



**Rosedale-Rio Bravo Water Storage District
Groundwater Sustainability Agency –
Stakeholder Advisory Committee Meeting
Tuesday, November 25th, 2025, at 9:00 am**

Location: Rosedale-Rio Bravo WSD Board Room
849 Allen Rd. Bakersfield, CA 93314

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online using the link and information below:

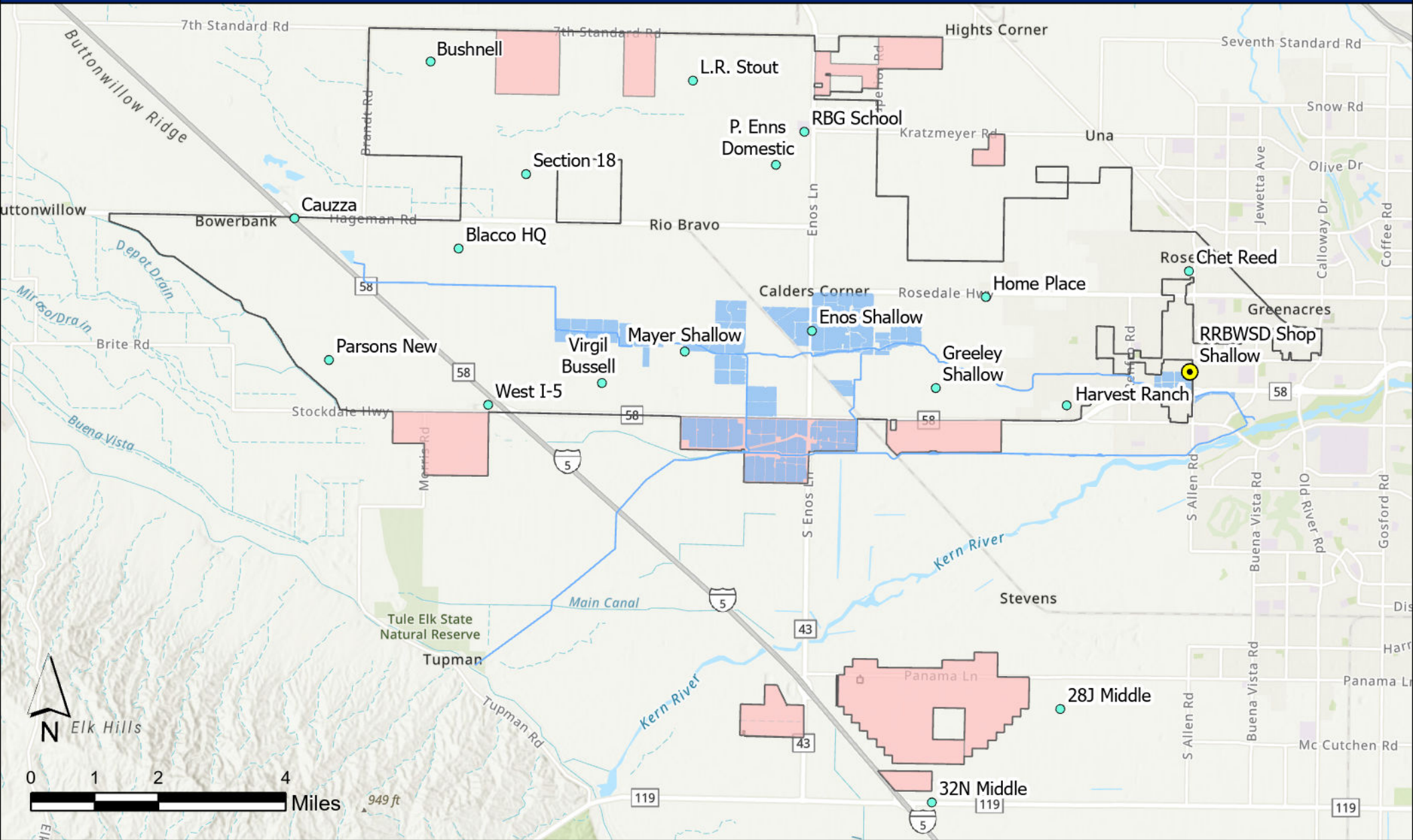
<https://us02web.zoom.us/j/81421911119?pwd=WaMZkE48W1nJJExdNLRuyufuqj3l4f.1>

Telephone Dial-in: (669) 900-6833
Meeting ID: 814 2191 1119
Password: 329439

AGENDA

- 1) Sustainability Management Criteria Status Update
 - a. Levels (MN)
 - b. Quality (RE)
 - c. Subsidence (RE)
- 2) Project Implementation
 - a. RRB-2: RRB Projects (MN)
 - b. RRB-5: Onyx Project (DB)
 - c. RRB-4 and RRB-7: Kern Fan Project (DB)
 - d. South Valley Project
- 3) Management Action Implementation
 - a. RRB-14: Water Charge Demand Reduction (TT)
 - b. RRB-13: White Land Imbalance Reduction (MN/TT)
 - c. KSB-5: Well Mitigation/SHE (TT)
 - d. KSB-7: Well Registry (RE)
 - e. KSB-8: ET Calculation (DB)
 - f. KSB-10: RMW Data Gaps (RE/MN)
- 4) SGMA Planning and Reporting
 - a. 2025 GSP (DB/TT)
 - b. KNDLA (RE)
 - c. 2024 Operations Report (DB)
 - d. The Rosedale Recap (RE)
- 5) Q&A Time

Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

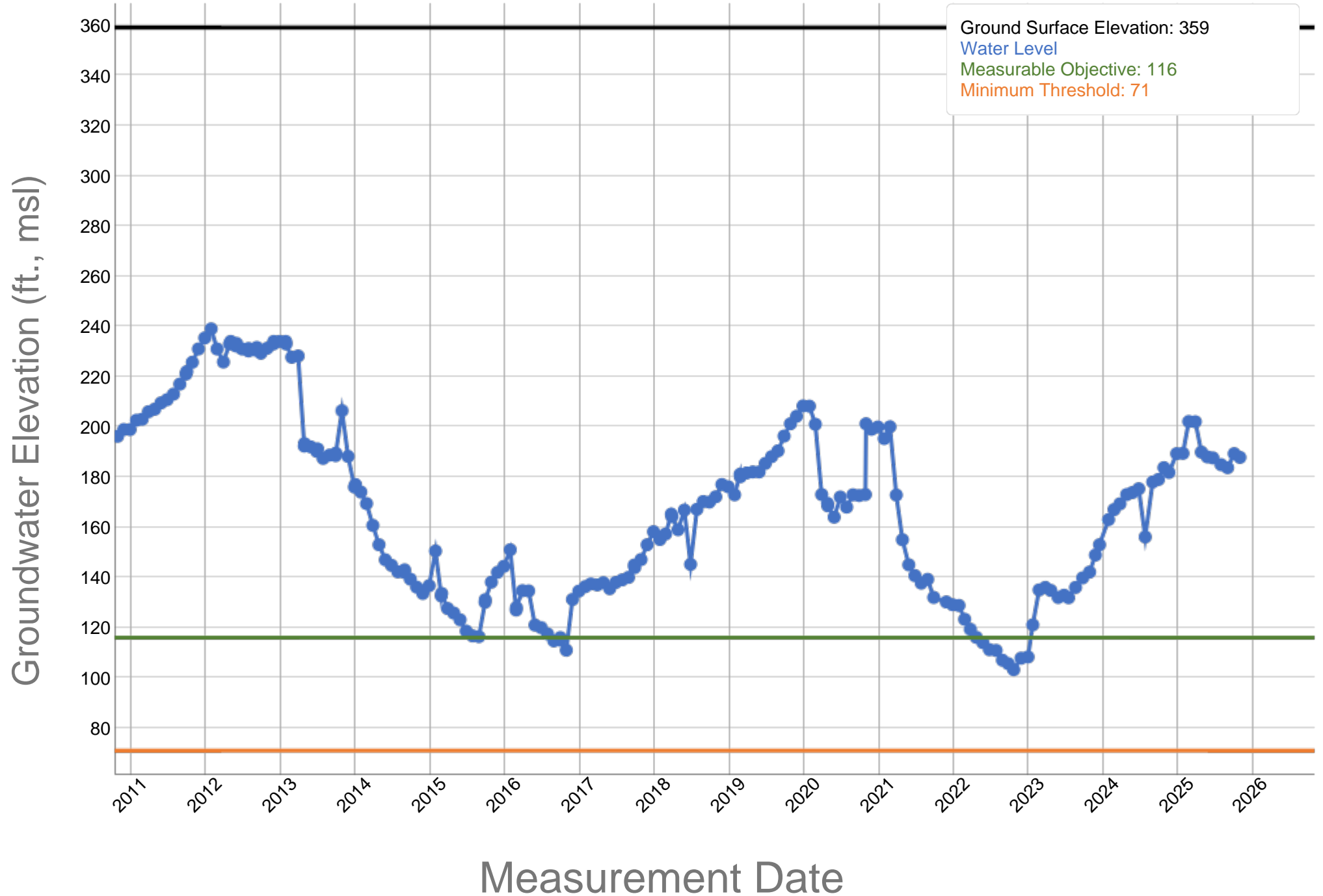


- Water Level Representative Monitoring Wells (RMWs)
- Conveyance Facilities
- Recharge Ponds
- RRBWSD GSA White Lands
- RRBWSD GSA Boundary

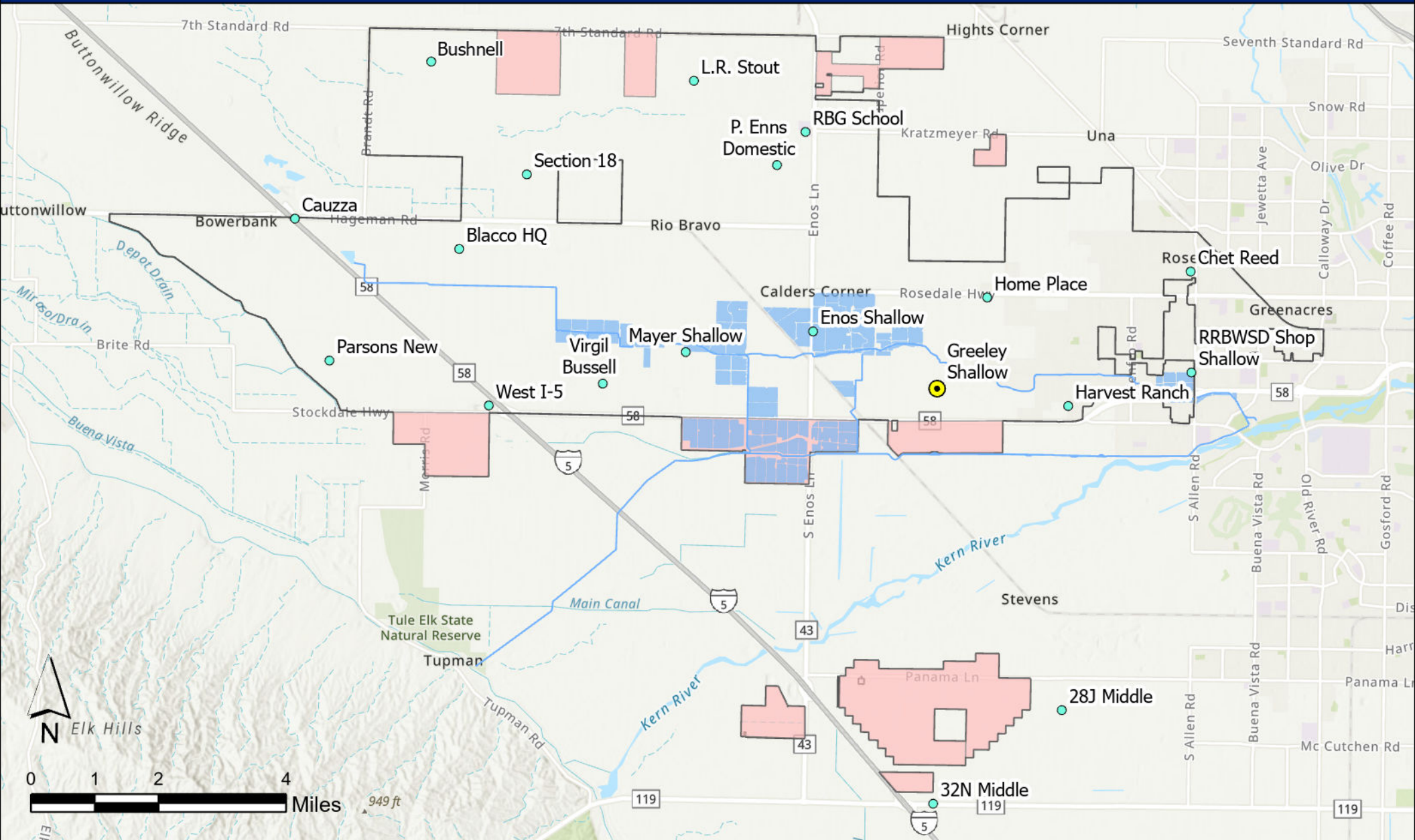
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Rosedale-Rio Bravo Water Storage District - 35H RRBWSD Shop - 353620N1191457W002



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

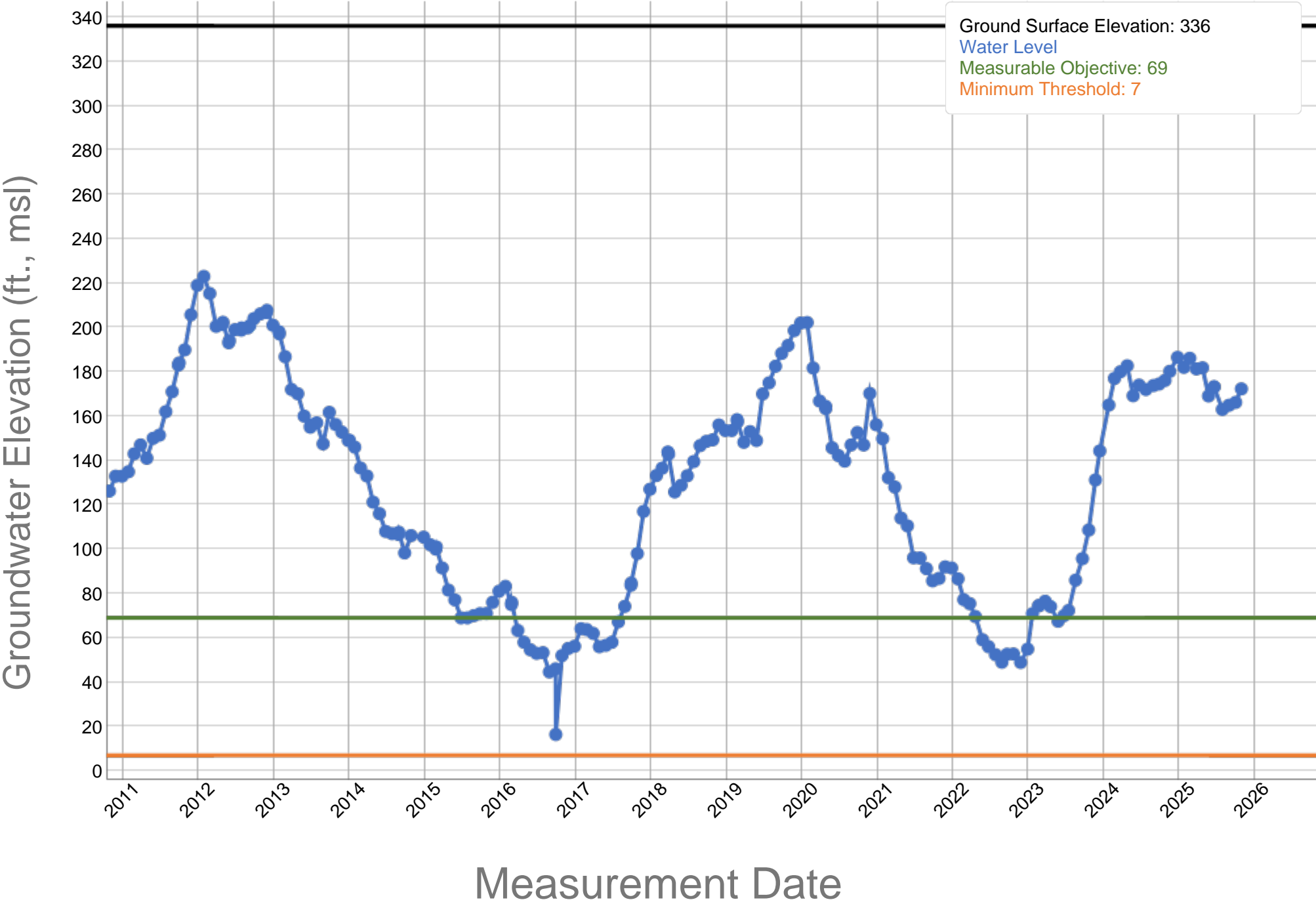


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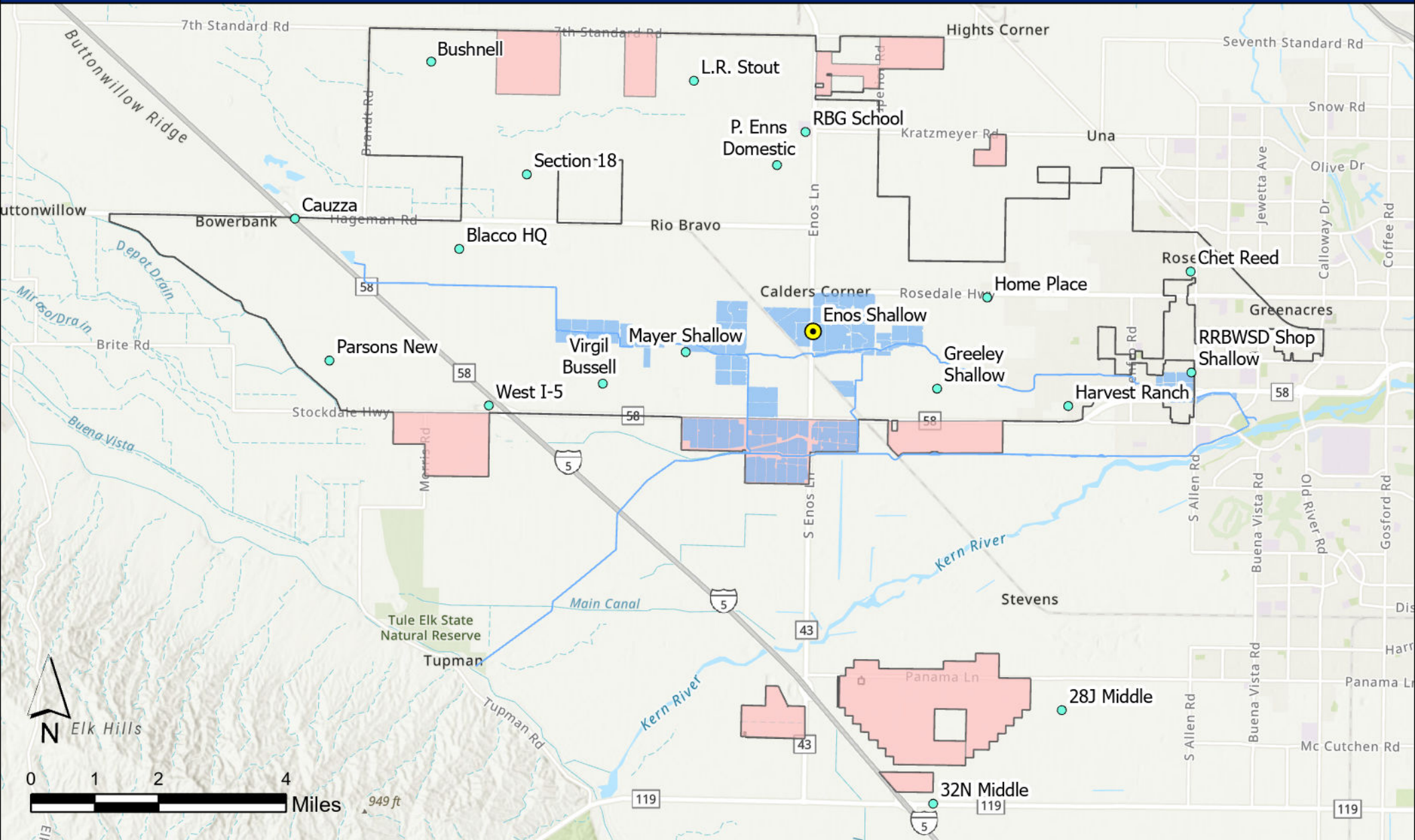
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Rosedale-Rio Bravo Water Storage District - 31H Greeley - 353618N1192169W001



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

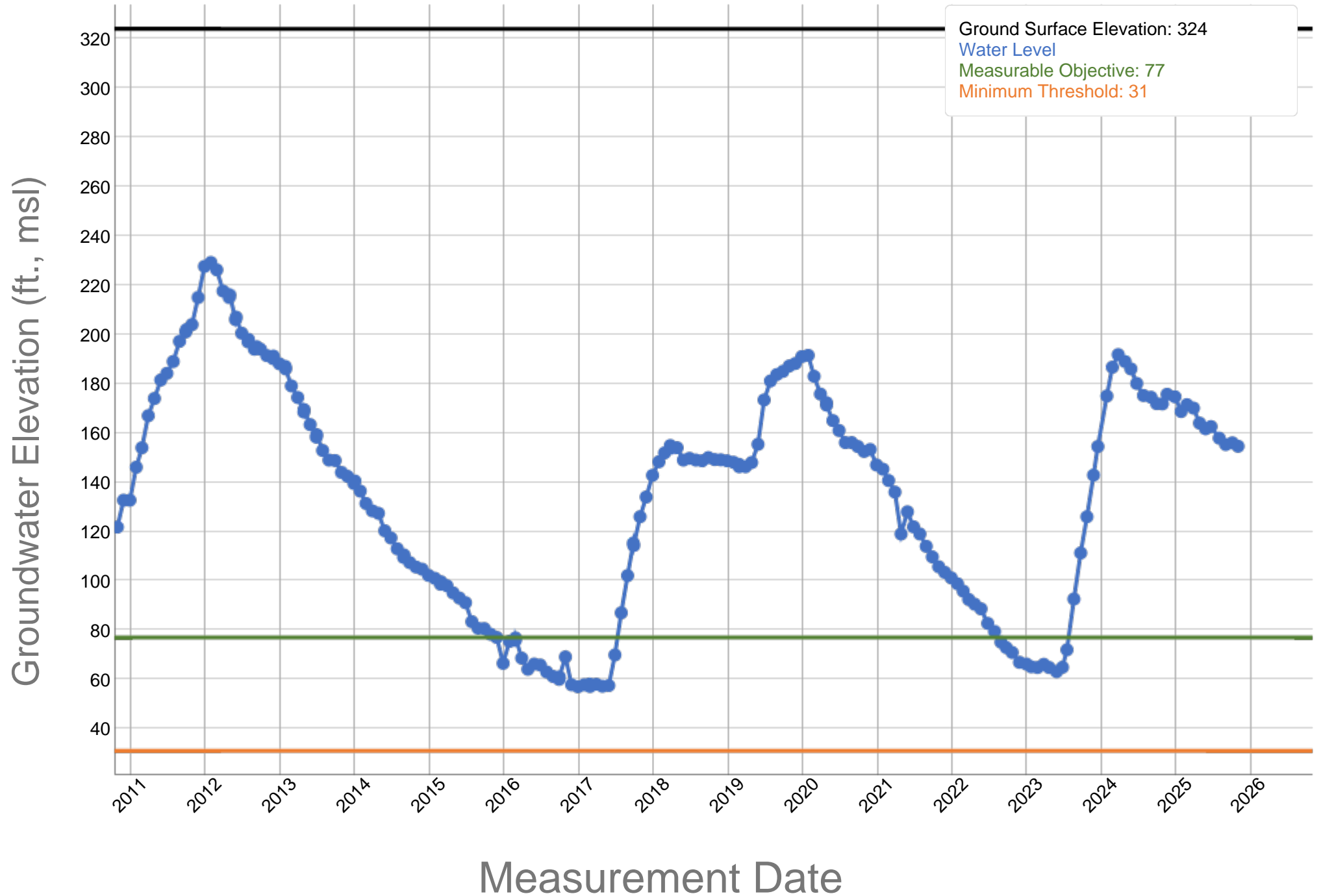


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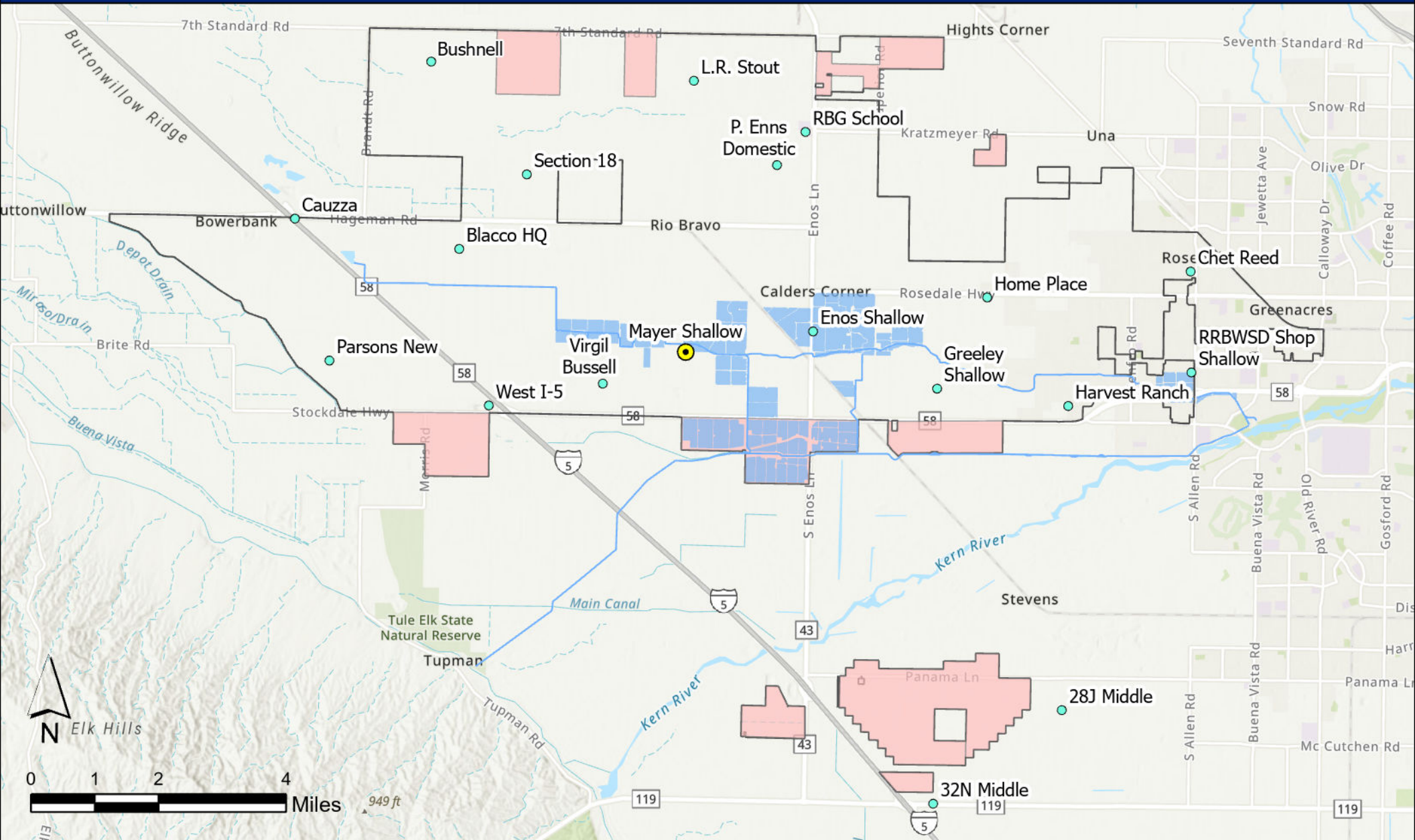
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Rosedale-Rio Bravo Water Storage District - 25M Enos - 353760N1192498W002



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

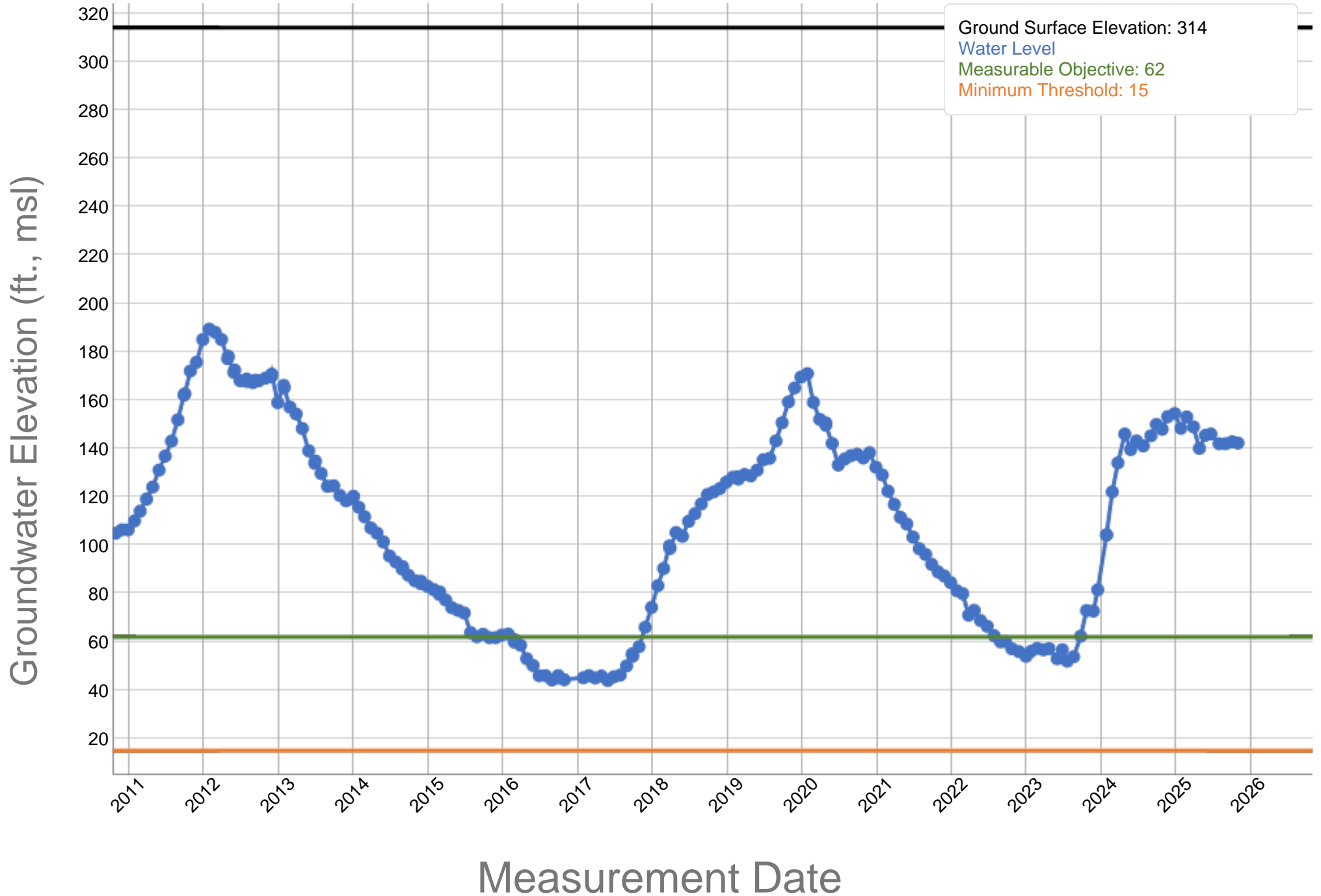


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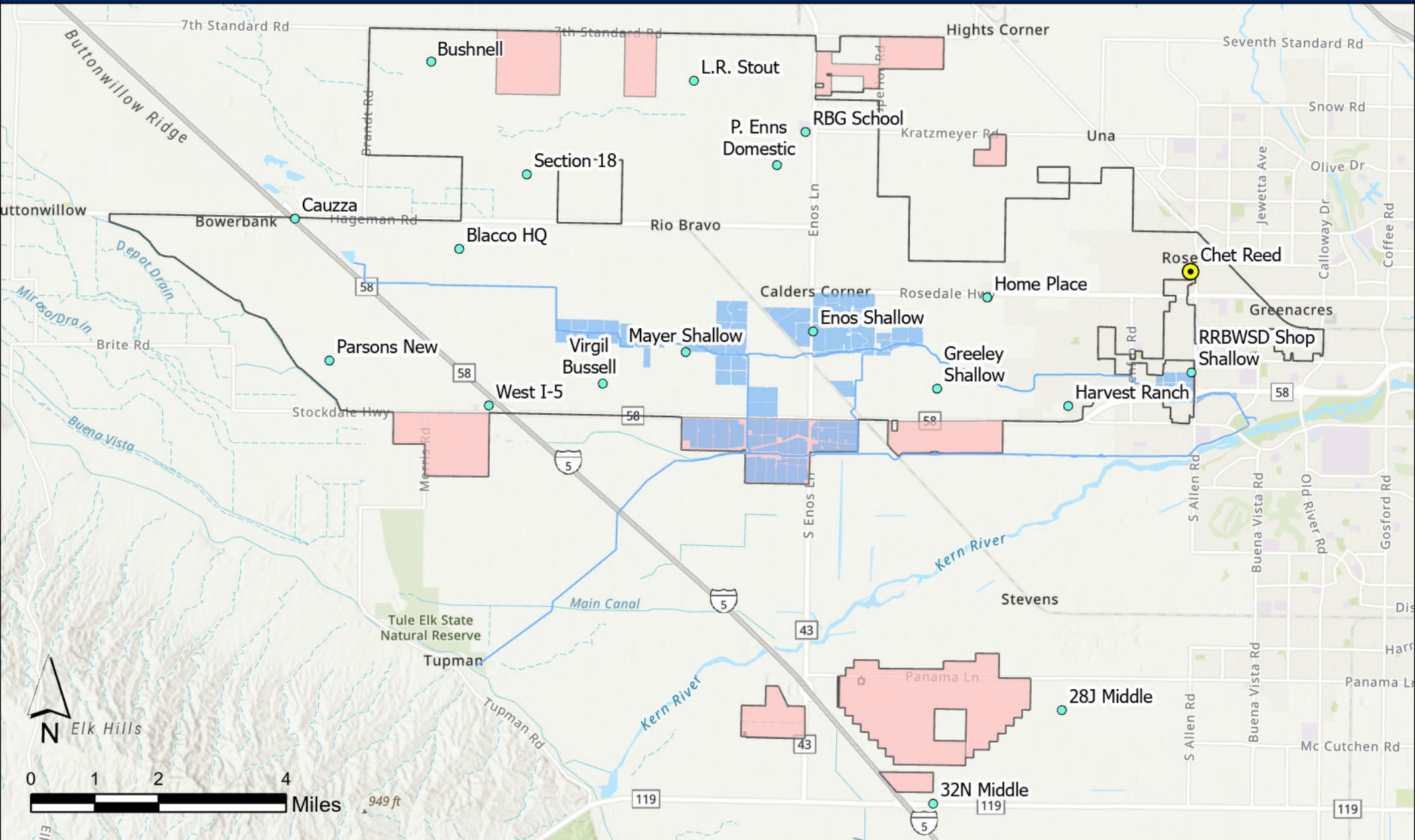
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Rosedale-Rio Bravo Water Storage District - 27N Mayer - 353699N1192856W002



