

April 17, 2025

2023/2024 Annual Report Tule Subbasin

Lower Tule River Irrigation District
GSA

*Data derived from Draft-Final Tule Subbasin 2023/24 Annual
Report
Author – TH&Co*



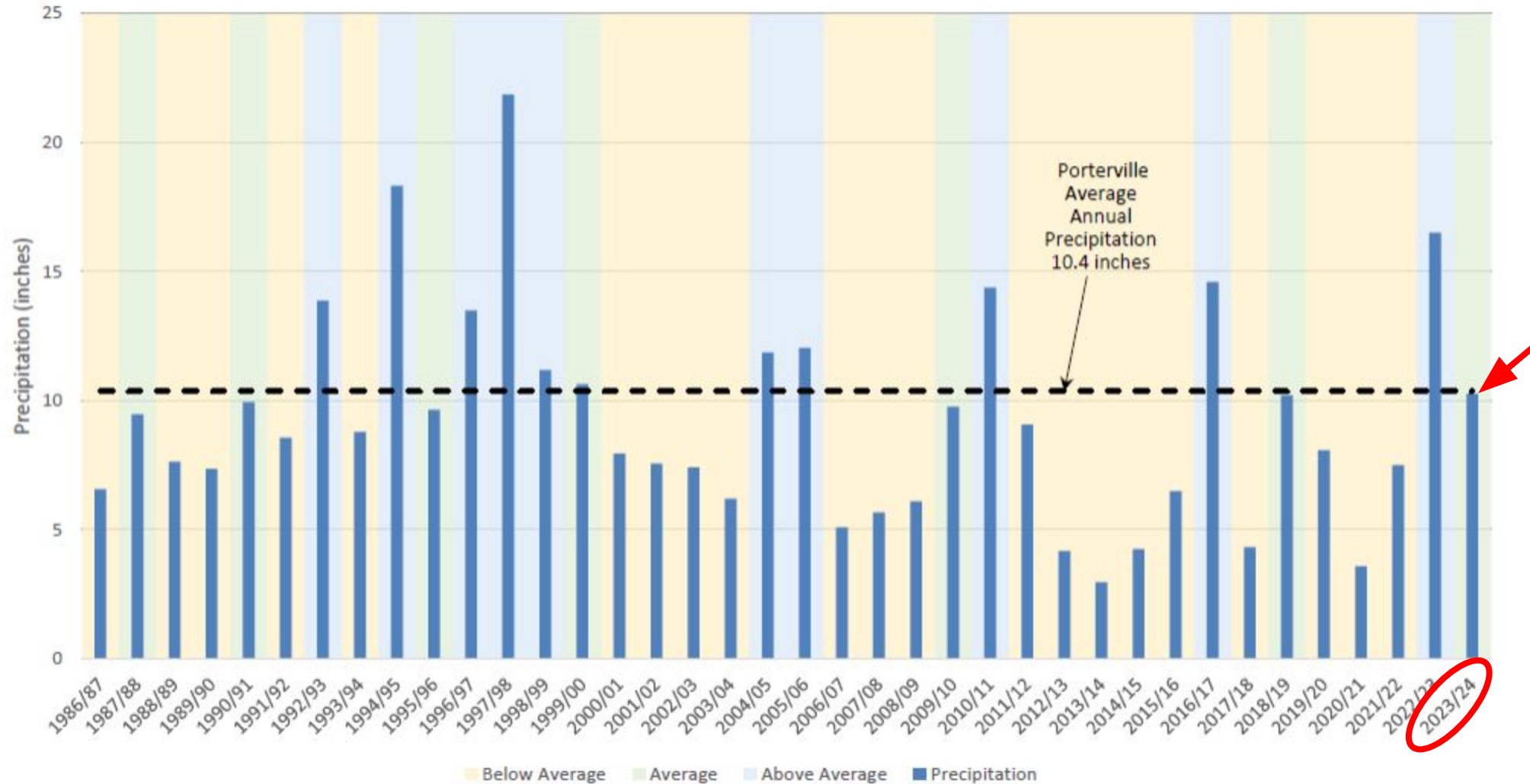
Overview

- Precipitation Data
- GSA Boundary and Groundwater Monitoring Networks
 - Groundwater Aquifer Level Contours
 - Estimated Change In Storage
- Land Surface Elevation and Subsidence Monitoring Network
 - Benchmarks and InSAR Data
- Tule Subbasin Water Supply
- Water Quality
- Data

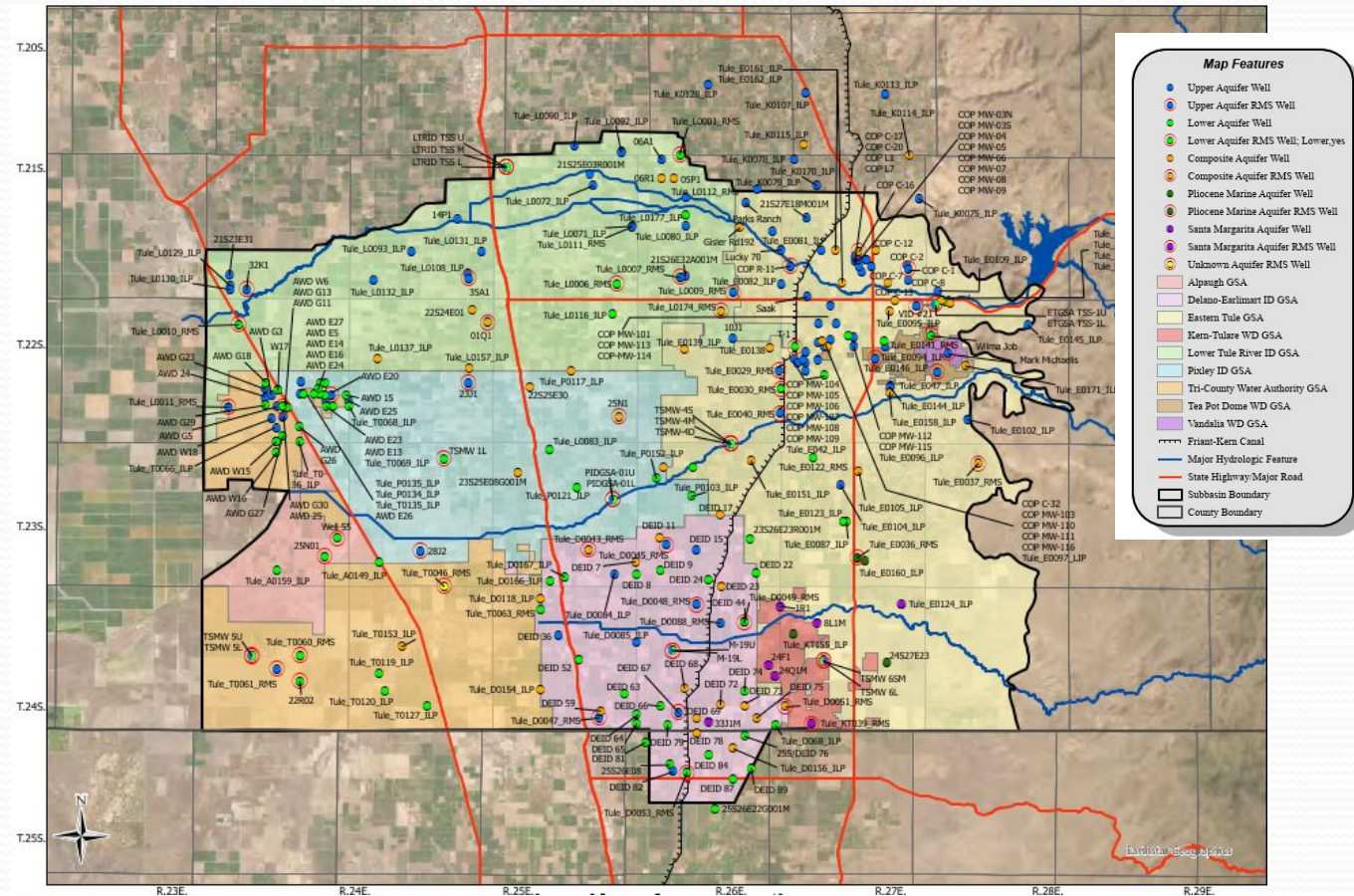
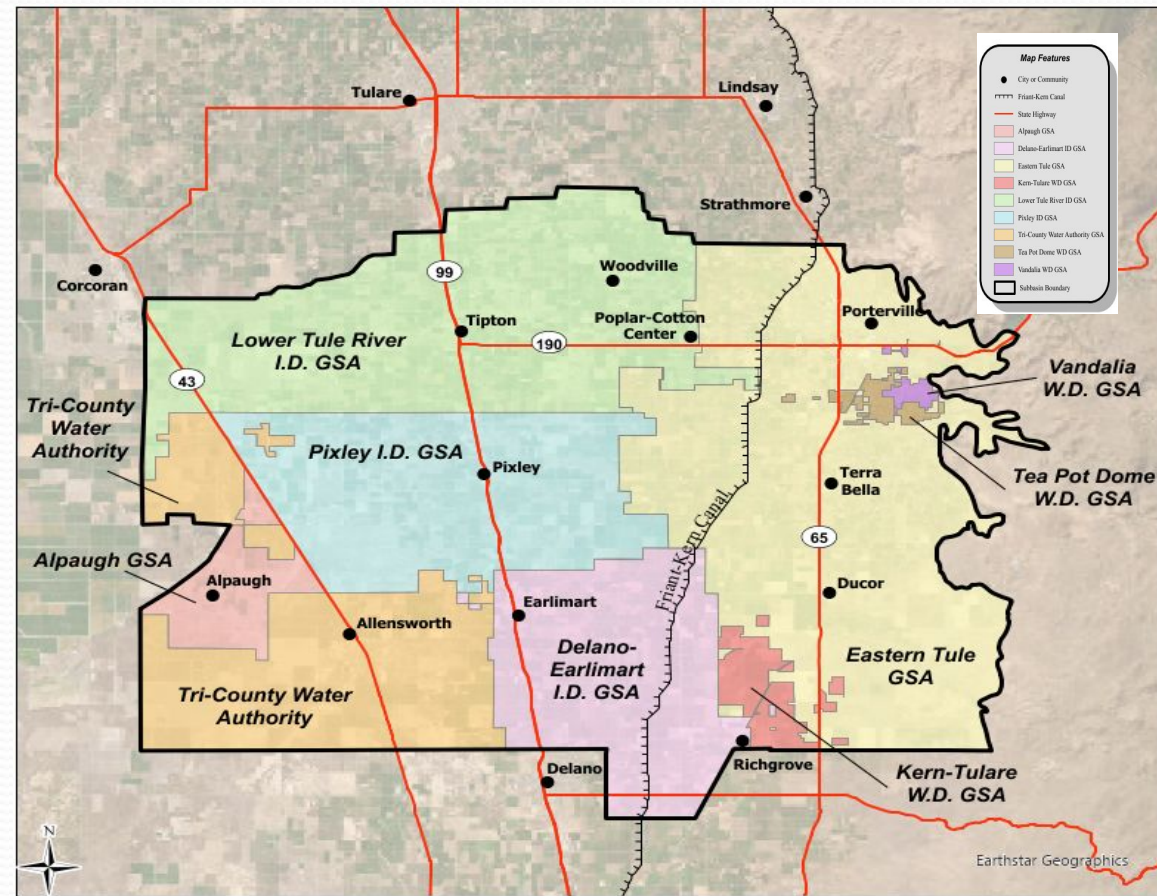


Precipitation for Water Year 2023/24 was Average

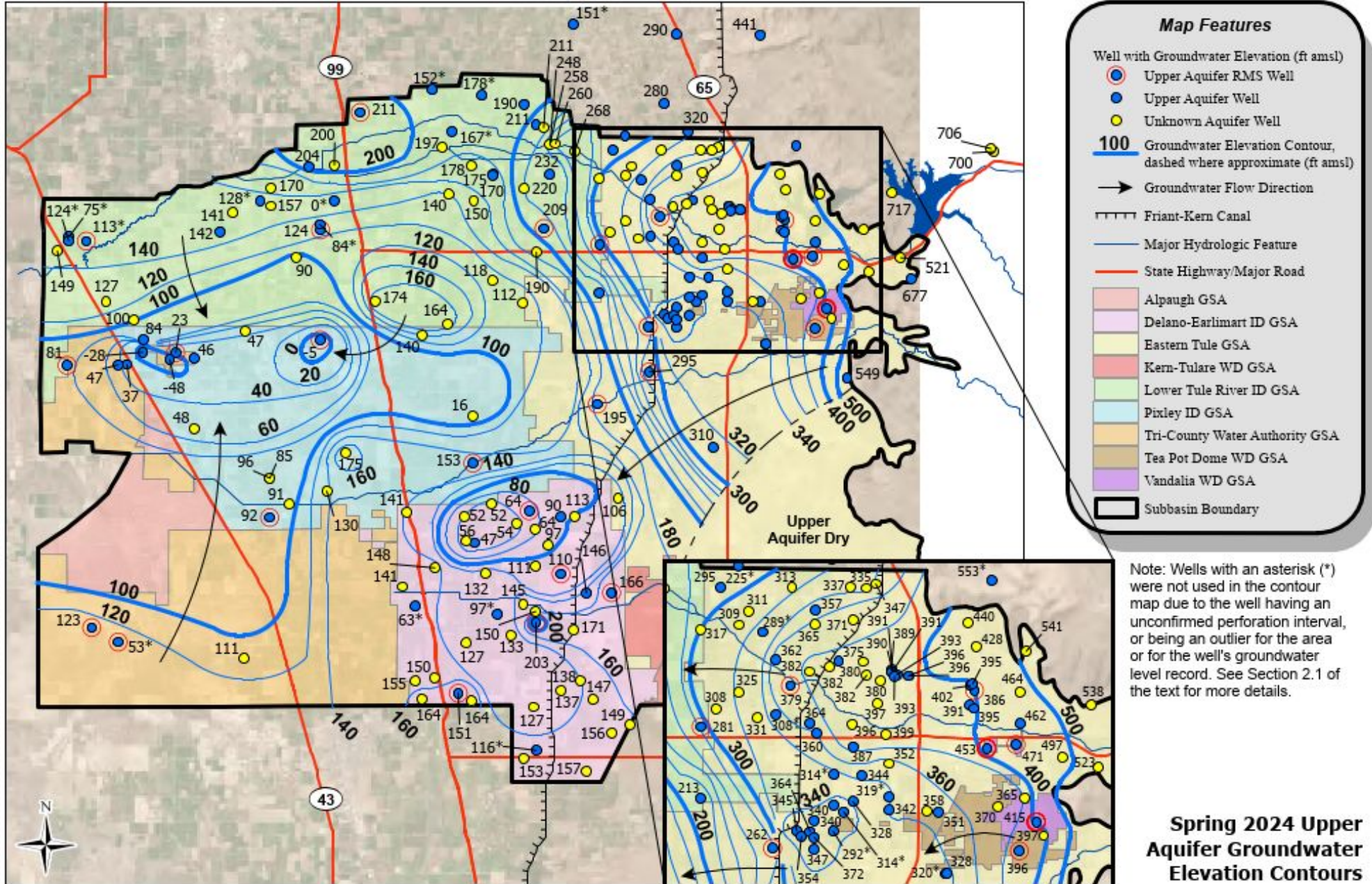
Annual Precipitation - Porterville Station
and Water Year Types 1986/87 to 2023/24



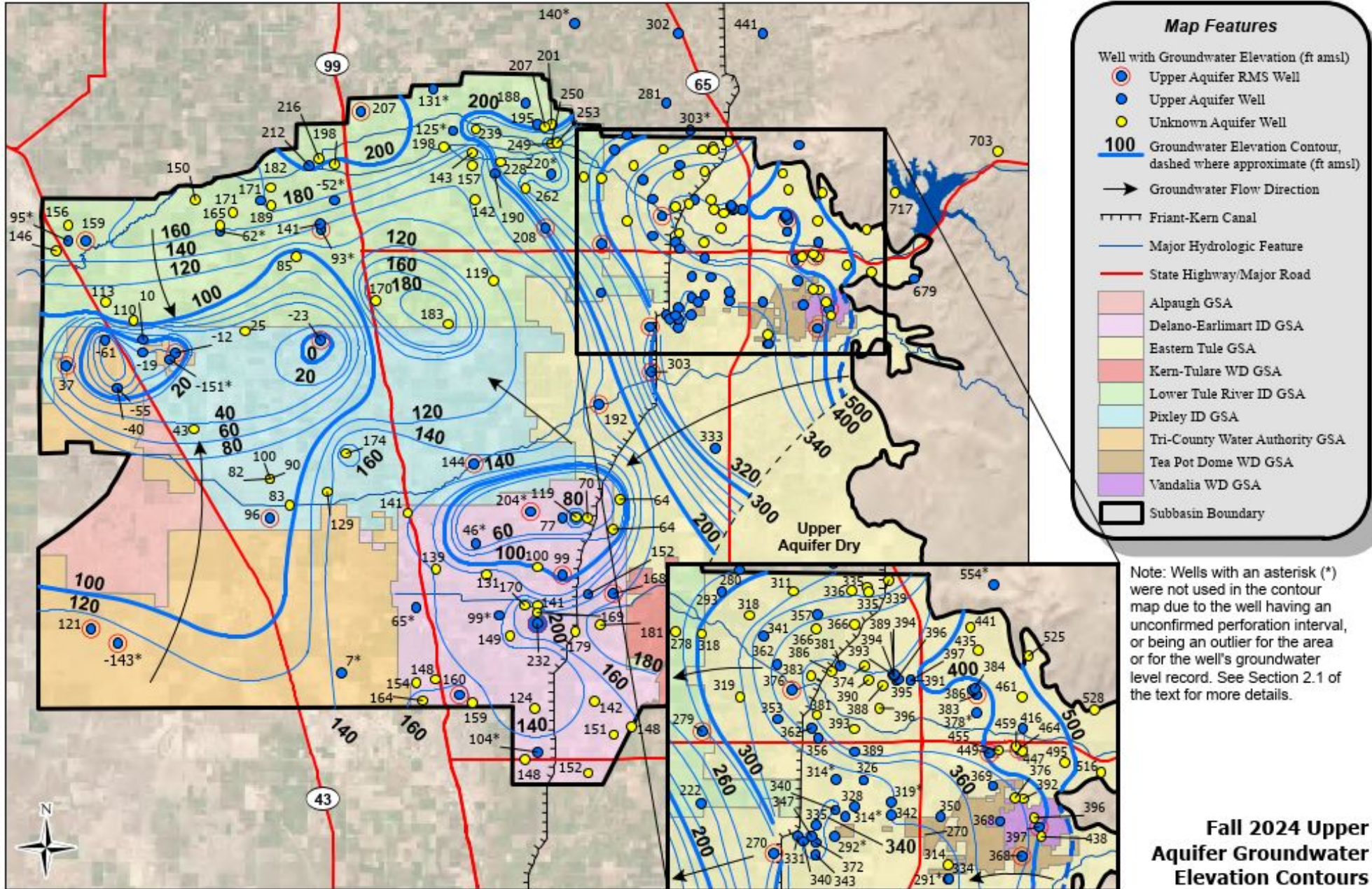
GSA Boundaries and Monitoring Network



Upper Aquifer Groundwater Levels – Spring 24

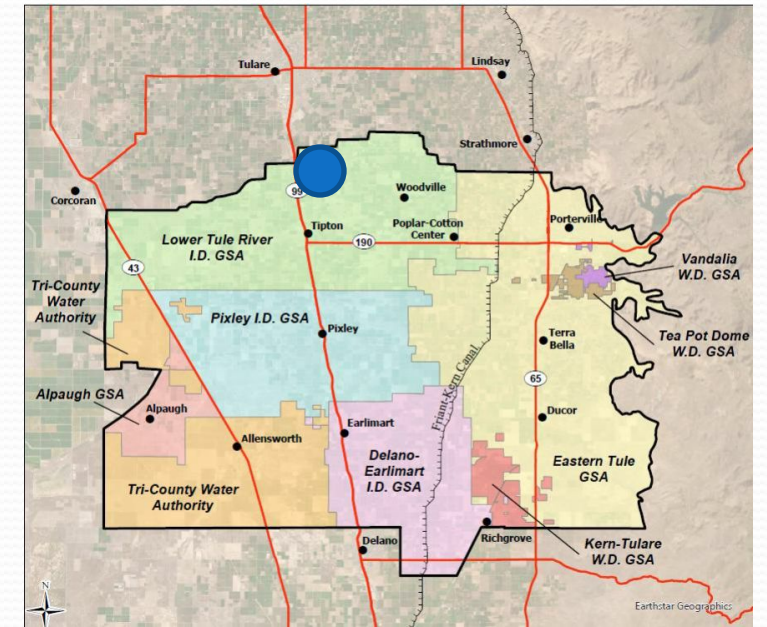
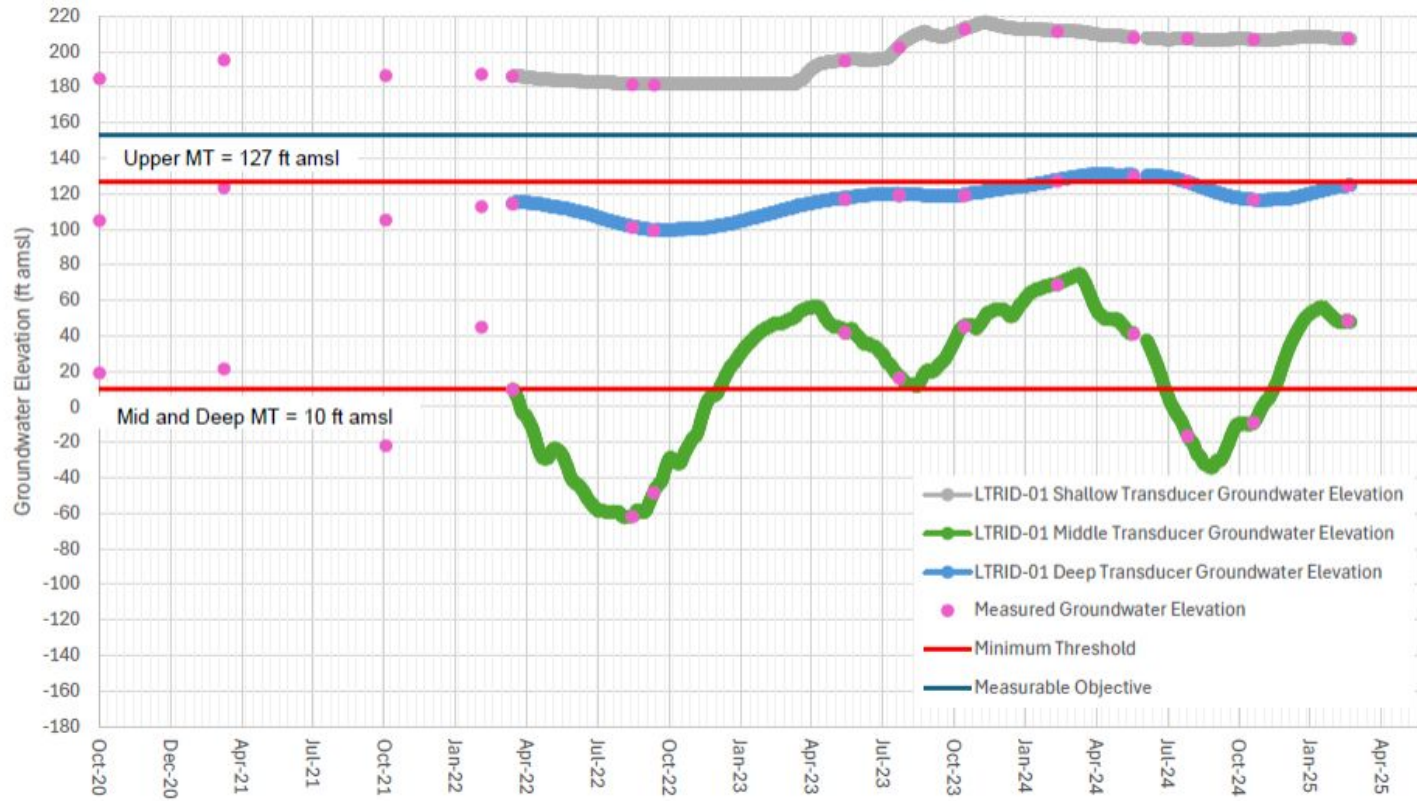


