



SPECIAL BOARD OF DIRECTORS MEETING

501 Taft Highway
Bakersfield, California

WEDNESDAY, April 17, 2024

AGENDA

CALL TO ORDER AND ANNOUNCEMENT OF QUORUM

11:30AM

CLOSED SESSION:

- A. Conference with Legal Counsel – Existing Litigation – Closed Session Pursuant to Gov. Code § 54956.9(d)(1):
 - 1. Bring Back the Kern, et al. v. City of Bakersfield, et al.
- B. Public Employee Performance Evaluation – Closed Session Pursuant to Gov. Code § 54957(b)(1)/54957.6:
 - 1. General Manager.
 - 2. General Counsel.

REGULAR SESSION:

INTRODUCTION OF GUESTS AND PUBLIC

- I. **PUBLIC COMMENT** (Members of the public may address the Board of Directors on any matter not on the agenda, but absent extraordinary circumstances, the Board may not act on such matters. Members of the public may address items of interest that are listed on the agenda prior to the Board’s decision on such items.)
- II. **CONSENT CALENDAR** (The Board will consider various non-controversial routine items and issues relating to matters which are of interest to the District. Any Board Member may request that any or all items be considered and acted upon independently of the others.)
 - A. Approval of Minutes from the Regular Board Meeting of April 2, 2024.
 - B. Approval of March/April District Construction and Water Banking Project(s) Disbursements.
 - C. Approval of March/April District Disbursements.
- III. **BUSINESS AND FINANCE** (The Board will consider various items and issues relating to financial matters which are of interest to the District.)
 - A. Business & Finance Committee Report – April 11, 2024.
 - i. Approval of March 2024 Financial Reports.
 - ii. Quarterly Investment Review.
 - B. Review and Approval of 2024 COLA Recommendation (Recommended by the Business and Finance Committee).
- IV. **OPERATIONS AND PROJECTS** (The Board will consider various items and issues relating to matters which have been, or will be, considered by committees of the Board and which are of interest to the District.)
 - A. Operations and Projects Committee Report – April 2, 2024.
 - i. District Encroachment Permit Report.

- ii. District Facility and Banking Maintenance Report.
 - iii. Pending Development Projects.
 - iv. Sunset Groundwater Banking Project Update.
 - B. Approval of Plans and Common Use Agreement with Panama-Buena Vista Union School District for the Pipelining of a Portion of the Randall Canal Just South of Taft Highway.
 - C. Approval of Plans and Canal Relocation Agreement with Deertrail Development LLC. for the Relocation of a Portion of the Stine Canal and Extension of the 31 Ditch Just North of McCutchen Road.
- V. **WATER RESOURCES REPORT** (The Board will consider various items and issues relating to the Kern River of interest to the District.)
- A. District Watermaster Report.
 - i. State Water Project – 2024 SWP Allocation 30%.
 - ii. Kern River Runoff Forecast B120 – 103% April – July.
 - B. Kern River Watermaster Report.
 - C. District Groundwater Manager Report.
- VI. **MANAGER'S REPORT** (The General Manager will discuss, and the Board will consider various items and issues relating to the ongoing and future operations of the District which are of interest to the Board)
- A. Verbal.
 - i. 2024 Water Management.
 - ii. SGMA Update.
 - B. External Agency Report.
 - C. Water Banking Projects Report.
- VII. **ATTORNEY'S REPORT** (Legal Counsel will discuss, and the Board will consider items and issues of legal interest to the District.)
- A. Verbal.
 - i. VAWC Legislative Update.
- VIII. **BOARD MEMBER COMMENTS** (This item provides Board Members with an opportunity to make announcements or provide general comments.)
- IX. **ADJOURN**

Requests for disability related modifications or accommodations, including auxiliary aids or services may be made by telephoning or contacting Madelyne Rodriguez at the District Office (661-834-4656). Please attempt to make such requests known at least 24 hours before the scheduled meeting. Pursuant to Government Code section 54957.5, any materials relating to an open session item on this agenda, distributed to the Board of Directors after the distribution of the agenda packet, will be made available for public inspection at the time of distribution at the District, 501 Taft Highway, Bakersfield, CA.

Tab II





To: Kern Delta Water District Board of Directors

From: Steven Teglia – General Manager

Date: April 17, 2024

Re: Agenda Item II – Consent Calendar

RECOMMENDATION:

Approve items A through C listed under Agenda Item II – Consent Calendar.

DISCUSSION:

Consent Calendar items are non-controversial routine matters. Board Members may request that any or all items listed under the Consent Calendar be moved to the regular agenda to be discussed and voted on separately. Otherwise, all items will be approved through one motion and vote.

II A. Approval of Minutes from the Regular Board Meeting of April 2, 2024 (attached).

II B. Approval of March/April District Construction and Water Banking Project(s) Disbursements totaling \$125,144.89* (attached), partially recommended for approval by the Operations and Projects Committee (*see April 2, 2024 Operations and Projects Committee Minutes for additional detail*).

II C. Approval of March/April District Disbursements (attached) recommended for approval by the Business and Finance Committee (*see April 11, 2024 Business and Finance Committee Minutes for additional detail*).

**The total includes disbursements approved by the Operations and Projects Committee (\$124,683.96) and an additional amount (\$460.93) for invoices which came in after April 2, 2024 and were subsequently recommended for approval by the Business and Finance Committee on April 11, 2024.*



**MINUTES OF THE REGULAR MEETING
OF THE BOARD OF DIRECTORS**

April 2, 2024

TUESDAY, April 2, 2024, 12:02PM – 1:39PM

DIRECTORS PRESENT: Palla, Mendonca, Antongiovanni, Tillema, Spitzer, Fanucchi, Borba, and Kaiser.

DIRECTORS ABSENT: Garone.

STAFF PRESENT: General Manager Teglia, Assistant General Manager Bellue, General Counsel Iger, and Controller Duncan.

OTHERS PRESENT: None.

CLOSED SESSION DECLARED AT 12:02PM

President Palla called to order the Closed Session of the Kern Delta Board of Directors at 12:02PM regarding the following agenda items:

- A. Conference with Legal Counsel – Existing Litigation – Closed Session Pursuant to Gov. Code § 54956.9(d)(1):
1. Bring Back the Kern, et al. v. City of Bakersfield, et al.

Closed Session concluded at 1:32PM.

REGULAR SESSION DECLARED AT 1:33PM

President Palla called to order the Regular Session of the Kern Delta Board of Directors at 1:33PM.

Closed Session Report: District General Counsel Iger reported the following:

Item A: Staff was given direction.

INTRODUCTION OF GUESTS AND PUBLIC

None.

I. PUBLIC COMMENT

None.

II. MANAGER'S REPORT

A. Approve Minutes of the Regular Board Meeting of March 19, 2024:

M/S/C (Borba/Tillema) (yes-8, no-0): By unanimous vote, with Director Garone absent, the Board approved the minutes from the regular board meeting of March 19, 2024 as presented.

III. BOARD MEMBER COMMENTS

None.

IV. ADJOURNMENT:

There being no further business, President Palla adjourned the meeting at approximately 1:39PM.

Respectfully Submitted,



Steven Teglia, General Manager

Approved by Board,



Richard Tillema, Board Secretary

**KERN DELTA WATER BANKING PROGRAM DISBURSEMENTS
RECOMMENDED BY THE OPERATIONS & PROJECTS COMMITTEE**

Tuesday, April 2, 2024

#	PAYEE	AMOUNT	CHECK
1	KERN DELTA WATER 2023 LABOR SHARE	123,915.05	3894
2	PGE - FR1 Well Utilities	27.47	3895
3	PGE - AE1 Well Utilities	144.04	3896
4	PGE - KI8 Well Utilities	75.24	3897
5	PGE - AE2 Well Utilities	67.87	3898
6	PGE - KD1 Well Utilities	46.33	3899
7	PGE - KI7 Well Utilities	69.89	3900
8	PGE - KD2 Well Utilities	122.30	3901
9	PGE - AE3 Well Utilities	68.11	3902
10	PGE - AE4 Well Utilities	147.66	3903
TOTAL		124,683.96	

The following were received after the April 2nd, 2024 Operations & Projects Committee meeting and will be reviewed at the April 11th, 2024 Business and Finance Committee meeting.

#	PAYEE	AMOUNT	CHECK
1	B&B SURPLUS Metal	172.77	3904
2	PGE - BV3 Well Utilities	41.57	3905
3	PGE - FR3 Well Utilities	46.33	3906
4	PGE - BV5 Well Utilities	66.00	3907
5	PGE - BV4 Well Utilities	69.86	3908
6	PGE - BV2 Well Utilities	64.40	3909
TOTAL		460.93	

KERN DELTA WATER DISTRICT
DISBURSEMENTS RECOMMENDED BY THE BUSINESS AND FINANCE COMMITTEE
Thursday, April 11, 2024

MARCH 2024 SUB TOTAL \$ 299,439.73

# PAYEE	AMOUNT	CHECK
1 VACUSWEEP - Parkinglot Maintenance	460.00	47244
2 ADVANCED DISTRIBUTION - Chains For Gates 200'	1,225.39	47245
3 AMAZON CAPITAL SERVICES - Cups, Descaler	135.84	47246
4 AMAZON CAPITAL SERVICES - Switch #326	7.58	47247
5 CHRISTENSEN, INC. - Fuel	8,075.21	47248
6 CINTAS - Uniforms, Towels, Mats	1,021.16	47249
7 CORELOGIC - Overpayment Refund	41.24	47250
8 COX, CASTLE & NICHOLSON LLP - Professional Services	13,623.50	47251
9 GRAINGER - Water Filters	237.14	47252
10 JIM BURKE FORD - Hoses #217, Motor Fan #217	663.55	47253
11 JIM BURKE FORD - Valve #217	147.51	47254
12 KERN COUNTY PUBLIC WORKS - Dump Fees	3,157.48	47255
13 MARCOM GROUP - Website Hosting	95.00	47256
14 MOTOR CITY - Motor Mount #105	107.83	47257
15 NORTH KERN - Weather Mod	15,029.40	47258
16 NV CATERING INC - Lunch 04/02/2024	589.31	47259
17 PACIFIC GAS & ELECTRIC - Office	1,864.55	47260
18 PACIFIC GAS & ELECTRIC - Shop	731.54	47261
19 PRINCIPAL LIFE INSURANCE - 04/01/24-04/30/24	5,879.04	47262
20 PROGRESSIVE TECHNOLOGY, INC. - 2 Pc, Licenses	5,080.43	47263
21 RELIABLE JANITORIAL - Janitorial Service	1,185.00	47264
22 CITIZENS CARD - Lunch, Office Supplies, Subscriptions	11,897.83	Wire
23 VERIZON CONNECT - GPS Service	438.70	Wire
24 STERLING ADMINISTRATION - HRA Admin	135.00	Wire
25 Payroll #6	77,455.45	Wire
26 EFT-IRS P/R #6	24,881.67	Wire
27 Edd-State P/R #6	4,794.57	Wire
28 CASDU	363.22	Wire
29 Payroll People #6	178.97	Wire
30 Lincoln Life - Retirement Program	12,343.35	Wire
31 Lincoln Life - Deferred Comp.	2,982.00	Wire
32 Empower - Deferred Comp.	1,582.00	Wire
33 Payroll #7	76,430.45	Wire
34 EFT-IRS P/R #7	24,593.79	Wire
35 Edd-State P/R #7	4,755.70	Wire
36 CASDU	363.22	Wire
37 Payroll People #7	190.94	Wire
38 Lincoln Life - Retirement Program	12,420.56	Wire
39 Lincoln Life - Deferred Comp.	3,292.00	Wire
40 Empower - Deferred Comp.	1,582.00	Wire
MARCH 2024 TOTAL	619,478.85	

# PAYEE	AMOUNT	CHECK
1 LOWE'S BUSINESS ACCOUNT - Lopper	39.66	Wire
2 CENTRALIZE HR, LLC. - Hr Services	1,895.00	Wire
3 VERIZON - Cell Service	678.49	Wire
4 LOWE'S BUSINESS ACCOUNT - Canal Supplies, Roof Repair Supplies	879.54	Wire
5 BUGNI HARDWARE AND FEED - Trash Rakes	514.71	47265
6 A1 ANSWERING SERVICE - Answering Service	642.18	47266
7 AG SPRAY EQUIPMENT - Gloves For Weed Control	76.00	47267
8 AMAZON CAPITAL SERVICES - Mats, Scanner	629.88	47268
9 B&B SURPLUS, INC. - Measuring Tube, Post	495.57	47269
10 BSE RENTS - Box Relocation	249.60	47270
11 CHRISTENSEN, INC. - Fuel	8,712.37	47271
12 CINTAS - Uniforms, Towels, Mats	1,011.73	47272
13 DANIELS TIRE SERVICE - Tire #T13, Spares	859.15	47273
14 ELLISON, SCHNEIDER & HARRIS L.L.P. - Professional Services	46,695.01	47274
15 FRED GARONE - Director Fees	700.00	47275
16 GEORGE BORBA - Director Fees	500.00	47276
17 GREENFIELD COUNTY WATER DIST. - Office Utilities	203.28	47277
18 INDUSTRIAL MEDICAL GROUP - Employee Physicals	155.00	47278
19 JIM BURKE FORD - Truck #234	33,365.43	47279
20 JOEY MENDONCA - Director Fees	500.00	47280
21 JOHN KAISER - Director Fees	700.00	47281
22 KERN COUNTY RECORDER - Redemptions 04/05/2024	60.00	47282
23 KERN COUNTY WATER AGENCY - 06/2023 Pioneer Recharge	68,505.00	47283
24 KEVIN ANTONGIOVANNI - Director Fees	800.00	47284
25 McMURTREY, HARTSOCK, WORTH & ST. LAWRENCE - Professional Services	2,000.00	47285
26 NORTH KERN WATER STORAGE DISTRICT - November 2023 Water Purchase	50,303.00	47286
27 O'REILLY AUTO PARTS - Brake Pads #106	208.39	47287
28 PACIFIC GAS & ELECTRIC - Lights	14.88	47288
29 PRICE DISPOSAL - Waste Removal	133.24	47289
30 PROGRESSIVE TECHNOLOGY, INC. - Phone Service	457.99	47290
31 QUINN - Repairs #404	3,283.85	47291
32 R&G PROPERTY INVESTMENTS, INC - S/A Refund	1,000.00	47292
33 RICHARD TILLEMA - Director Fees	800.00	47293
34 ROBERT FANUCCHI - Director Fees	800.00	47294
35 RODNEY PALLA - Director Fees	1,700.00	47295
36 ROSS E. SPITZER - Director Fees	400.00	47296
37 SCHWEBEL PETROLEUM - Grease	380.23	47297
38 SPECTRUM - Internet Service	391.51	47298
39 STERICYCLE, INC. - Shred Service	122.71	47299
40 TARGET SPECIALTY PRODUCTS - Torpedo, Roundup	9,778.41	47300
41 TECHNOFLO SYSTEMS, INC. - Repair Meter, 2 New Meters	4,978.05	47301
42 THC MECHANICAL INC - Service Hvac Systems	1,610.00	47302
43 VACUSWEEP - Parkinglot Maintenance	460.00	47303
44 VERIZON CONNECT - Gps Service	438.70	47304
APRIL 2024 SUBTOTAL		248,128.56

KERN DELTA WATER DISTRICT
Anticipated Disbursements - Month End - March 2024

Payee	Reason	April 2024 Estimated
ADVANCED DIST.	truck maintenance/repair	1,200.00
AMAZON CAPITAL SERVICES	office supplies	200.00
B & B SURPLUS	canal maintenance materials	75.00
BATTERY SYSTEMS	vehicle maintenance	150.00
BLUE PRINT SERVICE CO.	blue prints	50.00
BSE RENTS	concrete	400.00
BUDGET BOLT	maintenance materials	300.00
CARQUEST	brake fluid, lube	70.00
CHRISTENSEN/(Amerifuel)	gas/diesel fuel	8,000.00
CINTAS	uniform/laundry service	1,000.00
CITIZENS CARDMEMBER SERV	misc expenses	7,500.00
COX, CASTLE & NICHOLSON LLP	professional services	5,000.00
DANIELS TIRE SERVICE	vehicle tires/repair	1,000.00
ELLISON, SCHNEIDER & HARRIS	professional services	45,000.00
EMPOWER	deferred comp contributions	1,582.00
GRAINGER	safety materials	200.00
JIM BURKE	truck maintenance/repair	800.00
KERN COUNTY PUBLIC WORKS	waste disposal	3,200.00
LINCOLN FINANCIAL	pension/deferred comp contributions	15,750.00
MARCOM GROUP	district web site support	95.00
MOSSMAN'S	catering	585.00
NORTH KERN WSD	weather modification	15,000.00
P.G.&E.	district office utilities	2,600.00
PRINCIPAL LIFE INS.	dental/vision/life insurance premium	5,500.00
PROGRESSIVE TECH.	phones	458.00
QUINN	heavy equipment parts/repair	800.00
RELIABLE JANITORIAL	janitor service	1,185.00
SCHWEBEL PETROLEUM	oil/lubricants	500.00
SIERRA HYDROGRAPHICS	SCADA	15,000.00
SPECTRUM	internet access	378.00
STERICYCLE, INC (Shred-it)	office shredding and disposal	125.00
STERLING ADMINISTRATION	medical insurance - annual fees	135.00
TARGET	weed control chemicals	15,000.00
UNITED AG	medical insurance premium	34,000.00
VERIZON	cell phones and service	439.00
		<u>183,277.00</u>

Tab III





BUSINESS & FINANCE COMMITTEE MEETING

**501 Taft Highway
Bakersfield, CA**

THURSDAY, April 11, 2024
10:00AM

A G E N D A

- 1. Call to Order**
- 2. Public Comment Period**
- 3. Approve Minutes of March 14, 2024, Meeting of the Business & Finance Committee**
- 4. Financial Reports and Disbursements:**
 - a. Approve March and April District and Banking Project(s) Disbursements
 - b. Approve March 2024 Financial Reports
- 5. District Controller's Report:**
 - a. Quarterly Review of District Investments
 - b. 2024 COLA Review and Recommendation
- 6. Committee Comments**
- 7. Adjourn**

A handwritten signature in black ink, appearing to read "Bryan Duncan", written in a cursive style.

Bryan Duncan
District Controller

Posted: Monday April 8, 2024
Bakersfield, California

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MINUTES OF THE BUSINESS & FINANCE COMMITTEE
Thursday, April 11, 2024

DIRECTORS PRESENT: Antongiovanni, Garone, Tillema and Kaiser

OTHERS PRESENT: From KDWD: General Manager Teglia, Assistant General Manager Bellue, Controller Duncan, General Counsel Iger

1. CALL TO ORDER

Director Antongiovanni called the meeting to order at 10:01 A.M.

2. PUBLIC COMMENTS

None.

3. APPROVAL OF PREVIOUS COMMITTEE MEETING MINUTES

- a. **M/S/C (Kaiser/Tillema) (yes – 4, no – 0):** The Business & Finance Committee approved the minutes of the Business & Finance Committee meeting held on March 14, 2024, as presented.

4. FINANCIAL REPORTS AND DISBURSEMENTS

- a.- b. Approval of March 2024 and April 2024 Disbursements and March 2024 Financial Reports.

M/S/C (Garone/Tillema) (yes – 4, no – 0): The Business & Finance Committee recommends the Board approve the March 2024 and April 2024 District Disbursements, the March 2024 and April 2024 Water Banking Projects' Disbursements, the anticipated April 2024 end of month Disbursements, and the March 2024 District and Water Banking Projects' Financial Statements, Treasurer's Reports, and Delinquency Report as presented.

5. DISTRICT CONTROLLER'S REPORT

- a. Quarterly Investment Review.

Staff presented the District's Quarterly Investment Review for the 1st Quarter of 2024. Staff noted that \$3 million in US Treasury Notes matured in February 2024 and the proceeds were reinvested in US Treasury Notes maturing in January 2026.

- b. 2024 COLA Review and Recommendation.

Staff presented the Committee with a memorandum which outlined several CPI indices utilized during the annual COLA review process. Following discussion, the Committee recommended a 2024 COLA of 2.5% to the Board. **M/S/C (Garone/Tillema) (yes – 4, no – 0):** The Business & Finance Committee recommends the Board approve a COLA adjustment of 2.5% effective May 1, 2024.

6. DIRECTORS' COMMENTS

None.

7. ADJOURN

Director Antongiovanni adjourned the meeting at 10:48 A.M.

Respectfully submitted,

Kevin Antongiovanni – Chair

**Kern Delta Water District
Balance Sheet
As of March 31, 2024**

	<u>03/31/2024</u>	<u>02/29/2024</u>	<u>Month-to-Month Variance</u>
Assets			
Current Assets			
Cash & Cash Equivalents	24,078,772	24,345,222	(266,450)
Accounts Receivable	1,213,088	1,006,965	206,123
Inventory & Prepaid Expenses	513,911	554,099	(40,188)
Total Current Assets	<u>25,805,771</u>	<u>25,906,286</u>	<u>(100,515)</u>
Net Fixed Assets			
Fixed Assets			
District Structures, Rights of Way	18,077,760	18,077,760	0
CVC Expansion	8,776,668	8,776,668	0
Machinery & Equipment	3,708,912	3,687,549	21,362
Fixed Assets	<u>30,563,340</u>	<u>30,541,977</u>	<u>21,362</u>
Less Accumulated Depreciation	<u>(8,297,798)</u>	<u>(8,245,298)</u>	<u>(52,500)</u>
Net Fixed Assets	<u>22,265,542</u>	<u>22,296,679</u>	<u>(31,138)</u>
Investment in Joint Powers Authority	5,167	5,167	0
Investment in Banking Project	9,527,537	9,527,537	0
Investment in Sunset Banking Program	1,638,344	1,638,344	0
Total Assets	<u>59,242,361</u>	<u>59,374,013</u>	<u>(131,653)</u>
Liabilities & Equity			
Current Liabilities			
Accounts Payable	270,072	234,789	35,283
Other Liabilities	167,738	163,085	4,653
Total Current Liabilities	<u>437,810</u>	<u>397,874</u>	<u>39,936</u>
Long Term Liabilities			
Bonds & COP Debt	3,325,000	3,325,000	0
Bonds Premium & Costs	97,468	97,468	0
Total Long Term Liabilities	<u>3,422,468</u>	<u>3,422,467</u>	<u>0</u>
Equity From Past Years	57,941,720	57,941,720	0
Accumulated Equity - Current Year	<u>(2,559,637)</u>	<u>(2,388,048)</u>	<u>(171,589)</u>
Total Liabilities & Equity	<u>59,242,361</u>	<u>59,374,013</u>	<u>(131,653)</u>

**Kern Delta Water District
Cash Variance Analysis
March 31, 2024**

Cash Received:

Accounts Receivable Collections	168,285
Property Tax Receipts	226,324
Interest Received	19,379
	<u>413,987</u>

Cash Disbursed:

Kern Delta Water Banking Project - CVC O&M - 2nd Qtr	(45,306)
Disbursements for Goods and Services:	
Professional Services	(90,155)
City of Bakersfield - 3rd and 4th Qtr 2023 Isabella Accounting	(75,579)
Medical/Dental Monthly Insurance Premiums	(40,627)
Sierra Hydrographics - SCADA	(21,363)
Citizens Credit Card - Office Supplies/Catering	(19,616)
Target/UPL - Weed Chemicals	(16,723)
NKWSD - Weather Modification	(15,029)
Diesel/Gas for Fleet	(14,239)
Progressive Tech/Carefree Tech - Cyber Security, Tech	(5,080)
Canal maintenance - Core & Main	(3,957)
Kern County Public Works	(3,157)
Vehicle/Equipment Maintenance	(2,687)
Other Disbursements	(70,993)
	<u>(424,512)</u>
Payrolls Paid	(250,775)
	<u>(675,286)</u>

Positive/(Negative) Cash Variance Before FMV Adjustment (261,299)

FMV Adjustment to Kern County Funds (5,151)

Adjusted Positive/(Negative) Cash Variance (266,450)

Kern Delta Water District
Accounts Receivable Variance Analysis
March 31, 2024

Revenue Added to Accounts:

Seepage Revenue	153,594
Labor Cost Reimbursed From KDWBP	123,915
Water Sales - Utility Water	93,033
Water Sales - State Water	254
District Wells Revenue	161
Other Misc Revenues:	
Share of Rio Bravo Power Plant Charges	6,043
Penalties/Interest/Adjustments	842
	<hr/>
	377,843
	<hr/>

Cash Received:

Water Payments	(28,532)
Misc Payments	(104,879)
Assessments Payments	(34,874)
	<hr/>
	(168,285)
	<hr/>

2023 Accrued Interest Converted to Cash (3,434)

(171,720)

Net positive/(negative) variance **206,123**

**Kern Delta Water District
Inventory/Prepays Variance Analysis
March 31, 2024**

Additions to Accounts:

Weed Control Chemicals Purchased	25,247
Prepaid Additions	1,170
	<hr/>
	26,417
	<hr/>

Usage/Amortization:

Chemicals Consumed During Month	(41,333)
Amortization of Prepaid Accounts	(25,272)
	<hr/>
	(66,605)
	<hr/>

Net positive/(negative) variance	(40,188)
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**Kern Delta Water District
Statement of Operating Results
Through the Period Ended March 31, 2024**

	<u>Current Month</u>	<u>Year to Date</u>	<u>Annual Budget</u>	<u>YTD as %age of Budget (Target is 25%)</u>	<u>Budget Remaining</u>
REVENUE					
State Water Sales	254	254	1,102,239	0 %	(1,101,985)
Utility Water Sales	93,573	179,800	3,214,296	6 %	(3,034,496)
Seepage Revenue	94,854	0	750,000	0 %	(750,000)
Equalization	0	9,617	9,045	106 %	572
Assessments	(142)	979,412	980,678	100 %	(1,266)
Property Tax	226,324	226,323	6,391,589	4 %	(6,165,266)
Interest Revenue	15,944	107,172	720,000	15 %	(612,828)
Other Revenue	3,643	30,615	250,000	12 %	(219,384)
Water Transfer Charges	0	240,683	950,000	25 %	(709,318)
Expense Reimb From Banking	123,915	0	150,000	0 %	(150,000)
Total Revenue	558,365	1,773,876	14,517,847	12 %	(12,743,971)
EXPENDITURES					
Source of Supply					
State Water Costs	0	2,253,656	4,000,000	56 %	(1,746,344)
Exchange Fees	0	0	63,750	0 %	(63,750)
Watermaster, City, Isabella	15,030	38,649	550,600	7 %	(511,951)
Grower Recharge Program Costs	0	0	0	0 %	0
Miscellaneous Source Costs	50,303	10,098	950,000	1 %	(939,902)
Total Source of Supply	65,333	2,302,404	5,564,350	41 %	(3,261,947)
Transmission and Distribution					
Labor	241,420	709,274	2,977,807	24 %	(2,268,533)
Employee Benefits	85,169	222,432	1,067,816	21 %	(845,384)
Maintenance & Repairs	68,110	229,854	1,791,380	13 %	(1,561,525)
Total Transmission and Distribution	394,699	1,161,560	5,837,003	20 %	(4,675,442)
Administrative & Other Costs					
Engineering Consultants	0	0	50,000	0 %	(50,000)
Legal Expense	0	585	10,000	6 %	(9,415)
Special Legal/Engineering	60,318	142,392	300,000	47 %	(157,608)
Office Operations	22,399	114,977	425,609	27 %	(310,633)
Insurance	15,743	47,228	230,348	21 %	(183,120)
Special Expenses	113,811	452,284	976,000	46 %	(523,715)
Kern River GSA & SGMA	0	0	300,000	0 %	(300,000)
Construction Expense - Peripheral	0	0	0	0 %	0
Bond Interest Expense	0	0	106,986	0 %	(106,986)
FMV Adjustment	5,151	(45,417)	0	0 %	(45,417)
Depreciation	52,500	157,500	0	0 %	157,500
Total Administrative & Other	269,922	869,549	2,398,943	36 %	(1,529,395)
Total Expenses	729,954	4,333,513	13,800,296	31 %	(9,466,784)
Net Fav/(Unfav) Operating Results	(171,589)	(2,559,637)	717,551	(357) %	(3,277,188)

KERN DELTA WATER DISTRICT

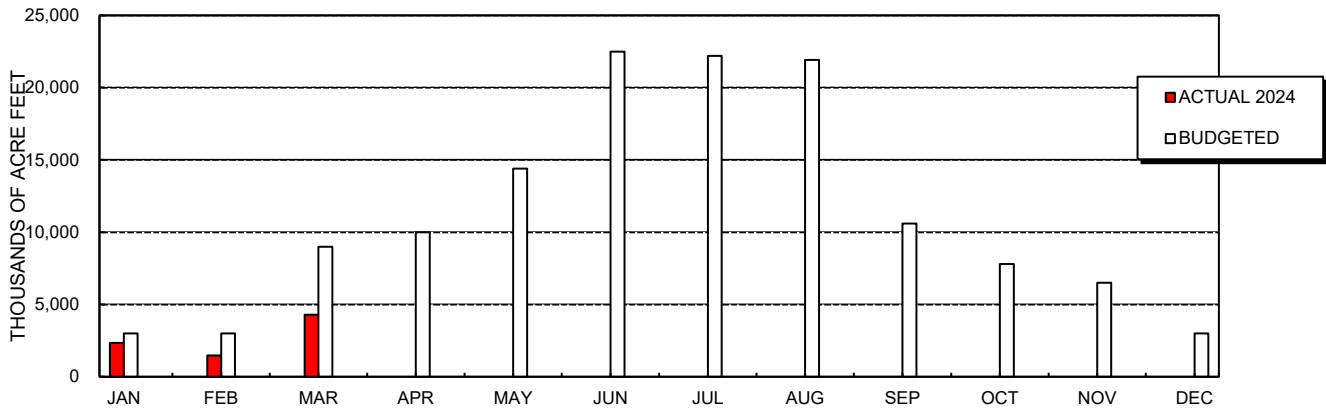
TREASURER'S REPORT

March 2024

	2024	2023	2022	2021
Cash & Securities on hand - March 1, 2024	\$ 24,345,222	\$ 21,015,518	\$ 21,299,431	\$ 24,202,731
Add: March receipts	408,836	264,977	289,342	400,174
Less: March disbursements	(675,286)	(1,801,746)	(836,619)	(4,021,030)
Cash & Securities on hand - March 31, 2024	\$ 24,078,772	\$ 19,478,749	\$ 20,752,155	\$ 20,581,874
Petty Cash	\$ 500			
Citizens Business Bank	334,936			
Kern County Treasury	487,657			
JP Morgan Money Market	2,821,471			
LPL Financial	20,434,209			
	<u>\$ 24,078,772</u>			
Restricted Reserves:				
Restricted Reserve Fund - Water Resources Manager	\$ (235,000)	\$ (283,749)	\$ (300,000)	\$ (300,000)
Unrestricted Reserves:				
Pipeline Maintenance	(311,912)	(216,912)	(216,912)	(213,845)
Water Rights Protection & Litigation Reserve	(3,408,358)	(3,168,358)	(2,718,358)	(2,810,369)
2015-A COP Reserve Fund	(3,325,000)	(3,565,000)	(4,015,000)	(4,015,000)
Operating Reserve	(5,000,000)	(5,000,000)	(5,000,000)	(5,000,000)
Capital Reserve	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
Groundwater Program Reserve	(3,500,000)	(3,500,000)	(3,500,000)	(3,500,000)
Total Reserves	\$ (17,780,271)	\$ (17,734,019)	\$ (17,750,270)	\$ (17,839,214)
Cash Available - March 31, 2024	\$ 6,298,501	\$ 1,744,730	\$ 3,001,885	\$ 2,742,661

**Kern Delta Water District
Monthly Water Sales Volume
in Acre Feet**

	2023	2024										
	Actual (Accumulated)	Budgeted		Actual								% of Budget
		Monthly	(Accumulated)	Monthly				Accumulated				
				Utility	State	Contracts	Total	Utility	State	Contracts	Total	
JAN	2,560	3,000	3,000	2,229	0	114	2,343	2,229	0	114	2,343	78%
FEB	6,738	3,000	6,000	1,356	0	115	1,471	3,585	0	229	3,814	64%
MAR	8,465	9,000	15,000	3,864	2	420	4,287	7,449	2	649	8,100	54%
APR	22,049	10,000	25,000									
MAY	45,308	14,400	39,400									
JUN	72,318	22,500	61,900									
JUL	107,829	22,200	84,100									
AUG	130,881	21,929	106,029									
SEP	144,263	10,600	116,629									
OCT	152,046	7,800	124,429									
NOV	157,262	6,500	130,929									
DEC	158,607	3,000	133,929									



KERN DELTA WATER DISTRICT

Aged Accounts Receivable

Past Due Accounts

April 16, 2024

Account	Name	0-30 Days	31-60 Days	61-90 Days	Over 90 Days	Total Past Due
	OTHER	30.86	1.94	1.91	126.80	161.51
		30.86	1.94	1.91	126.80	161.51

**Kern Delta Water Banking Project
Balance Sheet
As of March 31, 2024**

	<u>03/31/2024</u>	<u>02/29/2024</u>	<u>Month-to-Month Variance</u>
Total Assets			
Current Assets			
Cash & Cash Equivalents	6,700,147	7,082,439	(382,292)
Interest Receivable	3,285	4,279	(994)
Other Receivables	90,612	45,306	45,306
Inventory and Prepaids	117,331	117,331	0
Total Current Assets	<u>6,911,375</u>	<u>7,249,355</u>	<u>(337,980)</u>
Fixed Assets			
All Structures	64,742,488	64,733,332	9,155
Machinery and Equipment	598,823	598,824	0
Less Accumulated Depreciation	<u>(13,080,073)</u>	<u>(13,026,073)</u>	<u>(54,000)</u>
Fixed Assets Net of Depreciation	<u>52,261,238</u>	<u>52,306,083</u>	<u>(44,845)</u>
Other Assets			
Investment in Sunset Banking Project	1,638,344	1,638,344	0
Total Other Assets	<u>1,638,344</u>	<u>1,638,344</u>	<u>0</u>
Total Assets	<u>60,810,957</u>	<u>61,193,782</u>	<u>(382,825)</u>
Total Liabilities & Equity			
Current Liabilities			
Accounts Payable	433	125,201	(124,767)
Total Current Liabilities	<u>433</u>	<u>125,201</u>	<u>(124,767)</u>
Equity			
Capital Contributions From KDWD	9,527,537	9,527,537	0
Equity From Past Years	51,710,268	51,710,267	0
Accumulated Equity - Current Year	<u>(427,281)</u>	<u>(169,223)</u>	<u>(258,058)</u>
Total Equity	<u>60,810,524</u>	<u>61,068,581</u>	<u>(258,058)</u>
Total Liabilities & Equity	<u>60,810,957</u>	<u>61,193,782</u>	<u>(382,825)</u>

**Kern Delta Water Banking Project
Cash Variance Analysis
March 31, 2024**

Cash Received:

Received From KDWD - CVC Ops/Power	45,306
Interest Received	22,483
	<hr/>
	67,789
	<hr/>

Cash Disbursed:

KCWA - CVC 4th Qtr 2023 CVC Ops & Power	(181,223)
Weed Chemicals Purchased	(124,936)
KDWD - 2023 Labor Cost	(123,915)
Sierra Hydrographics - SCADA	(9,155)
Weed Control Labor by Others	(8,250)
PG&E - Well Power	(1,368)
	<hr/>
	(448,848)
	<hr/>

Positive/(Negative) Cash Variance Before FMV Adjustment **(381,059)**

FMV Adjustment to Kern County Funds (1,233)

Adjusted Positive/(Negative) Cash Variance **(382,292)**

**Kern Delta Water Banking Project
Statement of Operating Results
As of March 31, 2024**

	<u>Current Month</u>	<u>Year to Date</u>
<u>REVENUE:</u>		
Interest Revenue	21,490	57,858
Total Revenue	<u>21,490</u>	<u>57,858</u>
EXPENSES:		
Other Costs		
Power Cost - Wells	1,392	3,315
CVC Operating Costs	89,413	178,826
CVC Power Costs	1,199	2,397
Spreading OM&R	94,990	103,867
Wells OM&R and Other	37,320	36,195
FMV Adjustment	1,233	(1,461)
Depreciation	54,000	162,000
Total Other Costs	<u>279,548</u>	<u>485,139</u>
Total All Expenses	<u>279,548</u>	<u>485,139</u>
Fav/(Unfav) Operating Results	<u>(258,058)</u>	<u>(427,281)</u>
Estimated MWD Revenue thru 1st Qtr		<u>184,538</u>
Estimated Fav/(Unfav) Operating Results		<u>(242,743)</u>

KERN DELTA WATER BANKING PROJECT

TREASURER'S REPORT

March 2024

	2024	2023	2022	2021
Cash & Securities on hand - March 1, 2024	\$ 7,082,439	\$ 8,095,876	\$ 8,037,510	\$ 9,097,215
Add: March receipts	67,789	2,722,259	494,227	4,361,951
Less: March disbursements	(450,081)	(3,225,868)	(752,713)	(6,136,299)
Cash & Securities on hand - March 31, 2024	\$ 6,700,147	\$ 7,592,267	\$ 7,779,024	\$ 7,322,867
Citizens Business Bank	\$ 360,294			
Kern County Treasury	237,883			
JP Morgan Money Market	4,850,591			
LPL Financial	1,251,378			
	\$ 6,700,147			
Restricted Cash included in above:				
OM&R Spreading	\$ (126,220)	\$ (84,417)	\$ (224,436)	\$ (375,211)
OM&R Extraction	(493,320)	(508,619)	(600,182)	(515,339)
Take/Put Fees	(2,827,711)	(3,900,399)	(2,538,972)	(1,237,011)
Total Restricted	\$ (3,447,252)	\$ (4,493,435)	\$ (3,363,590)	\$ (2,127,561)
Cash Available for Construction - March 31, 2024	\$ 3,252,895	\$ 3,098,832	\$ 4,415,435	\$ 5,195,308

**Sunset Water Banking Project
Balance Sheet
As of March 31, 2024**

	<u>03/31/2024</u>	<u>02/29/2024</u>	<u>Month-to-Month Variance</u>
Assets			
Current Assets			
Cash & Cash Equivalents	1,266,031	1,750,662	(484,631)
Total Current Assets	<u>1,266,031</u>	<u>1,750,662</u>	<u>(484,631)</u>
Fixed Assets			
Construction in Progress	5,308,582	5,308,583	0
Total Fixed Assets at Cost	<u>5,308,582</u>	<u>5,308,583</u>	<u>0</u>
Net Fixed Assets	<u>5,308,582</u>	<u>5,308,583</u>	<u>0</u>
Total Assets	<u>6,574,613</u>	<u>7,059,245</u>	<u>(484,631)</u>
Liabilities & Equity			
Current Liabilities			
Accounts Payable	0	490,920	(490,920)
Total Current Liabilities	<u>0</u>	<u>(490,920)</u>	<u>490,920</u>
Equity			
Contributions to Equity - KDWD	1,627,928	1,627,928	0
Contributions to Equity - KDWBP	1,627,929	1,627,929	0
Contributions to Equity - AEWSA	3,255,856	3,255,856	0
Equity From Past Years	41,663	41,663	0
Accumulated Equity - Current Year	21,237	14,949	6,289
Total Equity	<u>6,574,613</u>	<u>6,568,325</u>	<u>6,289</u>
Total Liabilities & Equity	<u>6,574,613</u>	<u>7,059,245</u>	<u>(484,631)</u>

**Sunset Water Banking Project
Statement of Operating Results
As of March 31, 2024**

	<u>Current Month</u>	<u>Year to Date</u>
Revenue		
Interest Revenue	6,552	6,598
Total Revenue	<u>6,552</u>	<u>6,598</u>
Expenses		
FMV Adjustment	263	(14,640)
Total Expenses	<u>263</u>	<u>(14,640)</u>
Fav/(Unfav) Operating Results	<u>6,289</u>	<u>21,238</u>

SUNSET BANKING PROJECT

TREASURER'S REPORT

March 2024

	2024	2023	2022	2021
Cash & Securities on hand - March 1, 2024	\$ 1,750,662	\$ 1,059,559	\$ 1,040,333	\$ -
Add: March receipts	6,289	2,485,170	7,824	-
Less: March disbursements	(490,920)	(426,553)	(83,817)	-
Cash & Securities on hand - March 31, 2024	\$ 1,266,031	\$ 3,118,176	\$ 964,340	\$ -
Citizens Business Bank	340,703			
Kern County Treasury	925,328			
	<u>\$ 1,266,031</u>			
Unrestricted Reserves:				
None				
Total Reserves	\$ -	\$ -	\$ -	\$ -
Cash Available - March 31, 2024	\$ 1,266,031	\$ 3,118,176	\$ 964,340	\$ -



To: Kern Delta Water District Business & Finance Committee

From: Bryan Duncan – Controller

Date: April 11, 2024

Re: Agenda Item 5a. – Quarterly Investment Review

RECOMMENDATION:

Receive report, informational only.

DISCUSSION:

The Investment Policy of Kern Delta Water District requires the District’s Treasurer to submit to the Board of Directors a quarterly investment report. In compliance with this directive the District Controller offers the following discussion and analysis of the District’s cash and cash equivalents position and performance through the first quarter of the year ended March 31, 2024.

A comparative overview of the District’s cash and cash equivalents position as of March 31, 2024, is shown in the following table:

	3/31/2024	12/31/23	9/30/23	6/30/23
LPL Financial	\$21,685,587	\$21,937,279	\$21,858,963	\$18,799,199
JP Morgan Funds	7,672,062	5,007,396	7,912,629	5,229,446
Kern County Treasury	1,650,869	3,840,555	2,783,059	7,828,267
Citizens Business Bank	1,036,433	3,878,870	1,029,246	1,335,559
Total	\$32,044,951	\$34,664,100	\$33,583,897	\$33,192,471

Total Cash and Cash Equivalents decreased \$2.6 million during the first quarter of 2024. During the first week of the quarter the first installment of the District’s annual obligation to the California State Water Project was paid to the Kern County Water Agency in the amount of \$2.3 million.

LPL Financial Review:

\$3,000,000 in US Treasuries matured in February 2024 and paid interest in the amount of \$178,978 at an annualized yield of 4.80% as expected. With the cash made thusly available the District purchased \$3,000,000 in US Treasuries that will earn 4.51% annualized until they mature in January 2026.

JP Morgan Funds Review:

The Funds held at JP Morgan are in money market accounts that are 100% invested in US Treasuries. As of March 31, 2024, the average daily yield on these funds was 4.92%, down slightly from the previous quarter yield of 4.98%. The District continues to monitor the performance of these funds against the yields provided by the Kern County Treasury. Interest earned on these funds totaled \$84,666 for the first quarter of 2024. Excess cash made available in the normal course of operations is directed to the JP Morgan account as soon as possible where they earn interest at the rates noted until management is directed by the Business and Finance Committee to move them elsewhere.

Kern County Treasury Funds: Yields on cash reserves held at the Kern County Treasury (KCT) have improved but are still outpaced by the yields provided by the District's investments held in money market and long-term instruments. As of December 31, 2023, the annualized yield on KCT funds was 3.15% compared to 2.91% as of September 30. At the direction of the Board of Directors, staff continues to steer cash reserves away from KCT and into the higher yield money market and long-term holdings noted.

The attached "Kern Delta Water District Summary of Invested Cash Reserves" and "Kern County Treasurer's Pooled Cash Portfolio Summary" describe the nature and mix of the investments held at LPL Financial and at the KCT, respectively, as of February 29, 2024.

As of February 29, 2024, the Fair Market Value of KCT funds had increased slightly to 98.4% of Cost compared to 97.7% on November 30, 2023. The FMV of U.S. Treasuries and Federal Agencies, representing 80.3% of the entire KCT portfolio, is 98.2% and is, obviously, a key factor in the overall valuation of the portfolio. As a reminder, the FMV adjustment is a valuation disclosure required by generally accepted accounting principles and does not reflect the purchasing power of the investment. If all invested cash was liquidated from the District's accounts at Kern County, the actual cost, plus accrued interest, would be recovered and not the fair market value.

It should be noted that (1) all investment actions executed since the last report have been made in full compliance with the investment policy of the District and, (2) the District will meet its expenditure obligations for the next six months.

**Kern Delta Water District Summary of Invested Cash Reserves
US Treasury Investment Summary**

Acquisition Date	Maturity Date	Quantity (Q)	Par Value (PV)	Customer Price (P)	Principal (Prin) (Q x P)	Accrued Interest (AI)	Service Charge	Net Money (NM) (Prin + AI)	Coupon Rate (CR)	Coupon Interest (Cou)	Discount Returned (Disc) (PV - Prin)	Estimated Total Yield (Y) (Cou + Disc)	YTM	Value at Maturity (Prin + EYV)
10/28/2022	1/24/2023	999	999,000	991.61	990,615.59	-	5	990,621	0.000%	-	8,384	8,384	3.511%	999,000
10/28/2022	1/26/2023	999	999,000	991.32	990,328.68	-	5	990,334	0.000%	-	8,671	8,671	3.551%	999,000
10/28/2022	7/13/2023	1,000	1,000,000	971.80	971,803.96	-	5	971,809	0.000%	-	28,196	28,196	4.105%	1,000,000
10/28/2022	8/10/2023	1,000	1,000,000	968.43	968,427.19	-	5	968,432	0.000%	-	31,573	31,573	4.161%	1,000,000
10/14/2022	9/30/2023	1,000	1,000,000	987.39	987,390.00	1,105.77	5	988,501	2.875%	27,647	12,610	40,257	4.240%	1,027,647
10/14/2022	9/30/2023	1,000	1,000,000	972.49	972,490.72	528.85	5	973,025	1.375%	13,223	27,509	40,732	4.355%	1,013,223
10/14/2022	9/30/2023	1,000	1,000,000	961.80	961,803.13	96.15	5	961,904	0.250%	2,404	38,197	40,601	4.390%	1,002,404
11/7/2022	2/15/2024	3,000	3,000,000	975.38	2,926,130.00	18,831.52	5	2,944,967	2.750%	105,103	73,870	178,973	4.801%	3,105,103
11/7/2022	4/30/2024	3,000	3,000,000	962.00	2,886,005.00	1,160.22	5	2,887,170	2.000%	88,603	113,995	202,598	4.754%	3,088,603
10/14/2022	10/15/2024	1,000	1,000,000	929.20	929,205.00	3,107.92	5	932,318	0.625%	12,106	70,795	82,901	4.606%	1,012,106
10/14/2022	10/31/2024	1,000	1,000,000	960.50	960,507.24	10,210.60	5	970,723	2.250%	44,568	39,493	84,061	4.418%	1,044,568
10/14/2022	10/31/2024	1,000	1,000,000	945.55	945,553.94	6,807.07	5	952,366	1.500%	29,712	54,446	84,158	4.493%	1,029,712
7/26/2023	1/31/2025	2,000	2,000,000	964.10	1,928,191.18	24,309.39	5	1,952,506	2.500%	76,027	71,809	147,836	4.946%	2,076,027
7/26/2023	4/15/2025	2,000	2,000,000	962.15	1,924,305.00	14,631.15	5	1,938,941	2.625%	90,369	75,695	166,064	4.993%	2,090,369
8/16/2023	7/31/2025	1,000	1,000,000	916.08	916,084.79	108.70	5	916,198	0.250%	4,850	83,915	88,765	5.067%	1,004,850
10/18/2023	10/15/2025	3,000	3,000,000	985.27	2,955,829.07	1,045.08	5	2,956,879	4.250%	253,258	44,171	297,429	5.052%	3,253,258
2/20/2024	1/31/2026	3,000	3,000,000	995.00	2,985,005.00	7,005.50	5	2,992,016	4.250%	253,258	14,995	268,253	4.512%	3,253,258
			20,000,000		16,430,686.22									

Fixed Income CDs Investment Summary

Purchase Date	Maturity Date	Days to Maturity	Quantity/ Price	Service Charge	Net Amount	YTM	Expected Interest
5/23/2023	11/2/2024	529	250,000	5	250,002.22	4.850%	17,573
5/18/2023	11/5/2024	537	250,000	5	250,002.05	5.050%	18,574
5/25/2023	11/25/2024	550	250,000	5	250,002.22	5.100%	19,212
5/25/2023	11/25/2024	550	250,000	5	250,002.21	5.050%	19,024
5/26/2023	11/26/2024	550	250,000	5	250,002.22	5.050%	19,024
5/30/2023	11/29/2024	549	250,000	5	250,002.28	4.950%	18,613
5/19/2023	2/19/2025	642	250,000	5	250,002.57	4.850%	21,327
5/31/2023	4/30/2025	700	250,000	5	250,003.20	4.750%	22,774
5/19/2023	5/19/2025	731	250,000	5	250,002.89	4.850%	24,283
5/24/2023	5/22/2025	729	250,000	5	250,003.16	4.850%	24,217
5/24/2023	5/23/2025	730	250,000	5	250,003.15	4.850%	24,250
5/26/2023	5/26/2025	731	250,000	5	250,002.94	4.650%	23,282
5/24/2023	5/27/2025	734	250,000	5	250,002.94	4.850%	24,383
5/24/2023	5/27/2025	734	250,000	5	250,002.94	4.850%	24,383
5/30/2023	5/30/2025	731	250,000	5	250,002.97	4.950%	24,784
6/2/2023	6/2/2025	731	250,000	5	250,002.99	4.850%	24,283
			4,000,000		4,000,042.95		349,986

Total Invested Funds at Cost 20,430,729.17
Cash Balance 3,479.61
20,434,208.78

**Kern Delta Water Banking Project
US Treasury Investment Summary**

	Maturity Date	Quantity (Q)	Par Value (PV)	Customer Price (P)	Principal (Prin) (Q x P)	Accrued Interest (AI)	Service Charge	Net Money (NM) (Prin + AI)						
11/4/2022	4/13/2023	999	999,000	981.93	980,949.74	-	5	980,955						
11/4/2022	4/20/2023	999	999,000	980.82	979,840.12	-	5	979,845						
11/4/2022	4/27/2023	999	999,000	979.89	978,907.61	-	5	978,913						

Fixed Income CDs Investment Summary

Purchase Date	Maturity Date	Days to Maturity	Quantity/ Price	Service Charge	Net Amount	YTM	Expected Interest
5/31/2023	12/2/2024	551	250,000	5	250,002.27	5.100%	19,247
5/31/2023	12/2/2024	551	250,000	5	250,002.27	5.100%	19,247
5/31/2023	12/2/2024	551	250,000	5	250,002.27	5.100%	19,247
5/30/2023	5/30/2025	731	250,000	5	250,002.96	4.850%	24,283
5/31/2023	5/30/2025	730	250,000	5	250,003.01	4.950%	24,750

106,775

Total Invested Funds at Cost 1,250,012.78
Cash Balance 1,365.55

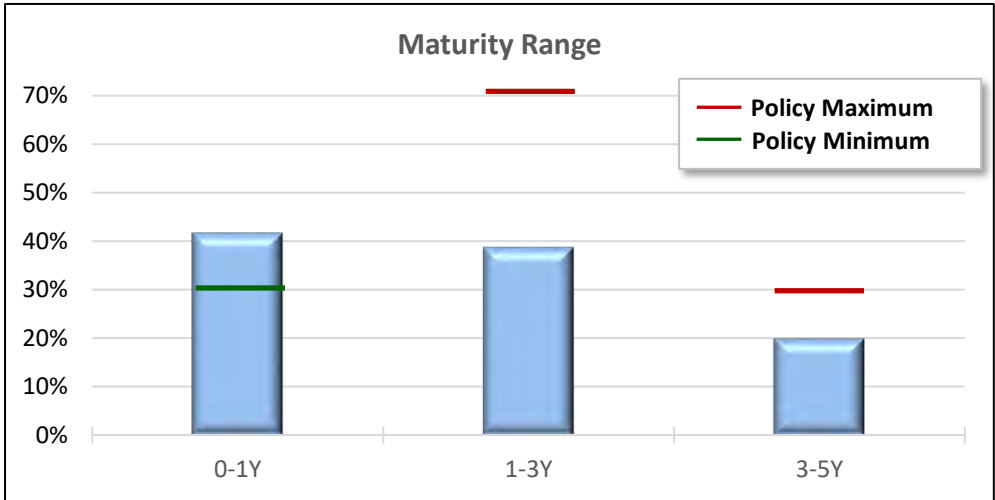
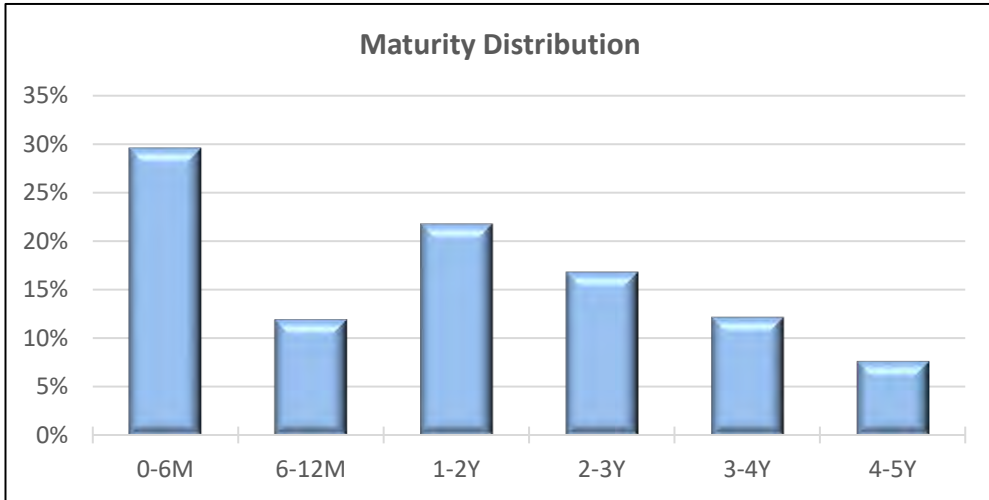
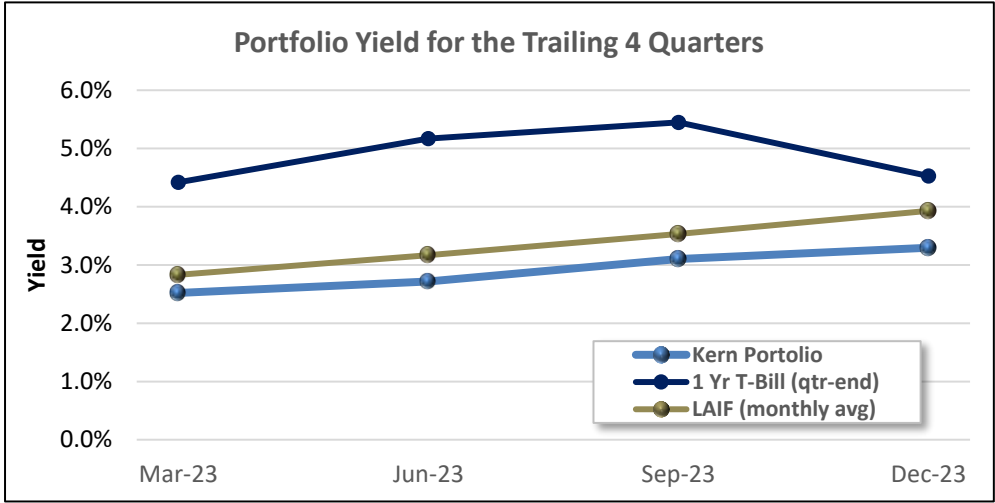
1,251,378.33



Kern County Treasurer's Pooled Cash Portfolio Summary

2/29/2024

Total Market Value	\$ 6,701,191,029
Yield to Maturity at Cost	3.39%
Yield to Maturity at Market	4.95%
Effective Duration	1.56
Weighted Average Years to Maturity	1.69



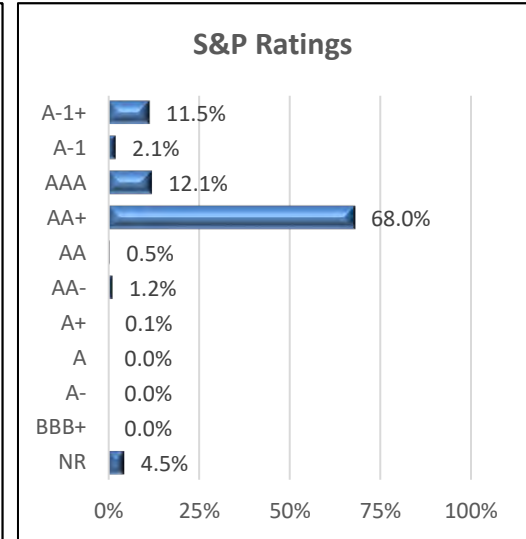
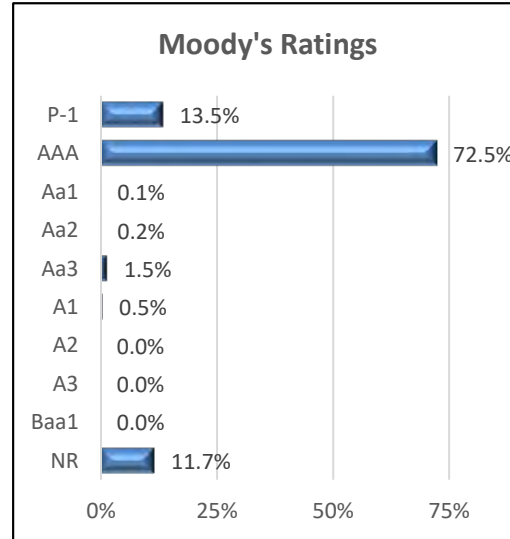
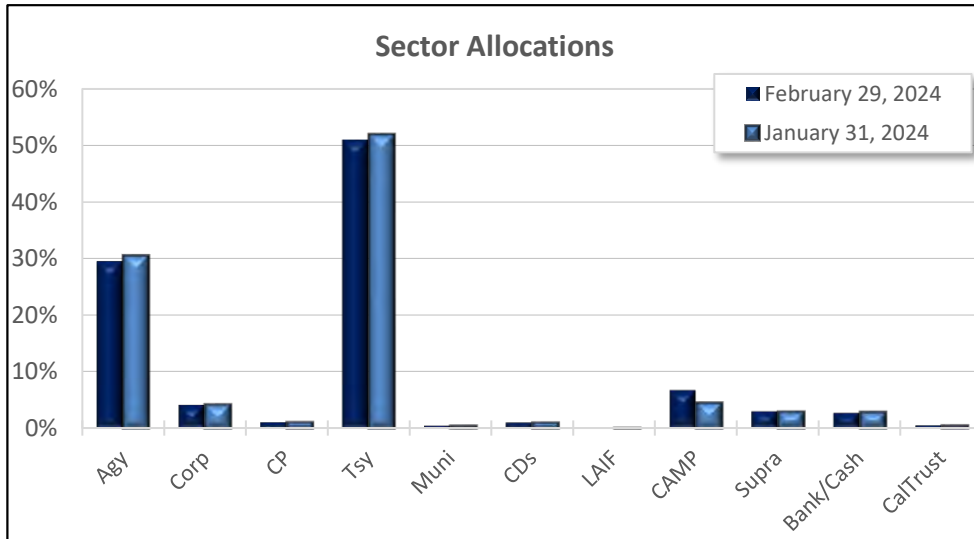
*The County Treasurer believes the Treasury Investment Pool contains sufficient cash flow from liquid and maturing securities, bank deposits, and incoming cash to meet the next six months of expected expenditures.



Kern County Treasurer's Pooled Cash Portfolio Summary

2/29/2024

Sector	Par Amount	Original Cost	Market Value	Original Yield	% of Total Assets	Policy Limit Rating	Days to Maturity
Local Agency Investment Fund	1,820,894	1,820,894	1,820,894	3.28%	0.03%	\$75 Million	1
California Asset Management Program	458,317,493	458,317,493	458,317,493	5.50%	6.84%	10%	1
CalTRUST	33,874,483	33,874,483	33,874,483	5.49%	0.51%	10%	1
Money Markets	96,836,913	96,836,913	96,836,913	5.24%	1.45%	10%	1
Bank Sweep (ICS)	10,839,627	10,839,627	10,839,627	4.25%	0.16%	10%	1
U.S. Treasuries	3,520,500,000	3,467,292,847	3,380,929,985	2.69%	50.45%	100%	761
Federal Agencies	2,045,141,000	2,008,399,405	1,997,455,203	4.12%	29.81%	75%	543
Municipal Bonds	30,000,000	30,000,000	28,644,293	0.75%	0.43%	10%	428
Supranationals	205,000,000	203,890,050	199,699,825	3.10%	2.98%	10%	1,158
Negotiable CDs	70,000,000	70,000,000	70,024,693	5.59%	1.04%	30%	137
Commercial Paper	75,000,000	72,691,650	73,531,485	5.46%	1.10%	40%	132
Corporate Notes	286,986,000	282,275,449	272,050,990	1.81%	4.06%	30%	541
Total Securities	6,834,316,409	6,736,238,810	6,624,025,883	3.39%	98.85%		616
Total Cash	77,165,146	77,165,146	77,165,146		1.15%		
Total Assets	6,911,481,556	6,813,403,957	6,701,191,029		100.00%		





To: Kern Delta Water District Board of Directors

From: Steven Teglia – General Manager

Date: April 16, 2024

Re: Annual Cost of Living Adjustment Review.

Background:

Typically, each April the Board has considered annual cost of living adjustments (COLA) for District employees ranging from 0-2%. In addition, the annual discussion has also included potential merit raises ranging from 0-2%. Once approved by the Board these compensation adjustments become effective the first pay period which includes May 1st.

In 2020, staff developed a new District Salary Schedule which was designed to provide greater clarity and structure to the compensation for each employee position classification. In addition, the schedule articulates how employees can achieve merit increases based on both time and performance. On April 21, 2020, the Board approved the new salary schedule which included a 2% COLA.

Given the previous actions of the Board, the annual process is now focused on the appropriateness of authorizing a potential COLA based on a review of several annual CPIs traditionally considered by the Board. Any COLA authorized by the Board will be reflected in a corresponding adjustment to the attached salary schedule.

Recent Board Approved COLA Adjustments	
Year	Approved COLA
2020	2%
2021	1.5%
2022	5.5%
(5/1/22 and 10/24/22)	(3.5% and 2%)
2023	3.5%

CPI Analysis:

Included below is a summary of historical CPI data the Board has traditionally utilized in the past. The below indexes are based on 1982-84 = 100 and escalation using the month of February in

2023 and 2024 for comparison of various indices (note the source information summary is attached to this memorandum).

Current CPI Information – February 2024			
All Urban Consumers (CPI-U)	Feb. 2023	Feb. 2024	% Change
U.S. City Average	300.840	310.326	3.2
West – Size Class B/C	185.968	191.874	3.2
Los Angeles-Long Beach-Anaheim, CA	317.571	328.232	3.4
Urban Wage Earners (CPI-W)	Feb. 2023	Feb. 2024	% Change
U.S City Average	295.057	304.284	3.1
West – Size Class B/C	187.224	193.309	3.3
Los Angeles-Long Beach-Anaheim, CA	306.444	315.625	3.0
Average of above CPIs			3.2

Recommendation:

Considering the average increase of the above CPIs, staff and the Business and Finance Committee are recommending the Board consider approving a COLA of 2.5% which will become effective the first pay period including May 1, 2024. This adjustment will be provided to all employees covered by the salary schedule and is reflected in the proposed revised salary schedule attached. Adequate funds are available in the approved 2024 Budget to cover the costs of the recommended COLA which is estimated to be \$47,000 annualized.

Attachment 1 – Current District Salary Schedule Board approved April 18, 2023.

Attachment 2 – Bureau of Labor Statistics Consumer Price Indexes Pacific Cities and U.S City Average February 2024.

Attachment 3 – Draft District Salary Schedule including recommended 2.5% COLA effective May 1, 2024.

Salary Schedule
Board Approved 4/18/23
Effective 5/1/23



Position Title:	Exempt	Step 1	Step 2	Step 3	Step 4	Step 5
Canal Tender I	Hour	\$16.96	\$17.81	\$18.70	\$19.64	\$20.62
	Annual	\$35,277	\$37,045	\$38,896	\$40,851	\$42,890
Canal Tender II	Hour	\$21.65	\$22.74	\$23.88	\$25.06	\$26.31
	Annual	\$45,032	\$47,299	\$49,670	\$52,125	\$54,725
Maintenance Crewman I	Hour	\$16.96	\$17.81	\$18.70	\$19.64	\$20.62
	Annual	\$35,277	\$37,045	\$38,896	\$40,851	\$42,890
Maintenance Crewman II	Hour	\$21.65	\$22.74	\$23.88	\$25.07	\$26.32
	Annual	\$45,032	\$47,299	\$49,670	\$52,146	\$54,746
Equipment Operator I	Hour	\$23.75	\$24.94	\$26.19	\$27.51	\$28.89
	Annual	\$49,400	\$51,875	\$54,475	\$57,221	\$60,091
Equipment Operator II	Hour	\$27.15	\$28.51	\$29.94	\$31.44	\$33.01
	Annual	\$56,472	\$59,301	\$62,275	\$65,395	\$68,661
Mechanic	Hour	\$27.50	\$28.88	\$30.32	\$31.84	\$33.44
	Annual	\$57,200	\$60,070	\$63,066	\$66,227	\$69,555
Weed Control I	Hour	\$24.32	\$25.54	\$26.82	\$28.16	\$29.57
	Annual	\$50,586	\$53,123	\$55,786	\$58,573	\$61,506
Weed Control II	Hour	\$27.72	\$29.11	\$30.57	\$32.10	\$33.71
	Annual	\$57,658	\$60,549	\$63,586	\$66,768	\$70,117
Dispatch Clerk	Hour	\$20.37	\$21.39	\$22.46	\$23.58	\$24.76
	Annual	\$42,370	\$44,491	\$46,717	\$49,046	\$51,501
Administrative Assistant	Hour	\$21.55	\$22.63	\$23.76	\$24.95	\$26.20
	Annual	\$44,824	\$47,070	\$49,421	\$51,896	\$54,496
Receptionist / Clerk	Hour	\$18.09	\$18.99	\$19.94	\$20.94	\$21.99
	Annual	\$37,627	\$39,499	\$41,475	\$43,555	\$45,739
Tax Assessor	Hour	\$22.63	\$23.76	\$24.95	\$26.20	\$27.51
	Annual	\$47,070	\$49,421	\$51,896	\$54,496	\$57,221
District Hydrographer	Hour	\$39.60	\$41.58	\$43.66	\$45.84	\$48.13
	Annual	\$82,368	\$86,486	\$90,813	\$95,347	\$100,110
Groundwater Manager	Hour	\$33.94	\$35.64	\$37.42	\$39.29	\$41.25
	Annual	\$70,595	\$74,131	\$77,834	\$81,723	\$85,800
Groundwater Technician	Hour	\$17.53	\$18.41	\$19.33	\$20.30	\$21.32
	Annual	\$36,462	\$38,293	\$40,206	\$42,224	\$44,346
Operations Lead	Hour	\$28.96	\$30.41	\$31.93	\$33.53	\$35.21
	Annual	\$60,237	\$63,253	\$66,414	\$69,742	\$73,237
Maintenance Lead	Hour	\$28.96	\$30.41	\$31.93	\$33.53	\$35.21
	Annual	\$60,237	\$63,253	\$66,414	\$69,742	\$73,237
Staff Engineer	E Hour	\$36.20	\$38.01	\$39.91	\$41.91	\$44.01
	Annual	\$75,296	\$79,061	\$83,013	\$87,173	\$91,541
Operations Supervisor	E Hour	\$33.72	\$35.41	\$37.18	\$39.04	\$41.00
	Annual	\$70,138	\$73,653	\$77,334	\$81,203	\$85,280
Maintenance Supervisor	E Hour	\$33.72	\$35.41	\$37.18	\$39.04	\$41.00
	Annual	\$70,138	\$73,653	\$77,334	\$81,203	\$85,280

Salary Schedule
Board Approved 4/18/23
Effective 5/1/23

Step 1: Initial Step.

Step 2: Eligible after Minimum 6 months in Step 1 and Must Include Recommendation by Supervisor and Approval of General Manager.

Step 3: Eligible after Minimum 2 years in Step 2 and Must Include Recommendation of Supervisor and Approval of General Manager.

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Notes:

*Salary Schedule Subject to approval and adjustment by the Kern Delta Board of Directors.

*General Manager may appoint employee to any step within the applicable range for a given position.

*Poor performance may result in delay of step increase or loss of step increase.

*If promoted to a II position (Canal Tender/Maintenance Crewman) after serving 2 years in Step 5 of the corresponding I position, each subsequent step increase shall be after a minimum of 2 years in each step and must include recommendation by supervisor and approval of General Manager.

CONSUMER PRICE INDEXES PACIFIC CITIES AND U. S. CITY AVERAGE February 2024

(All items indexes. 1982-84=100 unless otherwise noted. Not seasonally adjusted.)

MONTHLY DATA	All Urban Consumers (CPI-U)						Urban Wage Earners and Clerical Workers (CPI-W)					
	Indexes			Percent Change			Indexes			Percent Change		
				Year ending		1 Month ending				Year ending		1 Month ending
	Feb 2023	Jan 2024	Feb 2024	Jan 2024	Feb 2024	Feb 2024	Feb 2023	Jan 2024	Feb 2024	Jan 2024	Feb 2024	Feb 2024
U. S. City Average.....	300.840	308.417	310.326	3.1	3.2	0.6	295.057	302.201	304.284	2.9	3.1	0.7
West.....	319.130	328.053	329.339	3.3	3.2	0.4	311.086	319.433	320.965	3.1	3.2	0.5
West – Size Class A ¹	328.569	337.095	339.135	3.0	3.2	0.6	317.510	325.172	327.424	2.6	3.1	0.7
West – Size Class B/C ²	185.968	191.586	191.874	3.7	3.2	0.2	187.224	192.783	193.309	3.7	3.3	0.3
Mountain ³	126.934	129.814	130.059	3.0	2.5	0.2	128.254	130.881	131.423	2.9	2.5	0.4
Pacific ³	122.935	126.632	127.230	3.5	3.5	0.5	123.758	127.357	128.000	3.2	3.4	0.5
Los Angeles-Long Beach-Anaheim, CA.....	317.571	326.640	328.232	2.5	3.4	0.5	306.444	313.743	315.625	2.0	3.0	0.6
BI-MONTHLY DATA (Published for odd months)	Indexes			Percent Change			Indexes			Percent Change		
				Year ending		2 Months ending				Year ending		2 Months ending
	Jan 2023	Nov 2023	Jan 2024	Nov 2023	Jan 2024	Jan 2024	Jan 2023	Nov 2023	Jan 2024	Nov 2023	Jan 2024	Jan 2024
Riverside-San Bernardino-Ontario, CA ³	127.683	131.372	131.358	4.3	2.9	0.0	127.936	131.963	131.840	4.4	3.1	-0.1
San Diego-Carlsbad, CA.....	354.453	366.343	367.917	5.2	3.8	0.4	336.315	347.878	348.486	4.9	3.6	0.2
Urban Hawaii.....	320.790	331.428	333.172	3.6	3.9	0.5	320.135	330.577	332.335	3.8	3.8	0.5
BI-MONTHLY DATA (Published for even months)	Indexes			Percent Change			Indexes			Percent Change		
				Year ending		2 Months ending				Year ending		2 Months ending
	Feb 2023	Dec 2023	Feb 2024	Dec 2023	Feb 2024	Feb 2024	Feb 2023	Dec 2023	Feb 2024	Dec 2023	Feb 2024	Feb 2024
Phoenix-Mesa-Scottsdale, AZ ⁴	177.118	179.733	181.010	2.7	2.2	0.7	177.059	179.593	180.826	2.7	2.1	0.7
San Francisco-Oakland-Hayward, CA.....	337.173	339.915	345.151	2.6	2.4	1.5	331.875	335.597	341.595	2.8	2.9	1.8
Seattle-Tacoma-Bellevue, WA.....	334.987	344.982	349.288	4.4	4.3	1.2	328.615	338.852	342.387	4.3	4.2	1.0
Urban Alaska.....	256.856	261.178	261.340	1.8	1.7	0.1	254.887	258.598	259.326	1.4	1.7	0.3

1 Population over 2,500,000 2 Population 2,500,000 and under, Dec 1996 = 100 3 Dec 2017=100 4 Dec 2001=100

NOTE: In January 2018, BLS introduced a new geographic area sample for the Consumer Price Index (CPI): www.bls.gov/regions/west/factsheet/2018cpirevisionwest.pdf

1967=100 base year indexes and tables with semiannual and annual average data are available at: www.bls.gov/regions/west/factsheet/consumer-price-index-data-tables.htm

Release date March 12, 2023. The next release date is scheduled for April 10, 2024. For questions, please contact us at BLInfoSF@bls.gov or (415) 625-2270.

DRAFT Salary Schedule DRAFT

Board Approved / /

Effective 5/1/24



Position Title:	Exempt	Step 1	Step 2	Step 3	Step 4	Step 5
Canal Tender I	Hour	\$17.38	\$18.25	\$19.17	\$20.13	\$21.14
	Annual	\$36,150	\$37,960	\$39,874	\$41,870	\$43,971
Canal Tender II	Hour	\$22.19	\$23.30	\$24.47	\$25.70	\$26.99
	Annual	\$46,155	\$48,464	\$50,898	\$53,456	\$56,139
Maintenance Crewman I	Hour	\$17.38	\$18.25	\$19.17	\$20.13	\$21.14
	Annual	\$36,150	\$37,960	\$39,874	\$41,870	\$43,971
Maintenance Crewman II	Hour	\$22.19	\$23.30	\$24.47	\$25.70	\$26.99
	Annual	\$46,155	\$48,464	\$50,898	\$53,456	\$56,139
Equipment Operator I	Hour	\$24.34	\$25.56	\$26.84	\$28.19	\$29.60
	Annual	\$50,627	\$53,165	\$55,827	\$58,635	\$61,568
Equipment Operator II	Hour	\$27.83	\$29.23	\$30.70	\$32.24	\$33.86
	Annual	\$57,886	\$60,798	\$63,856	\$67,059	\$70,429
Mechanic	Hour	\$28.19	\$29.60	\$31.08	\$32.64	\$34.28
	Annual	\$58,635	\$61,568	\$64,646	\$67,891	\$71,302
Weed Control I	Hour	\$24.93	\$26.18	\$27.49	\$28.87	\$30.32
	Annual	\$51,854	\$54,454	\$57,179	\$60,050	\$63,066
Weed Control II	Hour	\$28.41	\$29.83	\$31.33	\$32.90	\$34.55
	Annual	\$59,093	\$62,046	\$65,166	\$68,432	\$71,864
Dispatch Clerk	Hour	\$20.88	\$21.93	\$23.03	\$24.19	\$25.40
	Annual	\$43,430	\$45,614	\$47,902	\$50,315	\$52,832
Administrative Assistant	Hour	\$22.09	\$23.20	\$24.36	\$25.58	\$26.86
	Annual	\$45,947	\$48,256	\$50,669	\$53,206	\$55,869
Receptionist / Clerk	Hour	\$18.54	\$19.47	\$20.45	\$21.48	\$22.56
	Annual	\$38,563	\$40,498	\$42,536	\$44,678	\$46,925
Tax Assessor	Hour	\$23.20	\$24.36	\$25.58	\$26.86	\$28.21
	Annual	\$48,256	\$50,669	\$53,206	\$55,869	\$58,677
District Hydrographer	Hour	\$40.59	\$42.62	\$44.75	\$46.99	\$49.34
	Annual	\$84,427	\$88,650	\$93,080	\$97,739	\$102,627
Groundwater Manager	Hour	\$34.79	\$36.53	\$38.36	\$40.28	\$42.30
	Annual	\$72,363	\$75,982	\$79,789	\$83,782	\$87,984
Groundwater Technician	Hour	\$17.97	\$18.87	\$19.82	\$20.82	\$21.86
	Annual	\$37,378	\$39,250	\$41,226	\$43,306	\$45,469
Office Manager	Hour	\$29.68	\$31.17	\$32.73	\$34.37	\$36.09
	Annual	\$61,734	\$64,834	\$68,078	\$71,490	\$75,067
Operations Lead	Hour	\$29.68	\$31.17	\$32.73	\$34.37	\$36.09
	Annual	\$61,734	\$64,834	\$68,078	\$71,490	\$75,067
Maintenance Lead	Hour	\$29.68	\$31.17	\$32.73	\$34.37	\$36.09
	Annual	\$61,734	\$64,834	\$68,078	\$71,490	\$75,067
Staff Engineer	E Hour	\$37.11	\$38.97	\$40.92	\$42.97	\$45.12
	Annual	\$77,189	\$81,058	\$85,114	\$89,378	\$93,850
Operations Supervisor	E Hour	\$34.56	\$36.29	\$38.11	\$40.02	\$42.03
	Annual	\$71,885	\$75,483	\$79,269	\$83,242	\$87,422
Maintenance Supervisor	E Hour	\$34.56	\$36.29	\$38.11	\$40.02	\$42.03
	Annual	\$71,885	\$75,483	\$79,269	\$83,242	\$87,422

DRAFT Salary Schedule DRAFT

Board Approved / /

Effective 5/1/24

Step 1: Initial Step.

Step 2: Eligible after Minimum 6 months in Step 1 and Must Include Recommendation by Supervisor and Approval of General Manager.

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Notes:

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*If promoted to a II position (Canal Tender/Maintenance Crewman) after serving 2 years in Step 5 of the corresponding I position, each subsequent step increase shall be after a minimum of 2 years in each step and must include recommendation by supervisor and approval of General Manager.

Tab IV





**OPERATIONS AND PROJECTS
COMMITTEE MEETING**

**501 Taft Highway
Bakersfield, CA**

**TUESDAY April 2, 2024
10:30 AM**

AGENDA

- 1. Call to Order**
- 2. Public Comment Period**
- 3. Assistant General Manager's Report:**
 - a. Approve the minutes of the Operations and Projects Committee Meeting of March 5, 2024
 - b. Encroachment Permit Update
 - c. District Facility and Banking Maintenance Report
 - d. Water Banking Construction and Power Invoices
 - e. Pending Development Projects
 - f. Sunset Basins Update
- 4. Committee Comments**
- 5. Adjourn**

A handwritten signature in black ink that reads "Chris Bellue".

Chris Bellue
Assistant General Manager

Posted: Friday, March 29, 2024
Bakersfield, California

Requests for disability related modifications or accommodations, including auxiliary aids or services may be made by telephoning or contacting Madelyne Rodriguez at the District Office (661-834-4656). Please attempt to make such requests known at least 24 hours before the scheduled meeting. Pursuant to Government Code section 54957.5, any materials relating to an open session item on this agenda, distributed to the Board of Directors after the distribution of the agenda packet, will be made available for public inspection at the time of distribution at the District, 501 Taft Highway, Bakersfield, CA.



MINUTES OF THE OPERATIONS AND PROJECTS COMMITTEE
Tuesday, April 2, 2024

DIRECTORS PRESENT: Mendonca, Spitzer, Fanucchi and Borba.

OTHERS PRESENT: From KDWD: General Manager Teglia, Assistant General Manager Bellue, District Counsel Iger, Staff Engineer DeLeon and Administrative Assistant Rodriguez.

1. CALL TO ORDER:

Director Mendonca called the meeting to order at 10:30 A.M.

2. PUBLIC COMMENTS:

None.

3. ASSISTANT GENERAL MANAGER'S REPORT:

- a. Approve minutes of the Operations and Projects Committee Meeting of March 5, 2024: M/S/C (Borba/Fanucchi) (yes-4, no-0): The Committee approved the minutes of the Operations and Projects Committee meeting held on March 5, 2024.
- b. Encroachment Permit Update: Mr. Bellue presented an encroachment request from SA Camp to install overhead power to a new well.
- c. District Facility and Banking Maintenance: Mr. Bellue mentioned that on the Eastside Canal debris was removed from the entire canal in preparation for the annual startup and Turnout No. 253, which was relocated to accommodate the Buena Vista Boulevard culvert replacement project, was reconnected to the customer's pipeline. A turnout on the Branch 2 pipeline was refurbished in anticipation for a water delivery to the former Old River Sod property. Mr. Bellue indicated that a burn permit was obtained in March and tumble weeds were burned on the Eastside Canal and at the Kern Island Basins. Maintenance staff worked with AEWSD staff and equipment to grade the north access road at the Sunset Basins property in anticipation of power pole installation. Sediment buildup was excavated from a plugged crossing on the Buena Vista Canal downstream of I-5 and upstream of the floating weir. Mr Bellue informed the committee that both spray rigs were used in March to treat weeds on the Eastside, Kern Island, Branch 1, Stine, and Buena Vista Canals. Mr Bellue also provided an update of jobs being performed by outside contractors, Mr. Backhoe and Sierra Hydrographics. Mr Backhoe completed the removal of sand buildup on the Stine Canal. Sierra Hydrographics has most SCADA sites reporting and will have remaining sites reporting by June 2024.
- d. Water Banking Construction and Power Invoices: M/S/C (Spitzer/Fanucchi) (yes-4, no-0): The Committee recommended the Board approve payment of Water Banking and Power Invoices totaling \$124,683.96.
- e. Pending Development Projects: Mr. Bellue provided a brief update on pending projects throughout the District.
- f. Sunset Basins update: Mr Bellue informed the Committee power lines will be energized this month and testing will begin in May.

4. COMMITTEE COMMENTS:

None.

5. ADJOURN:

Director Mendonca adjourned the meeting at 11:33 A.M.

Respectfully submitted,

Joey Mendonca – Chair



To: Kern Delta Water District Board of Directors

From: Daniel Deleon

Date: April 16th, 2024

Re: Encroachment Permit Applications & Easement Requests

DISCUSSION:

Following are the organizations that have applied for an encroachment permit with Kern Delta Water District and a summary of their intended locations and purposes for encroaching.

Organization: SA Camp

Location: 14 Ditch

Purpose: Install overhead power to new well

Anticipated Start Date: TBD

Maintenance Report

March 2024

1. **Structure and Turnout Repairs.** The following jobs were completed during the month.
 - a. Cleaned the Eastside Canal of debris in preparation for season run.
 - b. Relocated Turnout 253 on the Eastside Canal at Buena Vista Blvd and reconnected back to the farmer's pipeline.
 - c. Repaired gate on pipelined section of the Branch 2 Canal.
 - d. Removed trees on Branch 1 north of Panama Lane.
 - e. Installed screens on Turnouts 18 and 19 on the Rim Ditch.
 - f. Burned tumbleweeds on Eastside Canal.
 - g. Cleaned screens and filters on traveling screens on Central Canal.
2. **Shop.** The following jobs were completed during the month;
 - a. Normal service and repairs on District vehicles and equipment.
 - b. Repair tire on T-13 grappling trailer.
 - c. Replace brake caliper Truck #215.
 - d. Installed new battery on Truck #324.
 - e. Installed new evaporator on Truck #225.
 - f. Repaired tire on Truck #330.
 - g. Installed new fan motor and hoses on Truck #217.
 - h. Replaced motor mount on Truck #105.
 - i. Installed brakes and rotors on Truck #106.
3. **District Wells.**
 - a. Monthly service and inspection of all District wells, clean well pads as needed.
4. **Motor Grader # 403** The following canals were sloped, and roads graded;
 - a. Finished the Central.
 - b. Graded north road at Sunset basins.
 - c. Started on Kern Island at the 20' Working north.
5. **Backhoe # 402** The following jobs were completed during the month;
 - a. Assisted in tree removal on Branch 1 north of Panama.
6. **Backhoe # 404** The following jobs were completed this month;
 - a. Assist in cleaning of the Eastside canal.
 - b. Removed tumble weeds from the Stine and Farmers Canals.
 - c. Remove trees on East Branch at Casa Loma Dr.
 - d. Remove sediment from BV Canal at road crossing above floating weir.
7. **Backhoe # 408** The following jobs were completed this month;
 - a. Removed tumbleweeds from the Eastside Canal from DiGeorgio north to 58.
 - b. Removed tumble weeds on the Central from Panama Ln. to Pacheco Rd.
 - c. Dip Eastside after starting up.
 - d. Backfill wash ins on the BV Canal from Taft Hwy to Bear Mtn.

- e. Muck out Branch 1 north of Panama Lane.
8. **Weed Spraying.** The following canals were sprayed during the month;
- a. Finished spraying the Stine canal.
 - b. Sprayed the Kern Island and Branch 1 Canals.
 - c. Started the Eastside at the south end working north spraying outside banks and roadways as needed.
 - d. Spraying Buena Vista canal both inner/outer banks and roadways working north.
9. **Aquatic Treatments.** Treatments including surface spraying for algae mats and injection treatments for control of algae or vascular aquatic weeds;
- a. No treatments were made this month.
10. **Rodent Control**
- a. None.
11. **Trash Removal.**
- a. Clean trash racks throughout District.
 - b. Removed trash left behind from homeless encampments.
 - c. Cleaned Eastside Canal.
12. **Fence Repairs.** Fences and Gates were repaired at the following locations;
- a. Stine Canal- Straiten gate on Summertree.
 - b. Central Canal- Terrace way new pole for Gate. White Ln and Wilson.
 - c. Eastside Canal- Repair gate on Panama Ln. Columbus.
 - d. Kern Island Canal- Brundage, 30th.
 - e. Branch 1- Panama Ln.
 - f. BV Canal-
 - g. Farmers Canal- Harris Rd. and Seasons Dr.
13. **Safety Meetings.** Weekly tailgate safety topics were;
- a. Quarterly District safety meeting -Emergency Action Plan, procedures in the event of emergencies (first aid, fire protection & prevention, evacuation plan, earthquake, intruder etc.)
 - b. Machine Guarding- Guarding serves to protect employees from hazards created by rotating parts, pinch points, points of operation, and from flying particles and sparks, created by the operation of machines.
 - c. Being Aware of Your Surroundings- Carefully observe the work area to find immediate or potential hazards including people who walk on job sites.
 - d. Attitude and Safety- Having a Positive Attitude at Work.
 - e. Ready for Work- Coming into work healthy and in the right mindset, every day is just as important as being properly trained or having the right tool for the job.
 - f. Is Your Mindset Good Enough- When it comes to workplace safety, “good enough” does not cut it.

14. **Water Banking Activities.** The following jobs were completed during the month;

- a. Burned tumbleweeds around fence lines at the Kern Island Basins.
- b. Repair barbwire fence at DiGiorgio Basins.
- c. Build/repair swing gate at Old River Basins.

15. **Contractor Projects.**

- a. Mr Backhoe began sand removal from the Stine Canal on March 25th. Completion is estimated to be around April 8th.
- b. Sierra Hydrographics has all SCADA sites, except the Branch 1, reporting flow rates to the web portal. The Branch 1 site and stage data at select other sites will be online in May or June of 2024.

