BUREAU OF RECLAMATION

American River Group

1:30 PM – 3:30 PM
Conference Line: +1 (321) 209-6143; Access Code: 985 598 947#
Webinar: Join Microsoft Teams Meeting

Friday, June 20, 2025

Agenda

1. Introductions
2. Announcements
3. Housekeeping
    a. Confirm July ad-hoc meeting date/time
4. Fisheries Update
    a. CDFW
    b. CFS
    c. PSMFC
5. Operations Forecast
    a. SMUD
    b. PCWA
6. Central Valley Operations
7. Discussion
    a. Temperature Management Plan
8. Water Temperature Modeling Platform (WTMP), Part 5
9. Power Bypass SDM Presentation
10. Next Meetings:

a. Ad-Hoc Power Bypass SDM Meeting – Thursday July 3, 1:30-3:30

b. Regular Monthly ARG Meeting - Thursday, July 17, 1:30-3:30

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Lower American River 2025 Steelhead Spawning and Stranding Survey Summary

Spawning surveys

Steelhead spawning surveys were conducted from conducted 7 January - 3 April 2025 on the Lower American River. No new steelhead redds were observed after 3 March 2025.

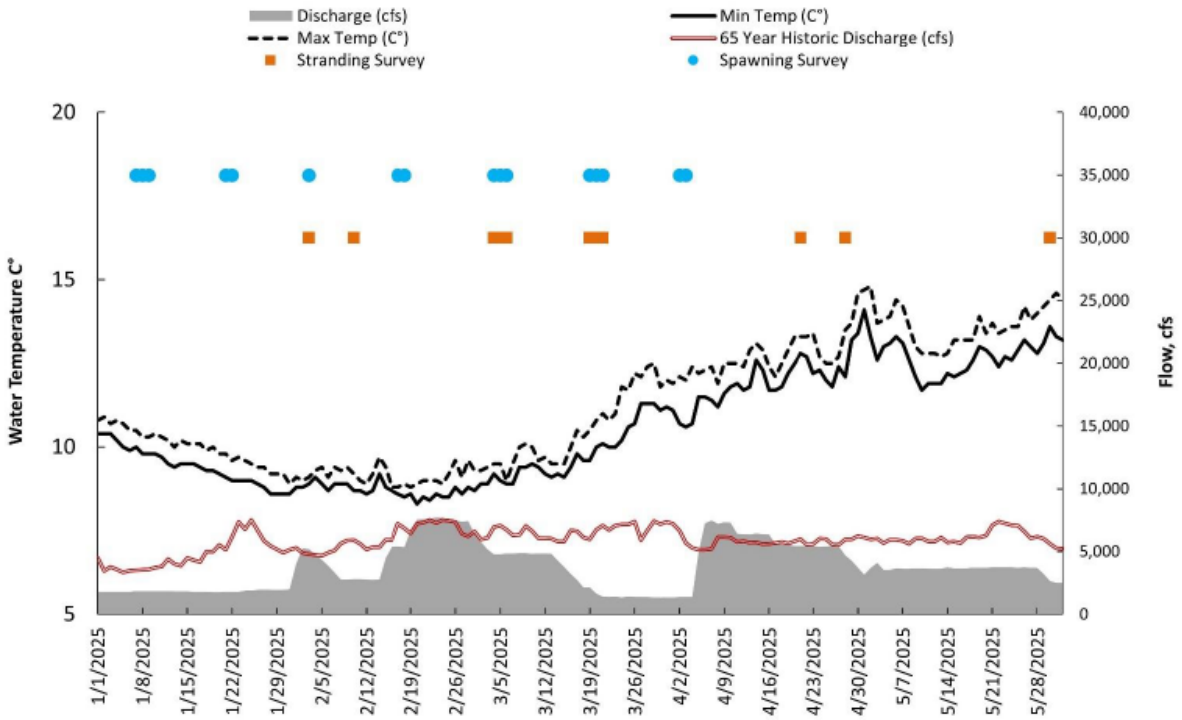

Figure 1. 2025 lower American River flow (AFO stream gage), temperature, and survey timing.

Figure 1 is a plot of temperature, historic and current discharge, and different timing of surveying on the lower American River from January 1st 2025 to May 28th 2025. Current discharge is shown as a gray shaded area with increases near 5,000 in February, March, and April. Maximum temperature is shown by a dotted black line with lower temperatures in February and the highest temperature in late April with minimum temperature following the same trends. The 65 year historic discharge is shown by a brown line and largely remains above 5,000 cfs. Stranding and Spawning surveys are shown by orange and blue dots. Stranding surveys occurred between February and May with Spawning surveys occurring between January 1st to early April.

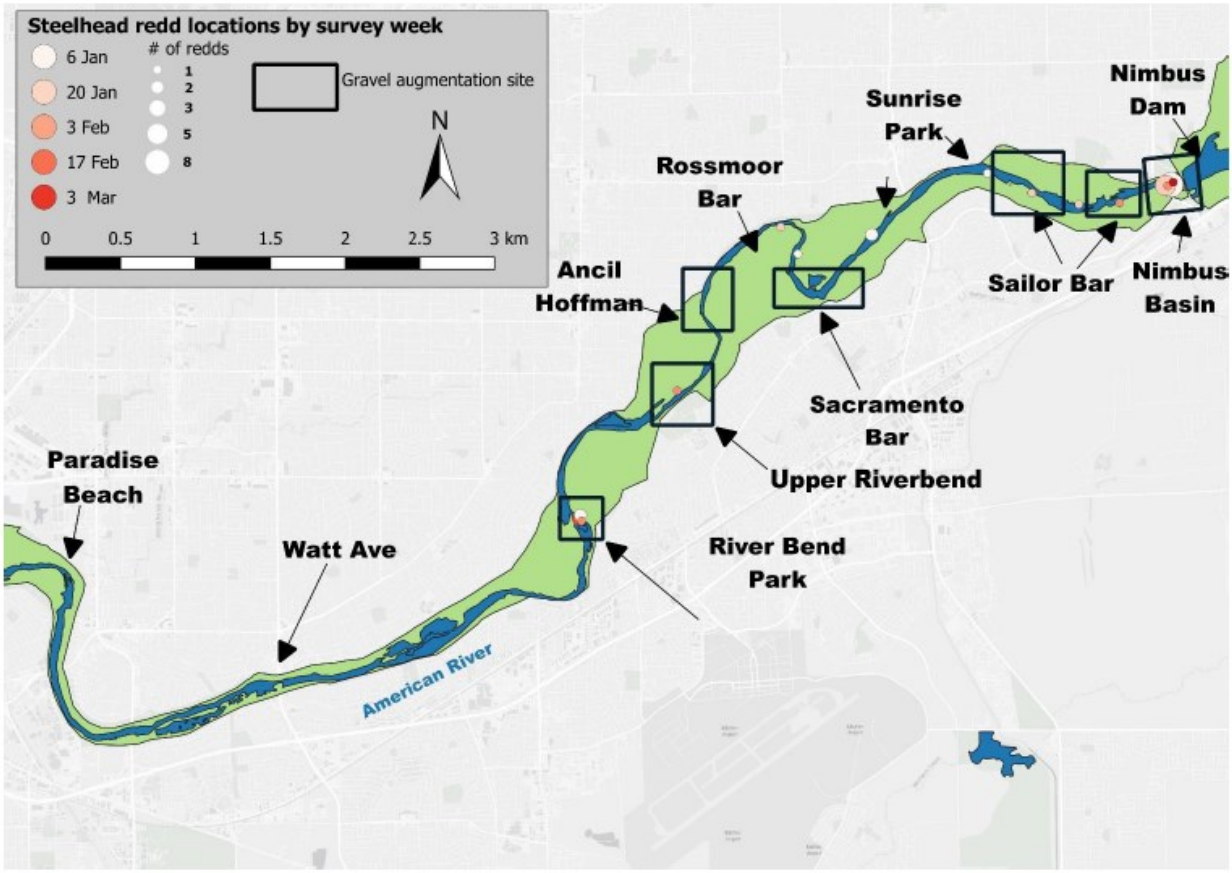

Figure 2. 2025 steelhead redd spatial distribution in the lower American River. A total of 29 steelhead redds were observed in 2025.

Figure 2 is a map of the lower American River with different geographic significant areas marked along with steelhead redd locations by survey week. Dots of different colors and sizes mark the locations of the surveys. The color represents the survey dates: January 6th and 20th, February 3rd and 17th, and March 3rd. The size of the dot represents the number of redd's located through the surveys.

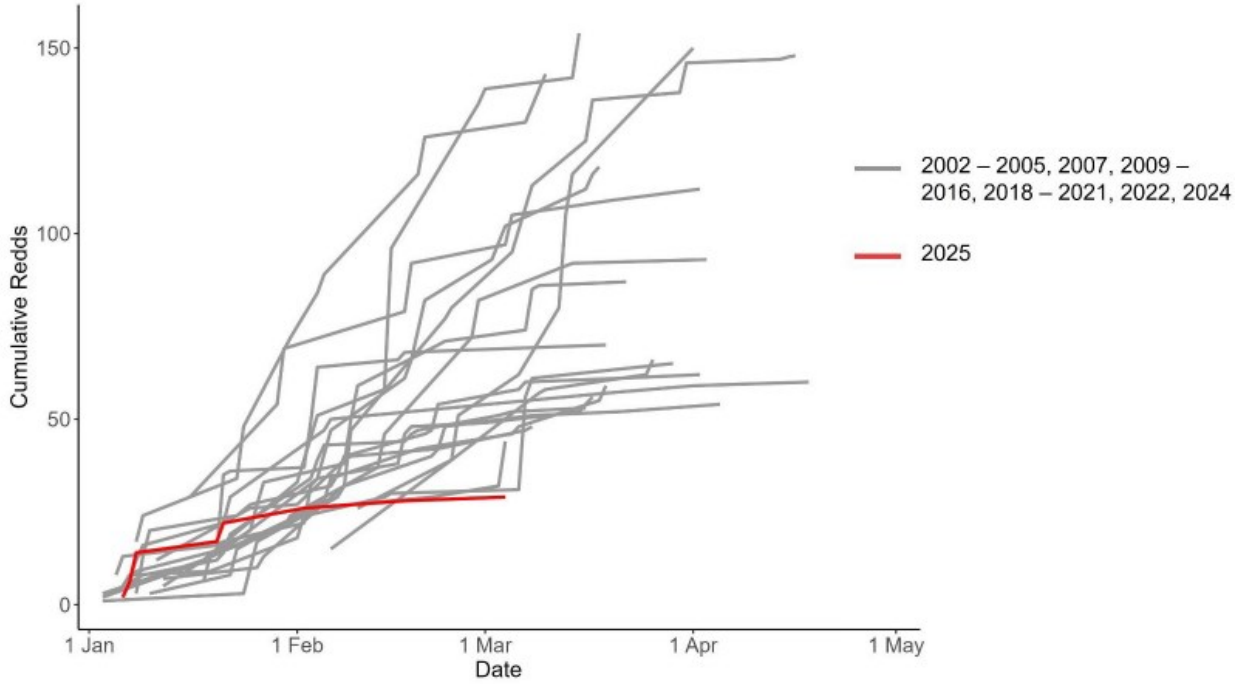

Figure 3. Temporal distribution of steelhead redds on the lower American River in 2025 compared to previous years.

Figure 3 is a line graph showing the distribution of steelhead redds on the lower American River for 2002-2005, 2007, 2009-2016, 2018-2021, 2022, and 2024 for January to May. The distribution for 2025 is shown in red.

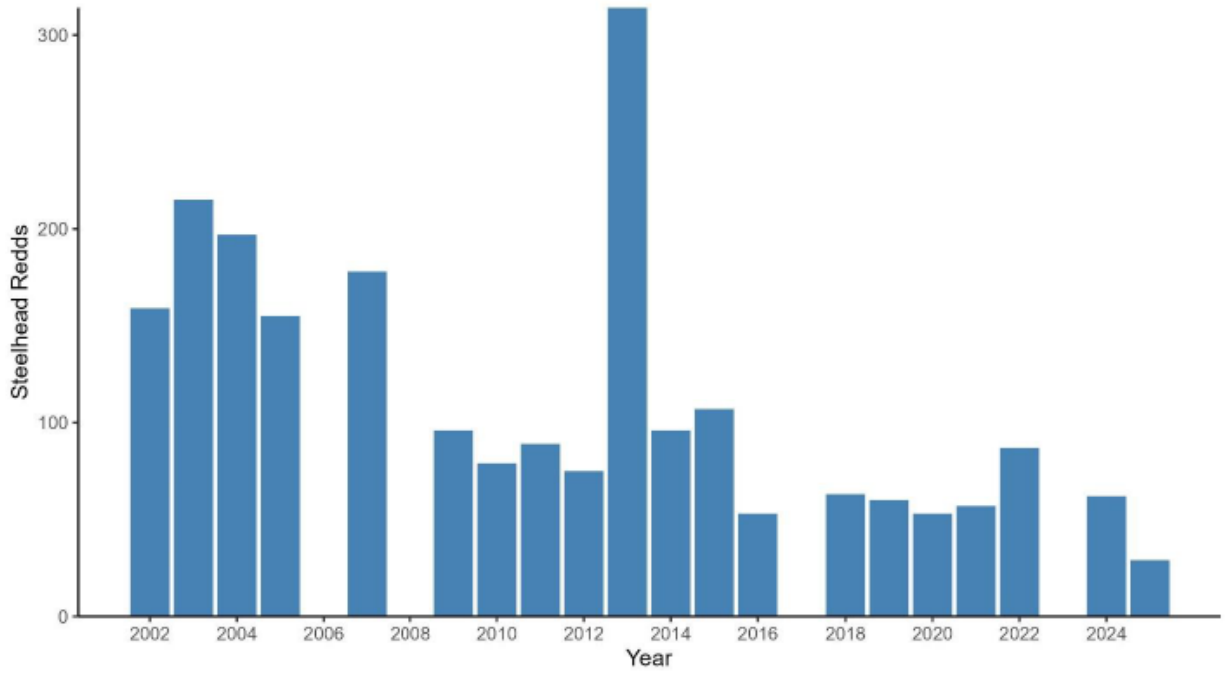

Figure 4. Comparison of 2025 redd counts with previous years. A total of 29 steelhead redds were observed in 2025.

