



— BUREAU OF —  
RECLAMATION

## American River Group

1:30 PM – 3:30 PM

Conference Line: +1 (321) 209-6143;

Access Code: 596 336 817#

Webinar: Join Microsoft Teams Meeting

Thursday, April 19, 2026

### Agenda

1. Introductions
2. Announcements
3. Operations Forecast
  - a. SMUD
  - b. PCWA
4. Central Valley Operations
  - a. Spring Pulse Flow Discussion
5. Fisheries Update
  - a. CDFW
  - b. CFS
6. Next Meetings:
  - a. Regular Monthly ARG Meeting – Thursday, May 21, 1:30-3:30

# SMUD American River Group Update 4/14/2026

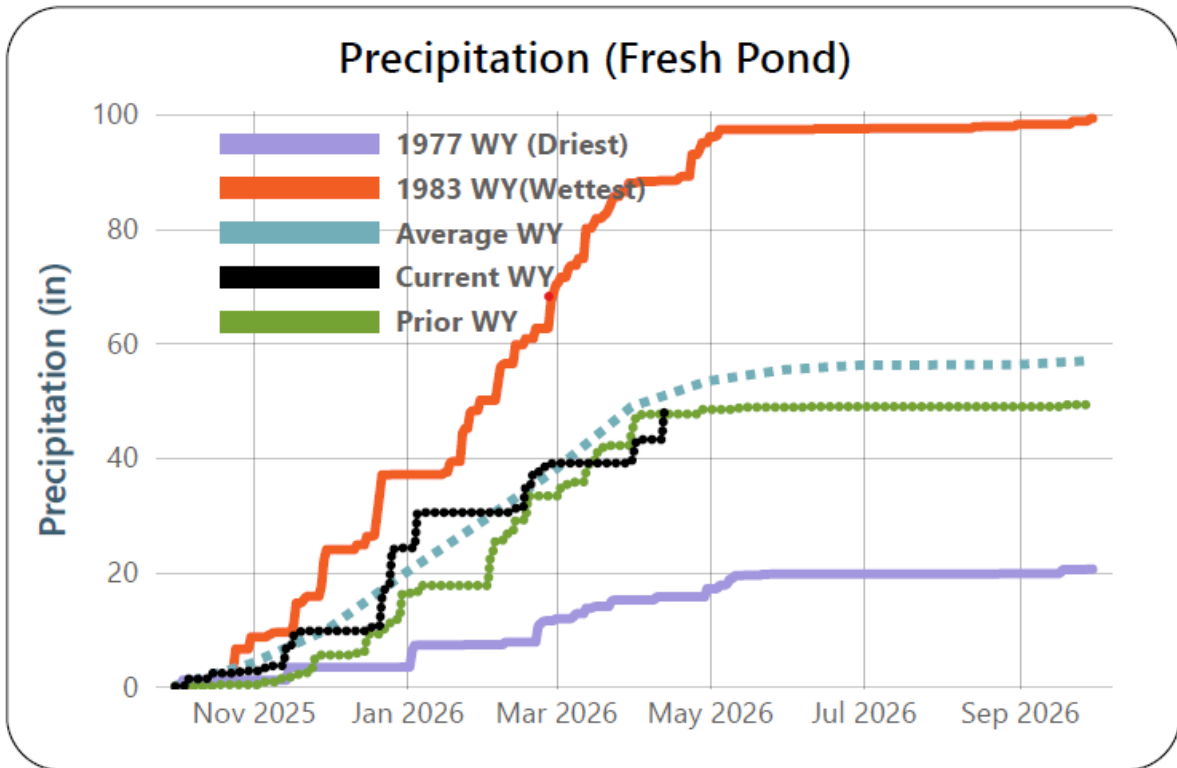


Figure 1. Fresh Pond Precipitation

Figure 1 is a line graph of fresh pond precipitation in inches for October 2025 – September 2026. It includes precipitation data from the driest water year (1977), 1983’s water year snowpack, average, current, and prior water year. The current precipitation is 94.2% of the average to date and 84.3% of the water year average.

Table 1. Fresh Pond Precipitation

Month	Current Water Year	Historical Average	% of Historical Average
October	2.70	3.99	68%
November	7.00	5.87	119%
December	14.50	9.88	147%
January	6.20	9.16	68%
February	8.55	8.70	98%
March	0.08	11.28	1%
April	8.99	4.46	202%
May	0.00	2.02	0%
June	0.00	0.78	0%

Month	Current Water Year	Historical Average	% of Historical Average
July	0.00	0.04	0%
August	0.00	0.04	0%
September	0.00	0.72	0%
Total	48.02	56.94	84%

\* Month to date total, full month historical average.

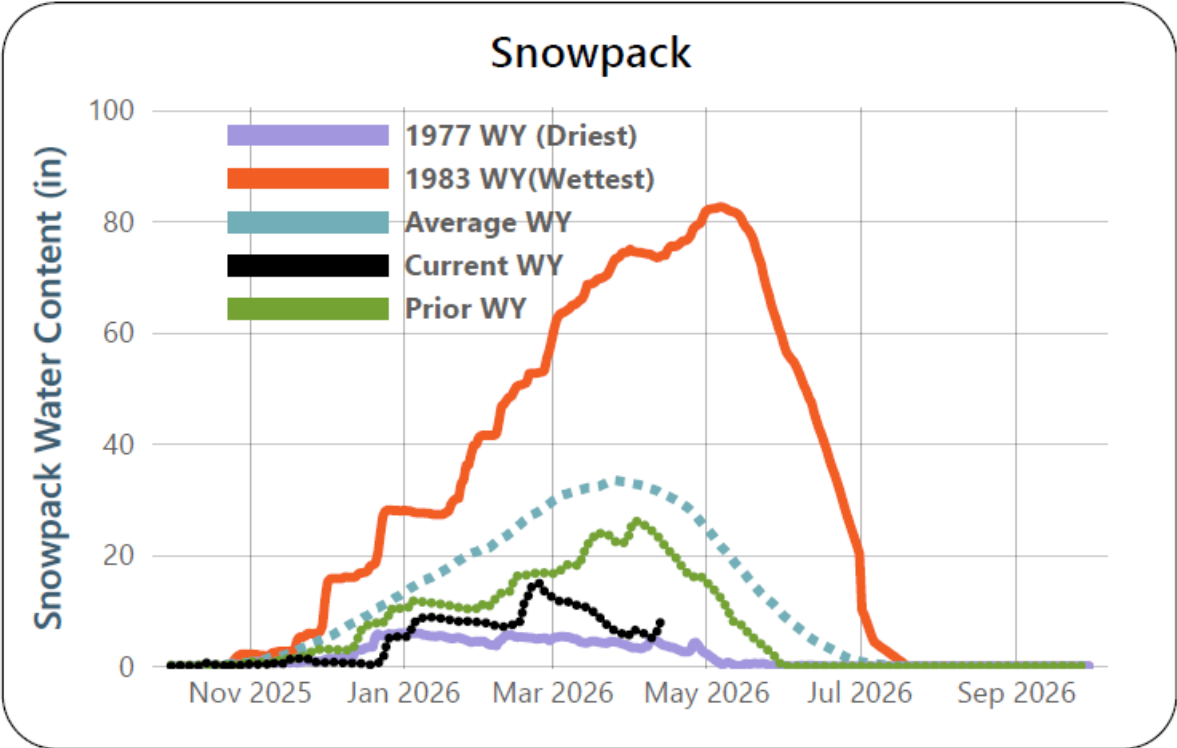


Figure 2. April 14, 2026, snowpack

Figure 2 is a line graph of snowpack water content in inches for October 2025- September 2026. It includes data from the driest water year (2015), 1983's water year snowpack, average, current, and prior water year. Runoff into the storage reservoir basins is 25.3% of average to date and 19.8% of the April 1 average.

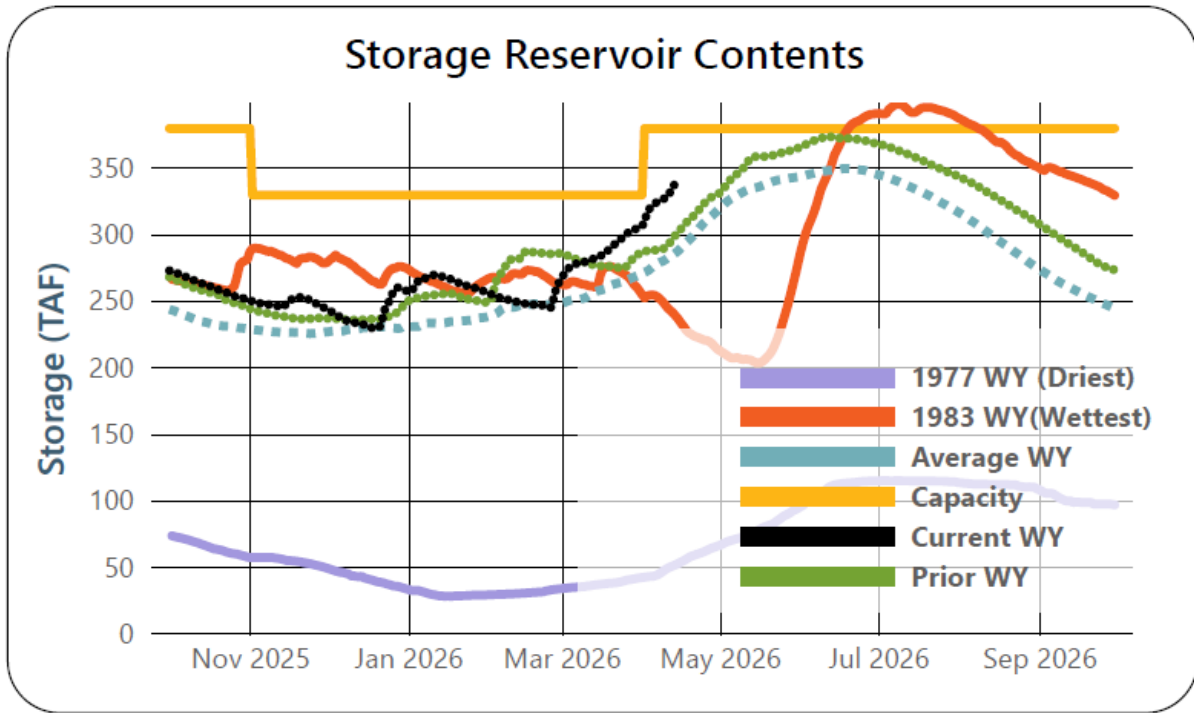


Figure 3. Storage Reservoir Contents

Figure 3 is a line graph of SMUD storage reservoir contents for October 2025 through September 2026. It includes data from the driest water year (1977), 1983’s water year snowpack, average, current, and prior water year. The total capacity of the reservoir network is also shown.

Table 2. SMUD Storage Reservoirs

Reservoir	Capacity Acre-ft	Current Acre-ft	Current % Full	Prior Year Acre-Ft	Prior Year % Full	Hist. Avg Acre-ft	Hist. Avg % Full
Loon Lake Reservoir	69,310	63,310	91.3%	40,632	59%	45,873	66%
Ice House Reservoir	43,500	37,325	85.8%	31,485	72%	31,797	73%
Union Valley Reservoir	266,370	237,807	89.3%	225,307	85%	215,303	81%
Total Reservoir Storage	379,180	338,442	89.3%	297,423	78%	292,973	77%

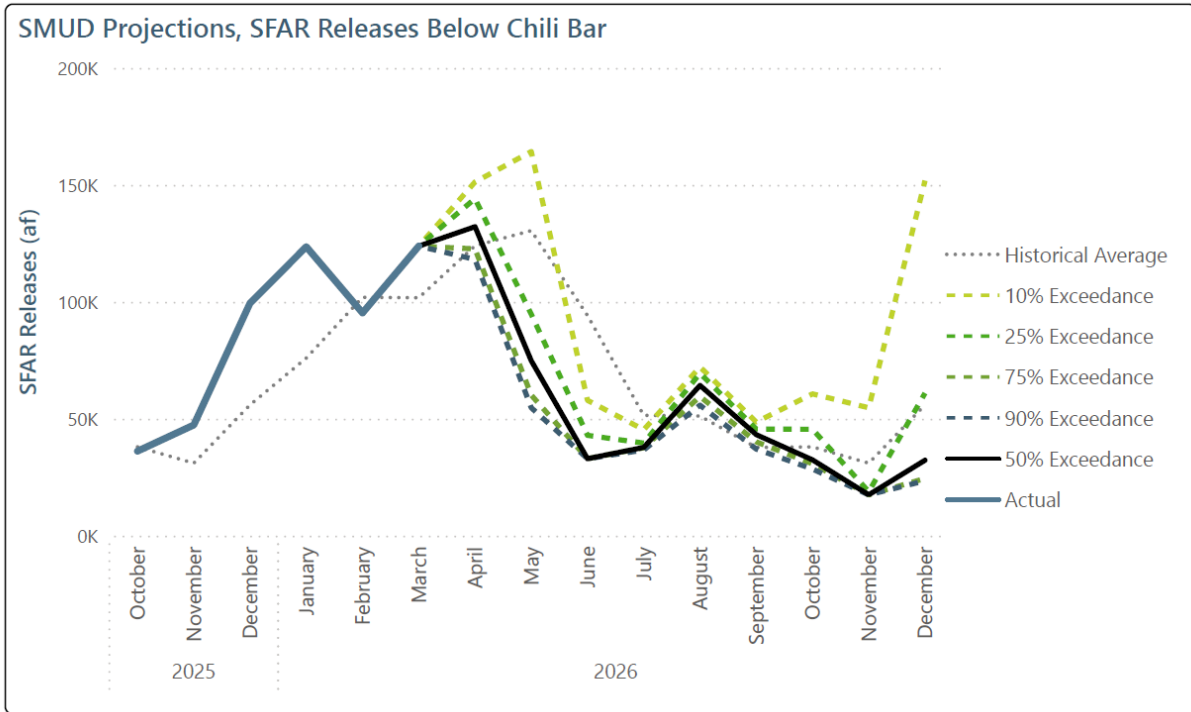


Figure 4. Chili Bar releases into the South Fork American River. Projections based on forecast from April 14th, 2026.

Figure 4 is a line graph of observed and projected releases below Chili Bar from October 2025 to December 2026. The graph includes a last 10-year average, actual prior water year data, and projections of 90%, 75%, 50%, 25%, and 10% exceedance likelihood.

