

YCFC&WCD BOARD OF DIRECTORS

June 6, 2023



Y O L O C O U N T Y
FLOOD CONTROL &
WATER CONSERVATION
DISTRICT

Agenda Item #1

Adoption of the
May 2, 2023 Regular Board
Meeting Minutes

Agenda Item #2

Open Forum

Guest introductions, unscheduled appearances and opportunity for public comment on non-agenda items

Agenda Item #3

Adding Items to the Posted Agenda

Agenda Item #4

Rescheduling the Regular July
Board Meeting

Agenda Item #5

January 2023 Storm Events
Emergency Canal Repairs



Pleasant's Prairie Canal



Cache Creek North Side





Cache Creek North Side



West Adams Canal



Cache Creek North Side

Agenda Item #6

Directors' Reports

Report on Meetings and Conferences Attended During the Prior Month on Behalf of the District

- i. ACWA/JPIA Spring Conference (5/8-5/11)
- ii. Yolo County Water Awareness Forum (5/16)
- iii. YSGA Ad Hoc Committee for Reconsidering Revenue (5/19)
- iv. Personnel Committee Meeting (5/30)
- v. NCWA Board of Directors and Conservation Task Force Meetings

Agenda Item #7

Attorney's Reports

Report on Legal Matters of Concern to the District

Agenda Item #8

General Manager's Report

- **Water Conditions Report**
- **Financial Report Summary**
- **Capital Improvement Program**
- **General Activities – 2023 Irrigation Season Update**
- **YSGA Update**
- **Upcoming Events**

Current Water Conditions (06-06-23)

	<u>Elevation</u>	<u>Available</u>	<u>2022</u>
Clear Lake			
• June 6	6.77'	113,038 AF	0.24' (0 AF)
• May 6	8.00'	150,000 AF	
• Total Difference	-0.23'	0 AF	
Indian Valley Reservoir			
• June 6	1,457.64'	200,600 AF	1,394.04' (50,260 AF)
• May 6	1,457.19'	199,100 AF	
• Total Gain	0.45'	1,500 AF	

Total Releases from Cache Creek Dam ~620 cfs

- West Adams Canal ~200 cfs
- Winters Canal ~360 cfs
- Total Diversions at Capay Dam ~560 cfs

Facility	Precipitation (10/1/22 – 06/06/23)
Cache Creek Dam	35.74"
Indian Valley Reservoir	33.39"
Headquarters	25.21"