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

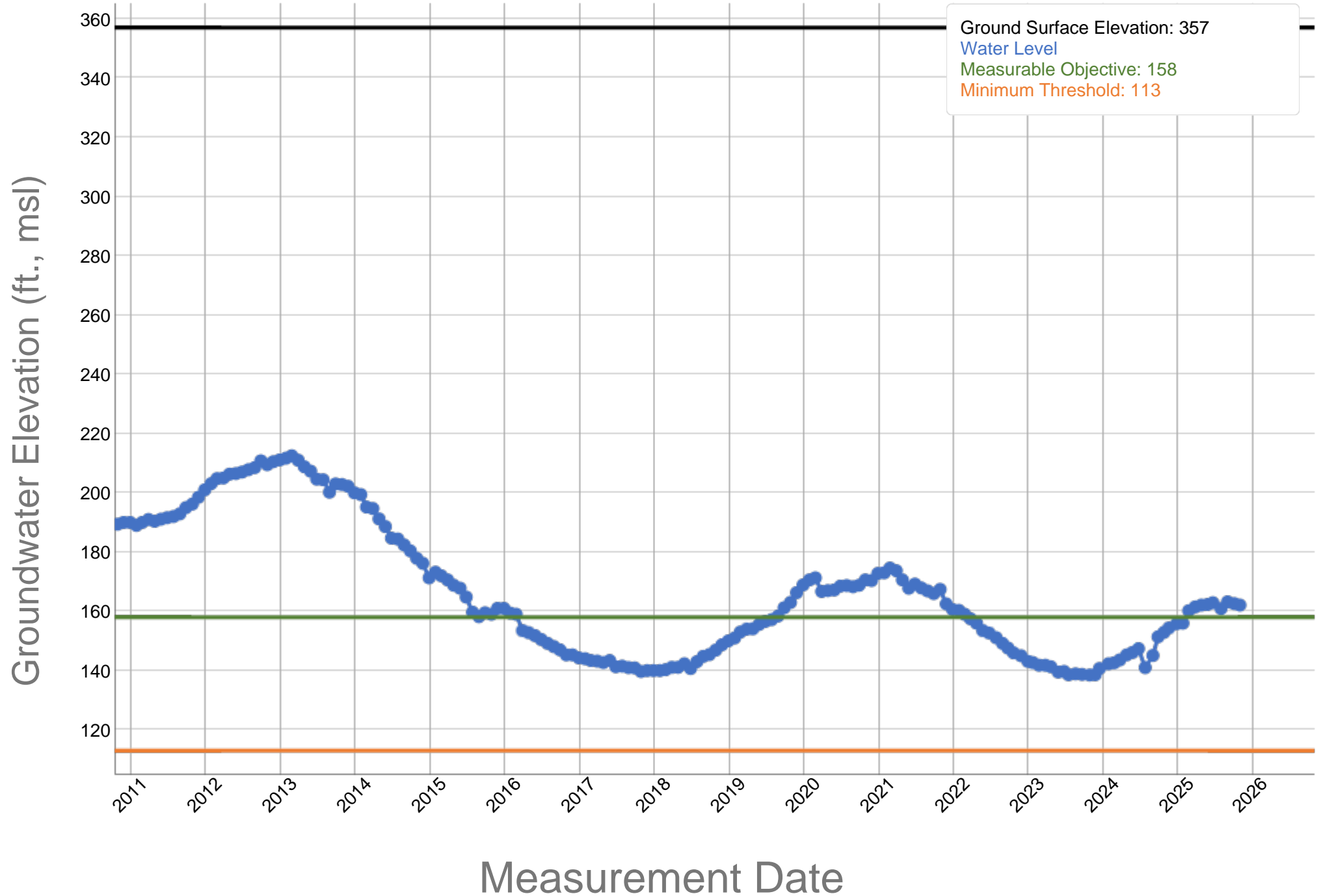


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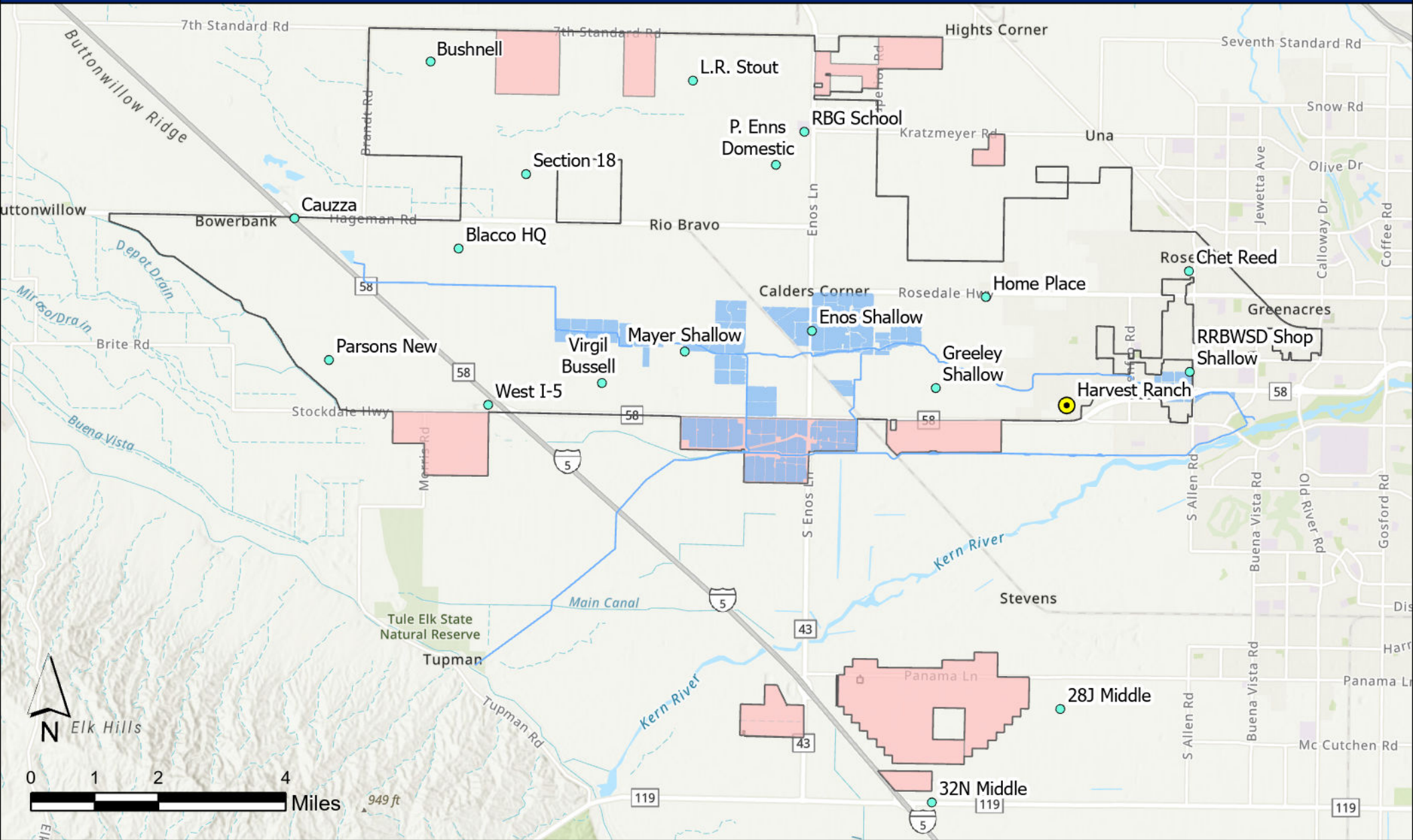
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Rosedale-Rio Bravo Water Storage District - Chet Reed - 353890N1191471W001



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

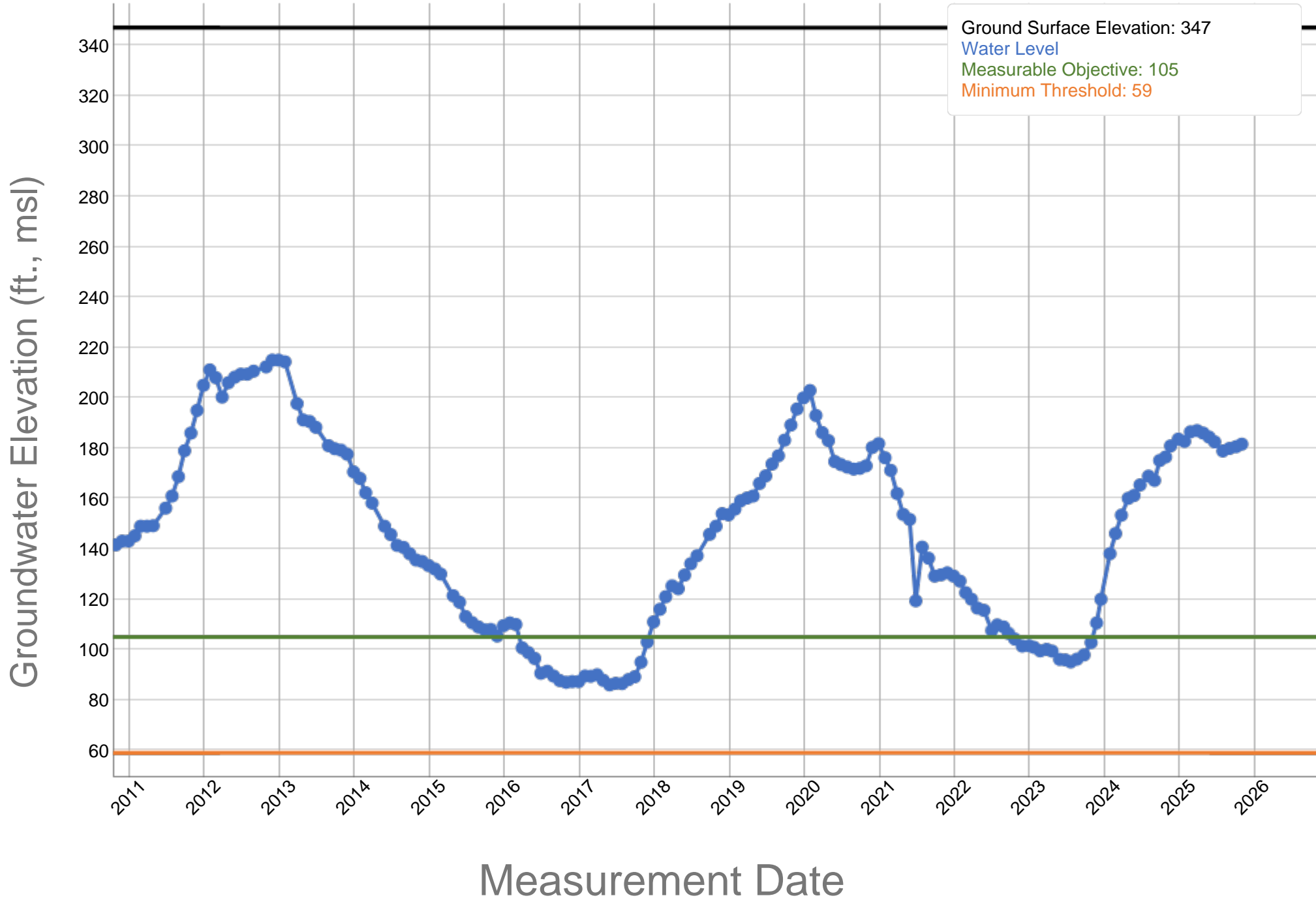


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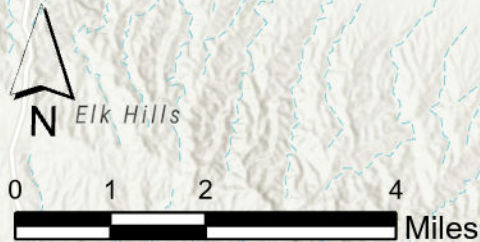
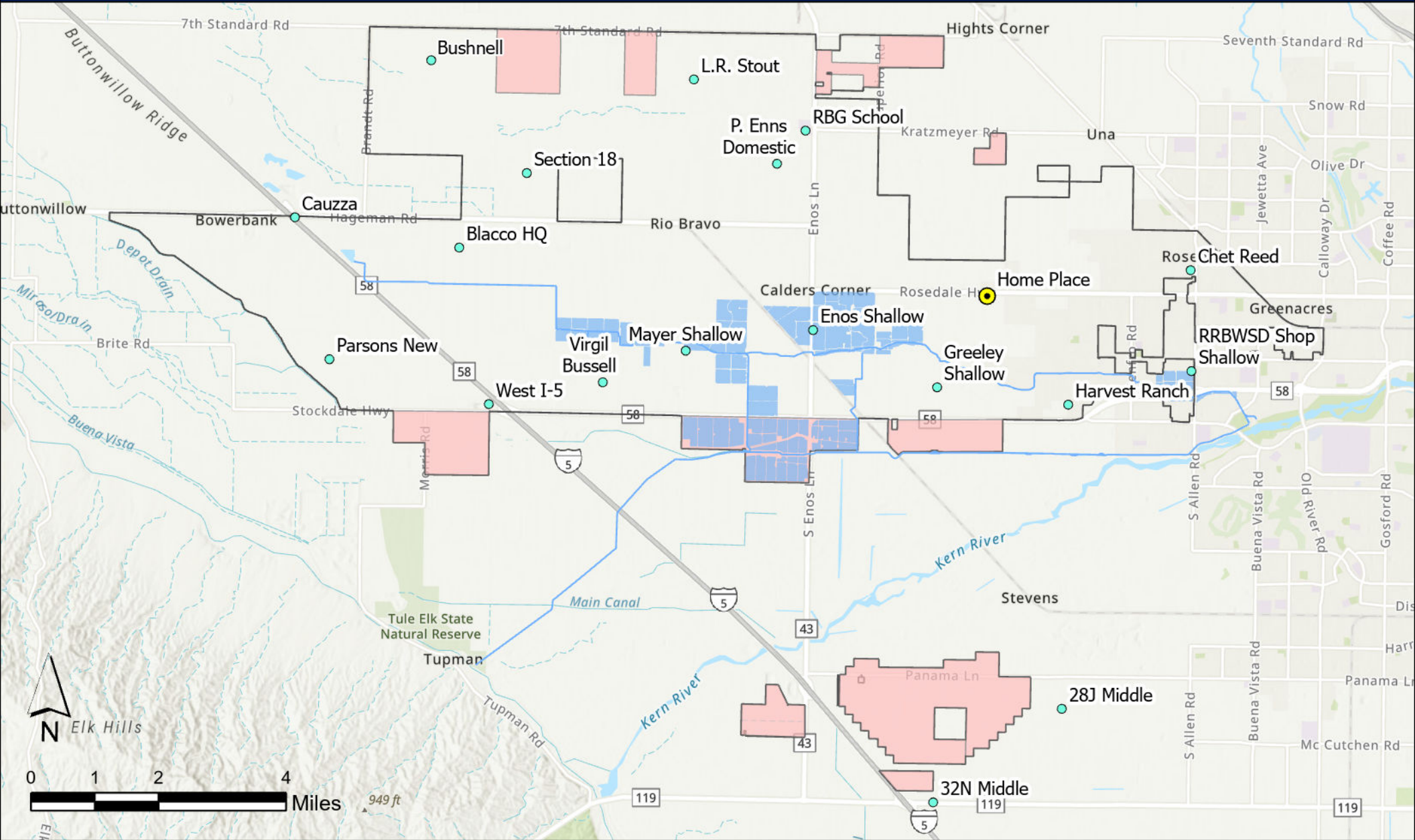
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Rosedale-Rio Bravo Water Storage District - Manon Manor Mutual Water Co - 353634N1191766W001



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

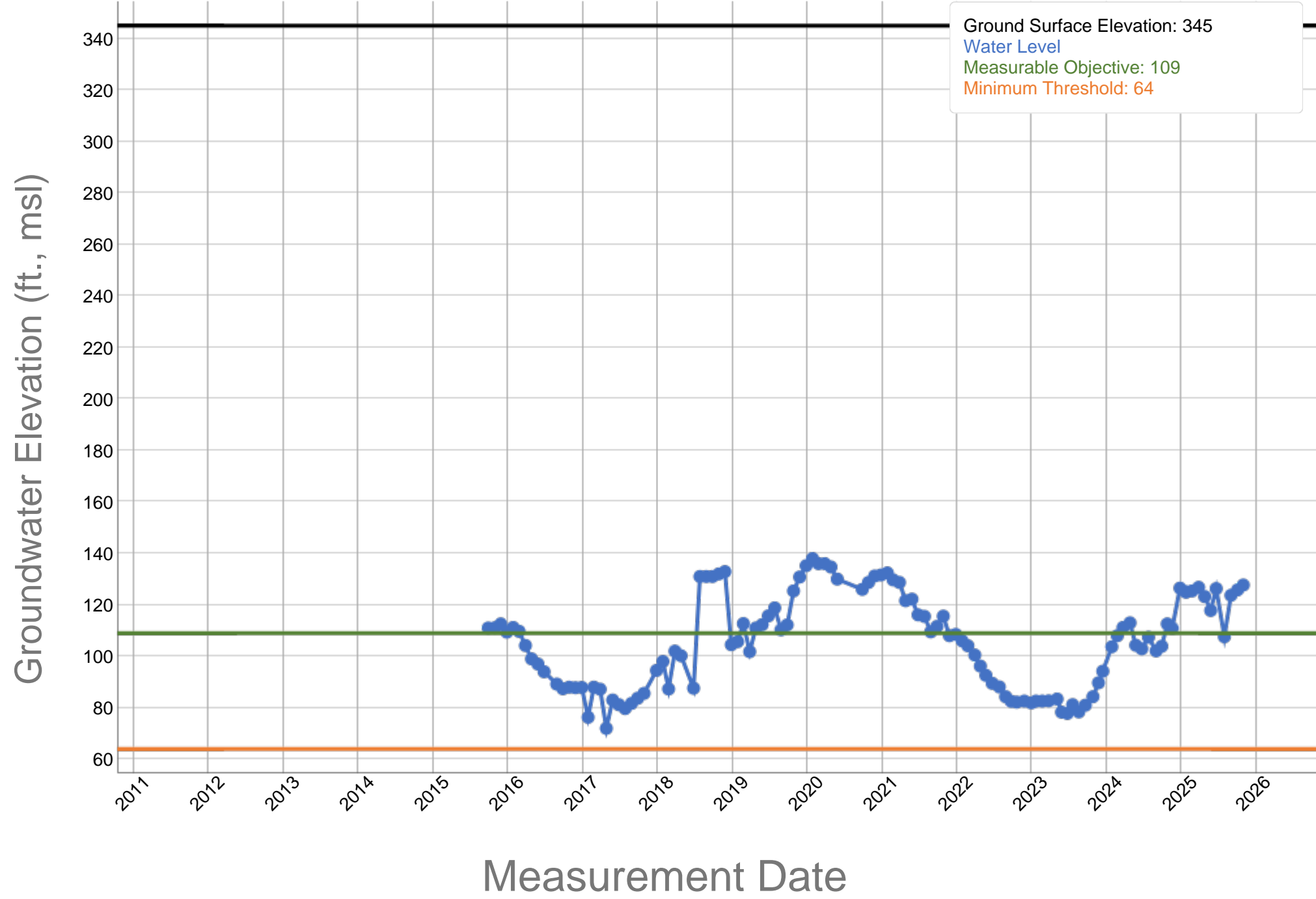


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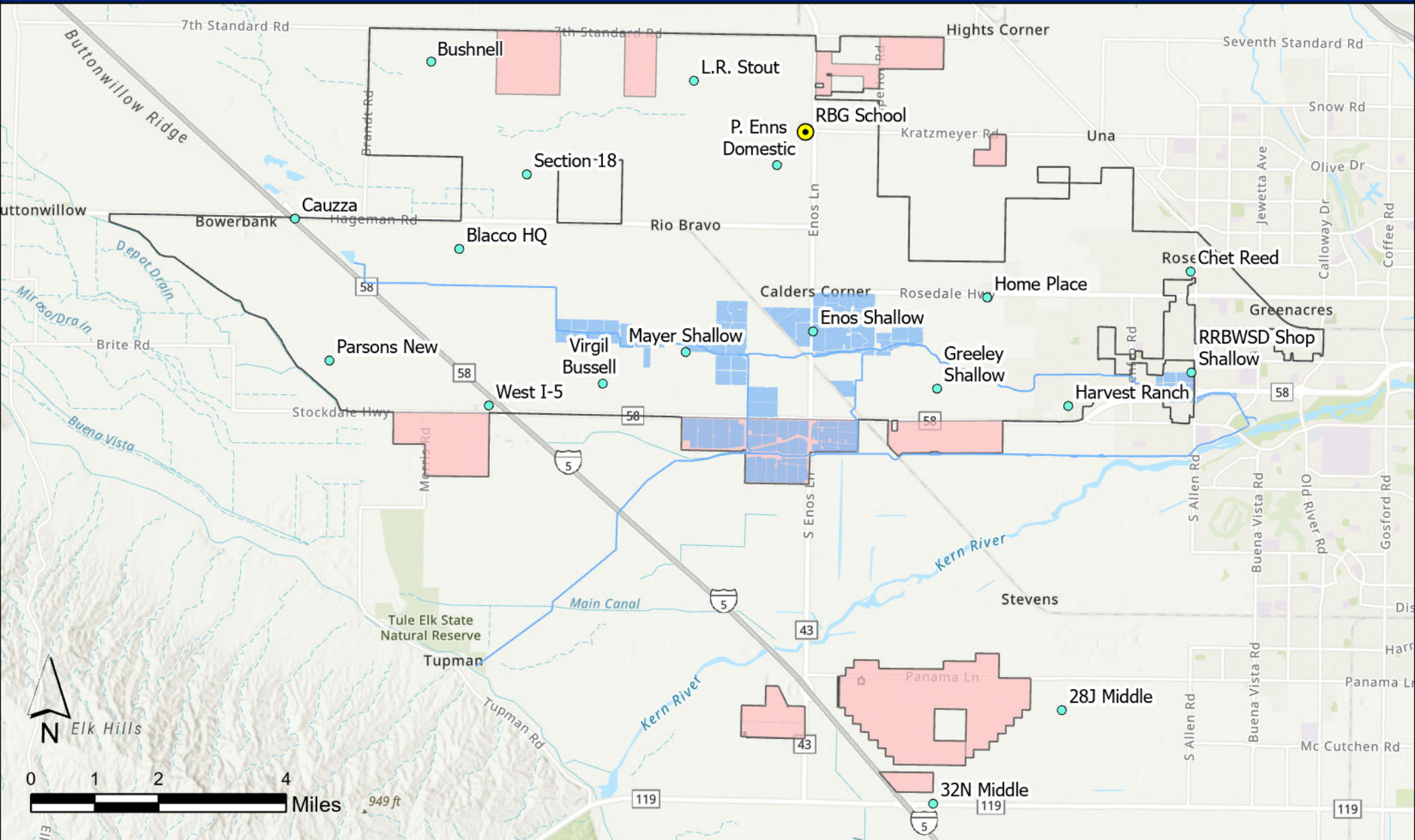
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Rosedale-Rio Bravo Water Storage District - Home Place - 353824N1192035W001



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

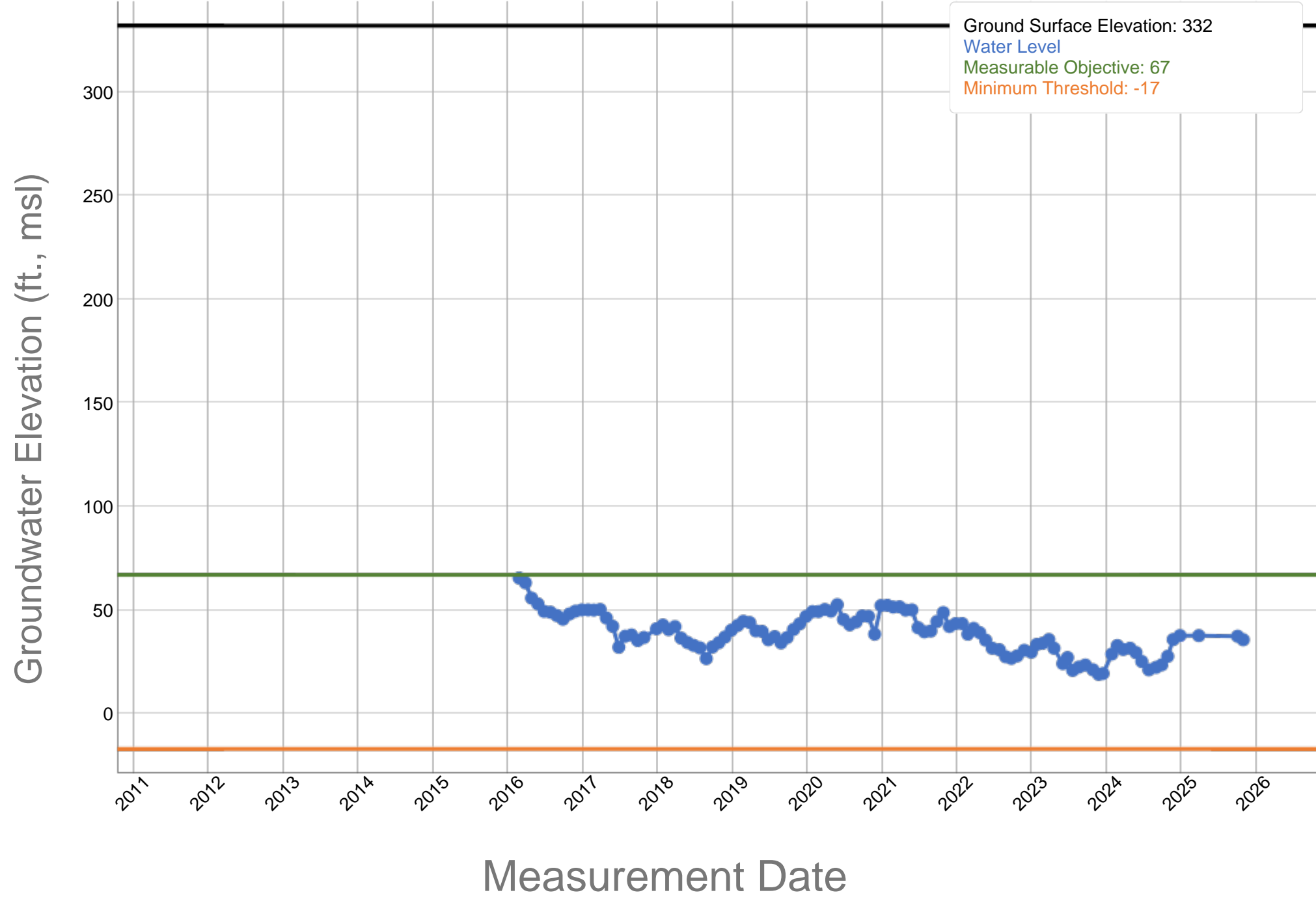


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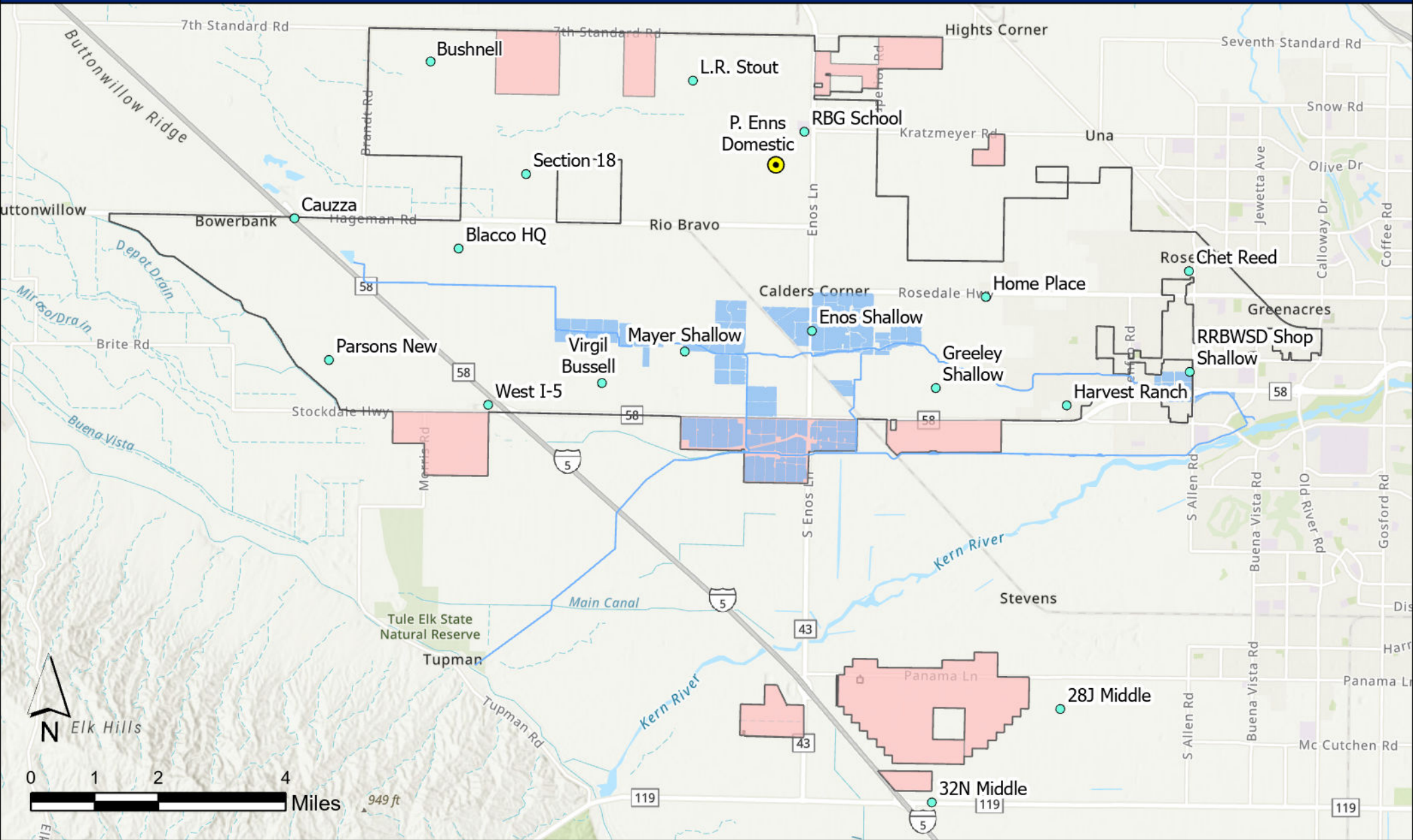
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Rosedale-Rio Bravo Water Storage District GSA - RBG School - 354197N1192544W001



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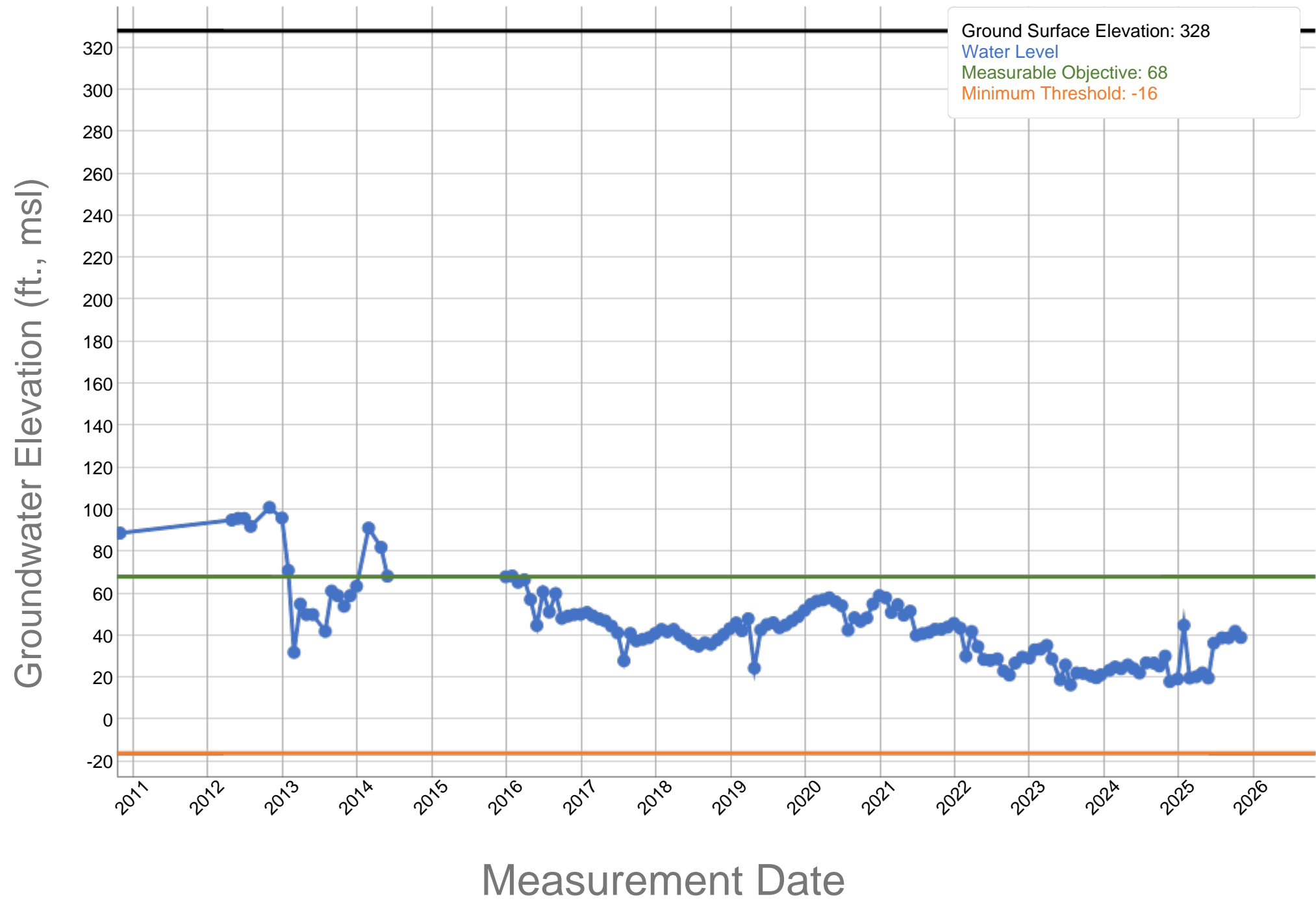


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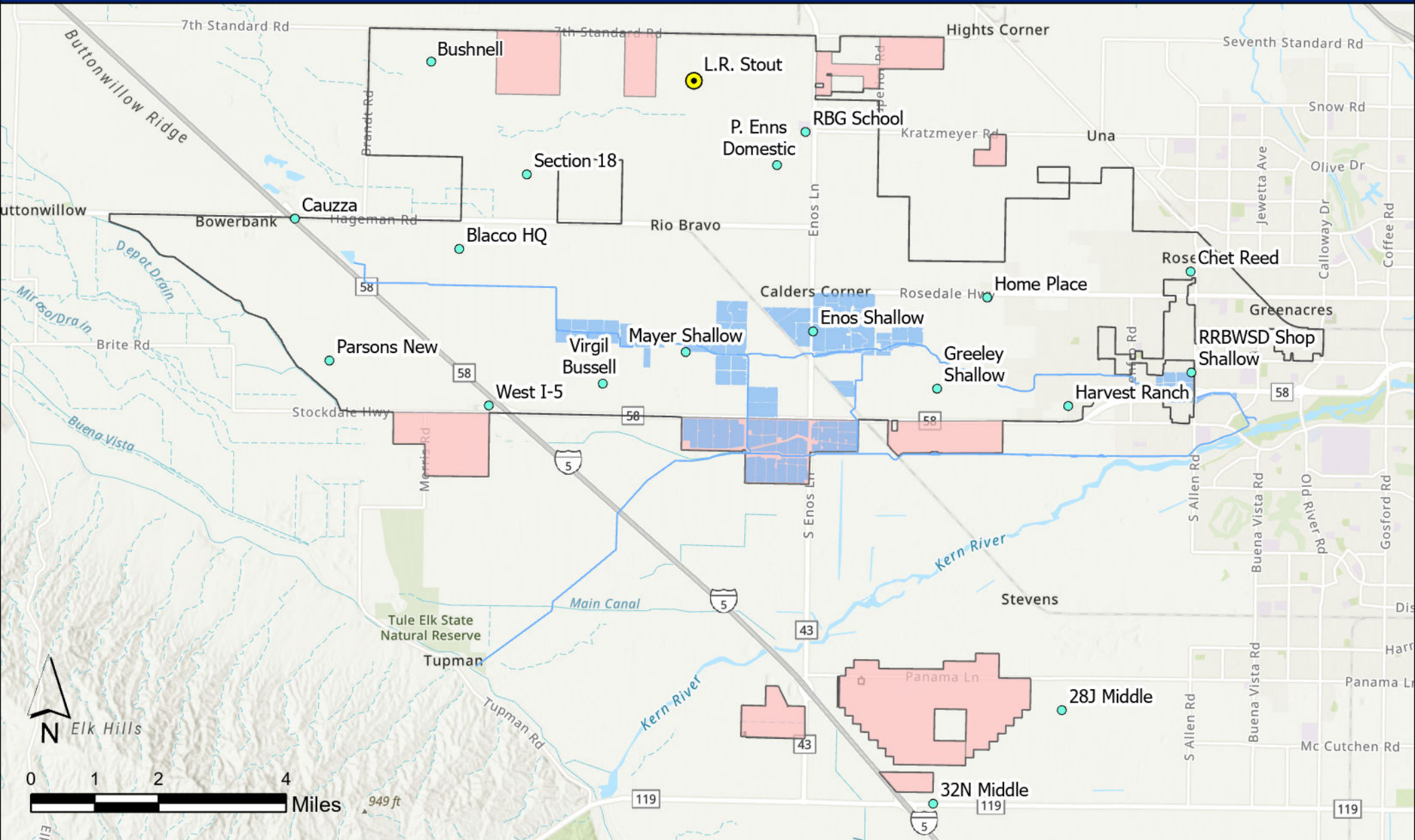
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Rosedale-Rio Bravo Water Storage District - P. Enns Domestic - 354121N1192623W001



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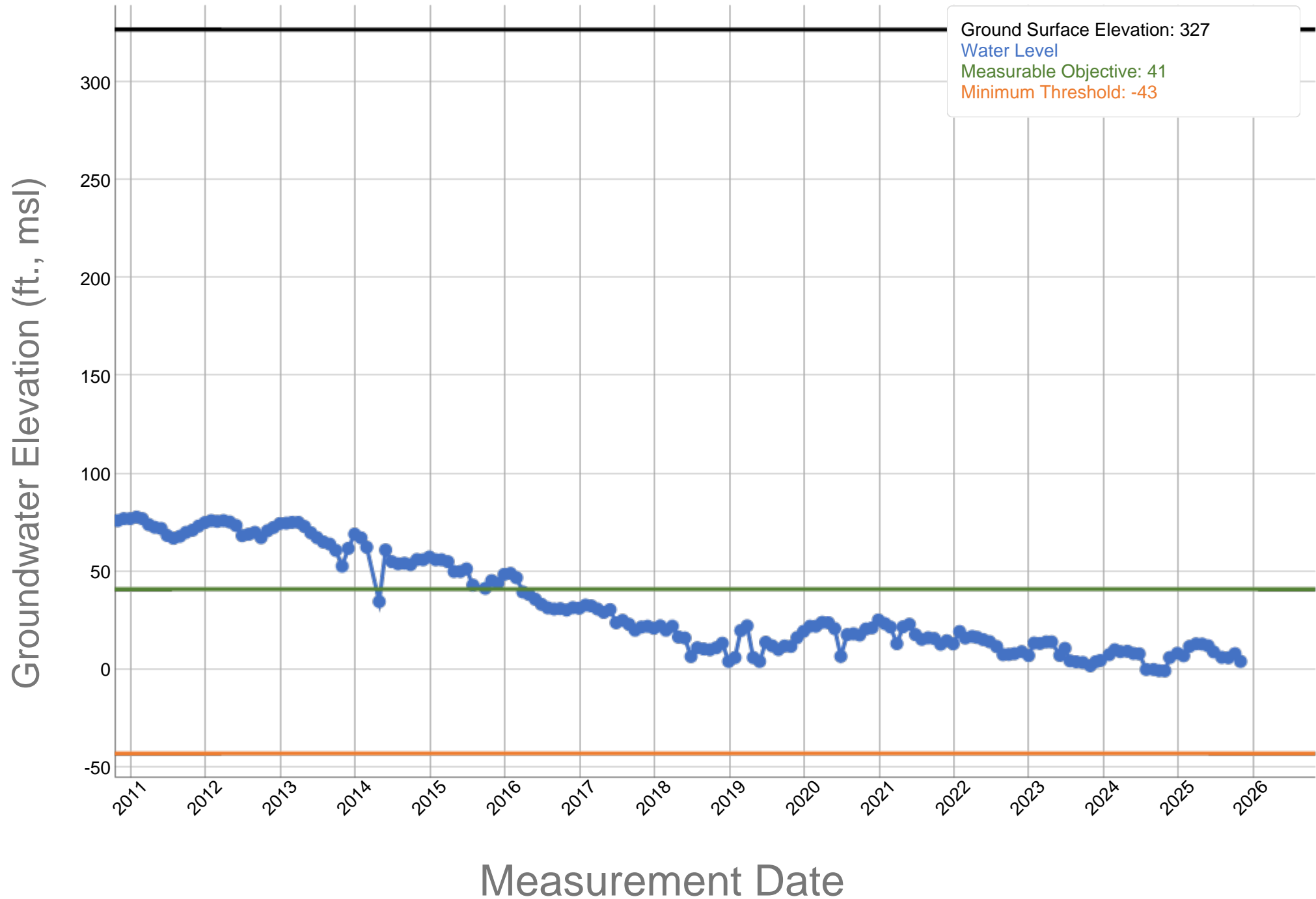