Table 3. Chili Bar releases into the South Fork American River

Type (Actual or Forecast)	Date	Daily Mean Release Rate (cfs)	Monthly Total Release (acre-ft)	Monthly Total Release (90% Exceedance)	Monthly Total Release (10% Exceedance)
Actual	Oct-25	589	36,150	36,150	36,150
Actual	Nov-25	797	47,329	47,329	47,329
Actual	Dec-25	1,619	99,405	99,405	99,405
Actual	Jan-26	2,013	123,558	123,558	123,558
Actual	Feb-26	1,718	95,255	95,255	95,255
Actual	Mar-26	2,017	123,809	123,809	123,809
Forecast	Apr-26	2,224	132,125	118,117	151,236
Forecast	May-26	1,219	74,804	54,713	164,227
Forecast	Jun-26	554	32,911	32,911	57,863
Forecast	Jul-26	615	37,755	36,624	45,303
Forecast	Aug-26	1,047	64,256	55,803	72,139

Type (Actual or Forecast)	Date	Daily Mean Release Rate (cfs)	Monthly Total Release (acre-ft)	Monthly Total Release (90% Exceedance)	Monthly Total Release (10% Exceedance)
Forecast	Sep-26	727	43,203	37,029	48,607
Forecast	Oct-26	528	32,418	28,503	60,637
Forecast	Nov-26	294	17,471	17,471	54,681
Forecast	Dec-26	526	32,256	23,462	151,825

## PCWA MFP OPERATIONS OVERVIEW for American River Operations Group

(Real Time Data as of April 15, 2026)

- French Meadows Storage = 116,000 AF of 136,405 AF = 85% Capacity
  - MFAR above FM Inflow (R24) = 7-day AVG ~285 cfs
  - 30-day AVG ~340 cfs; Peak = 3,048 cfs
- Hell Hole Storage = 208,697 AF of 207,590 AF = 100% Capacity
  - Five Lakes Inflow (R23) = 7-day AVG ~200 cfs
  - Rubicon Inflow (R22) = 7-day AVG ~340 cfs
- Combined Storage (FM+HH) = 325,000 AF/342,590 AF = 46% Capacity; ~147% of historical average
- MFAR @ R11: 7-day daily average ~2,300 cfs
- NFAR @ ARPS: 7-day daily average ~4,350 cfs
- Combined storage for the last 7 days => +14,000 AF
- Combined storage 4/16/2025 = 223 TAF; 106% of HISTORICAL AVG
- Extended PG&E TIGO on 230kV – expected to return to service today @1200.
- May 1 B-120 will set minimum flows and recreational releases through September.
- No Pulse flows this year – April B-120 was Below normal (BN).

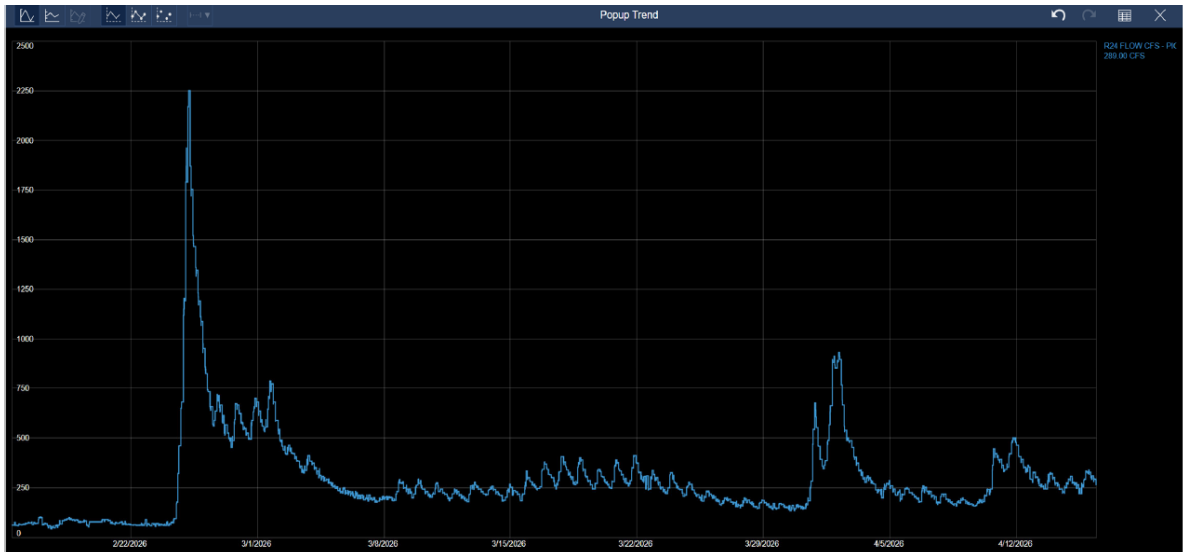


Figure 5. Middle Fork American River at French Meadows Precipitation Forecast

Figure 5 is a line graph of precipitation forecast at Middle Fork American River at French Meadows. It shows river flow (in cubic feet per second) over time from January to mid-April 2026. Flow is low around 50–100 cfs until a sharp spike in late February reaching approximately 2,200 cfs, followed by a rapid decline to 500–700 cfs and gradual tapering. Through March, flows fluctuate moderately between about 200–400 cfs. In early April, a second smaller peak reaches roughly 900 cfs, then declines again. A final smaller rise occurs in mid-April, peaking near 500 cfs before stabilizing around 250–300 cfs.

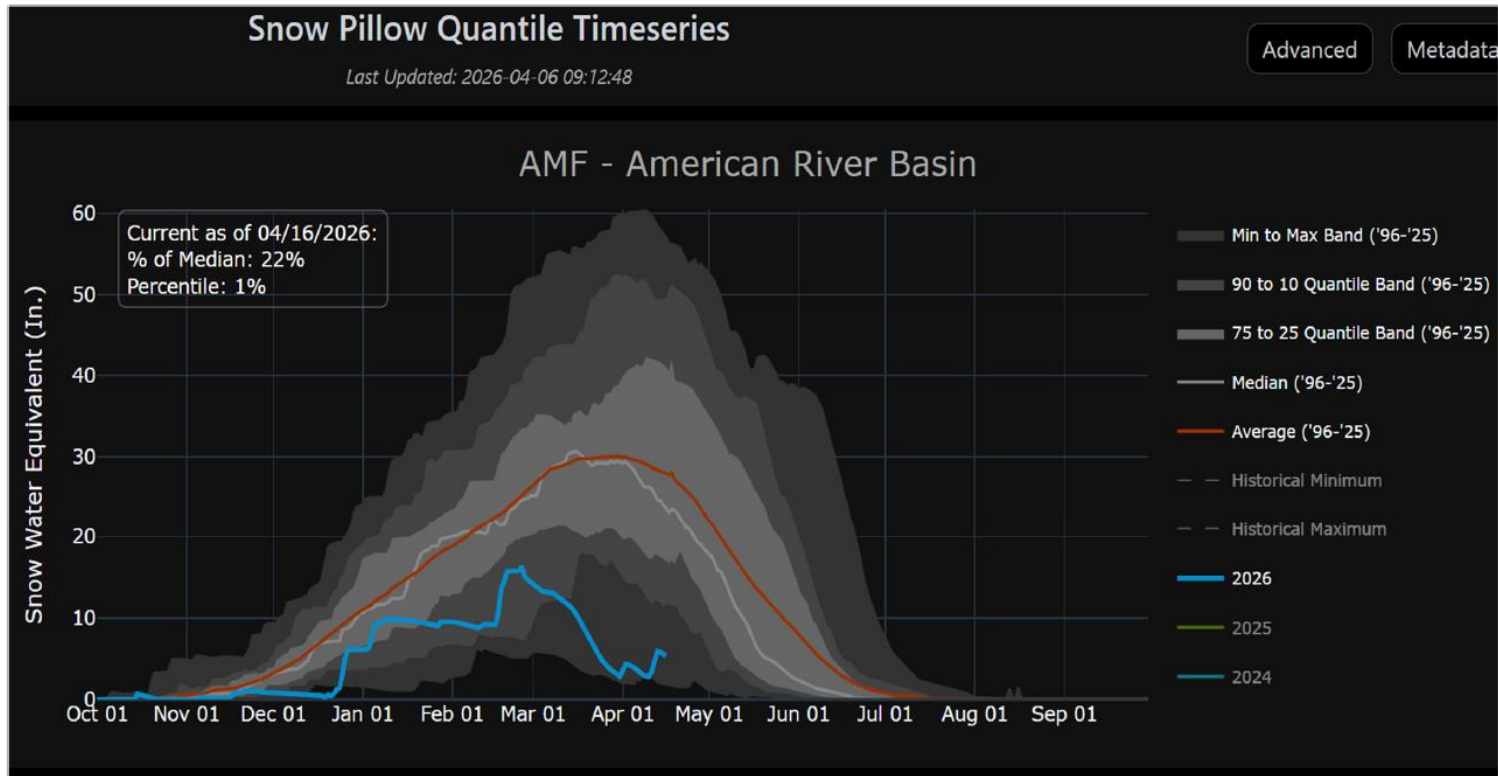


Figure 6. Snow Pillow Quantile Timeseries at American River Basin

Figure 6 displays snow water equivalent (SWE) in inches over the water year compared to the historical range (1996–2025). Shaded bands show the historical minimum–maximum range and the 90–10 and 75–25 percentile bands, with the historical median and average shown for reference. Lines represent recent water years (2023–2026). As of April 16, 2026, SWE is approximately 22% of median (1st percentile), tracking below average but within the historical range.

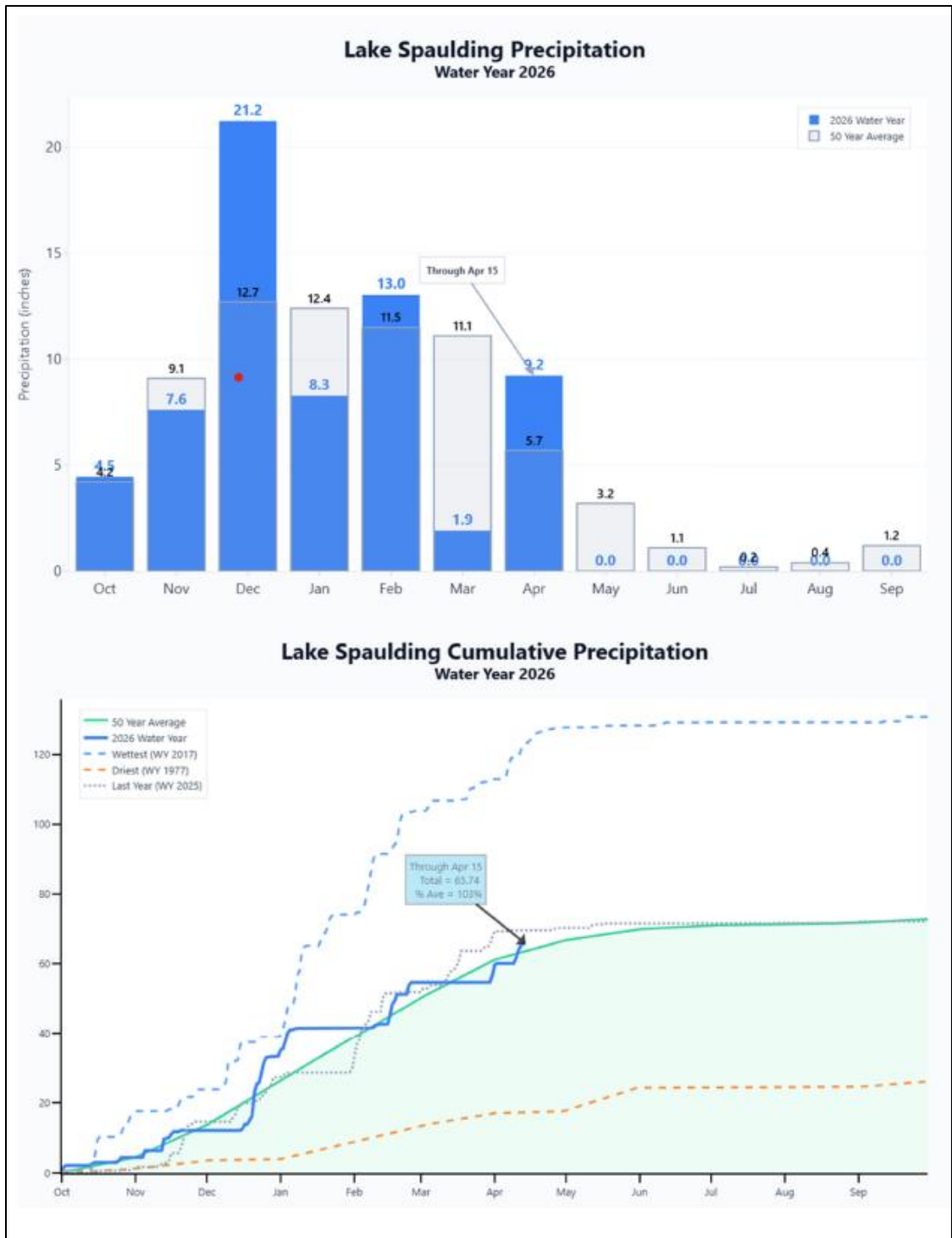


Figure 7. Lake Spaulding Precipitation: Water Year 2026

Figure 7 has two graphs. The first is a bar graph showing total precipitation over time. The second is a line graph comparing the total precipitation with the 50-year average, the 2026 water year, the wettest water year, the driest water year, and the last water year. Totals through April 15th is 65.74 inches and 103% of average.



Figure 8. April 15, 2026, Hell Hole Dam

Figure 8 is an image of the Hell Hole Dam Spillway at 4,650 msl as of April 15, 2026.

Table 4. Reservoir Releases in Cubic Feet/Second

Reservoir	Dam	WY 2025	WY 2026	15 Yr Median
Trinity	Lewiston	2,008	1,090	317
Sacramento	Keswick	4,587	6,474	4,645
Feather	Oroville (SWP)	11,000	5,000	1,900
American	Nimbus	6,157	7,241	3,262
Stanislaus	Goodwin	855	1,261	1,261
San Joaquin	Friant	931	880	460

Table 5. Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15 Yr Avg	WY 2025	WY 2026	% of 15 Yr Avg
Trinity	2,448	1,741	2,193	2,243	129
Shasta	4,552	3,649	4,347	4,100	112
Folsom	977	698	907	899	129
New Melones	2,420	1,552	2,003	1,862	120
Fed. San Luis	966	706	852	781	111
Total North CVP	11,363	8,345	10,302	9,885	118
Millerton	521	306	382	436	143
Oroville (SWP)	3,425	2,641	3,115	3,240	123

Table 6. Accumulated Inflow for Water Year to Date in Thousands of Acre-Feet

Reservoir	Current WY 2026	WY 1977	WY 1983	15 Yr Avg	% of 15 Yr Avg
Trinity	898	94	1,336	684	131
Shasta	3,619	1,492	7,589	3,379	107
Folsom	1,621	209	3,828	1,563	104
New Melones	480	N/A	1,214	508	94
Millerton	769	115	1,763	581	132

Table 7. Accumulated Precipitation for Water Year to Date in Inches

<b>Reservoir</b>	<b>Current WY 2026</b>	<b>WY 1977</b>	<b>WY 1983</b>	<b>Average (N Years)</b>	<b>% of Average</b>	<b>Last 24 Hours</b>
Trinity at Fish Hatchery	28.07	9.27	50.70	27.14(-66)	103	0.00
Sacramento at Shasta Dam	63.05	11.04	103.04	53.47(-71)	118	0.01
American at Blue Canyon	53.88	15.64	94.96	57.29(-52)	94	0.00
Stanislaus at New Melones	25.29	N/A	41.62	24.38(-49)	104	0.00
San Joaquin at Huntington Lk	28.80	11.50	74.10	35.46(-53)	81	0.23

