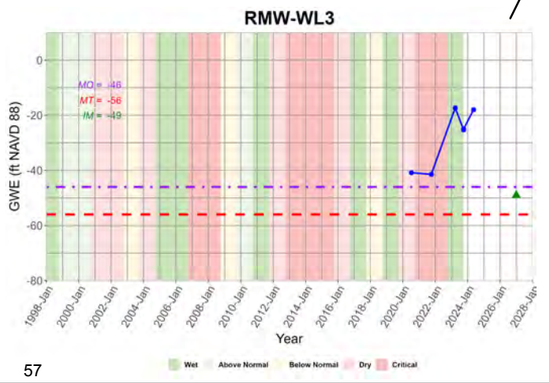


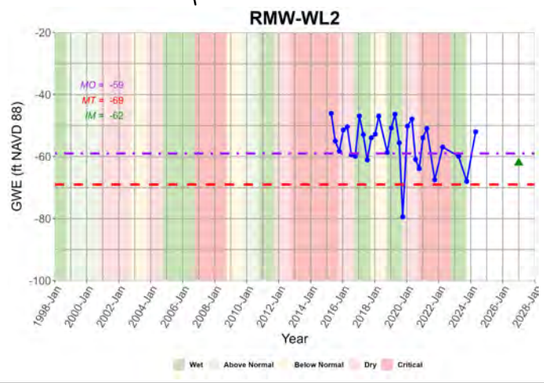


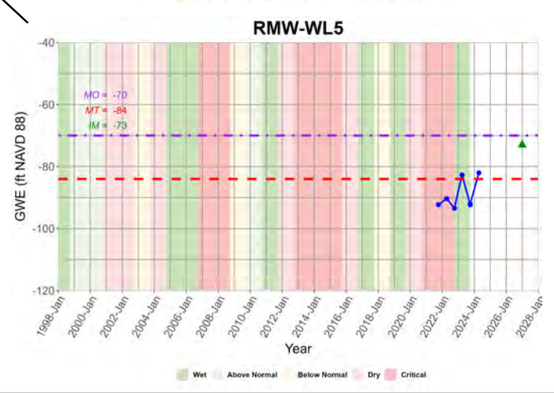












Legend

- 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
- Sloughhouse 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

1. All locations are approximate.
2. See Figure AR-4b for RMW-WL11 through RMW-WL19.
3. Fall 2023 water levels were not measured in RMW-WL9.

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(Scale in Miles)

Representative Monitoring Well - Hydrographs

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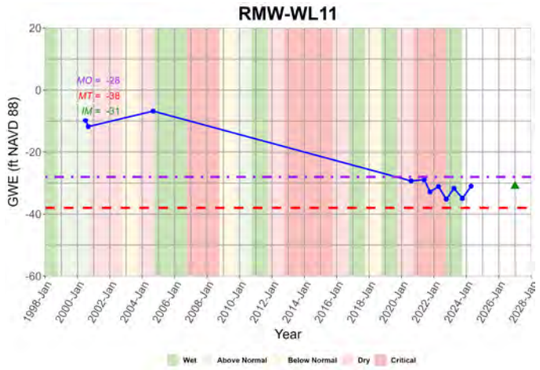
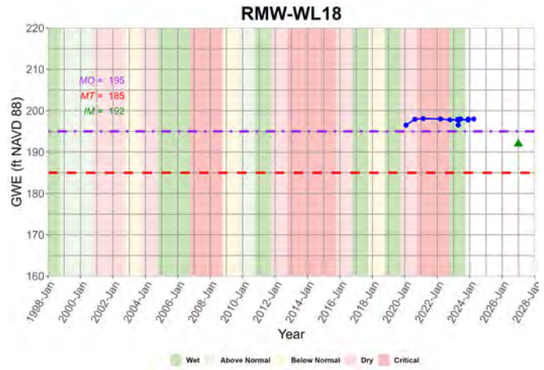
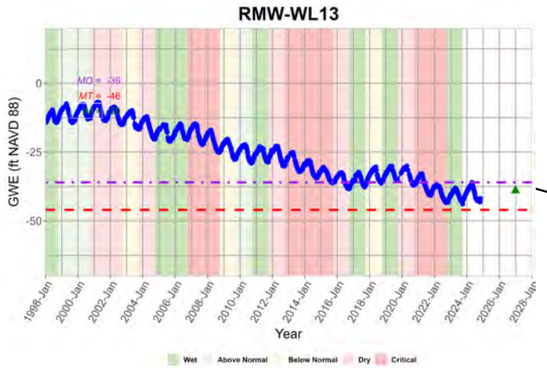
Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2025
C20149.02