Upper Aquifer Groundwater Level – Fall 24

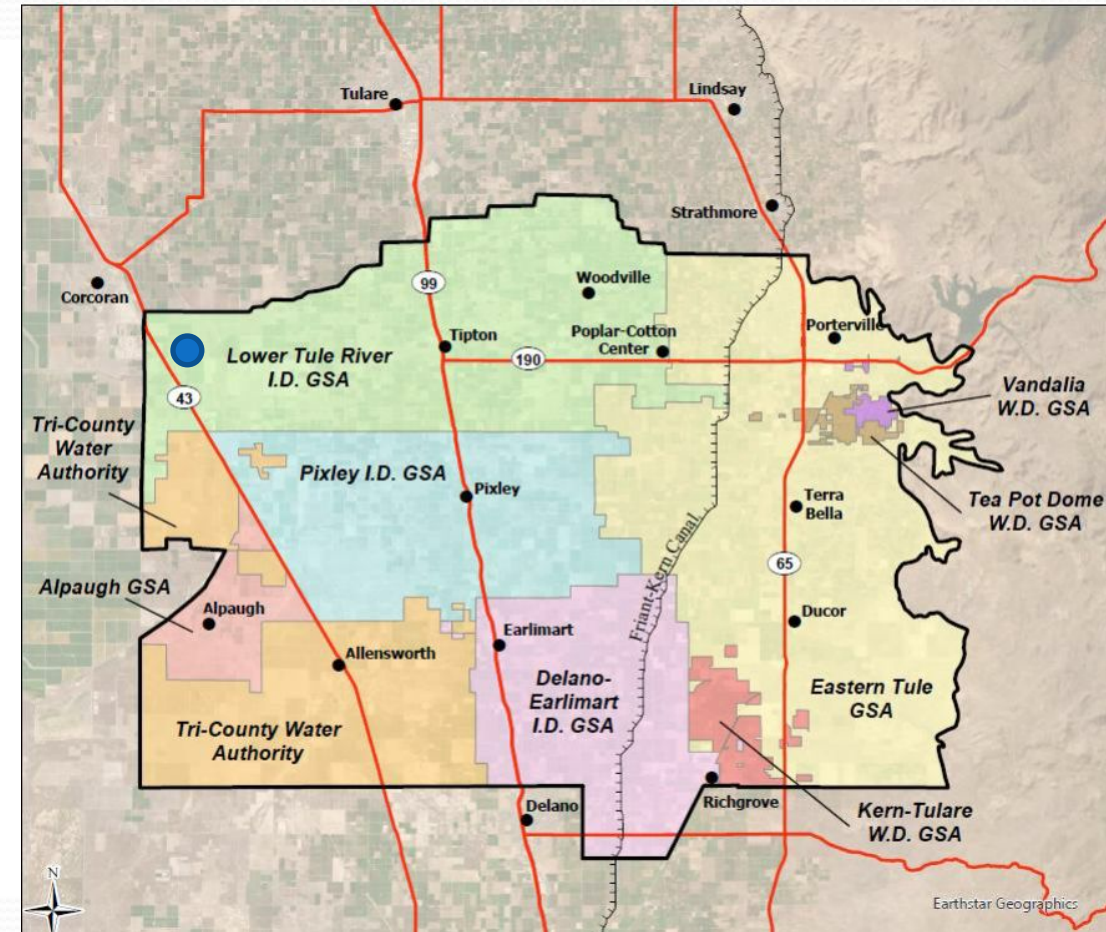
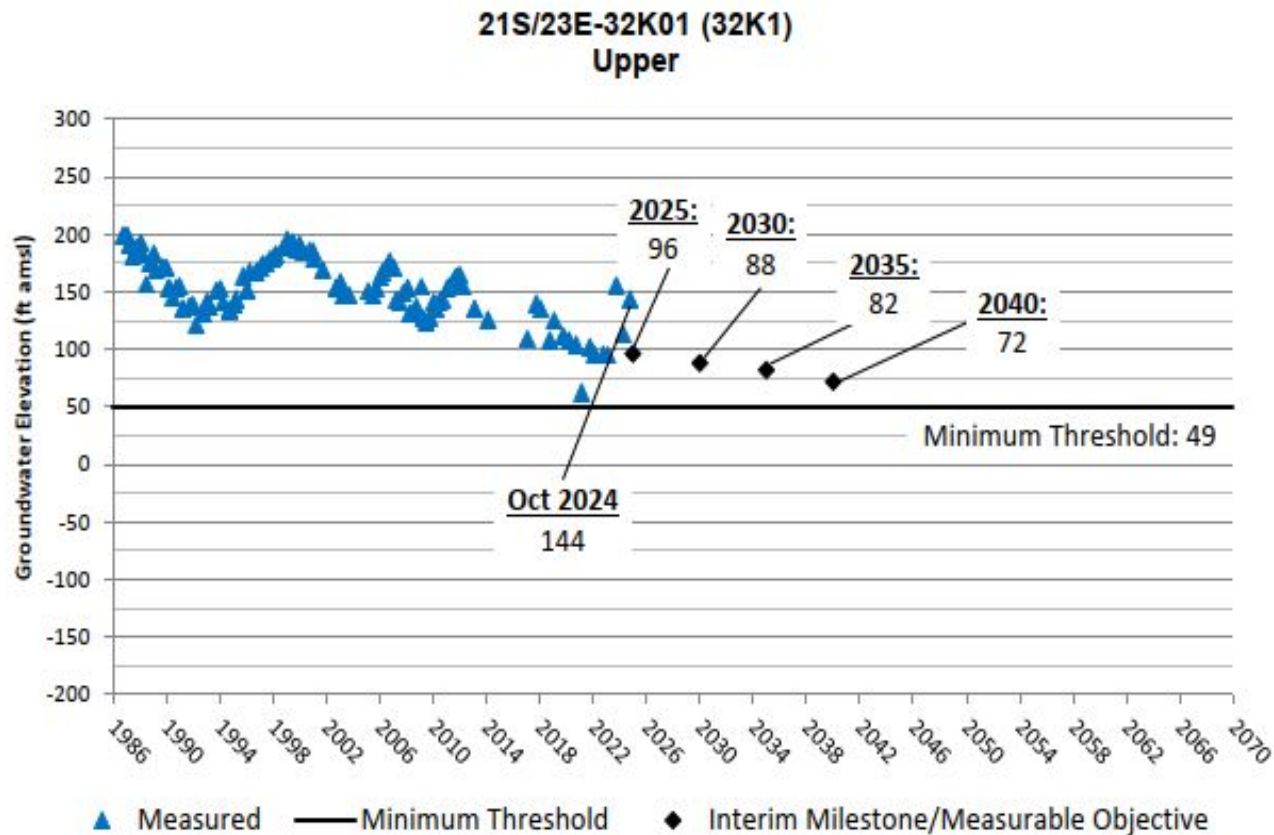


Groundwater Elevation Changes – LTRID-01 RMS

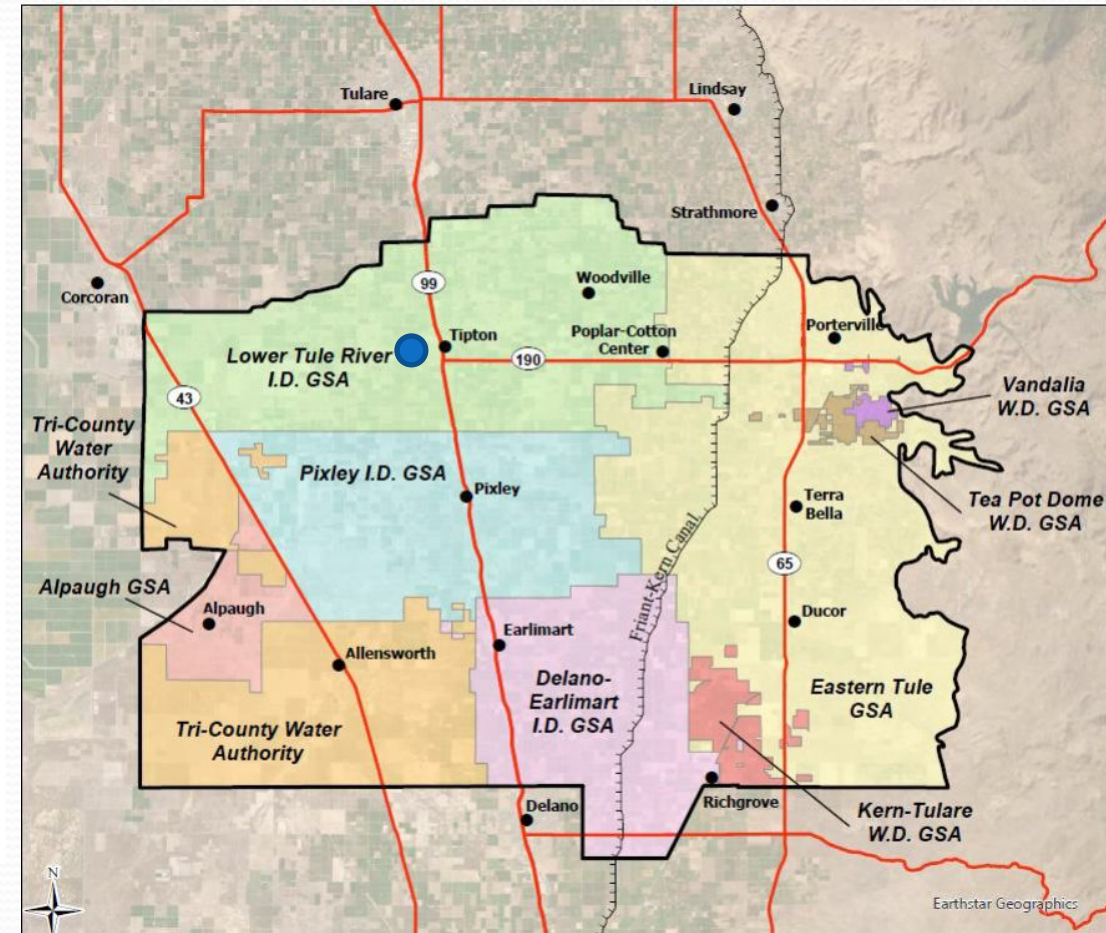
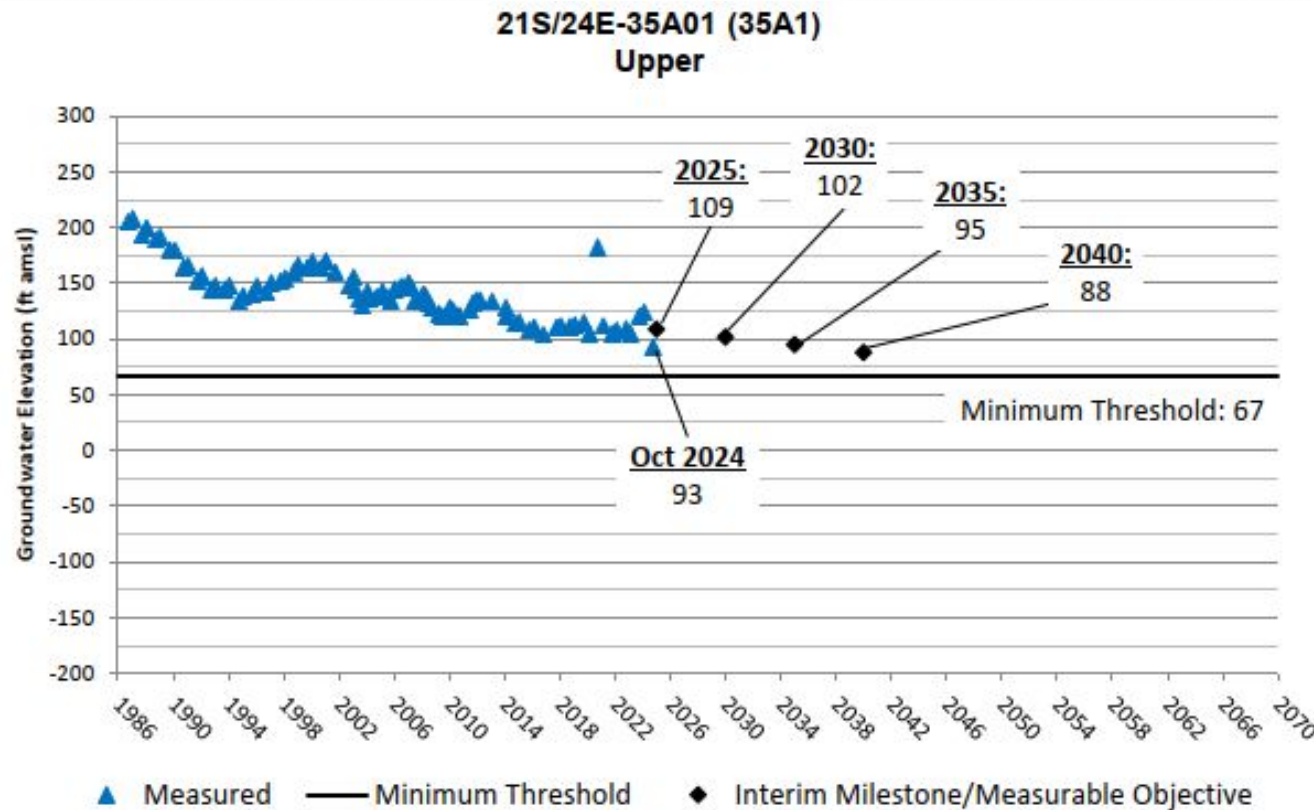
LTRID-01 Groundwater Elevations



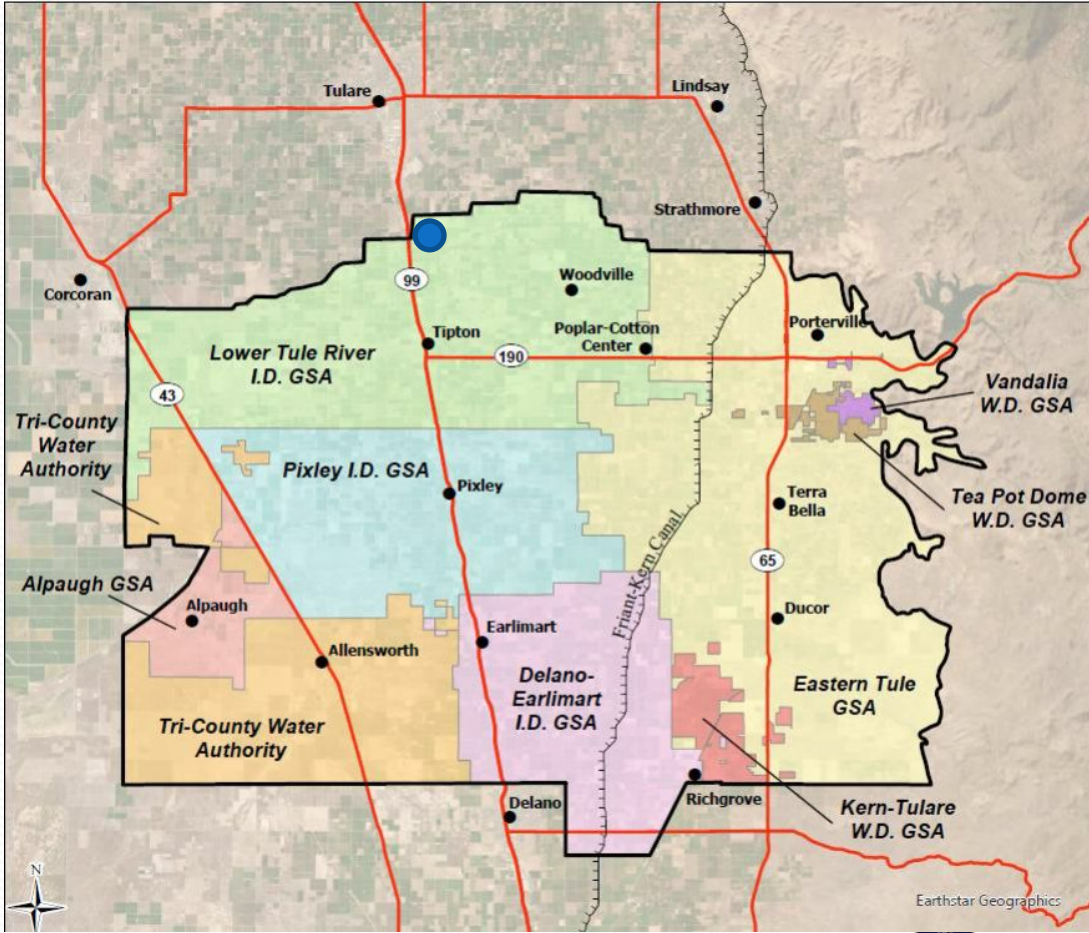
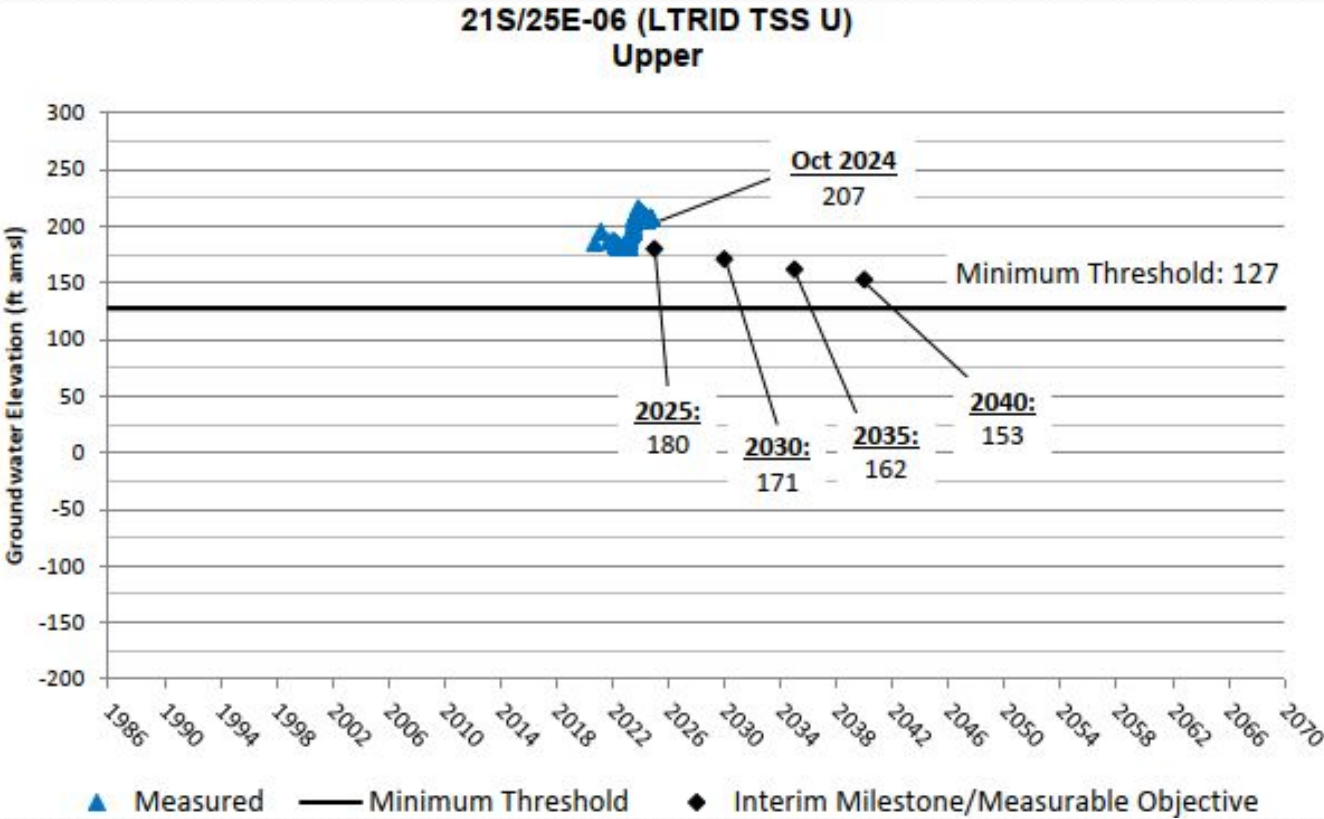
Groundwater Elevation Hydrographs – 32K1 Upper



Groundwater Elevation Hydrographs – 35A1 Upper

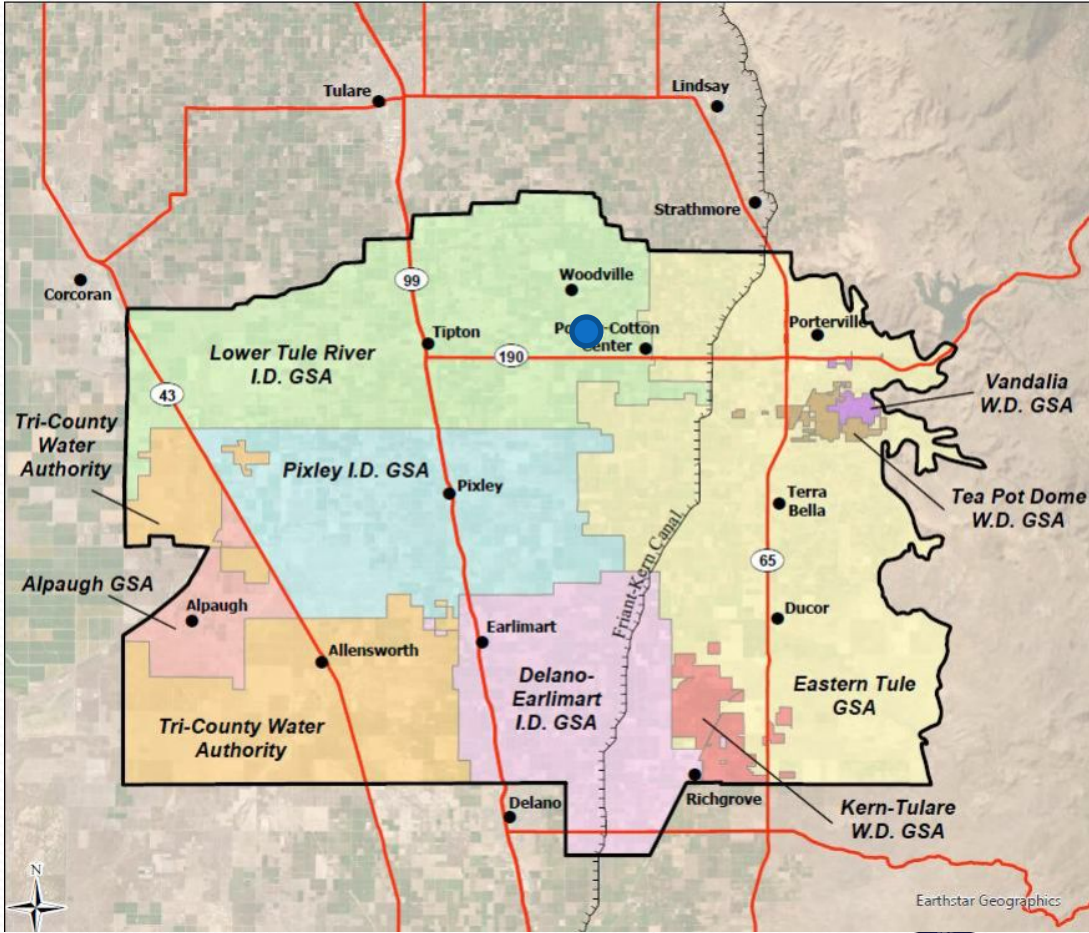
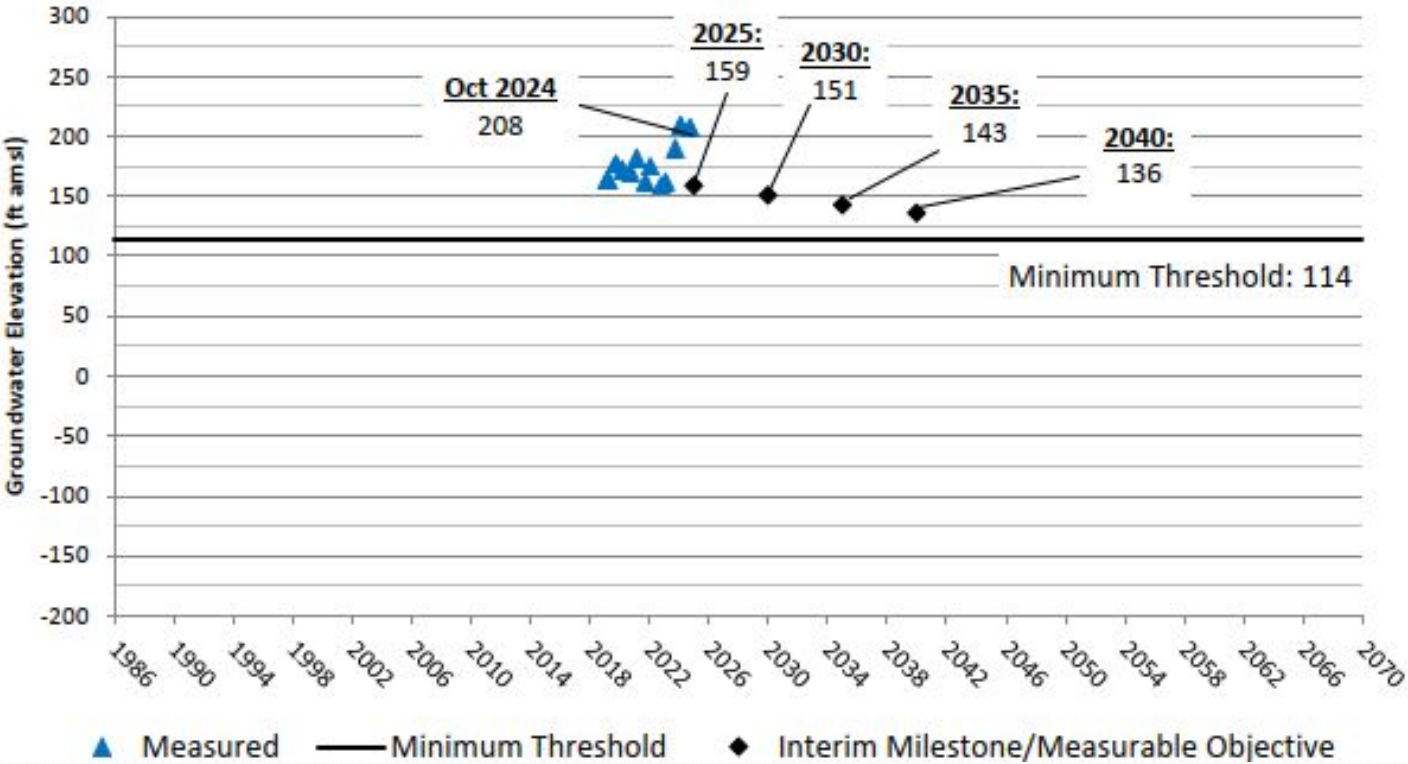