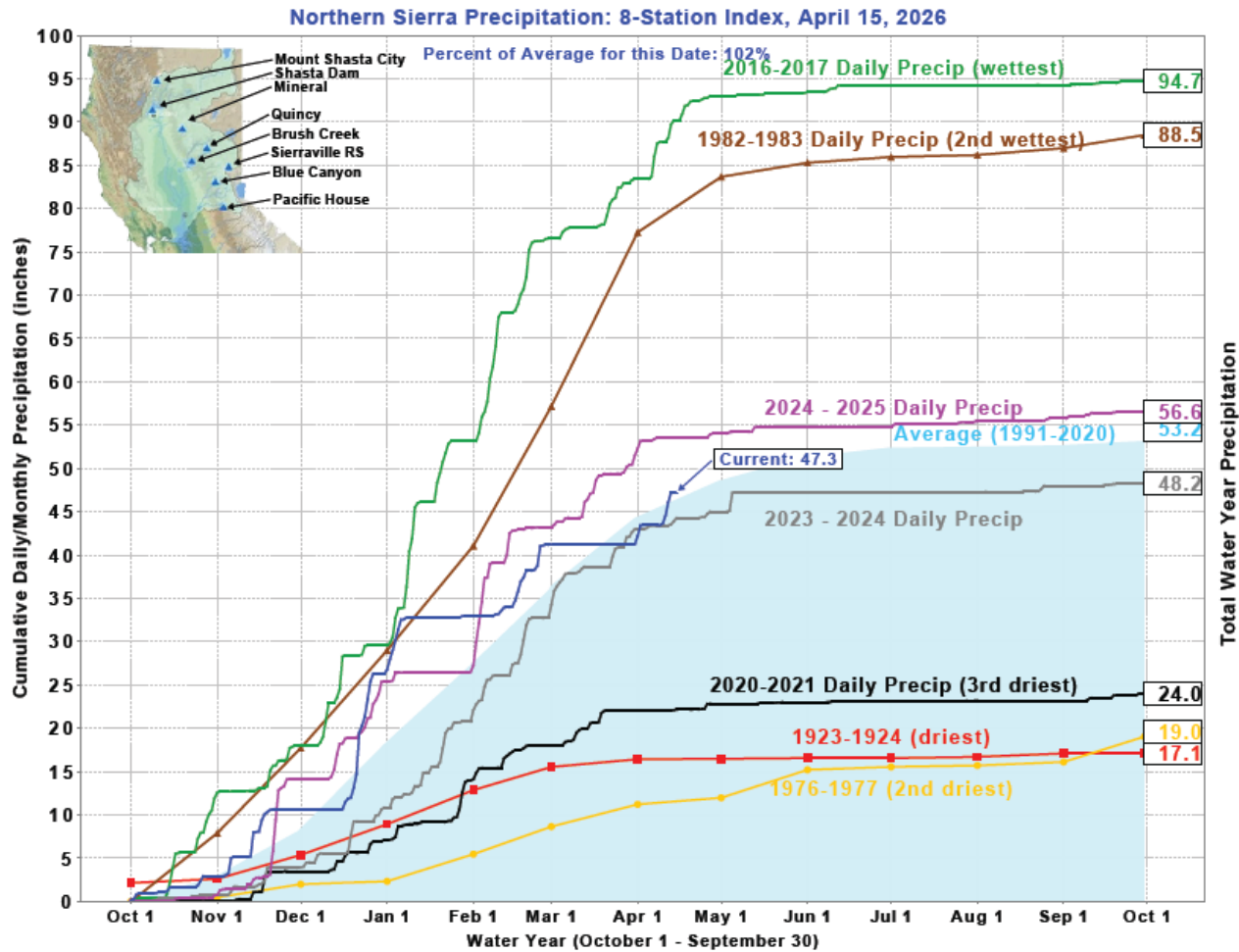


Figure 9. Total and Daily/Monthly Precipitation for Water Year 2026

Figure 9 is a graph depicting total year precipitation and cumulative daily/monthly precipitation in inches. The average for 1991-2020 is shown in shaded blue area (53.2 inches), 2016-2017 daily precipitation is the wettest at 94.7 inches, daily precipitation for 1982-1983 as the 3rd wettest 88.5 inches, 2023-2024 daily precipitation at 48.2 inches, current water year at 47.3 inches, 2024-2025 daily precipitation at 56.6 inches, 2020-2021 daily precipitation at 24.0 inches, 1923-1924 at 17.1 inches, and 1976-1977 at 19.0 inches. Percent of Average for April 15<sup>th</sup>, 2026 is 102%.



### Northern Sierra 8-Station Precipitation Index for Water Year 2026 - Updated on April 15, 2026 09:48 AM

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

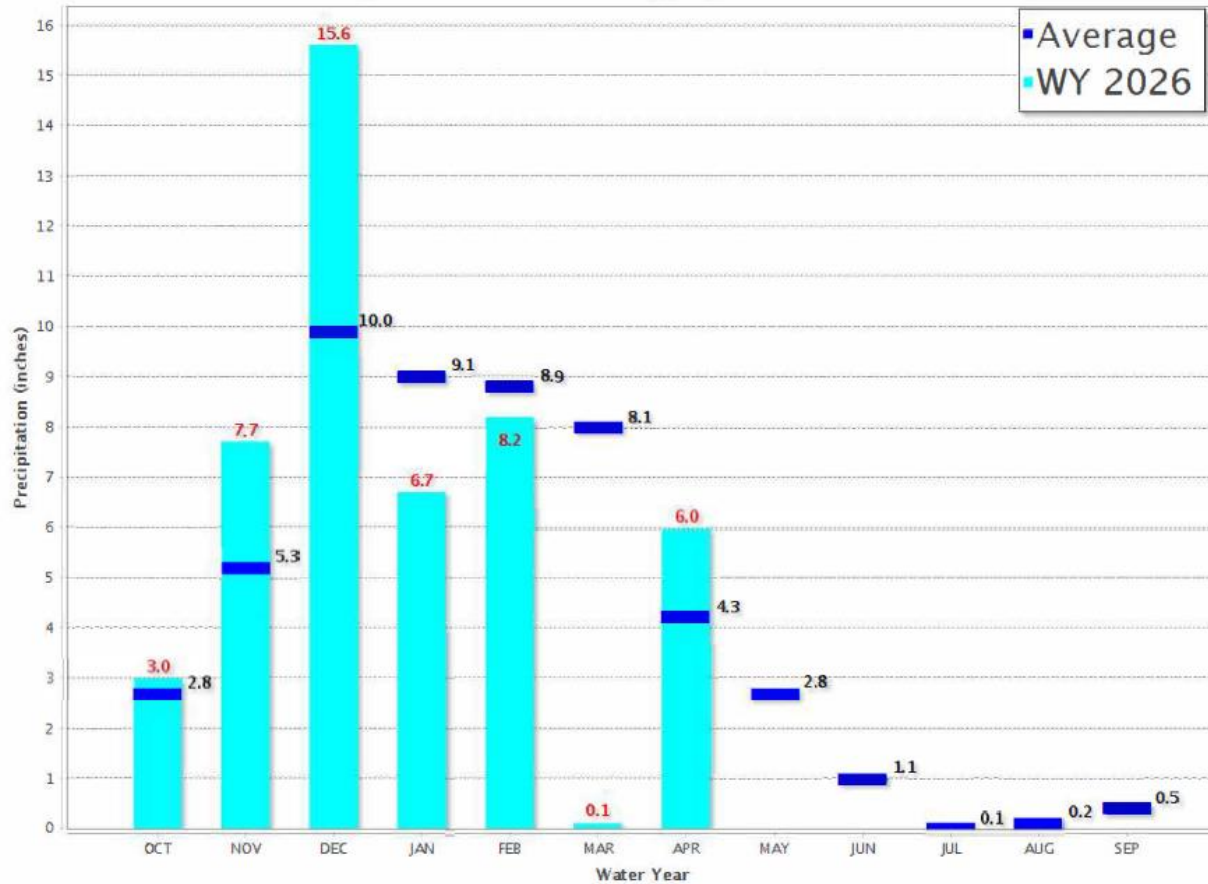


Figure 10. Northern Sierra 8-Station Precipitation Index

Figure 10 displays monthly precipitation totals for Water Year (WY) 2026 compared to the long-term average for the Northern Sierra 8-Station Index. Bars show observed WY 2026 precipitation through April, while markers indicate the historical average by month. The figure shows above-average precipitation in November, December, and April, with October and January closer to typical conditions.

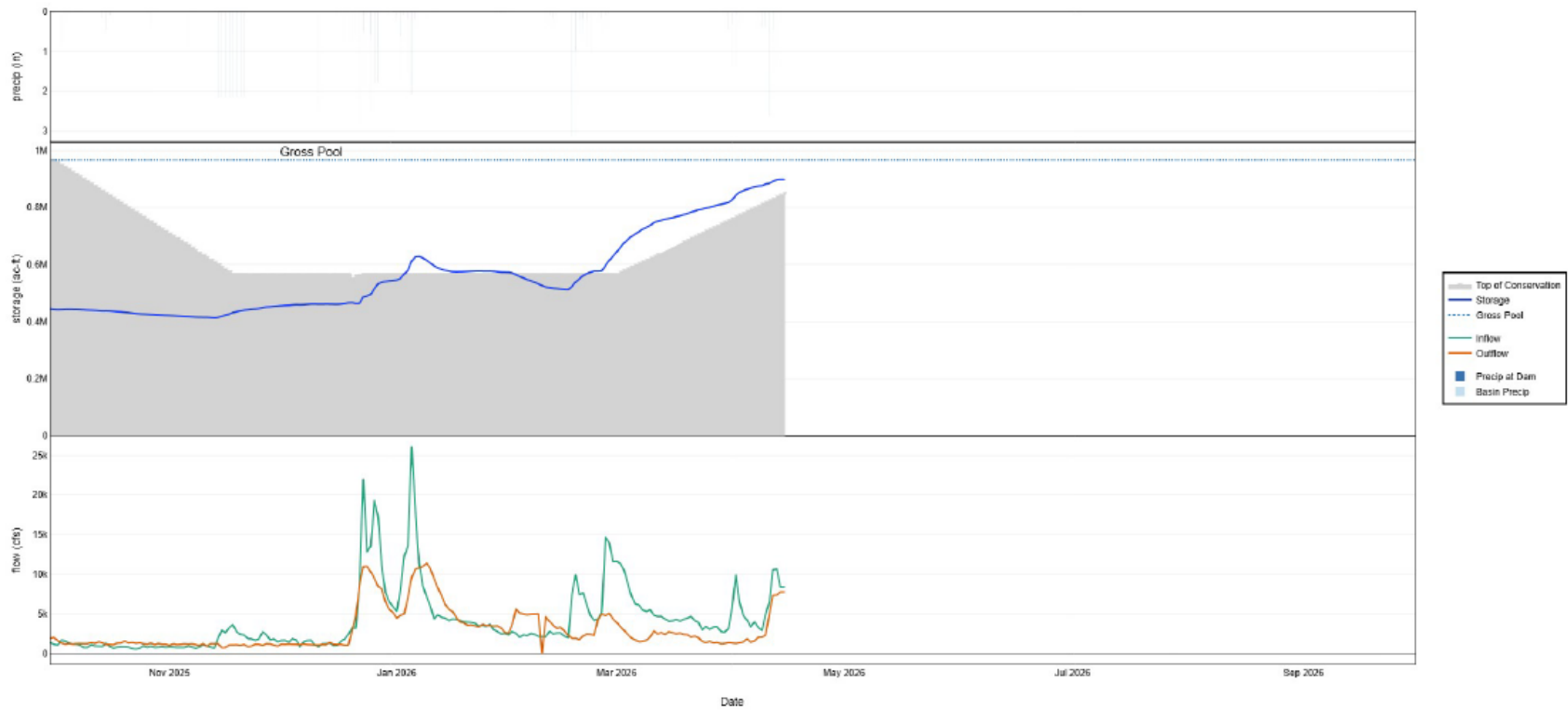


Figure 11. Folsom Dam and Lake Flow, Storage, and Precipitation Totals

Figure 11 is a graph that compares the flow, storage, and precipitation over time for the American River Basin.

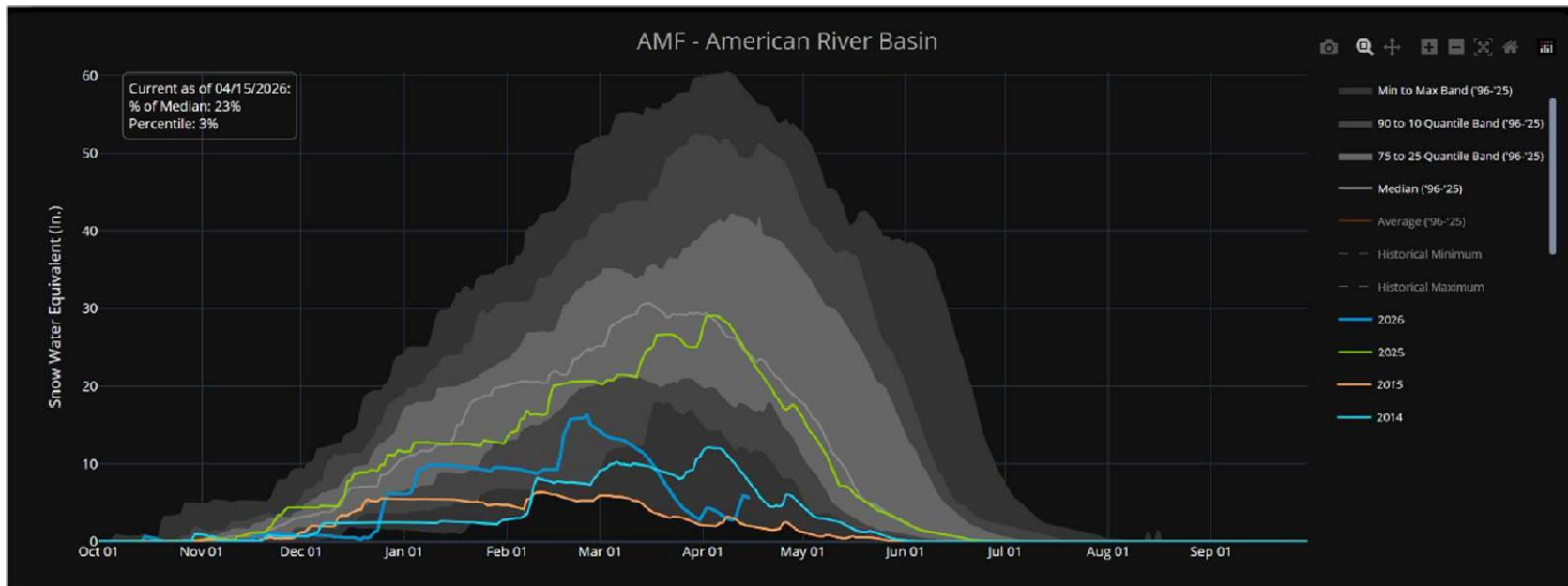


Figure 12. Snow Pillow Quantile Timeseries Dashboard at AMF (American River Basin)

Figure 12 displays snow water equivalent (SWE) for the American River Basin compared to the historical range (1996–2025). Shaded bands show the historical minimum–maximum range and the 90–10 and 75–25 percentile bands, with the historical median and average shown for reference. Lines represent recent water years. As of April 15, 2026, basin SWE is approximately 23% of median (3rd percentile).