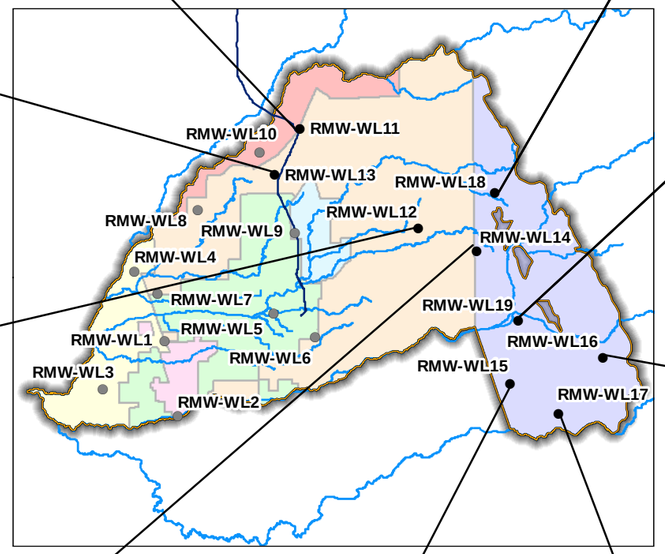
Figure AR-4a

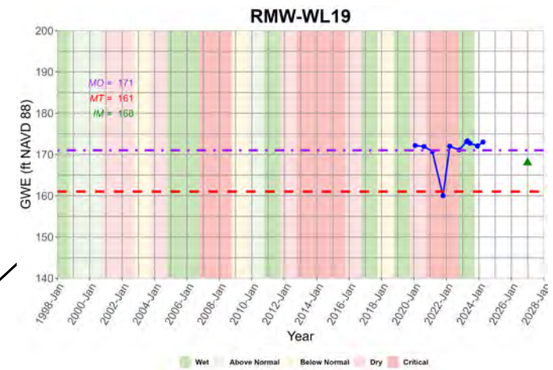
Path: X:\C20149.01\Map\2024\01\Figure AR-4. Representative Monitoring Well Hydrographs (a).mxd