**KERN DELTA WATER BANKING PROGRAM DISBURSEMENTS
RECOMMENDED BY THE OPERATIONS & PROJECTS COMMITTEE**

Tuesday, April 2, 2024

#	PAYEE		AMOUNT	CHECK
1	KERN DELTA WATER	2023 LABOR SHARE	123,915.05	3894
2	PGE - FR1	Well Utilities	27.47	3895
3	PGE - AE1	Well Utilities	144.04	3896
4	PGE - KI8	Well Utilities	75.24	3897
5	PGE - AE2	Well Utilities	67.87	3898
6	PGE - KD1	Well Utilities	46.33	3899
7	PGE - KI7	Well Utilities	69.89	3900
8	PGE - KD2	Well Utilities	122.30	3901
9	PGE - AE3	Well Utilities	68.11	3902
10	PGE - AE4	Well Utilities	147.66	3903
TOTAL			124,683.96	



Project No.	Tract	Developer/Owner	Facility	Location	Engineer/Contractor	Plans Received	Plan Check Comments	Status	Brief Description/Comment
1	6873	LGI	Branch II Canal	East of Gosford Road	McIntosh & Associates	-	-	A	Canal realignment and pipeline.
2	N/A	KDWD	Stine Canal	South of Stine Road	Mr. Backhoe	-	-	A	Stine Canal dredging.
3	N/A	County of Kern	Eastside Canal	Buena Vista Blvd	Nicholas Construction	-	-	A	Repair Eastside Canal road crossing.
4	6880	Lennar	Branch II Canal	West of Gosford Road	McIntosh & Associates	-	-	A	Canal realignment.
5	N/A	AEWSD	Sunset Basins	Sunset Basins	Provost & Pritchard	-	-	A	Overhead power line construction.
6	N/A	KDWD	Sunset Basins	Sunset Basins	Zeiders Consulting	-	-	A	Pump installation, electrical wiring.
7	N/A	AEWSD	FFP/Eastide Canal	Eastside Canal	Provost & Pritchard	-	-	A	Overhead power and modifications to intertie.
8	N/A	Love's Truck Stop	Kern Island Canal	Taft Highway	Lane Engineers	-	-	A	Storm drain bore scheduled for April 15th, 2024
9	6410	S&S Homes	Burnes Ditch	North of Taft Hwy	McIntosh & Associates	09-Nov-24	26-Feb-24	R	Taft Hwy culvert extension and new culvert at future street.
10	7136	Deertrail/D.R. Horton	Stine Canal	North of McCutchen	McIntosh & Associates	27-Mar-24	-	R	Canal realignment.
11	N/A	MPS Construction Mgm	Kern Island Canal	South of Hosking Ave	Dewalt	12-Mar-24	-	R	Southerly box culvert extension.
12	N/A	Panama BVUSD	Randall Ditch	West of Stine Road	Cornerstone Engineering	-	30-Jan-24	R	Canal realignment and pipeline.
13	N/A	Caltrans	Multiple	Multiple	Caltrans	-	-	R	Culvert extensions of multiple District canals along Taft Hwy.
14	N/A	Newhouse Dairy	BV East Canal	North of Bear Mt. Blvd	SA Camp	13-Mar-24	-	R	Install irrigation line underneath canal.
15	N/A	Cal Water	East Branch Canal	Multiple	-	-	-	R	Well discharge into canal.
16	N/A	KDWD	Old River Basins	Old River Basins	Zeiders Consulting	-	-	R	New recovery well.
17	N/A	Bidart Dairy	14 Ditch	Head of 14 Ditch	SA Camp	-	-	R	Overhead power
18	N/A	Pilot Truck Stop	Branch One Canal	Taft Highway	LAV//Pinnacle	-	-	R	Canal realignment and pipeline.
19	N/A	Caballero	East Branch Canal	South of Panama Ln	Caballero	-	-	R	Waiting on plans.
20	7405	Balfanz	Central Branch	North of Planz	Porter & Associates, Inc.	-	-	U	Panama Lane northern extension.
21	N/A	Cal Water	Kern Island Canal	Multiple	Pacific Irrigation	-	-	U	Well discharges into District canals.
22	N/A	Panama BVUSD	Randall Ditch	East of Stine Road	-	-	-	U	Waiting on plans.
23	N/A	PG&E	Branch II Canal	McCutchen Road	PG&E	-	-	U	Waiting on plans.
24	N/A	PG&E	Farmers Canal	Old River Road	PG&E	-	-	U	Waiting on plans.
25	N/A	PG&E	Central Branch	Ming Avenue	PG&E	-	-	U	Waiting on plans.
26	N/A	HP LLC	Multiple	Multiple	HP LLC	-	-	U	Fiber line crossing, two locations (34th St and White Ln).
27	N/A	Dosanjh Bros.	Eastside Canal	South of Mt. View Road	Pacific Irrigation	-	-	U	Install new turnout.
28	N/A	Unknown	Kern Island Canal	22nd Street	QK	-	-	U	Storm drain discharge. Waiting on plans.
29	N/A	Vanden Berge Dairy	Stine Canal	Vanden Berge Dairy	SA Camp	-	-	C	Overhead power line construction.
30	N/A	Pilot Truck Stop	Branch One Canal	Taft Highway	PowerPlus!	-	-	C	Temporary overhead power line construction.
31	N/A	KDWD	Multiple	Multiple	Ruben's Pipeline	-	-	C	Branch One and Kern Island Canal dredging.
32	N/A	KDWD	Drain and Rim	East of Union	Cross Land Leveling	-	-	C	Drain and Rim Ditch dredging.
33	N/A	Love's Truck Stop	Kern Island Canal	Taft Highway	Lane Engineers	-	-	C	Culvert extension.
34	N/A	PG&E	Eastside Canal	North of 30th Street	PG&E	-	-	C	Utility bridge removal
35	N/A	Cal Water	Kern Island Canal	N Street	Caltrans	-	-	C	Install water line underneath canal.
36	N/A	KDWD	Central Branch	South of Panama Ln	IWS	-	-	C	Install traveling water screens.

A-Active, in Construction
R - Under Review
U- Unknown
C - Complete

GRADING NOTES:

- ALL WORK SHALL BE DONE IN CONFORMANCE WITH KERN DELTA WATER DISTRICT (KDWD) REQUIREMENTS.
- ALL GRADING AND SITE PREPARATION SHALL CONFORM TO THESE PLANS, AND THE PROJECT SPECIFICATIONS. IN AND WHICH ARE MADE A PART HEREOF.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS PRIOR TO MOBILIZATION.
- FILL MATERIAL SHALL BE SUBJECT TO APPROVAL OF THE SOILS ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING OF CANAL LEEVES TO WITHIN 0.0' TO +0.2 VERTICALLY AND TO WITHIN 0.5' HORIZONTALLY.
- PRIOR TO PLACING FILL IN LEEVES, EXISTING VEGETATION & ORGANICS SHALL BE REMOVED, BE SCARIFIED TO 1 FT, MOISTURE CONDITIONED AND RE-COMPACTED TO MINIMUM COMPACTION AS SPECIFIED IN ITEM 7 BELOW.
- ALL LEEVES, ROADS, BANKS, BACKFILL OVER CULVERTS, AND BACKFILL AROUND STRUCTURES SHALL BE COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM DENSITY AS OBTAINED BY A.S.T.M. TEST METHOD D1557 UNLESS OTHERWISE SPECIFIED.
- THE ENGINEER SHALL EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING AND CONSTRUCTION TO ENSURE COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.
- UPON COMPLETION OF GRADING, A FINAL SOILS REPORT COVERING THE SITE PREPARATION, COMPACTION TESTING AND GRADING SHALL BE SUBMITTED BY THE SOILS ENGINEER.
- ALL CUT SLOPES SHALL NOT BE STEEPER THAN 1 HORIZONTAL TO 1 VERTICAL.
- ALL FILL SLOPES SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
- ALL FILL AREAS SHALL BE CLEARED OF ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FOR A STRUCTURAL FILL AND THE AREA SCARIFIED TO A DEPTH OF 12".
- PM10 AND SWPPP:
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT A DUST NUISANCE, STORMWATER POLLUTION AND TRACKOUT ORIGINATING FROM THE SITE OF WORK AS A RESULT OF HIS OPERATIONS DURING THE EFFECTIVE PERIOD OF THIS CONTRACT. PREVENTATIVE MEASURES TO BE TAKEN BY THE CONTRACTOR, IF REQUIRED, SHALL INCLUDE, BUT NOT LIMITED TO PREPARATION, SUBMITTAL FOR APPROVAL AND COMPLIANCE TO AN APPROVED SWPPP PLAN, AND PM10 PLAN.
- DURING EXCAVATION, REASONABLE SEARCHING SHALL BE PERFORMED FOR CONCEALED SUBSURFACE OBSTRUCTIONS. ALL ABANDONED SUBSURFACE OBSTRUCTIONS SHALL BE REMOVED. IF THE TERMINUS OF ANY ABANDONED PIPING IS OUTSIDE THE PROJECT LIMITS, THE PIPING SHOULD BE REMOVED WITHIN THE PROJECT AND PROPERLY CAPPED AT THE PROJECT BOUNDARY.
- THE CUT AND FILL QUANTITIES (IF SHOWN) ARE ESTIMATED AS SHOWN. NO SHRINKAGE FACTORS OR RATIOS HAVE BEEN INCLUDED. THE ENGINEER MAKES NO WARRANTY EITHER DIRECT OR IMPLIED AS TO WHAT THE ACTUAL SHRINKAGE (COMPACTION) FACTORS WILL BE. CONTRACTOR SHALL REVIEW THE CONDITIONS IN THE FIELD AND ANY OTHER RESOURCES THAT HE MAY HAVE TO ARRIVE AT HIS OWN SHRINKAGE RATIOS.
- THE FILL QUANTITIES (IF ANY) SHOWN ON THIS PLAN ARE FINAL PAY QUANTITIES. THE CONTRACTOR SHALL, AFTER EXAMINING THE PLAN, AND THE SITE TERRAIN, PREPARE HIS BID PRICE FOR THE PROJECT COMPLETE IN PLACE, INCLUDING ALL OVER EXCAVATION, PICKUP, HAUL, MIX, MANUFACTURE, MOISTURE CONDITION AND COMPACT COMPLETE IN-PLACE BASED ON HIS OWN ANALYSIS OF THE WORK REQUIRED.
- THE SOILS ENGINEER MUST APPROVE ALL SOIL COMPACTION INCLUDING THE STABILITY OF ALL SLOPES, BOTH THOSE THAT ARE CREATED BY AND THOSE REMAINING AFTER GRADING OPERATIONS.

NOTES

- REINFORCED CONCRETE PIPE SPEC (RCP): NEW PIPE SHALL BE 36" AND 48" DIAMETER ASTM 361, C-25, DOUBLE GASKET, LOW HEAD WATER TIGHT PRESSURE REINFORCED CONCRETE PIPE, WITH TEST PORTS. PIPE TO BE LAID WITH BELL ENDS DOWNSTREAM. THE PIPE SHALL BE INSTALLED TRUE TO LINE AND GRADE AS SHOWN TO WITHIN 2% OF THE OUTSIDE DIAMETER FOR LINE AND TO PLUS 0.05' FOR GRADE. THE PIPE SHALL NOT BE SET BELOW THE GRADES SHOWN ON THE PLAN. THE JOINTS OF THE PIPE SHALL BE SET SO THAT MINIMUM OF 1/4" GAP REMAINS BETWEEN THE BELL AND SPIGOT ENDS. A CERTIFICATE OF COMPLIANCE IS REQUIRED BEFORE INSTALLATION.
- CURING OF CONCRETE: ALL CONCRETE SHALL BE CURED AS SPECIFIED IN SECTION 90 OF STATE STANDARD SPECIFICATIONS, CURRENT ISSUES.
- PERMITS: ANY ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE KERN DELTA WATER DISTRICT BEFORE BEGINNING CONSTRUCTION IN THE CANAL RIGHT-OF-WAY. ADDITIONALLY, ANY ENCROACHMENT IN TO A CITY OF BAKERSFIELD OR CALTRANS RIGHT-OF-WAY SHALL REQUIRE APPROVED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- INSPECTION: THE OWNER SHALL FURNISH AN INSPECTOR AS NECESSARY TO ASSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. ALL BACKFILLING OPERATIONS SHALL BE TESTED BY THE OWNERS REPRESENTATIVE TO ASSURE CONFORMANCE WITH THE SPECIFIED COMPACTION.
- REMOVE ALL ORGANIC, VEGETABLE OR DELETERIOUS MATERIAL FROM CANAL AND DISPOSE PRIOR TO PLACING OF FILL MATERIAL.
- ALL FILL MATERIAL SHALL BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY PER ASTM D-1557.
- MAXIMUM ALLOWABLE PIPE GAP SHALL BE 1" AS PER THE PIPE MANUFACTURERS SPECIFICATIONS.

PRIVATE ENGINEERS NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS PLAN.

THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THIS PLAN.

ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA.

UNDERGROUND SERVICE ALERT SHALL BE CONTACTED TWO WORKING DAYS PRIOR TO CONSTRUCTION. 1-800-227-2600.

RANDALL DITCH PIPELINE AND RELOCATION PLAN

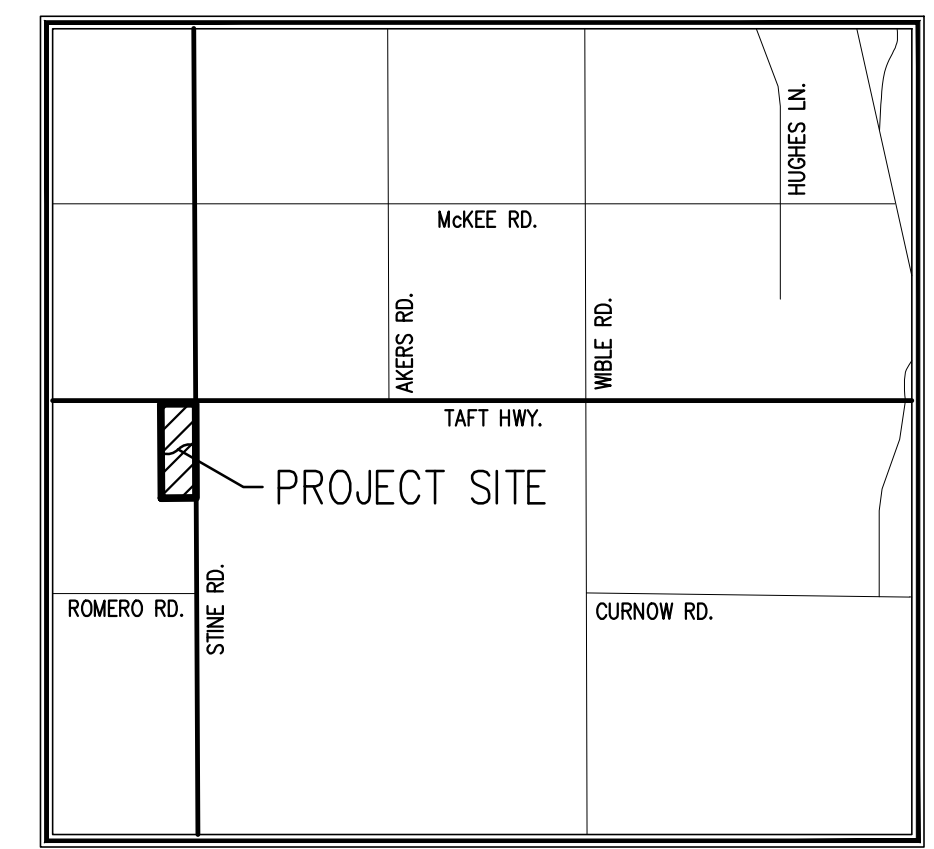
NEW TK-8 SCHOOL

PANAMA-BUENA VISTA UNION SCHOOL DISTRICT

10001 STINE ROAD

BAKERSFIELD, CA, 93313

APN: 184-220-09



VICINITY MAP
N.T.S.

SHEET INDEX

SHEET	DESCRIPTION
C600	COVER SHEET AND NOTES
C600.1	NOTES
C601	CANAL PIPELINE PLAN AND PROFILE
C602	CANAL PIPELINE PLAN AND PROFILE
C603	CANAL PIPELINE TIE-IN ENLARGED VIEWS
C604	CONCRETE BOWL REINFORCEMENT DETAIL
C605	CONCRETE BOWL SAWCUT PLAN
C606	REINFORCED CANAL BOWL SECTIONS
C607	REINFORCED CANAL BOWL DETAILS
C608	JUNCTION BOX & PRESSURE MANHOLE #1 DETAILS
C609	JUNCTION BOX & PRESSURE MANHOLE #1 DETAILS
C610	ACCESS BOX SECTIONS AND DETAILS
C611	ACCESS BOX SECTIONS AND DETAILS
C612	STREET CROSS SECTIONS
C613	WATER LINE CROSSINGS @ CANAL PIPELINE

UTILITY INFO:

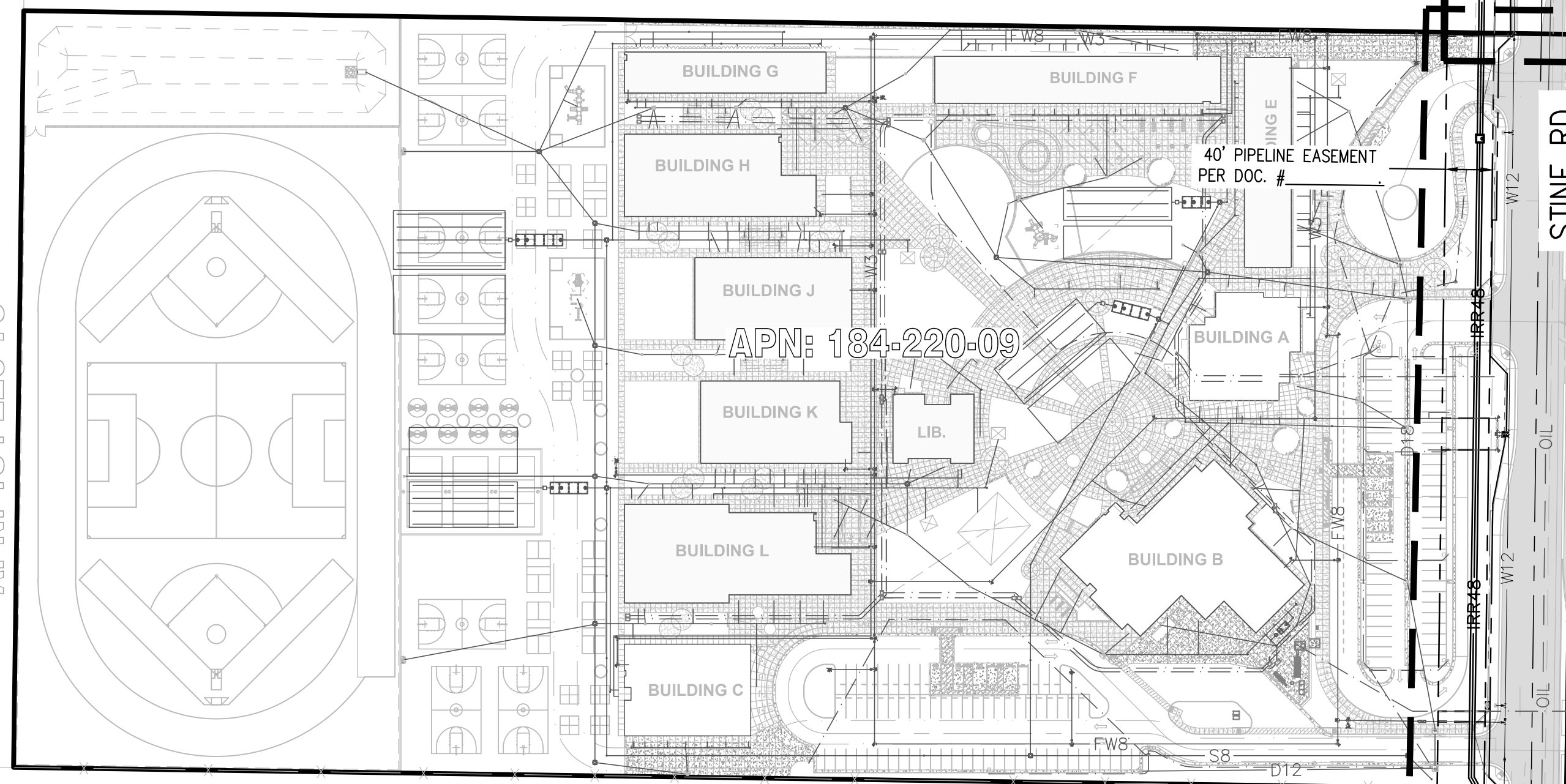
WATER:
CITY OF BAKERSFIELD WATER RESOURCES DEPARTMENT
ADDRESS: 1000 BUENA VISTA RD., BAKERSFIELD, CA 93311
PHONE: (661) 326-3715

SEWER:
FACILITY WILL BE ON A SEPTIC SYSTEM

ELECTRICAL AND GAS:
PACIFIC GAS & ELECTRIC COMPANY
ADDRESS: 4101 WIBLE RD., BAKERSFIELD, CA 93313
PHONE: (800) 743-5000

CANAL IMPROVEMENTS

QTY.	DESCRIPTION
86 LF	36" C-25 ASTM 361 RCP/RGJ PIPE
1,245 LF	48" C-25 ASTM 361 RCP/RGJ PIPE
3 EA	48" C-25 ASTM 361 RCP/RGJ PIPE-45 DEGREE BENDS
2 EA	JUNCTION BOX
1 EA	CONCRETE PIPE COLLAR
1 EA	CONCRETE BOWL DISCHARGE STRUCTURE



APN: 184-220-08

NOT A PART

APN: 184-220-09

APN: 184-220-10



SCALE: 1" = 100'

APPROVED AS TO CANAL REQUIREMENTS BY:

STEVEN TEGLIA, GENERAL MANAGER
KERN DELTA WATER DISTRICT

DATE

BASIS OF BEARING:

THE BEARING OF NORTH 00°45'45" EAST AS SHOWN FOR THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 3, TOWNSHIP 31 SOUTH, RANGE 27 EAST, M.D.B.M. PER TRACT MAP 6759 UNIT 1, FILED JULY 25, 2017 IN BOOK 62 OF MAPS AT PAGE 53 IN THE OFFICE OF THE KERN COUNTY RECORDER WAS HELD AS THE BASIS OF BEARINGS FOR THIS SURVEY.

LOCAL BENCHMARK:

CONCRETE MONUMENT IN LAMPHOLE STAMPED "RCE 33448"

PT# 21
N 2282531.51
E 6246208.19
EL 342.91

BENCHMARK:

THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) WAS USED AS THE VERTICAL DATUM AS SHOWN HEREON.

TOP OF CONCRETE MONUMENT IN LAMPHOLE LOCATED ON AGASSIZ ROCK WAY AT THE PHASE BOUNDARY LINE OF TRACT 6491 PER TRACT 6491 MONUMENT ELEVATION MAP.

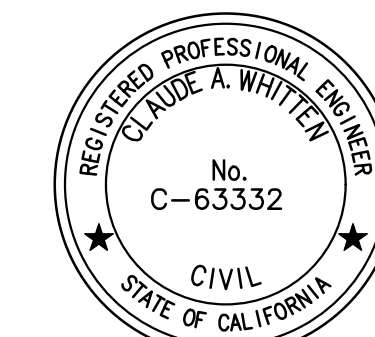
ELEVATION = 347.12 (NAVD88 DATUM)

N 2285953.575
E 6243937.939
EL 347.12



Know what's below.
Call before you dig.

CONTRACTOR SHALL CONTACT 811 FOR LOCATION OF ALL UTILITIES AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION



ENGINEER'S STATEMENT:

THESE PLANS AND SPECIFICATIONS WERE PREPARED BY ME OR UNDER MY DIRECTION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH KERN DELTA WATER DISTRICTS ORDINANCES, STANDARDS, AND DESIGN CRITERIA, AND INCLUDE ALL IMPROVEMENT REQUIREMENTS OF THE ADVISORY AGENCY OR OTHER REVIEW BOARD. ANY ERRORS, OMISSIONS OR OTHER VIOLATIONS OF THOSE ORDINANCES, STANDARDS OR DESIGN CRITERIA ENCOUNTERED DURING CONSTRUCTION SHALL BE CORRECTED AND SUCH CORRECTIONS REFLECTED ON CORRECTED PLANS SUBMITTED TO THE DISTRICT ENGINEER.

APPROVED BY:

Claude A. Whitten

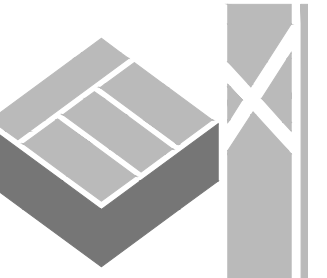
4/4/2024

CLAUDE A. WHITTEN - R.C.E. # C-063332

DATE

NO.	DATE	REVISION

CORNERSTONE ENGINEERING
CONSULTANTS • ENGINEERS • LAND SURVEYORS
5509 YOUNG STREET, BAKERSFIELD, CA 93311
TEL: (661) 325-9474 • FAX: (661) 322-0129
www.cornerstoneeng.com



DEVELOPMENT BY:
PANAMA-BUENA VISTA SCHOOL DISTRICT
4200 ASHE ROAD
BAKERSFIELD, CA 93313

RANDALL DITCH PIPELINE AND RELOCATION PLAN
10001 STINE ROAD
COVER SHEET AND NOTES

DESIGNER:	JEM
CHECKED BY:	CAW
DATE:	4/4/2024
DRAFTER:	REY/TREY/RAC
SCALE:	AS SHOWN
COMP. NO:	9430400_CANAL.dwg
JOB NO.:	943-04-00
SHEET	1
OF 15	

C600

**FOR THE BENEFIT OF AND
RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:**

**KERN DELTA WATER DISTRICT
501 Taft Highway
Bakersfield, CA 93307**

APN:184-220-09

SPACE ABOVE THIS LINE FOR RECORDER'S USE

COMMON USE AGREEMENT

Agreement No. 2024-03

THIS AGREEMENT is made on _____, by and between **KERN DELTA WATER DISTRICT**, a California water district (“**Water District**”) and **PANAMA- BUENA VISTA UNION SCHOOL DISTRICT (“P-BVUSD”)**. Water District, P-BVUSD are sometimes hereinafter individually or collectively called a “Party” or the “Parties”.

RECITALS:

WHEREAS, P-BVUSD owns certain real property in the City of Bakersfield, County of Kern, State of California, commonly referred to as Assessor Parcel No. 184-220-09 (the “**P-BVUSD Property**”);

WHEREAS, P-BVUSD intends to construct and operate a new school on the P-BVUSD Property;

WHEREAS, Water District is the owner and operator of an open ditch irrigation canal commonly known as the **Randall Ditch (“Canal”)** now existing on the P-BVUSD Property and is also the owner of an easement and right-of-way over and across a portion of the P-BVUSD Property through which the Canal travels (“**Canal Easement**”), dated April 20, 1928, recorded on June 25, 1928, in book 128, page 246 in the office of the Kern County Recorder;

WHEREAS, P-BVUSD desires to place the stretch of the Canal from Taft Highway to the southern end of P-BVUSD Property into an underground pipeline (“**Pipeline**”). The Pipeline will be located on a portion of the P-BVUSD Property within a landscape strip and a portion of the parking lot outside of the Stine Road right of way and distinct from the Canal Easement area (“**Area of Common Use**”) as reflected in the diagram attached hereto as **Exhibit “A1” and legal description attached hereto as Exhibit “A2”**;

WHEREAS, Canal was constructed in the late 1800's and enjoys a first in time priority over the construction of any improvement that might subsequently cross the Canal or the Canal Easement. P-BVUSD acknowledges that the Pipeline will maintain the first in time priority in that any improvements built within the Area of Common Use must be approved by Water District as specified herein;

WHEREAS, the Parties wish to replace the Canal Easement with a new easement for operation of the Pipeline coextensive with the Area of Common Use ("**Pipeline Easement**");

WHEREAS, upon acceptance of Pipeline Easement, Water District wishes to quitclaim all interest in Canal Easement to P-BVUSD so that the Canal Easement ceases to exist since P-BVUSD would own both the underlying fee and the Canal Easement; and

WHEREAS, Water District is willing to consent to the construction of the Pipeline in the Area of Common Use on the conditions identified below.

AGREEMENT:

NOW, THEREFORE, FOR GOOD AND VALUABLE CONSIDERATION, IT IS AGREED AS FOLLOWS:

1. Construction of Pipeline:

a. P-BVUSD has prepared, at its expense, detailed plans and specifications (including bid and contract documents) for the construction of Pipeline to be installed within the Area of Common Use which have been approved in writing by the Water District (the "**Approved Plans**"). While not attached as an exhibit, the Approved Plans are incorporated herein and made a part hereof.

b. P-BVUSD agrees to construct and install the Pipeline in material compliance with the Approved Plans ("**Project**"). In no event shall P-BVUSD install additional or different facilities within the Area of Common Use without first obtaining the written approval of Water District. In all instances, said construction and installation work shall be done at a time that will not interfere with the flow or distribution of water through the Canal as required and approved by Water District in writing, unless that requirement is waived by the Water District in writing. P-BVUSD acknowledges and agrees that work on the Pipeline can commence on the assigned date agreed upon by the Parties in writing (the "**Commencement Date**"). Once the Canal is shut down, failure to substantially complete work on the Pipeline by the assigned date for completion Agreed upon by the Parties in writing (the "**Completion Date**") will result in liquidated damages of \$1,500.00 per day for every day the Canal is shut down or interferes with the flow or distribution of water through the Canal beyond the assigned Completion Date unless Water District grants an extension to P-BVUSD in writing. The Parties agree to use their best efforts to create a mutually agreeable timeline that allows reasonable time for completion of construction.

c. P-BVUSD shall pay the entire cost of laying, constructing, and installing the Pipeline including the costs of all labor and materials incurred or used in connection with the installation, trenching, backfilling, leveling, and testing of the same, and the cost of all engineering, professional and other necessary services. In addition, Water District may hire, at P-BVUSD's expense, a construction inspector to inspect the work performed by P-BVUSD. P-BVUSD shall provide Water District copies of all as-built drawings depicting the location of the Pipeline as constructed.

d. In the event P-BVUSD does not pay the entire cost as described in Section 1.c and does not complete said work as provided in this Agreement, Water District may utilize the security furnished by P-BVUSD specified in Section 4.a of this Agreement to complete such work. In the event Water District is required to complete said work as provided in this Agreement, P-BVUSD acknowledges and agrees that P-BVUSD shall still be subject to and liable for the liquidated damages specified herein until Water District completes said work, or for 30 days from the date that Water District exercises its right to complete work under this section, whichever is shorter.

e. P-BVUSD agrees that, upon completion of construction and installation of Pipeline to the satisfaction of the Water District, P-BVUSD will provide Water District with a new Pipeline Easement in the location of the new pipeline coextensive with the Area of Common Use. P-BVUSD shall transfer to Water District all title, right, and interest in Pipeline in as-is, where-is condition. By accepting the transfer of the Pipeline and Pipeline Easement, Water District waives all claims against P-BVUSD for defective design or construction. Water District shall be in sole and absolute control of the manner, method, and time of conducting and discharging water through the Pipeline.

f. Thirty (30) business days after P-BVUSD's conveyance of the Pipeline Easement and the Pipeline, Water District shall transfer to P-BVUSD all title, right, and interest in the Canal and Canal Easement to P-BVUSD via Quitclaim Deed.

2. Common Use and Priority

a. Water District hereby consents to the construction of the Pipeline in the Area of Common Use subject to the terms and conditions herein contained.

b. P-BVUSD acknowledges the Canal Easement and the priority of Water District's title over P-BVUSD's rights in the Canal Easement area. Except as expressly set forth herein, this Agreement shall not in any way alter, modify, or terminate the legal rights of Water District in the Canal Easement or the Canal.

c. Water District has and reserves the right to use the Area of Common Use for all the purposes for which the Pipeline Easement was acquired. To maintain public safety, access to the future school, and to avoid future liability, Water District will request permission from P-BVUSD when it intends to construct in the Area of Common Use. Such permission will not be unreasonably denied by P-BVUSD. P-BVUSD shall use the Area of Common Use in such a manner as to not unreasonably interfere with Water District's right to use Pipeline. Water District

shall use the Pipeline and the Area of Common Use in such a manner as to not unreasonably interfere with P-BVUSD's right to use the Property.

d. The Parties agree to reasonably coordinate and schedule any construction in the Area of Common Use such that it does not interfere with the flow or distribution of water through the Pipeline as required and approved by Water District, and it does not interfere with school construction, access, or activities, except in cases of emergency threatening personal injury, loss of life, or significant property damage.

e. Water District recognizes that pursuant to Education Code section 45125.1 et seq. third parties that have a contract with a local educational agency "shall ensure that any employee who interacts with pupils, outside of the immediate supervision and control of the pupil's parent or guardian or a school employee, has a valid criminal records summary," as specified in the Education Code, and shall provide any arrest or conviction information it receives to the local educational agency. At the request of P-BVUSD, should P-BVUSD at any time determine that Water District or Water District's agents are subject to section 45125.1, Water District shall submit the names and fingerprints of all individuals that may perform work on or access the Property, to the Department of Justice for criminal background check purposes, if required or authorized by law. P-BVUSD shall be responsible for costs of fingerprinting and criminal background checks. Should P-BVUSD request fingerprinting and criminal background checks pursuant to this Paragraph, no employee, agent, or other assign of the Water District may work on or have access to the P-BVUSD Property, the Area of Common Use, or the Pipeline until compliance with such request, applicable P-BVUSD policies and other legal requirements, is achieved, except in cases of emergency threatening personal injury, loss of life, or significant property damage. This term will be inapplicable until such time as the planned school is complete.

3. Maintenance of the Area of Common Use.

a. P-BVUSD will maintain any sidewalk or landscaping within the Area of Common Use in good condition and repair and shall pay all costs of such repairs and maintenance and of any replacement of any part thereof required to provide safe access to the Area of Common Use, except for costs resulting from the negligence or misconduct of Water District.

b. In the event that repairs to the Pipeline are necessary, Water District shall have the right to make the necessary repairs without a permit and will bring the area back up to grade, subject to the requirements of Sections 2.c, 2.d, and 2.e. P-BVUSD will be responsible for any paving or replacement of landscaping within the Area of Common Use. Water District agrees to conduct all work relating to the Pipeline in such a manner that minimizes impacts to P-BVUSD's improvements.

c. Water District will maintain the Pipeline and related infrastructure in good condition and repair and shall pay all costs of such repairs and maintenance.

4. Security:

a. P-BVUSD agrees to make Water District an additional obligee to the construction bond paid by the contractor who will complete the Project.

5. Indemnity:

a. P-BVUSD hereby agrees and undertakes to indemnify, defend and hold harmless Water District, its Board members, officers, agents, and employees from any and all losses, costs, expenses (including reasonable attorneys' fees), claims, liabilities, actions or damages of any nature whatsoever, including injuries to or the death of any person or persons or damage to any property, in any way arising out of or connected with or incident to or alleged to have arisen in any manner out of, or to have been in any way connected with or incident to any negligent or reckless act or omission or willful misconduct of P-BVUSD, its Board members, officers, agents, employees, contractors, subcontractors, or independent contractors in the performance of this Agreement or to have occurred as a result of any, negligent or reckless acts or omissions or willful misconduct by P-BVUSD, its Board members, officers, agents, and employees in the performance of this Agreement.

b. Water District hereby agrees and undertakes to indemnify, defend and hold harmless P-BVUSD, its Board members, its officers, agents, and employees from any and all losses, costs, expenses (including reasonable attorneys' fees), claims, liabilities, actions or damages of any nature whatsoever, including injuries to or the death of any person or persons or damage to any property, in any way arising out of or connected with or incident to or alleged to have arisen in any manner out of, or to have been in any way connected with or incident to any negligent or reckless act or omission or willful misconduct of Water District, its Board members, officers, agents, employees, contractors, subcontractors, or independent contractors in the performance of this Agreement or to have occurred as a result of any, negligent or reckless acts or omissions or willful misconduct by Water District, its Board members, officers, agents, and employees in the performance of this Agreement.

6. Miscellaneous:

a. By entering into this agreement Water District does not extinguish, abandon, forfeit, relinquish, waive, modify, limit, restrict, or alter in any way Water District's water rights, including but not limited to, any and all water rights associated with or conveyed across the Area of Common Use, and this agreement further does not and will not restrict, interrupt, limit, or diminish Water District's use of and access to any of this water rights and water supplies.

b. Any contractor working in the Area of Common Use shall procure and maintain general liability insurance, providing coverage on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than One Million Dollars (\$1,000,000.00) per occurrence. The liability policy shall contain an additional insured endorsement which shall expressly name both P-BVUSD and Water District, their Board members, officers, agents, employees and consultants as additional insureds, without limitation. In addition, the contractor and/or subcontractors shall maintain workers' compensation insurance while working within the Area of Common Use. The workers' compensation policy shall

contain an express waivers of subrogation endorsement in favor of P-BVUSD and the Water District, their Board members, officers, agents, employees and consultants. Said additional insured endorsement and workers' compensation subrogation endorsement shall be furnished in the form approved by the Water District's legal counsel prior to any work authorized pursuant to this Agreement.

d. Water District and P-BVUSD shall not become or be deemed partners or joint venturers or associates by reason of the provisions of this Agreement. No Party shall for any purpose be considered an agent, officer or employee of the other Party.

e. The failure of any Party to enforce against another Party any provision of this Agreement shall not constitute a waiver of that Party's right to enforce such a provision at a later time and shall not serve to vary the terms of this Agreement.

f. This Agreement may be modified only in writing approved by Water District and P-BVUSD.

g. In the event of a conflict between the terms, conditions or specifications set forth in this Agreement and those in exhibits attached hereto, the terms, conditions or specifications set forth in this Agreement shall prevail. All exhibits to which reference is made in this Agreement are deemed incorporated in this Agreement whether or not actually attached.

h. All notices relative to this Agreement shall be given in writing and shall be personally served or sent by certified or registered mail and be effective upon actual personal service or depositing in the United States mail. The Parties shall be addressed as follows, or at any other address designated by notice:

WATER DISTRICT: Kern Delta Water District
501 Taft Highway
Bakersfield, CA 93307
Attn.: Steven Teglia, General Manager

P-BVUSD: Panama-Buena Vista Union School District
Facilities Planning and Construction Department
4200 Ashe Road
Bakersfield, CA 93313
Attn: Paul Johnson

i. The laws of the State of California will govern the validity of this Agreement, its interpretation and performance. Any litigation arising in any way from this Agreement shall be brought in Kern County, California.

j. Neither this Agreement, nor any interest in it, may be assigned or transferred by any Party without the prior written consent of all the Parties. Any such assignment may be subject to additional terms and conditions not set forth herein.

k. The rights and obligations of this Agreement shall inure to the benefit of, and be binding upon, the Parties to this Agreement and their heirs, administrators, executors, personal representatives, successors and assigns.

l. Each individual signing this Agreement on behalf of the respective entities represents and warrants that he or she is, respectively, duly authorized to sign on behalf of the entities and to bind the entities fully to each and all of the obligations set forth in this Agreement.

m. Each Party shall execute and deliver such papers, documents, and instruments, and perform such acts as are necessary or appropriate, to implement the terms of this Agreement and the intent of the Parties to this Agreement.

n. This Agreement is made for the benefit of the Parties hereto and is not intended to confer any benefit upon any third party.

o. The covenants herein shall be construed to be covenants running with the land with respect to the interests of the parties hereto and their successors in interest until this agreement terminates, and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder to the grantee, transferee or other successor in interest.

[Signatures on Following Page]

IN WITNESS WHEREOF, the Parties hereto have caused this instrument to be executed the day and year first above written.

**“WATER DISTRICT”
KERN DELTA WATER DISTRICT**

**“P-BVUSD”
PANAMA-BUENA VISTA UNION
SCHOOL DISTRICT**

Steven Teglia
General Manager

Katherine Gonzalez
Assistant Superintendent of Business Services

Approved as to Form:

Richard Iger
General Counsel


519-5/6807905.1



CORNERSTONE
ENGINEERING
 CONSULTANTS • ENGINEERS • LAND SURVEYORS
 5509 YOUNG STREET, BAKERSFIELD CA 93311
 TEL: (805) 325-8474 FAX: (805) 322-0129
 www.cornerstoneeng.com

EXHIBIT "A1"
NEW TK-8 SCHOOL - COMMON USE AREA

LEGEND

-  KDWD PIPELINE EASEMENT
- P.O.C. POINT OF COMMENCEMENT
- T.P.O.B. TRUE POINT OF BEGINNING

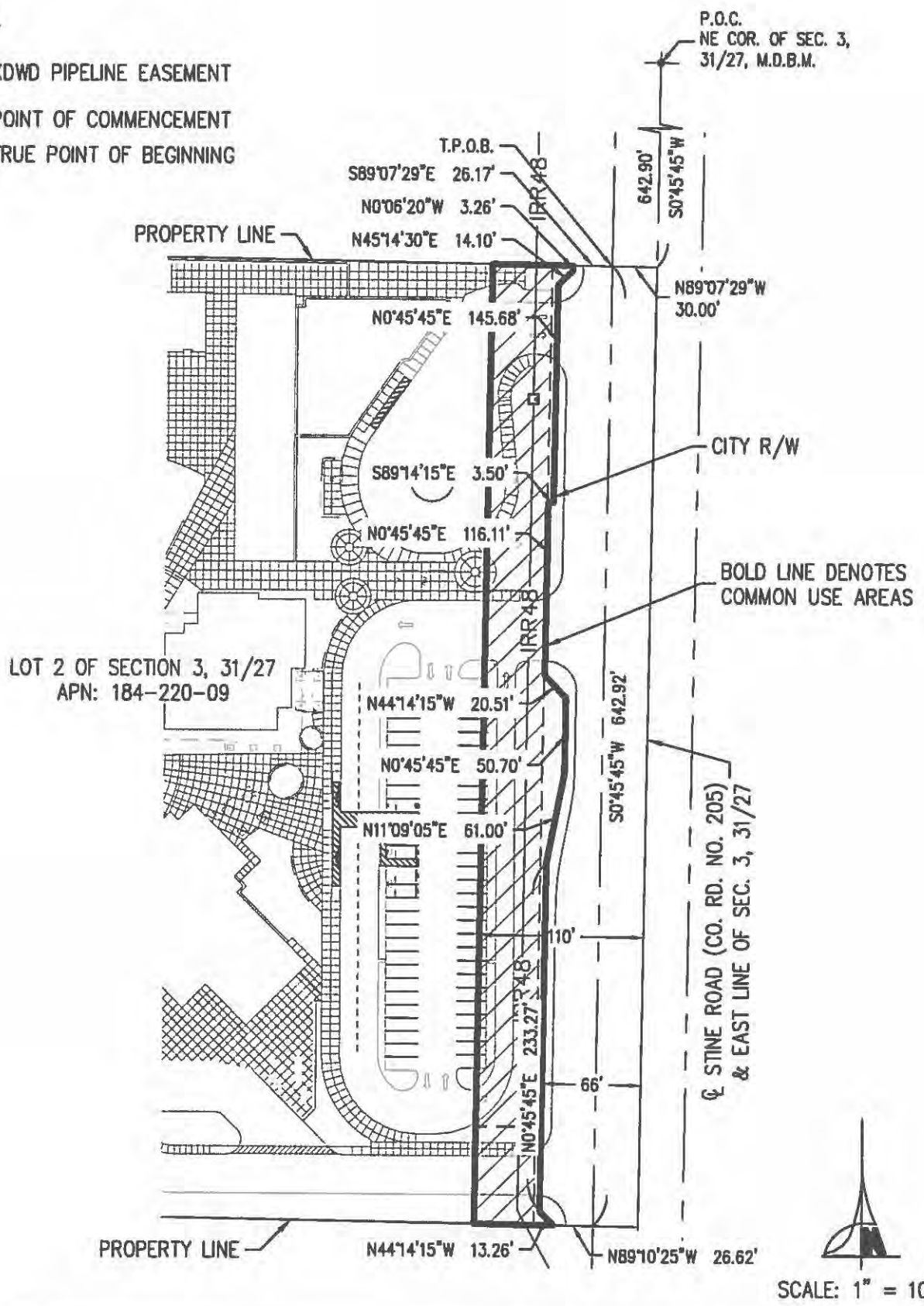


EXHIBIT "A2"
LEGAL DESCRIPTION
NEW TK-8 SCHOOL – COMMON USE AREA

BEING A PORTION OF LOT 2 OF SECTION 3, TOWNSHIP 31 SOUTH, RANGE 27 EAST, M.D.B.&M., IN THE CITY OF BAKERSFIELD, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE MAP ENTITLED "KERN COUNTY SALES MAP NO. 2 OF LANDS OF J.B. HAGGIN", FILED FOR RECORD ON MAY 24, 1889 IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEING THE EAST 110 FEET OF SAID LOT 2, LESS AND EXCEPTING THE FOLLOWING DESCRIBED LAND;

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3; THENCE SOUTH 0°45'45" WEST ALONG THE EAST LINE THEREOF, A DISTANCE OF 642.90 FEET TO THE NORTHEAST CORNER OF SAID LOT 2; THENCE DEPARTING LAST SAID EAST LINE, NORTH 89°07'29" WEST ALONG THE NORTH LINE OF SAID LOT 2, A DISTANCE OF 30.00 FEET TO A POINT IN THE WEST LINE OF THE EAST 30.00 FEET OF SAID SECTION 3, SAID POINT ALSO BEING THE TRUE POINT OF BEGINNING; THENCE

SOUTH 0°45'45" WEST ALONG LAST SAID WEST LINE, A DISTANCE OF 642.92 FEET TO A POINT ON THE SOUTH LINE OF SAID LOT 2; THENCE

NORTH 89°10'25" WEST ALONG LAST SAID SOUTH LINE, A DISTANCE OF 26.62 FEET; THENCE

NORTH 44°14'15" WEST, A DISTANCE OF 13.26 FEET TO A POINT ON THE WEST LINE OF THE EAST 66.00 FEET OF SAID SECTION 3; THENCE

NORTH 0°45'45" EAST ALONG LAST SAID WEST LINE, A DISTANCE OF 233.27 FEET; THENCE

NORTH 11°09'05" EAST, A DISTANCE OF 61.00 FEET; THENCE

NORTH 0°45'45" EAST, A DISTANCE OF 50.70 FEET; THENCE

NORTH 44°14'15" WEST, A DISTANCE OF 20.51 FEET; THENCE

NORTH 0°45'45" EAST, A DISTANCE OF 116.11 FEET; THENCE

SOUTH 89°14'15" EAST, A DISTANCE OF 3.50 FEET; THENCE


NORTH 0°45'45" EAST, A DISTANCE OF 145.68 FEET; THENCE

NORTH 45°14'30" EAST, A DISTANCE OF 14.10 FEET; THENCE

NORTH 0°06'20" WEST, A DISTANCE OF 3.26 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 2; THENCE

SOUTH 89°07'29" EAST ALONG LAST SAID NORTH LINE, A DISTANCE OF 26.17 FEET TO THE TRUE POINT OF BEGINNING;

CONTAINS 22,484 SQUARE FEET, MORE OR LESS.

 4/2/2024
DERRILL G. WHITTEN JR., PLS 7816



**FOR THE BENEFIT OF AND
RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:**

**KERN DELTA WATER DISTRICT
501 Taft Highway
Bakersfield, CA 93307**

APN:184-220-09

No recording fee required: exempt pursuant to
Government Code Section 27383.

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Government agency acquiring title – exempt from
Documentary Transfer Tax per R&T Code 11922

GC 27388.1(a)(1): Recorded document is expressly
Exempted from payment of recording fees (FBO) Govt. agency

GRANT OF EASEMENT

This Pipeline Easement Deed (“**Pipeline Easement**”) is made and entered into as of _____, 2024, by and between Panama-Buena Vista Union School District (“**PBVUSD**”) as grantor, and Kern Delta Water District (“**Water District**”) as grantee, each of which may also be identified individually herein as a “Party” or collectively as the “Parties.”

WHEREAS, PBVUSD is the owner of that real property located in the City of Bakersfield, County of Kern, State of California, commonly referred to as Assessor Parcel No. 184-220-09 (the “**PBVUSD Property**”);

WHEREAS, Water District is the owner and operator of an open ditch irrigation canal commonly known as the **Randall Ditch** (“**Canal**”) now existing on the PBVUSD Property and is also the owner of an easement and right-of-way over and across a portion of the PBVUSD Property through which the Canal travels (“**Canal Easement**”), dated April 20, 1928, recorded on June 25, 1928, in book 128, page 246 in the office of the Kern County Recorder;

WHEREAS, the Parties have entered into a Common Use Agreement, entered into as of _____ and recorded against the property (“**Common Use Agreement**”), for the construction and operation of a pipeline to replace the Canal Easement;

WHEREAS, the Parties wish to replace the Canal Easement with this new Pipeline Easement; and

WHEREAS, upon acceptance of this Pipeline Easement, Water District wishes to quitclaim all interest in Canal Easement to PBVUSD so that the Canal Easement ceases to exist since PBVUSD would own both the underlying fee and the Canal Easement.

NOW, THEREFORE, FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, PBVUSD hereby grants to the Water District a permanent right-of-way and Pipeline Easement to construct, operate, install, maintain, repair, reconstruct, and to flow and conduct water through, a buried pipeline and related infrastructure. PBVUSD hereby grants the further right to use this Pipeline Easement for ingress and egress from Water District facilities, subject to the requirements of the Common Use Agreement, in, under, over, along and across a strip of land more particularly described in **Exhibit "A"** which is attached hereto and by this reference made a part hereof. This Pipeline Easement is also shown on the plat map attached hereto as **Exhibit "B"** and by this reference made a part hereof.

Water District covenants to maintain this permanent Pipeline Easement and right-of-way in good condition and repair so that no unreasonable damage will result to the adjacent land of the PBVUSD, its successors, and assigns, from its use. PBVUSD, its successors, and assigns, covenant that they will not erect, place, or maintain, or allow to be erected, placed or maintained, within the boundaries of this permanent Pipeline Easement and right-of-way, any structure or improvement of any kind, without first securing written permission of the Water District, and that they will not plant or maintain or permit to be planted or maintained, any plants, shrubs, or trees that may interfere with the full and complete use of the permanent Pipeline Easement and right-of-way, except as indicated in the Approved Plans as defined in the Common Use Agreement. PBVUSD agrees that Water District, its successors, and assigns, and its agents or employees, may trim or remove any plants, shrubs, or trees that encroach on the permanent Pipeline Easement and right-of-way.

Use of the Pipeline Easement shall not unreasonably interfere with the use of the PBVUSD Property as a school, or with the construction of any school facilities thereon.

PBVUSD agrees that no other easement or easements shall be hereafter granted across, along, over, under, through, or within that portion of the permanent Pipeline Easement or right-of-way occupied by Water District's facilities by PBVUSDs, their successors and assigns, without the previous written consent of the Water District, except for the easements specified in the Approved Plans as defined in the Common Use Agreement. Water District will not unreasonably withhold such written consent for easements.

This Pipeline Easement may not be transferred without the prior written consent of PBVUSD. PBVUSD will not unreasonably withhold such written consent.

The terms and covenants of the permanent Pipeline Easement and right-of-way shall bind and inure to the benefit of the successors, executors, administrators, and assigns, of PBVUSD and the successors and assigns of the Water District.

In the event of a conflict between the terms of this Pipeline Easement and the terms of the Common Use Agreement, the Common Use Agreement shall govern.

IN WITNESS WHEREOF, the undersigned have executed this document on the date set forth below.

PBVUSD
PANAMA-BUENA VISTA UNION SCHOOL DISTRICT

Dated: _____

By: _____

Katherine Gonzalez
Assistant Superintendent of Business Services

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness accuracy or validity of that document.

State of California)
County of _____)

On _____, 2024, before me, _____,
Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

CERTIFICATE OF ACCEPTANCE
(Government Code Section 27281)

THIS IS TO CERTIFY that the within document is hereby accepted by the undersigned officer on behalf of the Board of Directors of Kern Delta Water District pursuant to authority conferred by resolution of the Board of Directors heretofore adopted, and the Water District consents to recordation thereof by its duly authorized officer.

DATED: _____

Steven Teglia, General Manager
Kern Delta Water District

519-5/6807908.1

EXHIBIT "A"
LEGAL DESCRIPTION
STINE ROAD – CANAL EASEMENT

BEING A PORTION OF LOT 2 OF SECTION 3, TOWNSHIP 31 SOUTH, RANGE 27 EAST, M.D.B.&M., IN THE CITY OF BAKERSFIELD, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE MAP ENTITLED "KERN COUNTY SALES MAP NO. 2 OF LANDS OF J.B. HAGGIN", FILED FOR RECORD ON MAY 24, 1889 IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3; THENCE SOUTH 0°45'45" WEST ALONG THE EAST LINE THEREOF, A DISTANCE OF 642.90 FEET TO THE NORTHEAST CORNER OF SAID LOT 2; THENCE DEPARTING LAST SAID EAST LINE, NORTH 89°07'29" WEST ALONG THE NORTH LINE OF SAID LOT 2, A DISTANCE OF 70.00 FEET TO A POINT IN THE WEST LINE OF THE EAST 70.00 FEET OF SAID SECTION 3, SAID POINT ALSO BEING THE **TRUE POINT OF BEGINNING**; THENCE

SOUTH 0°45'45" WEST ALONG LAST SAID WEST LINE, A DISTANCE OF 624.96 FEET TO A POINT ON THE SOUTH LINE OF SAID LOT 2; THENCE

NORTH 89°10'25" WEST ALONG LAST SAID SOUTH LINE, A DISTANCE OF 40.00 FEET TO A POINT ON THE WEST LINE OF THE EAST 110.00 FEET OF SAID SECTION 3; THENCE

NORTH 0°45'45" EAST ALONG LAST SAID WEST LINE, A DISTANCE OF 642.99 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 2; THENCE

SOUTH 89°07'29" EAST ALONG LAST SAID NORTH LINE, A DISTANCE OF 40.00 FEET TO THE **TRUE POINT OF BEGINNING**;

CONTAINS 25,719 SQUARE FEET, MORE OR LESS.

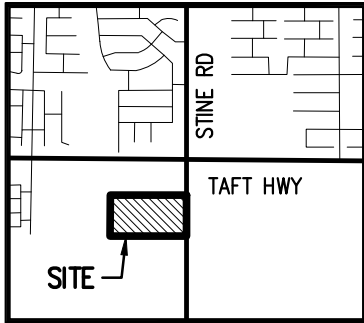


DERRILL G. WHITTEN JR., PLS 7816

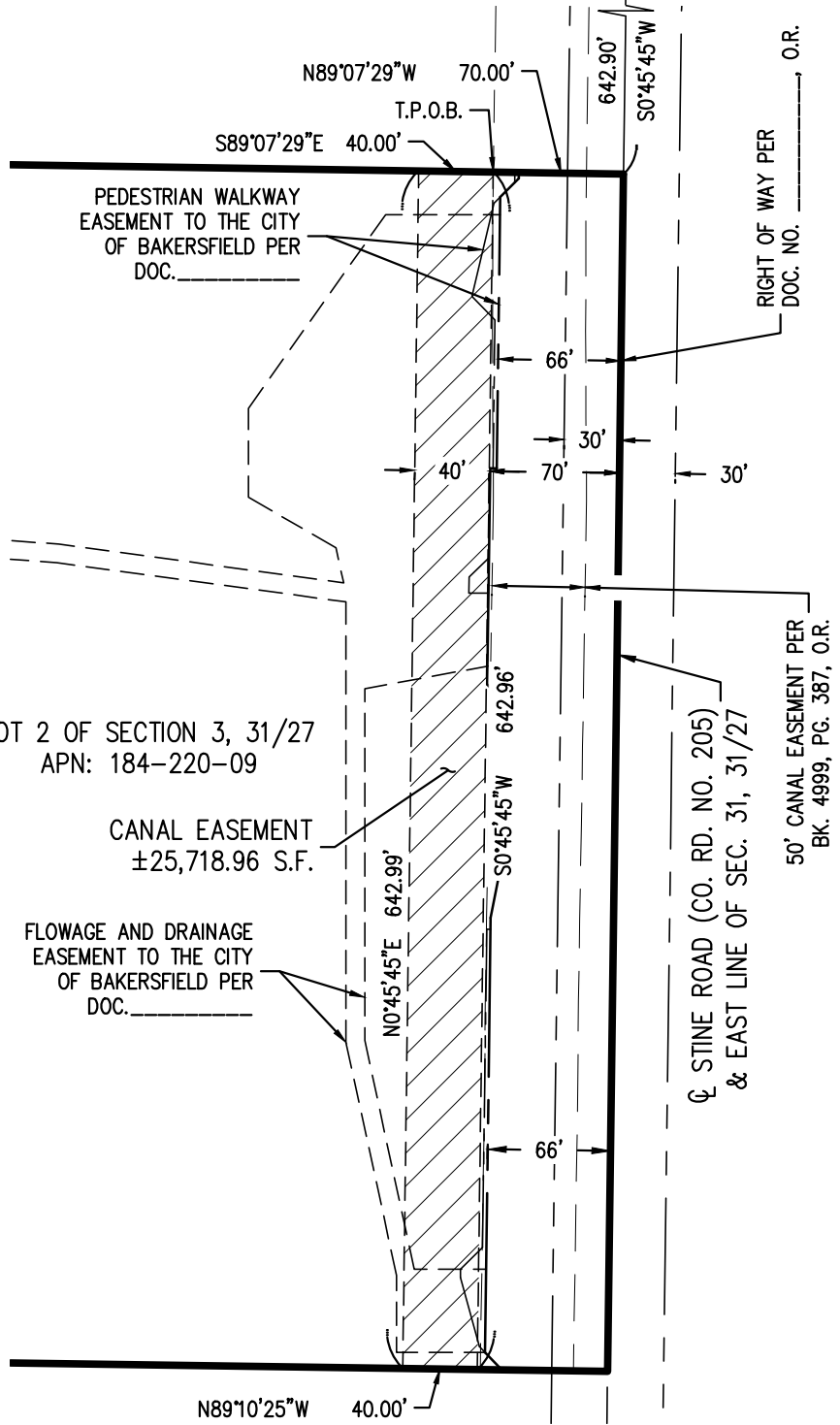
EXHIBIT "B"

STINE ROAD - CANAL EASEMENT

P.O.C.
NE COR. OF
SEC. 31, 31/27,
M.D.B.M.



VICINITY MAP
N.T.S.



LEGEND

- P.O.C. POINT OF COMMENCEMENT
- T.P.O.B. TRUE POINT OF BEGINNING

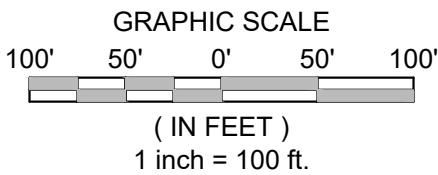
LOT 2 OF SECTION 3, 31/27
APN: 184-220-09

CANAL EASEMENT
±25,718.96 S.F.

FLOWAGE AND DRAINAGE
EASEMENT TO THE CITY
OF BAKERSFIELD PER
DOC. _____

STINE ROAD (CO. RD. NO. 205)
& EAST LINE OF SEC. 31, 31/27

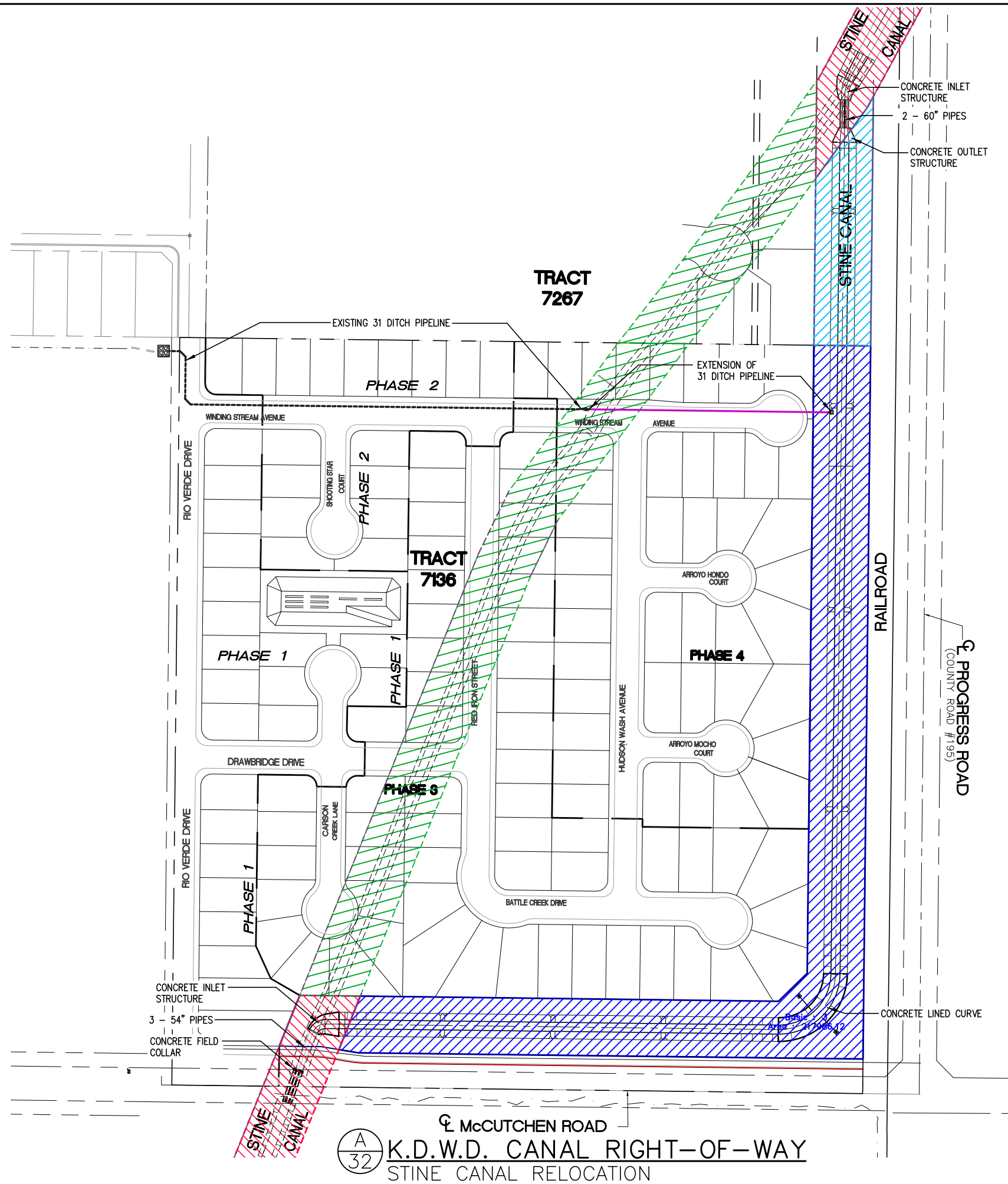
50' CANAL EASEMENT PER
BK. 4999, PG. 387, O.R.



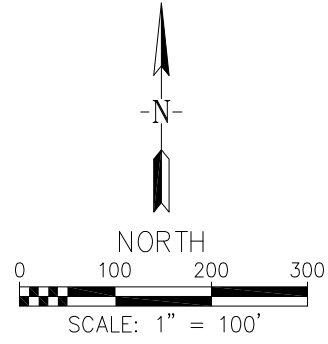
DERRILL G. WHITTEN JR., PLS NO. 7816

DATE

THIS MAP IS PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY



- = EXISTING K.D.W.D. STINE CANAL RIGHT-OF-WAY TO REMAIN
- = NEW K.D.W.D. STINE CANAL RIGHT-OF-WAY WITHIN TRACT 7136. 5.00 ACRES
- = NEW K.D.W.D. STINE CANAL RIGHT-OF-WAY NORTH OF TRACT 7136
- = EXISTING STINE CANAL RIGHT-OF-WAY AREA TO BE QUITCLAIMED
- = EXISTING 31 DITCH PIPELINE
- = EXTENSION OF 31 DITCH PIPELINE



McCUTCHEN ROAD
K.D.W.D. CANAL RIGHT-OF-WAY
 STINE CANAL RELOCATION

A
32

REV.	DATE	DESCRIPTION

DATE: APRIL 11, 2024
 SCALE: AS NOTED
 DRAWN BY: W. FREY
 CHECKED BY: W. ZEIDERS
 FILE NAME: TRACT 7136 ZC SHEETS.dwg

TRACT 7136 DEVELOPMENT
STINE CANAL RELOCATION
 K.D.W.D. CANAL RIGHT-OF-WAY - CANAL LAYOUT

ZEIDERS CONSULTING
 1655 GREELEY ROAD
 BAKERSFIELD, CA. 93314
 (661) 589-8366

90% DRAFT

DITCH ERADICATION AND CANAL RELOCATION AGREEMENT

THIS AGREEMENT is made on April 17, 2024, by and between **KERN DELTA WATER DISTRICT**, a California water district (“**District**”) and **DEERTRAIL DEVELOPMENT LLC**, (“**Applicant**”). District and Applicant are sometimes hereinafter individually or collectively called a “**Party**” or the “**Parties**”.

RECITALS:

WHEREAS, District owns and operates an irrigation canal commonly known as the **Stine Canal** (“**Canal**”) now existing as an open ditch and is the owner of an easement and right-of-way over and across certain real property in the City of Bakersfield, County of Kern, State of California, belonging to Applicant and specifically identified as Assessor Parcel Nos. 540-010-21, 540-010-67, 540-010-22, and 540-010-24, and across the adjacent property owned by S&S Homes and specifically identified as APN 540-010-18; and

WHEREAS, Applicant desires to fill in and eradicate the existing open ditch section of Canal, construct a new open ditch for Canal that ties into an extended crossing at McCutchen Road (“**Facilities**”), and provide District with a new easement in the location of the new open ditch (“**Easement**”) as described on Exhibit “A” and shown on Exhibit “B”; and

WHEREAS, District is willing to consent to the ditch eradication and construction of the Facilities on the conditions identified below.

AGREEMENT:

INCORPORATING THE ABOVE RECITALS AND FOR GOOD AND VALUABLE CONSIDERATION, IT IS AGREED AS FOLLOWS:

1. Construction of Facilities:

a. Applicant has prepared, at its expense, detailed plans and specifications (including bid and contract documents) for the ditch eradication and construction of Facilities to be installed within the Easement which have been approved by the District (the “**Approved Plans**”). While not attached as an exhibit, the Approved Plans are incorporated herein and made a part hereof.

b. Applicant agrees to construct and install the Facilities in strict compliance with the Approved Plans. In no event shall Applicant install additional or different facilities without first obtaining the written approval of District.

c. Applicant agrees to construct and install the Facilities within the Easement to the depth and on the grade as set forth in the Approved Plans and in the manner designated and

approved in writing by District's engineer. In all instances, said construction and installation work shall be done at a time that will not interfere with the flow or distribution of water through the Canal as required and approved by District in writing, unless that requirement is waived by District in writing. Applicant acknowledges and agrees that work on said project can commence on the assigned date for commencement approved by the District in writing (the “**Commencement Date**”). Once the Canal is shut down, failure to complete the project by the assigned date for completion approved by the District in writing (the “**Completion Date**”) will result in liquidated damages of \$10,000 per day for every day the Canal is shut down or the project remains incomplete beyond the assigned Completion Date unless District grants an extension to Applicant in writing. Applicant agrees to furnish District a cash deposit or performance bond in the amount of 5% of the engineer’s estimate for the Facilities payable to District should Applicant fail to complete the Facilities as approved.

d. Applicant shall pay the entire cost of constructing and installing the Facilities including the costs of all labor and materials incurred or used in connection with the installation, trenching, backfilling, leveling and testing of the same, and the cost of all engineering, professional and other necessary services furnished by District or others in connection therewith. In addition, District may hire at Applicant's expense a construction inspector to inspect the work performed by Applicant. Applicant shall provide District copies of all as-built drawings depicting the location of the Facilities as constructed.

e. In the event Applicant does not pay the entire cost as described in Section 1.d and complete said work as provided in this Agreement, District may, but shall not be required to, pay such costs and complete such work, and Applicant does hereby agree to repay District any amount so expended together with interest thereon at ten percent (10%) per annum from the date the same is expended until the date of repayment. In the event District elects to complete said work as provided in this Agreement, Applicant acknowledges and agrees that Applicant shall still be subject to and liable for the liquidated damages specified herein until District completes said work.

f. Applicant agrees that, upon completion of construction and installation of Facilities to the satisfaction of the District, Applicant will provide District with the Easement in the location of the new open ditch for Canal. District shall be in sole and absolute control of the manner, method, and time of conducting and discharging water through Facilities.

2. Maintenance and Warranty of Facilities.

a. Owner agrees to warrant, keep and maintain the Facilities in good condition and repair continuously for a period of three (3) years from and after the completion of construction and acceptance thereof by District and to pay all costs of such repairs and maintenance and of any replacement of any part thereof required to keep Facilities in good operating condition.

b. Owner agrees that in the event it fails, neglects or refuses to repair, maintain or replace promptly, upon demand, any part of the Facilities, District shall have the right, but shall not be required, to make any such repairs or replacements and Owner does hereby agree to repay

District the cost of any such repairs or replacements made by District, with interest at ten percent (10%) per annum from the date such cost is incurred to the date of repayment.

3. Miscellaneous:

a. By entering into this agreement District does not extinguish, abandon, forfeit, relinquish, waive, modify, limit, restrict, or alter in any way District's water rights, including but not limited to, any and all water rights associated with or conveyed in Canal or Facilities, and this agreement further does not and will not restrict, interrupt, limit, or diminish District's use of and access to any of this water rights and water supplies.

b. Applicant hereby agrees and undertakes to indemnify, defend and hold harmless District, its officers, agents, and employees from any and all losses, costs, expenses (including reasonable attorneys' fees), claims, liabilities, actions or damages of any nature whatsoever, including injuries to or the death of any person or persons or damage to any property, in any way arising out of or connected with or incident to or alleged to have arisen in any manner out of, or to have been in any way connected with or incident to any negligent, reckless, or willful act or omission of Applicant, its officers, agents, employees, contractors, subcontractors, or independent contractors in the performance of this Agreement or to have occurred as a result of any, negligent, reckless, or willful acts or omissions by Applicant, its officers, agents, and employees in the performance of this Agreement.

c. Any contractor working on the Facilities shall procure and maintain general liability insurance, providing coverage on an occurrence basis for bodily injury, including death, of one or more persons, property damage and personal injury, with limits of not less than One Million Dollars (\$1,000,000.00) per occurrence. The liability policy shall contain an additional insured endorsement which shall expressly name the District, their officers, agents, servants, employees and consultants as additional insureds, without limitation. In addition, the contractor and/or subcontractors shall maintain workers' compensation insurance while working on the Facilities. The workers' compensation policy shall contain an express waiver of subrogation endorsement in favor of the District, their officers, agents, servants, employees and consultants. Said additional insured endorsement and workers' compensation subrogation endorsement shall be furnished in the form approved by the District's legal counsel prior to any work authorized pursuant to this Agreement.

d. District and Applicant shall not become or be deemed partners or joint venturers or associates by reason of the provisions of this Agreement. No Party shall for any purpose be considered an agent, officer or employee of the other Party.

e. The failure of any Party to enforce against another Party any provision of this Agreement shall not constitute a waiver of that Party's right to enforce such a provision at a later time and shall not serve to vary the terms of this Agreement.

f. This Agreement may be modified only in writing approved by District and Applicant and signed by all the Parties.

g. In the event of a conflict between the terms, conditions or specifications set forth in this Agreement and those in exhibits attached hereto, the terms, conditions or specifications set forth in this Agreement shall prevail. All exhibits to which reference is made in this Agreement are deemed incorporated in this Agreement whether or not actually attached.

h. All notices relative to this Agreement shall be given in writing and shall be personally served or sent by certified or registered mail and be effective upon actual personal service or depositing in the United States mail. The Parties shall be addressed as follows, or at any other address designated by notice:

DISTRICT: Kern Delta Water District
501 Taft Highway
Bakersfield, CA 93307
Attn.: Steven Teglia, General Manager

APPLICANT: Deertrail Development LLC.
Attn: Russell Johnson
28749 Banducci Road
Tehachapi, CA 93561

i. The laws of the State of California will govern the validity of this Agreement, its interpretation and performance. Any litigation arising in any way from this Agreement shall be brought in Kern County, California.

j. Neither this Agreement, nor any interest in it, may be assigned or transferred by any Party without the prior written consent of all the Parties. Any such assignment may be subject to additional terms and conditions not set forth herein.

k. The rights and obligations of this Agreement shall inure to the benefit of, and be binding upon, the Parties to this Agreement and their heirs, administrators, executors, personal representatives, successors and assigns.

l. Each individual signing this Agreement on behalf of the respective entities represents and warrants that he or she is, respectively, duly authorized to sign on behalf of the entities and to bind the entities fully to each and all of the obligations set forth in this Agreement.

m. Each Party shall execute and deliver such papers, documents, and instruments, and perform such acts as are necessary or appropriate, to implement the terms of this Agreement and the intent of the Parties to this Agreement.

n. This Agreement is made for the benefit of the Parties hereto and is not intended to confer any benefit upon any third party.

o. District and Applicant agree that neither will hold District's engineer responsible for alleged engineering defects in the above-described project facilities unless such claim results from such engineer's failure as District's consultant to exercise the judgment and care, under circumstances then prevailing, which duly licensed civil engineers of prudence, skill, discretion and intelligence would exercise in (1) the review and approval of the plans and specifications for the design and construction of the subject facilities or (2) any review or supervision of construction necessary to protect the District's interests in insuring the adequacy and integrity of the new facilities.

[Signatures on following page]

IN WITNESS WHEREOF, the Parties hereto have caused this instrument to be executed the day and year first above written.

“DISTRICT”
KERN DELTA WATER DISTRICT

“APPLICANT”
DEERTRAIL DEVELOPMENT, LLC

Steven Teglia
General Manager

Russell Johnson
Member

Approved as to Form:

Richard Iger
General Counsel

EXHIBIT "A"
KERN DELTA WATER DISTRICT - CANAL EASEMENT
LEGAL DESCRIPTION

ALL THAT PORTION OF LOTS 26 AND 31 OF THE SALES MAP OF LANDS OF KERN COUNTY LAND COMPANY FILED JUNE 16, 1897, IN THE OFFICE OF THE KERN COUNTY RECORDER AS DESCRIBED IN QUITCLAIM DEED RECORDED DECEMBER 23, 1965, IN BOOK 3904, PAGE 811 AND QUITCLAIM DEED RECORDED DECEMBER 23, 1965, IN BOOK 3904, PAGE 812 AND A PORTION OF CERTIFICATE OF COMPLIANCE No. 1904 RECORDED SEPTEMBER 27, 1996 AS DOC No. 0196126022 ALL OF OFFICIAL RECORDS, ALSO BEING A PORTION OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 30 SOUTH, RANGE 27 EAST, M.D.M., IN THE CITY OF BAKERSFIELD, COUNTY OF KERN, STATE OF CALIFORNIA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF SAID LOT 26, AND THE WEST RIGHT-OF-WAY LINE OF SUNSET RAILROAD, FROM WHICH POINT THE NORTHEAST CORNER OF SAID LOT 26 BEARS SOUTH 89°17'41" EAST, A DISTANCE OF 100.00 FEET; THENCE

- 1) NORTH 89°17'41" WEST ALONG SAID NORTH LOT LINE, A DISTANCE OF 100.25 FEET; THENCE
- 2) DEPARTING SAID NORTH LOT LINE, SOUTH 00°36'46" WEST, A DISTANCE OF 1,108.84 FEET; THENCE
- 3) SOUTH 45°39'31" WEST, A DISTANCE OF 70.77 FEET; THENCE
- 4) NORTH 89°17'44" WEST, A DISTANCE OF 845.50 FEET TO A POINT ON THE EAST LINE OF TRACT 7136 UNIT 1, RECORDED NOVEMBER 22, 2022 IN BOOK 66, PAGES 136 THROUGH 139; THENCE
- 5) SOUTH 22°02'12" WEST ALONG SAID EAST TRACT LINE, A DISTANCE OF 96.75 FEET; THENCE
- 6) DEPARTING SAID EAST TRACT LINE, SOUTH 89°17'41" EAST, A DISTANCE OF 74.64 FEET; THENCE
- 7) SOUTH 80°34'14" EAST, A DISTANCE OF 65.93 FEET; THENCE
- 8) SOUTH 89°17'41" EAST, A DISTANCE OF 891.33 FEET TO A POINT ON SAID WEST RAILROAD RIGHT-OF-WAY LINE; THENCE
- 9) NORTH 00°36'54" EAST ALONG SAID WEST RAILROAD RIGHT OF WAY LINE, A DISTANCE OF 1,259.05 FEET TO THE POINT OF BEGINNING.

CONTAINING 5.00 ACRES, MORE OR LESS.

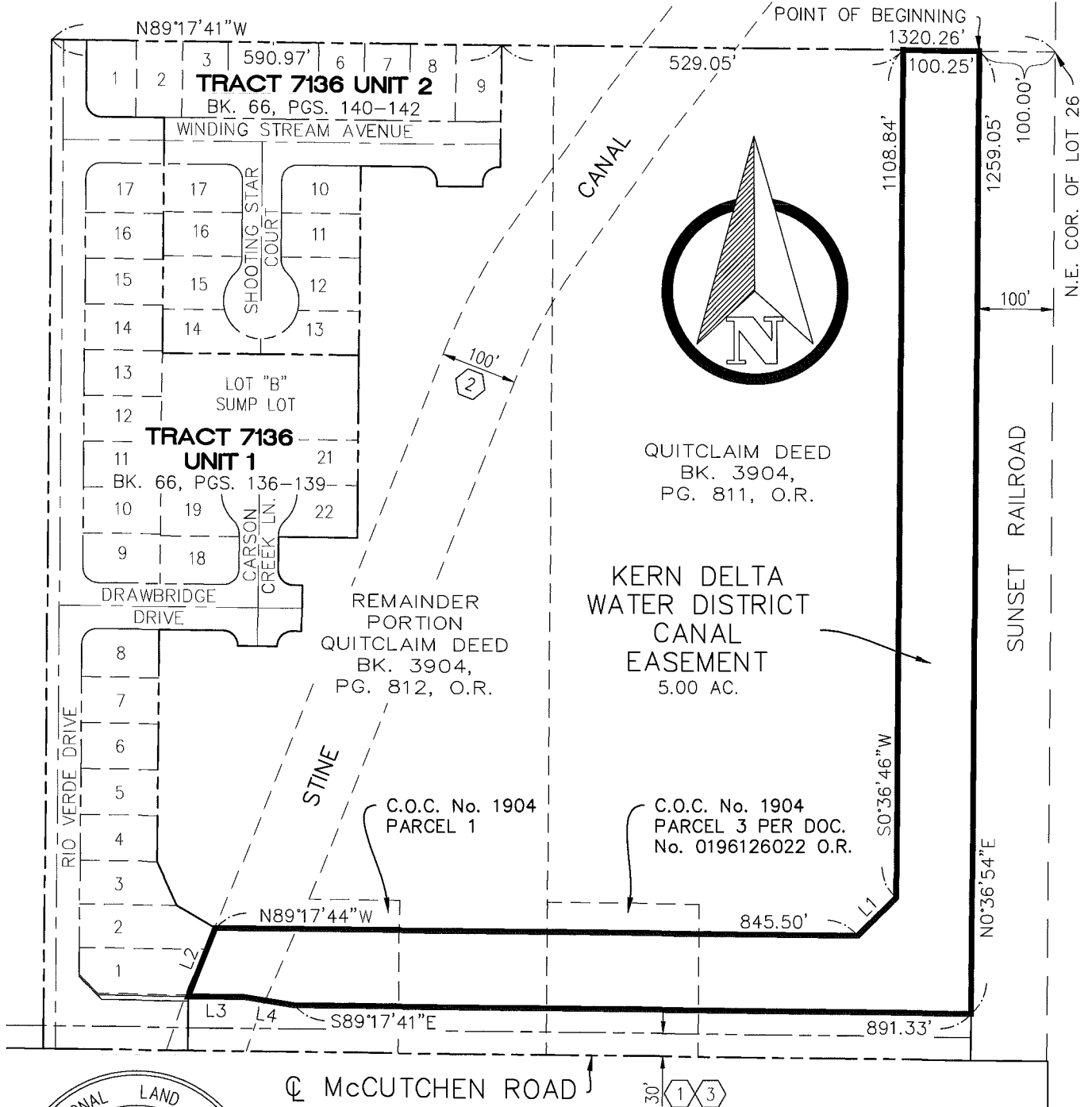


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PO Box 21687 • Bakersfield, CA 93309

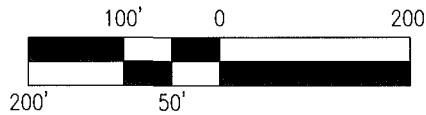


Samuel M. Walker Jr.
12 JAN 2023

EXHIBIT "B"



Samuel M. Walker Jr.
12 JAN 2023



SCALE: 1" = 200'



NEW GEN ENGINEERING GROUP
2001 WHEELAN CT. BAKERSFIELD, CA 93309 (661) 834-4814

D.R. HORTON CA3, INC.
S.W. 1/4 OF SEC. 29, T.30S., R.27E., M.D.M.
KERN DELTA WATER DISTRICT - CANAL EASEMENT

JOB NO. 14-068.03
DATE: 01/12/23
FILE NO. 1406803EM05
DONE BY: MWV
SHEET 1 OF 2

EXHIBIT "B"

EASEMENT NOTE

- ① 30' WIDE EASEMENT FOR PUBLIC HIGHWAY PURPOSES FOR COUNTY ROAD NO. 20, McCUTCHEN ROAD BY ORDER OF THE KERN COUNTY BOARD OF SUPERVISORS, MAY 8, 1876.
- ② AN EASEMENT FOR MAIN AND LATERAL CANALS AND INCIDENTAL PURPOSES IN FAVOR OF THE STINE CANAL COMPANY RECORDED IN BOOK 128, PAGE 284 OF OFFICIAL RECORDS.
- ③ 30' WIDE EASEMENT FOR ROAD AND HIGHWAY PURPOSES, IN FAVOR OF THE PUBLIC PER THE SALES MAP OF THE LANDS OF KERN COUNTY LAND COMPANY IN SAID SECTION 29, FILED JUNE 16, 1897, IN THE OFFICE OF THE KERN COUNTY RECORDER.

A RESERVATION OF EASEMENT FOR POLES, WIRES, DITCHES, CANALS, PIPES, AQUEDUCTS AND INCIDENTAL PURPOSES IN FAVOR OF KERN COUNTY LAND COMPANY RECORDED IN BOOK 80, PAGE 359 OF OFFICIAL RECORDS. (LOCATION IS NOT ASCERTAINABLE FROM RECORD)

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 45°39'31" W	70.77'
L2	S 22°02'12" W	96.75'
L3	S 89°17'41" E	74.64'
L4	S 80°34'14" E	65.93'



12 JAN 2023



NEW GEN ENGINEERING GROUP
2001 WHEELAN CT. BAKERSFIELD, CA 93309 (661) 834-4814

D.R. HORTON CA3, INC.

S.W. 1/4 OF SEC. 29, T.30S., R.27E., M.D.M.

KERN DELTA WATER DISTRICT - CANAL EASEMENT

JOB NO. 14-068.03
DATE: 01/12/23
FILE NO. 1406803EM05
DONE BY: MVW
SHEET 2 OF 2

KERN DELTA WATER DISTRICT - CANAL EASEMENT

DATE: 01/12/23



NEW GEN ENGINEERING GROUP
661-834-4814 • 661-834-0972
PO Box 21687 • Bakersfield, CA 93309

Done by: MVW
Job No: 14-068.03

Name: CANAL EASEMENT - BOUNDARY

North: 2291998.5804' East: 6232978.9267'

Segment #1 : Line
Course: N89°17'41"W Length: 100.25'
North: 2291999.8143' East: 6232878.6843'

Segment #2 : Line
Course: S0°36'46"W Length: 1108.84'
North: 2290891.0378' East: 6232866.8255'

Segment #3 : Line
Course: S45°39'31"W Length: 70.77'
North: 2290841.5743' East: 6232816.2117'

Segment #4 : Line
Course: N89°17'44"W Length: 845.50'
North: 2290851.9694' East: 6231970.7756'

Segment #5 : Line
Course: S22°02'12"W Length: 96.75'
North: 2290762.2876' East: 6231934.4750'

Segment #6 : Line
Course: S89°17'41"E Length: 74.64'
North: 2290761.3688' East: 6232009.1093'

Segment #7 : Line
Course: S80°34'14"E Length: 65.93'
North: 2290750.5673' East: 6232074.1485'

Segment #8 : Line
Course: S89°17'41"E Length: 891.33'
North: 2290739.5958' East: 6232965.4109'

Segment #9 : Line
Course: N0°36'54"E Length: 1259.05'
North: 2291998.5733' East: 6232978.9250'

Perimeter: 4513.05' Area: 217986.12 Sq. Ft. / 5.00 Acres
Error Closure: 0.0073 Course: S13°20'45"W
Error North: -0.00706 East: -0.00167
Precision 1: 618227.40



Handwritten signature and date: 12 JAN 2023

KERN DELTA WATER DISTRICT - CANAL EASEMENT

DATE: 01/12/23

Name: CANAL EASEMENT - TIE

North: 2291997.3408' East: 6233078.9192'

Segment #1 : Line

Course: N89°17'23"W Length: 100.00'

North: 2291998.5804' East: 6232978.9269'

Segment #2 : Line

Course: N89°17'41"W Length: 100.25'

North: 2291999.8144' East: 6232878.6845'

Segment #3 : Line

Course: S0°36'46"W Length: 1108.84'

North: 2290891.0378' East: 6232866.8257'

Segment #4 : Line

Course: N10°51'10"E Length: 1126.45' (Dummy Tie)

North: 2291997.3404' East: 6233078.9205'

Perimeter: 2435.54' Area: 111023.10 Sq. Ft.

Error Closure: 0.0014 Course: S73°32'55"E

Error North: -0.00039 East: 0.00131

Precision 1: 1739671.43

**FOR THE BENEFIT OF AND
RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:**

**KERN DELTA WATER DISTRICT
501 Taft Highway
Bakersfield, CA 93307**

**APN's: 540-010-21, 540-010-67, 540-010-
22, and 540-010-24**

No recording fee required: exempt pursuant to
Government Code Section 27383.

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Government agency acquiring title – exempt from
Documentary Transfer Tax per R&T Code 11922

GC 27388.1(a)(1): Recorded document is expressly
Exempted from payment of recording fees (FBO) Govt. agency

GRANT OF CANAL EASEMENT

FOR A VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, **DEERTRAIL DEVELOPMENT, LLC.**, hereinafter called “Grantor”, hereby grants to the **KERN DELTA WATER DISTRICT**, a California water district, hereinafter “Grantee”, an exclusive and permanent right-of-way and easement to construct, operate, install, maintain, alter, repair, improve, reconstruct, enlarge and supplement, and to flow and conduct water through, an open ditch canal, and appurtenant facilities together with the further right to use said easement for ingress and egress in, under, over, along and across a strip of land more particularly described in Exhibit “A” which attached hereto and by this reference made a part hereof. Said easement is also shown on the plat map attached hereto as Exhibit “B” and by this reference made a part hereof.

Grantee covenants to maintain the permanent easement and right-of-way in good condition and repair so that no unreasonable damage will result to the adjacent land of the Grantor, its heirs, successors, and assigns, from its use. Grantor, its heirs, successors, and assigns, covenant that they will not erect, place, or maintain, or allow to be erected, placed or maintained, within the boundaries of said permanent easement and right-of-way, any structure or improvement of any kind, without first securing written permission of the Grantee, and that they will not plant or maintain or permit to be planted or maintained, any plants, shrubs, or trees that may interfere with the full and complete use of the permanent easement and right-of-way. Grantor agrees that Grantee, its successors, and assigns, and its agents or employees, may trim or remove any plants, shrubs, or trees that encroach on the permanent easement and right-of-way.

Grantor agrees that no other easement or easements shall be hereafter granted across, along, over, under, through, or within that portion of the permanent easement or right-of-way occupied by Grantee's facilities by Grantors, their successors and assigns, without the previous written consent of the Grantee.

The terms and covenants of the permanent easement and right-of-way shall bind and inure to the benefit of the heirs, successors, executors, administrators, and assigns, of Grantor and the successors and assigns of the Grantee.

IN WITNESS WHEREOF, the undersigned have executed this document on the date set forth below:

GRANTOR
DEERTRAIL DEVELOPMENT, LLC

Dated: _____

By: _____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached and not the truthfulness accuracy or validity of that document.

