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WY2025 Annual Report

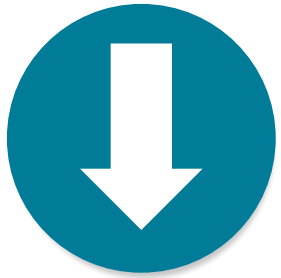
June 10, 2026

Department of Water Resources Annual Report

- Yearly status update on sustainable management criteria (SMC) due to DWR by April 1
- Presents data analysis of basin conditions for the water year (Oct 1 – Sept 30) in relation to set SMCs
- Identifies issues/data gaps that exist in the Basin
- Provides update on all GSP projects and management actions

The Six Sustainable Management Criteria

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY



Chronic lowering of groundwater levels

Degraded water quality

Reduction of groundwater storage

Land subsidence

Seawater intrusion

Depletions of interconnected surface waters

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Water Year Type

- DWR classifies water years into 5 different types
  - Wet (W), Above Normal (AN), Below Normal (BN), Dry (D), Critical (C)
- San Joaquin Valley Water Year Type Index for WY 2025 not yet finalized
  - Assumed to be Below Normal (BN)

Water Year	Type
2019	Wet (W)
2020	Dry (D)
2021	Critical (C)
2022	Critical (C)
2023	Wet (W)
2024	Above Normal (AN)
2025	Below Normal (BN)

Source: DWR Chronological Reconstructed Sacramento and San Joaquin Valley Water Year Hydrologic Classification Indices

Status of Sustainable Management Criteria (SMC)

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Status of Sustainable Management Criteria

Chronic lowering of groundwater levels

Groundwater Levels (GWL)

- Two representative monitoring network wells reported groundwater levels below the minimum thresholds during Fall 2024, but rebounded above minimum thresholds by Spring 2025
- Many wells met or exceeded their measurable objectives
- Data show seasonal groundwater level recovery across Subbasin

Reduction of groundwater storage

Groundwater Storage*

- Storage during WY 2025 decreased by 84,000 AF, which is 0.17% of the total freshwater in storage

Degraded water quality

Groundwater Quality (GWQ)

- No reported monitoring wells for water quality reported levels above the minimum thresholds for either TDS or chloride
- Groundwater quality conditions across the representative monitoring network remained consistent with sustainable groundwater management objectives

*The groundwater storage sustainability indicator uses the GWL SMC as a proxy.

Status of Sustainable Management Criteria, cont. 1

Seawater intrusion

Seawater Intrusion

- Removed as a relevant sustainability indicator in 2024 GSP Amendment
- Chloride now monitored as a constituent of concern as part of the groundwater quality monitoring network

Land subsidence

Land Subsidence

- Representative monitoring network consists of 4 CGPS Stations and 6 survey benchmarks
- Based on evaluation of the representative monitoring network during WY 2025, no locations exceeded their interim milestone or minimum threshold for land subsidence

Depletions of interconnected surface waters

Interconnected Surface Water (ISW)

- New representative monitoring network for ISW established in 2024 GSP Amendment consisting of 21 monitoring wells, 6 of which overlap with GWL monitoring network
- No undesirable results related to depletions of interconnected surface water were identified based on available data

Groundwater Elevations

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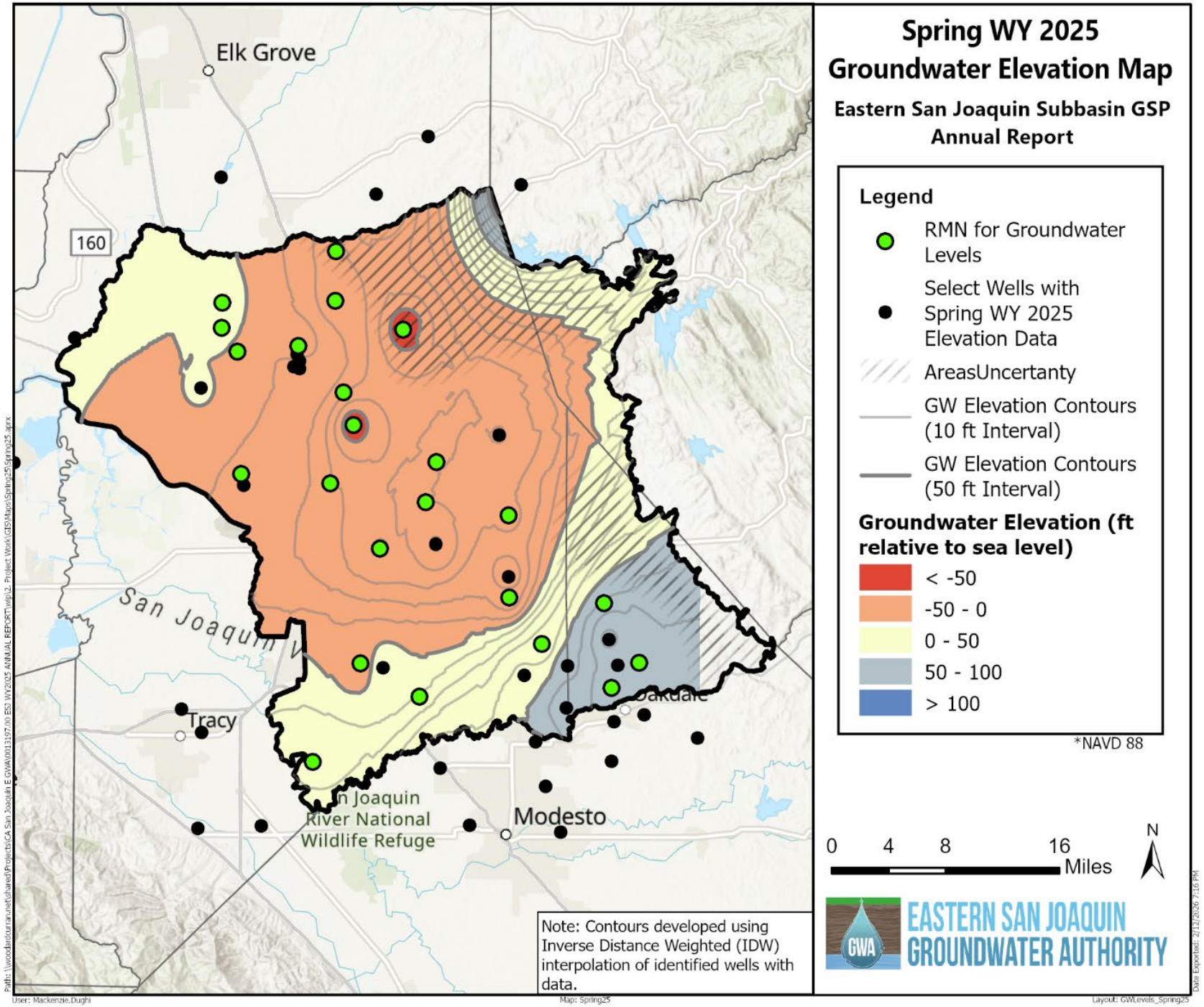
Groundwater Elevations per Water Code

(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.



EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Seasonal High

- Mapped Groundwater Elevations for Spring WY2025
- Data Range: March, April, and May 2025 (WY2025)