Figure 4 is a bar graph comparing annual redd counts from 2002 to 2025. The peak of redd counts occurred in 2013 with over 300.

Note: Redd surveys were not possible during portions of 2017 and 2023 due to high flows and low visibility, therefore the redd count is not included for these years. Redd surveys were not conducted in 2006 and 2008 due to low visibility.

Stranding surveys

Salmonid stranding surveys were conducted from 10 February, 4-6 March, 19 – 21 March, 29 April, 1 May and 30 May.

Table 1. Summary of stranded juvenile salmonids on the Lower American River observed during stranding surveys that occurred 10 February, 4-6 March, 19 - 21 March, 21 April, 1 May and 30 May. Numbers in parenthesis indicate estimated fish in pool unable to be rescued. [1]Pool unable to seined due to vegetation; [2]Pool too shallow for temperature and dissolved oxygen.

Date	Location (river mile)	Species - Chinook	Species - Steelheads	Species - Unidentified Salmonids	Total Pool Area (m2)	Rescued?	Density (# fish/m2)	Temperature (°C)	DO (mg/L)
10-Feb	Sailor Bar (22)	6	0	0	1.5	Y	3.98	9.8	11.0
5-Mar	Paradise Beach (5)	426	0	0	63	Y	6.76	14	17.4
6-Mar	Paradise Beach (5)	1,135	10	0	1,262	Y	0.91	9.4	12.0
6-Mar	Paradise Beach (5)[1]	NA	NA	NA	670	N	NA	13.7	6.0
6-Mar	Paradise Beach (5)	8	2	0	13	Y	13.40	14.8	19.4
19-Mar	Sailor Bar (22)	6	0	0	23	Y	0.26	7.6	7.8
19-Mar	Sailor Bar (22)	28	0	0	38	Y	0.74	7.1	8.0
19-Mar	Sailor Bar (22)	110 (100)	0	0	70	Y(N)	~2.98	8.2	9.4
19-Mar	Sailor Bar (22)	239 (100)	0	0	19	Y(N)	~17.97	8.5	8.4
19-Mar	Lower Sunrise side channel (19)[1]	(1,000)	0	0	407	N	~2.45	14.8	14.6
19-Mar	Lower Sunrise side channel (19)	1,407	0	0	54	Y	26.20	15	10.9
20-Mar	River Bend side channel (13)	5	0	0	3	Y	1.75	14.5	7.7
20-Mar	River Bend side channel (13)	589	(1)	0	117	Y(N)	~5.00	11.6	8.3
20-Mar	Below River Bend (12)	443	0	0	141	Y	3.14	16.7	12.4
20-Mar	Below River Bend (12)	885	0	0	44	Y	19.90	16.6	11.7

Date	Location (river mile)	Species - Chinook	Species - Steelheads	Species - Unidentified Salmonids	Total Pool Area (m2)	Rescued?	Density (# fish/m2)	Temperature (°C)	DO (mg/L)
21-Apr	Lower Sunrise side channel (19)	44	46	0	136	Y	0.66	15	10.9
1-May	Lower Sunrise side channel (19)[2]	10	2	0	1	Y	8.70	NA	NA
1-May	River Bend side channel (13)	1 (100)	(1)	0	12	Y (N)	~8.46	15.7	4.1
30-May	Lower Sunrise side channel (19)	0	1	0	24	Y	0.04	24.5	10.0
30-May	Lower Sunrise side channel (19)	116	0	0	523	Y	0.22	22.8	13.0
Total	N/A	**5358 (~1300)**	**61 (2)**	**0**	**3,622**	N/A	N/A	N/A	N/A

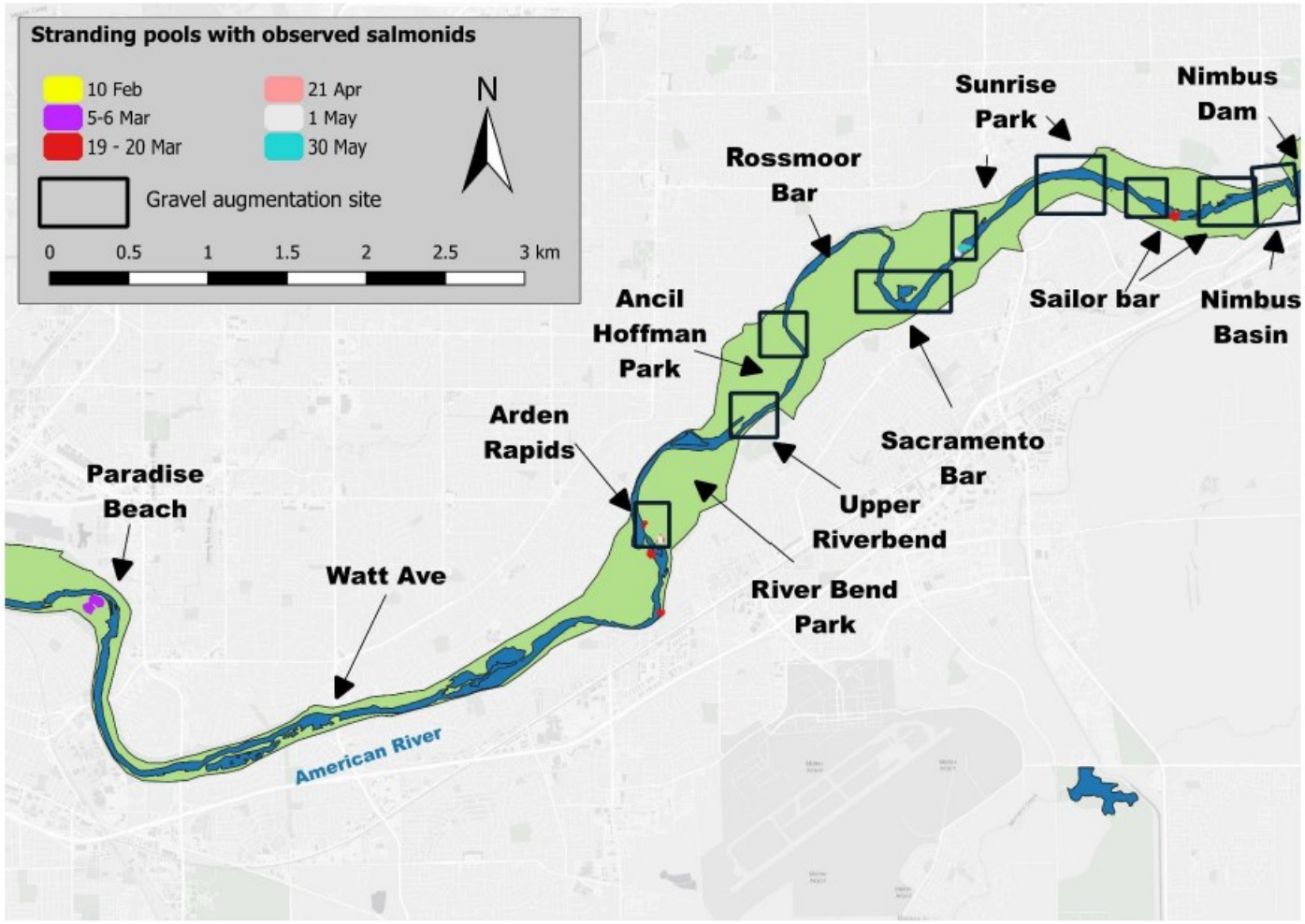

Figure 5. 2025 Lower American River stranding locations.

Figure 5 is a map of the lower American River with different geographic significant areas marked along with stranding pools with observed salmonids. Shaded areas represent different dates of the stranding pools seen with observed salmonids: February 10, March 5-6 and 19-20, April 21, and May 1 and 30.

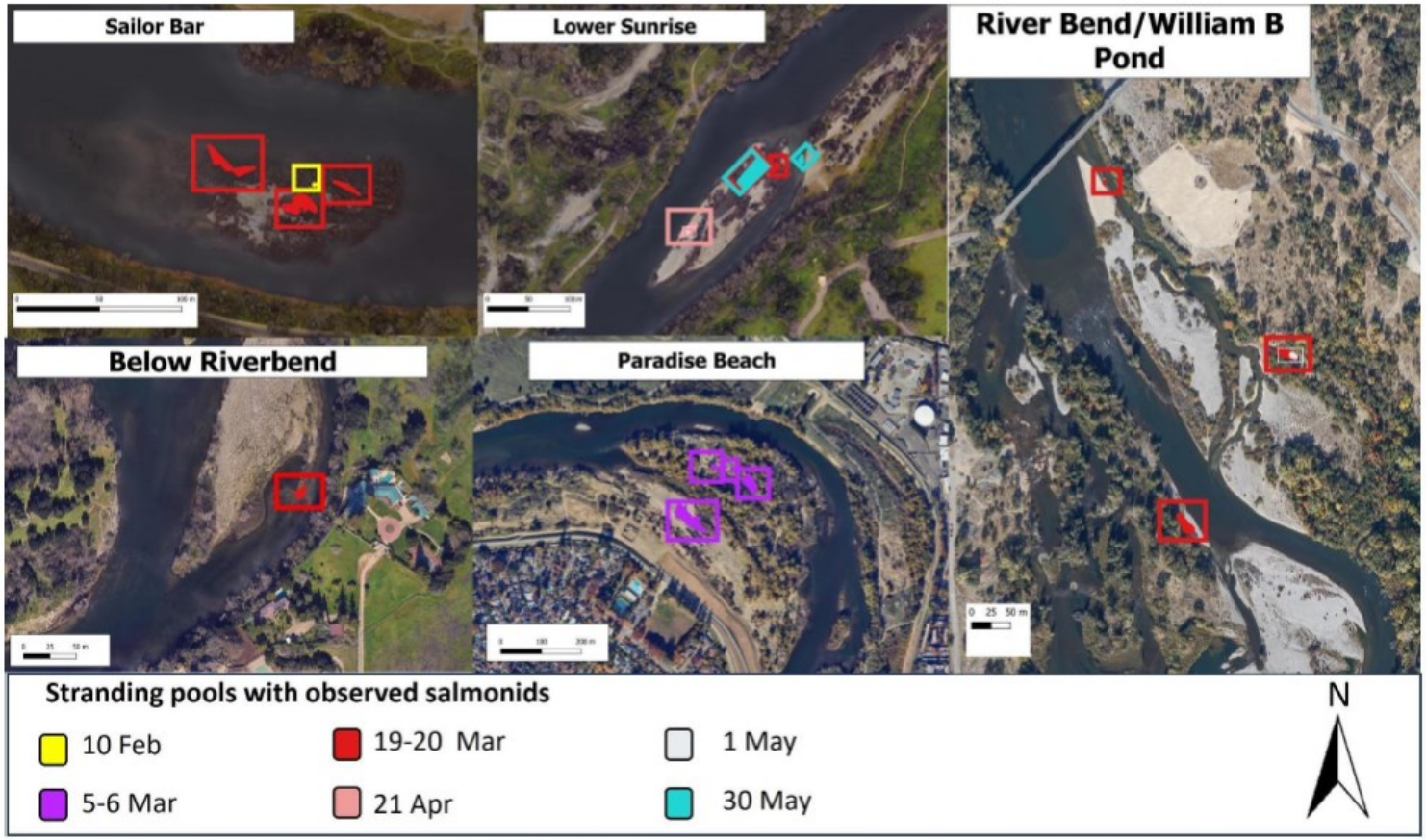

Figure 6. 2025 Lower American River stranding locations.

Figure 6 is a series of aerial photographs of Sailor Bar, Lower Sunrise, Below Riverbend, Paradise Beach, and River Bend/William B Pond on the Lower American River with different stranding locations noted in Figure 5 shaded.