State of California)
County of _____)

On _____, 2024, before me, _____,
Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
is/are subscribed to the within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the
instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the
foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

CERTIFICATE OF ACCEPTANCE
(Government Code Section 27281)

THIS IS TO CERTIFY that the within document is hereby accepted by the undersigned officer on behalf of the Board of Directors of Kern Delta Water District pursuant to authority conferred by resolution of the Board of Directors heretofore adopted, and the District consents to recordation thereof by its duly authorized officer.

DATED: _____

Steven Teglia, General Manager
Kern Delta Water District

EXHIBIT "A"
KERN DELTA WATER DISTRICT - CANAL EASEMENT
LEGAL DESCRIPTION

ALL THAT PORTION OF LOTS 26 AND 31 OF THE SALES MAP OF LANDS OF KERN COUNTY LAND COMPANY FILED JUNE 16, 1897, IN THE OFFICE OF THE KERN COUNTY RECORDER AS DESCRIBED IN QUITCLAIM DEED RECORDED DECEMBER 23, 1965, IN BOOK 3904, PAGE 811 AND QUITCLAIM DEED RECORDED DECEMBER 23, 1965, IN BOOK 3904, PAGE 812 AND A PORTION OF CERTIFICATE OF COMPLIANCE No. 1904 RECORDED SEPTEMBER 27, 1996 AS DOC No. 0196126022 ALL OF OFFICIAL RECORDS, ALSO BEING A PORTION OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 30 SOUTH, RANGE 27 EAST, M.D.M., IN THE CITY OF BAKERSFIELD, COUNTY OF KERN, STATE OF CALIFORNIA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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- 5) SOUTH 22°02'12" WEST ALONG SAID EAST TRACT LINE, A DISTANCE OF 96.75 FEET; THENCE
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- 8) SOUTH 89°17'41" EAST, A DISTANCE OF 891.33 FEET TO A POINT ON SAID WEST RAILROAD RIGHT-OF-WAY LINE; THENCE
- 9) NORTH 00°36'54" EAST ALONG SAID WEST RAILROAD RIGHT OF WAY LINE, A DISTANCE OF 1,259.05 FEET TO THE POINT OF BEGINNING.

CONTAINING 5.00 ACRES, MORE OR LESS.



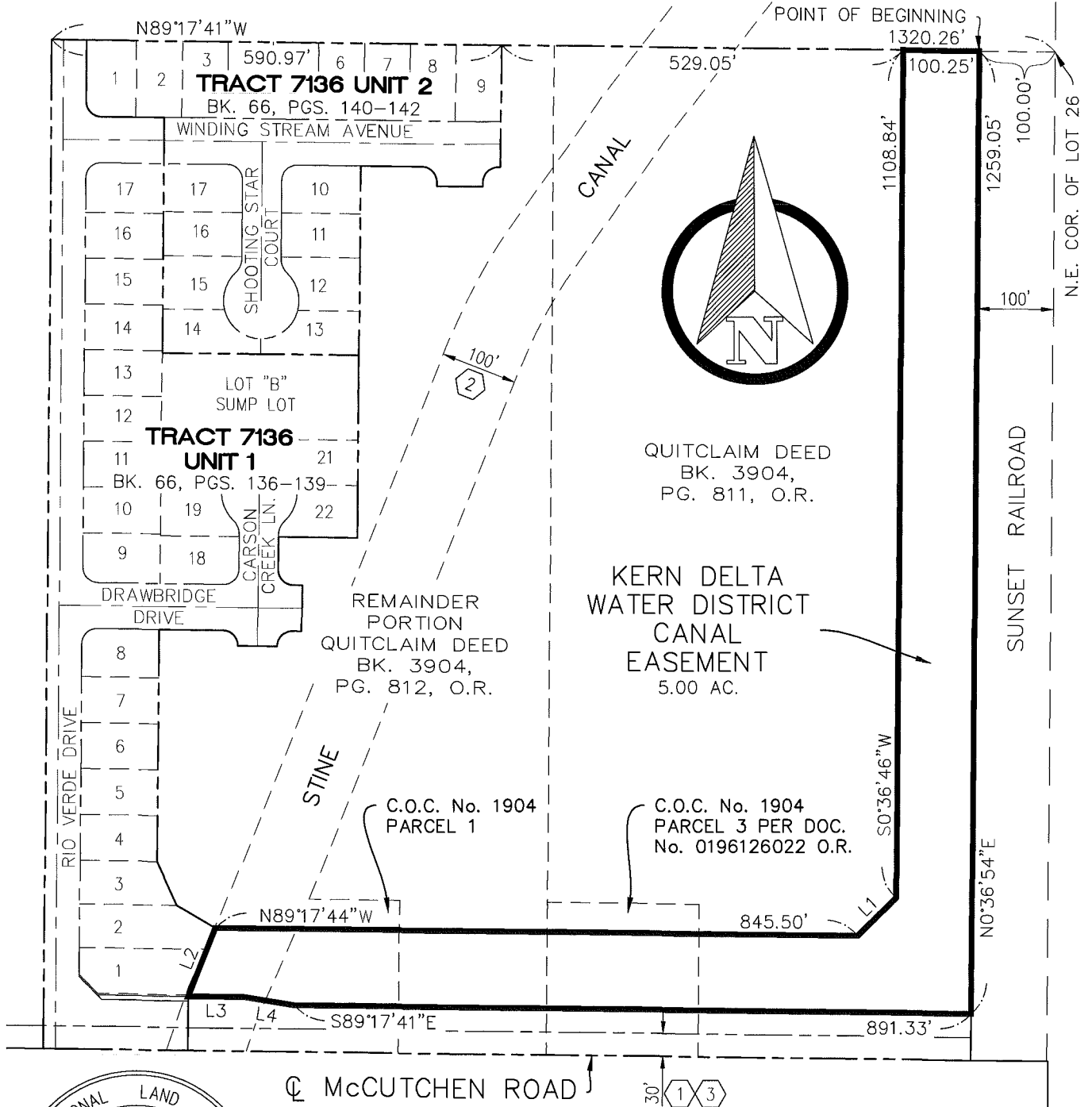
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PO Box 21687 • Bakersfield, CA 93309



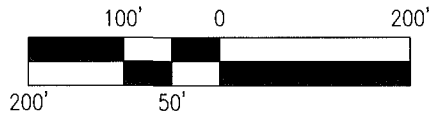
A handwritten signature in black ink, appearing to read 'Samuel M. Walker Jr.', written over the bottom portion of the professional seal.

12 JAN 2023

EXHIBIT "B"



Samuel M. Walker Jr.
12 Jan 2023



SCALE: 1" = 200'



NEW GEN ENGINEERING GROUP
2001 WHEELAN CT. BAKERSFIELD, CA 93309 (661) 834-4814

D.R. HORTON CA3, INC.
S.W. 1/4 OF SEC. 29, T.30S., R.27E., M.D.M.
KERN DELTA WATER DISTRICT - CANAL EASEMENT

JOB NO. 14-068.03
DATE: 01/12/23
FILE NO. 1406803EM05
DONE BY: MWV
SHEET 1 OF 2

EXHIBIT "B"

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L4	S 80°34'14" E	65.93'



12 JAN 2023



NEW GEN ENGINEERING GROUP
2001 WHEELAN CT. BAKERSFIELD, CA 93309 (661) 834-4814

D.R. HORTON CA3, INC.

S.W. 1/4 OF SEC. 29, T.30S., R.27E., M.D.M.

KERN DELTA WATER DISTRICT - CANAL EASEMENT

JOB NO. 14-068.03
DATE: 01/12/23
FILE NO. 1406803EM05
DONE BY: MVW
SHEET 2 OF 2

KERN DELTA WATER DISTRICT - CANAL EASEMENT

DATE: 01/12/23



NEW GEN ENGINEERING GROUP
661-834-4814 • 661-834-0972
PO Box 21687 • Bakersfield, CA 93309

Done by: MVW
Job No: 14-068.03

Name: CANAL EASEMENT - BOUNDARY

North: 2291998.5804' East: 6232978.9267'

Segment #1 : Line
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Course: S0°36'46"W Length: 1108.84'
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Course: S45°39'31"W Length: 70.77'
North: 2290841.5743' East: 6232816.2117'

Segment #4 : Line
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Error North: -0.00706 East: -0.00167
Precision 1: 618227.40



Handwritten signature and date: 12 JAN 2023

KERN DELTA WATER DISTRICT - CANAL EASEMENT

DATE: 01/12/23

Name: CANAL EASEMENT - TIE

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Segment #1 : Line

Course: N89°17'23"W Length: 100.00'

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Course: N89°17'41"W Length: 100.25'

North: 2291999.8144' East: 6232878.6845'

Segment #3 : Line

Course: S0°36'46"W Length: 1108.84'

North: 2290891.0378' East: 6232866.8257'

Segment #4 : Line

Course: N10°51'10"E Length: 1126.45' (Dummy Tie)

North: 2291997.3404' East: 6233078.9205'

Perimeter: 2435.54' Area: 111023.10 Sq. Ft.

Error Closure: 0.0014 Course: S73°32'55"E

Error North: -0.00039 East: 0.00131

Precision 1: 1739671.43

Tab V



KERN DELTA WATER DISTRICT

April 11, 2024

	4/11/2024	Last Year
KERN RIVER 3 DAY MEAN INFLOW	1,395 CFS	3,945 CFS
KERN RIVER MEAN OUTFLOW	1,191 CFS	5,204 CFS
ISABELLA RESERVOIR STORAGE	271,182 ACFT	302,636 ACFT
REQUESTED OUTFLOW	1,090 CFS	5,180 CFS

Estimated: (CFS)

KDWD DAILY DIVERTED: (APRIL 11, 2024)	@HEAD	STATE	XCHNG	BANKING
KERN ISLAND	215	0	0	0
EASTSIDE	58	0	0	0
BUENA VISTA -LEVEE	47	0	0	0
STINE	34	0	0	0
OTHER - River Channel	0	0	0	0
K.I. / A.E. Exchange Gate	0	0	0	0
STINE / A.E. Exchange Gate	0	0	0	0
EASTSIDE / A.E. Intertie	0	0	0	0
Total CFS	354	0	0	0

Estimated: (Acre Feet)

DIVERTED (MARCH 2024)	UTILITY	STATE	PURCHASE	BANKING
KERN ISLAND	6,516	0	0	0
EASTSIDE	1,012	113	0	0
C.O.B. Misc.	0	0	0	0
BUENA VISTA	0	0	0	0
STINE	0	0	0	0
FARMERS	0	0	0	0
SOUTH FORK	0	0	0	0
West Side State Sale	0	0	0	0
MONTHLY TOTAL	7,528	113	0	0
YEAR TO MARCH 31, 2024	28,532 ACFT	113	0	0

Year to March 31, 2024 Utility - State - Banking **28,645 ACFT**

	3/31/2024	Estimate 4/11/2024	Max Storage
ACFT. STORAGE BALANCE AS OF:	3/31/2024	4/11/2024	
KERN ISLAND	16,378	17,947	15,000
BUENA VISTA	4,881	5,386	Store All
STINE	7,457	8,405	Store All
FARMERS	7,272	8,234	Store All
STATE (23) Carryover	5,887	5,801	N/A
STATE (24) Contract	7,650	7,650	N/A
RRBWSO STORAGE	18,805	18,805	N/A
PIONEER PROJECT STORAGE (ODC)	45,938 (100,617)	45,938 (100,617)	N/A
TOTAL ACFT.	114,268	118,166	

K.D.W.D. CLIMATOLOGICAL OBSERVATION:

ISABELLA CLIMATOLOGICAL OBSERVATION:

<u>58</u>	MINIMUM TEMPERATURE	<u>43</u>
<u>84</u>	MAXIMUM TEMPERATURE	<u>78</u>
<u>59</u>	PRESENT TEMPERATURE	<u>48</u>
<u>0.00</u>	PRECIPITATION - 24 HR. DAY	<u>0.00</u>
<u>0.22</u>	PRECIPITATION - MONTH	<u>0.19</u>
<i>Seasonal</i> <u>6.56</u>	YEAR TO DATE PRECIP.	<u>7.62</u> <i>Seasonal</i>

ISABELLA RESEVOIR:

LAKE ELEVATION (FT.)	2,574.98	MARCH AC. FT. INFLOW	71,371
STORAGE ACFT.	271,182	MARCH AC. FT. OUTFLOW	38,301
GROSS STORAGE CAPACITY	568,075	ACCUMULATIVE ACFT. INFLOW (23-24)	265,867
% OF CAPACITY	48%	ACCUMULATIVE ACFT. OUTFLOW	351,777
SEASONAL STORAGE CAPACITY	463,874	% OF SEASONAL CAPACITY	58%

Summary of Utility Water Diverted Year to Date: 3/31/2024

Summary of Other Water Diverted Year to Date: 3/31/2024

	Utility	North Kern	Other Exchanges		State	Purchase	3rd Party Banking
<i>January</i>	10,282	0	0	<i>January</i>	0	0	0
<i>February</i>	10,722	0	0	<i>February</i>	0	0	0
<i>March</i>	7,528	0	0	<i>March</i>	113	0	0
<i>April</i>				<i>April</i>			
<i>May</i>				<i>May</i>			
<i>June</i>				<i>June</i>			
<i>July</i>				<i>July</i>			
<i>August</i>				<i>August</i>			
<i>September</i>				<i>September</i>			
<i>October</i>				<i>October</i>			
<i>November</i>				<i>November</i>			
<i>December</i>				<i>December</i>			
Total	28,532	0	0	Total	113	0	0

Water owed to K.D.W.D as of: 3/31/2024

Summary of Total State Water Used Year to Date: 3/31/2024

		(OWED)	(USED)
<i>B.V.W.S.D. 2023 State Carryover*:</i>	6,000	<i>2023 Contract</i>	5,801
<i>2024 State Contract: Table A</i>	7,650	<i>2024 Contract</i>	7,650
		Total	13,451
Quantities in acft.	TOTAL 13,650	Net Owed to KDWD	TOTAL 13,650

Maximum Annual State Carryover Balance: 6,000 acre feet

DISTRICT BANKING OPERATIONS

Thursday, April 11, 2024

<u>KERN ISLAND PROJECTS</u>	
Branch 1:	- CFS
Kern Island Met:	4.0 CFS
Other:	- CFS
Total:	4.0 CFS

<u>EASTSIDE PROJECTS</u>	
Digiorgio:	10.0 CFS
Sunset:	- CFS*
Other:	- CFS
Total:	10.0 CFS

<u>BUENA VISTA PROJECTS</u>	
BV North Basins:	- CFS
Buena Vista I5:	5.0 CFS
Other:	- CFS
Total:	5.0 CFS

<u>STINE PROJECTS</u>	
Old River:	- CFS
Bladder & Triangles:	- CFS
Other:	- CFS
Total:	- CFS

<u>FARMERS PROJECTS</u>	
Romero:	13.0 CFS
Stonefield:	10.0 CFS
Church:	- CFS
Other:	- CFS
Total:	23.0 CFS

<u>BANKING SUPPLIES</u>	
KDWD Untility:	42.00 CFS
AEWSD Project:	- CFS*
Other:	- CFS
Total In District:	42.0 CFS

Estimated: (Acre Feet)

<u>DIVERTED FOR BANKING (MARCH 2024)</u>	<u>UTILITY</u>	<u>STATE</u>	<u>PURCHASE</u>	<u>3RD PARTY</u>	<u>OPERATIONAL</u>
				<u>BANKING</u>	<u>RECHARGE</u>
KERN ISLAND	131	0	0	0	2,596
EASTSIDE	0	0	0	0	592
BUENA VISTA	0	0	0	0	0
STINE	0	0	0	0	0
FARMERS	35	0	0	0	0
MONTHLY TOTAL	166	0	0	0	3,188
YEAR TO MARCH 31, 2024	8,612 ACFT	0	0	0	11,702
<i>Year to March 31, 2024 All Supplies</i>	<i>20,314 ACFT</i>				

Summary of Spreading Year to Date: 3/31/2024

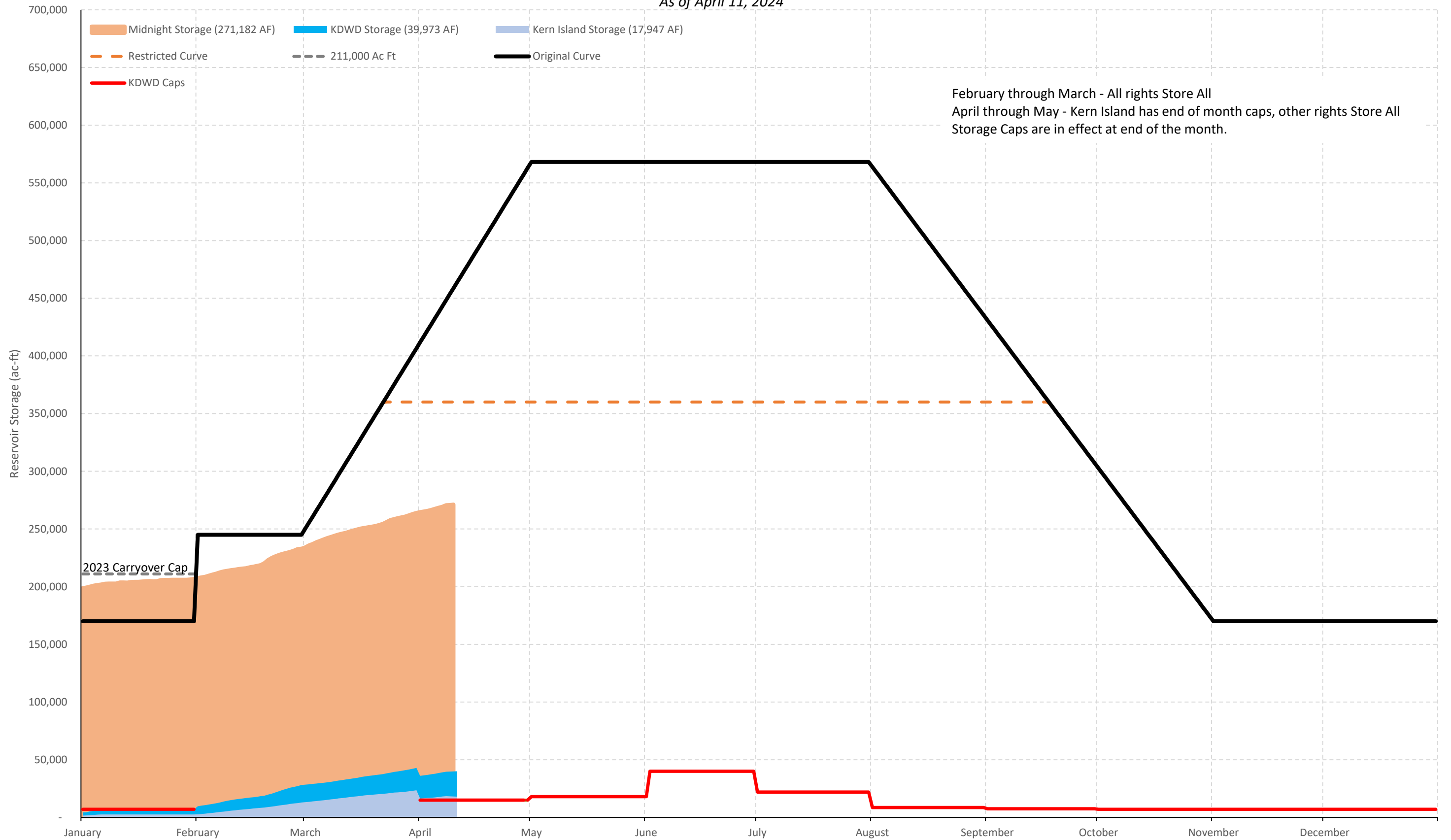
	<i>Utility</i>	<i>State</i>	<i>Purchase</i>	<i>3 Pty Bk</i>	<i>Op. Re.</i>
January	3,024	0	0	0	4,913
February	5,422	0	0	0	3,601
March	166	0	0	0	3,188
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total	8,612	0	0	0	11,702

Facility Flow Rate Quick Reference

<u>PROJECT</u>	<u>Fill</u>	<u>Operational (CFS)</u>		<u>Acreage</u>
	<u>(CFS)</u>	<u>Summer</u>	<u>Winter</u>	
<i>Kern Island Met:</i>	60	25	20	175
<i>Branch 1:</i>	18	18	5	75
<i>Digiorgio:</i>	30	15	10	70
<i>Sunset:</i>	TBD	TBD	TBD	140
<i>BV North:</i>	65	55	20	240
<i>Buena Vista I5:</i>	40	25	15	65
<i>Old River:</i>	40	30	TBD	145
<i>Bladder & Triangles:</i>	30	20	10	40
<i>Romero:</i>	45	40	15	170
<i>Stonefield:</i>	25	15	10	80
<i>Church:</i>	4	1	1	5
Total	357	244	106	1205

Midnight Lake Isabella Storage and Pool Restrictions

As of April 11, 2024



February through March - All rights Store All
April through May - Kern Island has end of month caps, other rights Store All
Storage Caps are in effect at end of the month.

2023 Carryover Cap

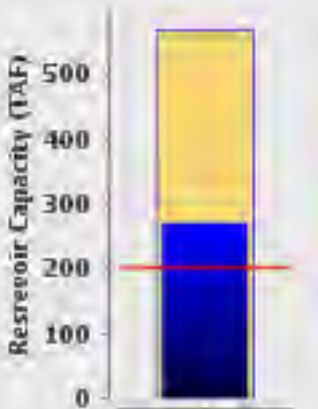


CURRENT RESERVOIR CONDITIONS



Isabella Lake Conditions

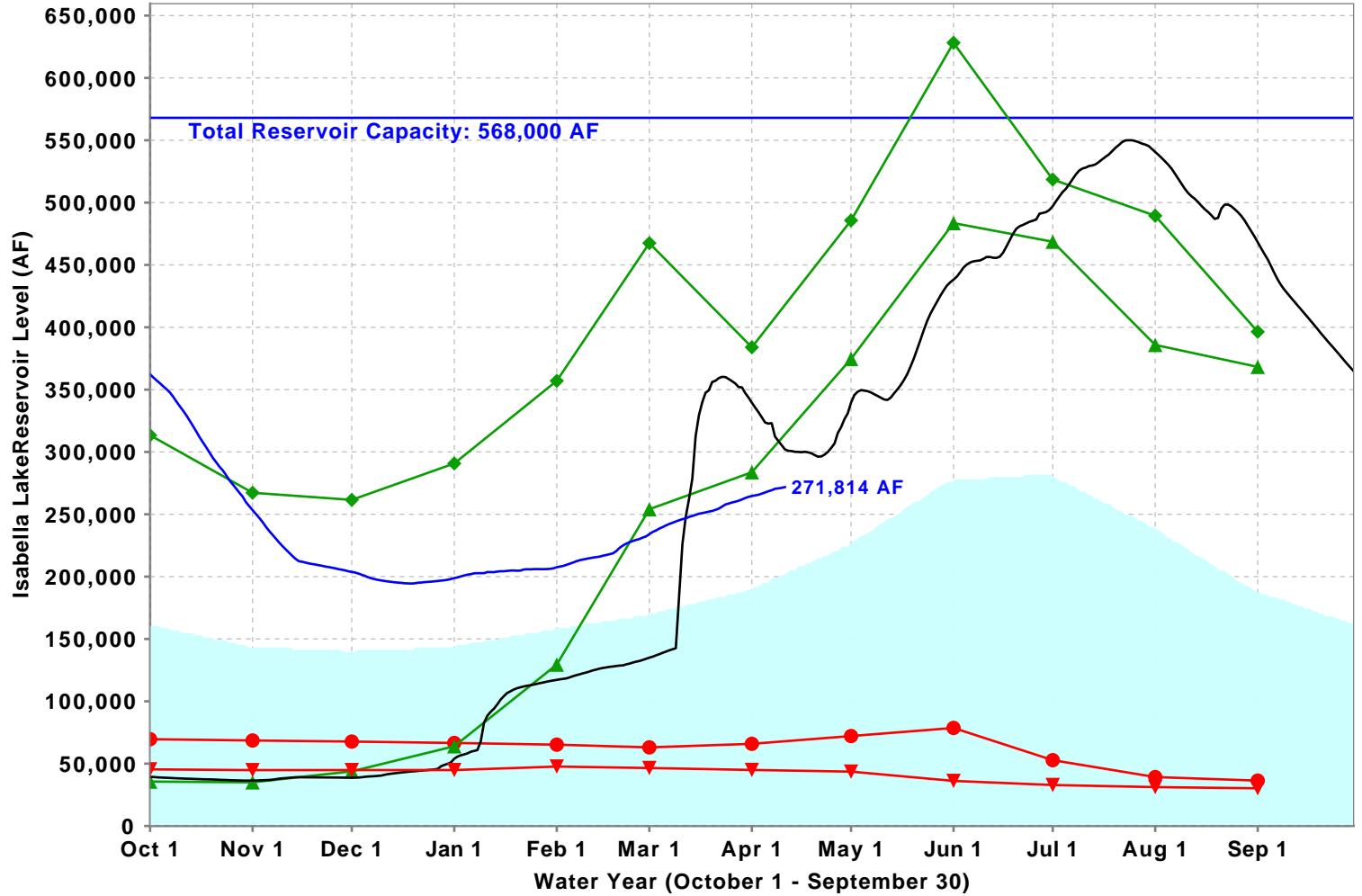
(as of Midnight - April 11, 2024)



Current Level: 271,814 AF

48% (Total Capacity) | **135%** (Historical Avg.)

Isabella Lake Levels: Various Past Water Years and Current Water Year, Ending At Midnight April 11, 2024



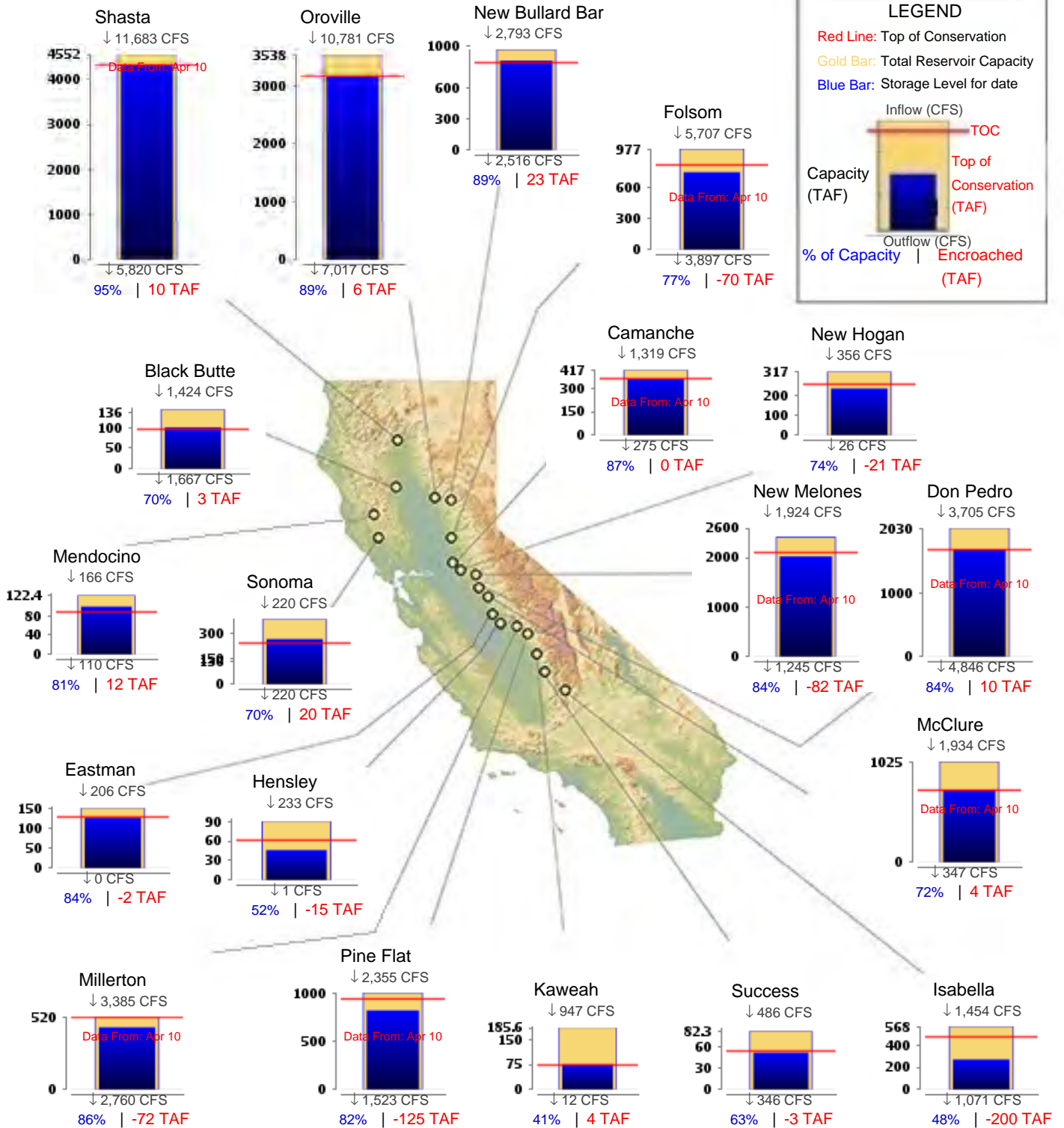


CURRENT RESERVOIR CONDITIONS

TOP OF CONSERVATION CONDITIONS (TOC)

Midnight - April 11, 2024

CENTRAL VALLEY RUSSIAN RIVER FLOOD CONTROL RESERVOIRS



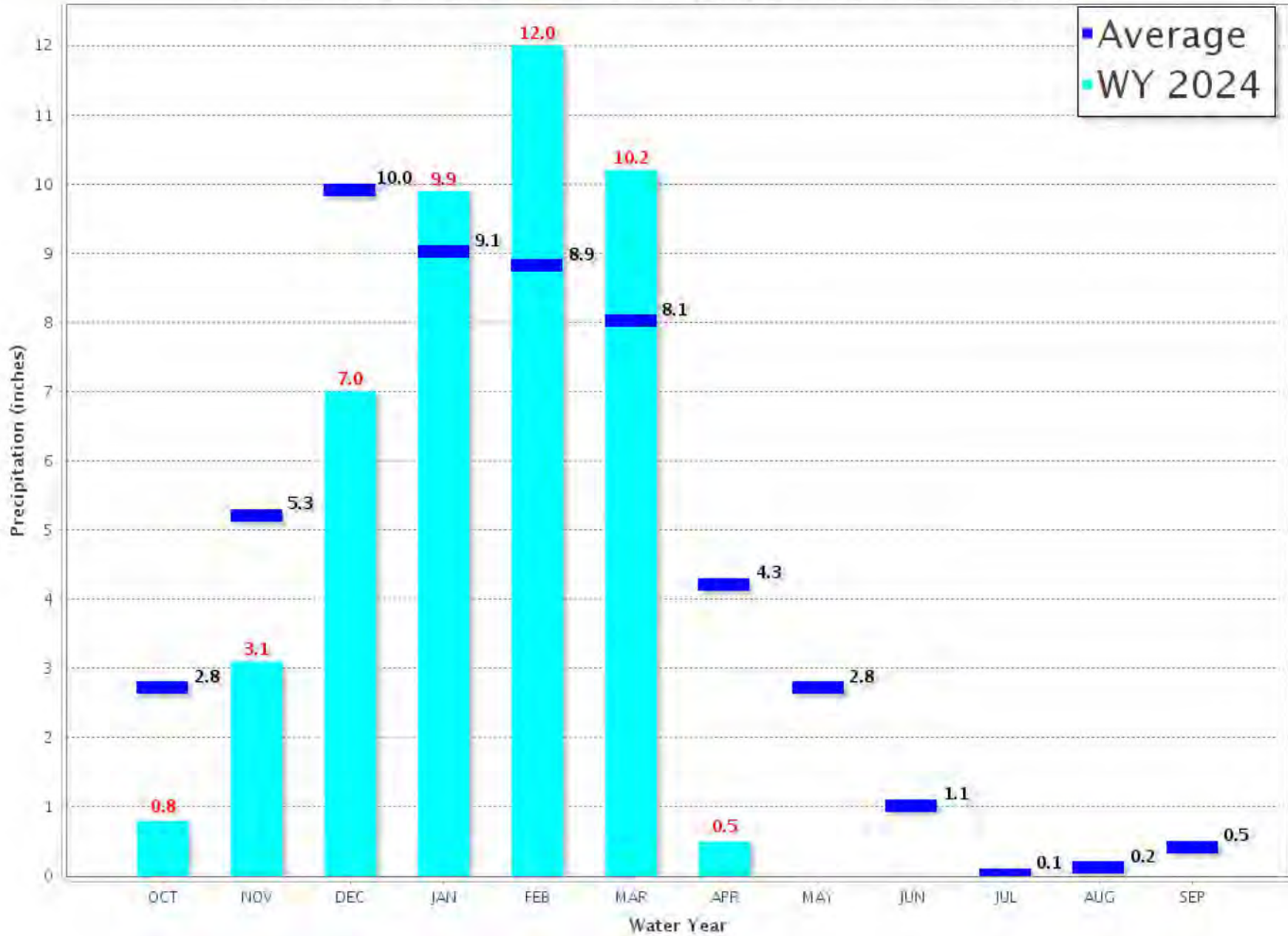


Northern Sierra 8-Station

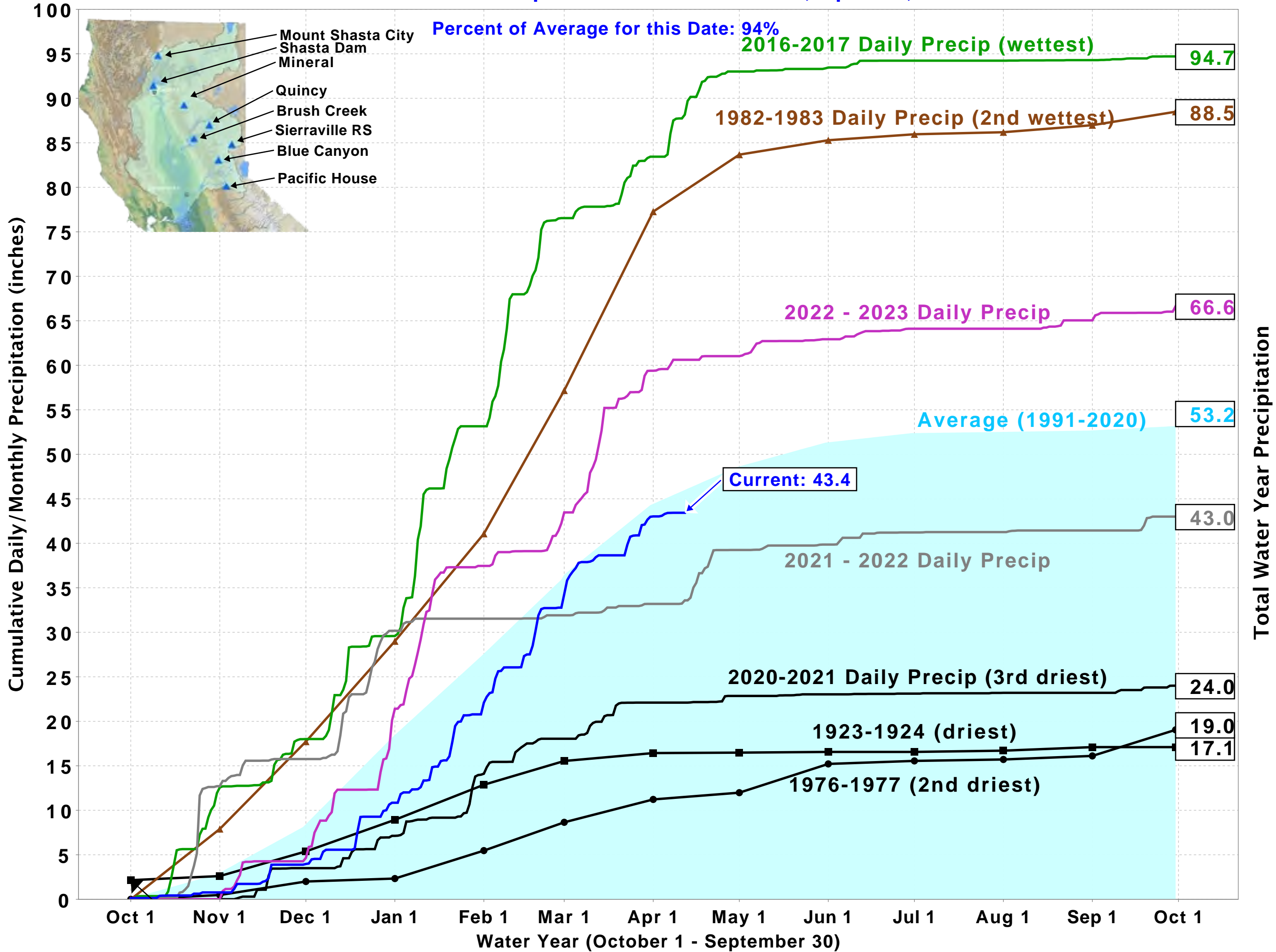
Precipitation Index for Water Year 2024 - Updated on April 12, 2024 12:48 PM

Note: Monthly totals may not add up to seasonal total because of rounding

Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST



Northern Sierra Precipitation: 8-Station Index, April 12, 2024



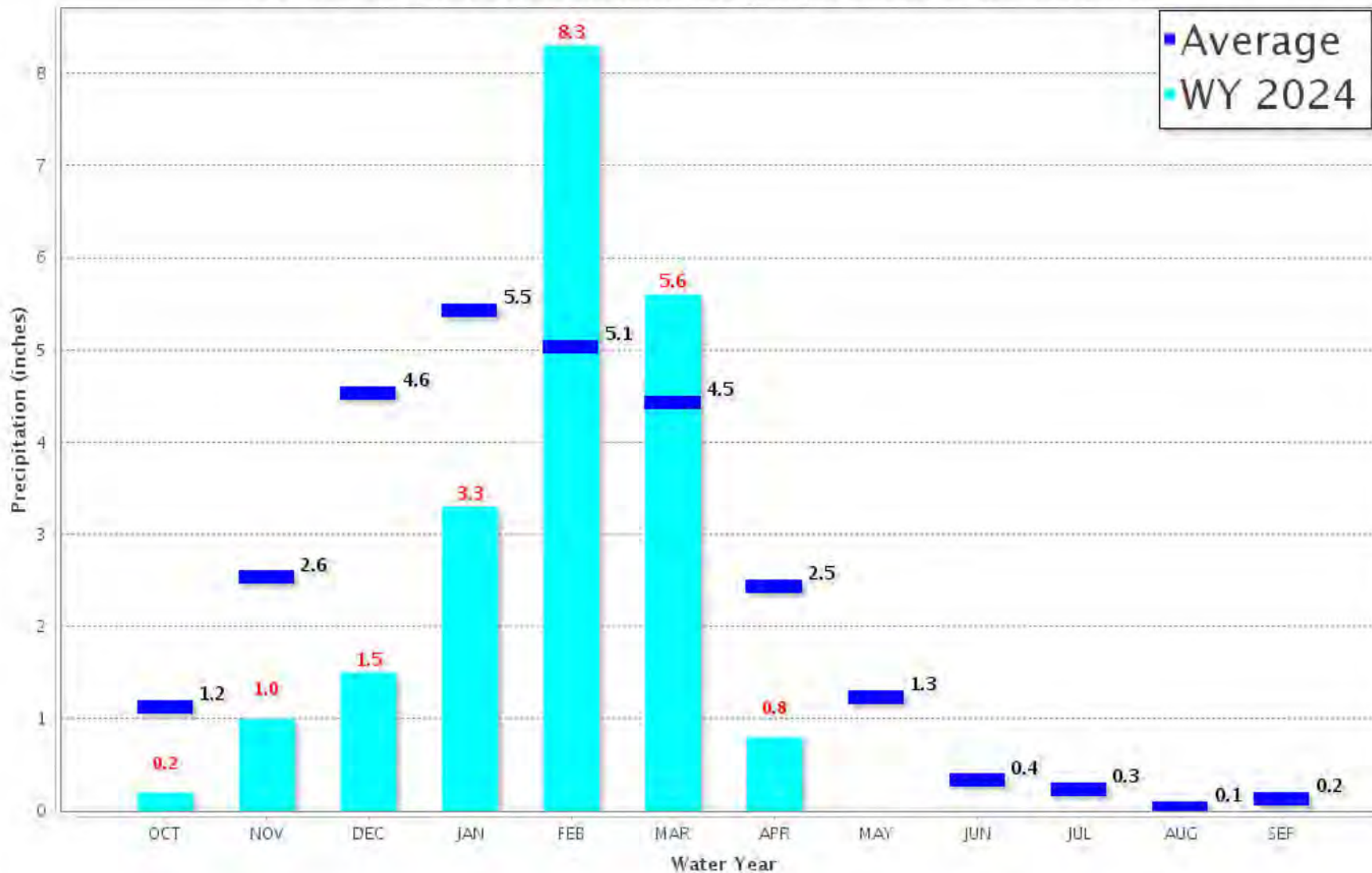


Tulare Basin 6-Station

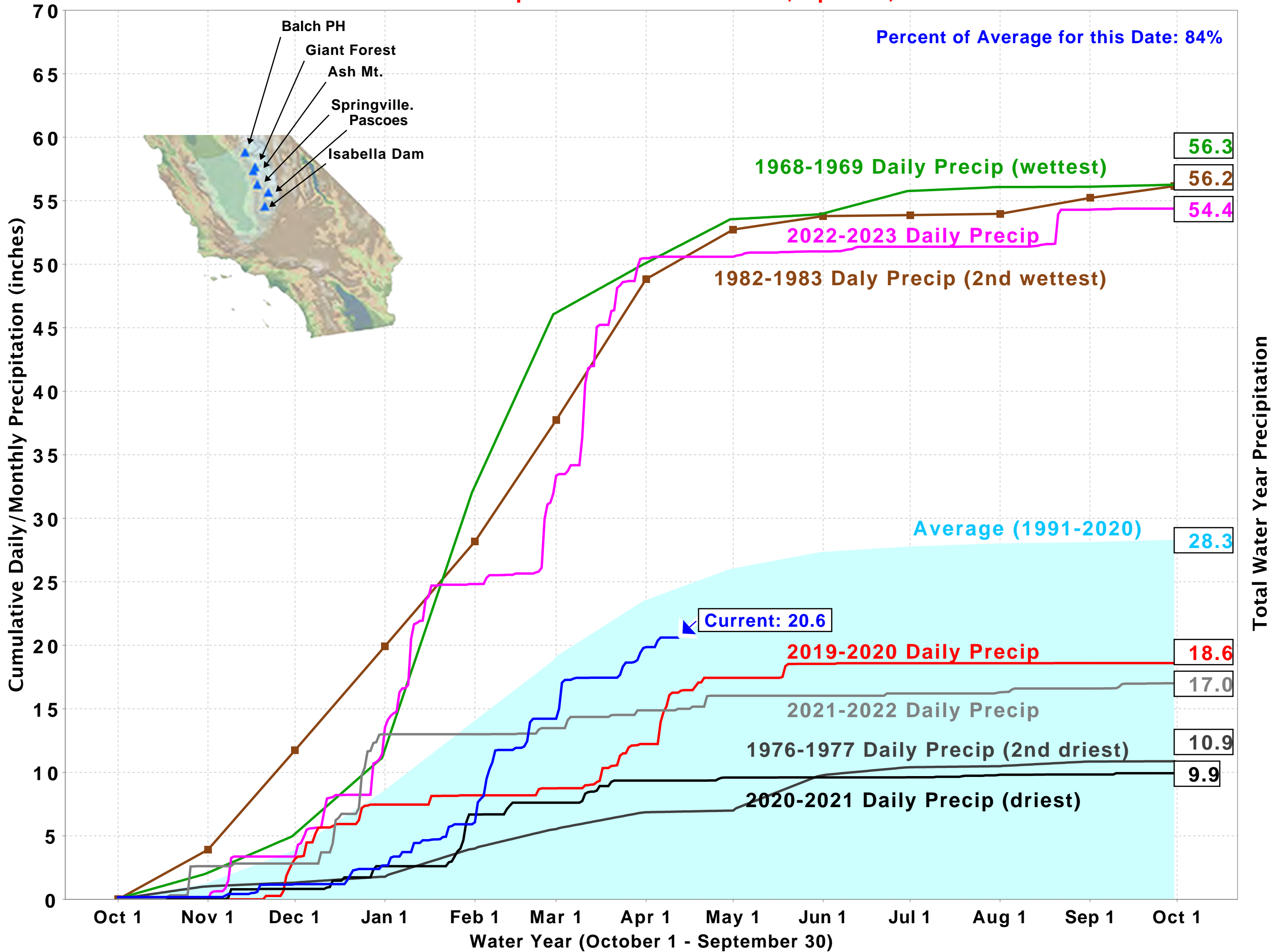
Precipitation Index for Water Year 2024 - Updated on April 12, 2024 12:48 PM

Note: Monthly totals may not add up to seasonal total because of rounding

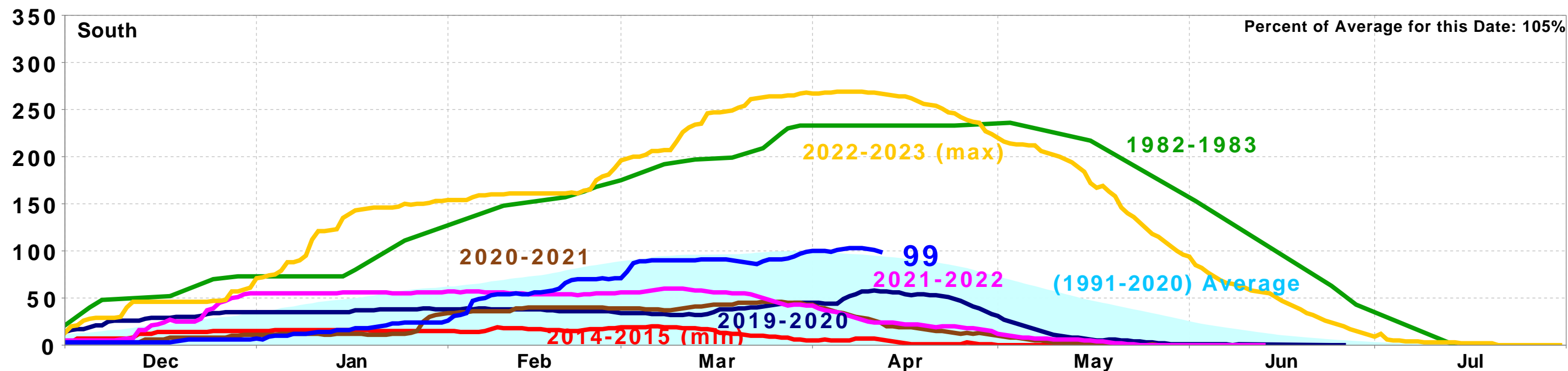
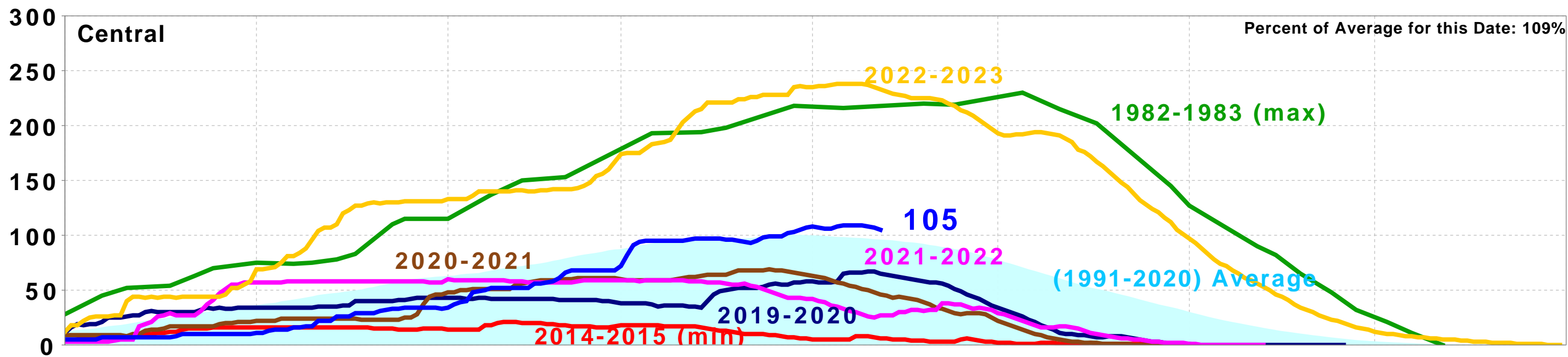
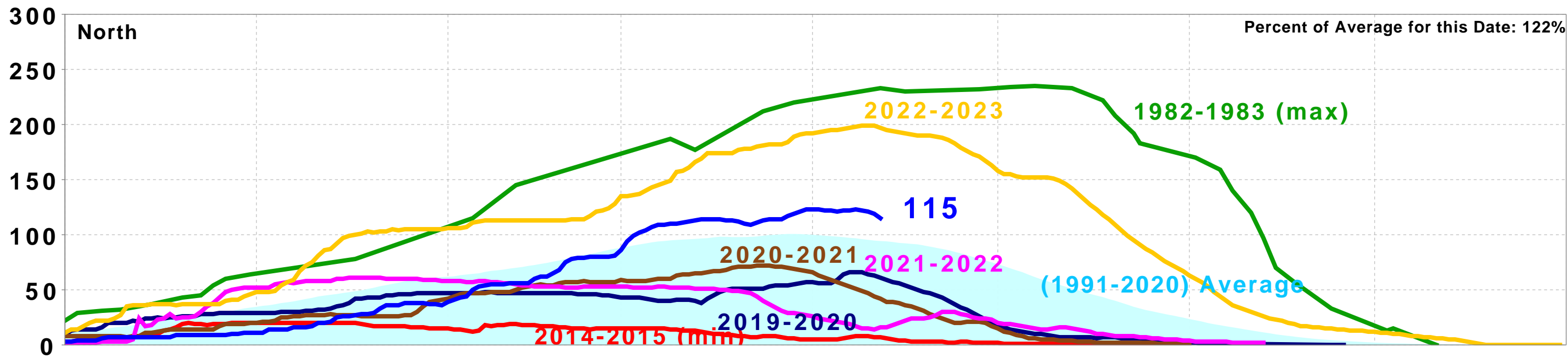
Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST



Tulare Basin Precipitation: 6-Station Index, April 12, 2024



California Snow Water Content, April 12, 2024, Percent of April 1 Average



Statewide Percent of April 1: 107%

Statewide Percent of Average for Date: 112%



STATEWIDE SNOW WATER CONTENT

CURRENT REGIONAL SNOWPACK FROM AUTOMATED SNOW SENSORS

% of April 1 Average / % of Normal for This Date



NORTH	
Data as of April 12, 2024	
Number of Stations Reporting	26
Average snow water equivalent (Inches)	32.7
Percent of April 1 Average (%)	115
Percent of normal for this date (%)	122

CENTRAL	
Data as of April 12, 2024	
Number of Stations Reporting	48
Average snow water equivalent (Inches)	28.1
Percent of April 1 Average (%)	105
Percent of normal for this date (%)	109

SOUTH	
Data as of April 12, 2024	
Number of Stations Reporting	25
Average snow water equivalent (Inches)	21.4
Percent of April 1 Average (%)	99
Percent of normal for this date (%)	105

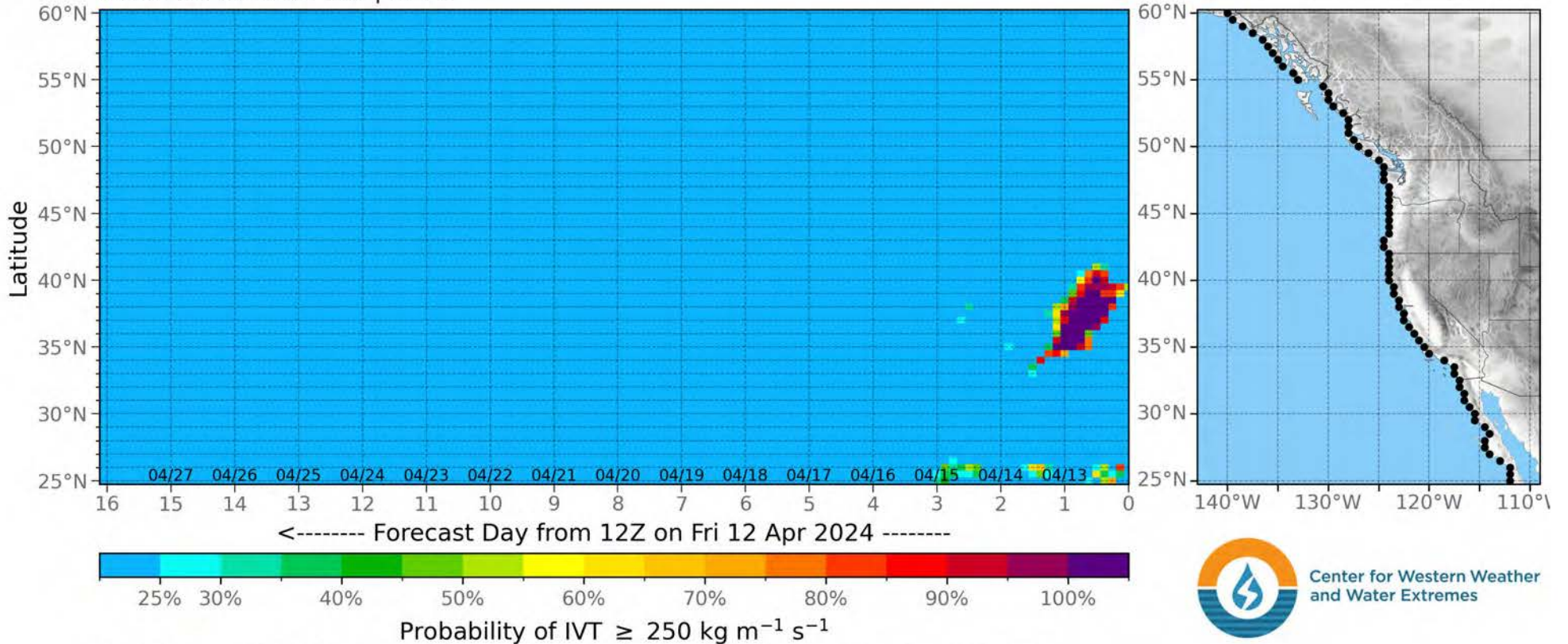
STATE	
Data as of April 12, 2024	
Number of Stations Reporting	99
Average snow water equivalent (Inches)	27.6
Percent of April 1 Average (%)	107
Percent of normal for this date (%)	112

Statewide Average: 107% / 112%

Data as of April 12, 2024

CW3E AR Landfall Tool | GEFS

Model Run: 12Z Fri 12 Apr 2024

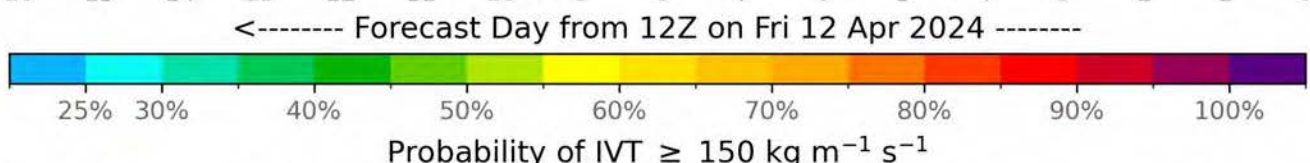
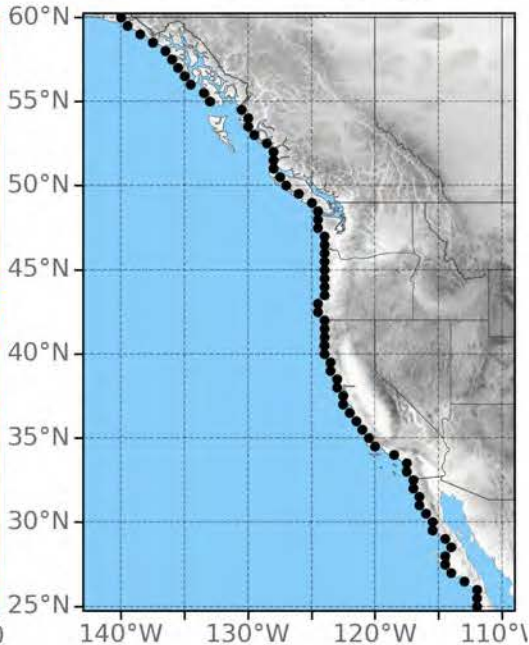
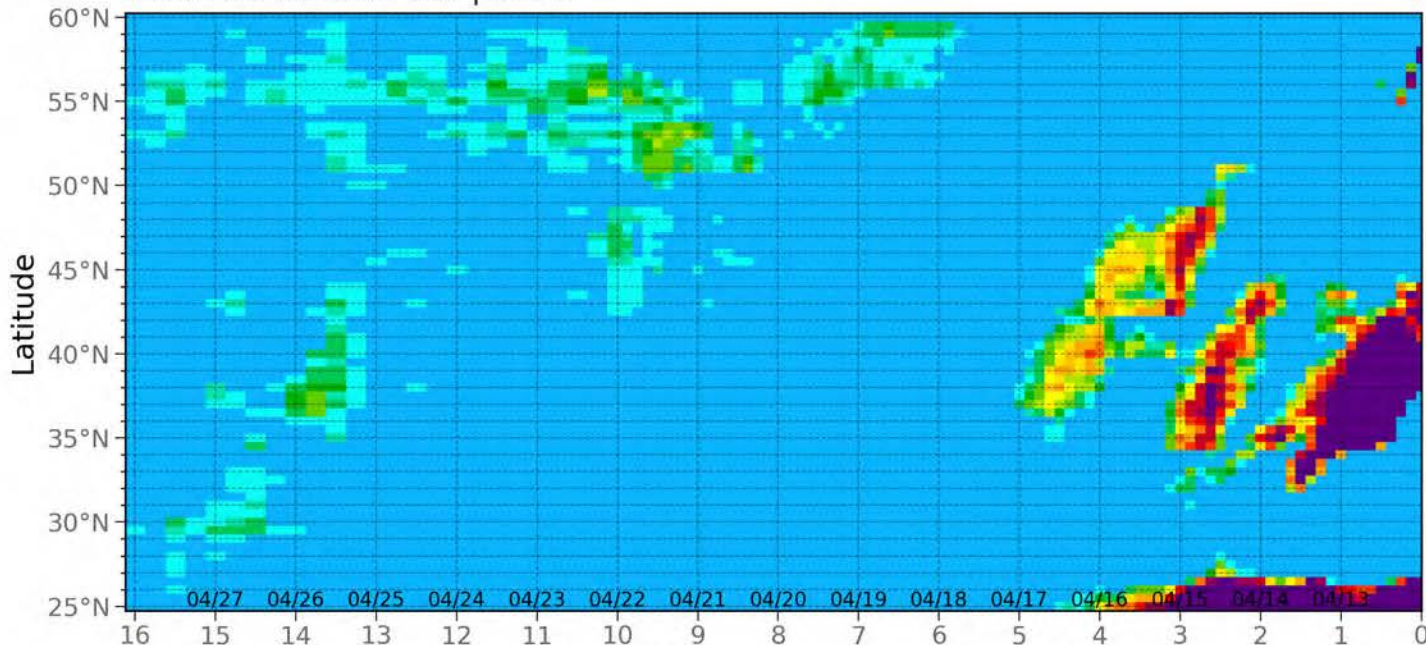


Forecasts support FIRO/CA-AR Program and NSF #2052972 | Intended for research purposes only



CW3E AR Landfall Tool | GEFS

Model Run: 12Z Fri 12 Apr 2024



Forecasts support FIRO/CA-AR Program and NSF #2052972 | Intended for research purposes only

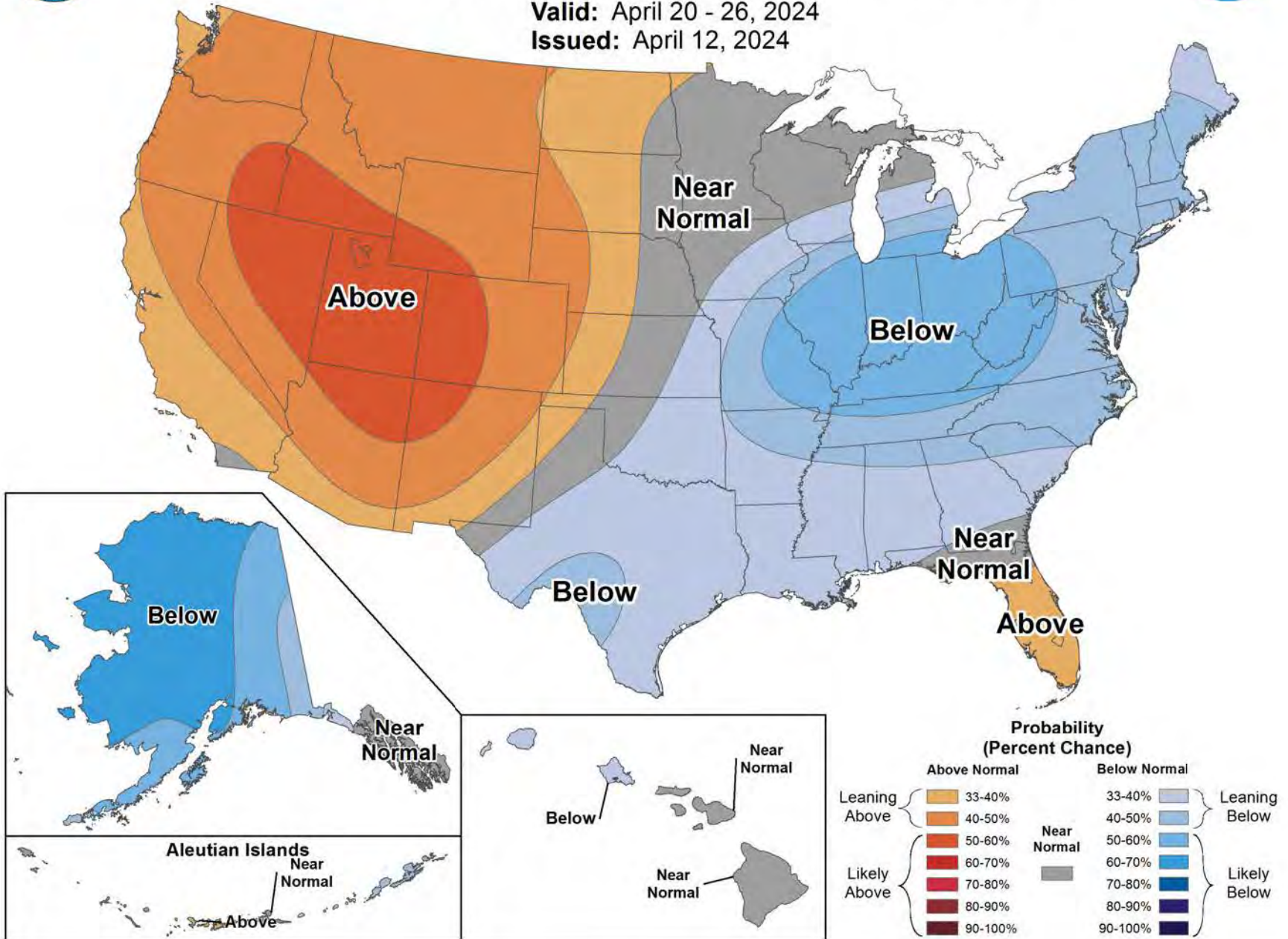


8-14 Day Temperature Outlook



Valid: April 20 - 26, 2024

Issued: April 12, 2024



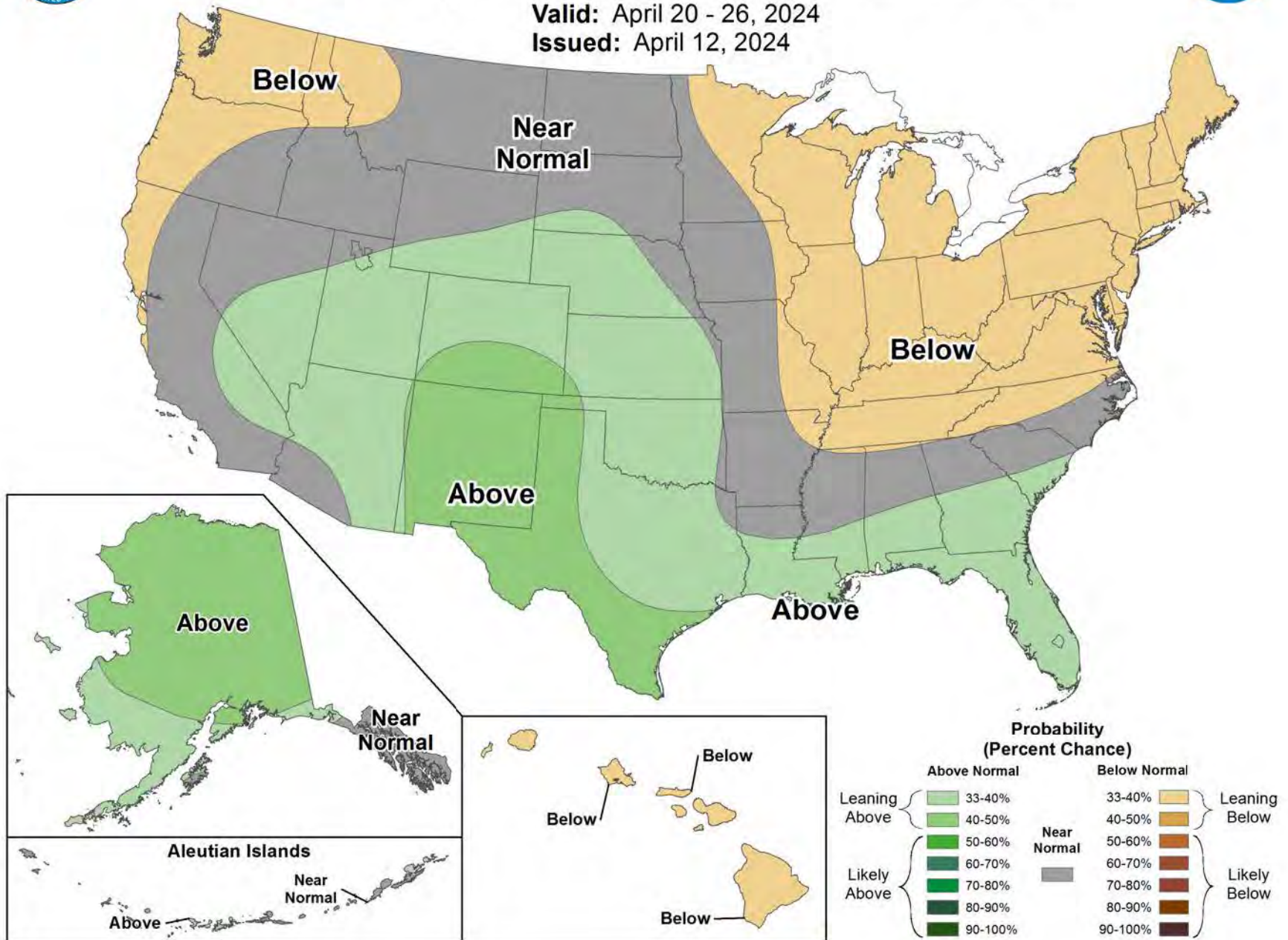


8-14 Day Precipitation Outlook



Valid: April 20 - 26, 2024

Issued: April 12, 2024



APRIL-JULY FORECAST UPDATE SUMMARY (IN THOUSANDS OF ACRE-FEET)

10% Exceedance	670	143	660	141						
Stanislaus River below Goodwin Res (blw New Melones)										Average = 699
90% Exceedance	550	79	600	86						
50% Exceedance	720	103	740	106						
10% Exceedance	960	137	930	133						
Tuolumne River below La Grange Res (blw Don Pedro)										Average = 1,222
90% Exceedance	1,020	83	1,080	88						
50% Exceedance	1,210	99	1,250	102						
10% Exceedance	1,610	132	1,580	129						
Merced River below Merced Falls (blw Lake McClure)										Average = 627
90% Exceedance	500	80	530	85						
50% Exceedance	630	100	650	104						
10% Exceedance	860	137	860	137						
San Joaquin River below Millerton Lake										Average = 1,229
90% Exceedance	990	81	1,090	89						
50% Exceedance	1,240	101	1,290	105						
10% Exceedance	1,540	125	1,540	125						

DAYS OF MONTH	APRIL 01		APRIL 09							
	AJ VOL	% AVG	AJ VOL	% AVG	AJ VOL	% AVG	AJ VOL	% AVG	AJ VOL	% AVG

Kings River below Pine Flat Reservoir										Average = 1,204
90% Exceedance	980	81	1,080	90						
50% Exceedance	1,200	100	1,250	104						
10% Exceedance	1,550	129	1,510	125						
Kaweah River below Terminus Reservoir										Average = 276
90% Exceedance	210	76	230	83						
50% Exceedance	270	98	280	101						
10% Exceedance	380	138	370	134						
Tule River below Lake Success										Average = 56
90% Exceedance	35	63	37	66						
50% Exceedance	55	98	56	100						
10% Exceedance	98	175	91	163						
Kern River, Inflow to Lake Isabella										Average = 427
90% Exceedance	380	89	390	91						
50% Exceedance	440	103	440	103						
10% Exceedance	580	136	550	129						

NOTES

- Runoff forecasts are unimpaired (full natural) flows which represent the natural water production of the river basin, unaltered by upstream diversions, storage, or export or import of water to or from other watersheds.
- Runoff exceedance levels are derived from historical data. The 90 percent exceedance level and the 10 percent exceedance level

WATER YEAR FORECAST SUMMARY AND MONTHLY DISTRIBUTION (IN THOUSANDS OF ACRE-FEET)

WATERSHED	OCT	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WATER YEAR TOTAL	80% PROBABILITY RANGE			WY % AVERAGE
	JAN										90%		10%	
American, Folsom	341	335	457	445	520	245	50	16	11	2,420	2,120		3,065	90
Cosumnes, Michigan Bar	56	85	129	58	38	11	3	1	1	383	340		540	98
Mokelumne, Pardee	65	66	95	135	210	136	19	3	1	730	615		905	96
Stanislaus, Goodwin	91	104	155	205	300	175	40	10	5	1,085	910		1,330	92
Tuolumne, La Grange	129	170	231	285	470	375	80	20	9	1,770	1,575		2,180	91
Merced, McClure	73	86	112	155	260	175	40	13	6	920	785		1,160	91
San Joaquin, Millerton	161	129	166	245	455	400	140	41	18	1,755	1,490		2,070	99
Kings, Pine Flat	140	92	113	220	455	405	120	42	18	1,605	1,370		1,975	96
Kaweah, Terminus	43	33	45	66	106	77	21	5	4	400	335		515	94
Tule, Success	29	20	27	25	20	8	2	1	0	131	110		180	99
Kern, Isabella	142	51	71	100	150	135	55	22	13	740	675		895	110

NOTES

- The averages are for the period 1991 to 2020.
- Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds.
- Water year distributions and 90 and 10 percent exceedance water year forecasts from the February 1, March 1, April 1, and May 1 Bulletin 120 forecasts are official forecasts.
- Water year distributions and 90 and 10 percent exceedance water year forecasts from weekly Bulletin 120 Update forecasts are considered unofficial. Bulletin 120 Update forecasts are for conditions as of any day of the month other than the first of the month.

KERN RIVER WATERMASTER

achianello@krwatermaster.org
661-549-6313

To: Kern River Interests

April 11, 2024

From: Art Chianello
Kern River Watermaster

RE: Report of Recent Activities

Runoff and Operations - On April 1st, Department of Water Resources' statewide seasonal April-July median forecast was 14.0 million acre-feet (MAF) or 99% of average, and the Kern River's April-July median forecast was 440,000 acre-feet or 103%. On April 9th, the Department of Water Resources' statewide seasonal April-July median forecast was 14.3 MAF which is 101% of the historic average, and the Kern River's April-July forecast remained unchanged at 103%.

Isabella Reservoir storage on March 1 was 234,078 acre-feet. April 1 storage was 264,666 acre-feet for an increase of 30,588 acre-feet.

The monthly Kern River Basin runoff volumes for the water year are shown below and compared to historical inflows. April through September are DWR's forecasted median values.

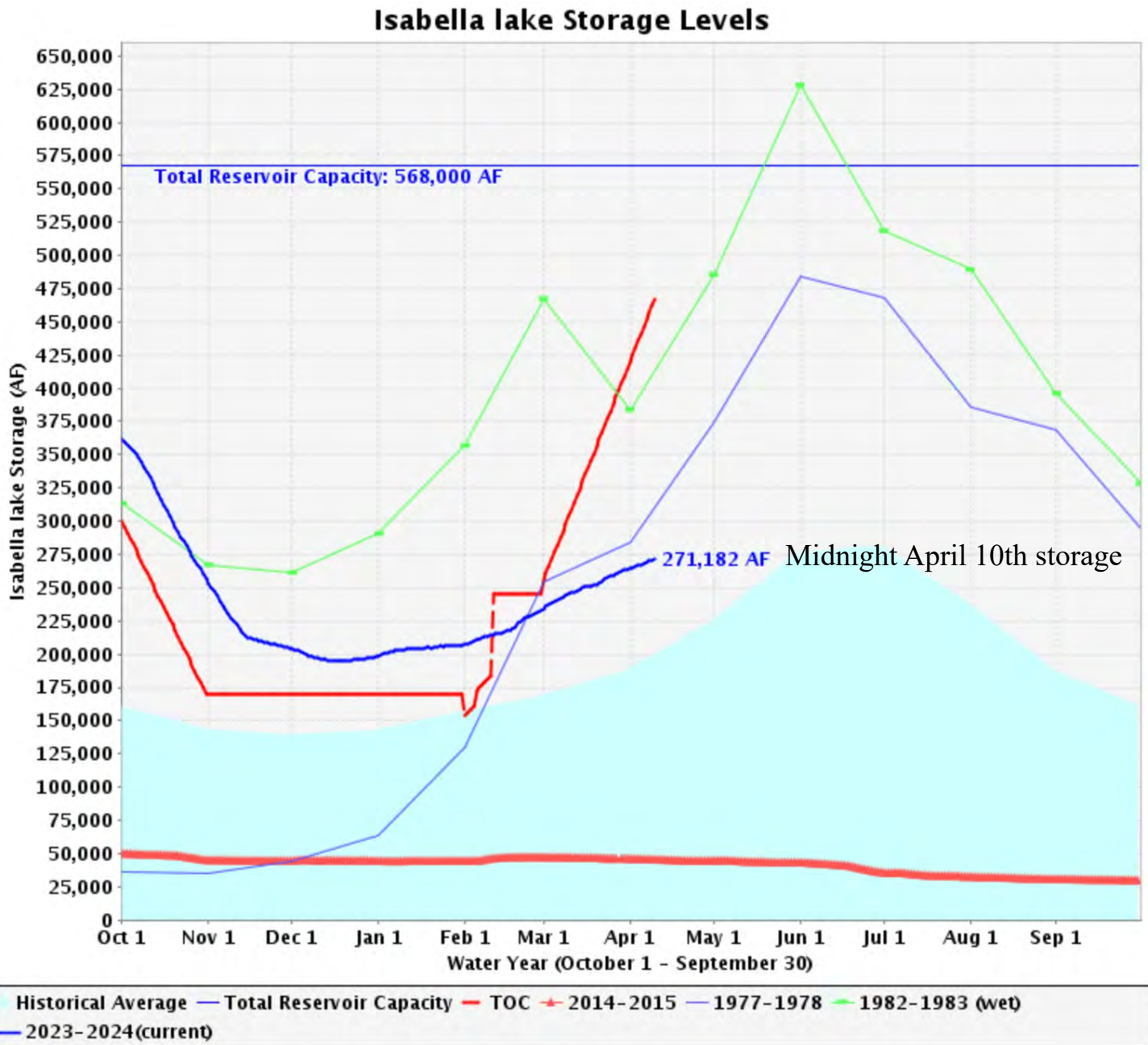
Month	Total Inflow, acre-feet	Historical Inflow, acre-feet
October 2023	37,981	16,500
November 2023	36,058	20,300
December 2023	35,788	28,800
January 2024	33,991	37,600
February 2024	51,391	42,400
March 2024	71,371	60,600
April 2024	100,000 forecasted	90,900
May 2024	150,000 forecasted	146,500
June 2024	135,000 forecasted	130,200
July 2024	55,000 forecasted	68,200
August 2024	22,000 forecasted	30,500
September 2024	13,000 forecasted	18,400
Total	740,000 forecasted	690,900

Cloud Seeding Activities - Since January 1 to present, the activities of cloud seeding flights and ground generator operations are shown below. There are three manual ground generators in the Kern. They are located at McNalleys north of Kernville, Onyx and Canebrake. Plumes typically rise 1,600 feet to 3,300 feet above the terrain. An activation temperature for silver iodide is 23 F to create new ice crystals.

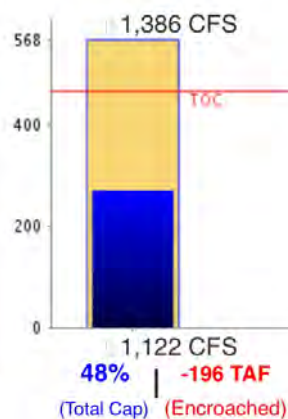
Jan 3	Seeding Flight 1.6 hrs	
Jan 6	Seeding Flight 1.4 hrs	
Jan 10		Ground Generators 11.0 hrs
Jan 13	Seeding Flight 1.4 hrs	Ground Generators 5.2 hrs
Jan 20	Seeding Flight 1.4 hrs	Ground Generators
Jan 21		Ground Generators 29.2 hrs for both days
Jan 22	Seeding Flight 1.5 hrs	Ground Generators 6.1 hrs
Feb 1	Seeding Flight 2.7 hrs	Ground Generators 33.7 unit-hrs
Feb 4	Seeding Flight 2.1 hrs	
Feb 6		Ground Generators 27.3 unit-hrs
Feb 7	Seeding Flight 2.4 hrs	
Feb 18	Seeding Flight 2.8 hrs	
Feb 20		Ground Generator at McNally's 9 unit-hrs
Mar 2	Seeding Flight 1.3 hrs	Ground Generators 36.5 unit-hrs
Mar 30	Seeding Flight 2.2 hrs	Ground Generators 40.9 unit-hrs
Apr 5	Seeding Flight 3.3 hrs	Ground Generators at McNally's 24.5 unit-hrs

Isabella Dam Operations

The graph below shows the trend in storage for the water year from October 1 to April 10th. The April 10th daily inflow was 1,386 cfs and the daily outflow was 1,122 cfs.



Isabella - Top of Conservation Conditions, April 10, 2024



Data as of Midnight: April 10, 2024

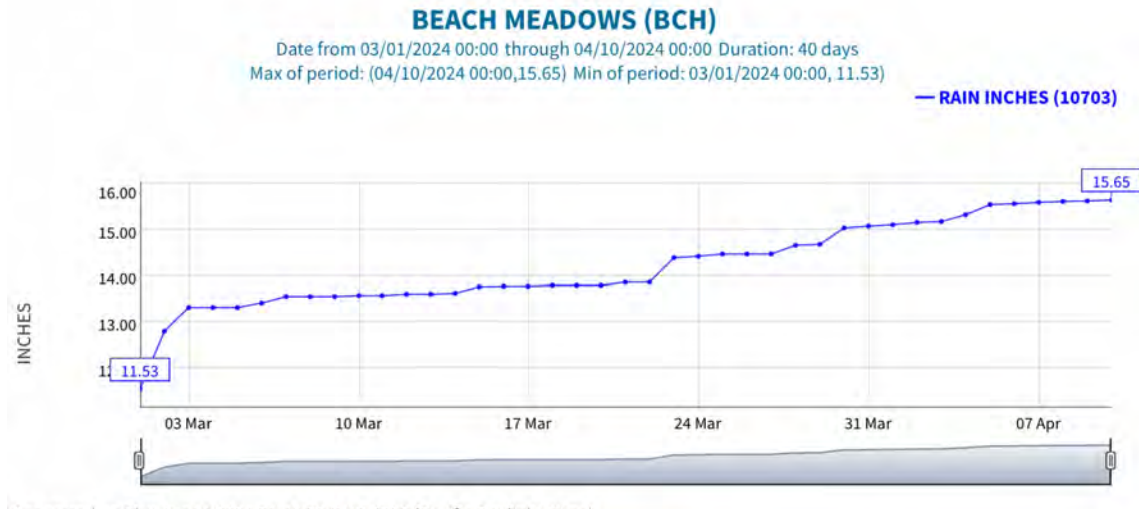
- Storage: 271,182 AF
- Reservoir Elevation: 2,574.98 FT
- 48% of Total Capacity
- -196 TAF Encroached For This Date
- Total Capacity: 568,000 AF
- Avg. Stor. April 10: 199,542 AF
- TOC Stor. 467,462 AF
- Daily Inflow: 1,386 CFS
- Daily Outflow: 1,122 CFS

Change Date: 10-Apr-2024

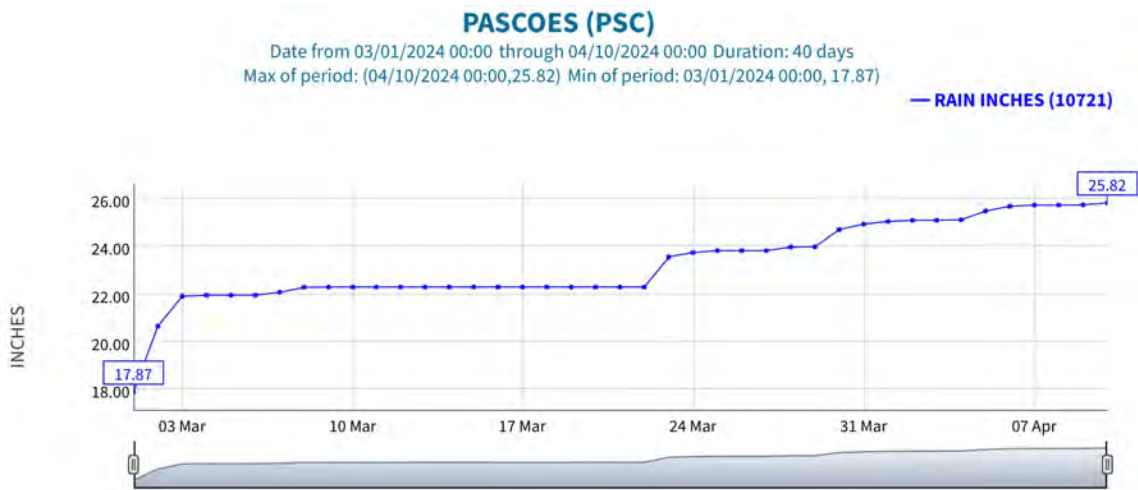
Water Supply Information

Precipitation - Plots of accumulated precipitation from the start of the WY 2024 to April 10th for several representative snow sensors in the Kern River Basin are shown below.

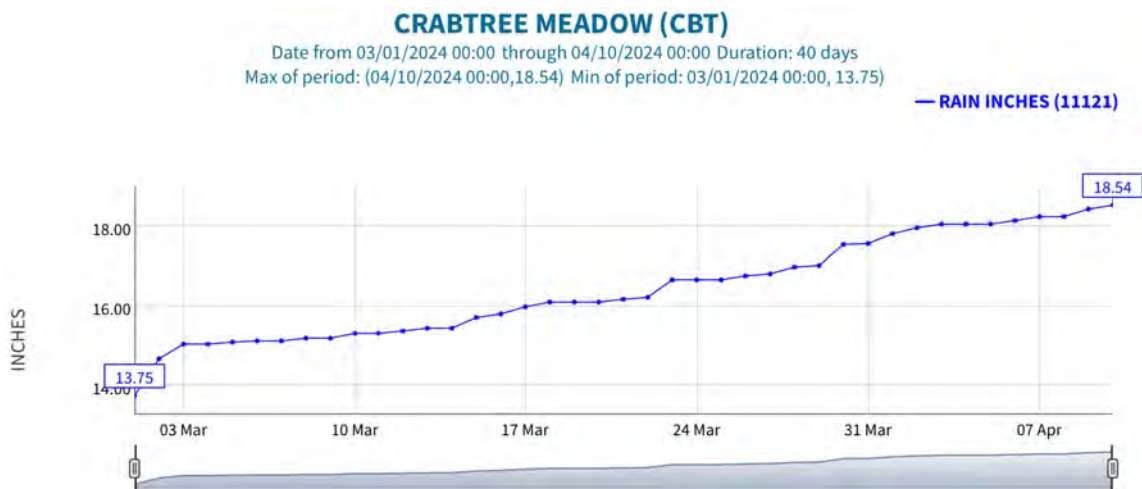
Elevation 7,650 ft. precip to date = 15.65" April 1 ave = 19.9"



Elevation 9,150 ft. precip to date = 25.82" April 1 ave = 29.4"



Elevation 10,700 ft. precip to date = 18.54" April 1 ave = 16.10"



Water Supply Information cont. The results of the April Kern River basin snow course measurements are shown below.

Snow Course Measurements for April 2024

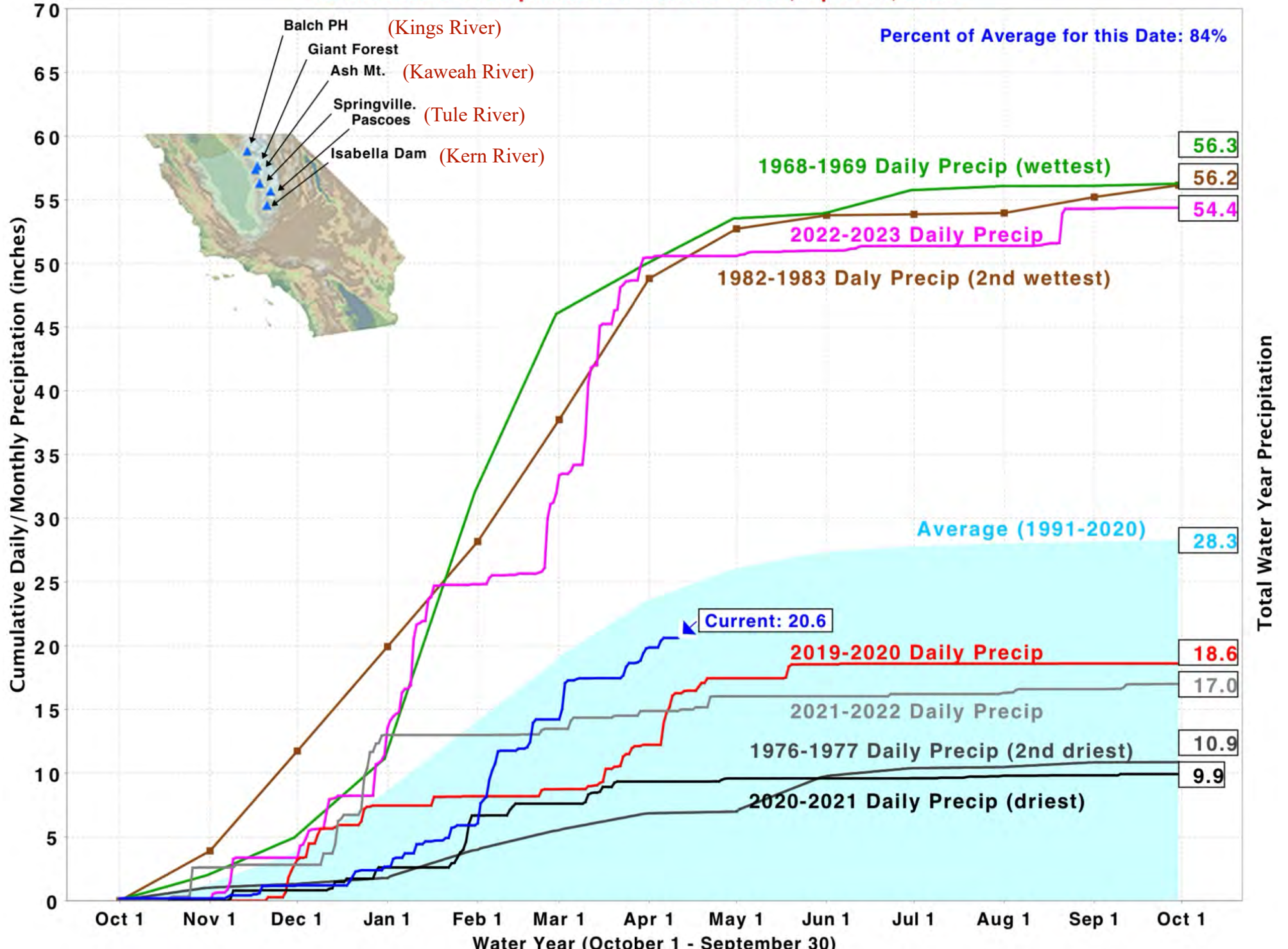
April measurements received as of Thu, April 04, 09:27 PM

Snow depth and water content are in inches. April 1 averages are based on measurements made during years 1991-2020. Courses are grouped by river basins, listed in north-south and high-low elevation order. Contact [Snow Surveys and Water Supply Forecasting Staff](#) for more information.