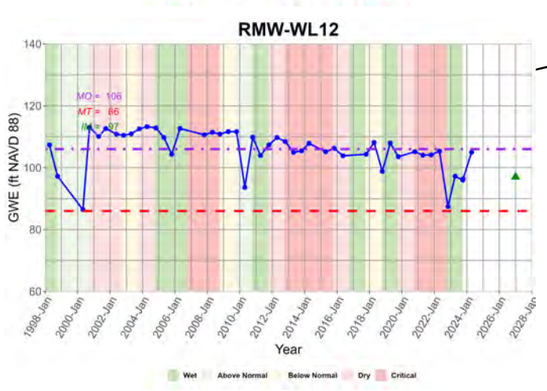


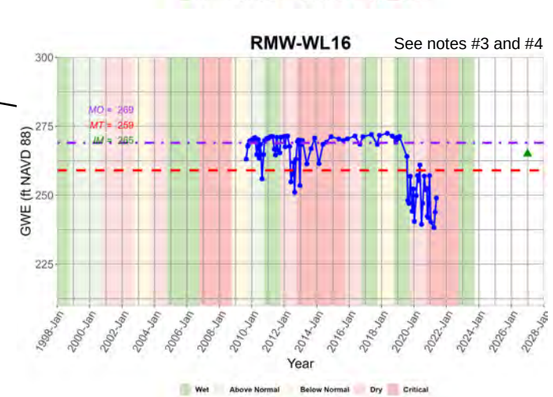


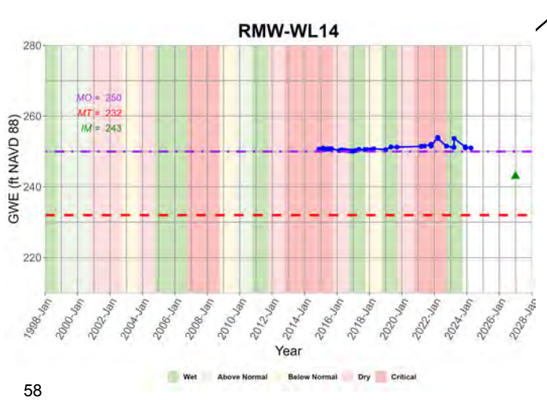


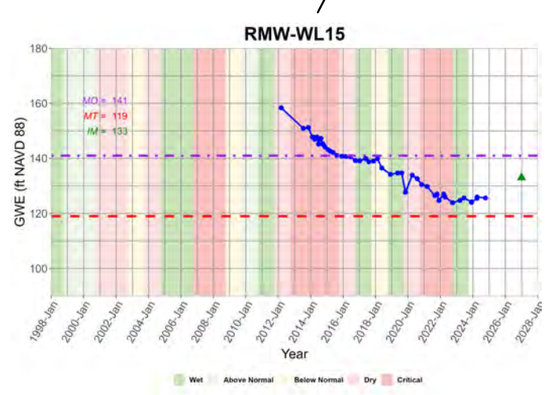


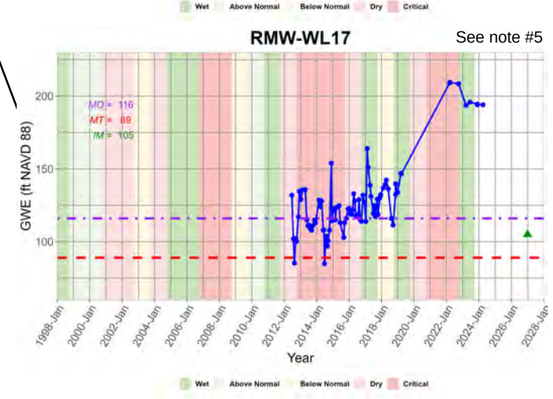












Legend

- 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
- Sloughhouse 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 note measured in RMW-WL16 during Water Year 2024.
4. Change in water level trends starting in Water Year 2020.
5. Measurements recorded after 15 March 2022 are considered questionable as all values are increased by up to 60 feet compared to historical data.

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(Scale in Miles)

Representative Monitoring Well - Hydrographs

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Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2025
C20149.02

Figure AR-4b

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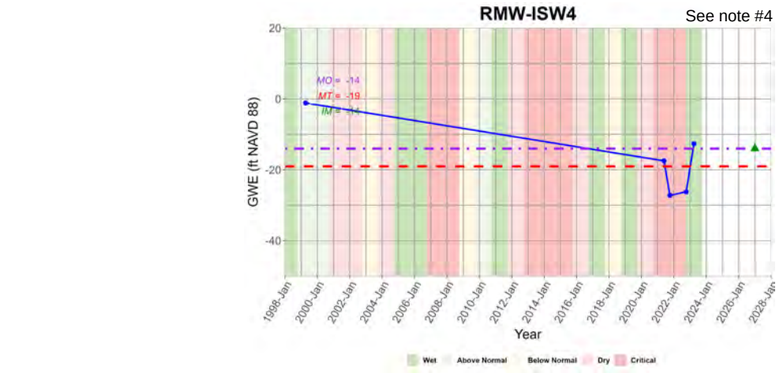
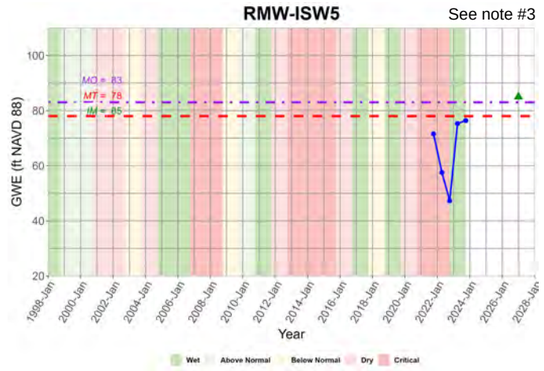
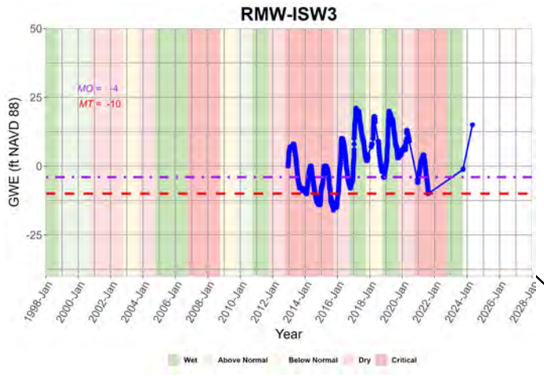
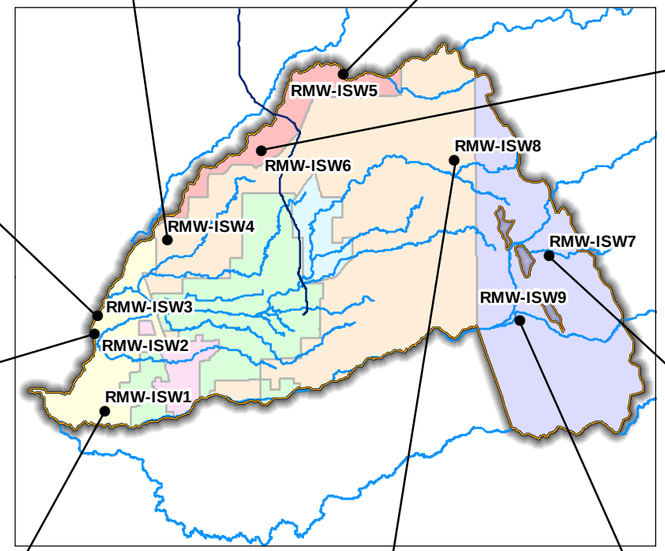
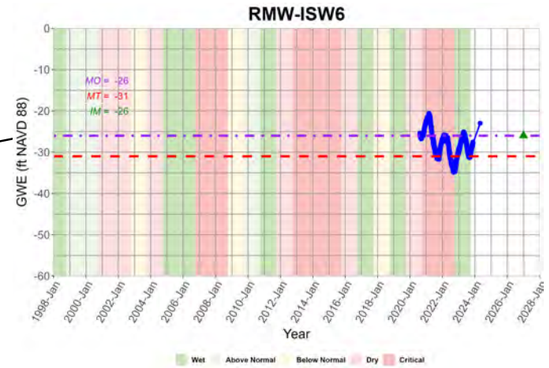
Path: X:\C20149.01\Map\2024\01\Figure AR-4. Representative Monitoring Well Hydrographs (b).mxd