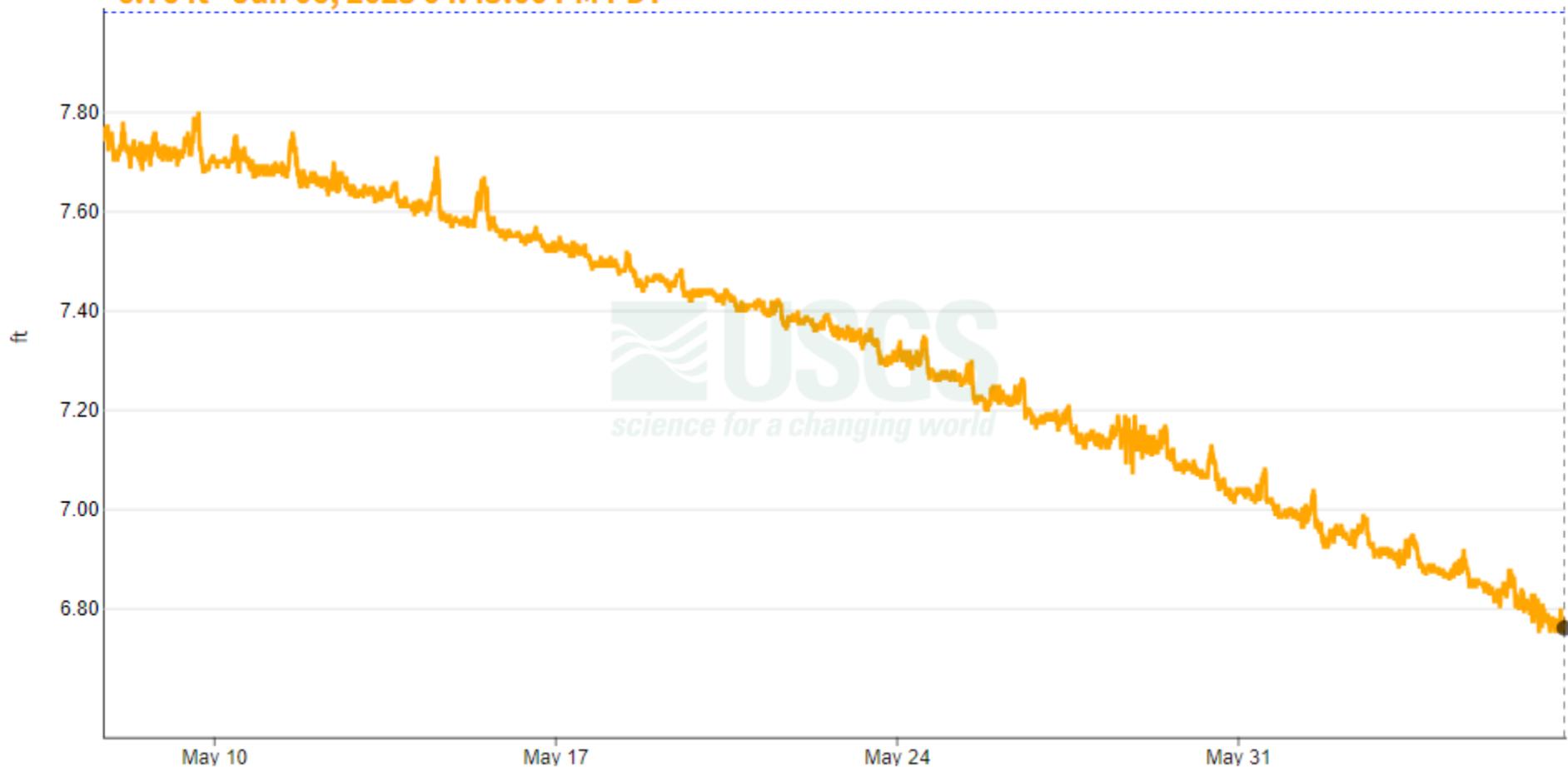
7 days 30 days 1 year

Clear LK a Lakeport CA - 11450000

May 7, 2023 - June 6, 2023

Gage height, ft 

6.76 ft - Jun 06, 2023 04:45:00 PM PDT



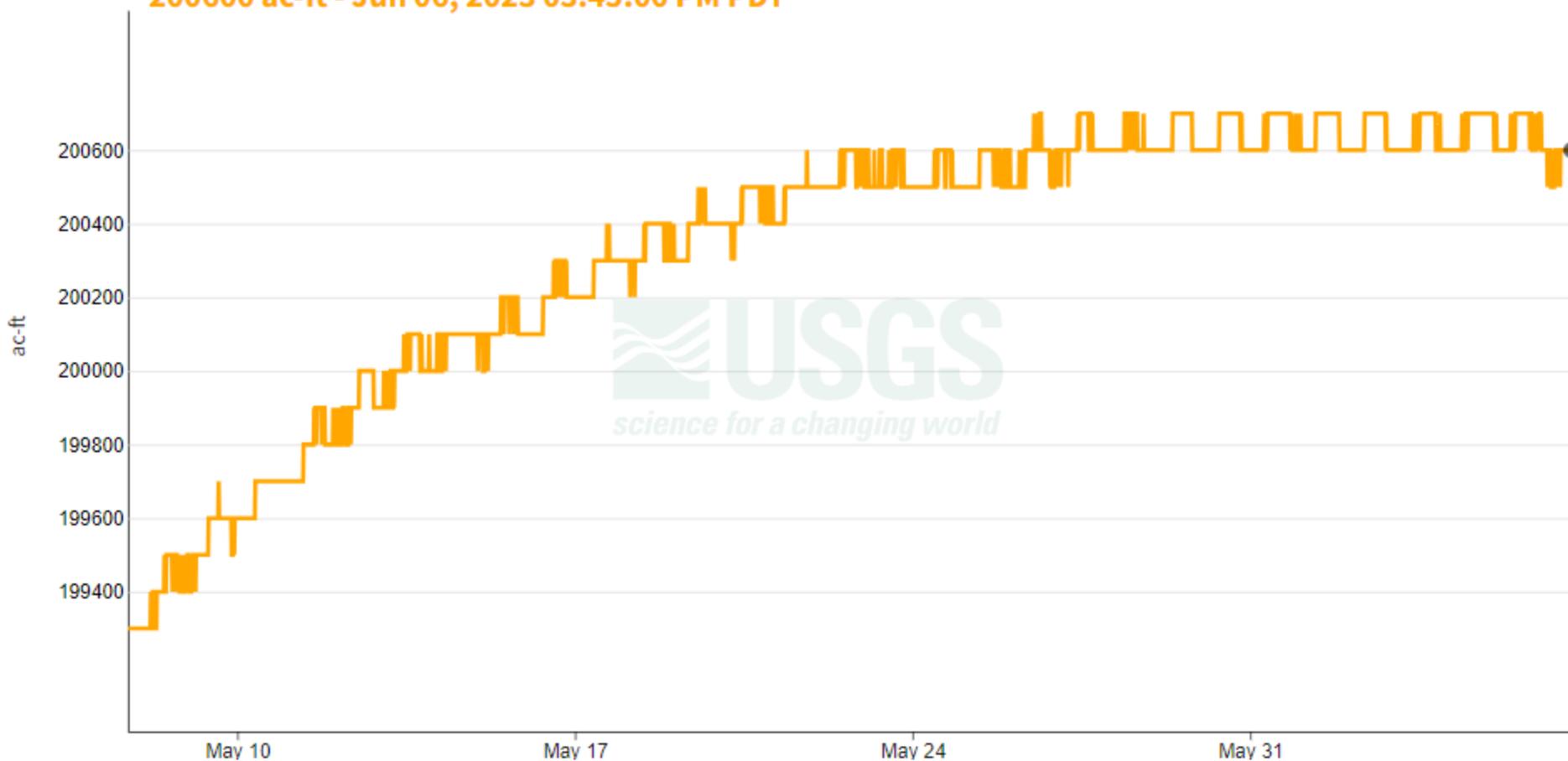
7 days 30 days 1 year

Indian Valley Res a Clearlake Oaks CA - 11451290

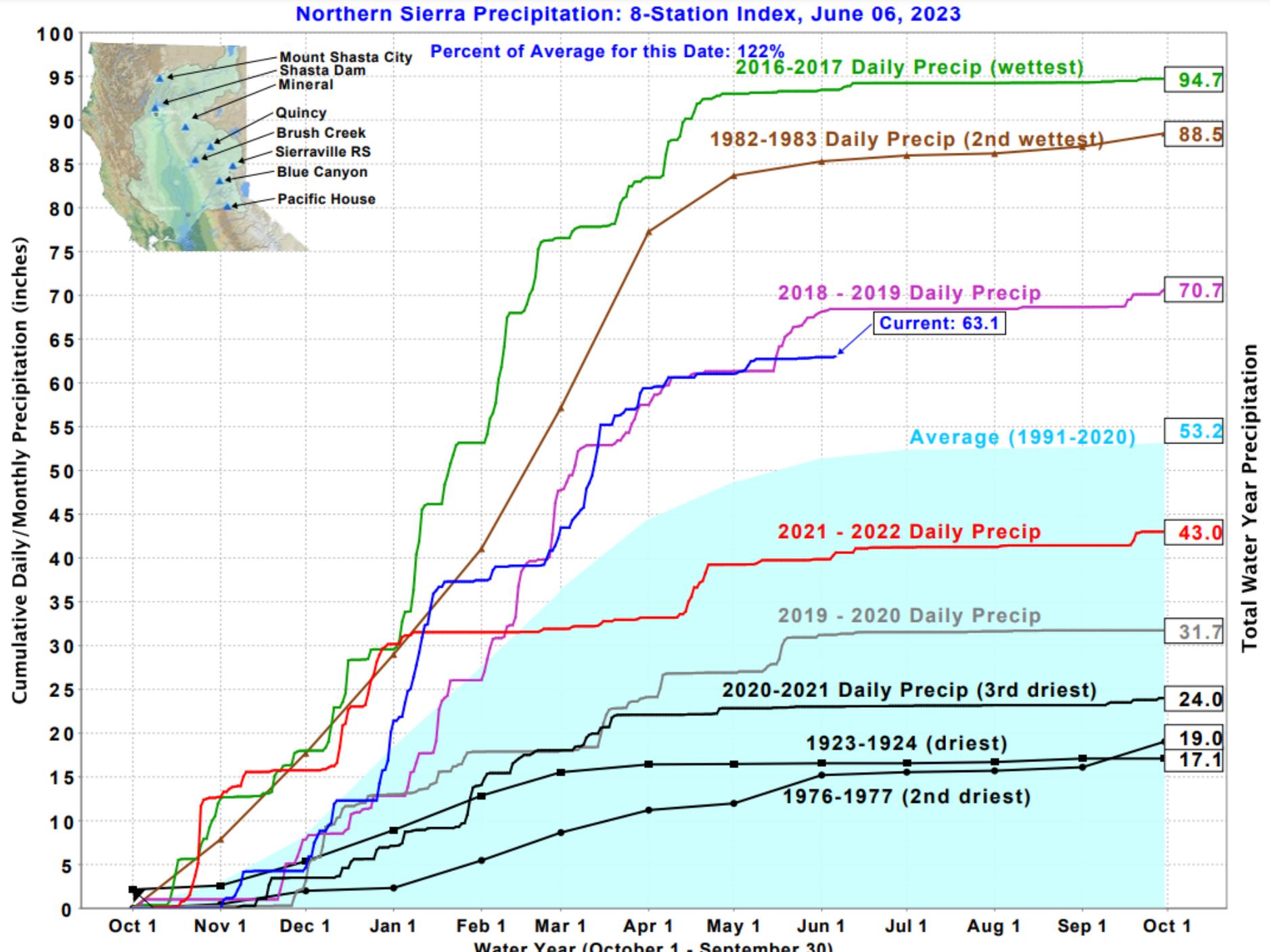
May 7, 2023 - June 6, 2023

Reservoir storage, acre-ft ⓘ

200600 ac-ft - Jun 06, 2023 03:45:00 PM PDT



1 month $\Delta \sim 2.1''$



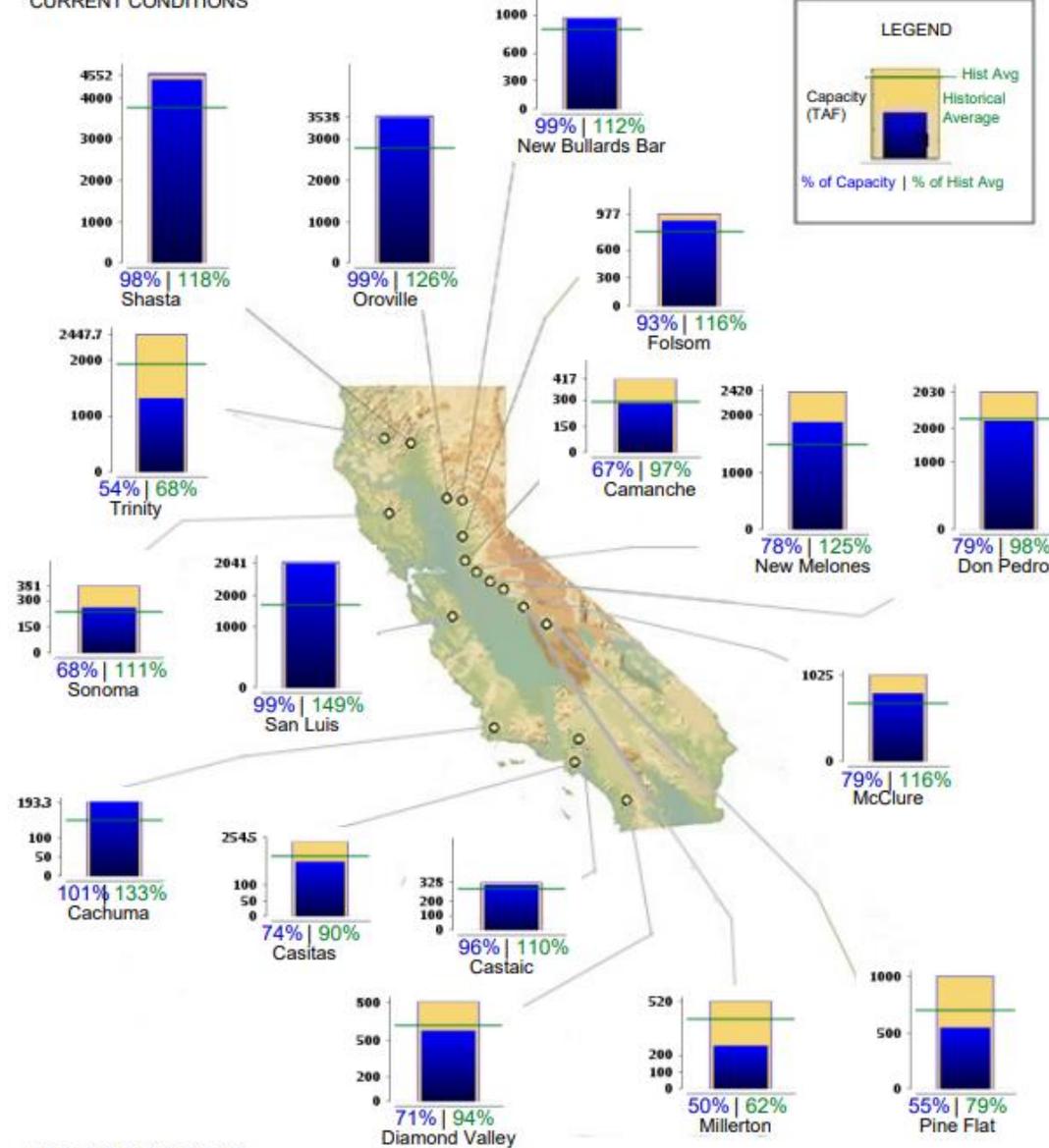


CURRENT RESERVOIR CONDITIONS