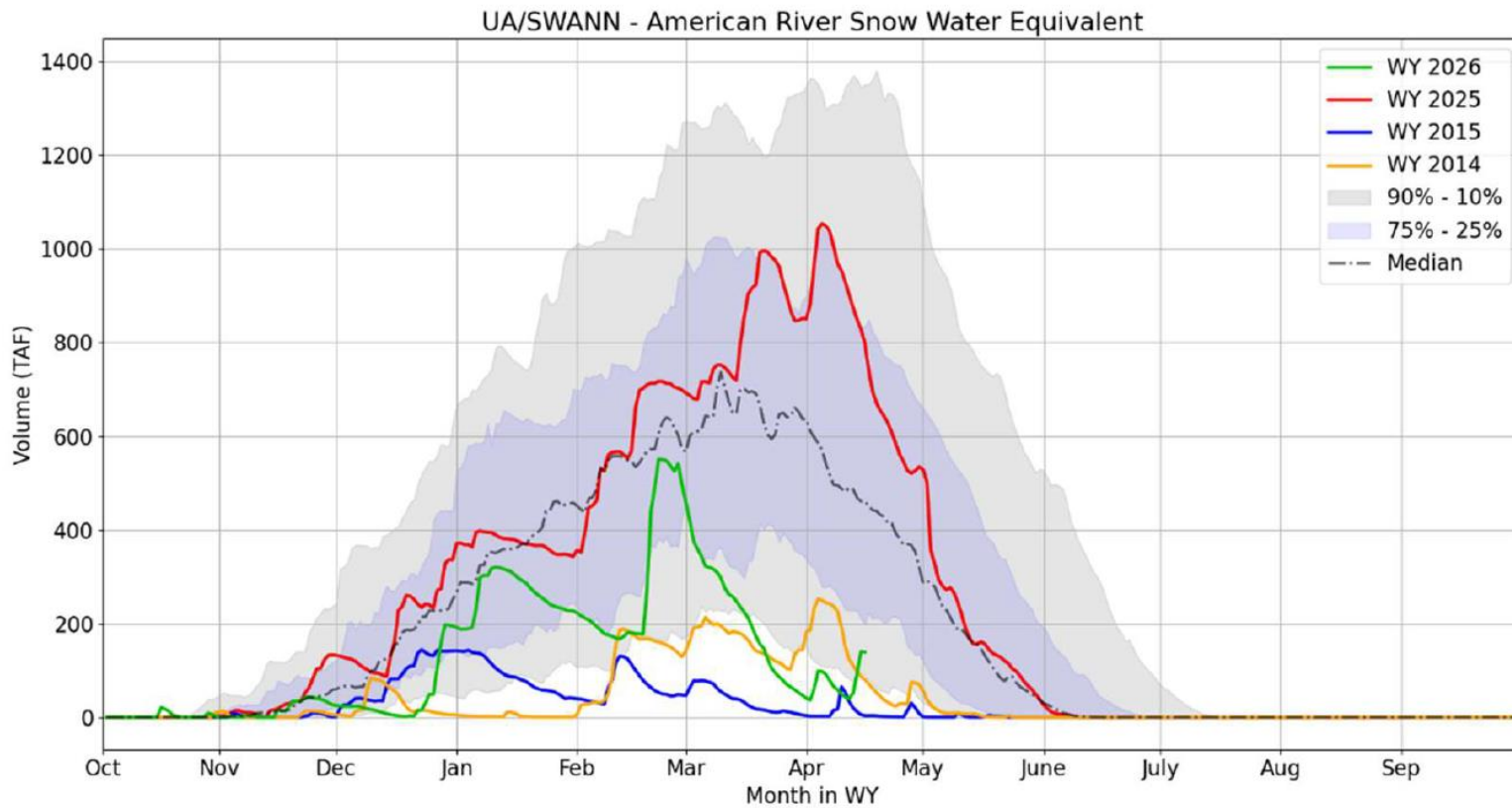


Figure 13. UA/SWANN – American River Snow Water Equivalent

Figure 13 displays snow water equivalent (SWE) for the American River Basin compared to water years 2014-2026. Shaded bands show the 90–10 and 75–25 percentile bands, with the median shown for reference. Lines represent recent water years.

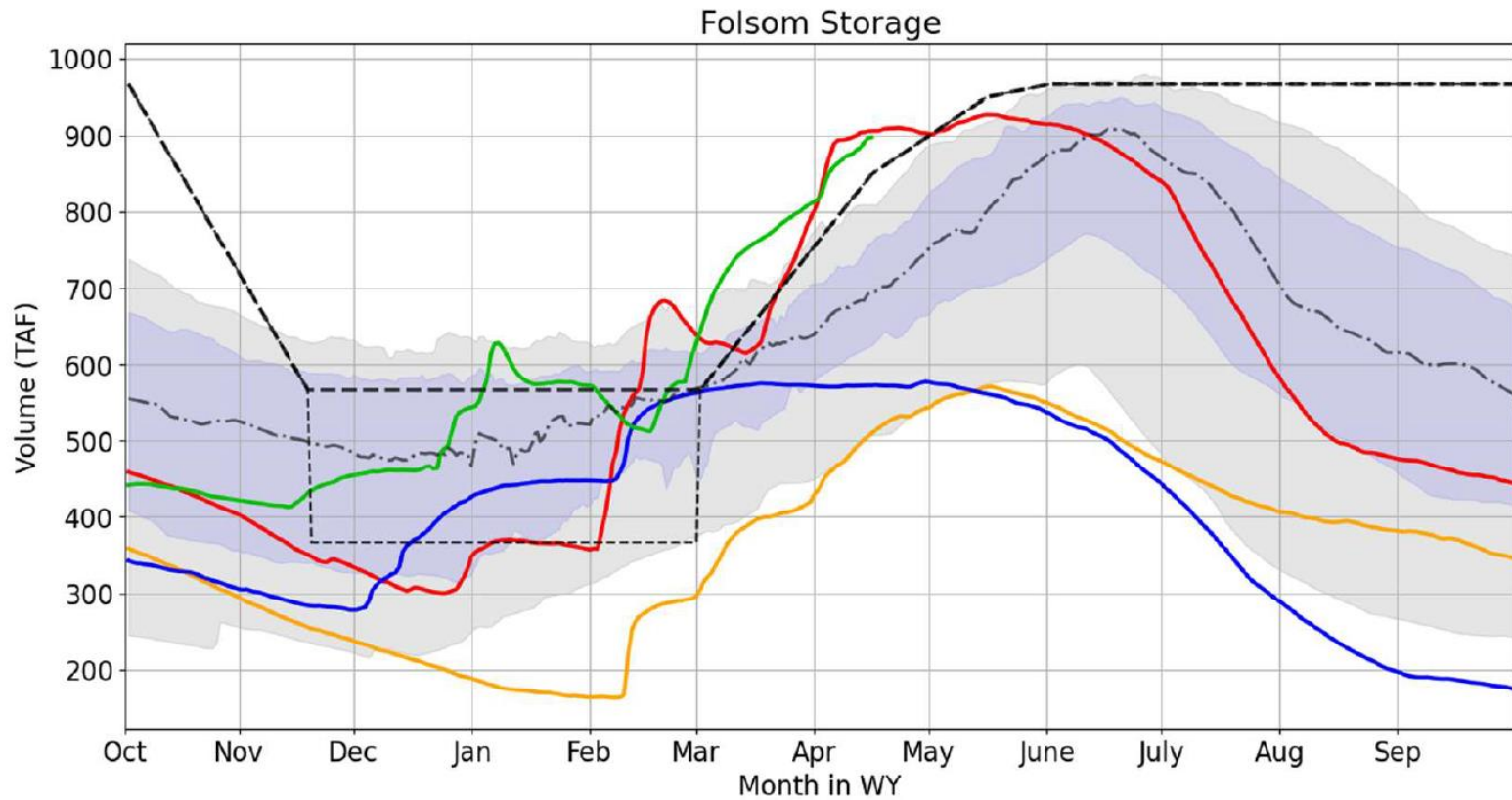


Figure 14. Snow Pillow Quantile Timeseries Dashboard at AMF (American River Basin)

Figure 14 displays snow water equivalent (SWE) for Folsom Storage compared to water years 2014-2026. Shaded bands show the 90-10 and 75-25 percentile bands, with the median shown for reference. Lines represent recent water years.

Table 8. March 2026 | Folsom Lake Daily Operations | Run Date: 04/10/2026

Day	Elev	Storage (1000 Acre-Feet) in Lake	Storage (1000 Acre-Feet) Change	Computed* Inflow C.F.S.	Release - C.F.S. River Power	Release - C.F.S. River Spill	Release - C.F.S. River Outlet	Pumping Plant	Evap. - C.F.S.	Evap. - Inches	Precip Inches
N/A	N/A	644.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	435.06	659.7	15.8	11,373	3,322	0	0	78	28	0.09	0.00
2	436.67	674.8	15.0	10,523	2,842	0	0	76	28	0.09	0.00
3	438.02	687.5	12.7	8,862	2,346	0	0	74	28	0.09	0.00
4	439.12	697.9	10.5	7,259	1,868	0	0	77	38	0.12	0.00
5	440.05	706.8	8.9	6,269	1,634	0	0	79	67	0.21	0.00
6	440.99	715.9	9.1	6,110	1,396	0	0	87	61	0.19	0.00
7	441.78	723.6	7.7	5,467	1,456	0	0	91	58	0.18	0.00
8	442.50	730.6	7.0	5,292	1,606	0	0	93	58	0.18	0.00
9	443.19	737.3	6.7	5,512	1,954	0	0	98	59	0.18	0.00
10	443.79	743.2	5.9	5,385	2,266	0	0	102	46	0.14	0.00
11	444.18	747.0	3.8	4,829	2,745	0	0	99	49	0.15	0.00
12	444.61	751.3	4.2	4,687	2,406	0	0	92	46	0.14	0.00
13	445.01	755.3	4.0	4,681	2,526	0	0	113	49	0.15	0.00
14	445.39	759.0	3.8	4,373	2,306	0	0	111	50	0.15	0.00
15	445.65	761.6	2.6	4,092	2,629	0	0	114	46	0.14	0.00

Day	Elev	Storage (1000 Acre- Feet) in Lake	Storage (1000 Acre- Feet) Change	Computed* Inflow C.F.S.	Release - C.F.S. River Power	Release - C.F.S. River Spill	Release - C.F.S. River Outlet	Pumping Plant	Evap. - C.F.S.	Evap. - Inches	Precip Inches
16	445.94	764.5	2.9	4,131	2,508	0	0	119	50	0.15	0.00
17	446.29	768.0	3.5	4,304	2,366	0	0	123	50	0.15	0.00
18	446.58	770.9	2.9	4,101	2,454	0	0	126	57	0.17	0.00
19	446.94	774.5	3.6	4,308	2,283	0	0	125	83	0.25	0.00
20	447.35	778.6	4.1	4,486	2,230	0	0	132	43	0.13	0.00
21	447.85	783.7	5.0	4,674	1,944	0	0	133	57	0.17	0.00
22	448.22	787.4	3.7	4,139	2,065	0	0	130	57	0.17	0.00
23	448.59	791.2	3.8	3,936	1,846	0	0	134	64	0.19	0.00
24	448.86	793.9	2.7	2,967	1,388	0	0	132	67	0.20	0.00
25	449.24	797.8	3.9	3,402	1,261	0	0	129	61	0.18	0.00
26	449.52	800.6	2.9	3,040	1,397	0	0	141	61	0.18	0.00
27	449.90	804.5	3.9	3,346	1,197	0	0	140	54	0.16	0.00
28	450.27	808.3	3.8	3,373	1,262	0	0	137	61	0.18	0.00
29	450.55	811.2	2.9	2,760	1,093	0	0	139	78	0.23	0.00
30	450.81	813.9	2.7	2,683	1,132	0	0	137	68	0.20	0.00
31	451.15	817.4	3.5	3,145	1,267	0	0	113	0	0.00	0.44
Totals	N/A	N/A	173.5	153,509	60,995	0	0	3,474	1,622	4.91	0.44
Acre- Feet	N/A	N/A	173,500	304,485	120,984	0	0	6,891	3,217	N/A	N/A

\* Computed inflow is the sum of change in storage, releases, pumping, and evaporation

Summary: Release (acre-feet)

Power	120,984
Spill	0
Outlet	0
Pumping Plant	6,891
Total Releases	127,874

Summary: Precipitation (Month/Inches)

This month	0.44
October 1, 2025 to date	31.53

Table 9. April 2026 | Folsom Lake Daily Operations | Run Date: 04/15/2026

Day	Elev	Storage (1000 Acre-Feet) in Lake	Storage (1000 Acre-Feet) Change	Computed* Inflow C.F.S.	Release - C.F.S. River Power	Release - C.F.S. River Spill	Release - C.F.S. River Outlet	Pumping Plant	Evap. - C.F.S.	Evap. - Inches	Precip Inches
N/A	N/A	817.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	451.97	825.8	8.5	5,606	1,223	0	0	112	0	0.00	0.32
2	453.60	842.8	17.0	9,894	1,176	0	0	106	55	0.16	0.07
3	454.57	853.0	10.2	6,536	1,224	0	0	127	56	0.16	0.00
4	455.19	859.5	6.5	4,810	1,334	0	0	128	56	0.16	0.00
5	455.62	864.1	4.5	4,218	1,699	0	0	150	77	0.22	0.00
6	455.97	867.8	3.7	3,368	1,278	0	0	140	84	0.24	0.00
7	456.40	872.3	4.6	3,983	1,466	0	0	150	63	0.18	0.00
8	456.63	874.8	2.4	3,323	1,888	0	0	140	63	0.18	0.00
9	456.79	876.5	1.7	2,918	1,909	0	0	151	0	0.00	0.38
10	457.27	881.6	5.1	4,889	2,182	0	0	127	0	0.00	0.38
11	457.55	884.6	3.0	6,504	4,889	0	0	106	0	0.00	2.62
12	458.15	891.0	6.4	10,563	7,206	0	0	120	0	0.00	0.44
13	458.75	897.4	6.4	10,661	5,945	1,305	0	118	43	0.12	0.02
14	458.85	898.5	1.1	8,365	6,420	1,243	0	106	54	0.15	0.00
Totals	N/A	N/A	81.1	85,638	39,839	2,548	0	1,781	551	1.57	4.23
Acre-Feet	N/A	N/A	81,100	169,863	79,021	5,054	0	3,533	1,093	N/A	N/A

\* Computed inflow is the sum of change in storage, releases, pumping, and evaporation

Summary: Release (acre-feet)

Power	79,021
Spill	5,054
Outlet	0
Pumping Plant	3,533
Total Releases	87,607

Summary: Precipitation (Month/Inches)

This month	4.23
October 1, 2025 to date	35.76

Table 10. March 2026 | Lake Natoma Daily Operations | Run Date: 04/10/2026

Day	Elev	Storage (Acre-Feet) in Lake	Storage (Acre-Feet) Change	Computed * Inflow C.F.S.	Release - C.F.S. Folsom South	Release - C.F.S. Power	Release - C.F.S. Spill	Release - C.F.S. Hatchery	Evap. - C.F.S. (1)
N/A	N/A	7,876	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	123.15	7,862	-14	3,402	10	3,288	0	110	1
2	123.33	7,946	84	2,909	0	2,756	0	110	1
3	123.53	8,040	94	2,413	0	2,255	0	110	1
4	123.47	8,012	-28	1,901	0	1,637	166	110	2
5	124.07	8,296	284	1,661	0	1,437	0	78	3
6	123.66	8,101	-195	1,419	0	1,130	345	40	2
7	123.29	7,927	-174	1,447	0	1,139	354	40	2
8	123.70	8,120	193	1,567	0	957	471	40	2
9	123.10	7,838	-282	1,971	0	1,298	773	40	2
10	122.55	7,589	-249	2,370	0	2,454	0	40	2
11	123.46	8,007	418	2,707	1	2,453	0	40	2
12	123.04	7,810	-197	2,399	25	1,820	611	40	2
13	123.18	7,876	66	2,522	50	2,175	222	40	2
14	122.65	7,634	-242	2,326	50	1,727	629	40	2
15	123.14	7,857	223	2,609	45	1,857	553	40	2
16	123.33	7,946	89	2,516	30	2,399	0	40	2

Day	Elev	Storage (Acre-Feet) in Lake	Storage (Acre-Feet) Change	Computed * Inflow C.F.S.	Release - C.F.S. Folsom South	Release - C.F.S. Power	Release - C.F.S. Spill	Release - C.F.S. Hatchery	Evap. - C.F.S. (1)
17	123.05	7,815	-131	2,427	30	2,421	0	40	2
18	123.03	7,805	-10	2,492	30	2,425	0	40	2
19	123.26	7,913	108	2,324	30	2,197	0	40	3
20	123.38	7,970	57	2,255	30	2,154	0	40	2
21	122.57	7,598	-372	2,018	30	2,134	0	40	2
22	123.32	7,941	343	2,040	30	1,795	0	40	2
23	123.48	8,017	76	1,848	36	1,669	63	40	2
24	122.93	7,760	-257	1,402	40	1,449	0	40	3
25	121.97	7,328	-432	1,305	44	1,437	0	40	2
26	122.59	7,607	279	1,336	49	1,104	0	40	2
27	122.57	7,598	-9	1,180	51	1,092	0	40	2
28	122.78	7,692	94	1,231	51	1,091	0	40	2
29	122.40	7,521	-171	1,100	51	1,092	0	40	3
30	122.20	7,431	-90	1,120	38	1,084	0	40	3
31	122.62	7,620	189	1,236	30	1,071	0	40	0
Totals	N/A	N/A	-256	61,453	781	54,997	4,187	1,558	62
Acre-Feet	N/A	N/A	-256	121,892	1,549	109,087	8,305	3,090	123

\*Computed inflow is sum of change in storage, releases, and evaporation.