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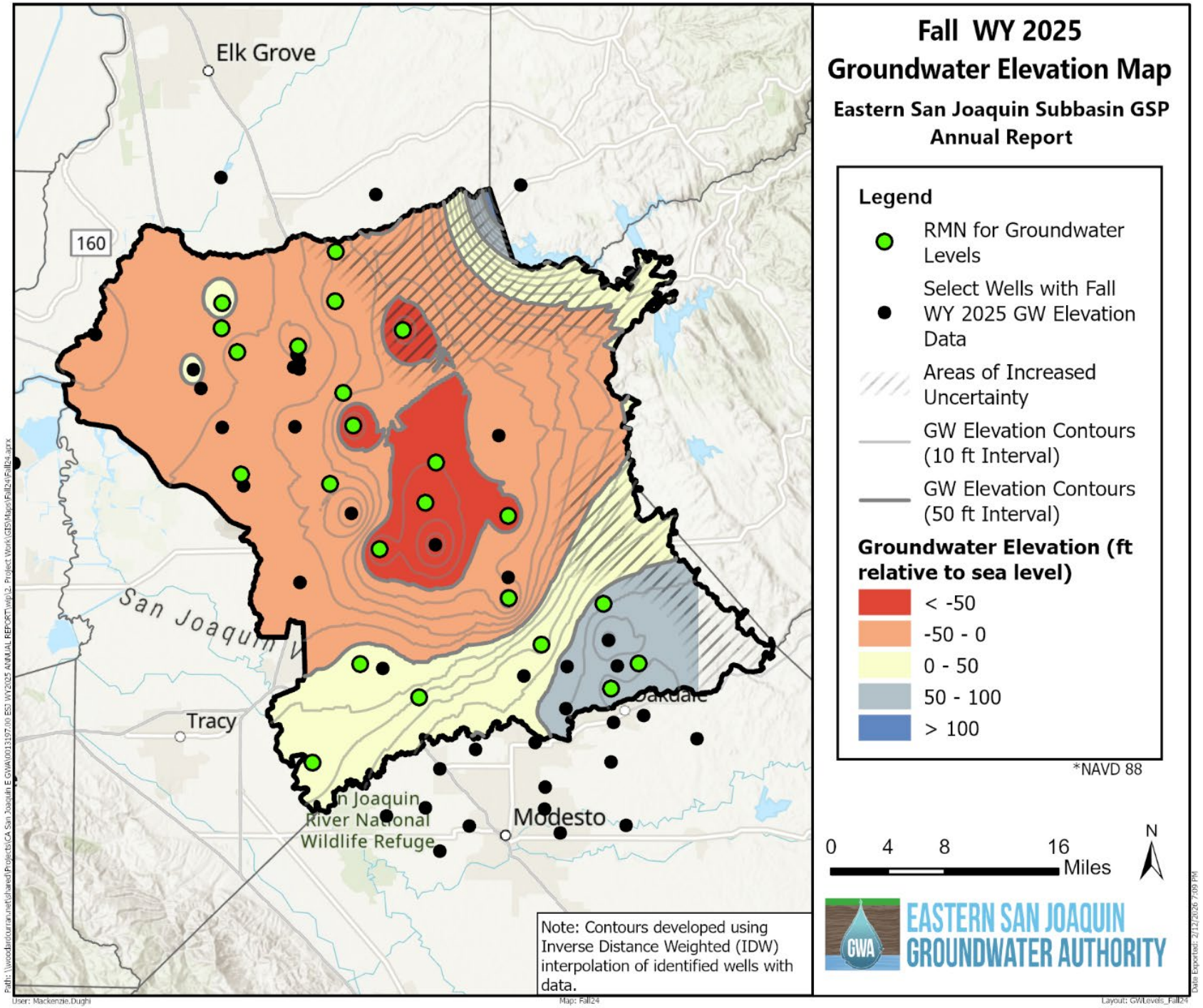

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Seasonal Low

- Mapped Groundwater Elevations for Fall WY2025
- Data Range: September 2024 (WY2024), October and November 2024 (WY2025)

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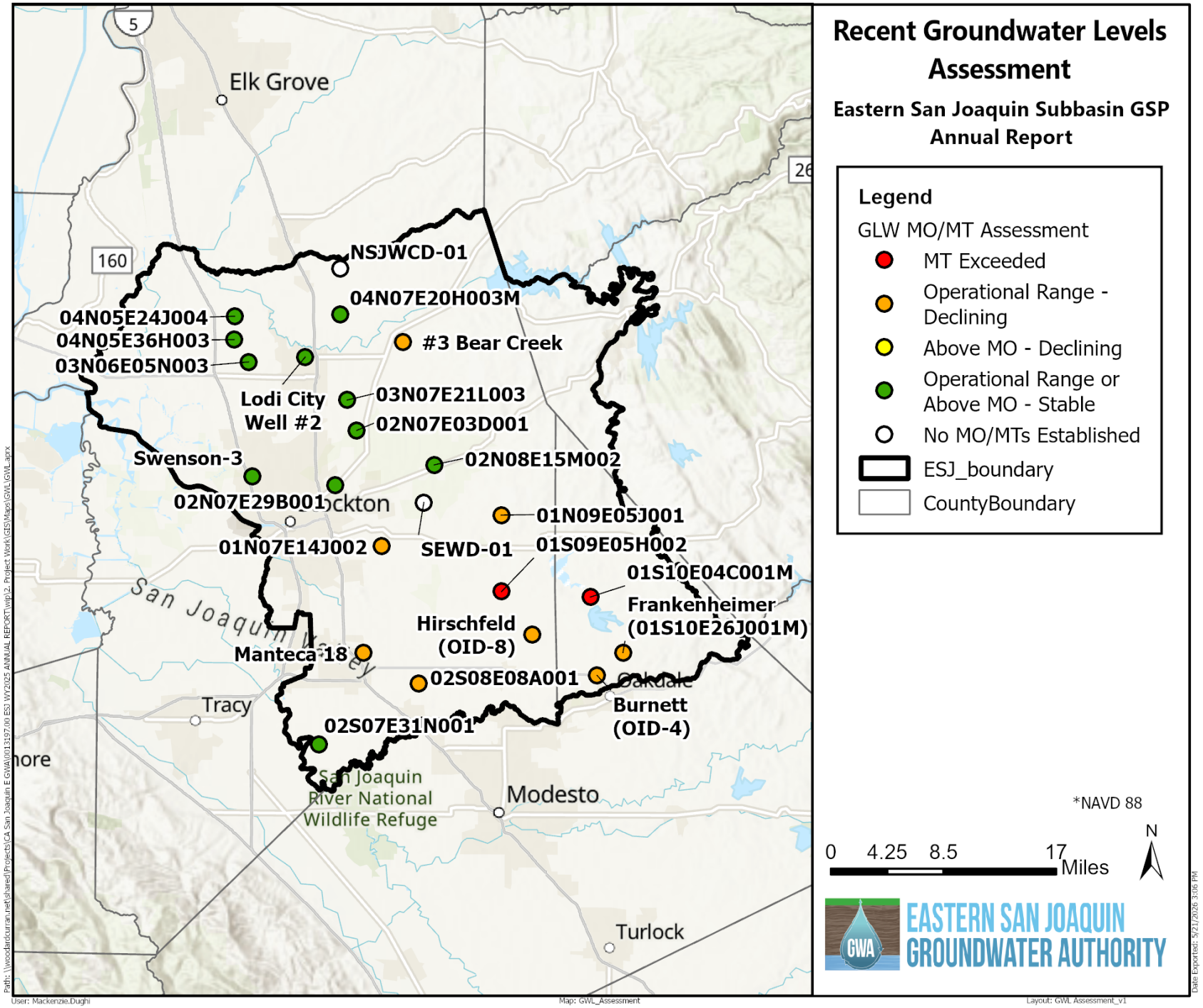

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GWL Assessment

- 2 MT Exceedances
- 8 Operational range and declining
- 11 Operational range or above MO and stable
- 2 MO/MTs not established yet

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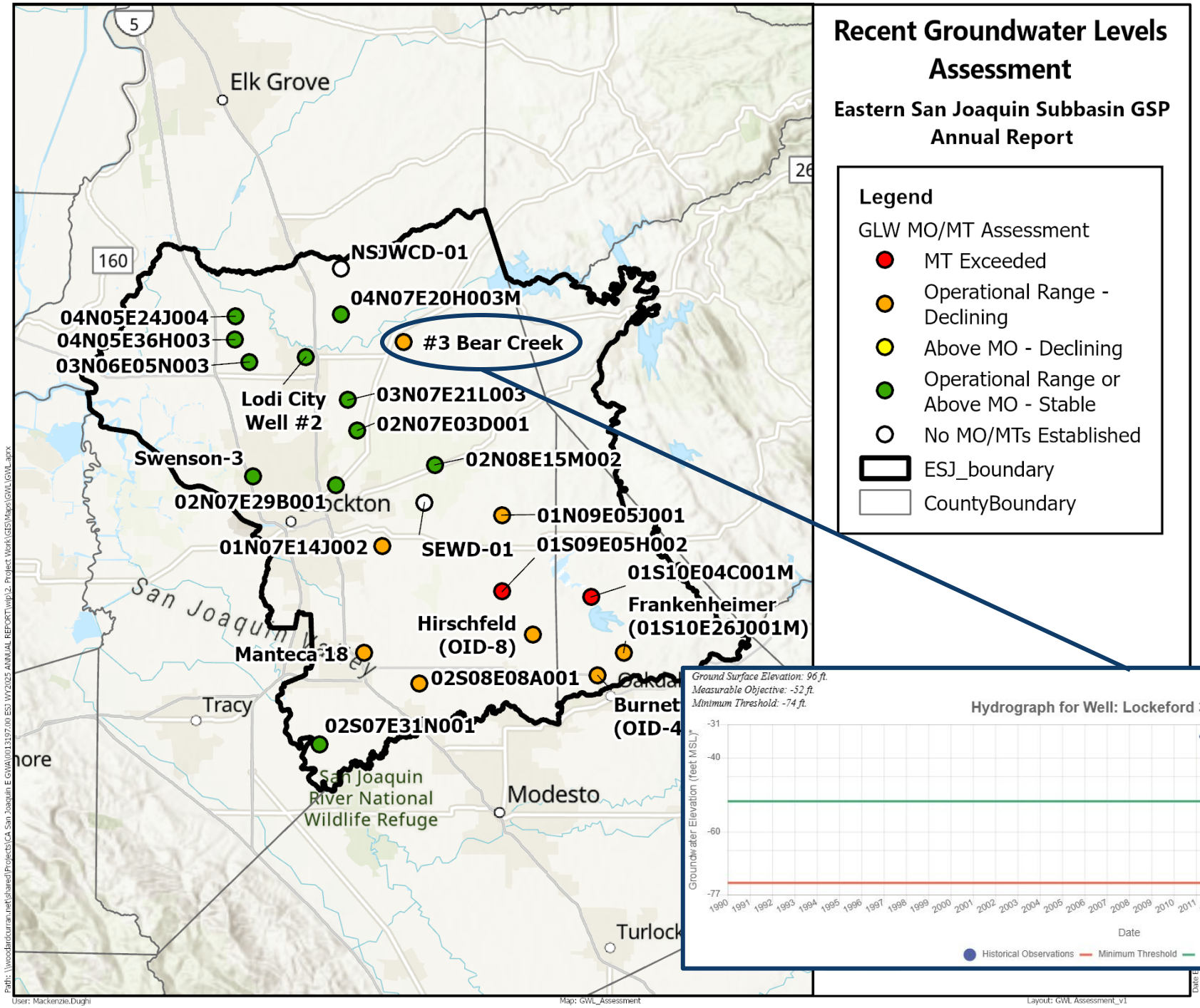
#3 Bear Creek