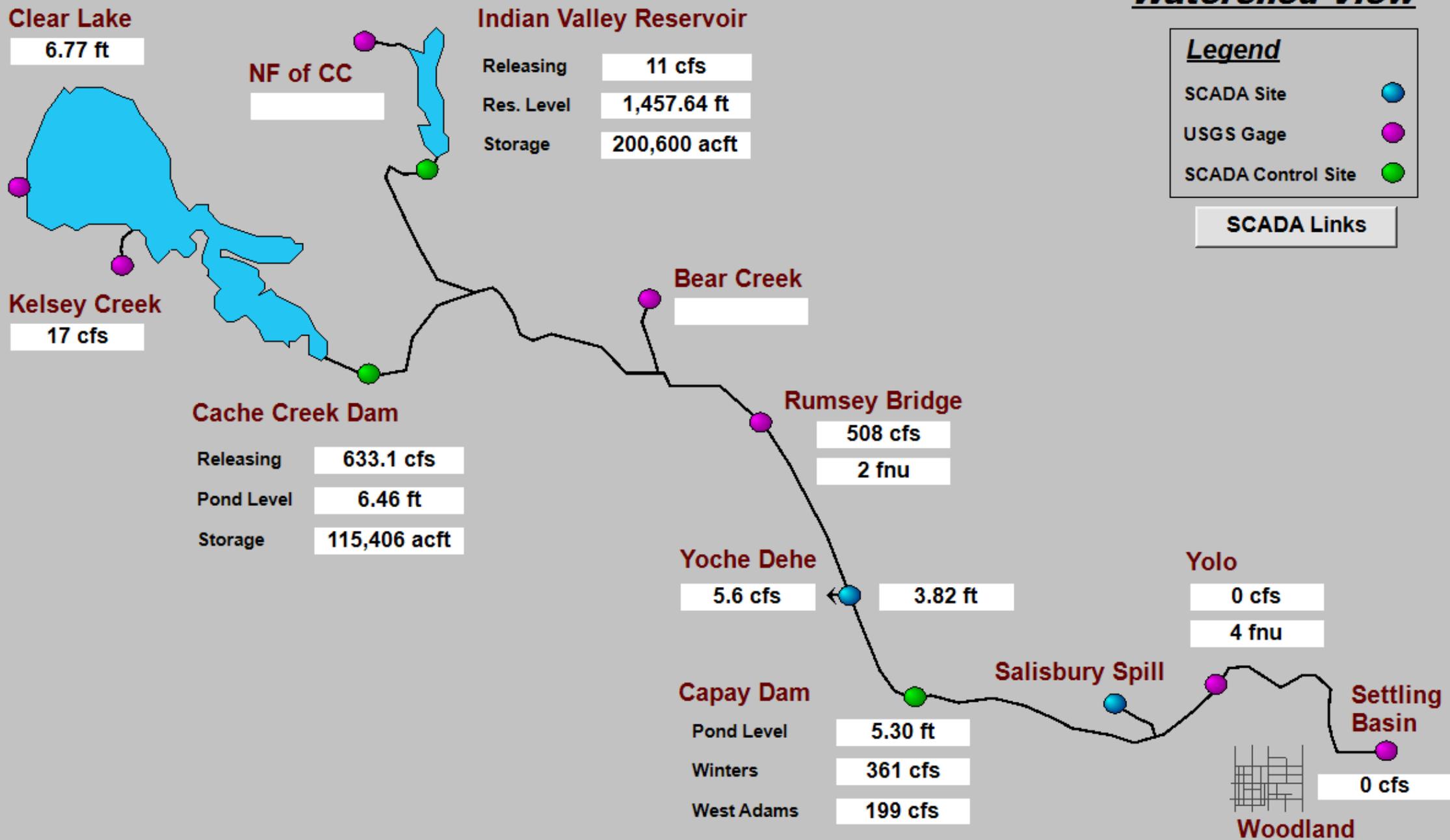
CALIFORNIA MAJOR WATER SUPPLY RESERVOIRS

Midnight - June 5, 2023

CURRENT CONDITIONS

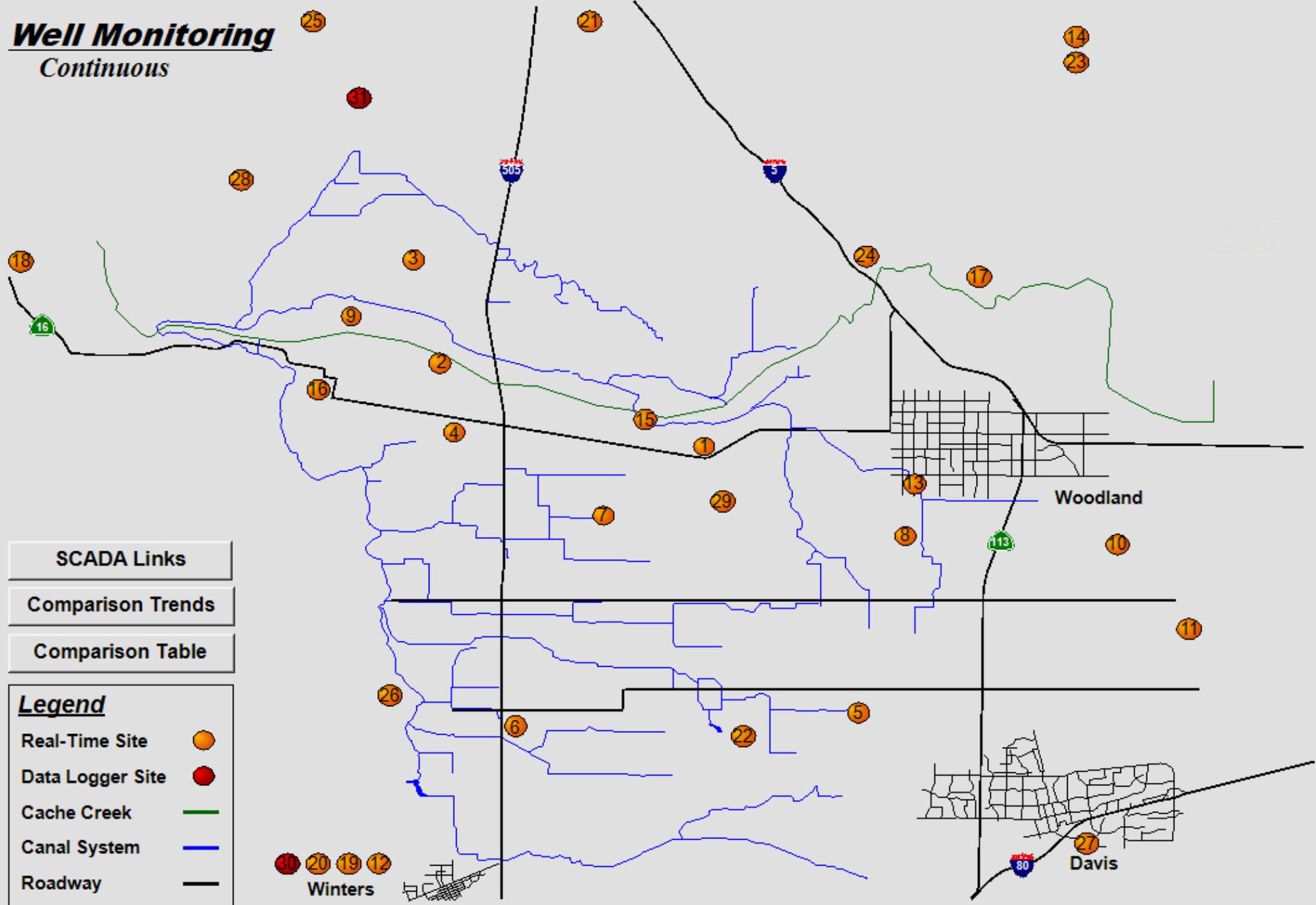


Watershed View



Well Monitoring

Continuous



SCADA Links

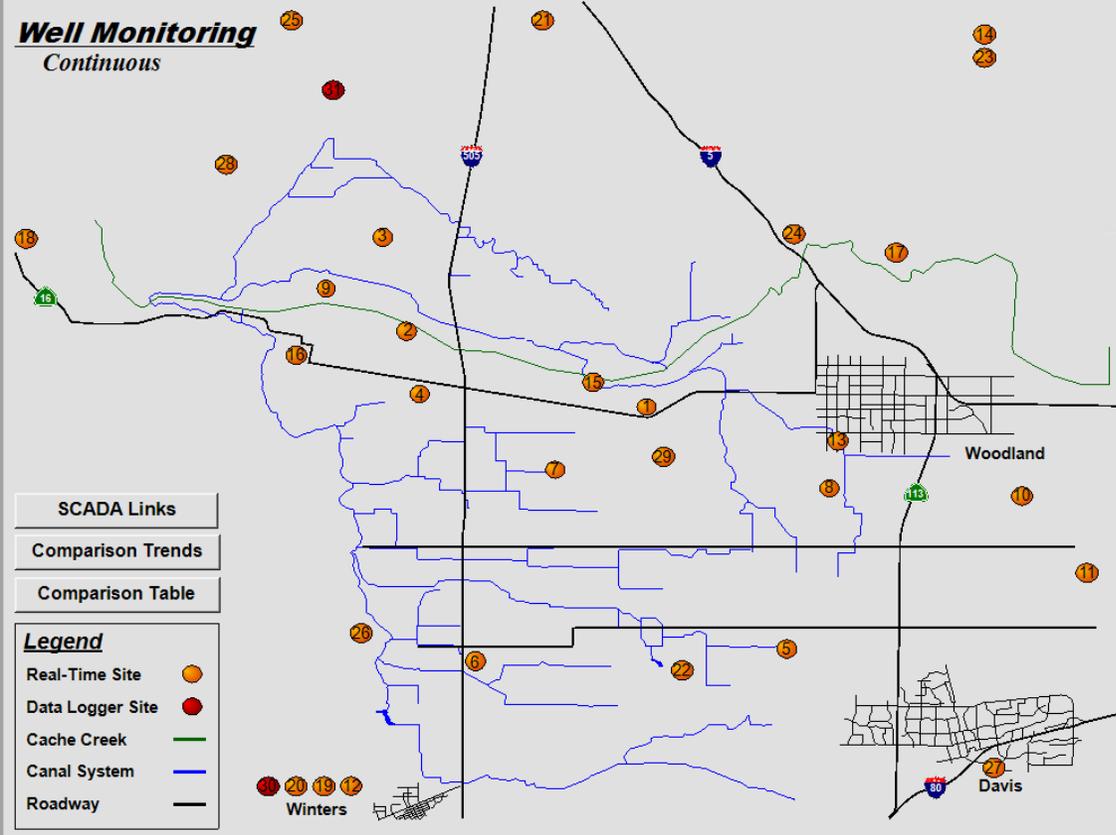
Comparison Trends

Comparison Table

Legend

- Real-Time Site 
- Data Logger Site 
- Cache Creek 
- Canal System 
- Roadway 

30 20 19 12
Winters



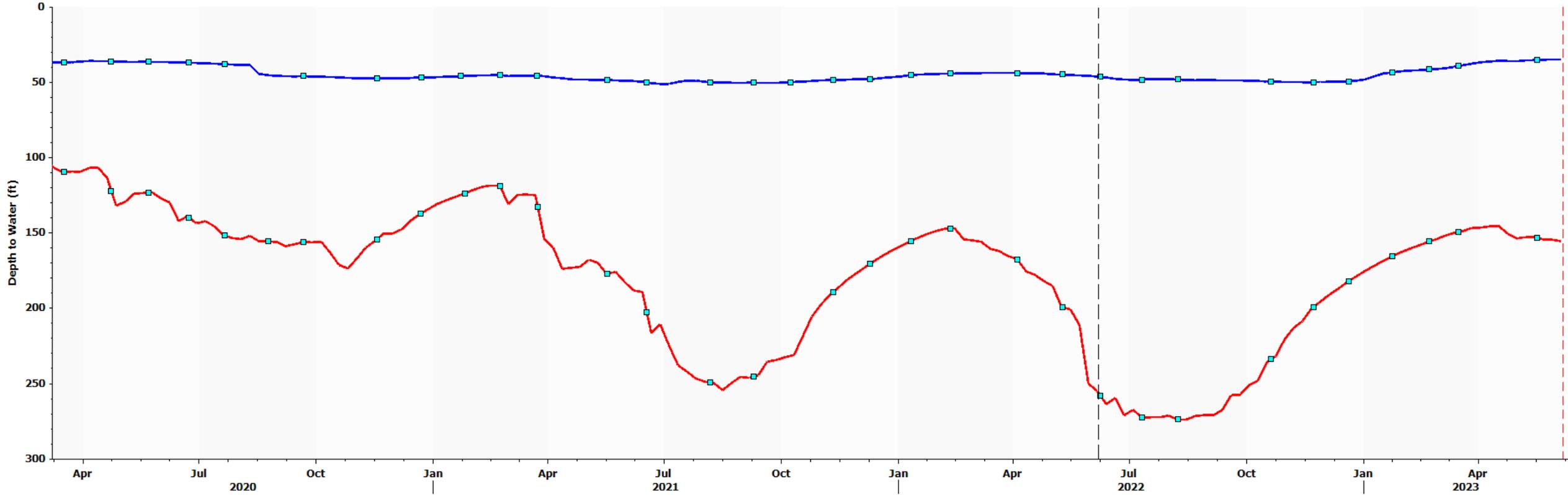
Well Monitoring

Depth to Water Historical Comparison
(Daily Average DTW in feet)