Dissolved Oxygen Monitoring

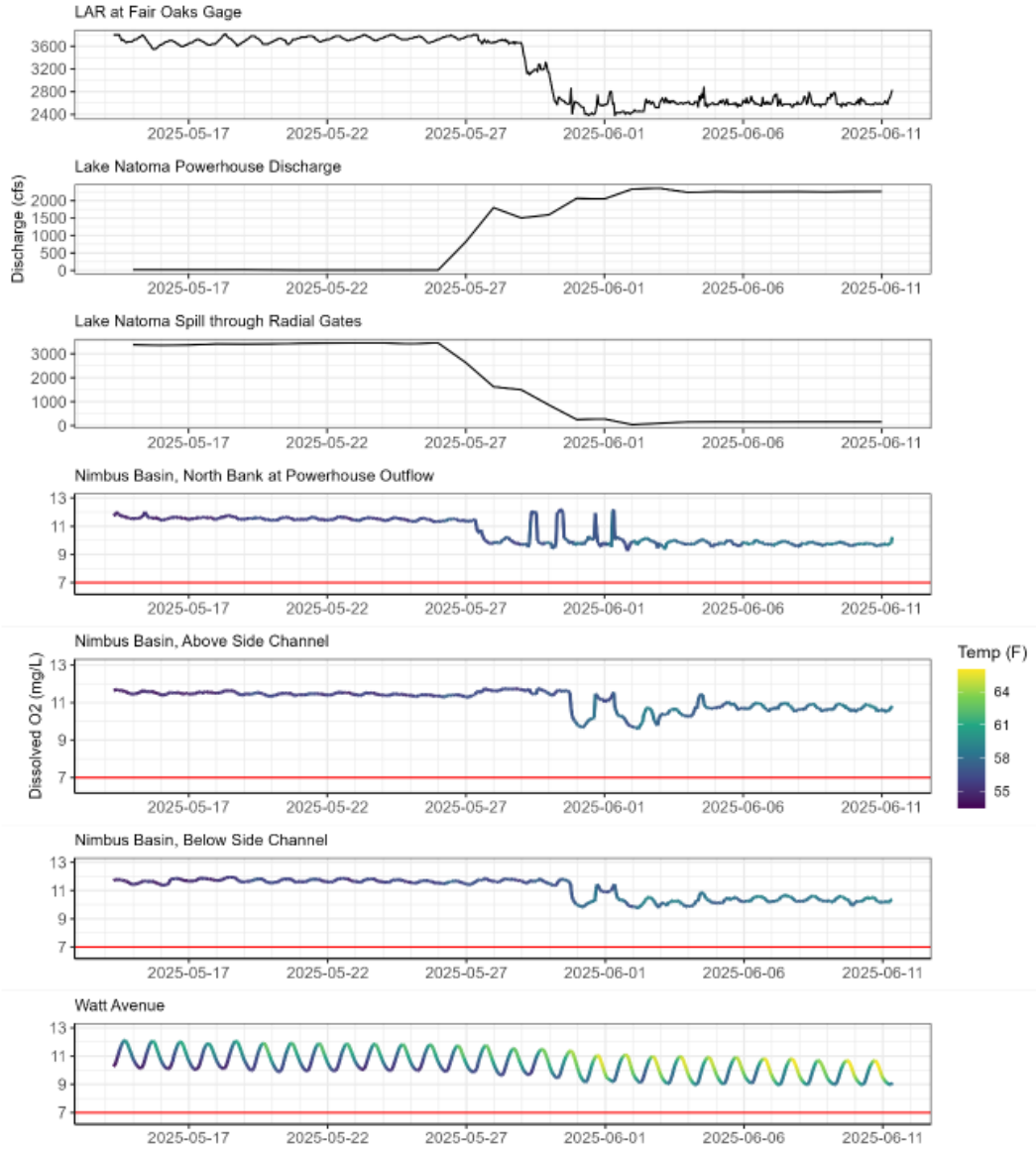

Figure 7. Dissolved oxygen through June 11 2025.

Figure 7 is a series of line graphs. Each line graph is at different locations along the lower American River depicting discharge, dissolved oxygen gages, and temperature at the Fair Oaks Gage, Lake Natoma Powerhouse discharge and spill through radial gates, Nimbus basin outflow and above side channel dissolved oxygen.

Dissolved oxygen levels are favorable and relatively steady, but beginning to trend slightly down with lower flows and higher temperatures.

Installation of dissolved oxygen logger in Lake Natoma below Folsom Dam is occurring on June 25 and new data will be presented at the July ARG meeting.

Snorkel Surveys

CFS began snorkel surveys at Nimbus Basin, Lower Sailor, Ancil Hoffman, Upper River Bend and the new River Bend side channels (and associated main channel control sites) on 28 Feb and 3-4 March 2025. The second survey occurred 25-27 March, the third survey occurred on 22-24 April, and the fourth survey occurred 20-22 May.

Higher numbers of juvenile salmon were observed in all sites during the March surveys compared to the April and May surveys, which occurred after the high flows in April/May. Observations continue to indicate heavy utilization of woody structures in restored project sites, particularly Upper River Bend and River Bend side channels.

The 5th and final snorkel survey is scheduled this week, 16-18 June.

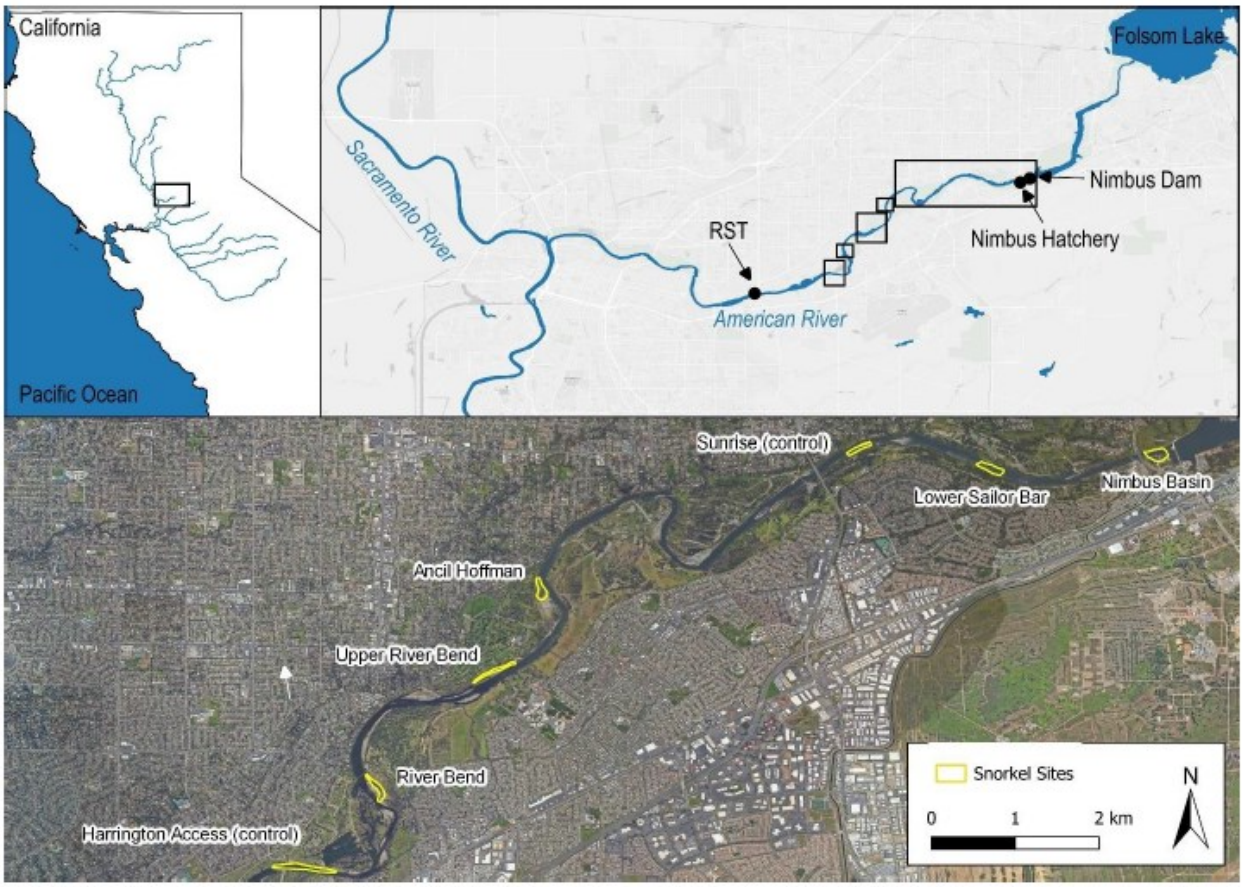

Figure 8. 2025 Lower American River snorkel sites.

Figure 8 is a collection of maps and aerial photographs of the Lower American River. Location of snorkel sites are shown by black dots.

UPDATED 6/16/25

RST Operations:

No sampling occurred on 5/17 - 5/18, 5/24 – 5/27, 5/31 - 6/1, 6/7 – 6/8, and 6/14 – 6/15 for weekend shutdowns as a result of the increase of river recreationalist.

Rotary screw trapping at American River at Watt Ave for the 2025 sampling season is expected to conclude on June 20 with uninstalls occurring the following week (June 24).

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

Fall	Late Fall	Spring	Winter
133,553	253	42	17

Unmarked *O. mykiss* (life stage):

Fry	Parr	Smolt	Adult
106	52	2	0

Lower American River RSTs at Watt Avenue:

Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2025 Lower American River rotary screw trap sampling season.

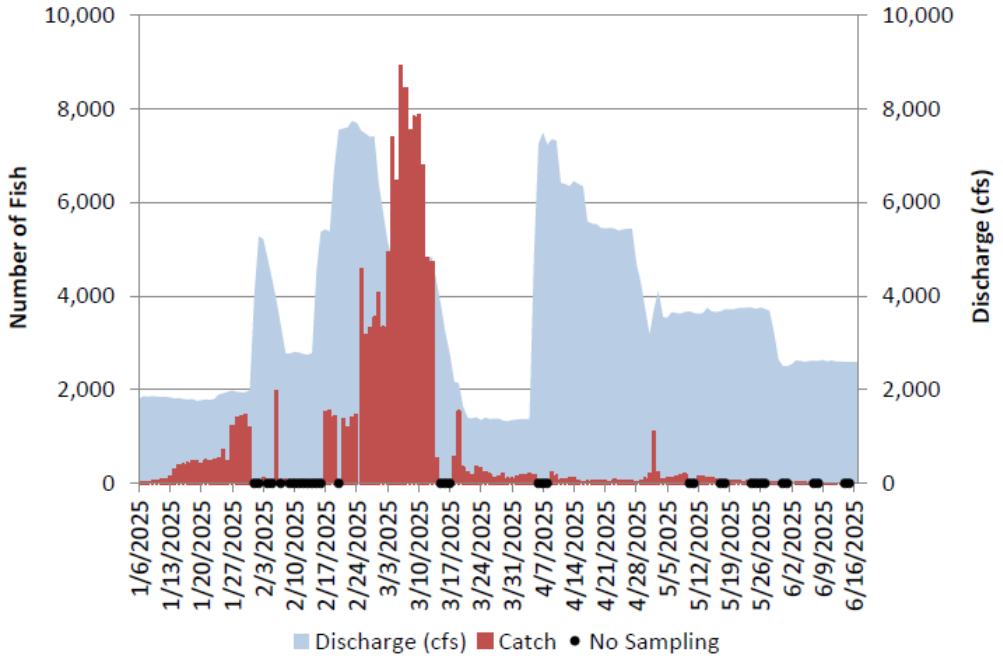

Figure 9. Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2025 Lower American River rotary screw trap sampling season.

Figure 9 is a bar chart showing discharge in cfs and catch from January 6th 2025 to June 16 2025. Discharge is shown in cfs by a grey shaded area with the base flow of around 2,000 from January 6th to early April with a spike of up to 7,500 cfs from February 24th to March 3rd and a step down of flow from April 7th from a flow of 7,500 cfs to around 2,250 cfs in late May. Catch is represented by a brown shading with a peak of close to 9,000 fish in March. Dates with no sampling are marked by black dots.

Lower American River RSTs at Watt Avenue:

Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks from April 1st to June 16th during the 2025 Lower American River rotary screw trap sampling season.

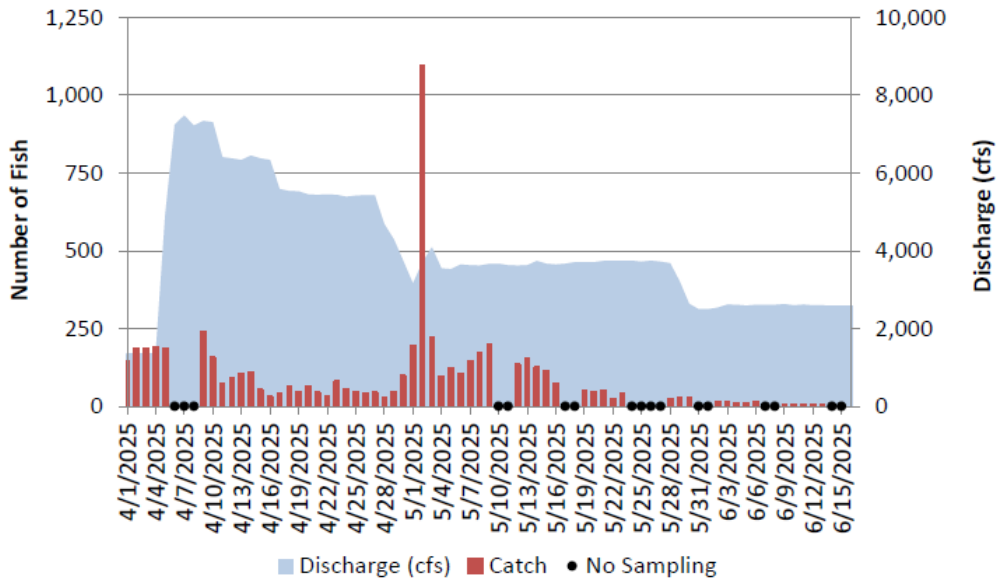

Figure 10. Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks from April 1st to June 16th during the 2025 Lower American River rotary screw trap sampling season.