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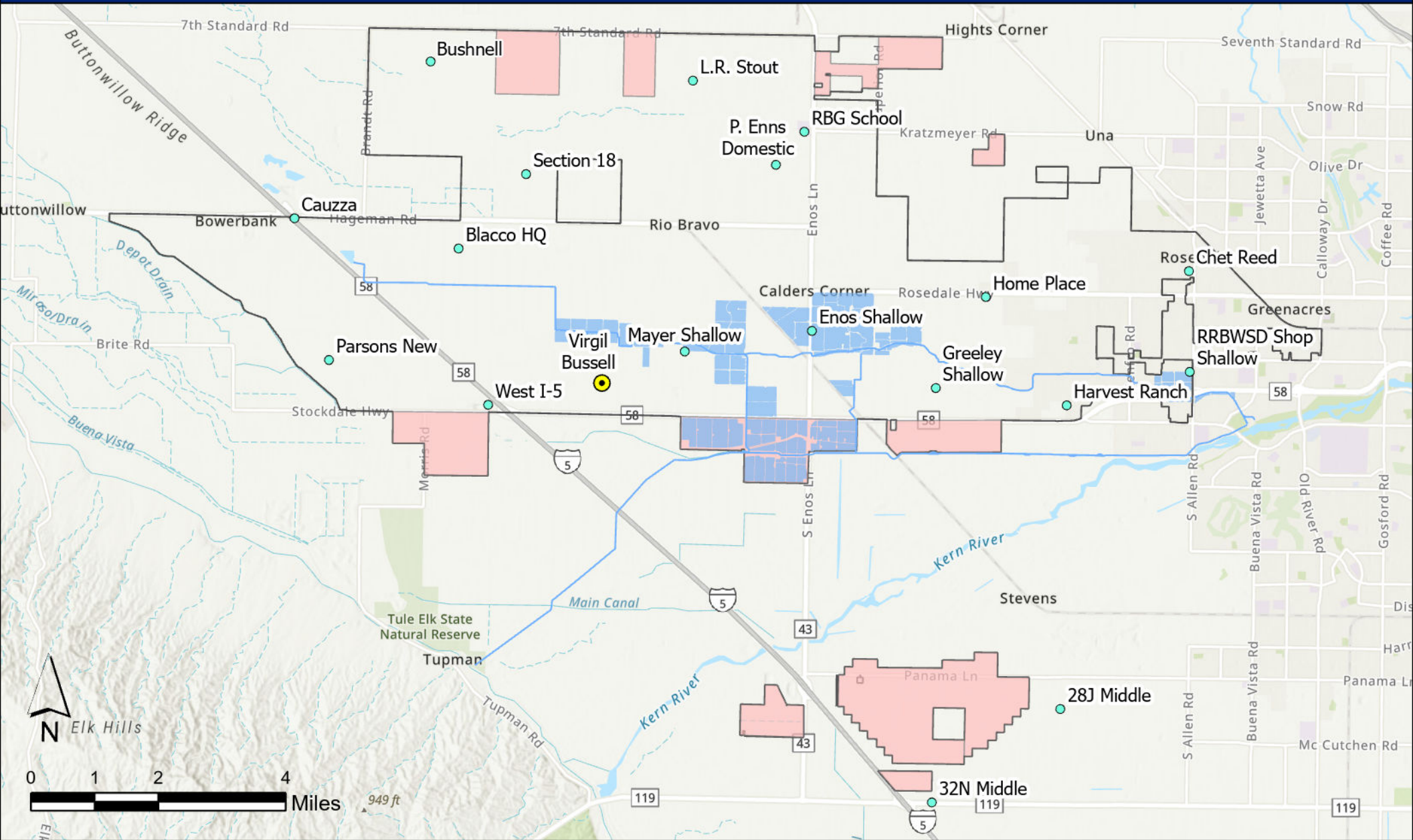
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Rosedale-Rio Bravo Water Storage District - L.R. Stout - 354309N1192859W001



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

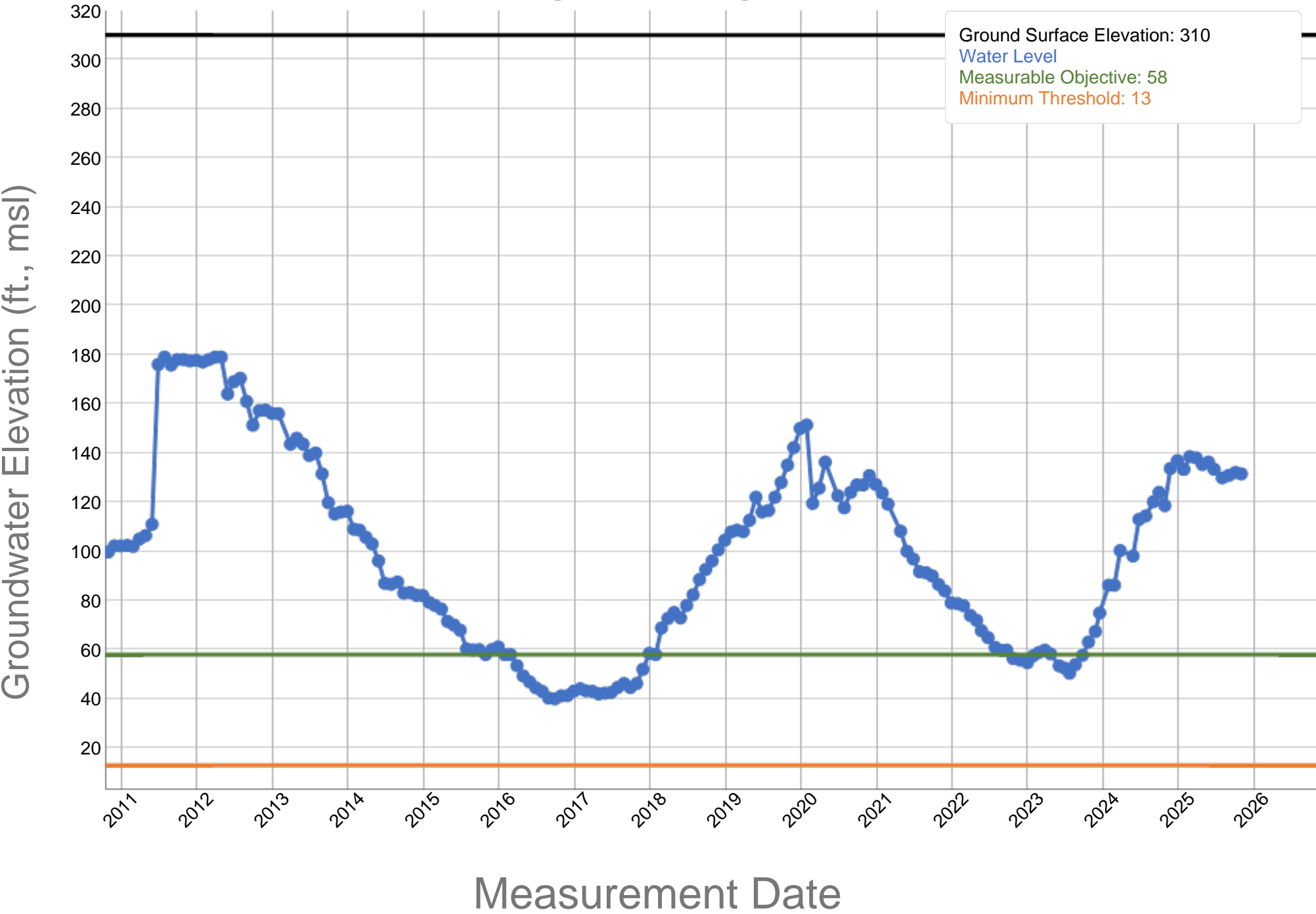


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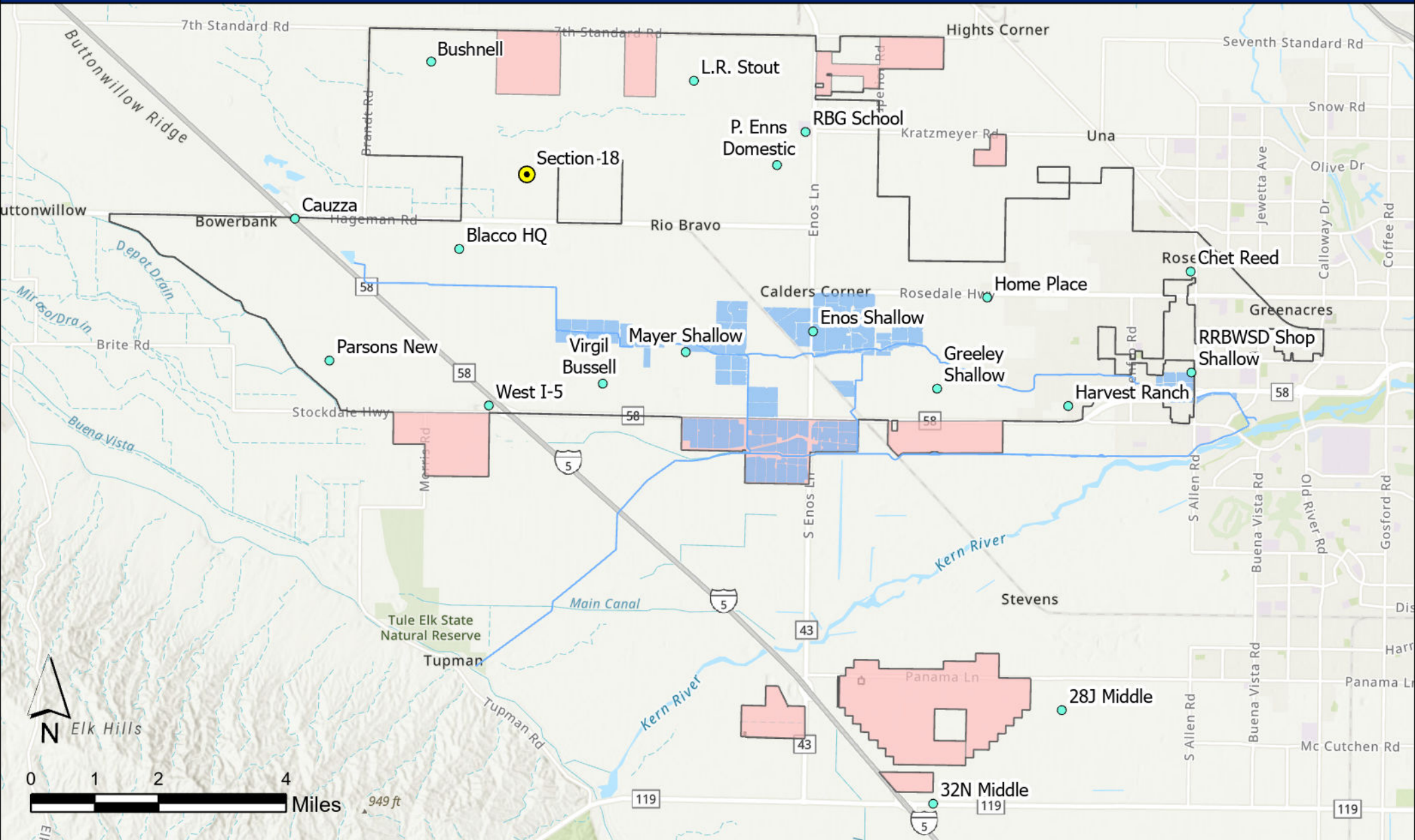
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Rosedale-Rio Bravo Water Storage District - Virgil Bussell - 353619N1193099W001



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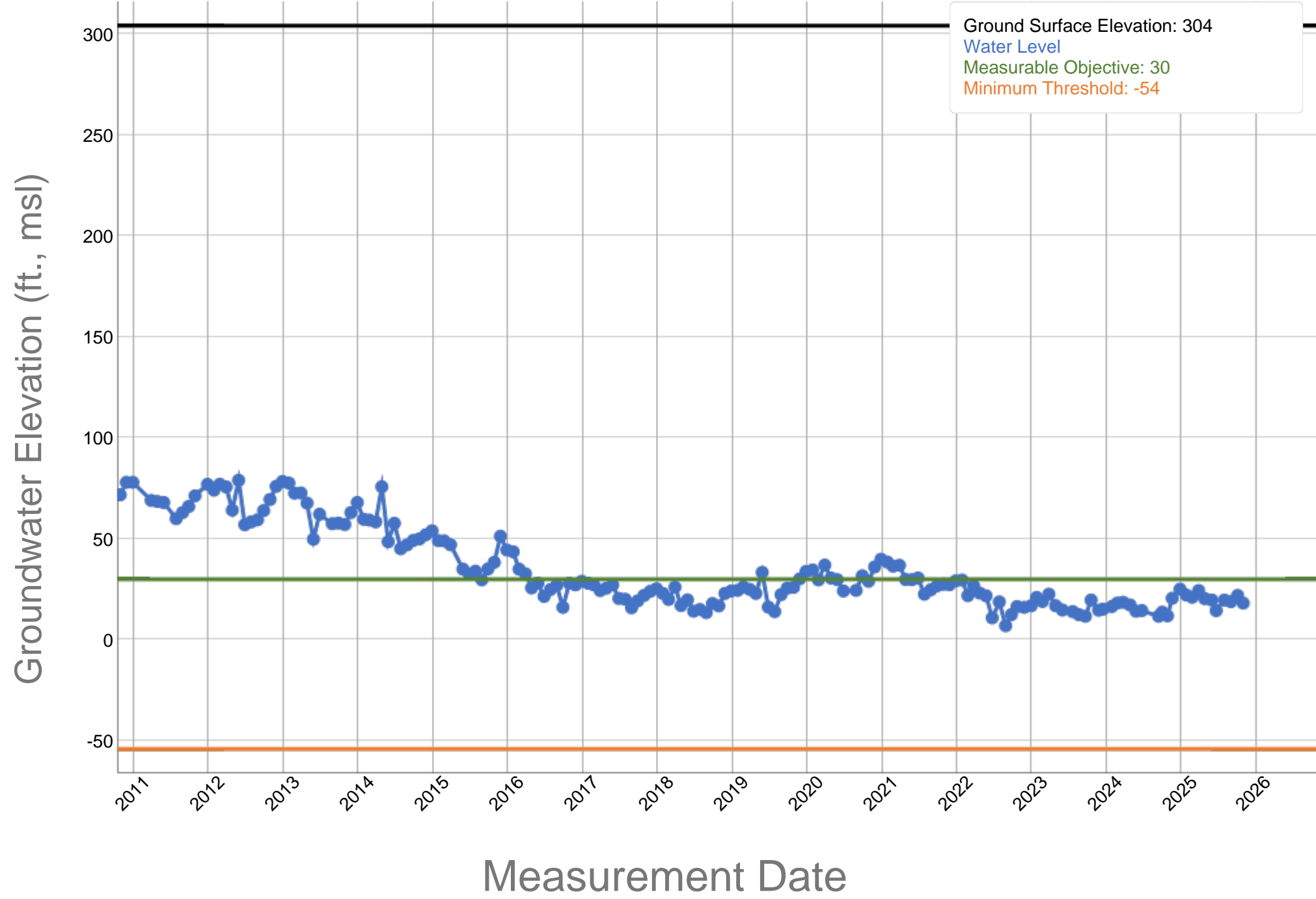


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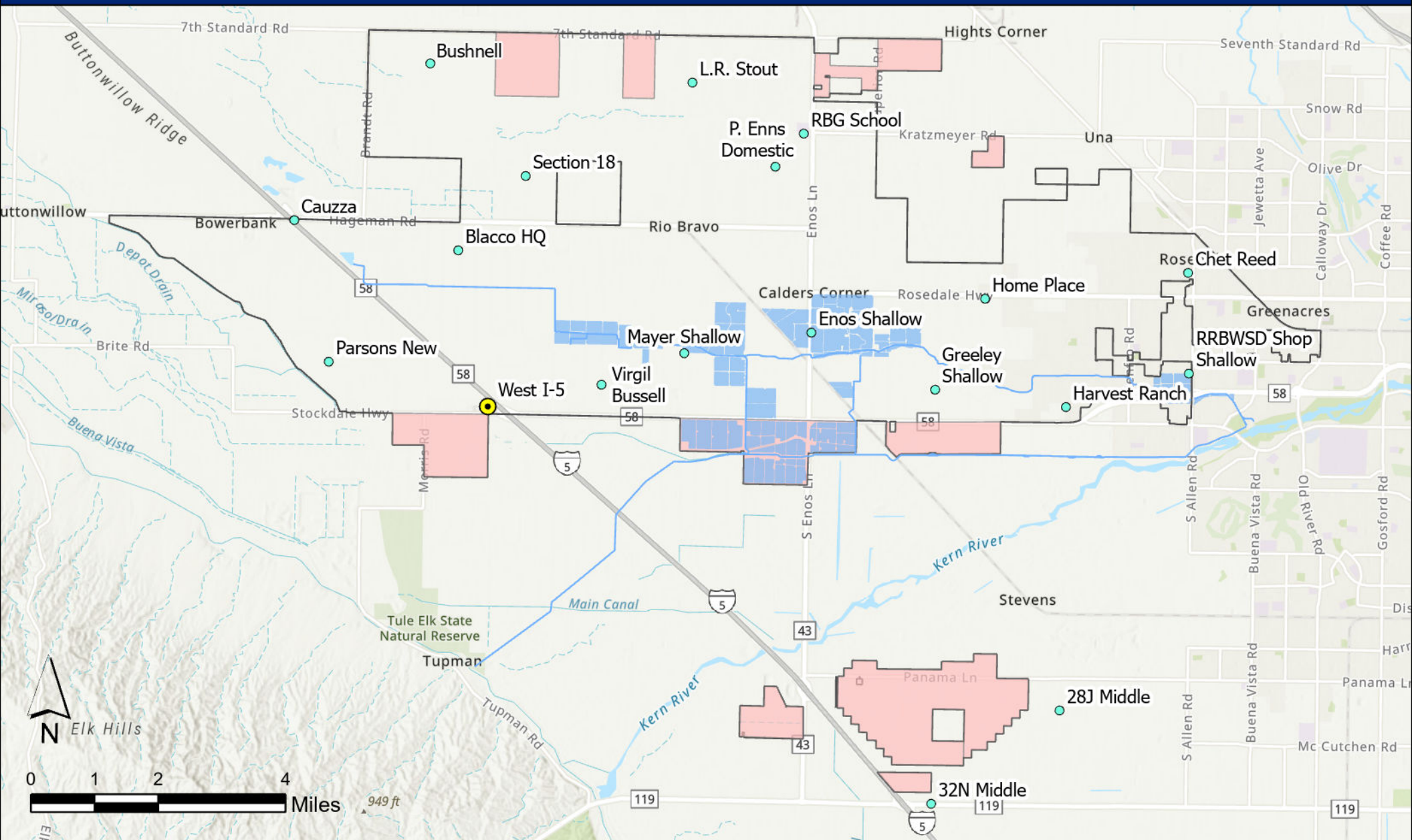
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Rosedale-Rio Bravo Water Storage District - Section 18 - 354090N1193318W001



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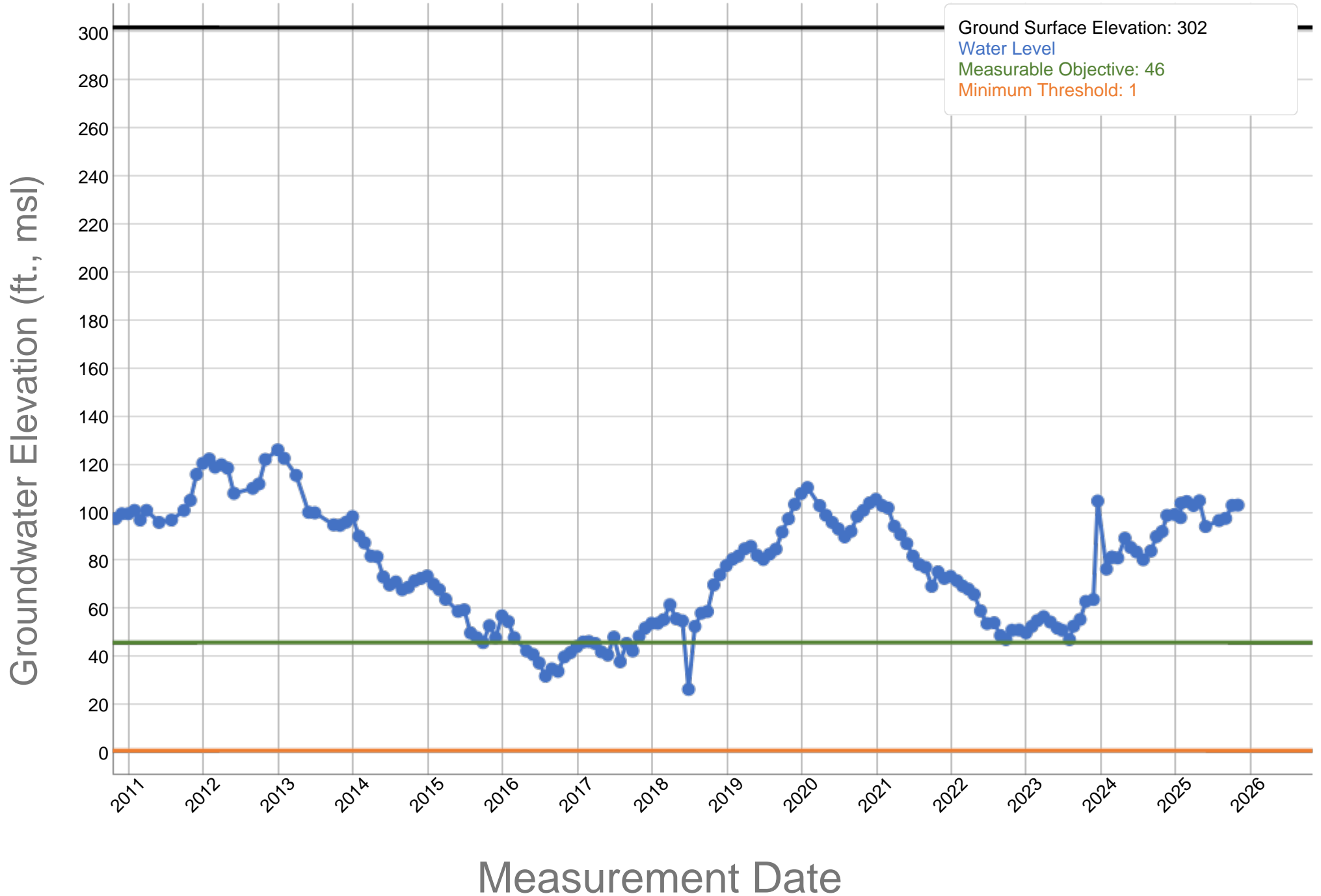


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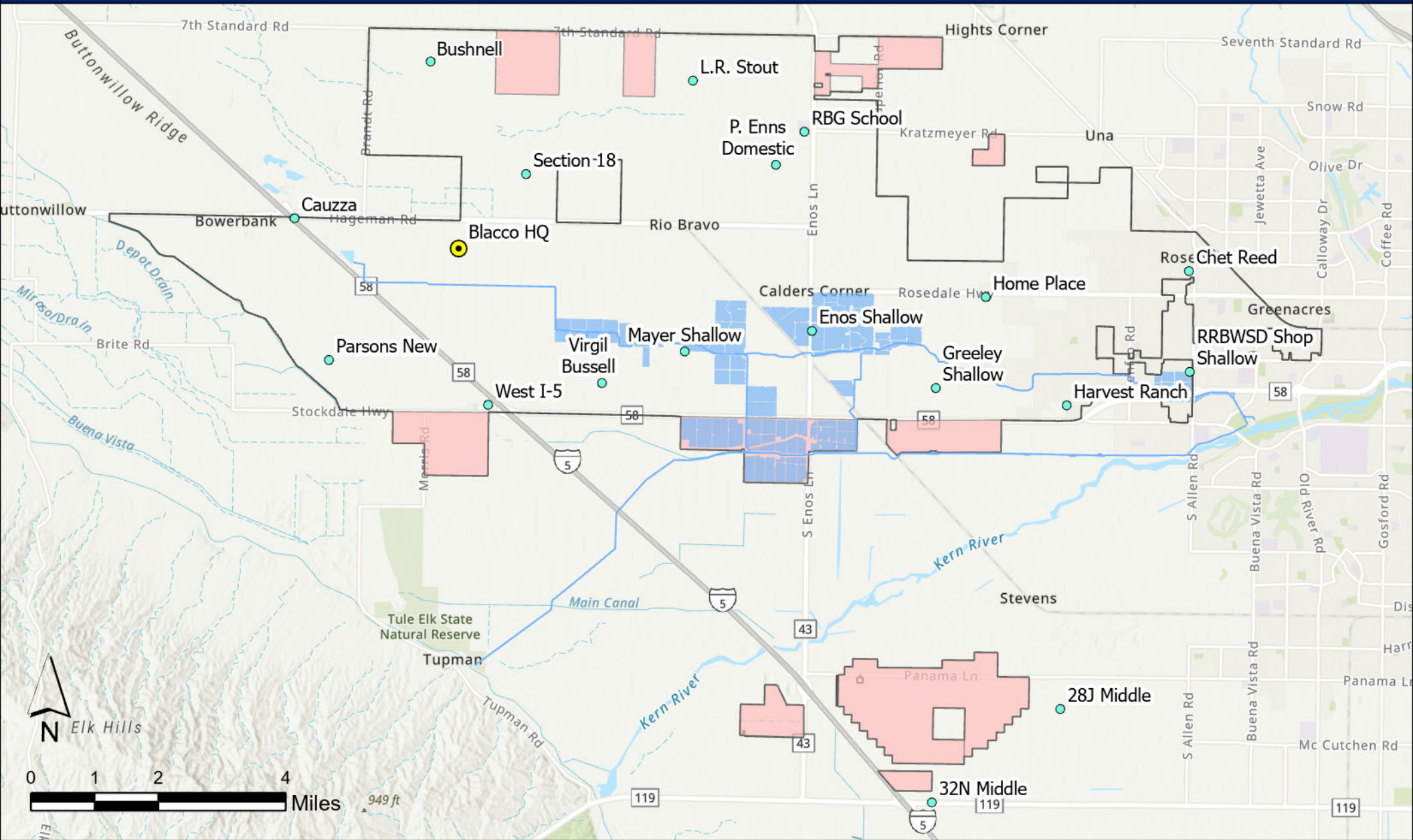
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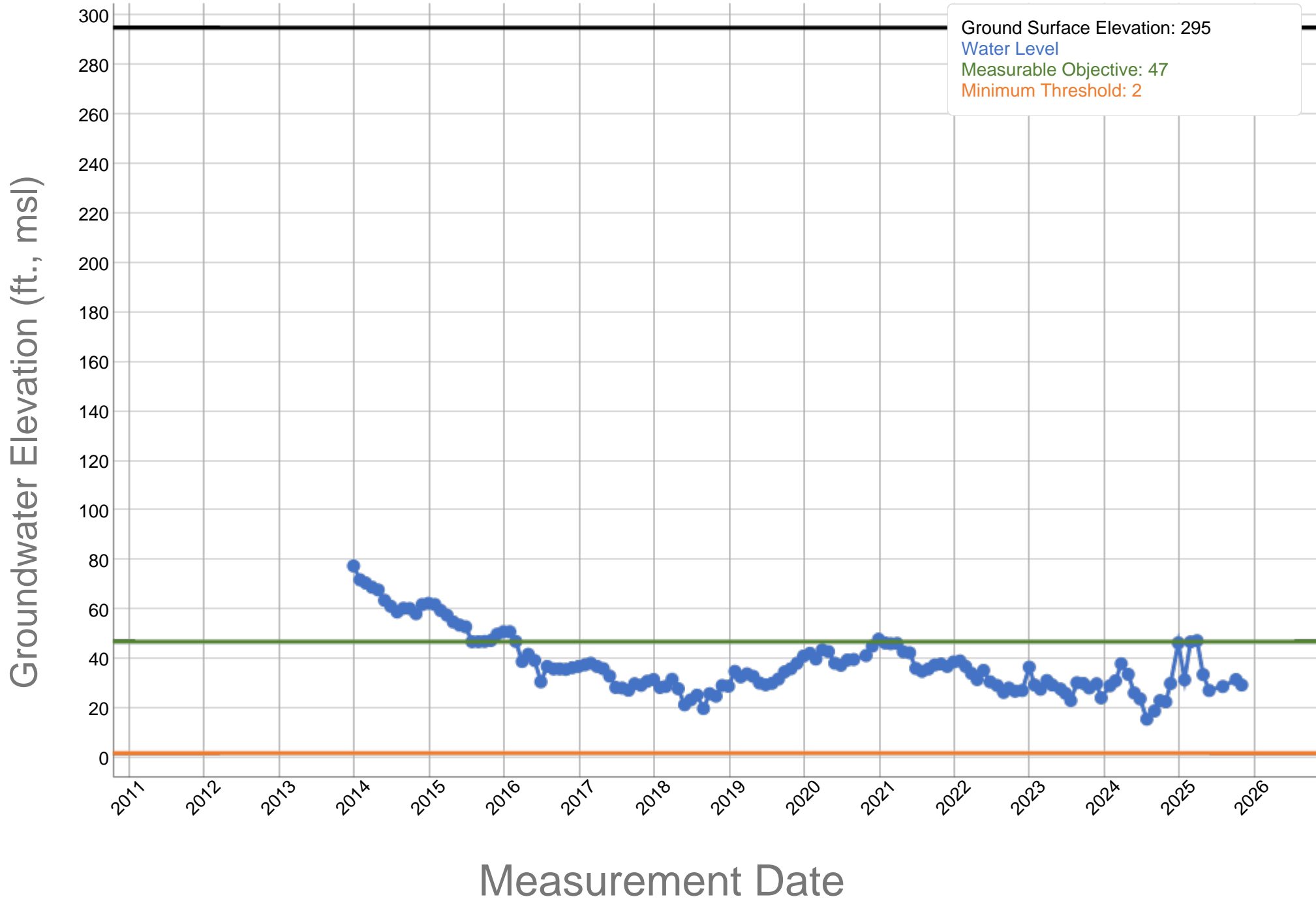


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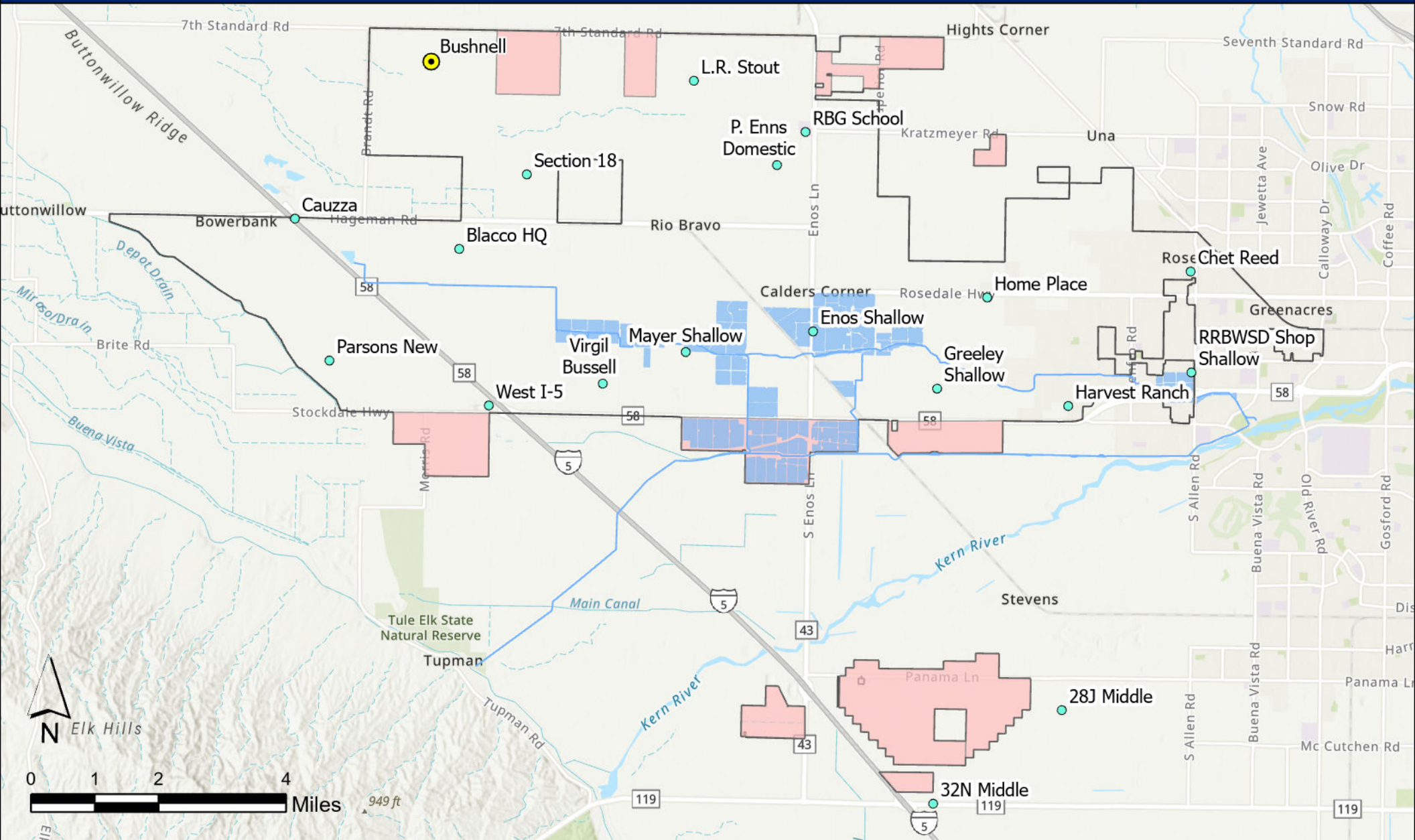
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Rosedale-Rio Bravo Water Storage District - Blacco HQ - 353915N1193454W001



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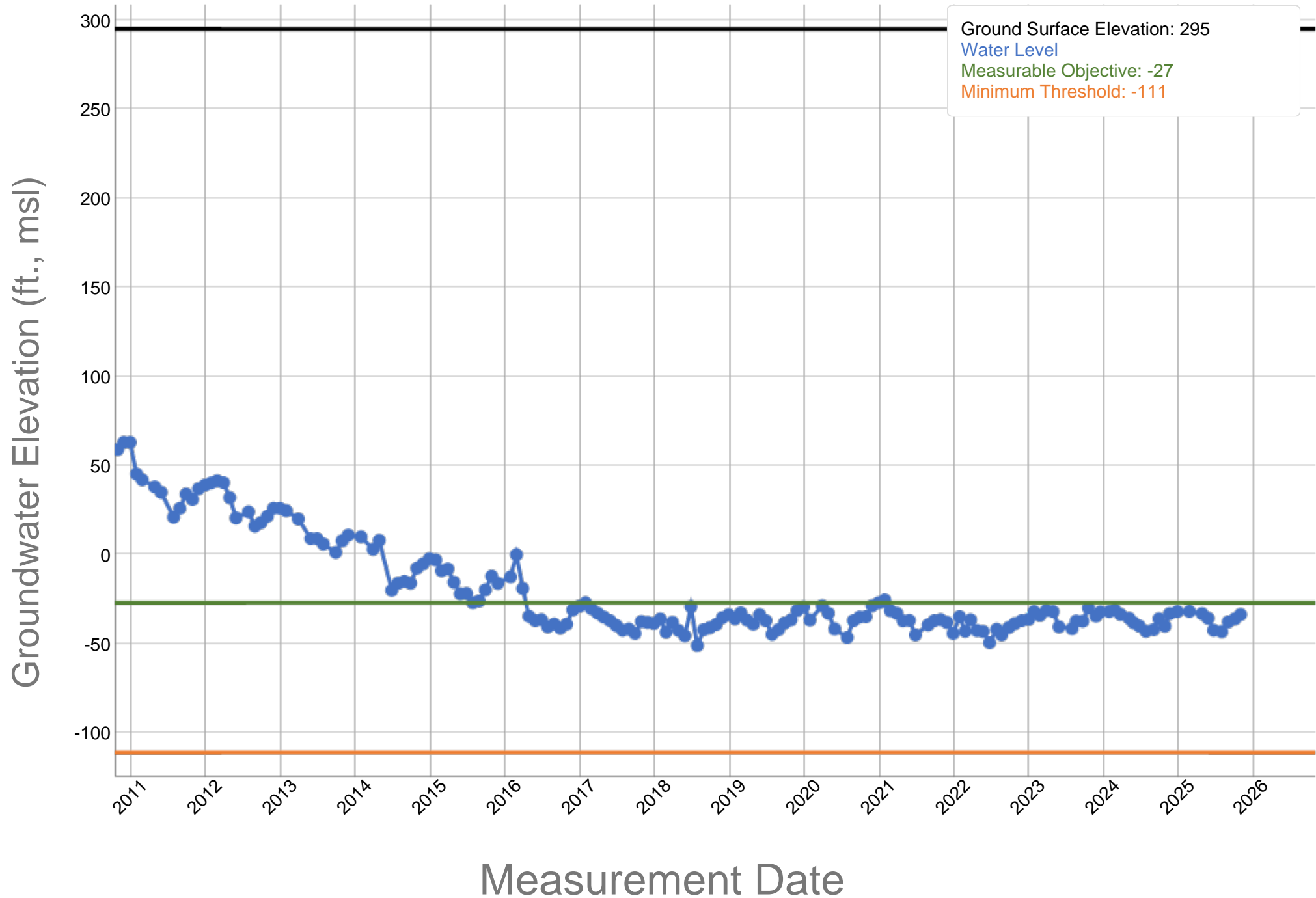