(1) Evaporation records taken from Folsom Pan.

Summary: Release (acre-feet)

Power	109,087
Spill	8,305
Folsom South Canal	1,549
Hatchery	3,090
Total Releases	122,031

Table 11. April 2026 | Lake Natoma Daily Operations | Run Date: 04/15/2026

Day	Elev	Storage (Acre-Feet) in Lake	Storage (Acre-Feet) Change	Computed* Inflow C.F.S.	Release - C.F.S. Folsom South	Release - C.F.S. Power	Release - C.F.S. Spill	Release - C.F.S. Hatchery	Evap. - C.F.S. (1)
N/A	N/A	7,620	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	123.19	7,880	260	1,292	24	1,097	0	40	0
2	123.22	7,894	14	1,171	19	1,103	0	40	2
3	123.30	7,932	38	1,182	14	1,107	0	40	2
4	122.89	7,742	-190	1,310	25	1,280	59	40	2
5	123.32	7,941	199	1,609	25	1,441	0	40	3
6	122.23	7,445	-496	1,267	25	1,449	0	40	3
7	121.80	7,257	-188	1,416	25	911	533	40	2
8	122.87	7,733	476	1,752	25	1,445	0	40	2
9	122.86	7,728	-5	1,839	25	1,777	0	40	0
10	123.62	8,082	354	2,174	25	1,931	0	40	0
11	124.07	8,296	214	4,995	13	3,786	1,048	40	0
12	123.88	8,205	-91	7,230	0	4,987	2,249	40	0
13	123.27	7,918	-287	7,104	0	4,996	2,211	40	2
14	123.94	8,233	315	7,402	0	4,521	2,680	40	2
Totals	N/A	N/A	613	41,743	245	31,831	8,780	560	20
Acre-Feet	N/A	N/A	613	82,797	486	63,137	17,415	1,111	40

\*Computed inflow is sum of change in storage, releases, and evaporation.

(1) Evaporation records taken from Folsom Pan.

Summary: Release (acre-feet)

Power	63,137
Spill	17,415
Folsom South Canal	486
Hatchery	1,111
Total Releases	82,149

Table 12. Isobath 04/01–04/14 (Mean Daily Temperature, Release, Storage, Unit Shutter Position/Load Percentage)

MDT = Mean Daily Temperature (°F)

USP/LP = Unit Shutter Position/Load Percentage

Date	MDT, Water NFA	MDT, Water ARP	MDT, Water AFD <sup>1</sup>	MDT, Water AFO	MDT, Water AWP	MDT, Water AWB	MDT, Air CSU	Release (CFS) Nimbus	Storage (TAF) Folsom	USP/LP Unit 1	USP/LP Unit 2	USP/LP Unit 3
04/01	53.8	54.9	51.4	54.0	55.2	56.0	57.3	1137	826	A16	A2	A83
04/02	51.5	54.7	51.8	54.3	55.8	56.9	55.8	1143	843	A16	A40	A43
04/03	51.4	53.6	51.6	55.0	56.9	57.8	65.1	1147	853	A17	A81	A2
04/04	52.1	53.7	52.0	54.6	57.2	59.0	63.9	1379	860	A14	A84	A1
04/05	53.1	54.6	51.8	54.6	55.5	58.3	65.4	1481	864	A13	A86	A1
04/06	54.7	55.5	51.7	54.4	57.1	58.7	63.8	1489	868	A15	A84	A1
04/07	56.1	54.4	51.7	54.2	56.4	58.1	61.1	1484	872	A15	A83	A1
04/08	57.3	55.0	51.9	54.9	57.3	58.8	65.4	1485	875	A24	A76	A1
04/09	58.3	56.4	51.7	54.3	56.9	59.0	66.8	1817	876	A27	A72	A1
04/10	58.0	54.1	51.8	54.6	55.6	56.9	60.3	1971	882	A54	A45	A1
04/11	56.2	53.9	51.6	53.9	54.9	56.0	55.8	4874	885	A38	A25	A36
04/12	52.1	53.6	52.2	52.7	53.2	53.7	54.1	7276	891	A33	A33	A34
04/13	50.1	53.6	53.5	52.5	53.2	53.7	54.3	7247	897	A34	A32	A34
04/14	51.4	52.3	53.0	54.0	54.7	55.2	57.6	7241	899	A33	A33	A34
04/15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date	MDT, Water NFA	MDT, Water ARP	MDT, Water AFD <sup>1</sup>	MDT, Water AFO	MDT, Water AWP	MDT Water AWB	MDT, Air CSU	Release (CFS) Nimbus	Storage (TAF) Folsom	USP/LP Unit 1	USP/LP Unit 2	USP/LP Unit 3
04/19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04/30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	Total AF	81661	N/A	N/A	N/A	N/A

Legend:

? = 1-9 hours of data missing

! = 10 or more hours of data missing

# = Station out of service

X = Exceedances

**Monthly Averages**

A = All Shutters Lowered

T = Top Shutter Raised

M = Middle Shutter Raised

B = Bottom Shutter Raised

O = Unit Outage

Notes:

1 AFD is a weighted average based on hourly flow values, including generation, bypass, and spill.

### American River Daily Average Water and Air Temperature April 2026

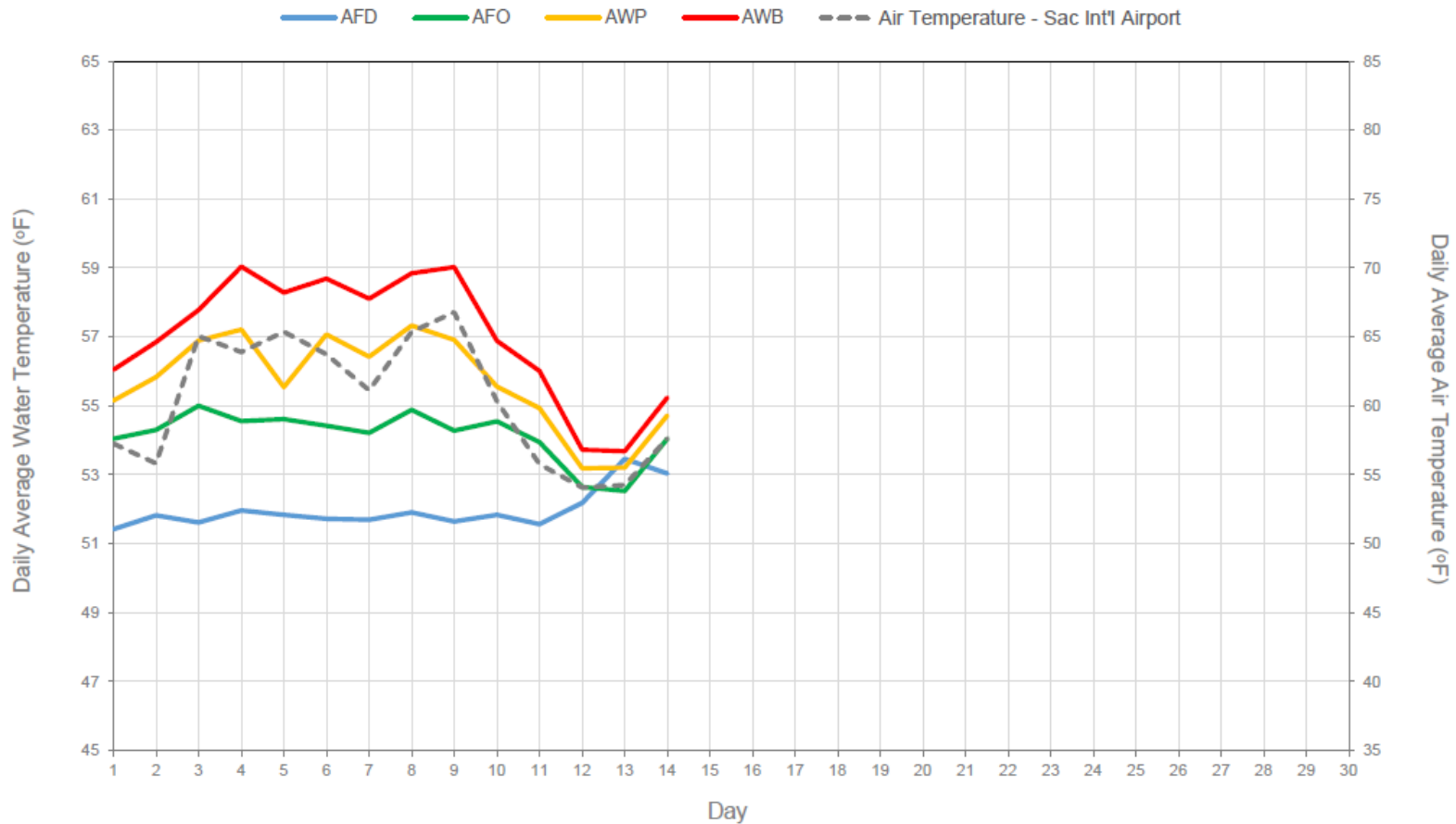


Figure 15. American River Daily Average Water and Air Temperatures

Figure 15 is a line graph comparing daily average water and air temperatures for days of the month (generalized). Temperatures from the AFD sensor is shown in light blue, AFO sensor in orange, AWP in green, AWB in red, and Sacramento International Airport in dotted gray. The target is indicated with a dotted red line.

Folsom Lake Isothermobaths Plot - 2025

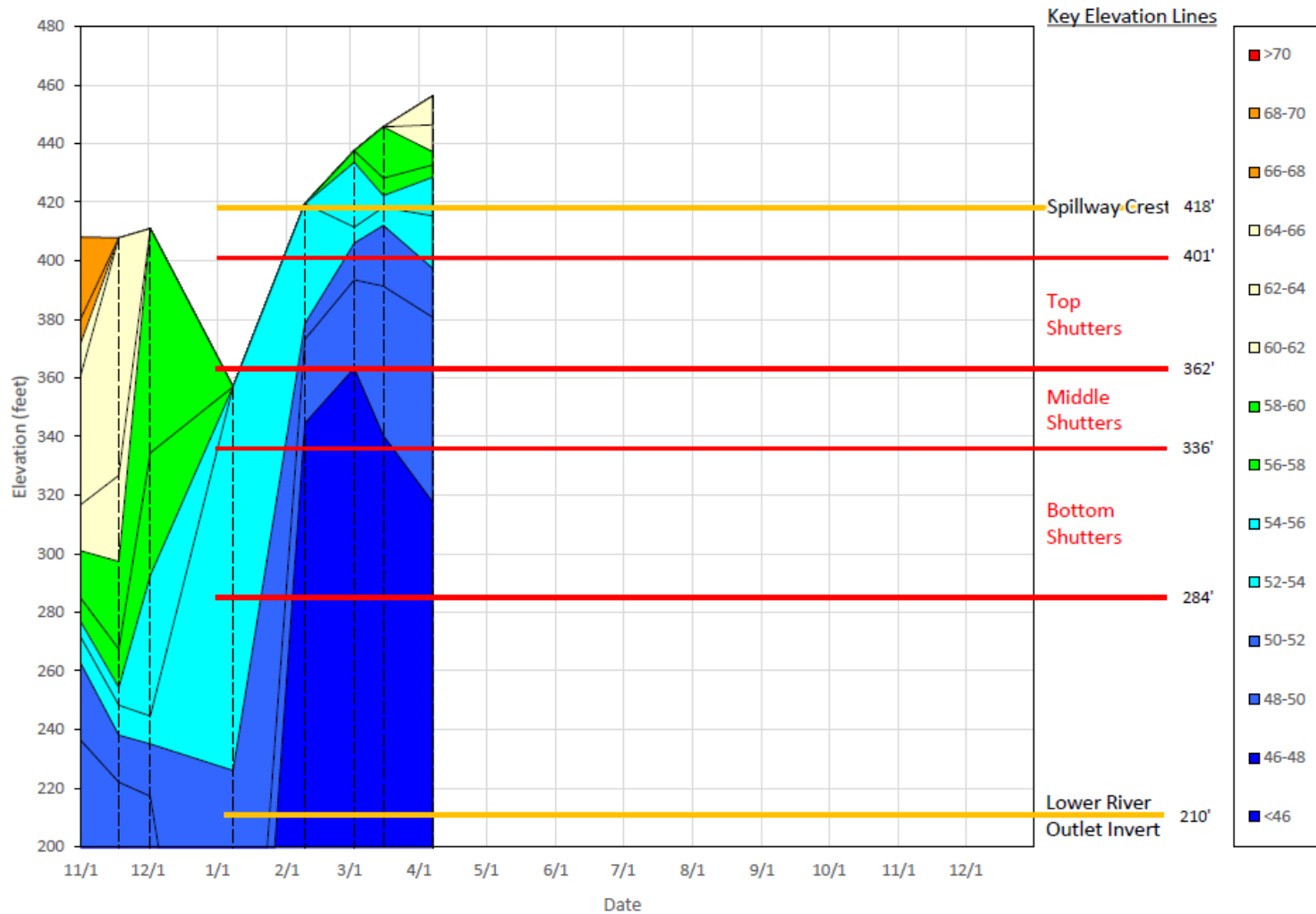


Figure 16. Isobath Plot 11/01 – 04/01

Figure 16 is an isobath Plot for November 2026 – April 2027 showing Spillway Crest, Top Shuttters, Middle Shuttters, Bottom Shuttters, and Lower River Outlet Invert