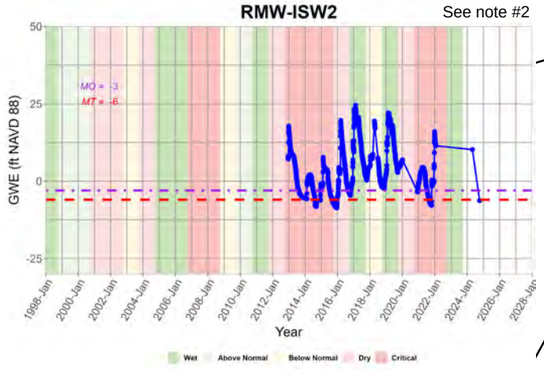


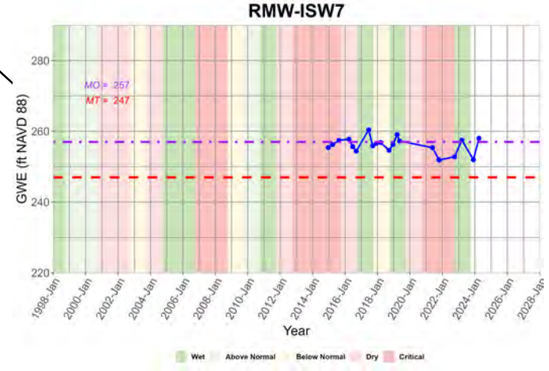


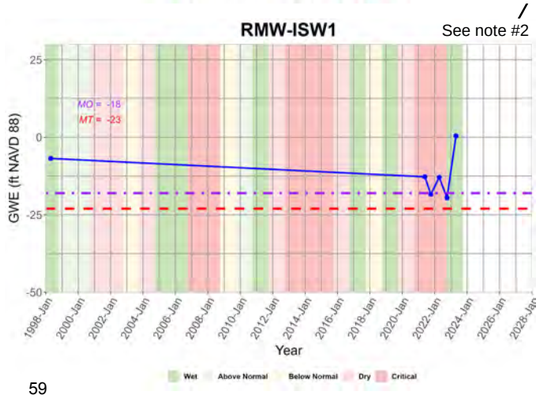


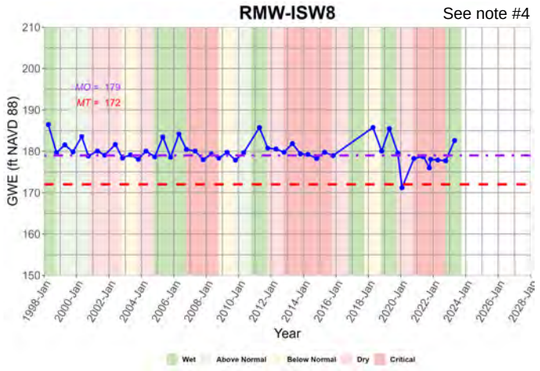


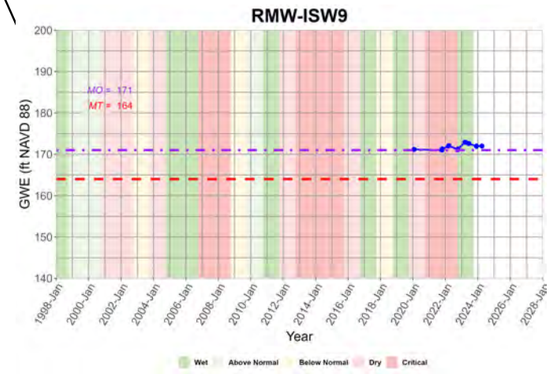












Legend

- 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
- Sloughhouse 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-ISW1, and RMW-ISW2 during Fall 2023.
3. Water level was not measured in RMW-ISW5 during Spring 2024.
4. Water levels were not measured in RMW-ISW4 and RMW-ISW8 during Water Year 2024.