Well	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Δ 2022 - 2023	Δ 2015 - 2023
1.	84.3	79.8	85.6	94.2	109.1	114.9	106.2	91.5	94.9	91.2	97.4	125.2	134.9	108.7	26.1	6.2
2.	42.3	34.6	47.8	43.7	60.9	45.5	42.5	26.8	32.5	26.3	31.4	37.4	45.4	34.6	10.8	10.9
3.		38.6	41.4	45.3	67.6	69.4	57.9	36.6	41.7	35.7	41.7	56.2	76.6	55.2	21.4	14.2
4.		26.4	36.1	41.0	52.5	59.1	47.3	37.7	32.6	24.7	32.3	47.6	65.3	37.1	28.2	22.1
5.		14.9	18.4	17.4	32.9	32.6	36.8	20.0	28.2	14.4	21.0	28.4	39.9	27.7	12.2	5.0
6.			60.2	56.0	84.6	76.4	72.1	40.7	45.5	30.1	44.7	63.5	79.8	56.3	23.6	20.1
7.				27.3	27.3	40.7	28.3	14.8	17.4	14.8	19.7	41.3	41.2	23.0	18.2	17.7
8.					85.9	85.6	84.1	62.0	63.0	43.0	63.9	83.5	91.5	64.1	27.4	21.5
9.					61.6	63.5	54.6	37.5	42.6	36.9	42.7	53.4	66.4	48.5	17.8	15.0
10.						120.0	69.0	52.7	44.7	23.8	54.1	74.7	121.3	66.9	54.4	53.1
11.						28.1	20.6	14.7	15.9	10.5	20.2	24.7	29.3	18.4	10.9	9.7
12.										107.2	115.6	135.5	147.8	138.5	9.4	
13.									91.3	63.5	103.0	126.9	159.4	85.9	73.5	
14.										7.7	9.8	11.8	11.2	8.7	2.4	
15s.										33.1	36.6	49.2	46.4	34.9	11.5	
15d.										109.9	127.8	199.6	261.9	156.2	105.7	
16.										33.0	41.6	44.5	53.4	44.1	9.4	
17.										18.1	22.3	30.7	34.0			
18.										44.1	48.1	83.2	59.7	36.9	22.8	
19.											170.2	185.1	195.6	190.6	5.0	
20.																
21.																
22.												121.5	133.2	140.7	130.7	10.0
23.													96.9	109.5	73.5	36.0
24.														86.5	52.9	33.6
25.														80.8	59.9	20.9
26.															103.2	
27.															93.3	
28.															60.4	
29.															139.0	
															84.4	

----- Working on a replacement -----

15. Moore Well Depth to Water

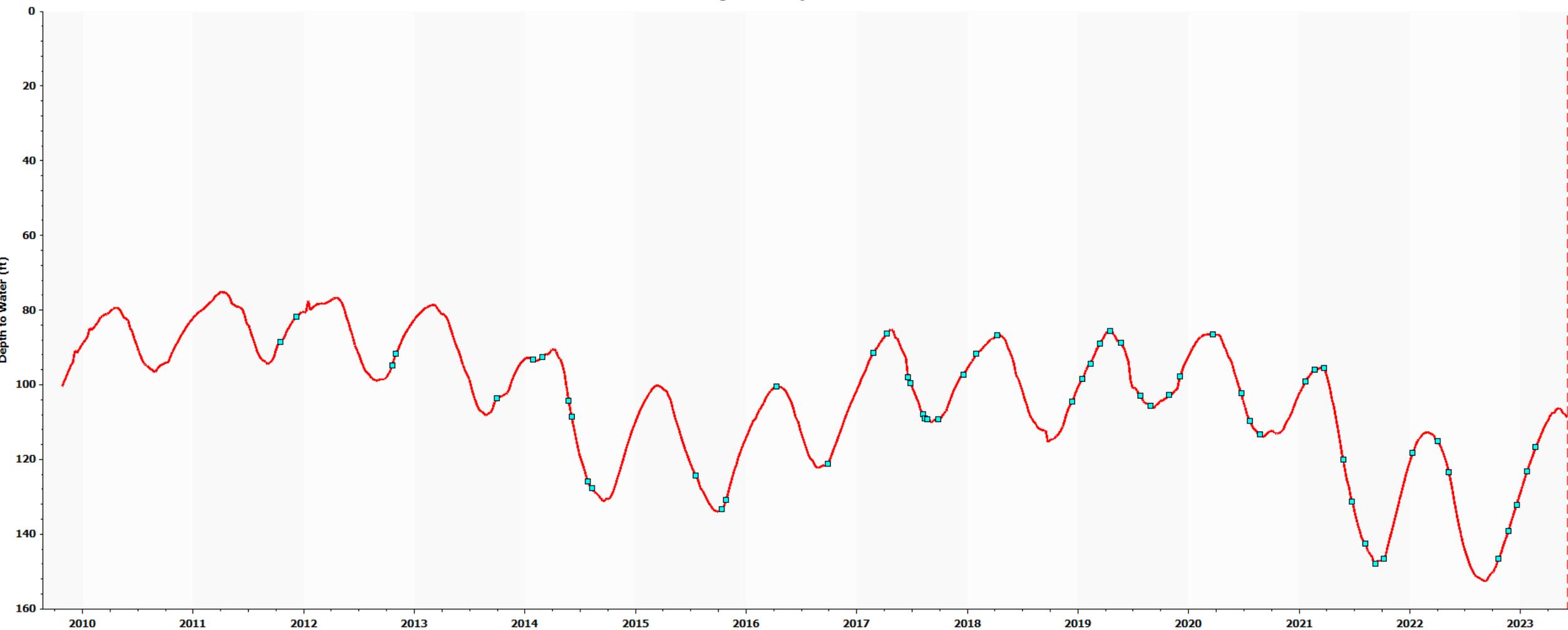


Trace

- Moore Well (s) Depth to Water (Weekly Minimum) 6/6/2022 10:30:09.987 PM 46.46
- Moore Well (d) Depth to Water (Weekly Minimum) 6/6/2022 10:30:09.987 PM 256.07