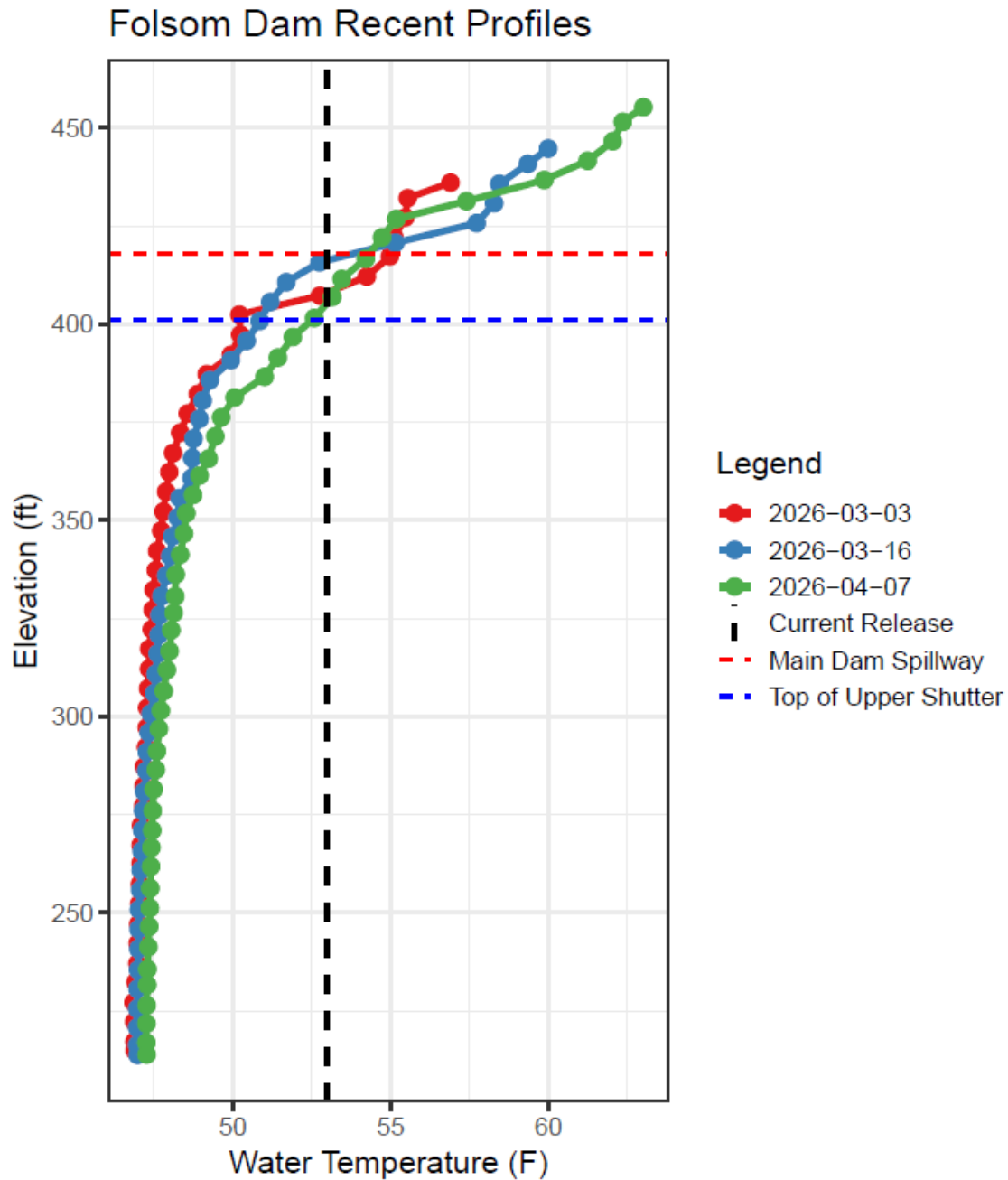


Figure 17. Folsom Dam Recent Profiles

Figure 17 is a chart showing the relationship between water temperature (°F) and elevation (ft) for March 3, 2026, March 16, 2026, and April 7, 2026, with colored lines indicating measurements. Horizontal dashed lines mark key elevation thresholds (main dam spillway and top of upper shutter), and a vertical dashed line indicates the current release temperature, showing how temperature profiles shift slightly warmer over time at higher elevations.

Table 13. American River Baseflow Table – WY 2026

Month	Index Used for Index-based MRR	Flood Mgmt (TAF) <sup>1</sup>	ARI or SRI	Index Based MRR (cfs)	RDPA-based MRR for fall-run Chinook salmon (applicable in Jan and Feb)	RDPA-based MRR for steelhead (applicable Feb to May)	Controlling MRR (cfs)	Actual Average Monthly Nimbus releases <sup>2</sup> (cfs)
October	May ARI <sup>3</sup> (50% exceedance)	0	1,614	992	NA	NA	992	1,079
November	May ARI <sup>3</sup> (50% exceedance)	0	1,614	992	NA	NA	992	1,071
December	May ARI <sup>3</sup> (50% exceedance)	159	1,614	992	NA	NA	992	3,638
January	Jan SRI (90% exceedance)	445	13.4 (SRI)	992	992	NA	992	5,743
February	Feb ARI (90% exceedance)	515	915	673	694	635	694	3,832
March	March ARI (90% exceedance)	572	1,265	1,063	NA	635	NA	1,959
April	April ARI (90% exceedance)	612 <sup>4</sup>	1,321	986	NA	635	986	2,610
May	May ARI (90% exceedance)	NA	NA	NA	NA	NA	NA	NA
June	May ARI <sup>3</sup> (90% exceedance)	NA	NA	NA	NA	NA	NA	NA
July	May ARI <sup>3</sup> (90% exceedance)	NA	NA	NA	NA	NA	NA	NA
August	May ARI <sup>3</sup> (90% exceedance)	NA	NA	NA	NA	NA	NA	NA
September	May ARI <sup>3</sup> (90% exceedance)	NA	NA	NA	NA	NA	NA	NA

Table 14. American River Baseflow Table – WY 2027

Month	Index Used for Index-based MRR	Flood Mgmt (TAF) <sup>1</sup>	ARI or SRI	Index Based MRR (cfs)	RDPB-based MRR for fall-run Chinook salmon (applicable in Jan and Feb)	RDPB-based MRR for steelhead (applicable Feb to May)	Controlling MRR (cfs)	Actual Average Monthly Nimbus releases <sup>2</sup> (cfs)
October	May ARI <sup>3</sup> (90% exceedance)	NA	NA	NA	NA	NA	NA	NA
November	May ARI <sup>3</sup> (90% exceedance)	NA	NA	NA	NA	NA	NA	NA
December	May ARI <sup>3</sup> (90% exceedance)	NA	NA	NA	NA	NA	NA	NA

1 Cumulative flood management releases as of the end of the corresponding month

2 Average of daily releases over the month from sum of Power, Spill, and Hatchery flows DailyOperationsNAT

3 B120 Forecasts are usually provided January through May. The May ARI would also be used for June-September of the current water year and October through December of the next water year unless there is an update to the ARI after May.

4 Accumulated spill as of 04/14/26

90% exceedance starting January 2025 (2024 ROD)

MRR=Minimum Release Requirement

RDPA=Redd Dewatering Protective Adjustment

ARI=American River Index

SRI=Sacramento River Index

NA = Not Applicable



# Lower American River Monitoring

## Dissolved Oxygen Monitoring

Below is a summary of dissolved oxygen and temperature in the American River in relation to flow since the previous ARG meeting. The next logger download is scheduled for May 1.

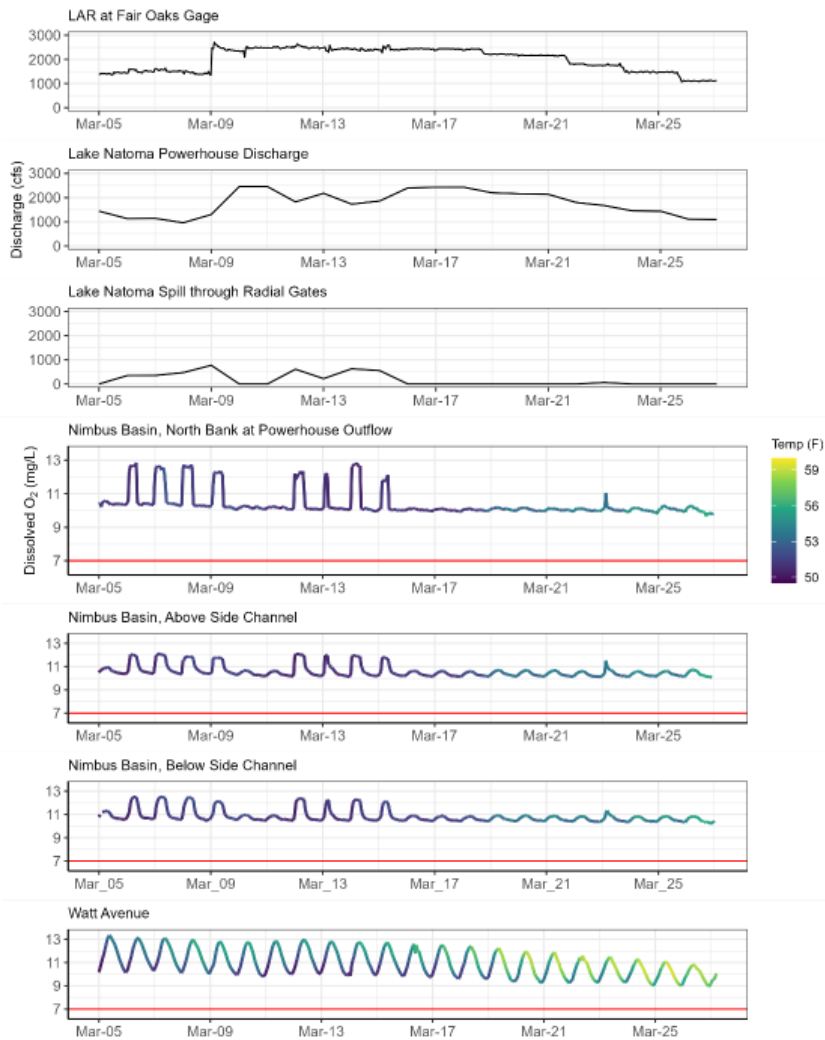


Figure 18. Discharge, temperature and dissolved oxygen dynamics at various locations in the Lower American River during the time when DO transects were conducted.

Figure 18 presents a series of line graphs showing discharge and dissolved oxygen (DO) conditions along the Lower American River from March. Panels include LAR discharge at the Fair Oaks gage, Lake Natoma powerhouse discharge, spill through radial gates, and DO concentrations at multiple



Nimbus Basin monitoring locations (north bank at powerhouse outflow, above side channel, below side channel, and Watt Avenue). Water temperature is indicated by color along the DO traces.

River discharge at Fair Oaks remains relatively stable for most of the period, with an increase in early March corresponding to higher powerhouse releases. Spill through radial gates remains minimal. Dissolved oxygen levels in Nimbus Basin generally trend upward through early March and remain above the 7 mg/L threshold, with short-term fluctuations corresponding to operational changes and temperature variation.

### Snorkel Surveys

Snorkel surveys were conducted the week of February 23 and March 23 in several locations in the lower reaches of the river as part of Water Forum’s WaterSmart restoration grant. Locations surveyed and observations are shown in the map below.

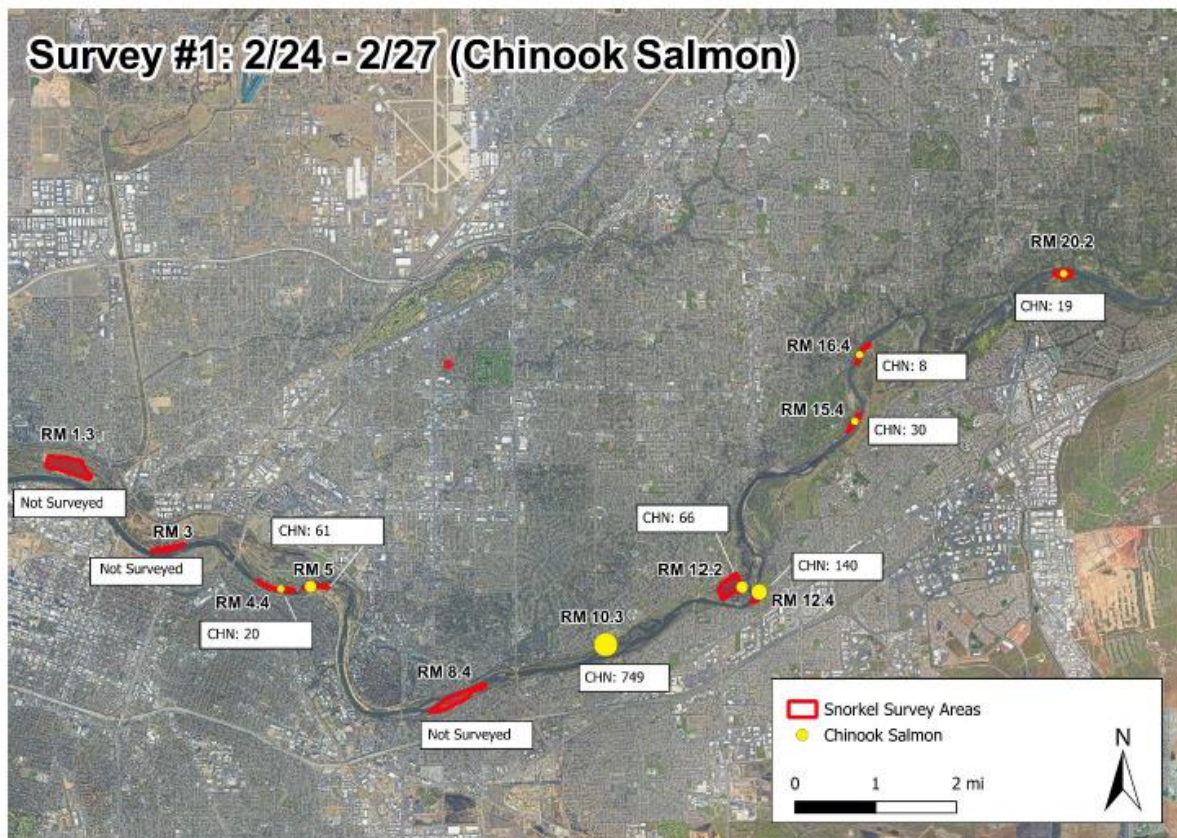


Figure 19. Survey 1, February 24 – 27. Locations Surveyed and Chinook Salmon Observed on the Lower American River.

Figure 19 is a map showing locations surveyed and Chinook Salmon observed during the 23 February snorkel surveys on the Lower American River.