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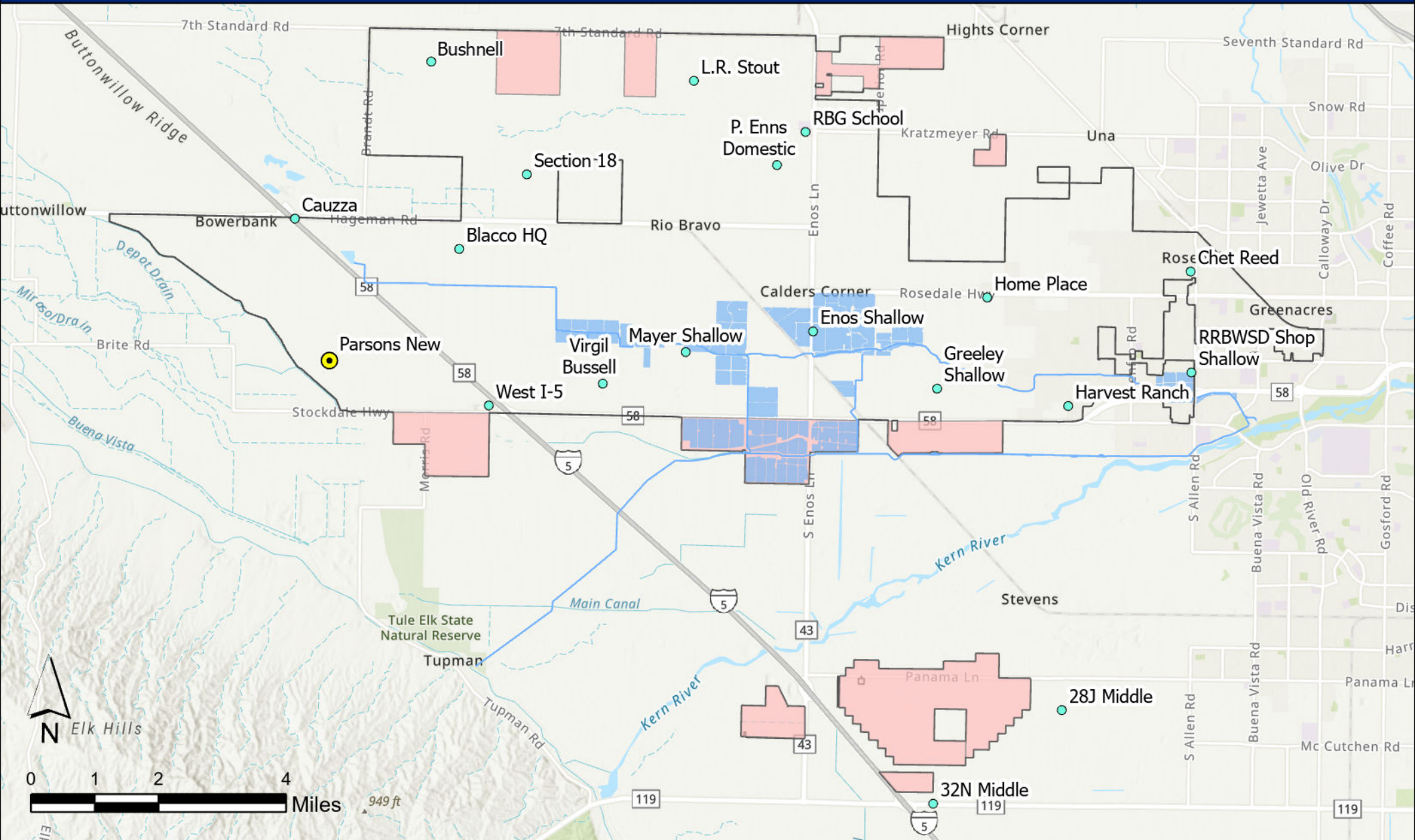
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Rosedale-Rio Bravo Water Storage District - Bushnell - 354350N1193586W001



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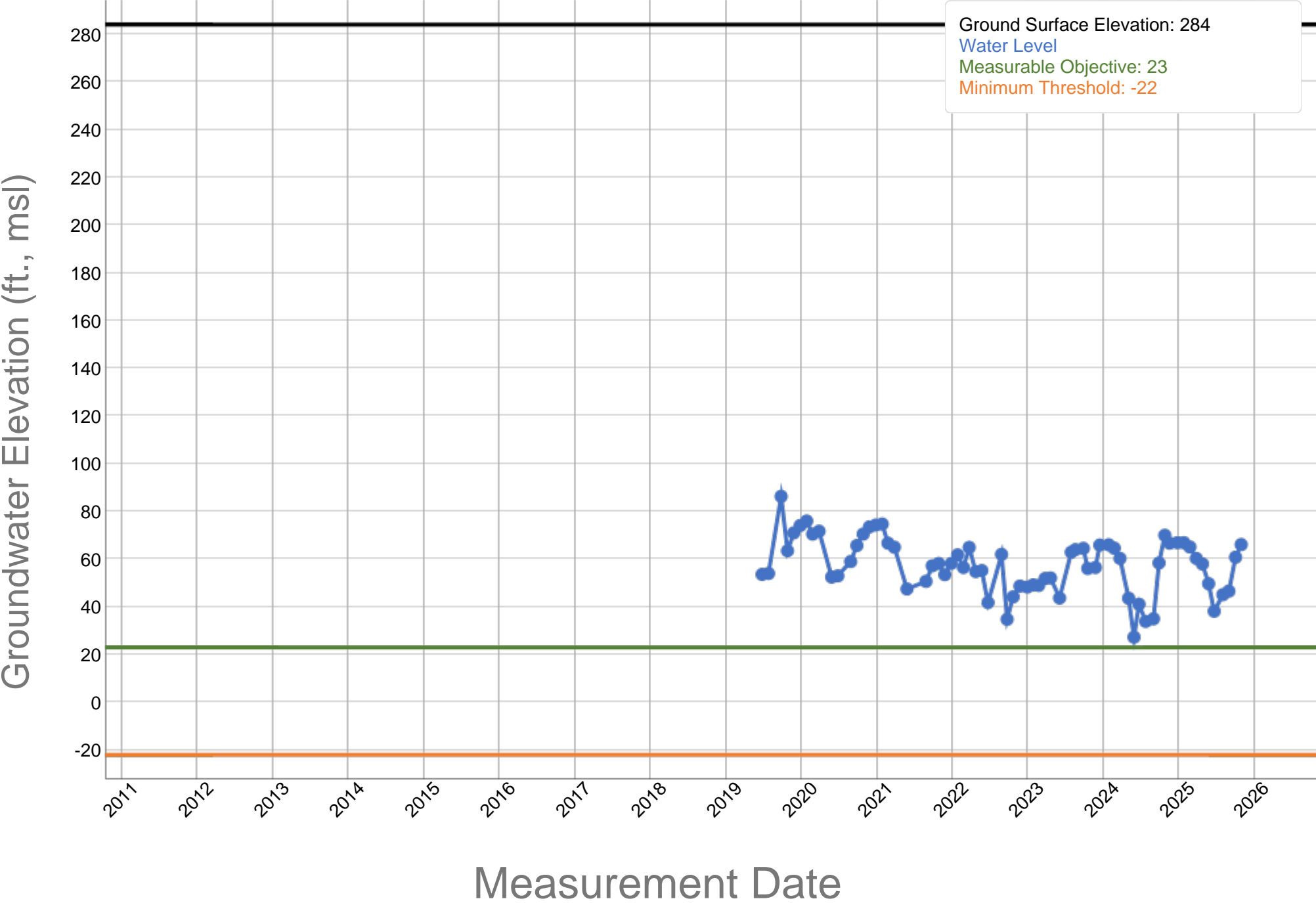


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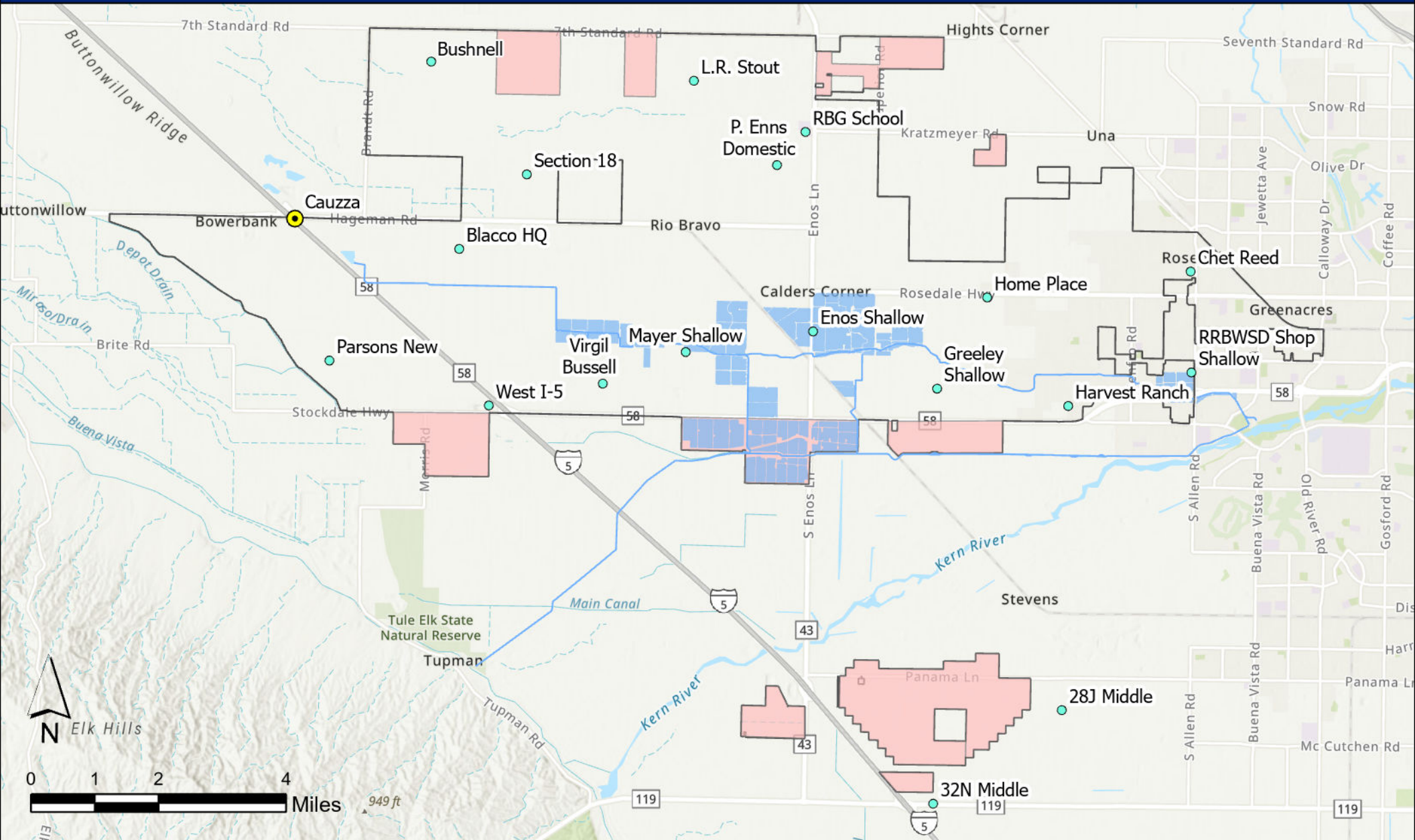
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Rosedale-Rio Bravo Water Storage District - Parsons New - 353660N1193859W001



Rosedale-Rio Bravo Water Storage District GSA Groundwater Level Monitoring Network Bakersfield, CA

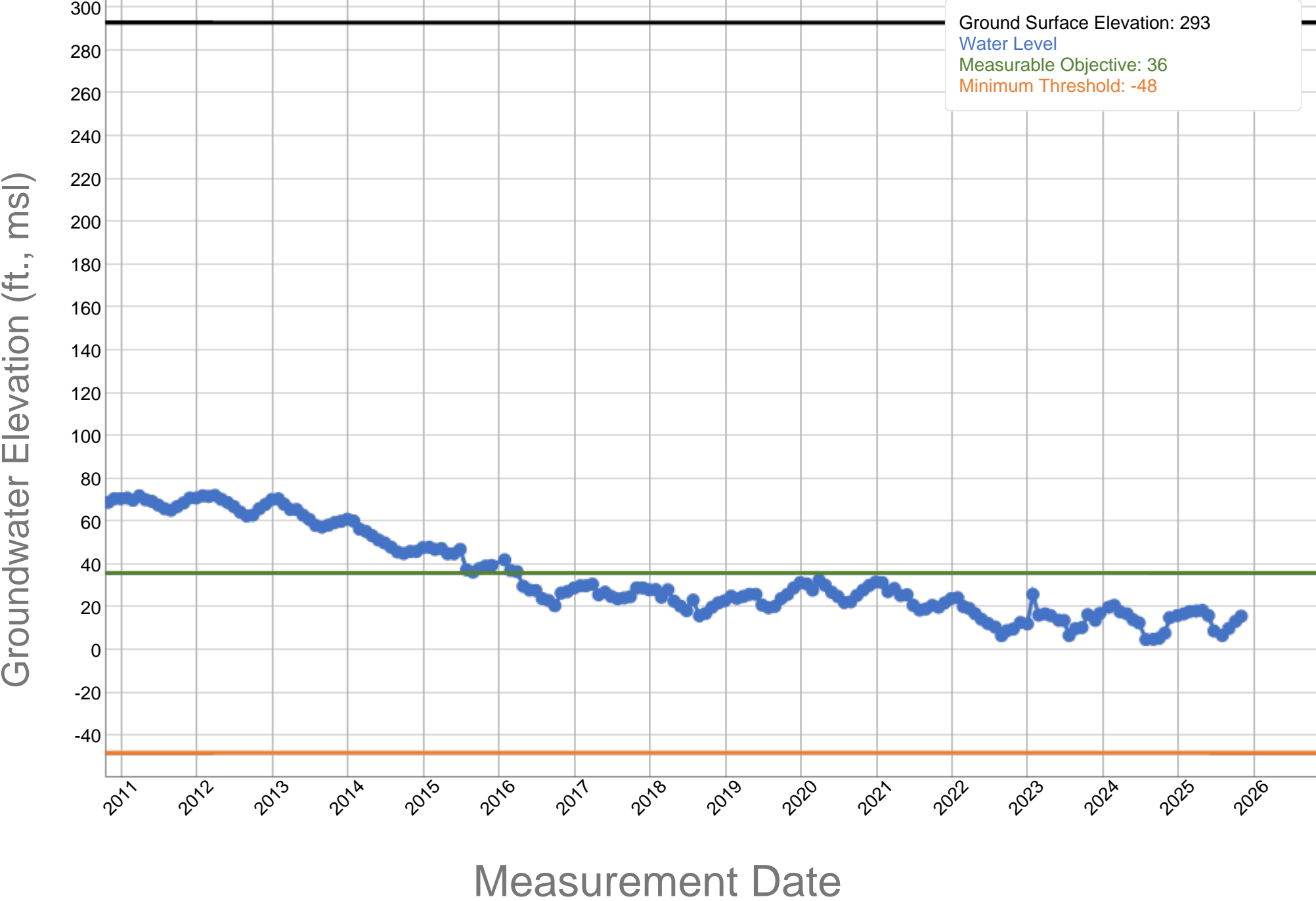


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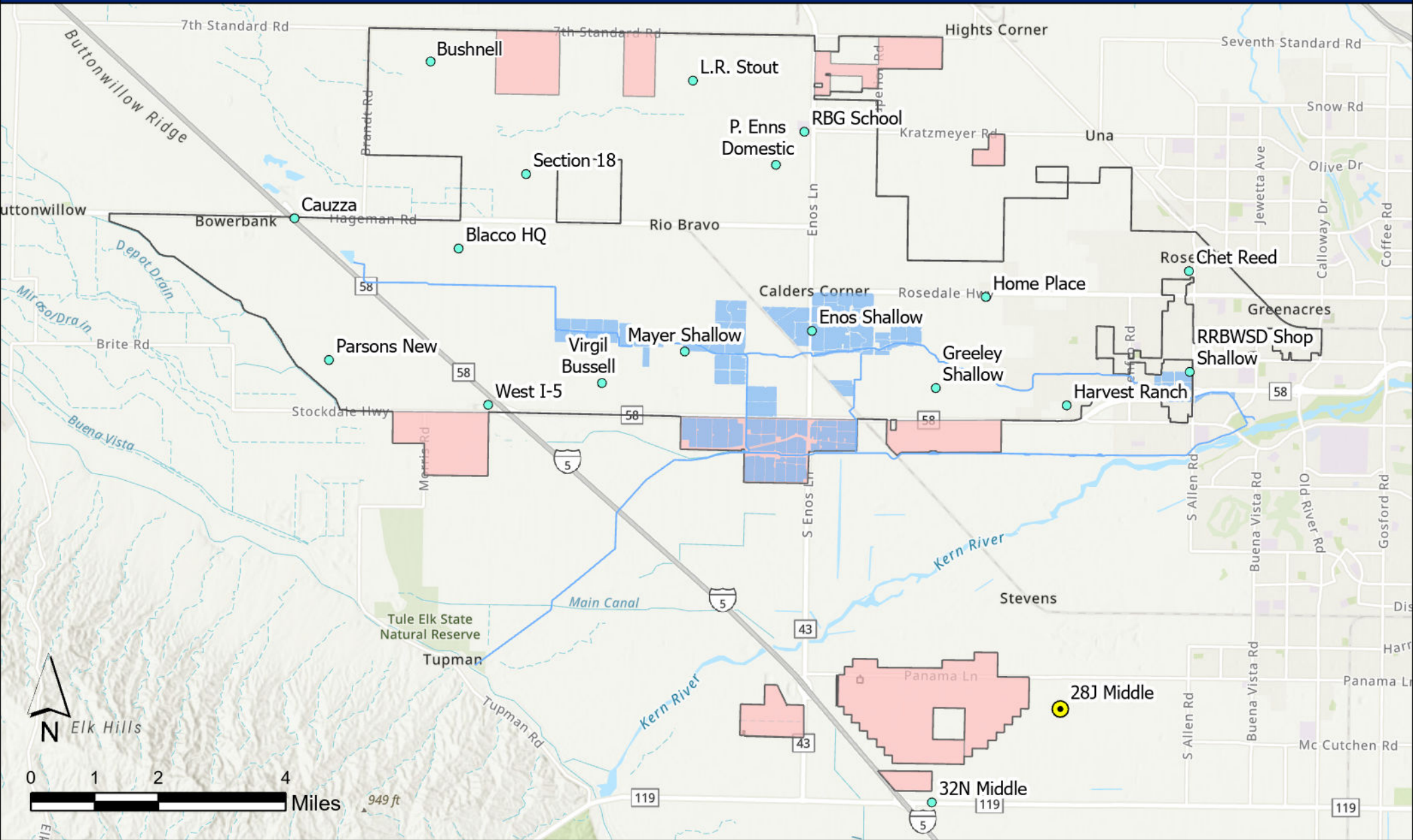
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Rosedale-Rio Bravo Water Storage District - Cauzza - 353986N1193948W001



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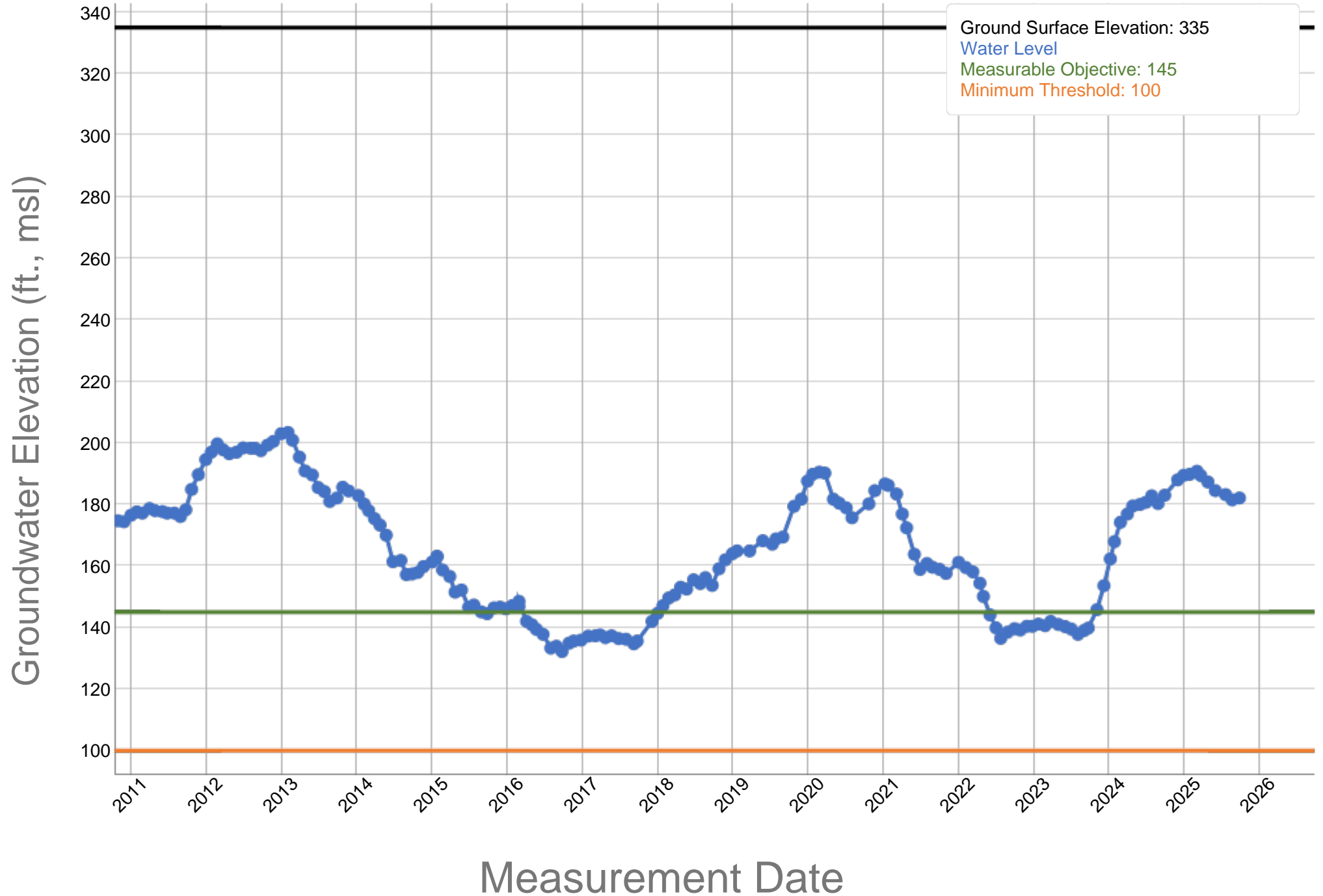


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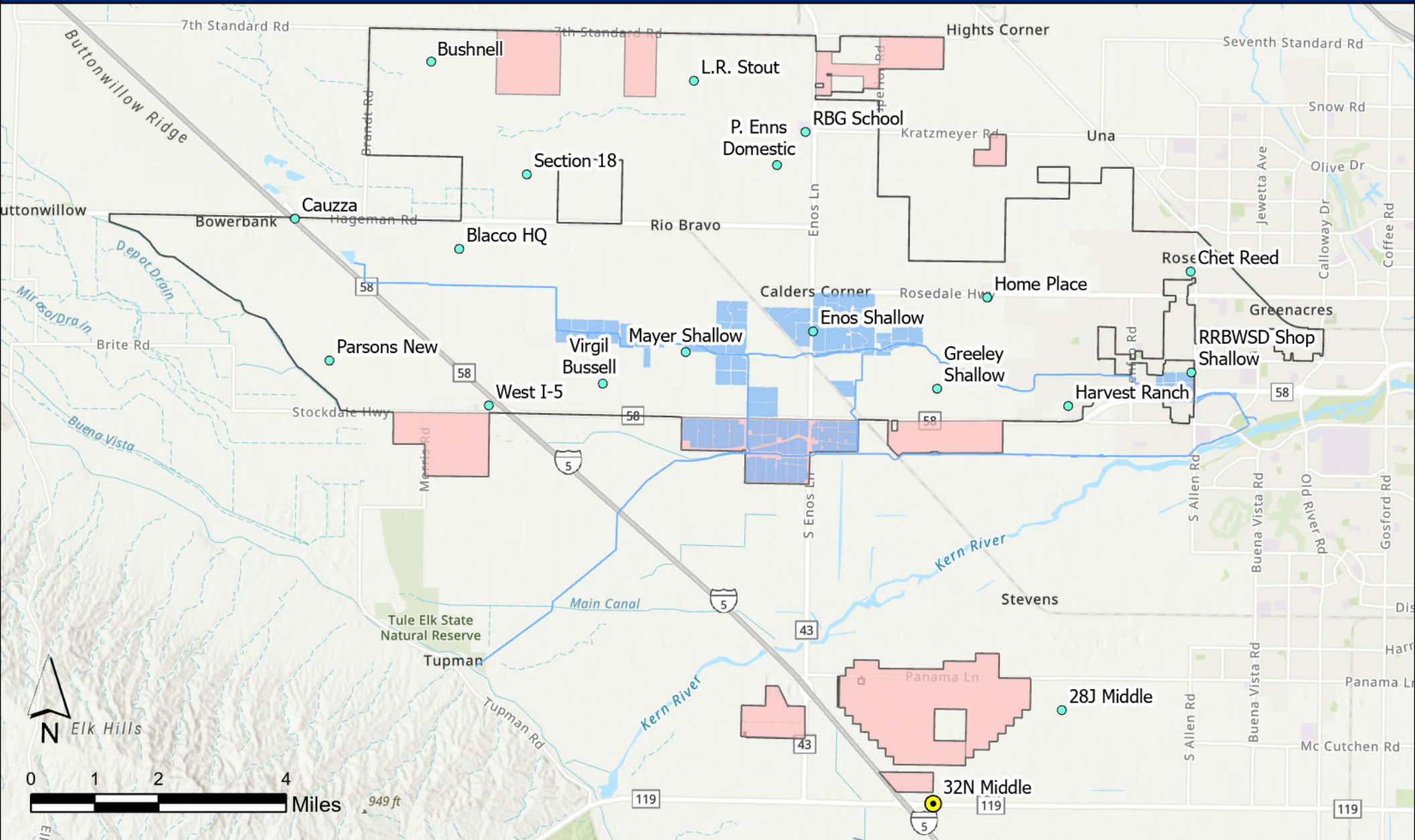
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Rosedale-Rio Bravo Water Storage District - 28J Triple - 352889N1191814W001



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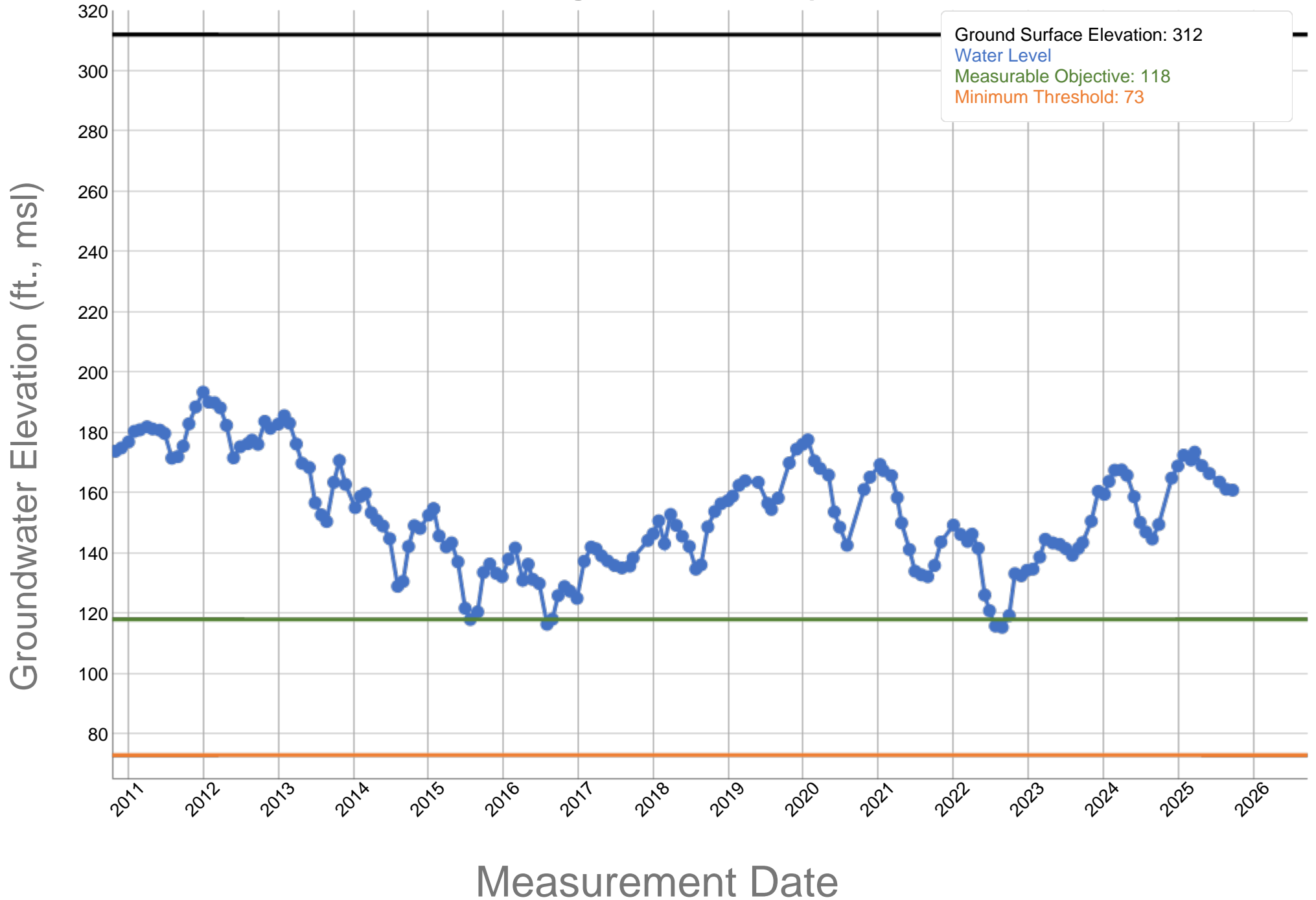


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Rosedale-Rio Bravo Water Storage District - 32N Triple - 352673N1192138W002





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849 Allen Road Bakersfield, CA 93314
(661)589-6045
www.rrbwsd.com

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 1b

From: Rachelle Echeverria

Re: SGMA Sustainable Management Criteria (SMC) - Water Quality Monitoring Update

Discussion:

As part of ongoing compliance with the Sustainable Groundwater Management Act (SGMA), this memo provides an update on groundwater quality monitoring for the Kern Subbasin's Groundwater Sustainability Plan (GSP). This includes a summary of RRBWSD's current efforts to track water quality constituents at our Representative Monitoring Wells (RMWs).

Constituents of Concern

The amended Subbasin GSP identifies the following constituents for water quality monitoring:

- Arsenic
- Nitrate
- Nitrite
- Total Dissolved Solids (TDS)
- Uranium
- 1,2,3-Trichloropropane (TCP)


RRBWSD GSA's RMW Sites

The following RMWs are being utilized to monitor groundwater quality within our management area (see attached map):

- Frito-Lay 1
- Enos Shallow
- Greeley Shallow
- RRB Shop Shallow

COCs	RMWs			
	Frito Lay	Enos Shallow	Greeley Shallow	RRB Shop Shallow
	MTs			
Arsenic (ug/L)	10	10	10	10
TDS (mg/L)	1000	1000	1000	1000
Nitrate (mg/L)	45	45	45	45
Nitrite as N (mg/L)	1	1	1	1
Uranium (ug/L)	30	30	30	30
1,2,3-TCP (ug/L)	0.005	0.005	0.005	0.005

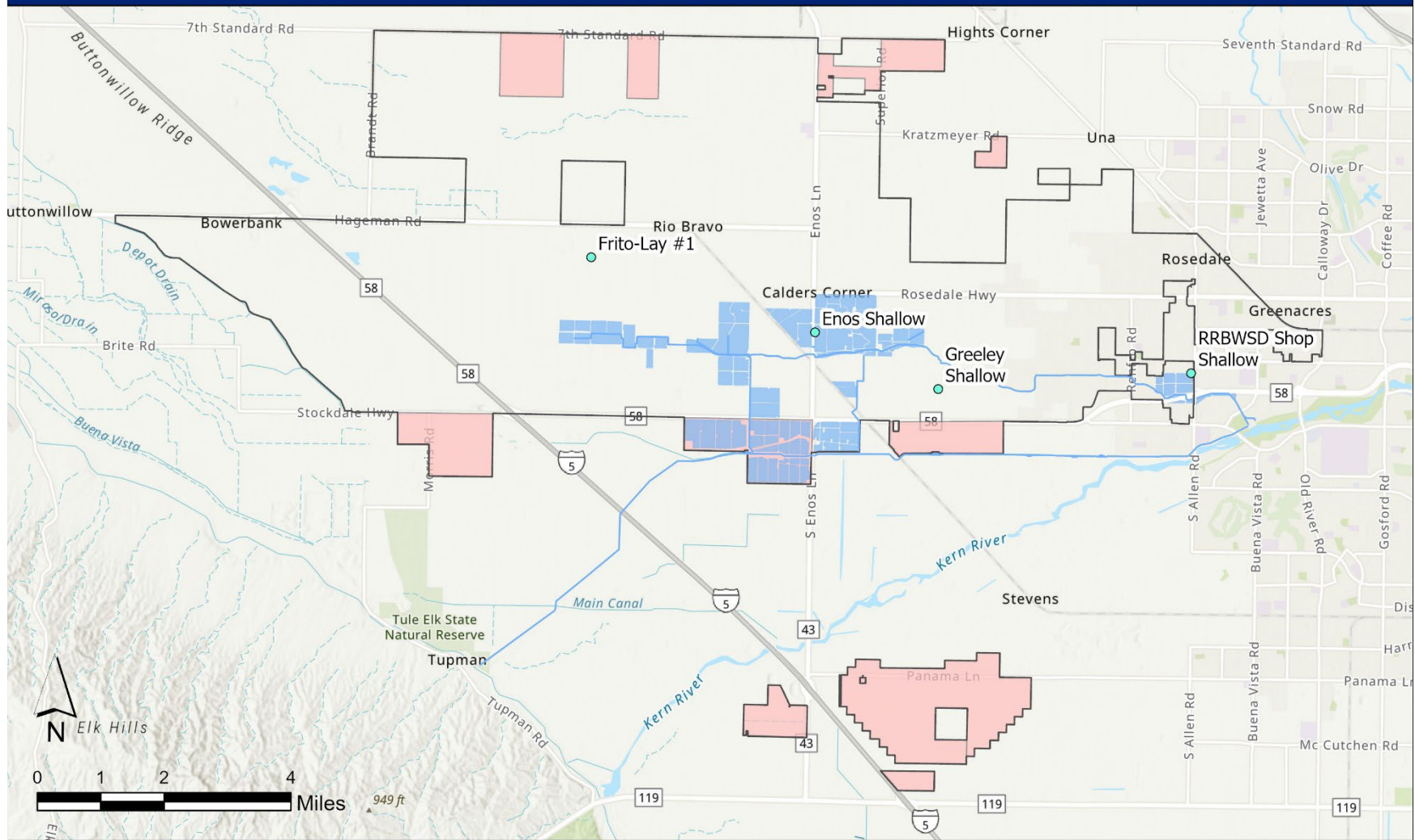
Taken From [Amended Kern County Subbasin GSP](#): Table ES-1. Summary of Sustainable Management Criteria

Sustainability Indicator	Undesirable Result	Minimum Threshold	Measurable Objective
 <p>Degraded Water Quality</p>	<p>One of the following occurs:</p> <p>(1) Subbasin-wide, 15 percent of the Representative Monitoring Well for Degraded Water Quality (RMW-WQs) exceed the MT for the constituents of concern per water year based on confirmed sample and MT Exceedance investigation results¹.</p> <p>(2) Annually, five percent of domestic wells have an assumed MT exceedance¹ based on radius of influence analysis around the RMW-WQ that exceeds the MT, with a cumulative maximum of 15 percent of domestic wells through 2040.</p> <p>(3) Mitigation¹ backstop: a GSA is unable to meet well mitigation needs.</p>	<p>(1) MT is set as close to the water quality objective as feasible.</p> <p>(2) If historical data exceeds the water quality objective, and at least five sample results are available, then the MT is set at the 80th Percentile value.</p> <p>(3) When clear trends are present, discretion should be applied</p> <p>(a) If there is an increasing trend, set the MT at the 80th Percentile of the Pre-2015 data</p> <p>(b) If there is a decreasing trend, MT should be set at the median value or as close to the water quality objective as is reasonable. If the 80th Percentile is within 10 percent of the drinking water MCL, the MT should be set at the water quality objective.</p> <p>(4) Proxy data are predominantly used to demonstrate baseline conditions; however, data may be used when the RMW-WQ and Proxy Well are similar enough to represent the same lithology/aquifer conditions.</p>	<p>The water quality objective.</p>

Notes:

1. Exceedances and mitigation applications are evaluated as defined in the Exceedance Policy and Action Plans (Appendix K-1) and Mitigation Programs (Appendix G).

Rosedale-Rio Bravo Water Storage District GSA Groundwater Quality Monitoring Network Bakersfield, CA



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- Representative Monitoring Wells

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BUILDING A SUSTAINABLE WATER SUPPLY TO HELP OUR COMMUNITY THRIVE

November 25, 2025

To: Stakeholder Advisory Group
 Rosedale-Rio Bravo Water Storage District
 Agenda Item: 2a.

From: Markus Nygren

Re: RRB-2: RRB Projects



P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Projects		Implemented	Functional	In-Process	As-Needed									
RRB-2	McCaslin Recharge Improvements Phase 1	Acquisition and retirement of 175 acres of irrigated ag lands and development of 175 acres of new recharge ponds. For conjunctive-use and 2:1 third party banking.			✓	✓	✓	Land Retirement Third-Party Banking	Complete	NA	NA	Implemented	Complete	Complete

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2023-	630	530	✓	✓	✓		NA	Kern River Flood, SWP Table A, SWP Article 21 , Friant-Kern Flood, 2:1 Exchanges, Kern River Purchase Contract	None	\$6,500,000	\$118,000	RRBWSD (Water Charge) USBR Grants

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 2b.

From: Dan Bartel

Re: RRB-5: Onyx Project



P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Projects		Implemented	Functional	In-Process	As-Needed									
RRB-5	Onyx Ranch Water Acquisition	Acquisition of 4109 acres of land with water rights from the South Fork of the Kern River. Following of ranches and change of point of diversion to Kern Subbasin for groundwater recharge.			✓	✓	✓	Exercise of Rights	Complete	NA	NA	Operational	Complete	Complete

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2026-	6000	0	✓	✓			NA	Kern River Pre 1914 Appropriative	None	\$33,000,000	\$450,000	RRBWSD (Water Charge)

November 11, 2025

To: Rosedale-Rio Bravo Water Storage District Board of Directors

Agenda Item: 7a

From: Dan Bartel

Re: Onyx Project Report

This month we:

- Continued operation of conveyance facilities.
- Recorded that the USGS did not verify South Fork station.
- Stream gaged at Doyle 5 times and Patterson 5 times to verify net project water.
- Coordinated Project operations with KRI's.
- Harder is working on model update for 2026 no-injury calculation.
- Redirected flows October 1-14, and 21-31. Net project water was 450 AF
- Worked with contractor on plan for stockwater well iron treatment services.
- Discussed conservation easement options with Audubon.