Groundwater Elevation Hydrographs – LTRID TSS U Upper

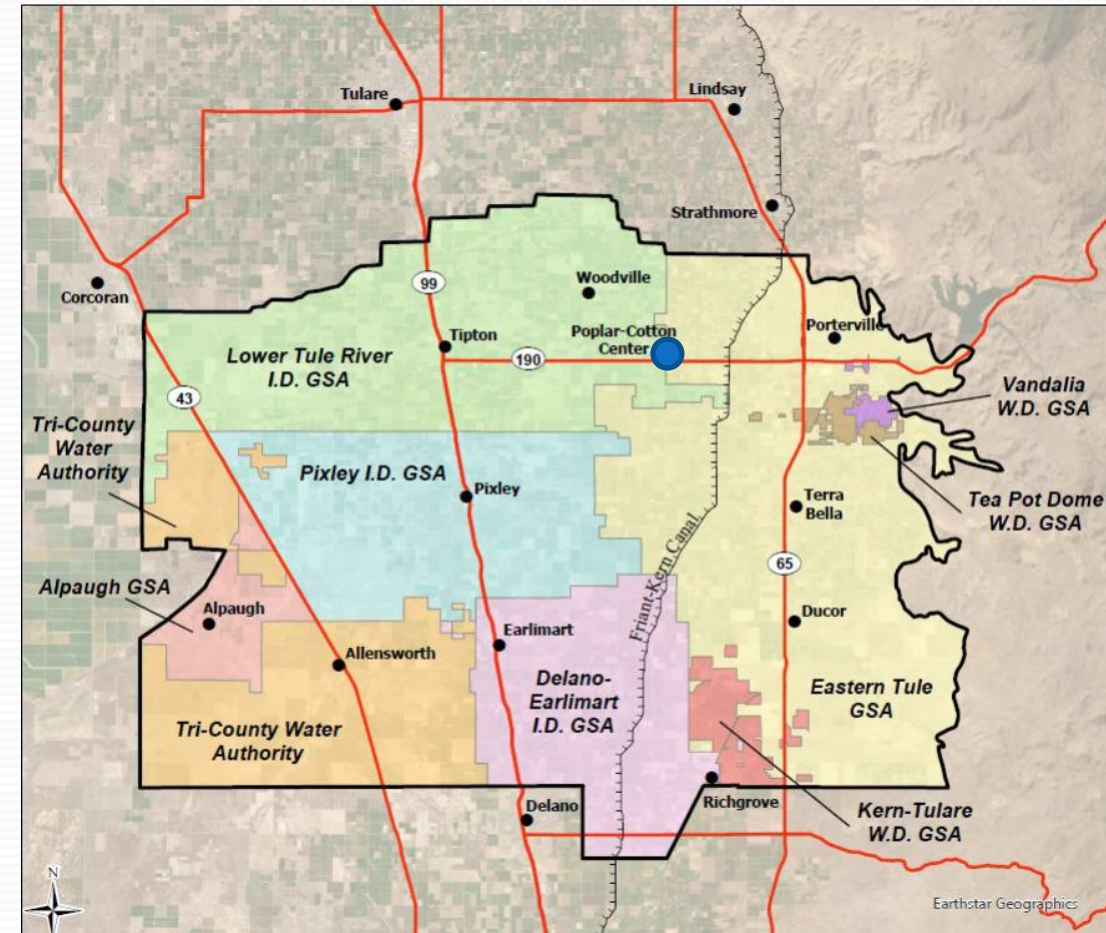
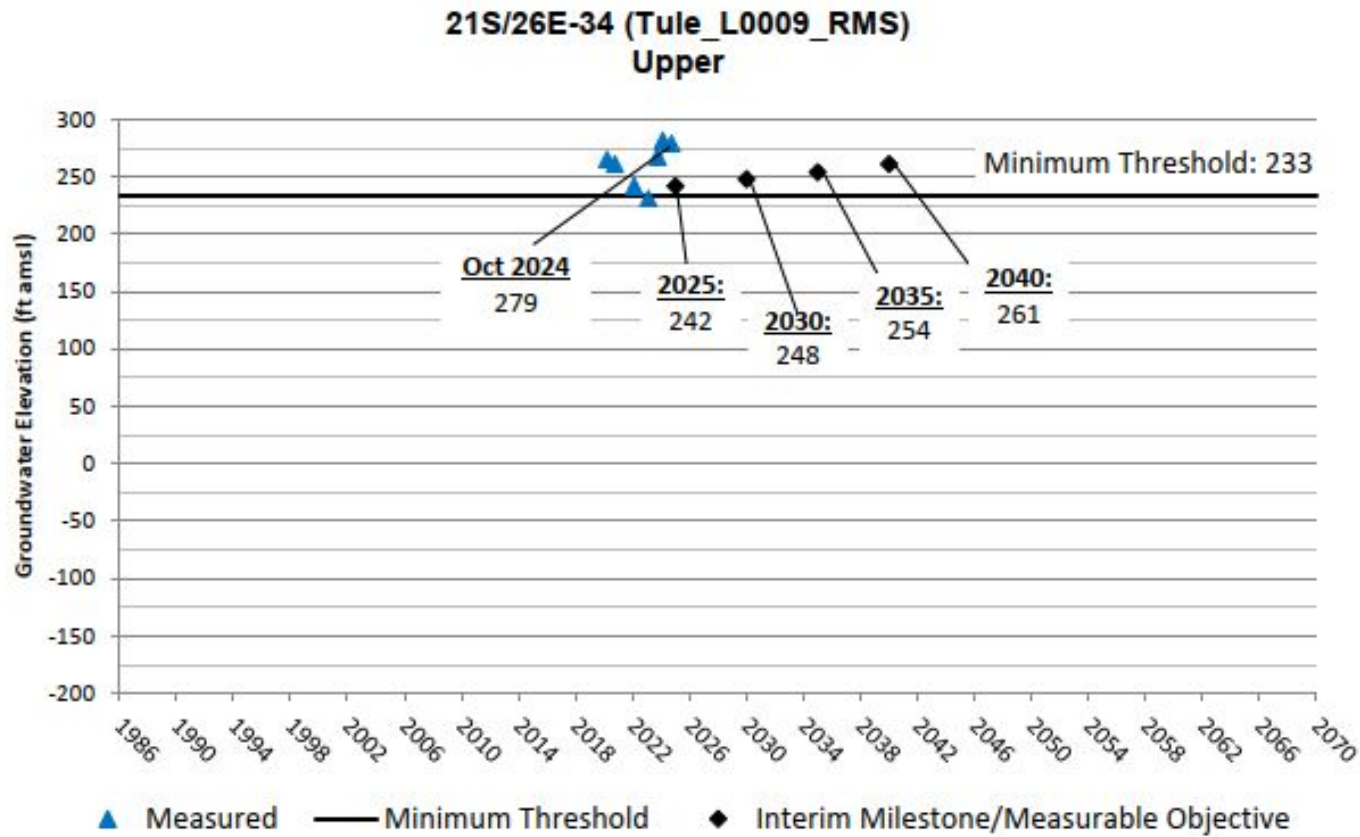


Groundwater Elevation Hydrographs – Tule L0007 RMS Upper

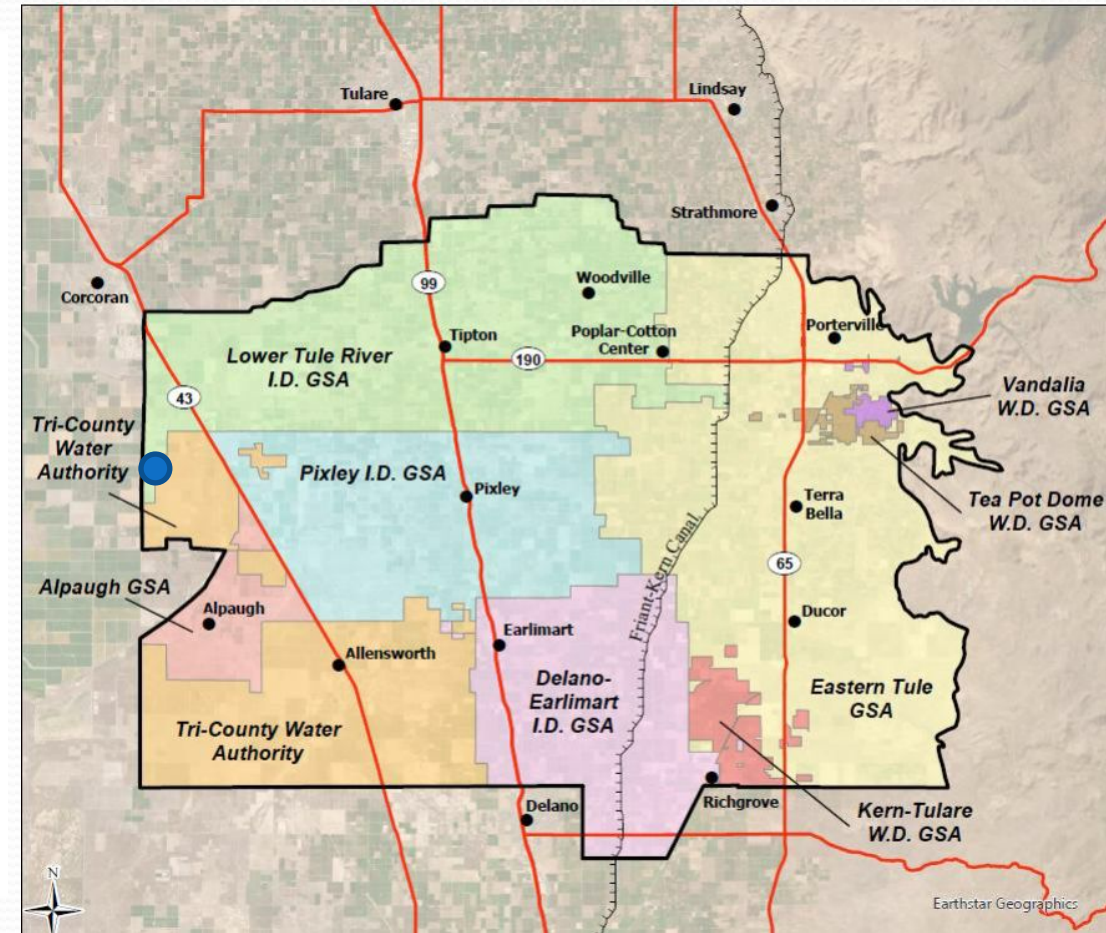
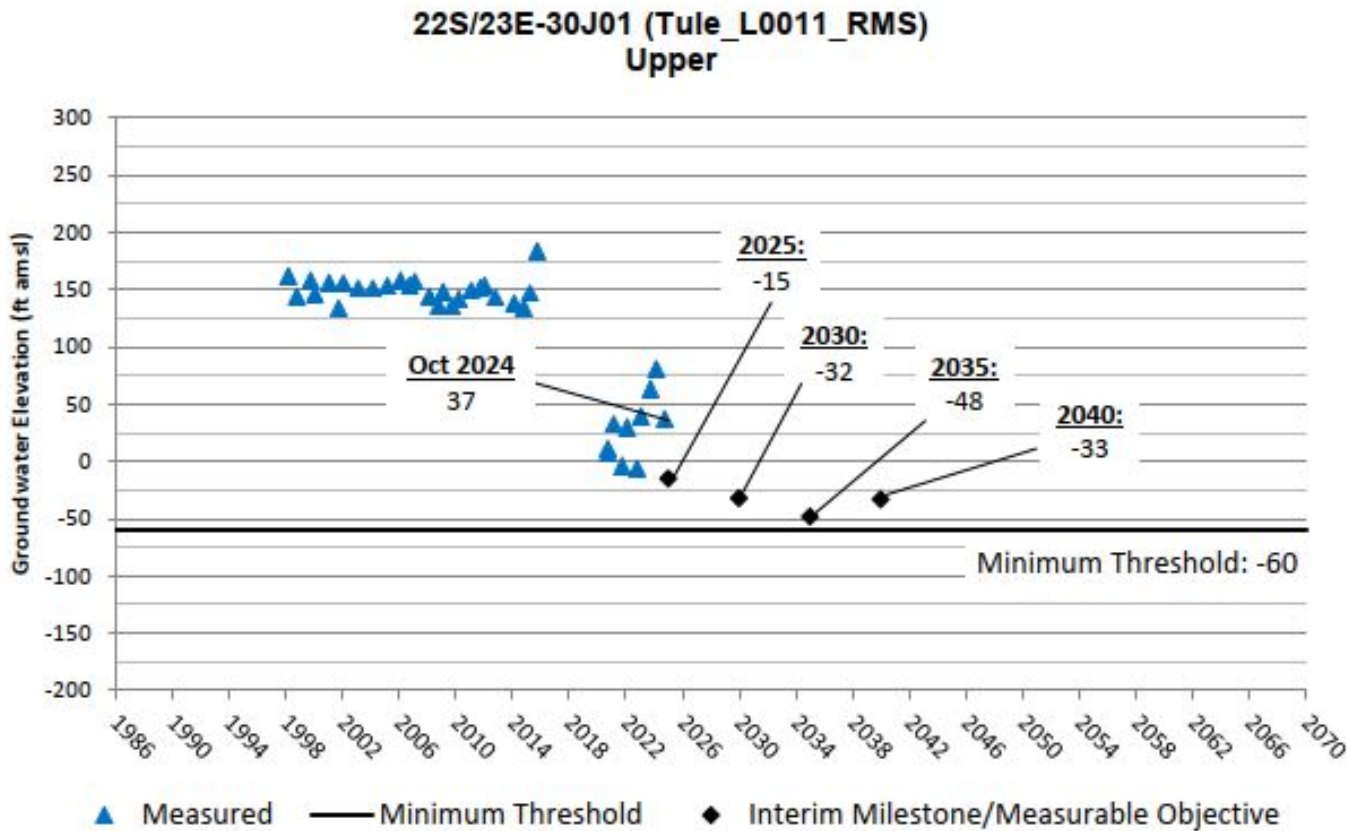
21S/26E-32B02 (Tule_L0007_RMS)
Upper



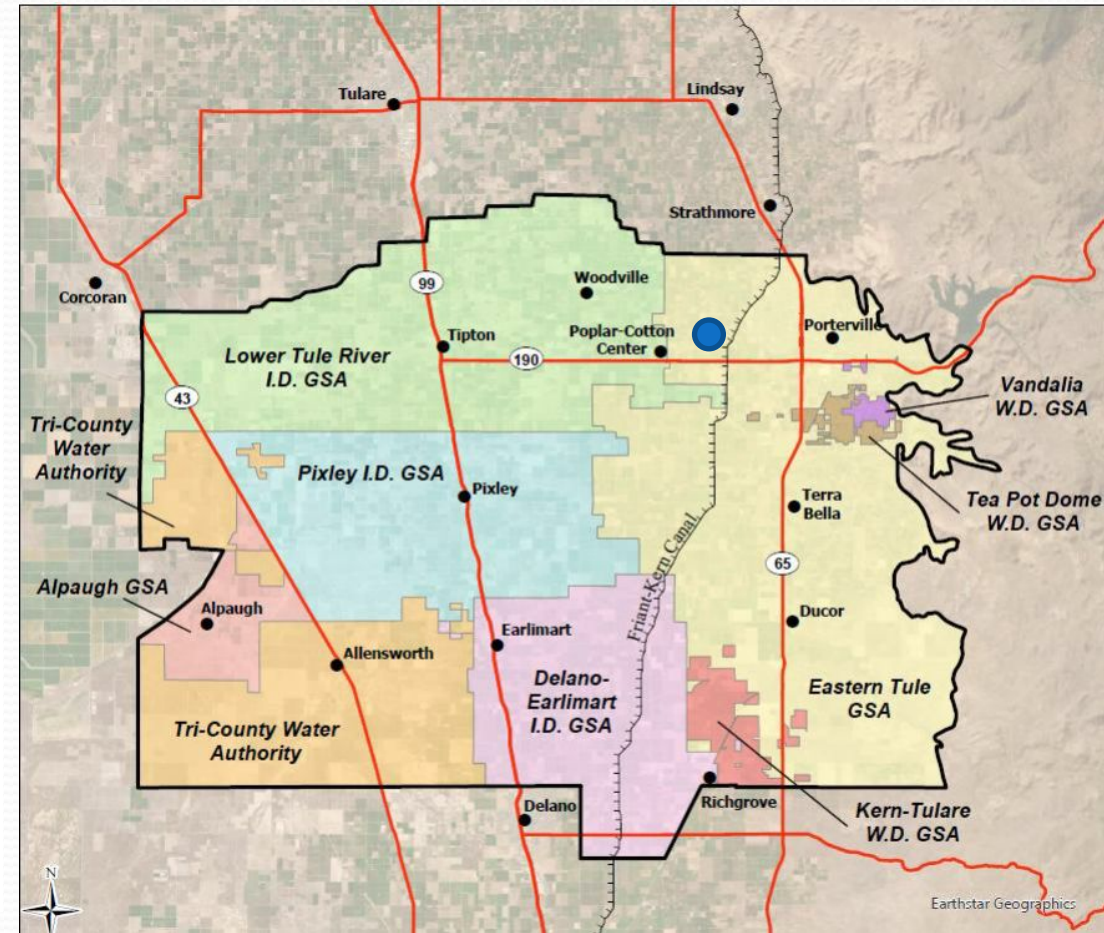
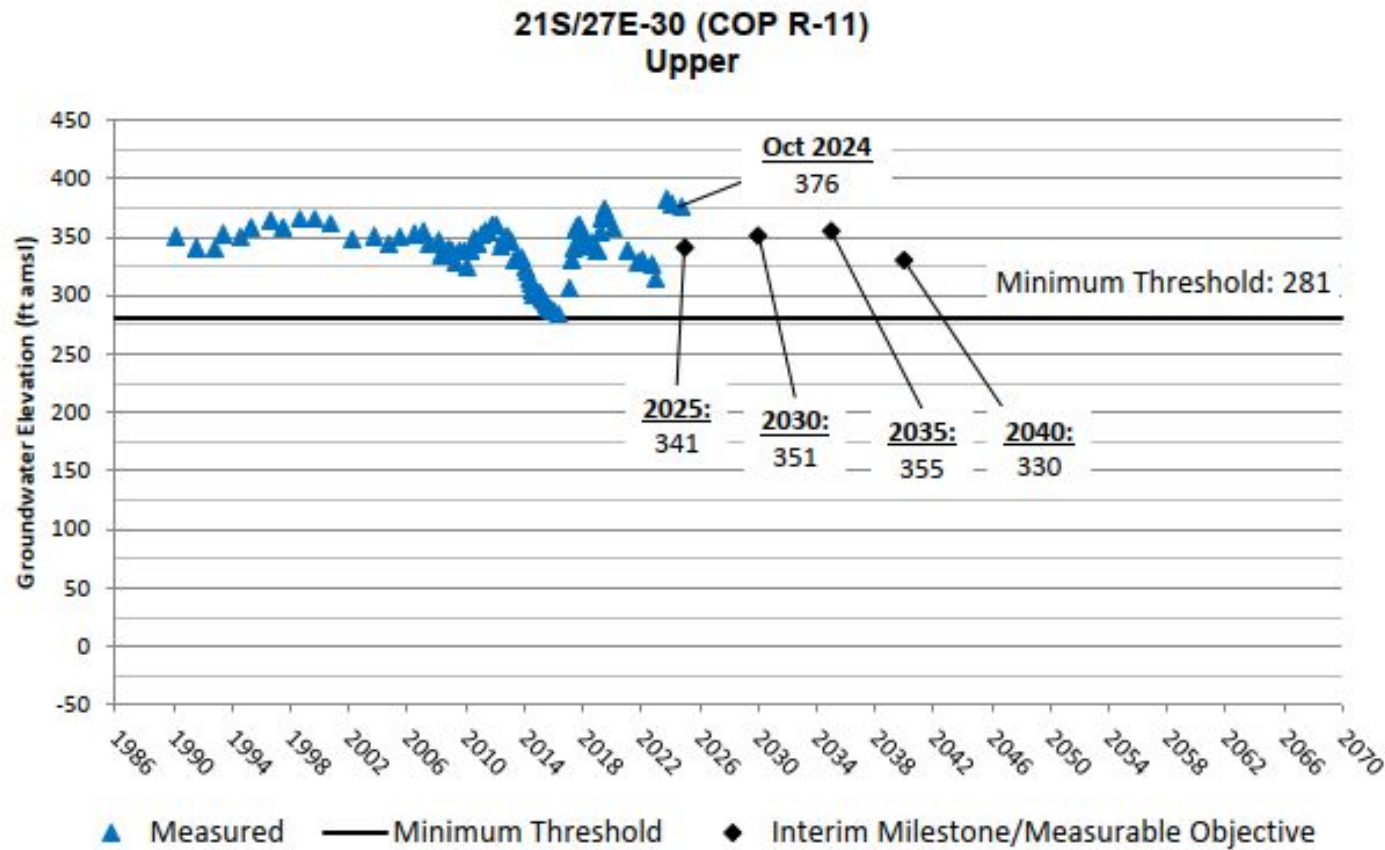
Groundwater Elevation Hydrographs – Tule L0009 RMS Upper



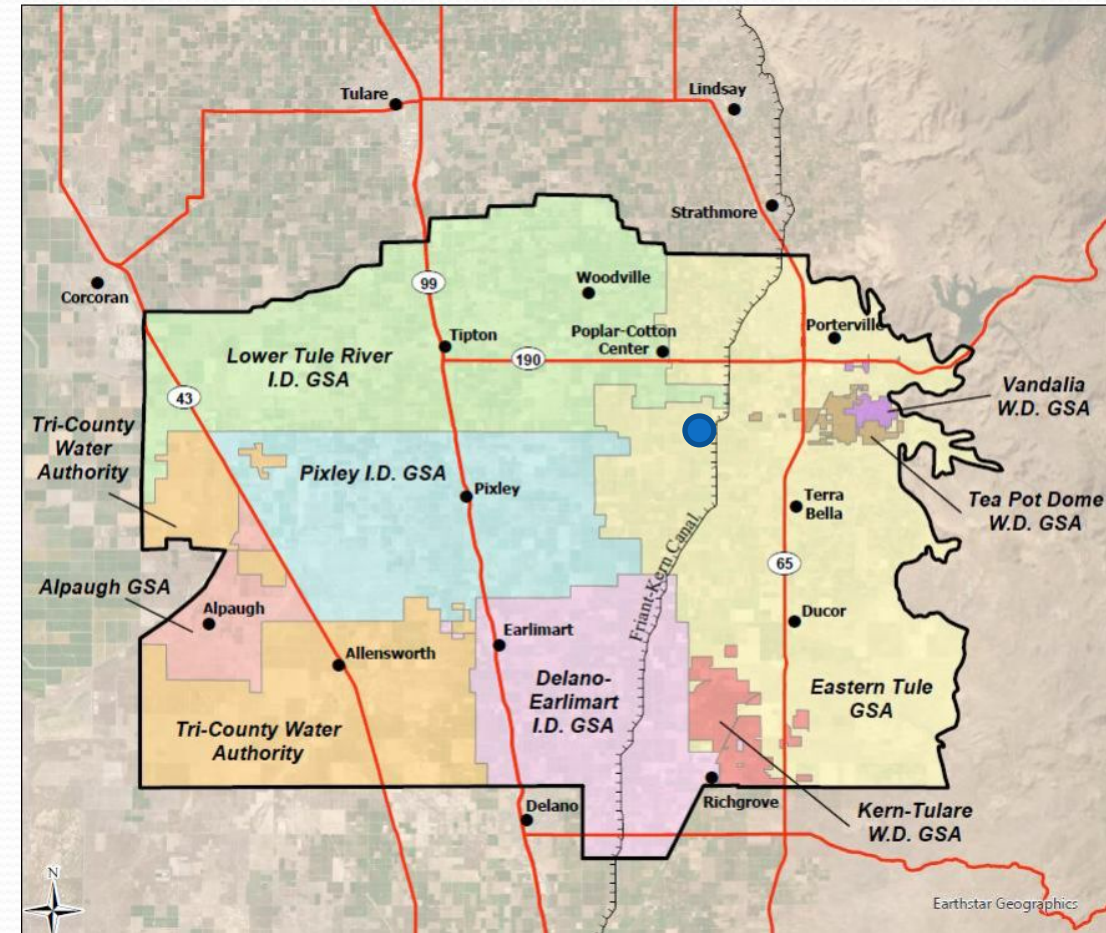
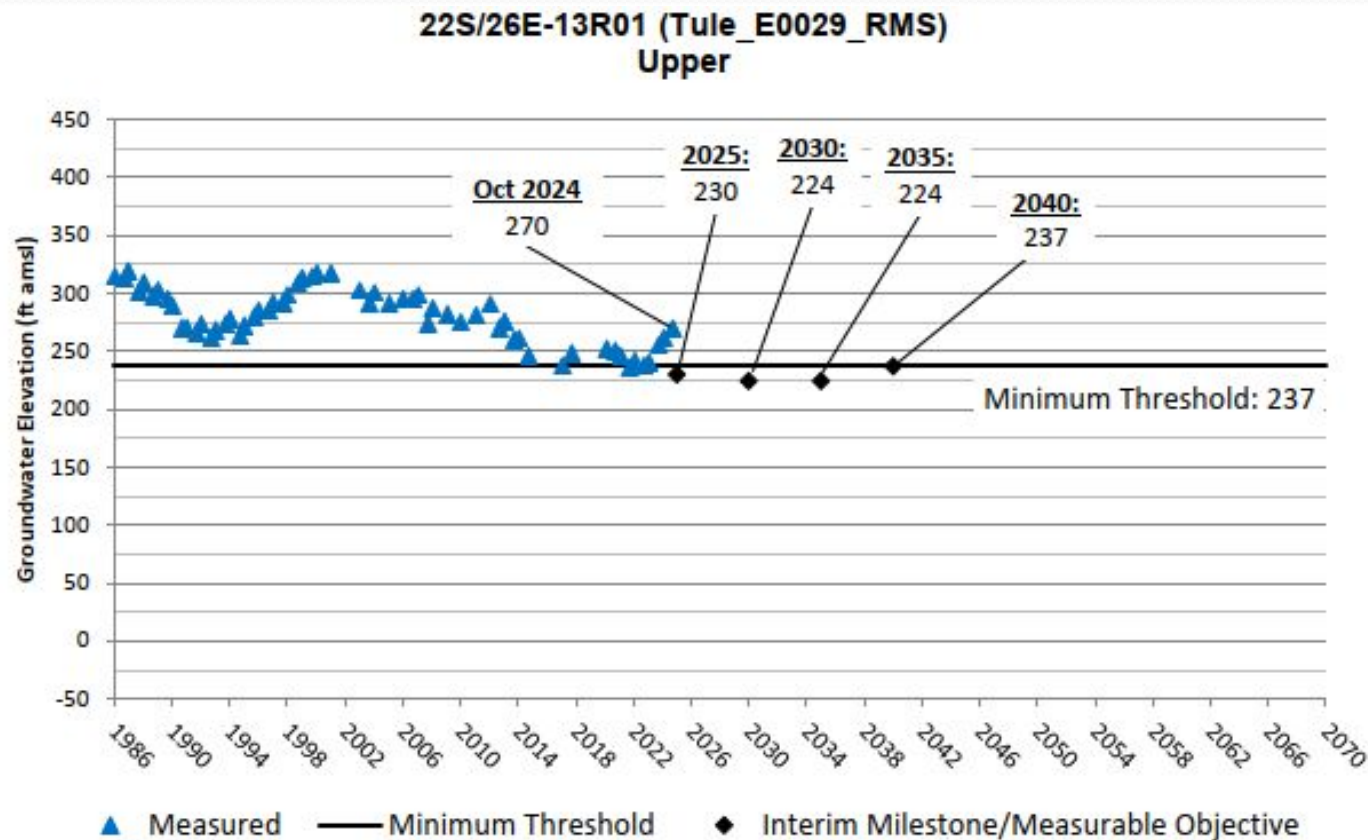
Groundwater Elevation Hydrographs – Tule L0011 RMS Upper