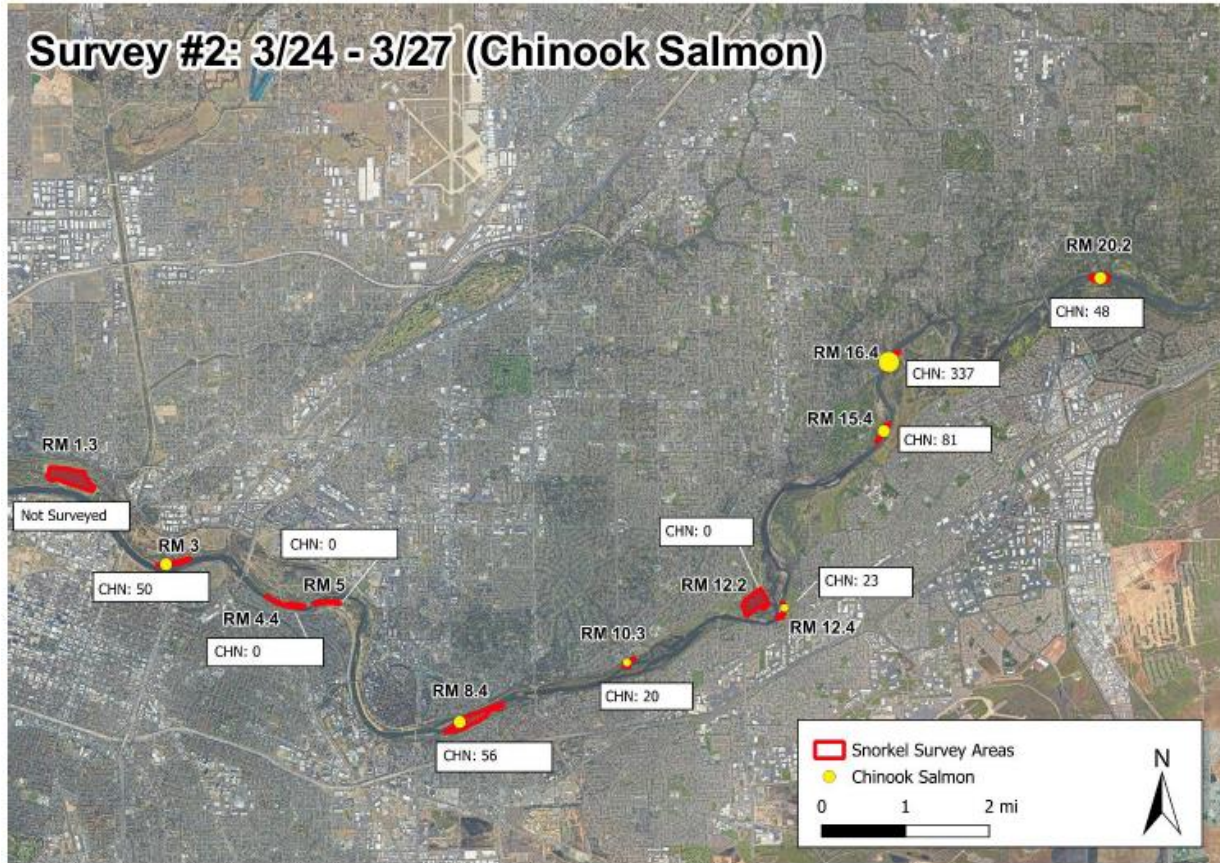


Figure 20. Survey 2, March 24 – 27. Locations Surveyed and Chinook Salmon Observed on the Lower American River.

Figure 20 is a map showing locations surveyed and Chinook Salmon observed during the 23 March snorkel surveys on the Lower American River.

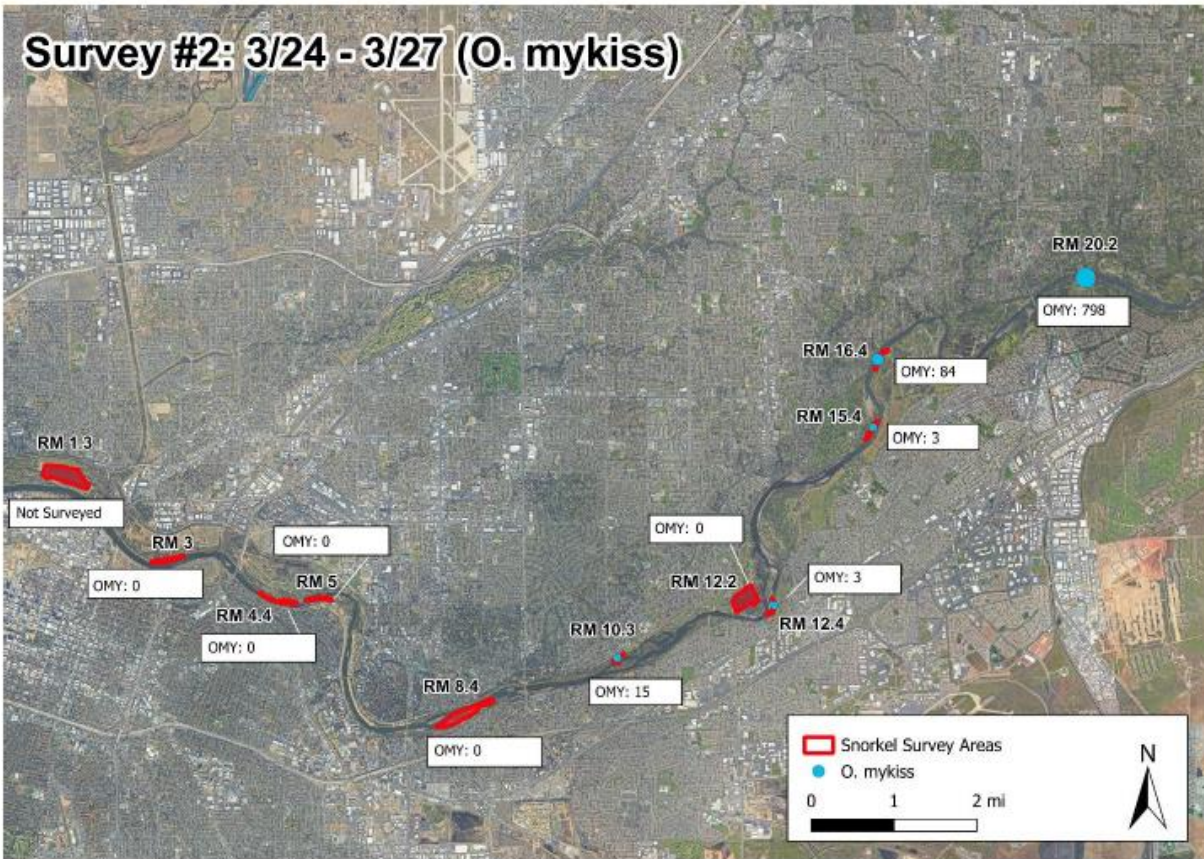


Figure 21. Survey 2, March 24 – 27. Locations Surveyed and O.mykiss Observed on the Lower American River.

Figure 21 is a map showing locations surveyed and O.mykiss observed during the 23 March snorkel surveys on the Lower American River. No juvenile O.mykiss were observed during the 23 February survey.

## Steelhead Spawning and Stranding Surveys

Steelhead redd counts through April 1, 2026.

Table 15. Steelhead and Chinook salmon redd counts during the 2026 steelhead spawning surveys. Only new, freshly built redds with clean rocks and no algae colonization are included in table.

Dates	Steelhead	Chinook	Lamprey	Unknown <sup>1</sup>	Total
January 20 - 22	9	1	0	0	10
February 3 - 4	15	0	0	1	16
February 18 - 20	9	0	0	0	9
March 3 - 5	1	0	0	0	1
March 17-19	5	0	9	0	14
March 30 - Apr 1	0	0	2	0	2
Total	39	1	11	1	52

<sup>1</sup>Redd measurements unable to be collected due to depth, thus remained classified as 'unknown'.

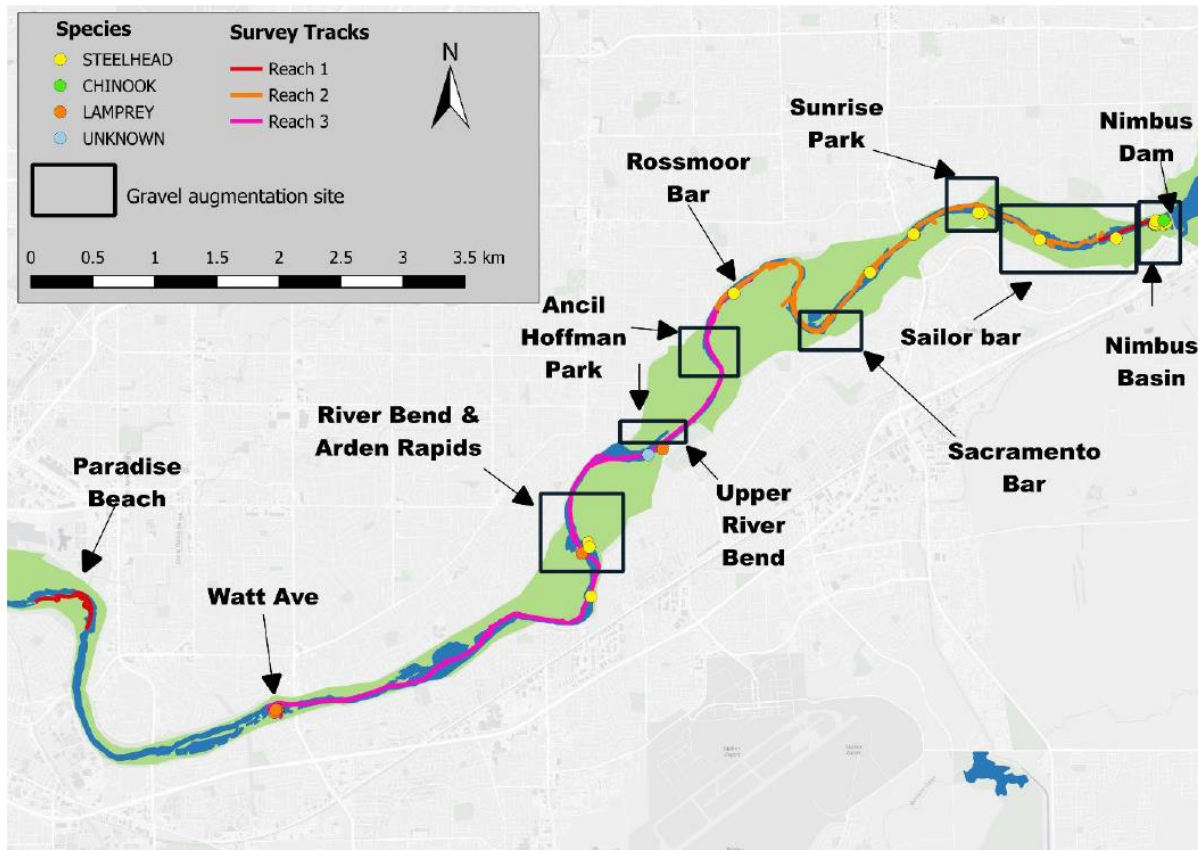


Figure 22. Locations of new redds identified during the 20 January through 1 April 2026 steelhead spawning surveys.

Figure 22 is a map showing locations of new redds identified during the 20 January through 1 April 2026 steelhead spawning surveys along the Lower American River. The gravel augmentation boxes represent general areas where gravel augmentation has occurred.

Spawning surveys are being conducted this week (April 15-17).



Stranding surveys through April 1, 2026.

Table 16. Salmonids and environmental conditions in isolated pools observed through 1 April 2026.

Location (river mile)	Date	Chinook	O. mykiss	Unidentified Salmonids	Total Pool Area (m <sup>2</sup> )	Density (fish/m <sup>2</sup> )	Temp (°C)	Dissolved Oxygen (mg/L)
Paradise Beach (5)	1/20/2026	20 *	0	0	N/A	N/A	N/A	N/A
Paradise Beach (5)	1/22/2026	141	0	0	167	0.84	11.9	12.2
Paradise Beach (5) <sup>1</sup>	1/22/2026	N/A	N/A	N/A	402	N/A	11.3	11.6
Paradise Beach (5) <sup>1</sup>	1/29/2026	69	0	0	9	7.8	8.4	4.1
Sailor Bar (22)	2/20/2026	113	0	0	32	3	7.1	10.8
Sailor Bar (22)	2/20/2026	61	0	0	31	2	7.8	8.1
Sailor Bar (22)	2/20/2026	102	0	0	86	1	10.4	9.2
Lower Sunrise (19)	2/20/2026	927	0	0	41	22	11.7	8.9
Lower Sunrise (19)	3/3/2026	185	0	0	45	4	15.4	8.13
Below River Bend side channel (13)	3/4/2026	113	0	0	105	1	17.7	11.87



— BUREAU OF —  
RECLAMATION



Location (river mile)	Date	Chinook	O. mykiss	Unidentified Salmonids	Total Pool Area (m <sup>2</sup> )	Density (fish/m <sup>2</sup> )	Temp (°C)	Dissolved Oxygen (mg/L)
Below River Bend (12)	3/4/2026	83	0	0	34	2	14.5	11.35
Paradise Beach (5)	3/16/2026	123 *	0	0	3	41	31.6	7.26
Below Rossmoor/Ancil Hoffman top (16)	3/26/2026	0	1	0	2	0	27.3	8.68
Nimbus Basin (22)	3/27/2026	90	200	0	85	3	14.3	7.55
Lower Sunrise side	3/27/2026	11	41	0	256	0	16.5	3.73
Total	N/A	2038	242	0	N/A	N/A	N/A	N/A

\*Mortalities due to pool desiccation.

<sup>1</sup>Pool revisited to perform rescues

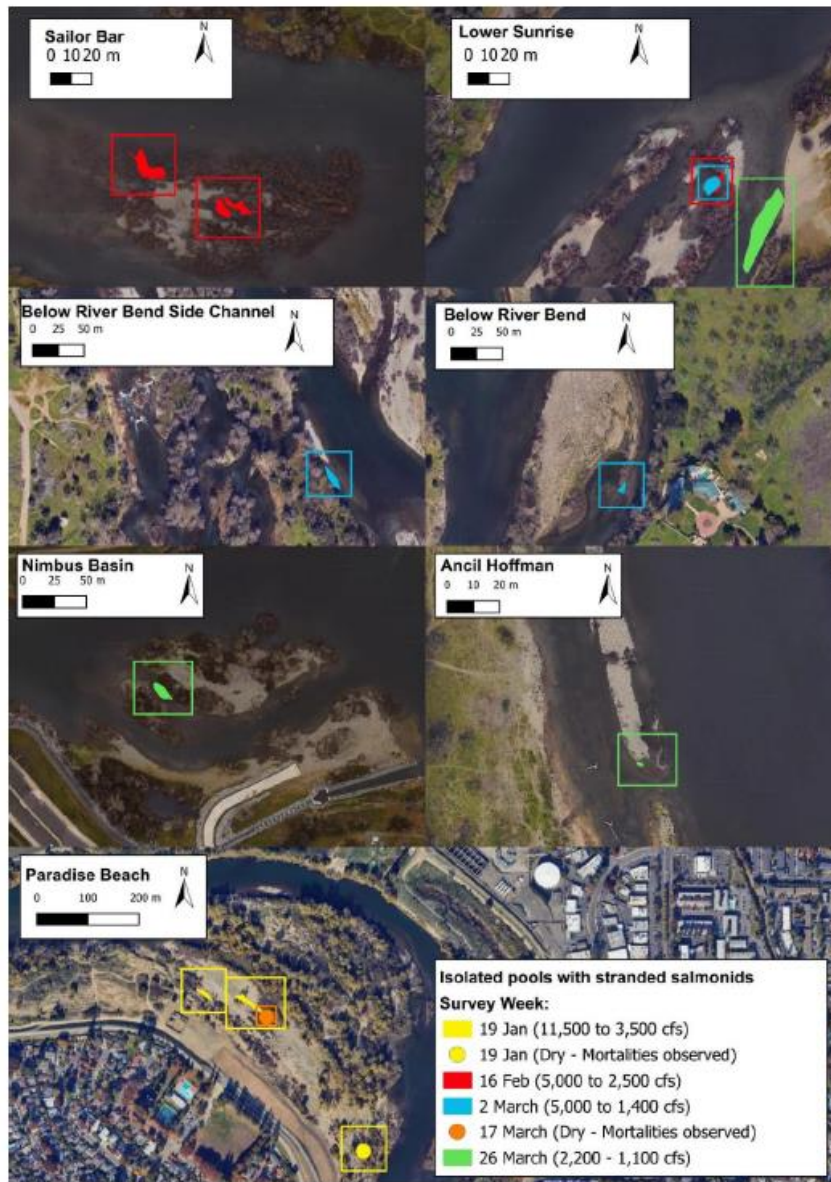


Figure 23. Locations of Stranding Pools Observed on the Lower American River.