- Operational range and declining



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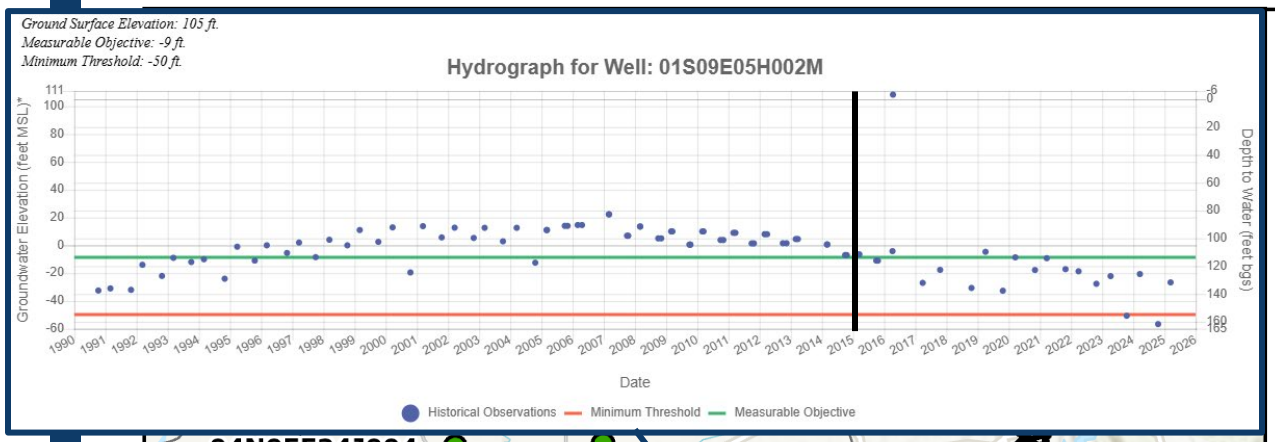