South Fork flows downstream of Bloomfield averaged 31 cfs plus calculated accretions of 3 cfs, for a total average flow of about 34 cfs.



Daily values in SFD = Second Foot Days, Monthly total in AF = Acre-Feet

Note:	210	18	13.47
-------	-----	----	-------

Note:

Cottonwood via the Landers

Miller ditch water is being split Prince and Haf. 50/50

Redirected Historic Irrigation Demand Limit = 26

##	South Fork Doyle Ranch Flow measurement, value carries for next week
----	--

USGS SFork at 0500

<https://waterdata.usgs.gov/monitoring-location/11189500/#dataTypeId=continuous-00065-0&period=P7D>

Bold ## on USGS denotes USGS gage verification

next week Accretions on 10/25 calculated to 5 cfs, used 3 cfs. Confirmed flow at Patterson on 10/28 so increased back to 5 cfs.

Heavy Precip 10/14 project off 10/15-10/20

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 2c.

From: Dan Bartel

Re: RRB-4 and RRB-7: Kern Fan Project



P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Projects		Implemented	Functional	In-Process	As-Needed									
RRB-4	Kern Fan Water Storage Project Phase 1	Acquisition and retirement of 350 acres of irrigated ag lands, and development of 350 acres of new recharge ponds. For conjunctive-use and 2:1 third party banking.			✓	✓	✓	Land Retirement Third-Party Banking	Completion of Design	Stakeholder Meetings Board Meetings Hearing	NA	Recharge Complete Recovery in Construction	Current	2025

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2025-	1260	1059	✓	✓	✓		NA	Kern River Flood, SWP Table A, SWP Article 21 , Friant-Kern Flood, 2:1 Exchanges, Kern River Purchase Contract	None	\$13,000,000	\$236,000	RRBWSD (Water Charge) CA WSIP Funding USBR Small Storage Grant

P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Projects		Implemented	Functional	In-Process	As-Needed									
RRB-7	Kern Fan Groundwater Storage Project Phase 2	Acquisition and retirement of 850 acres of irrigated ag lands and development of 850 acres of new recharge ponds. For conjunctive-use and 2:1 third party banking. Construction of approximately 400 cfs of conveyance capacity from the California Aqueduct			✓	✓	✓	Land Retirement Third-Party Banking	As Needed	Stakeholder Meetings Board Meetings Hearing	NA	Feasibility	As Needed	2035

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2035-	3780	3177	✓	✓	✓		NA	Kern River Flood, SWP Table A, SWP Article 21 , Friant-Kern Flood, 2:1 Exchanges, Kern River Purchase Contract	None	\$65,000,000	\$944,000	RRBWSD (Water Charge) CA WSIP Funding USBR Small Storage Grant

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3a.



From: Trent Taylor

Re: RRB-14: Water Charge Demand Reduction

P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Management Actions		Implemented	Functional	In-Process	As-Needed									
RRB-14	District Land Water Budget/Water Charge Demand Reduction	Setting of a Sustainable Water Budget and collection of a Groundwater Use Charge assisting with project financing and creating approximately a 2.5% demand reduction.			✓	✓	✓	Demand Reduction	NA	Stakeholder Meetings Board Meetings Hearing	NA	Implemented	NA	2023

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2024-	0	2000	✓					NA	None	\$100,000	\$25,000	RRBWSD (Assessments)



ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
GROUNDWATER SUSTAINABILITY AGENCY

849 Allen Road Bakersfield, CA 93314
(661)589-6045
www.rrbwsd.com

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3a

From: Trent Taylor

Re: Water Charge Update

Discussion:

The District's sustainable groundwater management has been hindered in the short term by hydrology (i.e., recent droughts), and in the long term by regulatory constraints on pumping from the Sacramento-San Joaquin River Delta which has resulted in a decline in available District supplies from the State Water Project. The Water Charge is intended to fund projects and the acquisition of land and water in order to generally balance the water supply and demand in the District and to meet the requirements of the Sustainable Groundwater Management Act (SGMA). Therefore, in November 2023, the Board adopted Resolution 536 adopting the District's Water Charge Policy.

At the November 2025 Rosedale-Rio Bravo Water Storage District Board Meeting, the Board adopted the District's 2026 Water Charge Rate of \$145/AF. The 2026 Project Water supply per acre and estimated 2026 available water supply per acre (Project Water, precipitation and native yield) was also discussed at this meeting. Utilizing the 20-year rolling average, the 2026 Project Water supply will be set at 1.61 acre-feet per acre. A breakdown of the estimated 2026 available water supply per acre is as follows:

2026 Project Water supply	= 1.61 AF per acre
2026 Native Yield supply	= .15 AF per acre
<u>2026 Estimated Average Annual Precipitation</u>	<u>= .42 AF per acre</u>
Estimated 2026 Available Water Supply (AF per acre)	= 2.18 AF per acre

The total actual Available Water Supply for 2026 will not be finalized until the end of the 2026 calendar year to reflect actual precipitation for the year.

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3b.



From: Trent Taylor/Markus Nygren

Re: RRB-13: White Land Imbalance Reduction

P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Management Actions		Implemented	Functional	In-Process	As-Needed									
RRB-13	White Land Water Budget/Demand Imbalance Reduction	White Lands (non-RRBWSD lands in RRBWSD GSA) not used for groundwater banking will correct the water supply imbalance by setting water budgets and a linear reduction of 5% per year over the planning period of 2020-2040.			✓	✓	✓	Demand Reduction	NA	Stakeholder Meetings Board Meetings Hearing	NA	Implemented	NA	2020

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2020-	0	5200	✓					NA	None	\$100,000	\$25,000	RRBWSD (Assessments)

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3c.



From: Trent Taylor

Re: KSB-5: Well Mitigation/SHE

P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Management Actions		Implemented	Functional	In-Process	As-Needed									
KSB-5	Well Mitigation Program	Implementation of a well mitigation program to address water level and quality impacts on drinking water. The program provides emergency bottled water, well assessments, hauled water, and well improvements or replacements.			✓				When groundwater management activities impact domestic wells.	Refer to Subbasin Outreach and Engagement Plan	NA	With the adoption of the GSP in December, the Well Mitigation Plan will be adopted and implemented beginning on January 1, 2025.	NA	2026

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2025-	0	0				✓		NA	NA	\$0	\$45,000	RRBWSD (Assessments)

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3d.



From: Rachelle Echeverria

Re: KSB-7: Well Registry

P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Management Actions		Implemented	Functional	In-Process	As-Needed									
KSB-7	Well Registry	An ongoing effort to update and maintain the Subbasin well inventory and translate it into a well registry. Information will be updated and housed within the Subbasin data management system.			✓	✓	✓			Refer to Subbasin Outreach and Engagement Plan	NA	Ongoing	NA	2024-

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented	Functional		In-Process			As-Needed						
2024-	0	0				✓	✓	NA	NA	\$0	\$25,000	RRBWSD (Assessments)



ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
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November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3d

From: Rachelle Echeverria

Re: KSB-7 Well Registry Update

Discussion:

The Subbasin is continuing work on the KSB-7 Well Registry, an effort to update, standardize, and reconcile all well records across the Subbasin. GEI maintains the master Subbasin-wide inventory, and each GSA is responsible for validating its assigned wells and contributing verified data back to the centralized data management system.

This work is essential for SGMA compliance, including representative monitoring network evaluation, vulnerability analyses, and notification procedures.

Inventory Compilation:

- GEI merged records from OSWCR, Kern County Public Health (KCPH), and DDW/GAMA.
- Many OSWCR exports contain errors, missing data, or section-centroid coordinates; GSAs are correcting these through desktop review and field surveys.
- Field surveys have already identified numerous wells with no public construction record; these are being added to ensure the inventory reflects *all* wells in the Subbasin.

Review Status Categories:

- NOT Verified: Raw OSWCR data, uncorrected.
- Refine: Questionable status or location; may be duplicates; often requires field verification.
- Verified: Data confirmed through desktop review of OSWCR/KCPH.
- Survey: Field-verified wells with confirmed status.
- Removed: Wells that no longer exist but are tracked for reference.

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3e.



From: Dan Bartel

Re: KSB-8: ET Calculation

P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Management Actions		Implemented	Functional	In-Process	As-Needed									
KSB-8	Consumptive-Use Study	Maintain and improve existing Subbasin consumptive-use study (ITRC Metric/LandIQ) for accurate estimates of water use by parcel within GSA's.			✓	✓	✓			Refer to Subbasin Outreach and Engagement Plan	NA	Ongoing	NA	2020-

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2020-	0	0				✓	✓	NA	NA	\$0	\$25,000	RRBWSD (Assessments)

GROWER AND MANAGER IRRIGATION MANAGEMENT TOOL: DAILY ET AND PRECIPITATION – ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT AND GROUNDWATER SUSTAINABILITY AGENCY

TO: Rosedale-Rio Bravo Water Storage District and Groundwater Sustainability Agency

FROM: Joel Kimmelshue/Land IQ
Mica Heilmann/Land IQ
Casey Gudel/Land IQ
Adriana Joosep/Land IQ
Kylie Applemun/Land IQ

DATE: November 4, 2025

INTRODUCTION

Rosedale-Rio Bravo Water Storage District and Groundwater Sustainability Agency (RRBWSD and GSA) has utilized Land IQ for developing a monthly field-by-field estimate of actual evapotranspiration (ET). The work proposed here is to provide growers and the GSA with a daily, field-by-field account of ET and precipitation to aid in irrigation management and water use tracking. This daily result matches the proven results of the 30-day deliverables the GSA is currently receiving.

STAFFING RESOURCES AND PROJECT COOPERATORS

Staff expected to work on this project from Land IQ have been involved in various aspects of ET field measurements and modeling, agricultural remote sensing, and regulatory support for the last 4 to 29 years and are listed below. Other appropriately qualified staff may also participate to facilitate completion of any tasks approved by the RRBWSD and GSA as a part of this proposed scope of work.

- Principal In Charge and Principal Agricultural Scientist – Joel Kimmelshue, PhD
- Senior Geospatial Developer – Xue Gao, MS
- Full Stack Developer – Tianyi Sun, MS
- Remote Sensing Analyst – Zhehan Tang, PhD
- Biometeorologist – Frank Anderson, MS
- Agricultural Scientist – Adriana Joosep, BS
- Project Manager/Client Relations – Casey Gudel, MS
- Assistant Project Manager/Client Relations – Kylie Applemun, BS
- GIS Analyst – Justin Sitton, BS
- Support Staff – Various as needed

Land IQ also welcomes input and collaboration with RRBWSD and GSA staff and individual growers.

Scope Confidentiality: This scope of work is considered confidential in nature, and is intended for review and consideration only by the addressees or direct representatives of the organization in the “Prepared For” line.

TASKS

This scope of work has been developed based on discussions for RRBWSD and GSA. These tasks include:

- **Task 1** – Irrigation Management Tool: Daily Field-by-Field ET and Precipitation

Each of these tasks is discussed in detail below and includes schedule, deliverables, and cost.

TASK 1. IRRIGATION MANAGEMENT TOOL: DAILY FIELD-BY-FIELD ET AND PRECIPITATION

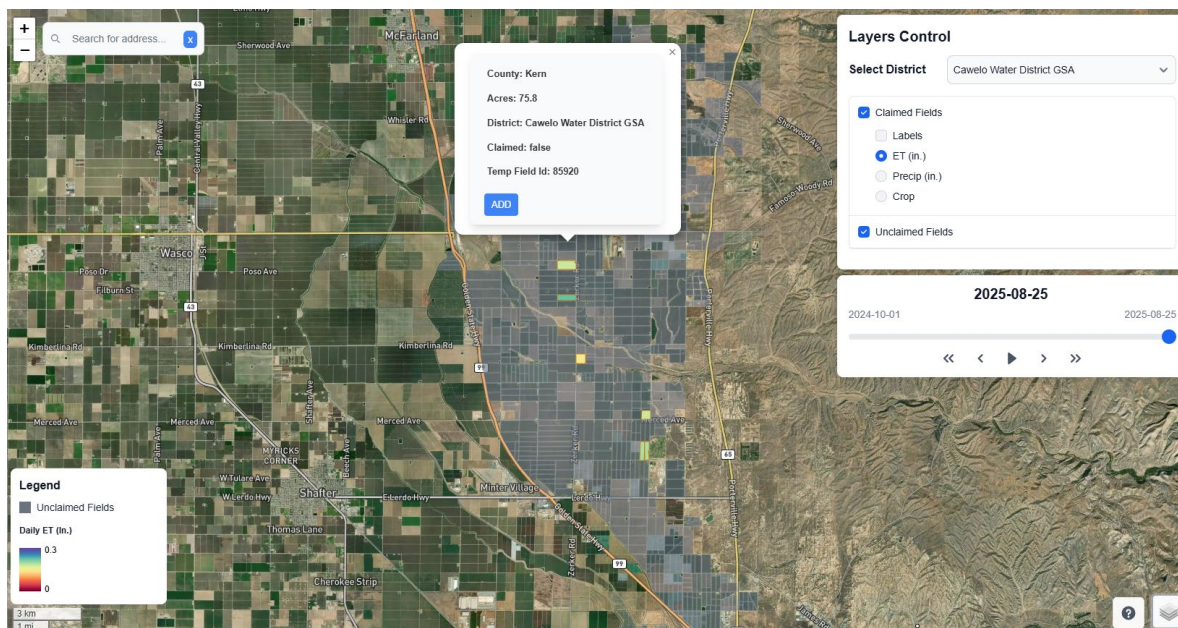
Scope of Work: Land IQ has developed a grower-level, field-by-field, daily ET product portal (see visual examples below).

The development of this tool is in response to grower demands to access daily ET and precipitation results, within 1-2 days. This is for the purpose of individual water management decision-making. For consistency, the results of this daily product will be reconciled against and will match the proven results of the 30-day ET results that are currently provided and proposed in this scope of work. The goal is for growers to track their water use on a daily basis in relation to a district-, GSA-, or grower-defined threshold. This will allow the grower to adjust water management decisions during the year on a real time basis to achieve, and hopefully not exceed, this threshold.

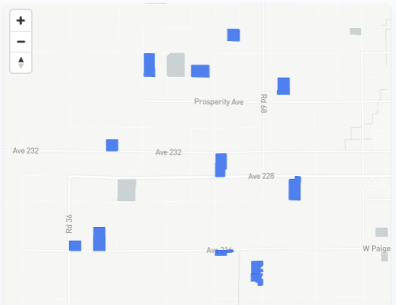
There is both a grower portal and a manager/administrative-level portal. Visual examples of both are provided below. The grower only sees the results of his/her fields, while the administrative user-level sees all individual grower fields and is provided with area-wide (e.g., GSA, irrigation or water storage district, or similar entity) summaries of accumulated consumption, precipitation, grower participation, crop type, field-level results, etc.

All results are continuously updated and downloadable at any time in Excel format for the use by the individual grower or manager entity.

Grower Portal Examples:



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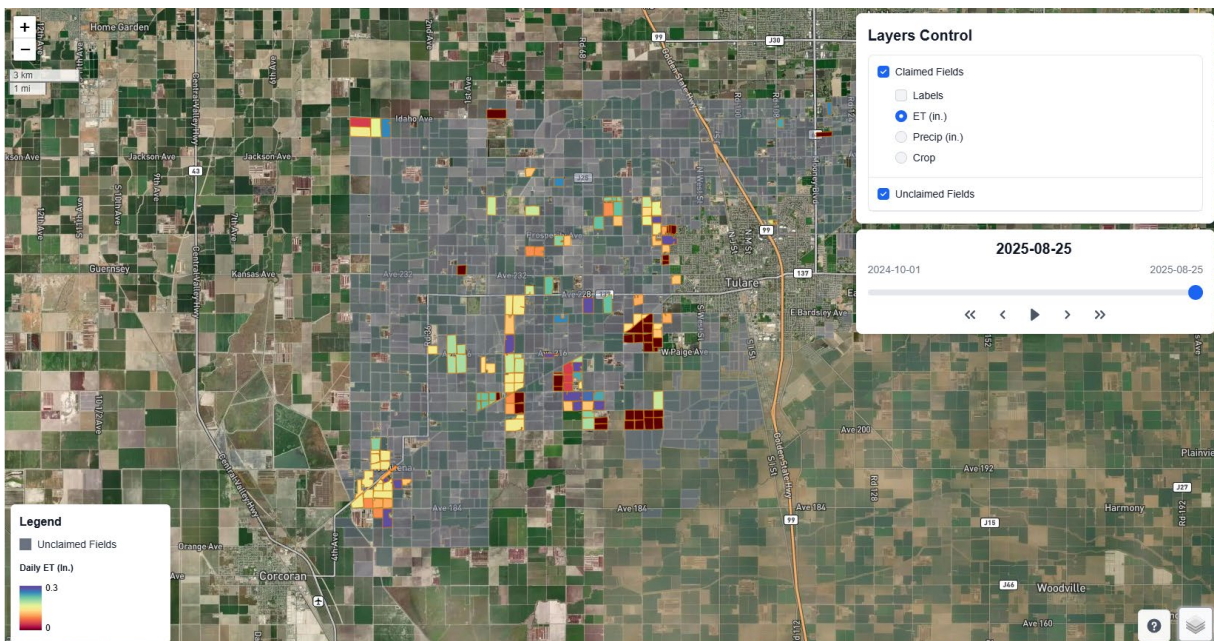


Claimed Fields			
FIELD NAME	ENTITY	TARGET_WATER	CROP 1
AZ Dairy Home Ranch #1	None	33 Inches (ET)	Forage Mix (2024-11-20 - 2025-03-25)
AZ Dairy Home Ranch #2	None	40 Inches (ET)	Alfalfa (2024-10-01 - 2025-09-30)
AZ Dairy Home Ranch #3	None	35 Inches (ET)	Corn (field) (2025-03-20 - 2025-08-06)

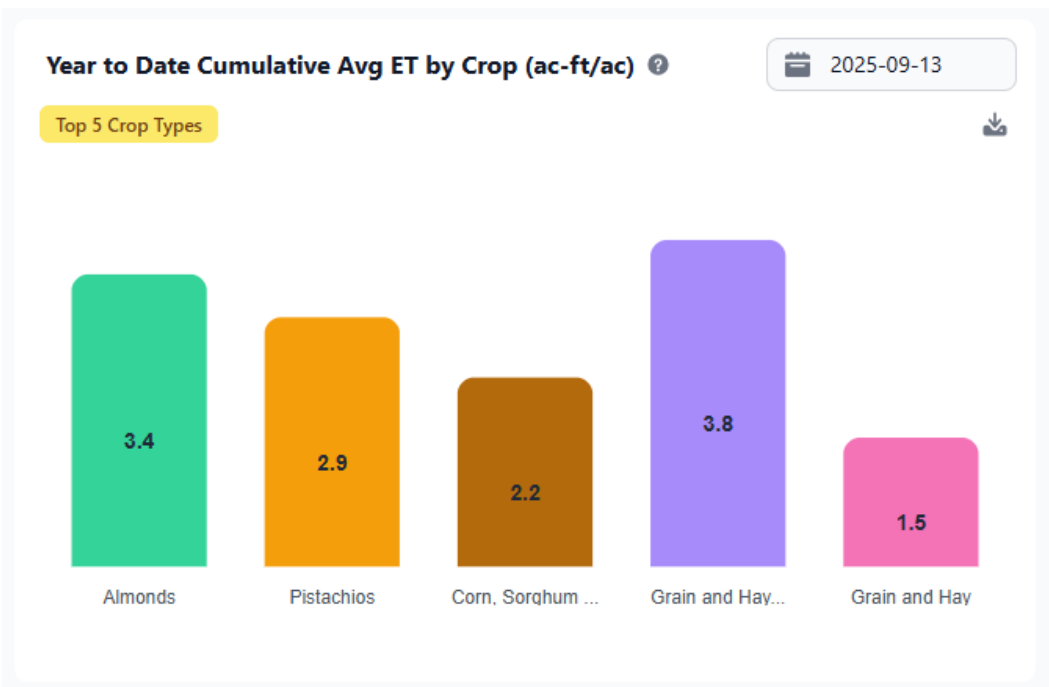
Showing 1 - 3 of 14



Additional Manager Portal Summaries:



Scope Confidentiality: This scope of work is considered confidential in nature, and is intended for review and consideration only by the addressees or direct representatives of the organization in the "Prepared For" line.



SCHEDULE

This scope of services is intended to cover a 3-year duration:

Beginning Water Year Date: October 1, 2025

Ending Water Year Date: September 30, 2028

TOTAL COST AND PAYMENT TERMS

As of 2025 Land IQ mapping, there are approximately 31,268 cropped and/or managed acres across both the RRBWSD and GSA as delineated fields. Please note that because this daily tool is intended to be an irrigation management resource, only cropped and/or actively managed fields are considered. Costs are only associated with those cropped and/or managed acres.

Table 1. Cropped and/or Managed Fields and Associated Cost Estimates.

RRBWSD and GSA	Proposed – 3 Years		
	October 1, 2025 – September 30, 2026	October 1, 2026 – September 30, 2027	October 1, 2027- September 30, 2028
Analysis Acres	31,268	31,268	31,268
Cost (\$)/Acre/Year	\$0.55	\$0.57	\$0.59
Annual Cost	\$17,197.40	\$17,822.76	\$18,448.12
Monthly Cost	\$1,433.12	\$1,485.23	\$1,537.34

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3f.



From: Rachelle Echeverria/Markus Nygren

Re: KSB-10: RMW Data Gaps

P/MA Number	P/MA Name	Summary Description			Relevant Sustainability Indicators Affected			Overdraft Correction Description Category	Circumstances for Implementation	Public Noticing Process	Permitting and Regulatory Process Requirements	Status	Timetable / Circumstances for Initiation	Timetable for Completion
					Groundwater Levels & Storage	Groundwater Quality	Land Subsidence							
Management Actions		Implemented	Functional	In-Process	As-Needed									
KSB-10	RMW Data Gaps	An assessment of level and quality data gaps identified RMN data gaps for water levels and quality. Identified data gaps will be evaluated and addressed by the end of 2026 as specified in Section 15.			✓	✓	✓	NA	NA	NA	Permitting will be required if new wells need to be drilled	Ongoing	NA	2026

Timetable for Accrual of Expected Benefits	Expected Benefits							Source(s) of Water, if applicable	Legal Authority Required	Estimated Costs		
	Primary (AFY)		Secondary							One-time Costs	Ongoing Costs (per year)	Potential Funding Source(s)
	Water Supply Augmentation	Demand Reduction	Water Quality Improvement	Flood Control	Water Management Flexibility / Efficiency	Mitigation Programs	Data Gap Filling/ Monitoring					
Implemented		Functional		In-Process			As-Needed					
2026-	0	0					✓	NA	NA	Unknown at this time	Unknown at this time	Unknown at this time



ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT
GROUNDWATER SUSTAINABILITY AGENCY

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(661)589-6045
www.rrbwsd.com

November 25, 2025

To: Stakeholder Advisory Group
Rosedale-Rio Bravo Water Storage District
Agenda Item: 3f

From: Rachelle Echeverria

Re: KSB-10 RMW Data Gaps

Discussion:

As part of the Subbasin's work to strengthen the Representative Monitoring Network (RMN), a hexagon-based spatial analysis was conducted to evaluate monitoring coverage for both groundwater levels and groundwater quality.

The Subbasin was divided into uniform hexagons to ensure consistent geographic spacing and to identify areas where existing wells do not provide sufficient data to evaluate trends or support Sustainable Management Criteria (SMCs).

Each GSA was then assigned hexagons within its jurisdiction to review and, if needed, fill identified data gaps.

Rosedale was assigned two hexagons with groundwater quality gaps requiring additional monitoring wells.

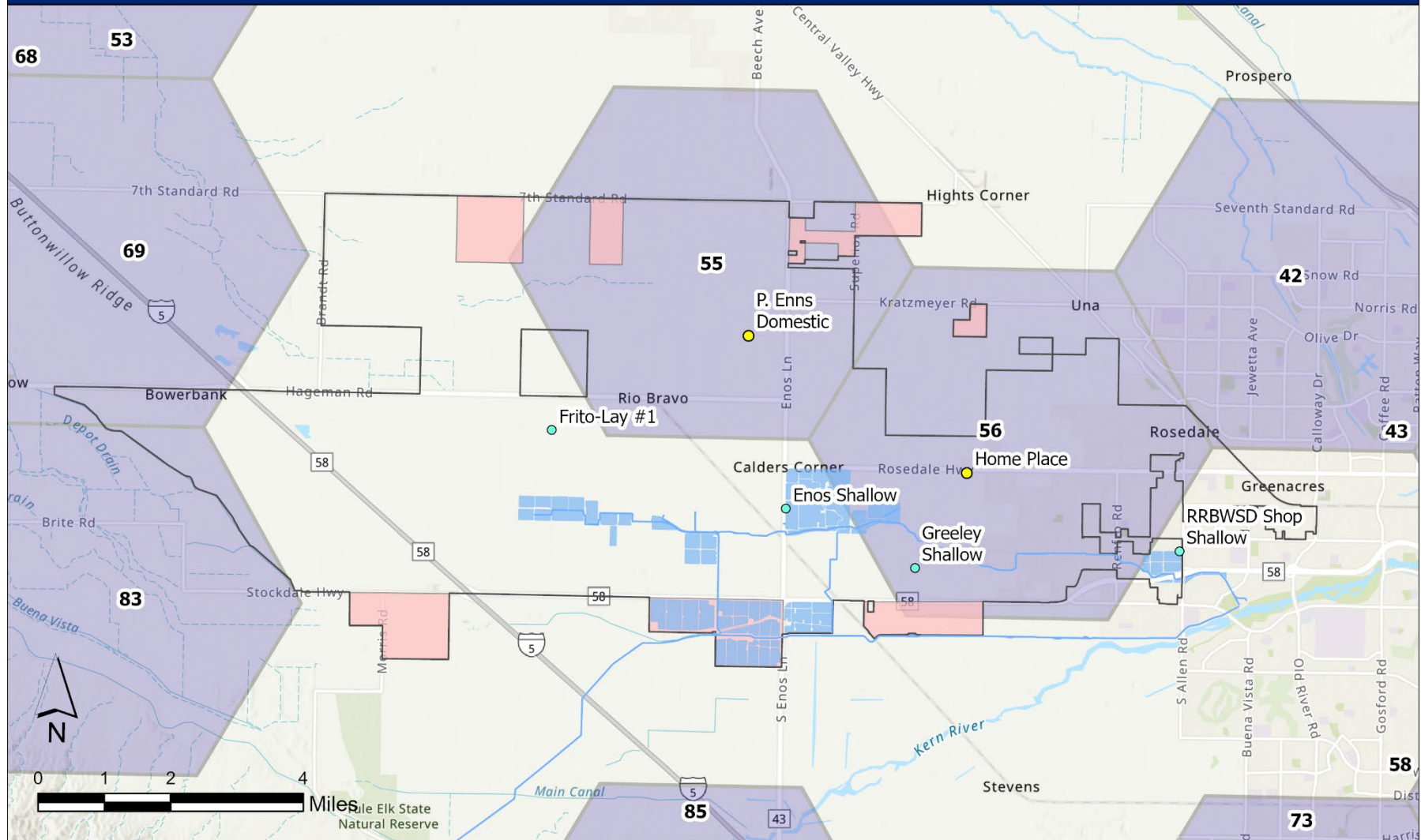
Hexagon 55 – Groundwater Quality Gap

- Gap Identified: Insufficient groundwater quality data within the hexagon.
- Rosedale Action: Working on getting samples from the P. Enns Domestic well as a potential representative well to fill this gap.
- Status: Will be sampled for eligibility within the coming weeks.

Hexagon 56 – Groundwater Quality Gap

- Gap Identified: Insufficient groundwater quality data within the hexagon.
- Rosedale Action: Sampled RMW-064 (Home Place) for SGMA constituents of concern.
- Rationale: Well location, construction, and water quality suitability make it appropriate to continue as the representative well.
- Status: RMW-064 (Home Place) will remain in Rosedale's RMN for ongoing monitoring.

RRBWSD GSA Groundwater Quality Monitoring Network and Groundwater Quality Data Gaps Bakersfield, CA



- Conveyance Facilities
- Recharge Ponds
- RRBWSD GSA White Lands
- RRBWSD GSA Boundary
- Representative Monitoring Wells
- GWQ_DataGaps
- Potential_DataGap_Filler

RRB ROSEDALE-RIO BRAVO
WATER STORAGE DISTRICT

RRBWSD
GSA
ROSEDALE RIO BRAVO WATER STORAGE DISTRICT
GROUNDWATER SUSTAINABILITY AGENCY

BUILDING A SUSTAINABLE WATER SUPPLY TO HELP OUR COMMUNITY THRIVE

**KERN SUBBASIN GSP
COST SHARING AGREEMENT (25-01)**

This Cost Sharing Agreement ("Agreement") is entered into on 11/14/2025 by and among the following Groundwater Sustainability Agencies ("GSAs") and Management Areas located within the Kern Subbasin, each a "Party" and collectively referred to as the "Parties":

South of Kern River GSA Group

1. Arvin GSA
2. Wheeler-Ridge Maricopa GSA
3. Tejon-Castac Water District GSA

Kern River GSA

4. Kern Delta Water District
5. City of Bakersfield
6. KCWA Improvement District No. 4

North Central Kern GSA Group

7. Southern San Joaquin Municipal Utility District GSA
8. Shafter-Wasco Irrigation District GSA
9. Shafter-Wasco 7th Standard Annex
10. North Kern Water Storage District GSA
11. Cawelo Water District GSA

12. Semitropic Water Storage District GSA

13. West Kern Water District GSA

14. KCWA - Pioneer GSA

15. Kern Water Bank GSA

16. Kern-Tulare Water District GSA

17. Eastside Management Area

18. Westside District Water Authority GSA

19. Rosedale-Rio Bravo Water Storage District GSA

20. Henry Miller Water District GSA

21. Olcese Water District GSA

22. Buena Vista GSA

RECITALS:

WHEREAS, prior to the State Water Resources Control Board's ("SWRCB") hearing on the Kern Subbasin, held on September 17, 2025, the Parties collectively revised and submitted Groundwater Sustainability Plans ("GSPs") for the Kern Subbasin to satisfy the requirements of the Sustainable Groundwater Management Act ("SGMA");

WHEREAS, following the September 17, 2025 hearing, the SWRCB recommended that the Kern Subbasin be returned to oversight by the Department of Water Resources ("DWR") provided the Kern Subbasin addresses issues identified by the SWRCB;

WHEREAS, several Parties will retain consultants to perform the work necessary to meet the requirements for returning to DWR oversight, with each consultant engaged under a separate agreement with its respective Party;

WHEREAS, the total cost of the consultant work is estimated to be Seven Hundred Twenty-One Thousand Nine Hundred Twenty-Five Dollars (\$721,925), as set forth in the scopes of work attached hereto and incorporated herein as **Exhibits A through F** (collectively, the "Scopes of Work");

WHEREAS, the Parties acknowledge that sharing the costs associated with this process is beneficial and cost-effective;

WHEREAS, the Parties wish to appoint Buena Vista Water Storage District as the custodian of the shared funds for the purpose of this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Parties agree as follows:

AGREEMENT TERMS:

1. Cost Sharing: The Parties agree to collectively share the total cost of \$721,925 for the Scopes of Work, with each Party contributing an equal 1/22 share of the total cost. The Parties will contribute their share of the total cost over two cash calls with the first occurring this year to cover the work to be completed in 2025 and a future cash call to cover the work done in 2026. A Party must timely complete its cost-share contribution before it is entitled to joint ownership of work product under paragraph 7.

2. Payment to Buena Vista Water Storage District: The Parties shall deposit their respective contributions with Buena Vista Water Storage District, which will serve as the custodian of the funds. In order for a Consultant's fee to be eligible for cost sharing under this Agreement, it must be consistent with the Scopes of Work, and the Consultant must be under contract with at least one Party. Consultant invoices will be sent directly to the contracting Party, and a copy of each invoice shall be forwarded to Buena Vista Water Storage District for payment following review by the Parties for consistency with the scopes of work. The Plan Manager will facilitate the Parties' timely review of invoices.

3. Accounting: Buena Vista Water Storage District shall maintain accurate accounting records and other documentation pertaining to all monies concerning this Agreement. Such records and documentation shall be kept at Buena Vista Water Storage District's office during the term of this Agreement, and for a period of three (3) years from the date the final invoice is received from any of the Parties. Buena Vista Water Storage District shall, at any time during regular business hours, make available to any requesting Party the accounting records pertaining to that requesting Party.

4. Amendments: This Agreement may only be amended in writing and signed by all Parties hereto.

5. Governing Law: This Agreement shall be governed by and construed in accordance with the laws of the State of California.

6. Joint Ownership of Work Product: All work product generated pursuant to this Agreement shall be jointly owned by the Parties so that each will have access and ability to utilize said work product.

7. Electronic Signatures: Electronic signatures shall be binding.

EXECUTION:

IN WITNESS WHEREOF, the Parties hereto have executed this Cost Sharing Agreement as of the date first above written.


[Signature Block for Each Entity]

Arvin GSA


Signed by:

E1C82EE4B0C1471...
Derek Yurosek, Director

Wheeler-Ridge Maricopa GSA

Signed by:

20AA0A3F61324E8...
Dennis Atkinson, President

Tejon-Castac Water District GSA

DocuSigned by:

FB7E48CF267E471...
Angelica Martin, Board Secretary

Kern Delta Water District

DocuSigned by:

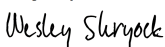
ECC3BE39CF14479...
Rodney Palla, Board Chair

City of Bakersfield


Signed by:

B0F5C71B20C0438...
Bob Smith, City Councilmember


KCWA Improvement District No. 4

Signed by:

27BA10EDD482475...
Wesley Shryock, General Manager


Southern San Joaquin Municipal Utility District

Signed by:

C047AC533A5B40B...
Roland Gross, General Manager

Shafter-Wasco Irrigation District GSA

Signed by:

C4329A6C5DE943C...
Randy Bloemhof, Board Member

Shafter-Wasco 7th Standard Annex

Signed by:

C4329A6C5DE943C...
Randy Bloemhof, Board Member

North Kern Water Storage District GSA

DocuSigned by:

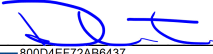
4C0864CFA3734FE...
Kevin Andrew, Board President

Cawelo Water District GSA

Signed by:

AADF128C7D204F5...
David Halopoff, Assistant General Manager

Semitropic Water Storage District GSA

DocuSigned by:

800D4EE72AB6437...
Dan Waterhouse, Board President

West Kern Water District GSA

Signed by:


EEA85AEC18784B5...
Greg A. Hammett, General Manager

KCWA - Pioneer GSA


DocuSigned by:

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Lauren Bauer, Water Resources Manager

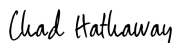
Kern Water Bank GSA

Signed by:

D28EB72F4F18408...
Joseph Butkiewicz, General Manager

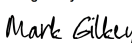
Kern-Tulare Water District GSA

DocuSigned by:

A98E2F5BB6E84BD...
Skye Grass, General Manager


Eastside Water Management Area

DocuSigned by:

850F9CA517E54A3...
Chad Hathaway, President

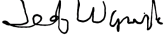
Westside District Water Authority GSA

Signed by:

1AA944CDF9614D3...
Mark Gilkey, Executive Director


Rosedale-Rio Bravo Water Storage District GSA

DocuSigned by:

0AF A98D07C50427...
Dan Bartel, Engineer-Manager


Henry Miller Water District GSA


DocuSigned by:

67E7223A9FF4465...
Jeof Wyrick, President, Chairman

Olcese Water District GSA

DocuSigned by:

D9EC12EDC08748A...
James L. Nickel, President

Buena Vista GSA

DocuSigned by:

C2845D15127A462...
Terry Chicca

DocuSigned by:

341D61C8B51642C...
Tim Ashlock, Engineer-Manager

Kern Subbasin Cost Share Agreement (25-01)

	<u>Date:</u>	<u>Amount:</u>
Base Agreement (25-01):	11/1/2025	\$721,925.00

Exhibit A - Subsidence Monitoring Program:

Aquilogic:	10/1/25 - 3/31/26	\$66,700.00
EKI:	10/1/25 - 12/31/26	\$149,700.00
Intera:	10/1/25 - 3/31/26	\$85,928.00
Todd GW:	10/1/25 - 3/31/26	\$34,700.00
		<hr/>
		\$337,028.00

Exhibit B - Data Gaps Analysis and Well Inventory:

LSCE:	10/1/25 - 12/31/25	\$67,000.00
GEI:	10/1/25 - 12/31/25	\$23,640.00
		<hr/>
		\$90,640.00

Exhibit C - Water Quality Monitoring / Well Mitigation Program:

Kahn, Soares & Conway	10/1/25 - 12/31/25	\$40,500.00
		<hr/>
		\$40,500.00

Exhibit D - Outreach and Engagement:

Intera:	10/1/25 - 9/30/26	\$87,000.00
		<hr/>
		\$87,000.00

Exhibit E - Annual Report Prep / Support:

Todd GW:	10/1/25 - 4/30/26	\$92,700.00
GEI:	10/1/25 - 4/30/26	\$40,000.00
		<hr/>
		\$132,700.00

Exhibit F - Kern Subbasin POC/Plan Manager:

Rincon	10/1/25 - 12/31/25	\$34,057.00
		<hr/>
		\$34,057.00

Total:	<hr/> <hr/>	\$721,925.00
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1/22 =		\$32,814.77
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Exhibit A - Subsidence Monitoring Program:

Aquilologic:	10/1/25 - 3/31/26	\$66,700.00
EKI:	10/1/25 - 12/31/26	\$149,700.00
Intera:	10/1/25 - 3/31/26	\$85,928.00
Todd GW:	10/1/25 - 3/31/26	<u>\$34,700.00</u>
		\$337,028.00



245 Fischer Avenue, Suite D-2
Costa Mesa, CA 92626
Tel. +1.714.770.8040
Web: www.aquilologic.com

September 30, 2025

(revised October 10, 2025)

Kristin Pittack

Kern Subbasin SGMA Point of Contact

sent via email to:

kpittack@rinconconsultants.com

Re: Estimated Budget - SGMA Technical Consulting Support

Dear Kristin:

Per the request of the Subbasin Managers, Aquilologic Inc. (**aquilologic**) is submitting this proposed scope of work and cost estimate to provide SGMA technical consulting support to the Kern Subbasin. The period of support covered by this submittal is September 30, 2025, through March 31, 2026. To date, our work has focused on the deficiencies identified by the Department of Water Resources (DWR) in the various iterations of the Subbasin Groundwater Sustainability Plan (GSP), with special emphasis on the causes and rates of Subbasin land subsidence and the distinction between Groundwater Sustainability Agency (GSA)-related versus non-GSA causes of subsidence.