Figure 23 are aerial images of locations of the stranding pools observed on the Lower American River through 1 April 2026. Approximately 20 Chinook Salmon observed during 19 January surveys were mortalities (yellow point) and approximately 123 Chinook Salmon observed during the 17 March surveys were mortalities due to a flow reduction on the Sacramento River (orange point).

## Potential Dewatering Assessment



Figure 24. Stranding and steelhead redd dewatering observations in Nimbus Basin.

Figure 24 are aerial images of stranding and steelhead redd dewatering observations in Nimbus Basin on 27 March 2026. Flow on the Lower American River was approximately 1,100 cfs when measurements were taken.

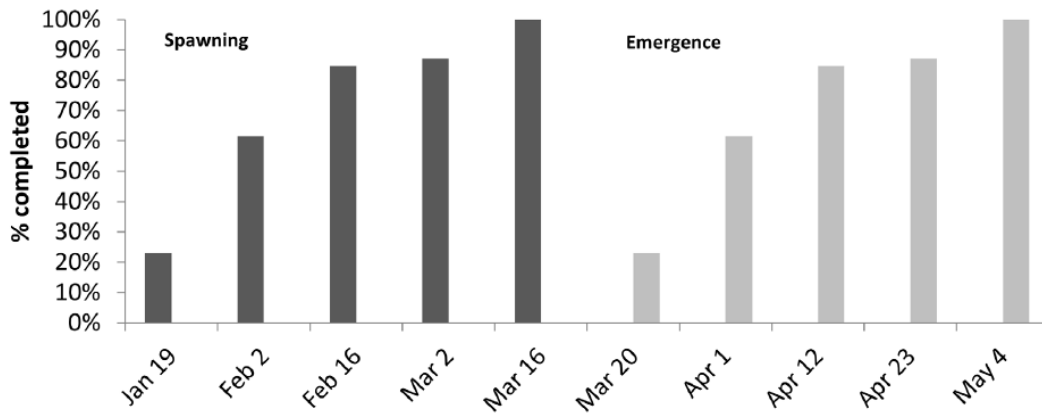


Figure 25. Steelhead Spawning and Emergence Estimates.

Figure 25 is a bar chart showing the percentage of completion over time for two phases: Spawning (January to mid-March) and Emergence (late March to early May). Completion increases steadily in both phases, starting around 20% in January and reaching 100% by mid-March for Spawning and early May for Emergence.

Steelhead spawning and emergence estimates based upon bi-weekly steelhead surveys conducted January – March 2026. To obtain emergence estimates, we used a temperature-based steelhead emergence model with date of redd observations as a starting point and temperature data from USGS 11446500 AMERICAN R A FAIR OAKS CA gage. Lower American River temperature data from 2024 was used to predict emergence timing in April and May when current temperatures were not yet available.

### Potential Redd Scour Assessment

With LAR flow increases anticipated in advance and/or during recent mid-April storm event, the information below was utilized to inform Reclamation operators on possible localized scour risk at 8,000 cfs flow due to water velocity in proximity to recently observed steelhead redds.

The image below is a subset of observed steelhead redd locations of potential concern overlain with modeled velocity conditions.

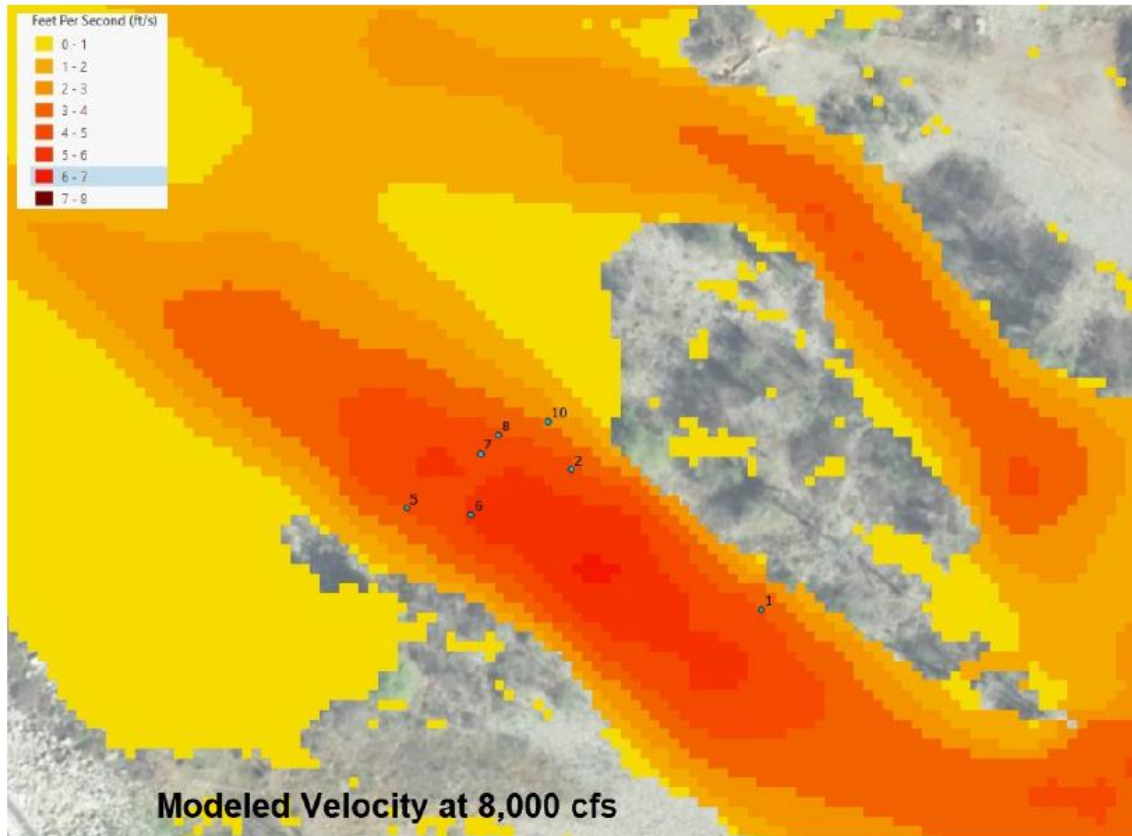


Figure 26. Subset of observed steelhead redd locations of potential concern.

Figure 26 is an image of a subset of observed steelhead redd locations of potential concern overlain with modeled velocity conditions modeled at a velocity of 8,000 cfs.

### ***Analysis Assumption***

- Focus on steelhead redds that were observed 20 February, 5 March and 19 March per the Cramer Fish Sciences emergence model because these redds still contain developing embryos, whereas embryos at the other observed redds are estimated to have emerged.
  - All of these redds are located in Nimbus Basin.
- Using Water Forum’s design gravel augmentation gradations mobility calculations 3/8”– 4” (d50=1.5”, d90=3”).
- Model terrain is 3ft DEM based on 2023 LiDAR. There may be some more localized bedform hydraulic affects or changes to the DEM since the LiDAR was flown.
- Relating past Shields stress mobility analysis to simulated velocity.



### ***Explanation***

- Generally, we start showing partial transport of spawning gravels (point at which the smaller grain size fraction would start to mobilize) at velocities of 4.75 feet per second (fps).
  - There is potential for scour at velocities at or above 4.75 fps, but not a guarantee.
  - This can be verified during subsequent surveys by Cramer Fish Sciences, which is already scheduled.

### ***Reeds of concern:***

- ID#6 - Date observed:2/20/2026, Cluster of 2 redds.
  - Velocity exceeds 4.75 fps above 4,000 cfs
- ID#7 - Date observed:2/20/2026, Cluster of 3 redds.
  - Velocity exceeds 4.75 fps above 8,000 cfs.
- ID#3 - Located in main channel and is very close (5-8 ft) spatially to velocities exceeding
  - 4.75 fps for flows of 5,000-6,500 cfs.

### ***Summary***

- Based on the emergence model and timing of redd construction, fry from redds in areas of potential velocity concern will be likely have emerged by the pulse flow start date.
- All other observed redds show adjacent velocities less than 4 fps up to the 8,000 cfs analysis flow, therefore have low risk of potential scouring.

## RST Operations

Cones were lowered on 4/6/26 for the 2026 sampling season.

Traps were raised between 4/11 – 4/13 due to the storm/heavy debris and due to staffing limitations.

RSTs are expected to be continuously operated 5 days per week (M-F) for the remainder of the sampling season.

### Unmarked Juvenile Chinook Salmon (length-at-date):

Table 17. Unmarked Juvenile Chinook Salmon

Fall	Late Fall	Spring	Winter
236	0	39	1

### Unmarked O. mykiss (life stage):

Table 18. Unmarked Juvenile Chinook Salmon

Fry	Parr	Smolt	Adult
2	9	0	0

### Lower American River RSTs at Watt Avenue

Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2026 Lower American River rotary screw trap sampling season.

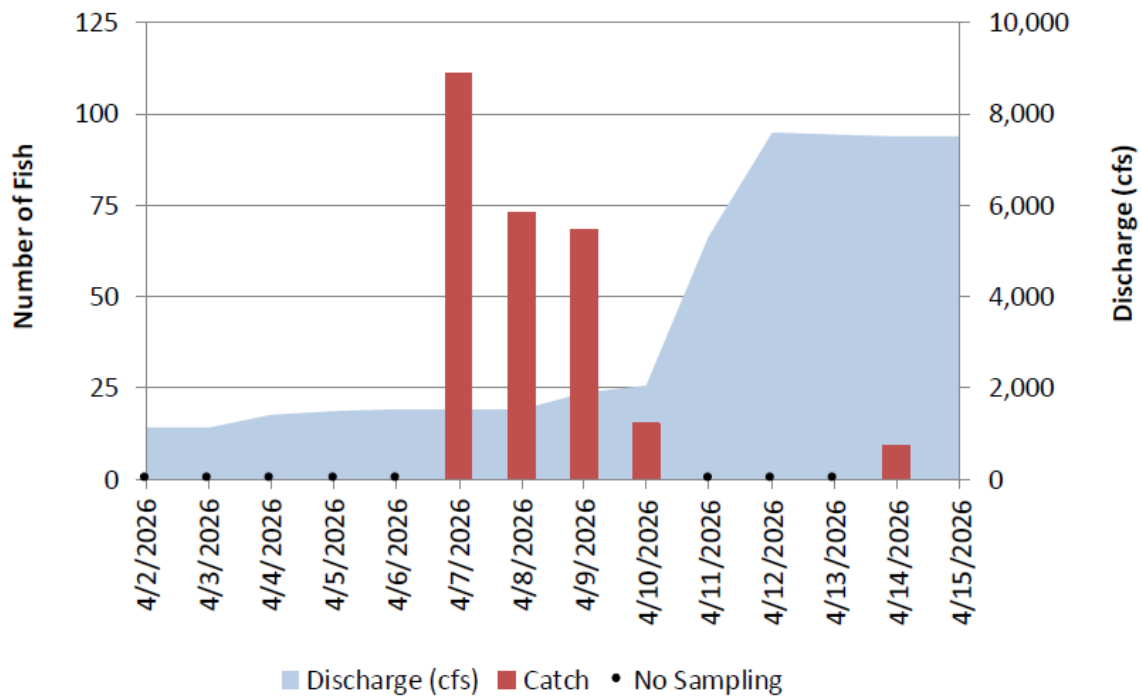


Figure 27. Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks.

Figure 27 is a chart showing the daily number of fish caught alongside the water discharge rate in cubic feet per second (cfs) from April 2 to April 15, 2026, while also noting days where no sampling occurred. The data illustrates that fish catches peaked between April 7 and April 9 during a period of low, stable water discharge.

Daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2026 Lower American River rotary screw trap sampling season.

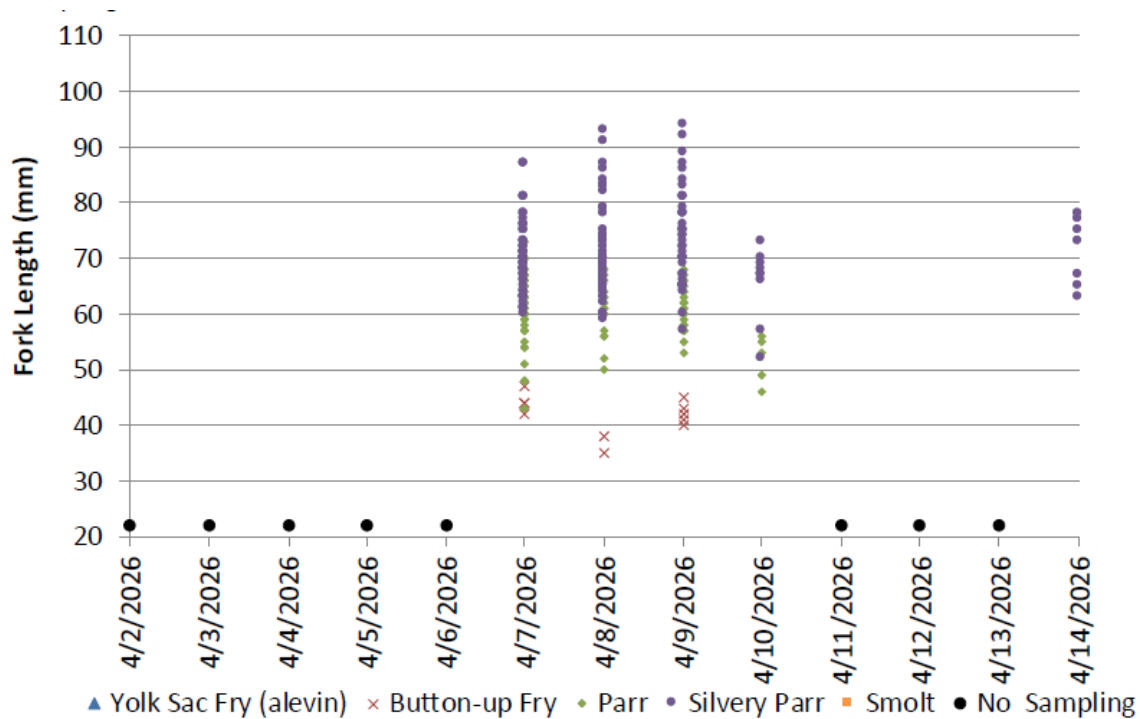


Figure 28. Daily fork length distribution by life stage of unmarked Chinook Salmon.

Figure 28 is a plot chart showing the daily fork length in millimeters of different fish life stages caught between April 2 and April 14, 2026, while also marking the days where no sampling took place. The plotted data indicates that successful catches occurred primarily from April 7 to April 10 and on April 14, with Silvery Parr representing the most frequently caught and longest life stage, accompanied by smaller numbers of Parr and Button-up Fry.

More information is available on the [CalFish Lower American River – RST Monitoring webpage](#).