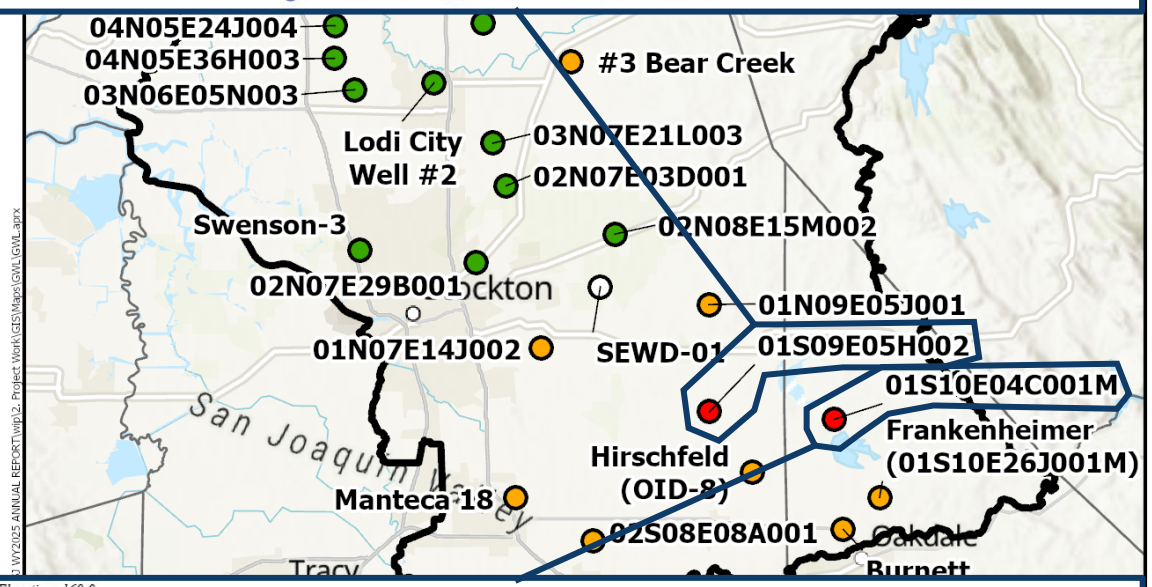

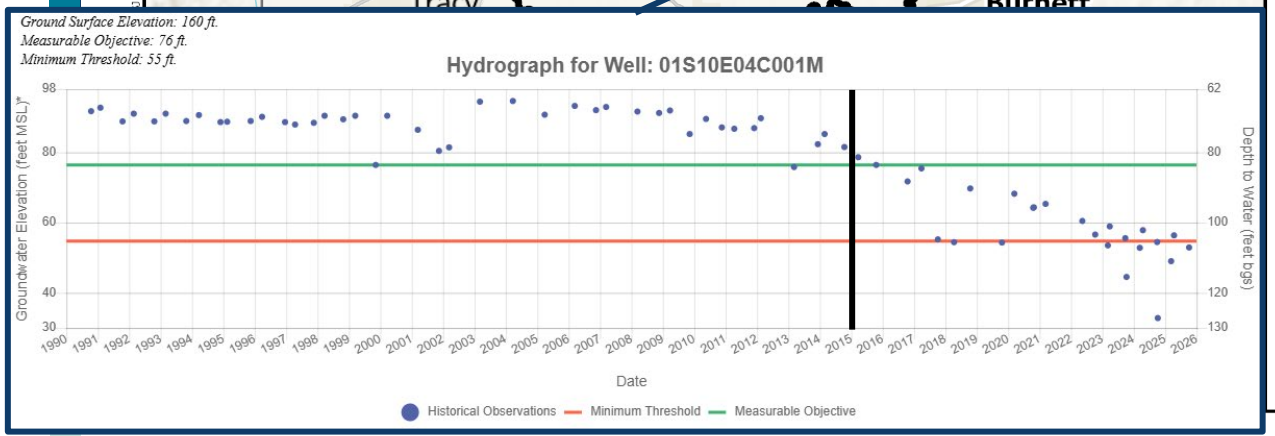

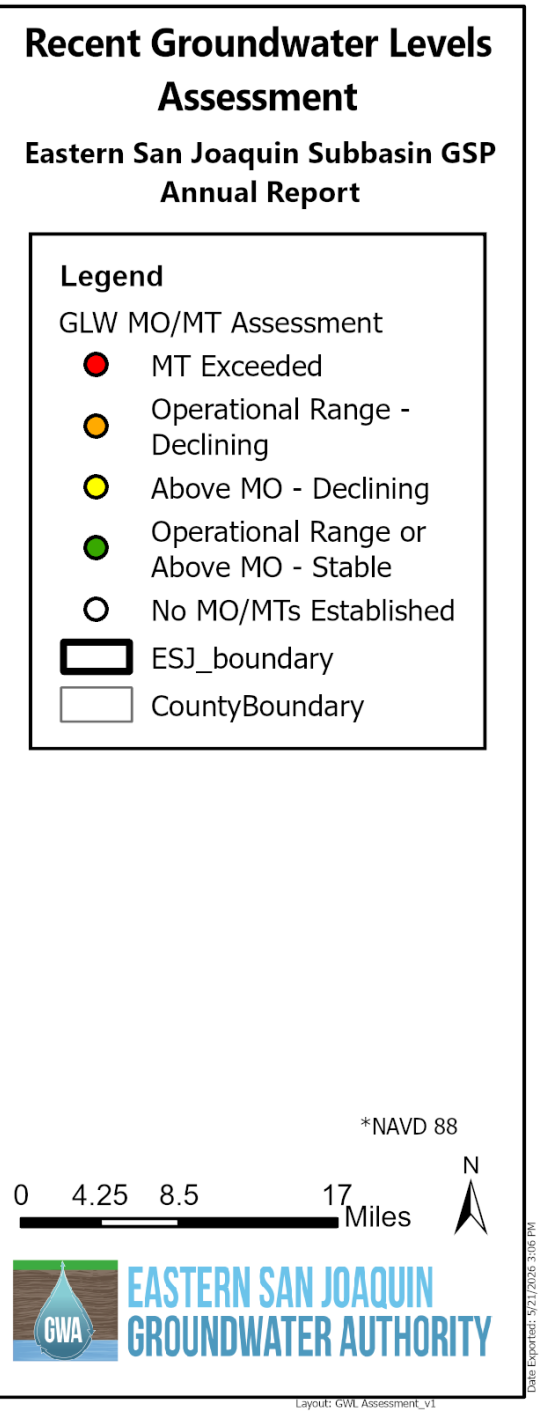

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

01S09E05H002 & 01S10E04C001M

- MT Exceedances

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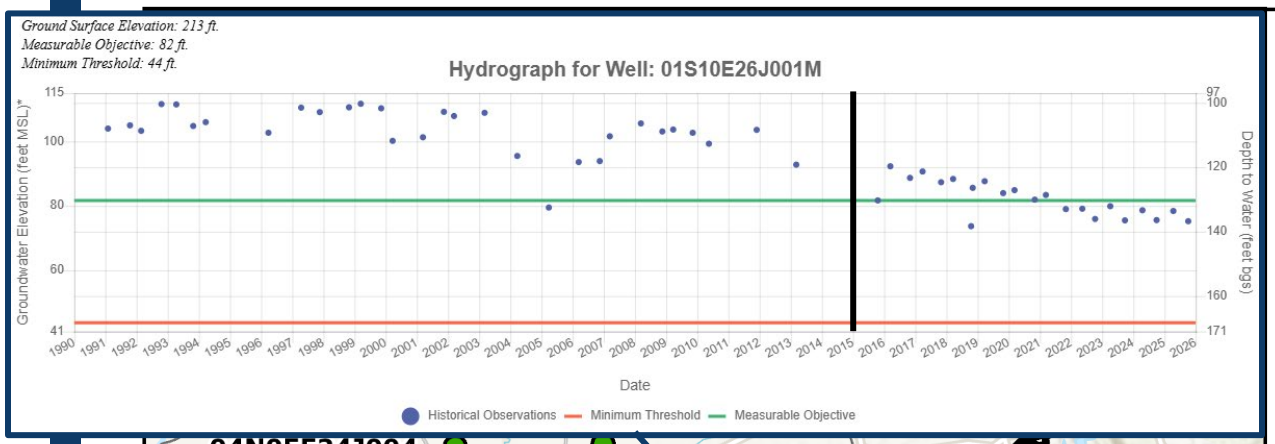

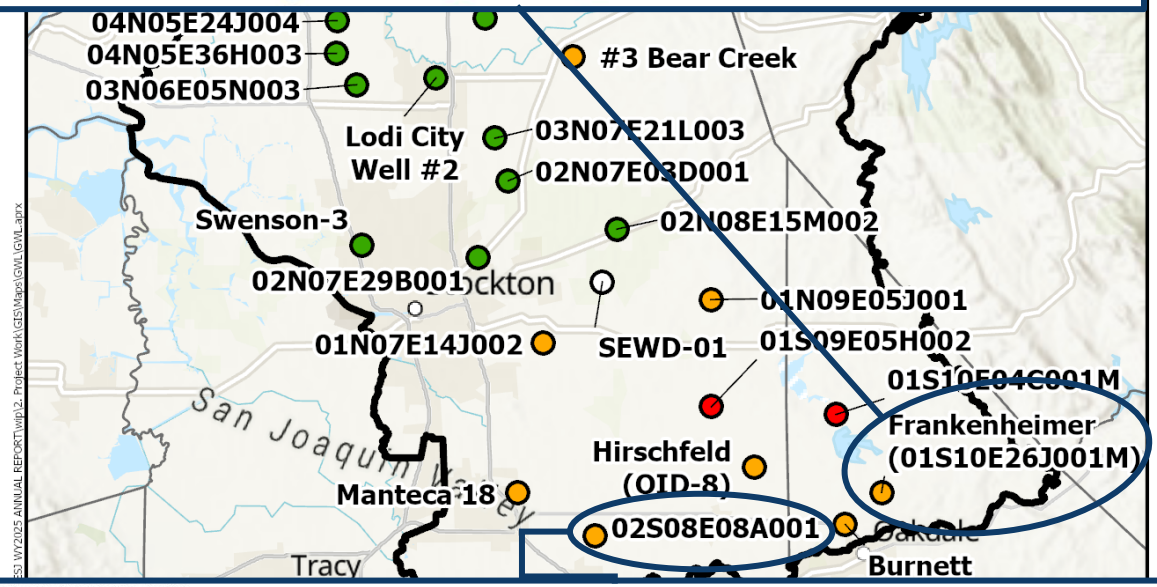

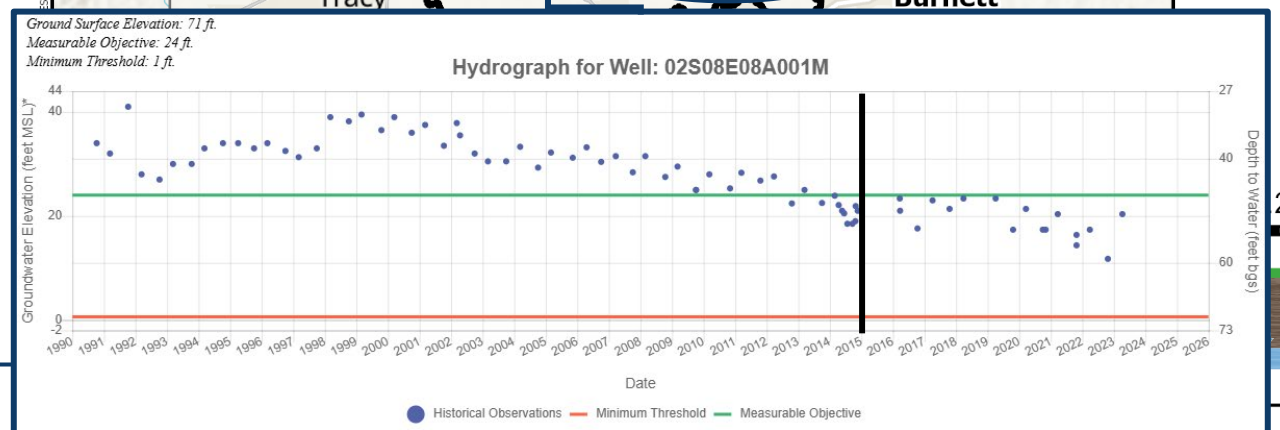

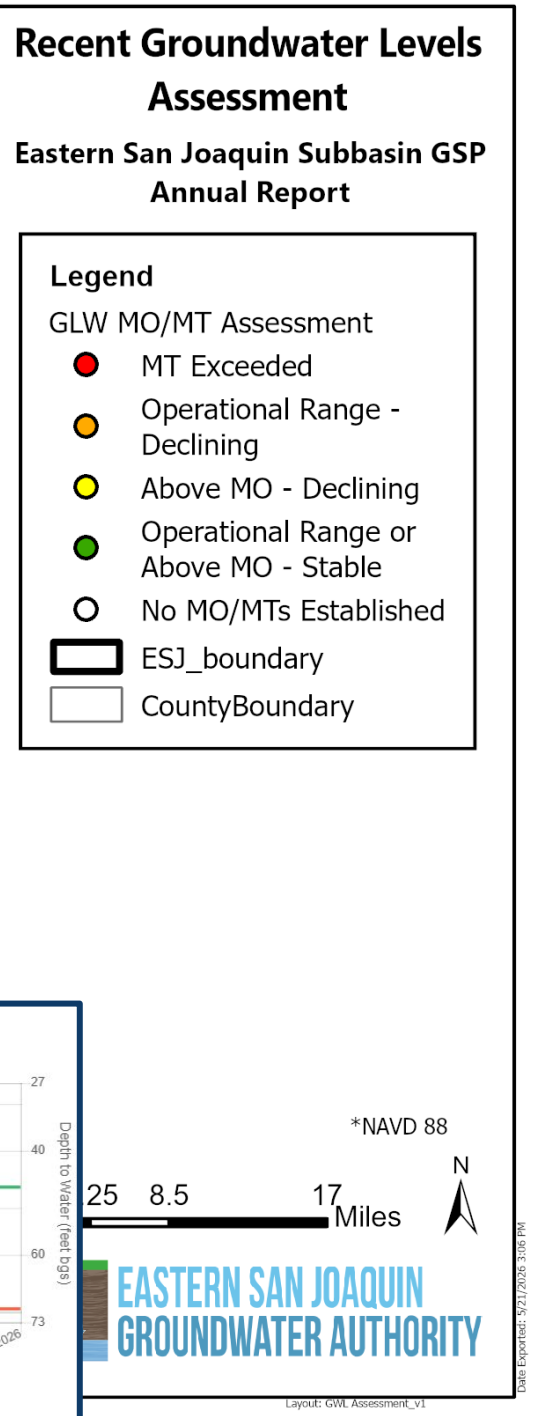

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Frankenheimer (01S10E26J001) & 02S08E0A001