Figure 10 is a bar chart showing discharge in cfs and catch from April 1st to June 15th at RST's at Watt Avenue. Discharge is shown in cfs by a grey shaded area with a peak of around 7,700 cfs in mid-April followed by a step-down reduction until just above 2,000 cfs in late May. Catch is shown by a brown bar with peak catch occurring in early May of over 1,000 fish. Days with no sampling are shown by black dots.

Lower American River RSTs at Watt Avenue:

Daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2025 Lower American River rotary screw trap sampling season.

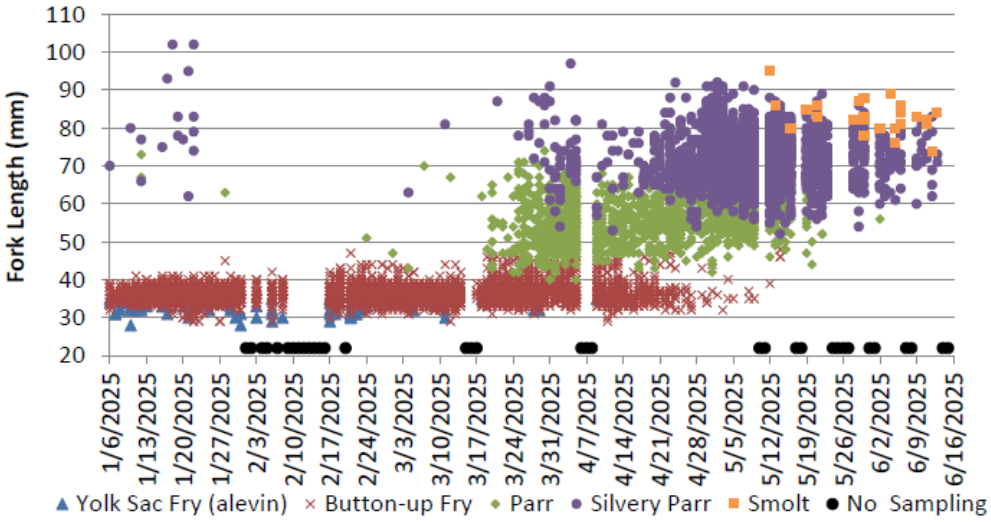

Figure 11. Daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2025 Lower American River rotary screw trap sampling season.

Figure 11 is a plot depicting daily fork length distribution by life stage at Lower American River RST's at Watt Avenue from January 6th 2025 to June 16th 2025. Yolk Sac Fry fork length is shown by a blue triangle, button-up Fry a red x, Parr a green diamond, Silvery Parr a grey circle, and Smolt an orange box. Days with no sampling are marked by a black dot.

Lower American River RST CalFish Webpage.

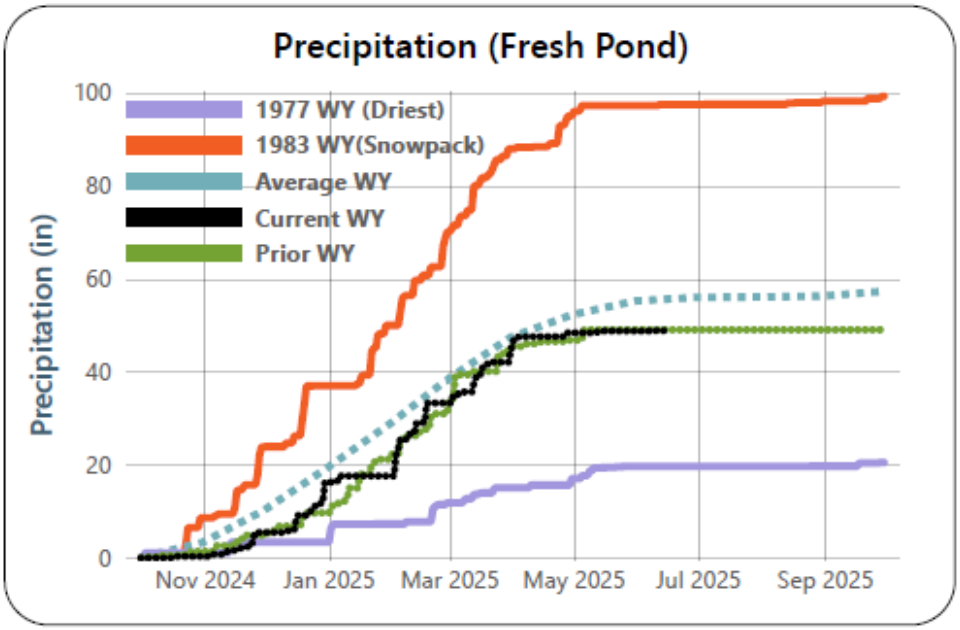

Figure 12. Fresh Pond Precipitation

Figure 12 is a line graph of fresh pond precipitation in inches for November 2023 – September 2024. 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 87.8% average to date and 85.3 water year average percentage.

Table 2. Fresh Pond Precipitation

Month	Current Water Year	Historical Average	% of Historical Average
October	0.31	3.30	9%
November	5.17	6.87	75%
December	10.81	9.14	118%
January	1.34	9.55	14%
February	15.66	9.29	169%
March	11.00	9.27	119%
April	4.10	4.84	85%
May	0.40	2.97	13%
June	0.10	0.79	13%
July	0.00	0.08	0%
August	0.00	0.20	0%
September	0.00	1.02	0%
Total	48.89	57.32	85%

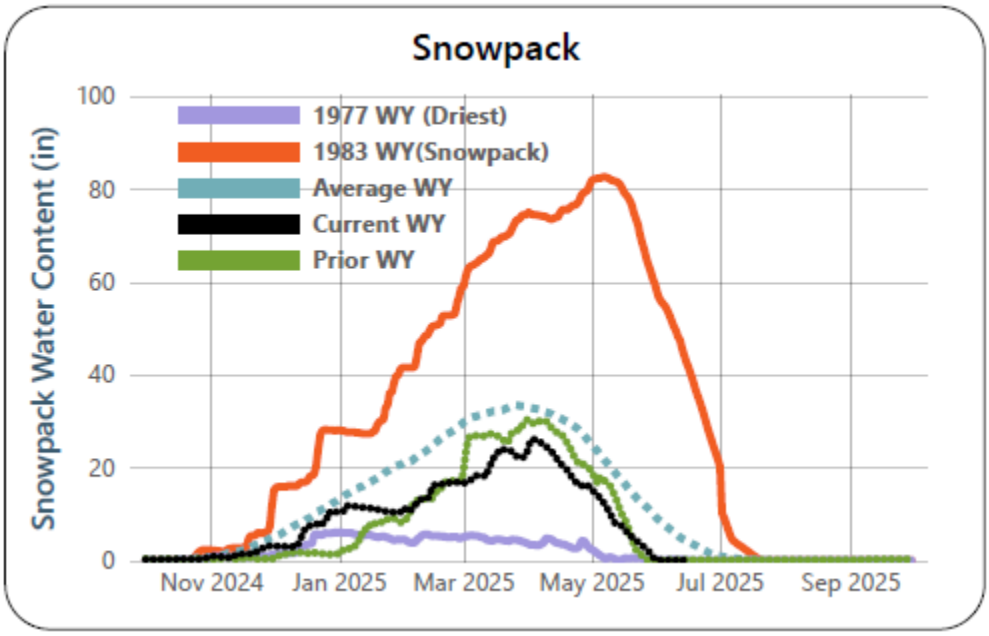

Figure 13. June 2025 Snowpack

Figure 13 is a line graph of snowpack water content in inches for November 2024 to September 2025. 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 0.4% average to date with a 0.0% April 1 average.

Note from SMUD: SMUD storage reservoirs are essentially full, and spring runoff has mostly transitioned to summer baseflow. Water releases through the end of the month will be primarily limited to meeting Chili Bar recreation requirements to conserve water to support system loads with hydroelectric generation later on in the summer.

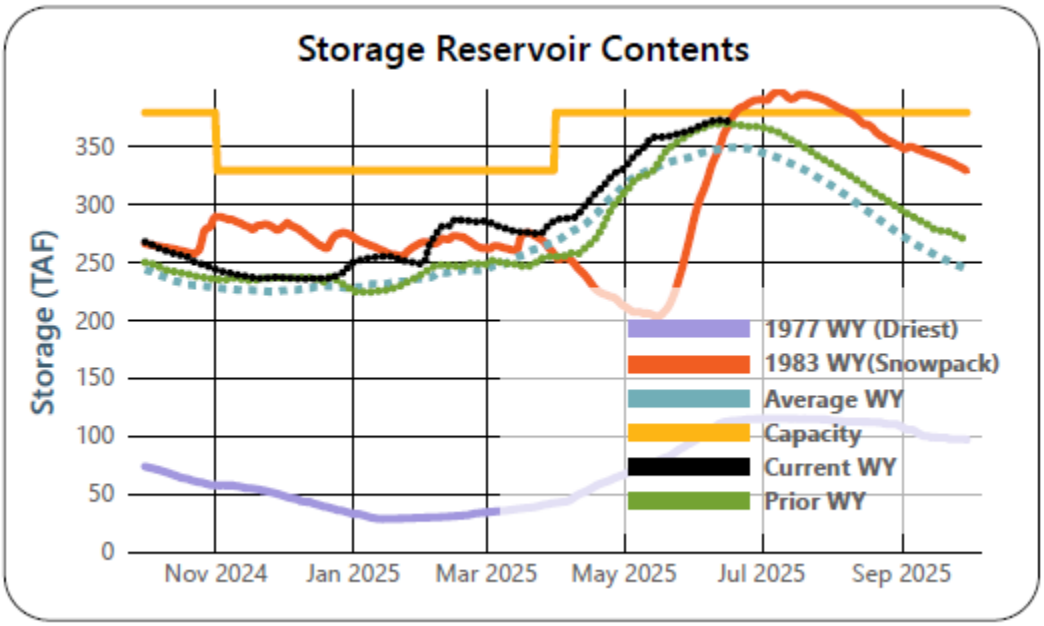

Figure 14. Storage Reservoir Contents

Figure 14 is a line graph of SMUD storage reservoir contents for November 2024 to September 2025. 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 3. 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	67,533	97.4%	67,463	97%	62,922	91%
Ice House Reservoir	43,500	40,845	93.9%	40,790	94%	39,180	90%
Union Valley Reservoir	266,370	263,003	98.7%	260,923	98%	246,205	92%
Total Reservoir Storage	379,180	371,380	97.9%	369,176	97%	348,308	92%

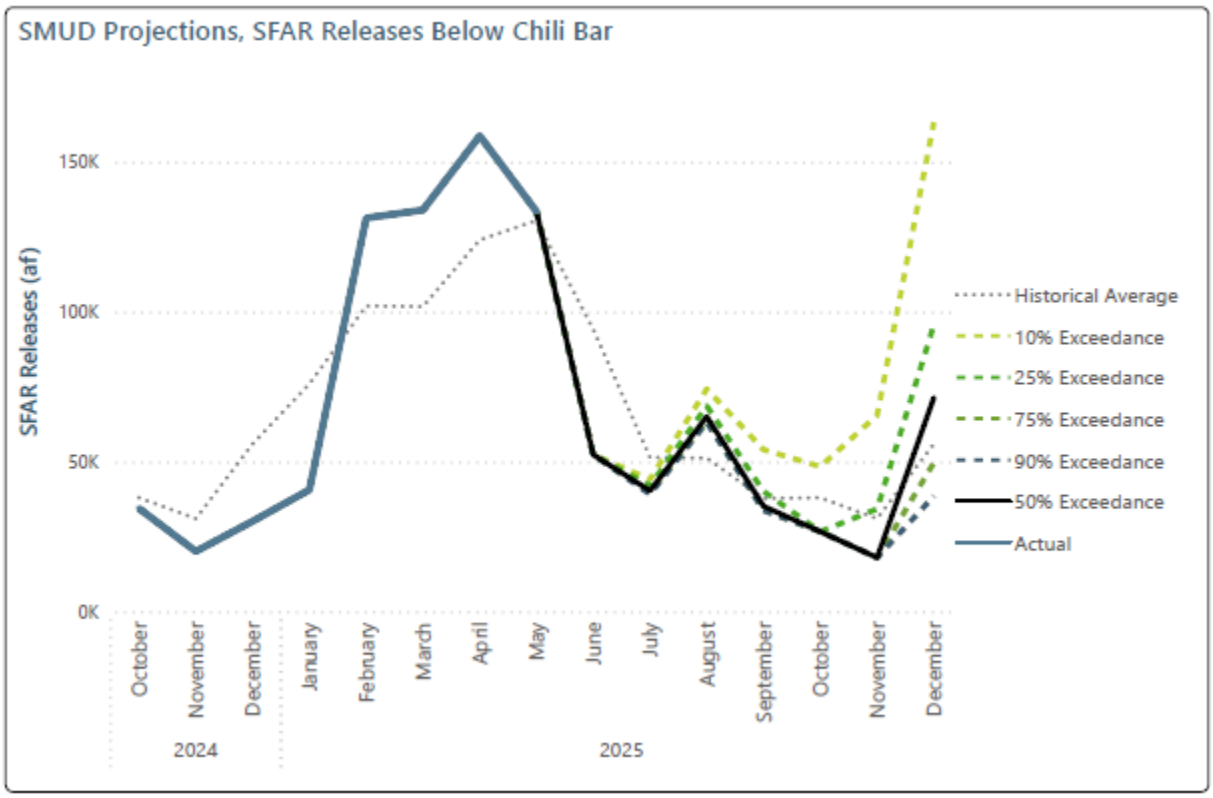

Figure 15. Chili Bar releases into the South Fork American River

Figure 15 is a line graph of observed and projected releases below Chili Bar from October 2024 to December 2025. The graph includes a last 10-year average, actual prior water year data, and projections of 90%, 75%, 50%, 25%, and 10% likelihood.