Num	Name	Elev.	Date	Depth	Points	Water Content	Density	April 1	Average
KERN RIVER									
250	BIGHORN PLATEAU	11,350	26-MAR	55.0	7	19.0	35%	21.8	87%
251	COTTONWOOD PASS	11,050	02-APR	48.5	10	17.0	35%	14.2	120%
252	SIBERIAN PASS	10,900	24-MAR	50.5	9	16.5	33%	18.5	89%
253	CRABTREE MEADOW	10,700	25-MAR	43.5	10	14.5	33%	18.8	77%
255	TYNDALL CREEK	10,650	26-MAR	50.0	10	16.5	33%	18.9	87%
275	SANDY MEADOWS	10,650	26-MAR	42.0	10	13.5	32%	18.2	74%
254	GUYOT FLAT	10,650	25-MAR	52.0	10	16.5	32%	19.9	83%
257	BIG WHITNEY MEADOW	9,750	01-APR	53.0	10	17.5	33%	15.9	110%
256	ROCK CREEK	9,600	28-MAR	41.0	10	14.0	34%	17.1	82%
258	ROUND MEADOW	9,000	29-MAR	60.0	10	23.5	39%	23.8	99%
259	RAMSHAW MEADOWS	8,700	30-MAR	36.5	10	11.5	32%	11.2	103%
260	LITTLE WHITNEY MEADOW	8,500	31-MAR	40.0	10	15.0	38%	13.5	111%
264	QUINN RANGER STATION	8,350	26-MAR	51.0	10	20.0	39%	18.4	109%
262	CASA VIEJA MEADOWS	8,300	27-MAR	50.5	10	18.5	37%	19.3	96%
261	BONITA MEADOWS	8,300	28-MAR	37.0	10	14.0	38%	13.4	104%
265	BEACH MEADOWS	7,650	28-MAR	20.5	10	8.5	41%	8.1	105%
249	DEAD HORSE MEADOW	7,300	02-APR	32.0	10	12.0	38%	10.2	118%
Basin Average Pct. of Apr 1: 97%									

April 11th Southern Sierra Nevada Percent of Average for this Date

Tulare Basin Precipitation: 6-Station Index, April 11, 2024



Tulare Basin 6-Station Precipitation (inches)

Water Year 2024

Thursday, April 11, 2024

Month	Average (Inches)	Observed (Inches)	Observed (as Percent of Avg)
October-2023	1.2"	0.2"	16%
November-2023	2.6"	1.0"	38%
December-2023	4.6"	1.5"	32%
January-2024	5.5"	3.3"	60%
February-2024	5.1"	8.3"	162%
March-2024	4.5"	5.6"	124%
April-2024	2.5"	0.8"	32%
May-2024	1.3"		
June-2024	0.4"		
July-2024	0.3"		
August-2024	0.1"		
September-2024	0.2"		

Total precipitation since Wednesday, April 10, 2024, 0400 PST: 0.0"

Total precipitation for past 7 days, 0400 - 0400 PST: 0.8"

(Monthly totals may not add up to seasonal total because of rounding)

Seasonal Total to Date (Inches)		Seasonal Avg to Date (Inches)		Percent of Seasonal Avg to Date	
20.6"		24.4"		84%	
Water Year Average (Inches)			Percent of an Average Water Year		
29.3"			74%		
Driest Water Years	Precipitation (inches)	Wettest Water Years	Precipitation (inches)		
2021	9.9"	1969	56.3"		
1977	10.9"	1983	56.2"		
1924	11.8"	1998	54.2"		
1959	13.4"	1967	50.1"		
2015	13.6"	1978	49.9"		
2014	14.2"	1938	47.6"		
1961	15.7"	2017	46.8"		

Notes:	Precipitation (inches)	Percent of Average
Last Year Seasonal Total to Date	50.6"	207%
Last Year April-2023 Total	0.1"	4%
Last Year March-2023 Total	18.5"	412%

B-120 WATER SUPPLY FORECAST UPDATE SUMMARY

UNIMPAIRED FLOW FOR - April 2024

(Provisional data, subject to change)

Report generated: April 11, 2024 15:03

APRIL-JULY FORECAST UPDATE SUMMARY (IN THOUSANDS OF ACRE-FEET)										
DAYS OF MONTH	APRIL 01		APRIL 09							
	AJ VOL	% AVG	AJ VOL	% AVG	AJ VOL	% AVG	AJ VOL	% AVG	AJ VOL	% AVG
Kings River below Pine Flat Reservoir										Average = 1,204
90% Exceedance	980	81	1,080	90						
50% Exceedance	1,200	100	1,250	104						
10% Exceedance	1,550	129	1,510	125						
Kaweah River below Terminus Reservoir										Average = 276
90% Exceedance	210	76	230	83						
50% Exceedance	270	98	280	101						
10% Exceedance	380	138	370	134						
Tule River below Lake Success										Average = 56
90% Exceedance	35	63	37	66						
50% Exceedance	55	98	56	100						
10% Exceedance	98	175	91	163						
Kern River, Inflow to Lake Isabella										Average = 427
90% Exceedance	380	89	390	91						
50% Exceedance	440	103	440	103						
10% Exceedance	580	136	550	129						

NOTES

- Runoff forecasts are unimpaired (full natural) flows which represent the natural water production of the river basin, unaltered by upstream diversions, storage, or export or import of water to or from other watersheds.
- Runoff exceedance levels are derived from historical data. The 90 percent exceedance level and the 10 percent exceedance level together comprise a range about the median forecast in which the actual runoff should fall 8 times out of 10.
- Forecasts are stated in 1,000's of acre-feet and percent of (30-year) average.
- The averages are for the period 1991 to 2020.

April 11th April - July Runoff Forecast

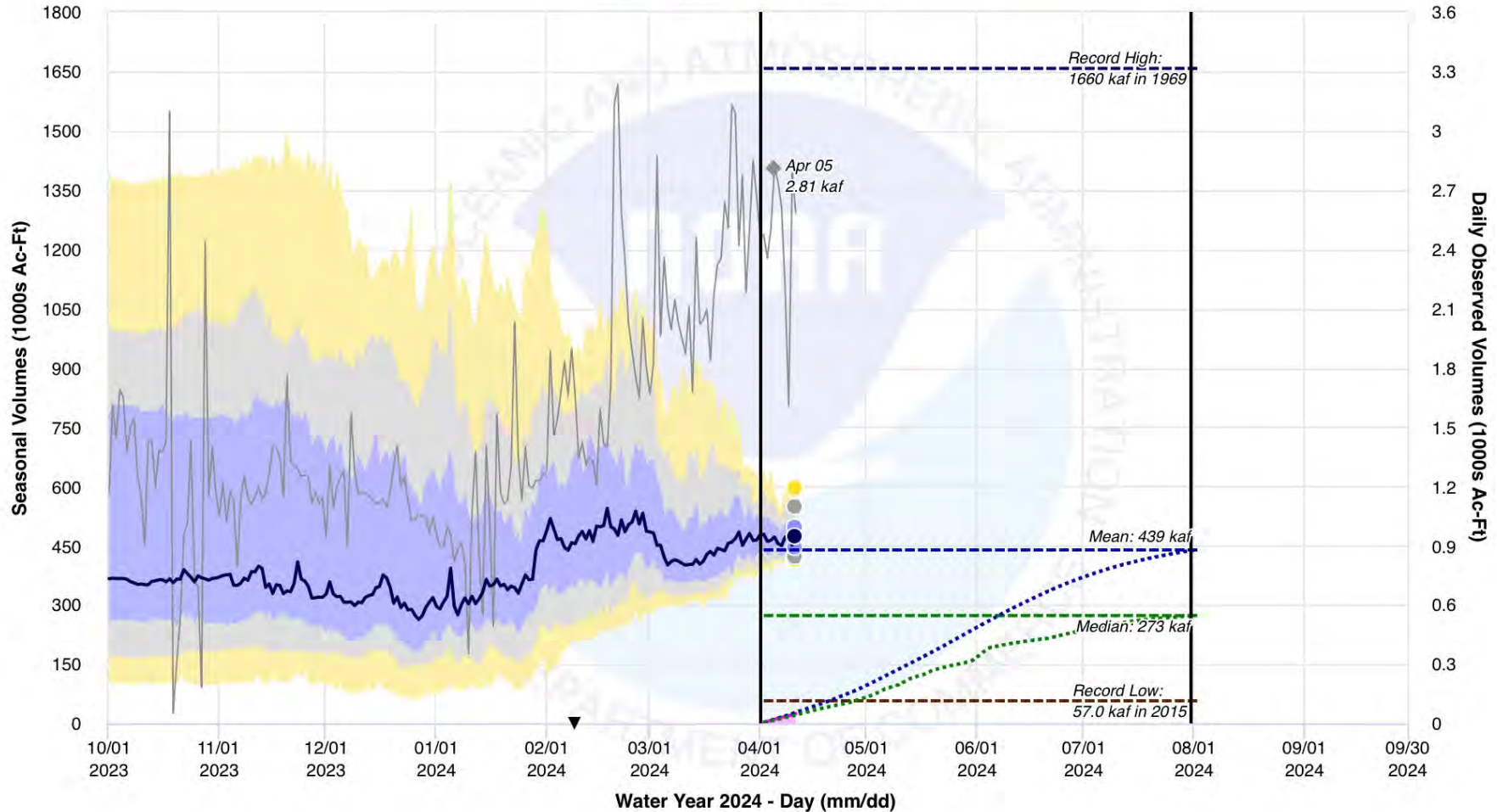
2024 Seasonal Trend Plot (Year View)

Tabular View | Select a Different Water Year: 2024

Switch to Seasonal View

KERN - ISABELLA DAM, BLO (ISAC1) 04/11/2024
Median Forecast: 474 kaf | 108% of Mean | 174% of Median

Created: 04/11/2024 at 09:11 AM PDT



Observed Season to Date Percent of Mean: 81% (24.7 kaf) Season to Date Mean: 30.5 kaf

Historical Apr-Jul Vol Max: 1660 kaf in 1969 Historical Apr-Jul Vol Min: 57.0 kaf in 2015

This product only considers meteorological uncertainty and does not account for hydrologic uncertainty.

Means/medians are based on the period of Water Years 1980 through 2022.

Legend entries below can be toggled on/off.

- Apr-Jul Vol Mean
- Apr-Jul Vol Median
- Season to Date Mean
- ◆ Season to Date Median
- Season to Date Obs
- Daily Obs
- ◆ Obs Peak
- Apr-Jul Fcst 50%
- Apr-Jul Fcst 25/75%
- Apr-Jul Fcst 10/90%
- Apr-Jul Fcst Max/Min
- Record Low
- ▼ Snow Model Updates

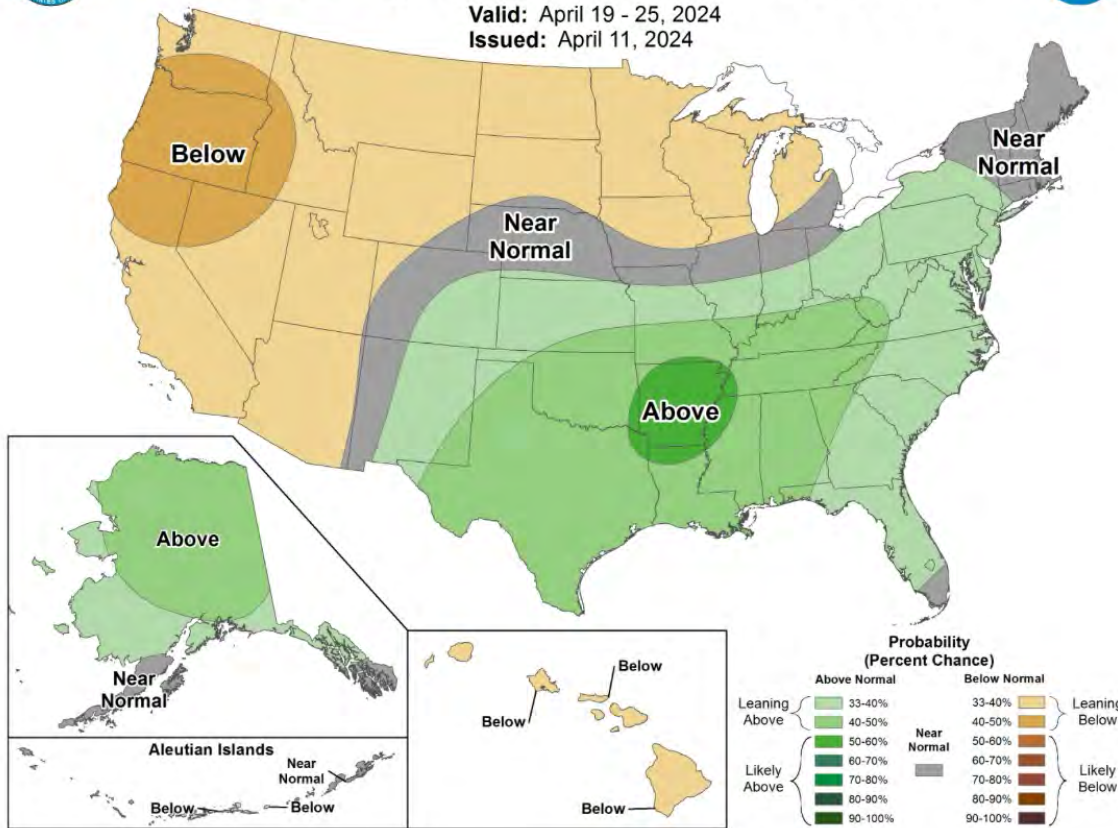
8-14 day outlook shows likely below precipitation and likely above temperatures



8-14 Day Precipitation Outlook



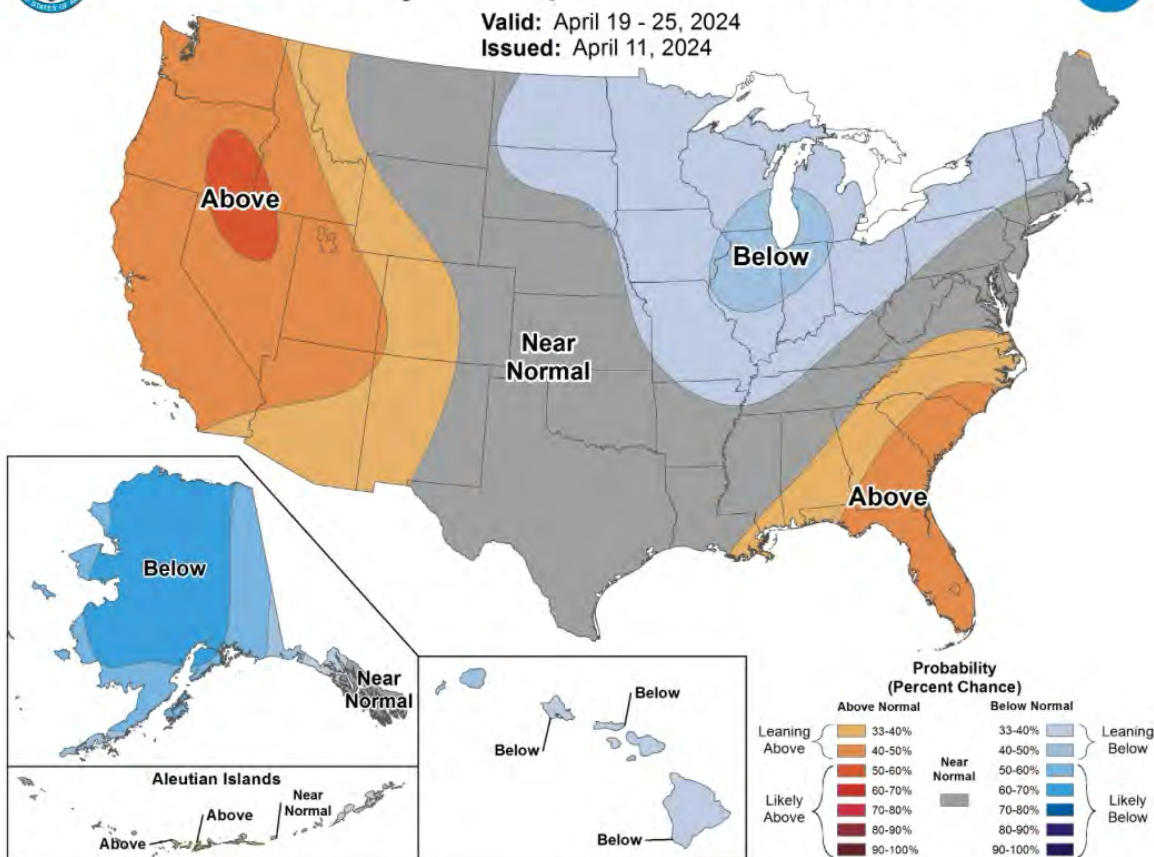
Valid: April 19 - 25, 2024
 Issued: April 11, 2024



8-14 Day Temperature Outlook



Valid: April 19 - 25, 2024
 Issued: April 11, 2024

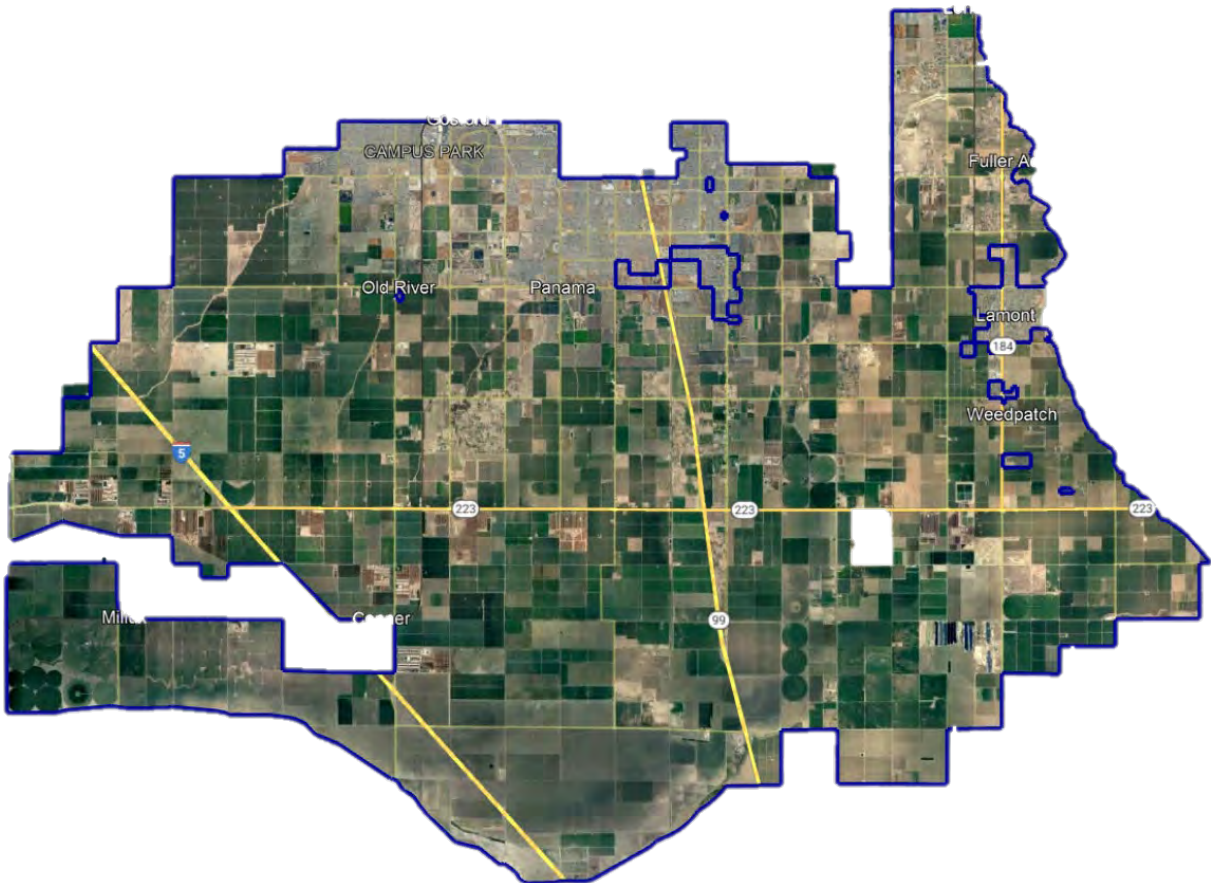


Aerial Snow Observatory - The second Kern ASO survey of the season occurred on Thursday April 11th. Two planes were used flying simultaneously within a few thousand feet of each other.

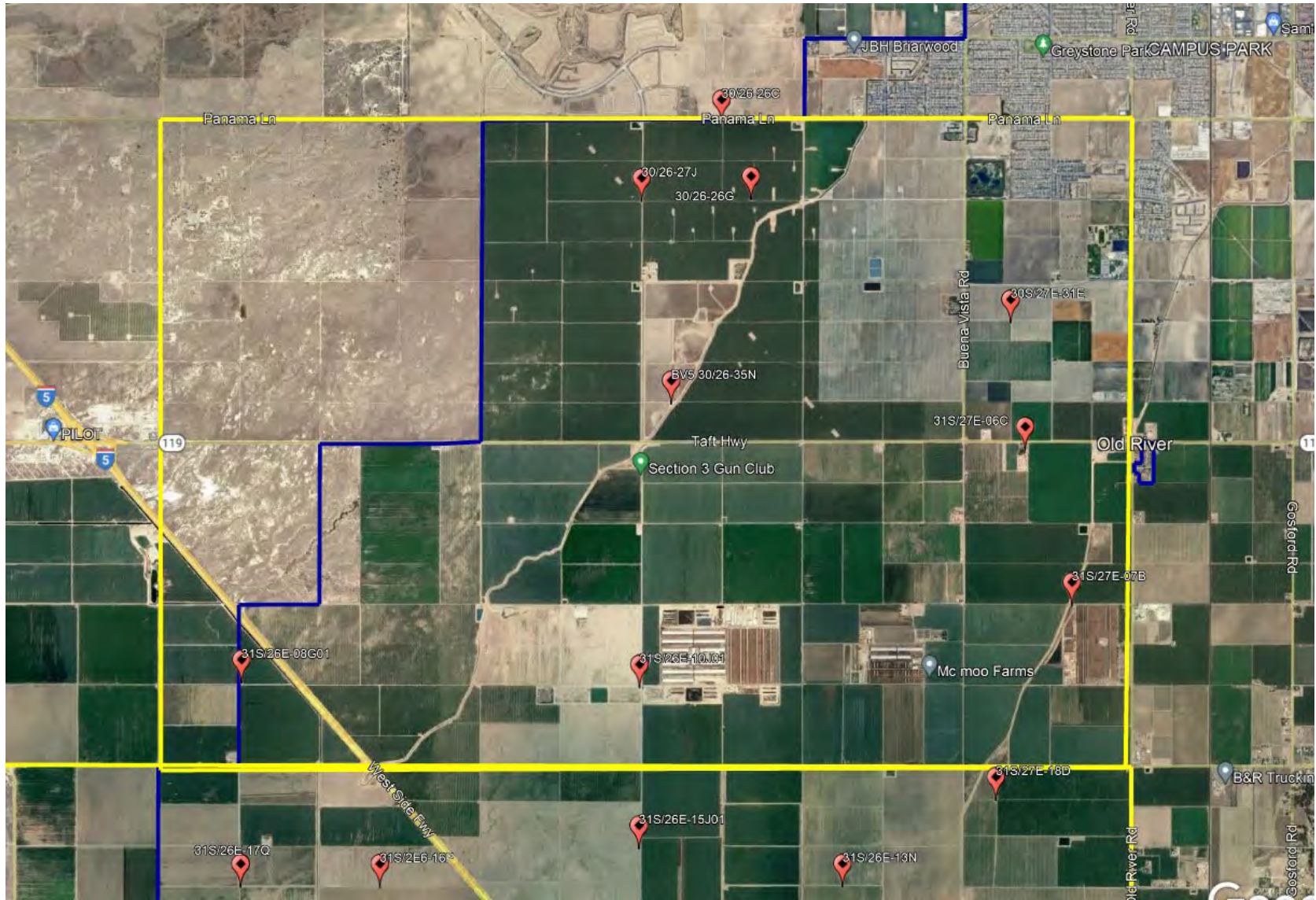
Public Outreach - Answered questions on upcoming monthly inflows into Isabella Reservoir and DWR forecast updates.



Monthly Groundwater Report



April 2024

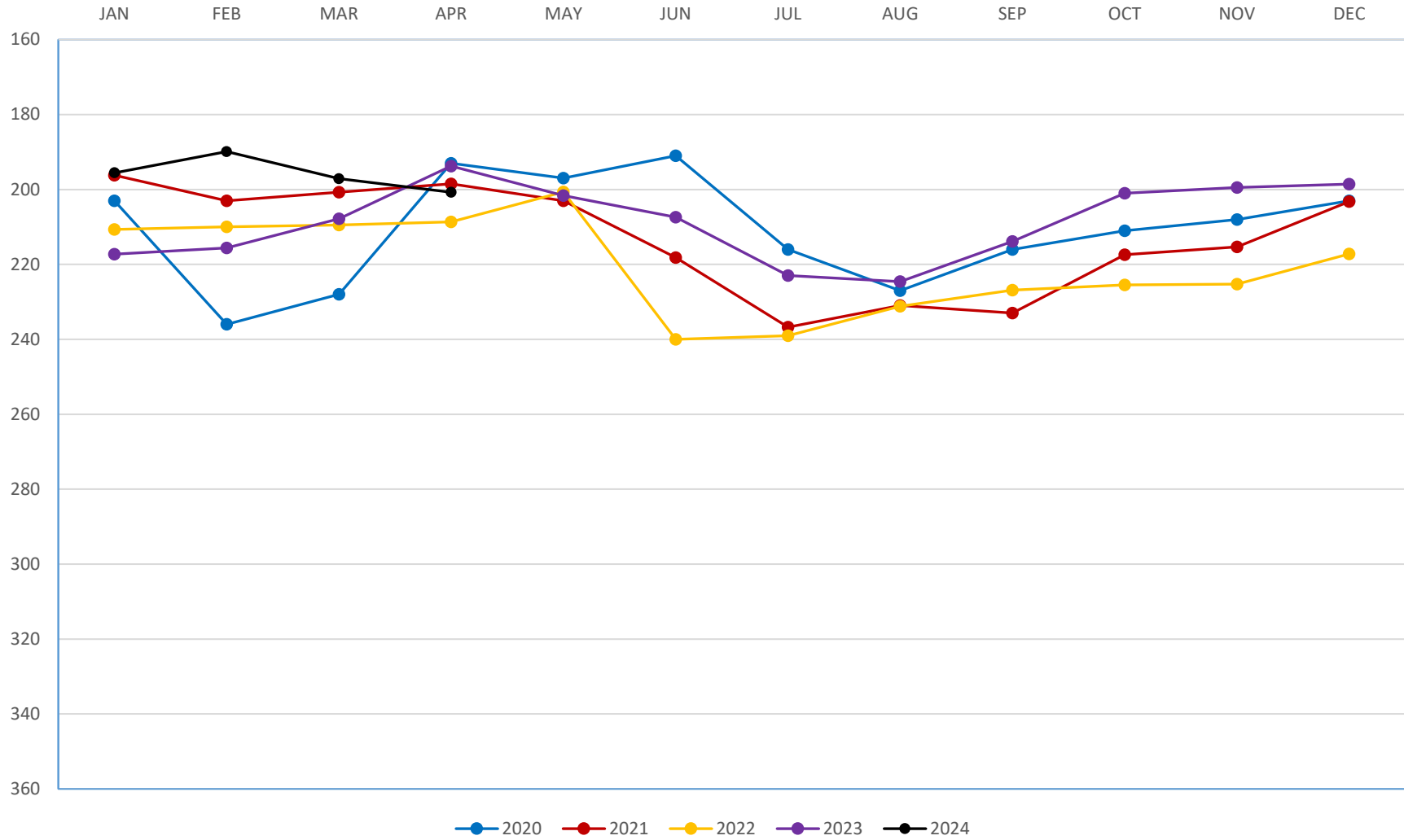


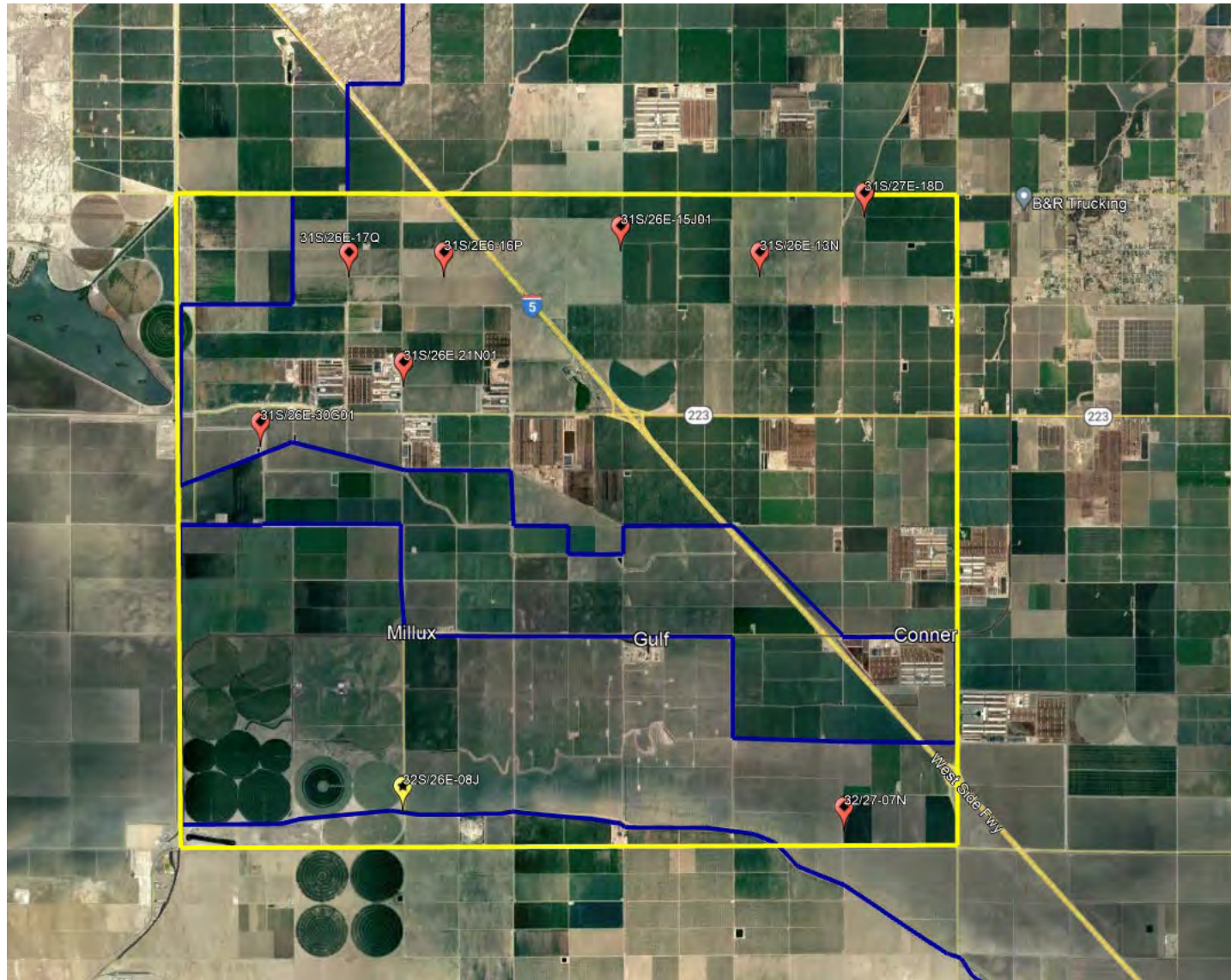
		JAN 2020	JAN 2021	JAN 2022	JAN 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	OCT 2024	NOV 2024	DEC 2024	HIGH (by well)	LOW (by well)	AVERAGE (by well)	
Northwest Quadrant	30/26-26C	204	G	G	207	194	189	185	200									207	185	197	
	30/26-26G	199	G	G	G	201	196	195	208									208	195	200	
	30/26-27J	210	G	G	218	196	189	202	R									218	189	203	
	30/26-35N	171	169	185	217	184	179	177	180									217	169	183	
	30/27-31E	219	201	224	228	209	205	219	207									228	201	214	
	31/26-08G	204	205	200	NR	168	170	200	200										205	168	192
	31/26-10J	NR	203	205	216	201	180	202	200										216	180	201
	31/27-06C	215	203	215	228	210	209	212	209										228	203	213
	31/27-07B	200	NR	235	207	197	192	182	202										235	182	202
	MONTHLY AVG	203	196	211	217	196	190	197	201												
MAXIMUM DEPTH TO WATER NW (running average for all data last 5 years)																	235				
MINIMUM DEPTH TO WATER NW (running average for all data last 5 years)																	168				
AVERAGE DEPTH TO WATER NW (running average for all data last 5 years)																	201				

G = gated well, unable to access
 R = running well, no measurement taken
 NR = temporary 'no reading', no measurement taken

yellow shading = inactive well

NORTHWEST

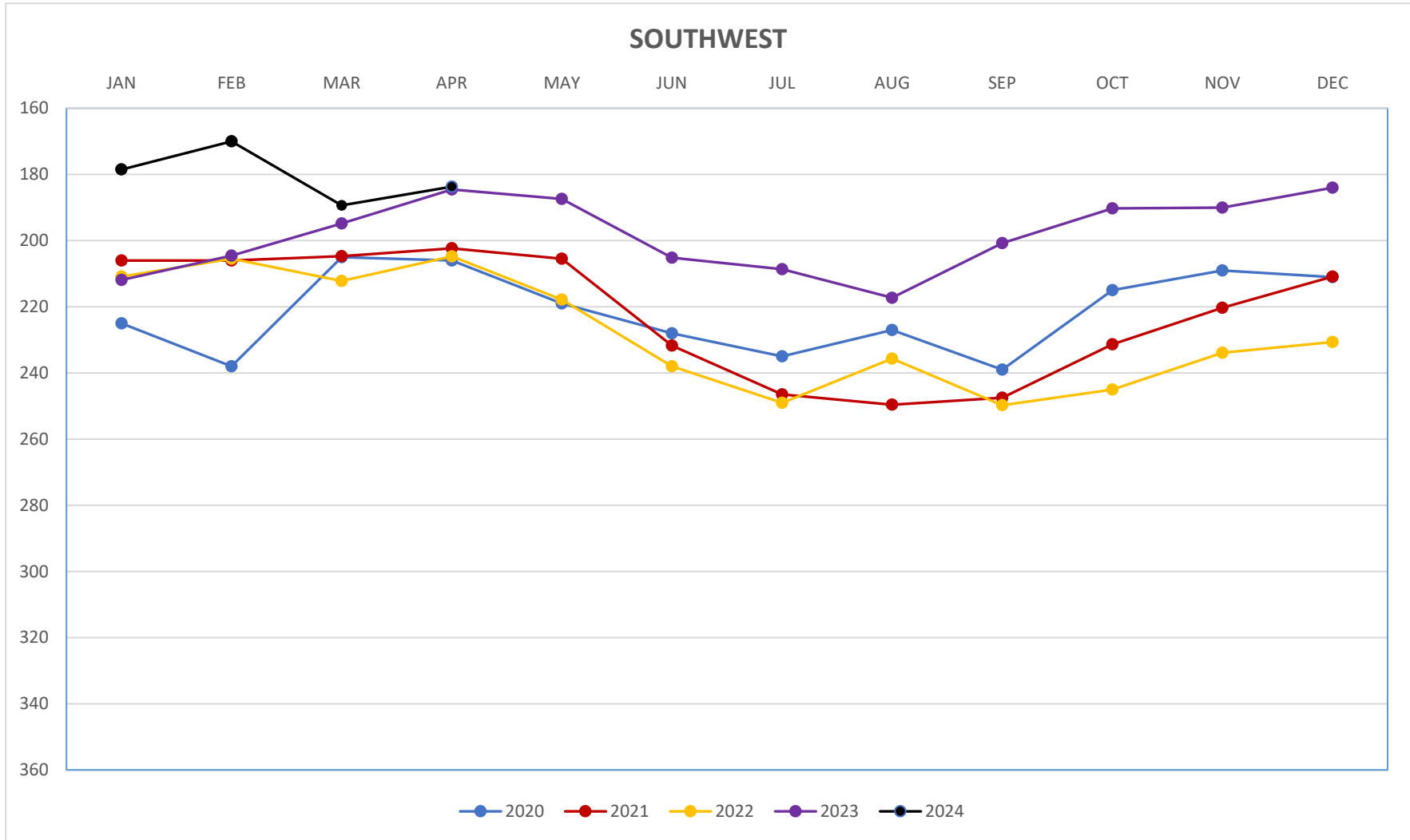


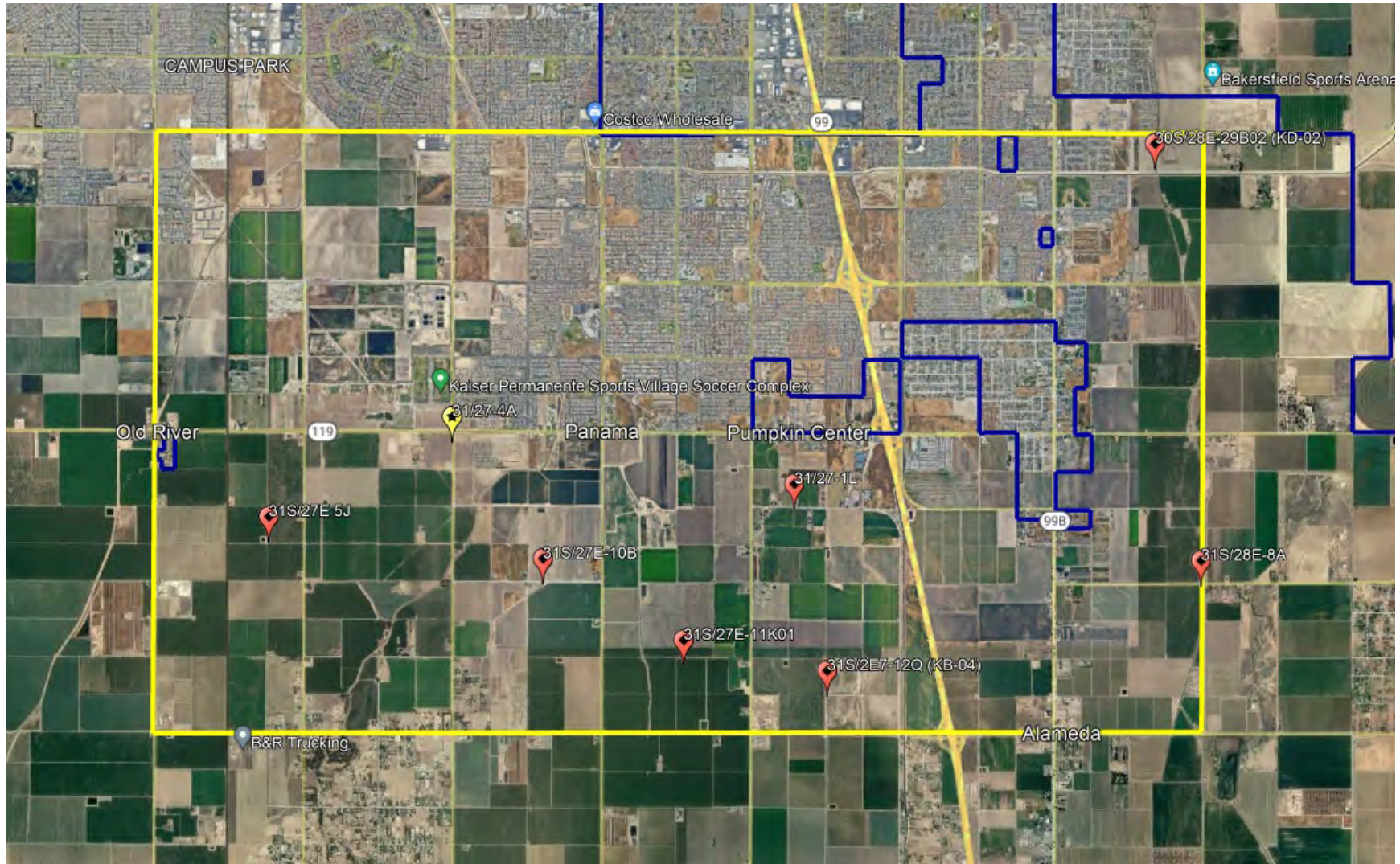


		JAN 2020	JAN 2021	JAN 2022	JAN 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	OCT 2024	NOV 2024	DEC 2024	HIGH (by well)	LOW (by well)	AVERAGE (by well)
Southwest Quadrant	31/26-13N	NR	NR	206	215	191	189	202	200									215	189	201
	31/26-15J	NR	201	205	211	186	178	181	176									211	176	191
	31/26-16P	204	202	200	207	181	165	201	176									207	165	192
	31/26-17Q	203	219	202	NR	188	176	R	R									219	176	198
	31/26-21N	204	204	228	215	180	171	R	200									228	171	200
	31/26-30G	268	203	234	200	152	146	206	R									268	146	201
	31/27-18D01	201	203	222	222	190	184	R	R									222	184	204
	32/26-08J	209	212	200	213	NR	NR	202	201									213	200	206
	32/27-07N	288	200	201	NR	160	151	144	149									288	144	185
	MONTHLY AVG	225	206	211	212	179	170	189	184											
MAXIMUM DEPTH TO WATER SW (running average for all data last 5 years)																	288			
MINIMUM DEPTH TO WATER SW (running average for all data last 5 years)																	144			
AVERAGE DEPTH TO WATER SW (running average for all data last 5 years)																	197			

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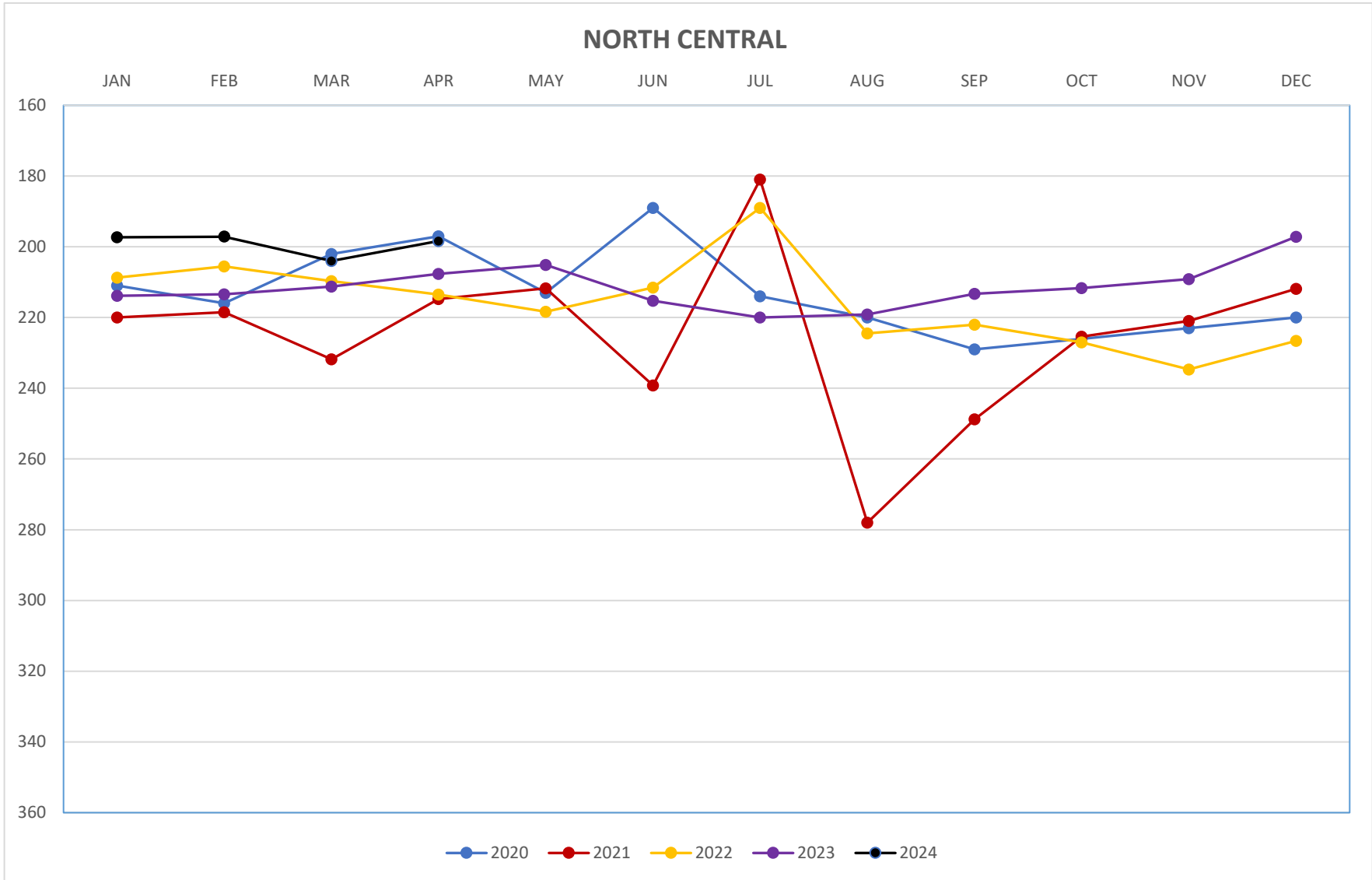


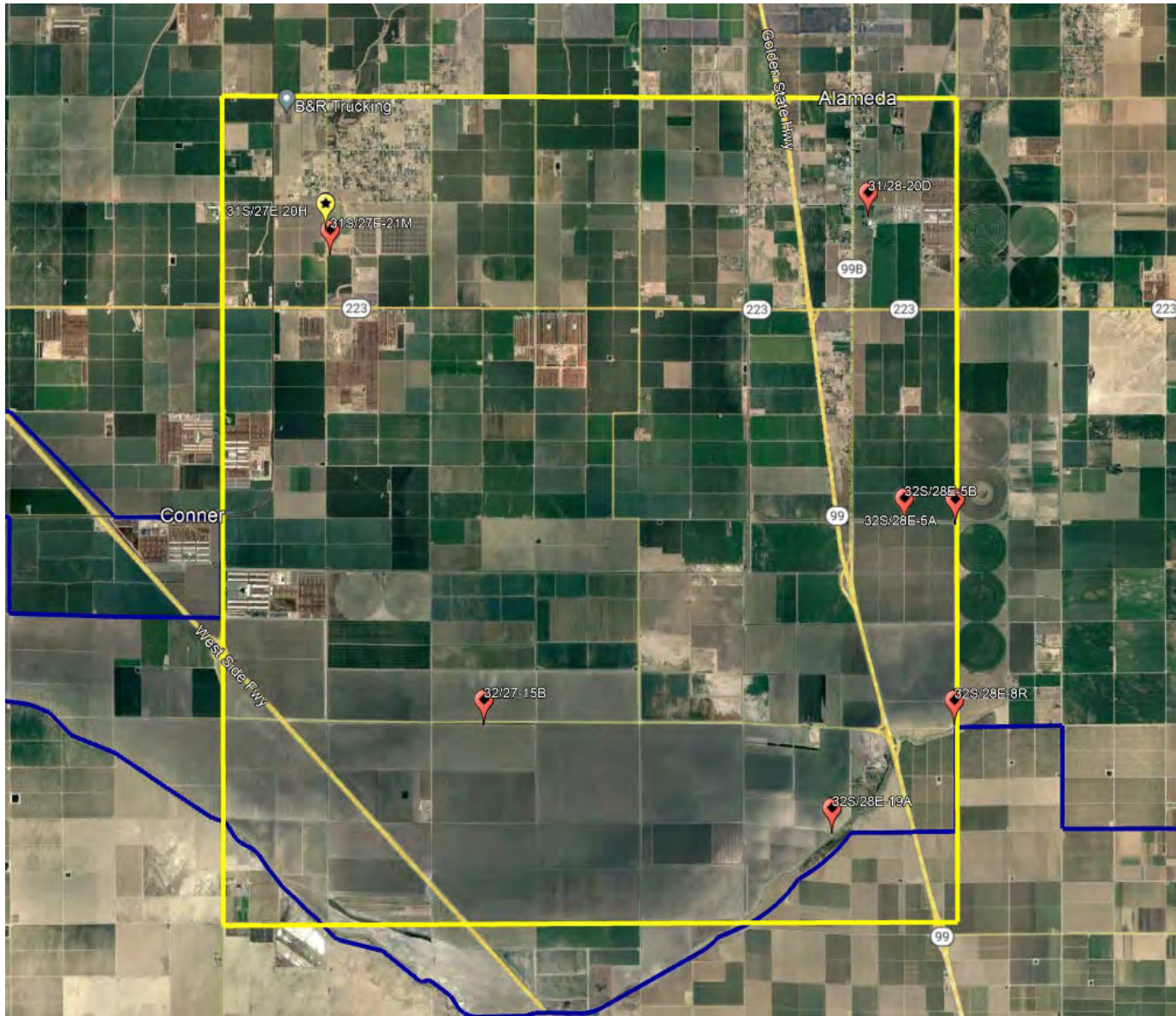


		JAN 2020	JAN 2021	JAN 2022	JAN 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	OCT 2024	NOV 2024	DEC 2024	HIGH (by well)	LOW (by well)	AVERAGE (by well)	
North-Central Quadrant	30/28-29B	229	225	231	240	NR	NR	232	NR									240	225	231	
	31/27-01L	232	219	170	219	212	205	207	207									232	170	209	
	31/27-04A	184	179	182	186	174	171	169	172									186	169	177	
	31/27-05J	228	207	230	214	209	209	210	204									230	204	214	
	31/27-10B	208	208	210	210	208	200	199	R									210	199	206	
	31/27-12Q	139	141	174	172	149	145	162	160									174	139	155	
	31/28-08A	244	249	264	256	232	253	249	249									264	232	250	
	MONTHLY AVG	209	204	209	214	197	197	204	198												
	MAXIMUM DEPTH TO WATER N-C (running average for all data last 5 years)																	264			
	MINIMUM DEPTH TO WATER N-C (running average for all data last 5 years)																	139			
AVERAGE DEPTH TO WATER N-C (running average for all data last 5 years)																	204				

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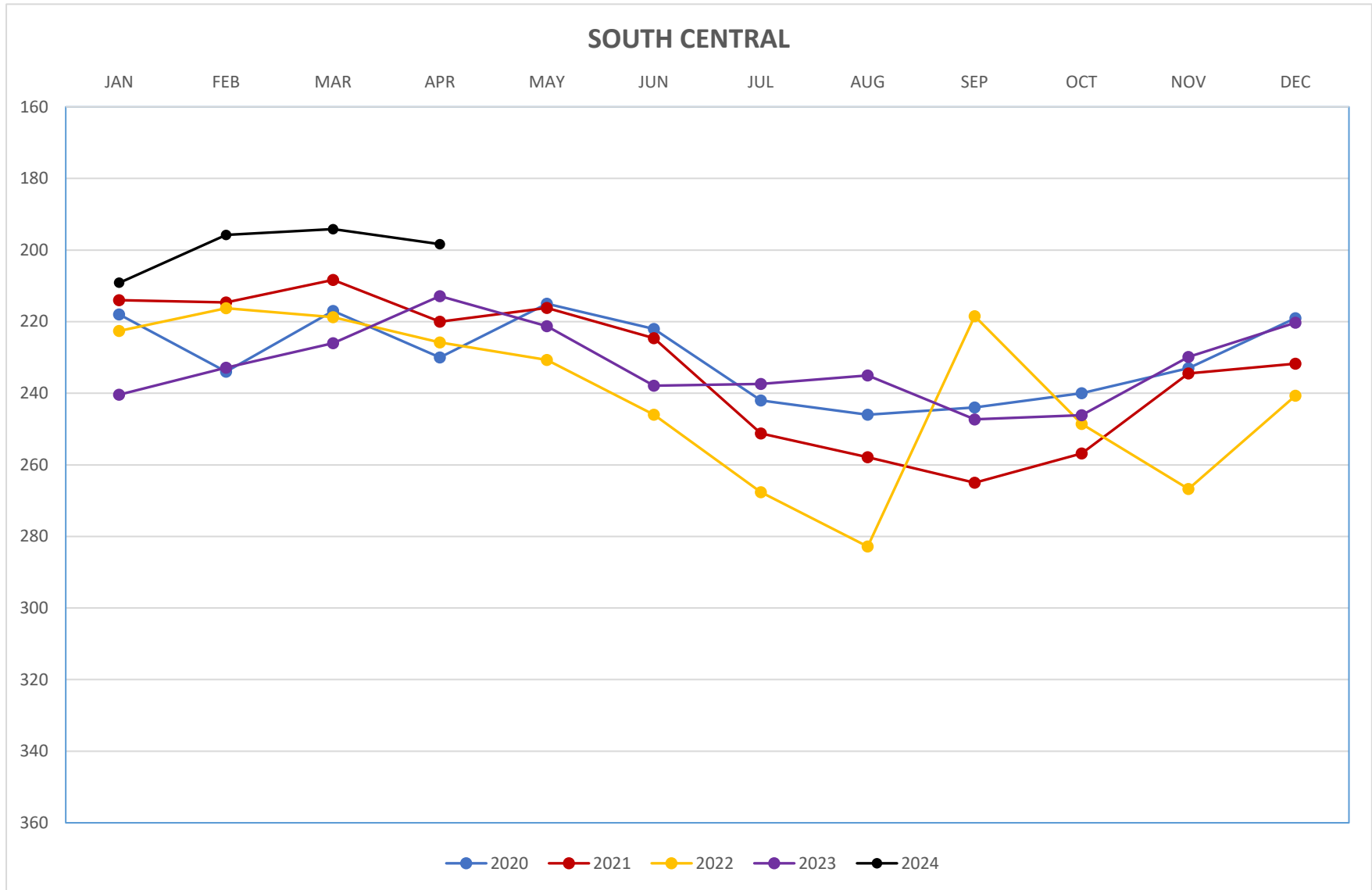


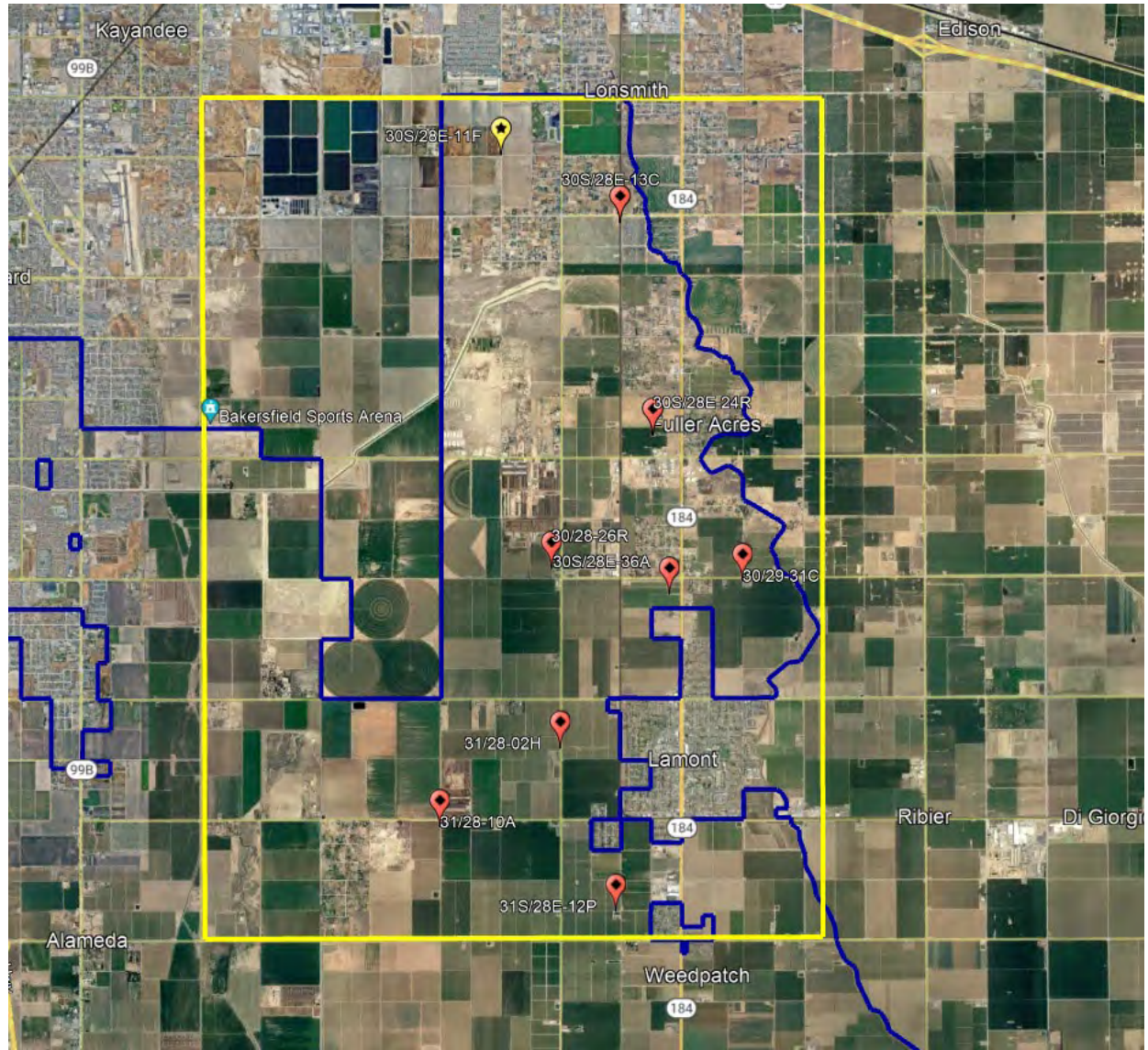


		JAN 2020	JAN 2021	JAN 2022	JAN 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	OCT 2024	NOV 2024	DEC 2024	HIGH (by well)	LOW (by well)	AVERAGE (by well)	
South-Central Quadrant	31/27-20H	211	NR	213	203	162	159	161	165									213	159	182	
	31/27-21M	L	NR	220	NR	189	183	186	R									220	183	195	
	31/28-20D	201	R	202	203	NR	154	R	R									203	154	190	
	32/27-15B	202	200	201	338	NR	180	214	NR									338	180	223	
	32/28-19A	222	222	255	NR	242	241	204	NR									255	204	231	
	32/28-05A	239	220	214	243	217	216	200	215									243	200	221	
	32/28-05B	201	205	221	215	210	205	192	NR									221	192	207	
	32/28-08R	253	222	255	NR	235	228	202	215									255	202	230	
	MONTHLY AVG	218	214	223	240	209	196	194	198												
	MAXIMUM DEPTH TO WATER S-C (running average for all data last 5 years)																	338			
MINIMUM DEPTH TO WATER S-C (running average for all data last 5 years)																	154				
AVERAGE DEPTH TO WATER S-C (running average for all data last 5 years)																	211				

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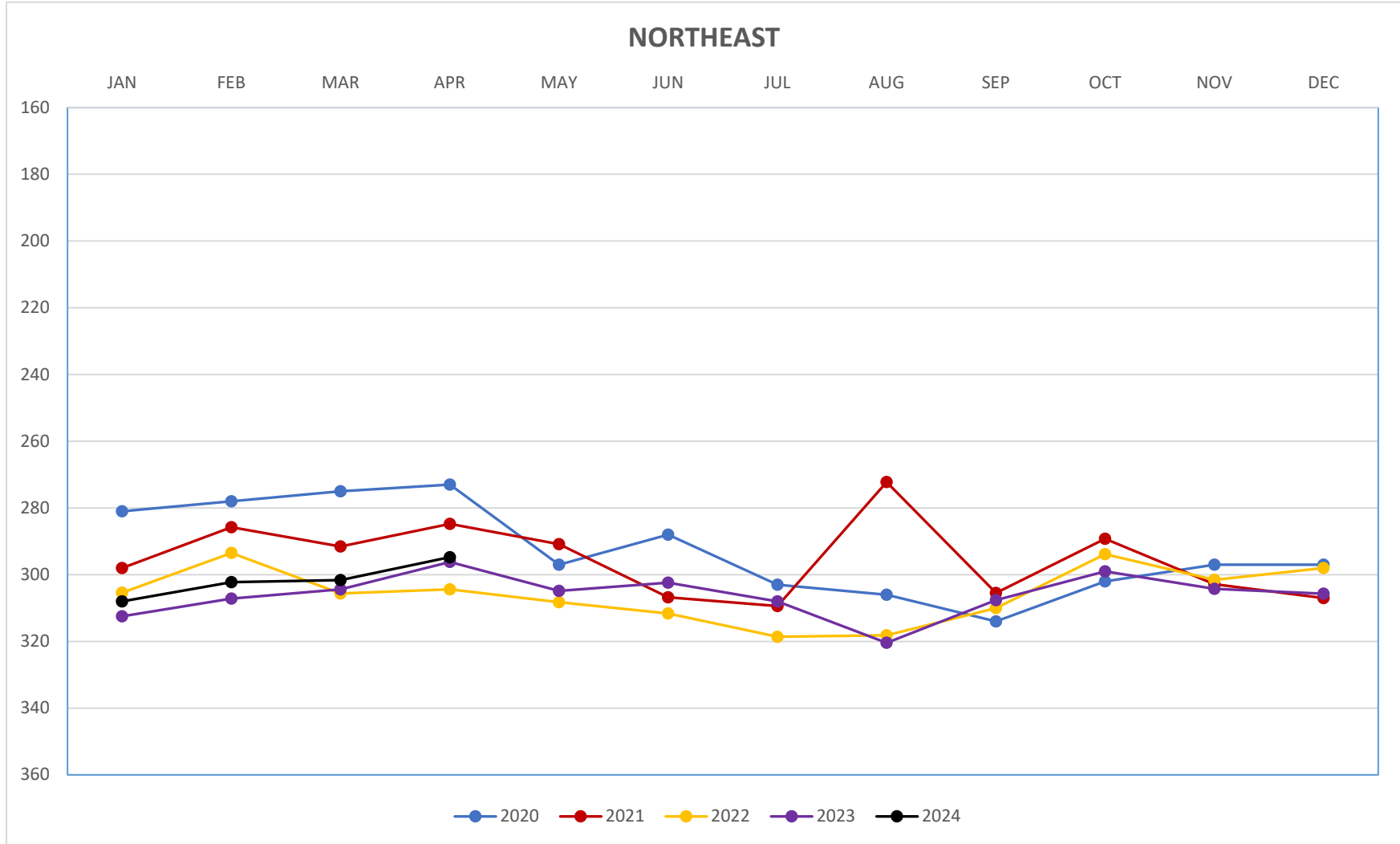


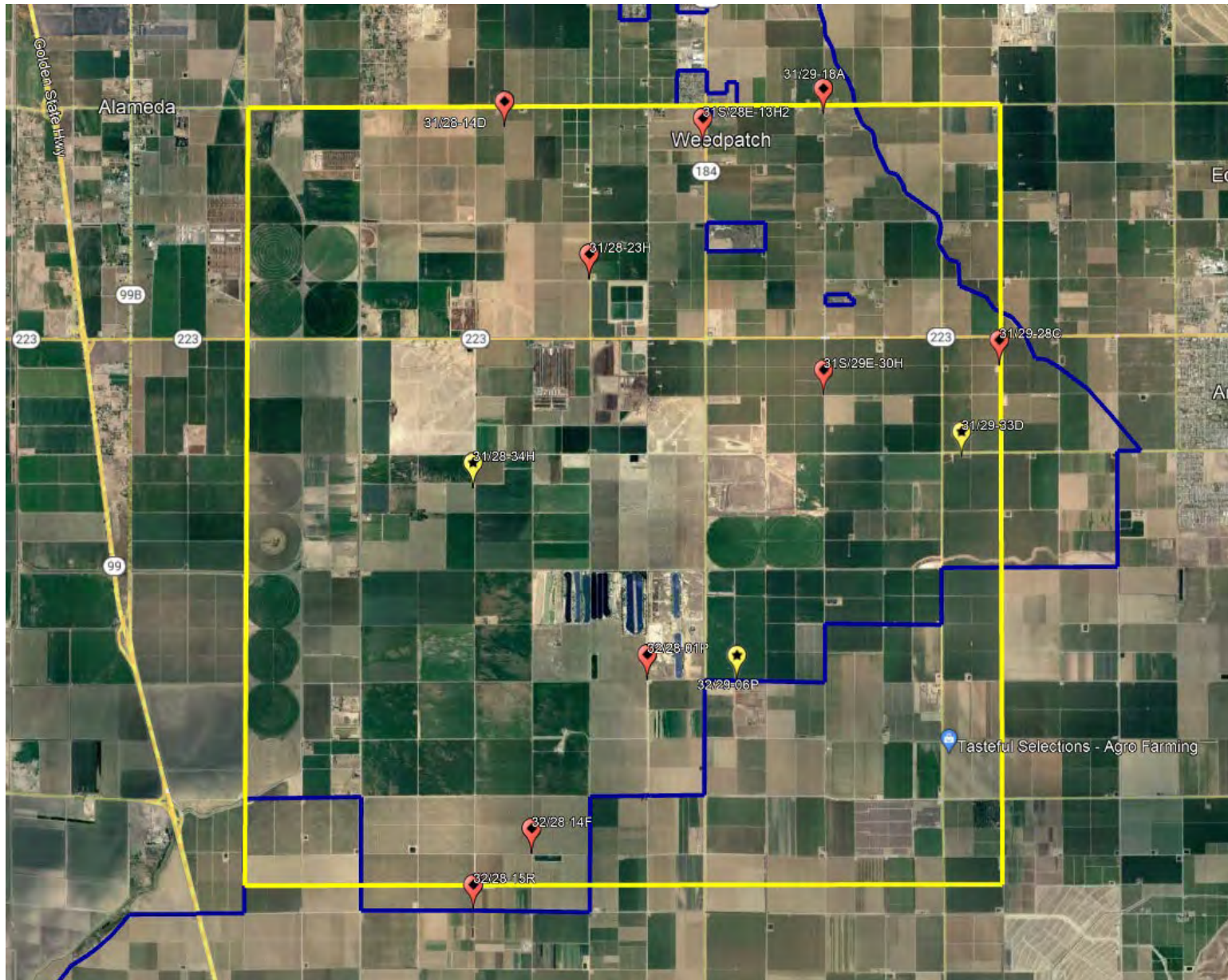


		JAN 2020	JAN 2021	JAN 2022	JAN 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	OCT 2024	NOV 2024	DEC 2024	HIGH (by well)	LOW (by well)	AVERAGE (by well)	
Northeast Quadrant	30/28-11F	263	264	272	NR	280	278	278	NR									280	263	273	
	30/28-13C	300	331	320	313	317	322	320	NR									331	300	318	
	30/28-26R	NR	NR	NR	NR	306	298	296	294									306	294	299	
	30/28-36A	212	NR	NR	334	336	344	327	327									344	212	313	
	30/29-31C	338	330	344	347	344	342	340	NR									347	330	341	
	31/28-02H	290	295	326	310	NR	277	293	NR									326	277	299	
	31/28-10A	253	258	265	269	265	262	264	266									269	253	263	
	31/28-12P	284	NR	NR	302	NR	295	295	292									302	284	294	
	MONTHLY AVG	277	296	305	313	308	302	302	295												
	MAXIMUM DEPTH TO WATER NE (running average for all data last 5 years)																	347			
MINIMUM DEPTH TO WATER NE (running average for all data last 5 years)																	212				
AVERAGE DEPTH TO WATER NE (running average for all data last 5 years)																	300				

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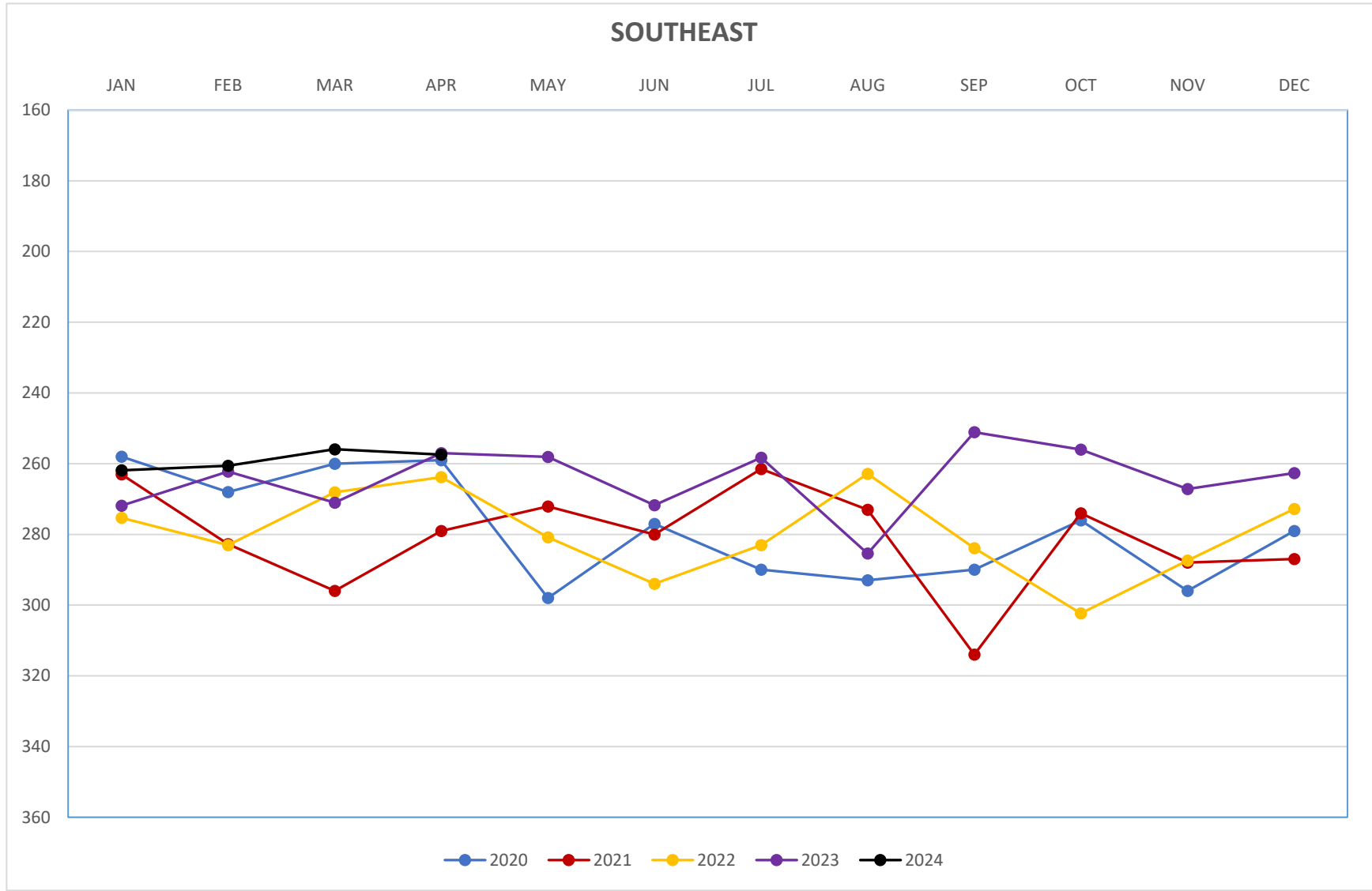


2024

		JAN 2020	JAN 2021	JAN 2022	JAN 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024	AUG 2024	SEP 2024	OCT 2024	NOV 2024	DEC 2024	HIGH (by well)	LOW (by well)	AVERAGE (by well)	
Southeast Quadrant	31/28-13H2	NR	NR	290	299	296	285	290	NR									299	285	292	
	31/28-14D	230	235	247	245	243	240	238	241									247	230	240	
	31/28-23H	286	275	276	313	300	296	295	292									313	275	292	
	31/28-34H	206	204	203	213	224	NR	219	215									224	203	212	
	31/29-28C	344	NR	NR	201	NR	NR	210	NR									344	201	252	
	31/29-30H	NR	331	353	333	324	317	323	NR									353	317	330	
	31/29-33D	250	338	239	347	341	337	336	345									347	239	317	
	32/28-14F	222	241	NR	NR	243	230	238	245										245	222	237
	32/28-15R	272	291	314	298	R	272	281	280										314	272	287
	32/28-01P	NR	NR	207	NR	196	183	200	NR										207	183	197
	32/29-06P	177	208	NR	198	190	185	185	184										208	177	190
	MONTHLY AVG	248	265	266	272	262	261	256	257												
																		353			
																		177			
																			261		

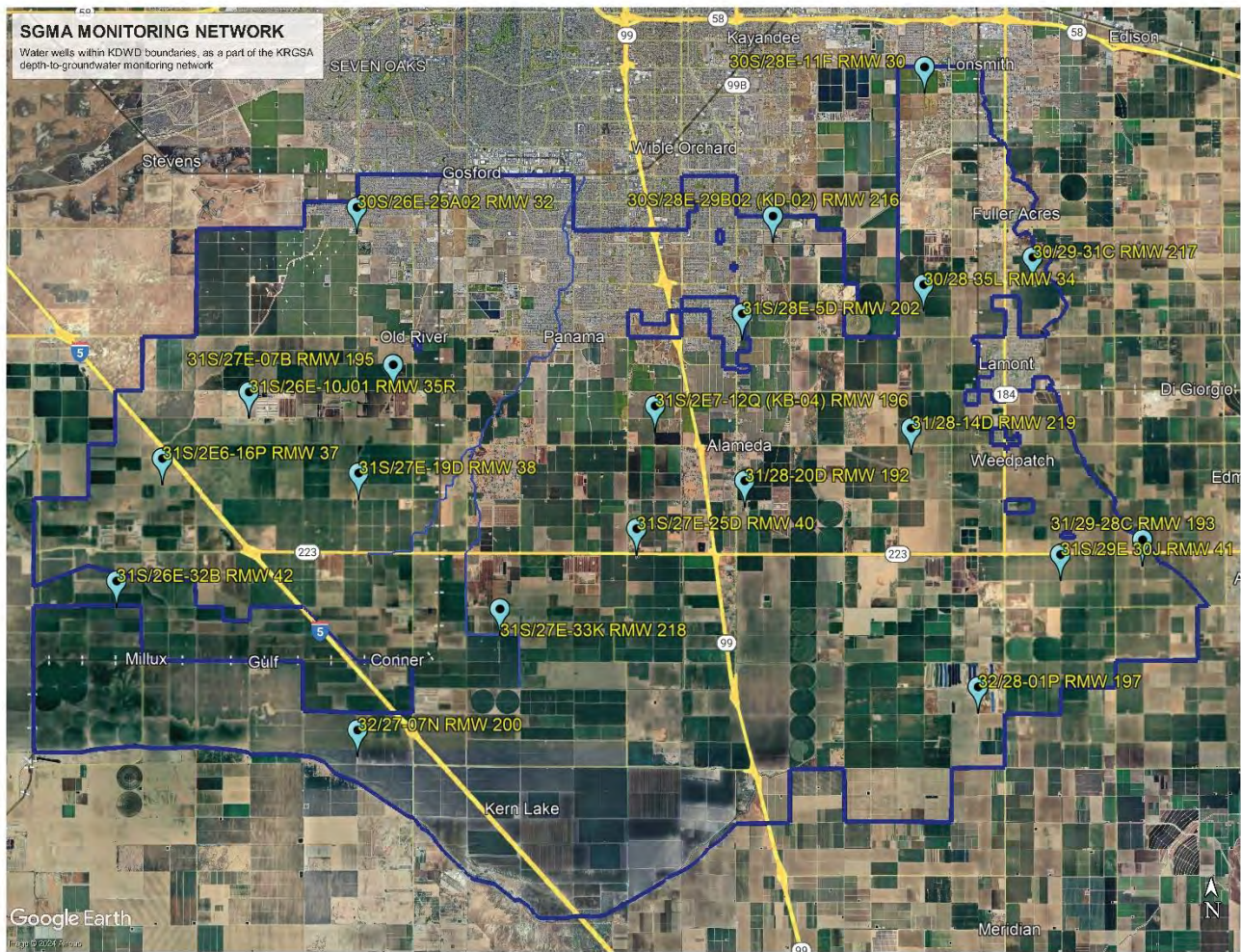
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Monthly SGMA Wells Monitoring Report

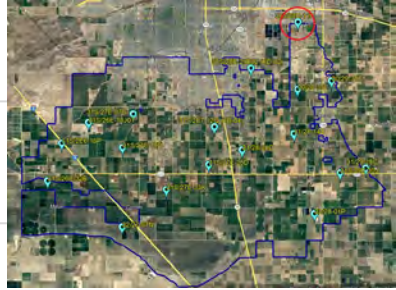
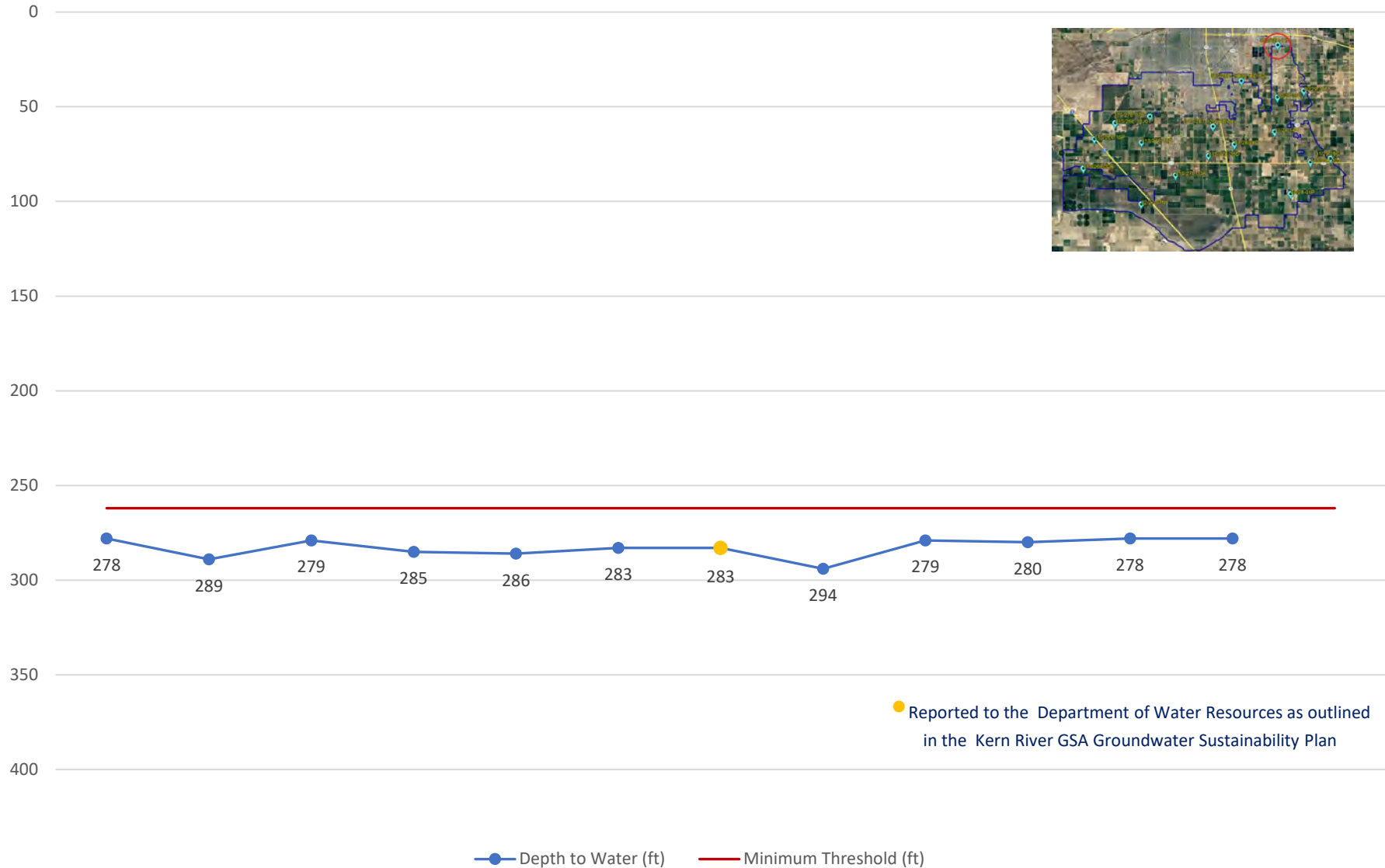


April 2024

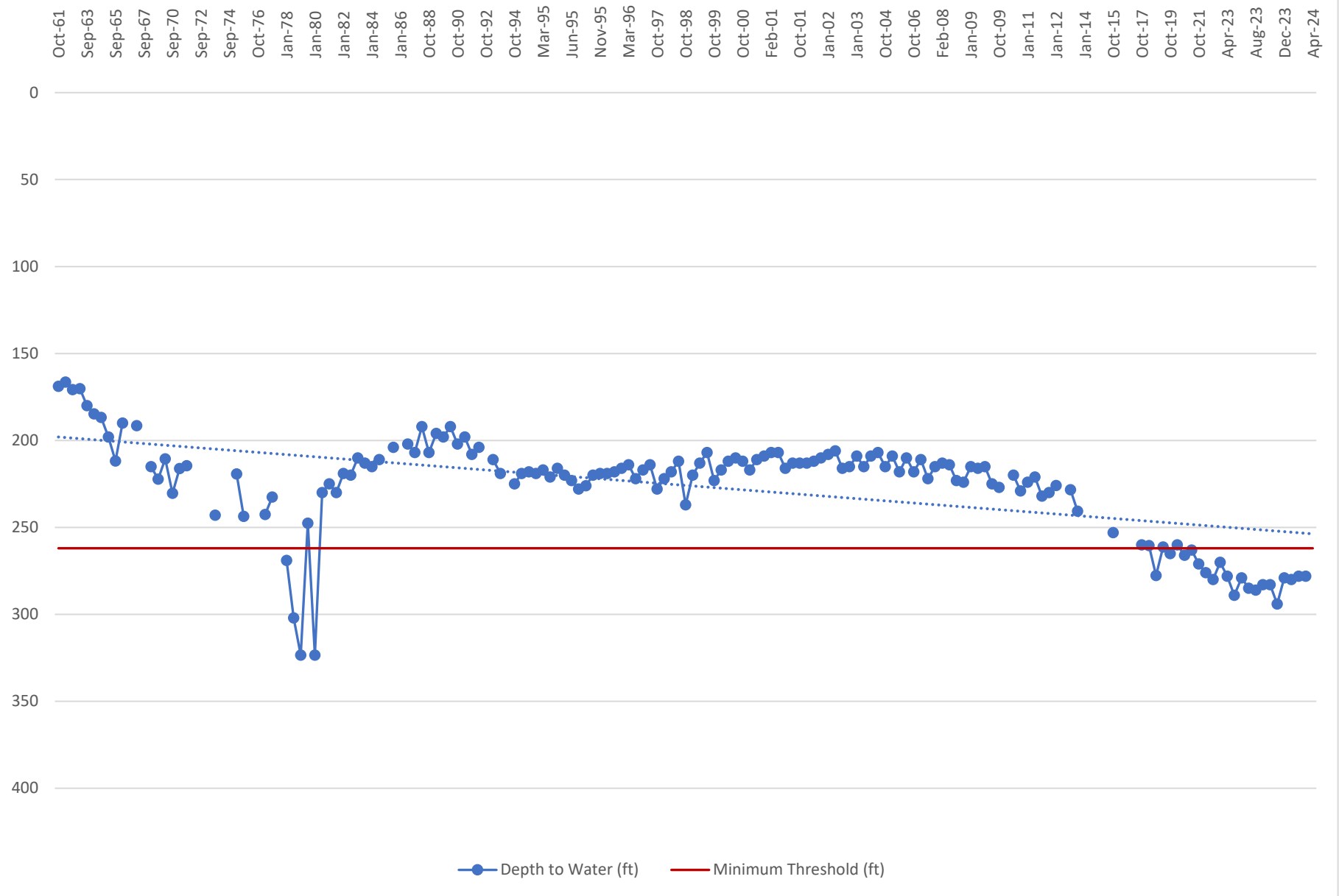
RMW-030 30S/28E-11F

not to exceed 262' (depth to water)

Apr-2023 May-2023 Jun-2023 Jul-2023 Aug-2023 Sep-2023 Oct-2023 Nov-2023 Dec-2023 Jan-2024 Feb-2024 Mar-2024 Apr-2024