- Operational range and declining

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Groundwater Quality Monitoring Reported

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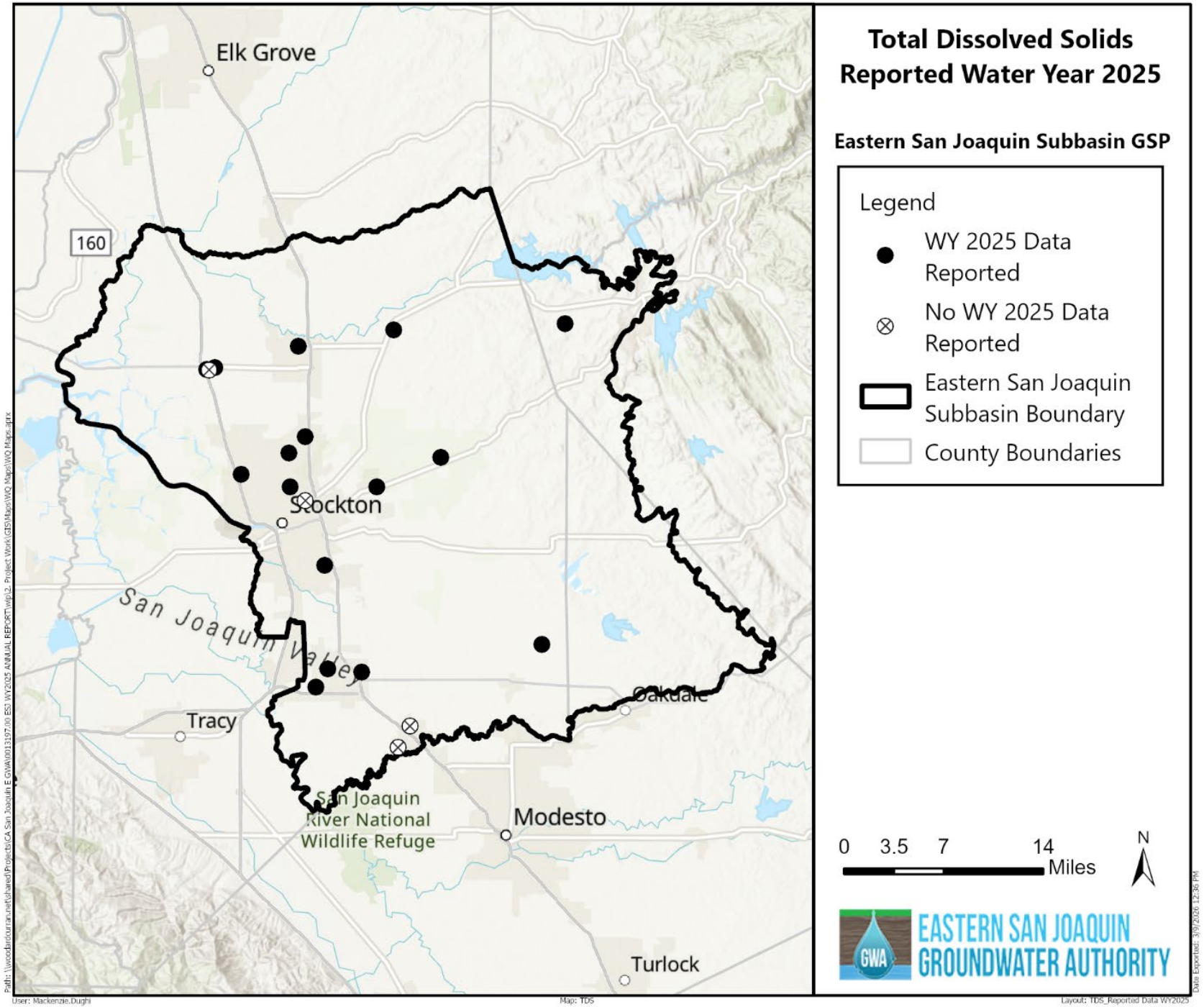
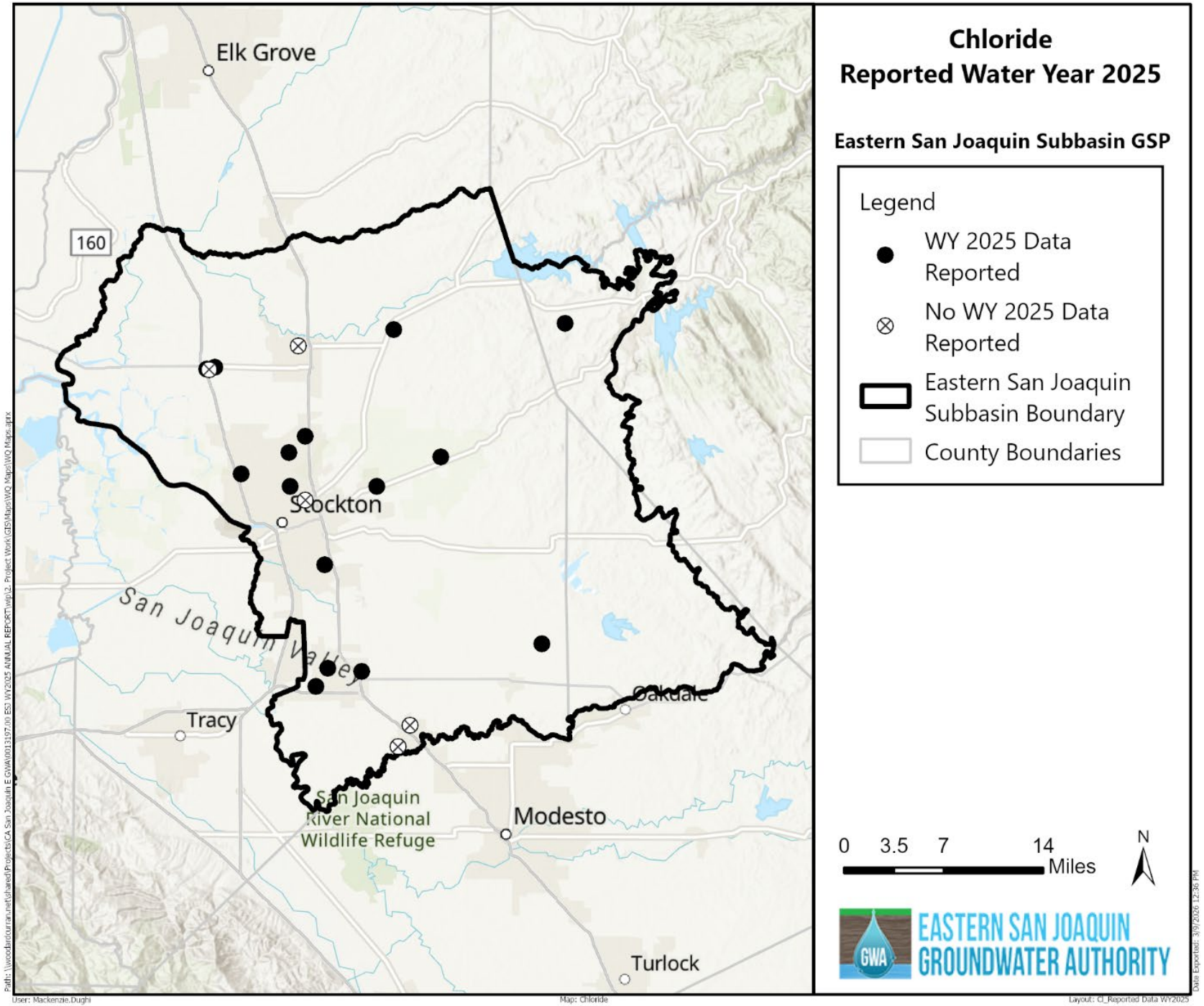


TDS Reported

- Total Dissolved Solids (TDS) measurements collected at representative water quality wells



EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Chloride Reported

- Chloride measurements collected at representative water quality wells

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Modeling Update & Outputs

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ESJWRM Update

Model-Related Components in WY 2025 Annual Report:

(1) Groundwater Extraction

(2) Surface Water Supply

(3) Total Water Use

(4) Change in Groundwater Storage

ESJWRM Update Process

- Updated Historical ESJWRM through WY 2025
- Data were collected and incorporated into ESJWRM from the following agencies:

Municipal Water Purveyors:

- California Water Service Company Stockton District
- City of Escalon
- City of Lodi
- City of Manteca
- City of Ripon
- City of Stockton
- Linden County Water District
- Lockeford Community Services District
- Stockton East Water District

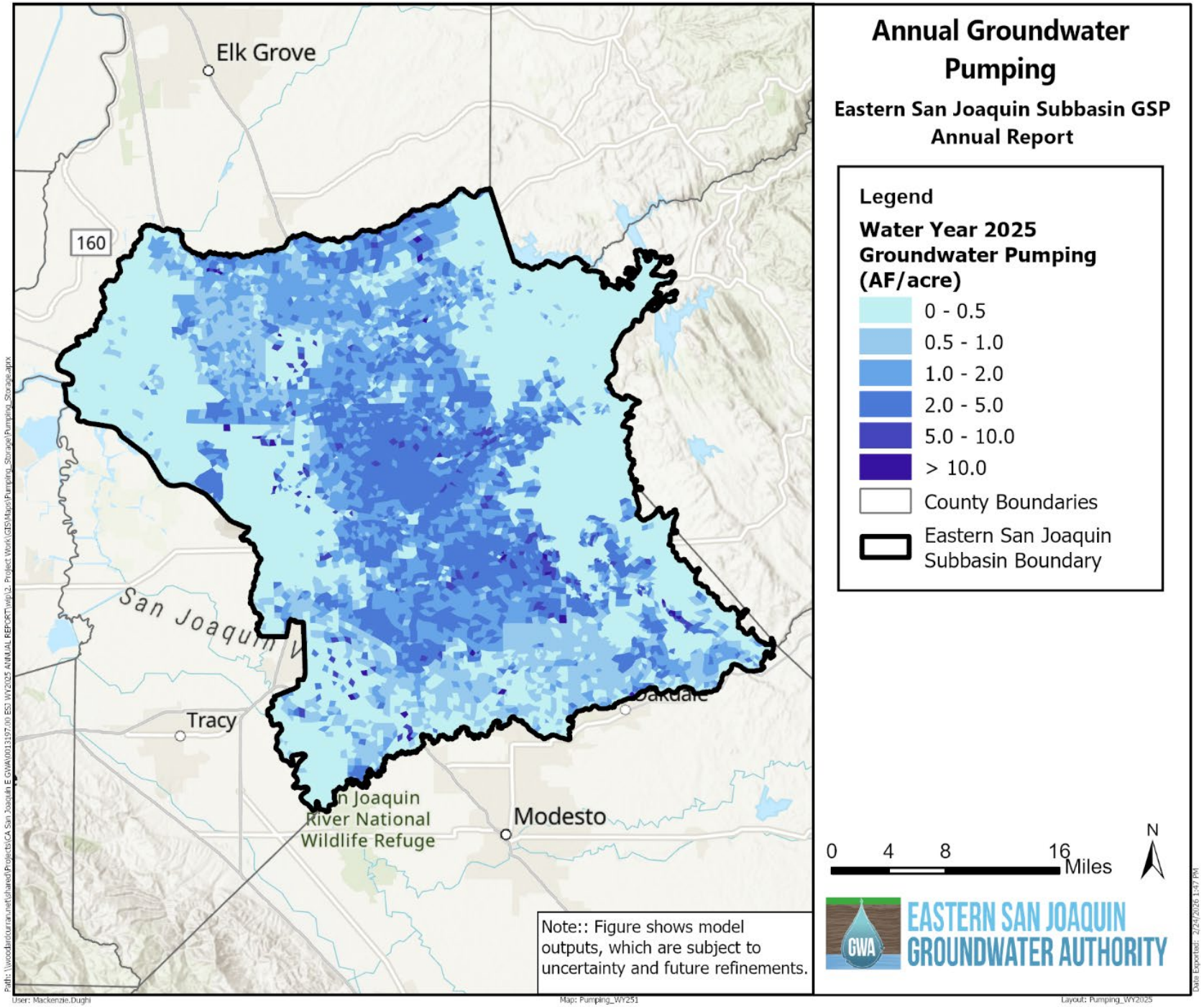
Agricultural Water Purveyors:

- Calaveras County Water District
- Central San Joaquin Water Conservation District
- North San Joaquin Water Conservation District
- Oakdale Irrigation District
- South San Joaquin Irrigation District
- Stockton East Water District
- Woodbridge Irrigation District

(1) Groundwater Extraction

(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.

***CA Code of Regs: Article 7 Section 356.2**



EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Groundwater Pumping Map

- Mapped total groundwater pumping by ESJWRM element for WY2025
- Units of feet are shown to normalize across different element sizes

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Groundwater Use (AF)

Month	Agricultural	Agricultural	Urban and Industrial	Urban and Industrial	Total
	Agency Reported Values	*Estimated Agricultural**	*Agency Reported Values*	*Private Domestic**	
Oct-24	303	94,200	1,675	2,600	98,779
Nov-24	0	2,600	938	1,900	5,438
Dec-24	0	3,300	907	1,600	5,807
Jan-25	0	4,100	952	1,600	6,652
Feb-25	6	18,500	1,439	1,400	21,345
Mar-25	64	13,900	1,651	1,800	17,415
Apr-25	532	80,500	2,413	2,300	85,745
May-25	680	124,600	2,303	3,400	130,984
Jun-25	789	121,900	2,759	3,900	129,348
Jul-25	699	86,100	2,346	4,500	93,645
Aug-25	482	112,800	2,247	4,400	119,929
Sep-25	347	83,100	1,878	3,700	89,026
Total	***3,903***	***745,600***	***21,510***	***33,100***	***804,112***
Measurement Accuracy	***High***	***Medium***	***High***	***Medium***	***-***

* Additional groundwater pumping is estimated by the ESJWRM based on crop type, hydrologic data (precipitation and evapotranspiration), irrigation efficiency, and population information.

For Comparison:

Total WY 2024	***8,526***	***734,300***	***18,050***	***38,600***	***799,476***
Difference	***(4,623)***	***11,300***	***3,460***	***(5,500)***	***4,636***

(2) Surface Water Supply

(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.

***CA Code of Regs: Article 7 Section 356.2**

Surface Water Deliveries (AF)

Month	Agricultural	Agricultural	Urban and Industrial	Urban and Industrial	Total
	*Agency Reported Values**	*Estimated Riparian***	*Agency Reported Values*	*Estimated in ESJWRM*	
Oct-24	24,372	10,100	6,772	0	41,244
Nov-24	2,626	800	4,892	0	8,318
Dec-24	1,921	300	3,843	0	6,064
Jan-25	2,420	500	4,526	0	7,445
Feb-25	9,057	900	2,869	0	12,826
Mar-25	10,819	2,400	3,550	0	16,769
Apr-25	25,372	9,300	4,235	0	38,906
May-25	43,554	44,100	6,486	0	94,140
Jun-25	53,032	24,700	7,319	0	85,051
Jul-25	58,069	45,500	7,926	0	111,495
Aug-25	57,295	29,600	7,859	0	94,754
Sep-25	44,143	31,600	7,015	0	82,758
Total	***332,678***	***199,800***	***67,292***	***0***	***599,770***
Measurement Accuracy	***High***	***Medium***	***High***	***Medium***	***-***

* Agency reported values reflect deliveries to meet demand, which was based on evapotranspiration and land use.
** Estimated agricultural surface water deliveries include deliveries to Central Delta Water Authority, South Delta Water Authority, and riparian users along major streams.

For Comparison:

Total WY 2024	***314,951***	***198,600***	***74,562***	***0***	***588,112***
Difference	***17,727***	***1,200***	***(7,270)***	***0***	***11,658***

Groundwater Recharge or In-Lieu Use

- Agencies conducting in-lieu recharge include Cal Water, CCWD, City of Escalon, City of Lodi, City of Manteca, City of Ripon, City of Stockton, CSJWCD, LCWD, NSJWCD, OID, SSJID, SEWD, and WID.
- Riparian users of surface water are also benefitting from in-lieu recharge.
- Direct recharge projects exist in NSJWCD and SEWD and over 14,000 AF in WY 2025.