Groundwater Elevation Hydrographs along FKC

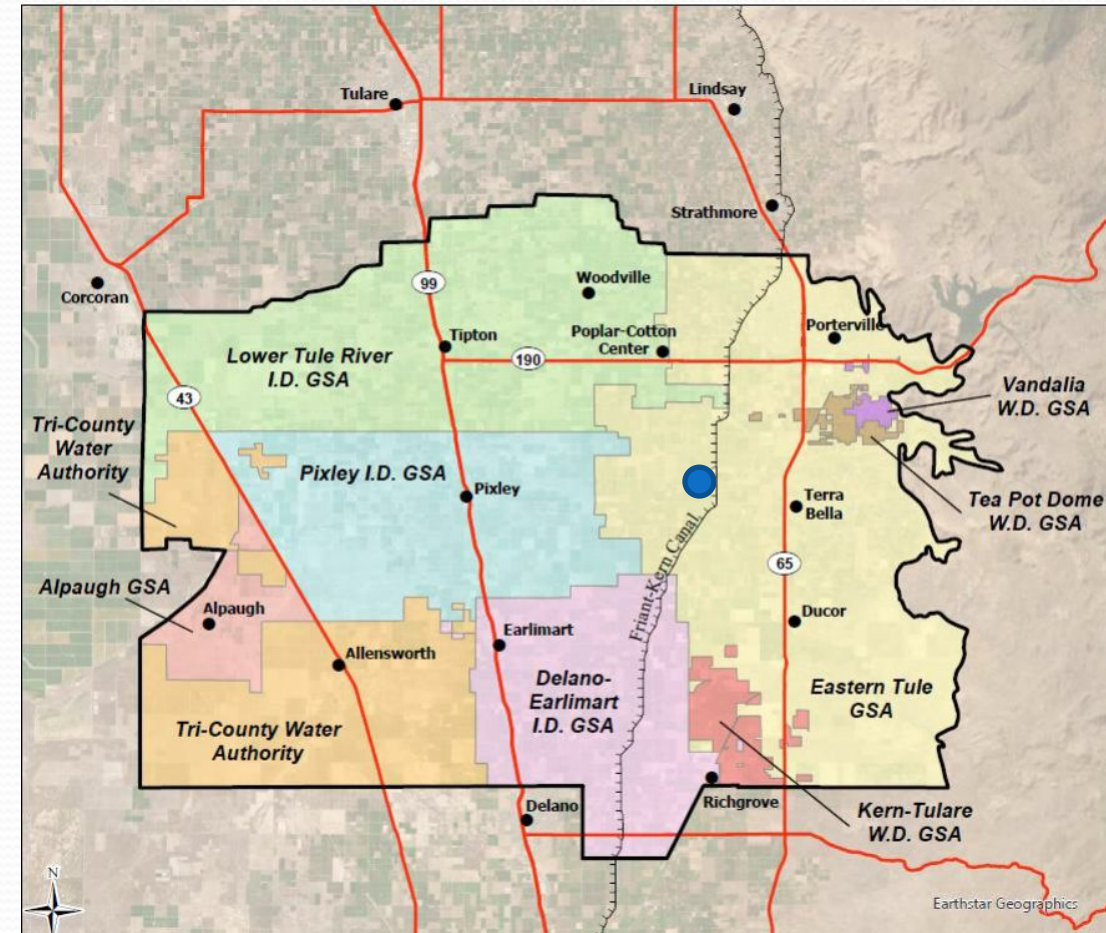
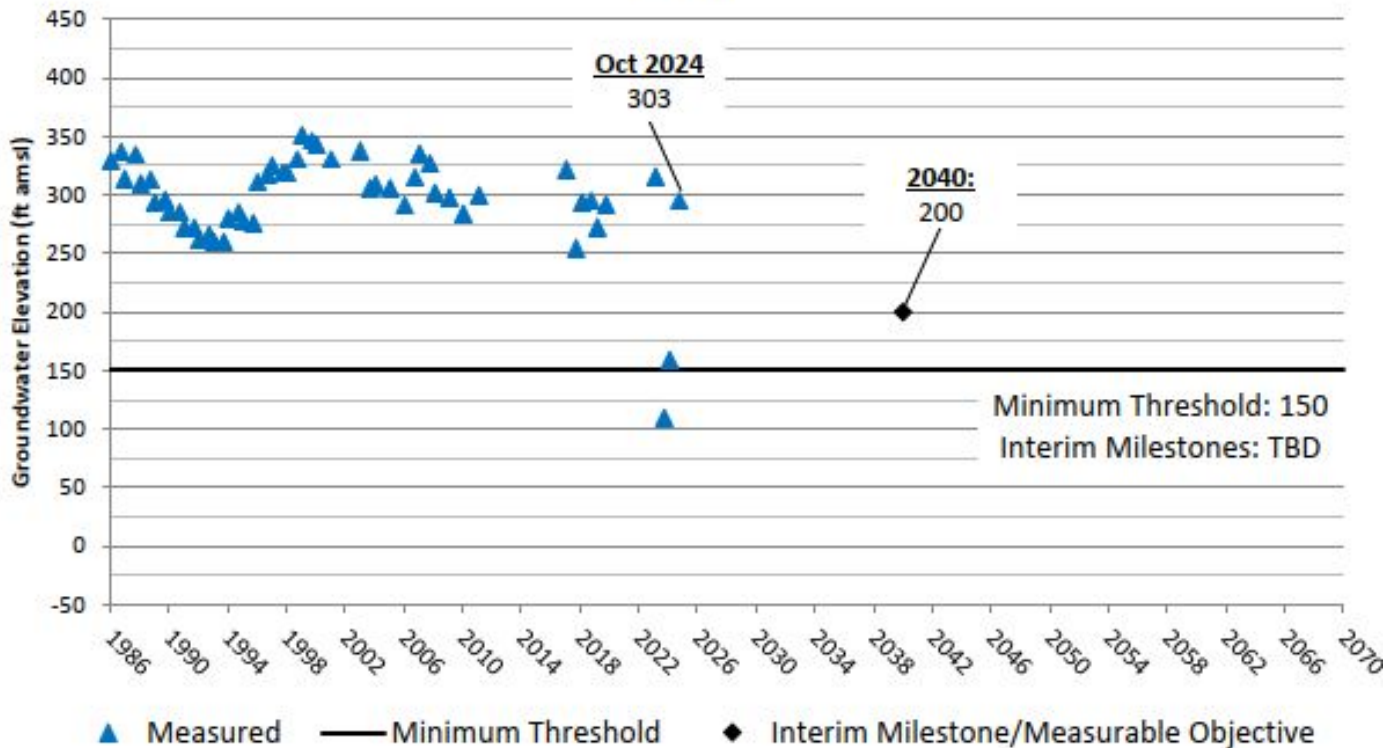


Groundwater Elevation Hydrographs along FKC



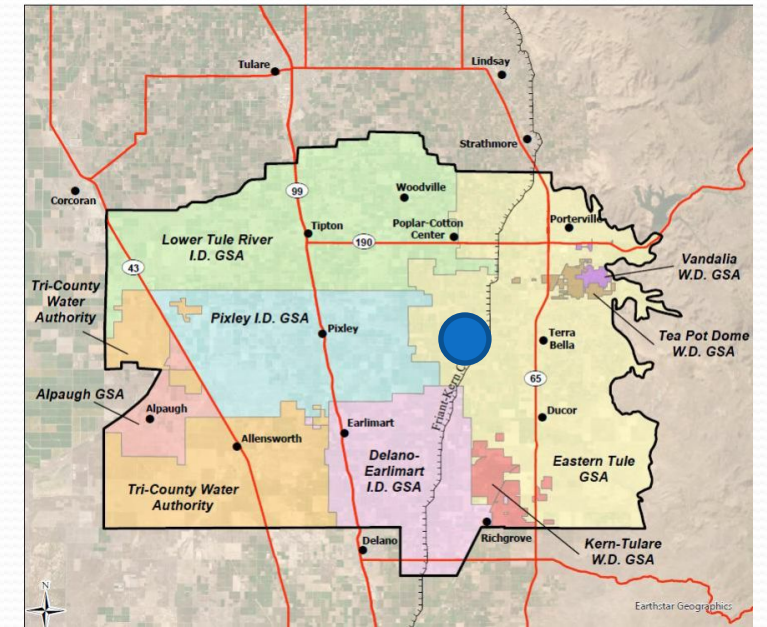
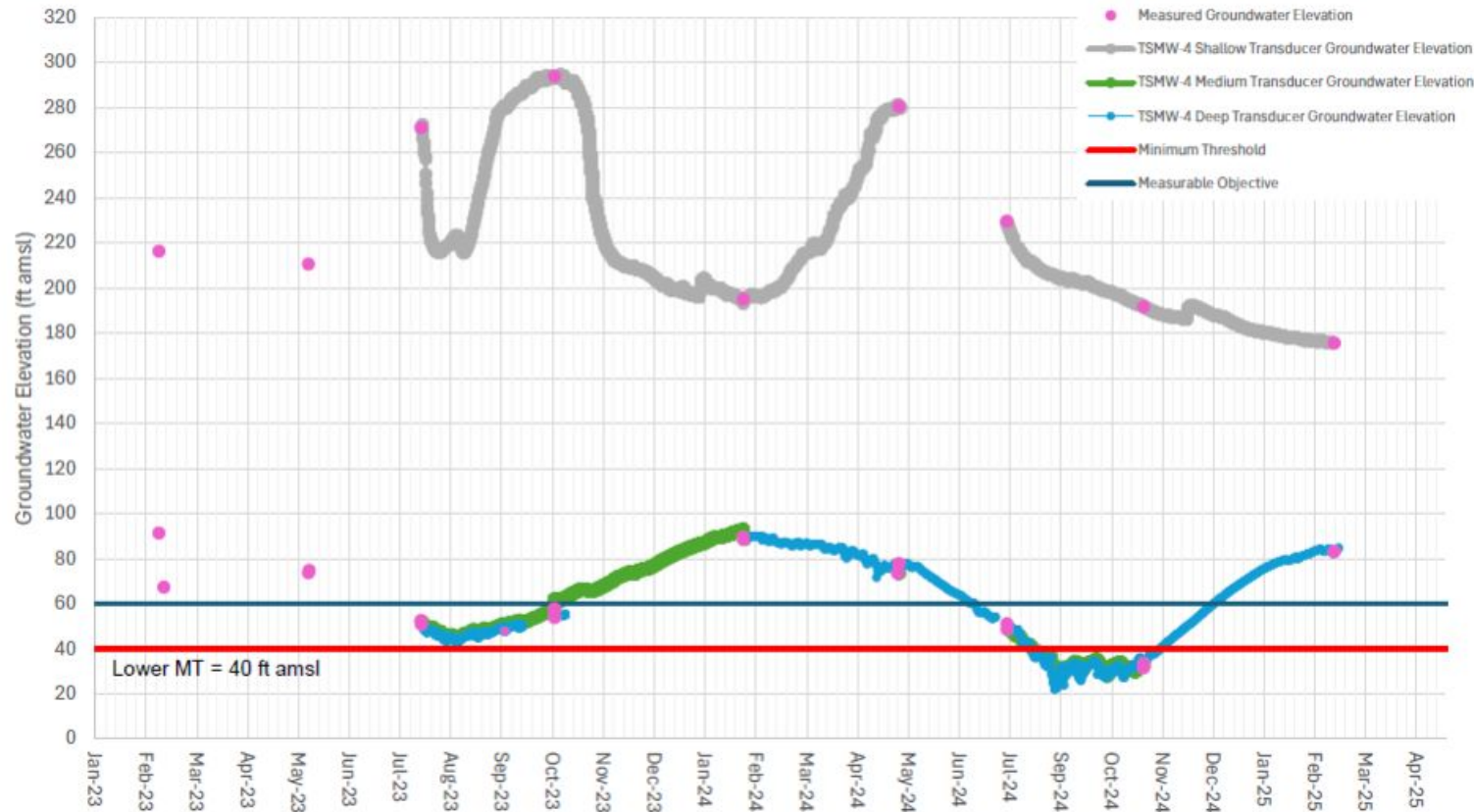
Groundwater Elevation Hydrographs along FKC

22S/26E-25J01 (Tule_E0040_RMS)
Upper

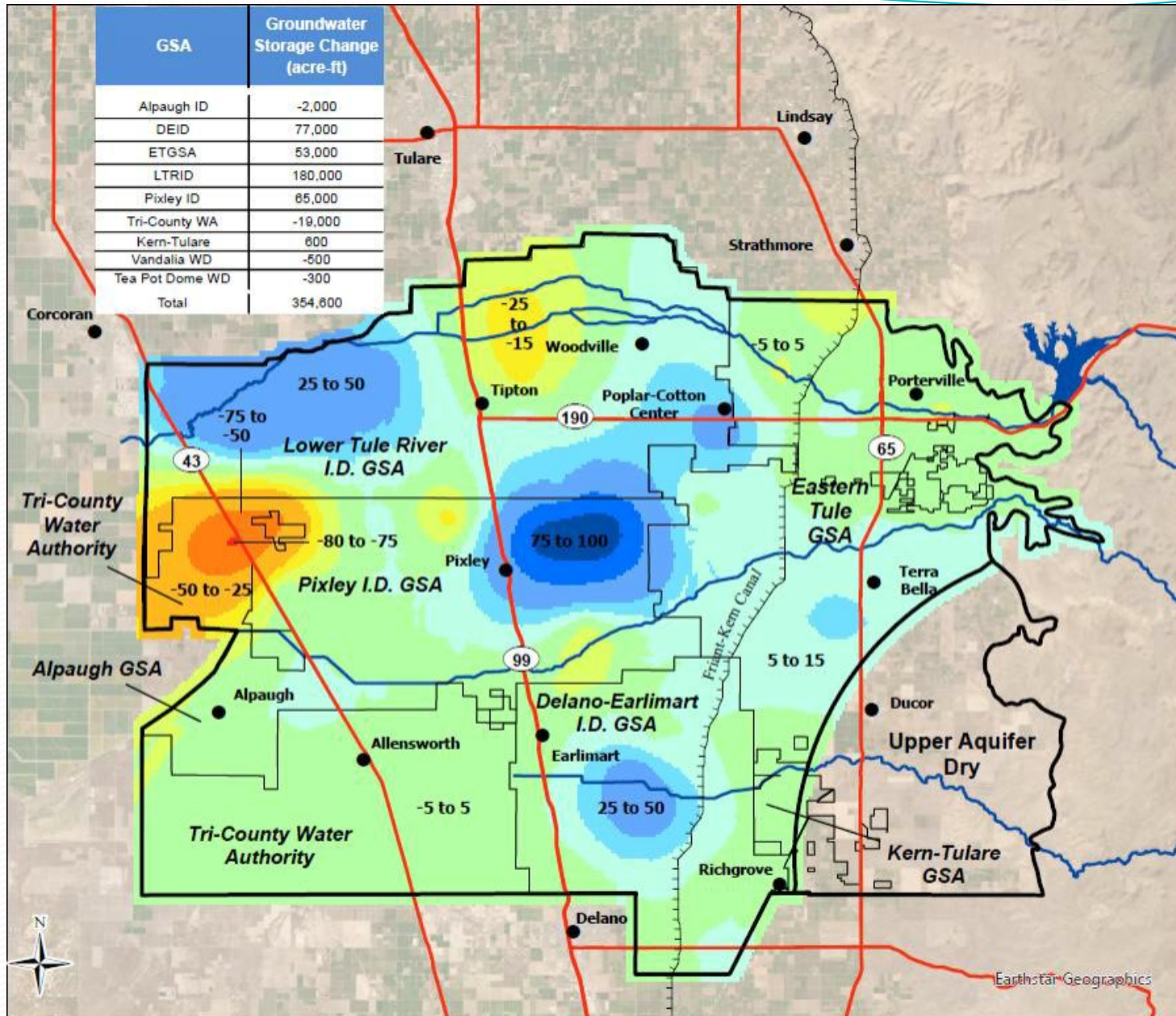


Groundwater Elevation Changes – TSMW-04 RMS

TSMW-4 Groundwater Elevations



Estimated Storage change – Upper Aquifer



Map Features

Change in Groundwater Elevation (ft)
Fall 2023 to Fall 2024

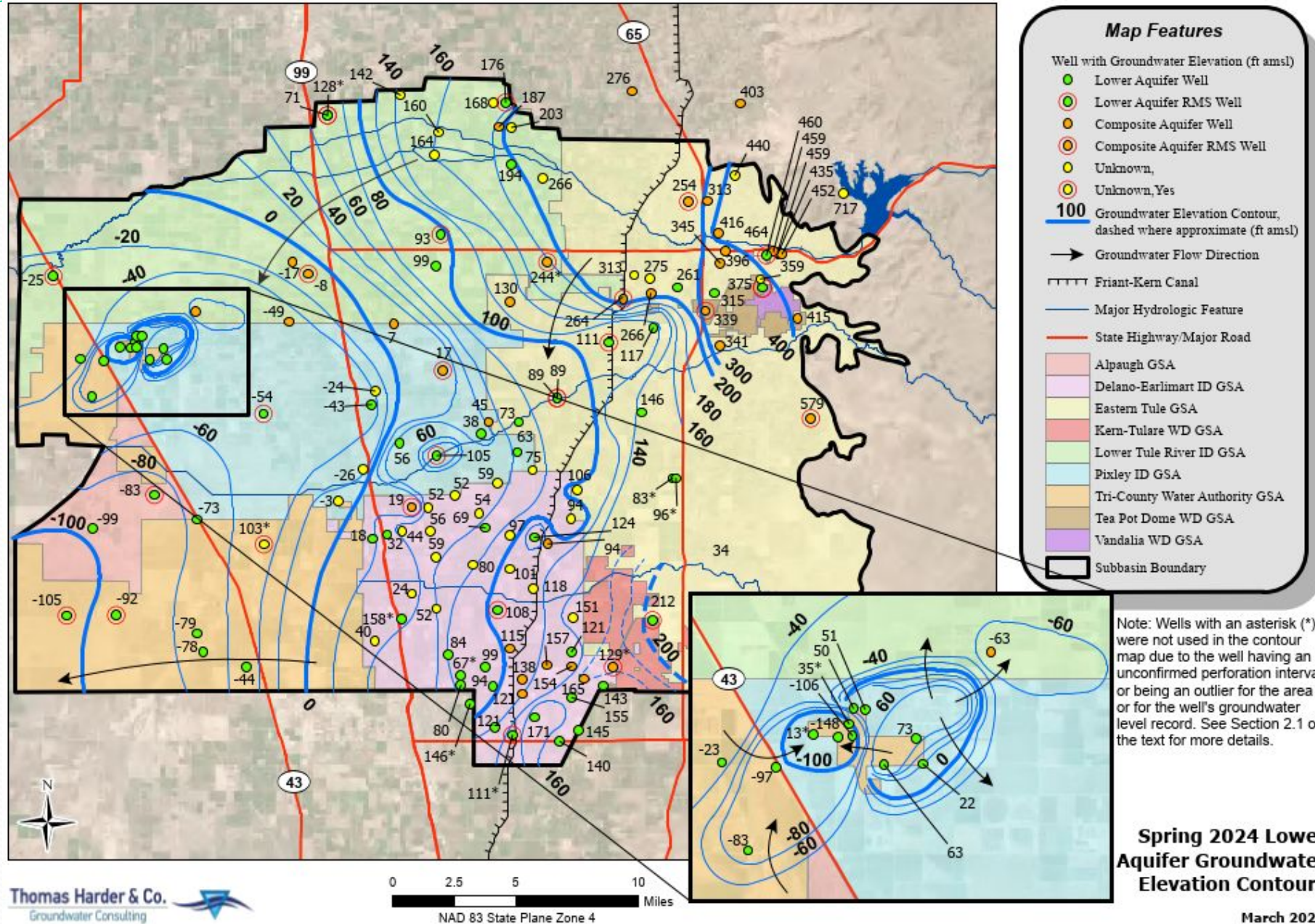
- 75 to 100
- 50 to 75
- 25 to 50
- 15 to 25
- 5 to 15
- 5 to 5
- 15 to -5
- 25 to -15
- 50 to -25
- 75 to -50
- 80 to -75

- City or Community
- State Highway/Major Road
- ▬ Friant-Kern Canal
- Major Hydrologic Feature
- ▭ Subbasin Boundary

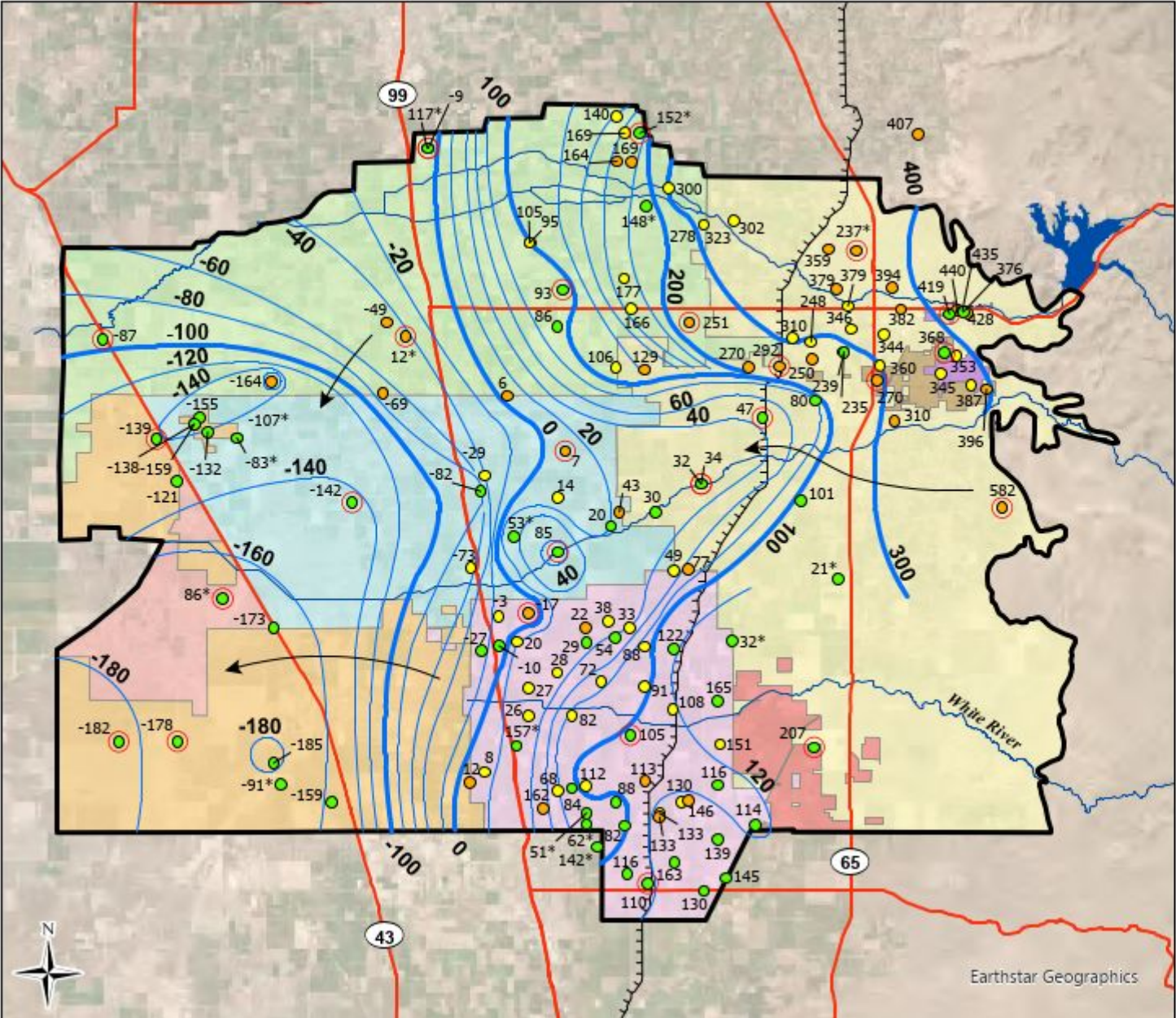
Change in Groundwater Elevation Upper Aquifer - Fall 2023 to Fall 2024



Lower Aquifer Groundwater Level – Spring 24



Lower Aquifer Groundwater Level – Fall 24



Map Features

- Well with Groundwater Elevation (ft amsl)
 - Lower Aquifer RMS Well
 - Lower Aquifer Well
 - Composite Aquifer RMS Well
 - Composite Aquifer Well
 - Unknown Aquifer Well
- Groundwater Elevation Contour, dashed where approximate (ft amsl)
- Groundwater Flow Direction
- Friant-Kern Canal
- Major Hydrologic Feature
- State Highway/Major Road
- Alpaugh GSA
- Delano-Earlimart ID GSA
- Eastern Tule GSA
- Kern-Tulare WD GSA
- Lower Tule River ID GSA
- Pixley ID GSA
- Tri-County Water Authority GSA
- Tea Pot Dome WD GSA
- Vandalia WD GSA
- Subbasin Boundary