Background

On September 17, 2025 the State Water Resources Control Board (SWRCB) determined that the seven Final 2025 Subbasin GSPs were conditionally approved for referral back to the DWR pending SWRCB Staff review of the seven Final Subbasin 2025 GSPs and comparison with the associated redline versions. The SWRCB review is anticipated to be complete in approximately six to eight weeks. Assuming there will be no further technical concerns raised by SWRCB Staff, the Subbasin Coordination Committee (SCC) has embarked on implementing the 2025 GSP. To help achieve the twin objectives of sustainability and SGMA implementation compliance, the SCC had formed an advisory technical working group (TWG). The TWG is comprised of current GSA technical consultants, including **aquilologic**.

Our understanding of the purpose of this scope of work and cost estimate is to assist the Subbasin in successfully implementing the 2025 GSP, including the initial GSP Quarterly monitoring and reporting requirements through the end of 2025 and identifies critical path tasks for subsidence compliance that will be conducted during the first Quarter (Q1) of 2026. Work items for the remainder of 2026 will be identified and discussed with the Subbasin



Managers after planned Subsidence Subcommittee meetings with CASP and DWR. This **aquilologic** scope of work consists of four tasks briefly described below:

Task 1: 2025 California Aqueduct Working Group Technical Support

Aquilologic will, in association with the relevant Subbasin managers and Subsidence Subcommittee members, interact with the DWR, and pertinent agencies (e.g., California Aqueduct Subsidence Project [CASP], Geologic Energy Management [CalGEM] etc.) as needed to address Aqueduct subsidence-related concerns and assist in the preparation of technical responses to any potentially unresolved items pertaining to Aqueduct subsidence identified by the SWRCB as part of their final review of the Subbasin 2025 GSPs. In addition, **aquilologic** will;

- Participate in three, 1-hour Aqueduct Working Group technical meetings to discuss data results and compliance strategy
- Coordinate with the Subbasin DMS consultant (GEI) and relevant Subsidence Subcommittee members to identify a straightforward and coherent process to upload and utilize Aqueduct and Subbasin-wide subsidence data accrued by Subbasin GSAs. As currently planned the body of the subsidence DMS task work will be conducted in 2026 by GEI.

Task 2: 2025 Subbasin Technical Support

Aquilologic will, in association with the pertinent Subbasin Managers and Subsidence Subcommittee members, interact with the DWR, and relevant agencies (e.g., California Aqueduct Subsidence Project [CASP], Geologic Energy Management [Cal GEM] etc.) as needed to address Subbasin subsidence-related concerns and assist in the preparation of technical responses to any potentially unresolved items pertaining to Subbasin subsidence identified by the SWRCB as part of their final review of the Subbasin 2025 GSPs. In addition, **aquilologic** will;

- Participate in two Subbasin technical meetings per month of 1.5 hours each
- Prepare the initial baseline set of Aqueduct mile post IM/MT compliance charts for the Northern pools (approximately 60 mile posts) in close consultation with the Subbasin Subcommittee. In the future this analysis will be conducted by the relevant GSAs (or group of GSAs) per the Subbasin Subsidence Action Plan
- Prepare the Subbasin Subsidence Exceedance Investigation/Report SOP element in close consultation with the Subsidence Subcommittee
- Review and incorporate relevant and applicable DWR subsidence best management practices (BMPs) in the drafting of necessary Subbasin subsidence monitoring standard operating procedures (SOPs) in close collaboration with the Subsidence Subcommittee. The



Draft Subsidence SOPs will be reviewed by the SCC before requesting subsequent input from DWR and CASP prior to finalization

- Conduct Quarterly InSAR review/QA/QC
- Participate in an initial meeting with CASP to discuss Subbasin subsidence status and proposed monitoring, InSAR data processing and Subbasin reporting methodologies etc.

Task 3: 2026 California Aqueduct Working Group Technical Support

Per the request of Subbasin Mangers, this SOW includes some preliminary 2026 critical path tasks for Aqueduct subsidence monitoring and compliance identified in the GSP report now under final review for approval by the SWRCB and the DWR. It is expected that additional tasks and schedule adjustments will be identified during planned technical discussions with DWR and/or CASP. That work will be the subject of a separate future SOW and discussions with Subbasin Mangers. This subject SOW includes the following preliminary 2026 Aqueduct Working Group task elements.

- Participate in CASP Quarterly Check-in meetings to discuss the status of Aqueduct monitoring and P/MAs. Assumes 4-2hour meetings, plus 4-1hour Aqueduct Working Group preparation meetings
- Conduct Annual review of DWR benchmark survey data
- Compile next Aqueduct Northern Pool mile post IM /MT compliance charts (with GSA support/participation)
- Review the status of GSA targeted P/MA data designed to ameliorate groundwater levels and/or subsidence within the CASP 5-mile wide Aqueduct monitoring zone
- Review of Aqueduct-related exceedance notifications/investigation plans in collaboration with relevant GSAs and Subsidence Subcommittee members

Task 4: 2026 Subbasin Technical Support

Per the request of Subbasin Mangers, this SOW includes some preliminary 2026 critical path tasks for Subbasin subsidence monitoring and compliance which are identified in the GSP report currently under final review for approval by the SWRCB and the DWR. As noted in Task 3 it is expected that additional tasks and schedule adjustments will be identified during planned technical discussions with DWR and/or CASP. That additional work will be the subject of a separate future SOW and discussions with Subbasin Mangers. This subject SOW includes the following preliminary 2026 Subbasin Technical Support task elements.



re: Request for GSP Implementation Budget

- Participate in Q1 2026 Subbasin technical meetings. Assumes one meeting per month at 1.5 hours each.
- Consultation with the Subsidence Subcommittee
- Provide support to the Subbasin critical head analysis and review to be conducted by Intera
- Subbasin InSAR data review/QA/QC being accrued from DWR by Todd
- Support Subbasin CGPS location recommendation analysis to corroborate InSAR data
- Support DMS template integration (template developed by GEI)
- Support/review subsidence-related elements in the Annual Report being prepared by Todd

It is possible that new InSAR time series may be needed to help assess potential causes of subsidence, or the existing InSAR time series locations will require updating. In that eventuality a separate budget estimate for those items will be provided once the specific InSAR data processing methodology is coordinated between the Subbasin and DWR and CASP.

Estimated Budget

The following is the proposed estimated budget for the period September 30, 2025, through March 31, 2026, for Tasks 1 through 4 described above:

#	Task	Estimated Budget
1	2025 Aqueduct Support	\$8,400
2	2025 Subbasin Support	\$31,800
3	2026 Q1 Aqueduct Support	\$12,000
4	2026 Q1 Subbasin Support	\$14,500
TOTAL		\$66,700

Closing

All work will be billed on a time and materials basis up to a total amount above according to the attached preferred client fee schedule. Should a supplemental budget be required to complete the entire scope, a change order will be provided for your approval. No such supplemental or additional work will be performed without prior authorization. Should Subbasin request that additional or supplemental work be performed, we will invoice the Subbasin for this work on a time and materials basis. We look forward to continuing our support to the Kern Subbasin.



re: Request for GSP Implementation Budget

Should you have any questions, please do not hesitate to contact me at +1.714.770.8040 ext.133 or tom.watson@aquilologic.com.

Sincerely,
aquilologic, Inc.

Thomas Watson, PG
Principal Geologist

cc: Morgan Campbell, WDWA
Encl.: 2025 Fee Schedule



245 Fischer Avenue, Suite D-2
Costa Mesa, CA 92626, USA
Tel.: +1.714.770.8040
Web: www.aquilologic.com

2025 SCHEDULE OF FEES: CONSULTING SERVICES FOR PREFERRED CLIENTS

1. Professional Services

Professional Services performed by personnel of **aquilologic** (including full-time, part-time, and contract staff) for hours spent on project activity, including office, field, and travel time, will be charged as follows (in U.S. Dollars):

Professional Personnel	Rate	Professional Personnel	Rate
Principal-in-Charge	\$440	Project Consultant	\$230
Senior Principal Consultant	\$380	Staff Consultant	\$170
Principal Consultant	\$355	Project Accountant (CPA)	\$230
Project Manager/ Senior Consultant	\$290	Intern or Technician	\$95

Unless otherwise agreed to in writing, time will be billed in half hour increments. All overtime (hourly or non-exempt support staff) will be billed at 1.25 times the above rates. Night, weekend, and holiday work requested by the client (all staff) will be billed at 1.25 times the above rates. Specialist services (e.g., consulting boards, advisory panels or similar specialist consultation, trial preparation) will be billed at 1.5 times the above rates (with a four-hour minimum). Deposition and trial testimony will be billed at \$880 per hour (with a four-hour minimum).

This fee schedule is effective for the calendar year indicated at the top of this page. **Aquilologic** will issue a new fee schedule in December of each year that will apply for services performed in the subsequent year unless a new separate, client-specific fee schedule is negotiated for any subsequent year.

2. Subsistence and Expenses

Living and travel expenses incurred by personnel of **aquilologic** associated with a project will be charged at cost plus twelve percent (12%). A fixed per diem can be negotiated for specific projects. All airline travel exceeding four hours airport gate to gate (on the most direct route) will be in business class.

3. Materials, Subcontracts, and Equipment Rental

Direct material, equipment, outside services, and other expenses contracted or incurred by **aquilologic** on behalf of a project will be charged at cost plus twelve percent (12%), excluding contract staff. These disbursements include but are not limited to: Field equipment (e.g., field vehicles, testing equipment); subcontractor services (e.g., laboratory analyses); materials and supplies (e.g., sampling supplies); and other expenses (e.g., work permits, bonds). Postage, non-overnight shipping, telephone (office and cellular), office computing, facsimile, photocopying (excluding color), and miscellaneous office supplies are now included in the hourly rate.

4. Billings

Statements normally will be issued monthly, or at the completion of the project, and are payable upon receipt, unless otherwise agreed in writing by **aquilologic**. Interest, at the rate of one percent (1%) per month, not to exceed the maximum rate allowed by law, will be payable on any amounts not paid within thirty (30) days; payment thereafter to be applied first to accrued interest and then to the principal unpaid amount. Unless otherwise specified in other contract documents or project proposal, all work on a project will cease should any invoice remain unpaid 60 days after the invoice has been submitted to the client. Work will not recommence until the account has been made current; that is, all outstanding invoices (including accrued interest) have been paid.

For projects where **aquilologic** experts are offering testimony at deposition, trial, and/or part of an administrative hearing, all outstanding invoices must be paid prior to such testimony.

5. Indemnity

aquilologic shall indemnify, defend, and hold Client harmless from and against all claims, liabilities, suits, loss, cost, expense and damages for injury to or death of persons or damage to or destruction of property arising in



245 Fischer Avenue, Suite D-2
Costa Mesa, CA 92626, USA
Tel.: +1.714.770.8040
Web: www.aquilologic.com

connection with and to the extent of Consultant's negligence in the performance of the Services under this Agreement.

6. Warranty

aquilologic warrants that the Services shall be performed in accordance with the standards customarily provided by an experienced and competent professional engineering organization performing the same or similar Services. Consultant shall re-perform at its own expense any of said Services which were not performed in accordance with this standard, provided that Consultant is notified in writing of the nonconformity within twelve (12) months after the performance of the deficient Services, and provided further that the cost to Consultant of such remedial Services shall not exceed the amount paid to Consultant under this Agreement. The foregoing are Consultant's entire responsibilities and Client's exclusive remedies for Services performed or to be performed hereunder, and no other warranties, guarantees, liabilities or obligations are to be implied.

7. Consequential Damages

In no event shall **aquilologic** or its sub-consultants/sub-contractors or vendors of any tier be liable in contract, tort, strict liability, warranty, or otherwise for any special, indirect, incidental, or consequential damages such as but not limited to loss of product, loss of use, non-operation, or increased costs of operation of equipment or systems, loss of anticipated profits or revenue, costs of capital, or cost of purchased or replacement equipment or systems.

8. Limitation of Liability

In no event shall the total aggregate liability of **aquilologic** exceed the amount paid by Client for the Services performed.

9. Disputes

Any disputes between the Parties which arise out of this Agreement which cannot be settled amicably by the Parties shall be submitted to and settled under the arbitration rules of the American Arbitration Association with proceedings in Los Angeles, California. Such disputes shall be governed in accordance with the laws of the state of California, U.S.A.

10. Confidentiality

aquilologic and the Client agree to keep confidential all Information supplied by others and not to utilize, either directly or indirectly, any information for any purpose other than related to Services being performed, or to disclose it to anyone, including partners and affiliated companies, except on a "need to know" basis, without prior written consent from the party providing said confidential information. If required, **aquilologic** and the Client shall execute a non-disclosure or confidentiality agreement (NDA) that further defines the provision, use and disclosure of confidential information.

11. Termination

Client may at any time, by fifteen (15) days written notice to **aquilologic**, terminate all or any part of the unperformed Services under this Agreement. In such event, **aquilologic** shall be compensated for Services performed to the effective date of termination, plus the reasonable costs of demobilization and settlement of subcontracts, purchase orders, and other commitments incurred by **aquilologic** for performance of the Services.

12. Entire Agreement

In the absence of any other executed agreement, this schedule of fees and accompanying proposal constitute the entire agreement between the Client and **aquilologic** for the Services to be performed. No modification shall be effective unless it is in writing and executed by both Parties. This Agreement supersedes any and all other agreements between the Parties, whether written or oral, with respect to the subject matter hereof.



Corporate Office
2001 Junipero Serra Boulevard, Suite 300
Daly City, CA 94014
(650) 292-9100
ekiconsult.com

9 October 2025

Kristin Pittack
Kern Subbasin Plan Manager
via email: kpittack@rinconconsultants.com

Subject: Proposal for Kern County Subbasin Subsidence Subcommittee Support through 2026
Kern County Subbasin, Kern County, CA
(EKI C20055.13)

Dear Ms. Pittack:

The Kern County Subbasin (Subbasin) managers have requested that EKI Environment and Water, Inc. (EKI) prepare a Scope of Work and budget to support the Subsidence Subcommittee in its implementation of the coordinated Kern County Subbasin Groundwater Sustainability Plan (2025 Plan). In addition to being a technical member of the Subbasin-wide subsidence subcommittee, EKI has been identified as a Technical Working Group (TWG) lead for the California Aqueduct Working Group.

SCOPE OF WORK

The following scope of work focuses on key tasks identified by the Subsidence Subcommittee on 25 September 2025. The tasks have been separated into those that will be performed for the (1) California Aqueduct Working Group or (2) Subbasin Subsidence Subcommittee, per direction provided by the Kern Subbasin Managers on 3 and 8 October 2025. Tasks 1 and 2 will be completed in 2025 and Tasks 3 and 4 will be completed in 2026. It is understood that additional tasks may be identified in 2026 pursuant to additional work authorizations.

Task 1 – 2025 California Aqueduct Working Group

Task 1 involves 2025 work associated with supporting the California Aqueduct Working Group, including communication with the California Aqueduct Subsidence Program (CASP). EKI work efforts will include the following:

- Co-leading the California Aqueduct Working Group, including development of meeting agendas and materials as needed.
- Preparation for and attendance at the first virtual quarterly meeting with CASP, tentatively scheduled for early December 2025.
- Review and conduct quality checks of the California Aqueduct benchmark survey data and quarterly InSAR data along the California Aqueduct.
- Support Interim Milestone (IM) and Minimum Threshold (MT) exceedance notifications.
- Development of Sustainable Management Criteria (SMC) compliance graphics to support CASP discussions.
- Development of a Standard Operating Procedure (SOP) for updating SMC compliance graphics.

Kristin Pittack
Kern Subbasin Plan Manager
9 October 2025
Page 2 of 7



Key Assumptions:

- Attendance by up to two EKI personnel at three (3) California Aqueduct Working Group meetings; meetings will be one-hour in length.
- Attendance by up to two EKI personnel at one two-hour meeting with CASP.
- All meetings will be conducted virtually.
- Compliance graphics will focus on the southern portion of the California Aqueduct, from Pools 31 to 35.
- Exceedance notifications will be communicated to GSA(s) directly. Notifications will transition to being issued through the Kern Data Management System (DMS) in 2026.

Deliverables:

- CASP meeting material(s)
- SMC compliance graphics along the California Aqueduct (co-produced by California Aqueduct Working Group)
- SOP for updating SMC compliance graphics

Task 2 – 2025 Subbasin Subsidence Subcommittee

Under Task 2, EKI will provide technical support to the Subbasin Subsidence Subcommittee during 2025. EKI support will include the following:

- Technical review of subsidence-related data, including InSAR data summaries for the Hydrogeological Conceptual Model (HCM) Areas.
- Supporting the Subbasin Subsidence Subcommittee with development of GSA-area monitoring SOP to provide consistency across the GSA-area infrastructure. The SOP will also include InSAR data processing adjacent to GSA-area infrastructure.
- Review of Draft Exceedance Report SOP and other templates required to facilitate execution of the Action Plan for Land Subsidence.
- Review of DWR subsidence Best Management Practices (BMPs) to ensure relevant BMPs are incorporated into the SOPs, as applicable.
- Attendance at Subbasin Subsidence Subcommittee meetings.
- Supporting development of a roadmap to support GSP implementation through 2026.

Key assumptions:

- InSAR data will be processed by other TWG members and will be provided in a format readily useable for comparisons.
- EKI staff will provide technical review of the Draft Exceedance Report SOP produced by other subcommittee members.
- Attendance by up to two EKI personnel at up to six virtual subcommittee meetings; meetings will be one and a half hours in length.

Kristin Pittack
Kern Subbasin Plan Manager
9 October 2025
Page 3 of 7



- Attendance by EKI personnel at meetings with other entities (e.g., Friant Water Authority) is not included herein.
- Costs associated with attendance by EKI personnel at Kern Managers and Coordination Committee meetings are not included herein.

Deliverables:

- GSA-area SOP (co-produced by Subbasin Subsidence Subcommittee)
- Exceedance Report SOP (co-produced by Subbasin Subsidence Subcommittee)
- 2026 Road Map (co-produced by Subbasin Subsidence Subcommittee)

Task 3 – 2026 California Aqueduct Working Group

Task 3 involves 2026 work associated with the California Aqueduct Working Group, including communication with CASP. EKI support will include the following:

- Co-leading the California Aqueduct Working Group, including development of meeting agendas and materials as needed.
- Preparation for and attendance at quarterly meetings with CASP.
- Review and conduct quality checks of the California Aqueduct benchmark survey data and quarterly InSAR data along the California Aqueduct.
- Support and review of Kern Data Management System (DMS) templates for CASP benchmark data integration.
- Tracking of MT exceedances, Exceedance Report submittals, and resultant targeted Projects and/or Management Actions (P/MAs) along the California Aqueduct for integration into the Annual Report.

Key Assumptions:

- Attendance by up to two EKI personnel at four (4) California Aqueduct Working Group meetings; meetings will be two-hours in length.
- Attendance by up to two EKI personnel at four (4) meetings with CASP; meetings will be two hours in length.
- All meetings will be conducted virtually.
- Starting in 2026, compliance charts will be produced by individual GSAs, using the SOP developed under Task 1.
- Technical components regarding the Kern DMS subsidence module will be conducted by GEI. EKI staff will provide input and review of selected materials that will feed into the DMS (e.g., data upload templates) focused along the California Aqueduct. EKI support for templates related to benchmark surveys along the Friant-Kern Canal and/or InSAR data is not included herein.
- Exceedance Report(s) including details on targeted P/MAs will be provided by GSA(s).
- Starting in 2026, exceedance notifications will be issued through the Kern DMS.

Kristin Pittack
Kern Subbasin Plan Manager
9 October 2025
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- Exceedance investigation(s) will be conducted by the GSA(s) in which the exceedance(s) occur(s).

Deliverables:

- CASP meeting material(s)
- Summary table of MT exceedances and resultant targeted P/MAs along the California Aqueduct (co-produced by California Aqueduct Working Group)

Task 4 – 2026 Subbasin Subsidence Subcommittee

Under Task 4, EKI will provide technical support to the Subbasin Subsidence Subcommittee during 2026. EKI will conduct the following work efforts:

- Technical review of subsidence-related data, including InSAR data summaries for the HCM Areas.
- Support other Subsidence Subcommittee members in conducting a data assessment for critical head analyses across the Subbasin.
- Assess subsidence monitoring coverage, and develop recommendation(s) for new continuous Global Positioning System (CGPS) station request(s) to be submitted to DWR.
- Support development of Kern DMS exceedance notifications for the three potential triggers (Regional Critical Infrastructure, GSA-Area Infrastructure, and HCM Area).
- Integrate DWR BMPs into the Exceedance Policy and Action Plan for Land Subsidence.
- Preparation for and attendance at two virtual meetings with DWR Sustainable Groundwater Management Office (SGMO).
- Attendance at Subbasin Subsidence Subcommittee meetings.
- Conduct a preliminary critical head assessment against groundwater level MTs at up to five Representative Monitoring Well locations using the Kern-IWFM.
- Technical review of the Water Year 2025 Annual Report as it relates to land subsidence and compliance with SMCs.

Key assumptions:

- InSAR data will be processed by other TWG members and will be provided in a format readily useable for comparisons.
- Attendance by up to two EKI personnel at up to 12 virtual subcommittee meetings; meetings will be one hour in length.
- Costs associated with attendance by EKI personnel at Kern Managers and Coordination Committee meetings are not included herein.
- Attendance by up to two EKI personnel at two (2) virtual DWR SGMO meetings; meetings will be two hours in length.
- Attendance by EKI personnel at meetings with other entities (e.g., Friant Water Authority) is not included herein.

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 Kern Subbasin Plan Manager
 9 October 2025
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- The Kern-IWFM model files will be provided to EKI. The model will be calibrated adequately to support critical head evaluation. No additional subsidence simulation calibration will be required, and no additional 1-D subsidence models will be developed. Up to five Representative Monitoring Wells located in areas with measurable historical subsidence and extensive water level data records will be selected to conduct the preliminary analysis. The preliminary analysis will be used to inform a future task related to critical head assessment against groundwater level MTs across the Subbasin.
- Technical review of subsidence-related data will occur quarterly.
- Technical components regarding the Kern DMS subsidence module will be conducted by GEI. EKI staff will provide input and review of selected materials that feed into the DMS (e.g., data upload templates, exceedance notifications).
- Starting in 2026, exceedance notifications will be issued through the Kern DMS.
- This scope of work does not include support for HCM Area exceedance investigation(s).

Deliverables:

- Location recommendation(s) for critical head analysis (co-produced by the Subbasin Subsidence Subcommittee)
- Location recommendation(s) for CGPS stations (co-produced by the Subbasin Subsidence Subcommittee)
- Revised Action Plan for Land Subsidence (co-produced by the Subbasin Subsidence Subcommittee)
- Presentation on preliminary critical head assessment against groundwater level MTs

BUDGET

Compensation for consulting services by EKI will be on a time and expense reimbursement basis in accordance with our current Schedule of Charges. Based on the proposed Scope of Work described above, we propose a budget of \$149,700 (see also Table 1) for the performance of Tasks 1 through 4, based on our best estimate at this time. This budget will not be exceeded without additional authorization from the Client. EKI's staff members who will lead this project include Anona Dutton, P.G., C.Hg. (Officer) and Christina Lucero, P.G. (Senior II); grades in parentheses are for purposes of billing. Other EKI staff members will be assigned to assist with the performance of the tasks as required to meet project commitments.

Kristin Pittack
Kern Subbasin Plan Manager
9 October 2025
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Table 1. Estimated Budget

TASK	Cost Estimate
Task 1 – 2025 California Aqueduct Working Group	\$15,700
Task 2 – 2025 Subbasin Subsidence Subcommittee	\$26,300
2025 TOTAL:	\$42,000
Task 3 – 2026 California Aqueduct Working Group	\$27,300
Task 4 – 2026 Subbasin Subsidence Subcommittee	\$80,400
2026 TOTAL:	\$107,700
TOTAL	\$149,700

SCHEDULE

Upon authorization to proceed, EKI is prepared to start work on the above Scope of Work immediately. Tasks 1 and 2 in this Scope of Work will cover work efforts conducted from 1 October 2025 through 31 December 2025. Tasks 3 and 4 in this Scope of Work will cover work efforts conducted 1 January 2026 through 31 December 2026.

TERMS AND CONDITIONS

This work will be conducted pursuant to our existing agreement with the Wheeler Ridge-Maricopa Water Storage District.

Kristin Pittack
Kern Subbasin Plan Manager
9 October 2025
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We are happy to discuss the proposed approach and anticipated level of effort for these tasks in more detail with you and look forward to working with you on this important project.

Very truly yours,

EKI ENVIRONMENT & WATER, INC.

A handwritten signature in blue ink, appearing to read 'Anona L. Dutton', followed by a long horizontal flourish.

Anona L. Dutton, P.G., C.Hg.
Vice President / Principal-In-Charge

AUTHORIZATION

Signed _____

Printed Name _____

Title _____

Date _____

cc: Sheridan Nicholas, Wheeler Ridge-Maricopa Water Storage District



INTERA Incorporated
3838 W. Carson Street, #380
Torrance, CA 90503
+1 (424) 275 4055
INTERA.com



October 10, 2025

Derek Yurosek
Kern Subbasin Manager
Kern River Groundwater Sustainability Agency
3200 Rio Mirada Drive
Bakersfield, CA 93308

RE: Proposal for Kern County Subbasin SGMA Support Services from October 2025 through March 2026

Dear Mr. Derek Yurosek,

The Kern Subbasin is now transitioning from a successful period of GSP refinement and regulatory coordination into the critical implementation phase. INTERA is proud to have supported this progress. We value the continued trust of the Subbasin and propose to build directly upon the momentum we have collectively achieved. This proposal outlines the scope for subsidence implementation support from October 2025 through March 2026, across three general categories of tasks: 1) subbasin subsidence coordination and technical support; 2) Friant Kern Canal subsidence coordination and technical support; and 3) California Aqueduct coordination and technical support. We have also included an additional task for any document or presentation support needed for subbasin efforts.

1.0 Scope of Work

1.1 Subbasin Subsidence Coordination and Technical Support

Incorporation of InSAR SMC Workflows into the DMS and Annual Reports

INTERA developed workflows and scripts to calculate subsidence sustainable management criteria (SMCs) for the 2024 and 2025 GSP updates. INTERA will support the processing of available 2025 InSAR data to evaluate any subsidence exceedances in preparation for the 2026 annual reports and work with the DMS team to transfer these workflows to the DMS for future reporting. INTERA will also support the 2025 Annual Report (to be submitted in April 2026), by QA/QCing and reviewing subsidence-related sections, figures, and tables.

Support Exceedance Reports & Subbasin Subsidence Implementation SOP

Subsidence SMC Exceedance Reports and Standard Operating Procedures need to be developed for regional critical infrastructure, GSA critical infrastructure, and HCM Areas. INTERA will support the development of the SOPs through review, QA/QC, and needed revisions. INTERA will also support the Subsidence sub-committee on the review and evaluation of the final DWR Subsidence BMP (expected November 2025) to ensure the exceedance reports and implementation SOPs are consistent with the BMP.

Data Assessment for Future Critical Head Analysis (Phase I)

DWR's recent Draft Subsidence Best Management Practice (BMP) expects more rigorous, basin-wide analyses of critical head conditions. **Our Approach:** As the technical contributors to the BMP itself, INTERA is uniquely positioned to support the Subbasin through compliance in the future. Based on our understanding, the BMP is supposed to be finalized before the end of 2025. A key part of the Subsidence BMP is the need to evaluate "critical heads" to avoid future inelastic subsidence in areas where this may lead to undesirable results. DWR will also be releasing new subsidence one-dimensional (1-D) subsidence model datasets as part of the California Bulletin 118 update (also expected in Q4 of 2025). The 1-D subsidence models can support future critical head analysis. Note, that INTERA has already developed four 1-D models near the Friant Kern Canal, which are consistent with the 1-D subsidence modeling done by DWR. Finally, the Kern Subbasin will continue to coordinate with the Friant Water Authority and DWR California Aqueduct Subsidence Program (CASP).

The focus of this task will be on data collection, assessment, and methodology development to prepare for a basin-wide critical head evaluation in 2026. Building on INTERA's previous 1D subsidence modeling in support of the Department of the DWR Subsidence BMP and the Friant-Kern Canal (FKC), we will:

- Assemble existing 1-D models developed for the FKC attribution analysis and DWR Subsidence BMP. INTERA has developed 4 1-D models along and near the FKC. Based on our understanding, additional (up to 5) 1-D models will be made available by DWR (as part of the Bulletin 118 Update) later this year. INTERA will collate all available 1-D models and assess their usefulness to support regional critical head analyses, especially in areas with subsidence vulnerability. The 1-D models will be presented to the subsidence sub-committee and Kern managers, with recommendations.
- Compile and preprocess available (in addition to the 1-D models above) groundwater level, lithology, and subsidence datasets (including leveling, GPS, extensometers, and InSAR).
- Develop representative sites (approximately 12 locations in addition to the 1-D models above) across the Subbasin for critical head analysis, based on data availability.
- Develop recommendations and a work plan on methodology for basin-wide critical head analysis to be implemented in 2026. This may include additional 1-D modeling or more correlative groundwater level and subsidence analysis in areas where limited data is available. The methodology recommended will be consistent with the DWR BMP.
- Present findings, methodology recommendations, and preliminary empirical analysis to the Subbasin and the Subsidence Subcommittee for review and discussion (five subcommittee meetings). The recommendations will include discussion of data gaps and uncertainties related to critical head analysis, based on the data availability (or the lack thereof).

This year's scope emphasizes data assessment and preparation, positioning the Subbasin for full-scale critical head analysis in the next calendar year.

Develop 2026 Subbasin Workplan

INTERA will work with the Subsidence sub-committee to develop recommendations for subsidence tasks in 2026, based on the review of the Subsidence BMP as well as any discussions with the Friant Water Authority (FWA), DWR California Aqueduct Subsidence Program (CASP), DWR SGMO, and SWRCB (as the case may be). We will also incorporate recommendations from the subsidence data evaluation discussed.

Deliverables:

- Post-Processed InSAR SMC results for 2025
- InSAR SMC workflows and scripts to transfer to DMS
- Compiled Dataset of available 1-D models and up to 12 additional sites for critical head analysis
- Presentation on the Data Assessment for future Critical Head Analysis
- 2026 Subbasin Work Plan

1.2 FKC Subsidence Coordination and Technical Support

INTERA will continue its role as technical lead on subsidence impacts to the FKC, including:

- Coordinating with the Friant Water Authority (one meeting every quarter).
- Identifying and scoping additional steps for mitigation, building on our prior 1D modeling work.
- Presenting and discussing findings and next steps at both the Subsidence Subcommittee and Subbasin-wide meetings.
- Attending and communicating within the Subsidence subcommittee meetings.

These activities will ensure that canal-specific risks are managed alongside broader Subbasin planning.

Deliverables:

- Presentation to the FWA on the GSP Updates and Future Steps on FKC Mitigation Evaluation
- 2026 FKC Work Plan

1.3 California Aqueduct Subsidence Coordination and Technical Support

INTERA will attend and support subsidence subcommittee meetings and tasks associated with the California Aqueduct. We assume one meeting with CASP (assume one meeting every quarter). As the FKC lead, INTERA will ensure that coordination and consistency is maintained across the subsidence approach taken for both Regional Critical Infrastructure - the FKC and the California Aqueduct.

1.4 Document & Presentation Support

The Kern Subbasin is working on version 3.0 of the Mitigation Plan, with a dedicated financial assistance track for State-Small water systems. INTERA developed the original Mitigation Plan document(s) and will

continue to support any edits or graphics needed for the next version of the Mitigation Plan. INTERA will also support TWG and/or Subbasin Presentations by summarizing complex topics into easy to communicate graphics and schematics. This task provides technical writing, formatting, and graphic design support for two key deliverables: the Well Mitigation Plan (Version 3.0) and external stakeholder or state agency presentations.

Well Mitigation Plan (Version 3.0) Support

Building on INTERA's previous role in developing Version 1.0 and providing formatting and graphic support for Version 2.0, this task includes scope and budget for equivalent support for Version 3.0. The timeline for initiating Version 3.0 is dependent on factors outside this proposal's period of performance. Should the draft not be ready during this term, the allocated budget for this scope will remain available for future use, pending a contract amendment.

TWG Presentation Support

This task also includes a limited budget for refining technical presentations for public or regulatory audiences (SWRCB, DWR). Support will focus on enhancing visual clarity, ensuring consistent messaging, and developing new graphics as needed. This work will build upon existing materials, such as the successful hearing presentation developed for the Subbasin. Anticipated needs assume up to three presentations (e.g., to introduce the 2025 Plan and summarize implementation), which will be adapted from current assets with a focus on edits, formatting, and supplemental graphics for clarity.

Deliverables:

- 3 Formatted Presentations *with associated graphics*
- Draft Well Mitigation Plan Version 3.0 *with associated graphics*
- Final Well Mitigation Plan Version 3.0 *with associated graphics*

2.0 Assumptions

To ensure transparency and shared understanding, we have outlined the assumptions that form the basis of our proposed scope and approach.

- Dr. Abhishek Singh will be the designated INTERA TWG co-lead.
- Mr. Trey Driscoll will be the designated Subsidence Sub-Committee representative from INTERA.
- Ms. Kait Palys will be the designated lead on Document Support (Task 1.4) from INTERA.
- INTERA will typically have up to two attendees on Subsidence Sub-Committee meetings. An additional attendee may be added to present the InSAR SMC results and subsidence data assessment, as needed.
- All meetings will be attended virtually.
- All required data and information will have undergone quality-assurance/quality-control prior to being sent to INTERA
- Collaborating Kern Subbasin consultant teams will perform their respective Subbasin-wide tasks in a transparent and timely manner
- No significant changes to jurisdictional boundaries are to occur (such as a new GSA formation)

- No significant changes to proposed methodologies are to occur
- The SWRCB Staff maintain the position that the Kern Subbasin's 2025 Plan has passed a red flag review and the Subbasin will not be proceeding to probation
- The Kern Subbasin should exit state intervention before 2026

3.0 Schedule

This proposal covers identified tasks for the period from October 2025 to March 2026.

4.0 Budget

The budget for the scope outline above is \$85,928, spread between the next two quarters as Q4, 2025: \$59,512 and Q1, 2026: \$26,416 (Tables 1 and 2, below). Please note that additional scope/budget for Q1, 2026 may be developed as part of the 2026 work-plan development. The breakdown of hours and budget by staff and tasks is shown in the tables below. INTERA will bill on a time and material basis, hence scope outlined above but not executed will not be billed. Any deviation in scope will be promptly communicated to Kern Managers.

Table 1. October 2025 through December 2025 Budget

Task No.	2025 Estimated Hours by Staff Type							Task Totals	
	Principal Engineer/Scientist I	Principal Engineer/Scientist I	Principal Engineer/Scientist III	Sr. Engineer/Scientist III	Sr. Engineer/Scientist III	Engineer/Scientist I	Sr. Tech Editor	Total Task Hours	Total Task Cost
	Singh	Driscoll	Ellis	Saberi	Palys	Neely	Davis		
Task 1.1. Subbasin Support	8	24	40	40	0	80	0	192	\$47,008.00
Task 1.2. FKC Support	8	8						16	\$5,104.00
Task 1.3. CASP Support	4	4						8	\$2,552.00
Task 1.3. Document & Presentation Support					16		8	24	\$4,848.00
Total Hours by Staff Type	20	36	40	40	16	80	8	240	
Estimated 2025 Budget									\$59,512

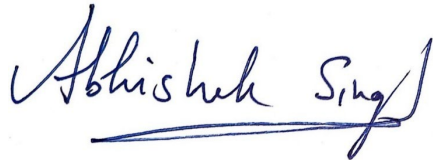
Table 2. January 2026 through March 2026 Budget

Task No.	2026 Estimated Hours by Staff Type							Task Totals	
	Principal Engineer/Scientist I	Principal Engineer/Scientist I	Principal Engineer/Scientist III	Sr. Engineer/Scientist III	Sr. Engineer/Scientist III	Engineer/Scientist I	Sr. Tech Editor	Total Task Hours	Total Task Cost
	Singh	Driscoll	Ellis	Saberi	Palys	Neely	Davis		
Task 1.1. Subbasin Support	8	16		20		20		64	\$16,336.00
Task 1.2. FKC Support	8	8						16	\$5,104.00
Task 1.3. CASP Support	4	4						8	\$2,552.00
Task 1.3. Document & Presentation Support					8		4	12	\$2,424.00
Total Hours by Staff Type	20	28	0	20	8	20	4	100	
Estimated 2026 Budget									\$26,416

Thank you for considering our proposal to continue this important work. We are eager to build on our partnership. Should our approach be selected, we are ready to begin seamlessly supporting the implementation.

Sincerely,

INTERA Incorporated

A handwritten signature in blue ink that reads "Abhishek Singh". The signature is fluid and cursive, with a long horizontal stroke at the end.

Abhishek Singh, PE, PhD
President - Water Resources & Supply, Principal Engineer



October 16, 2025

MEMORANDUM

To: Kristin Pittack, Kern Subbasin Plan Manager

From: Michael Maley, PE, PG, CHg

Re: Todd Groundwater Subsidence Subcommittee Budget Request

The Kern County Subbasin (Subbasin) managers have requested the Technical Working Group (TWG) prepare a Scope of Work and budget to support the Subsidence Subcommittee in its near-term implementation of the coordinated Kern County Subbasin Groundwater Sustainability Plan (2025 Plan). Todd Groundwater has been identified as the technical lead for the Subbasin-wide subsidence data compilation. Todd Groundwater's scope covers the period through March 31, 2026.