(3) Total Water Use (AF)

Month	Agricultural						Urban and Industrial						Total
	Direct Measurement			*Estimated in ESJWRM**			*Direct Measurement*			*Estimated in ESJWRM**			
	Groundwater	*Surface Water*	*Total*	*Groundwater*	*Surface Water*	*Total*	*Groundwater*	*Surface Water*	*Total*	*Groundwater*	*Surface Water*	*Total*	
Oct-24	303	24,372	24,675	94,200	10,100	104,300	1,675	6,772	8,448	2,600	0	2,600	140,023
Nov-24	0	2,626	2,626	2,600	800	3,400	938	4,892	5,830	1,900	0	1,900	13,756
Dec-24	0	1,921	1,921	3,300	300	3,600	907	3,843	4,750	1,600	0	1,600	11,871
Jan-25	0	2,420	2,420	4,100	500	4,600	952	4,526	5,478	1,600	0	1,600	14,097
Feb-25	6	9,057	9,063	18,500	900	19,400	1,439	2,869	4,308	1,400	0	1,400	34,171
Mar-25	64	10,819	10,883	13,900	2,400	16,300	1,651	3,550	5,201	1,800	0	1,800	34,184
Apr-25	532	25,372	25,903	80,500	9,300	89,800	2,413	4,235	6,648	2,300	0	2,300	124,651
May-25	680	43,554	44,234	124,600	44,100	168,700	2,303	6,486	8,789	3,400	0	3,400	225,123
Jun-25	789	53,032	53,821	121,900	24,700	146,600	2,759	7,319	10,079	3,900	0	3,900	214,399
Jul-25	699	58,069	58,768	86,100	45,500	131,600	2,346	7,926	10,272	4,500	0	4,500	205,140
Aug-25	482	57,295	57,777	112,800	29,600	142,400	2,247	7,859	10,106	4,400	0	4,400	214,684
Sep-25	347	44,143	44,490	83,100	31,600	114,700	1,878	7,015	8,893	3,700	0	3,700	171,784
Total	***3,903***	***332,678***	***336,581***	***745,600***	***199,800***	***945,400***	***21,510***	***67,292***	***88,802***	***33,100***	***0***	***33,100***	***1,403,882***
Measurement Accuracy	***High***	***High***	***High***	***Medium***	***Medium***	***Medium***	***High***	***High***	***High***	***Medium***	***Medium***	***Medium***	***-***

* Includes estimated agricultural groundwater use, estimated private domestic groundwater use, and estimated riparian surface water use. See previous tables for further details.

For Comparison:

Total WY 2024	***8,526***	***314,951***	***323,476***	***734,300***	***198,600***	***932,900***	***18,050***	***74,562***	***92,612***	***38,600***	***0***	***38,600***	***1,387,588***
Difference	***(4,623)***	***17,727***	***13,105***	***11,300***	***1,200***	***12,500***	***3,460***	***(7,270)***	***(3,810)***	***(5,500)***	***0***	***(5,500)***	***16,294***

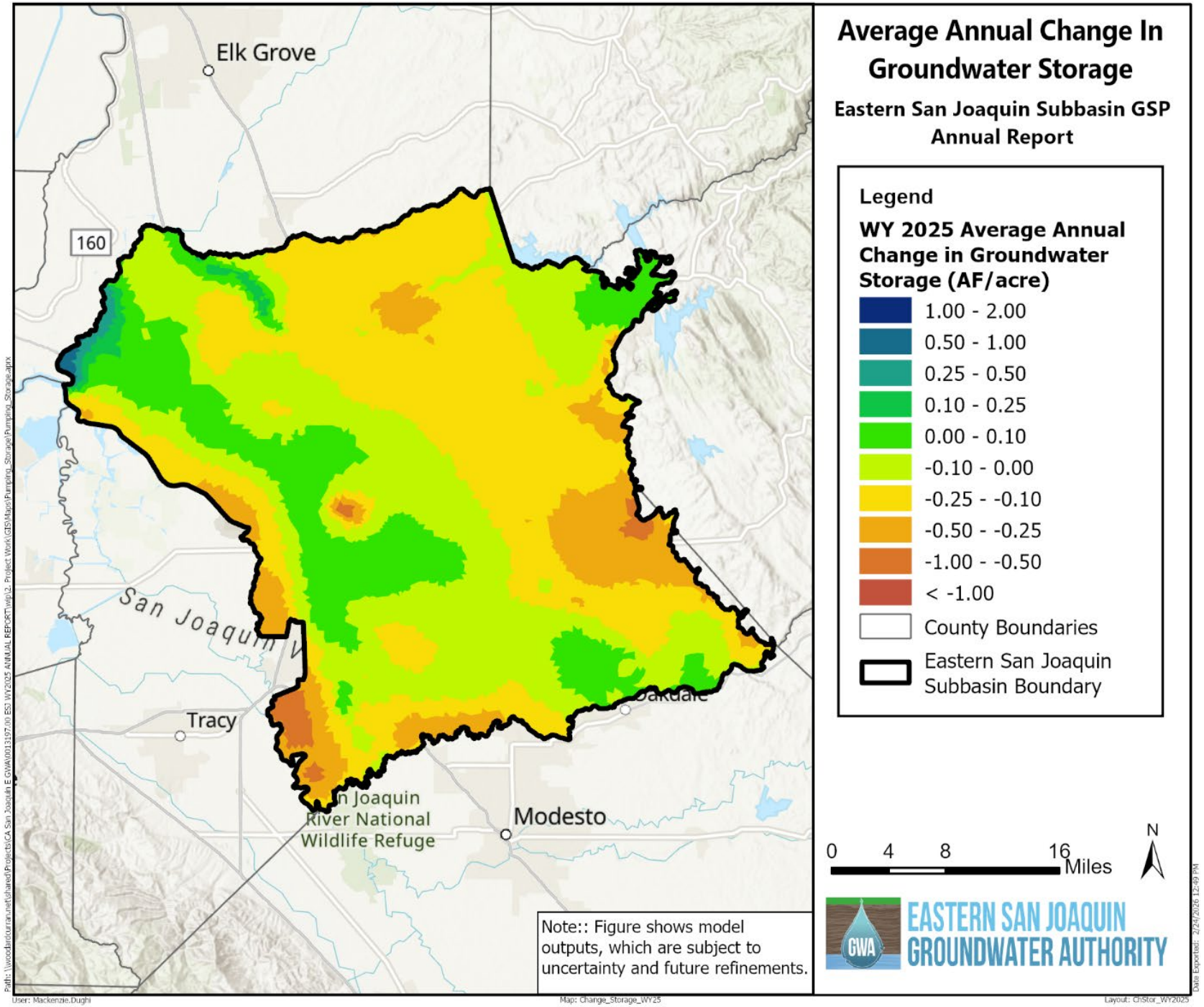
(4) Groundwater Storage

(5) 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.

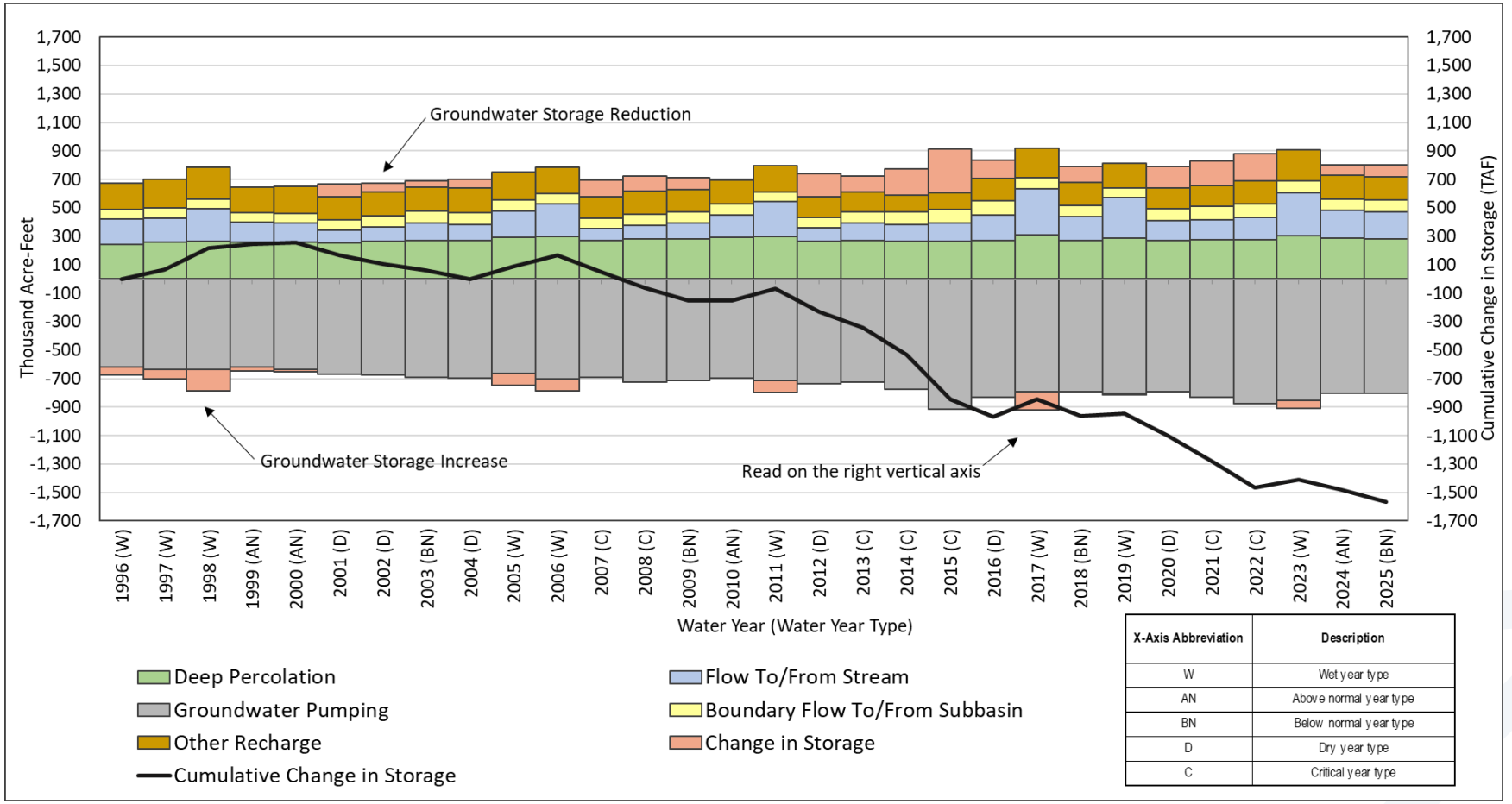
***CA Code of Regs: Article 7 Section 356.2**