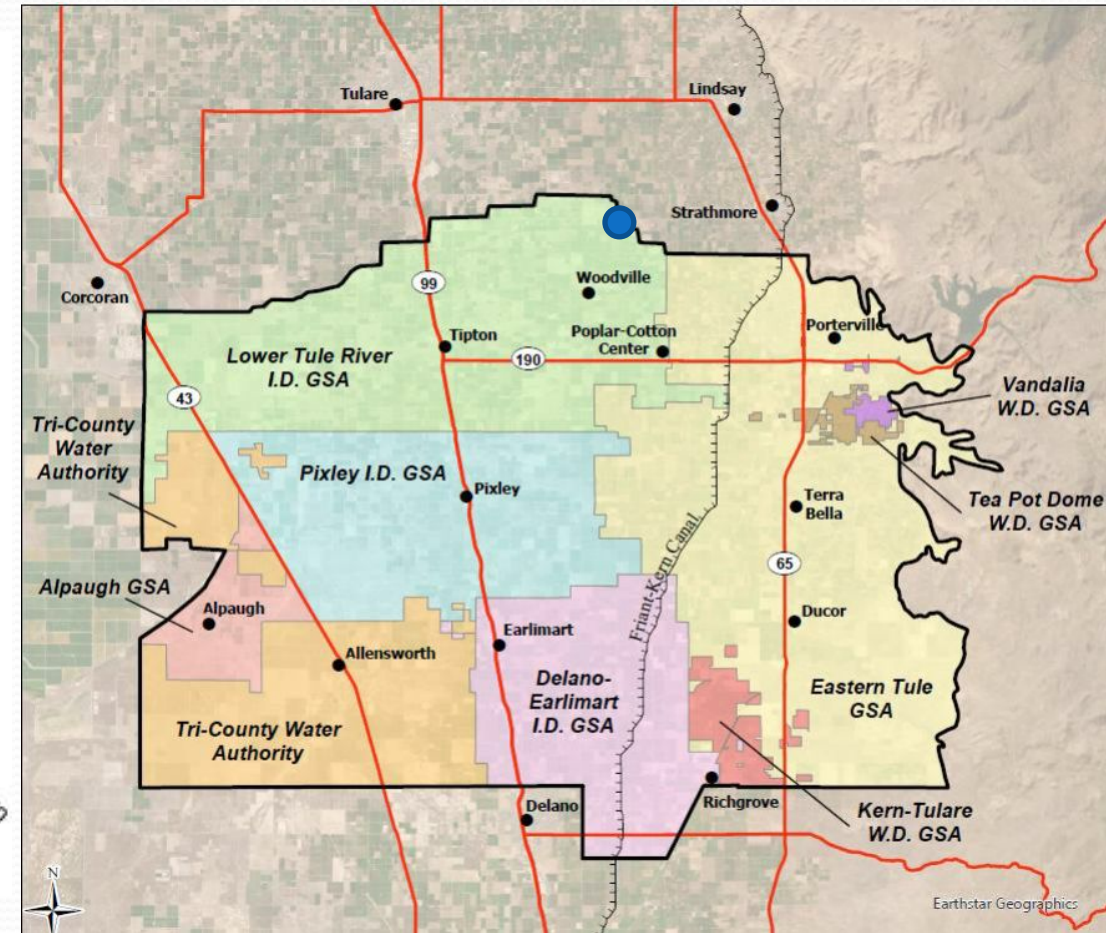
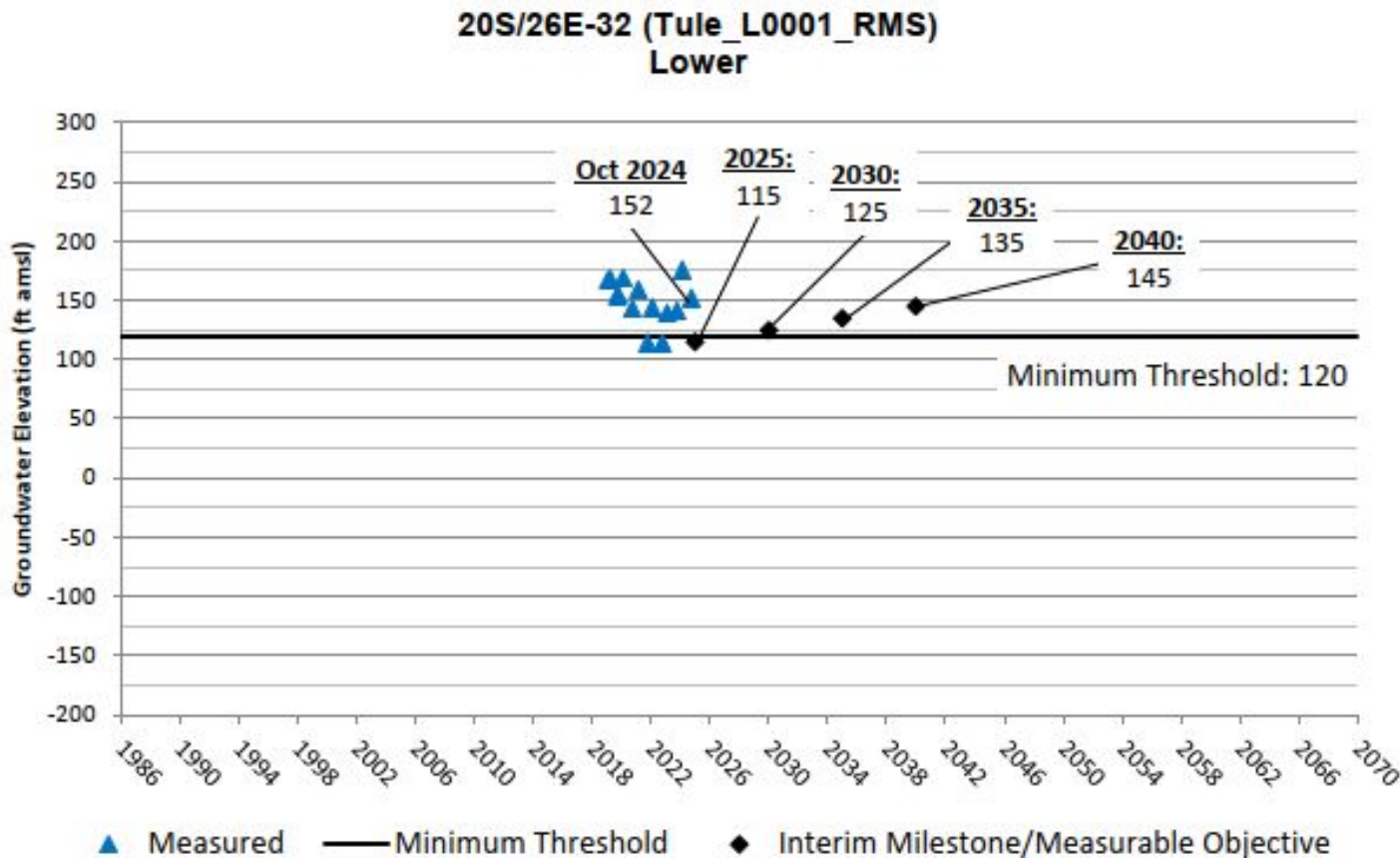
Note: Wells with an asterisk (*) were not used in the contour map due to the well having an unconfirmed perforation interval, or being an outlier for the area or for the well's groundwater level record. See Section 2.1 of the text for more details.

Earthstar Geographics

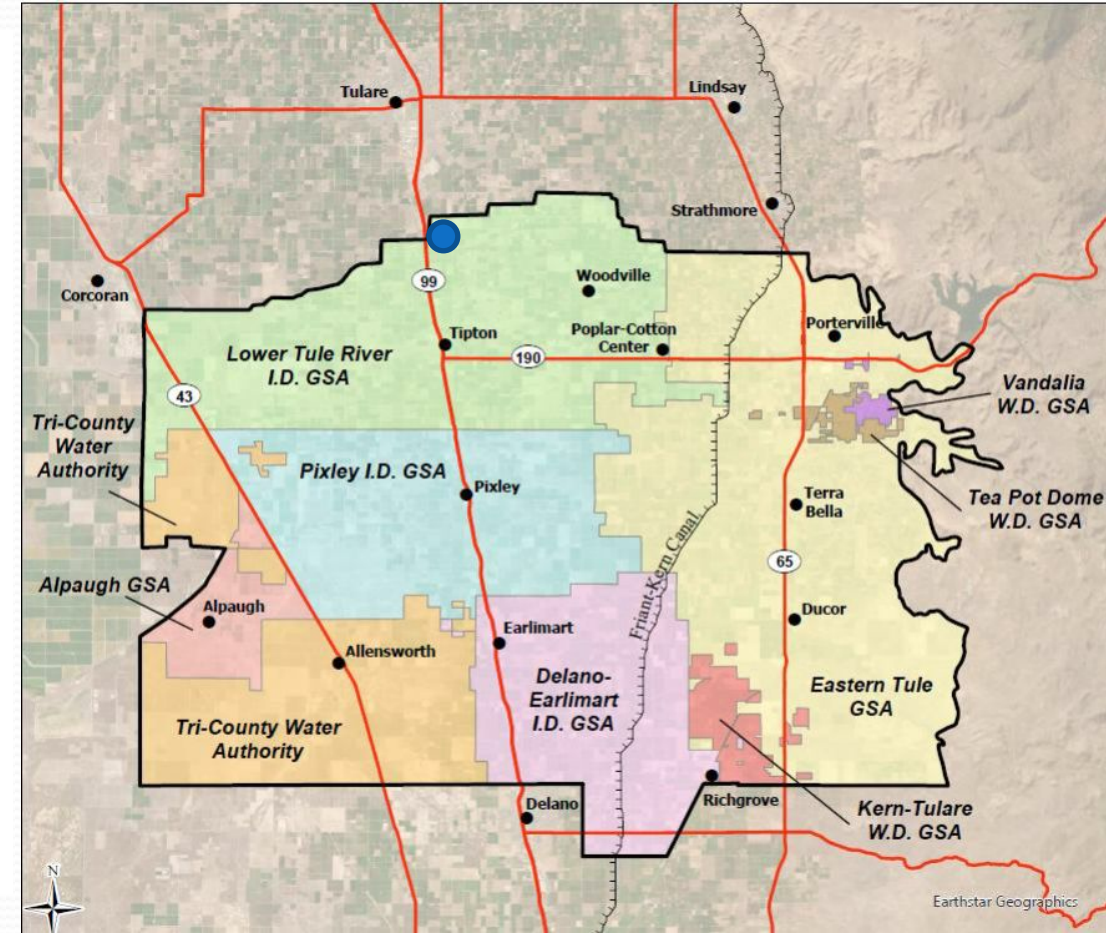
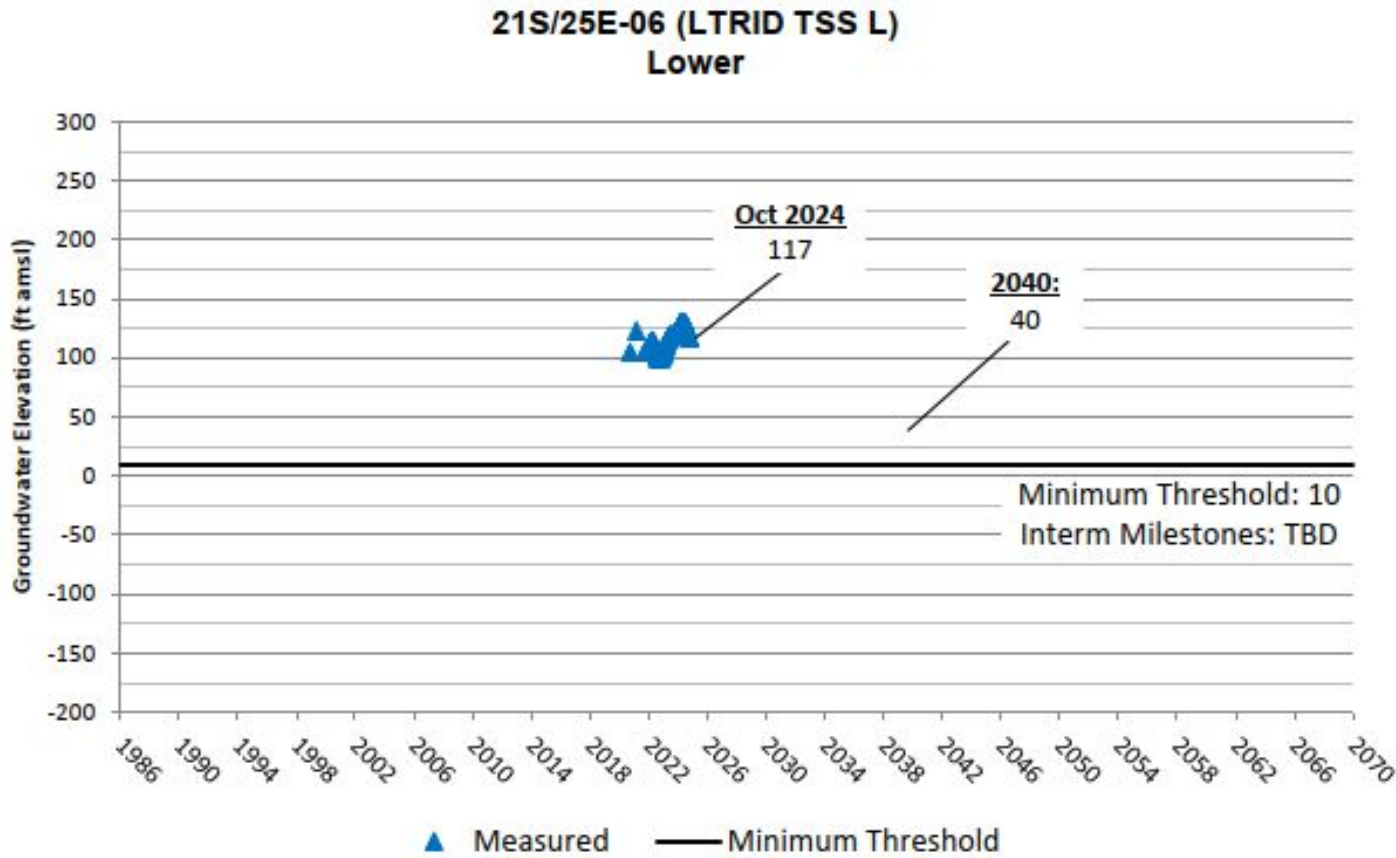
Fall 2024 Lower Aquifer Groundwater Elevation Contours



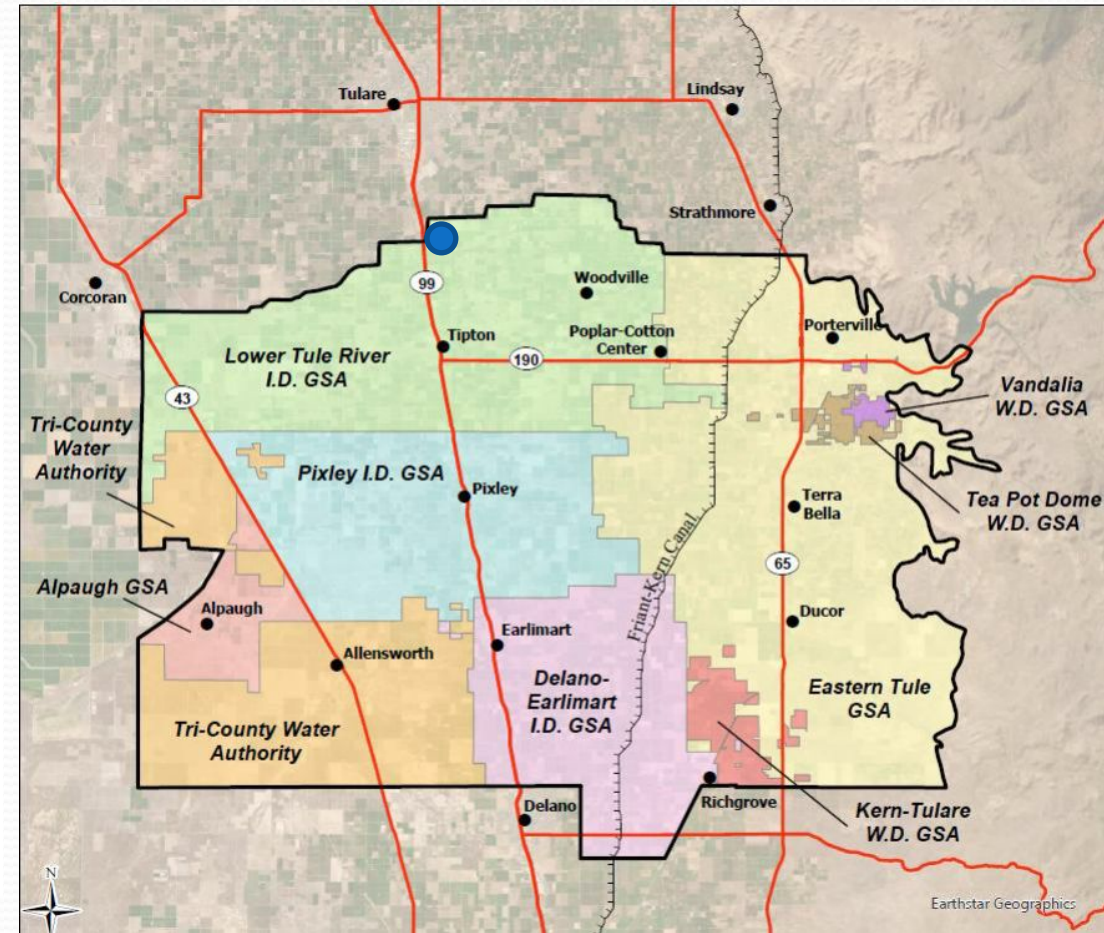
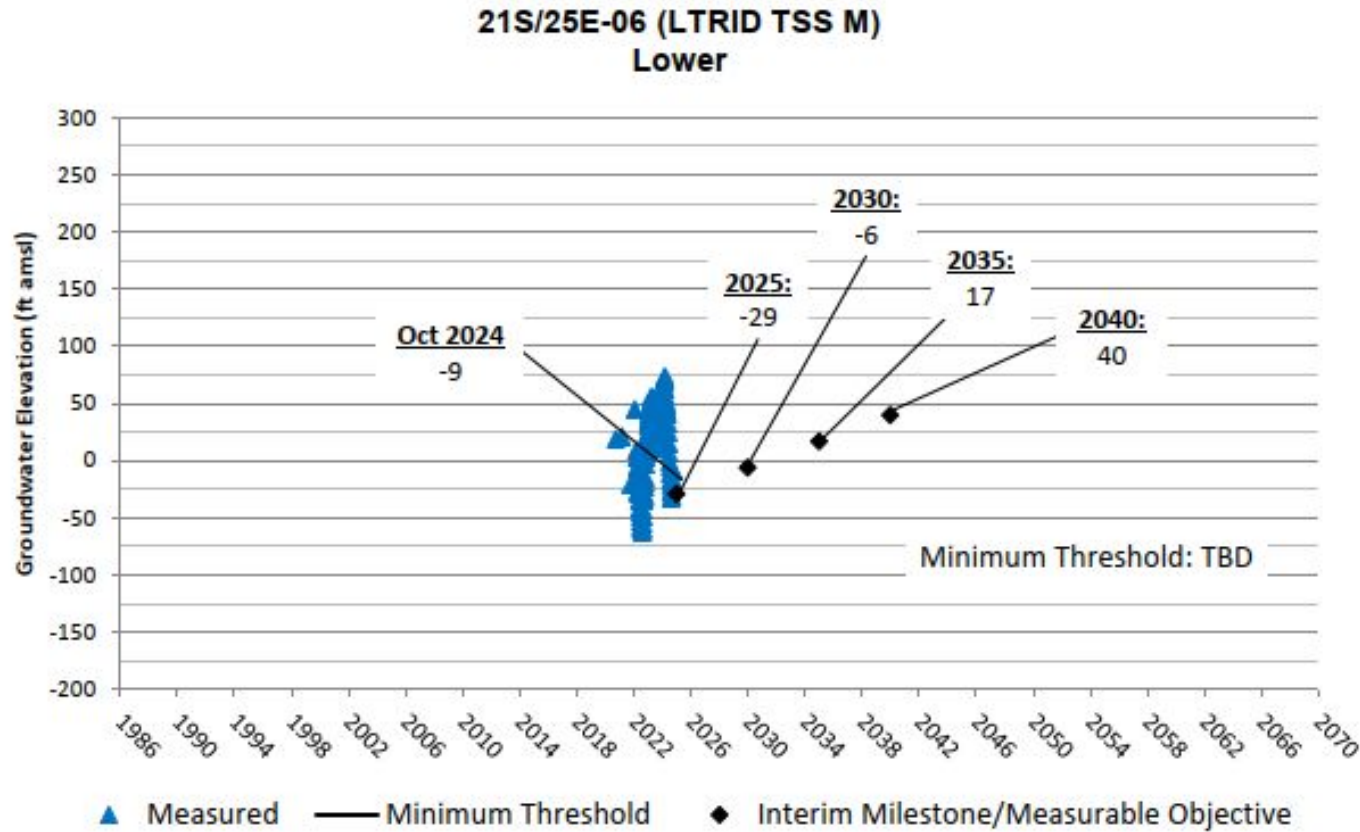
Groundwater Elevation Hydrographs – Tule L0001 RMS Lower



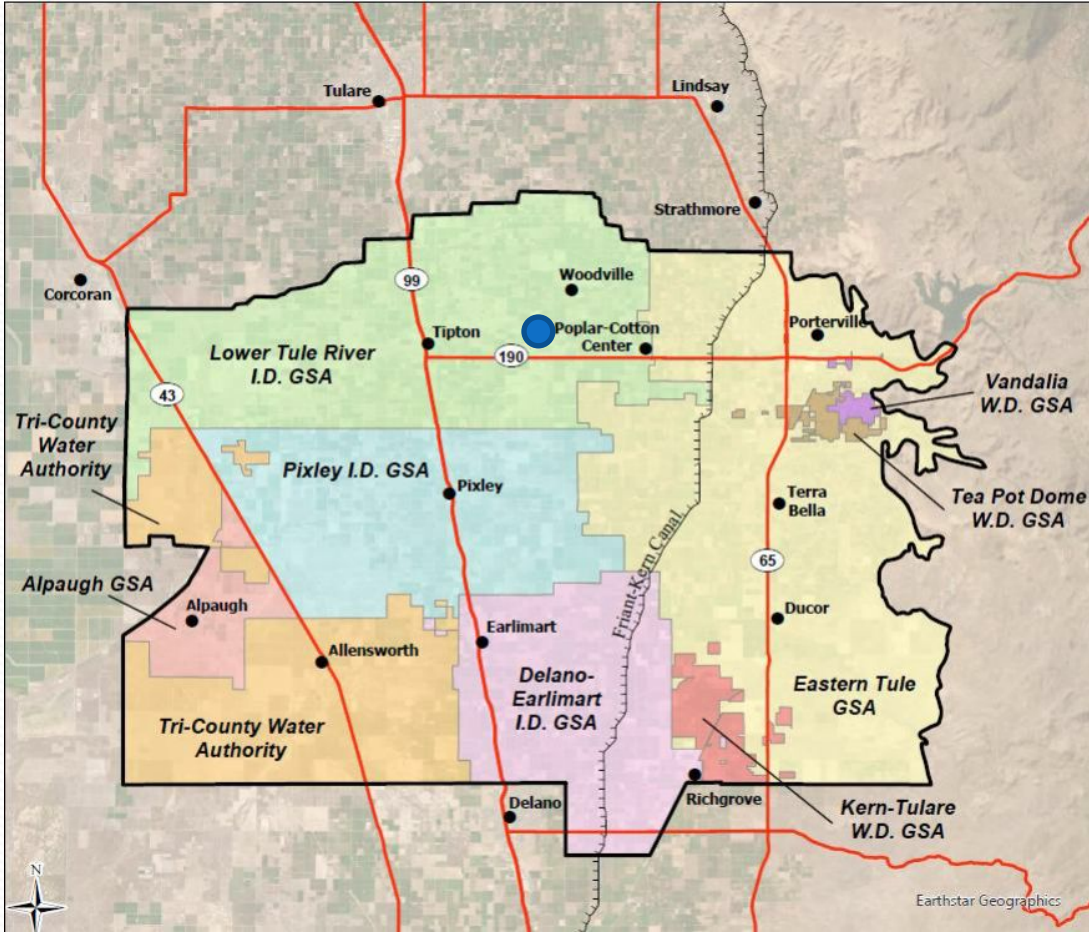
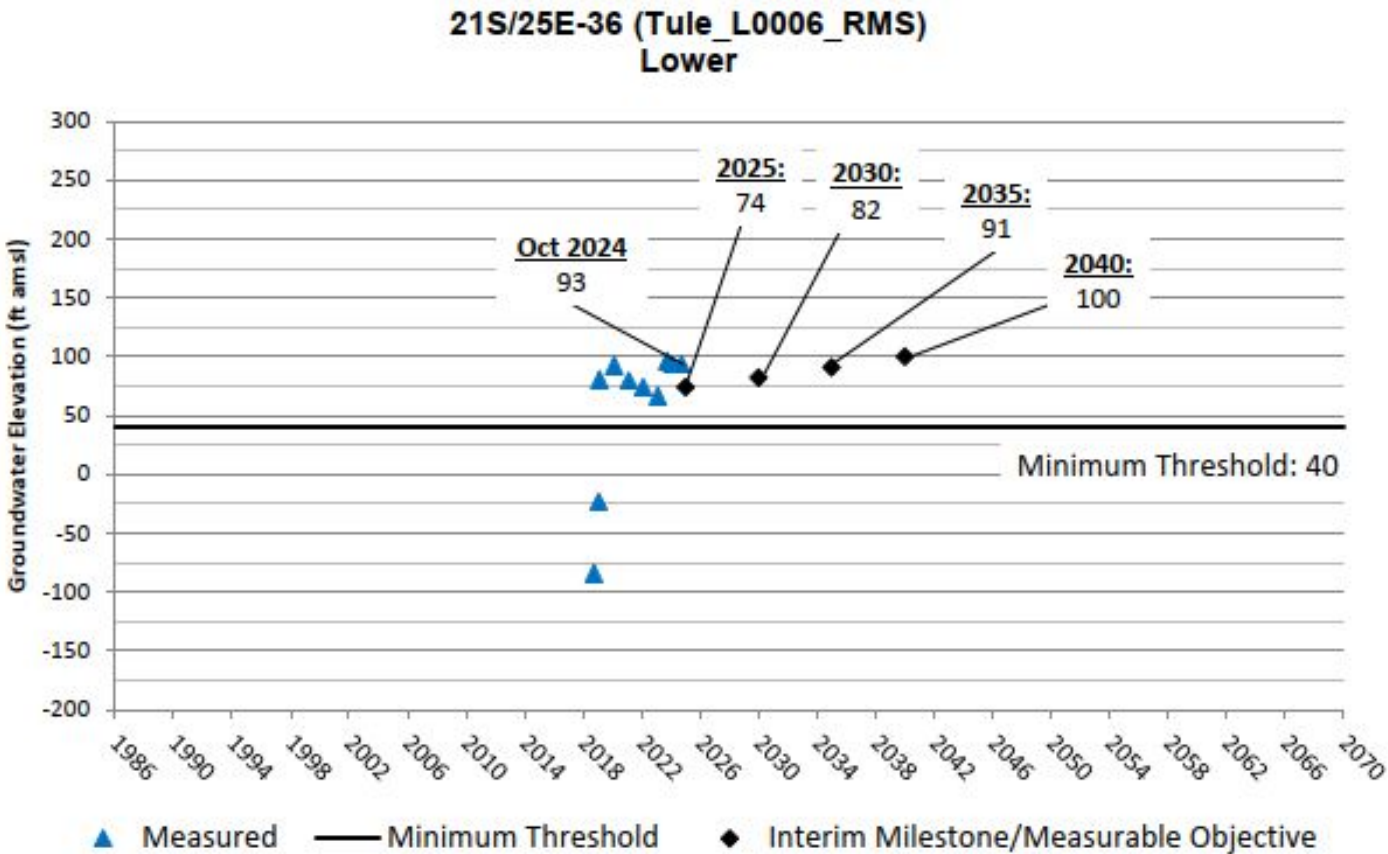
Groundwater Elevation Hydrographs – LTRID TSS L Lower