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(Scale in Miles)

Representative Monitoring Well - Hydrographs

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Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2025
C20149.02

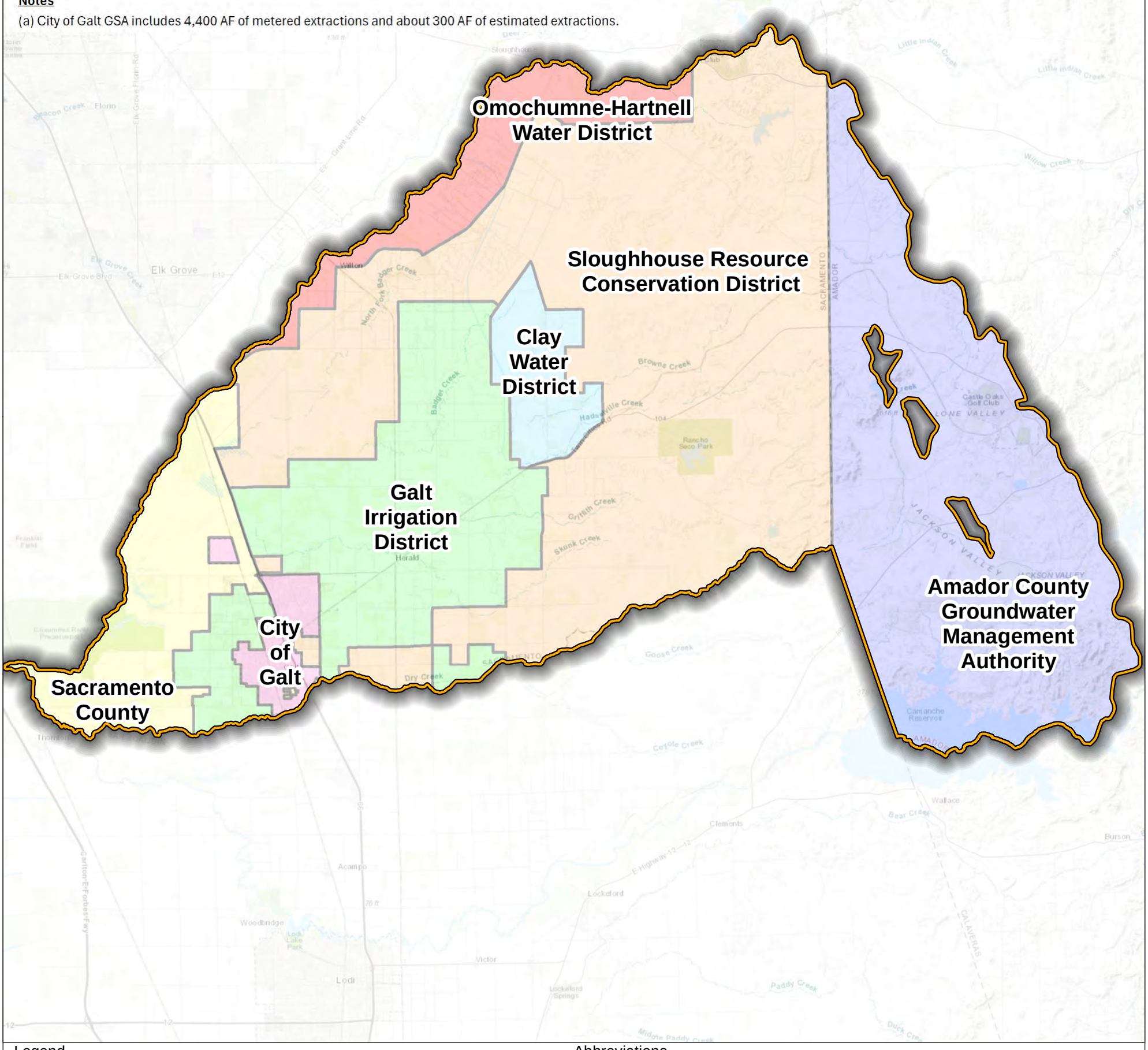
Figure AR-4c

Path: X:\C20149.01\Map\2024\01\Figure AR-4. Representative Monitoring Well Hydrographs (c).mxd

Groundwater Sustainability Agency	Total Estimated Extractions (AF)
Amador County Groundwater Management Authority	1,100
City of Galt[(a)]	4,700
Clay Water District	6,800
Galt Irrigation District	50,100
Omochumne-Hartnell Water District	5,800
Sacramento County	13,000
Sloughhouse Resource Conservation District	38,700
Total	120,200

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
- Sloughhouse 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

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

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(Scale in Miles)