Table 4. 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-24	560	34,393	34,393	34,393
Actual	Nov-24	338	20,076	20,076	20,076
Actual	Dec-24	491	30,134	30,134	30,134
Actual	Jan-25	662	40,627	40,627	40,627
Actual	Feb-25	2,367	131,227	131,227	131,227
Actual	Mar-25	2,182	133,937	133,937	133,937
Actual	Apr-25	2,671	158,666	158,666	158,666
Actual	May-25	2,174	133,436	133,436	133,436
Forecast	Jun-25	881	52,320	52,320	52,320
Forecast	Jul-25	656	40,277	39,148	44,075
Forecast	Aug-25	1,059	65,006	63,094	74,219

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-25	591	35,134	33,760	54,006
Forecast	Oct-25	434	26,667	26,667	48,357
Forecast	Nov-25	303	17,991	17,991	65,447
Forecast	Dec-25	1,162	71,345	38,505	163,160

PCWA MFP Operations Overview for American River Group

Real Time Data as of June 19, 2025

- French Meadows Storage = 119,000 AF of 136,405 AF = 88% Capacity
    - MFAR above FM Inflow (R24) =7-day AVG ~75 cfs
- Hell Hole Storage = 174,000 AF of 207,590 AF = 84% Capacity
    - Five Lakes Inflow (R23) = 7-day AVG ~40 cfs
    - Rubicon Inflow (R22) = 7-day AVG ~50 cfs
- Combined Storage (FM+HH) = 293,000 AF/342,590 AF = 86% Capacity; ~100% of Historical AVG
- MFAR @ R11: 7-day daily average ~500 cfs
- NFAR @ ARPS: 7-day daily average ~700 cfs
- Currently operating MFP in storage conservation mode.
- Combined storage for the last 14 days => UNCHANGED
- Combined storage on 6/19/24 = 311 TAF; 106% of HISTORICAL AVG

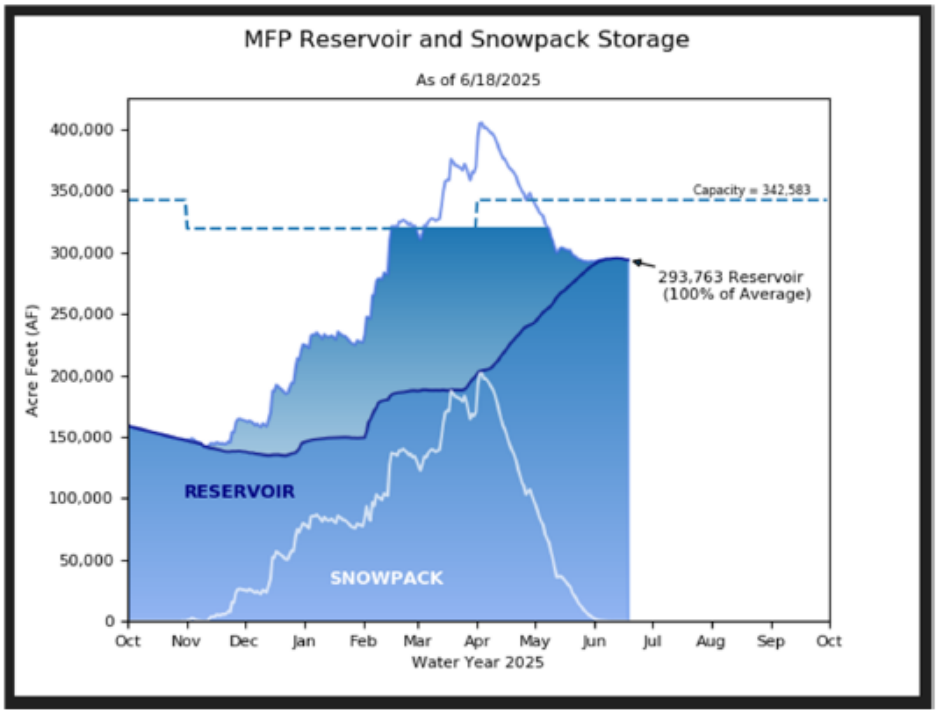

Figure 16. MFP Reservoir and Snowpack Storage

Figure 16 is a line graph depicting the MFP reservoir capacity in acre feet and snowpack contributions as of June 18, 2025. The current capacity is shown by different shadings of blue. Each different shading represents the reservoir and snowpack contributions. The capacity of the reservoir is shown by a dotted blue line. The reservoir level is currently 293,763 acre-feet or 100% of the average.

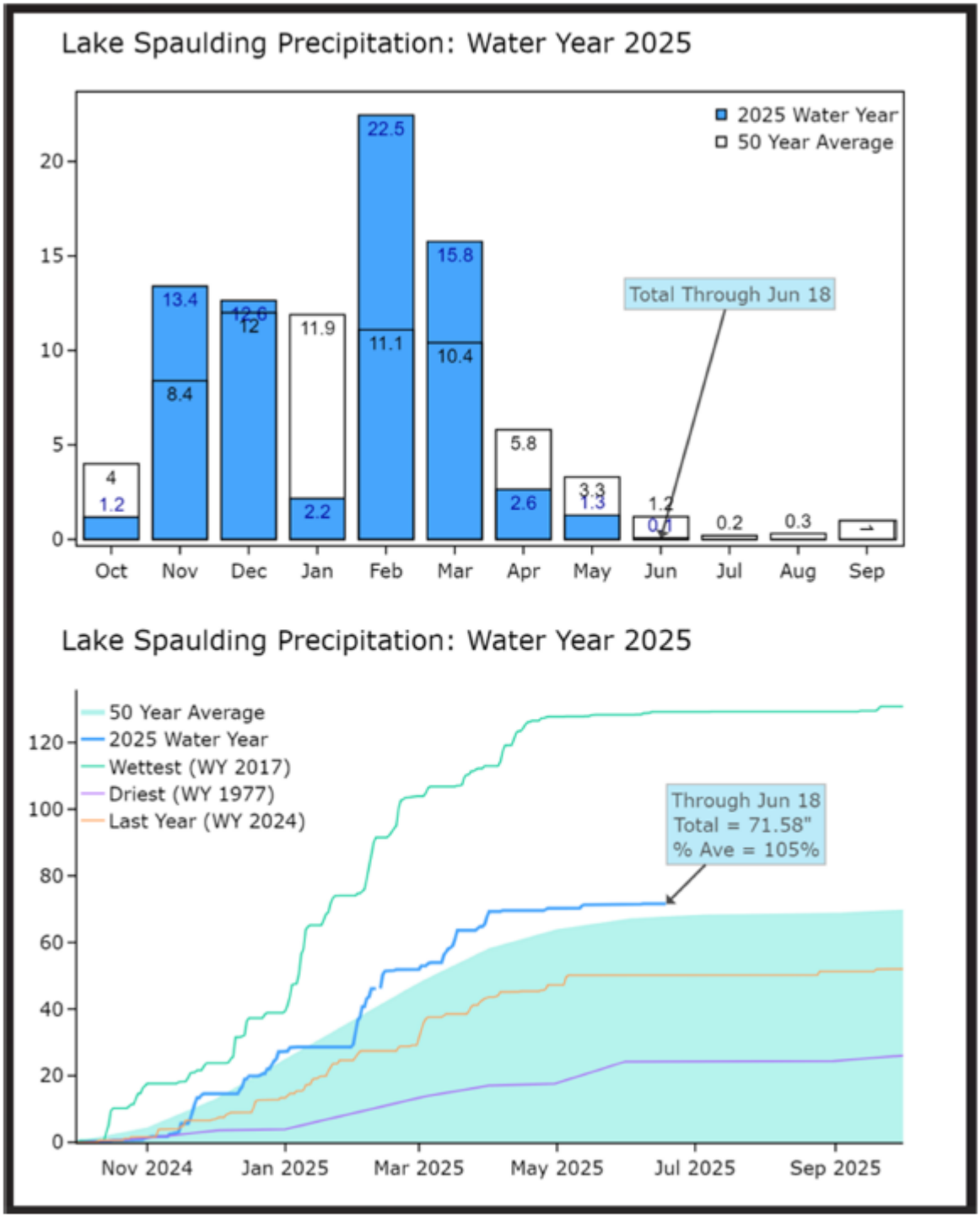

Figure 17. Lake Spaulding Precipitation: Water Year 2025

Figure 17 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 2024 water year, the wettest water year, the driest water year, and the last water year. Totals through June 18th is a total of 71.58 inches 105% of average.

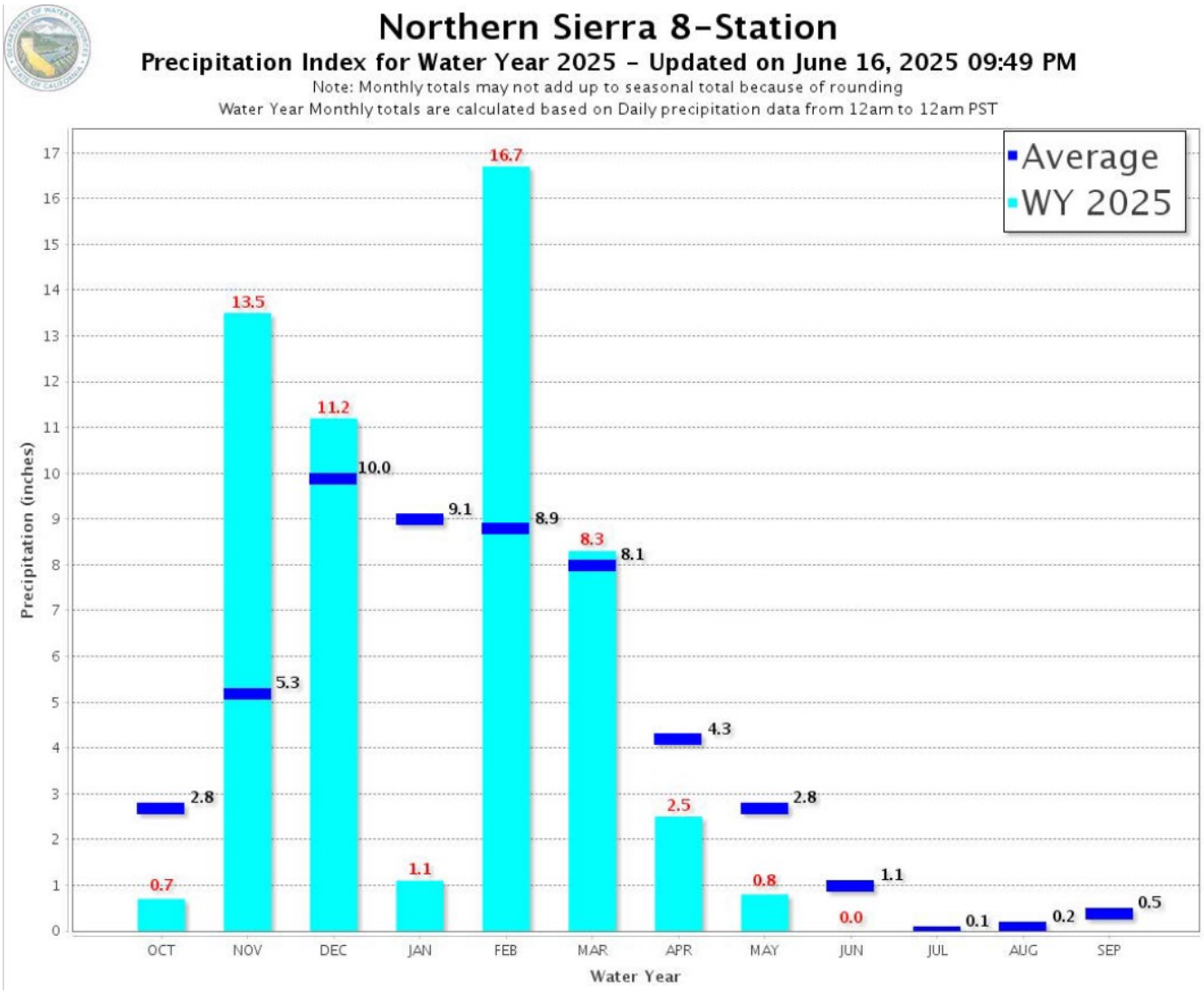

Figure 18. Precipitation Index for Water Year 2025. Projections as of June 16, 2025.