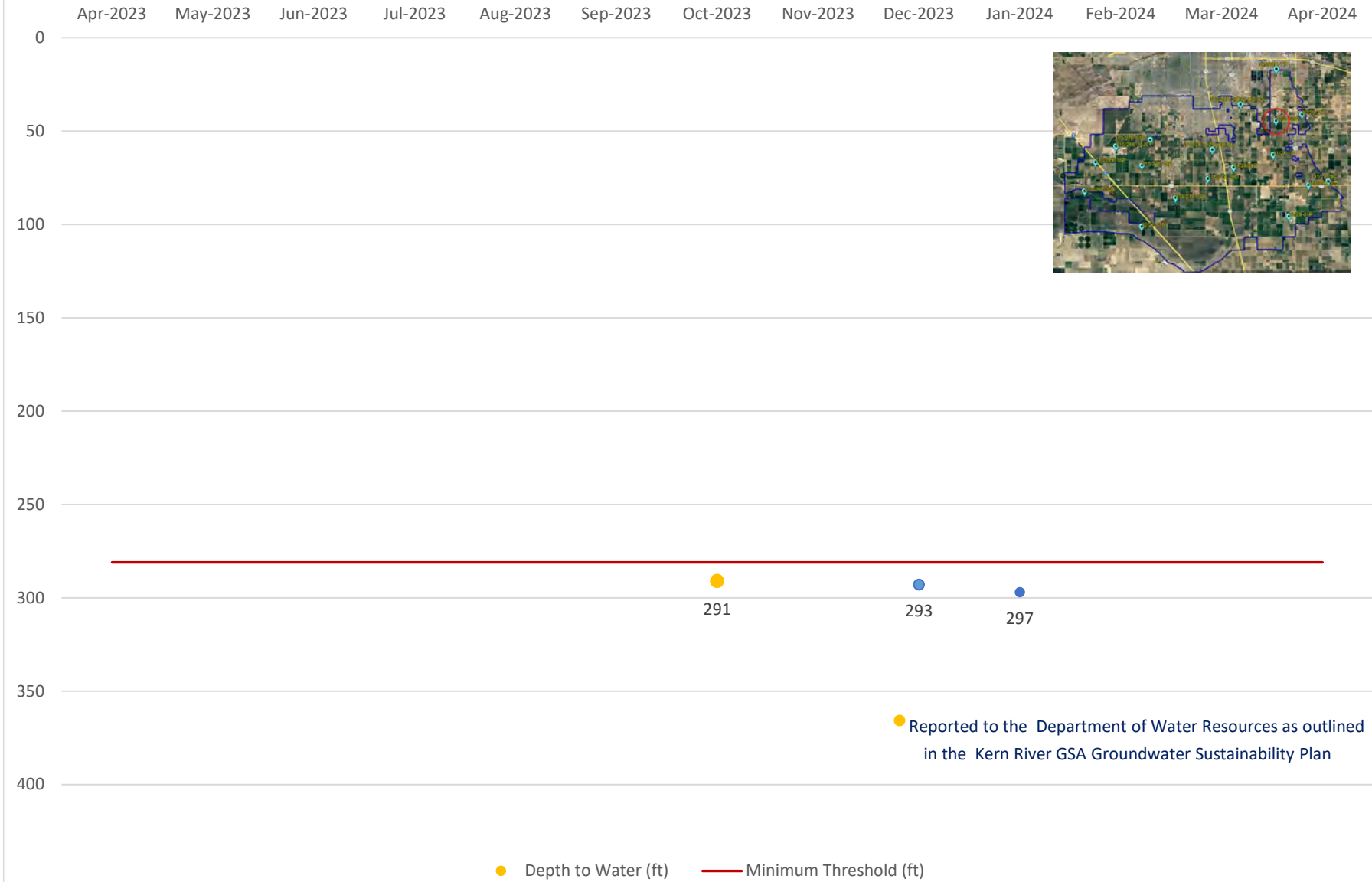


RMW-030 Long-term

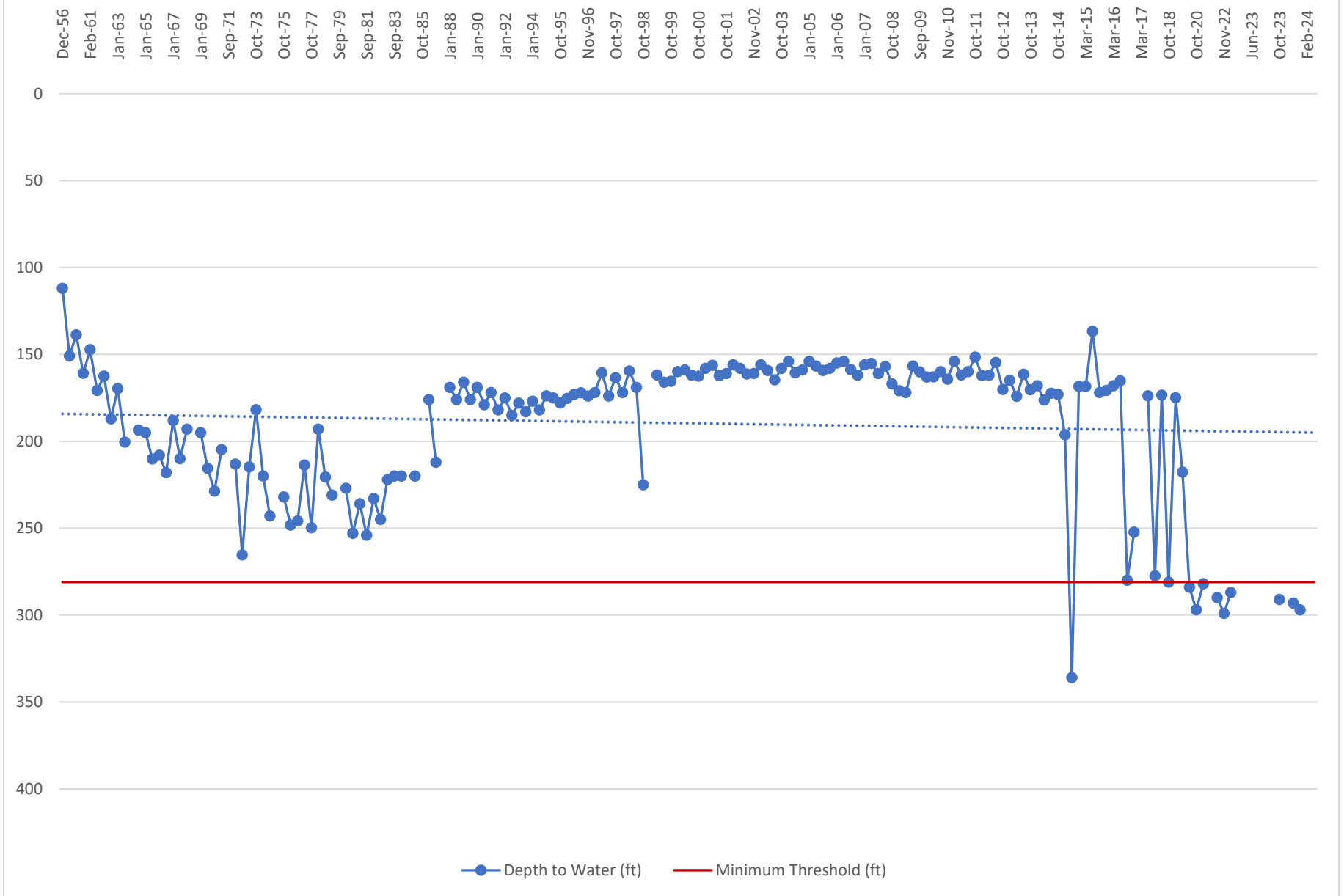


RMW-034 30S/28E-35L

not to exceed 281' (depth to water)

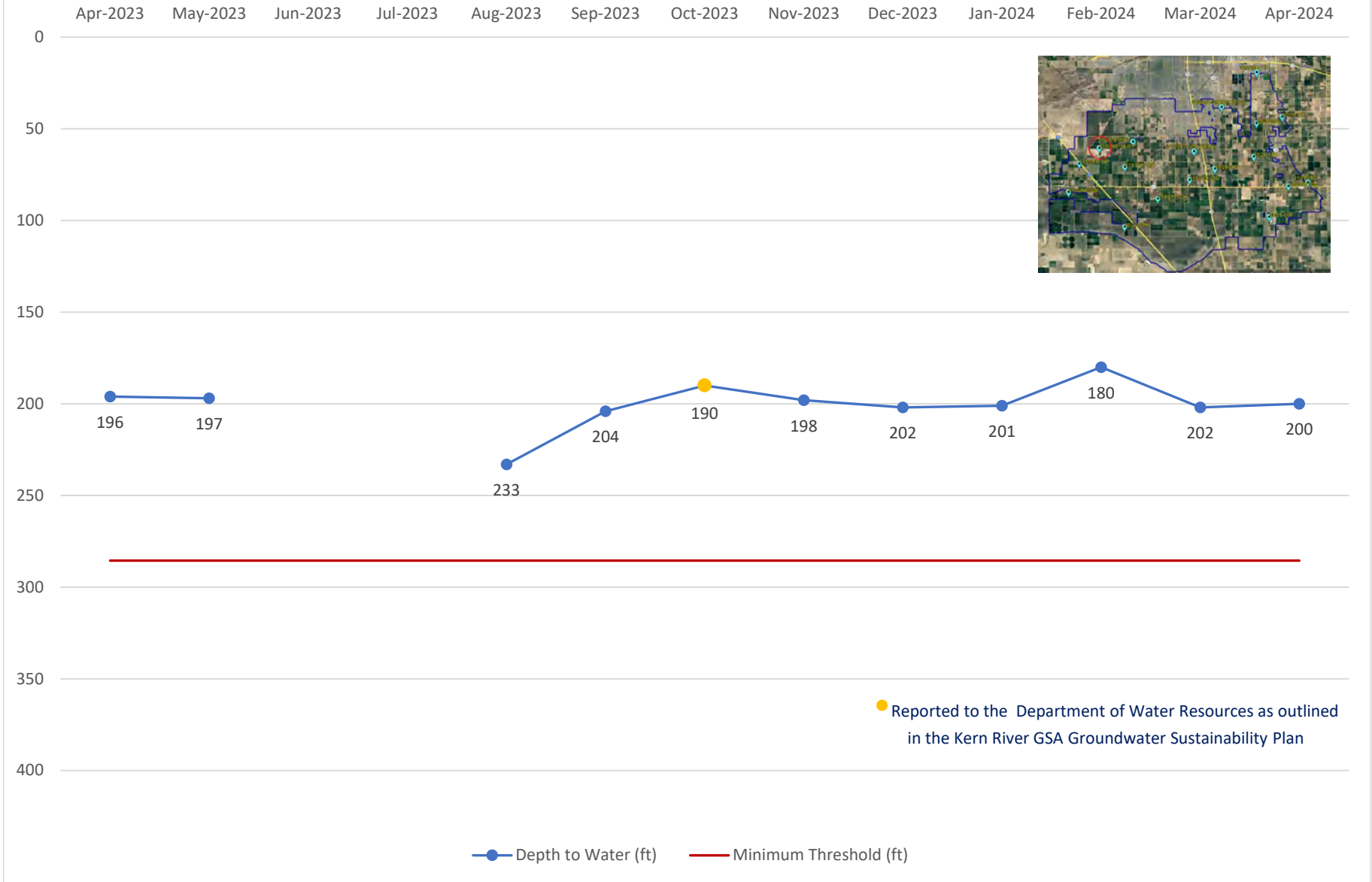


RMW-034 Long-term

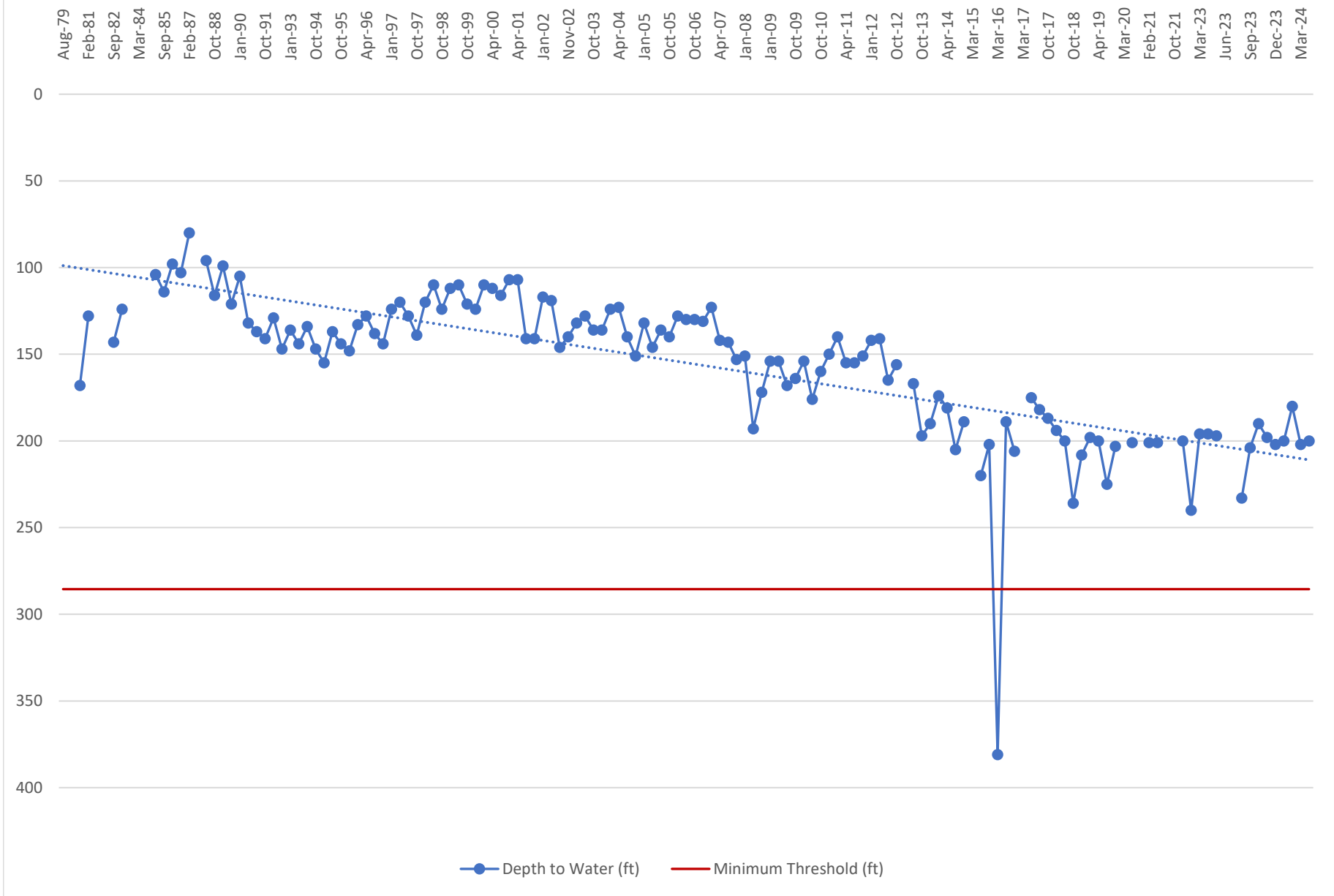


RMW-035R 31S/26E-10J

not to exceed 285.5' (depth to water)

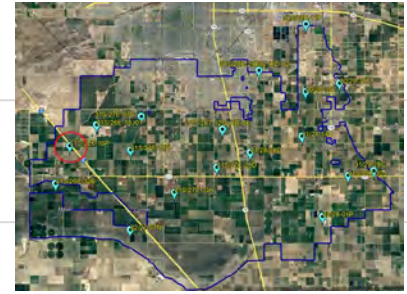
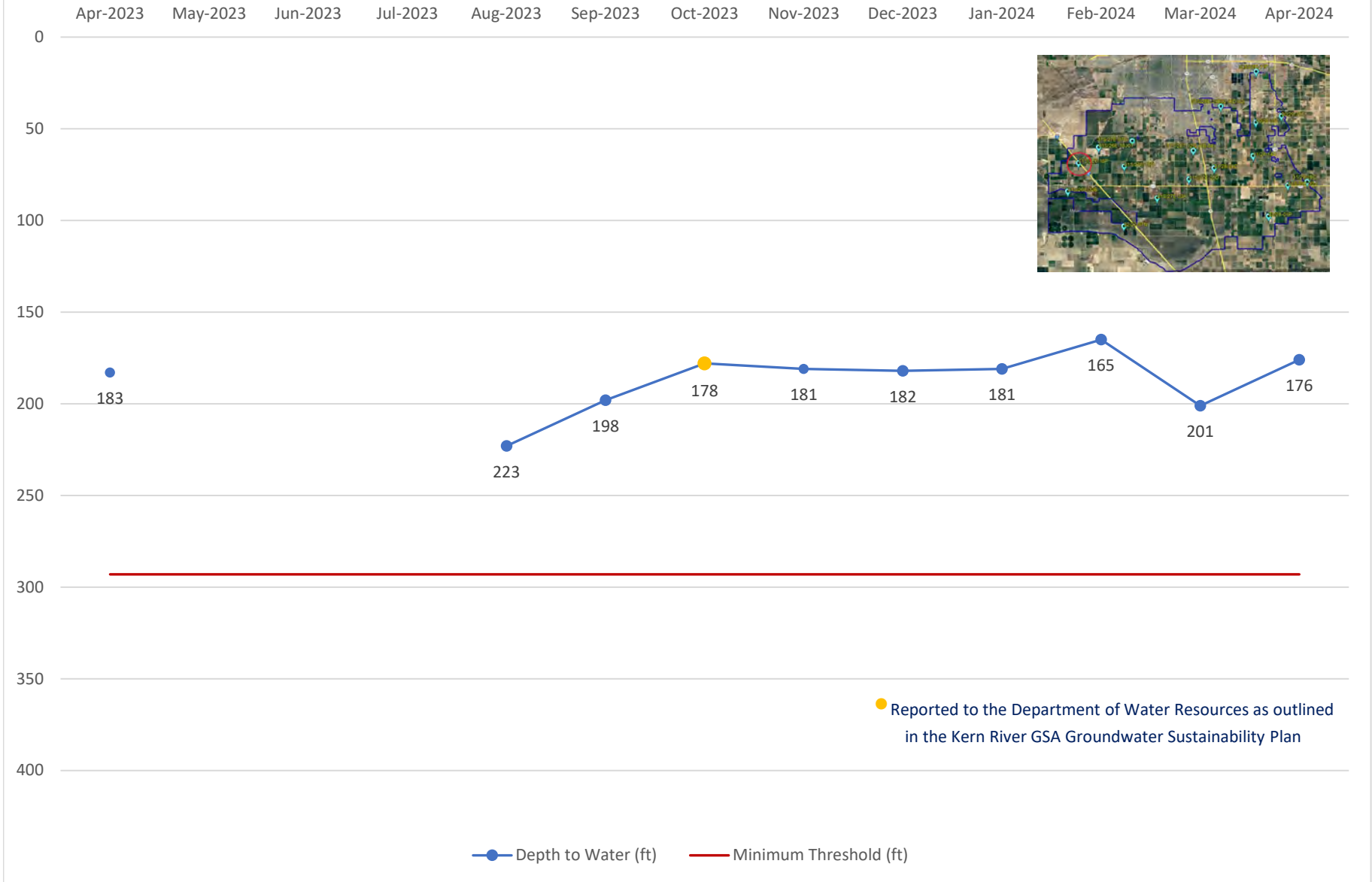


RMW-035R Long-term

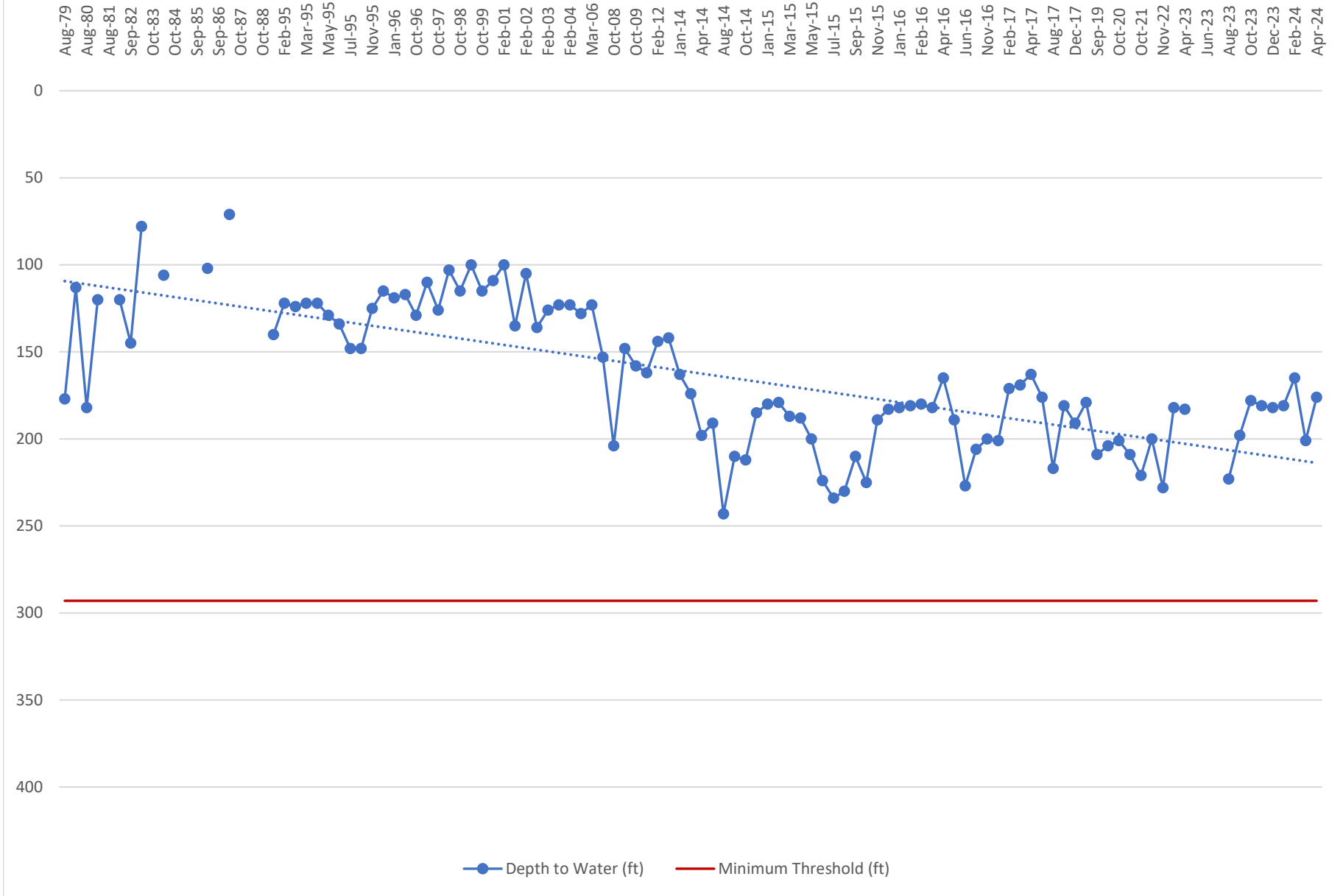


RMW-037 31S/26E-16P

not to exceed 293' (depth to water)

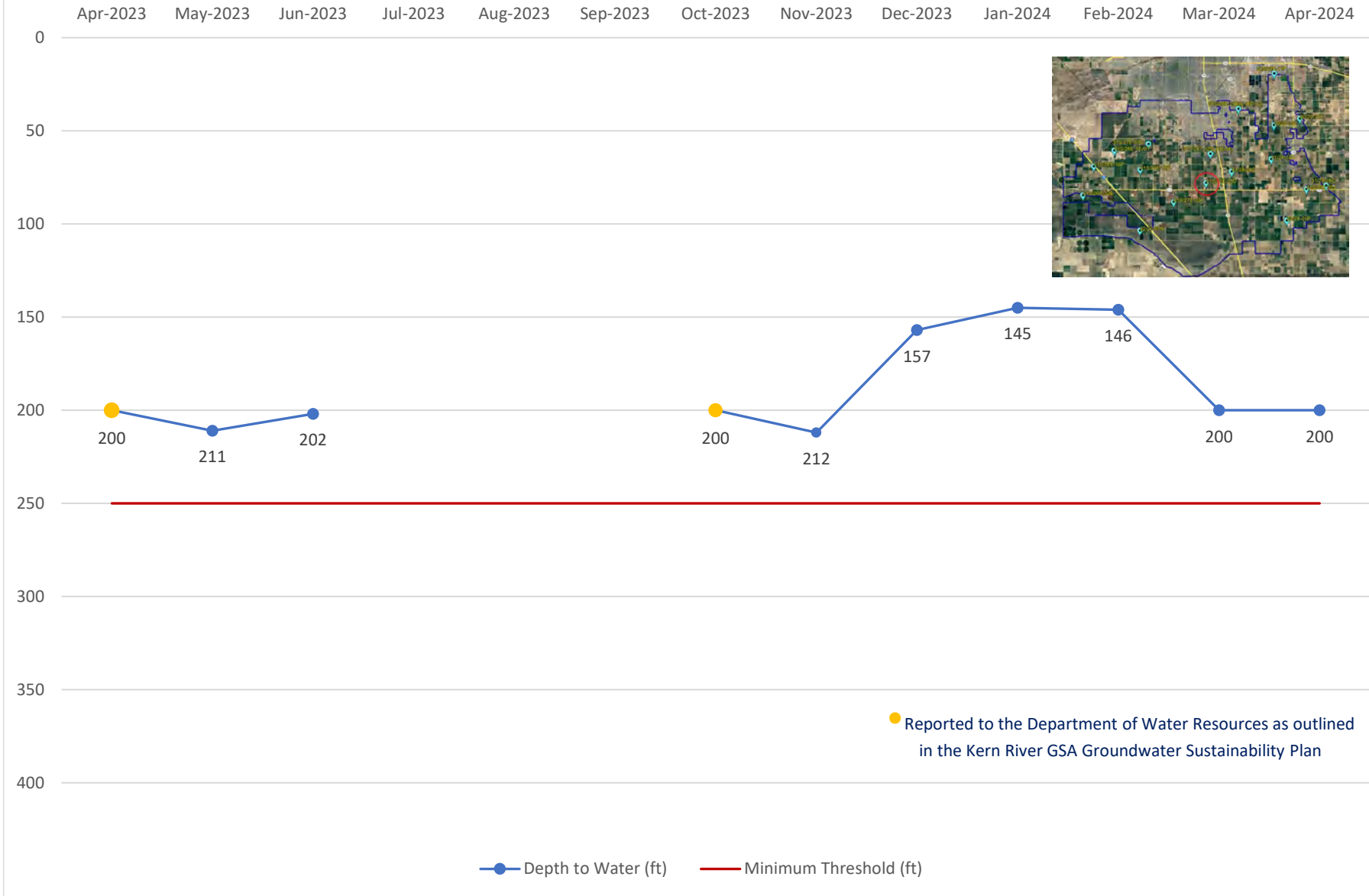


RMW-037 Long-term

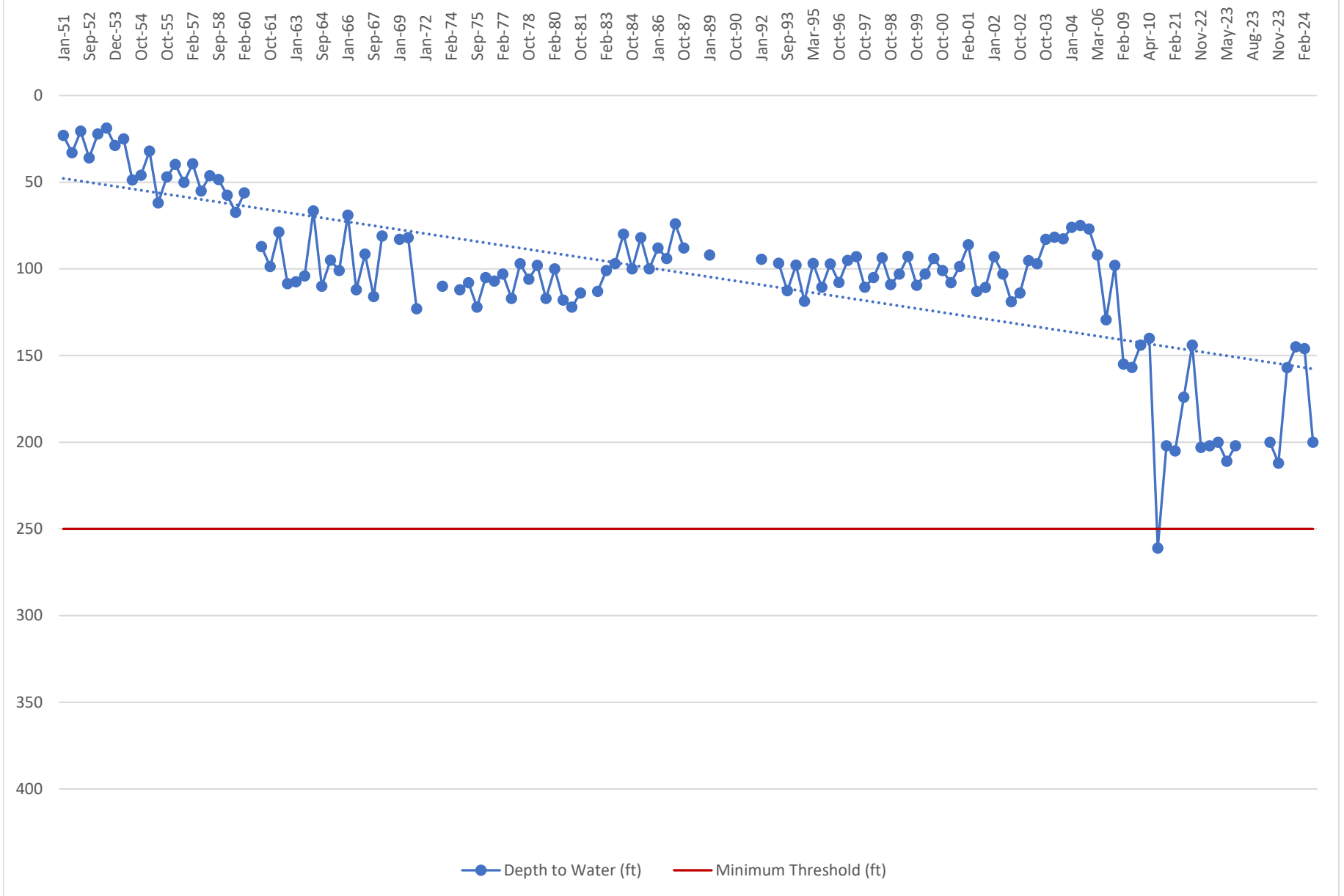


RMW-040 31S/27E-25D

not to exceed 250' (depth to water)

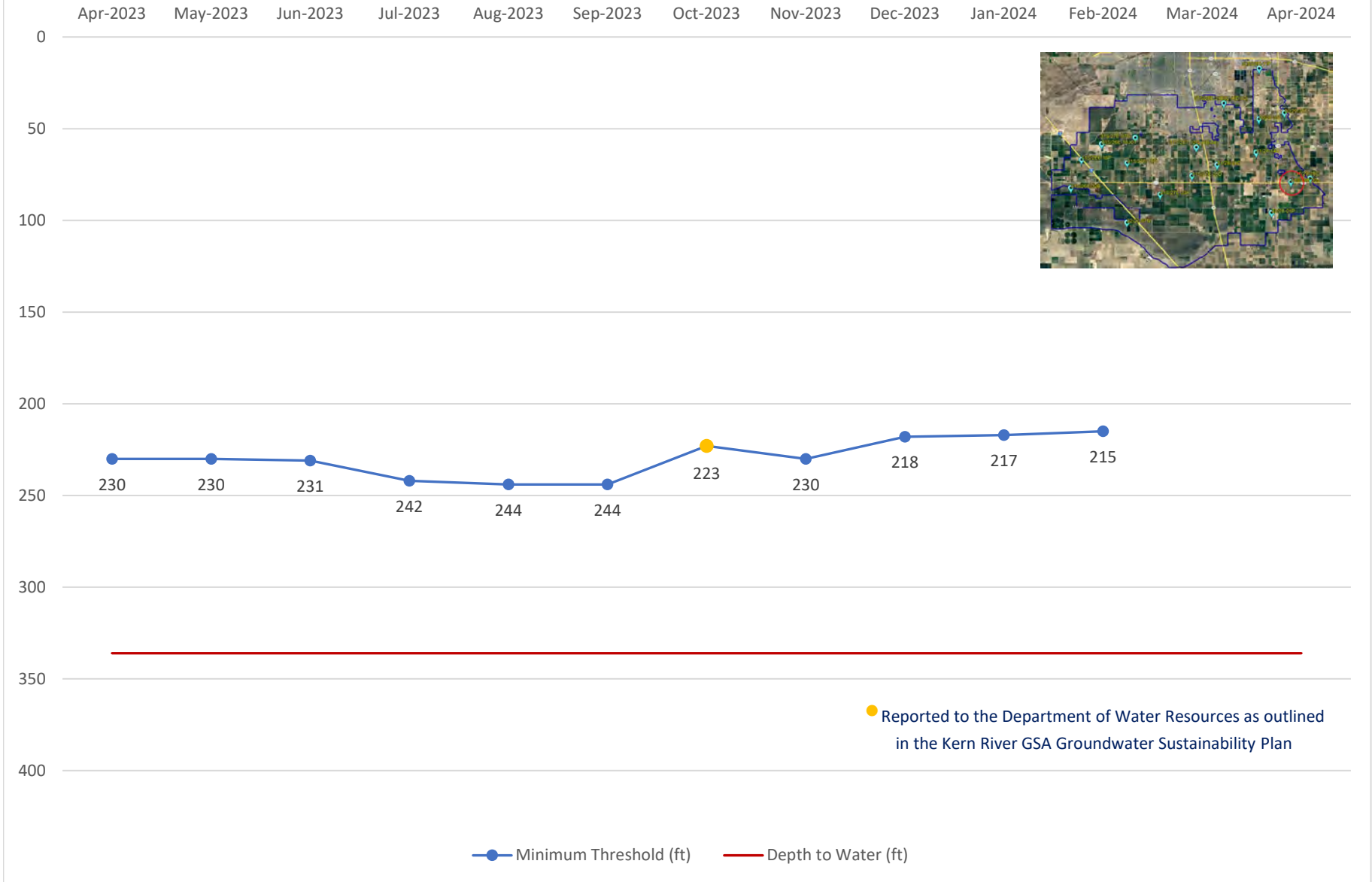


RMW-040 Long-term

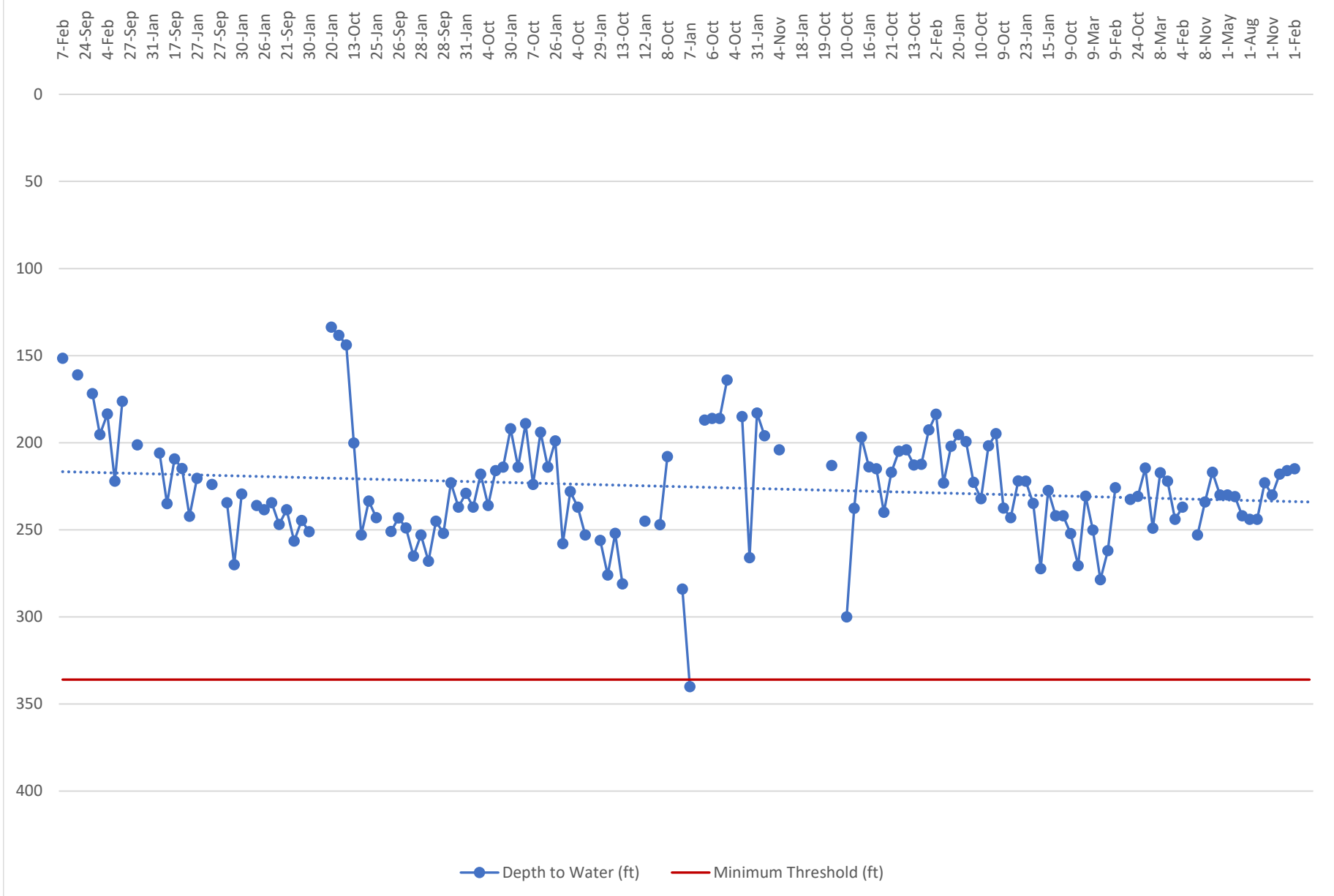


RMW-041 31S/29E-30J

not to exceed 336' (depth to water)

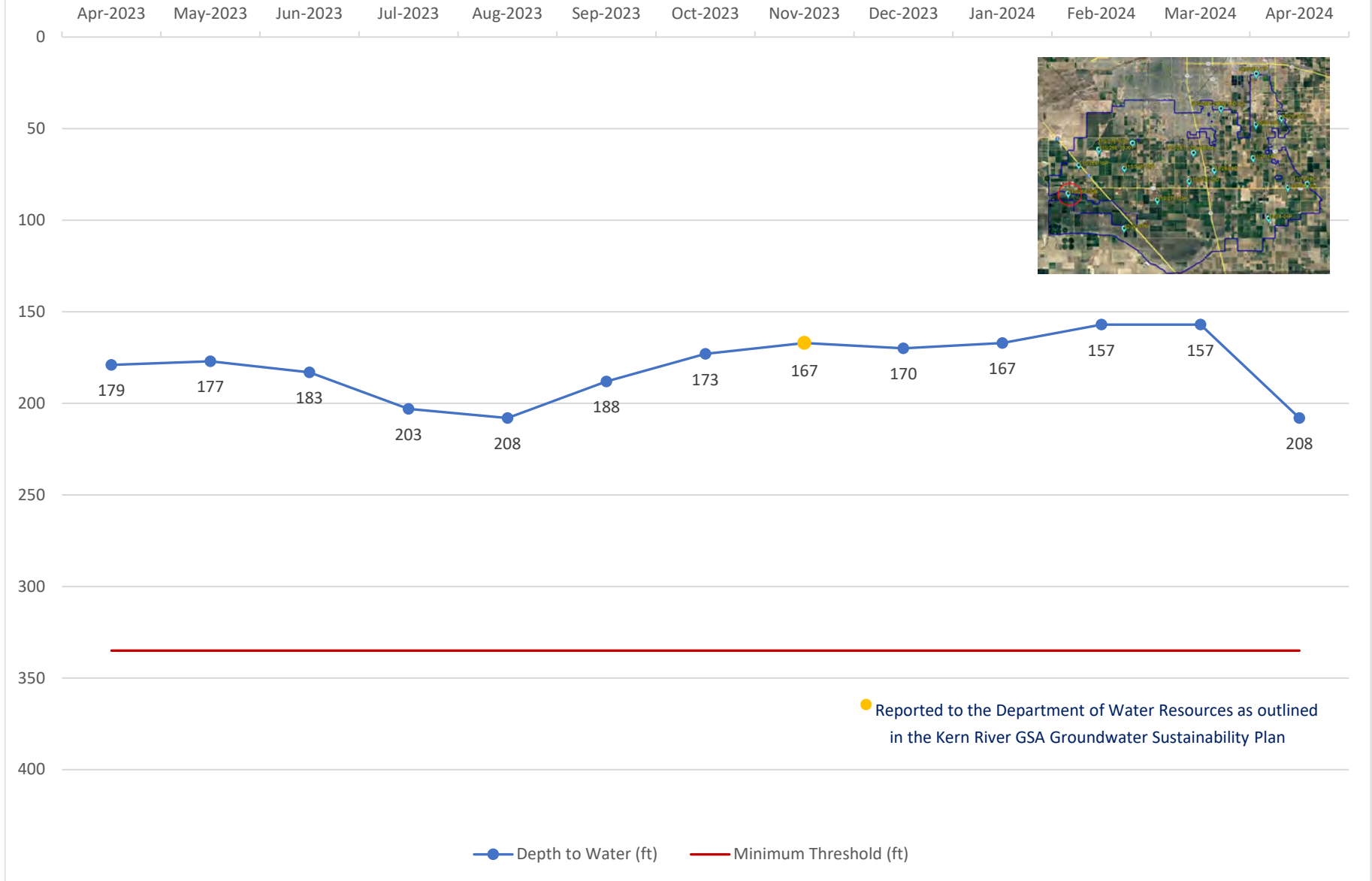


RMW-041 Long-term

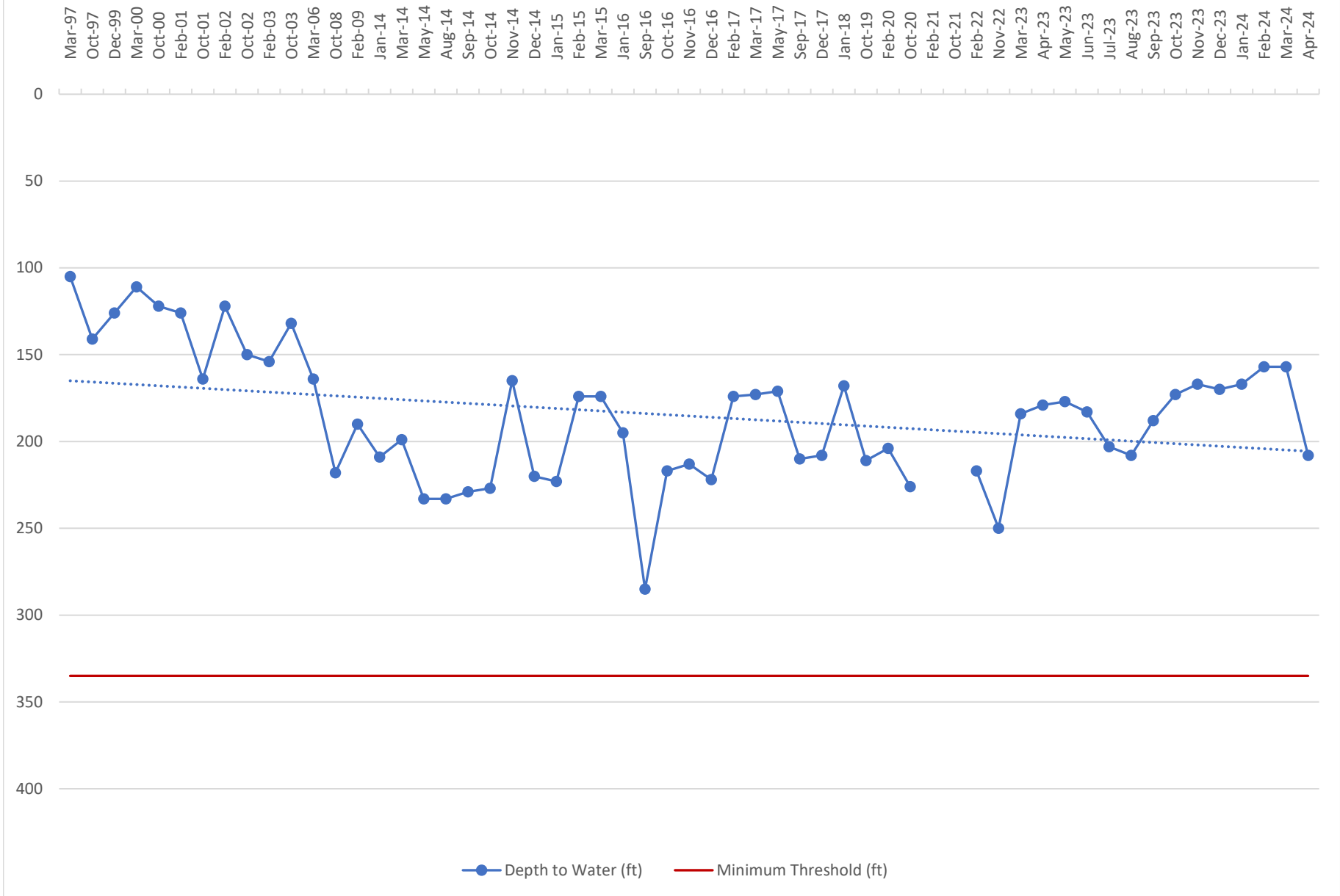


RMW-042 31S/26E-32B

not to exceed 335' (depth to water)



RMW-042 Long-term

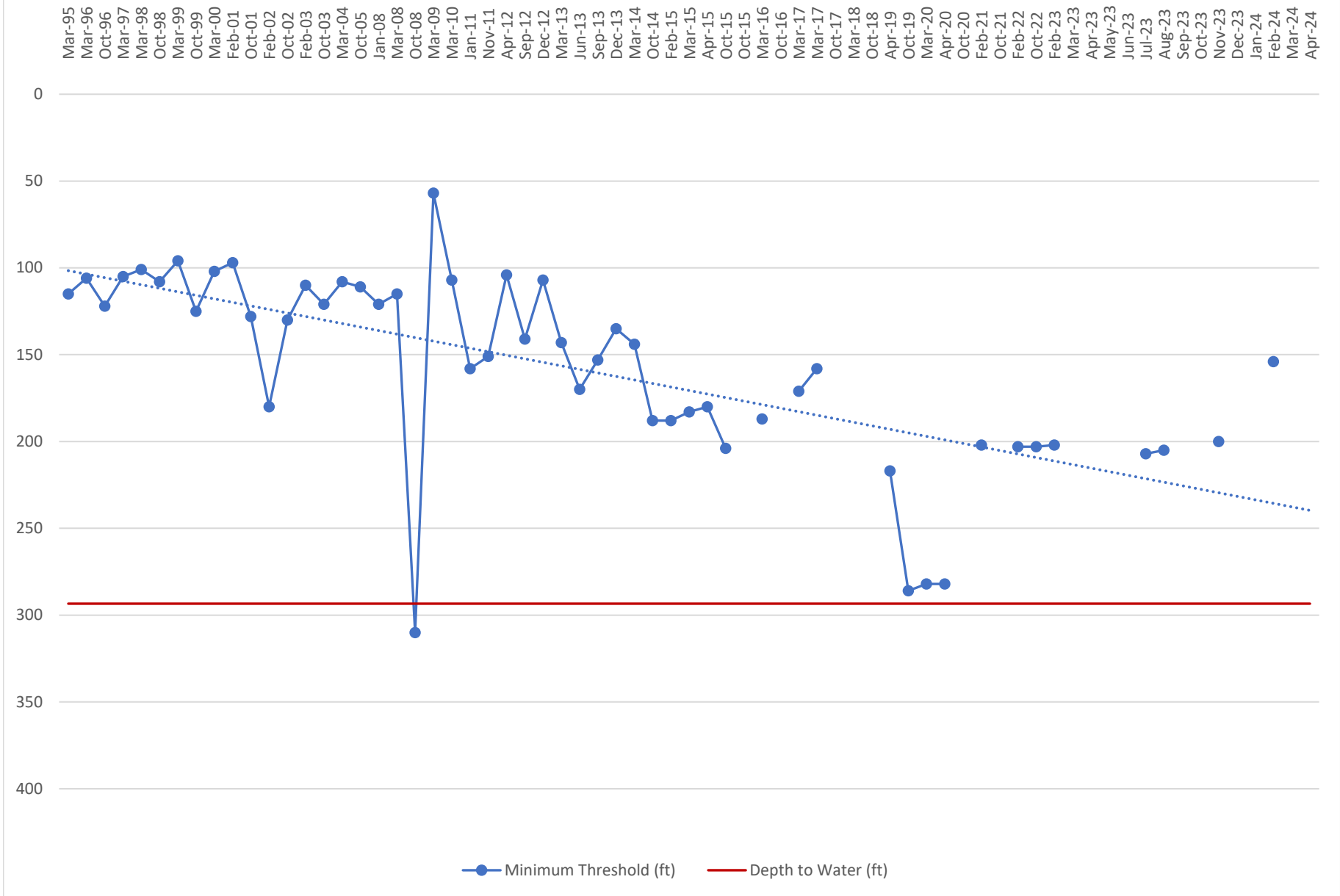


RMW-192 31S/28E-20D

not to exceed 293.4' (depth to water)

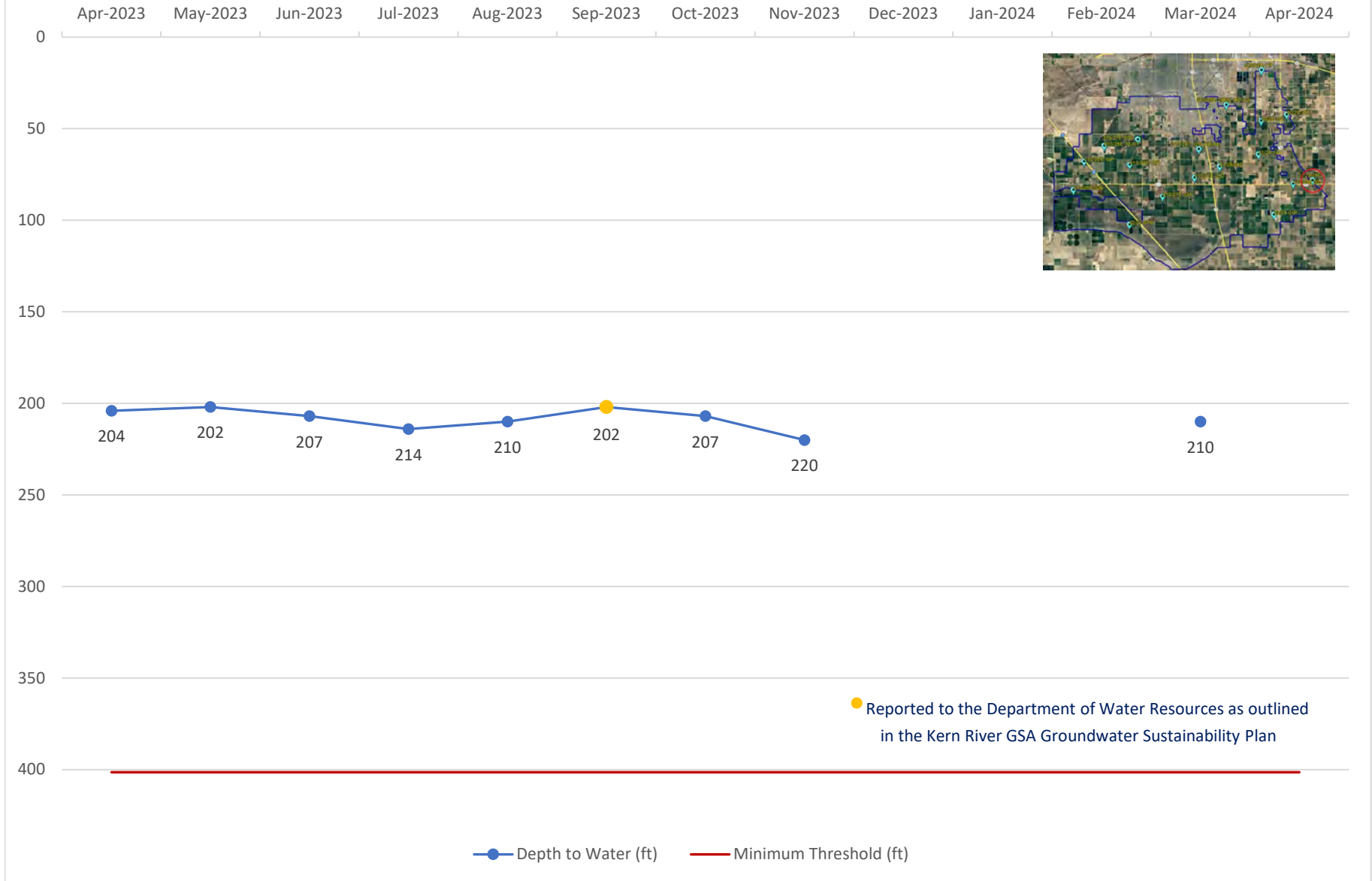


RMW-192 Long-term

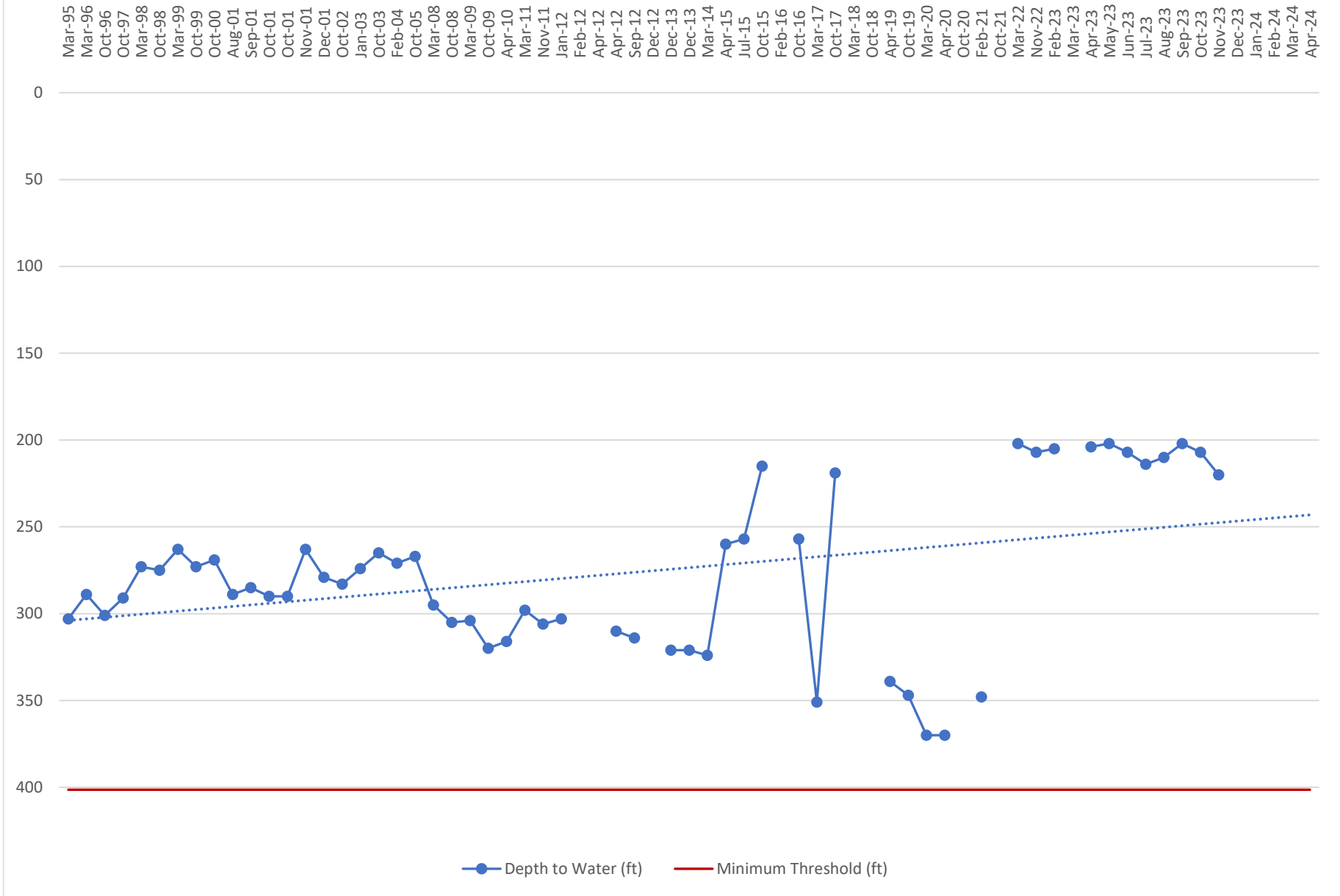


RMW-193 31S/29E-28C

not to exceed 401.4' (depth to water)

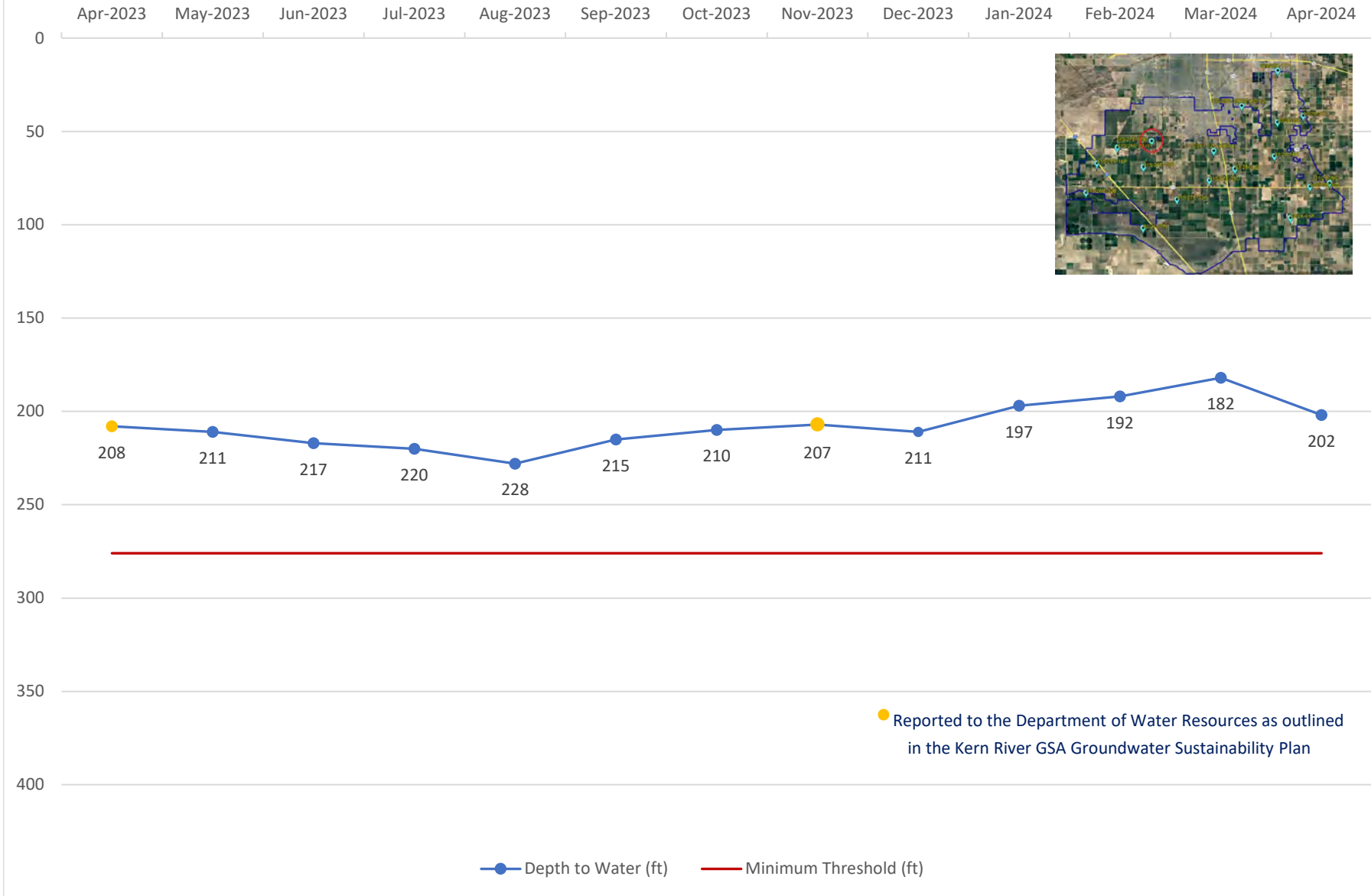


RMW-193 Long-term

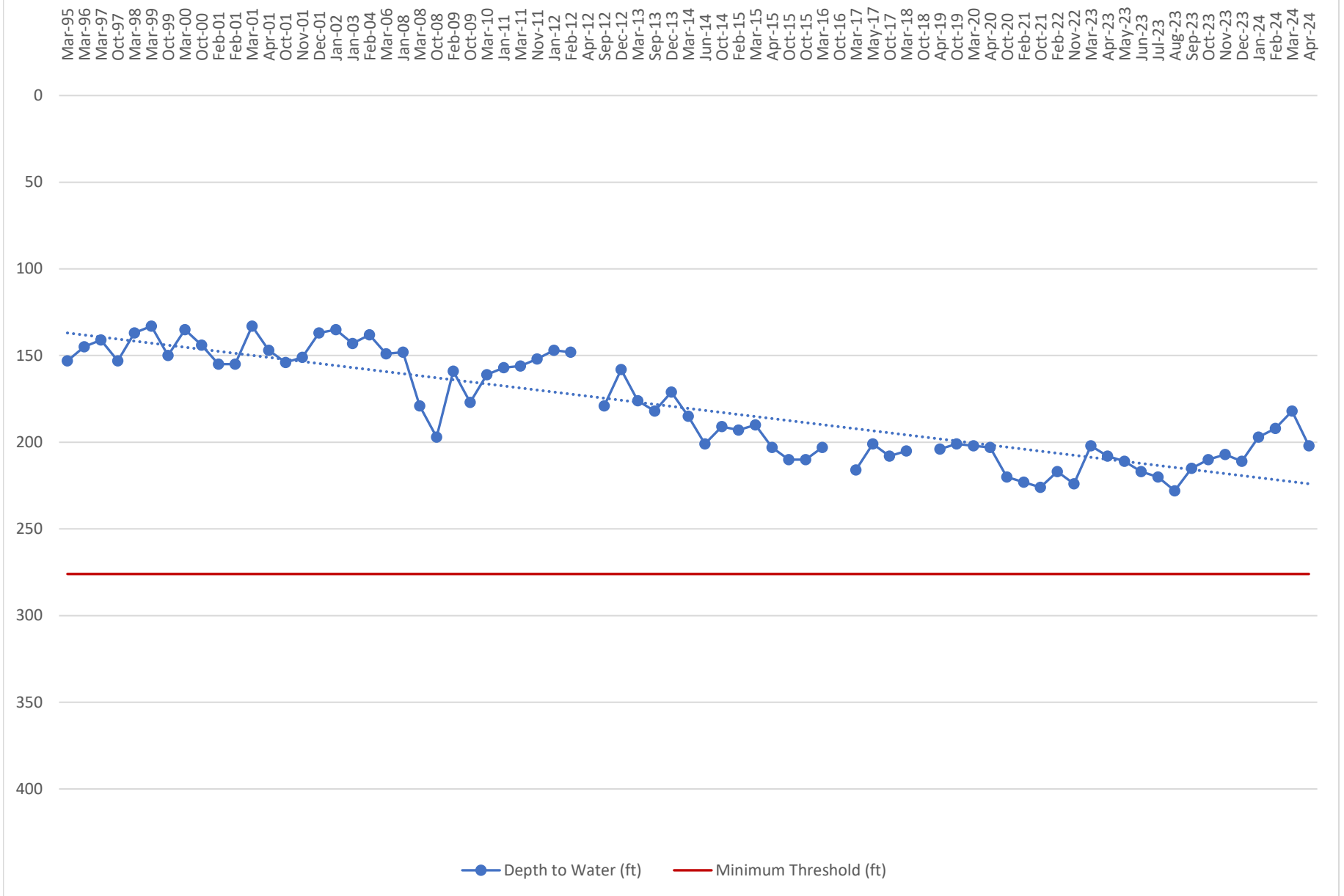


RMW-195 31S/27E-07B

not to exceed 276' (depth to water)

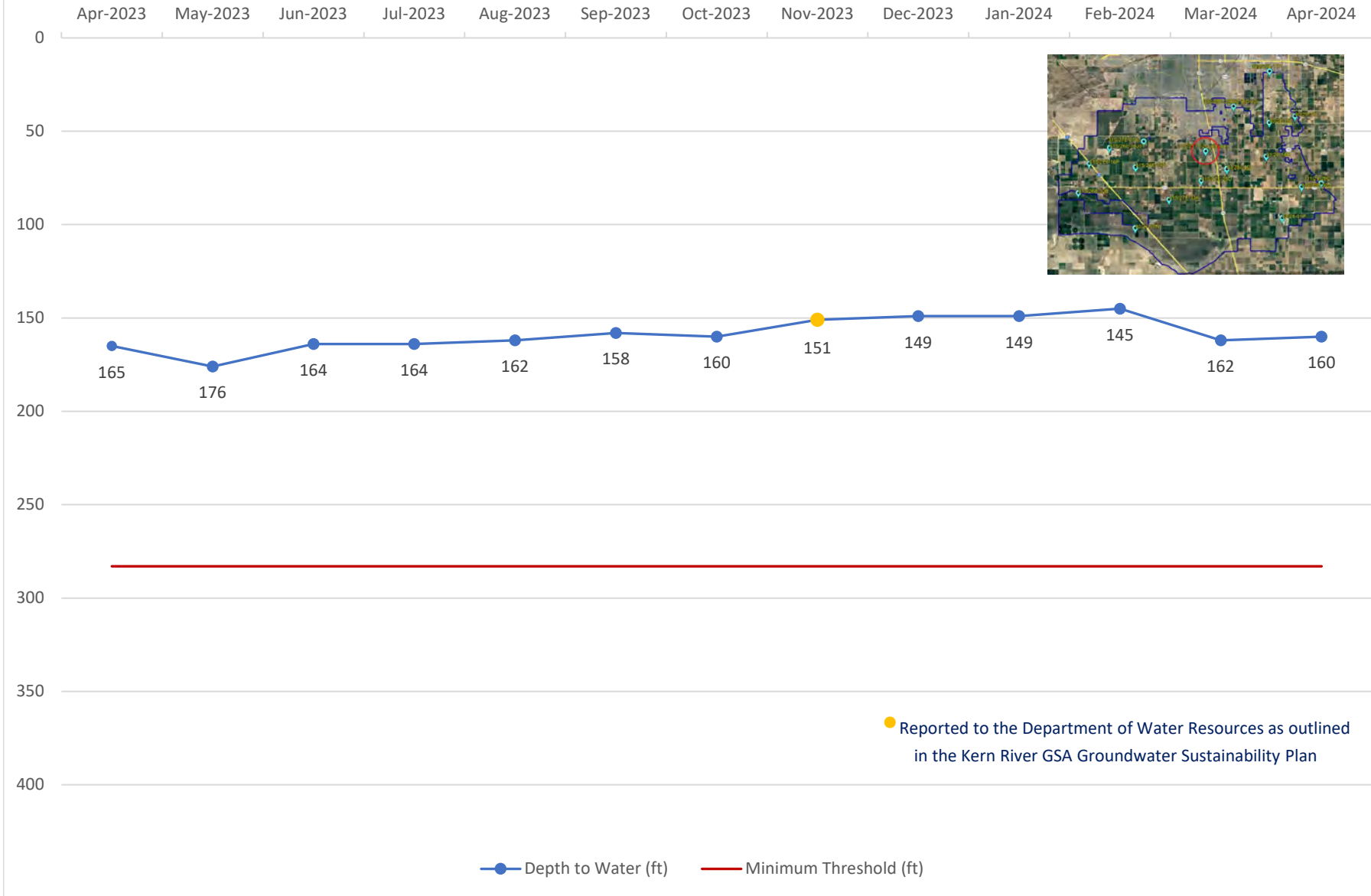


RMW-195 Long-term

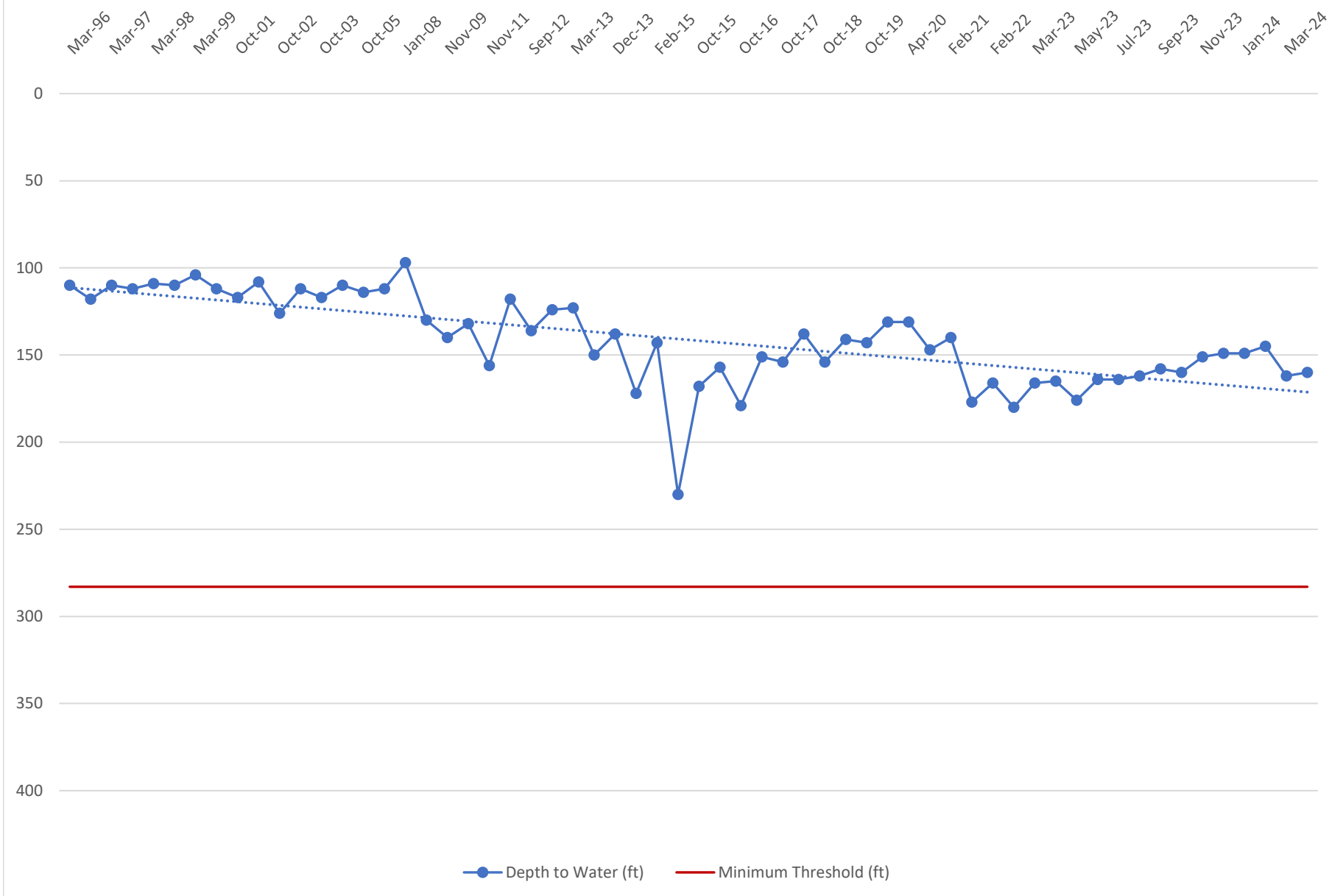


RMW-196 31S/27E-12Q

not to exceed 283' (depth to water)

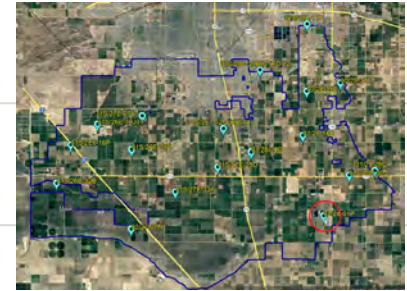


RMW-196 Long-term

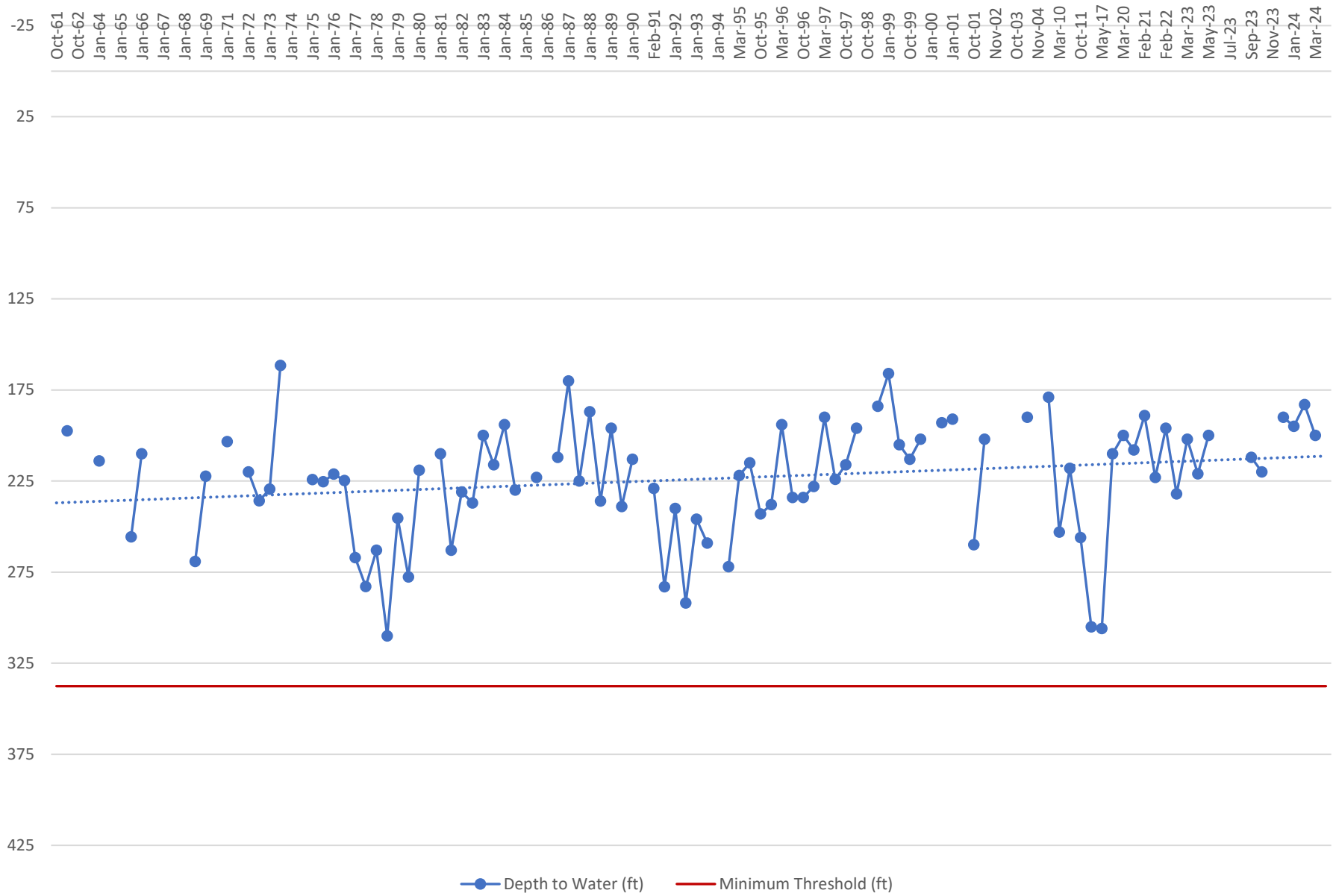


RMW-197 32S/28E-01P

not to exceed 337.6' (depth to water)

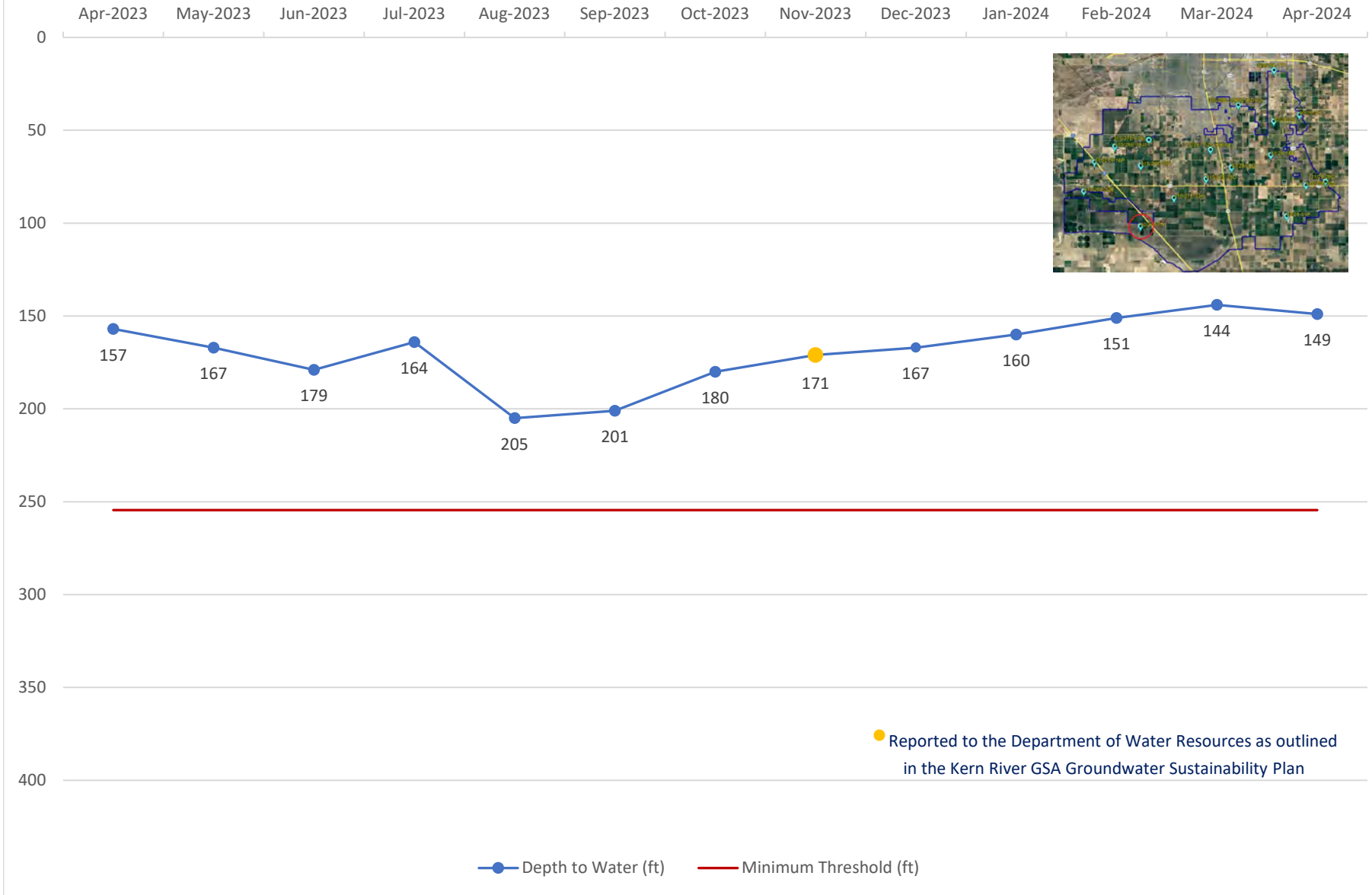


RMW-197 Long-term

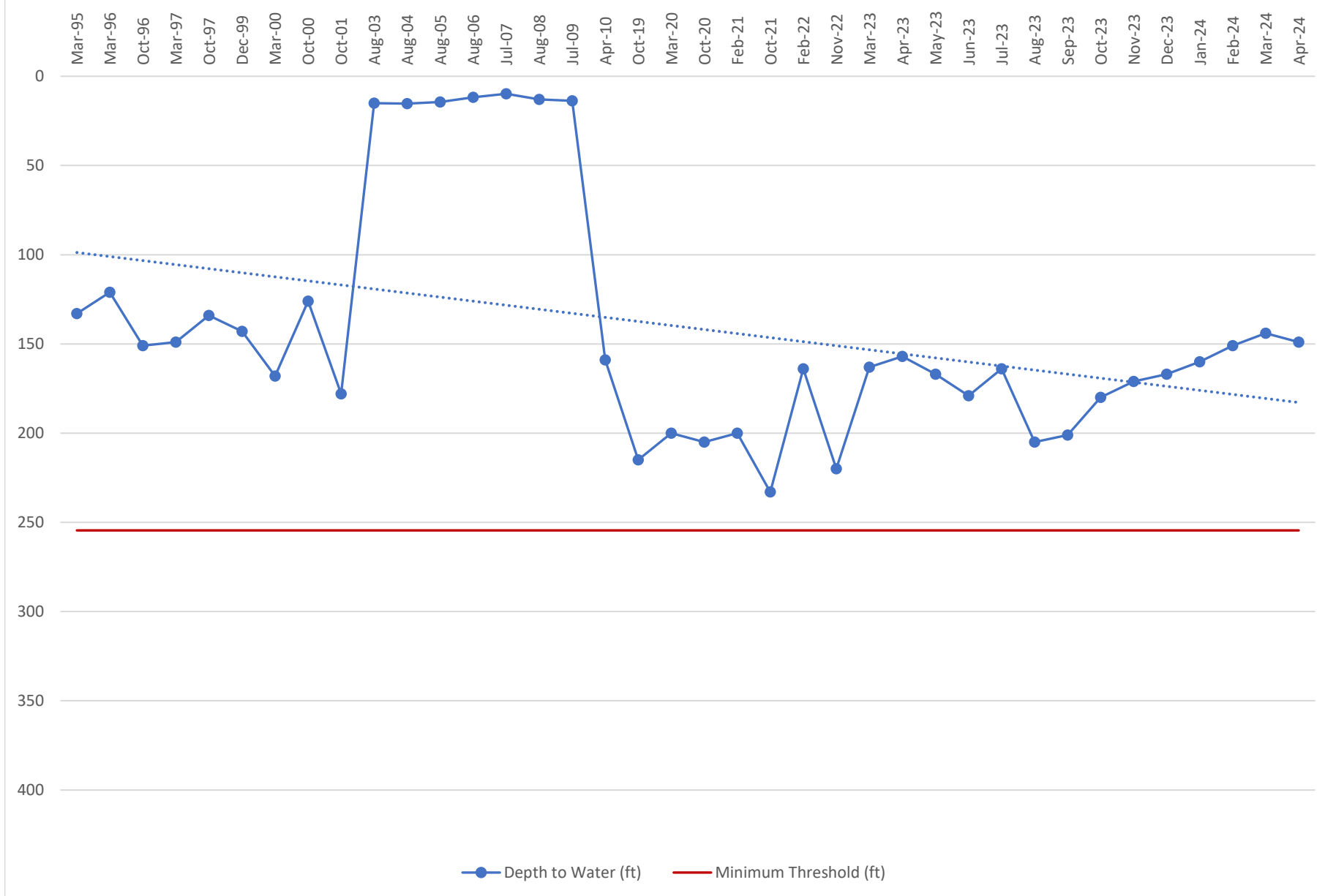


RMW-200 32S/27E-07N

not to exceed 254.5' (depth to water)

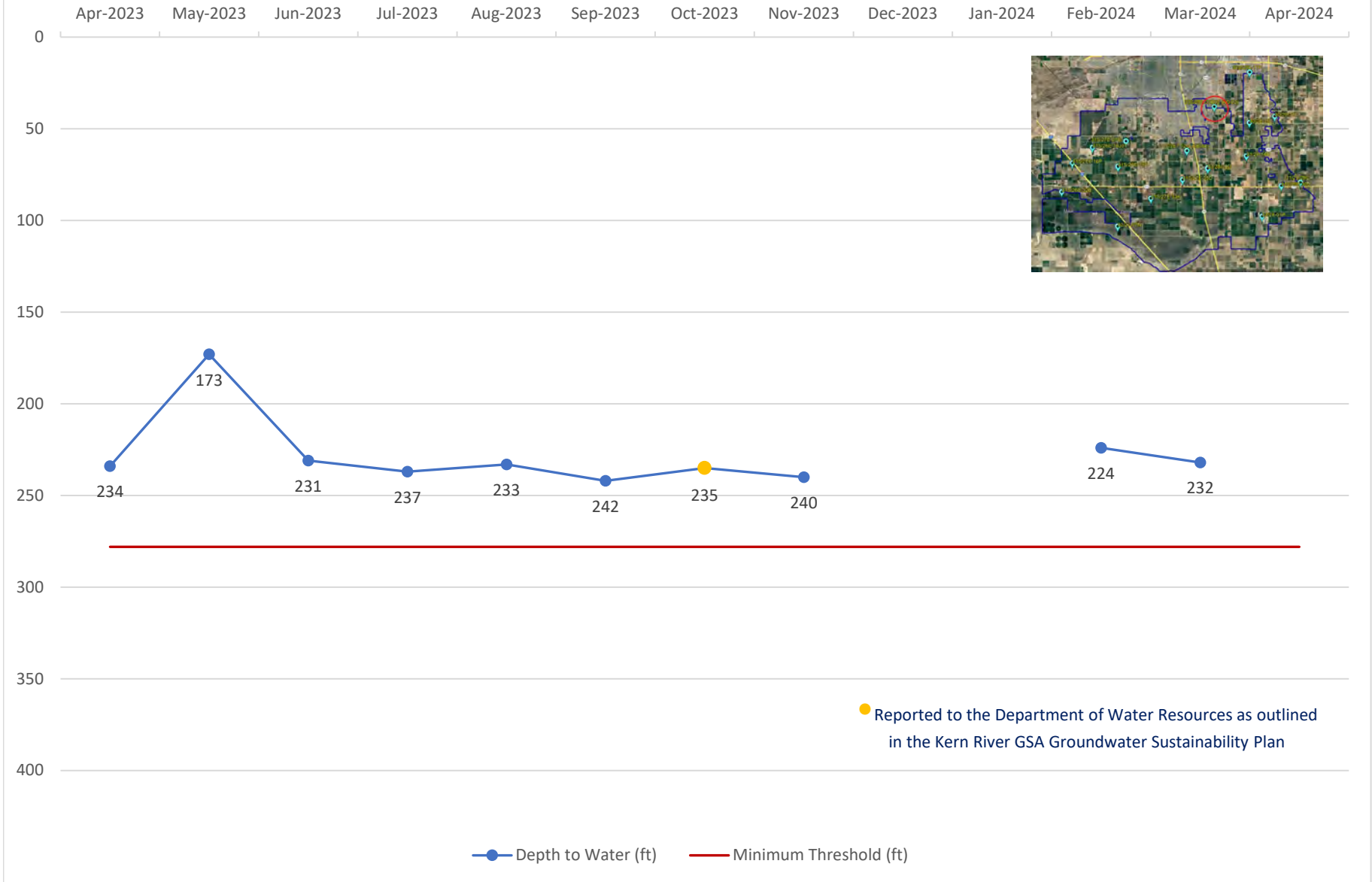


RMW-200 Long-term

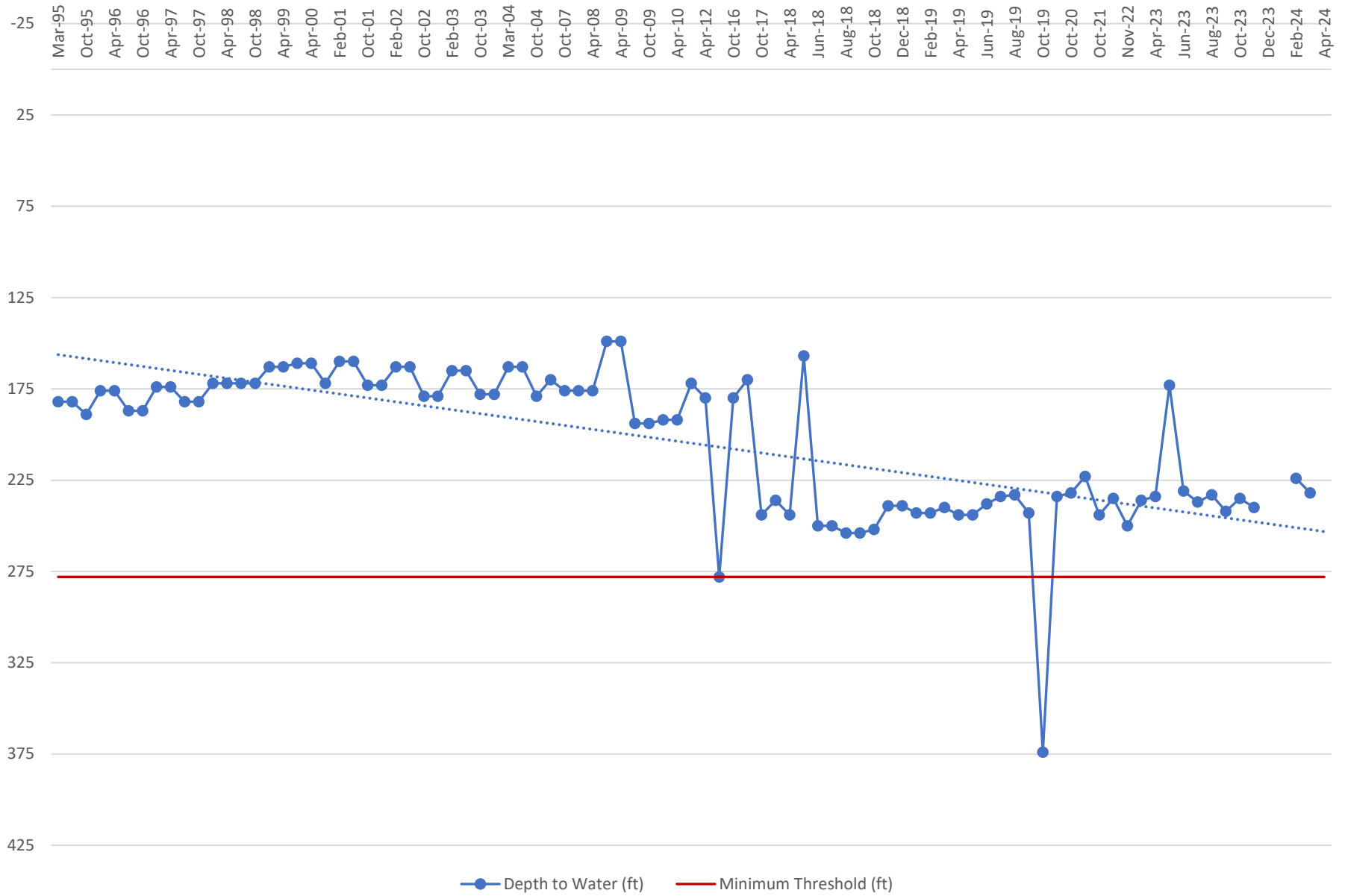


RMW-216 30S/28E-29B

not to exceed 278' (depth to water)