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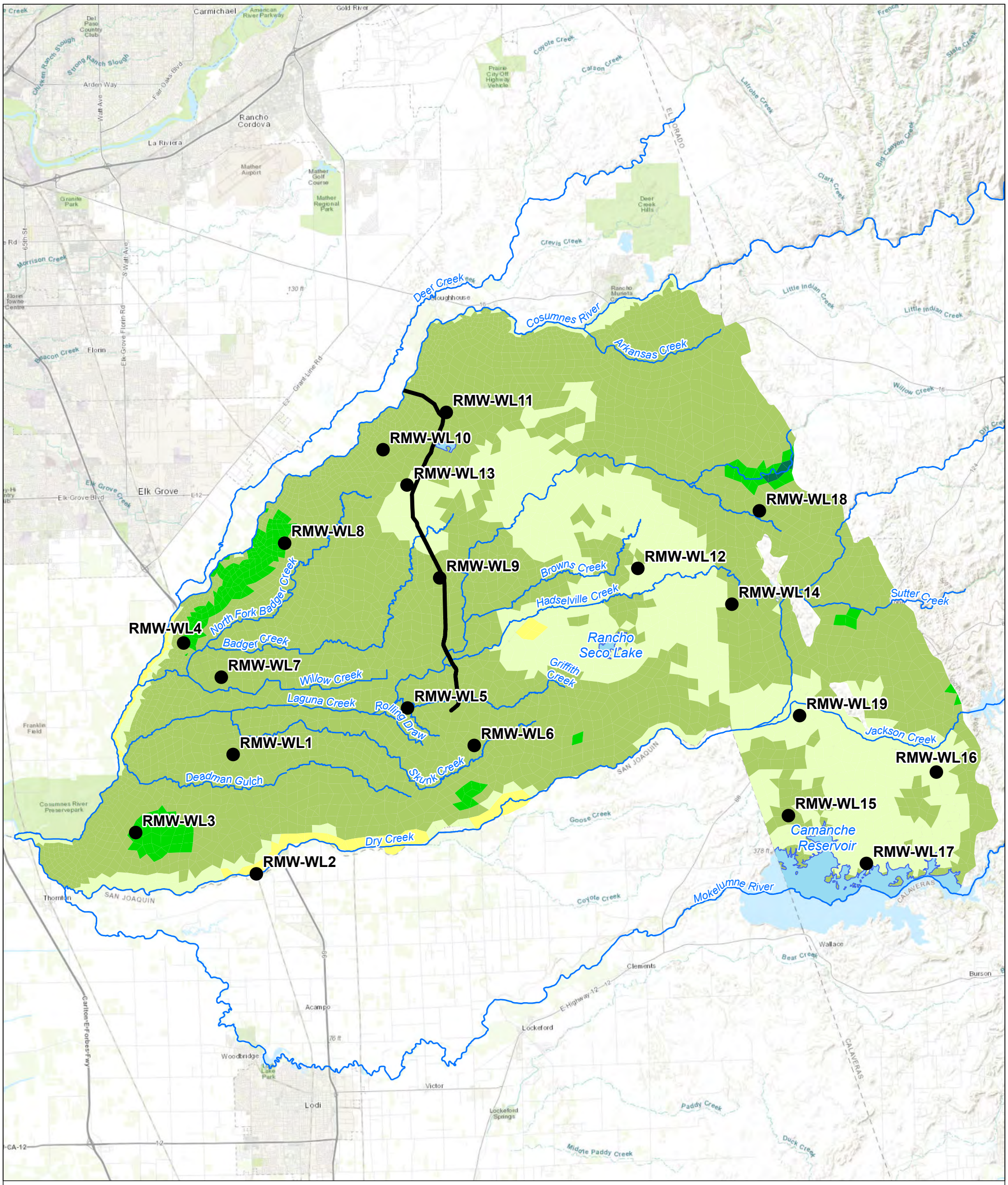
General Locations and Volumes of Annual Extractions Water Year 2024

Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2024
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/yr)

- < -0.25
- -0.25 - 0
- 0 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 1

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 20 February 2025.
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").

N

0 3 6

(Scale in Miles)