Groundwater Storage Map

- Mapped change in storage by model element for WY 2025
- Units of feet are shown to normalize across different element sizes

Groundwater Storage



X-Axis Abbreviation	Description
W	Wet year type
AN	Above normal year type
BN	Below normal year type
D	Dry year type
C	Critical year type

- Decrease of 84,100 AF over WY2025
- Total freshwater storage: 50 MAF
- Represents a 0.17% change in overall freshwater storage

For Comparison: WY 2024 showed a 55,000 AF decrease (0.1% change in freshwater storage)

Status of Projects & Management Actions (PMAs)

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Status of Category A Projects and Management Actions

Project	Status
Lake Grupe In-lieu Recharge	• Project is complete. Meter is installed..
SEWD Surface Water Implementation Expansion	• Project being implemented in stages. • During WY 2025, an additional 1,100 acres had access to surface water. • The SWEEP projects will be fully implemented by the end of 2026 with many projects already completed as of the end of 2025. • Through SWEG program an additional 2,350 acres are in the planning stages to implement surface water infrastructure. • Conversion of 3,044 acres to surface water has been completed and an additional acres 2,870 acres are in the planning stage by the end of 2026.
White Slough Water Pollution Control Facility Expansion	• Project is complete
CSJWCD Capital Improvement Program	• Cost share component of program increased to $300 per acre to reduce surface water costs over a 10-year period. • In first year of implementation, one application has been submitted and two applications are pending.

Status of Category A Projects and Management Actions, cont. 1

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

Project	Status
NSJWCD South System Modernization	• Phase 1: Completed in 2019-2021 including - new pump station, variable frequency drive (VFD), meters, automation equipment, SCADA, new main junction box at Tretheway and Brandt Road. • Phase 2: Completed 2023-2024 include new sections of main pipeline and adding more meters and SCADA (Construction planned for 2023). • Phase 3: Completed 2024-2025 include additional mainline replacement and recharge capacity and a second pump on the pump station. • Future Phases: Include completing replacement of the remaining segments of the mainline, and additional laterals and recharge capacity along the south system to expand the capacity to take wet year water for recharge.
Long-term Water Transfer to SEWD and CSJWCD	• OID and SJJID completed a ten-year water transfer to SEWD in 2023 that will make available to SEWD up to 10,000 AF in critical years and up to 20,000 AF in non-critical years depending on availability of pre-1914 Stanislaus River water.
City of Stockton Advanced Metering Infrastructure	• Project to convert touch read meters to full AMI. • To be completed over 6 years. Initial study completed in 2011. Contract award in March 2024. Project completion in 2028..

Status of Category A Projects and Management Actions, cont. 2

Project	Status
South System Groundwater Banking with EBMUD	• NSJWCD and EBMUD completed contracts, new facilities, water right change petitions, water delivery and extraction for the pilot DREAM Project (1,000 AF). • Planning efforts for a larger scale banking project are underway.
NSJWCD North System Modernization/Lakso Recharge	• Awarded Proposition 68 Round 2 funding $3.9M. • Phase 1A has been constructed and began operating in 2023-24 to recharge in two locations. • Phase 1B added half a mile of 42-inch pipe along Acampo Road and was completed in 2025 to add irrigation connections. • Phase 1C included nearly half a mile of 42-inch PVC in Tretheway Road and the new 80-acre Lakso Recharge Basin. • Currently working with North System landowners to form an improvement district to use surface water for irrigation and conduct on-farm recharge in wet years. • NSJWCD operated an 80-acre LAKSO basin in 2025. • Phase 2, planned for 2026-28, will replace temporary pumps with a new 40 cfs permanent pump station.

Status of Category A Projects and Management Actions, cont. 3

Project	Status
Tecklenberg Recharge Project	• District acquired a 10-acre parcel in 2023 and constructed and operated a recharge basin from July 2023 to present. • District installed a new lateral from South System mainline to increase project capacity in 2025 and added permanent basin walls
City of Stockton Phase 1: Groundwater Recharge Project	• Request for proposals was released in early spring of 2022. • Contract awarded and the geotechnical study began in July of 2022. • Geotechnical and feasibility studies were completed in December 2023. • Basin design is in progress and construction of the basin(s) will begin in Spring 2025
Threfall Ranch Reservoir	• Final design has been completed • Environmental review and permitting is pending receipt of project funding.
West Groundwater Recharge Basin	• Project currently in the design stage with first phase construction beginning Spring 2025 • Estimated to be completed in approximately 2040. • Removal of material has started at project site.

Status of Category A Projects and Management Actions, cont. 4

New Projects Added in WY 2022	Status
NSJWCD Private Pump Partnerships	• One agreement executed with an existing riparian pumper in 2024 to use NSJWCD water permit to irrigate 200 acre. • Plans to add an additional 200 acres each year for 5 years
Oakdale Irrigation District In-lieu and Direct Recharge Project	• 10-Year out-of-District Water Sales Program began in 2023 and can potentially be extended for another 10-year term, for a total of 20 years. • Program includes 4,292 irrigated acres in the ESJ Subbasin within the ESJGSA. • Participating landowners are required to purchase a minimum of 1.5 acre-feet per irrigated acre when surplus surface water is available resulting in a minimum of 6,438 acre-feet being purchased each year. • Landowners have the opportunity to purchase and use additional surplus surface water throughout the irrigation season if available. • 6,888 acre-feet were delivered in WY 2025.

Status of Category A Projects and Management Actions, cont. 5

New Projects Added in WY 2022	Status
Re-Connection to District Service	• 53.73 acres have been signed back on to SSJID service replacing groundwater use on lands. • Since 2015, there has been 2,131 acres signed back onto District service

Status of Projects & Management Actions

- Call for projects during 2024 GSP Amendment resulted in new PMAs added to master list
  - One project (BNSF Railway Company Intermodal Facility Recharge Pond) was removed from the list
- 2024 GSP Amendment includes 48 projects

Notable Milestones

- Continued expansion of SEWD's Surface Water Implementation Expansion program, including additional conversions to surface water and infrastructure development to support in-lieu recharge
- Completion of Phase 3 of the NSJWCD South System Modernization project
- Completion of Phase 1A, 1B, and 1C of the NSJWCD North System Modernization/Lakso Recharge project, including operation of the 80-acre Lakso Recharge Basin
- Advancement of the Bellota Weir Modifications Project to construction (SEWD)
- Completion of the Water Treatment Plant Aquifer Storage Recovery Well – 7401 project (SEWD)
- Initiation of planning efforts for the Mariposa Drain and Avena Drain Improvement Projects (CSJWCD)

Wrap Up

Woodard & Curran

Annual Report Has Been Submitted to DWR

- Annual Report Document
- GSP Annual Report Elements Guide ("Crosswalk")
  - Included in the Annual Report Document itself
- DWR Data Upload Templates
  - Part A: Groundwater Extractions
  - Part B: Groundwater Extractions Methods
  - Part C: Surface Water Supply
  - Part D: Total Water Use

THANK YOU!

Woodard & Curran