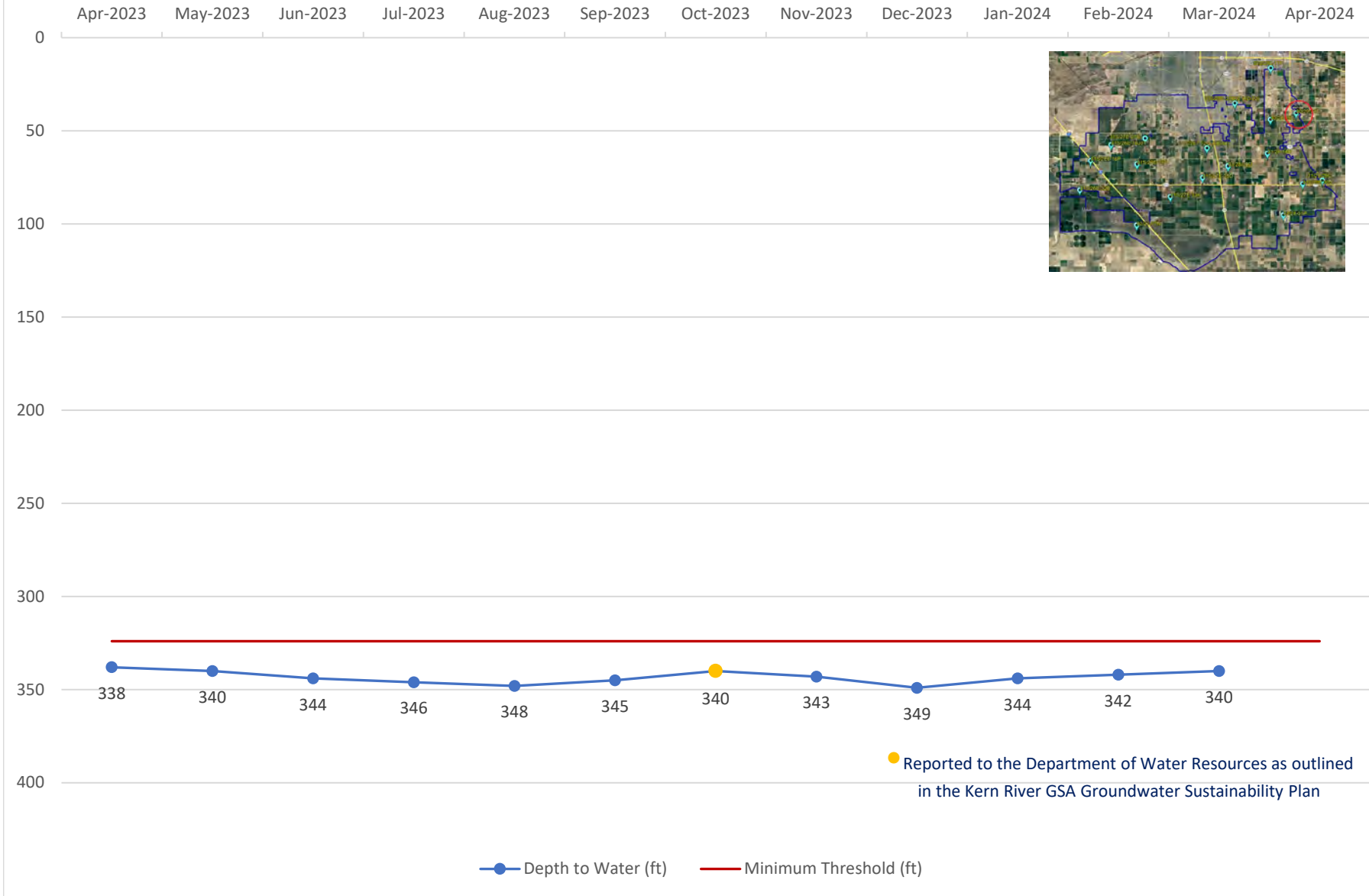


RMW-216 Long-term

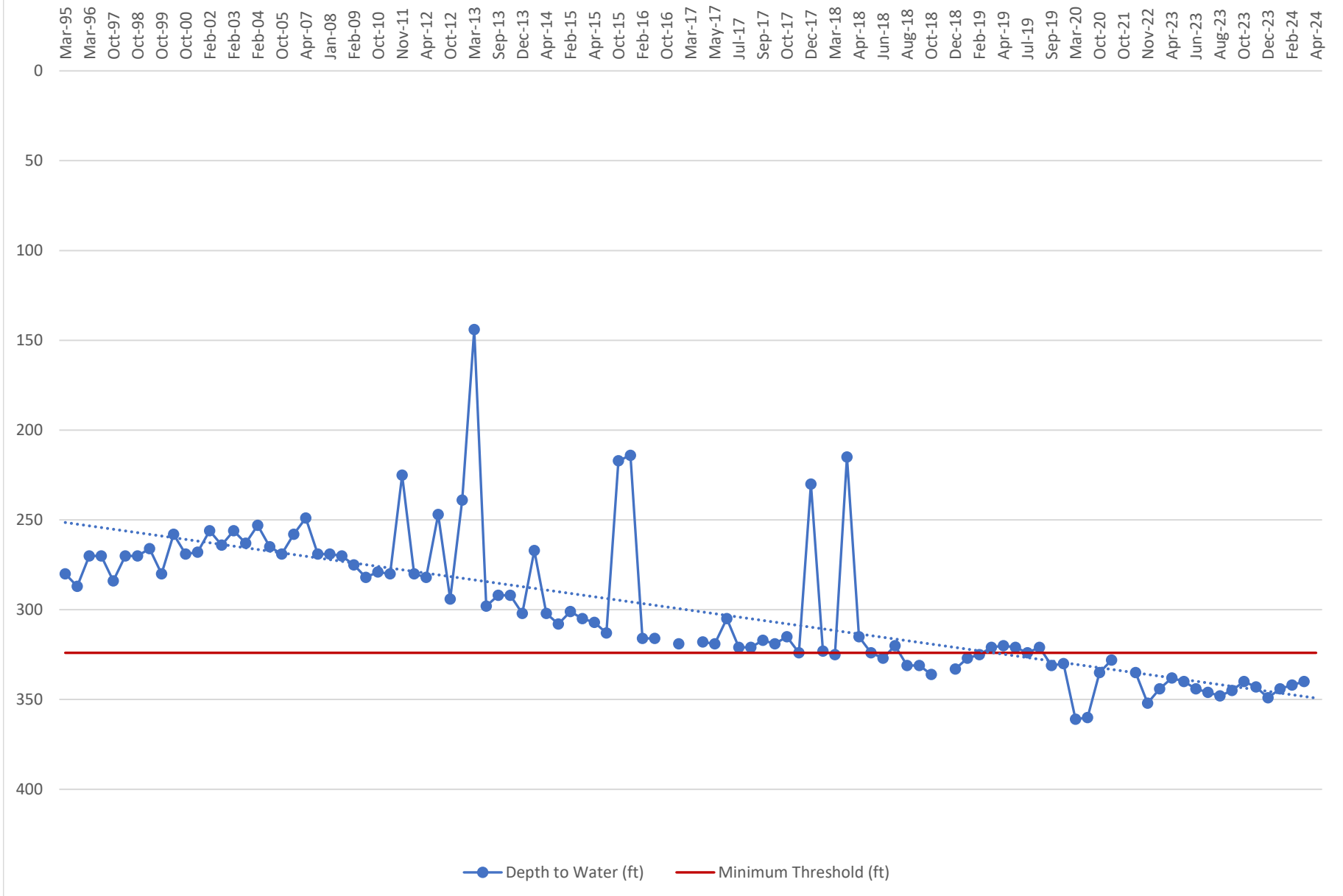


RMW-217 30S/29E-31C

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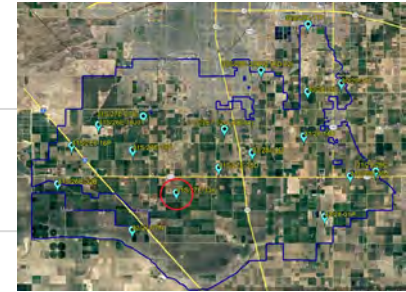


RMW-217 Long-term

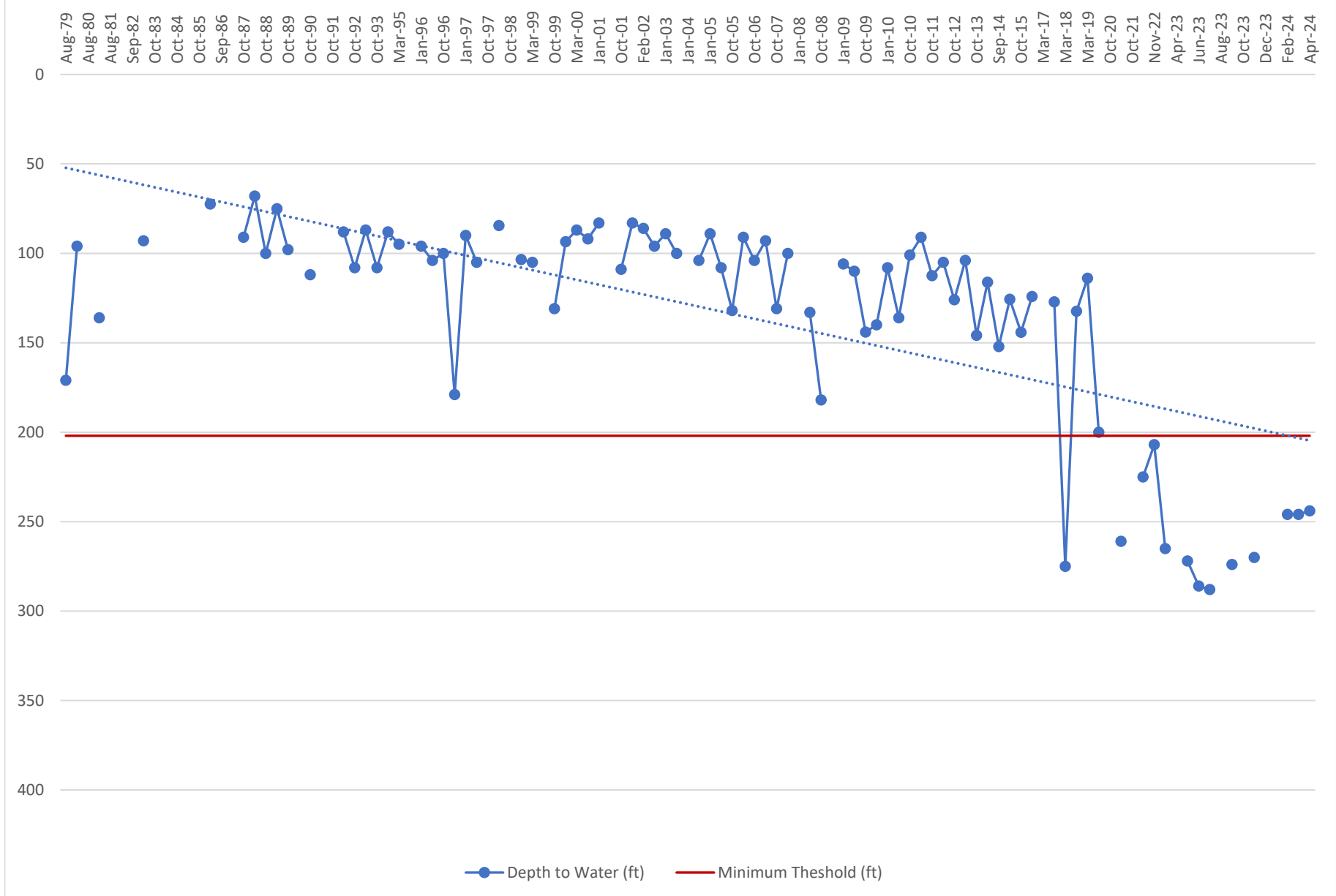


RMW-218 31S/27E-33K

not to exceed 202' (depth to water)

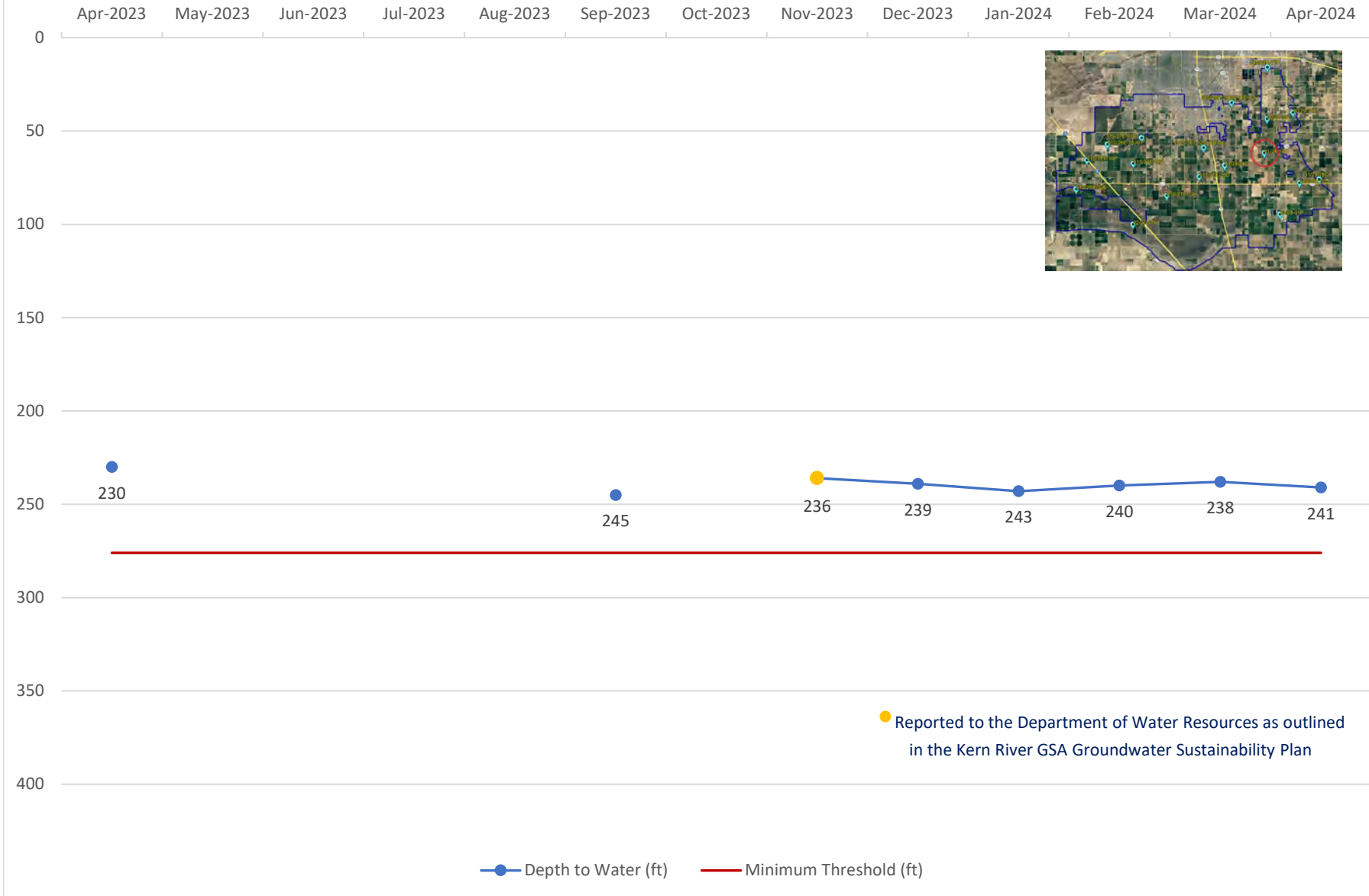


RMW-218 Long-term

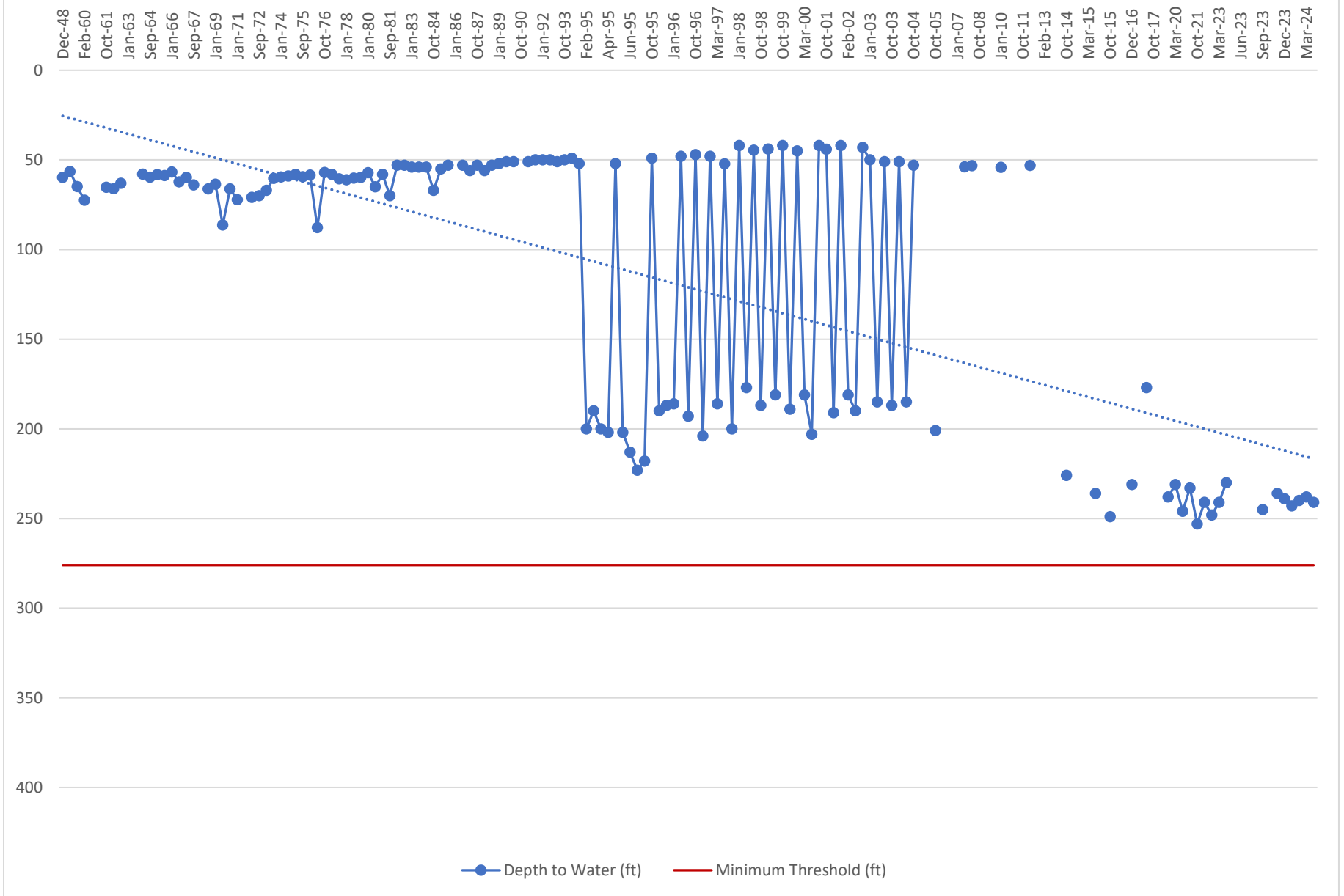


RMW-219 31S/28E-14D

not to exceed 276' (depth to water)



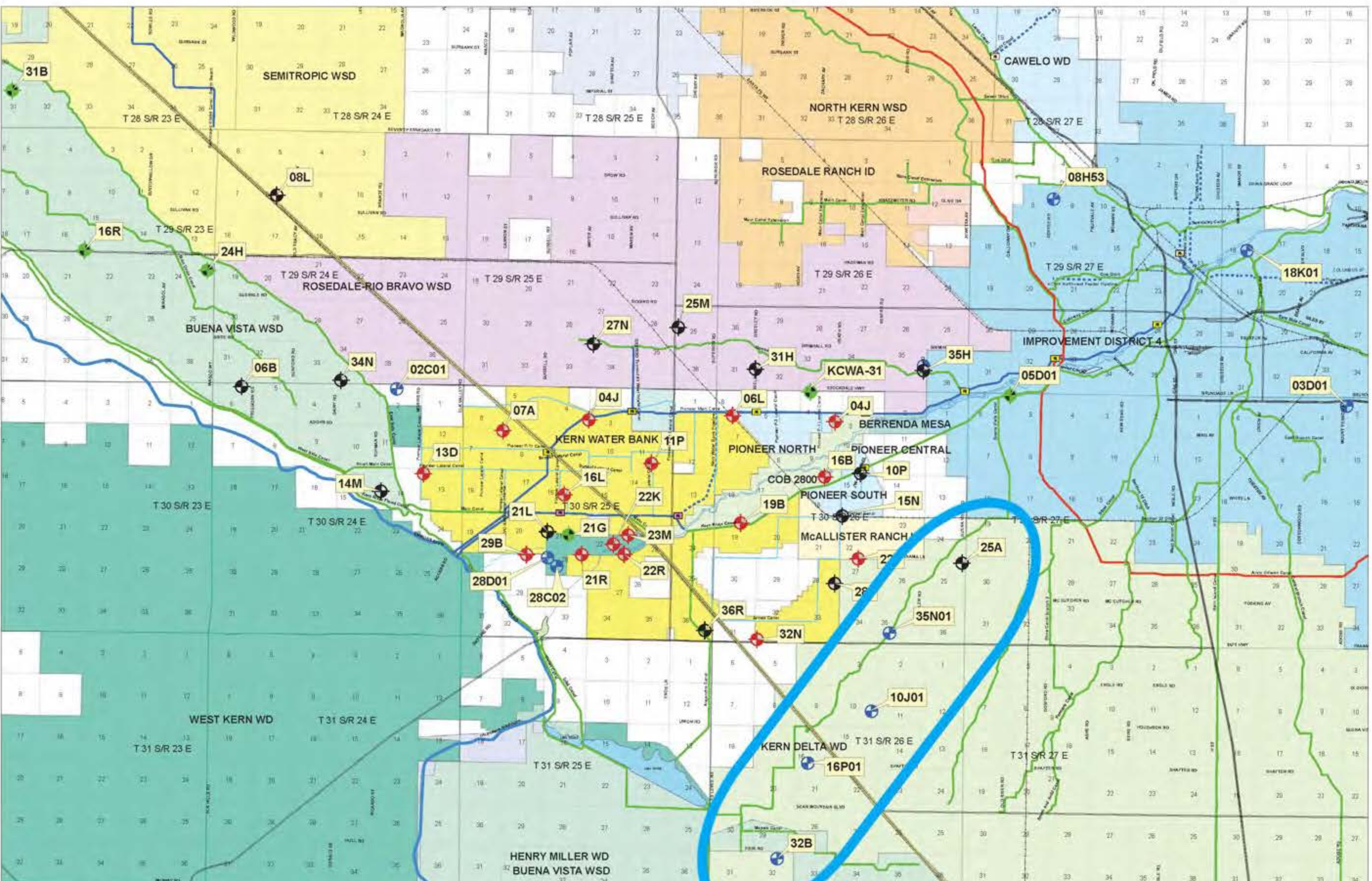
RMW-219 Long-term





Kern Fan
Monitoring
Committee
HYDROGRAPHS

April 2024



**KERN FAN MONITORING COMMITTEE
WELLS USED FOR HYDROGRAPHS**



FIG. KERN FAN HYDROGRAPH WELLS, 15-026
 Created: 01-31-07, T. Muehlebach
 Revised: 02-20-15, M. Allen
 Revised: 11-29-19, M. Allen
 Revised: 03-08-20, M. Allen

Legend

- Hydrograph Wells
- Monitor (Single)
- Monitor (Cluster)
- Monitor (Nested)
- Production Well

30S/26E-25A



KCWA
GROUNDWATER
DATABASE

GS Elevation 348.0 ft.



Data provided by: Kern County Water Agency

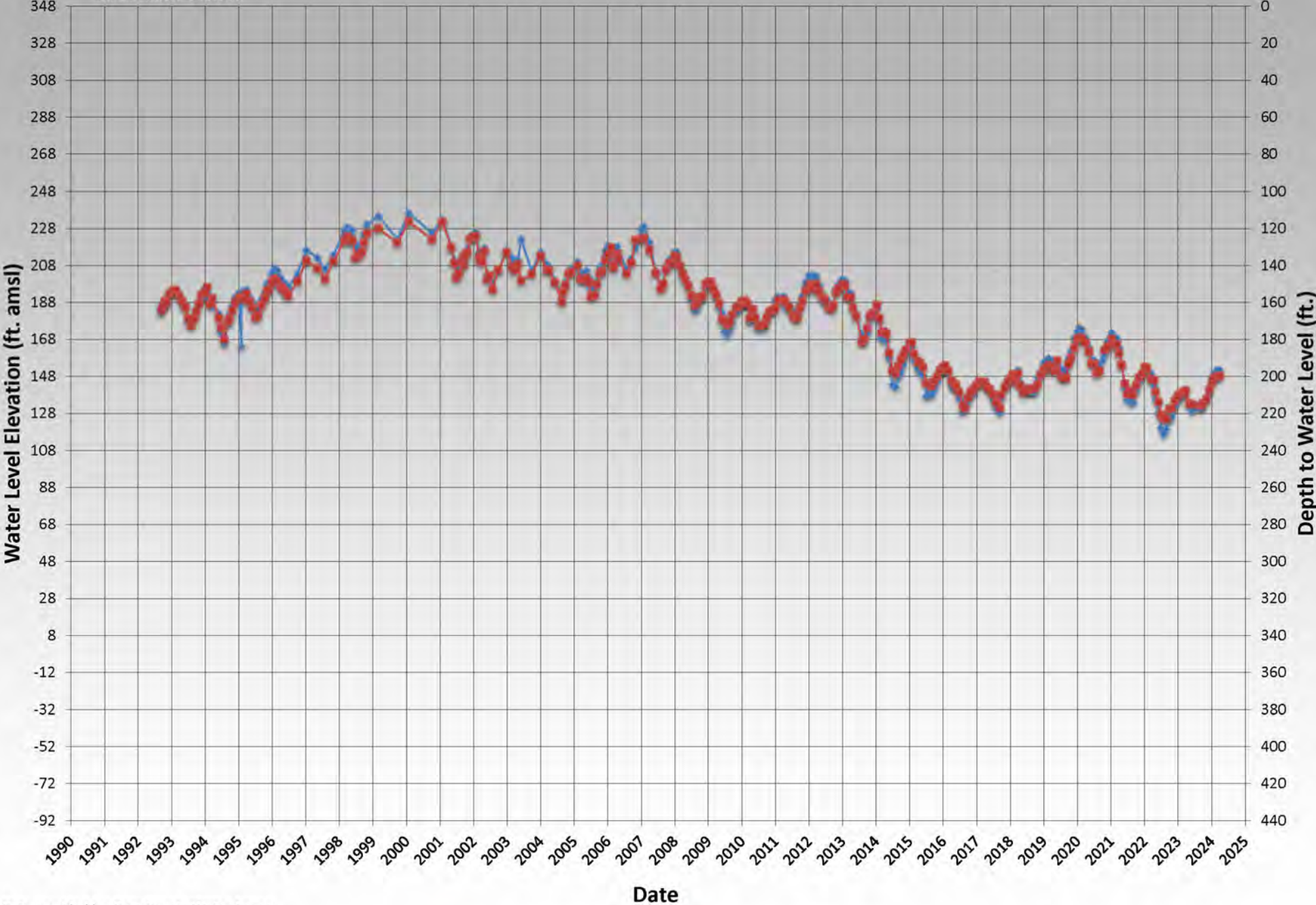
25A02 PERF INT 590'-690' 25A03 PERF INT 290'-390'

30S/26E-25A



KCWA
GROUNDWATER
DATABASE

GS Elevation 348.0 ft.



Data provided by: Kern County Water Agency

—●— 25A02 PERF INT 590'-690' —■— 25A03 PERF INT 290'-390'

30S/26E-35N01



KCWA
GROUNDWATER
DATABASE



Data provided by: Kern Delta Water District

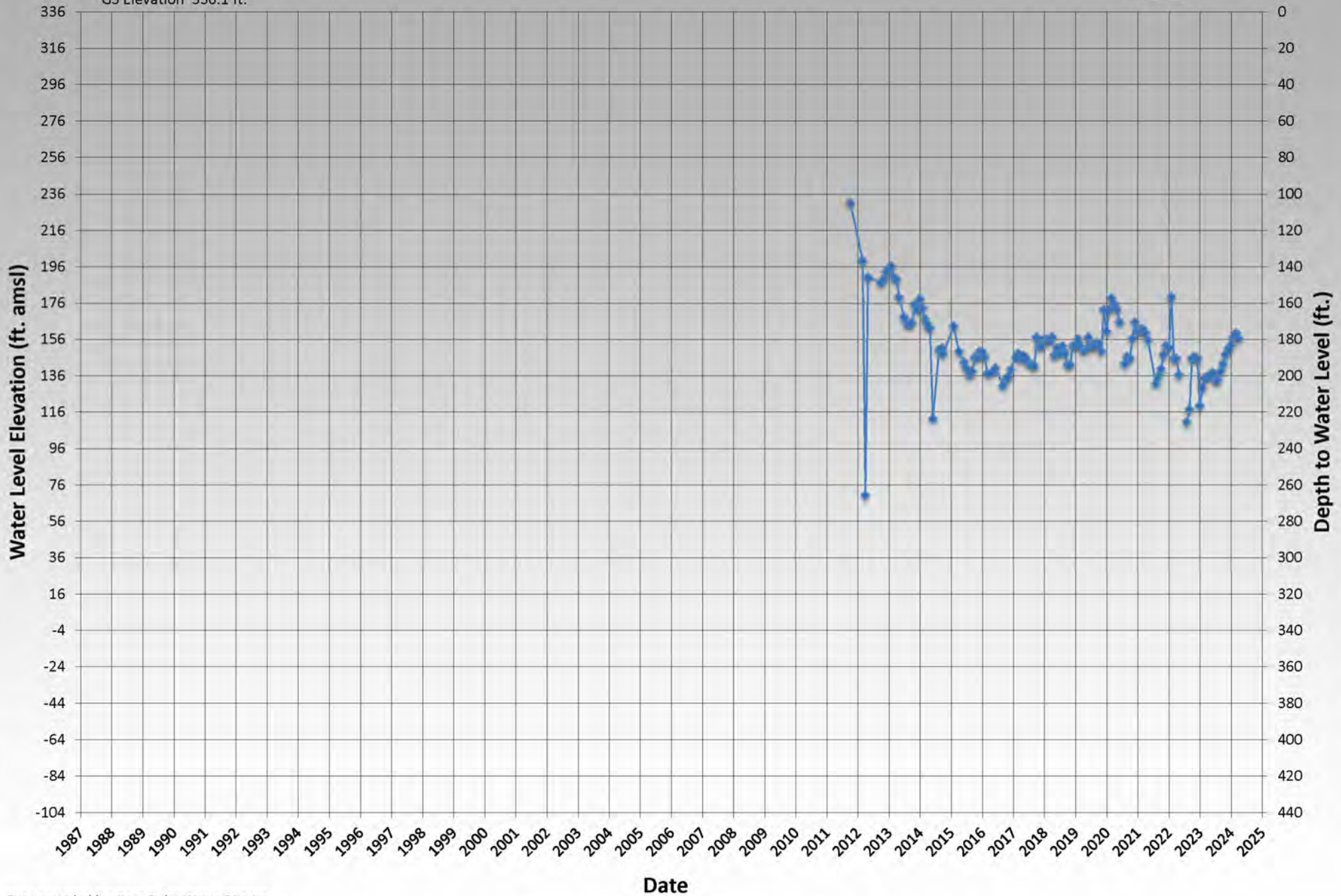
◆ 35N01 PERF INT 200'-470', 530'-650', 750'-850'

30S/26E-35N01



KCWA
GROUNDWATER
DATABASE

GS Elevation 336.1 ft.



Data provided by: Kern Delta Water District

35N01 PERF INT 200'-470', 530'-650', 750'-850'

31S/26E-10J01



KCWA
GROUNDWATER
DATABASE



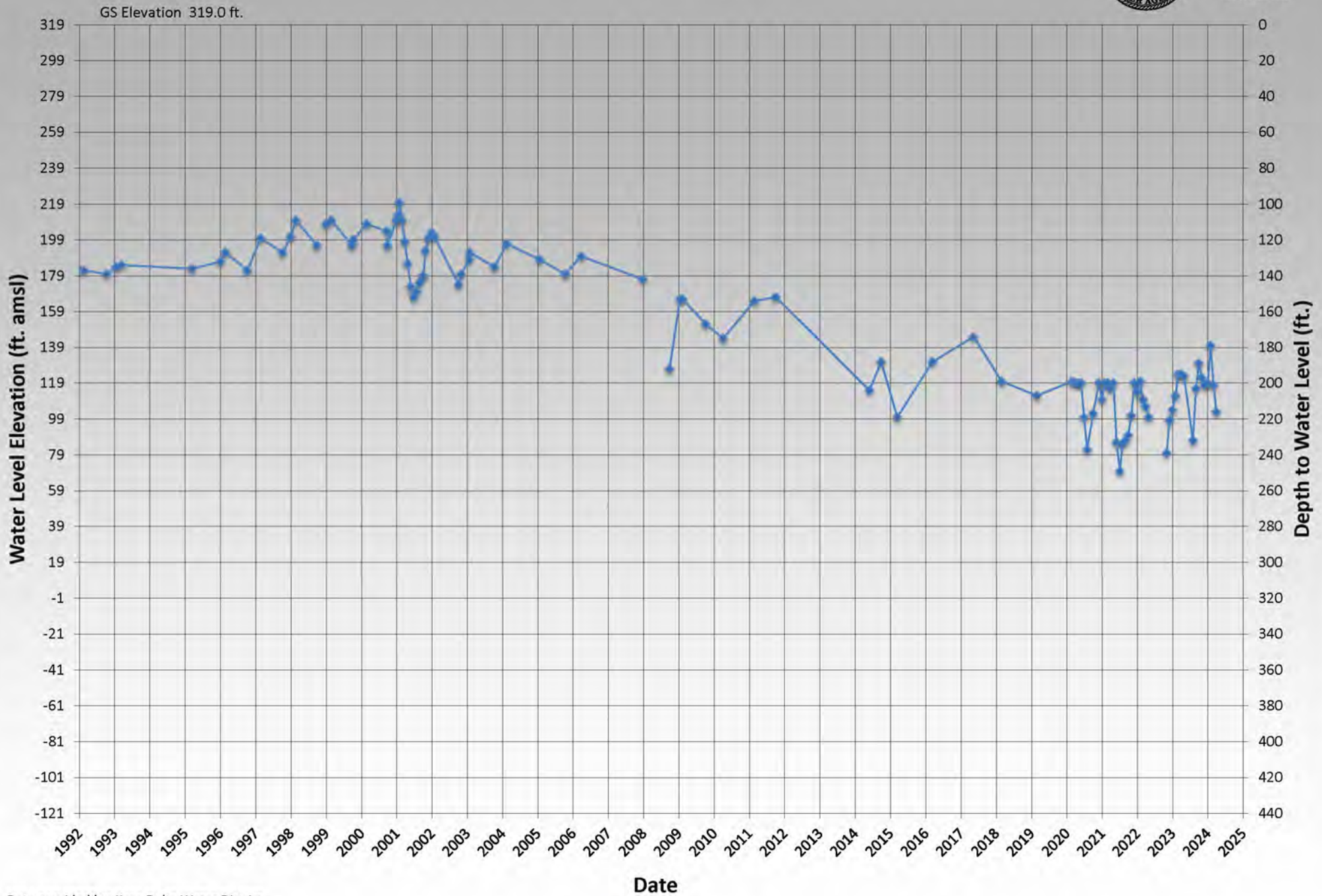
Data provided by: Kern Delta Water District

31S/26E-10J01

31S/26E-10J01



KCWA
GROUNDWATER
DATABASE



Data provided by: Kern Delta Water District

31S/26E-10J01

31S/26E-16P01



KCWA
GROUNDWATER
DATABASE



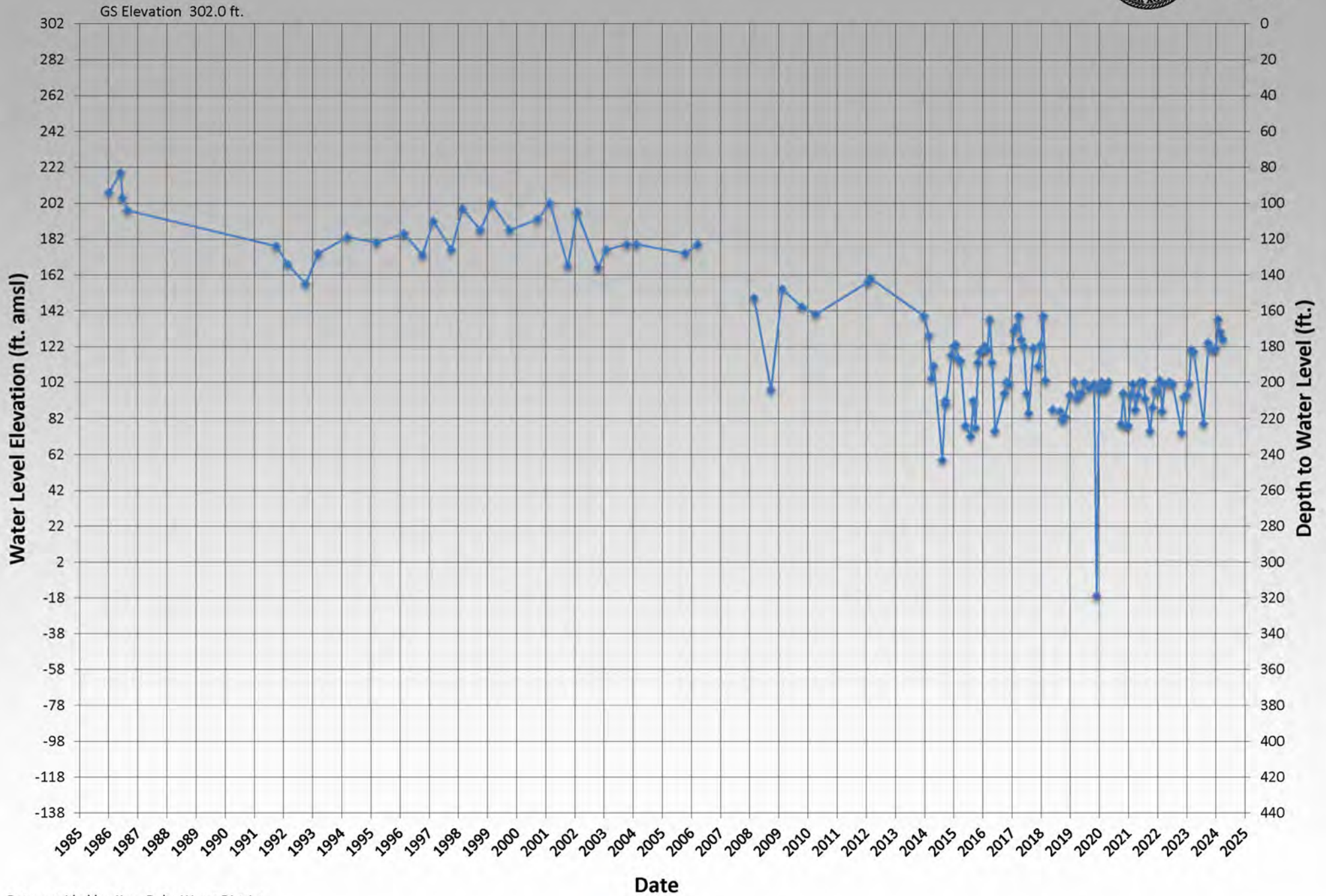
Data provided by: Kern Delta Water District

31S/26E-16P01

31S/26E-16P01



KCWA
GROUNDWATER
DATABASE



Data provided by: Kern Delta Water District

31S/26E-16P01

31S/26E-32B



KCWA
GROUNDWATER
DATABASE

GS Elevation 290.0 ft.



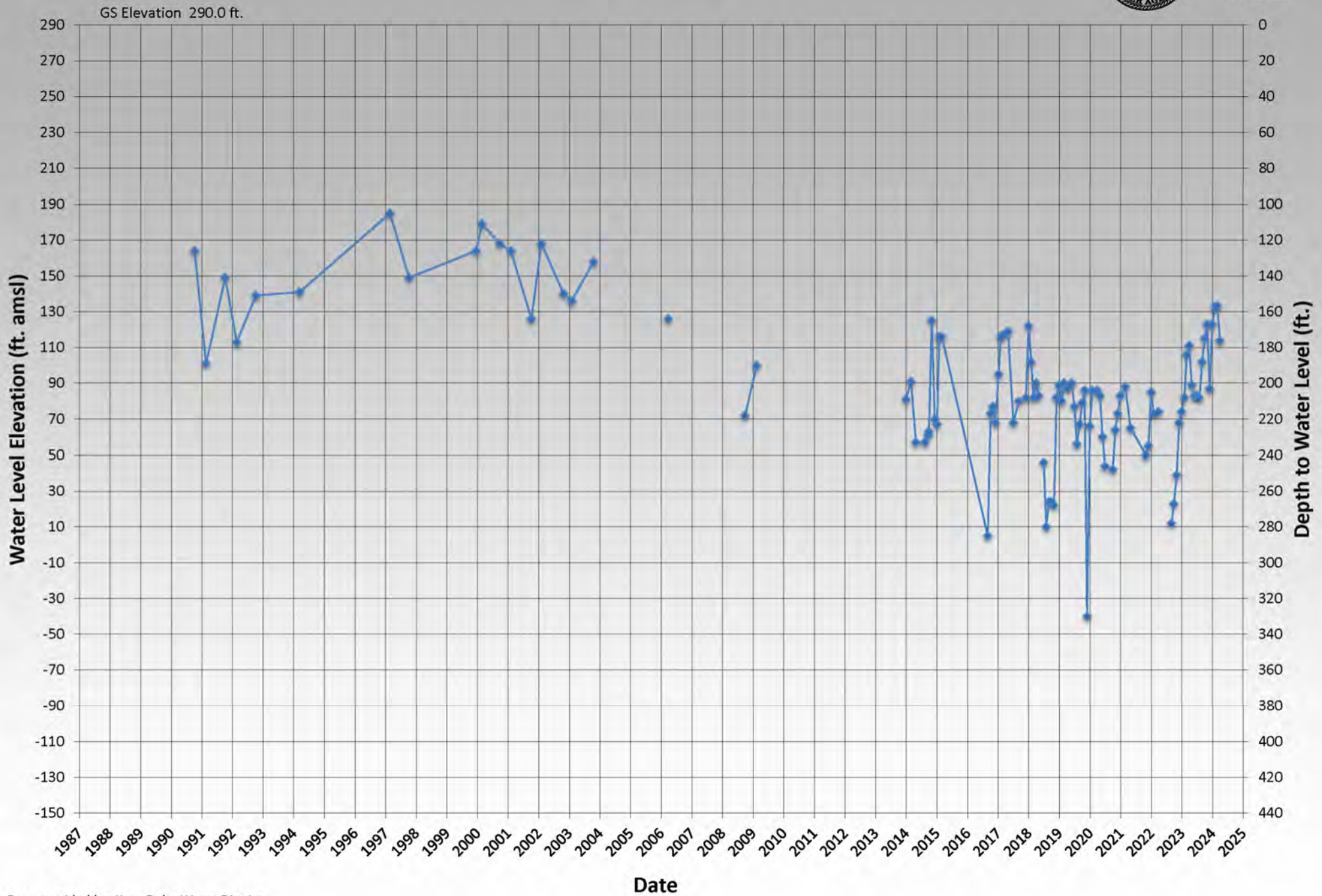
Data provided by: Kern Delta Water District

31S/26E-32B

31S/26E-32B



KCWA
GROUNDWATER
DATABASE



Data provided by: Kern Delta Water District

31S/26E-32B

Tab VI





To: Kern Delta Water District Board of Directors

From: Steven Teglia – General Manager

Date: April 17, 2024

Re: Agenda Item VI B. – External Agency Report

RECOMMENDATION:

Receive report, informational item only.

DISCUSSION:

Staff participates in / monitors multiple external agency meetings monthly. Below is a summary including items of note from the various meetings:

[Kern County Water Agency:](#)

- The KCWA Board met March 28, 2024.
- Next regular meeting will be April 25, 2024.
- Update on Water Transfers, Exchanges, and Purchases.
- Update on Delta Conveyance Activities (see schedule attached).
- Update on CVC and Pioneer Operations.
- 2024 allocation for SWP – 30%.
- Summary of groundwater and overdraft correction accounts (attached).

[Kern Fan Authority:](#)

- The KFA met March 27, 2024.
- 2023/24 Water Supply.
- Review of KCWA Board agenda.
- Pioneer Project.
- Local SGMA activities.
- Other activities (IRWMP/CVSALTS).

[Kern River Groundwater Sustainability Agency \(KRGSA\):](#)

- The KRGSA met April 4, 2024 (agenda attached).
- Election of Officers – Rodney Palla Chair
- Basin Coordination Committee update.
- Kern Subbasin Letter to SWRCB – GSP Revision Update.

[Kern Groundwater Authority \(KGA\):](#)

- The KGA meeting of March 27, 2024 was canceled.
- Basin Grant update.

[Kern River Watershed Coalition Authority \(KRWCA\)\(ILRP\):](#)

- The KRWCA met April 4, 2024 (agenda attached).
- Kern Water Collaborative Update – Nitrate Control Program Management Zone.
- Administrative Services Agreement for Kern Water Collaborative.
- Membership Update.
- On Farm Drinking Water Well reports due Dec. 31, 2024 (BC Labs removed / BSK Labs added).
- Updates regarding the status of various reports.

[South Valley Water Resources Authority:](#)

- The SVWRA meeting of March 28, 2024 was canceled.
- Fish Friendly Diversion Pilot Project update/discussion regarding project funding.
- Potential Special Activity Agreement No. 4.
- Blueprint activity update.

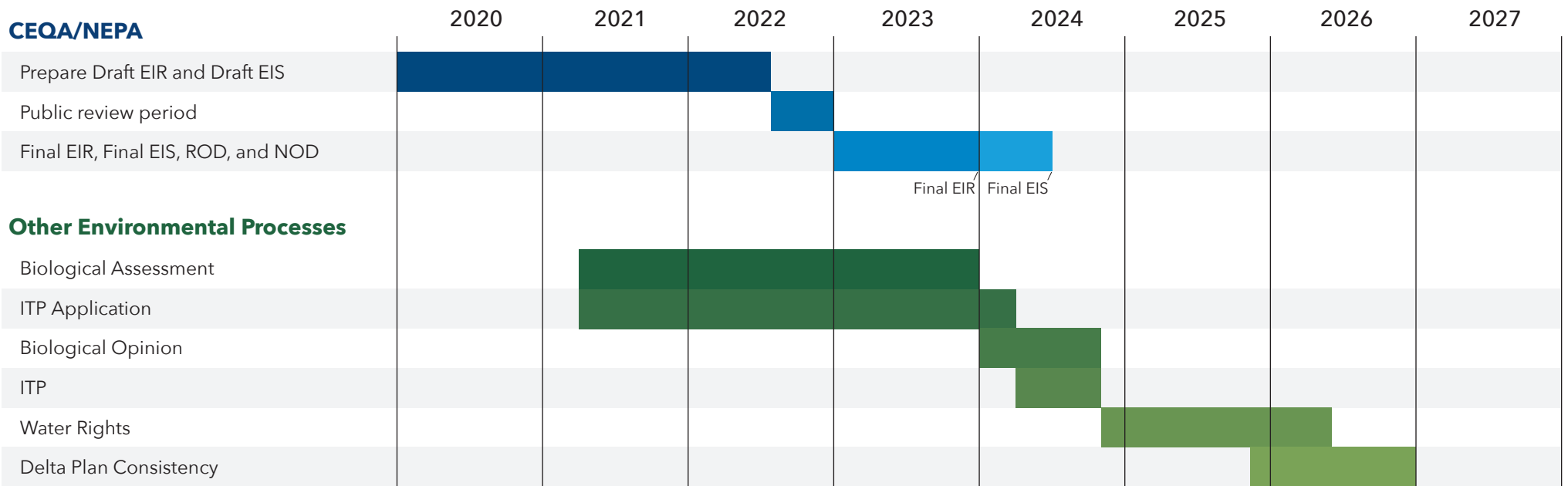
[Integrated Regional Water Management Plan \(IRWMP\):](#)

- No recent meetings.

[Water Association of Kern County \(WAKC\):](#)

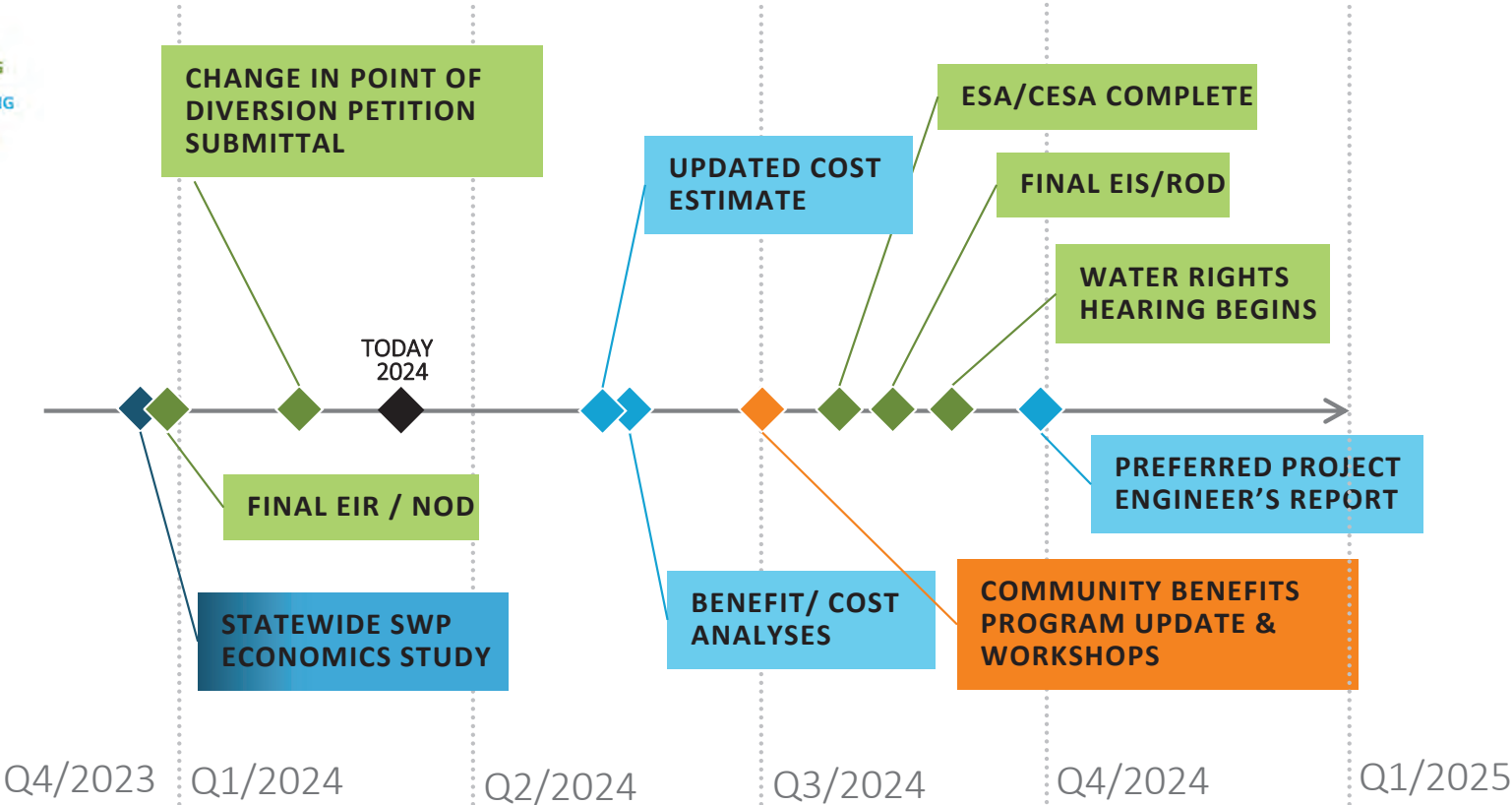
- WAKC met March 26, 2024.
- 2024 Water Summit recap.
- Workshops/Lunch speakers.

Delta Conveyance Project Planned Schedule



DCP 2024 Milestones

KEY
PERMITTING
ENGINEERING
OUTREACH



**Kern County Water Agency
Estimated Summary of Overdraft Correction Accounts
As of February 29, 2024**

Preliminary - Subject to Revision

Quantities in acre-feet

District	Estimated Balance as of December 31, 2023	Estimated Balance as of February 29, 2024					
		Pioneer Property	2800 Acres	Pioneer Project Subtotal	Berrenda Mesa	Kern Water Bank ^[1]	Total
Buena Vista WSD	76,325	64,970	0	64,970	0	11,355	76,325
Henry Miller WD	94,883	67,846	375	68,221	2,584	24,078	94,883
Kern County Water Agency	55,030	35,356	7,121	42,477	0	12,553	55,030
Kern Delta WD	102,442	75,038	409	75,447	2,026	24,969	102,442
Rosedale-Rio Bravo WSD	247,228	190,531	4,190	194,721	3,220	49,287	247,228
Total	575,908	433,741	12,095	445,836	7,830	122,242	575,908

^[1] Does not include purchase of 2011 4% reserve water.

**Kern County Water Agency
Estimated Summary of Groundwater Bank Accounts
As of February 29, 2024**

Preliminary - Subject to Revision

Quantities in acre-feet

District	Estimated Balance as of December 31, 2023	Estimated Balance as of February 29, 2024					Total
		Pioneer Property	2800 Acres	Pioneer Project Subtotal	Berrenda Mesa	Kern Water Bank	
Belridge WSD	80,524	75,689	5,959	81,648	3,876	0	85,524
Berrenda Mesa WD	102,939	67,718	4,599	72,317	35,960	0	108,277
Buena Vista WSD	162,741	106,656	3,601	110,257	0	52,484	162,741
Cawelo WD	0	0	0	0	0	0	0
Dudley Ridge WD	63,870	0	0	0	0	67,838	67,838
Henry Miller WD	44,079	43,246	833	44,079	0	0	44,079
Improvement District No. 4	247,331	43,255	6,169	49,424	0	198,887	248,311
Kern County Water Agency	185,256	103,700	60,099	163,799	3,499	17,958	185,256
Kern Delta WD	47,763	47,763	0	47,763	0	0	47,763
Lost Hills WD	86,401	59,911	24,460	84,371	3,252	0	87,623
Rosedale-Rio Bravo WSD	71,899	73,047	835	73,882	0	0	73,882
Semitropic WSD	264,171	33,391	860	34,251	0	233,779	268,030
Tehachapi-Cummings CWD	5,820	0	0	0	0	5,820	5,820
Tejon-Castac WD	64,734	2,666	1,283	3,949	0	61,483	65,432
Westside Mutual Water Co.	532,085	0	0	0	0	541,152	541,152
Wheeler Ridge-Maricopa WSD	280,661	19,590	16,008	35,598	5,541	239,522	280,661
Total	2,240,274	676,632	124,706	801,338	52,128	1,418,923	2,272,389



Board Members:
Rodney Palla, Chair
Bob Smith, Vice-Chair
Gene Lundquist

KERN RIVER GSA REGULAR BOARD MEETING

Thursday, April 4, 2024
10:00 a.m.

City of Bakersfield Water Resources Department
1000 Buena Vista Road, Bakersfield CA 93311
Large Conference Room

AGENDA

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PUBLIC STATEMENTS**
- 4. APPROVAL OF MINUTES** of the March 8, 2024, Special Meeting
- 5. NEW BUSINESS**
 - A. Election of Officers
 - B. Correspondence Received (City Clerk, Maldonado)
 - C. Finance Updates (McKeegan)
 - i. Receive and File Financial Report
 - D. Management Group Updates (Beard, Maldonado, Teglia)
 - i. Basin Coordination Committee Updates
 - a. Update on SWRCB Meetings/Revised GSP
 - b. Approval of Letter of Intent with Self Help Enterprises for Well Mitigation Work
- 6. CLOSED SESSION**
 - A. Conference with Legal Counsel – **Potential Litigation**; Closed session pursuant to Government Code section 54956.9 (d)(2), (e)(1); Two Matters
- 7. CLOSED SESSION ACTION**
- 8. COMMITTEE COMMENTS**

9. ADJOURNMENT

March 29, 2024

Dorene D'Adamo, Vice Chair
State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812-0100
Via email: dorene.dadamo@statewaterboard.ca.gov

Subject: Kern County Subbasin Progress Update

Vice Chair D'Adamo:

The Kern County Subbasin (Subbasin) Groundwater Sustainability Agencies and Management Areas¹ (GSAs/MAs) write to inform the State Water Resources Control Board (SWRCB or Board) Members about the Subbasin's work to revise the 2022 Groundwater Sustainability Plans (GSPs) in response to the Department of Water Resources (DWR) March 2023 Inadequate Determination Letter² (DWR Letter). The Subbasin GSAs, in consultation with SWRCB staff and Subbasin stakeholders, have made significant progress during the past year to address the plan deficiencies identified by DWR for the 2022 GSPs and have incorporated feedback received from consultation meetings with SWRCB staff. **The Subbasin GSAs/MAs intend to submit revised GSP(s) in May 2024³** for the Board Members' consideration prior to preparation of the SWRCB staff report and the Subbasin's tentative January 2025 probationary hearing date.

Revised GSP(s) Development

Since receipt of the DWR Letter on March 2, 2023, which deemed the Kern County Subbasin GSPs inadequate, the Subbasin GSAs/MAs have invested significant time and resources in addressing the plan deficiencies through development of more consistent and coordinated revised GSP(s), with a project cost of \$1.3 million. Throughout this process, the Subbasin held seven (7) technical meetings with SWRCB staff (Figure 1).⁴



18 Managers **60** TWG **28** Subbasin **7** SWRCB

Figure 1. Kern County Subbasin Revised GSPs Development Meetings

The Subbasin has held over 117 meetings between landowner representative policy members, GSA/MA managers, and a technical working group (TWG) consisting of the GSA/MA consultants.⁵ These meetings are in addition to regularly held GSA meetings.

The meetings to date have addressed the Subbasin's revised GSP(s) with a Subbasin-wide coordinated approach for:

- Sustainable Management Criteria
 - Groundwater Levels
 - Subsidence
 - Water Quality
 - Water Budgets
- Well Inventory and Well Mitigation Program
- Monitoring Network
- Projects and Management Actions

¹ December 2023, Kern County Subbasin Map (Attachment 1)

² March 2, 2023, Department of Water Resources, *Inadequate Determination Letter* (Attachment 2)

³ Kern County Subbasin Revised GSP(s) Schedule (Attachment 3)

⁴ 2023-2024, SWRCB and Kern County Technical Meetings (Attachment 4)

⁵ March 2024, Kern County Subbasin Contacts List (Attachment 5)

Addressing DWR Identified Deficiencies

The Subbasin’s aim over the last year has been to develop “a well-explained Plan that will be implemented in a coordinated manner.” In addition to developing and applying uniform Sustainable Management Criteria (SMCs) methodologies based on the best available science to all GSPs within the Subbasin, the Subbasin has also developed a common organizational structure and a consistent narrative explanation for how the Subbasin will achieve sustainability by 2040. The revised GSP(s) also rely on common data and methodologies to SMCs and Undesirable Results (URs), as described in more detail below.

Deficiency 1: The GSPs do not establish undesirable results that are consistent for the entire Subbasin^{6,7}

The revised GSP(s) utilize consistent data and methodologies, adopt clear and consistent terminology and standard templates to clearly define Subbasin-wide definitions for URs, Minimum Thresholds (MTs), and Measurable Objectives (MOs) for each applicable Sustainability Indicator. For example, to define UR’s for lowering of groundwater levels, the Subbasin conducted a robust Subbasin-wide well impacts analysis using the revised MTs and updated Subbasin well inventory to quantify potential impacts to beneficial users. The progress made on revised MTs and URs for lowering of groundwater levels was presented to SWRCB staff on October 4, 2023. On November 1, 2023, the Subbasin presented additional analyses to SWRCB staff to address feedback received from the October 4, 2023, meeting.

Revised UR Definition: Based on the technical analysis, the Subbasin developed a two-part definition that considers direct impacts on domestic and drinking water supply wells (no more than 15 dewatered per year) and a Subbasin-wide percentage of 25% MT exceedances at representative monitoring wells (184 total) across the Subbasin. Through model results, the most likely scenario results in at most 51 total drinking water wells being impacted by 2040 at the projected MTs (out of 1,476 or 3%). To address potential impacts to drinking water wells, the following Subbasin-wide approaches were developed and presented to SWRCB staff on March 6, 2024:

- 1. MT Exceedance Policy:** Requires GSA action in the event of a single MT exceedance for Chronic Lowering of Groundwater Levels, Degraded Water Quality, and Land Subsidence.
- 2. Well Mitigation Program:** Addresses proactive mitigation of Chronic Lowering of Groundwater Levels and Degraded Water Quality impacts on domestic and drinking water wells.

The Subbasin has also initiated a Letter of Intent to begin negotiations with Self-Help Enterprises (SHE) to administer a locally funded Subbasin-wide Well Mitigation Program (Program). In response to SWRCB staff feedback, the Subbasin has accelerated the initial, proposed implementation timeline for the Program. The Subbasin intends for the Program to begin January 2025, and include Program components shown in Figure 2.



Figure 2. Kern Subbasin Coordinated Well Mitigation Program Components

⁶ Page 13, March 2, 2023, Department of Water Resources, *Inadequate Determination Letter*

⁷ Pages 9-13, March 2, 2023, Department of Water Resources, *Inadequate Determination Letter*

The Subbasin is committed to funding effective implementation of the Program to ensure domestic well mitigation services are provided to any domestic or drinking water user submitting a verified claim. Existing well mitigation programs in the Subbasin will continue to assure adequate coverage continues as the 2024 SHE contracts are finalized.

Deficiency 2: The Subbasin’s chronic lowering of groundwater levels sustainable management criteria do not satisfy the requirements of SGMA and the GSP Regulations^{8,9}

The revised GSP(s) utilize a Subbasin-wide methodology for setting MTs and MOs for Chronic Lowering of Groundwater Levels. This methodology was established using an iterative process that considered more than eleven (11) potential MT methodologies that were vetted against the Subbasin UR definition, and potential well impacts, which resulted in development of Subbasin-wide analyses (Figure 3).

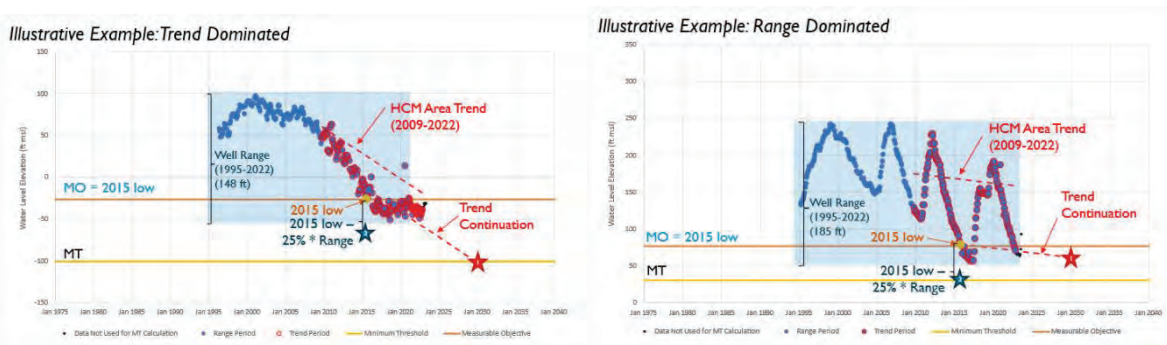


Figure 3. Kern Subbasin Coordinated Minimum Threshold Analyses

1. **Well Impacts Analysis:** Conducted using the updated Subbasin well inventory, MTs and the quantitative criteria for URs to better quantify potential impacts to beneficial users. To address SWRCB staff feedback, the Subbasin has set MOs at 2015 groundwater levels. The above graphic illustrates the MT variance to consider Subbasin complexity to address local concerns, while maintaining a unified approach throughout the Subbasin.
2. **Depletion of Supply Analysis:** Conducted to quantify the percentage of domestic and drinking water supply wells that may be impacted at MTs and the UR definition. Under the modeled most likely scenario, only 1.5% of the total estimated domestic and drinking water supply may be impacted by 2040 at the projected MTs (which will be subject to mitigation). The Subbasin has estimated a 4% reduction of groundwater storage that would occur at groundwater level MTs. As previously mentioned, the Subbasin will address impacts to domestic and drinking water supply wells via the Subbasin-wide well mitigation program developed in partnership with SHE.
3. **Representative Monitoring Well (Level and Quality) Density:** The Subbasin has a common and consistent groundwater level density grid (111 sites) with additional 73 monitoring sites for a total of 184 wells (Figure 4). In addition, groundwater level proxy for water quality



Figure 4. Kern Subbasin Coordinated Representative Monitoring Well Density

⁸ Page 32, March 2, 2023, Department of Water Resources, *Inadequate Determination Letter*

⁹ Pages 31-32, March 2, 2023, Department of Water Resources, *Inadequate Determination Letter*

results was replaced with a representative water quality network to protect areas with the potential for water quality to be impacted by groundwater management actions. In sensitive areas of drinking water concerns, groundwater level MTs were adjusted to be protective of water quality concerns. In response to SWRCB staff feedback received on February 5, 2024, water quality monitoring was expanded to include the addition of Uranium and 123TCP to the constituents of concern list (also monitoring Arsenic, Nitrate and Total Dissolved Solids [TDS]).

Deficiency 3: The Subbasin’s land subsidence sustainable management criteria do not satisfy the requirements of SGMA and the GSP regulations^{10,11}

The revised GSP(s) assess Subbasin-wide causes, extent, and magnitude of land subsidence and impacts to critical infrastructure through development of a coordinated approach in addressing land subsidence (Figure 5). As presented to SWRCB staff on December 13, 2023, analyses resulted in two main objectives which guided the Subbasin-wide approach for the assessment of impacts to land subsidence and critical infrastructure to develop SMCs:

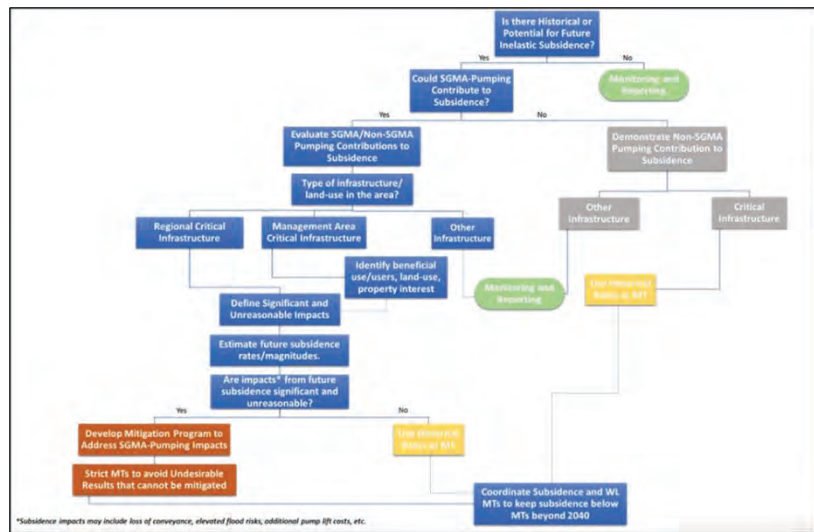


Figure 5. Kern Subbasin Coordinated Subsidence Approach

1. Identify Subsidence Factors:

In comparison to other Southern San Joaquin Valley subbasins, the Subbasin has not historically experienced significant amounts of subsidence with widespread impacts to land surface infrastructure. However, in response to DWR’s identified deficiencies, the Subbasin further investigated and scientifically demonstrated differences between subsidence caused by groundwater extraction activities (within GSA authorities) versus other causes for example oil production, geotechnical/expansive soils, and infrastructure lifespan (outside of GSA authorities) using the most recently available data (including DWR InSAR).

2. Protect Regional and Management Area Infrastructure: Developed consistent SMCs to address subsidence within GSA authorities that accommodate Subbasin complexity and meet SGMA objectives to assess and monitor land subsidence and develop projects and management actions to prevent future impacts. A Subbasin-wide monitoring network has been established.

- 3. Considered Best Available Data and Studies:** During this process, the Subbasin:
- Funded a series of new land subsidence studies that filled key data gaps noted by DWR in their deficiency letter. These studies have been shared with DWR’s California Aqueduct Subsidence Project (CASP) and the Subbasin continues to engage with CASP as an interested stakeholder.
 - Coordinated with the Friant Water Authority (FWA), including construction of a new extensometer on the Friant-Kern Canal, and the Subbasin continues to engage with FWA as an interested stakeholder.

¹⁰ Page 45, March 2, 2023, Department of Water Resources, *Inadequate Determination Letter*

¹¹ Pages 42-45, March 2, 2023, Department of Water Resources, *Inadequate Determination Letter*

- Continues to incorporate updated DWR InSAR data as it is released into technical analysis (Figure 6).
- Updated basin setting definitions consistent with DWR Best Management Practice guidance to consider physical (e.g., to of bedrock), geophysical (e.g., US EPA Underground Source of Drinking Water) and geologic boundaries of aquifer exemptions.

Conclusion

The Subbasin has made significant progress and expended substantial resources to create revised GSP(s) to address the deficiencies identified in DWR's inadequate determination, as well as incorporating SWRCB staff feedback. **The existing GSPs do not represent the Subbasin, and the Subbasin respectfully request that SWRCB staff forego further review of the existing GSPs and instead focus review on the revised GSP(s) to be submitted in May 2024 for consideration prior to preparation of the SWRCB staff report and the Subbasin's tentative January 2025 probationary hearing date. The revised GSP(s) will include a brief Executive Summary that will present key aspects of the document(s).**

The Subbasin is eager to share a comprehensive overview of how our revised GSP(s) address both DWR's deficiencies and SWRCB staff feedback at our May 31, 2024, meeting with SWRCB staff. The Subbasin welcomes and encourages any State Board members who are available to attend this meeting. In addition, the Subbasin landowner representative policy members would like to extend an invitation to all Board Members (while respecting any legal limitations) and invite the Board Members to a hosted tour, or tours, of the Kern County Subbasin.

The Subbasin appreciates your consideration and this opportunity to provide an update on progress. If you have any questions regarding this letter, please contact Kristin Pittack at 760-223-5062 or kpittack@rinconconsultants.com.

Sincerely,



Kristin Pittack, MS
Kern County Subbasin Plan Manager/Point-of-Contact

CC:

E. Joaquin Esquivel, Chair
State Water Resources Control Board

Laurel Firestone, Board Member
State Water Resources Control Board

Sean Maguire, Board Member
State Water Resources Control Board

Nichole Morgan, Board Member
State Water Resources Control Board

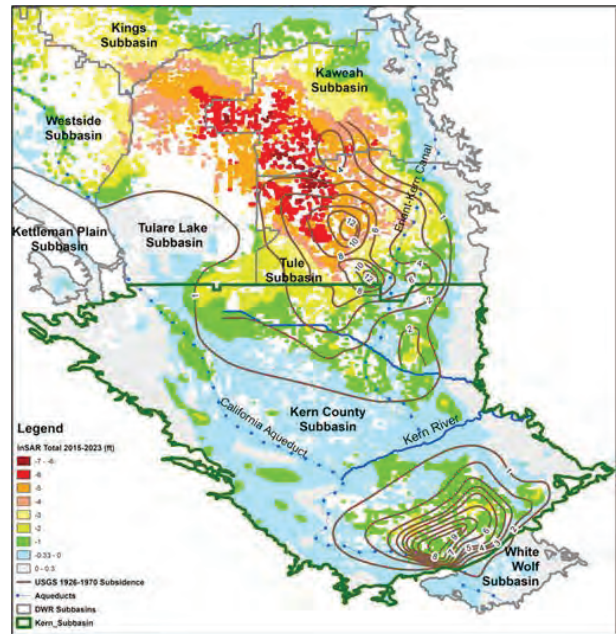
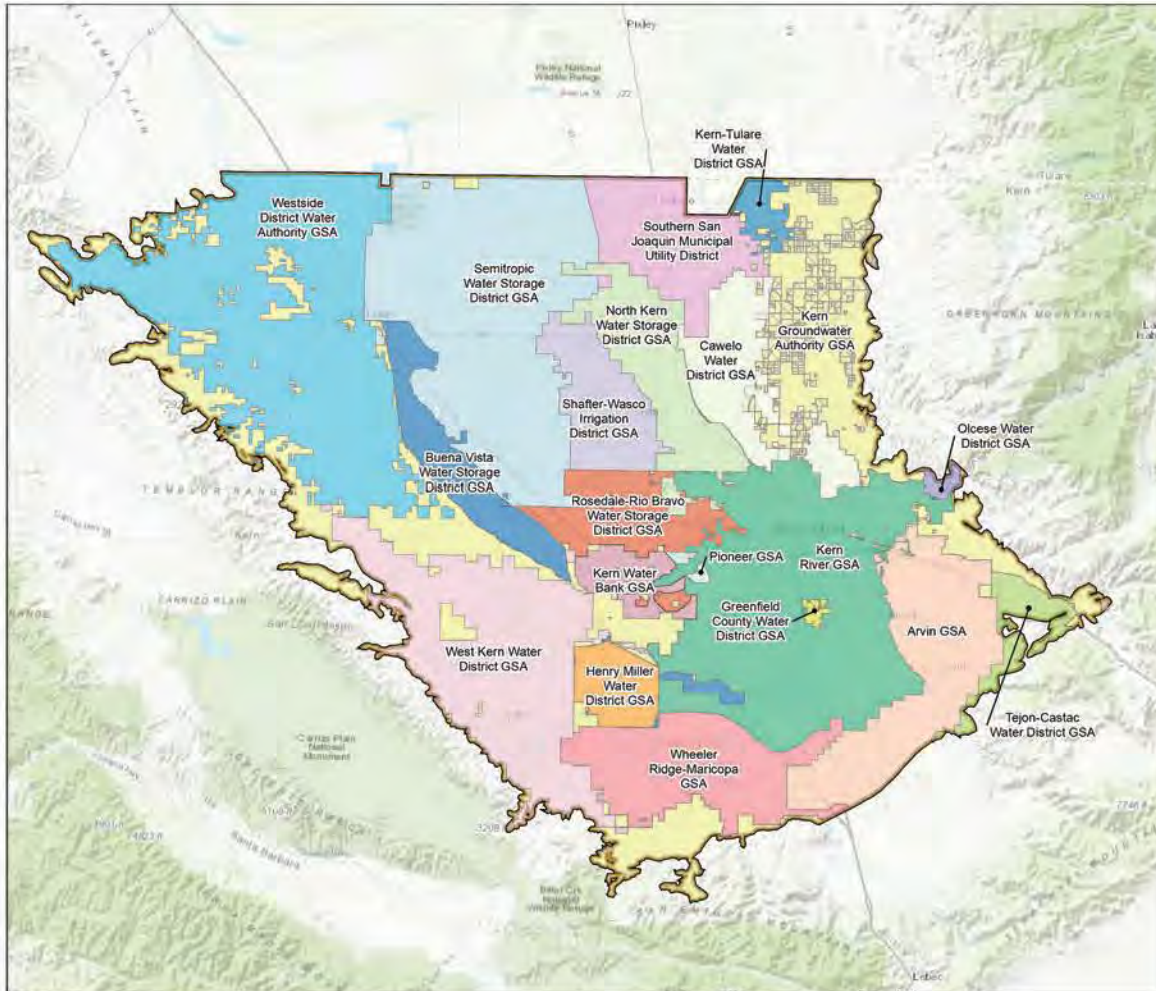


Figure 6. SGMA Data Viewer, Subsidence Vertical Displacement



Legend

Groundwater Subbasin

Kern County (DWR 5-022.14)

GSA

- Arvin GSA
- Buena Vista Water Storage District GSA
- Cawelo Water District GSA
- Greenfield County Water District GSA
- Henry Miller Water District GSA
- Kern Groundwater Authority GSA
- Kern River GSA
- Kern Water Bank GSA
- Kern-Tulare Water District GSA
- North Kern Water Storage District GSA
- Olcese Water District GSA
- Pioneer GSA
- Rosedale-Rio Bravo Water Storage District GSA
- Semitropic Water Storage District GSA
- Shafter-Wasco Irrigation District GSA
- Southern San Joaquin Municipal Utility District
- Tejon-Castac Water District GSA
- West Kern Water District GSA
- Westside District Water Authority GSA
- Wheeler Ridge-Maricopa GSA
- Eastside Water Management Area

Abbreviations

DWR = California Department of Water Resources
 GSA = Groundwater Sustainability Agency

Notes

- All locations are approximate.
- Eastside Water Management Area (EWMA) is an organized management area of non-districted lands.

Sources

- Basemap is ESRI's ArcGIS Online world topographic map, obtained 27 February 2024.
- DWR groundwater basins are based on the boundaries defined in California's Groundwater Bulletin 118 - 2019 Update.
- GSA boundaries downloaded from DWR SGMA data viewer on 5 December 2023.
<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#boundaries>

GSA Coverage in the Kern Subbasin

eki environment & water

Kern County Subbasin
 Kern County, CA
 February 2024



CALIFORNIA DEPARTMENT OF WATER RESOURCES

SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

715 P Street, 8th Floor | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

March 2, 2023

Patricia Poire
Kern County Subbasin Point of Contact
Kern Groundwater Authority
1800 30th Street, Suite 280
Bakersfield, CA 93301
ppoire@kerngwa.com

RE: Inadequate Determination of the Revised 2020 Groundwater Sustainability Plans Submitted for the San Joaquin Valley – Kern County Subbasin.

Dear Patricia Poire,

The Department of Water Resources (Department) has evaluated the six groundwater sustainability plans (GSPs or Plan) submitted for the San Joaquin Valley – Kern County Subbasin (Subbasin), as well as the materials considered to be part of the required coordination agreement. Collectively, the six GSPs and the coordination agreement are referred to as the Plan for the Subbasin. The Department has evaluated the revised Plan for the Kern County Subbasin in response to the Department's incomplete determination on January 28, 2022, and has determined that the actions taken to correct deficiencies identified by the Department were not sufficient (23 CCR § 355.2(e)(3)(C)).

The Department based its inadequate determination on recommendations from the Staff Report, included as an enclosure to the attached Statement of Findings, which explains why the Department believes that the Subbasin's Plan did not take sufficient actions to correct the deficiencies previously identified by the Department and, therefore, does not substantially comply with the GSP Regulations nor satisfy the objectives of the Sustainable Groundwater Management Act (SGMA).

Once the Department determines that a GSP is inadequate, primary jurisdiction shifts from the Department to the State Water Resources Control Board (State Board), which may designate the basin probationary (Water Code § 10735.2(a)). However, Department involvement does not end at that point; the Department may, at the request of the State Board, further assess a plan, including any updates, and may provide technical recommendations to remedy deficiencies to that plan. In addition, the responsibilities of the GSA do not end with an inadequate determination. Regardless of the status of a plan, a GSA remains obligated to continue collecting and submitting monitoring network data (Water Code Part 2.11; Water Code § 10727.2; 23 CCR § 353.40; 23 CCR § 354.40), submit an annual report to the Department (Water Code § 10728; 23 CCR § 356.2), conduct periodic updates to the plan at least every five years (Water Code § 10728.2; 23 CCR § 356.4), and submit this information to DWR's SGMA

Portal (23 CCR § 354.40). The Department also encourages GSAs to continue implementation efforts on project and management actions that will support the Subbasin's progress towards achieving sustainability.

Prior to this determination, the Department consulted with the State Board as required by SGMA (Water Code § 10735.2(a)(3)). Moving forward, for questions related to state intervention, please send a request to sgma@Waterboards.ca.gov. For any questions related to assessments, the State Board will coordinate with the Department.

For any other questions, please contact Sustainable Groundwater Management staff by emailing sgmps@water.ca.gov.

Thank You,

Paul Gosselin _____

Paul Gosselin
Deputy Director
Sustainable Groundwater Management

Attachment:

1. Statement of Findings Regarding the Inadequate Determination of the San Joaquin Valley – Kern County Subbasin Groundwater Sustainability Plans

**STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES**

**STATEMENT OF FINDINGS REGARDING THE
DETERMINATION OF INADEQUATE STATUS OF THE
SAN JOAQUIN VALLEY BASIN – KERN COUNTY SUBBASIN
GROUNDWATER SUSTAINABILITY PLAN**

The Department of Water Resources (Department) is required to evaluate whether a submitted groundwater sustainability plan (GSP or Plan) conforms to specific requirements of the Sustainable Groundwater Management Act (SGMA or Act), is likely to achieve the sustainability goal for the basin covered by the Plan, and whether the Plan adversely affects the ability of an adjacent basin to implement its GSP or impedes achievement of sustainability goals in an adjacent basin. (Water Code § 10733.) The Department is directed to issue an assessment of the Plan within two years of its submission. (Water Code § 10733.4.) If a Plan is determined to be Incomplete, the Department identifies deficiencies that preclude approval of the Plan and identifies corrective actions required to make the Plan compliant with SGMA and the GSP Regulations. The GSA has up to 180 days from the date the Department issues its assessment to make the necessary corrections and submit a revised Plan. (23 CCR § 355.2(e)(2)). This Statement of Findings explains the Department’s decision regarding the revised Plan for the San Joaquin Valley Basin – Kern County Subbasin (No. 5-022.14).

SGMA allows for multiple GSPs implemented by multiple GSAs and coordinated pursuant to a single coordination agreement that covers the entire basin to be an acceptable planning scenario. (Water Code § 10727.) In the San Joaquin Valley – Kern County Subbasin (Subbasin), six GSPs were prepared by 17 GSAs for the various management areas established in the Subbasin pursuant to the coordination agreement. Collectively, the six GSPs and the coordination agreement are referred to as the Plan for the Subbasin. Individually, the GSPs include the following:

- *Kern Groundwater Authority Groundwater Sustainability Plan* – Amended July 2022 (KGA GSP) – prepared by the Kern Groundwater Authority (KGA) GSA, Semitropic Water Storage District (SWSD) GSA, Cawelo Water District (CWD) GSA, City of McFarland GSA, Pioneer GSA, West Kern Water District (WKWD) GSA, and Westside District Water Authority GSA.
- *Amended Kern River Groundwater Sustainability Plan* – July 2022 (Kern River GSP) – prepared by the Kern River GSA and Greenfield County Water District GSA.

Statement of Findings

San Joaquin Valley – Kern County Subbasin (Basin No. 5-022.14)

March 2, 2023

- *Buena Vista Water Storage District GSA Groundwater Sustainability Plan* – July 2022 (Buena Vista GSP) – prepared by the Buena Vista Water Storage District (Buena Vista) GSA.
- *Olcese Groundwater Sustainability Agency Groundwater Sustainability Plan* – July 2022 (Olcese GSP) – prepared by the Olcese Water District (OWD) GSA.
- *Henry Miller Water District Groundwater Sustainability Plan* – July 2022 (Henry Miller GSP) – prepared by the Henry Miller Water District (HMWD) GSA.
- *South of Kern River Groundwater Sustainability Plan* – July 2022 (SOKR GSP) – prepared by the Arvin GSA, Tejon-Castac Water District (TCWD) GSA, and the Wheeler Ridge-Maricopa GSA.

Department management has discussed the Plan with staff and has reviewed the Department Staff Report, entitled *Groundwater Sustainability Plan Assessment Staff Report – San Joaquin Valley – Kern County Subbasin*, attached as Exhibit A, recommending an inadequate determination of the GSP. Department management is satisfied that staff have conducted a thorough evaluation and assessment of the resubmitted Plan and concurs with staff’s recommendation. The Department therefore finds the resubmitted Plan **INADEQUATE** and makes the following findings:

- A. The initial Plan for the basin submitted by the GSA for the Department’s evaluation satisfied the required conditions as outlined the required conditions regarding the submission deadline, completeness, coordination, and Basin coverage, as outlined in § 355.4(a) of the GSP Regulations (23 CCR § 350 et seq.), and Department Staff therefore evaluated the initial Plan.
- B. On January 28, 2022, the Department issued a Staff Report and Findings determining the initial GSP submitted by the Agencies for the basin to be incomplete, because the GSP did not satisfy the requirements of SGMA, nor did it substantially comply with the GSP Regulations. At that time, the Department provided corrective actions in the Staff Report that were intended to address the deficiencies that precluded approval. Consistent with the GSP Regulations, the Department provided the Agencies with up to 180 days to address the deficiencies detailed in the Staff Report. On July 27, 2022, within the 180 days provided to remedy the deficiencies identified in the Staff Report related to the Department’s initial incomplete determination, the Agencies resubmitted the basin GSP to the Department for reevaluation. When evaluating a resubmitted GSP that was initially determined to be incomplete, the Department reviews the materials (e.g., revised or amended GSP) that were submitted within the 180-day deadline and does not review or rely on materials that were submitted to the Department by the GSAs after the resubmission deadline. Furthermore, the Department does not conduct a full evaluation of all components of a resubmitted Plan, but rather focuses on how the Agency has addressed the previously identified deficiencies that precluded approval of the initially submitted Plan. The

Department shall find a Plan previously determined to be incomplete to be inadequate if, after consultation with the State Water Resources Control Board, the Agency has not taken sufficient actions to correct the deficiencies previously identified by the Department. (23 CCR § 355.2(e)(3)(C).)