Figure 18 is a bar chart depicting average and total WY2025 precipitation in inches from October to September. WY2025 experienced the highest precipitation in November at 13.5 inches and February at 16.7.

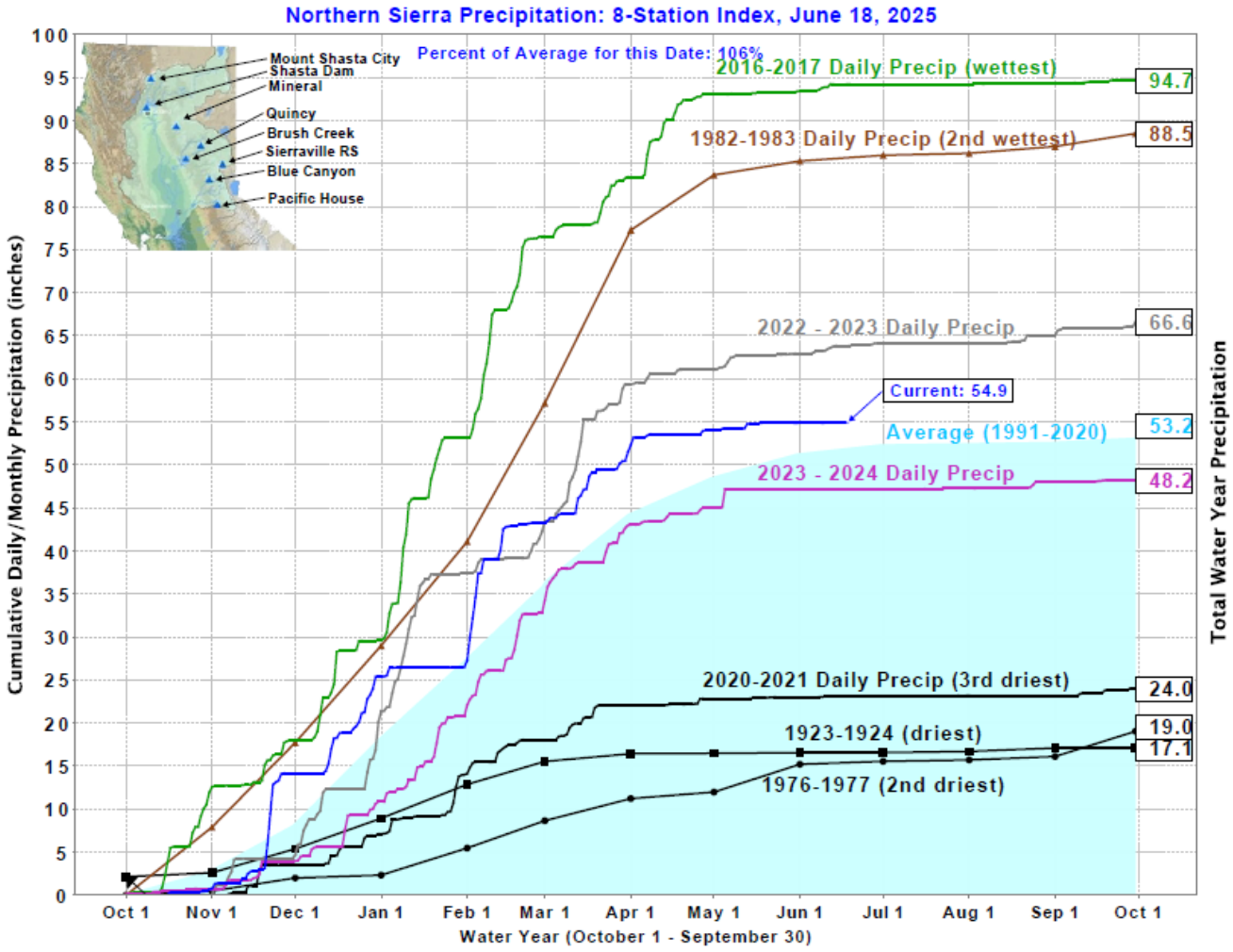

Figure 19. Total and Daily/Monthly Precipitation for Water Year 2025

Figure 19 is a graph depicting total water year precipitation and cumulative daily/monthly precipitation in inches. The average for 1991-2020 is shown in a shaded blue area (53.2 inches), 2016-2017 daily precipitation is the wettest at 94.7 inches, daily precipitation for 1982-1983 as the 2nd wettest at 88.5 inches, 2022-2023 daily precipitation at 66.6 inches, current water year at 54.9 inches, 2023-2024 daily precipitation 48.2 inches, 2020-2021 daily precipitation at 24.0 inches, 1923-1924 17.1 inches, and 1976-1977 19.0 inches.

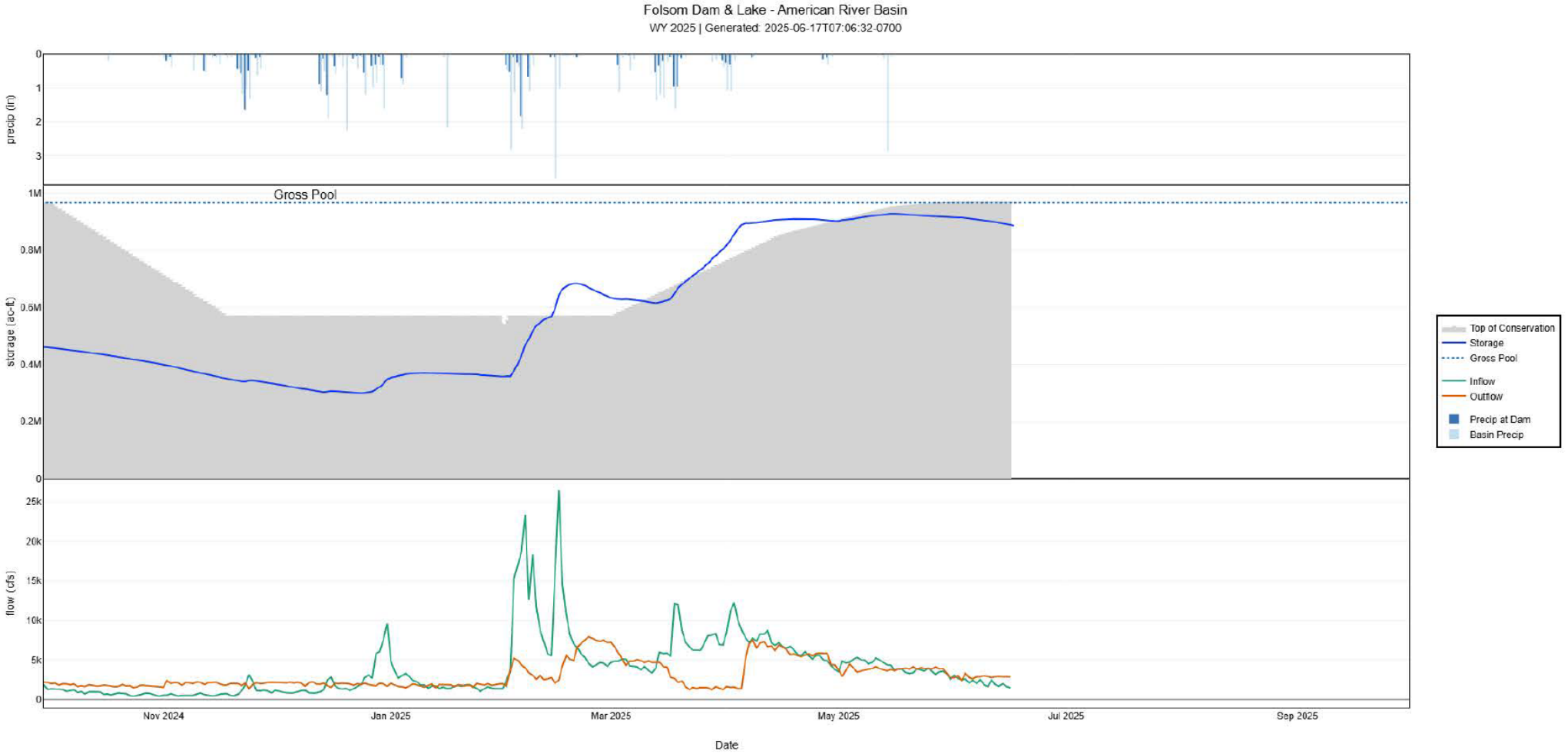

Figure 20. Folsom Dam and Lake Flow, Storage, and Precipitation Totals

Figure 20 is a graph that compares the flow, storage, and precipitation over time for the American River Basin.

Bureau of Reclamation
Historical Archive and Report Database
Daily CVP Water Supply
November 16, 2025 | Run Date: 06/17/2025

Reservoir Releases in Cubic Feet/Second

Reservoir	Dam	WY 2024	WY 2025	15 Yr Median
Trinity	Lewiston	1,806	858	858
Sacramento	Keswick	8,895	11,353	9,536
Feather	Oroville(SWP)	4,500	4,500	3,300
American	Nimbus	3,439	2,471	3,348
Stanislaus	Goodwin	1,501	1,173	1,127
San Joaquin	Friant	391	0	395

Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15 Yr Avg	WY 2024	WY 2025	% of 15 Yr Avg
Trinity	2,448	1,723	2,093	2,252	131
Shasta	4,552	3,483	4,184	4,018	115
Folsom	977	784	932	886	113
New Melones	2,420	1,543	2,086	1,863	121
Fed. San Luis	966	527	713	535	101
Total North CVP	11,363	8,060	10,008	9,554	119
Millerton	521	386	508	0	0
Oroville (SWP)	3,425	2,657	3,489	3,365	127

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

Reservoir	Current WY 2025	WY 1977	WY 1983	15 Yr Avg	% of 15 Yr Avg
Trinity	1,552	184	2,358	1,037	150
Shasta	5,949	1,929	9,592	4,246	140
Folsom	2,031	292	5,436	2,298	88
New Melones	544	N/A	2,070	853	64
Millerton	931	162	3,094	1,178	79

Accumulated Precipitation for Water Year to Date in Inches

Reservoir	Current WY 2025	WY 1977	WY 1983	Average (N Years)	% of Average	Last 24 Hours
Trinity at Fish Hatchery	34.76	12.06	54.65	29.74	(65)	117
Sacramento at Shasta Dam	65.12	17.38	112.33	58.18	(70)	112
American at Blue Canyon	69.66	15.64	103.88	63.53	(51)	110
Stanislaus at New Melones	19.54	N/A	45.33	26.49	(48)	74
San Joaquin at Huntington Lk	29.44	17.20	81.40	39.24	(52)	75

June 2025 | Folsom Lake Daily Operations | Run Date: 06/17/2025

Day	Elev	Storage (1000 Acre-Feet) in Lake	Storage (1000 Acre-Feet) Change	Compu-ted* Inflow C.F.S.	Release - C.F.S. River Power	Release - C.F.S. River Spill	Release - C.F.S. River Outlet	Pump-ing Plant	Evap. - C.F.S.	Evap. - Inches	Precip Inches
N/A	N/A	915.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	460.31	914.3	-1.0	2,683	2,778	0	0	240	158	0.44	0.00
2	460.30	914.2	-0.1	2,500	2,190	0	0	243	122	0.34	0.00
3	460.15	912.6	-1.6	2,598	3,047	21	0	240	111	0.31	0.00
4	460.00	910.9	-1.6	2,078	2,533	0	0	240	126	0.35	0.00
5	459.94	910.3	-0.6	2,424	2,397	0	0	239	115	0.32	0.00
6	459.76	908.3	-1.9	2,040	2,621	37	0	240	122	0.34	0.00
7	459.67	907.4	-1.0	2,501	2,627	0	0	242	122	0.34	0.00
8	459.44	904.9	-2.5	1,861	2,779	0	0	242	93	0.26	0.00
9	459.19	902.2	-2.7	1,675	2,688	0	0	241	107	0.30	0.00
10	459.12	901.4	-0.8	2,472	2,527	0	0	240	86	0.24	0.00
11	458.91	899.2	-2.3	1,885	2,644	0	0	243	139	0.39	0.00
12	458.66	896.5	-2.7	1,680	2,681	0	0	242	111	0.31	0.00
13	458.47	894.4	-2.0	1,976	2,633	0	0	240	132	0.37	0.00
14	458.22	891.7	-2.7	1,663	2,668	0	0	242	107	0.30	0.00
15	457.94	888.7	-3.0	1,475	2,613	0	0	241	135	0.38	0.00
16	457.66	885.8	-3.0	1,530	2,661	0	0	243	135	0.38	0.00
Totals	N/A	N/A	-29.5	33,041	42,087	58	0	3,858	1,921	5.37	0.00
Acre-Feet	N/A	N/A	-29,500	65,537	83,480	115	0	7,652	3,810	N/A	N/A