Ruler Value

1. HQ Well Depth to Water



Depth to Water

05/05/22: 122.4 feet

06/05/22: 135 feet

Δ -12.6 feet

Depth to Water

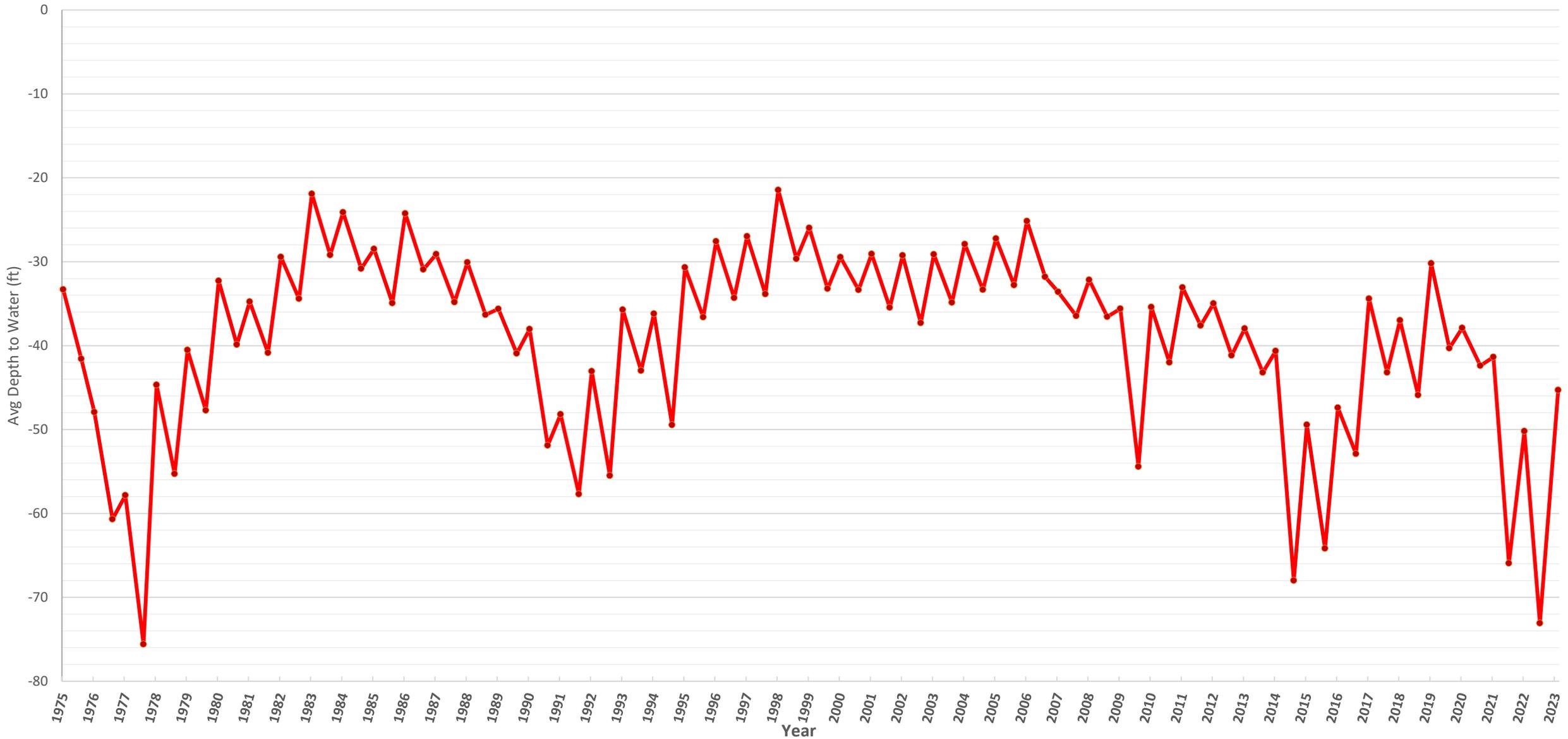
05/05/23: 107.7 feet

06/05/23: 109.2 feet

Δ -1.5 feet

Draft YCFCWCD Average Groundwater

Depth by Season (Spring 2023 is 148 wells)**



YCFCWCD Average Groundwater

Depth by Season (Spring 2023 is 148 wells)**

Fall to Spring Recovery

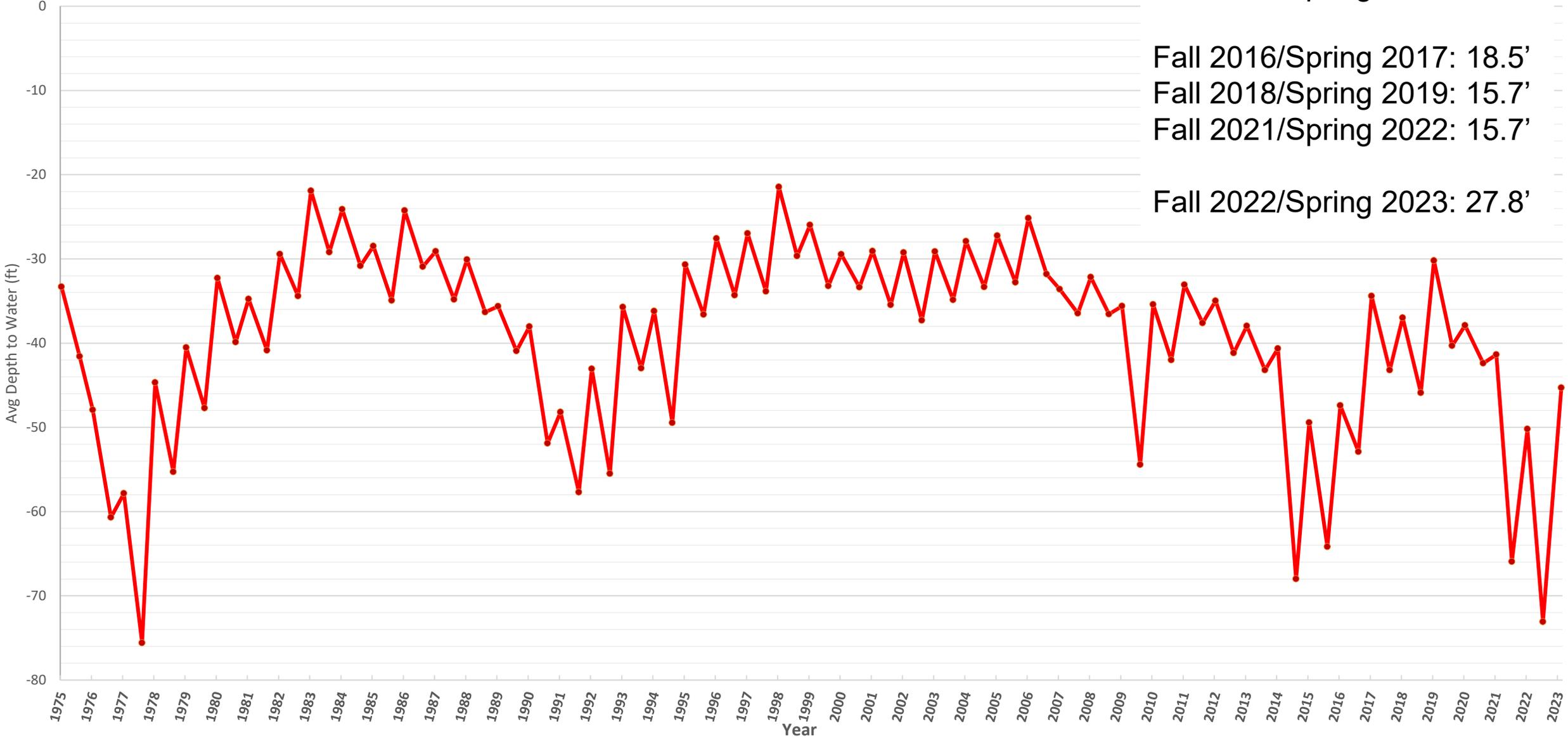
Fall 1977/Spring 1978: 30.9'

Fall 2016/Spring 2017: 18.5'

Fall 2018/Spring 2019: 15.7'

Fall 2021/Spring 2022: 15.7'

Fall 2022/Spring 2023: 27.8'



Preliminary Financial Report

Highlights as of May 31, 2023

Preliminary Budget Summary as of 5/31/2023

Key Revenue Drivers	Year-to-Date	Budget	Difference
Agricultural Water Sales	\$827,200	\$6,217,700	(\$5,390,500)
Non-Agricultural (M&I) Water Sales	\$5,100	\$343,300	(\$338,200)
Property Taxes *includes Special Property Tax Assessment	\$15,900	\$2,586,400	(\$2,570,500)
IV Dam Hydro (less fees)	\$0	\$350,000	(\$350,000)
Other Revenue	\$8,900	\$1,456,700	(\$1,447,800)
<i>Shared Services Revenue</i>	<i>\$1,800</i>	<i>\$315,200</i>	<i>(\$313,400)</i>
<i>YSGA Reimbursements</i>	<i>\$0</i>	<i>\$250,000</i>	<i>(\$250,000)</i>
<i>Interest</i>	<i>\$7,100</i>	<i>\$120,000</i>	<i>(\$112,900)</i>
<i>Other (includes FEMA)</i>	<i>\$0</i>	<i>\$771,500</i>	<i>(\$771,500)</i>
TOTAL REVENUE	\$857,100	\$10,954,100	(\$10,097,000)

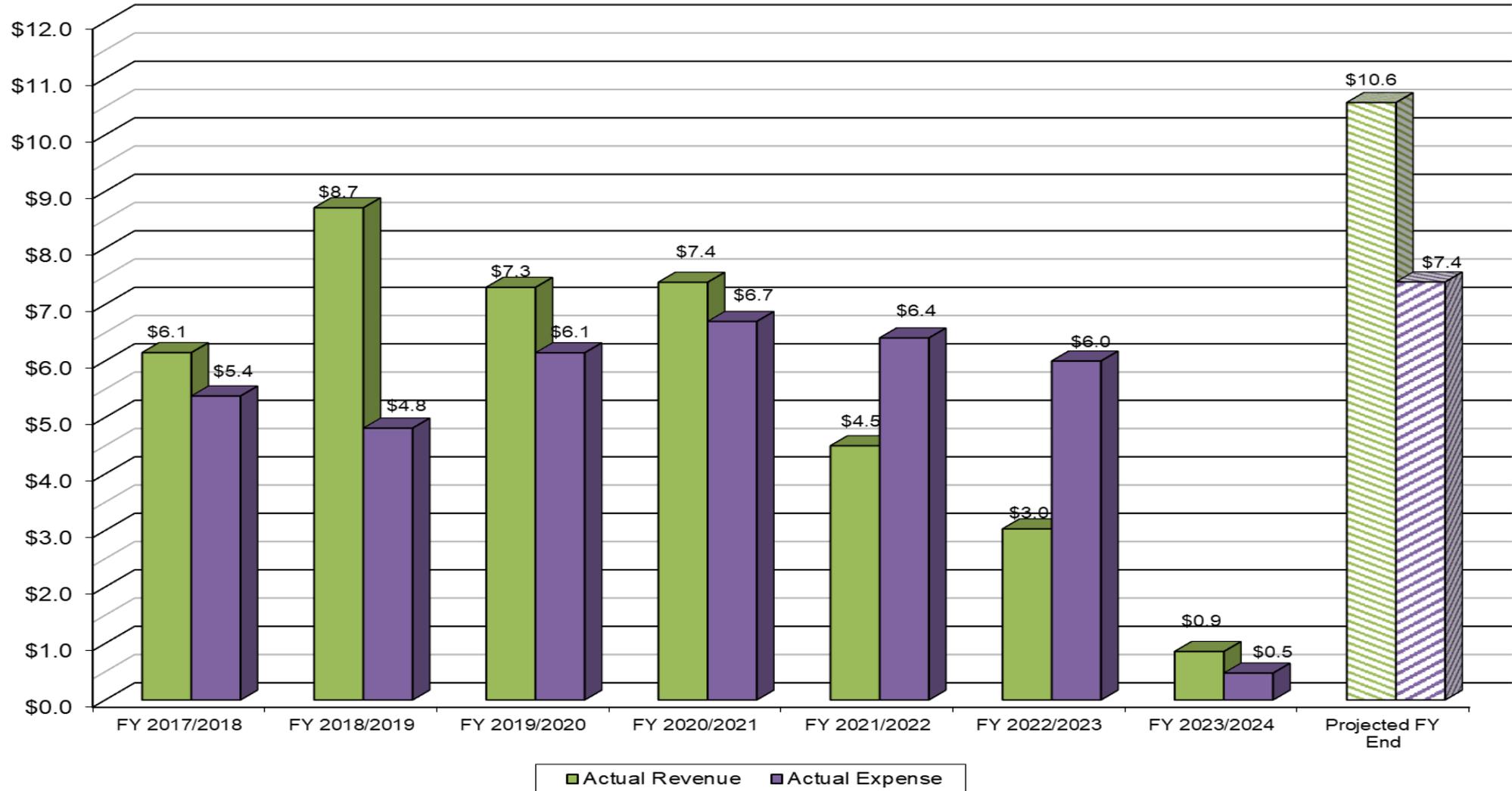
Key Expense Drivers	Year-to-Date	Budget	Difference
Transmission and Distribution (O&M)	\$113,400	\$1,343,100	(\$1,229,700)
General Administration	\$136,400	\$2,846,900	(\$2,710,500)
Other Expenses	\$225,700	\$3,451,900	(\$3,226,200)
TOTAL EXPENSES	\$475,500	\$7,641,900	(\$7,166,400)