C. The Department's initial Staff Report identified the deficiencies that precluded approval of the initially submitted Plan. After staff's thorough evaluation of the resubmitted Plan, the Department makes the following findings regarding the sufficiency of the actions taken by the Agency to correct those deficiencies:

1. Deficiency 1: involved how the Plan established and justified undesirable results that represent effects caused by groundwater conditions occurring throughout the Subbasin. The corrective action advised the Agencies to evaluate the groundwater conditions that would be occurring throughout the Subbasin at the defined quantitative criteria described in the Plan. The corrective action also advised the Plan to explain how the Subbasin has utilized the same data and methodologies to define the Subbasin-wide undesirable results and how the Plan has considered the interests of beneficial uses and users of groundwater. The corrective actions included developing clear and consistent terminology and reporting processes for the Subbasin. The Staff Report indicates that the Agencies did not take sufficient actions to correct this deficiency, which materially affects the ability of the Agencies to achieve sustainability and the ability of the Department to evaluate the likelihood of the Plan to achieve sustainability.
2. Deficiency 2: involved the establishment of minimum thresholds for the chronic lowering of groundwater levels. The corrective action advised the Agencies to describe the various methods used to establish minimum thresholds and the potential effects on beneficial uses and users. The corrective action also advised the Plan to explain how the lowering of groundwater levels minimum thresholds and measurable objectives that are set below historical lows will impact other applicable sustainability indicators. The Staff Report indicates that the Agencies made progress toward describing the specific minimum thresholds at the management area plan scale but still did not take sufficient action to explain how the various minimum thresholds will collectively achieve the sustainability goals and avoid undesirable results for the Subbasin, which materially affects the ability of the Agencies to achieve sustainability and the ability of the Department to evaluate the likelihood of the Plan to achieve sustainability.

3. Deficiency 3: involved the establishment of sustainable management criteria for land subsidence. The corrective action advised the Plan to establish a Subbasin-wide approach to land subsidence, including Subbasin-wide subsidence sustainable management criteria and assessment of critical infrastructure that would be susceptible to substantial interference from future subsidence. The Staff Report indicates that the Agencies did not take sufficient actions to correct this deficiency, which materially affects the ability of the Agencies to achieve sustainability and the ability of the Department to evaluate the likelihood of the Plan to achieve sustainability.

D. In addition to the grounds listed above, the Department also finds that:

1. The Department developed its GSP Regulations consistent with and intending to further the state policy regarding the human right to water (Water Code § 106.3) through implementation of SGMA and the Regulations, primarily by achieving sustainable groundwater management in a basin. By ensuring substantial compliance with the GSP Regulations the Department has considered the state policy regarding the human right to water in its evaluation of the Plan. (23 CCR § 350.4(g).)
2. The California Environmental Quality Act (Public Resources Code § 21000 *et seq.*) does not apply to the Department's evaluation and assessment of the Plan.

SGMA requires basins to achieve sustainability within 20 years of Plan implementation and requires local GSAs and the Department to continually evaluate a basin's progress towards achieving its sustainability goals. SGMA also requires GSAs to encourage the active involvement of diverse social, cultural, and economic elements of the population within each basin prior to and during development and implementation of Plans. Under SGMA, the GSP is the primary document disclosing and informing the Department, local GSA boards, other local and state agencies, and interested or affected parties of the intended management program for the basin and the potential physical or regulatory impacts or changes that may occur within the basin during decades of Plan implementation. It is therefore essential that each basin begin with a Plan that adequately analyzes, discloses, and informs and that each Plan conform with certain requirements of SGMA and substantially comply with the GSP Regulations. For the reasons stated here and further discussed in the Staff Report, the revised Plan for the Kern County Subbasin is hereby determined to be **INADEQUATE**.

Statement of Findings

San Joaquin Valley – Kern County Subbasin (Basin No. 5-022.14)

March 2, 2023

Signed:

 Karla Nemeth _____

Karla Nemeth, Director

Date: March 2, 2023

Enclosure: Groundwater Sustainability Plan Assessment Staff Report – San Joaquin Valley – Kern County Subbasin

State of California
Department of Water Resources
Sustainable Groundwater Management Program
Groundwater Sustainability Plan Assessment
Staff Report

Groundwater Basin Name: San Joaquin Valley Basin – Kern County Subbasin (No. 5-022.14)
Number of GSPs: 6 (see list below)
Number of GSAs: 17 (see list below)
Submittal Type: Revised Plan in Response to Incomplete Determination
Submittal Date: July 27, 2022
Recommendation: Inadequate
Date: March 2, 2023

On July 27, 2022, multiple GSAs submitted multiple groundwater sustainability plans (GSPs) for the entire Kern County Subbasin (Kern Subbasin or Subbasin), which are coordinated pursuant to a required coordination agreement, to the Department of Water Resources (Department) in response to the Department’s incomplete determination on January 28, 2022¹ for evaluation and assessment as required by the Sustainable Groundwater Management Act (SGMA)² and GSP Regulations.³ In total, six GSPs, 5 revised GSPs and one new GSP, which are adopted and will be implemented by 17 GSAs. Collectively, all GSPs and the coordination agreement are, for evaluation and assessment purposes, treated and referred to as the Plan for the Subbasin. Individually, the GSPs include the following:

- *Kern Groundwater Authority Groundwater Sustainability Plan* – Amended July 2022 (KGA GSP) – prepared by the Kern Groundwater Authority (KGA) GSA, Semitropic Water Storage District (SWSD) GSA, Cawelo Water District (CWD) GSA, City of McFarland GSA, Pioneer GSA, West Kern Water District (WKWD) GSA, and Westside District Water Authority GSA.
- *Amended Kern River Groundwater Sustainability Plan* (Kern River GSP) – July 2022 – prepared by the Kern River GSA and Greenfield County Water District GSA.

¹ Water Code § 10733.4(b); 23 CCR § 355.4(a)(4);
<https://sgma.water.ca.gov/portal/service/gspdocument/download/7785>

² Water Code § 10720 *et seq.*

³ 23 CCR § 350 *et seq.*

- *Buena Vista Water Storage District GSA Amended Groundwater Sustainability Plan* – July 2022 (Buena Vista GSP) – prepared by the Buena Vista Water Storage District (Buena Vista) GSA.
- *Olcese Groundwater Sustainability Agency Groundwater Sustainability Plan* – July 2022 (Olcese GSP) – prepared by the Olcese Water District (OWD) GSA.
- *Henry Miller Water District Groundwater Sustainability Plan* – July 2022 (Henry Miller GSP) – prepared by the Henry Miller Water District (HMWD) GSA.
- *South of Kern River Groundwater Sustainability Plan* – July 2022 (SOKR GSP) – prepared by the Arvin GSA, Tejon-Castac Water District (TCWD) GSA, and the Wheeler Ridge-Maricopa GSA. This is the new GSP.

After evaluation and assessment, Department staff conclude the Plan has not taken sufficient actions to address the deficiencies identified in the Department’s incomplete determination.⁴

- **Based on the evaluation of the Plan, Department staff recommend the Plan be determined inadequate.**

This assessment includes five sections:

- **Section 1 – Summary**: Provides an overview of the Department staff’s assessment.
- **Section 2 – Evaluation Criteria**: Describes the legislative requirements and the Department’s evaluation criteria.
- **Section 3 – Required Conditions**: Describes the submission requirements of an incomplete resubmittal to be evaluated by the Department.
- **Section 4 – Deficiency Evaluation**: Provides an assessment of whether and how the contents included in the GSP resubmittal addressed the deficiencies identified by the Department in the initial incomplete determination.
- **Section 5 – Staff Recommendation**: Includes the staff recommendation for the Plan.

⁴ 23 CCR § 352.2(e)(3)(C).

1 SUMMARY

Department staff recommend the Plan for the Kern County Subbasin be determined **INADEQUATE**.

Department staff concluded the GSAs did not take sufficient action to correct the following deficiencies identified in the incomplete determination:

Deficiency 1 – The GSPs do not establish undesirable results that are consistent for the entire Subbasin.

Deficiency 2 – The Subbasin’s chronic lowering of groundwater levels sustainable management criteria do not satisfy the requirements of SGMA and the GSP Regulations.

Deficiency 3 – The Subbasin’s land subsidence sustainable management criteria do not satisfy the requirements of SGMA and the GSP Regulations.

Generally, while the GSAs have put forth a great amount of effort to respond to the Department’s corrective actions identified in the incomplete determination staff report, Department staff conclude that the information provided was not sufficiently detailed and the analysis was not sufficiently thorough and reasonable to correct the deficiencies identified by the Department. These deficiencies have been found to materially affect the ability of the Department to evaluate the likelihood of the Plan to attain sustainability.

2 EVALUATION CRITERIA

The Department evaluates whether a Plan conforms to the statutory requirements of SGMA⁵ and is likely to achieve the basin’s sustainability goal,⁶ whether evaluating a basin’s first Plan,⁷ a Plan previously determined incomplete,⁸ an amended Plan,⁹ or a GSA’s periodic update to an approved Plan.¹⁰ To achieve the sustainability goal, each version of the Plan must demonstrate that implementation will lead to sustainable groundwater management, which means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.¹¹ The Department is also required to evaluate, on an ongoing basis, whether the Plan will adversely affect the ability of an adjacent basin to implement its groundwater sustainability program or achieve its sustainability goal.¹²

⁵ Water Code §§ 10727.2, 10727.4, 10727.6.

⁶ Water Code § 10733; 23 CCR § 354.24.

⁷ Water Code § 10720.7.

⁸ 23 CCR § 355.2(e)(2).

⁹ 23 CCR § 355.10.

¹⁰ 23 CCR § 355.6.

¹¹ Water Code § 10721(v).

¹² Water Code § 10733(c).

The Plan evaluated in this Staff Report was previously determined to be incomplete. An incomplete Plan is one which had one or more deficiencies that precluded its initial approval, may not have had supporting information that was sufficiently detailed or analyses that were sufficiently thorough and reasonable, or Department staff determined it was unlikely the GSAs in the basin could achieve the sustainability goal. After a GSA has been afforded up to 180 days to address the deficiencies and based on the GSA's efforts, the Department can either approve¹³ the Plan or determine the Plan inadequate.¹⁴

The Department's reevaluation and reassessment of a Plan previously determined to be incomplete, as presented in this Staff Report, continues to follow Article 6 of the GSP Regulations¹⁵ to determine whether the Plan, with revisions or additions prepared by the GSA, complies with SGMA and substantially complies with the GSP Regulations.¹⁶ As stated in the GSP Regulations, "substantial compliance means that the supporting information is sufficiently detailed and the analyses sufficiently thorough and reasonable, in the judgment of the Department, to evaluate the Plan, and the Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal for the basin, or the ability of the Department to evaluate the likelihood of the Plan to attain that goal."¹⁷

The recommendation to approve a Plan previously determined to be incomplete does not signify that Department staff, were they to exercise the professional judgment required to develop a Plan for the basin, would make the same assumptions and interpretations as those contained in the revised Plan, but simply that Department staff have determined that the modified assumptions and interpretations relied upon by the submitting GSA(s) are supported by adequate, credible evidence, and are scientifically reasonable. The reassessment of a Plan previously determined to be incomplete may involve the review of new information presented by the GSA(s), including models and assumptions, and a reevaluation of that information based on scientific reasonableness. In conducting its reassessment, Department staff does not recalculate or reevaluate technical information or perform its own geologic or engineering analysis of that information.

The recommendation that a Plan previously determined to be incomplete be determined to be inadequate is based on staff's conclusion that the GSAs have not taken sufficient actions to correct the deficiencies previously identified by the Department when it found the Plan incomplete.¹⁸

¹³ 23 CCR §§ 355.2(e)(1).

¹⁴ 23 CCR §§ 355.2(e)(3).

¹⁵ 23 CCR § 355 *et seq.*

¹⁶ 23 CCR § 350 *et seq.*

¹⁷ 23 CCR § 355.4(b).

¹⁸ Water Code § 10735 *et seq.*

3 REQUIRED CONDITIONS

For a Plan that the Department determined to be incomplete, the Department identifies corrective actions to address those deficiencies that preclude approval of the Plan as initially submitted. The GSAs in a basin, whether developing a single GSP covering the basin or multiple GSPs, must attempt to sufficiently address those corrective actions within the time provided, not to exceed 180 days, for the Plan to be evaluated by the Department.

3.1 INCOMPLETE RESUBMITTAL

GSP Regulations specify that the Department shall evaluate a resubmitted GSP in which the GSAs have taken corrective actions within 180 days from the date the Department issued an incomplete determination to address deficiencies.¹⁹

The Department issued the incomplete determination on January 28, 2022. The GSAs resubmitted their individual GSPs and the coordination agreement on July 27, 2022, in compliance with the 180-day deadline.

4 DEFICIENCY EVALUATION

As stated in Section 355.4 of the GSP Regulations, a basin “shall be sustainably managed within 20 years of the applicable statutory deadline consistent with the objectives of the Act.” The Department’s assessment is based on a number of related factors including whether the elements of a GSP were developed in the manner required by the GSP Regulations, whether the GSP was developed using appropriate data and methodologies and whether its conclusions are scientifically reasonable, and whether the GSP, through the implementation of clearly defined and technically feasible projects and management actions, is likely to achieve a tenable sustainability goal for the basin.

In its initial incomplete determination, the Department identified three principal deficiencies in the Plan related to the establishment of undesirable results and sustainable management criteria for groundwater levels and subsidence, which precluded the Plan’s approval in January 2022.²⁰ The GSAs were given 180 days to take corrective actions to remedy the identified deficiencies. Consistent with the GSP Regulations, Department staff are providing an evaluation of the revised Plan to determine if the GSAs have taken sufficient actions to correct the deficiencies.

¹⁹ 23 CCR § 355.4(a)(4).

²⁰ Incomplete Determination of the 2020 Groundwater Sustainability Plans Submitted for the San Joaquin Valley – Kern County Subbasin. California Department of Water Resources, January 28, 2022, <https://sgma.water.ca.gov/portal/service/gspdocument/download/7785>

Evaluation Summary

As discussed in the initial incomplete determination, the Kern Subbasin is the largest groundwater subbasin and one of the most complex subbasins with regards to entities involved and associated demands. With that, Department staff still believe that in order to comply with SGMA and the GSP Regulations and achieve sustainable groundwater management, the Kern Subbasin needs a well-explained Plan that will be implemented in a coordinated manner. Although the revised Plan (i.e., the GSPs implemented together in accordance with the coordination agreement) made progress toward explaining a coordinated approach to sustainable groundwater management, especially regarding the development of consistent terminology, Department staff continue to find the Plan difficult to evaluate in terms of whether or not implementation will likely achieve the sustainability goals for the Subbasin.

The revised Plan maintains the sustainability goal of collectively bringing the Subbasin into sustainability and achieving long term sustainability through the implementation of more than 180 projects and management actions to be developed and executed by the individual management areas. The Plan also continues to use a percent of land area framework to quantify conditions that would lead to undesirable results. The Plan improved the quantitative metric that indicates when a management area would contribute to the Subbasin-wide percent land area calculation – the Plan considers this a Management Area Exceedance which occurs when 40% of a management area’s representative monitoring wells exceed the management area specific minimum thresholds for four consecutive bi-annual measurements (i.e., spring and fall measurements). The Management Area Exceedance concept is an improvement from the original Plan’s concept of the “watch area,” but the definition still does not represent or explain the groundwater conditions that would be occurring throughout the Subbasin that the GSAs are trying to avoid to achieve sustainability. This continues to be evident because the Subbasin’s management areas still employ various data and methodologies to establish minimum thresholds and measurable objectives in which all the individual minimum thresholds are set at differing magnitudes below historic low groundwater levels.

Additionally, the Plan maintains the results of the Todd Groundwater Technical Memorandum, a key piece of the Subbasin’s coordinated management, which indicates that the 324,326 acre-feet per year of overdraft estimated from the baseline condition’s projected future simulations may be offset by the various 180 projects and management actions “once fully implemented.”²¹ The Todd Groundwater Technical Memorandum also states that for most of the management areas in the Subbasin, the simulated projected water levels fall near or below the minimum thresholds without projects, but will generally be above the minimum thresholds if the SGMA projects are fully implemented.²² Therefore, it is Department staff’s understanding that if the projects and management actions are effectively implemented and the full allotment of water supply augmentation

²¹ First Amended Kern County Subbasin Coordination Agreement, pp. 43-49.

²² First Amended Kern County Subbasin Coordination Agreement, p. 49.

is realized then the management approach described in the coordination agreement may marginally address the initial estimate of overdraft, maintain conditions above the minimum thresholds, and avoid undesirable results.

However, after reviewing the revised Plan, Department staff believe that even though the Subbasin has developed consistent terminology and conducted well impact analyses and while the GSPs often state that the minimum thresholds for groundwater levels were coordinated and compared, there still appears to be no real analysis or understanding of the effects of the groundwater conditions if the minimum thresholds are exceeded and groundwater levels continue to decline for years before a Subbasin-wide undesirable result is declared. Department staff remain concerned that the varied and fragmented approaches to establish individual water budgets (i.e., the checkbook budgets) and sustainable management criteria might allow for groundwater conditions to worsen at a greater rate or extent than otherwise would have occurred with a more coordinated Plan.

As mentioned above, being that the Kern Subbasin maintains the sustainability goal to “achieve sustainable groundwater management in the Kern County Subbasin through the implementation of projects and management actions at the member agency level of each GSA,”²³ Department staff still consider the implementation of projects and management actions to be absolutely critical to assessing the progress toward sustainable groundwater management in the Kern Subbasin. However, being that the various data and methodologies used to establish sustainable management criteria and the fine margins indicated by the results of the Todd Groundwater Technical Memorandum to achieve sustainability (e.g., -45,965 acre-feet per year change in storage at 2070 climate with projects)²⁴ were not reevaluated or revisited, Department staff continue to believe and be concerned that if proposed projects and management actions are not diligently pursued, are significantly delayed, or are not likely to be implemented, it may lead to inadequate progress toward achieving sustainability for the Subbasin.

4.1 DEFICIENCY 1 – THE GSPs DO NOT ESTABLISH UNDESIRABLE RESULTS THAT ARE CONSISTENT FOR THE ENTIRE SUBBASIN.

4.1.1 Corrective Action 1

As described in the Department’s GSP Assessment Staff Report released in January 2022, Department staff recommended the GSAs consider and address the following:

- a) The Plan’s Coordination Agreement should be revised to explain how the undesirable results definitions are consistent with the requirements of SGMA and the GSP Regulations, which specify that undesirable results represent effects caused by groundwater conditions occurring throughout the Subbasin.²⁵ The discussion should include descriptions of how the Plans have utilized the same

²³ First Amended Kern County Subbasin Coordination Agreement, p. 11

²⁴ First Amended Kern County Subbasin Coordination Agreement, p. 44.

²⁵ 23 CCR § 354.26(a).

data and methodologies to define the Subbasin-wide undesirable results and how the Plan has considered the interests of beneficial uses and users of groundwater.²⁶

- b) Because of the fragmented approach used in the Subbasin that could allow for substantial exceedances of locally defined minimum thresholds over sustained periods of time, the GSAs must commit to comprehensively reporting on the status of minimum threshold exceedances by area in the annual reports and describe how groundwater conditions at or below the minimum thresholds may impact beneficial uses and users prior to the occurrence of a formal undesirable result.²⁷
- c) The GSAs must adopt clear and consistent terminology to ensure the various plans are comparable and reviewable by the GSAs, interested parties, and Department staff. This terminology should also adhere to the definitions of various terms in SGMA and the GSP Regulations including the understanding that undesirable results are conditions occurring throughout the Subbasin.²⁸ The Plan and associated coordination materials must also be revised to clearly document how all of the various undesirable results definitions and methodologies achieve the same common sustainability goal.²⁹ Department staff recommend the revisions should include, at minimum:
 - A map of the entire Subbasin showing each of the GSP areas, including management areas and the management areas within the management area plans, associated monitoring zones, etc. that have a locally defined “undesirable result” that can contribute to the Subbasin’s undesirable result area-based definitions described in the Coordination Agreement
 - A comprehensive table or another organized form of identifying each of the areas, the land coverage – both absolutely and as a percentage – of each of those listed areas in comparison to the Subbasin in total, and a clear and concise description of the conditions that would cause that area to trigger a localized undesirable result (i.e., a watch area, etc.). These materials should demonstrate that 100 percent of the Subbasin area is being managed under the various GSPs with reasonable definitions for undesirable results.

In addition to the graphical and tabular representation of the definition of the Subbasin-wide undesirable results, and if the GSAs elect to maintain the percentage of land area definition for undesirable results, the GSAs need to provide a comprehensive description of the groundwater conditions that would lead to localized undesirable results in the GSAs and other management areas which ultimately contribute to the 15 percent or 30 percent of land area criteria.

²⁶ 23 CCR §§ 354.26(b), 357.4(a).

²⁷ 23 CCR § 354.26(b)(4).

²⁸ 23 CCR § 354.26(a).

²⁹ 23 CCR § 357.4(a).

4.1.2 Evaluation

In response to Deficiency 1, the GSAs made appreciable efforts to develop consistent Subbasin-wide terminology and definitions for certain components of the Subbasin's sustainable groundwater management program. One key component was establishing the concept of a Management Area Exceedance which represents localized undesirable conditions specific to each management area (i.e., distinct from an undesirable result associated with groundwater conditions occurring throughout the Subbasin that may be impacting beneficial uses and users of groundwater). The Management Area Exceedance is quantitatively defined as when 40% of a specific management area's representative monitoring sites exceed the management area defined minimum thresholds for four consecutive bi-annual measurements.³⁰ The amended Coordination Agreement maintains the quantitative Subbasin-wide undesirable result definition for chronic lowering of groundwater levels as "when the minimum threshold for groundwater levels are exceeded in at least three (3) adjacent management areas that represent at least 15% of the Subbasin or greater than 30% of the Subbasin (as measured by each management area). Minimum thresholds shall be set by each of the management areas through their respective management area plans or Groundwater Sustainability Plans."³¹ From a quantitative metric perspective, Department staff understand that if a management area observes conditions that exceed the minimum thresholds in 40 percent of their representative monitoring sites for four consecutive bi-annual measurements, then that management area would contribute to the 15 percent or 30 percent of land area criteria that represents a Subbasin-wide undesirable result. Effectively the Plan maintains a two-tier undesirable result definition for the Subbasin in which a management area prerequisite must occur before an undesirable result would be declared in the Subbasin.

While progress was made in standardizing terminology and definitions across the various management areas – including the Management Area Exceedance concept – the Plan continues to generally lack a comprehensive description of the groundwater conditions that would lead to localized undesirable results in the GSAs and other management areas (i.e., conditions that would result in a Management Area Exceedance) which then would ultimately contribute to the 15 percent or 30 percent of land area criteria. Looking at chronic lowering of groundwater levels as an example, it remains unclear to Department staff what effects or conditions would be occurring in each management area if a Management Area Exceedance was to be realized without triggering a Subbasin-wide undesirable result, especially being that the data and methodologies to establish groundwater level minimum thresholds varies across the management areas. In more general terms, Department staff maintain the position that the Plan still contains a complex set of minimum threshold values established in approximately 186 regional monitoring wells³² that must be observed and evaluated before a Management Area Exceedance occurs, and consequently, before a collection of Management Area

³⁰ First Amended Kern County Subbasin Coordination Agreement, p. 12.

³¹ First Amended Kern County Subbasin Coordination Agreement, p. 298.

³² First Amended Kern County Subbasin Coordination Agreement, pp. 48, 110-296.

Exceedances result in an undesirable condition for the Subbasin via the land area criteria.³³ Department staff also reiterate, and discuss in further detail below in [Deficiency 2](#), that the chronic lowering of groundwater minimum thresholds are still established using various datasets and methodologies across the management area plans. The specific management area methods utilized for developing the water level sustainable management criteria allow for differing degrees of lowering of groundwater levels – all beyond historical lows. The complexity involved with the variety of water level minimum threshold values, the four consecutive measurement condition, and the two-tier percentage definition to declare an undesirable result for the Subbasin, continues to be problematic because it can allow for situations where groundwater conditions could degrade for potentially sustained periods of time in potentially significant portions of the Subbasin without triggering Subbasin-wide management actions necessary to address Subbasin-wide undesirable results.

Regarding the chronic lowering of groundwater levels, many of the proposed sustainable management criteria in the Plan do not appear to consider the analysis and results of the Subbasin-wide California Central Valley Groundwater-Surface Water Simulation Model (C2VSim) Kern County model (i.e., C2VSimFG-Kern).³⁴ The model is presented in the Coordination Agreement and is used to produce estimates of the sustainable yield, total change in storage for a baseline period and future projections, and native yield as well as evaluate how sustainability will be achieved through the implementation of the assorted projects and management actions. In the view of Department staff, some management areas' approach to setting sustainable management criteria do not appear to be informed by the Todd Groundwater Technical Memorandum results indicating how, through the full implementation of the proposed projects and management actions, sustainability will be achieved and undesirable results will be avoided.³⁵ It should be noted that the sustainability assessment described in the Todd Groundwater Technical Memorandum indicates that without the implementation of any of the proposed projects and management actions the Subbasin groundwater extractions would exceed the estimated sustainable yield by 25 percent to 34 percent.³⁶ Below, Department staff describe select examples presenting the discrepancies between where the sustainable management criteria were established versus the C2VSim Kern County model simulations:

- In the KGA GSP Semitropic Water Storage District (SWSD) management area the measurable objectives and minimum thresholds for groundwater levels are set

³³ The total number of representative monitoring wells varies. The Todd Groundwater Memorandum in the Coordination Agreement contains hydrographs depicting simulated groundwater conditions and the associated measurable objectives and minimum thresholds for 186 regional monitoring wells. The Kern County Subbasin Third Annual Report submitted March 30, 2022, contains hydrographs comparing groundwater levels to measurable objectives and minimum thresholds in 203 representative monitoring wells. As of February 2023, the Department's Monitoring Network Module indicates 238 groundwater level representative monitoring wells.

³⁴ First Amended Kern County Subbasin Coordination Agreement, pp. 15-296.

³⁵ First Amended Kern County Subbasin Coordination Agreement, pp. 43-44.

³⁶ First Amended Kern County Subbasin Coordination Agreement, p. 48.

below all of the projected water level model scenarios, including the projected climate scenarios that exclude the implementation of the projects and management actions. In evaluating the hydrographs presented in the amended management area plan, it appears that the SWSD minimum thresholds would allow for approximately more than 100 feet of groundwater level decline beyond the simulated groundwater levels for water year 2040 where projects and management actions are not implemented.³⁷ This indicates to Department staff that if groundwater conditions reached the minimum thresholds in SWSD, then pumping would not likely be within the sustainable yield and undesirable results may be occurring.

- The Kern River GSP has established a narrower margin of operational flexibility (i.e., water level difference between the measurable objectives and minimum threshold) with many of the established measurable objectives aligning with the simulated projected groundwater conditions with the implementation of projects and management actions. However, the minimum thresholds, with the exception of two representative monitoring wells (RMW-026 and RMW-030), are set at groundwater levels below the projected water level scenarios that exclude projects and management actions. In some representative monitoring wells, the difference between the simulated water level without projects and management actions and the minimum threshold is upwards of 100 feet at water year 2040.³⁸ This indicates to Department staff that, although Kern River's measurable objectives appear to be correlated with the projected water levels with projects and management actions, without the full implementation of the various projects and management actions, the GSA may not achieve their sustainability goal. Additionally, the data indicate that – with the exception of the two wells listed above – if groundwater levels were to reach the minimum thresholds, then the management area and Subbasin may not be operating within its sustainable yield resulting in the Subbasin not likely achieving the sustainability goals.

As highlighted in the examples above, the locally derived minimum thresholds – and in some cases the measurable objectives – are well below the range of simulated water levels in model runs where sustainability was achieved through the implementation of projects and management actions at the member agency level of each GSA. This indicates that the baseline conditions in the model do not consider the groundwater conditions occurring throughout the Subbasin if the management areas were operating at or near their specific minimum thresholds. Additionally, in some management areas, the minimum thresholds – and in some cases the measurable objectives – are set below the model simulations which evaluate projected future climate conditions with no GSA actions taken (i.e., without the implementation of projects and management actions).

³⁷ First Amended Kern County Subbasin Coordination Agreement, pp. 200-216; KGA GSP Semitropic Water Storage District Revised Management Area Plan (MAP), Figures 5-7 through 5-18, pp. 329-340.

³⁸ First Amended Kern County Subbasin Coordination Agreement, pp. 127-146; Kern River Amended GSP, Appendix H, pp. 974-1016.

After evaluating the proposed management area minimum thresholds and the simulation results from the Todd Groundwater Technical Memorandum, Department staff cannot understand how the Plan's assessment of overdraft conditions were incorporated into the development of sustainable management criteria, and how the Subbasin will achieve its sustainability goal, especially if the estimated benefits of the various projects and management actions are not fully realized.

Department staff recognize that the amended Coordination Agreement includes a table and maps identifying each of the management areas and their land coverage (both absolute and as a percentage of the Subbasin), the total number of representative monitoring wells in each area, and the number of representative monitoring wells exceeding the minimum thresholds required to trigger a Management Area Exceedance which would contribute to the calculation for a Subbasin-wide undesirable result.³⁹ The entirety of the Subbasin appears to be represented on the maps and in the accompanying table. With the submission of these materials, Department staff find that sufficient action was taken by the GSAs in developing a graphical and tabular representation of the definition of the Subbasin-wide undesirable results as requested in Corrective Action 1c of Deficiency 1. However, as highlighted above and being that the Plan maintains the percent land area definition, Department staff do not believe the GSAs took sufficient action to provide a comprehensive description of the groundwater conditions that would lead to localized undesirable results in the GSAs and other management areas which ultimately contribute to the 15 percent or 30 percent of land area criteria.

Related to the graphical and tabular documentation of how the quantification of undesirable results will be triggered, it is still unclear to Department staff how minimum threshold exceedances will be tracked and reported in each management area and evaluated against the land area-based Subbasin-wide undesirable result definition. While Department staff understand the Subbasin has launched an initial version of their data management system⁴⁰ and the GSAs collectively produce and submit annual reports, Department staff cannot evaluate how the various management areas would assess whether any minimum threshold exceedance, for any amount of time and in any area, is causing effects that could be or become significant and unreasonable. It is Department staff's understanding that with the current two-tier undesirable result quantification with the associated multi-seasonal measurement component, the Subbasin could be experiencing minimum threshold exceedances at a large number of sites for a sustained period without this being considered undesirable by the Subbasin's groundwater managers – meaning localized conditions could be degrading while GSP and management area specific water budgets do not clearly show where the overdraft is occurring.

Additionally, the four consecutive bi-annual water level measurements constraint for minimum threshold exceedances associated with the Management Area Exceedance

³⁹ First Amended Kern County Subbasin Coordination Agreement, pp. 301-303.

⁴⁰ Kern County Subbasin GSPs Third Annual Report Water Year 2021, Section 7.1.2, p. 45.

criterion can allow for isolated or anomalous groundwater recharge events raising water levels above the minimum thresholds which would reset the temporal trigger incorporated in the two-tier Subbasin-wide undesirable result calculation framework. The occurrence of these nuanced groundwater level conditions may cause significant fluctuations in water levels in a selection of representative monitoring wells, occurring over relatively short time periods, and may be influenced by local groundwater banking operations. It is unclear to Department staff how or if groundwater banking operations occurring throughout the Subbasin would affect the quantitative metrics that define a Management Area Exceedance.

To support the evaluation of potential impacts to beneficial uses and users at the locally established sustainable management criteria, each GSP resubmission included some variation of a well impact analysis to identify wells that could go dry at proposed minimum thresholds and measurable objects. In addition to the well impact studies, the South of Kern River GSAs⁴¹ and BVGSA⁴² include (or will develop) some variation of a well mitigation plan if impacts are observed. Furthermore, all management areas in the KGA are required to have a mitigation plan if more than 5% of identified domestic wells are predicted to be dewatered at the minimum thresholds.⁴³

Department staff are encouraged by the inclusion of the well impact studies and believe that the GSAs took steps to understand how beneficial users of groundwater, including drinking water users, may be affected during Plan implementation. These studies provide transparency of the potential magnitude of impacts to beneficial users that can be expected if water levels decline to local sustainable management criteria minimum thresholds. However, these studies provide less clarity on how an individual GSP's implementation may affect beneficial uses and users across the greater Subbasin given that excessive pumping in any given Management Area could affect water levels beyond that management area's jurisdictional boundaries. Again, this becomes problematic with the disparate methodologies used to establish sustainable management criteria and conflicts with GSP Regulations,⁴⁴ which require that management areas operating under different minimum thresholds and measurable objectives explain how they will not cause undesirable results outside the management area.

4.1.3 Conclusion

Ultimately, the fragmented management area approach to groundwater management, particularly in establishing minimum thresholds and measurable objectives, undermines the GSAs ability to clearly define the Subbasin-wide significant and unreasonable effects they hope to avoid. It is, therefore, unclear to Department staff how or whether the sustainable groundwater management approach described in the Plan will achieve the sustainability goals included in the amended Coordination Agreement, specifically: (1)

⁴¹ South of Kern River GSP, Section 18.1.6.2, pp. 599-600.

⁴² Buena Vista Amended GSP, Section 5.4.1.3, p. 144.

⁴³ KGA Amended GSP, p. 15.

⁴⁴ 23 CCR § 354.20(b)(4).

collectively bringing the Subbasin into sustainability and maintaining sustainability over the implementation horizon; (2) maintaining groundwater use within the sustainable yield as demonstrated by monitoring and reporting groundwater conditions; and (3) operating within the established sustainable management criteria which are based on collective technical information.⁴⁵

4.2 DEFICIENCY 2 – THE SUBBASIN’S CHRONIC LOWERING OF GROUNDWATER LEVELS SUSTAINABLE MANAGEMENT CRITERIA DO NOT SATISFY THE REQUIREMENTS OF SGMA AND THE GSP REGULATIONS.

4.2.1 Corrective Action 2 and GSA Responses

Below is a table highlighting Department staff’s recommendations from the Department’s GSP Assessment Staff Report released in January 2022 and brief descriptions of what each management area provided in response to the corrective actions.

Kern Groundwater Authority GSP
<i>Areas Outside of Management Areas (Umbrella Document)</i>
<p><u>Corrective Action</u> Provide a comprehensive discussion of areas covered by the KGA GSP, but that are not contained within the various management area plans. Among other items, provide maps of these areas, describe the uses and users of groundwater in these areas, and either set sustainable management criteria for these areas or include robust discussions justifying why sustainable management criteria are not required.</p> <p><u>GSA Response to Corrective Action</u> The Umbrella Plan states that descriptions of areas covered by the KGA GSP, such as non-districted lands, were included in the Umbrella Plan. However, the GSA was unable to include these lands at time of submittal due to the landowner not signing to become a member of KGA. The Umbrella Plan states that the GSA will retain and monitor over all lands under its jurisdiction. The Umbrella Plan states that activities in the non-districted lands that are still not under a management area include oil and grazing activities and do not require sustainable management criteria. A figure visualizing non-districted lands⁴⁶ and another figure reflecting the lack of water wells⁴⁷ within these lands are included in the Umbrella Plan.</p>
<i>Cawelo Water District Management Area</i>

⁴⁵ First Amended Kern County Coordination Agreement, p. 11.

⁴⁶ KGA Amended GSP, Figure 1-5a, p. 81.

⁴⁷ KGA Amended GSP, Figure 1-6a, p. 83.

Corrective Action

The KGA GSP must describe how the minimum thresholds in the Cawelo management area may affect the interests of beneficial uses and users of groundwater or land uses and property interests.

GSA Response to Corrective Action

The management area performed a ‘well completion analysis.’ The analysis compared screen intervals and saturated thickness of 290 water supply wells to the proposed minimum thresholds from nearby representative monitoring wells. The analysis determined that 3% of domestic wells and <1% of agricultural/industrial supply wells would be potentially impacted if water level conditions reached the proposed minimum thresholds. The Cawelo management area developed a summary table correlating each sustainability indicator to their respective beneficial uses/users, effects to beneficial uses and users, undesirable result causes, local undesirable result criteria and definitions, justification for local undesirable results, minimum threshold definitions and justification, and measurable objective definition. The minimum threshold definitions included a summary of how the conditions will avoid undesirable results for other sustainability indicators.⁴⁸

Eastside Water Management Area

Corrective Action

The KGA GSP must describe how the minimum thresholds in the Eastside management area may affect the interests of beneficial uses and users of groundwater or land uses and property interests.

GSA Response to Corrective Action

The Eastside Water Management Area (EWMA) conducted a well impact analysis to evaluate potential impacts to beneficial users. The analysis included developing a management area specific analytical model that established a radius of influence for each representative monitoring well, then existing well information was collected to see what well types (i.e., beneficial use) were within the radius of the monitoring location. The model then estimated the impacts to the well types as groundwater levels decreased to the minimum thresholds. EWMA then reviewed the potential impacts to agricultural and domestic wells in an area of influence at each representative monitoring well. The results of the well impact indicates 20 agricultural production wells, five domestic wells, and two municipal wells could be impacted if water levels reach the minimum thresholds. The EWMA management area plan states that the GSA ensures well information in the analysis includes all current, publicly available data.⁴⁹

Kern Water Bank Management Area

Corrective Actions

⁴⁸ KGA GSP Cawelo Revised MAP, Section 7.2.6, pp. 200-202.

⁴⁹ KGA GSP Eastside Revised MAP, Section 12.1.3, p. 85.

- While the Department understands the unique circumstances with the Kern Water Bank, compliance with SGMA and the GSP Regulations is still a requirement and while the thresholds established in the Joint Operation Plan are being utilized to meet these requirements, all parts of the GSP Regulations related to the sustainable management criteria must be addressed. The KGA GSP must provide an explanation of how the Joint Operation Plan meets the requirements of SGMA and the GSP Regulations.
- It is also noted that the Joint Operation Plan expired on January 31, 2019. Provide an updated explanation if these thresholds have changed and the latest Joint Operation Plan if applicable.

GSA Response to Corrective Actions

The Kern Water Bank GSA renewed the Joint Operations Plan through 2023 and have not changed the original thresholds. The Joint Operations Plan was established to “prevent, eliminate or mitigate significant adverse impacts as a result of project implementation” in the Kern Water Bank, Rosedale-Rio Bravo, and Pioneer Project management areas. The Umbrella Plan states that the Kern Water Bank operations cannot recover native groundwater supplies.⁵⁰ However, the management area plan states the Kern Water Bank Memorandum of Understanding allows 0.3 acre-feet per acre of native groundwater to be extracted for farmed acreage. The management area plan explains that because irrigation does not occur in the management area, the allowance is not used.⁵¹ As a result, the minimum threshold for a reduction of native groundwater supplies is when stored water accounts equal zero.⁵²

Kern-Tulare Water District Management Area

Corrective Actions

- The KGA GSP must provide an explanation of how minimum thresholds within the Kern-Tulare management area at the monitoring sites are consistent with the requirement to be based on a groundwater elevation indicating a significant and unreasonable depletion of supply at a given location. If the minimum thresholds were not set consistent with levels indicating an undesirable depletion of supply, the thresholds should be revised accordingly.
- Provide a discussion identifying how the minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.

GSA Response to Corrective Actions

The management area plan states that minimum thresholds were initially established as the historical low water elevation within the Santa Margarita Formation observed during the peak of the drought in August 2015. The Kern-Tulare Water District (KTWD) management area plan states that after discussing the minimum thresholds with the

⁵⁰ KGA Amended GSP, Table 2a, p. 18.

⁵¹ KGA GSP Kern Water Bank Revised MAP, Section 2.1.3.1, p. 15.

⁵² KGA GSP Kern Water Bank Revised MAP, Section 2.1.2.8, p. 14, Appendix I, pp. 183-190.

adjacent EWMA it became apparent that some of EWMA’s monitoring locations were much shallower than KTWD and were at risk of going dry at KTWD’s proposed minimum thresholds. Based on the feedback from EWMA and local landowners in KTWD, the minimum thresholds were adjusted on a well-by-well basis to prevent impacts to agricultural users. The KTWD management area plan states that all domestic wells within KTWD are to depths less than 700 feet below ground surface and would not be impacted by groundwater extractions occurring in the Santa Margarita Formation which is located at approximately 1,800 to 2,400 feet below ground surface.⁵³

North Kern Water Storage District/Shafter-Wasco Irrigation District Management Area

Corrective Actions

- The KGA GSP must establish sustainable management criteria for management area NKWSD-MA-2.
- The KGA GSP must be revised to explain how minimum thresholds within the North Kern Water Storage District/Shafter-Wasco Irrigation District management area at the monitoring sites are consistent with the requirement to be based on a groundwater elevation indicating a significant and unreasonable depletion of supply at a given location. If the minimum thresholds were not set consistent with levels indicating an undesirable depletion of supply, the thresholds should be revised accordingly.
- Verify how the subset of wells used in the well impact analysis is representative of the wells in the management area. Provide an explanation of the mitigation plan for domestic wells.

GSA Response to Corrective Actions

The North Kern Water Storage District (NKWSD) identified two representative monitoring wells for MA-2, conducted a Well Impact Study, and established minimum thresholds and measurable objectives for each location. The Well Impact Study utilized groundwater elevation and well completion report data to identify monitoring locations to better evaluate impacts to beneficial uses and users in the management area. Groundwater level data was collected from State and local agency databases and filtered to include a subset of wells with similar groundwater elevations. The management area plan states that groundwater elevation data was then used to establish hydrogeologic zones and subzones, which were used to characterize well types in the management area. The Well Impact Study used well completion report data from the Department’s public database, however, the NKWSD management area plan recognized a data gap in obtaining domestic well information. The GSA intends to address this data gap with the Domestic Well Survey management action, which is expected to be completed in the 2025 Plan update. The NKWSD management area plan states that the results of the Well Impact Study show the median minimum threshold is approximately 542 feet below ground surface, median well depth is 656

⁵³ KGA GSP Kern-Tulare Water District MAP, Section 3.5.1, pp. 74-76.

feet below ground surface, and the median value for the base of fresh water is 2,200 feet below ground surface.⁵⁴ The NKWSD management area plan states that minimum thresholds and measurable objectives were established at levels that had minor potential impacts on domestic wells and were protective of municipal wells. The NKWSD management area plan states that minimum thresholds are consistent with the requirement to be based on a groundwater elevation indicating a significant and unreasonable depletion of supply at a given location and set at depths that are sufficiently protective of beneficial uses and users and groundwater supply. The NKWSD management area plan included a draft Domestic Well Mitigation Plan, planned to be finalized and adopted by the end of 2022, which intends to designate measures to mitigate adverse impacts to domestic wells resulting from GSP implementation.⁵⁵

Kern County Water Agency Pioneer GSA Management Area

Corrective Action

The KGA GSP must explain the selection of groundwater level minimum thresholds for the Pioneer management area, including how they represent site-specific levels of depletion that could cause undesirable results, how they may affect the interests of beneficial uses and users of groundwater, and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels.

GSA Response to Corrective Action

The Pioneer management area plan states that sustainable management criteria were established to provide operational flexibility and maintain long-term sustainability for beneficial uses and users. The management area plan also states that participants of the Pioneer Project, the sole beneficial users of groundwater in the management area, were consulted during sustainable management criteria development to determine what minimum thresholds were appropriate for groundwater elevations and storage to trigger an undesirable result as it related to the Pioneer Project's banking operations. The management area plan states that potential impacts of undesirable results on the beneficial uses and users are increased operation costs. The management area plan also states that coordination efforts took place with neighboring GSA's during the establishment of sustainable management criteria to ensure that neighboring beneficial uses and users were protected and that minimum thresholds were consistent with minimum thresholds in adjacent management areas. The management area plan provides an analysis on the relationship between historical groundwater quality, land subsidence, and groundwater elevation data. For the water quality sustainability indicator, the analysis correlated historical groundwater elevation to arsenic, nitrate, and specific conductance data in four of the five monitoring locations through linear

⁵⁴ KGA GSP North Kern Water Storage District/Shafter-Wasco Irrigation District Revised MAP, Section 3.5.1, pp. 240-241.

⁵⁵ KGA GSP North Kern Water Storage District/Shafter-Wasco Irrigation District Revised MAP, Appendix N, pp. 922-928.

regression. The results of the analysis concluded that none of the constituents of concern, with the exception of arsenic at one monitoring location, would exceed minimum thresholds using the proposed chronic lowering of groundwater sustainable management criteria.⁵⁶ The management area plan states that land subsidence is anticipated to be influenced by groundwater level sustainable management criteria and that the minimum thresholds established for groundwater levels were set at elevations to mitigate potential inelastic subsidence.⁵⁷ The management area plan does not provide any additional information or analysis on the relationship between groundwater levels and inelastic subsidence used to make this determination.

Rosedale Rio Bravo Management Area

Corrective Action

The KGA GSP must provide clarification regarding why minimum threshold exceedances are allowed to occur in one of the North, Central, or South of the River zones for this management area (i.e., why it takes two of those zones to exceed their threshold before the management area plan considers an undesirable result to have occurred). Describe any projects or management actions that may be implemented if the minimum threshold is exceeded in one of those areas and users are impacted but an undesirable result is not triggered.

GSA Response to Corrective Action

The Rosedale-Rio Bravo Management Area (RRBMA) management area plan states that all monitoring areas (North, Central, South of River) will be included in one single management area and the entire management area will be subject to the Subbasin-wide undesirable result trigger. The RRBMA GSA conducted a Well Impact Analysis to evaluate wells that would be impacted at varying minimum thresholds. The minimum thresholds in the RRBMA plan were updated from 75 feet to 50 feet below the lowest groundwater elevation from the latest drought.⁵⁸ The RRBMA plan states that monitoring locations which exceed chronic lowering of groundwater levels minimum thresholds will be subject to the protocols of existing mitigation requirements or proposed adaptive management actions. The existing mitigation requirements are conducted through the Joint or Long-Term Operations Plan, including investigation of claims and pump lowering, well replacement, or reduction or adjustment of banking project recovery activities.⁵⁹ The proposed adaptive management action discussed in the RRBMA plan is intended to avoid undesirable results as a result of the chronic lowering of groundwater levels. This management action includes identifying the minimum threshold exceedance, investigation of the monitoring location area, evaluate contributing factors outside the management area, considerations towards developing new or modifying existing management actions and/or projects, and considerations

⁵⁶ KGA GSP Pioneer Revised MAP, Section 7.6.3, p. 143, Table 7-2, p. 143.

⁵⁷ KGA GSP Pioneer Revised MAP, Section 7.7.3, p. 144.

⁵⁸ KGA GSP Rosedale-Rio Bravo Water Storage District Revised MAP, Section 5.1, pp. 96-97.

⁵⁹ KGA GSP Rosedale-Rio Bravo Water Storage District Revised MAP, Section 1.4.4.4, p. 28.

towards developing and/or implementing policies and programs to mitigate or eliminate the exceedance.⁶⁰

Semitropic Water Storage District Management Area

Corrective Actions

- The KGA GSP must explain the selection of groundwater level minimum thresholds for the Semitropic Water Storage District management area, including how they represent site-specific levels of depletion that could cause undesirable results and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels. If minimum thresholds were not set consistent with levels indicating a depletion of supply, the minimum thresholds should be revised accordingly.
- Reconcile Figure 3-1 and Table 3-1 to utilize the same well naming convention so that Department staff and other interested parties may correlate the two.
- Verify how the subset of wells used in the well impact analysis is representative of the wells in the management area. Provide an explanation of the mitigation plan for domestic wells.

GSA Response to Corrective Actions

The Semitropic Water Storage District (SWSD) GSA performed a Well Impact Analysis to evaluate impacts of declining groundwater elevations on beneficial uses and users. The Well Impact Analysis used well completion report data from the Department and Kern County Environmental Health Department to estimate the percentage of beneficial use wells that would be impacted by proposed sustainable management criteria. The wells used in the analysis were selected based on those that contained complete construction data. The proposed sustainable management criteria were selected based on groundwater levels that were able to support access to groundwater while considering costs those beneficial uses and users were able to self-mitigate. The results of the Well Impact Analysis, based on worst case drought scenarios, concluded that 25%, 37%, and 23% of domestic and small community wells would be dewatered by the proposed minimum thresholds in Management Areas 1, 2, and 3, respectively. The analysis also concluded that 15% of domestic and small community wells would be dewatered by the proposed measurable objectives in Management Areas 2 and 3.⁶¹ The SWSD management area plan states that the sustainable management criteria utilized in the Well Impact Analysis were discussed with SWSD GSA stakeholders and landowners and ultimately accepted and adopted by the GSA.⁶² The SWSD management area plan explains the relationship between the chronic lowering of groundwater levels and degraded water quality sustainability indicators are negligible as water quality is not significantly affected by groundwater elevations above the

⁶⁰ KGA GSP Rosedale-Rio Bravo Water Storage District Revised MAP, Section 7.5.2, pp. 121-122.

⁶¹ KGA GSP Semitropic Water Storage District Revised MAP, Tables 3-3, 3-4, 3-5, pp. 238-239.

⁶² KGA GSP Semitropic Water Storage District Revised MAP, Section 3.5.1, p. 232.

minimum threshold.⁶³ The SWSD management area plan states that groundwater elevation changes and sodium concentrations in the lower zone aquifer west of the spreading ground show a direct correlation. However, groundwater elevation changes and sodium concentrations in the upper zone aquifer and the lower zone aquifer south of the spreading ground show an inverse correlation.⁶⁴ The SWSD management area plan states that as groundwater elevations decrease in the lower aquifer zone, arsenic concentrations tend to decrease as well. Conversely, as groundwater elevations increase in the upper aquifer zone, arsenic concentrations increase.⁶⁵ The SWSD management area plan does not include an analysis of the relationship between groundwater elevations and the other identified constituents of concern, nitrate and 1,2,3-Trichloropropane. The SWSD management area plan acknowledges that inelastic subsidence can occur from aquifer compact by overdraft caused by groundwater extraction;⁶⁶ however, the SWSD management area plan does not provide an analysis of the relationship between the chronic lowering of groundwater levels and land subsidence sustainability indicators.

The SWSD management area plan revised the original Figure 3-1 and Table 3-1 so that well numbers were able to be correlated. The SWSD management area plan included a Domestic Well Mitigation Program, funded by a Tiered Pricing Structure, which intends to designate measures to mitigate adverse impacts to domestic wells resulting from GSP implementation. The mitigation program consists of providing a short-term emergency water supply, providing funds to lower existing well pumps, providing funds to complete a connection to a water provider, supply water from an alternative source, provide funds to mitigate the impact of the affected well with a deeper domestic well, reduce or adjust groundwater storage recovery pumping to prevent the impact, and other mitigation measures not fully discussed in the SWSD management area plan.⁶⁷

Shafter-Wasco Irrigation District (7th Standard Rd.) Management Area

Corrective Action

The KGA GSP must explain the selection of groundwater level minimum thresholds for the Shafter-Wasco Irrigation District management area, including how they represent site-specific levels of depletion that could cause undesirable results and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels. If minimum thresholds were not set consistent with levels indicating a depletion of supply, the minimum thresholds should be revised accordingly.

⁶³ KGA GSP Semitropic Water Storage District Revised MAP, Section 3.5.1.1, p. 233.

⁶⁴ KGA GSP Semitropic Water Storage District Revised MAP, Figures 2-34, 2-36, 2-37, pp. 160-161.

⁶⁵ KGA GSP Semitropic Water Storage District Revised MAP, Figures 2-39 and 2-40, pp. 167-168.

⁶⁶ KGA GSP Semitropic Water Storage District Revised MAP, Section 2.3.6, pp. 171-172.

⁶⁷ KGA GSP Semitropic Water Storage District Revised MAP, Section 5.2.6, p. 325.

GSA Response to Corrective Action

The Shafter-Wasco Irrigation District 7th Standard Annex (SWID) amended management area plan states that the minimum thresholds for the chronic lowering of groundwater levels indicator were raised by 50 feet based on coordination efforts with neighboring management areas.⁶⁸ Minimum thresholds were established utilizing historical water level data from select monitoring locations, well construction information, and coordination with and consideration of adjacent GSAs, basins, and other sustainability indicators.⁶⁹ Monitoring locations were selected by those that contained long-term historical records, ranging from 1968 to 2018. The SWID management area plan states that minimum thresholds were established using a trendline analysis assuming that groundwater elevations that occurred during periods of overdraft (2006 – 2016) would continue over the 20-year GSP implementation horizon ending in 2040. The trendline analysis estimated that the lowest groundwater elevation in the management area by 2040 would be -137 feet above mean sea level. The SWID management area plan established the minimum threshold in this area at 50 feet above this projected groundwater elevation, ultimately setting the minimum threshold at -87 feet above mean sea level for all monitoring locations.⁷⁰ The SWID management area plan states that minimum thresholds for groundwater levels were established to avoid depletion of supply that would lead to undesirable results as they were set above projected low groundwater elevations based on historical groundwater trends in the management area. The SWID management area plan states that the chronic lowering of groundwater sustainability indicator is directly related to the reduction of groundwater storage and is used as a proxy for this indicator. However, the SWID management area plan does not believe that the chronic of lowering of groundwater indicator is correlated to degraded water or land subsidence in the management area based on the best available data.⁷¹ The SWID states that due to limited data on constituent of concern concentrations statistically significant trends related to groundwater elevation changes were unable to be established.⁷²

Southern San Joaquin Municipal Utility District Management Area

Corrective Actions

- The KGA GSP must explain the selection of groundwater level minimum thresholds for the Southern San Joaquin Municipal Utilities District management area, including how they represent site-specific levels of depletion that could cause undesirable results, how they may affect the interests of beneficial uses and users of groundwater, and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels. If minimum thresholds were not set consistent with levels

⁶⁸ KGA GSP Shafter-Wasco Irrigation District (7th Standard Rd.) Revised MAP, Section 13.1, p. 176.

⁶⁹ KGA GSP Shafter-Wasco Irrigation District (7th Standard Rd.) Revised MAP, Section 13.1, p. 175.

⁷⁰ KGA GSP Shafter-Wasco Irrigation District (7th Standard Rd.) Revised MAP, Table SMC-5, p. 176.

⁷¹ KGA GSP Shafter-Wasco Irrigation District (7th Standard Rd.) Revised MAP, Section 13.1.1, p. 176.

⁷² KGA GSP Shafter-Wasco Irrigation District (7th Standard Rd.) Revised MAP, Section 7.4.1, p. 90.

indicating a depletion of supply, the minimum thresholds should be revised accordingly.

- Verify how the subset of wells used in the well impact analysis is representative of the wells in the management area. Provide an explanation of the mitigation plan for domestic wells.

GSA Response to Corrective Actions

The Southern San Joaquin Municipal Utility District (SSJMUD) amended management area plan states that a Well Impact Analysis was completed to determine minimum thresholds for chronic lowering of groundwater levels and to determine if site-specific levels of depletions that could eventually lead to undesirable results. The Well Impact Analysis used well completion report data provided by the Department and proposed sustainable management criteria based on what groundwater elevations were appropriate for reasonable access and recovery. The SSJMUD management area plan states that the Well Impact Analysis was also performed to better understand the amount and type of wells in the management area. The analysis identified 19 municipal wells, 67 domestic and small community wells, and 243 agricultural and industrial wells. The SSJMUD management area plan concluded that 43% of domestic and small communities and 10% agricultural and industrial users would be impacted by the minimum thresholds. Also, 19% of domestic and small community wells and 5% of agricultural and industrial wells would be impacted by the measurable objectives.⁷³ The SSJMUD management area plan states that the results of the Well Impact Analysis concluded that minimum thresholds were set at depths that are protective of groundwater supply. The SSJMUD management area plan bases this statement on the fact that the GSA has elected to maintain approximately 10-years of groundwater supply above the groundwater level minimum threshold as method of managing a 10-year operational drought.

The SSJMUD management area plan explains that the chronic lowering of groundwater levels sustainability indicator is a proxy for the reduction of groundwater storage and degraded water quality indicators. The SSJMUD explains that the relationship between these sustainability indicators is based on the inverse relationship of constituents of concern and groundwater elevation changes, such as 1,2,3-Trichloropropane⁷⁴ and nitrate.⁷⁵ Arsenic concentrations, conversely, were observed to decline with decreasing groundwater elevations.⁷⁶ The SSJMUD management area plan did not provide an analysis discussing the correlation between groundwater elevations and sodium and chloride concentrations. The SSJMUD management area plan concludes that water quality in the SSJMUD management area is not significantly affected by groundwater elevation fluctuations above the minimum thresholds. The SSJMUD management area plan does not consider the impacts of the chronic lowering of groundwater elevations

⁷³ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Table 3-2, p. 201.

⁷⁴ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Figures 2-25 and 2-26, pp. 115-116.

⁷⁵ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Figure 2-29, 2-30, 2-31, pp. 124-125.

⁷⁶ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Figure 2-27, p. 118.

to the land subsidence sustainability indicator, but it does acknowledge that groundwater elevation decline will continue to cause land subsidence in the management area.⁷⁷

The SSJMUD management area plan included a draft Domestic Well Mitigation Program, planned to be finalized and adopted by the end of 2022, which intends to designate measures to mitigate adverse impacts to domestic wells resulting from GSP implementation. The program includes a well vulnerability and impact analysis, domestic well monitoring, adaptive triggers and actions, and additional actions.⁷⁸ The management actions described in the program include notifications to well owners, GSA inspections, short-term water supply, and funding for increasing well depth to groundwater levels needed to avoid impacts. These actions are dependent on triggers such as groundwater elevations reaching measurable objectives, approaching minimum thresholds, landowner claims that wells are impacted, and if impacted wells meet criteria for mitigation.⁷⁹

West Kern Water District Management Area

Corrective Actions

- The KGA GSP must provide sustainable management criteria for all identified management areas.
- The minimum thresholds must include a description of the selection of groundwater level minimum thresholds, including how they represent site-specific levels of significant and unreasonable depletion of supply that could cause undesirable results, how they may affect the interests of beneficial uses and users of groundwater, and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels.

GSA Response to Corrective Actions

The West Kern Water District (WKWD) management area plan states that the management area plan was revised to characterize the following areas to match the Subbasin-wide definition: North Project Management Area, South Project Management Area, Lake Watch Area, Western Watch Area, and Little Santa Maria Valley Watch Area. The WKWD management area plan states that sustainable management criteria were previously established for the two management areas in the 2020 management area plan submittal and that sustainable management criteria were not developed for the three watch areas as there is no significant ongoing or future use of groundwater.⁸⁰

⁷⁷ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Section 3.5.2.5, p. 214.

⁷⁸ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Appendix L, pp. 552-556.

⁷⁹ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Appendix L, Table 1, p. 556.

⁸⁰ KGA GSP West Kern Water District Revised MAP, Section 7.3, pp. 180-181.

The WKWD management area plan determined that the minimum threshold trigger for groundwater levels would signify an undesirable result which would impact the management area's sole beneficial user, WKWD. According to the WKWD management area plan, the WKWD GSA was consulted during the GSP development process to ensure that sustainable management criteria accurately represented the quantitative and qualitative conditions required by SGMA. WKWD GSA coordinated with neighboring GSAs to ensure that the management area's minimum thresholds and measurable objectives would not negatively impact the adjacent management area's beneficial uses and users. A water level trend analysis was conducted by WKWD to ensure that minimum thresholds within the management area were consistent with those of adjacent management areas. The water level trend analysis for minimum thresholds was conducted by determining the maximum and minimum historical groundwater elevations for each monitoring location. Once historical groundwater elevations were established, the difference between the maximum and minimum was calculated and then 20% of the calculated difference from each well was subtracted from that monitoring location's historically low groundwater elevation. The resulting value was then used as that monitoring location's minimum threshold. Measurable objectives established by calculating a water level where groundwater elevations were above the minimum thresholds during three years of drought usage and/or storage decline.⁸¹

Minimum thresholds and measurable objectives were calculated in the same manner for both the North and South Project Management Areas. The WKWD management area plan provides an analysis on the relationship between historical groundwater quality and groundwater elevation minimum thresholds. The analysis consisted of performing a linear regression between constituent of concern concentration data to minimum thresholds in representative monitoring locations. The WKWD management area plan provides the results of the analysis for one monitoring location, where no groundwater quality thresholds would be exceeded at the minimum threshold for groundwater levels.⁸² The WKWD management area plan acknowledges that land subsidence may be a result of groundwater extraction, however it does not provide an analysis on the relationship with the chronic lowering of groundwater sustainability indicator.⁸³

Westside District Authority Management Area

Corrective Actions

- The KGA GSP must explain the selection of groundwater level minimum thresholds for the Westside management area, including how they represent site-specific levels of depletion that could cause undesirable results, how they may affect the interests of beneficial uses and users of groundwater, and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels. If minimum

⁸¹ KGA GSP West Kern Water District Revised MAP, Section 7.4.1, pp. 182-183.

⁸² KGA GSP West Kern Water District Revised MAP, Table 7-3, p. 189.

⁸³ KGA GSP West Kern Water District Revised MAP, Section 7.8.3, p. 191.

thresholds were not set consistent with levels indicating a depletion of supply, the minimum thresholds should be revised accordingly.

- The larger portion of the management area must establish sustainable management criteria, including the establishment of minimum thresholds and monitoring; otherwise, further evaluation and justification is needed to negate management criteria in this portion of the management area.

GSA Response to Corrective Actions

The Westside District Water Authority (WDWA) management area plan states that there is no significant use of groundwater within the management area that would be subject to SGMA. The WDWA management area plan also states that changes in groundwater levels and storage are attributed to underflow beneath WDWA and that the GSA has no control over this phenomenon.⁸⁴ The WDWA management area plan states that definitions of watch areas, including Lost Hills Watch Area and Southwest Watch Area have been revised to match Subbasin-wide definitions. The WDWA management area plan has included KGA Undistricted Lands as a watch area within WDWA. The WDWA management area plan states that two additional monitoring locations were added to the monitoring network, with one additional monitoring location under consideration. The minimum thresholds for the added wells are considered preliminary and were established based on historic groundwater elevations within the management area.⁸⁵ The management area plan states that through hydrogeologic modeling efforts, the proposed sustainable management criteria would not negatively impact beneficial uses and users nor lead to an undesirable result. Additional information on the establishment of sustainable management criteria or their impacts on beneficial uses and users was not provided. The management area plan acknowledges that inelastic subsidence is occurring within the management area, but data gaps exist to fully understand the cause of the subsidence.⁸⁶

KERN RIVER GSP

KRGSA Agricultural Management Area

Corrective Action

The Kern River GSP must provide clarification regarding the management action mentioned in the sustainable management criteria section of the GSP related to identification of well users, including domestic users and small water systems, in the agricultural subareas of the Agricultural Management Area.

GSP Response to Corrective Action

As a response to the Department's Corrective Action, the Kern River GSP now includes a standalone management action, which extends across the entire Plan Area, that was developed to avoid widespread impacts to domestic and small water systems wells. The GSP states that the evaluation of the management action has allowed the GSA to

⁸⁴ KGA GSP Westside District Water Authority Revised MAP, Section 4.2.1, p. 146.

⁸⁵ KGA GSP Westside District Water Authority Revised MAP, Section 4.1.1, p. 143.

⁸⁶ KGA GSP Westside District Water Authority Revised MAP, Section 4.1.2, pp. 144-145.

update domestic well numbers and depths. The Kern River GSA has developed a more comprehensive dataset of active domestic wells, which was used to conduct a recent Well Impact Analysis.⁸⁷

BUENA VISTA GSP

Maples Management Area

Corrective Action

The Buena Vista GSP must be revised to include sustainable management criteria, including groundwater level minimum thresholds, for the Maples Management Area. Reference the specific methodologies from the Kern River GSP (of which there are several, depending on nearby beneficial uses and users, as noted herein) that guide development of the Maples Management Area's criteria and describe how those criteria are consistent with the requirements of the GSP Regulations. Department staff recommend providing similar detail regarding the hydrogeologic and beneficial user considerations as were provided for the Buttonwillow Management Area sustainable management criteria development.

GSP Response to Corrective Action

The Maples Management Area (MMA) in the Buena Vista Water Storage District did not contain applicable sustainable management criteria in the 2020 GSP submittal. The amended GSP states that minimum thresholds in the MMA were established using historically low groundwater elevations observed in the management area. Minimum thresholds were set at elevations ranging from 20 to 50 feet below historical lows to adjust to Kern River GSA minimum thresholds within the same groundwater elevations.⁸⁸ Measurable objectives were established using a similar method as the minimum thresholds; however, the measurable objectives were set at groundwater elevations ranging from 40 to 118 below historical high groundwater elevations. The GSP states that measurable objectives were established at groundwater elevations similar to those in the adjacent Kern River GSA area.⁸⁹ The GSP does not include additional information validating the establishment of the sustainable management criteria or how these may impact beneficial uses and users.

The GSP states that chronic lowering of groundwater sustainable management criteria will be used as a proxy for the reduction of groundwater storage.⁹⁰ Groundwater elevations were used as a proxy for the degraded water quality sustainability indicator, however the groundwater elevations differed from the chronic lowering of groundwater sustainable management criteria. The minimum thresholds for degraded water quality were established at 50 feet below the historic low groundwater elevation. Measurable objectives were established based on the average high groundwater elevation, minimum threshold, and four benchmark Kern River GSA monitoring wells. The methodology for establishing the MMA water quality measurable objectives is not

⁸⁷ Kern River Amended GSP, Section 5.4.4.2, pp. 311-314.

⁸⁸ Buena Vista Amended GSP, Section 5.9.1, pp. 193-194.

⁸⁹ Buena Vista Amended GSP, Section 5.9.2, pp. 195-196.

⁹⁰ Buena Vista Amended GSP, Section 5.10, pp. 197-199.

discussed in the Plan. The GSP states that available water quality data is insufficient to establish baseline minimum thresholds based on constituent of concern concentrations.⁹¹ The GSP states that sustainable management criteria for land subsidence are based historical groundwater elevations. Minimum thresholds were set at 20 feet below the historical low groundwater level at the monitoring location.⁹² Measurable objectives for land subsidence were established using the average historical high groundwater elevation, the minimum threshold, and four benchmark Kern River GSA monitoring wells.⁹³ Similar to the degraded water quality sustainability indicator, the GSP does not provide a full analysis of how sustainable management criteria were established or their impacts to beneficial uses and users.

HENRY MILLER GSP

Corrective Action

The Henry Miller GSP must provide a sufficient description of the selection of groundwater level minimum thresholds, including how they represent site-specific levels of significant and unreasonable depletion of supply that could cause undesirable results, how they may affect the interests of beneficial uses and users of groundwater, and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels.

GSP Response to Corrective Action

The HMWD GSP states that groundwater level minimum thresholds are based on historical groundwater levels, the potential for future decline, and well construction information. The GSP states that a minimum threshold has been exceeded when a static depth to groundwater of 350 feet is exceeded in 40% or more of monitoring locations over four consecutive bi-annual monitoring events. The GSP states that the minimum thresholds will not adversely affect beneficial uses and users as a subset of monitoring locations will have pump settings that prevent groundwater extraction and will only temporarily prevent access to groundwater. The GSP further explains that these monitoring locations have well screens that extend much deeper into the aquifer and the pumps would be lowered for affected monitoring sites and access would be reestablished. Additionally, the GSP does not consider the operational cost of lowering pumps to 350 feet below ground surface to be a burden economically and not considered an undesirable result by agricultural beneficial users.⁹⁴

SOUTH OF KERN RIVER GSP

Arvin-Edison Water Storage District Management Area

Corrective Action (Previously Identified in the KGA GSP)

⁹¹ Buena Vista Amended GSP, Section 5.11, pp. 199-201.

⁹² Buena Vista Amended GSP, Table 5-32, p. 203.

⁹³ Buena Vista Amended GSP, Table 5-33, p. 203.

⁹⁴ Henry Miller Amended GSP, Section 3.3.1, p. 155.

As the Arvin-Edison management area plan appears to rely, at least to some extent, on the Impacted Well Mitigation Program to justify its minimum thresholds, which allow for continued lowering of groundwater levels in some areas, the KGA GSP must provide specific details, including timeline for implementation, of the program. Describe the scope of the program and how users impacted by continued groundwater level decline, particularly early in implementation of the Plan, will be addressed.

GSP Response to Corrective Action

The South of Kern River (SOKR) GSA includes three management areas, Arvin-Edison, Wheeler Ridge-Maricopa, and Tejon-Castac, that were previously members of the KGA GSP. The SOKR GSP provided responses to the Corrective Actions directed towards its management areas. The GSP identified beneficial uses and users for each sustainability indicator, how each sustainability indicator impacts the other, potential impacts of sustainable management criteria to neighboring basins and management areas and expanded the discussion of data and methodologies used to conduct the Well Impact Analysis. The GSP also developed multiple approaches related to the degraded water quality sustainability indicator, including an approach to developing Local Management Area Exceedance Criteria in accordance with the Water Code,⁹⁵ additional justification for screening constituents of concern, and establishing sustainable management criteria for arsenic at two monitoring locations in the Arvin-Edison management area.⁹⁶

Tejon-Castac Water District Management Area

Corrective Action (Previously Identified in the KGA GSP)

The KGA GSP must explain the selection of groundwater level minimum thresholds for the Tejon-Castac management area, including how they represent site-specific levels of depletion that could cause undesirable results, how they may affect the interests of beneficial uses and users of groundwater, and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels. If minimum thresholds were not set consistent with levels indicating a depletion of supply, the minimum thresholds should be revised accordingly.

GSP Response to Corrective Action

The GSP states that minimum thresholds for the chronic lowering of groundwater in the Tejon-Castac management area were set at the average historical low groundwater elevation for wells within the Arvin-Edison management area nearest the respective Tejon-Castac monitoring location. The Plan concludes that the relationship between these two management areas justifies both areas avoiding an undesirable result.⁹⁷

Wheeler Ridge-Maricopa Water Storage District Management Area

⁹⁵ South of Kern River GSP, Section 14.4.1, p. 443.

⁹⁶ South of Kern River GSP, Section 14.4.2, pp. 443-447.

⁹⁷ South of Kern River GSP, Section 14.1.1, pp. 430-439.

Corrective Action (Previously Identified in the KGA GSP)

As the KGA GSP Wheeler Ridge-Maricopa management area appears to rely, at least to some extent, on the Impacted Well Mitigation Program to justify its minimum thresholds, which allow for continued lowering of groundwater levels in some areas, provide specific details, including timeline for implementation, of the program. Describe the scope of the program and how users impacted by continued groundwater level decline, particularly early in implementation of the Plan, will be addressed.

GSP Response to Corrective Actions

The South of Kern River (SOKR) GSA includes three management areas, Arvin-Edison, Wheeler Ridge-Maricopa, and Tejon-Castac, that were previously members of the Kern Groundwater Authority GSA. The SOKR GSP provided responses to the Corrective Actions directed towards its management areas. The GSP identified beneficial uses and users for each sustainability indicator, how each sustainability indicator impacts the other, potential impacts of sustainable management criteria to neighboring basins and management areas and expanded the discussion of data and methodologies used to conduct the Well Impact Analysis. The GSP also developed multiple approaches related to the degraded water quality sustainability indicator, including an approach to developing Local Management Area Exceedance Criteria in accordance with the Water Code⁹⁸, additional justification for screening constituents of concern, and establishing sustainable management criteria for arsenic at nine monitoring locations in the Wheeler Ridge-Maricopa management area.⁹⁹ The GSP also provides details related to the proposed Well Mitigation Program, which aims to address negative impacts related to groundwater level decline.

ALL GSPs

Corrective Action

All the GSPs must demonstrate the relationship between the minimum thresholds for each sustainability indicator, including an explanation of how the GSA has determined that basin conditions at each minimum threshold will avoid undesirable results for each of the sustainability indicators.

GSP Response to Corrective Action

As discussed in detail in Deficiency 1, the Plan does not adequately describe the basin conditions at each minimum threshold that would lead to or help avoid undesirable results in the Subbasin.

⁹⁸ South of Kern River GSP, Section 14.4.1, p. 443.

⁹⁹ South of Kern River GSP, Section 14.4.2, pp. 443-447.

4.2.2 Evaluation

The Department reviewed the GSA's responses to the Incomplete Determination in each revised GSP (including management area plans). Department staff believe the individual management areas made progress toward addressing the specific management area corrective actions and are encouraged by the Plan's analysis of potential impacts to the various water supply wells throughout the Subbasin. Department staff recognize that nearly every GSP has provided some level of assessment of potential well impacts and some GSPs, such as the KGA GSP and the Kern River GSP, provide discussion related to projects and management actions that can be implemented to help offset impacts to drinking water users (i.e., KGA member agencies agreed to develop a well mitigation strategy if it's predicted that more than 5% of wells within their management area may be dewatered; the Kern River GSA has proposed developing allocation schemes and reducing agricultural pumping and municipal pumping via conjunctive use efforts). After reviewing the revised GSPs, however, Department staff still believe the approaches used for developing chronic lowering of groundwater levels minimum thresholds and the level of analysis to support those approaches, is disparate across the various plans.

Based on the Department's evaluation, although progress was made on the individual management area scale it is still unclear how the various approaches to developing sustainable management criteria help achieve the sustainability goals for the Subbasin. The following has been determined to still be lacking with respect to Deficiency 2:

- The Plans still use various data and methods to establish the sustainable management criteria which generally do not incorporate the analysis and results of the Todd Groundwater Technical Memorandum.
- The Plan's discussion related to why the various minimum thresholds reflect different groundwater conditions across the Subbasin and between adjacent management areas is still incomplete. These discussions should include how other sustainability indicators may be affected by the various minimum thresholds within the specific management areas but also in adjacent management areas.

As discussed in the evaluation of Deficiency 1 above, Department staff believe the various approaches, data, and methodologies used to establish minimum thresholds across the management areas complicates understanding the groundwater conditions the Subbasin identifies as significant and unreasonable and would lead to a Subbasin-wide undesirable result. For example, some of the management areas in the northern portion of the Subbasin still project recent historic conditions (i.e., 2006 to 2016 conditions) to 2040 and establish the minimum threshold at that projected value which in some cases is over 200 feet below historical lows.¹⁰⁰ In contrast, some management areas in the southern portion of the Subbasin utilize a formula approach to establish the minimum thresholds that incorporates the historical low groundwater levels, a "variability correction factor", and a

¹⁰⁰ KGA GSP Semitropic Water Storage District Revised MAP, Section 3.5, pp. 232-240; KGA GSP North Kern Water Storage District/Shafter-Wasco Irrigation District Revised MAP, Section 3.5, pp. 235-258.

“trend continuation factor.”¹⁰¹ The minimum thresholds in these southern management areas are still below historical lows but within approximately 100 feet of the lowest observed water level. It remains unclear to Department staff why the management areas have employed such different approaches to establishing sustainable management criteria that results in a disparate level of continued groundwater declines beyond historical lows. Additionally, none of the methods to establish sustainable management criteria described in the management area plans incorporate or discuss the results of the Todd Groundwater Technical Memorandum, which as discussed in length above, establishes estimates of overdraft and sustainable yield. It should also be noted that the Todd Groundwater Technical Memorandum also does not incorporate the analyses or final minimum threshold values into the evaluation of change in storage or future projected conditions – with the exception of superimposing sustainable management criteria values on simulated hydrographs.

Because of the various methods employed that result in continued groundwater declines at different magnitudes across the management areas, Department staff are still unable to fully evaluate the potential effects conditions in one management area may have on adjacent management areas. Department staff understand that some management areas have consulted neighboring management areas and adjusted minimum thresholds in representative monitoring sites; however, given the Management Area Exceedance criteria, it is conceivable that multiple management areas could operate at or near the minimum thresholds without resulting in a Management Area Exceedance. And because the definition of a Management Area Exceedance does not include a description of the significant and unreasonable groundwater conditions that would be occurring in the management areas at the 40% of minimum threshold exceedances over a four consecutive biannual measurement timeframe, it is unclear how one management area’s operations may affect another or how a collection of management areas may affect a particular region of the Subbasin, especially as it relates to effects on the other sustainability indicators.

4.3 DEFICIENCY 3 – THE SUBBASIN’S LAND SUBSIDENCE SUSTAINABLE MANAGEMENT CRITERIA DO NOT SATISFY THE REQUIREMENTS OF SGMA AND THE GSP REGULATIONS.

4.3.1 Corrective Action 3

As described in the Department’s GSP Assessment Staff Report released in January 2022, Department staff recommended the GSAs consider and address the following:

The Subbasin’s GSAs should coordinate and collectively satisfy the requirements of SGMA and the GSP Regulations to develop the sustainable management criteria for land subsidence. The GSPs should document the conditions for undesirable results for which the GSAs are trying to avoid, supported by their

¹⁰¹ South of Kern River GSP, Section 14.1, pp. 430-439.

understanding of land uses and critical infrastructure in the Subbasin and the amount of subsidence that would substantially interfere with those uses.¹⁰² The revised Plan, and component GSPs and management areas, should identify the rate and extent of subsidence corresponding with substantial interference that will serve as the minimum threshold, or should thoroughly demonstrate that another metric can serve as a proxy for that rate and extent.¹⁰³ As described in Deficiency 1, the Coordination Agreement should be revised to clearly identify the undesirable result parameters for each of the GSPs, management areas, and management area plans so it is clear how the various plans work together at the Subbasin level.

The revised Plan should explain how implementing projects and management actions proposed in the various GSPs is consistent with avoiding subsidence minimum thresholds, sufficient to avoid substantial interference, similar to the original Plan's assessment of whether implementation would avoid undesirable results for groundwater levels.

If land subsidence is not applicable to parts of the Subbasin, the GSPs must provide supported justification of such. The supporting information must be sufficiently detailed and the analyses sufficiently thorough and reasonable based on the best available information and best available science.

4.3.2 Subbasin's Response to Deficiency 3

In response to Deficiency 3, the Subbasin's GSAs submitted a revised Plan including updated content related to subsidence in its amended Coordination Agreement and the various GSPs and management area plans.

As part of its "Basin-wide Coordinated GSP Subsidence Plan", the amended Coordination Agreement establishes new Subbasin-wide definitions for "Regional Critical Infrastructure" and "Management Area Critical Infrastructure" as part of the Subbasin-wide response to subsidence.¹⁰⁴ Most of the GSPs and management area plans were updated to also include these new definitions.

Regional Critical Infrastructure is defined as "infrastructure located within the Subbasin that serves multiple areas of the Subbasin and whose loss of significant functionality due to inelastic subsidence, if caused by SGMA related Subbasin groundwater extractions, would have significant impacts to beneficial users."¹⁰⁵ The Regional Critical Infrastructure within the Subbasin were then collectively identified as the California Aqueduct and the Friant-Kern Canal. The amended Coordination Agreement also provided definitions for interim sustainable management criteria for subsidence for both Regional Critical Infrastructure.

¹⁰² 23 CCR § 354.26(b).

¹⁰³ 23 CCR § 354.28(c)(5).

¹⁰⁴ First Amended Kern County Subbasin Coordination Agreement, pp. 362 and 392.

¹⁰⁵ First Amended Kern County Subbasin Coordination Agreement, pp. 362 and 392.

The amended Coordination Agreement explains that the sustainable management criteria were established as interim criteria for subsidence due to Subbasin’s GSAs’ concerns about setting sustainable management criteria with “significant” data gaps.¹⁰⁶ The Plan intends to establish new sustainable management criteria in 2025 that will be informed by data from additional studies and subsidence modeling.¹⁰⁷ The interim minimum threshold is intended to be used until 2025, with several “caveats”. These caveats include:

- 1) the sustainable management criteria would be valid until 2025 then updated in the 2025 GSP update;
- 2) the GSAs would not be required to manage or otherwise be liable for “impacts resulting from actions outside the authority of the GSA or outside the GSA’s ability to manage sustainability under SGMA”; and
- 3) the GSAs would not be held responsible for addressing subsidence caused by activities outside the jurisdiction of SGMA.¹⁰⁸

The KGA GSP, Buena Vista GSP, and Henry Miller GSP specify the activities outside the jurisdiction of SGMA as the “[p]ermanent loss of freeboard from land subsidence due to other causes including but not limited to oil or gas production, natural compaction of shallow underlying soils beneath or near the Aqueduct, or any other cause that is not within the jurisdiction of a GSA, shall not be considered as a loss of freeboard that contributes to the amount specified for any [measurable objective] or [minimum threshold]”.¹⁰⁹

The amended Coordination Agreement also includes two new white papers describing the process and methods for defining the interim sustainable management criteria for the California Aqueduct and Friant-Kern Canal. Both white papers reference two studies, conducted by Earth Consultants International¹¹⁰ and Lawrence Berkeley National Laboratory,¹¹¹ that provided the Subbasin with baseline subsidence rates. The studies documented analyses using Differential Interferometric Synthetic Aperture Radar data (i.e., InSAR). The analysis considered a “long-time series” (ranging from 2015 to 2021)¹¹² to capture the “cyclical pumping and recharge [pattern] of underlying aquifers and... long-term effects such as drought conditions [in the Subbasin]”.¹¹³ They have expressed that the subsidence rates previously calculated by the National Aeronautics and Space Administration/Jet Propulsion Laboratory for “shorter time intervals” were overestimated by 45% to 50%.¹¹⁴ The Subbasin used these studies and their results to develop a

¹⁰⁶ First Amended Kern County Subbasin Coordination Agreement, pp. 363 and 393.

¹⁰⁷ First Amended Kern County Subbasin Coordination Agreement, pp. 367, 396-397.

¹⁰⁸ First Amended Kern County Subbasin Coordination Agreement, pp. 363 and 393.

¹⁰⁹ KGA Amended GSP, Section 3.5.3.2, p. 301; Buena Vista Amended GSP, Section 5.7.11, p. 185; Henry Miller Amended GSP, Section 3.3.4, p. 156.

¹¹⁰ First Amended Kern County Subbasin Coordination Agreement, pp. 417-520.

¹¹¹ First Amended Kern County Subbasin Coordination Agreement, pp. 399-415.

¹¹² First Amended Kern County Subbasin Coordination Agreement, pp. 400 and 429.

¹¹³ First Amended Kern County Subbasin Coordination Agreement, p. 429.

¹¹⁴ First Amended Kern County Subbasin Coordination Agreement, p. 429.

methodology for developing the Subbasin’s interim minimum thresholds and measurable objectives.¹¹⁵

The amended Coordination Agreement defines Management Area Critical Infrastructure as “infrastructure located within a particular Subbasin Management Area whose loss of significant functionality due to inelastic subsidence if caused by SGMA related Subbasin groundwater extractions would have significant impacts to beneficial users within that Subbasin Management Area.”¹¹⁶ Identification of Management Area Critical Infrastructure was delegated to the individual GSPs and management area plans.

The revised GSPs and management area plans in which the California Aqueduct or Friant-Kern Canal runs through their jurisdictional boundaries updated their sustainable management criteria to be consistent with the amended Coordination Agreement.

4.3.2.1 Regional Critical Infrastructure: The California Aqueduct

The California Aqueduct White Paper defines an undesirable result for land subsidence along the California Aqueduct as “the point at which the amount of inelastic subsidence, if caused by SGMA-related Subbasin groundwater extractions, creates a significant and unreasonable impact (requiring either retrofitting or replacement to a point that is economically unfeasible to the beneficial users) to surface land uses or critical infrastructure. A significant loss in functionality that could be mitigated through retrofitting and is considered economically feasible to the beneficial users would not be considered undesirable.”¹¹⁷ An undesirable result will occur when a single minimum threshold is exceeded along the California Aqueduct.¹¹⁸

The interim minimum threshold for the California Aqueduct is defined as “[t]he avoidance of a permanent loss (associated with inelastic subsidence) of conveyance capacity as attributable to subsidence as limited by remaining concrete liner freeboard for a specific Aqueduct Pool that exceeds twice the average observed rate from 2016-2022.”¹¹⁹ The minimum threshold rate was established by calculating twice the average subsidence rate along the portion of the California Aqueduct that lies in the Subbasin from 2016-2022 (i.e., -0.05 feet per year) using the Department’s California Aqueduct Subsidence Program (CASP) data.¹²⁰ This is equivalent to a land surface elevation change of -0.1 feet per year and cumulatively -1.8 feet by 2040.¹²¹ The measurable objective rate is set at the 2016-2022 average, or -0.05 feet per year and cumulatively -0.9 feet by 2040. The Plan intends

¹¹⁵ First Amended Kern County Subbasin Coordination Agreement, p. 367.

¹¹⁶ First Amended Kern County Subbasin Coordination Agreement, pp. 362 and 392.

¹¹⁷ First Amended Kern County Subbasin Coordination Agreement, pp. 363-364.

¹¹⁸ First Amended Kern County Subbasin Coordination Agreement, p. 362.

¹¹⁹ First Amended Kern County Subbasin Coordination Agreement, p. 367.

¹²⁰ First Amended Kern County Subbasin Coordination Agreement, p. 367. Note: The First Amended Kern County Subbasin Coordination Agreement provides the average observed rate of -0.05 feet per year “for all Pools of the Aqueduct within the Kern Subbasin” however, Table 2 contradicts this statement by establishing a different rate for Pools 33 through 35 of -0.07 feet per year.

¹²¹ First Amended Kern County Subbasin Coordination Agreement, Table 2, p. 368.

to assess the minimum threshold and measurable objective as a respective average annual rate over a rolling 6-year period.¹²²

The California Aqueduct is contained within the boundaries of the KGA GSP Westside District Water Authority Management Area, the KGA GSP West Kern Water District Management Area, Henry Miller Water District GSP, Buena Vista Water Storage District GSP, and the South of Kern River Wheeler Ridge Maricopa Water Storage District Management Area. These GSPs and management area plans were all updated to include the definition of Regional Critical Infrastructure and were updated to include or reference the amended Coordination Agreement Subbasin-wide sustainable management criteria for subsidence.

4.3.2.2 Regional Critical Infrastructure: The Friant-Kern Canal

In addition to the California Aqueduct white paper, the amended Coordination Agreement provided the Friant-Kern Canal White Paper for the Lower Reach of the Friant-Kern Canal, which is nearly entirely located in the Subbasin between its northern boundary and terminates at the Kern River.¹²³ The Friant-Kern Canal White Paper defines an undesirable result for land subsidence along the Friant Kern Canal as when “the flow capacity through the Lower Reach is reduced to capacities below historical operational flow capacities over the previous 10 years, impacting surface land uses of available water supplies, as a result of groundwater extractions from agricultural, domestic, municipal, or urban beneficial users within the Kern County Subbasin.”¹²⁴

The interim minimum threshold for the lower reach of the Friant Kern Canal is defined as a land surface elevation change of -0.2 feet per year and cumulatively -3.6 feet by 2040.¹²⁵ The interim minimum threshold values were established by using the average annual rate of subsidence along the Lower Reach of the Friant Kern Canal between 2016 to 2022.¹²⁶ The Plan intends to assess the minimum threshold as an average annual rate over a rolling 6-year period and monitor within a 2.5 mile corridor on either side of the Friant -Kern Canal.¹²⁷ The measurable objective is defined as a land surface elevation change of -0.1 feet per year and cumulative -1.8 feet by 2040.¹²⁸ As described previously, the amended Coordination Agreement states that new sustainable management criteria will be established for the Friant -Kern Canal in 2025.¹²⁹

The Friant-Kern Canal is contained within the boundaries of the KGA GSP Southern San Joaquin Municipal Utilities District Management Area, KGA GSP North Kern Water Storage District Management Area, and the Kern River GSP. All these plans were

¹²² First Amended Kern County Subbasin Coordination Agreement, p. 367.