DRAFT

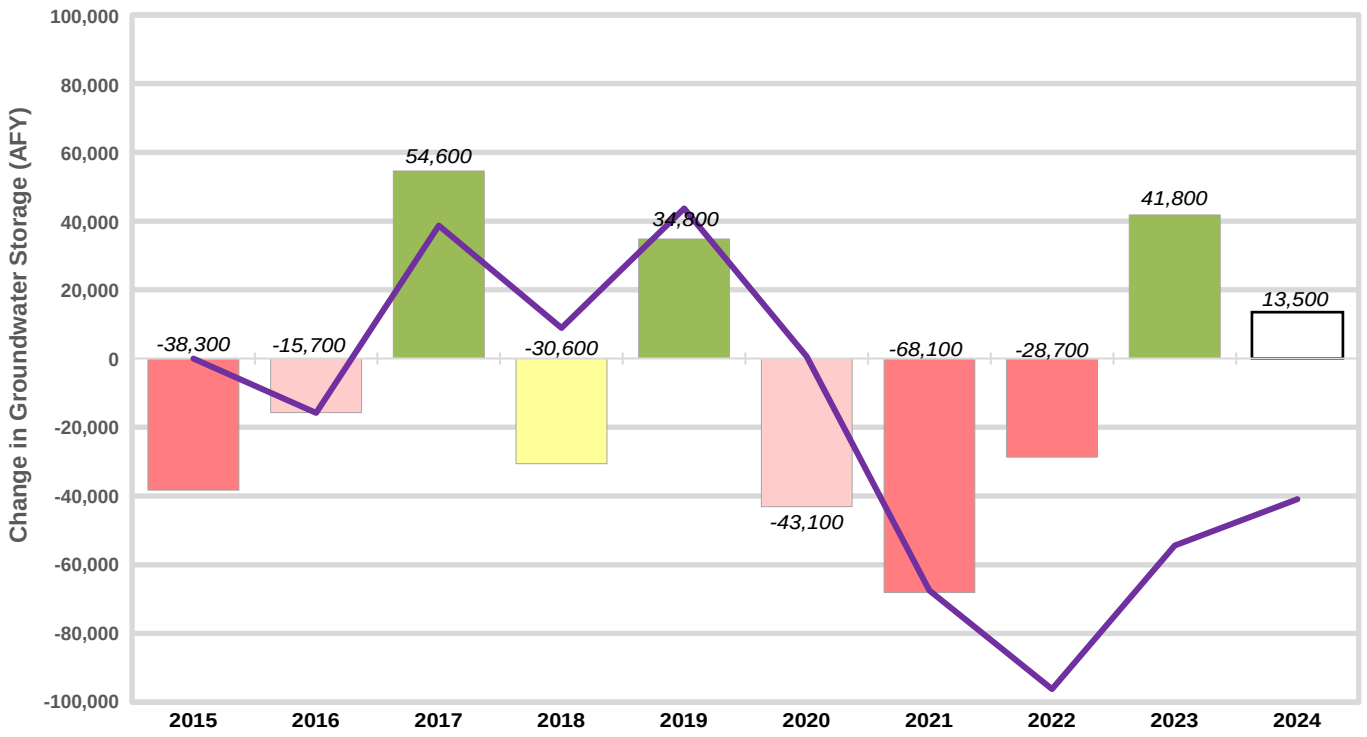
Map Showing the Distribution of Model-Calculated Changes in Groundwater Storage between October 1, 2023 through September 30, 2024 (Water Year 2024), Normalized by Model Element Area and Reported in feet

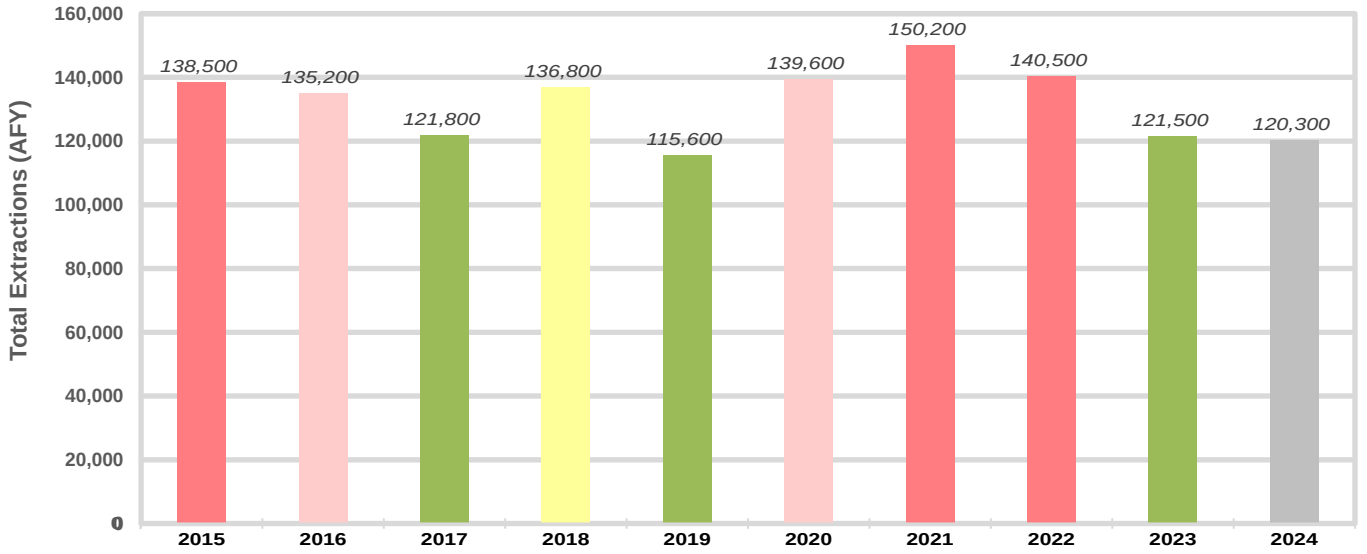
Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2025
C20149.02

Figure AR-10

eki environment & water

Path: X:\C20149.01\Map\2025\02\COSb_AR_WY2024\COSb_AR_WY2024.aprx





Legend

DWR Water Year Type and Annual Groundwater Storage Change (AFY)

- 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 - 2023 is from DWR's Water Year Hydrologic Classification Indices for the San Joaquin Valley (http://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST).
2. DWR has not released the Water Year 2024 water year type; this classification will be udpated in the next Annual Report.