SCOPE OF WORK

Todd Groundwater's work for the Subsidence Subcommittee will focus on Subbasin-wide activities, which are those subsidence related activities that are not associated with either the Friant-Kern Canal or California Aqueduct Subsidence Working Groups. Our scope of work for work on the Subsidence Subcommittee, covering the period from October 2025 to March 31, 2026, includes:

Compilation of Subbasin-wide InSAR and Monitoring Data

Todd Groundwater will compile the WY2025 InSAR from DWR and prepare maps for monthly, annual and cumulative displacement measured by InSAR. A statistical analysis of subsidence will be developed for the Subbasin and HCM areas following the approach we used for the 2025 GSP. This information will be distributed to the Subsidence Subcommittee members for use in their work.

Initial Preparation of Annual Report Subsidence Summary

Coordination with the Subsidence Subcommittee members on developing an annual report summary on subsidence. The InSAR maps listed above will also be incorporated into the Annual Report. Initial coordination with Subbasin GSAs on their WY2025 subsidence work with the Subcommittee to develop a template for ongoing reporting of these activities in the current and future annual reports.

Road Mapping of Subbasin-wide Subsidence Compliance Requirements

This task is to provide initial coordination with any Subbasin GSAs who have current or future planned subsidence monitoring or other subsidence related activities that are not associated with either the Friant-Kern Canal or California Aqueduct Subsidence Working Groups. Based on input from these GSA managers and subcommittee members, a road map will be developed to outline the process to support further coordination of GSAs with Subbasin-wide subsidence monitoring or other activities.

Coordination & Meetings

Participation in Subbasin Subsidence Subcommittee meetings. It is anticipated that these meetings will be conducted weekly during this period.

ESTIMATED COST

The total budget for the scope of work is \$34,700. The budget is further subdivided by time period as follows:

- The estimated cost for work during October to December 2025 is \$15,420.
- The estimated cost for work during January to March 2026 is \$19,280.

A budget summary by task is provided in Table 1. The cost estimate covers the period through March 31, 2026. This cost estimate is considered a not-to-exceed estimate and Todd Groundwater will not exceed this cost without written authorization from the Subbasin GSAs. In addition, work will be conducted on a time and materials basis and only the costs expended will be invoiced.

Todd Groundwater does not include any budget for work directly for either the California Aqueduct Working Group or the Friant-Kern Working Group. If Todd Groundwater is requested to help support these Working Groups directly, that would be considered an extra scope of work. Please let us know if you have questions regarding this proposal.

TABLE 1 – Budget Summary to Complete the Subsidence Subcommittee tasks through March 31, 2026

TASKS	Oct-Dec 2025 Budget	Jan-Mar 2026 Budget
Compilation of Basinwide InSAR and Monitoring Data	\$8,100	\$2,720
Initial Preparation of Annual Report Subsidence Summary	\$2,400	\$3,800
Road Mapping of Future Subsidence Compliance Requirements	\$-	\$6,640
Coordination & Meetings	\$4,920	\$6,120
TOTAL	\$15,420	\$19,280

Exhibit B - Data Gaps Analysis and Well Inventory:

LSCE:	10/1/25 - 12/31/25	\$67,000.00
GEI:	10/1/25 - 12/31/25	<u>\$23,640.00</u>
		\$90,640.00



September 26, 2025

Kristin Pittack
Kern Subbasin Point of Contact
via email: kernsubbasinpoc@rinconconsultants.com

Re: Scope of Work for Well Inventory and Support with Monitoring Networks Data Gaps

Dear Ms. Pittack:

This Scope of Work and the cost estimate for GEI Consultants is to continue providing support to the Kern County Subbasin (Subbasin) with ongoing coordination for the Subbasin well inventory from October 1 through December 31, 2025. Outlined tasks and fees associated with this proposed Scope of Work are described below.

TASK 1. WELL INVENTORY

Monitoring Network data gaps analyses were based on the Subbasin's February 2025 well inventory, which reconciled approximately 65% of the records and confirmed accurate construction data, and approximately 45% of the wells are accurately located with coordinates associated with the parcel. GEI proposes to continue this effort of supporting GSAs with reconciling records, gathering additional data, and managing the dataset to maintain accuracy and consistency. After the February 2025 version, public supply (DDW regulated) and state-small well information was incorporated into the Subbasin well inventory to aid GSAs in identifying all records within their jurisdictional boundaries. Recommended tasks to continue providing support with reconciling the Well Inventory include:

- Continue updating records, working with GSAs to refine their data, and compiling GSA datasets as they are completed.
- Collect data from Kern County Environmental Health Services to identify parcels served by non-public water systems; property information redacted from public versions of the WCRs that don't provide adequate location details to assign records to the correct parcel; and collect water system service area data to identify parcels supplied by a public water system.
- Conduct GIS analysis of parcels supplied by public water systems to identify potentially destroyed and abandoned wells and identify parcels with no water supply to fill data gaps in the well inventory.
- Continue updating the datasets through August 2025 to have a complete and comprehensive dataset to support the Subbasin's well registration program.
- Coordinate with and support LSCE in repeating the monitoring network data gaps by providing current data sets and notes tracking data improvements.

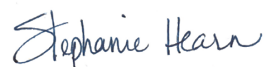
Budget

The proposed budget effort is \$23,640; this estimated budget covers work performed from October 1 through December 31, 2025 (well inventory through December 31). Billing for all work completed under this proposal will be in accordance with the terms of the Professional Services Agreement between GEI and Buena Vista Water Storage District, with labor billed at 3.05 times the labor rate. Invoices are prepared on a time-and-materials basis and submitted within one month of performing the work. The Subbasin will only be billed for the actual hours worked. Monthly progress reports will be provided with each invoice to support budget tracking and if any out-of-scope work is performed.

Closing

If this proposal is acceptable, please have an authorized representative sign indicating your acceptance of this Task Order. We look forward to continuing to work with the Kern Subbasin. If you have any questions or require additional information, please contact Stephanie Hearn at 661.716.3026 or shearn@geiconsultants.com.

Sincerely,



Stephanie Hearn
Branch Manager, Permitting and Compliance



David Miller
Principal Consultant



October 2, 2025

Project No. 25-1-070

Kristin Pittack
Kern County Subbasin Plan Manager
kernsubbasinpoc@riconconsultants

SUBJECT: Revised Scope of Work and Budget for Groundwater Sustainability Plan Implementation Activities for October through December 2025, Kern County Subbasin

Dear Kristin:

As requested, Luhdorff and Scalmanini Consulting Engineers (LSCE) has prepared the following revised Scope of Work and budget for technical services to support the Kern County Subbasin (Subbasin) for the months of October through December 2025. This Scope of Work and budget focuses on supporting the Subbasin's efforts in implementing the Kern County Subbasin Groundwater Sustainability Plans (2025 Plan), specifically the groundwater level and groundwater quality monitoring networks data gap filling activities.

BACKGROUND

The 2025 Plan for the Subbasin identifies the need to strengthen the Representative Monitoring Network (RMN) by filling groundwater level and groundwater quality data gaps. In the 2025 Plan, the Subbasin committed to:

- Collecting missing RMN well construction information;
- Filling remaining data gaps with existing wells to the extent feasible, with the goal of completing this work by the end of 2025;
- Filling any subsequently remaining data gaps with newly constructed monitoring wells, with the goal of completing new well construction by the end of 2026; and
- Re-analyzing the sufficiency of the number of wells in certain pumping group categories after the groundwater model is updated (this commitment is not part of this Scope of Work).

For purposes of this Scope of Work, the first three commitments are described as two phases of implementation:

- Phase 1 (through 2025): Collecting missing RMN well construction information and incorporating existing wells into the groundwater level and groundwater quality RMNs to address data gaps where feasible.
- Phase 2 (through 2026): Planning for and constructing new monitoring wells where data gaps cannot be addressed with existing wells.

Kern County Subbasin

October 2, 2025

Page 2

SCOPE OF SERVICES

The following describes each of the key tasks necessary to perform this proposed Scope of Work.

Task 1. Data QA/QC

The Kern Subbasin's 2025 Plan data gap analysis was based on the Well Inventory and Representative Monitoring Network (RMN) datasets as of February 2025. Since that time, Groundwater Sustainability Agencies (GSAs) have been updating the well inventory and collecting missing RMN well construction information. GEI, the firm that manages the Subbasin Data Management System (DMS), will compile these updates into revised Well Inventory and RMN datasets for use in the update of the data gap analysis (Task 3).

LSCE will coordinate with GEI to perform QA/QC of the updated datasets to ensure accuracy, completeness, and consistency of well information, as well as compatibility with the formats required for Task 3. The QA/QC effort will focus on verifying well construction information, location accuracy, and alignment with 2025 Plan criteria for groundwater level and groundwater quality monitoring wells.

This updated information is critical because RMN well construction data is necessary to determine whether existing wells can adequately address data gaps. In addition, the revised Well Inventory may resolve previously identified data gaps (e.g., if domestic well counts are lower than assumed in the February 2025 dataset) or may result in new data gaps (e.g., if domestic well counts are higher or if the spatial distribution of wells has changed).

Task 1. Assumptions

- GSAs will provide updated well inventory and RMN well construction information to GEI.
- GEI will compile and provide the updated Well Inventory and RMN datasets to LSCE for QA/QC.
- LSCE's QA/QC is limited to data accuracy, consistency, and formatting for use in Task 3; it does not include independent verification of well construction details beyond what GSAs provide to GEI.

Task 2. Identifying and Confirming Wells to Fill Existing Data Gaps

GSAs, with support from their staff or consultants, are primarily responsible for identifying candidate wells that may be incorporated into the groundwater level and groundwater quality RMNs to address existing data gaps. LSCE will coordinate with GSAs and/or their consultants during this process. If requested, LSCE may provide GSA-specific well selection criteria at the hexagon level to help guide identification of candidate wells; otherwise, GSAs may identify wells independently.

Once candidate wells have been identified, LSCE will review and confirm whether they are appropriate for filling data gaps. This confirmation will consider both the technical criteria established in the 2025 Plan and the concerns and criteria raised by State Water Resources Control Board (SWRCB) staff. Evaluation will include review of well construction details (e.g., depth, screened interval) as well as the availability, completeness, and representativeness of data from the wells. The updated RMN well construction information gathered in Task 1 will be critical to this review, since in some cases a data gap hexagon may

Kern County Subbasin

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be resolved by confirming that an existing RMN well is representative of domestic wells within that hexagon.

LSCE will provide recommendations to GSAs on which wells are suitable for incorporation into the RMNs, helping ensure well selections are technically sound, defensible, and consistent across the Subbasin. Following confirmation, GSAs will be responsible for securing access agreements for wells determined to be suitable; this step is outside LSCE's scope, although LSCE will ensure GSAs have the technical documentation needed to support their outreach.

Task 2. Assumptions

- GSAs (or their consultants) will identify candidate wells, with LSCE providing GSA-specific well selection criteria and technical guidance if requested.
- GSAs will lead outreach and secure access agreements for confirmed wells; this responsibility is entirely outside LSCE's scope.

Task 3. Data Gap Analysis Update

LSCE will update the data gap analysis originally performed for the groundwater level and groundwater quality RMNs and documented in the 2025 Plan. The updated analysis will use the revised Well Inventory and RMN datasets compiled and quality-checked under Task 1, ensuring that the most current information provided by GSAs is reflected. The analysis will otherwise follow the same methodology applied in 2025 and will continue to rely on the previously used datasets for hydrographs and Corcoran Clay, which remain unchanged.

The updated analysis will also incorporate results of Task 2, to the extent feasible. Candidate wells identified and confirmed by LSCE will only be included if GSAs have secured access agreements prior to the analysis. This ensures that results reflect wells that are confirmed and available for monitoring, rather than wells that remain uncertain.

The updated analysis will include:

1. 2025 Plan-Based Data Gap Analysis – applying the methodology described in the 2025 Plan using updated datasets.
2. SWRCB Staff Criteria/Concerns – applying additional criteria identified by SWRCB staff, limited to the hexagons that staff previously identified as areas of concern.

The updated analysis will produce the same set of hexagon panels generated in the original analysis, as well as updated summary tables in the format used in the 2025 Plan appendices. LSCE will also prepare Subbasin-scale summary maps and spreadsheets of the updated results to assist GSAs in identifying additional candidate wells for LSCE confirmation under Task 4, if new data gaps are identified. The documentation produced from the updated analysis will support potential requests by State Agencies that GSP implementation activities have been conducted.

Kern County Subbasin

October 2, 2025

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Task 3. Assumptions

- The updated analysis will apply the same methodology as the 2025 Plan analysis, with the addition of SWRCB staff criteria applied only to hexagons staff previously identified as concerns.
- Candidate wells will only be incorporated into the updated analysis if GSAs have secured access agreements prior to LSCE's work.

Task 3. Deliverables

- Updated hexagon panels consistent with those produced in the previous analysis.
- Summary tables of data gap results in the same format as the 2025 Plan appendices.
- Subbasin-scale summary maps and tables of updated data gap results.
- Change summary comparing the updated data gap analysis results to the 2025 analysis (gaps resolved, gaps remaining, new gaps).

Task 4. Identifying and Confirming Wells to Fill New Data Gaps (Optional)

If the updated data gap analysis conducted under Task 3 identifies new groundwater level or groundwater quality monitoring network data gaps, LSCE will assist GSAs in addressing them using existing wells. The work under this task will mirror the process described in Task 2. The need for Task 4, as well as the level of effort required, is dependent upon the outcomes of Tasks 2 and 3. Therefore, a budget for Task 4 is not included in this scope.

GSAs, with support from their staff or consultants, will be primarily responsible for identifying candidate wells that may be incorporated into the RMN to address new data gaps. LSCE will coordinate with GSAs and/or their consultants during this process and, if requested, may provide GSA-specific well selection criteria to guide identification of candidate wells.

LSCE will then evaluate whether the candidate wells identified by GSAs meet both the technical criteria established in the 2025 Plan and the concerns/criteria raised by SWRCB staff. This evaluation will include review of well construction details and the availability, completeness, and representativeness of data from the wells. LSCE will provide recommendations to GSAs on which wells are suitable for incorporation into the RMN.

GSAs will be solely responsible for securing access agreements for wells confirmed as suitable; this step is not included in LSCE's scope.

Task 4. Assumptions

- GSAs (or their consultants) will identify candidate wells, with LSCE providing well selection criteria and technical guidance if requested.
- GSAs will lead outreach and secure access agreements for confirmed wells; this responsibility is entirely outside LSCE's scope.

Kern County Subbasin

October 2, 2025

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- No budget is included in this scope for Task 4. The need for this task, and the level of effort required, will depend on the outcomes of Tasks 2 and 3 and may occur in early 2026.

Task 5. GSA Coordination and Monitoring Well Design Support (Optional)

If data gaps remain after Phase 1 efforts (Tasks 1, 2, 3, and optional Task 4), the Subbasin will need to advance to Phase 2, which involves filling gaps through construction of new groundwater level and/or groundwater quality monitoring wells. Under this scope, LSCE's role in Phase 2 is limited to supporting two key components: identifying where new monitoring wells are needed and providing technical assistance on well design.

Building on the outcomes of Phase 1, LSCE will confirm which data gaps cannot be addressed with existing wells and will identify the locations where new monitoring wells are required. GSAs will be responsible for subsequent site selection, securing access agreements, and contracting for well construction. GEI will be responsible for incorporating final RMN updates into the DMS and DWR reporting.

For well design, LSCE may either (a) develop preliminary designs for new monitoring wells or (b) review and confirm designs prepared by GSAs or their consultants, ensuring they meet 2025 Plan criteria for representativeness and address concerns previously identified by SWRCB staff. Well design considerations will include construction details (e.g., depth, screened intervals, casing) and aquifer representativeness to ensure that new monitoring wells fill identified gaps.

Because this scope only extends through December 2025, Task 5 is considered optional and may only begin during this period if time and budget allow. Full implementation of Phase 2 is anticipated to occur in 2026. No budget is included in this scope for Task 5, as the level of effort will depend on the outcomes of earlier tasks.

Task 5. Assumptions

- Task 5 will only begin if GSAs elect to advance Phase 2 activities.
- GSAs are responsible for site selection, access agreements, and well construction; LSCE's role is limited to identifying where new monitoring wells are needed and assisting with well design.
- GEI will handle final updates to the DMS and reporting to DWR.
- Budget for Task 5 is not included in this scope, as the extent of effort required cannot be determined until results from Tasks 2–4 are available.

Task 6. Project Coordination and Management

LSCE will provide project coordination and management support to ensure effective and timely implementation of the tasks described in this scope. This includes tracking progress, maintaining communication with GSAs, and supporting consistency across GSAs in carrying out Phase 1 commitments.

As part of this task, LSCE will attend Subbasin Managers meetings and policy meetings, which are expected to be weekly for managers and bi-monthly for policy meetings. This scope also includes up to two meetings a month with technical working group (TWG) leads. LSCE will provide updates on the status of data gap implementation. The scope allows for attendance at up to eight meetings per month, each up to two

Kern County Subbasin

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hours in duration. LSCE will also prepare presentation materials to accompany these updates, ensuring that Subbasin Managers receive clear and consistent information on progress.

In addition, LSCE will prepare a technical memorandum summarizing the outcomes of data gap implementation efforts completed under this Scope of Work. The memorandum will be structured to provide the necessary documentation for inclusion in the 2025 Annual Report to DWR, as required by SGMA. LSCE will provide the Subbasin with one draft version of the memorandum, incorporate GSA and Subbasin feedback, and prepare a final version. LSCE will also coordinate with Subbasin consultants responsible for preparing the Annual Report to ensure the content of the memorandum aligns seamlessly with other sections of the report.

Task 6. Assumptions

- GSAs will provide timely input and feedback on the draft technical memorandum.
- Only one consolidated round of comments will be provided by GSAs/Subbasin for the technical memorandum, which LSCE will address in the final version.
- The technical memorandum will summarize activities completed through December 2025 under this Scope of Work.
- Subbasin Annual Report consultants will be available and responsive for coordination on content integration.

Task 6. Deliverables

- Updates to Subbasin Managers and Policy groups during scheduled meetings.
- Draft technical memorandum summarizing data gap implementation outcomes.
- Final technical memorandum incorporating GSA/Subbasin feedback, prepared for use in the 2025 Annual Report to DWR.

PROJECT BUDGET

Based on LSCE's understanding of the tasks outlined above, Table 1 presents a breakdown of the budget estimates by task. LSCE will perform services on a time-and-materials basis, invoiced monthly in accordance with the attached *2025 Schedule of Fees – Engineering and Related Field Services*. The Senior Principal, Senior Professional, and Staff Professional billing rate categories will be used primarily to complete the work described herein.

The budget does not include allocations for optional Task 4 (Identifying and Confirming Wells to Fill New Data Gaps) or Task 5 (GSA Coordination and Monitoring Well Design Support). The need for these tasks, and the level of effort required, will depend on the outcomes of Tasks 2 and 3 for Task 4, and on the extent of remaining data gaps requiring new well construction for Task 5. If these optional tasks are triggered, a separate scope and budget will be prepared at that time.

The budget for Task 6 (Project Coordination and Management) accounts for LSCE staff attendance at up to six Subbasin meetings and two TWG meetings per month through December 2025 (each up to two hours), preparation of presentation materials, and preparation of a technical memorandum summarizing

Kern County Subbasin

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2025 data gap implementation results for inclusion in the Annual Report to DWR. However, Task 6 costs may be lower if meeting attendance and coordination needs are less intensive than experienced during prior 2025 Plan development efforts.

Table 1. Estimated Project Budget	
Tasks	Total Budget
Task 1. Data QA/QC	\$5,000
Task 2. Identifying and Confirming Wells to Fill Existing Gaps	\$12,000
Task 3. Data Gap Analysis Update	\$15,000
Task 4. Identifying and Confirming Wells to Fill New Gaps (Optional)	N/A
Task 5. GSA Coordination and Monitoring Well Design Support (Optional)	N/A
Task 6. Project Coordination and Management	\$35,000
Total Project Budget	\$67,000

SCHEDULE

The schedule for this Scope of Work spans October through December 2025 and is organized around Tasks 1 through 6. The timeline is designed to align with the Subbasin's commitments to fill existing groundwater level and groundwater quality RMNs data gaps by the end of 2025 and prepare documentation for inclusion in the 2025 Annual Report to DWR.

- **October 2025:**
 - Task 1 (Data QA/QC): GSAs provide RMN well construction information and finalize the Well Inventory for GEI; GEI compiles and provides updated datasets to LSCE for QA/QC.
 - Task 2 (Existing Wells): GSAs begin identifying candidate wells to fill data gaps, with LSCE confirming suitability; GSAs initiate access agreement efforts.
 - Task 6 (Coordination and Management): LSCE provides updates at Subbasin meetings.
- **November 2025:**
 - Task 2 (Existing Wells): GSAs continue identifying candidate wells and pursuing access agreements; LSCE continues confirming suitability.
 - Task 3 (Data Gap Re-Analysis): LSCE conducts the data gap analysis using updated datasets from Task 1. The quality and completeness of results will improve as more candidate wells are identified and confirmed through Task 2.
 - Task 6 (Coordination and Management): LSCE provides updates at Subbasin meetings.
- **December 2025:**
 - Task 2 (Existing Wells): GSAs continue securing access agreements and LSCE continues confirming wells as needed.
 - Task 3 (Data Gap Re-Analysis): LSCE finalizes the analysis and prepares Subbasin-scale summary outputs.

Kern County Subbasin

October 2, 2025

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- Task 4 (Optional – New Gaps): If new data gaps are identified in Task 3, LSCE may assist GSAs in identifying and confirming additional wells.
- Task 6 (Coordination and Management): LSCE provides updates at Subbasin meetings and prepares the technical memorandum summarizing 2025 data gap implementation results for inclusion in the Annual Report to DWR.

This schedule provides a framework for completing Phase 1 of the Subbasin's data gap implementation by the end of 2025. However, the completion of Phase 1 work is contingent on the ability of all parties involved in Phase 1 work to complete the tasks in the schedule provided. If this schedule is delayed by factors beyond LSCE's control, then Phase 1 work may extend into 2026 and LSCE may need to request a budget amendment if the budget in this scope of work is impacted by these delays. Phase 2, which involves filling remaining gaps with newly constructed monitoring wells, is anticipated to proceed in 2026.

This scope provides a framework for advancing groundwater level and groundwater quality monitoring network data gap implementation, ensuring progress toward Subbasin commitments, and positioning the Subbasin for timely and effective implementation of the 2025 Plan.

Sincerely,

LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS

William Z. Halligan
Will Halligan, PG
Senior Principal Hydrogeologist

Angela M. Hansen
Angela Hansen
Senior Hydrogeologist

Attachment(s): 2025 Schedule of Fees – Engineering and Related Field Services.



Woodland-Roseville-Chico-Daly City-Meridian, ID

2025 SCHEDULE OF FEES

ENGINEERING AND RELATED FIELD SERVICES

Professional*

Senior Principal	\$280/hr.
Principal Professional.....	\$260/hr.
Supervising Professional	\$248/hr.
Senior Professional	\$220/hr.
Project Professional	\$192/hr.
Staff Professional	\$170/hr.

Technical

Data Management Specialist**	\$160/hr.
Senior GIS Analyst	\$160/hr.
GIS Specialist.....	\$120/hr.
Engineering Asst./Scientist.....	\$120/hr.

Project Admin Support

Word Processing, Clerical.....	\$105/hr.
Digital Communications Specialist	\$120/hr.
Project Administrator	\$120/hr.

Vehicle Use	\$0.70/mi (or curr. IRS rate)
Subsistence	Cost Plus 15%
Field Equipment (Flow Meters, Transducers, etc.)	\$25 to \$100/day
Copies	\$0.20 ea.
Professional or Technical Testimony	200% of Regular Rates
Technical Overtime (if required)	150% of Regular Rates
Outside Services/Rentals	Cost Plus 15%
Services by Associate Firms	Cost Plus 15%
Prevailing Wage Rate	\$210/hr.

* Engineer, Geologist, Hydrogeologist, and Hydrologist

**Information Systems Analyst and Database Specialist

Note: Send invoice payments to Accounts Receivable, 500 1st Street, Woodland, CA 95695

Exhibit C - Water Quality Monitoring / Well Mitigation Program:

Kahn, Soares & Conway	10/1/25 - 12/31/25	<u>\$40,500.00</u>
		\$40,500.00

**PROPOSAL FOR CAWELo WATER DISTRICT
SCOPE OF WORK FOR KAHN, SOARES & CONWAY
ASSISTANCE TO KERN COUNTY GSAS RE: DEGRADED WATER QUALITY PROVISIONS
AND WELL MITIGATION PROGRAM IMPLEMENTATION**

OCTOBER – DECEMBER 2025

The Scope of Work provided here covers the time-period of October 1 through December 31, 2025.

Task	Estimated Hours	Estimated Costs
Task 1 – Coordination and Internal Meetings with Subbasin Committees, Subbasin leads, Cawelo Water District	30 hours	\$ 13,500.00
Task 2 – Draft and Edit Kern Subbasin Well Mitigation Program to Include State Small Financial Assistance Track; draft and edit scopes of work for water quality consultants; draft and edit domestic well owner notices	30 hours	\$ 13,500.00
Task 3 – Participate in external meetings with State Water Board members and staff; DWR staff; SHE; and, others – as requested re: Degraded Water Quality Provisions	10 hours	\$ 4,500.00
Task 4 – Coordination with Mitigation Sub-Committee, as requested; review consultant proposals; advise Mitigation Sub-Committee on Mitigation and Degraded Water Quality Implementation	20 hours	\$ 9,000.00
Total		\$ 40,500.00

Exhibit D - Outreach and Engagement:

Intera:	10/1/25 - 9/30/26	\$87,000.00
		<hr/> \$87,000.00



INTERA Incorporated
3838 W Carson St #380
Torrance, CA 90503
+1 (424) 275-4055
INTERA.com



October 16, 2025

Derek Yurosek
Kern Subbasin Manager
Kern River Groundwater Sustainability Agency
3200 Rio Mirada Drive
Bakersfield, CA 93308

RE: Proposal for Kern County Subbasin Community Outreach & Engagement Support from October 2025 through September 2026

Dear Mr. Derek Yurosek,

The Kern Subbasin is transitioning from a successful period of Groundwater Sustainability Plan (Plan) development and regulatory coordination into the Plan implementation phase. INTERA is proud to have supported this progress and appreciates the continued trust placed in our team.

This proposal outlines a focused approach to sustain meeting community outreach and engagement commitments through September 2026. This effort, unlike the intensive 2025 Plan Development's Community Outreach and Engagement Strategy, is more streamlined. This reflects the Subbasin's shift from Plan development under State Water Resources Control Board oversight to implementation under the Department of Water Resources. It is important to note that this proposal covers a 12-month period, whereas the prior effort covered only 6 months.

Our support is designed to help the Subbasin communicate effectively with diverse external audiences. Technical and policy work must be conveyed clearly and accessibly—whether to state agencies, NGOs, or the public.

1.0 Scope of Work

Task 1. Community Outreach & Engagement

This task will maintain the momentum built through prior outreach efforts—continuing to strengthen trust and rapport with community groups, NGOs, and nonprofit organizations across the Kern Subbasin while sustaining positive relationships with the DWR and SWRCB. All activities align with the commitments outlined in the 2025 Plan's *Stakeholder Communications and Engagement Plan*.

The scope and budget for this period are organized by quarters. Most of the Subbasin's major outreach initiatives are scheduled for 2026. Larger efforts—such as the Annual Report Workshop, a potential Well Mitigation Plan Workshop (pending release of Version 3.0), and outreach related to forthcoming basin-wide studies—will be addressed under a separate scope of work. This task aims to ensure continuous

Proposal for Kern County Subbasin Community Outreach & Engagement Support

From October 2025 through September 2026

October 16, 2025

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communication and lay the groundwork for future engagements in 2026. A conceptual schedule outlining activities from 2025 to 2026 and anticipated outreach is provided in this proposal to support Subbasin planning.

- **Digital Content Development & Management**

- Maintain the Subbasin's Facebook and Instagram accounts through consistent, multilingual engagement.
- Develop and coordinate up to five new social media posts per month (English, Spanish, Punjabi).
- Update key sections of KernGSP.com—including the Homepage, GSP Documents, Contact Us, and 2026 Meetings & Events Calendar—to reflect the release of the 2025 Plan.
- Produce updated public-facing materials such as flyers and handouts (e.g., GSP Key Highlights), contingent on GSA Manager and Policy Committee review and approval prior to release.
- Develop Bi-Annual Newsletters and coordinate release on the website and email blasts.

- **Managing Stakeholder Inquiries:** INTERA will facilitate a structured process for receiving, tracking, and responding to inquiries from NGOs and community members in coordination with the Subbasin Plan Manager. This process ensures that all feedback is acknowledged, routed appropriately, and documented to maintain transparency and trust.

- **Partnership Organization Collaboration:** INTERA will identify and promote events hosted by partner organizations—such as the Kern Water Collaborative, Water Association of Kern County, and Kern County Farm Bureau—through the Subbasin's social media accounts, email notifications, and updated event calendar postings.

- **Media Opportunity Solicitation:** INTERA will monitor and flag *optional* media and community engagement opportunities for GSA managers and staff. Notifications will be provided through brief email updates and/or Manager's meeting updates (as needed). Potential opportunities may include local news features, community presentations, or outreach collaborations. All outreach activities—including those listed above—will be tracked for inclusion in the upcoming Annual Report, demonstrating continued compliance with community engagement requirements and commitments.

- **Annual Report Workshop:** 2025 Water Year Annual Report Workshop: INTERA will manage all planning, notifications, and presenter coordination for a public workshop. We will develop the public facing presentation based on the Annual Report deliverables prepared by Todd Groundwater and coordinate with external vendors to provide all materials and live interpretation in English, Spanish, and Punjabi.

- **Well Mitigation Program Version 3.0 Workshop:** Following the release of Version 3.0, INTERA will organize and host a virtual public workshop. This includes close coordination with the Well Mitigation Subcommittee to develop the presentation and digital reference materials, with support from external language interpretation vendors.

- **Community Pop-Up Events:** INTERA will plan and execute two public engagement events. The first is participation in the Kern County Fair Water Day (anticipated September 2026). The second will be held in a disadvantaged community in partnership with a local organization (e.g.,

Proposal for Kern County Subbasin Community Outreach & Engagement Support

From October 2025 through September 2026

October 16, 2025

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Kern Water Collaborative). Both events will include multilingual presentations and materials.

Note: Cost savings may be achieved if bilingual GSA staff are available to support interpretation.

To ensure consistency with the Kern Subbasin's communication approach and strengthen coordination across GSAs, it is recommended that the Subbasin establish a Community Outreach and Engagement Working Group. This group would include the Plan Manager, two INTERA outreach team members, and at least three GSA managers with relevant community engagement experience. The Working Group will review draft materials, provide conceptual input on proposed activities, and ensure alignment prior to distribution to the broader Managers Committee. Meetings would occur quarterly or as needed, based on activity levels. Given the duration of this proposal period, one Working Group meeting is included in this scope.

Deliverables:

- Monthly drafts and final versions of five social media posts (English, Spanish, Punjabi)
- 2x Draft and final website update language for KernGSP.com (English, Spanish, Punjabi)
- Draft and final GSP Key Highlights Flyer (English, Spanish, Punjabi)
- Draft and final 2026 Meetings & Events Calendar (English, Spanish, Punjabi)
- Draft and final 2025 Plan Implementation flyers (English, Spanish, Punjabi)
- 2x Draft and final Bi-Annual Newsletter (English, Spanish, Punjabi)
- 2x Community Pop-Up Event Flyers and hand-out materials (English, Spanish, Punjabi)
- 2x Workshop Presentations, Flyers, digital noticing language, and hand-out materials, (English, Spanish, Punjabi)

2.0 Assumptions

To ensure transparency and shared understanding, we have outlined the assumptions that form the basis of our proposed scope and approach.

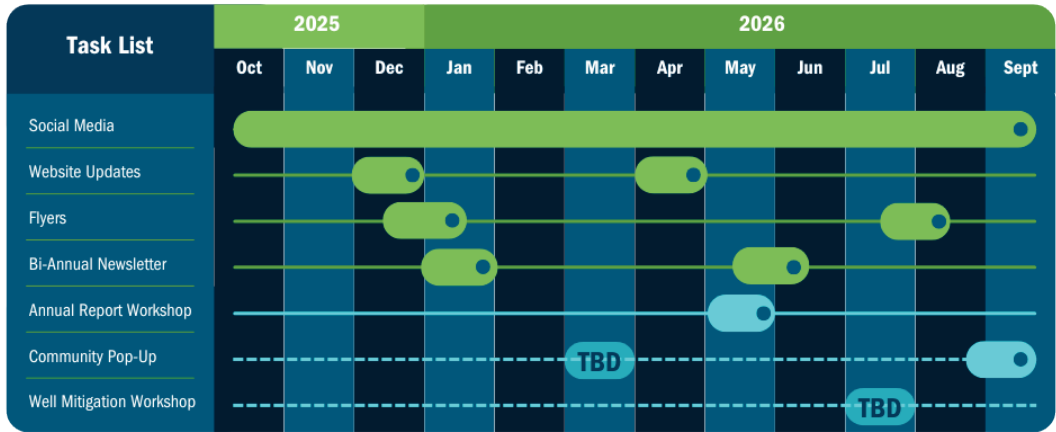
- INTERA will have one attendee from the Community Outreach & Engagement team on one managers meeting and one policy committee meeting per month.
- All meetings will be attended virtually
- Translation will continue to be handled under a separate vendor agreement and not included in this scope and budget
- All required data and information will have undergone quality-assurance/quality-control prior to submittal to INTERA
- GEI will manage the website, with INTERA providing the content to be updated.
- The Kern Subbasin should exit SWRCB intervention before 2026
- Coordination with DWR is not to occur until after November 2025

3.0 Schedule

This schedule outlines key community outreach and engagement milestones for the upcoming 12 months in support of Kern Subbasin planning. Please note that the schedule is subject to change. The

Well Mitigation Program Version 3.0 Workshop and one Community Pop-Up Event are currently marked "TBD" (To Be Determined) as their dates are pending. The timeline may be adjusted to align with the evolving priorities of the Subbasin's Manager and Policy committees, as well as external factors such as the official transition of oversight from the State Water Resources Control Board to the Department of Water Resources.

2026 Water Year Kern Subbasin
Anticipated Community Outreach & Engagement Key Milestones



Green: Written materials and deliverables
Light Blue: Virtual or in-person engagement events

4.0 Budget

The budget for this period are organized by quarters, with most of the Subbasin’s major outreach initiatives are scheduled for 2026, as depicted in the schedule above.

Proposal for Kern County Subbasin Community Outreach & Engagement Support
 From October 2025 through September 2026
 October 16, 2025
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Table 1. October through December 2025 Budget

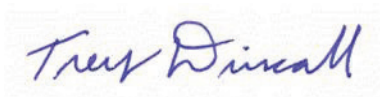
Quarter & Year	Milestone Activity Summary	Total
Q4 2025	Social media updates, website updates, flyer development	\$15,000
Q1 2026	Social media updates, website updates, bi-annual newsletter development, (tentative) community pop-up event	\$20,000
Q2 2026	Social media updates, flyer development, Annual Report Workshop	\$24,000
Q3 2026	Social media updates, website updates, bi-annual newsletter development, Community Pop-Up event, (tentative) Well Mitigation Program Version 3.0 Workshop	\$28,000
Total for October 2025 – September 2026		\$87,000

The timing of budgeted activities is subject to change. Should key milestones shift—such as those for the Well Mitigation Program Workshop or Community Pop-Up events—the revised schedule will be communicated to, and require formal approval from, the Managers and Policy Committee before proceeding.

Thank you for considering our proposal to continue this important work. We are eager to build on our partnership. Should our approach be selected, we are ready to begin seamlessly supporting the implementation.

Sincerely,

INTERA Incorporated



Trey Driscoll, PG, CHG
 Principal Hydrogeologist



Kait Palys
 Senior Water Resources Scientist

Exhibit E - Annual Report Prep / Support:

Todd GW:	10/1/25 - 4/30/26	\$92,700.00
GEI:	10/1/25 - 4/30/26	<u>\$40,000.00</u>
		\$132,700.00



October 15, 2025

MEMORANDUM

To: Kristin Pittack, Kern County Subbasin Plan Manager

From: Michael Maley, Principal Hydrogeologist
Maureen Reilly, Principal Engineer

Re: Proposal – Preparation of GSP Annual Report for WY2025
Kern County Subbasin Groundwater Sustainability Plans (GSP)

1 INTRODUCTION

The Kern County Subbasin (Subbasin) Groundwater Sustainability Agencies (GSAs) submitted adopted Groundwater Sustainability Plans (GSPs) covering the entire Subbasin to the Department of Water Resources (DWR) on January 31, 2020. Annual Reports are due to DWR “by April 1 of each year following the adoption of the Plan” (§356.2). Subbasin GSAs are currently cooperating in preparation of the seventh GSP Annual Report covering Water Year (WY) 2025 for the Kern County Subbasin.

Todd Groundwater successfully prepared and submitted the previous six Annual Reports (WY2019 through WY2024) to DWR. We envision working cooperatively with Subbasin GSAs and their consultants to compile and incorporate information that either is currently available or is being collected as part of GSP implementation. As occurred during the preparation of the previous annual reports, we assume that all the Subbasin GSAs will provide upload the required water budget data and GSP Implementation Progress Summaries for the Annual Report via the Subbasin Data Management System (DMS). Changes in WY2025 include the following:

- Documenting our coordination with SWRCB (State Water Resources Control Board) staff and the development and adoption of amended GSPs for the Subbasin.
- Coordinating with technical working group (TWG) subcommittees to provide expanded assessment of current conditions for subsidence and water quality sustainability indicators.
- Coordinating with TWG subcommittees to provide expanded documentation of other implementation activities for stakeholder outreach, well mitigation and other topics.
- Shift to using the updated Kern-IWFM to replace the existing C2VSimFG-Kern model to support water budget reporting requirements.

Todd Groundwater will work with the Subbasin Plan Manager (Kristin Pittack) to coordinate communications with Subbasin GSAs and DWR.