Groundwater Elevation Hydrographs – LTRID TSS M Lower

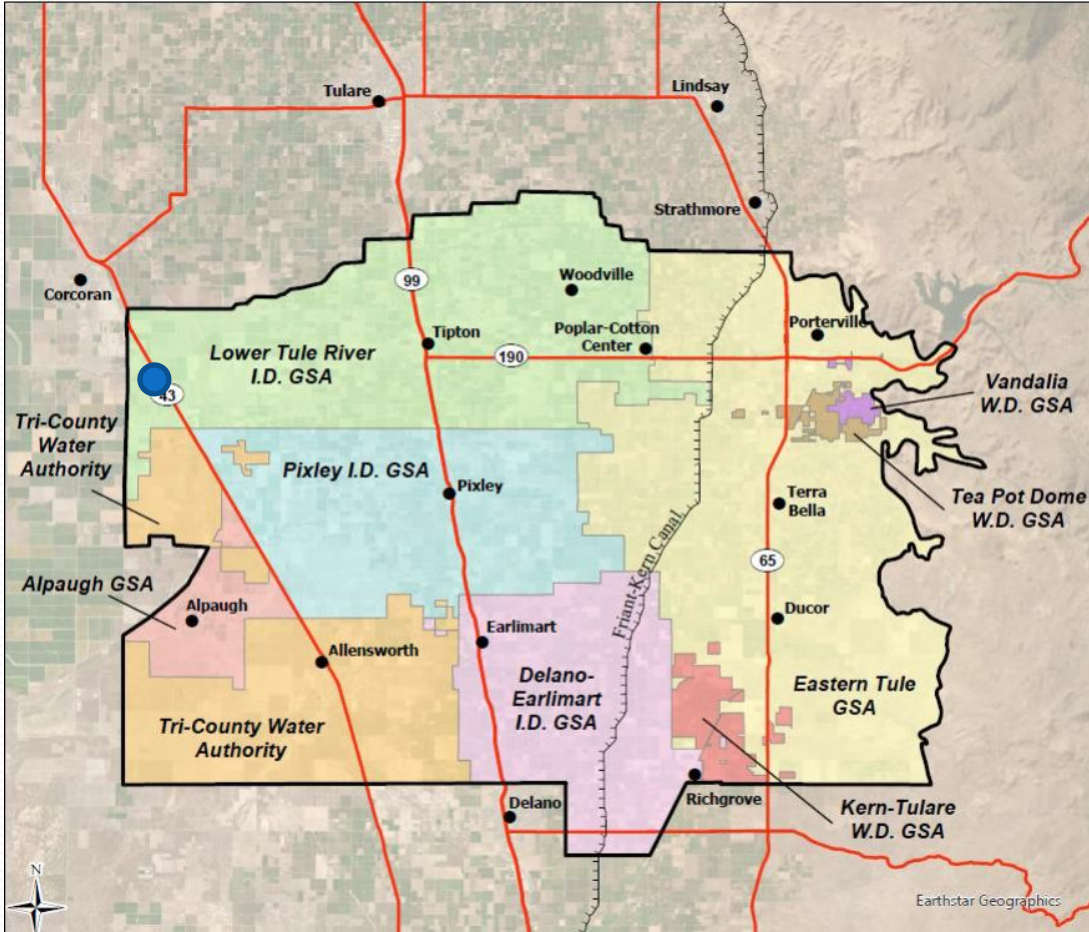
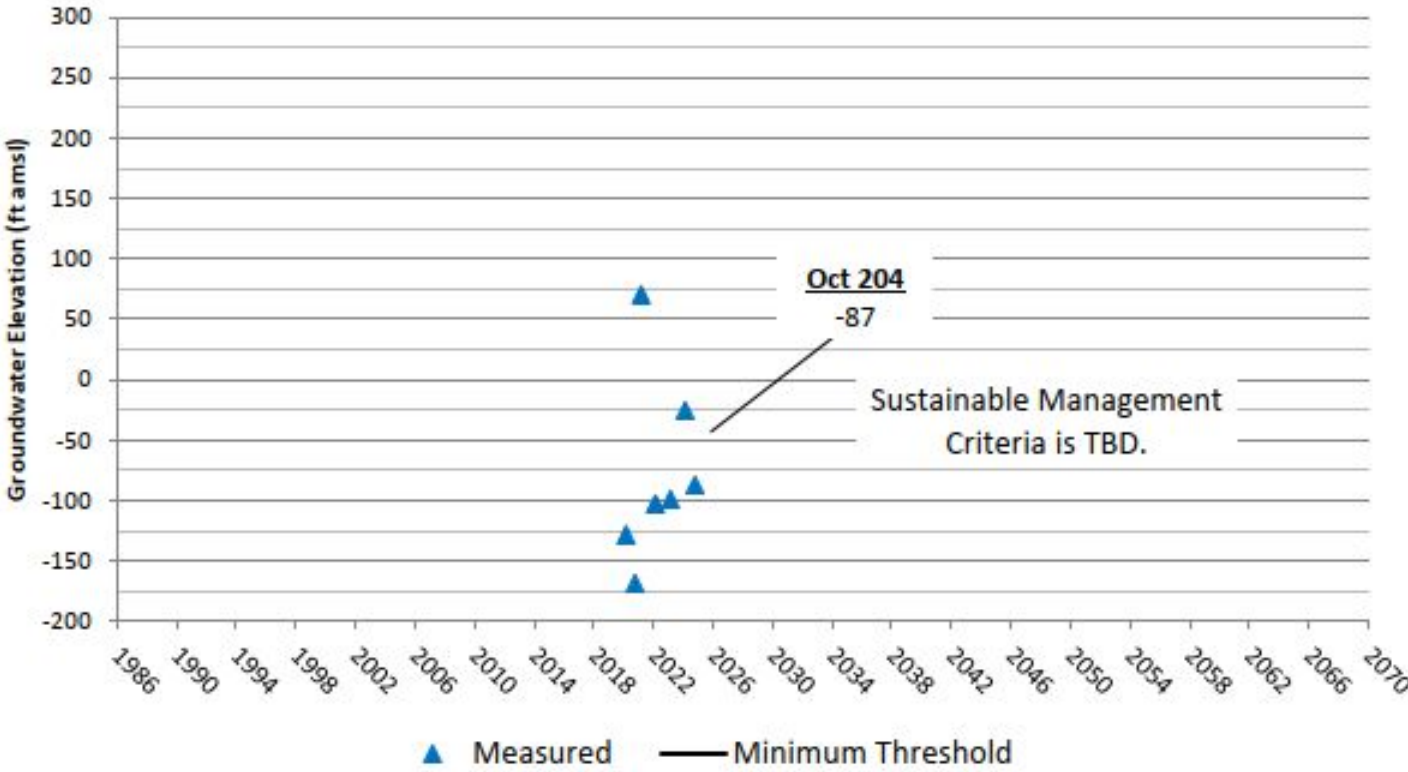


Groundwater Elevation Hydrographs – Tule L0006 RMS Lower

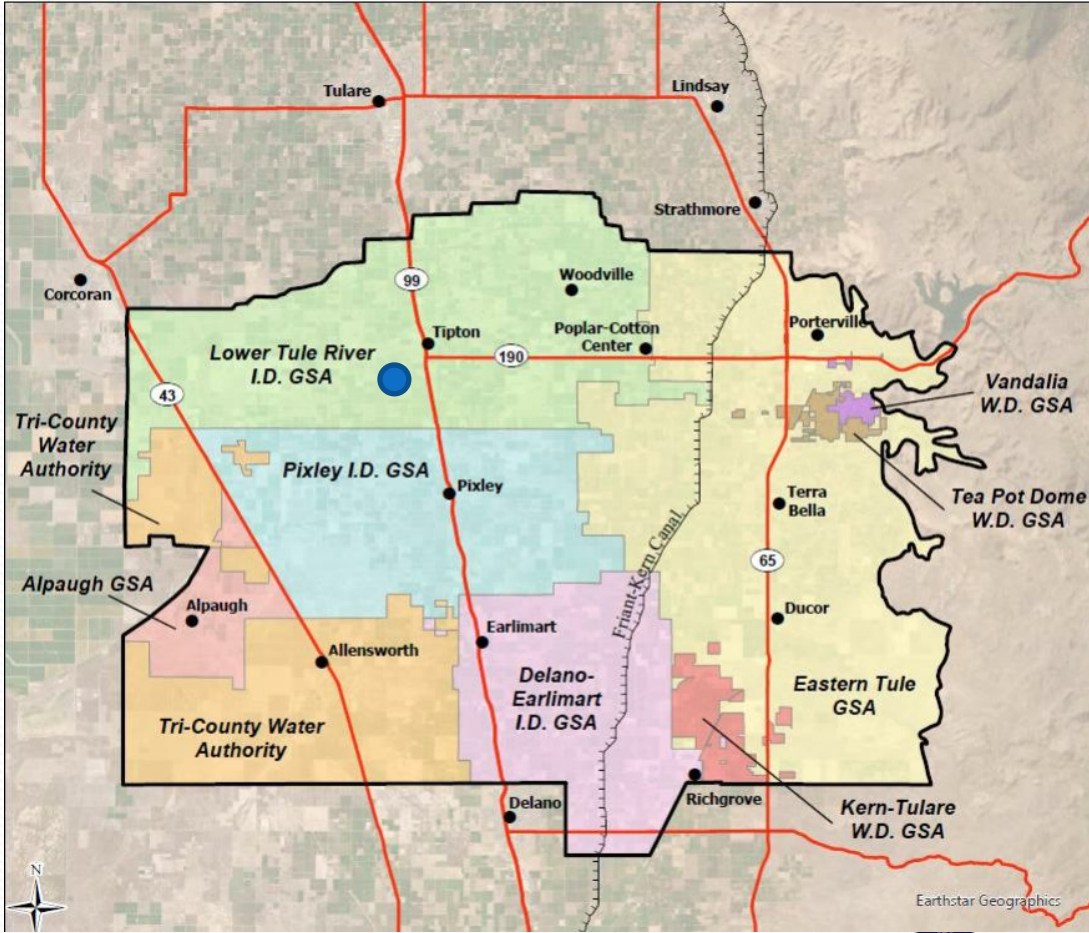
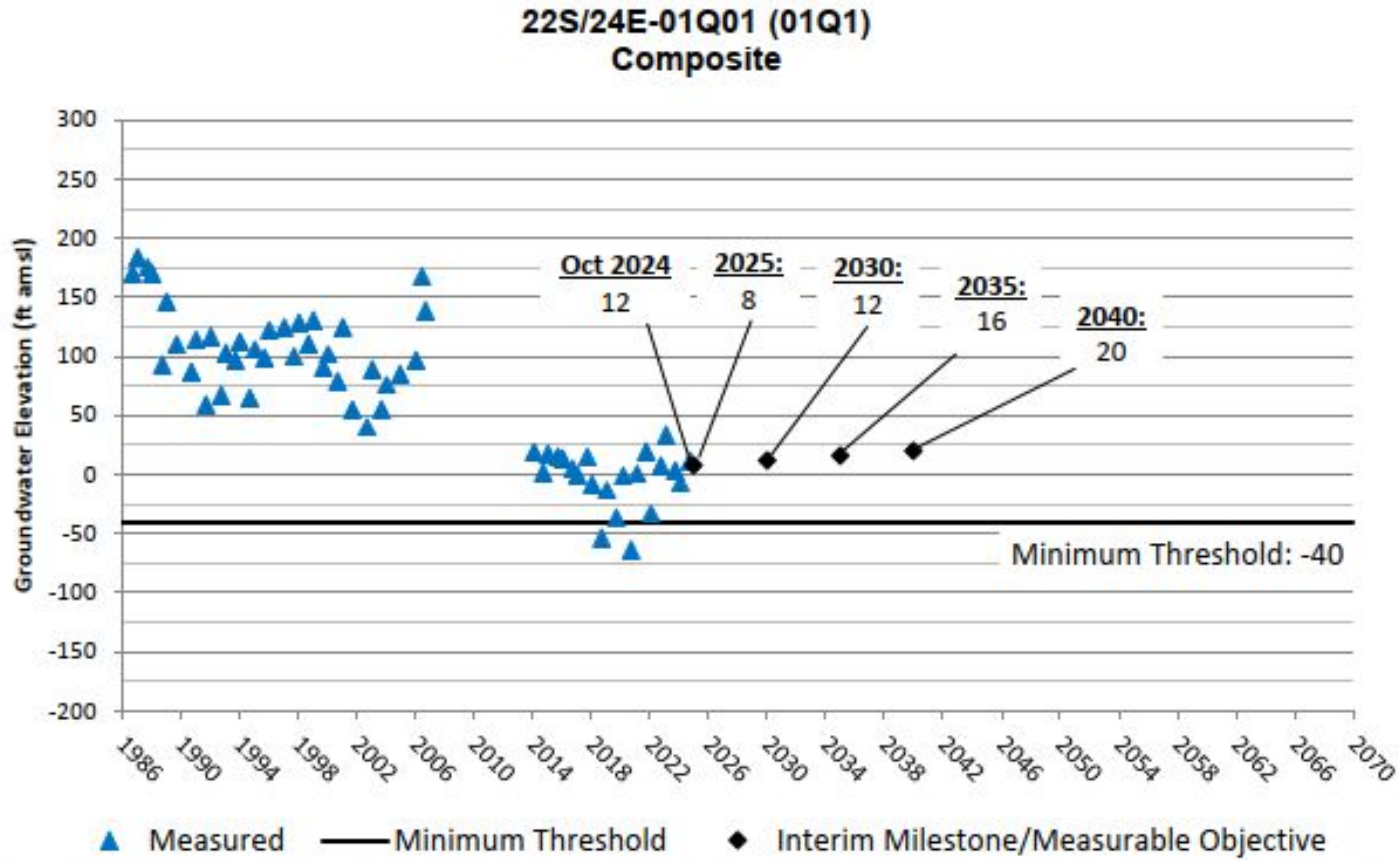


Groundwater Elevation Hydrographs – Tule L0010 RMS Lower

22S/23E-08 (Tule_L0010_RMS)
Lower



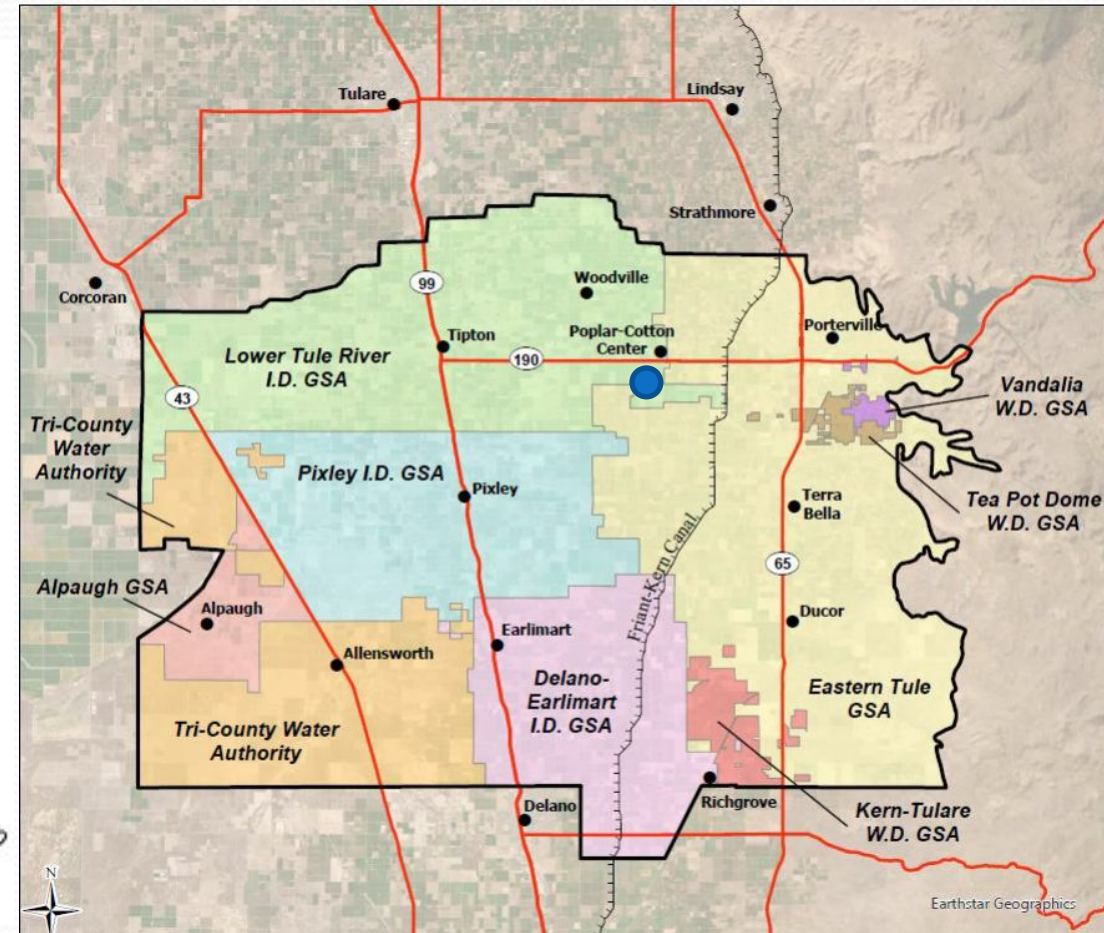
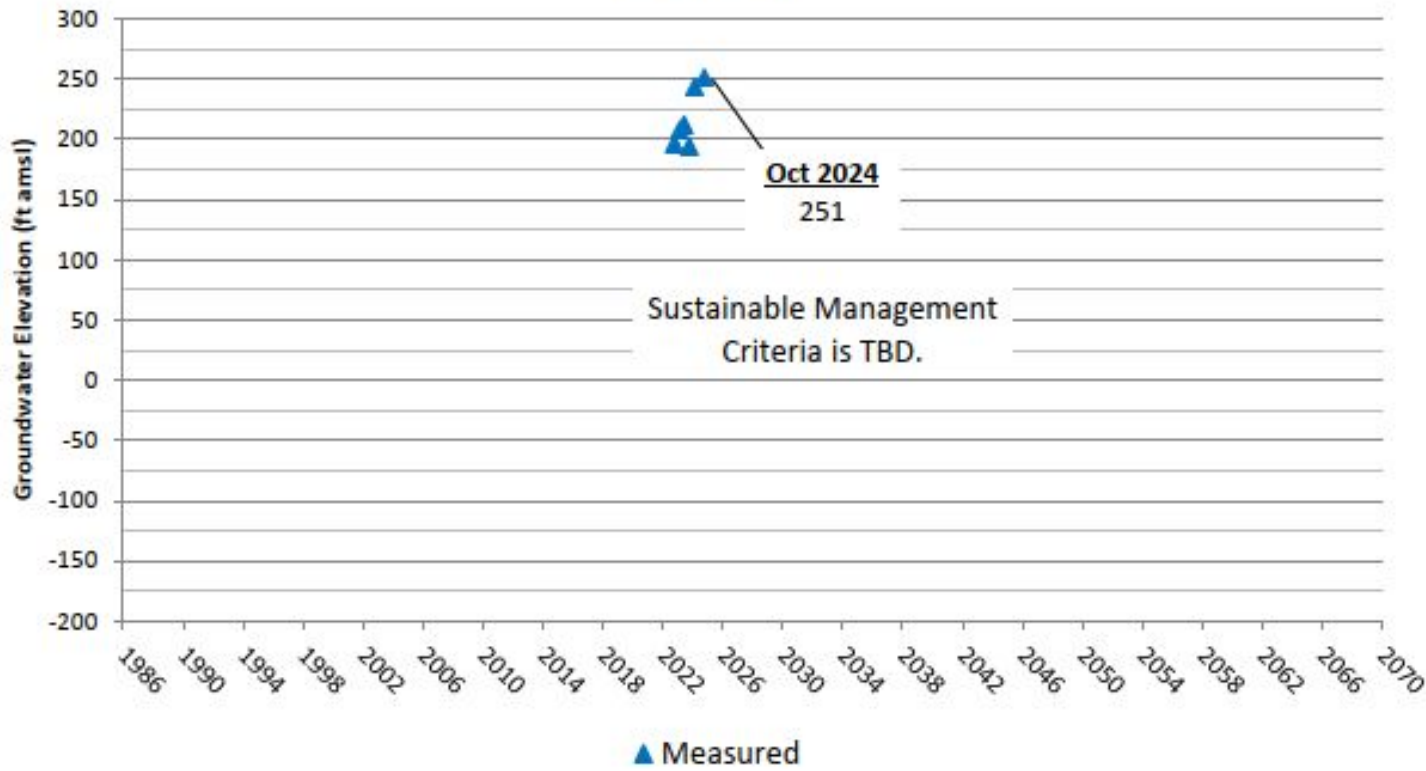
Groundwater Elevation Hydrographs – 01Q1 Composite



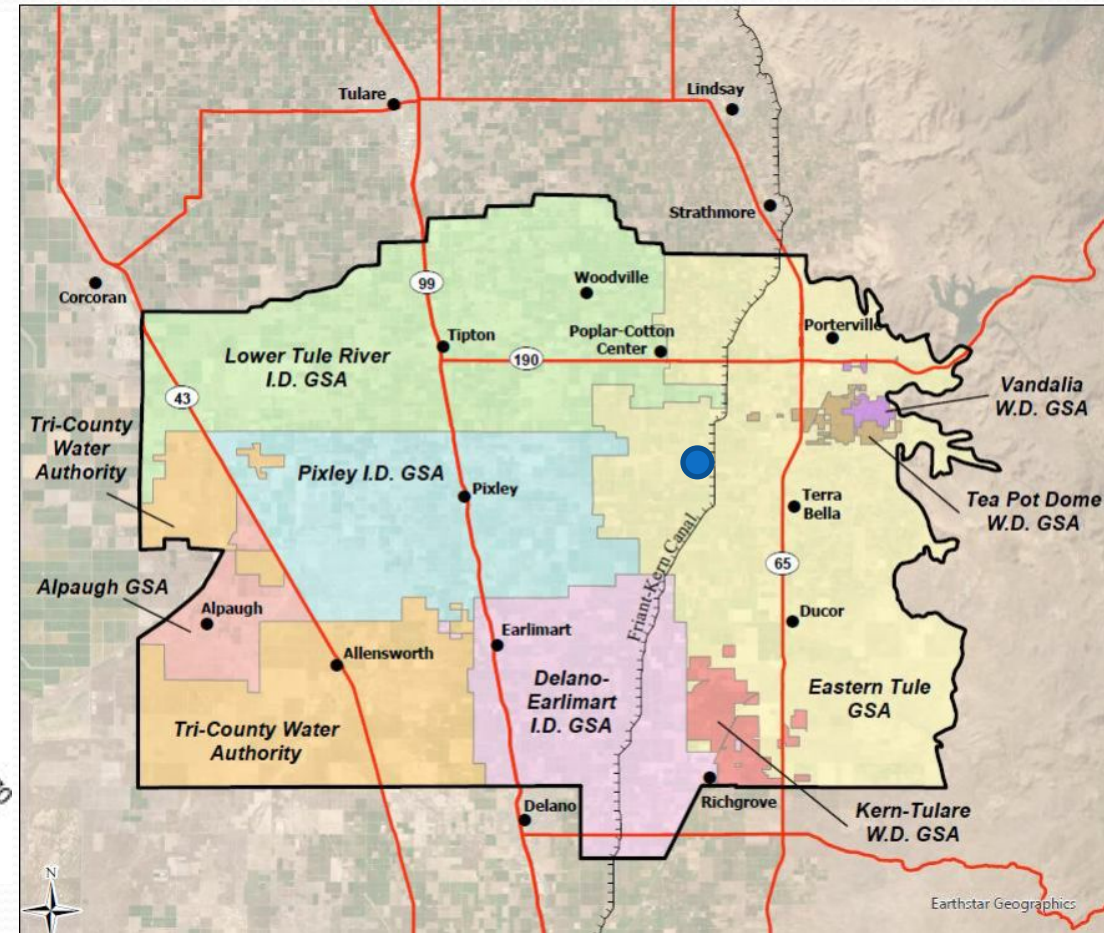
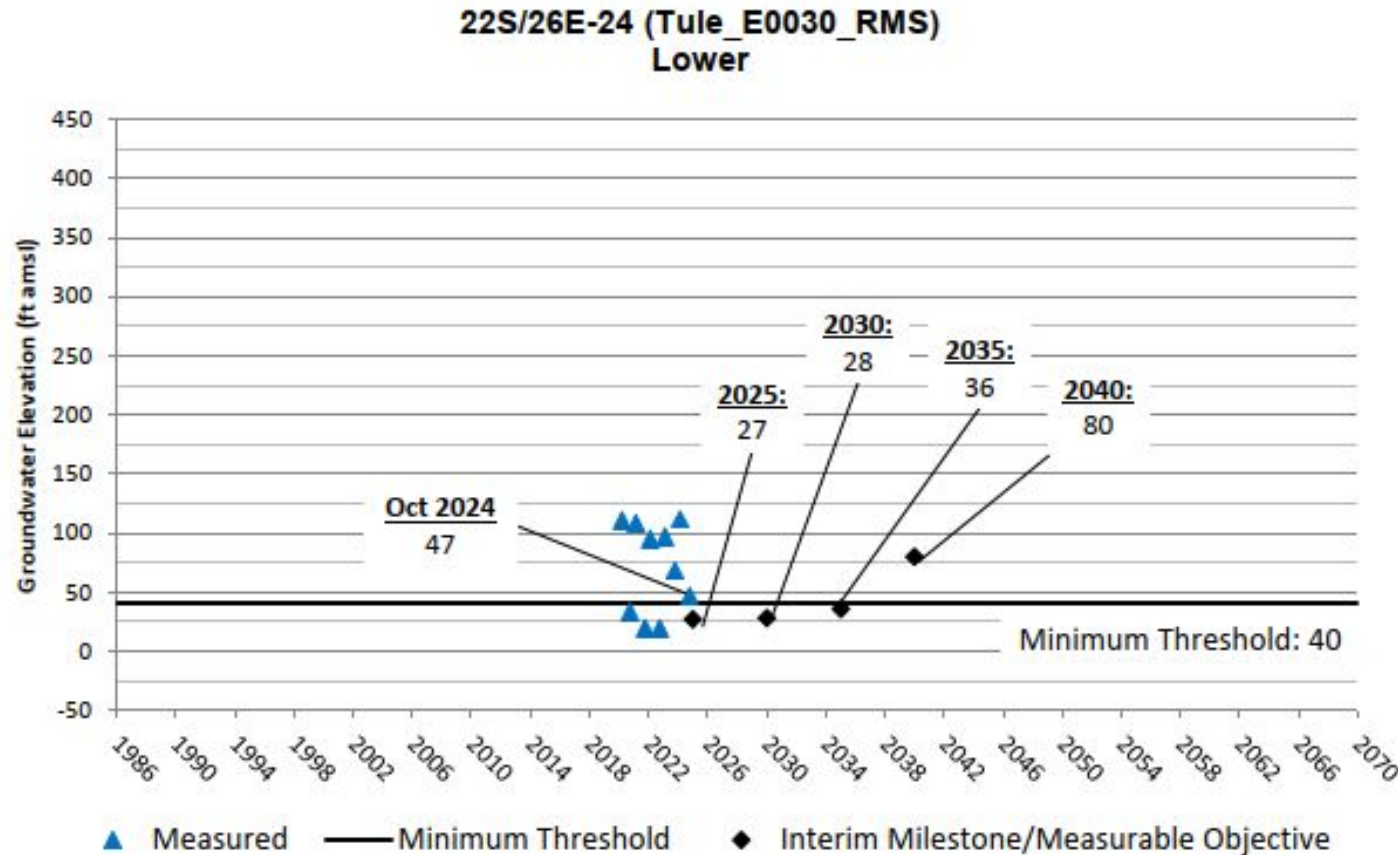
Earthstar Geographics