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

Summary: Release (acre-feet)

Power	83,480
Spill	115
Outlet	0
Pumping Plant	7,652
Total Releases	91,247

Summary: Precipitation (Month/Inches)

This month	0.00
October 1, 2024 to date	17.90

Isobath 06/01–06/17 (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, WaterA FD[1]	MDT, Water AFO	MDT, Water AWP	MDTWater AWB	MDT, Air, CSU	Release (CFS) Nimbus	Storage (TAF) Folsom	USP/LP Unit 1	USP/ LP Unit 2	USP/LP Unit 3
May	60.0	56.0	53.5	55.8	57.4	58.6	68.1	3408	N/A	N/A	N/A	N/A
06/01	67.7	61.5	54.8	56.9	59.7	61.5	70.5	2386	914	A 50	A 1	A 49
06/02	68.2	61.6	54.8	57.9	59.9	61.3	70.7	2433	914	A 75	A 1	A 24
06/03	69.1	61.6	54.8	57.9	60.2	61.7	75.0	2510	913	A 45	A 1	A 54
06/04	68.7	62.8	54.9	57.6	60.0	61.8	71.1	2452	911	A 50	A 1	A 49
06/05	68.6	64.3	55.1	57.3	59.8	61.5	71.3	2476	910	A 50	A 1	A 49
06/06	69.0	64.5	! 55.3	58.3	60.3	61.7	71.5	2470	908	A 50	A 1	A 49
06/07	68.8	65.4	! 55.3	58.0	60.6	62.3	78.5	2471	907	A 49	A 1	A 49
06/08	69.3	65.8	55.7	57.8	59.8	61.5	74.0	2475	905	A 77	A 1	A 22
06/09	70.3	65.9	55.7	58.1	60.6	62.0	76.5	2469	902	A 75	A 1	A 24
06/10	70.9	66.2	55.8	58.3	60.7	62.3	73.5	2476	901	A 77	A 1	A 22
06/11	70.7	65.8	56.0	58.8	60.6	62.0	69.5	2479	899	A 75	A 1	A 24
06/12	70.6	67.0	56.1	58.9	61.1	62.4	72.6	2473	896	A 77	A 1	A 22
06/13	70.4	65.5	56.3	58.6	60.7	62.2	72.5	2474	894	A 76	A 1	A 23
06/14	68.6	65.8	56.6	58.8	60.7	62.0	71.5	2478	892	A 75	A 1	A 24
06/15	67.7	66.0	56.5	59.0	61.0	62.4	73.2	2477	889	A 75	A 1	A 24
06/16	67.3	66.1	56.7	58.7	60.9	62.4	73.4	2471	886	A 75	A 1	A 23
06/17	68.1	66.6	57.0	59.4	61.4	62.8	73.6	2472	882	A 75	A 1	A 24

Date	MDT, Water NFA	MDT, Water ARP	MDT, WaterAFD[1]	MDT, Water AFO	MDT, Water AWP	MDTWater AWB	MDT, Air, CSU	Release (CFS) Nimbus	Storage (TAF) Folsom	USP/LP Unit 1	USP/ LP Unit 2	USP/LP Unit 3
Jun Avg.	**69.0**	**64.9**	**55.7**	**58.2**	**60.5**	**62.0**	**72.9**	**2467**	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	**Total**	**AF**	**83190**	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
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

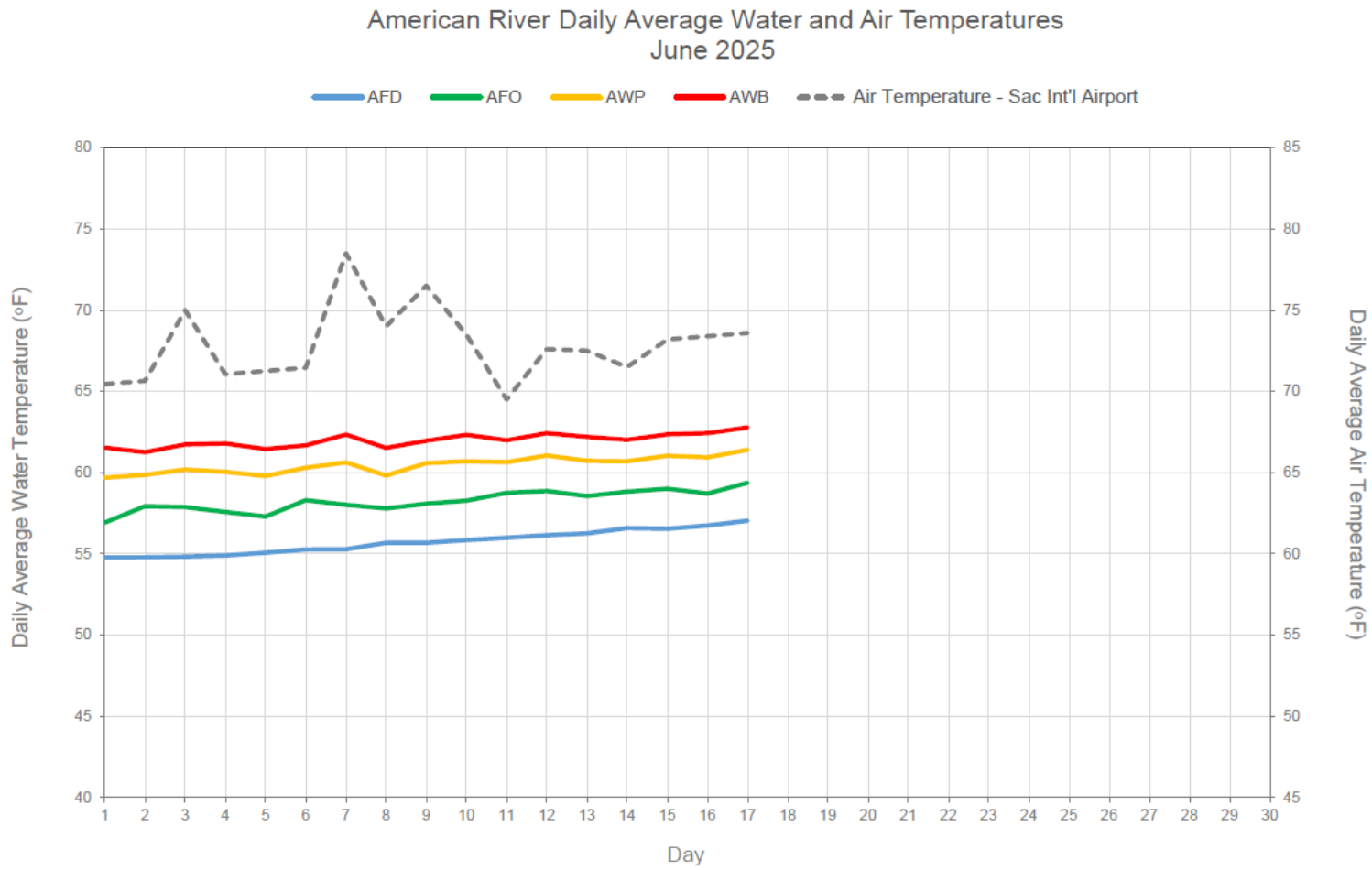

Figure 21. American River Daily Average Water and Air Temperatures

Figure 21 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 light green, AWP in yellow, and AWB in red. The air temperature at Sacramento International Airport in a dotted black line.

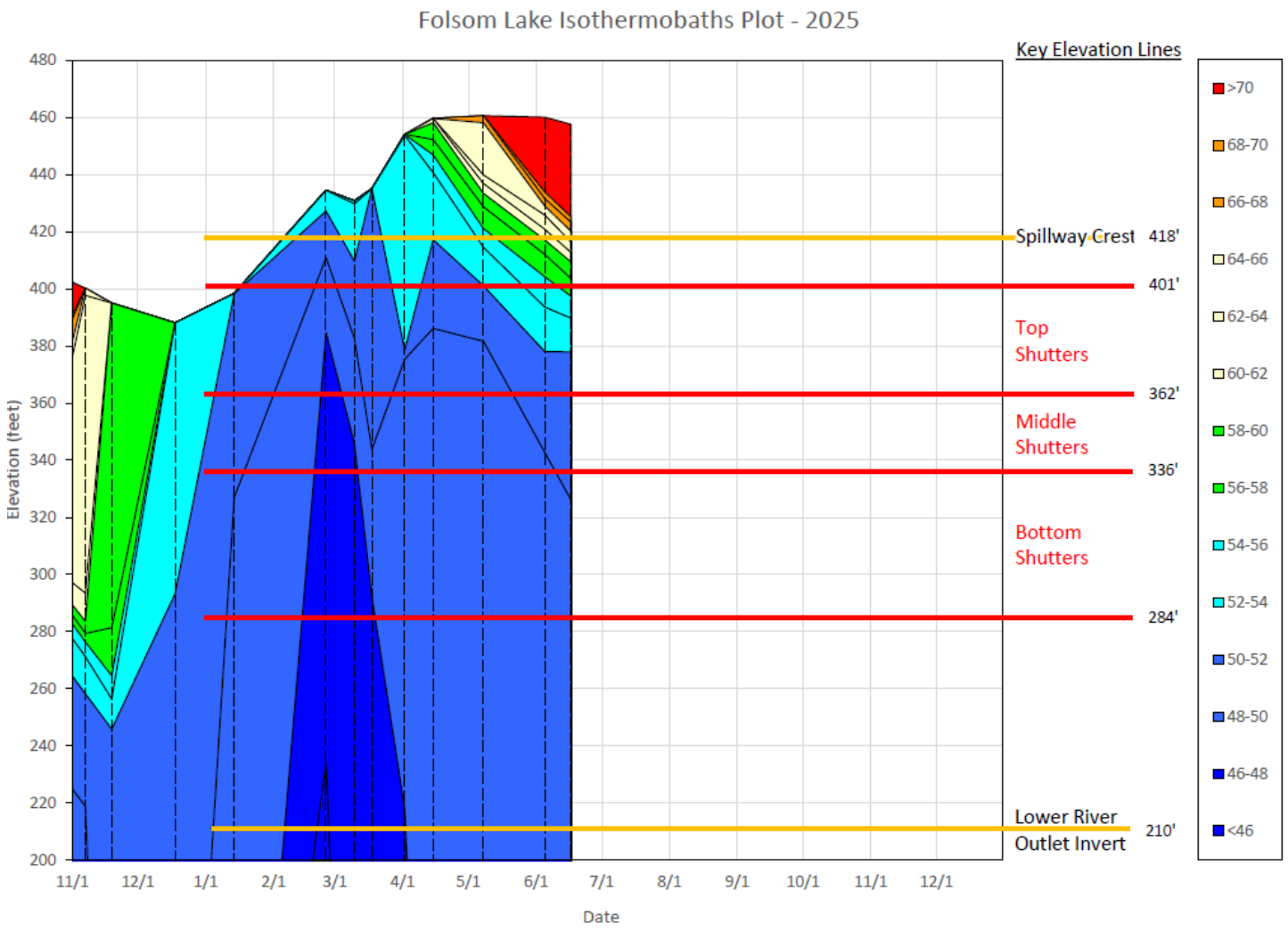

Figure 22. Folsom Lake Isothermobaths Plot

Figure 21 is a shaded chart of the Folsom Lake Isothermobaths plot for 2025 from November 1st to June 15th. The temperature of the water is depicting through different colors with the spillway crest, top, middle, and bottom shutters, and lower river outlet inverts are shown by horizontal lines.