2 APPROACH

Preparation of the WY2025 Annual Report will continue to follow regulatory requirements provided in reporting standards for Annual Report data in Article 3 (§352.4) and additional reporting provisions in Article 4 (§353.4). In October 2023, DWR issued a Guidance¹ document for preparation of Annual Reports that included additional information requirements. The new DWR Guidance document lists three primary sections for the Annual Report. These include:

- Executive Summary
- Data Analysis Summary
- Progress Toward Implementation

The Executive Summary and Data Analysis Summary sections in the previous Annual Report are generally consistent with the requirements of the new DWR Guidance document with only minor modifications. The Progress Toward Implementation provided a more detailed description of the reporting requirements than were listed in Article 7 of the GSP regulations (§356). These include the following topics:

- **Current Conditions for Each Sustainability Indicator** - The Report should describe, tabulate, and provide graphical representation of how current sustainability indicator conditions compare to minimum thresholds, interim milestones, and measurable objectives identified in the Plan.
- **Projects and Management Actions (PMAs)** – The Report should provide a description and table(s) of the status and/or progress toward implementing PMAs. The discussion should include the status of each PMAs listed in the GSP (e.g., active, pre-planning, conceptual, inactive), the benefits observed from active PMAs, expected schedule for PMAs in planning stages, and descriptions of anticipated benefits to occur within the next water year.
- **Progress Made on Recommended Corrective Actions** - The Annual Report should describe what actions have been taken during the preceding water year to address recommended corrective actions.
- **Other Information on Implementation Progress** - summarize any agency outreach and engagement during the preceding water year to inform the public of the status of GSP implementation, such as committee meetings, stakeholder engagement, public outreach events, coordination efforts with state and federal agencies, local well permitting and land use planning agencies, and neighboring GSAs.

Todd Groundwater will coordinate with the Subbasin Plan Manager and DMS Group for the for collection of the water budget data and GSP Implementation Progress summaries for the WY2025 Annual Report.

- **The target date for getting GSAs to update the DMS with their GSP Implementation Progress summaries is December 31, 2025.**
- **The target date for getting GSAs to update the DMS with their water budget data is January 30, 2026.**

¹ Groundwater Sustainability Plan Implementation: A Guide to Annual Reports, Periodic Evaluations & Plan Amendments, California Department of Water Resources, October 2023.

The water budget data serves a dual purpose of populating the DWR water budget templates and providing the required groundwater extraction and change in storage maps. Todd Groundwater will generate hydrographs of the Subbasin monitoring network wells that conform with the new DWR Guidance document. To provide sufficient time to incorporate this data into the annual report with sufficient time for Subbasin GSA review to meet the April 1, 2026, submittal deadline, we request that all the Subbasin GSAs provide their data and information in a timely manner following the proposed schedule.

We anticipate using the updated Kern-IWFM model to replace the previous C2VSimFG-Kern model. We will continue to follow the same technical approach used in the previous annual reports, to support the data analysis for the WY2025 Annual Report. The model has proved to be an efficient tool to develop several of the required regulatory water budgets and other analyses. Specifically, the model will be used to develop change in groundwater in storage (maps and tables), a map of groundwater extractions, and the non-measured components on the four DWR templates. Use of the model for each of these analyses provided technically credible results that are consistent with the water budgets presented in current Subbasin GSPs.

3 SCOPE OF SERVICES

Tasks associated with the proposed scope of services are summarized below. Todd Groundwater intends to follow a similar approach used for previous annual reports to maintain consistency in methodology and presentation.

Task 1: Update Groundwater Conditions, Water Budget and Progress Reports

The guidance from Article 7 of the GSP regulations specified annual reporting requirements that include presentation of water budget data, hydrographs, groundwater elevation maps that are compiled from GSAs, member agencies, and other entities throughout the Subbasin. The existing format is considered to meet the requirements of the new DWR Guidance, so no substantial report format changes are considered necessary for these sections. The generation of hydrographs and water budget data will be performed via the DMS for WY2025. The subtasks described below outline the steps necessary to meet these annual reporting requirements.

Subtask 1A: Review Hydrographs

In compliance with regulatory requirements and the new DWR Guidance document, hydrographs will be prepared for all of the GSP network wells in the Subbasin. These will be as an appendix to the Report. The hydrographs will present overall trends and fluctuations for WY1995 through WY2025, which will be described briefly in the context of water year type. Hydrographs will include the minimum threshold and measurable objective for each well; therefore, any updates to these values will need to be provided by the reporting GSA. A map showing the location of submitted hydrographs will be developed and PDF files of each hydrograph will be included in an appendix of the Annual Report.

Subtask 1B: Prepare Water Budget Templates

DWR provides four required templates documenting water types, sources, and use within the Subbasin. Working with the individual agencies, Todd Groundwater will compile water supply data for the following categories:

- Groundwater Extractions tabulated by water use sector.
- Groundwater extraction measurement methods and accuracy.
- Surface Water Supply tabulated by water use source type.
- Total Water Use.

In accordance with guidance from Article 7 of the GSP regulations, data from more than 40 member agencies, municipalities and other entities throughout the Subbasin will be compiled through the DMS. Metered groundwater extractions, surface water supplies and water use data will be compiled for the DWR water budget templates via the DMS. The Kern-IWFM model update will be used to calculate agricultural water demand. Reported data will be reviewed for consistency with the previous templates and with information provided for the model update. For example, the total surface water supply will be compared to total diversions into the basin to check for potential major discrepancies.

Subtask 1C: Construct Groundwater Elevation Contour Maps

Subbasin-wide water level contour maps for the Primary Principal Aquifer will be developed consistent with interpretations with the recently adopted GSP. Water level data required for the contour maps will be downloaded from the DMS. For the three additional local Principal Aquifers (Upper Principal Aquifer in the northwest, Santa Margarita Principal Aquifer in the northeast, and the Olcese Principal Aquifer in the east), Todd Groundwater will work directly with the GSAs responsible for those aquifers. It is preferred that the responsible GSA develop the localized groundwater elevation maps to the extent that data are available to better ensure that the interpretation is consistent with their GSP. Todd Groundwater will coordinate with the appropriate agencies to incorporate the Fall 2024 and Spring 2025 maps into the Annual Report.

Subtask 1D: Analyze Change in Groundwater in Storage and Groundwater Extraction

GSP regulations (§ 356.2 (b)(5)(B)) for the Annual Report require both a map and graph of changes in groundwater in storage and groundwater extraction be developed over the entire groundwater basin. Todd Groundwater will develop change in groundwater in storage maps and graphs using the C2VSimFG-Kern model, using the same tool and methodology as in previous annual reports to maintain consistency in the results.

Data for the model update will be compiled by the DMS using similar data templates that were sent to each district in prior years. WY2025 ET rates, precipitation and crop acreages for the Kern County Subbasin will be provided by LandIQ. The Kern River and Poso Creek streamflow for WY2025 will be updated based on locally measured weir data. Precipitation data will be supplemented using publicly available precipitation data from the PRISM Climate Group at Oregon State University. The monthly rainfall data for Kern County for WY2025 will be mapped into Kern-IWFM input files. Todd Groundwater will utilize these data sets to develop the WY2025 Annual Report water budget update.

One annual change in groundwater storage map and one groundwater extraction map will be developed for WY2025 for the entire Kern County Subbasin using the updated Kern-IWFM subbasin-wide results. Map generation will follow methodology similar to that used for the previous annual reports.

Task 2: Evaluate GSP Implementation Progress

As GSP implementation progresses, the Subbasin will be evaluating performance with respect to sustainability as part of the Annual Report based on each GSA providing a GSP Implementation Summary for WY2025 via the DMS.

Subtask 2A: Summary of Coordination with SWRCB during Preparation of Revised Subbasin GSP

Subtask 2A will provide a summary to document the activities and coordination between the Subbasin GSAs and the SWRCB staff during the preparation of two amended Subbasin GSPs adopted in December 2024 (2024 Plan) and August 2025 (2025 Plan).

Subtask 2B: Current Sustainability Indicator Conditions

Input for assessing the current sustainability indicator conditions will be based on GSA data input and GSP Implementation Progress Summaries submitted via the DMS compared to the appropriate section of the applicable GSP. Todd Groundwater will provide an assessment of current information for the following sustainability indicators:

- groundwater elevation,
- change in storage and
- interconnected surface water and groundwater dependent ecosystems

These data will be described, tabulated, and presented graphically to represent how current sustainability indicator conditions compare to minimum thresholds, interim milestones, and measurable objectives identified in the Plan, including an evaluation whether minimum threshold exceedances have occurred and determine if those exceedances constitute an undesirable result in the basin, for each applicable sustainability indicator.

The DWR Guidance document lists the following information to be provided for each sustainability indicator with applicable monitoring and data collected during the previous water year:

- Definition of significant and unreasonable conditions
- Description of sustainable management criteria (minimum threshold, measurable objective and interim milestones, undesirable results)
- Representative monitoring site information (e.g., name and location of well or subsidence InSAR mapping data)
- Measurement information and monitoring methods
- Comparison of measurement to sustainable management criteria
- Discussion of results and potential causes of observed conditions

The DWR Guidance document further recommends assessing whether impacts to beneficial users from changes in groundwater conditions have occurred during the preceding water year. These will be documented in the Examples provided include:

- Dry wells
- Subsidence-related infrastructure damage
- Emergency water shortages
- Changes in water quality

The current conditions for each sustainability indicator section should also include a description of efforts to fill data gaps during the preceding water year and how new data and information are being applied to improve basin understanding and reduce management uncertainty identified in the Plan. New information obtained from existing wells in the monitoring network during the preceding water year, such as well video surveys, reference elevation surveys, and geophysical data can also be described and used to update the understanding of the basin and the SGMA Portal Monitoring Network Module.

Subtask 2C: Other Current Sustainability Indicator Conditions

Starting with the WY2025 Annual Report, expanded assessment of current conditions for subsidence and water quality sustainability indicators will be developed by their respective TWG subcommittees. The TWG subcommittee will provide the technical input, including any necessary figures and tables. Todd Groundwater will coordinate with the TWG subcommittees on Annual Report requirements and provide an initial review and comment on the input provided.

Subtask 2D: Projects and Management Actions (PMAs)

Similar to the previous annual report, each GSA will submit a GSP Implementation Progress Summary via the DMS. Each GSA should provide a summary sentence/paragraph along with a bullet list of the WY2025 GSP activities or actions for their area. Documentation of progress with GSP implementation will need to be consistent with the current Revised GSPs for each GSA. Todd Groundwater will review each summary, and any questions will be directed to the reporting GSA. The final GSP Implementation summaries will be compiled into the WY2025 Annual Report.

The new DWR Guidance document requires that each GSA should provide updates in the Annual Report on implemented, planned, or proposed actions to address observed impacts. The GSP Implementation Progress Summary will be updated to provide a description and table(s) that include the following:

- status of the various projects proposed in the GSP (e.g., active, pre-planning, conceptual, inactive),
- the benefits observed from active PMAs, expected schedule for projects and management actions in planning stages, and
- descriptions of anticipated benefits to occur within the next water year, to be reported in the next Annual Report.
- assessment of PMAs necessary to respond to hydrologic or climate conditions and the response of those activities on achieving the sustainability goal for the basin.
- brief evaluation of whether the implementation of PMAs are resulting in adverse impacts to the various sustainability indicators, adjacent groundwater basins, or beneficial uses and users
- methods and processes that occurred during the water year to publicly notice and engage interested parties concerning the status and implementation of PMAs

The Annual Report will provide a consolidated basinwide summary of GSP Implementation that will highlight observations demonstrating the effectiveness of GSP implementation and provide documentation potential issues. The purpose is to provide a more coordinated basinwide summary of GSP Implementation progress for DWR reviewers. This summary will include:

- **GSP Implementation Projects and Management Actions.** This is envisioned as a table intended to highlight the actions that have been taken by the Subbasin GSAs. This table will be based on input provided in the GSA GSP Implementation Progress Summaries (Subtask 2A) and will be

accompanied by a brief discussion. Starting in WY2025, the Annual Report will include a Subbasin Glide Path that compares the reported GSP Implementation to the Plan.

- **Compliance with Exceedance Policy.** This will provide a consolidated summary of groundwater level exceedances and actions taken during WY2025 based on input provided by each GSA's GSP Implementation Progress Summary (Subtask 2A). The discussion of the groundwater level exceedances will be presented in context with the overall Subbasin monitoring program results to provide a preliminary assessment of undesirable result status.
- **Water Budget Assessment.** The water budget assessment will include a summary of changes observed in the basinwide water budgets based on the WY2025 data submitted to the DMS and other sources. The evaluation will compare the total recharge, water use and change in groundwater in storage for WY2025 to similar hydrologic years from the 1995 to 2014 Historical Baseline period from the GSPs. The assessment will focus on presenting observations but will be represented as a preliminary since there are multiple potential factors that may be contributing to the observed changes in water use.

Since this is an expanded component the Annual Report based on the newly adopted 2024 and 2025 Plans for the Subbasin, we anticipate that this section will require considerable review by the Subbasin GSAs before it can be finalized in the Annual Report. Additional requirements that may be added to those outlined above may require an additional scope of work. It is important for Subbasin GSAs for provide timely Annual Report input so that there is sufficient time to prepare and review this section before the April 1, 2026, submittal deadline.

Subtask 2D: Other Information on Implementation Progress

Starting with the WY2025 Annual Report, expanded documentation of other implementation activities for stakeholder outreach, well mitigation and other topics will be developed by their respective TWG subcommittees. The TWG subcommittee will provide the technical input, including any necessary figures and tables. Todd Groundwater will coordinate with the TWG subcommittees on Annual Report requirements and provide an initial review and comment on the input provided.

Each of these TWG subcommittee updates should provide information or accomplishments related to implementation efforts that it is using to achieve the sustainability goal for the basin, such as obtaining additional funding. Finally, the GSA should outline anticipated implementation activities and efforts to occur in the upcoming water year, such as planned data gap filling efforts or project and management action implementation.

Task 3: Prepare Administrative Draft, Draft, and Final Annual Report

Task 3 provides for the preparation of the Annual Report document. Prior to the submittal of the Final Report to DWR, Todd Groundwater will prepare a series of draft reports that will be circulated to the Subbasin GSAs for review and comment. The general schedule for the draft and final reports are planned as follows:

- Review Draft Annual Report: Updated Annual Report sections will be provided as they become available. These sections will be posted on the Manager Portal for Subbasin GSA review and comment. Initial results of these updated sections will be presented at the Subbasin GSA Manager Meeting as they become available.

- Complete Draft Annual Report will provide a complete document where includes revisions based on comments on the Review Draft. This draft will be provided to the Subbasin GSAs for review and comment. This draft is tentatively scheduled for **March 16, 2026**.
- A Draft Final Annual Report will be provided prior to submittal for any last-minute minor additions or corrections, if necessary.
- The Final Annual Report will be coordinated by Todd Groundwater and the Subbasin Plan Manager for submittal of the report prior to the deadline of **April 1, 2026**.

The draft report review period will be to address remaining data deficiencies, incorporate comments, and review the report for compliance with Annual Report regulations. Todd Groundwater, or the respective TWG subcommittee, will respond to comments. Todd Groundwater will coordinate document production during this period. The final report will be prepared as a PDF document that will be uploaded to the DWR SGMA portal and distributed to the Subbasin GSAs.

The DWR Water Budget Templates that will be uploaded separately to DWR along with this Annual Report. Each of the main budget data types will be summarized in the Annual Report along with a brief data description using a similar format as was used for the previous annual reports.

Task 4: Coordination, Communication and Meetings

Todd Groundwater will work with the Subbasin Plan Manager (Kristin Pittack) to coordinate communications with Subbasin GSAs, TWG subcommittees and DWR. As indicated above, there will be a need for communication with Subbasin GSAs and TWG subcommittees to obtain comparable data across the entire Subbasin for inclusion in the WY2025 Annual Report. Communications may include individual calls/emails with Subbasin agencies, conference calls with TWG subcommittees, and video conference meetings to present progress to date and discuss outstanding items or issues. In particular, any questions or contacts with DWR regarding clarifications of Annual Report requirements will be coordinated through the Subbasin Plan Manager.

For budget and planning purposes, two Teams Meeting updates on the Annual Report are assumed as part of this scope. Because of the large number of attendees, the Subbasin Managers Meetings – typically held on Friday mornings – will be used as a forum for data requests, discussion, and comments regarding the Annual Report preparation process.

4 BUDGET AND SCHEDULE

To better facilitate preparation of the WY2025 Annual Report, our work on the Annual Report data requests will begin upon receipt of a notice to proceed. The Todd Groundwater team will include staff members who worked on previous GSP annual reports and are all familiar with the Kern County Subbasin and GSP data in order to meet the regulatory submittal date of April 1, 2026.

Execution of the scope of work described herein is estimated to cost \$92,700. This budget has increased from WY2024 to provide additional time for expanded technical work and coordination with TWG subcommittees. A budget summary by task is provided in Table 1. This cost estimate is considered a not-to-exceed estimate and Todd Groundwater will not exceed this cost without written authorization from the Subbasin GSAs. In addition, work will be conducted on a time and materials basis and only the costs expended will be invoiced.

Please let us know if you have questions regarding this proposal. For the WY2025 Annual Report, time is of the essence, and we stand ready to move the effort forward as soon as possible.

TABLE 1 – Budget Summary to Complete the WY2025 Annual Report

TASKS	ESTIMATED COST
Task 1: Update Groundwater Conditions and Water Budgets	\$29,840
Task 2: Evaluate of GSP Implementation Progress	\$28,360
Task 3: Prepare Administrative Draft, Draft, and Final Annual Report	\$28,620
Task 4: Coordination, Communication and Meetings	\$5,880
TOTAL	\$92,700

October 17, 2025

Kristin Pittack
Kern Subbasin Plan Manager
VIA EMAIL: kernsubbasinpoc@rinconconsultants.com

Re: Proposal for Kern Subbasin Water Year 2025 Annual Report Assistance

The purpose of this proposal is to define the Scope of Work and the cost estimate for assisting the Kern Subbasin and Todd Groundwater with data collection and management necessary to prepare the Water Year (WY) 2025 Annual Report to the Department of Water Resources (DWR). Since 2020, GEI has supported data management for the Subbasin and actively works to maintain integrity of data entered and stored in the Subbasin's Data Management System (DMS). Additionally, GEI supports data collection through mining databases and working with agencies to collect relevant water use information. Assistance is also provided with entering data, ensuring it's accurately reported to the DMS, and verifying accuracy of exports. Based on previous annual report assistance and new requirements stemming from the 2024 Groundwater Sustainability Plan (2024 Plan), the following tasks are proposed to fulfill the data needs.

Task 1. Gather Water Use Data and Import into the DMS

- Municipal surface water supplies for Cal Water, City of Bakersfield, East Niles CSD, and Oildale Mutual Water Co.
- Export water use data from the Conservation Portal for large water systems and SAFER Portal for small communities.
- Collect water use data from cities that are not required to report to a public database (Buttonwillow, Lost Hills, and McFarland).
- Obtain wastewater data from North of the River Sanitation District, cities and prison facilities. Waste Discharge volumes will also be downloaded from the Regional Board's website for municipalities that report electronically.
- Fill data gaps in the DMS to preserve data integrity for future reference.
- Compile GWL MTs into a consolidated spreadsheet and archive in the DMS for future reference.

Task 2. Support Users with DMS Data Entry

- Create WY2025 narrative report templates and assists users as requested. Each year, GEI prepares the GSA narrative templates and assists with exporting them into a contiguous file, performing QAQC review of conservation portal data (municipal water use), extracting groundwater pumping data, and assisting with reconciling data or performing QAQC data reviews as requested by Todd Groundwater.
- Additionally, GEI assists users entering water use/supply data and developing the appropriate formula for categorizing the data.

Task 3. Draft Subbasin-wide Narrative of Groundwater Quality Conditions

- WY 2025 will report on groundwater conditions defined in the 2024 Plan, sampling from RMW-WQ, and develop a template for comparing groundwater conditions with the MTs in future annual reports.
- GEI will also assist with preparing a Subbasin-wide summary of P/MAs implemented in response to MT exceedances and any other corrective actions based on the GSA narratives.

Assumptions

- Labor hours are budgeted for GEI programmers to support data fixes, mass imports, and create chemographs for RMW-GWQ.

Deliverables

- Collect data and import it into the DMS
- Provide data management support to users and as-requested assistance to Todd Groundwater.
- Prepare GSA-specific narrative templates.
- Produce hydrographs and chemographs for RMWs, raft the Subbasin-wide assessment of groundwater conditions, summarize compliance with GWQ MTs based on GSA narratives.

Budget

The maximum estimated budget of \$40,000 is based on the proposed scope of work and assumptions. Billing for all work completed under this proposal will be in accordance with the terms of the Professional Services Agreement between GEI and Buena Vista Water Storage District, with labor billed at 3.05 times the labor rate. Invoices are prepared on a time-and-materials basis and submitted within one month of performing the work. The Subbasin will only be billed for the actual hours worked. Total Project billings will not exceed the authorized budget amount without obtaining written authorization.

Table 1. Budget Estimate

Task	Hours	Budget
1. Gather Data and Import into the DMS	68	\$15,000
2. Support Users with DMS Data Entry	24	\$ 8,000
3. Draft Subbasin-wide Narrative of GWQ Conditions	34	\$12,000
4. As-requested additional assistance	20	\$ 5,000
Total Budget Estimate		\$40,000

Closing

If this proposal is acceptable, please have an authorized representative sign indicating your acceptance of this Task Order. We look forward to continuing to work with the Kern Subbasin. If you have any questions or require additional information, please contact Stephanie Hearn at 661.716.3026 or shearn@geiconsultants.com.

Sincerely,



GEI Consultants, Inc.

Stephanie Hearn

Permitting and Water Quality Compliance



GEI Consultants, Inc.

Jackie Takeda

Permitting and Water Quality Compliance

Exhibit F - Kern Subbasin POC/Plan Manager:

Rincon	10/1/25 - 12/31/25	<u>\$34,057.00</u>
		\$34,057.00



Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003
805-644-4455

October 15, 2025

Rincon Project No. 23-14981

Derek Yurosek, Coordination Committee Chair

Kern County Subbasin

P.O. Box 4119

Buttonwillow, California 93238

Via email: dyurosek@bolthouseproperties.com

**Subject: Request for Task Order Changes and Amendment to the Kern County Subbasin Plan Manager Support Contract Agreement
Kern County, California**

Dear Mr. Yurosek:

Rincon Consultants, Inc. (Rincon) is pleased to provide this letter requesting task order changes and amendment to the Kern County Subbasin Plan Manager Support contract. The task order changes would support continued professional services to the Kern County Subbasin (Kern Subbasin) for Sustainable Groundwater Management Act (SGMA) compliance and implementation through December 31, 2025.

Background

On September 17, 2025, at the State Water Resources Control Board (SWRCB) probationary hearing for the Kern Subbasin, the SWRCB Board unanimously resolved that the Kern Subbasin 2025 Groundwater Sustainability Plans (GSPs) addressed both Department of Water Resources (DWR) deficiencies and SWRCB additional deficiencies, pending SWRCB Staff's review of the final adopted version. Within 8 weeks of the SWRCB resolution, it is anticipated that the Kern Subbasin and DWR will receive a letter from SWRCB Staff which will direct the Kern Subbasin return to DWR oversight. To facilitate a successful transition from SWRCB to DWR, and well-managed oversight of 2025 GSPs implementation, continued professional services (including additional meeting facilitation, Plan Manager/Point-of-Contact and task support) are anticipated.

Task 1 Meeting Support

Coordination Committee Meetings

Rincon will provide meeting support to the Coordination Committee on a bi-weekly basis by scheduling, coordinating, drafting and distributing agendas, and note taking.

Managers' Meetings

Rincon will provide meeting support to the Kern Subbasin Managers on a weekly basis by scheduling, coordinating, drafting and distributing agendas, and note taking.

Coordination Committee Chair Meetings

Rincon will schedule and attend 30-minute meetings on a weekly basis with the Coordination Committee Chair to prepare agenda topics for upcoming Managers' and Subbasin meetings.



Agency Coordination and Meetings

Rincon will continue to serve as the Point-of-Contact on behalf of the Kern Subbasin with DWR and SWRCB on an as needed basis. This scope of work includes correspondence via email and calls up to 2 hours per month, and attending two, 1-hour meetings with agencies. The Point-of-Contact will provide all email correspondence and verbal reports to the Coordination Committee and Managers.

Task 2 As Needed Task Support

Rincon will continue to provide as needed task support, as directed by the Coordination Committee, on a variety of tasks which may include but are not limited to those listed below. Up to 40 hours is estimated through the scope of work period.

- Review, comment, and finalization of materials
- Preparation and revisions of presentations for various meetings
- Coordination of Subbasin members, technical and legal teams on additional tasks or deliverables
- Support for coordination and preparation of Kern Subbasin Annual Report
- Fall 2025 Groundwater Level Reporting and upload to SGMA Portal

Rincon will document as needed task support directed by the Coordination Committee in Subbasin Meetings notes and provide verbal updates on progress at all Manager and Subbasin meetings.

Deliverables

- Meeting agendas and notes in Microsoft Word and PDF format
- Presentations in PPT and PDF format
- Draft and Final Fall 2025 Groundwater Level Data Reports (Excel spreadsheet format)

Assumptions

- All meetings will be attended by Rincon virtually. It is anticipated that up to 3 hours is needed on a weekly basis to prepare for Manager and Subbasin meetings, which includes coordination for agenda topics and materials and meeting preparation time.
- Should meetings extend beyond the timeframes described in this scope of work, or additional meetings be requested as directed by the Coordination Committee, impacts to the cost estimates provided in this scope of work will occur and additional task order changes will be requested.
- Tasks are only directed by the Coordination Committee at Subbasin Meetings.
- All meeting notes will be archived on Rincon hard drives and will only be distributed as requested by the Coordination Committee.
- Work under this scope excludes any public outreach and engagement efforts, ad-hoc committee/subcommittee-directed work or meeting attendance, which are being conducted by separate consultants or GSA managers tasked with those efforts.



Cost

As shown in Table 1 below, the estimated cost for this additional scope is \$34,057.00. Labor for the above additional scope will be billed on a time and materials basis. Back-up detail will be provided for all billed time.

Table 1 Cost Summary

Task		Estimated Cost
Task 1	Meeting Support	\$25,069.00
Task 2	As Needed Task Support	\$8,988.00
Total		\$34,057.00

Thank you for your consideration and for the continued opportunity to support the professional services provided. If you have any questions regarding this memo, please contact Kristin Pittack at 760-223-5062 or kpittack@rinconconsultants.com or Rosalyn Prickett at 760-930-7671 or rprickett@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

Handwritten signature of Kristin Pittack in blue ink.

Kristin Pittack, MS
Senior Water Resources Planner

Handwritten signature of Rosalyn Prickett in blue ink.

Rosalyn Prickett
Principal, Water Resources

Attachments

Attachment 1 2025 Rincon Fee Schedule



Standard Fee Schedule for Environmental Sciences and Planning Services

Professional, Technical and Support Personnel*	January 1, 2025 – December 31, 2025
Senior Principal	\$330
Principal	\$318
Director	\$318
Senior Supervisor II	\$302
Supervisor I	\$282
Senior Professional II	\$264
Senior Professional I	\$246
Professional IV	\$218
Professional III	\$203
Professional II	\$180
Professional I	\$160
Associate III	\$135
Associate II	\$121
Associate I	\$113
Field Technician	\$97
Technical Editor	\$152
Project Accountant	\$129
Billing Specialist	\$111
Publishing Specialist	\$124
Clerical	\$111

* Professional classifications include environmental scientists, urban planners, biologists, geologists, marine scientists, GHG verifiers, sustainability experts, cultural resources experts, data technology experts, and other professionals. Expert witness services consisting of depositions or in-court testimony are charged at the hourly rate of \$400.

Reimbursable Expenses

Direct Cost	Rates
Photocopies – B/W	\$0.25 (single-sided), \$0.45 (double-sided)
Photocopies – Color	\$1.55 (single-sided), \$3.10 (double-sided)
Photocopies – 11" by 17"	\$0.55 (B/W), \$3.40 (color)
Oversized Maps	\$8.50/square foot
Digital Production	\$15/CD, \$20/flash drive
Light-Duty and Passenger Vehicles*	\$90/day
4WD and Off-Road Vehicles*	\$150/day

* Current IRS mileage rate for mileage over 50 and for all miles incurred in employee-owned vehicles.

Direct Costs. Other direct costs associated with the execution of a project, that are not included in the hourly rates above, are billed at cost plus 16%. These may include, but are not limited to, laboratory and drilling services, subcontractor services, authorized travel expenses, permit charges and filing fees, mailings and postage, performance bonds, sample handling and shipment, rental equipment, and vehicles other than covered by the above charges.

Annual Escalation. Standard rates subject to 3.5% annual escalation, on January 1.

Payment Terms. All fees will be billed to Client monthly and shall be due and payable upon receipt or as indicated in the contract provisions for the assignment. Invoices are delinquent if not paid within 10 days from receipt or per the contractually required payment terms.

KERN NON-DISTRICTED LAND AUTHORITY

(FORMERLY KERN GROUNDWATER AUTHORITY)

3200 Rio Mirada Drive Bakersfield, CA 93308

Meeting of the Board of Directors

October 27, 2025, 2:00 p.m.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online using the link and information below:

<https://us02web.zoom.us/j/87916828311?pwd=MXovFd9w4lFdX8AnOTJBubbKBaglaC.1>

Telephone Dial-in: (669) 900-6833

Meeting ID: 879 1682 8311

Password: 795650

KERN NON-DISTRICTED LAND AUTHORITY BOARD OF DIRECTORS AGENDA

This meeting is held in accordance with the Brown Act pursuant to Section 54956 of the California Government Code and the Kern Non-Districted Land Authority Joint Powers Agreement.

1. Roll Call- Quorum Determination.

In the absence of a quorum, the Board will handle only those items not needing a quorum.

2. Flag Salute

3. Public Input

This portion of the meeting is set aside to provide the public with an opportunity to bring to the attention of the Board matters of which the Board may not be aware and which are not on the current agenda. No action can be taken on any matter raised during this portion of the meeting; however, a Board member may request that the matter be placed on any future agenda for further review and possible action. Members of the public may directly address the Board of Directors on any item of interest within the Board's subject matter jurisdiction, before or during the Board's consideration of the item. The President may limit the time allowed for comment

4. Approval of Minutes

- a. *September 22, 2025 (Jenny)

5. Financial Report

- a. *Financial Report & Accounts Payables (Jenny)

6. Administration

- a. Executive Director Report (Jenny)
- b. Landowner Assessment Ad Hoc (Jenny)
- c. Nov/ Dec Meeting Schedule

7. DWR Grant Administration

- a. Report on Grant Administration (Jason)

8. County of Kern Participation

- a. Kern County Participation Ad Hoc Committee Report (Royce)

9. Legal (Valerie)

- a. Statewide Update

10. New Business

-
- 11. Correspondence**
 - 12. Closed Session**
 - a. KNDLA Assessment
 - 13. Adjournment**

A person with a qualifying disability under the Americans with Disabilities Act of 1990 may request the Authority provide disability-related modification or accommodation in order to participate in any public meeting of the Authority. Such assistance includes appropriate alternative formats for the agendas and agenda packets. Requests should be made in person, by telephone, facsimile and/or written correspondence to the Authority office, at least 48 hours before a public Authority meeting. Written materials related to an item on this agenda to be considered in open session that are public documents and that are distributed to board members after the posting of the agenda, will be made available for public inspection when they are so distributed at the location of the KNDLA meeting during normal business hours. Documents that are public documents provided by others during a meeting will be available at the same location during business hours after the meeting.

TO: Rosedale-Rio Bravo Water Storage District Board of Directors
Agenda Item 4.d

FROM: Zach Smith

DATE: October 13, 2025

RE: Consideration of 2024 Operations Report

Discussion:

AECOM and District staff have completed the 2024 Operations Report. The full report can be found at the following link: <https://www.rrbwsd.com/wp-content/uploads/2025/10/Final-RRBWSD-2024-Operations-Report.pdf>

The report includes:

- 2024 water supplies, demands, and groundwater recharge project operations
- Discussion of current groundwater levels and historical trends
- Discussion of current groundwater quality and historical trends
- Status of District's groundwater balance (currently 213,213 acre-feet)
- Status of District's groundwater banking programs
- Summary of actions regarding Basin Management Objectives and SGMA implementation.

The groundwater banking tables were updated in this year's report. Rosedale's banking programs vary to some extent (share, losses, etc.). Previous partner banking tables tried to fit dissimilar programs into the same type of table. The adjustments made to the individual partner tables have helped with the transition to the summary tables provided in the report.

[View this email in your browser](#)



The Rosedale Recap!

October 2025 Newsletter

October 13, 2025, Special Board Meeting Update

The District convenes on the second Tuesday of every month at 8 AM. We encourage public participation and value your input during these Board meetings. To review our most recent Board Packet, please click the button below.

[Explore Board Packet](#)

OCT
13
2025

SPECIAL BOARD
OF DIRECTORS
MEETING
&
RRBWSD GSA
STAKEHOLDER
MEETING

8:00 AM

Attention Domestic Well Owners!

We are collecting data from domestic well owners in our area. This effort will help us better understand which wells may be at risk during future droughts and connect residents with potential resources.

If you own a domestic well, please take a few minutes to complete our short survey. Your participation will also make you eligible for **free groundwater level monitoring** to help track the condition of your well. You can access the survey and flyer using the buttons attached.



[Domestic Well Survey](#)

[Flyer \(English & Spanish\)](#)



SGMA Update: The Kern Subbasin Avoids Probation

[SWRCB Resolution No. 2025-0029](#)

Good news for Kern County groundwater management! At its September 17th hearing, the State Water Resources Control Board (SWRCB) voted to return the Kern County Subbasin to local oversight under the Department of Water Resources, avoiding state probation under the Sustainable Groundwater Management Act (SGMA). The decision recognizes the significant progress local Groundwater Sustainability Agencies (GSAs), including Rosedale, have made to strengthen coordination, monitoring, and groundwater management across the basin.

Before the transition is finalized, the state has asked GSAs to make a few final improvements, mainly ensuring all areas are covered by a managing agency and that programs are in place to support any domestic wells impacted by groundwater conditions. With local control preserved, Rosedale and our neighboring agencies will continue implementing projects, tracking progress, and working collaboratively to protect groundwater for our community's long-term future.

Readers can learn more using the buttons below:



[View the Kern Subbasin GSP](#)

[SWRCB Presentation Slides](#)

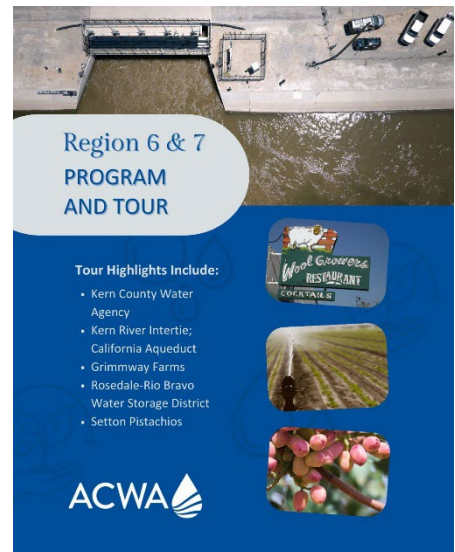
RRBWSD GSA Water Charge Updates

RRBWSD staff has completed the 2024 Water Charge process, and we want to thank our landowners for their cooperation and continued support as we work toward full SGMA implementation. As a reminder, the Water Charge for water use during the 2025 calendar year is set at **\$145.00 per acre-foot** used in excess of available supply. Looking ahead, the District will begin determining the 2026 Water Charge rate next month.

Rosedale is continuing to work with LandIQ to enhance our water accounting procedures, which includes monthly field-level estimates of evapotranspiration (ET), precipitation, and crop type using satellite imagery. In addition, the District is considering updates to the water accounting platform to improve accuracy, transparency, and usability for landowners.

Use the button below for more information about the District's water charge program.

[Visit Our Water Charge Page](#)



ACWA Region 6 & 7 Tour Recap

Rosedale was proud to serve as one of the stops during the ACWA Regions 6 & 7 “Advanced Water Management in the Central Valley” Tour, held October 9th & 10th in partnership with the California Farm Water Coalition. The Association of California Water Agencies (ACWA) represents more than 460 public water agencies statewide, working together to manage and protect California’s most vital resource.

The two-day event brought water leaders, growers, and industry professionals to Kern County to explore innovative water management practices at locations including Grimmway Farms, Setton Pistachios, the Kern River Intertie, and of course, the Rosedale-Rio Bravo Water Storage District.

Although the tour didn’t go exactly as planned, when the bus broke down on the way to Rosedale’s office, our staff jumped into action, delivering lunches to the stranded group about 40 minutes away. Once the bus made it to our facility for servicing, we welcomed attendees for a presentation on Rosedale’s recharge and banking programs and shared how we’re advancing sustainable groundwater management.

In true Rosedale fashion, the day ended with teamwork, flexibility, and a few laughs as staff shuttled guests back to the Kern County Water Agency. Despite the unexpected twists, it was a great opportunity to connect with water professionals from across the state, highlight the innovative work happening here in Kern County, and showcase Rosedale’s commitment to collaboration and problem-solving, both in the field and on the fly.

We’ve Got Water! Check out our latest video!

On October 10, RRBWSD began receiving water from the Kern River and the City of Bakersfield. Check out this video clip of the Kern River intake in action to see the flow as it enters our system and supports sustainable water management across the District.



Check out these helpful resources to find the water information you need!

Don't know which GSA you are in?

Use the button to access the Kern County GIS Map. View the **Layers** category, expand the **Water Resources** tab and select **Groundwater Sustainability Agencies**.

[Kern County GIS](#)

[Interactive Map](#)



Kern County Subbasin
Groundwater Sustainability Agencies

Visit the Kern Subbasin GSA website for information about the Groundwater Sustainability Plan (GSP).

[Kern Subbasin Website](#)

Don't forget: You can use the Kern Subbasin Data Management System (DMS) to access water data near you.

[Explore the DMS](#)



Need some help using the DMS? Check out our tutorial on using the DMS to find depth to water readings!

Have you lost access to drinking water? Please contact Self-Help Enterprises. Click the English or Spanish button for more information.

[English](#)

[Spanish](#)

Mark your calendars for important upcoming meetings!

Kern Non-Districted Land Authority (KNDLA) Board Meeting:

Monday, October 27th, at 2:00 PM at
the Kern County Water Agency's office
and via Zoom.

OCT
27
2025

KERN NON
DISTRICTED
LAND
AUTHORITY
(KNDLA) BOARD
MEETING

2:00 PM

RRBWSD Board & RRBWSD GSA Stakeholder Meeting:

Tuesday, November 11th, at 8:00 AM at
the RRBWSD office (**in person only**).

NOV
11
2025

BOARD OF
DIRECTORS
MEETING
&
RRBWSD GSA
STAKEHOLDER
MEETING

8:00 AM

RRBWSD GSA Stakeholder Meeting:

Tuesday, November 25th, at 9:00 AM at
the RRBWSD office and via Zoom.

NOV
25
2025

RRBWSD GSA
STAKEHOLDER
ADVISORY
MEETING

9:00 AM





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Our mailing address is:
Rosedale-Rio Bravo Water Storage District
849 Allen Road Bakersfield, CA 93314

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