Groundwater Elevation Hydrographs – Tule L0174 Composite

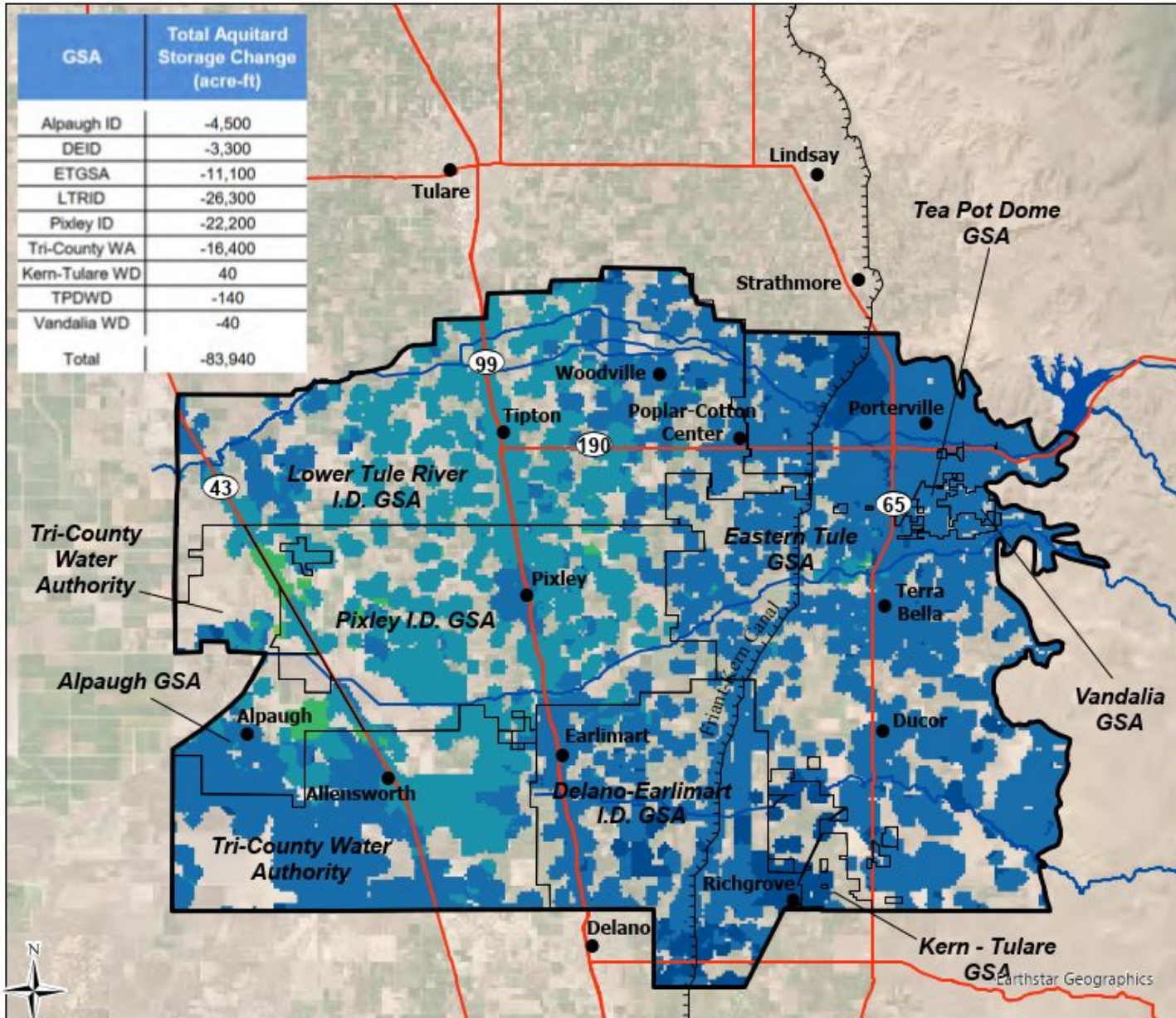
22S/26E-03 (Tule_L0174_RMS)
Composite



Groundwater Elevation Hydrographs along FKC



Estimated Storage change - Lower



Map Features

InSAR Subsidence from October 2023 to September 2024 (ft)

- 0.75 to 1.00
- 0.50 to 0.75
- 0.25 to 0.50
- 0.00 to 0.25
- < 0.00 (Uplift)

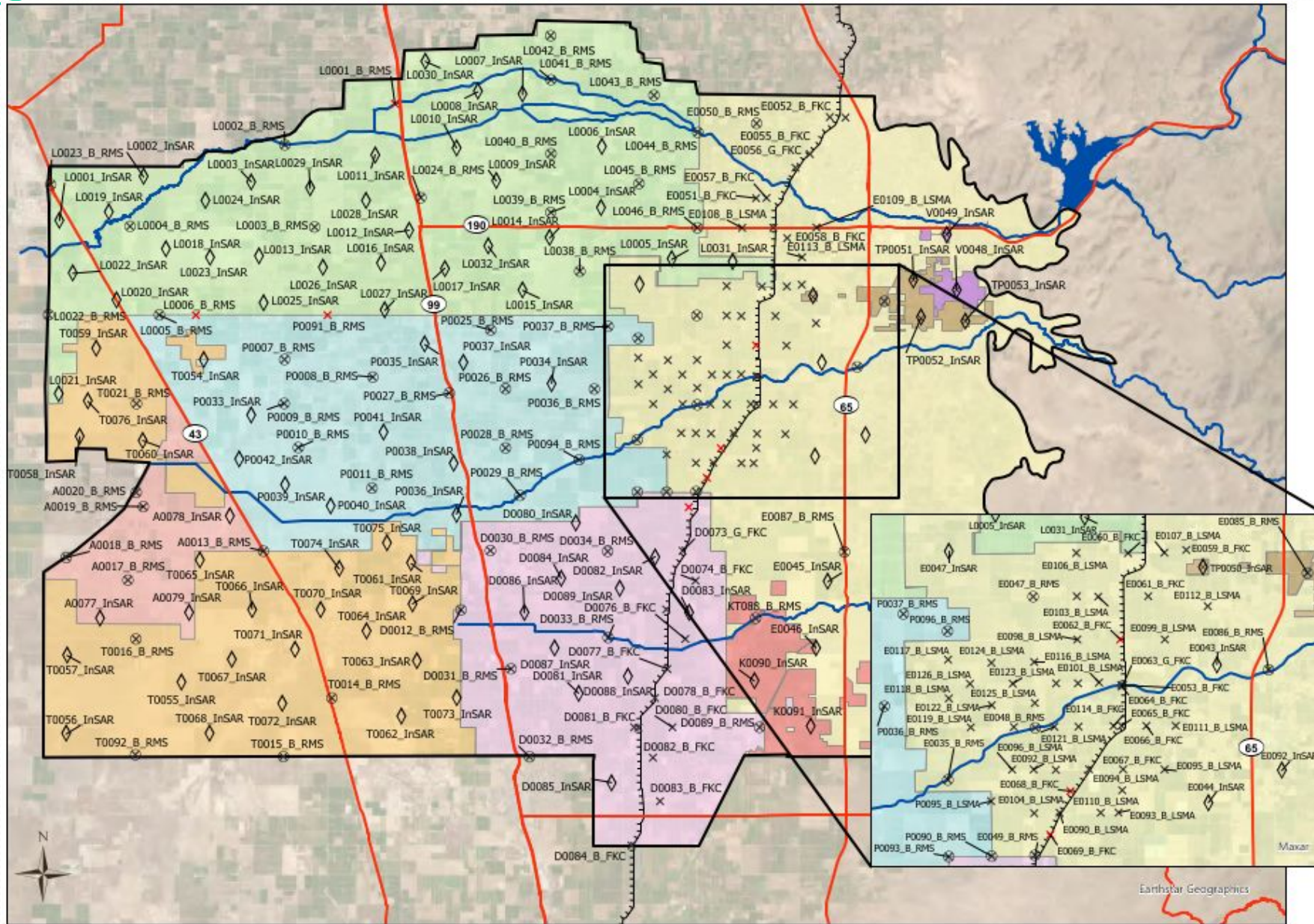
- City or Community
- Friant-Kern Canal
- Major Hydrologic Feature
- State Highway/Major Road
- GSA Boundary
- Subbasin Boundary

Note: For this annual report, the change in storage for the Lower Aquifer was equated to the volume of water associated with compression of aquitards for the water year. This approximation was based on the premise that this volume is equal to the volume of land subsidence that occurred during this time. The areal distribution of land subsidence was based on InSAR data from October 1 (Fall) at the beginning of the water year to October 1 (i.e. through September) at the end of the water year.

**Change in Lower Aquifer Storage as Estimated from Land Subsidence
Fall 2023 to Fall 2024**



Land Surface Elevation and Subsidence Monitoring Network



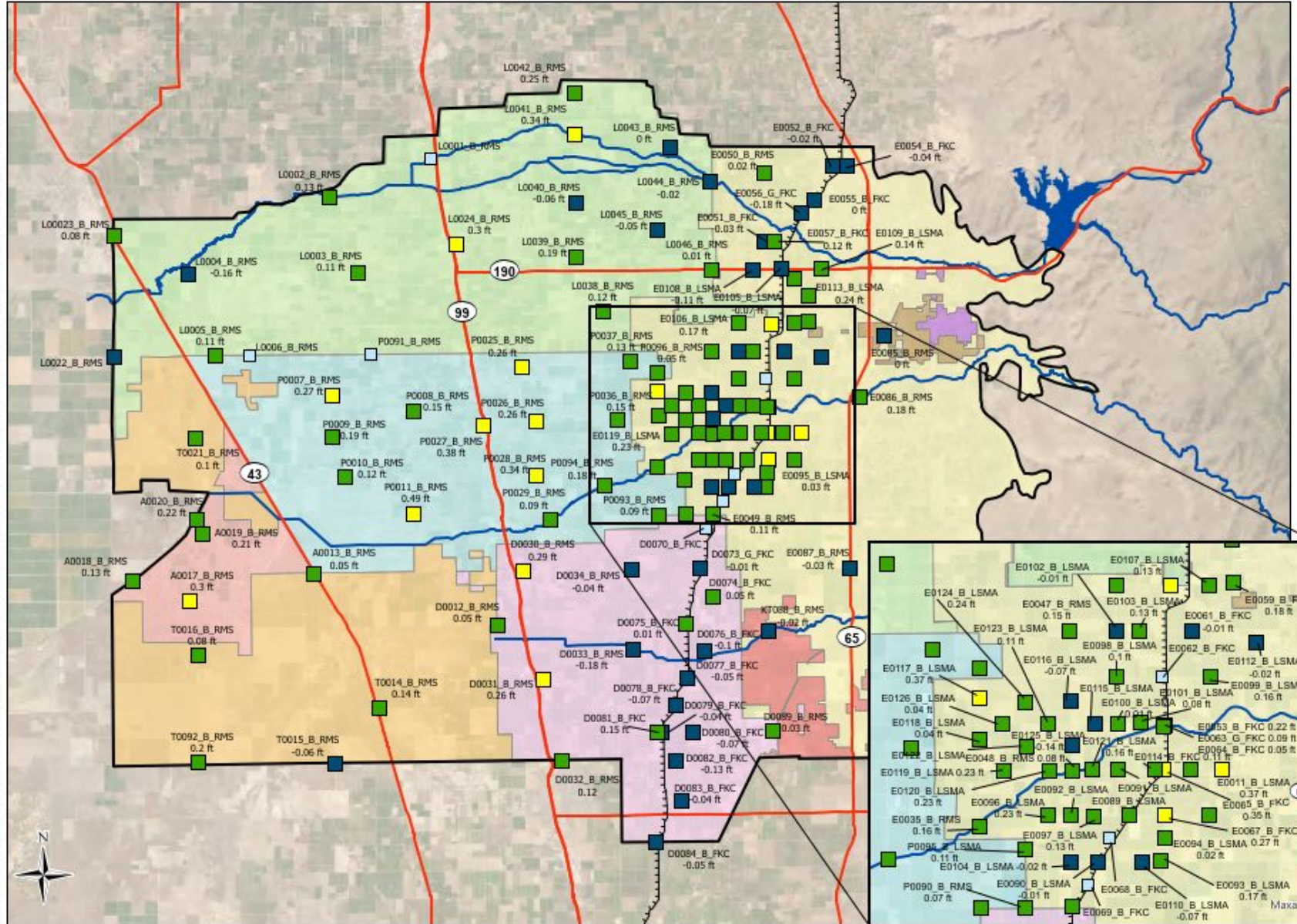
Map Features

- ⊗ Land Surface Elevation Benchmarks RMS
- × Land Surface Elevation Benchmarkas
- ✗ Destroyed Land Surface Elevation Benchmark
- ◇ InSAR Monitoring Point RMS
- ◊ InSAR Monitoring Point
- Friant-Kern Canal
- Major Hydrologic Feature
- State Highway/Major Road
- ▭ Subbasin Boundary
- Alpaugh GSA
- Delano-Earlimart ID GSA
- Eastern Tule GSA
- Kern-Tulare WD GSA
- Lower Tule River ID GSA
- Pixley ID GSA
- Tri-County Water Authority GSA
- Tea Pot Dome WD GSA
- Vandalia WD GSA

Land Surface Elevation and Subsidence Monitoring Network



Land Subsidence Benchmarks



Map Features

Subsidence at Benchmarks (ft)

- 0.25 - 0.50
- 0.00 - 0.25
- <0.00 (Uplift)
- 2023 and/or 2024 Data Not Available

Map Features

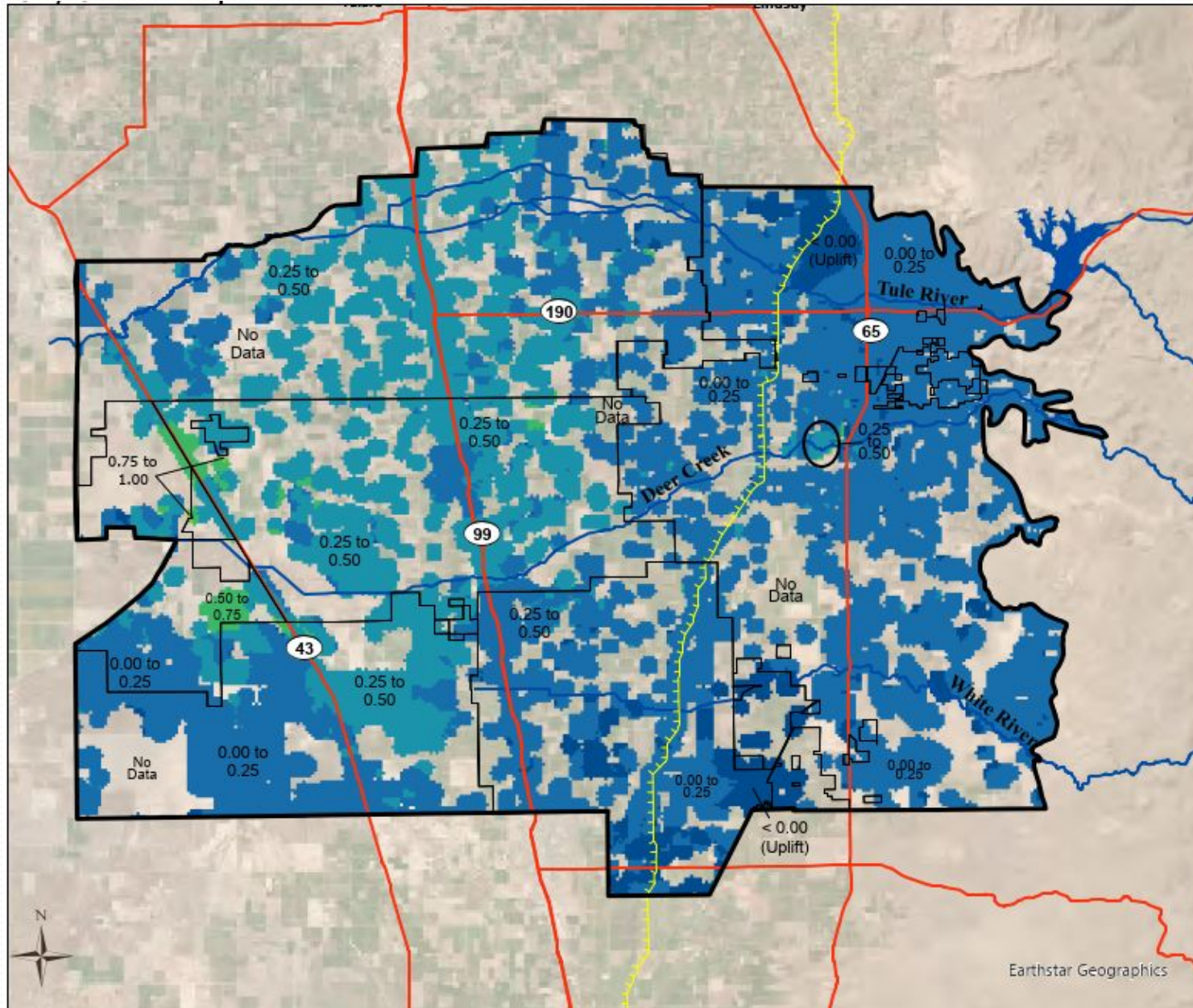
- Friant-Kern Canal
- Major Hydrologic Feature
- State Highway/Major Road
- Subbasin Boundary
- Alpaugh GSA
- Delano-Earlimart ID GSA
- Eastern Tule GSA
- Kern-Tulare WD GSA
- Lower Tule River ID GSA
- Pixley ID GSA
- Tri-County Water Authority GSA
- Tea Pot Dome WD GSA
- Vandalia WD GSA

Data from Tule Subbasin Monitoring Network.



July 2023 to July 2024
Benchmarks Land Subsidence

InSAR Land Subsidence (Oct 23-Sept 24)



Map Features

InSAR Subsidence from October 2023 to September 2024 (ft)

- 0.75 to 1.00
- 0.50 to 0.75
- 0.25 to 0.50
- 0.00 to 0.25
- < 0.00 (Uplift)

Friant-Kern Canal

Major Hydrologic Feature

State Highway/Major Road

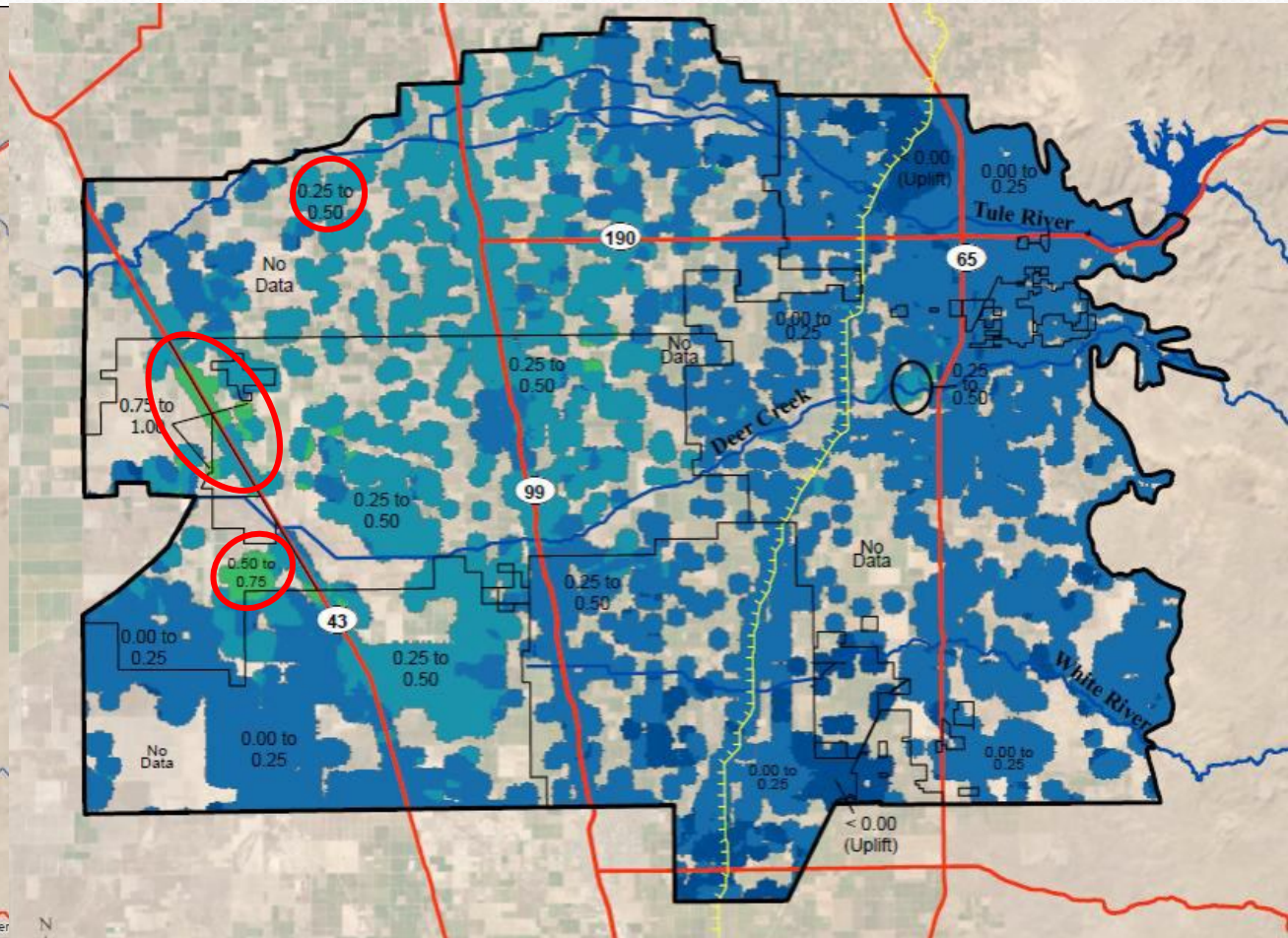
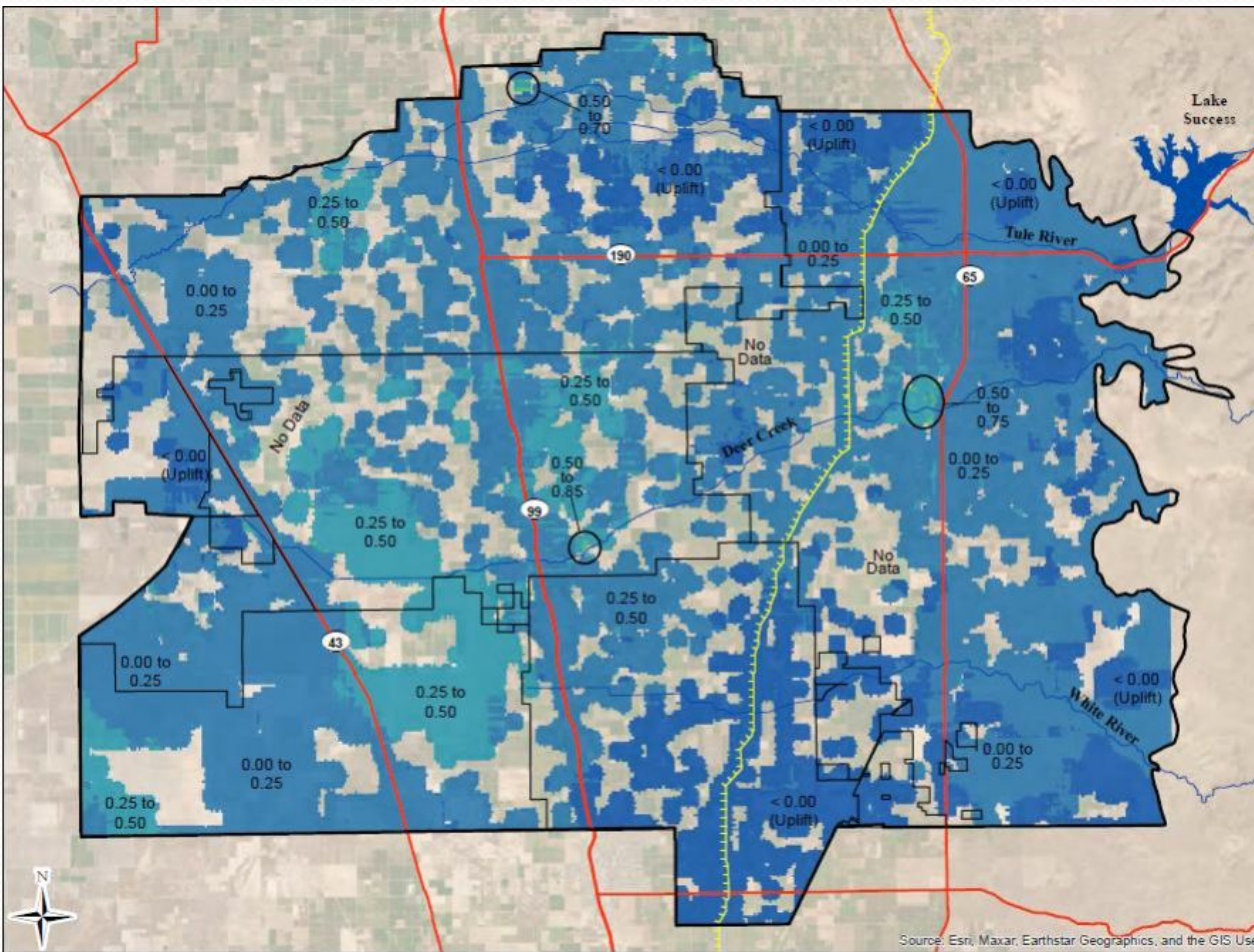
GSA Boundary