Preliminary Financial Report

Comparison of Actual Revenue vs. Actual Expense

Original Budget
\$10.95 / \$7.6

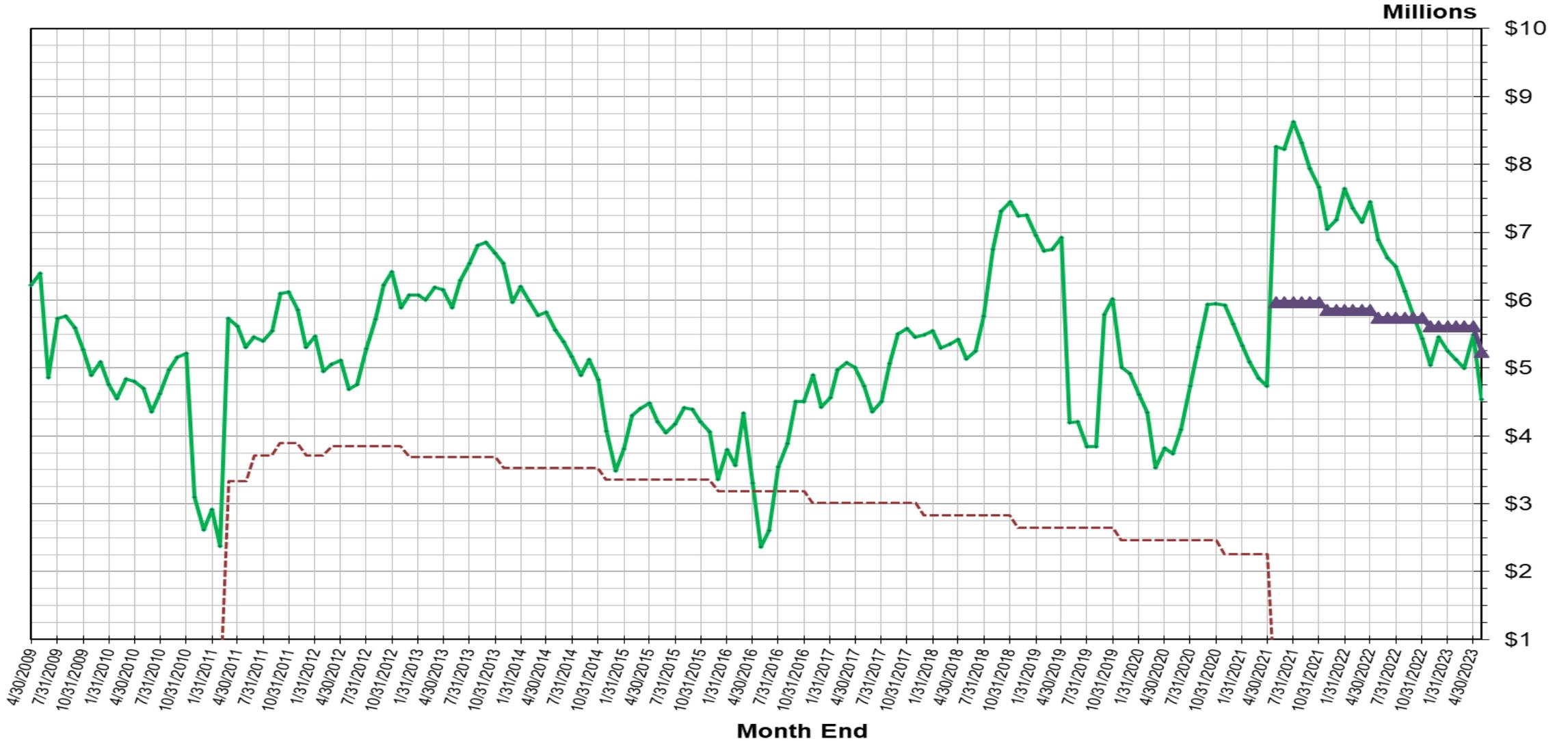
Millions



Preliminary Financial Report

Cash History

— Total Cash & Investments - - - SWRCB Loan Debt ▲ ZION BANK LOAN DEBT



Zion Bank Loan Debt: Rate Covenant Includes Reserves and Flexibility of Lockbox

Capital Improvement Program

Planning for Capital Jobs

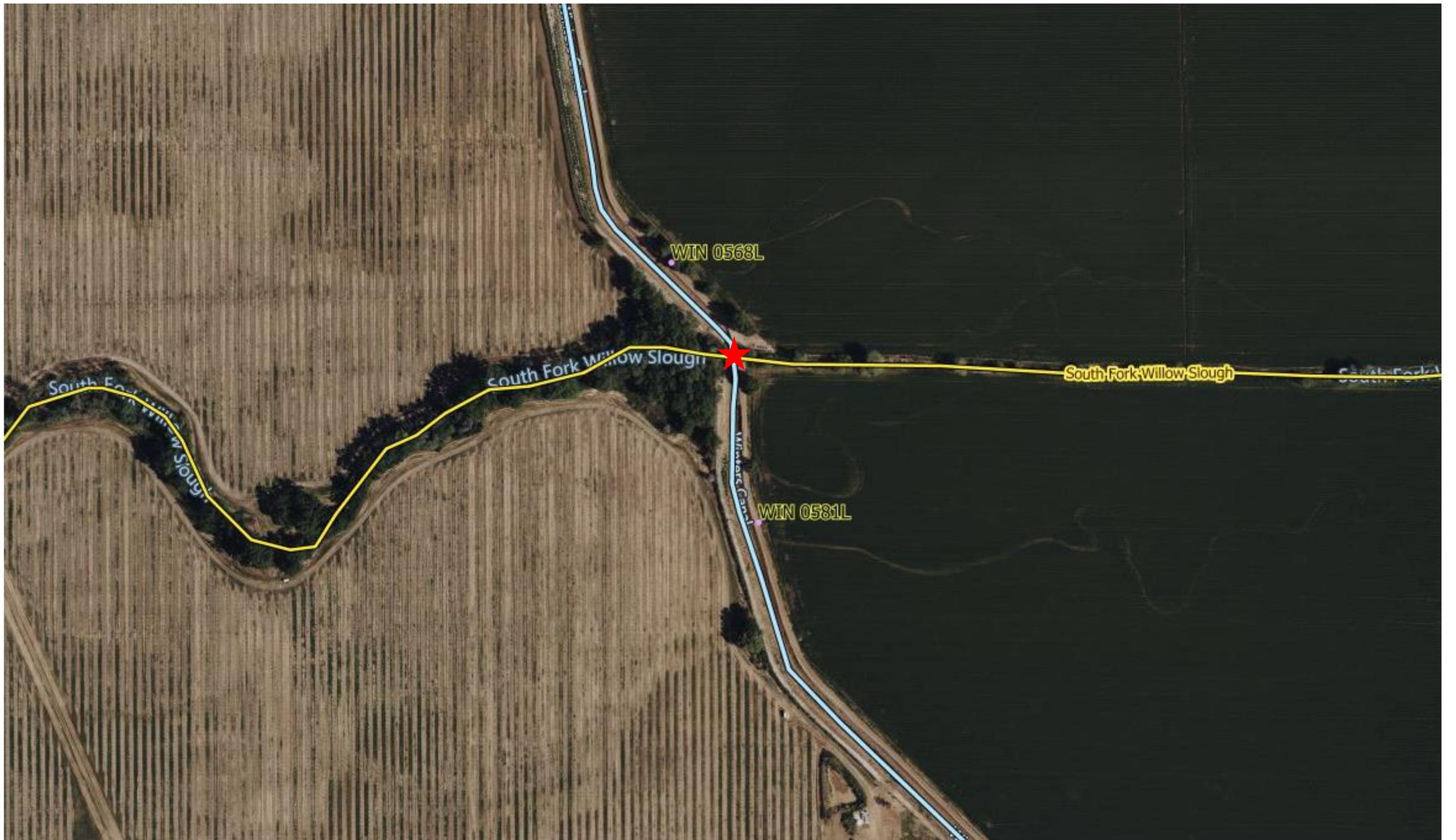
Capay Dam Bladder Replacement Project

FY 22/23 Planning Activities Related to Large Capital Jobs

Almondale Flume: Emergency Repairs Project

Hungry Hollow Canal – Pipeline Extension Project







Almondale Flume on
Winters Canal: Emergency
Repairs Project



The AquaLastic® Concrete Repair System

Prolong the Life of and Protect your Infrastructure

Our solution is a complete concrete repair system capable of fixing many different areas and types of degradation problems in concrete, earthen and metal canals, flumes, spillways, flood control channels, dams and other structures.





2023 Irrigation Season Update

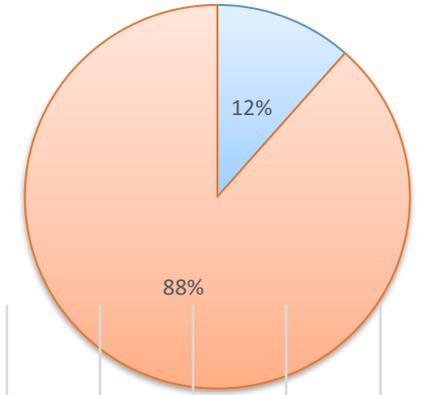
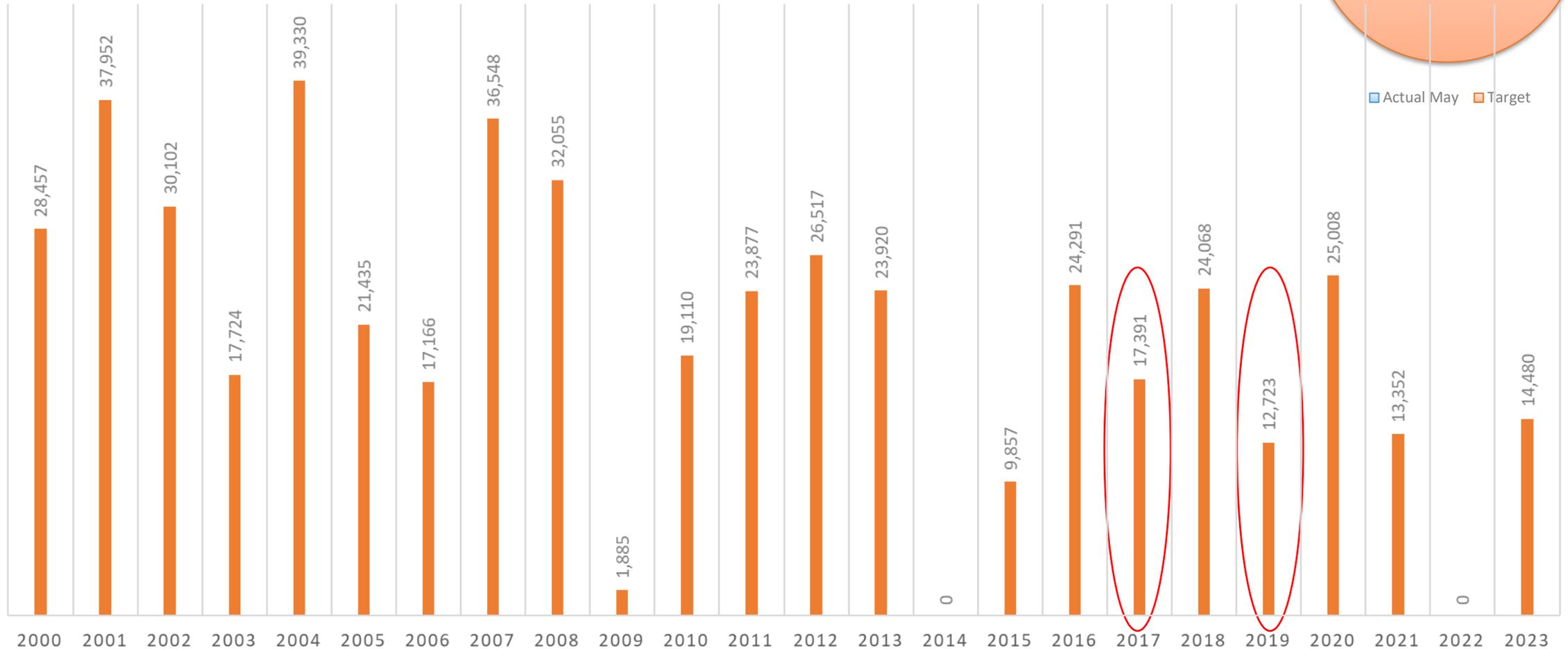
- “Start of Season” – May 5
 - Delay in demand because of April and May(!) rains
- Flow Measurement QA/QC
 - Cache Creek Dam – USGS rating curve update
 - Managing Capay Dam “spill”
 - Various points in the canal system
- “Bottlenecks”/Points of Constriction
 - Cottonwood, Cottonwood South, Ulrich Canals
- Aquatic Weeds