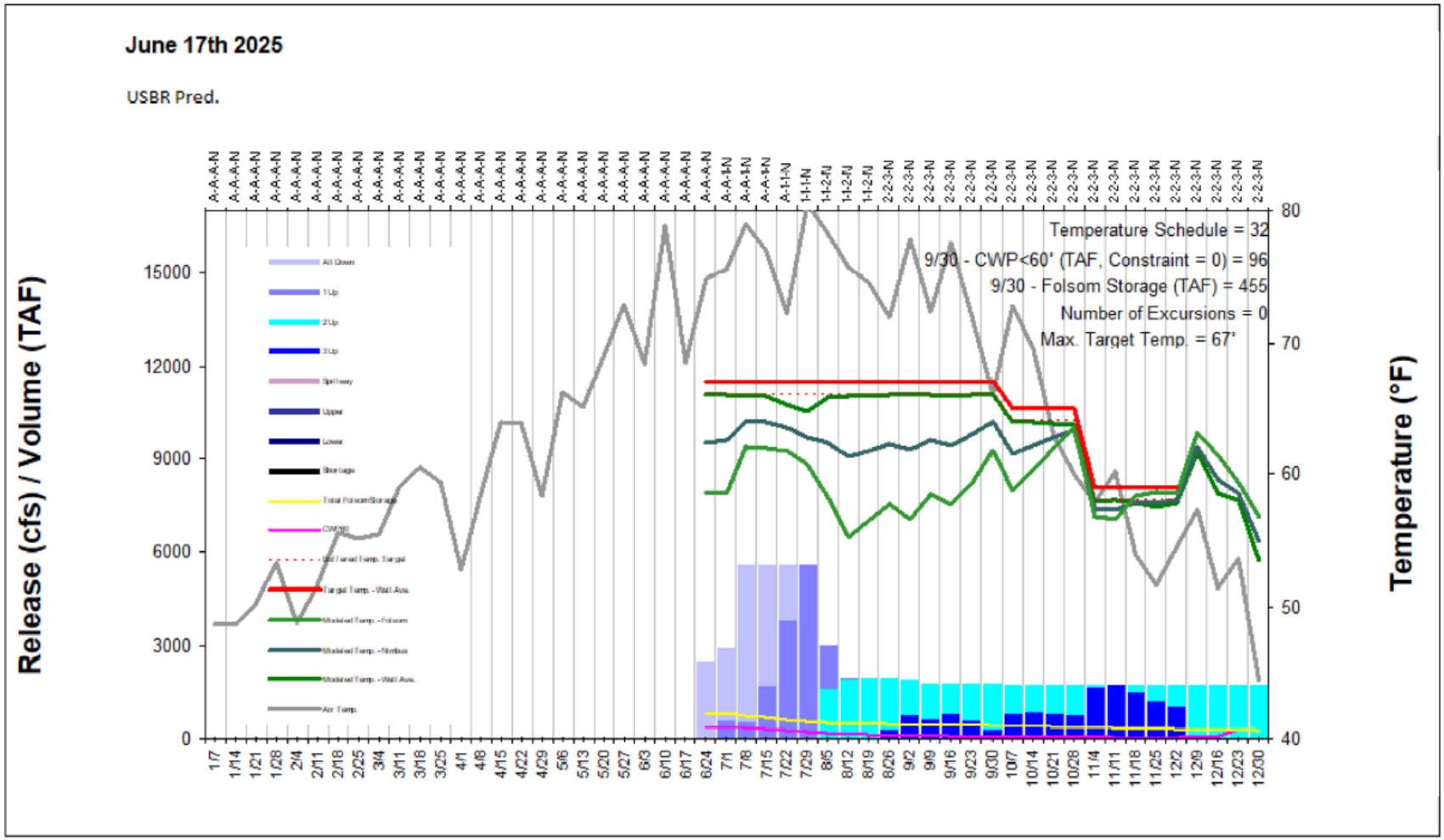

Figure 23. iCPMM 90% Hydrology 2014 Met.

Figure 23 shows the iCPMM 90% hydrology based on the 2014 meteorological conditions run on June 17th 2025. The graph depicts the models temperature, release of different facilities, and tempreature schedule from January 7th to December 30th.

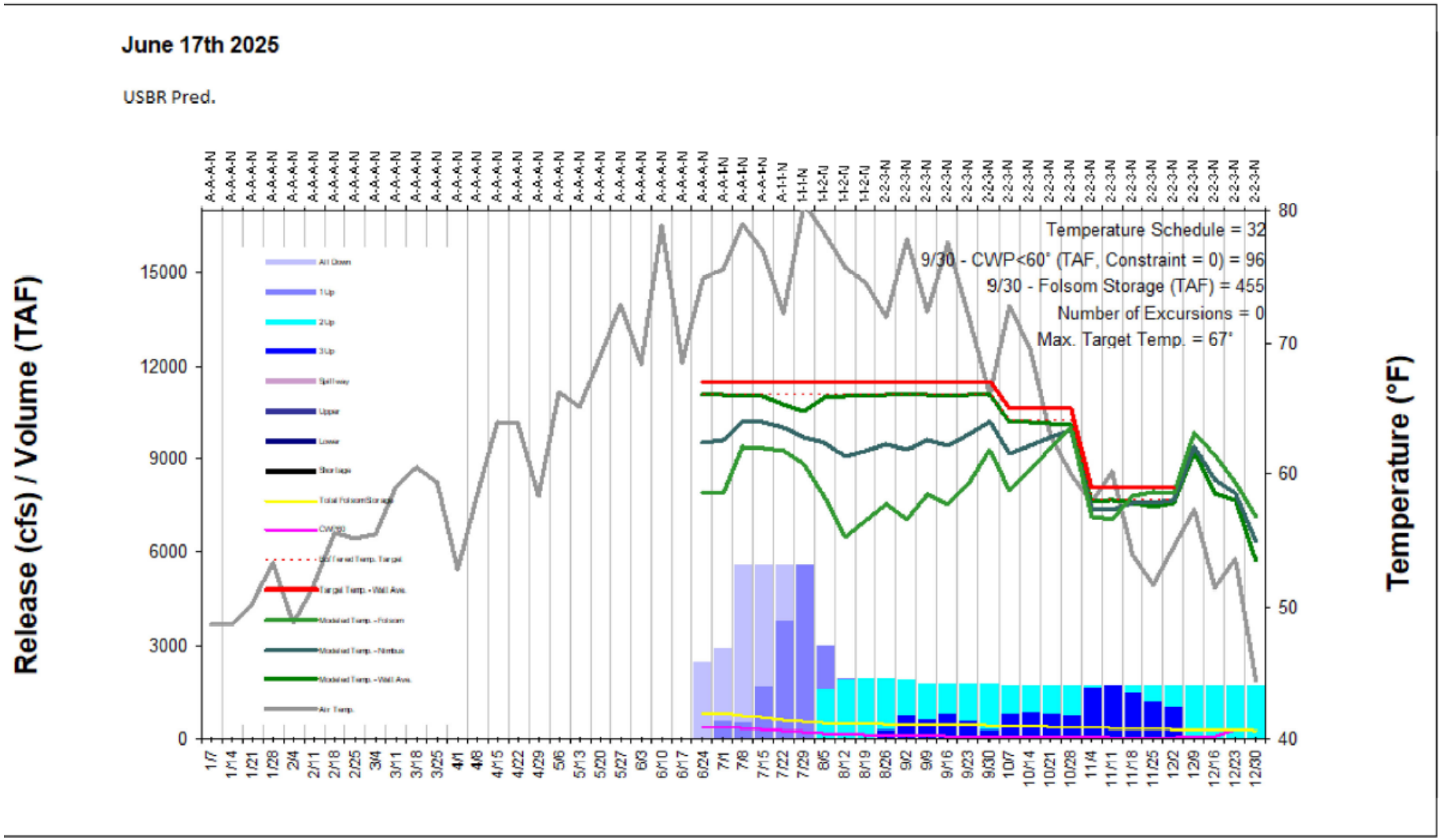

Figure 24. iCPMM 90% Hydrology Ave. Met

Figure 24 shows the iCPMM 90% hydrology based on the average meteorological conditions run on June 17th 2025. The graph depicts the models temperature, release of different facilities, and tempreature schedule from January 7th to December 30th.

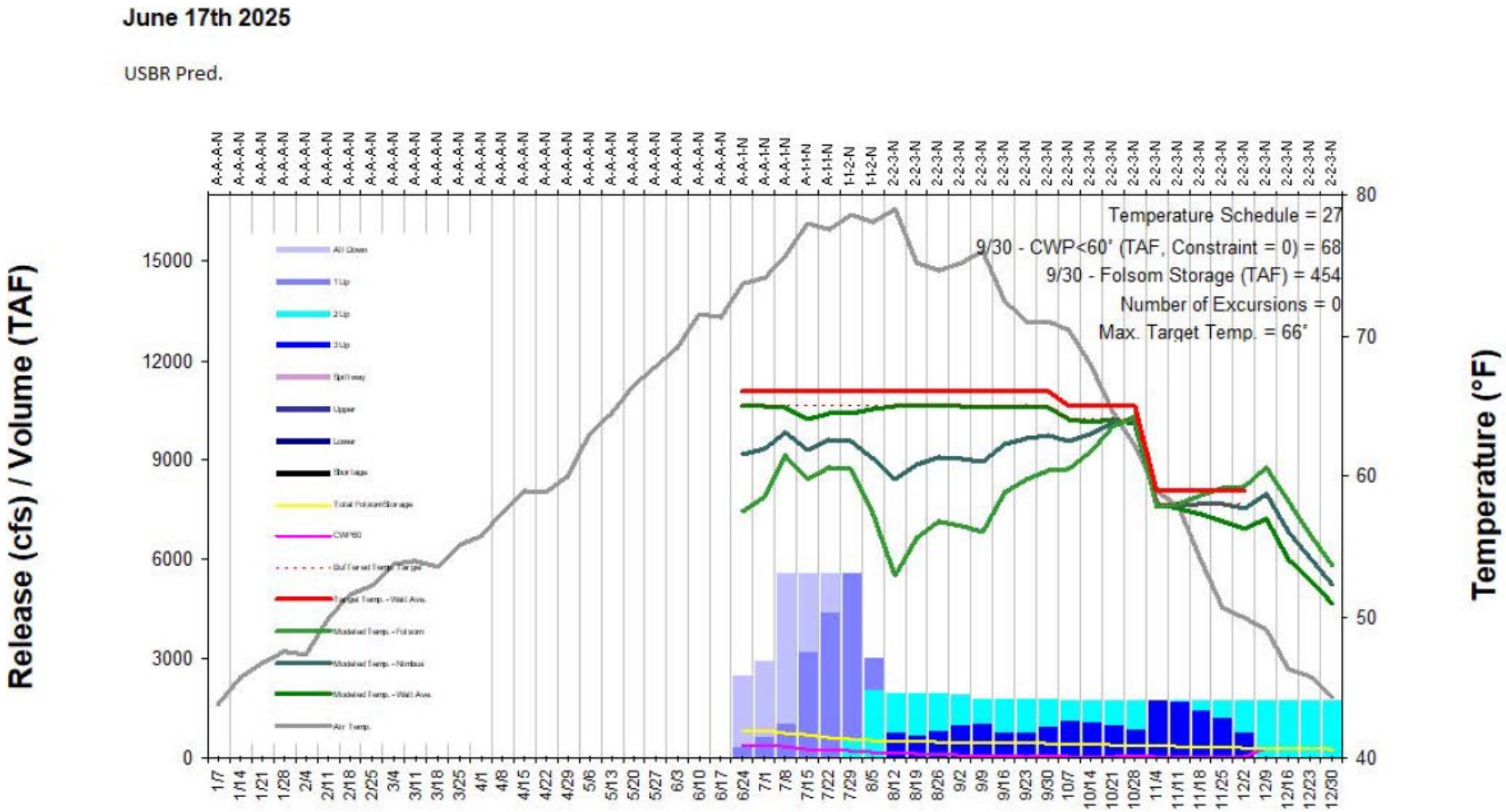

Figure 25. iCPMM 90% Ave Met.

Figure 24 shows the iCPMM 90% hydrology based on the average meteorological conditions run on June 17th 2025. The graph depicts the models temperature, release of different facilities, and tempreature schedule from January 7th to December 30th.

Draft June 2025 Outlook

50% Inflow/Runoff Exceedance Hydrology

Federal End of the Month Storage/Elevation (TAF/Feet)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Folsom Storage	915	859	583	532	484	417	356	311	288	313	409	516	597
Folsom Elevation	N/A	455	426	420	414	405	396	389	385	389	404	419	428

Monthly River Release (TAF/cfs)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
American TAF	N/A	150	345	123	107	108	104	108	86	78	77	99	95
American cfs	N/A	2516	5605	2000	1800	1750	1750	1750	1400	1400	1250	1668	1545

90% Inflow/Runoff Exceedance Hydrology

Federal End of the Month Storage/Elevation (TAF/Feet)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Folsom Storage	915	859	583	532	484	417	356	311	288	313	409	516	597
Folsom Elevation	N/A	455	426	420	414	405	396	389	385	389	404	419	428

Monthly River Release (TAF/cfs)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
American TAF	N/A	150	345	123	107	108	104	108	86	78	77	99	95
American cfs	N/A	2516	5605	2000	1800	1750	1750	1750	1400	1400	1250	1668	1545

Table 5. American River Baseflow Table

Month	Index Used for Index-based MRR	Flood Mgmt (TAF)[1]	ARI or SRI	Index Based MRR (cfs)	RDPB-based MRR for fall-run Chinook salmon (applicable in Jun and Feb)	RDPB-based MRR for steelhead (applicable Feb to May)	Controlling MRR (cfs)	Actual Average Monthly Nimbus release[2] (cfs)
October	May ARI[3] (50% exceedance)	0	2,329	1,500	N/A	N/A	1,500	1,545
November	May ARI[3] (50% exceedance)	0	2,329	2,000	N/A	N/A	2,000	1,997
December	May ARI[3] (50% exceedance)	0	2,329	2,000	N/A	N/A	2,000	2,027
January	January SRI (90% exceedance)	0	13.6 (SRI)	1,750	1,400	N/A	1,750	1,761
February	February ARI (90% exceedance)	190	1,280	1,118	1,215	1,400	1,400	4,838
March	March ARI (90% exceedance)	292	1,520	1,316	N/A	1,215	1,316	3,075
April	April ARI (90% exceedance)	524	1,898	1,320	N/A	1,215	1,320	5,085
May	May ARI (90% exceedance)	602	1,676	1,191	N/A	1,215	1,215	3,428
June	May ARI[3] (90% exceedance)	N/A	1,598	1,146	N/A	N/A	N/A	N/A
July	May ARI[3] (90% exceedance)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
August	May ARI[3] (90% exceedance)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
September	May ARI[3] (90% exceedance)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] Cumulative flood management releases
[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.

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