Subbasin Boundary

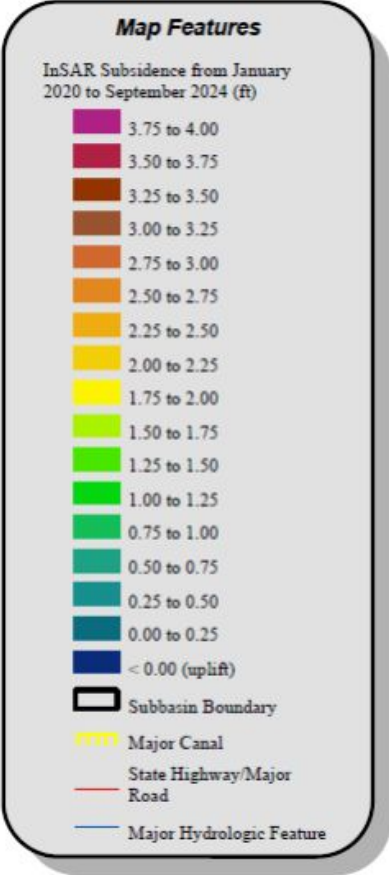
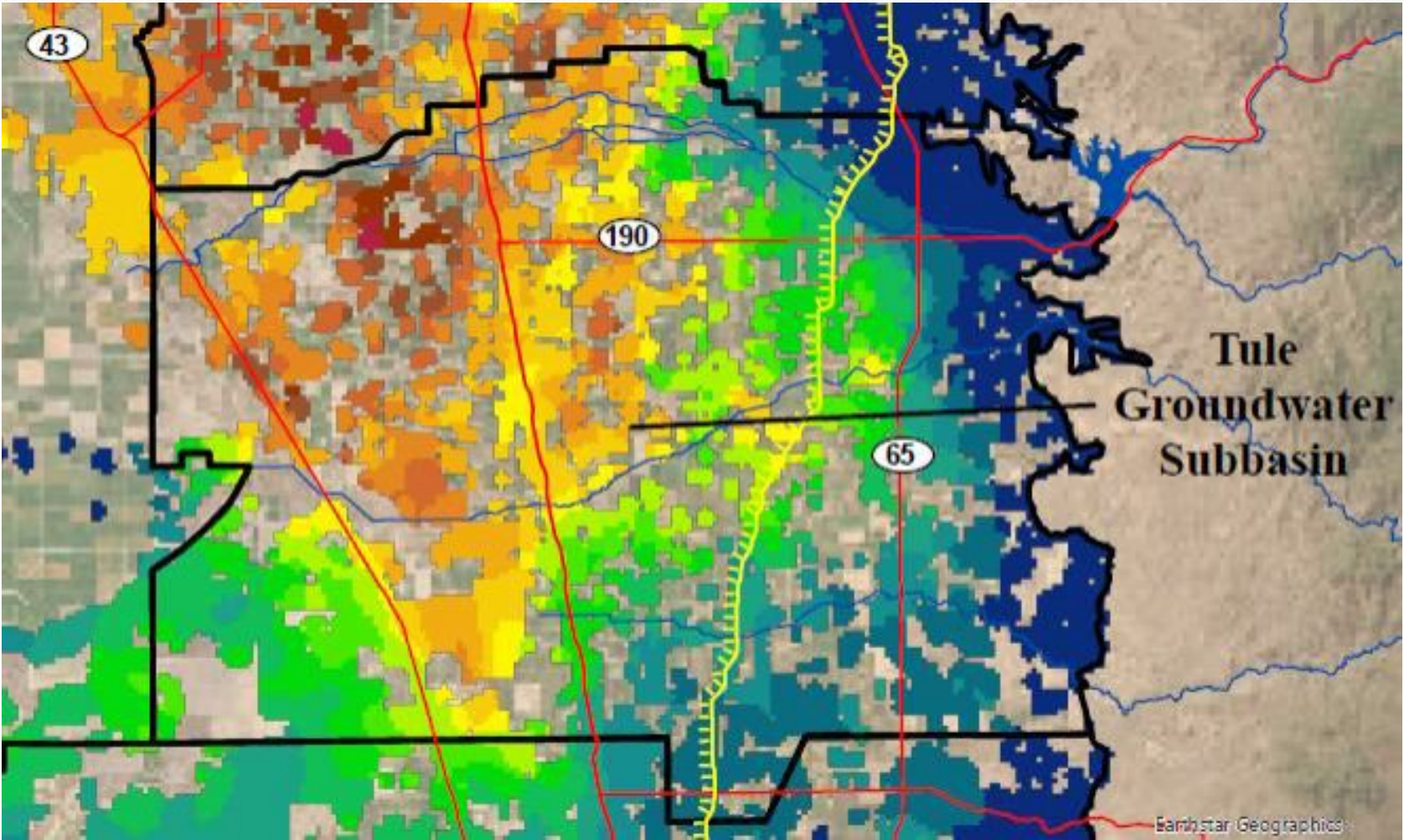


October 2023 to September 2024
InSAR Land Subsidence

Comparison of Subsidence Rates Between 2022/23 and 2023/24



Cumulative Land Subsidence Jan. 2020 – Sept 2024



Tule Subbasin Groundwater Extraction 23/24

Groundwater Sustainability Agency	Management Area	Groundwater Extraction Sector			Total
		Agricultural	Urban	For Export	
LTRID	Agricultural	127,000	0	0	127,000
	Municipal	0	1,350	0	1,350
	Tulare County MOU	2,000	0	0	2,000
	Total	129,000	1,350	0	130,350
ETGSA	Greater Tule	154,100	0	0	154,100
	Porterville Community	17,700	10,580	0	28,280
	Ducor Community	0	90	0	90
	Terra Bella Community	0	402	0	402
	Total	171,800	11,072	0	182,872
DEID	DEID	44,000	0	0	44,000
	Richgrove CSD	0	870	0	870
	Earlimart PUD	0	2,930	0	2,930
	Total	44,000	3,800	0	47,800
Pixley ID	Pixley ID	108,300	0	0	108,300
	Pixley PUD	0	560	0	560
	Teviston CSD	0	80	0	80
	Total	108,300	640	0	108,940
TCWA	North	2,800	0	8,500	11,300
	Southeast	60,200	100	0	60,300
	Total	63,000	100	8,500	71,600
Alpaugh ID	Total	14,800	280	0	15,080
KTWD	Total	700	0	0	700
Tea Pot Dome	Total	600	0	0	600
Vandalia	Total	1,800	0	0	1,800
Grand Total		534,000	17,242	8,500	559,742



Tule Subbasin Surface Water Supplies 2023/2024

GSA	Management Area	Central Valley Project	Managed Local Supplies	Recycled Water	Reused Water	Precipitation	Total
LTRID	Agricultural	162,000	120,800	200	0	73,000	356,000
	Municipal	0	0	180	0	0	180
	Tulare County MOU	0	0	0	0	500	500
	Total	162,000	120,800	380	0	73,500	356,680
ETGSA	Greater Tule	104,900	31,900	0	0	99,900	236,700
	Porterville Community	0	8,000	4,800	0	14,200	27,000
	Ducor Community	0	0	0	0	0	0
	Terra Bella Community	1,300	0	0	0	0	1,300
	Total	106,200	39,900	4,800	0	114,100	265,000
DEID	DEID	178,800	0	0	0	38,200	217,000
	Richgrove CSD	0	0	0	0	0	0
	Earlimart PUD	0	0	0	0	0	0
	Total	178,800	0	0	0	38,200	217,000
Pixley ID	Pixley ID	40,200	3,100	0	0	43,800	87,100
	Pixley PUD	0	0	0	0	0	0
	Teviston CSD	0	0	0	0	0	0
	Total	40,200	3,100	0	0	43,800	87,100
TCWA	North	0	3,500	0	0	5,000	8,500
	Southeast	0	0	0	0	30,500	30,500
	Total	0	3,500	0	0	35,500	39,000
Alpaugh ID	Total	500	1,000	0	0	8,300	9,800
KTWD	Total	13,800	0	0	1,200	6,100	21,100
Tea Pot Dome	Total	6,800	0	0	0	2,500	9,300
Vandalia	Total	0	2,800	0	0	1,200	4,000
	Grand Total	508,300	171,100	5,180	1,200	323,200	1,008,980



Tule Subbasin Total Water Use 23/24

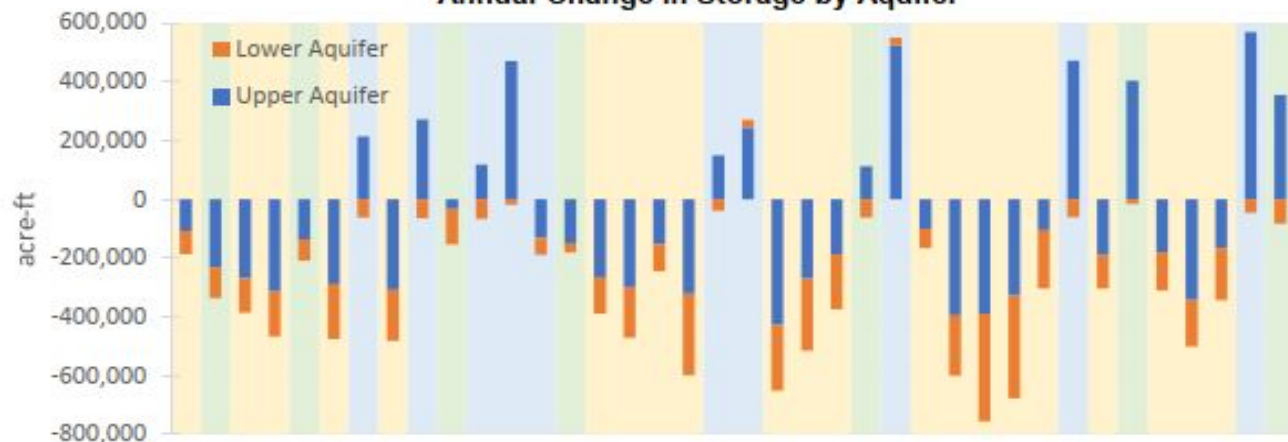
GSA	Management Area	Groundwater Extraction	Surface Water Supplies	Recycled Water	Reused Water	Total
LTRID	Agricultural	127,000	355,800	200	0	483,000
	Municipal	1,350	0	180	0	1,530
	Tulare County MOU	2,000	500	0	0	2,500
	Total	130,350	356,300	380	0	487,030
ETGSA	Greater Tule	154,100	236,700	0	0	390,800
	Porterville Community	28,280	22,200	4,800	0	55,280
	Ducor Community	90	0	0	0	90
	Terra Bella Community	402	1,300	0	0	1,702
	Total	182,872	260,200	4,800	0	447,872
DEID	DEID	44,000	217,000	0	0	261,000
	Richgrove CSD	870	0	0	0	870
	Earlimart PUD	2,930	0	0	0	2,930
	Total	47,800	217,000	0	0	264,800
Pixley ID	Pixley ID	108,300	87,100	0	0	195,400
	Pixley PUD	560	0	0	0	560
	Teviston CSD	80	0	0	0	80
	Total	108,940	87,100	0	0	196,040
TCWA	North	11,300	8,500	0	0	19,800
	Southeast	60,300	30,500	0	0	90,800
	Total	71,600	39,000	0	0	110,600
Alpaugh ID	Total	15,080	9,800	0	0	24,880
KTWD	Total	700	19,900	0	1,200	21,800
Tea Pot Dome	Total	600	9,300	0	0	9,900
Vandalia	Total	1,800	4,000	0	0	5,800
Grand Total		559,742	1,002,600	5,180	1,200	1,568,722

Note: All values are in acre-ft.

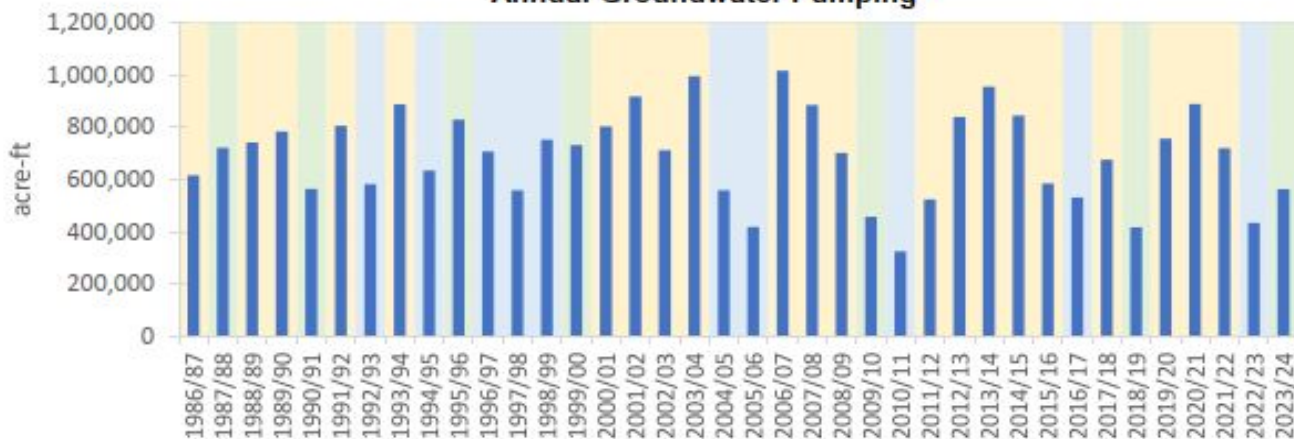


Tule Subbasin Groundwater Use and Change in Storage

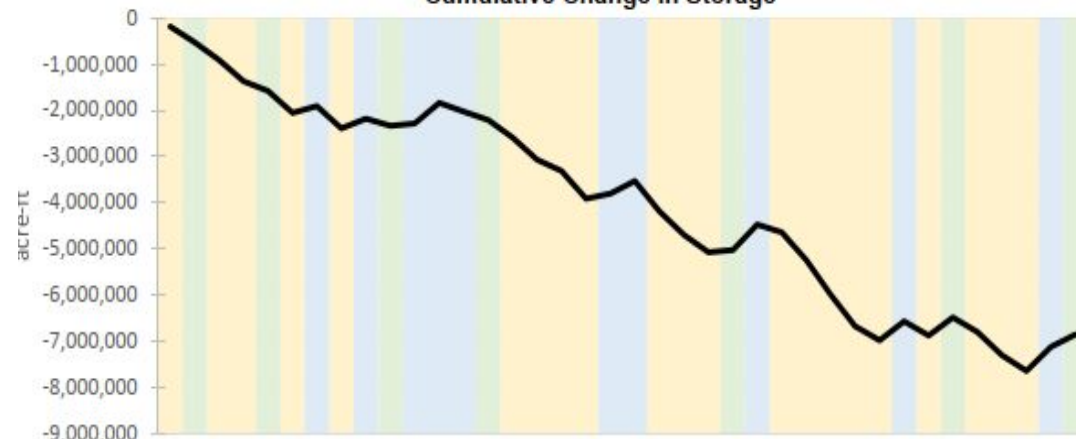
Annual Change in Storage by Aquifer



Annual Groundwater Pumping



Cumulative Change in Storage



Wet Year
Average Year
Dry Year



Water Quality

RMS Groundwater Quality in Drinking Water Designated Wells – Upper Aquifer

GSA	SGMA ID	Sample Date	Constituents of Concern										
			Nitrate as N (mg/L)	TDS (mg/L)	Chloride (mg/L)	DBCP (µg/l)	PCE (µg/l)	1,2,3-TCP (µg/l)	Perchlorate (µg/l)	Uranium (pCi/L)	Hexavalent Chromium (µg/l)	Arsenic (µg/l)	
ETGSA	21S/27E-08 (Tule_K0170_ILP)	6/18/2024	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹
	21S/26E-24 (Tule_E0081_ILP)	7/1/2024	8	390	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21S/26E-36 (Tule_E0082_ILP)	6/12/2024	2.9	230	NS	NS	NS	NS	NS	NS	NS	NS	NS
	22S/27E-11 (Tule_E0094_ILP)	6/12/2024	16	410	NS	NS	NS	NS	NS	NS	NS	NS	NS
	22S/27E-23 (Tule_E0098_ILP)	6/19/2024	1.6	670	NS	NS	NS	NS	NS	NS	NS	NS	NS
	22S/28E-11 (Tule_E0145_ILP)	6/26/2024	ND	91	NS	NS	NS	NS	NS	NS	NS	NS	NS
	22S/28E-17 (Tule_E0171_ILP)	6/12/2024	26	460	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23S/26E-03 (TSMW-4S)	8/28/2024	ND	250	NS	ND	ND	ND	ND	ND	ND	ND	8.2
VWD	22S/28E-06 (ETGSA TSS-1U)	8/21/2024	ND	170	NS	ND	ND	ND	ND	ND	1.4	ND	ND
TPDWD	22S/28E-19 (Tule_E0147_ILP)	6/12/2024	10	310	NS	NS	NS	NS	NS	NS	NS	NS	NS
LTRID	21S/26E-32B02 (Tule_L0007_RMS)	6/19/2024	6	300	NS	ND	ND	ND	ND	ND	6.9	0.36	ND
	21S/25E-06 (LTRID TSS U)	6/25/2024	2.9	250	NS	ND	ND	ND	ND	ND	3	2	15
	21S/25E-13 (Tule_L0071_ILP)	6/24/2024	15	320	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21S/25E-11 (Tule_L0072_ILP)	6/24/2024	8.1	240	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21S/25E-12 (Tule_L0073_ILP)	6/17/2024	2.3	230	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21S/26E-05 (Tule_L0074_ILP)	6/17/2024	2.6	240	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21S/26E-17 (Tule_L0080_ILP)	6/17/2024	11	430	NS	NS	NS	NS	NS	NS	NS	NS	NS
	20S/25E-33 (Tule_L0090_ILP)	6/17/2024	30	710	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21S/24E-28 (Tule_L0093_ILP)	6/10/2024	31	650	NS	NS	NS	NS	NS	NS	NS	NS	NS
	21S/24E-26 (Tule_L0108_ILP)	6/10/2024	5.6	260	NS	NS	NS	NS	NS	NS	NS	NS	NS
	22S/26E-03 (Tule_L0174_RMS)	6/18/2024	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PIXID	23S/25E-08G01 (Tule_P0021_RMS)	6/17/2024	2.8	380	NS	ND	ND	0.033	ND	1.9	1.4	3.2	
	22S/25E-22 (Tule_P0117_ILP)	6/24/2024	19	550	NS	NS	NS	NS	NS	NS	NS	NS	
	22S/23E-27 (Tule_P0133_ILP)	7/15/2024	0.99	660	NS	NS	NS	NS	NS	NS	NS	NS	
	23S/25E-14 (PIDGSA-01U)	6/25/2024	3.4	260	NS	ND	ND	ND	ND	3	0.75	3.7	
TCWA	24S/23E-17 (TSMW 5U)	8/24/2024	ND	600	NS	ND	ND	ND	ND	0.91	ND	ND	
	22S/23E-33 (AWD W14)	6/15/2024	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	
	24S/24E-29 (Tule_T0089_ILP)	6/20/2024	ND	210	NS	NS	NS	NS	NS	NS	NS	NS	
DEID	23S/25E-36 (Tule_D0084_ILP)	6/18/2024	12	330	NS	NS	NS	NS	NS	NS	NS	NS	
	24S/25E-13 (Tule_D0085_ILP)	6/19/2024	6.6	370	NS	NS	NS	NS	NS	NS	NS	NS	

1. Not pumping



Water Quality

RMS Groundwater Quality in Drinking Water Designated Wells – Lower Aquifer

GSA	SGMA ID	Sample Date	Constituents of Concern									
			Nitrate as N (mg/L)	TDS (mg/L)	Chloride (mg/L)	DBCP (µg/l)	PCE (µg/l)	1,2,3-TCP (µg/l)	Perchlorate (µg/l)	Uranium (pCi/L)	Hexavalent Chromium (µg/l)	Arsenic (µg/l)
ETGSA	23S/27E-21 (Tule_E0123_ILP)	6/25/2024	12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	23S/26E-09 (Tule_E0140_ILP)	7/15/2024	0.36	260	NS	NS	NS	NS	NS	NS	NS	NS
	22S/27E-20 (Tule_E0142_ILP)	6/12/2024	0.47	230	NS	NS	NS	NS	NS	NS	NS	NS
	23S/27E-27 (Tule_E0180_ILP)	6/17/2024	ND	400	NS	NS	NS	NS	NS	NS	NS	NS
	22S/28E-06 (Tule_E0185_ILP)	7/16/2024	3.3	340	NS	NS	NS	NS	NS	NS	NS	NS
	23S/26E-03 (TSMW-4D)	8/28/2024	1	150	NS	ND	ND	ND	ND	ND	0.35	ND
	24S/27E-23 (Tule_E0038_RMS)	7/17/2024	ND	300	NS	ND	ND	ND	ND	ND	ND	21
VWD	22S/28E-06 (ETGSA TSS-1L)	8/21/2024	ND	230	NS	ND	ND	ND	ND	2.5	ND	ND
LTRID	21S/25E-36 (Tule_L0006_RMS)	6/18/2024	5.4	210	NS	NS	NS	NS	NS	NS	NS	NS
	21S/25E-06 (LTRID TSS M)	6/25/2024	1.9	270	NS	ND	ND	ND	ND	3.2	2.1	13
	23S/25E-04 (Tule_L0083_ILP)	7/1/2024	1	170	NS	NS	NS	NS	NS	NS	NS	NS
PIXID	23S/25E-10 (Tule_P0121_ILP)	6/19/2024	5.5	240	NS	NS	NS	NS	NS	NS	NS	NS
TCWA	24S/24E-27 (Tule_T0127_ILP)	6/11/2024	1.1	200	NS	NS	NS	NS	NS	NS	NS	NS
	22S/23E-26 (Tule_T0135_ILP)	6/17/2024	ND	160	NS	NS	NS	NS	NS	NS	NS	NS
	22S/23E-33 (Tule_T0148_ILP)	6/20/2024	ND	210	NS	NS	NS	NS	NS	NS	NS	NS
DEID	23S/25E-33 (Tule_D0166_ILP)	6/20/2024	4.5	270	NS	NS	NS	NS	NS	NS	NS	NS
	24S/26E-36 (Tule_D0168_ILP)	6/20/2024	1.6	670	NS	NS	NS	NS	NS	NS	NS	NS
	25S/26E-08 (Tule_D0173_RMS)	6/20/2024	17	780	NS	NS	NS	NS	NS	NS	NS	NS
KTWD	24S/27E-20 (TSMW 6L)	6/15/2024	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹
	24S/27E-18 (Tule_KT155_ILP)	6/27/2024	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹	NM ¹
Alpaugh	23S/23E-34 (Tule_A0159_ILP)	6/16/2024	ND	370	NS	NS	NS	NS	NS	NS	NS	NS



Water Quality

RMS Groundwater Quality in Drinking Water Designated Wells – Public Supply Wells

GSA	GM_Well_ID	Sample Date	Constituents of Concern												
			Nitrate as N (mg/L)	TDS (mg/L)	Chloride (mg/L)	DBCP (µg/l)	PCE (µg/l)	1,2,3-TCP (µg/l)	Perchlorate (µg/l)	Uranium (pCi/L)	Hexavalent Chromium (µg/l)	Arsenic (µg/l)	PFOS (ng/L)	PFOA (ng/L)	
Alpaugh	CA5410050_004_004	7/8/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.3	NS	NS
TCWA	CA5400544_002_002	3/27/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.5	NS	NS
	CA5403039_001_001	3/6/2024	14.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5403053_002_002	7/11/2024	13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5403139_003_003	4/18/2024	6.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
DEID	CA5400810_001_001	4/1/2024	12.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5400886_001_001	7/29/2024	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5400964_001_001	12/7/2023	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5403204_001_001	11/2/2023	ND	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5410021_001_001	3/27/2024	NS	NS	NS	NS	NS	NS	0.0044	NS	NS	NS	NS	NS	NS
ETGSA	CA5400604_003_003	11/28/2023	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5400769_001_001	12/4/2023	14.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5400884_003_003	12/13/2023	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5400935_001_001	12/13/2023	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5410010_015_015	5/8/2024	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND
	CA5410801_006_006	5/6/2024	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LTRID	CA5403007_001_001	5/1/2024	26.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CA5410025_002_002	2/21/2024	6.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PIXID	CA5403139_003_003	4/18/2024	6.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS



LTRID GSA Data - ET

Evapotranspiration (acre-feet)					
Management Area	2019/20 WY	2020/21 WY	2021/22 WY	2022/23 WY	2023/24 WY
Agricultural MA	258,796	249,464	236,084	268,267	244,615
Municipal MA	1,893	1,270	1,253	1,671	1,340
Tulare County MOU MA	2,848	1,987	2,019	2,503	2,694
	263,537	252,721	239,356	272,441	248,649
TOTAL (acre-feet)	Annual Δ in ET:	-10,816 ¹	-13,365 ²	33,085 ³	-23,792 ⁴
	Average Δ in ET:	-3,722 ⁵			



LTRID GSA Data – GW Extraction

Groundwater Extraction (acre-feet)				
2019/20 WY	2020/21 WY	2021/22 WY	2022/23 WY	2023/24 WY
226,000	283,000	236,000	65,400	130,350
Annual Δ in Groundwater Extraction:	57,000 ¹	-47,000 ²	-170,600 ³	64,950 ⁴
Average Δ in Groundwater Extraction:	-23,913 ⁵			



LTRID Recharge in the Community

- Water Recharged around communities (direct and in-lieu)

Water Recharge around Community (direct and in-lieu), amount in Acre-feet						
Community	2019	2020	2021	2022	2023	2024
Tipton	11,851	1,335	307	1714	16,124	5,763
Poplar	2,525	523	303	1,014	14,705	1,782
Woodville	7,550	965	1,018	2,064	19,037	4,903
TOTAL	21,927	2,824	1,630	4,794	49,866	12,449