2023 Irrigation Season Update

2023 Water Sales Target

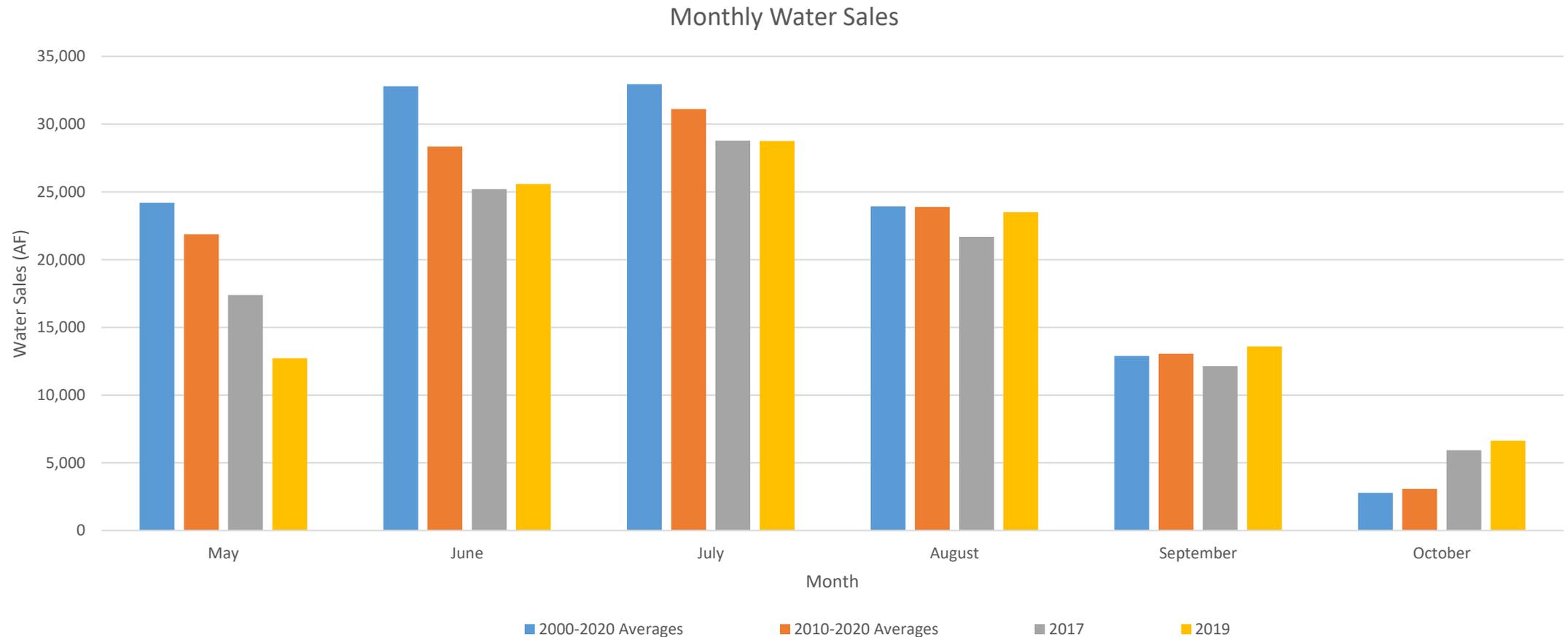
MONTH OF MAY SALES

Month of May Sales



Actual May Target

Monthly Average of Water Sales: Similar Water Year Type



Aquatic Weeds





Cache Creek Dam: Source Water





Capay Dam



Grower Solution



Grower Solution

Mechanical Removal



Control Methods



Background

- Similar issue in 2016 after the 2014/2015 drought
- In 2016, sago pondweed and algae were an issue
- FY 23/24: \$80,000 budgeted for aquatic weeds (anticipate > \$80k)

Problem Weeds

- Sago pondweed – present in system for a long time, and currently a minor issue
- Horned pondweed – similar to sago but annual life cycle (have not found this yet)
- Green algae (*Cladophora* spp.) – present in system historically, and currently an issue
- Upright burhead – more problematic in previous years (have not found this yet)

Sago Pondweed





A stream flows through a dry, sandy landscape. The water is dark blue, and a thick, bright green layer of algae covers a significant portion of the water's surface, particularly in the middle and right sections of the frame. The banks are composed of light brown, sandy soil with some sparse, dry grasses and small green plants. The overall scene suggests a dry, arid environment where the algae has thrived in the water.

Green Algae

Green algae

- Different types
- *Cladophora* spp. the most problematic for District
- Common in warm, eutrophic systems
- Historically only a minor problem, this year is considered worse
- Recorded in ~20% of system in 2015
- Most problematic towards the ends of canals
 - Currently an issue at the “headwaters”





Why?

Potential Causes:

- Irrigation releases currently only from Clear Lake (warmer water)?
- Cache Creek serving as a breeding ground to the algae due to lower flows in the drought?
- Reduced flows due to conversion to drip systems and permanent crops?
- Change in nutrient cycling with new crops favoring aquatic weed growth?
- A perfect storm of all of these factors and/or others yet unknown?

Conclusion



- Increase in expenses and hassles for both the District and water customers
- Encourages customers to use groundwater
- Increase in NPDES costs
- Highlights the need for a District understanding of aquatic weed growth and control methods
- Need for improved weed control over time

General Activities (May 3-June 6)

PROJECTS:

- **2023 Storm Damage Repairs (Contractor and Force Acct.) and FEMA Reimbursement Process**
- **2023 Irrigation Season Kick-Off**
- **Staff Annual Performance Evaluations**
- **YSGA – Well Permitting Review; Project Development; Outreach; GSP Implementation; Groundwater Monitoring Program Improvements; Grant Opportunities; Neighboring Subbasin Coordination; Grey Area Projects and Outreach**
- **Water Right Reporting Violations; and Appropriator Water Rights**
- **Preparing for Drought Update to County BOS**
- **Voluntary Agreement Process**
- **Outreach with various agencies on District's Recharge Program**
- **Planning for Yolo County Water Awareness Forum**
- **Capital Projects – small infrastructure projects and USBR WaterSMART Grant**
- **Various Private Jobs**
- **Drought Assistance – Dry well checks (Contract with Yolo County OES)**
- **Creek Spraying for CCC and Chipper Program for Yolo RCD**
- **Vegetation Management (MERCOSA, NDM and Wild Wings CSAs, Madison and Knights Landing CSDs)**
- **Shared Services: Cacheville CSD (part-time GM), SCWA, private jobs, spraying, etc.**
- **Encroachment Permits, Easement Research, Misc. Water Rights Investigations**

General Activities (May 3-June 6)

OUTREACH:

1. Planning for and Participating in Yolo County Water Awareness Forum (May 5, 8, and 16)
2. YCFB // YSGA Monthly Coordination Meeting (May 5)
3. YSGA: Coordination Meeting with Solano Subbasin (May 8)
4. ACWA Spring Conference and Committee Meetings (May 9-11)
5. YSGA: Meeting with CAFF (May 15)
6. Rolling Acres Ad Hoc Internal Coordination Meeting (May 15)
7. Cache Creek Dam Tour with City of Clearlake (May 17)
8. UCD Groundwater Shortcourse (May 18)
9. CII Board of Directors Meeting (May 18)
10. YSGA: Ad Hoc Committee for Reconsideration of Expense Allocation (May 19)
11. Cache Creek TAC Meeting (May 22)
12. FERC Part12D Kick-off Meeting (May 24)
13. Yolo County Water Awareness Forum Post-Mortem (May 24)
14. YSGA: Executive Committee Meeting (May 30)
15. Meeting with Highlands MWC Regarding SB 88 Reporting (May 30)
16. Yolo County Drought Planning Assistance Meeting with DWR (May 31)
17. NCWA Managers Dinner, Sac River Basin (May 31)
18. YSGA: Coordination with Yolo County EH on Well Permitting (June 1)
19. ACWA Board of Directors and State Legislative Committee Meetings (June 2)