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

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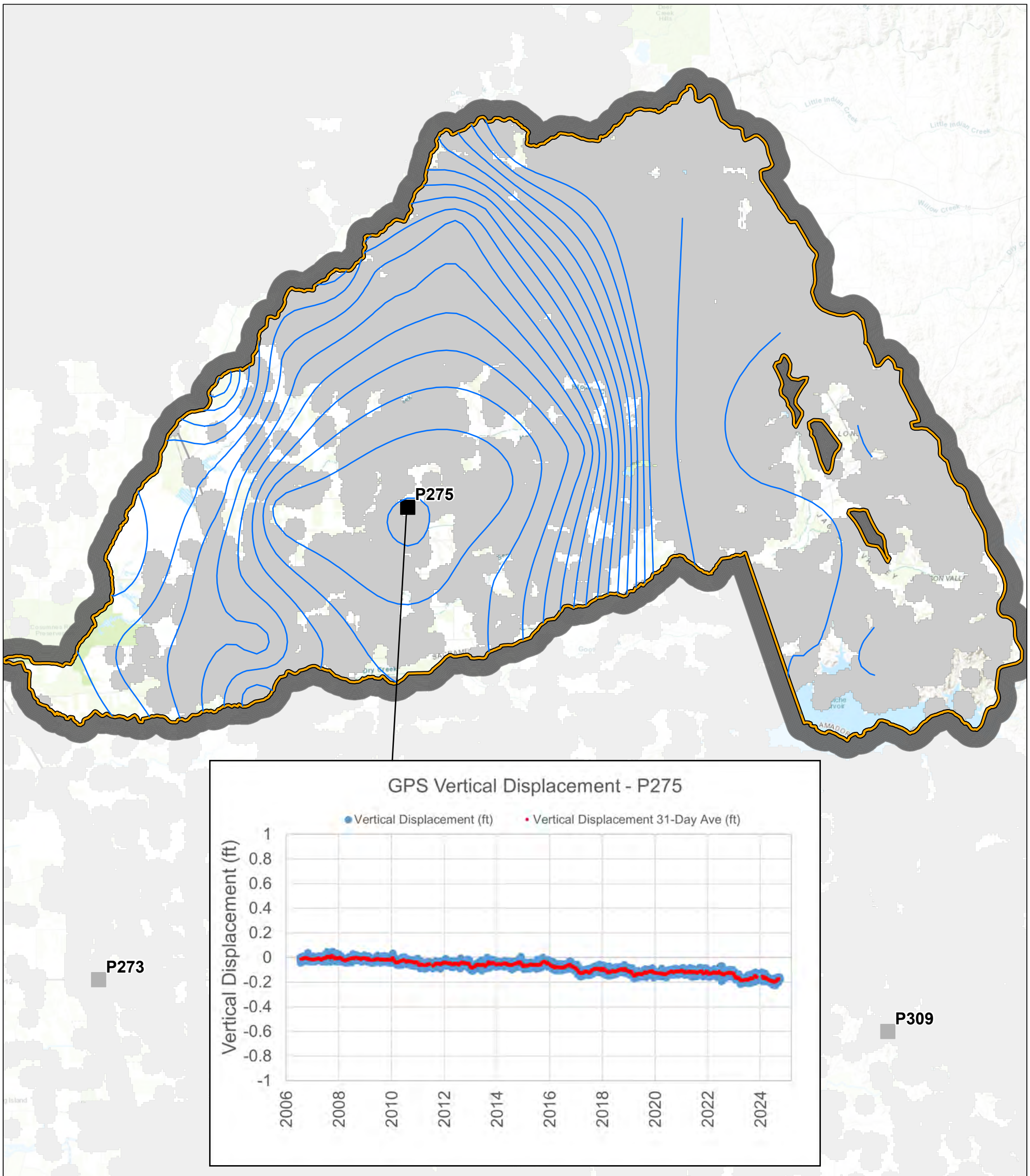
Cosumnes Subbasin
March 2025
C20149.02

Figure AR-10



Legend

- Subsidence Monitoring Station
- Fall 2023 GWE (ft NAVD 88)

Groundwater Subbasin

- Cosumnes Subbasin (5-022.16)

TRE Altamira InSAR Vertical Displacement WY 2023

- < - 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 2021 through October 2022.

Sources

1. Basemap is ESRI's ArcGIS Online world topographic map, obtained 10 February 2025.
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=SGMA DataViewer#currentconditions
4. GWE contours from Figure AR-2.

N

0 3 6

(Scale in Miles)

DRAFT

Subsidence Monitoring WY 2024

Cosumnes Groundwater Authority
Cosumnes Subbasin
March 2025
C20149.02

Figure AR-12

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