¹²³ First Amended Kern County Subbasin Coordination Agreement, pp. 392-393.

¹²⁴ First Amended Kern County Subbasin Coordination Agreement, p. 395.

¹²⁵ First Amended Kern County Subbasin Coordination Agreement, p. 396.

¹²⁶ First Amended Kern County Subbasin Coordination Agreement, p. 396, Table 1, p. 397.

¹²⁷ First Amended Kern County Subbasin Coordination Agreement, pp. 396 and 398.

¹²⁸ First Amended Kern County Subbasin Coordination Agreement, p. 397.

¹²⁹ First Amended Kern County Subbasin Coordination Agreement, p. 396.

updated to define the Friant-Kern Canal as Regional Critical Infrastructure consistently with the amended Coordination Agreement.

4.3.2.3 *Plan Areas Outside of Regional Critical Infrastructure*

There are several management areas that do not contain Regional Critical Infrastructure but may still be within the boundaries of the respective monitoring corridors, extending 2.5 miles on each side of the California Aqueduct and Friant Kern Canal. These management areas are discussed below.

- The KGA GSP Kern Water Bank Management Area is located to the east of the California Aqueduct and may be within the monitoring corridor, corresponding to Pools 28 and 29.¹³⁰ The management area plan describes that the management area has experienced subsidence ranging from 0.16 feet to -0.36 feet from 2015-2018.¹³¹ In terms of the California Aqueduct, mile post 238 is reported to have risen by 0.3 feet and subsided by 0.35 feet. Available freeboard for most of the area adjacent has not changed from as-built conditions.¹³² The management area plan concludes that the changes are indicative of elastic rebound and recovery for Pools 28 and 29.¹³³
- The KGA GSP Semitropic Water Storage District Management Area is located to the east of the California Aqueduct and may be within the monitoring corridor, corresponding to Pool 24.¹³⁴ The management area plan did not establish minimum thresholds for subsidence since the management area has not historically experienced impacts to local infrastructure¹³⁵ and the Semitropic Water Storage District GSA identifies the need for greater understanding of the causes of local and regional subsidence.¹³⁶ However, the management area plan does provide the Subbasin-wide minimum threshold definition for Regional Critical Infrastructure¹³⁷ but there is no discussion of adopting the Subbasin-wide minimum threshold nor is there a discussion on potential impacts to Pool 24.
- The Buena Vista GSP Buttonwillow Management Area border lies near the California Aqueduct, corresponding to Pool 24, Pool 25, and a portion of Pool 26.¹³⁸ Additionally, it may be within the monitoring corridor for Pools 27 and 28.¹³⁹ The Buena Vista GSP provides minimum thresholds for Pools 24 through 28 that differ from the amended Coordination Agreement's minimum thresholds, ranging

¹³⁰ First Amended Kern County Subbasin Coordination Agreement, p. 366.

¹³¹ KGA GSP Kern Water Bank Revised MAP, Section 2.2.2.11 and Figure 16, pp. 33 and 34.

¹³² KGA GSP Kern Water Bank Revised MAP, Section 2.2.2.11, p. 33.

¹³³ KGA GSP Kern Water Bank Revised MAP, Section 2.2.2.11 and Figure 17, pp. 33 and 35.

¹³⁴ First Amended Kern County Subbasin Coordination Agreement, p. 366.

¹³⁵ KGA GSP Semitropic Water Storage District Revised MAP, Section 3.5.2.3, p. 240.

¹³⁶ KGA GSP Semitropic Water Storage District Revised MAP, Section 3.5.2.3, p. 241.

¹³⁷ KGA GSP Semitropic Water Storage District Revised MAP, Section 3.5.2.3, p. 241.

¹³⁸ Buena Vista Amended GSP, Section 5.7.1.2, p. 179, Section 5.7.9, p. 183.

¹³⁹ Buena Vista Amended GSP, Table 5-22, p. 184.

from -0.38 feet to -2.62 feet.¹⁴⁰ The GSP states that these minimum thresholds were established by multiplying the average existing freeboard by 75 percent.¹⁴¹ Measurable objectives ranged between -0.25 and -1.75 feet and were established by multiplying the existing freeboard by 50 percent.¹⁴² Additionally, while the California Aqueduct is defined as critical infrastructure within the GSP, the GSP does not use the Regional Critical Infrastructure definition as described in the amended Coordination Agreement.¹⁴³

- The South of Kern River Arvin Edison Water Storage District Management Area is located to the east in the vicinity of the California Aqueduct.
- The KGA GSP Shafter Wasco Irrigation District Management Area is located to the west of the Friant-Kern Canal. Because the KGA Shafter Wasco Irrigation District Management Area submitted a joint management area plan with the KGA North Kern Water Storage District Management Area, the Sustainable Management Criteria for the Shafter Wasco Irrigation District is the same and is consistent with the amended Coordination Agreement's sustainable management criteria.¹⁴⁴
- The KGA GSP Cawelo Water District Management Area is located to the east of the Friant-Kern Canal.

4.3.2.4 *Management Area Critical Infrastructure*

The GSPs and management area plans within the Subbasin were tasked with defining their own Management Area Critical Infrastructure, which included but were not limited to roadways, water conveyances, transportation routes, utility lines, and wells. The definitions of Management Area Critical Infrastructure and the responses from their respective agencies vary across the Subbasin. Some GSPs or management area plans defined Management Area Critical Infrastructure but did not develop sustainable management criteria, some GSPs or management area plans did not define Management Area Critical Infrastructure nor sustainable management criteria, and some GSPs or Management Areas defined Management Area Critical Infrastructure and defined sustainable management criteria. Below are descriptions of select examples of where Department staff identified the various scenarios related to management area critical infrastructure.

Examples of GSPs or management area plans that defined Management Area Critical Infrastructure but did not define sustainable management criteria include the following:

¹⁴⁰ Buena Vista Amended GSP, Table 5-24, p. 185.

¹⁴¹ Buena Vista Amended GSP, Section 5.7.11, p. 185.

¹⁴² Buena Vista Amended GSP, Section 5.7.12, p. 186, Table 5-25, p. 187.

¹⁴³ Buena Vista Amended GSP, Section 5.7.1, p. 171.

¹⁴⁴ KGA GSP North Kern Water Storage District/Shafter-Wasco Irrigation District Revised MAP, Section 3.5.5, p. 261.

- The KGA GSP Semitropic Water District Management Area acknowledges “critical infrastructure” within its plan boundaries; however, it does not specify what the critical infrastructure is. The management area plan states that subsidence is occurring primarily in its Management Areas 1 and 3 and that “no impacts to critical infrastructure have been identified” within any of its management areas. The plan states that because no impacts to critical infrastructure have been identified and that the lack of understanding of the relationship between groundwater pumping and subsidence, subsidence was identified as a “data gap” and that no minimum thresholds are established at this time. The plan states the management area will adopt minimum thresholds once “a clear understanding of the causes and effects can be developed.”¹⁴⁵ However, a description of how the management area will establish sustainable management criteria in the future is not clearly outlined within the plan.
- The KGA GSP West Kern Water District Management Area identifies natural gas pipelines and electrical transmission lines as Management Area Critical Infrastructure but does not set sustainable management criteria related to these facilities. The plan does not explicitly state why it chooses to not define sustainable management criteria but states that “impacts on this infrastructure due to subsidence caused by groundwater recovery are expected to be minimal.”¹⁴⁶ The plan does not explain the process or what factors or evidence were used to reach this conclusion.
- The KGA GSP Southern San Joaquin Municipal Utility District management area plan establishes the Regional Critical Infrastructure sustainable management criteria for the Friant-Kern Canal and states that nine Friant-Kern Canal Turnouts are within its plan area and considered to be Management Area Critical Infrastructure. The plan states that these structures “have not experienced adverse impacts” while acknowledging the historical subsidence experienced within the management area. The plan states that while these facilities will be monitored, no sustainable management criteria are defined at this time.¹⁴⁷ While the Southern San Joaquin Municipal Utility District management area uses the Subbasin-wide sustainable management criteria for the Regional Critical Infrastructure, it states that it does not establish sustainable management criteria “relative to impacts to local infrastructure or beneficial uses and users.”¹⁴⁸
- KGA GSP Kern County Water Authority Pioneer Management Area identifies the Cross Valley Canal and Kern River Canal as Management Area Critical Infrastructure. However, no sustainable management criteria were defined because the management area plan states that no undesirable results have

¹⁴⁵ KGA GSP Semitropic Water Storage District Revised MAP, Section 3.4.4, p. 231.

¹⁴⁶ KGA GSP West Kern Water District Revised MAP, Section 7.8.2, p. 190.

¹⁴⁷ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Section 3.4.4, p. 199.

¹⁴⁸ KGA GSP Southern San Joaquin Municipal Utility District Revised MAP, Section 3.5.2.5, p. 214.

historically been identified.¹⁴⁹ The plan did not include any analysis that subsidence has never occurred or analysis that future groundwater elevation declines below historic low levels will not cause subsidence.

- The KGA GSP Kern Water Bank Management Area also identifies the Cross Valley Canal as Management Area Critical Infrastructure.¹⁵⁰ However, the plan states that no sustainable management criteria are provided because “[t]he Kern County Water Agency monitors the elevation of the Cross Valley Canal and has reported no subsidence to the KWBA to date. Likewise, the City of Bakersfield operates the Kern River Canal and no issues have been reported to the [Kern Water Bank].”¹⁵¹
- The KGA GSP Shafter-Wasco Irrigation District 7th Standard Annex management area plan identifies the North of River Sanitary Wastewater Treatment Plant, utility infrastructure, and industrial facilities as Management Area Critical Infrastructure. However, no sustainable management criteria were provided because the management area plan states that “no historical subsidence or subsidence related impacts...have been observed”.¹⁵² The plan did not include any analysis that subsidence has not ever occurred or analysis that future groundwater elevation declines below historic low levels will not cause subsidence.
- KGA GSP North Kern Water Storage District/Shafter Wasco Irrigation District management area plan establishes criteria for Regional Critical Infrastructure and identifies the Lerdo Canal, Calloway Canal, 8-1 Pump Station, and the Shafter-Wasco FKC Turnout #2 as Management Area Critical Infrastructure. However, while the Agencies commit to “monitoring their respective facilities”, sustainable management criteria for the Management Area Critical Infrastructure are not defined.¹⁵³
- The Buena Vista GSP defines its Management Area Critical Infrastructure as Interstate-5. The Plan states that its minimum thresholds for the chronic lowering of groundwater levels “are intended to be protective of critical infrastructure.”¹⁵⁴ However, the GSP states that because there have been no impacts to critical infrastructure identified there is not a clear understanding of how groundwater pumping in different areas of the Subbasin affect subsidence and the development of a regional approach to the subsidence undesirable result. The Buena Vista GSP identifies subsidence as a data gap and does not define sustainable management criteria for subsidence.¹⁵⁵

¹⁴⁹ KGA GSP Pioneer Revised MAP, Section 7.7.3, pp. 144-145.

¹⁵⁰ KGA GSP Kern Water Bank Revised MAP, Section 3.2.4, p. 44.

¹⁵¹ KGA GSP Kern Water Bank Revised MAP, Section 3.2.4, p. 44.

¹⁵² KGA GSP Shafter-Wasco Irrigation District (7th Standard Rd.) Revised MAP, Section 12.5.3, p. 172.

¹⁵³ KGA GSP North Kern Water Storage District/Shafter-Wasco Irrigation District Revised MAP, Section 3.4.4, pp. 232-233.

¹⁵⁴ Buena Vista Amended GSP, Section 5.7.1, p. 171.

¹⁵⁵ Buena Vista Amended GSP, Section 5.7.1.2, pp. 179-180.

SGMA requires sustainable management criteria for all indicators even if subsidence has never previously occurred.

Examples of GSPs or management area plans that did not define Management Area Critical Infrastructure nor subsidence sustainable management criteria include the following:

- The KGA GSP Tejon-Castac Water District management area plan states that there is no Regional or Management Area Critical Infrastructure within the management area and that groundwater level minimum thresholds “are set to be protective of potential subsidence.” Therefore, the management area plan does not set sustainable management criteria for subsidence.¹⁵⁶
- The KGA GSP Eastside Water management area plan states that no critical infrastructure is located within the management area and does not define sustainable management criteria.¹⁵⁷
- The KGA GSP Kern-Tulare Water District management area plan listed roads, wells, and pipelines as infrastructure within the area but were not designated as “critical infrastructure”, therefore no undesirable results have been experienced and no sustainable management criteria are established.¹⁵⁸
- The KGA GSP Westside District Authority management area plan provides a discussion of the Regional Critical Infrastructure but does not provide discussion on Management Area Critical Infrastructure.¹⁵⁹ The plan references a study which indicates that subsidence within the management area is attributable to oilfield activities over which the District has no control.¹⁶⁰

Examples of GSPs or management area plans that defined Management Area Critical Infrastructure and defined subsidence sustainable management criteria include the following:

- Kern River GSP identifies municipal wells, canals, pipelines, roads, buildings, water treatment facilities, Bakersfield Meadows Field Airport, Highway 99, and Interstate-5 as critical infrastructure¹⁶¹ within its three management areas (i.e., urban, agricultural, and banking). The minimum thresholds were established using historical water levels or setting the minimum threshold at 20 or 50 feet below the historic water levels.¹⁶²
- KGA GSP Rosedale-Rio Bravo WSD management area plan identifies major transportation routes, pipelines, railroads, and water conveyance facilities as

¹⁵⁶ South of Kern River GSP, Section 13.5.2, p. 423, Section 14.5, p. 450.

¹⁵⁷ KGA GSP Eastside Revised MAP, Section 12.5 and 12.5.2, p. 90.

¹⁵⁸ KGA GSP Kern-Tulare Water District MAP, Sections 3.4.3 and 3.5.3, pp. 73 and 76.

¹⁵⁹ KGA GSP Westside District Water Authority Revised MAP, Section 4.1.2, pp. 144-145.

¹⁶⁰ KGA GSP Westside District Water Authority Revised MAP, Table 2b, p. 362.

¹⁶¹ Kern River Amended GSP, Section 3.3.5.3, p. 177.

¹⁶² Kern River Amended GSP, Table 5-2a, p. 304.

critical infrastructure.¹⁶³ The management area plan defined the subsidence sustainable management criteria for the management area critical infrastructure. A management area exceedance for land subsidence occurs when the average measured subsidence rate exceeds the minimum thresholds over a six-year rolling average. The minimum threshold is set at 0.10 feet per year over a six-year rolling average.¹⁶⁴

- The South of Kern River Arvin-Edison management area plan does not identify Regional Critical Infrastructure but identifies Management Area Critical Infrastructure and establishes sustainable management criteria. The minimum threshold is defined as the maximum annual rate of subsidence observed between 2014 and 2018 which is equal to 1.5 inches per year. The minimum threshold will be assessed as an average annual rate over a 6-year rolling monitoring period.
- KGA GSP Cawelo Water District management area plan identified the CWD gravity flow components of surface water distribution system, Lerdo Canal, 8-1 Pump Station, and Beardsley Canal as Management Area Critical Infrastructure. The management area establishes groundwater levels as a proxy for land subsidence sustainable management criteria. The minimum threshold is set at 80 feet below the lowest historical low groundwater elevation. The plan states an estimated 0.8 feet of additional subsidence may occur in the management area.¹⁶⁵
- The Olcese Water District GSP defines its Management Area Critical Infrastructure as the Gravity driven canal to its Rio-Bravo Hydroelectric Plant. The GSP states that because this canal was defined as Management Area Critical Infrastructure, “therefore, sustainable management criteria for land subsidence are defined.” The GSP defines its Undesirable Result “in terms of reduction in canal capacity, defined based on the relationship between capacity and slope.” The Undesirable Result is defined as a 25% reduction in canal capacity, if found to be “due to land subsidence caused by groundwater extractions.” The GSP uses two monitoring locations a known distance apart to calculate a reduction of slope, which can be used to calculate the canal capacity via Manning’s equation. The Minimum Threshold for land subsidence is defined as a relative elevation difference of 0.75 feet between the two selected monitoring points, which results in a reduction of canal capacity of 25%. The measurable objective is defined as a relative elevation difference of 0 feet between the two selected monitoring points.¹⁶⁶

4.3.3 Evaluation

As part of Corrective Action 3, the Department stated that the Plan should define their undesirable results supported by the amount of subsidence that would substantially interfere with the land uses and critical infrastructure in the Subbasin; additionally, plans

¹⁶³ KGA GSP Rosedale-Rio Bravo Water Storage District Revised MAP, Section 3.2.5, p. 89.

¹⁶⁴ KGA GSP Rosedale-Rio Bravo Water Storage District Revised MAP, Section 5.5, p. 108.

¹⁶⁵ KGA GSP Cawelo Revised MAP, Section 7.4.3, pp. 210-212.

¹⁶⁶ Olcese Amended GSP, Section 13.5, pp. 151-153, Section 14.5, p. 158, Section 15.5, p. 162.

should identify the rate and extent of subsidence corresponding with substantial interference that will serve as the minimum threshold or should thoroughly demonstrate that another metric can serve as a proxy for that rate and extent. While the Subbasin provided the analysis documented in the two white papers and defined new interim sustainable management criteria for the Subbasin Regional Critical infrastructure, the Plan does not provide supporting evidence that the minimum thresholds, corresponded to a rate of subsidence, would cause substantial interference to these facilities.

Department staff believe that the rates and cumulative amounts of subsidence that are defined for minimum thresholds along the California Aqueduct and Friant-Kern Canal are not consistently analyzed in terms of lasting impacts, but rather from estimates from observed subsidence rates from previous studies. As a result, the Plan does not provide a coordinated, complete analysis of how the respective minimum thresholds could affect the conveyance operations of the California Aqueduct or Friant-Kern Canal. Ultimately, Department staff still cannot determine how the Agencies apparently concluded that the amount of subsidence potentially allowed by the interim minimum thresholds would not substantially interfere with the operations of the California Aqueduct or Friant-Kern Canal.

For example, the Subbasin's undesirable result for the Friant-Kern Canal is in part defined as "when the flow capacity through the Lower Reach is reduced to capacities below historical operational flow capacities over the previous 10 years."¹⁶⁷ However, the Friant-Kern Canal White Paper does not explain how its interim minimum thresholds, which plan to continue historical rates of subsidence, would impact the conveyance capacity of the Friant-Kern Canal. It is not clear whether the minimum thresholds would prevent the flow capacity of the canal from being further reduced to capacities below that of the previous 10 years. Additionally, the Plan does not state if or how the agencies plan to monitor the conveyance capacity of the canal for use in the undesirable result definition. Due to the apparent disconnect between the definition of the undesirable result and the definition of the interim minimum thresholds, Department staff are unable to determine how or whether the Agencies determined the proposed or allowable rates of subsidence under the interim minimum thresholds would avoid substantial interference to the Friant-Kern Canal.

For the California Aqueduct, an undesirable result is defined in part as "the amount of inelastic subsidence...[that] creates a significant and unreasonable impact (requiring either retrofitting or replacement to a point that is economically unfeasible to the beneficial users) to surface land uses or critical infrastructure".¹⁶⁸ However, the Plan does not explain how its minimum thresholds, set at two times the average observed from 2016 to 2022, could impact the Aqueduct.¹⁶⁹ While the California Aqueduct white paper provides the remaining freeboard ranges at the various aqueduct pools, it does not provide an analysis about the effects (e.g., loss of conveyance capacity, increased maintenance

¹⁶⁷ First Amended Kern County Subbasin Coordination Agreement, p. 395.

¹⁶⁸ First Amended Kern County Subbasin Coordination Agreement, pp. 363-364.

¹⁶⁹ First Amended Kern County Subbasin Coordination Agreement, p. 367.

costs, other operational considerations, etc.) of further reducing the freeboard through continued subsidence.¹⁷⁰ Due to the apparent disconnect between the definition of the undesirable result and the definition of the interim minimum thresholds, Department staff are unable to determine how or whether the Agencies determined the proposed rates of subsidence for the interim minimum thresholds would not cause substantial interference to the California Aqueduct.

The Plan also emphasizes that the Subbasin-wide sustainable management criteria will only apply to subsidence caused by “SGMA-related groundwater extractions” from certain beneficial uses and users and that subsidence purportedly caused by other activities will not constitute or contribute to an exceedance of minimum thresholds or measurable objectives; however, the Plan does not describe the process that the Agencies will use to differentiate between possible causes of subsidence.¹⁷¹

All of the initial sustainable management criteria definitions relating to Regional Critical Infrastructure emphasize that for subsidence to apply towards a minimum threshold exceedance, it must be caused by “SGMA-related” activities. The KGA GSP, Buena Vista GSP, Henry Miller GSP, and some management area plans contain similar caveats which state that “[p]ermanent loss of freeboard from land subsidence due to other causes including but not limited to oil or gas production, natural compaction of shallow underlying soils beneath or near the Aqueduct, or any other cause that is not within the jurisdiction of a GSA, shall not be considered as a loss of freeboard that contributes to the amount specified for any measurable objective or minimum threshold.”¹⁷² However, despite this caveat, the plans lack discussion on how the GSAs would determine whether the subsidence was caused by so-called SGMA-related activities rather than other causes of subsidence.

It is unclear to Department staff whether the Plan has the capability to quantify “SGMA related” subsidence when evaluating its subsidence monitoring which it will be using to monitor the minimum thresholds. The Lawrence Berkeley Study and Earth Consultants International Study imply that they are able to differentiate between oil and gas and SGMA-related subsidence; however, it is unclear if or how the plans will be utilizing these studies to quantify SGMA-related subsidence.¹⁷³ Additionally, the Plan does not demonstrate that they will be using consistent methodology to quantify the amount of “SGMA-related” subsidence. For example, some plans state that they do not understand the relationship between subsidence and groundwater extraction at this time. The KGA GSP Semitropic Water Storage District Management Area does not define minimum thresholds for subsidence because of “data gaps” related to a lack of knowledge of the

¹⁷⁰ First Amended Kern County Subbasin Coordination Agreement, Table 1b, p. 366.

¹⁷¹ First Amended Kern County Subbasin Coordination Agreement, pp. 368-369.

¹⁷² KGA Amended GSP, Section 3.5.3.2, p. 301; Buena Vista Amended GSP, Section 5.7.11, p. 185; Henry Miller GSP, Section 3.3.4, p. 156.

¹⁷³ First Amended Kern County Subbasin Coordination Agreement, Lawrence Study, p. 404, Earth Consultants International Study, p. 426.

relationship between groundwater pumping and subsidence.¹⁷⁴ Similarly, the Buena Vista GSP states that sustainable management criteria for subsidence were not defined in part because there is not a clear understanding of how groundwater pumping in different areas of the Subbasin affect subsidence.¹⁷⁵ If there is a way that the studies are differentiating between “SGMA related” and other types of subsidence, this methodology is not part of a coordinated response at the GSP or management area plan level.

Department staff also conclude that outside of the regional infrastructure, the Subbasin still does not have a Subbasin-wide approach for managing subsidence because of the differing data and methodologies used to establish Management Area Critical Infrastructure and corresponding sustainable management criteria. The new subsidence approach is primarily concerned with the Subbasin’s Regional Critical Infrastructure (i.e., the California Aqueduct and Friant Kern Canal). However, the GSPs and management area plans were tasked with defining their own Management Area Critical Infrastructure and corresponding sustainable management criteria. As previously described, some plans defined both Management Area Critical Infrastructure and sustainable management criteria; some plans defined Management Area Critical Infrastructure but did not provide sustainable management criteria; and some plans did not define Management Area Critical Infrastructure nor subsidence sustainable management criteria. Due to the variations in the plans’ responses, Department staff conclude that the plans did not define “Management Area Critical Infrastructure” consistently and many do not set corresponding sustainable management criteria. The varying approaches to managing Management Area Critical Infrastructure does not clearly demonstrate a coordinated Subbasin-level response to subsidence, as required by Corrective Action 3.

4.3.4 Conclusion

In sum, the Plan made progress in moving towards coordinated Subbasin-wide subsidence management by establishing sustainable management criteria for the Regional Critical Infrastructure and defining Management Area Critical Infrastructure. However, the Plan still lacks a description and discussion of the conditions occurring throughout the Subbasin that would cause undesirable results that the GSAs propose to manage the basin to avoid. The Plan lacks detailed, supporting information describing and demonstrating the understanding of land uses and critical infrastructure (the Management Area Critical Infrastructure in particular) in the Subbasin and the amount of subsidence that would substantially interfere with those uses and critical infrastructure.

¹⁷⁴ KGA GSP Semitropic Water Storage District Revised MAP, Section 3.4.4, p. 231, Section 3.5.2.3, p. 241.

¹⁷⁵ Buena Vista Amended GSP, Section 5.7.1.2, pp. 179-180.

5 STAFF RECOMMENDATION

Department staff conclude that the GSAs did not take sufficient actions to correct the previously identified deficiencies. Department staff recommend the Plan be determined **INADEQUATE**.

SWRCB Staff and Kern County Subbasin Meetings (2023 - 2024)

Date	Topics
5/17/23	\$%&'()*+,-./0,1)* +2344).15)63+1)',71/ 8)\$7--.4 01)9+,572/0,14
6/23/23	&3;0435)<\$*4) =>>+.2?@\$74/.01.-0A/8,14053+./ 0,14B=55+3440(C)D3E2312034B+,>,435) FC3A01
10/4/23	J010G7GF?+34?,A54B3.4 7+3.-A3)K-L32034B).15)M15340+-.A3)&347A/=>>+.2?
11/1/23	10/04/23 Tec?102.A)N,A)M>@+ ,715O./3+)P3;3A4
12/13/23	\$7-4 053123}>>+.2?
1/24/24	%./3+)Q7.A(B)=>>+.2?
3/6/24	%3A)1;31/,+8)R)%3A)0/0C./0,1)+,C+.G)=>>+.2?
4/3/24	\$74/.01.-A3)J.1.C3G 31/)+0/30.).15)J,10/ ,+01C)S3D,+T)=>>+.2?
4/23/24	%./3+)(75C3/4B(.1T 01C)*;C+.G 4BR)* J =4)=>>+.2?
5/29/24	N0.A)<\$*)+3431/./0,1

Kern County Subbasin Contact List - March 2024

Party	AGENCY	MEMBER	DIRECTOR	MANAGER	CONSULTANT	CONSULTANT LEAD	GENERAL COUNSEL	ATTORNEY	SIGNATORY	
1	South of Kern River (3)	Arvin-Edison	Derek Yurosek dyurosek@bolthouseproperties.com	Jeevan Muhar jmuhar@aewsd.org	EKI	Anona Dutton adutton@ekiconsult.com	Hughes/KDG	Julie Gantenbein	Derek Yurosek dyurosek@bolthouseproperties.com	
2		Wheeler Ridge	Michael Blaine michael.blaine@pajm.com	Shendan Nicholas snicholas@wrmsd.com			Torigiani/YW		Dennis Atkinson dalsaks20@gmail.com	
3		Tejon-Castac	Mark Valpredo mbvalpredo@gmail.com	Angelica Martin amartin@tejonranch.com			Doud/YW		Angelica Martin amartin@tejonranch.com	
4	Kern River GSA (3)	Kern Delta	Rodney Palla rodney@rpfarms.com	Steve Teglia steven@kerndelta.org	Todd Groundwater	Maureen Riley MRiley@toddgroundwater.com	Iger	Iger	Rodney Palla rodney@rpfarms.com	
5		City of Bakersfield	Bob Smith bobsmith727@icloud.com	Daniel Maldonado dramaldonado@bakersfieldcity.us			Gennaro		Gennaro	Bob Smith bobsmith727@icloud.com
6		KCWA ID4	Gene Lundquist glundquist@kcwa.com	David Beard dbeard@kcwa.com			Minaberrigari		Minaberrigari	David Beard dbeard@kcwa.com
7	North Central Kern (5)	Southern San Joaquin	Brandon Morris brandon@bdrmorrisfarms.com	Roland Gross roland@ssjmd.org	GEI	Stephanie Hearn shearn@geiconsultants.com	Young Wooldridge	Doud	Roland Gross roland@ssjmd.org	
8		Shafter-Wasco	Randy Bloemhof	Kris Lawrence klawrence@swid.org	INTERA	Abhi Singh singh@intera.com			Randy Bloemhof randy@supremealmonds.com	
9		7th Standard Annex	Kevin Andrew kandrew@illumeag.com	David Hampton dhampton@northkernwswd.com					Kevin Andrew kandrew@illumeag.com	
10		North Kern	John Gaugel jgaugel@wonderful.com	David Halopoff dhalopoff@cawelowlowd.org					David Halopoff dhalopoff@cawelowlowd.org	
11	Cawelo			Todd Groundwater	Mike Maley MMaley@toddgroundwater.com	St. Lawrence	Tom Bunn			
12	Kern Groundwater Authority (7)	Westside District Water Authority	Rob Goff rob.goff@wonderful.com	Morgan Campbell mccampbell@westsidewa.org	Aquilogic	Tom Watson tom.watson@aquilogic.com	Hughes/KDG	Valerie Kincaid	Mark Gilkey mgilkey@westsidewa.org	
13		Semitropic	Dan Waterhouse dan@neuhousefarms.com	Jason Gianquinto jgianquinto@semitropic.com	GEI	Larry Rodriguez lrodriguez@geiconsultants.com	Kevin O'Brien		Dan Waterhouse dan@neuhousefarms.com	
14		Pioneer	Royce Fast roycefast@sbjglobal.net	Lauren Bauer lbauer@kcwa.com	Woodard Curran	Micah Eggleton ceggleton@woodardcurran.com	Minaberrigari		Tom McCarthy tmcarthy@kcwa.com	
15		Kern Water Bank	Kim Brown kimberly.brown@wonderful.com	Jon Parker jparker@kwb.org	KWB	N/A	Torigiani/YW		Jon Parker jparker@kwb.org	
16		West Kern	Gary Morris gimorris45@hotmail.com	Greg Hammett ghammett@kwkw.org	Woodard Curran	Micah Eggleton ceggleton@woodardcurran.com	Hughes/KDG		Greg Hammett ghammett@westsidewa.org	
17		Kern Tulare	Andrew Hart ahart@boothranchessllc.com	Vanessa Yap vanessa@kern-tulare.com	KT	N/A	David Cameron		Skye Grass skye@kern-tulare.com	
18		Eastside Water	Chad Hathaway chathaway@hathawayllc.com	Taylor Blakslee TBlakslee@hgcpm.com	EKI	Jeff Shaw jshaw@ekiconsult.com	Dan Raytus		Chad Hathaway chathaway@hathawayllc.com	
19	Rosedale	Rosedale	Gary Unruh garuh@msn.com	Dan Bartel dbartel@rtbwswd.com	RRB	N/A	Dan Raytus	Dan Raytus	Dan Bartel dbartel@rtbwswd.com	
20	Henry Miller	Henry Miller	Jeof Wyrick jwyrick@igboswell.com	Dominic Sween dsween@igboswell.com	Luhdorff Scalmanini	Will Halligan whalligan@isce.com	St. Lawrence	St. Lawrence	Jeof Wyrick jwyrick@igboswell.com	
21	Olcese	Olcese	Jim Nickel jnickel@nflc.net	Brian Grant bgrant@nflc.net	EKI	Anona Dutton adutton@ekiconsult.com	St. Lawrence	St. Lawrence	James L. Nickel jnickel@nflc.net	
22	Buena Vista	Buena Vista	Terry Chicca tchicca@aol.com	Tim Ashlock tim@bvh2o.com	GEI	Dave Miller dmiller@geiconsultants.com	St. Lawrence	St. Lawrence	Terry Chicca tchicca@aol.com	

Plan Manager (Kristin Pittack - Rincon)
 Listed Manager is Agencies SGMA rep and may not be the General Manager
 Kern River GSA includes Greenfield and Lamont
 SWID/NKWSW includes Shafter and Wasco
 Arvin GSA includes Arvin CSD

Technical Working Group Members

Name	GSA	Firm
Abhishek Singh	North Central Kern GSA - NK & SWID	Intera
Anona Dutton	South of Kern River & Olcese GSAs	EKI
Christina Lucero	South of Kern River GSA	EKI
Dan Bartel	Rosedale-Rio Bravo Water Storage District	Rosedale-Rio Bravo Water Storage District
David Miller	Buena Vista WSD GSA	GEI
Jonathan Parker	KGA – Kern Water Bank	Kern Water Bank
Larry Rodriguez	KGA – Semitropic GSA	GEI
Micah Eggleton	KGA – Pioneer GSA & West Kern WD	Woodward & Curran
Mike Maley	North Central Kern GSA - Cawelo	Todd Groundwater
Maureen Riley	Kern River GSA	Todd Groundwater
Stephanie Hearn	North Central Kern GSA - SSJMUD	GEI
Tom Watson	KGA – Westside Districts MA	Aquilogic
Vanessa Yap	KGA – Kern-Tulare WD	Kern-Tulare Water Storage District
Will Halligan	Henry Miller GSA	Luhdorff & Scalmanini Consulting Engineers

Technical Working Group Tasks

Task	Name
GSP Amendment & Schedule	All TWG Members
Subcommittees	
Alternative Methodologies for Groundwater Levels SMC – 7 Additional Committees: Domestic/Beneficial Users, Critical Infrastructure/Subsidence, Aquifers, Gradients, Banking, Trends, Refinements	Anona (Lead) , Christina, Larry, Abhi, Tom, Will, and David – <u>7 Additional Committees: All TWG Members</u>
Well Mitigation Program	Stephanie (Lead) , Dan, Jon, Abhi
Projects and Management Actions	Dan (Lead) , David, Mike, Larry
Subsidence	Tom (Lead) , Abhi, Mike, Anona, Stephanie, Vanessa
Water Quality	Stephanie (Lead) , Maureen, Anona
Monitoring Network	Will (Lead) , Vanessa, Mike

Division 3. State Water Resources Control Board and Regional Water Quality Control Boards

Chapter 4.5. Implementation of the Sustainable Groundwater Management Act of 2014 (SGMA)

Article 3. Filing Fees

§ 1040. Annual Filing Fee Schedule.

Except as provided in section 1041, any person required to file a report shall submit to the board an annual filing fee in accordance with the following schedule:

(a) For groundwater extractions described in section 5202, subdivision (a)(2) of the Water Code, but not section 5202, subdivision (a)(1) of the Water Code:

(1) The annual fee is \$300 per well plus:

(A) \$10 per acre-foot of groundwater extracted during the preceding water year if the person uses a meter to measure groundwater extractions and certifies on a form provided by the Board that the measurements were made using a meter.

(B) \$25 per acre-foot of groundwater extracted during the preceding water year if the person does not use a meter to measure groundwater extractions or fails to certify on a form provided by the Board that the measurements were made using a meter.

(2) For groundwater extractions in an area that became part of an agency's management area during the preceding water year and was within an agency's management area as of September 30, volumetric charges required by subdivision (a)(1) will be based on the volume of groundwater extracted during the portion of the preceding water year when the area was not within the management area of an agency.

(3) For groundwater extractions in an area that is not within the management area of an agency as of September 30, the volumetric charges required by subdivision (a)(1) will be based on the volume of groundwater the person extracted during the entire water year.

(b) For groundwater extractions described in section 5202, subdivision (a)(1) of the Water Code:

(1) The annual fee is \$300 per well plus a volumetric charge of **\$4020** per acre-foot of groundwater extracted during the preceding water year, except that for de minimis extractors required to file a report, the annual fee is \$100 per well.

(2) For groundwater extractions in a basin where the board has determined pursuant to section 10735.4, subdivision (c) or section 10735.6, subdivision (b) of the Water Code that the deficiencies resulting in the probationary designation have not been remedied, an additional volumetric charge of \$15 per acre-foot of groundwater extracted during the preceding water year shall apply to the fee required by subdivision (b)(1).

(c) For persons required to file a report who fail to file the report by February 1, the annual fee shall include an additional charge of 25 percent of the annual fee described in subdivisions (a) and (b), plus 25 percent of the annual fee described in subdivisions (a) and (b) for each 30-day period after February 1 in which the report has not been filed. In no case shall the additional charge exceed three times the annual fee described in subdivisions (a) and (b).

Authority: Sections 1529.5, 1530, 5107, 5208 and 10736(d)(3), Water Code.

Reference: Sections 5202, 5202(a)(1), 5202(a)(2), 10735.4(c) and 10735.6(b), Water Code.



BOARD OF DIRECTORS MEETING

Date: Thursday, April 4, 2024
Time: 1:00 P.M.
Location: Rosedale-Rio Bravo WSD, 849 Allen Road, Bakersfield, CA 93314

AGENDA

1. CALL TO ORDER
2. ANNOUNCEMENT OF QUORUM
3. INTRODUCTIONS
4. PUBLIC COMMENT
5. APPROVAL of 2/29/2024 Special Board Meeting Minutes*
6. TREASURER/FINANCIAL REPORT
 - a. March 2024 Accounts Payable/Receivable Ratification*
 - b. SWB '23-'24 Fees*
7. ADMINISTRATIVE
 - a. Form 700, w/ Original Signatures Due April 2, 2024.
 - b. Adoption of Resolution Changing Time of Board Meetings*
8. KRWCA MANAGER REPORT/ILRP PROGRAM UPDATE
 - a. Enrollment
 - b. Reporting
 - c. MPEP FREP Letter of Support
9. NITRATE CONTROL PROGRAM MANAGEMENT ZONE
 - a. Kern Water Collaborative (KWC) Update:
 - b. Administrative Services Agreement: Report of action taken by KWC
 - c. KWC Contribution Agreement*
 - i. 2024 KWC Contribution Statement (Pay Q1 & Q2)*
 - d. Possible Coordination Agreement between SGMA and KWC

Posted pursuant to Government Code § 54954.2(a) at least 72 hours prior to said meeting.

By: Nicole M. Bell Date: April 1, 2024

Per Govt. Code § 54953.2 and § 54961, requests for a disability-related modification or accommodation, including auxiliary aids or services, to attend or participate in this meeting should be made to Nicole Bell (phone 661-616-6500) in advance of the meeting to ensure availability of the requested service or accommodation.



10. REPORT OF PROVOST & PRITCHARD CONSULTING GROUP
 - a. Program Updates:
11. CV-SALTS <http://www.cvsalinity.org>
Manager Bell and Land IQ represent KRWCA at the Monthly CV-SALTS Meetings. Information related to CVSALTS is available at www.cvsalinity.org.
12. OLD OR NEW BUSINESS
13. ATTORNEYS REPORT
14. CLOSED SESSION
 - a. Conference with Legal Counsel - Pending Litigation - Government Code Section 54956.9(d)(1)
 - i. Petitions filed by the Kern River Watershed Coalition Authority, et al. with the State Water Resources Control Board (SWRCB) regarding the Tulare Lake Basin General Order.
 - ii. Environmental Law Foundation v. SWRCB, et al., Sac. County Sup. Ct., Case No. Case No. 34-2018-80002851
 - iii. Protectores Del Aqua Subterranea v. SWRCB, et al., Sac. County Sup. Ct., Case No. 34-2018-80002852
 - iv. Monterey Coastkeeper, et al. v. Central Valley Regional Water Quality Control Board, et al., Sac. County Sup. Ct., Case No. 34-2018-80002853
 - v. Petition for Review by Protectores Del Aqua Subterranea with the SWRCB in Re CVRWQCB Order R5-2019-001 Amending General Orders for Grower Members of a Third-Party Group: Tulare Lake Basin Area R5-2013-0120-06, etc.
 - b. Conference with Legal Counsel – Anticipated Litigation/Significant exposure to litigation – Government Code Section 54956.9(d)(2). One item.
15. RECONVENE and REPORT from CLOSED SESSION - Gov't. Code section 54957.1.
16. KRWCA MEETING ATTENDANCE HIGHLIGHTS – INFORMATION ITEM
 - a. 3/1, Kern Water Collaborative Board Meeting
 - b. 3/6, SSJV MPEP Meeting
 - c. 3/13, MZ Leaders Meeting/CVSC Board Workshop, Sacramento
 - d. 3/14, CVSALTS, Sacramento
 - e. 3/18, CVGMC Meeting
 - f. 3/19, KWC Technical Team Meeting
 - g. 3/20, GWP Targets Meeting
 - h. 3/26, KWC SGMA Coordination Call
 - i. 3/29, PEOC Meeting
 - j. 4/1, KWC Technical Team Meeting
 - k. 4/2, MZ Leaders Coordination Meeting
 - l. 4/3, SSJV MPEP Meeting
 - m. 4/3, P&O Study Archetype Call with Technical Team



17. NEXT MEETING

The next regular KRWCA Board Meeting is scheduled for May 2, 2024.

18. ADJOURN

“*” Notates and action item (Approval/Ratification)



To: Kern Delta Water District Board of Directors

From: Steven Teglia – General Manager

Date: April 17, 2024

Re: Agenda Item VI C. – Water Banking Projects Report

RECOMMENDATION:

Receive report, informational item only.

DISCUSSION:

Below is a summary of activities of note related to various water banking projects/activities of interest to the District.

Kern Fan Recovery Activity:

- As of April 9, 2024 Kern Fan groundwater recharge was approximately 46cfs a day, as reported via KCWA weekly call. Kern Fan groundwater recovery is expected in the Kern Water Bank in April.
- See attached graphs provided by KCWA for Kern Fan banking information as of February 29, 2024.

Pioneer Participant Meeting:

- The Pioneer Project Participants meeting of April 11, 2024 was canceled.
- Update on current operations.
- Discussion regarding new Pioneer wells.
- Discussion of proposed McAllister Canal and Pioneer Improvements.
- Discussion of the Recharge Replacement Fee.
- Discussion regarding the Pioneer GSA.

Kern Fan Monitoring Committee:

- The Kern Fan Monitoring Committee met March 20, 2024.
- Update on reports.
- Call for funds.
- Review of water level monitoring hydrographs.
- Next meeting May 15, 2024

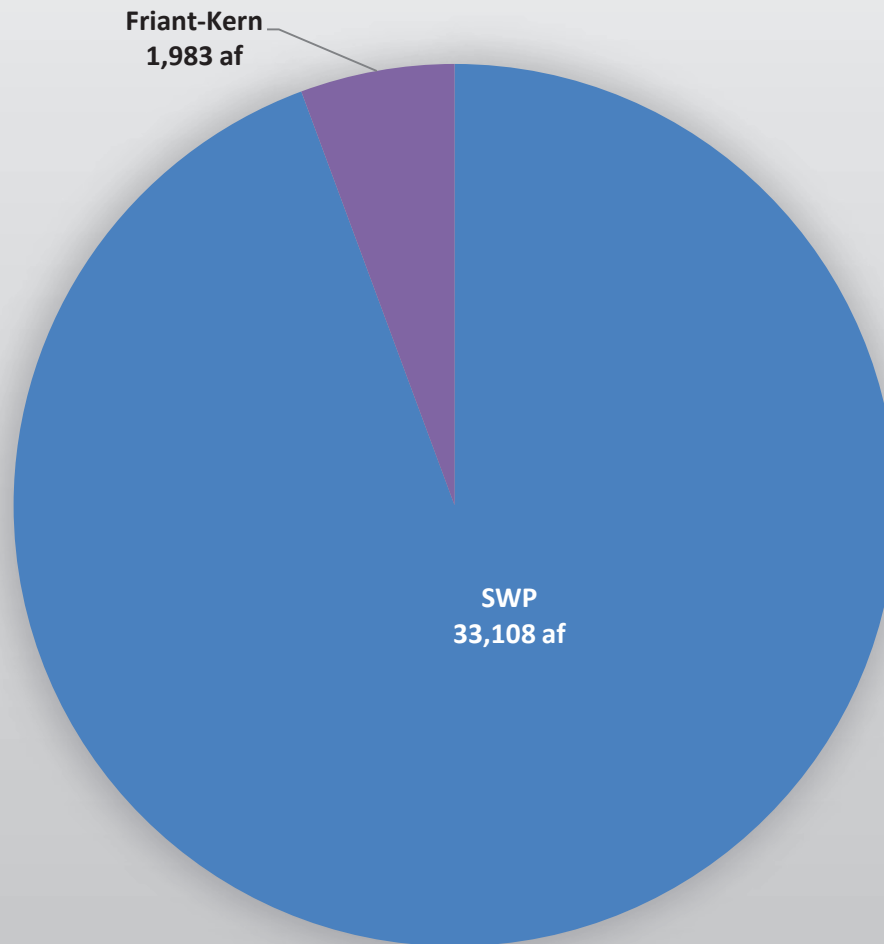
KDWD Water Banking Project:

- MWD has provided the District with an initial analysis for 2024. MWD will be balanced at a SWP allocation of 30% and will likely initiate banking at a SWP allocation of 40%.

Cross Valley Canal Advisory Committee:

- The CVC Advisory Committee met March 27, 2024.
- Report on CVC operations.
- Update on Pioneer Inlet Improvements Project.
- CVC down March 16th – July 1.
- Sediment removal project and meter replacements.
- See attached graphs provided by KCWA regarding CVC utilization.

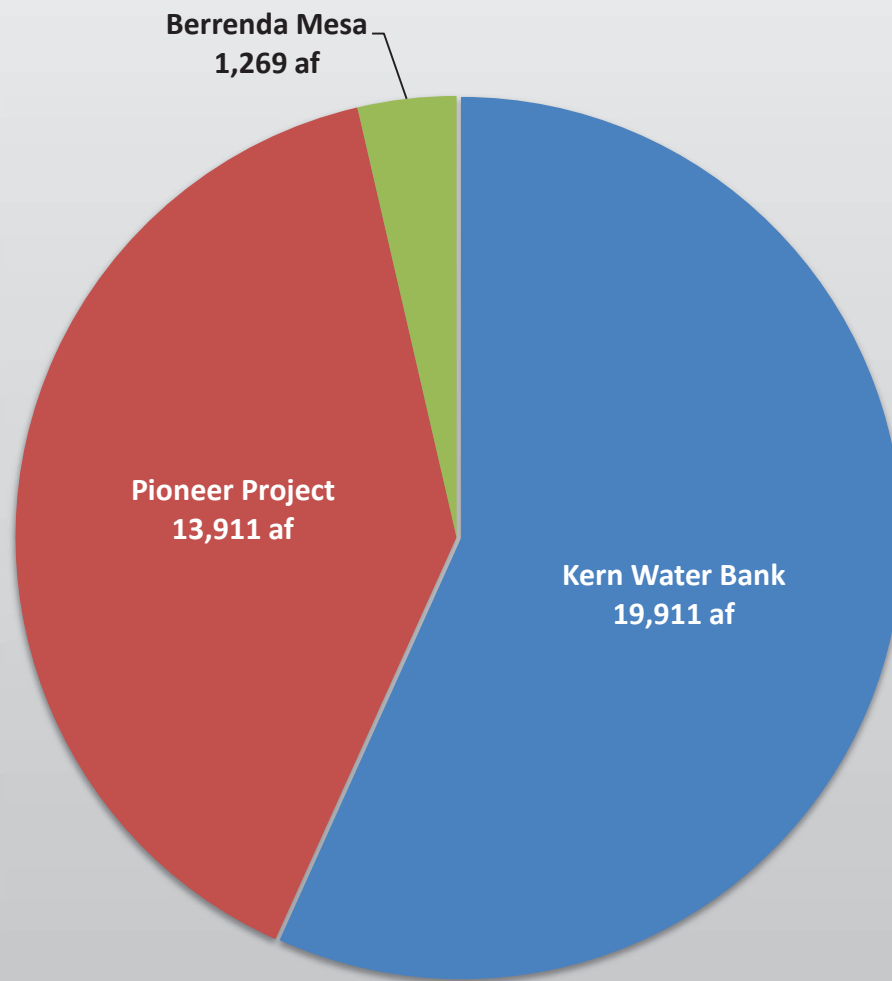
**2024 Estimated Kern Fan Banking Project Deliveries
(by Water Type)
Deliveries through February 29, 2024
Total Deliveries 35,091 af**



2024 Estimated Kern Fan Banking Project Deliveries (by Project)

Deliveries through February 29, 2024

Total Deliveries 35,091 af



CROSS VALLEY CANAL PIONEER INLET IMPROVEMENTS PROJECT CONTRACT NO. KCWA 2022-02

PROJECT SUMMARY FOR FEBRUARY 2024

SUMMARY

Remove and replace existing Pioneer Inlet and damaged concrete liner and tie-in Pioneer Canal box culvert to the replaced structure.

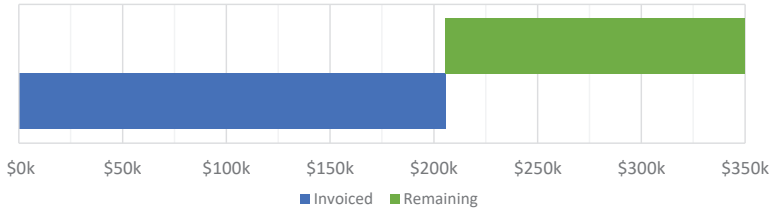
Prepared By: Scott Chambless

Reviewed By: Tom McCarthy

COST BREAKDOWN

CONSULTANTS

Consultants Billed to Date vs. Remaining Contract



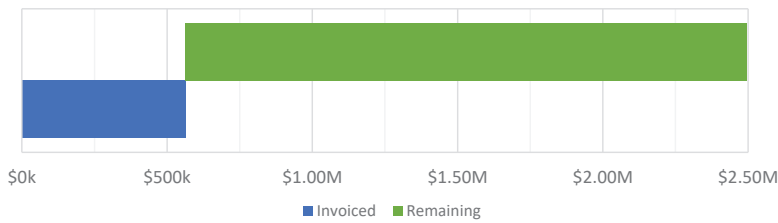
	Contracted	Invoiced	Remaining
V&A, Inc.	\$ 210,000	\$ 115,662	\$ 94,338
SEI	\$ 60,000	\$ 24,720	\$ 35,280
GEI	\$ 80,000	\$ 65,146	\$ 14,854

TOTAL CONSULTANT COSTS

Total Contract Amount	\$ 350,000
Total Invoiced Amount	\$ 205,528
REMAINING BALANCE	\$ 144,472

CONSTRUCTION

Construction Billed to Date vs. Remaining Contract



Original Contract	\$ 2,379,244
Original Contingency Amount	\$ 237,924
Increase to Contract	\$ 70,178
TOTAL	\$ 2,449,422

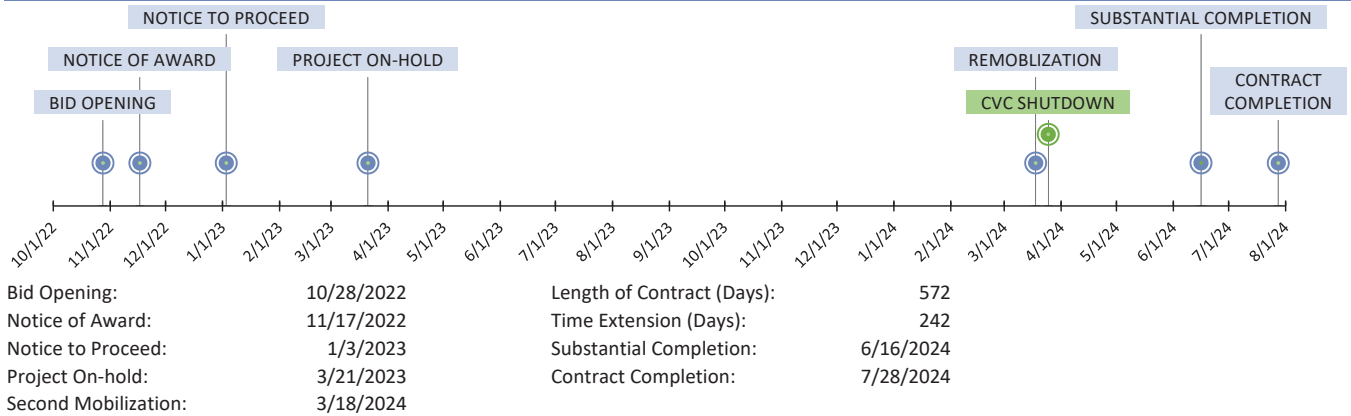
PAYMENT BREAKDOWN

Pay Requests Total	\$ 562,513
Retained (5%)	\$ (28,126)
Paid to Date	\$ 534,388

CONTRACT CHANGE ORDERS

Description of Changes	DATE	AMOUNT	DAYS ADDED
Change Order 1 - Emergency use of the CVC (Kern River shutdown)	5/19/2023	\$ 47,670	0
Change Order 2 - ID1 Levee Restoration	11/20/2023	\$ 15,764	92
Change Order 3 - Remobilization and Material Cost Increases	2/26/2024	\$ 54,414	150
	Contingency Expended	\$ 117,847	242
	Contingency Remaining	\$ 190,255	

PROJECT SCHEDULE



RECENT ACTIVITY

ID1 levee restored in July 2023.

CVC shutdown scheduled for end of March.

PLANNED CONSTRUCTION ACTIVITY

Mobilize to site.

Remo remaining plates and beams from shoring system.

Demolition of existing Pioneer Inlt structure and damaged concrete liner.

CONSTRUCTION ACTIVITY LOCATION (Blue circled area denotes construction location)



PHOTOGRAPHS

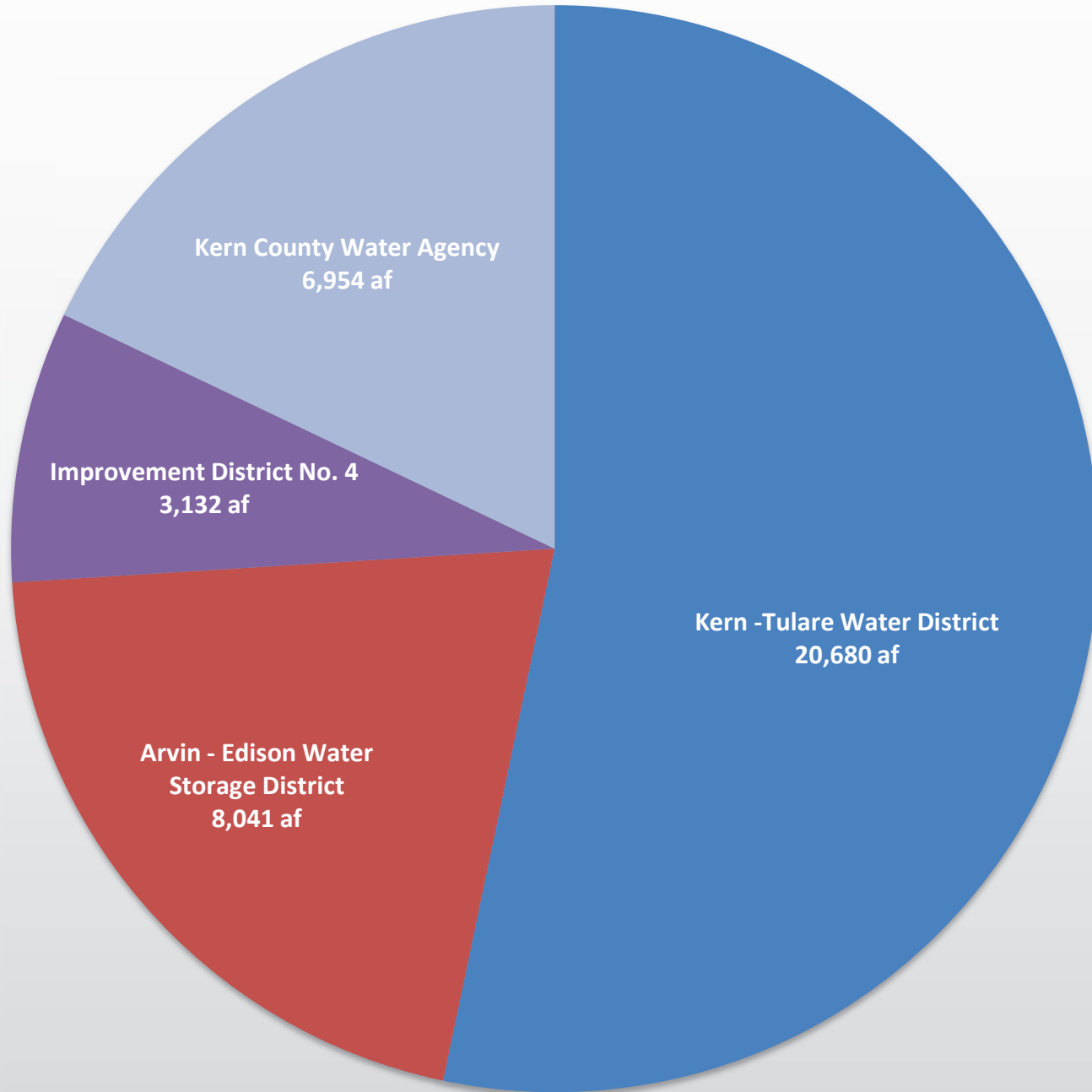


Removing plates from shoring system.



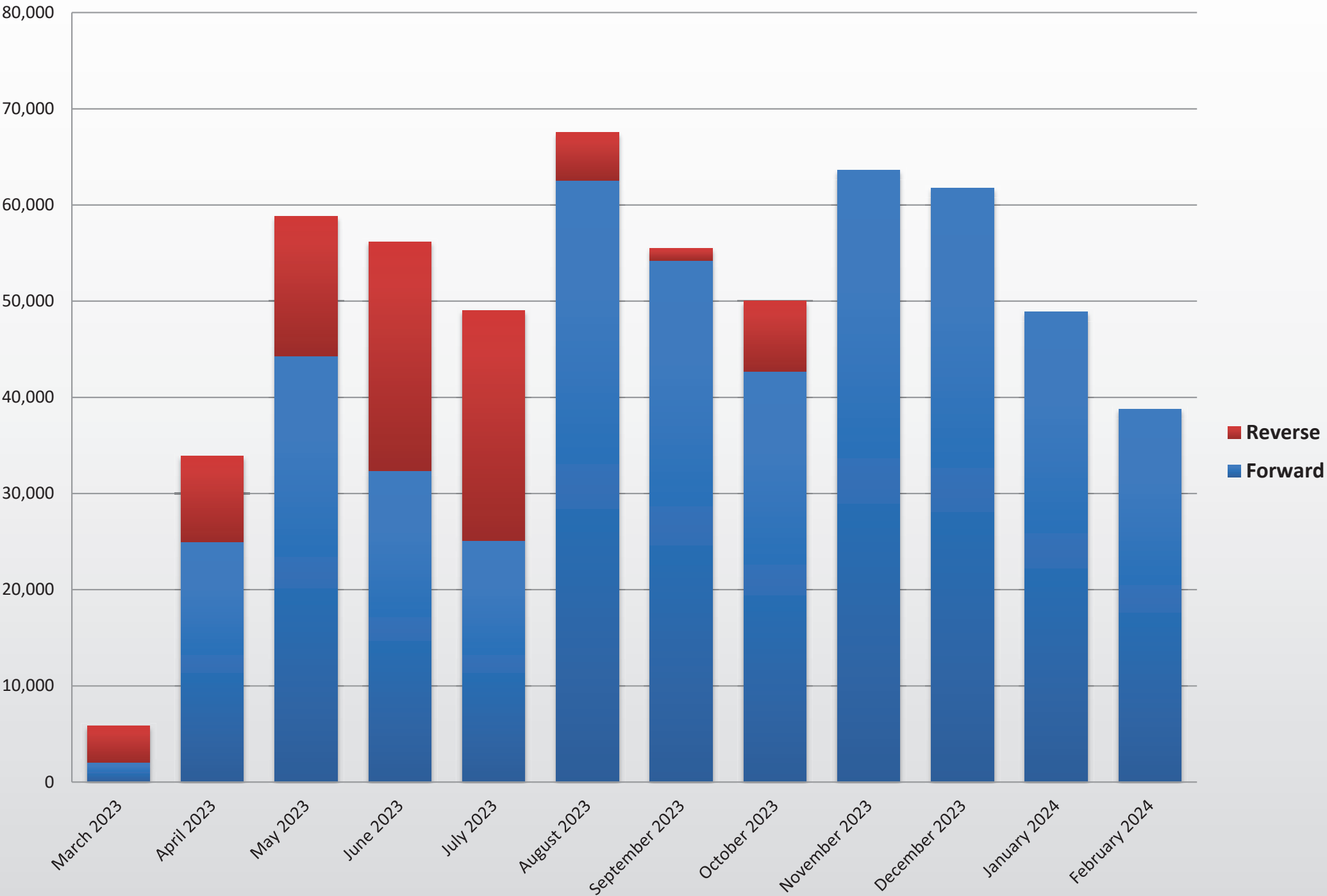
Plates within canal prism removed and slope armored with rip-rap.

**Cross Valley Canal
February 2024 Deliveries
Total deliveries 38,807 af**

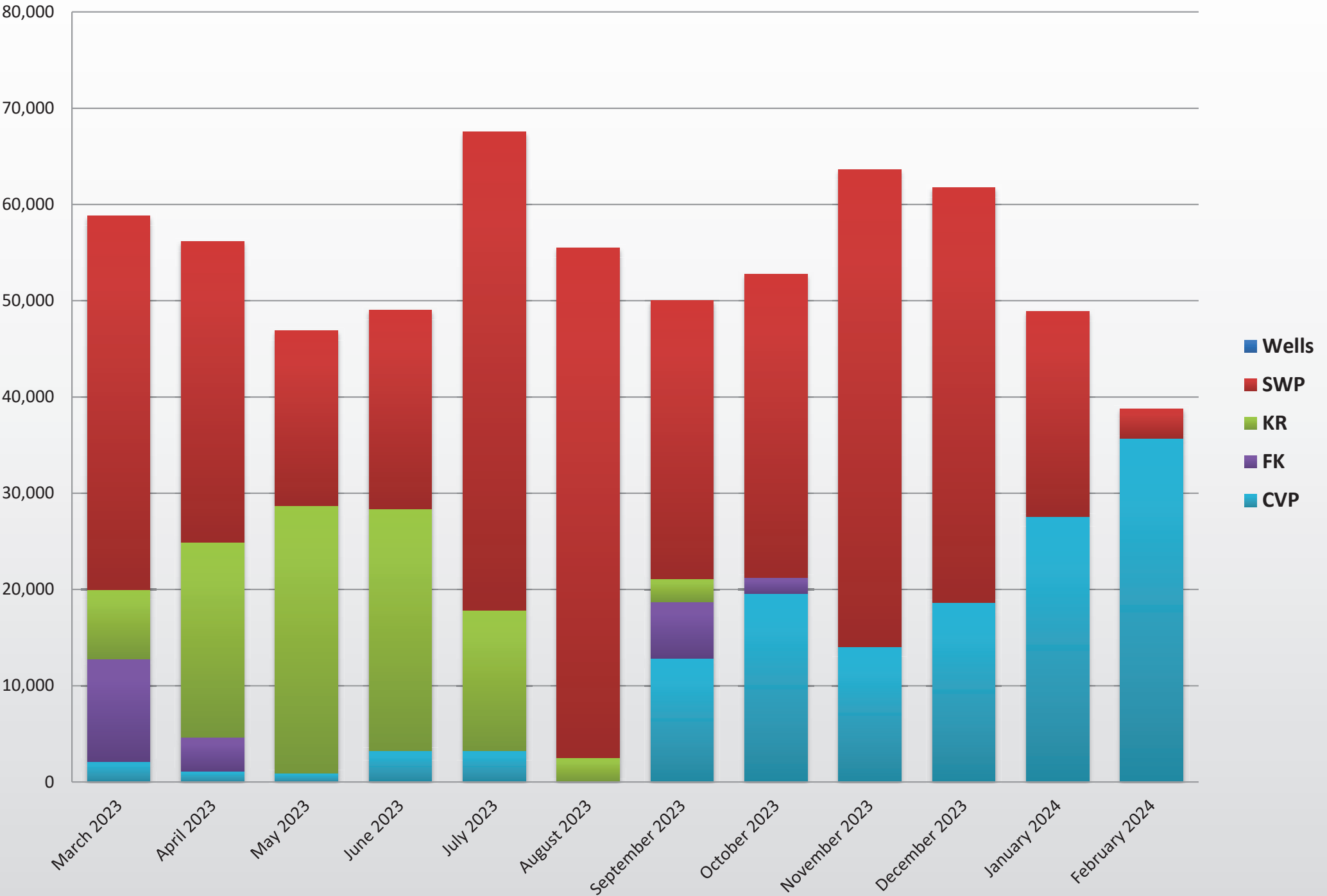


Cross Valley Canal

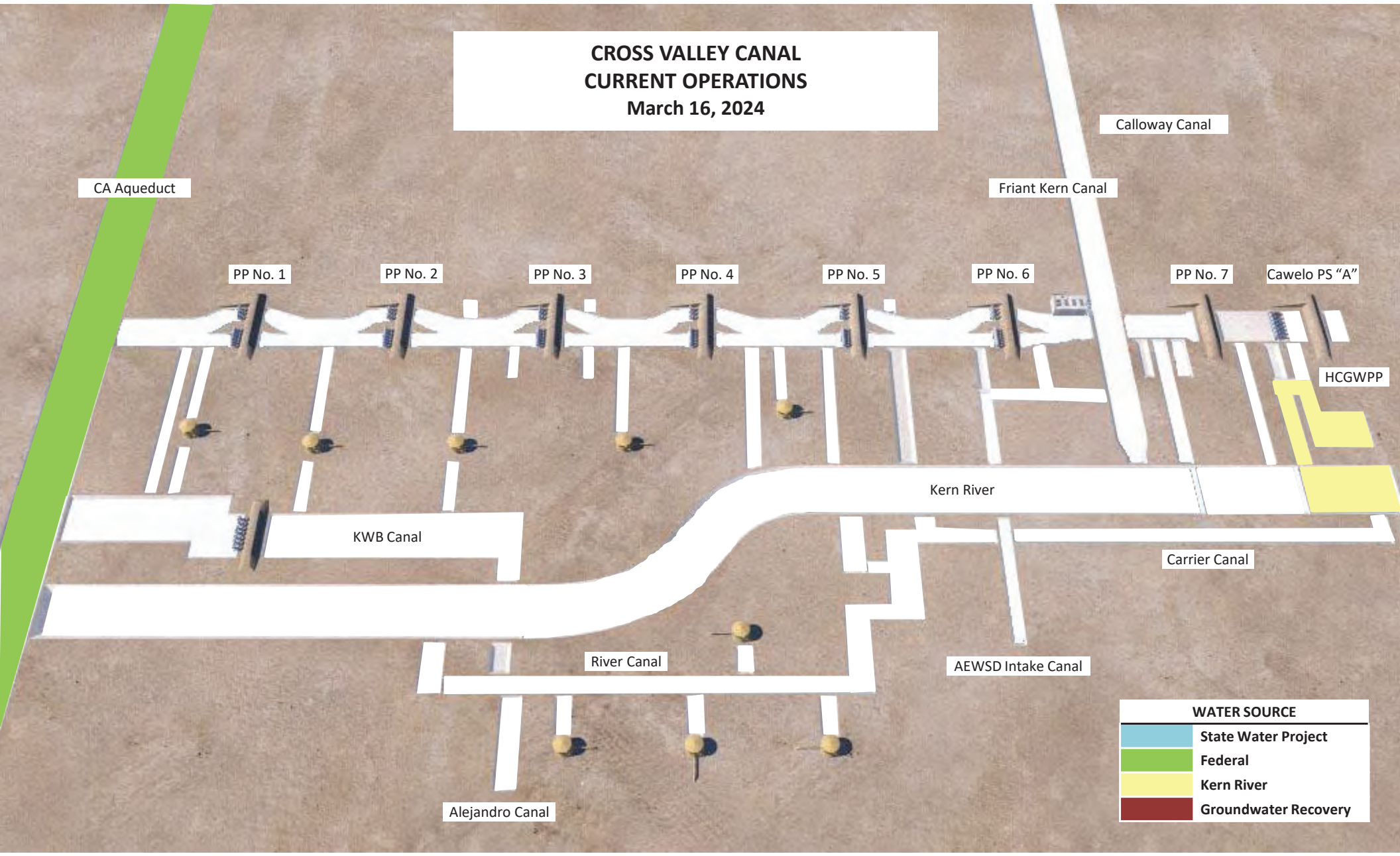
Twelve Month Delivery by Direction



Cross Valley Canal Twelve Month Delivery by Source



**CROSS VALLEY CANAL
CURRENT OPERATIONS
March 16, 2024**



CA Aqueduct

PP No. 1

PP No. 2

PP No. 3

PP No. 4

PP No. 5

PP No. 6

PP No. 7

Cawelo PS "A"

Calloway Canal

Friant Kern Canal

HCGWPP

KWB Canal

Kern River

Carrier Canal

River Canal

AEWSD Intake Canal

Alejandro Canal

WATER SOURCE	
State Water Project	Light Blue
Federal	Green
Kern River	Yellow
Groundwater Recovery	Dark Red

**Cross Valley Canal
Pump and Flow Configuration
Last Updated on March 13, 2024**

'A' Pumping Plants												'B' Pumping Plants					
		A	B	C	D	E	F	G	H	J	Total cfs	K	L	M	N	Total cfs	Total cfs
Pumping Plant No. 1	Estimated Horsepower	100	250	565	565	565	565	250	100			800	800	800			
	Estimated Flow Rate (cfs)	31	70	180	180	180	180	70	31		922	167	167	167		500	1,422
Pumping Plant No. 2	Estimated Horsepower	100	250	565	565	400	565	250	100			700	700	700			
	Estimated Flow Rate (cfs)	Service	Service	180	180	Service	180	70	31		641	167	167	167		500	1,141
Pumping Plant No. 3	Estimated Horsepower	100	250	565	565	565	250	100	250	100		700	700	700			
	Estimated Flow Rate (cfs)	Service	70	180	180	180	70	Service	70	31	781	167	167	Service		334	1,115
Pumping Plant No. 4	Estimated Horsepower	100	250	565	565	565	250	100	250	100		700	700	700			
	Estimated Flow Rate (cfs)	Service	Service	180	Service	180	Service	31	70	31	492	167	167	167		500	992
Pumping Plant No. 5	Estimated Horsepower	100	250	565	565	565	250	100	250	100		700	700	700			
	Estimated Flow Rate (cfs)	31	70	180	180	180	Service	31	Service	31	703	167	Service	167		334	1,037
Pumping Plant No. 6	Estimated Horsepower	100	250	565	565	565	250	250	100			200	600	600	350		
	Estimated Flow Rate (cfs)	31	Service	180	180	180	Service	70	Service		641	40	193	Service	90	323	964
Pumping Plant No. 7	Estimated Horsepower	100	250	250	250	250	100										
	Estimated Flow Rate (cfs)	31	Service	70	70	70	31				272						272

Tab VII



**Valley Ag Water Coalition
2023-24 Regular Session, Second Year**

[AB 460](#) ([Bauer-Kahan D](#)) **State Water Resources Control Board: water rights and usage: interim relief: procedures.**

Current Text: Amended: 5/18/2023 [html](#) [pdf](#)

Introduced: 2/6/2023

Last Amend: 5/18/2023

Status: 7/14/2023-Failed Deadline pursuant to Rule 61(a)(10). (Last location was N.R. & W. on 6/7/2023)(May be acted upon Jan 2024)

Is Urgency: N

Is Fiscal: Y

Location: 7/14/2023-S. 2 YEAR

Summary: Current law authorizes the State Water Resources Control Board to investigate all streams, stream systems, lakes, or other bodies of water, take testimony relating to the rights to water or the use of water, and ascertain whether water filed upon or attempted to be appropriated is appropriated under the laws of the state. Current law requires the board to take appropriate actions to prevent waste or the unreasonable use of water. This bill would authorize the board, in conducting specified investigations or proceedings to inspect the property or facilities of a person or entity, as specified. The bill would authorize the board, if consent is denied for an inspection, to obtain an inspection warrant, as specified, or in the event of an emergency affecting public health and safety, to conduct an inspection without consent or a warrant.

Organization	Position
VAWC	Oppose

[AB 828](#) ([Connolly D](#)) **Sustainable groundwater management: managed wetlands.**

Current Text: Amended: 1/11/2024 [html](#) [pdf](#)

Introduced: 2/13/2023

Last Amend: 1/11/2024

Status: 1/29/2024-Read third time. Passed. Ordered to the Senate. (Ayes 47. Noes 15.) In Senate. Read first time. To Com. on RLS. for assignment.

Is Urgency: N

Is Fiscal: Y

Location: 1/29/2024-S. RLS.

Summary: The Sustainable Groundwater Management Act requires all groundwater basins designated as high- or medium-priority basins by the Department of Water Resources to be managed under a groundwater sustainability plan or coordinated groundwater sustainability plans, except as specified. Current law defines various terms for purposes of the act. This bill would add various defined terms for purposes of the act, including the terms "managed wetland" and "small community water system."

Organization	Position
VAWC	Oppose

[AB 1205](#) ([Bauer-Kahan D](#)) **Water rights: sale, transfer, or lease: agricultural lands.**

Current Text: Amended: 7/13/2023 [html](#) [pdf](#)

Introduced: 2/16/2023

Last Amend: 7/13/2023

Status: 9/14/2023-Failed Deadline pursuant to Rule 61(a)(14). (Last location was INACTIVE FILE on 9/11/2023)(May be acted upon Jan 2024)

Is Urgency: N

Is Fiscal: Y

Location: 9/14/2023-S. 2 YEAR

Summary: Current law declares that, because of the conditions prevailing in this state, the general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable, that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of the water is to be exercised with a view to the reasonable and beneficial use of the water in the interest of the people and for the public welfare. This bill would require the State Water Resources Control Board to, on or before January 1, 2027, conduct a study and report to the Legislature and appropriate policy committees on the existence of speculation or profiteering by an investment fund in the sale, transfer, or lease of an interest in any surface water right or groundwater right previously put to beneficial use on agricultural lands, as specified. The bill would repeal this provision on January 1, 2031.

Organization	Position
VAWC	Oppose

[AB 1337](#)

(Wicks D) State Water Resources Control Board: water diversion curtailment.

Current Text: Amended: 5/18/2023 [html](#) [pdf](#)

Introduced: 2/16/2023

Last Amend: 5/18/2023

Status: 7/14/2023-Failed Deadline pursuant to Rule 61(a)(10). (Last location was N.R. & W. on 6/7/2023)(May be acted upon Jan 2024)

Is Urgency: N

Is Fiscal: Y

Location: 7/14/2023-S. 2 YEAR

Summary: Under existing law, the diversion or use of water other than as authorized by specified provisions of law is a trespass, subject to specified civil liability. This bill would expand the instances when the diversion or use of water is considered a trespass. This bill contains other related provisions and other existing laws.

Organization	Position
VAWC	Oppose

[AB 1563](#)

(Bennett D) Groundwater sustainability agency: groundwater extraction permit: verification.

Current Text: Amended: 6/28/2023 [html](#) [pdf](#)

Introduced: 2/17/2023

Last Amend: 6/28/2023

Status: 7/14/2023-Failed Deadline pursuant to Rule 61(a)(10). (Last location was GOV. & F. on 6/22/2023)(May be acted upon Jan 2024)

Is Urgency: N

Is Fiscal: Y

Location: 7/14/2023-S. 2 YEAR

Summary: Current law authorizes any local agency or combination of local agencies overlying a groundwater basin to decide to become a groundwater sustainability agency for that basin and imposes specified duties upon that agency or combination of agencies, as provided. Current law authorizes a groundwater sustainability agency to request of the county, and requires a county to consider, that the county forward permit requests for the construction of new groundwater wells, the enlarging of existing groundwater wells, and the reactivation of abandoned groundwater wells to the agency before permit approval. This bill would instead require a county to forward permit requests for the construction of new groundwater wells, the enlarging of existing groundwater wells, and the reactivation of abandoned groundwater wells to the groundwater sustainability agency before permit approval.

Organization	Position
VAWC	Oppose

[AB 1567](#)

(Garcia D) Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, Clean Energy, and Workforce Development Bond Act of 2024.

Current Text: Amended: 5/26/2023 [html](#) [pdf](#)

Introduced: 2/17/2023

Last Amend: 5/26/2023

Status: 6/14/2023-Referred to Coms. on N.R. & W. and GOV. & F.

Is Urgency: N

Is Fiscal: Y

Location: 6/14/2023-S. N.R. & W.

Summary: Would enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, Clean Energy, and Workforce Development Bond Act of 2024, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$15,995,000,000 pursuant to the State General Obligation Bond Law to finance projects for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, clean energy, and workforce development programs.

Organization	Position
VAWC	Support/Amend

[AB 2060](#)

(Soria D) Lake and streambed alteration agreements: exemptions.

Current Text: Introduced: 2/1/2024 [html](#) [pdf](#)

Introduced: 2/1/2024

Status: 4/4/2024-In committee: Hearing postponed by committee.

Is Urgency: N

Is Fiscal: Y

Location: 2/12/2024-A. W.,P. & W.

Calendar: 4/23/2024 9 a.m. - State Capitol, Room 444 ASSEMBLY WATER, PARKS AND

WILDLIFE, PAPAN, DIANE, Chair

Summary: Current law prohibits a person, a state or local governmental agency, or a public utility from substantially diverting or obstructing the natural flow of, or substantially changing or using any material from the bed, channel, or bank of, any river, stream, or lake, or depositing or disposing of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless prescribed requirements are met, including written notification to the Department of Fish and Wildlife regarding the activity. Current law prescribes various requirements for lake and streambed alteration agreements. Current law also establishes various exemptions from these provisions, including, until January 1, 2029, the diversion of floodflows for groundwater recharge, as provided. This bill would indefinitely exempt from these provisions the temporary operation of existing infrastructure or temporary pumps being used to divert flood stage flows, as identified by the California Nevada River Forecast Center or the State Water Resources Control Board, or near-flood stage flows, as defined, to groundwater recharge as long as certain conditions are met.

Organization	Position
VAWC	Support

AB 2079 (Bennett D) Groundwater extraction: large-diameter, high-capacity wells: permits.

Current Text: Amended: 3/21/2024 [html](#) [pdf](#)

Introduced: 2/5/2024

Last Amend: 3/21/2024

Status: 4/1/2024-Re-referred to Com. on W., P., & W.

Is Urgency: N

Is Fiscal: Y

Location: 3/21/2024-A. W.,P. & W.

Calendar: 4/23/2024 9 a.m. - State Capitol, Room 444 ASSEMBLY WATER, PARKS AND WILDLIFE, PAPAN, DIANE, Chair

Summary: The Sustainable Groundwater Management Act requires all groundwater basins designated as high- or medium-priority basins by the Department of Water Resources to be managed under a groundwater sustainability plan or coordinated groundwater sustainability plans, except as specified. Current law authorizes any local agency or combination of local agencies overlying a groundwater basin to decide to become a groundwater sustainability agency for that basin and imposes specified duties upon that agency or combination of agencies, as provided. Current law requires the State Water Resources Control Board to adopt a model water well, cathodic protection well, and monitoring well drilling and abandonment ordinance implementing certain standards for water well construction, maintenance, and abandonment and requires each county, city, or water agency, where appropriate, not later than January 15, 1990, to adopt a water well, cathodic protection well, and monitoring well drilling and abandonment ordinance that meets or exceeds certain standards. Under current law, if a county, city, or water agency, where appropriate, fails to adopt an ordinance establishing water well, cathodic protection well, and monitoring well drilling and abandonment standards, the model ordinance adopted by the state board is required to take effect on February 15, 1990, and is required to be enforced by the county or city and have the same force and effect as if adopted as a county or city ordinance. This bill would require a local enforcement agency, as defined, to perform specified activities at least 30 days before determining whether to approve a permit for a new large-diameter, high-capacity well, as defined. By imposing additional requirements on a local enforcement agency, the bill would impose a state-mandated local program.

Organization	Position
VAWC	Oppose

AB 2614 (Ramos D) Water policy: California tribal communities.

Current Text: Amended: 3/21/2024 [html](#) [pdf](#)

Introduced: 2/14/2024

Last Amend: 3/21/2024

Status: 4/10/2024-Coauthors revised. From committee: Do pass and re-refer to Com. on W., P., & W. (Ayes 6. Noes 0.) (April 9). Re-referred to Com. on W., P., & W.

Is Urgency: N

Is Fiscal: Y

Location: 4/10/2024-A. W.,P. & W.

Calendar: 4/23/2024 9 a.m. - State Capitol, Room 444 ASSEMBLY WATER, PARKS AND WILDLIFE, PAPAN, DIANE, Chair

Summary: The Porter-Cologne Water Quality Control Act establishes a statewide program for the control of the quality of all the waters in the state and makes certain legislative findings and declarations. Existing law defines the term "beneficial uses" for the purposes of water quality as certain waters of the state that may be protected against quality degradation, to include, among others, domestic, municipal, agricultural, and industrial supplies. This bill would add findings and declarations related to California tribal communities and the importance of protecting tribal water use, as those terms are defined. The bill would add tribal water uses as waters of the state that may be protected against quality degradation for purposes of the defined term "beneficial uses."

Organization	Position
VAWC	Oppose Unless Amended

[ACA 2](#)

(Alanis R) Water Resiliency Act of 2024.

Current Text: Amended: 3/6/2024 [html](#) [pdf](#)

Introduced: 12/5/2022

Last Amend: 3/6/2024

Status: 3/19/2024-In committee: Set, first hearing. Hearing canceled at the request of author.

Is Urgency:

Is Fiscal: Y

Location: 4/20/2023-A. W.,P. & W.

Summary: The California Constitution declares that the general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable, and that the right to the use of water does not extend to the waste or unreasonable use, method of use, or method of diversion of water. This measure would require the Treasurer to annually transfer an amount equal to 1.5% of all state revenues from the General Fund to the California Water Resiliency Trust Fund, which the measure would create. The measure would continuously appropriate moneys in the fund to the California Water Commission for its actual costs of implementing these provisions and for specified water infrastructure projects.

Organization	Position
VAWC	Favor

[SB 366](#)

(Caballero D) The California Water Plan: long-term supply targets.

Current Text: Amended: 4/8/2024 [html](#) [pdf](#)

Introduced: 2/8/2023

Last Amend: 4/8/2024

Status: 4/8/2024-From committee with author's amendments. Read second time and amended. Re-referred to Com. on W., P., & W.

Is Urgency: N

Is Fiscal: Y

Location: 6/8/2023-A. W.,P. & W.

Summary: Current law requires the Department of Water Resources to update every 5 years the plan for the orderly and coordinated control, protection, conservation, development, and use of the water resources of the state, which is known as "The California Water Plan." Current law requires the department to include a discussion of various strategies in the plan update, including, but not limited to, strategies relating to the development of new water storage facilities, water conservation, water recycling, desalination, conjunctive use, water transfers, and alternative pricing policies that may be pursued in order to meet the future needs of the state. Current law requires the department to establish an advisory committee to assist the department in updating the plan. This bill would revise and recast certain provisions regarding The California Water Plan to, among other things, require the department to instead establish a stakeholder advisory committee and to expand the membership of the committee to include tribes, labor, and environmental justice interests. The bill would require the department to coordinate with the California Water Commission, the State Water Resources Control Board, other state and federal agencies as appropriate, and the stakeholder advisory committee to develop a comprehensive plan for addressing the state's water needs and meeting specified long-term water supply targets established by the bill for purposes of The California Water Plan. The bill would require the plan to provide recommendations and strategies to ensure enough water supply for all designated beneficial uses.

Organization	Position
VAWC	Support

[SB 638](#)

(Eggman D) Climate Resiliency and Flood Protection Bond Act of 2024.

Current Text: Amended: 6/28/2023 [html](#) [pdf](#)

Introduced: 2/16/2023

Last Amend: 6/28/2023

Status: 7/6/2023-July 11 hearing postponed by committee.

Is Urgency: N

Is Fiscal: Y

Location: 6/15/2023-A. W.,P. & W.

Summary: Would enact the Climate Resiliency and Flood Protection Bond Act of 2024 which, if approved by the voters, would authorize the issuance of bonds in the amount of \$6,000,000,000 pursuant to the State General Obligation Bond Law, for flood protection and climate resiliency projects.

Organization	Position
VAWC	Support

[SB 867](#)**(Allen D) Drought, Flood, and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, Park Creation and Outdoor Access, and Clean Energy Bond Act of 2024.****Current Text:** Amended: 6/22/2023 [html](#) [pdf](#)**Introduced:** 2/17/2023**Last Amend:** 6/22/2023**Status:** 7/6/2023-July 10 hearing postponed by committee.**Is Urgency:** N**Is Fiscal:** Y**Location:** 6/20/2023-A. NAT. RES.**Summary:** Would enact the Drought, Flood, and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, Park Creation and Outdoor Access, and Clean Energy Bond Act of 2024, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$15,500,000,000 pursuant to the State General Obligation Bond Law to finance projects for drought, flood, and water resilience, wildfire and forest resilience, coastal resilience, extreme heat mitigation, biodiversity and nature-based climate solutions, climate smart agriculture, park creation and outdoor access, and clean energy programs.

Organization	Position
VAWC	Watch/Amend

[SB 973](#)**(Grove R) Williamson Act: cancellation: solar energy projects.****Current Text:** Introduced: 1/29/2024 [html](#) [pdf](#)**Introduced:** 1/29/2024**Status:** 2/21/2024-Referred to Coms. on L. GOV. and E.Q.**Is Urgency:** N**Is Fiscal:** N**Location:** 2/21/2024-S. L. GOV.**Summary:** Current law, known as the Williamson Act, authorizes a city or county to contract with a landowner to limit the use of agricultural land located in an agricultural preserve designated by the city or county to preserve the land, subject to conditions of the contract, that may include an agreement to a specified valuation of the land for purposes of property taxation. The act authorizes a landowner to petition the city council or board of supervisors, as applicable, for cancellation of the contract under specified circumstances and imposes a cancellation fee equal to 12.5% of the fair market value of the land without the restriction of the contract. This bill would authorize a board or council to grant a petition for cancellation where the land subject to the contract is located in a basin under the jurisdiction of an adjudicated watermaster or the groundwater sustainability agency. The bill would require the landowner to commit to limiting the amount of water rights to a specific solar energy project, as defined, that uses less water than the agricultural use. The bill would also require the board or council to make specified findings, including that the solar energy project use is being permitted that will use less water than the agricultural use.

Organization	Position
VAWC	Watch

[SB 1390](#)**(Caballero D) Groundwater recharge: floodflows: diversion.****Current Text:** Introduced: 2/16/2024 [html](#) [pdf](#)**Introduced:** 2/16/2024**Status:** 4/2/2024-Set for hearing April 23.**Is Urgency:** N**Is Fiscal:** Y**Location:** 2/29/2024-S. N.R. & W.**Calendar:** 4/23/2024 9 a.m. - 1021 O Street, Room 2100 SENATE NATURAL RESOURCES AND WATER, MIN, DAVE, Chair**Summary:** Current law declares that all water within the state is the property of the people of the state, but the right to the use of the water may be acquired by appropriation in the manner provided by law. Current law requires the appropriation to be for some useful or beneficial purpose. Current law provides, however, that the diversion of flood flows for groundwater recharge does not require an appropriative water right if certain conditions are met, including that a local or regional agency has adopted a local plan of flood control or has considered flood risks part of its most recently adopted general plan. Current law also requires the person or entity making the diversion to file with the State Water Resources Control Board a final report after the diversions cease, as provided. These requirements apply to diversions commenced before January 1, 2029. This bill would extend the operation of these requirements to diversions commenced before January 1, 2034. The bill would revise, recast, and expand the conditions that are required to be met to include a requirement that a local or regional agency make a declaration that its proposed diversion is in accordance with one of

certain enumerated plans relating to flood control or flood risk, as specified, or a county emergency operations plan.

Organization	Position
VAWC	Support

Total Measures: 15

Total Tracking Forms: 15