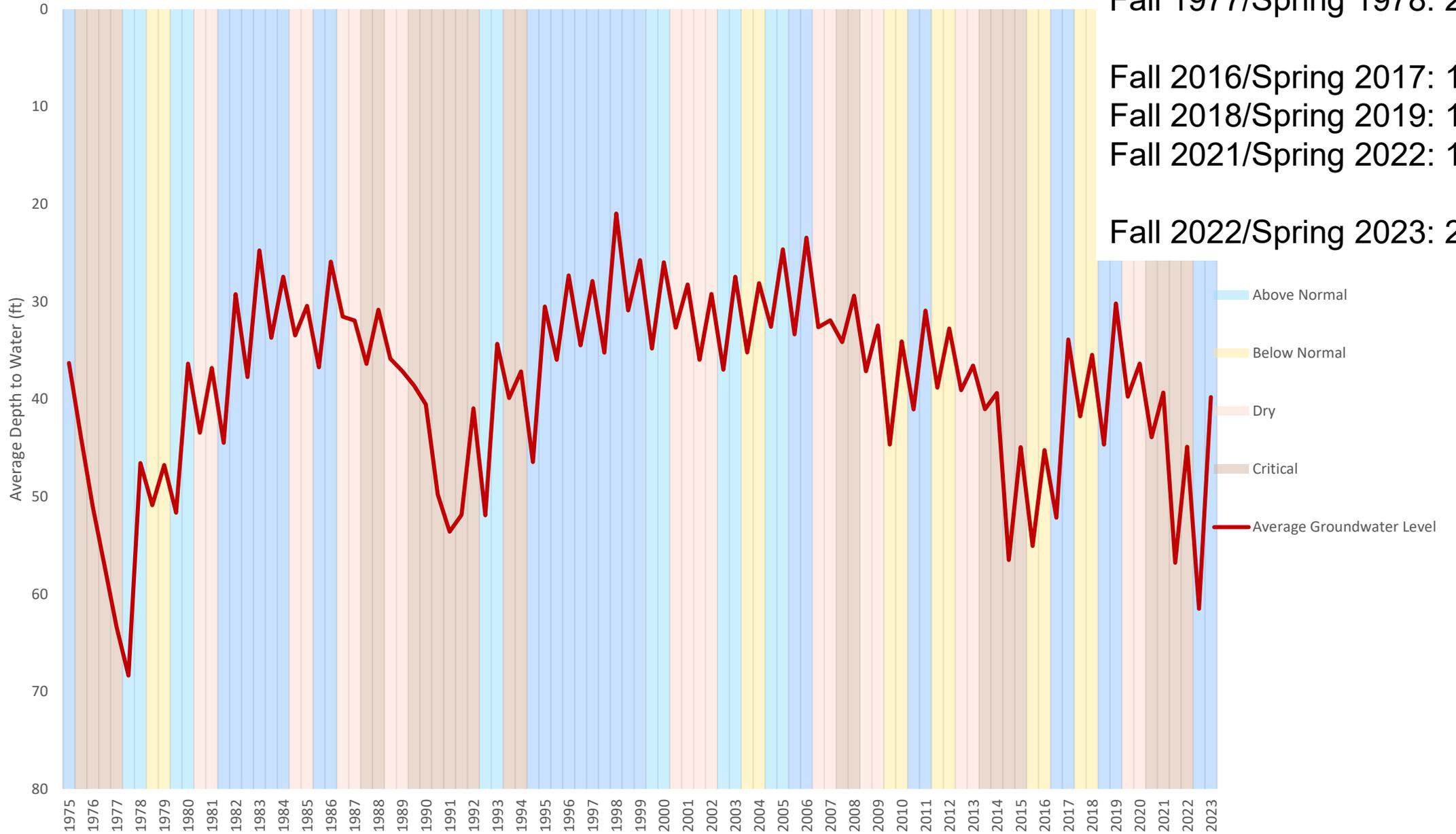
YSGA Update

YSGA 2023 Q2/Q3 Activities

- Onboarding New Employee: Nathan Fisher
- Working with DWR to Construct 3 New Multi-Completion Wells
- Well Permitting Process
 - [Tracking Assembly Bill 1563](#) – passed Assembly in May
- GSP Implementation
 - Management Area Advisory Committees
 - Proceeding with Fee Study
 - Prioritizing Projects / Preparing Grant Applications
 - Grant Award – Draft Announcement of \$7.917M (5/8 projects funded)
- Drought Task Force Meetings (SB 552: Drought/Water Shortage Planning)
- Preparing for Yolo County Board of Supervisors Drought Update – scheduled for June 27, 2023
- YSGA Board of Directors Meeting
 - Regular Meeting June 19, 2023
 - Regular Meeting September 18, 2023
 - Helen Thomson Recognition

Yolo Subbasin Average Groundwater
Representative Wells - Depth by Season (62 Wells)

Fall to Spring Recovery



Fall 1977/Spring 1978: 21.8'

Fall 2016/Spring 2017: 18.3'

Fall 2018/Spring 2019: 14.5'

Fall 2021/Spring 2022: 11.9'

Fall 2022/Spring 2023: 21.7'

Upcoming Meetings & Events

1. GRA/ACWA GSA Summit (June 7-8)
2. NCWA's Groundwater Management Task Force Meeting (June 12)
3. Update on DWR FMO Cache Creek Capacity Restoration Activities (June 14)
4. Yolo County Financial Oversight Committee Meeting (June 15)
5. YSGA: Board of Directors Meeting (June 19)
6. ACWA SGMA Implementation Committee Meeting (June 20)
7. Yolo County's Cache Creek Walk (June 21-23)
8. Supervisor Frerichs and Barajas: Agricultural Forum / Roundtable (June 22)
9. Reinvigorating the Cache Creek Watershed (June 22)
10. Drought/Groundwater Update to Board of Supervisors (June 27)
11. YCFB/County Check-in (June 29)
12. City of Woodland Chamber Lunch & Learn (July 5)
13. YSGA Executive Committee Meeting (July 14)
14. CII Board of Directors Meeting (July 21)
15. ACWA Board of Directors Meetings (July 27-28)

Agenda Item #9

General Discussion

Opportunity for Board Members to ask questions for clarification, provide information to staff, request staff to report back on a matter, or direct staff to place a matter on a subsequent agenda.

Agenda Item #10

Consider Approval of Larsen Wurzel &
Associates Contract Exceedance

Agenda Item #11

Payment of Bills

Consider the approval and payment of the bills
(Checks #62358-62374)

Check Number	Check Amount	Vendor Name		Check Date		
		Invoice Number	Invoice Date	Description	Invoice Amount	
0000062358	\$43,694.19	ACWA / JPIA Employee Benefits			6/6/23	
		0699576 JUN 2023	6/1/23	MONTHLY MEDICAL INSURANCE		43,694.19
0000062359	\$8,494.55	Bartkiewicz Kronick & Shanahan			6/6/23	
		1650-0001 APR 2023	4/30/23	GENERAL LEGAL		4,339.67
		1650-001 APR 2023	4/30/23	CLEAR LAKE LEGAL		1,323.75
		1650-0010 MAY 2023	6/5/23	CLEAR LAKE LEGAL		2,647.50
		1650-0020 APR 2023	4/30/23	DELTA ISSUES LEGAL		99.88
		1650-0020 MAY 2023	6/5/23	DELTA ISSUES		83.75
0000062360	\$5,049.38	Briggs Manufacturing			6/6/23	
		20221352	5/17/23	PO6774 TWIN TRACK WEIR. C10 INSERTS.B&G	<i>50% Reimbursable</i>	5,049.38
0000062361	\$6,090.00	Environmental AQUA, Inc.			6/6/23	
		81293	5/2/23	POTABLE WATER DELIVERY	<i>Reimbursable</i>	6,090.00
0000062362	\$106,470.00	CA Dept of Water Resources			6/6/23	
		1800157124	5/19/23	ANNUAL DAM FEES FY 23-24		106,470.00
0000062363	\$139,000.00	Diamond D General Eng Inc.			6/6/23	
		202314-1	4/28/23	EMERGENCY CANAL REPAIRS APRIL 2023	<i>Reimbursable</i>	139,000.00
0000062364	\$11,372.20	Integral Networks, Inc.			6/6/23	
		31492	5/1/23	PO6522 COMPLETE MANAGED SERVICES		4,013.90
		31506	5/10/23	PO6697 CONFIGURE COMM. NEW SERVER HOST		3,330.00
		31569	6/1/23	PO6522 AGREEMENT INTEGRAL COMPLETE MANAG		4,028.30
0000062365	\$12,169.22	Interstate Oil Company			6/6/23	
		T608915-IN	5/24/23	1850GAL GAS, 1010GAL DIESEL		12,169.22
0000062366	\$37,675.08	Larsen Wurzel & Associates, Inc.			6/6/23	
		2115200-0223	3/31/23	2/1 - 2/28/23 TASKS 2.1, 2.2, 2.3		20,966.71
		2115200-0323	4/26/23	3/1 - 3/31/23 TASKS 2.1, 2.2, 2.3		16,708.37

0000062367	\$18,506.00	MBK Engineers		6/6/23		
		10359	3/28/23		WATER RIGHT ASSISTANCE	-1,301.25
		10734	4/26/23		DISTRICT GENERAL SERVICES	516.00
		10735	4/26/23		WATER RIGHT ASSISTANCE	9,167.50
		11042	5/18/23		DISTRICT GENERAL SERVICES	258.00
		11173	5/24/23		WATER RIGHT ASSISTANCE THRU 04/30/2023	9,865.75
0000062368	\$50,750.00	Pacific Coatings		6/6/23		
		1008QB	5/25/23		PO4481 MOBILIZATION TO CONCRETE IN FLUME	50,750.00
0000062369	\$18,737.21	Pioneer Machinery, Inc.		6/6/23		
		1-516913-2	5/23/23		PO6776 SYSTEM WIDE REPAIRS	5,207.21
		1-516926	4/30/23		PO6767 EXCAVATOR CAT RENTAL 4/10-4/28/23	13,530.00
0000062370	\$21,216.32	Quam General Engineering		6/6/23		
		1260	5/4/23		PO6772 CULVERT IMPROVEMENTS CR29	21,216.32
0000062371	\$5,250.00	Rubicon Systems America, Inc.		6/6/23		
		102980	5/26/23		PO6801 7 EA GATE COMMISSIONING	5,250.00
0000062372	\$9,347.96	TechnoFlo System		6/6/23		
		40121	5/9/23		PO6697 (2)8" SEAMETRICS AG3000 FLOWMETER	5,323.16
		40245	5/16/23		PO6700 PULSAR LITE LEVEL SENSOR,2WIRE	2,003.40
		40500	5/31/23		PO6802 PULSAR IMP LITE LEVEL SENSOR	2,021.40
0000062373	\$17,808.75	U.S. Geological Survey		6/6/23		
		91062102	4/12/23		JOINT FUNDING AGREEMENT ENDING 03/31/23	17,808.75
0000062374	\$112,074.06	Woodland Ford (Inc.)		6/6/23		
		20230531 6609	5/31/23		PO6742 2023 FORD F150 4X4 SUPERCAB	56,037.03
		20230531 6636	5/31/23		PO6742 NEW 2023 F150 4X4 SUPERCAB	56,037.03

\$ 623,704.92

\$ 623,704.92

Agenda Item #12

Closed Session: Bay-Delta

Conference with legal counsel for existing administrative proceeding and anticipated litigation/significant exposure to litigation pursuant to Government Code 54956.9, subsections (d)(1) and (d)(2) – State Water Resources Control Board Bay/Delta Plan update proceeding.

Closed Session Report

Agenda Item #13

Closed Session: Public Employee Performance Evaluation

Government Code 54954.5(e) and 54957
Title: General Manager

Closed Session Report

Agenda Item #14

Closed Session: Labor Negotiations

Government Code 54957.6

District Representative(s): Directors Mary Kimball and Jim Mayer

Unrepresented Employee: General Manager

Closed Session Report

Agenda Item #15

Consider Merit Increase to General
Manager Salary

Agenda Item #16

Adjourn