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
Meeting ID: 265 797 031 228 5
Passcode: qL9ru3cH

Thursday, August 21, 2025

Agenda

1. Introductions
2. Announcements
3. Housekeeping
4. Fisheries Update
    a. CDFW
    b. CFS
    c. PSMFC
5. Operations Forecast
    a. SMUD
    b. PCWA
6. Central Valley Operations
7. Discussion
    a. Temperature Results
    b. Power Bypass SDM Update
    c. WTMP Update

8. Next Meetings:
    a. Power Bypass SDM Meeting – Wednesday, August 27, 9:30-12:30pm
    b. Regular Monthly ARG Meeting - Thursday, September 18, 1:30-3:30pm

Fisheries Update

California Department of Fish and Wildlife (CDFW)

N/A

Cramer Fish Sciences (CFS)

Lower American River Dissolved oxygen monitoring

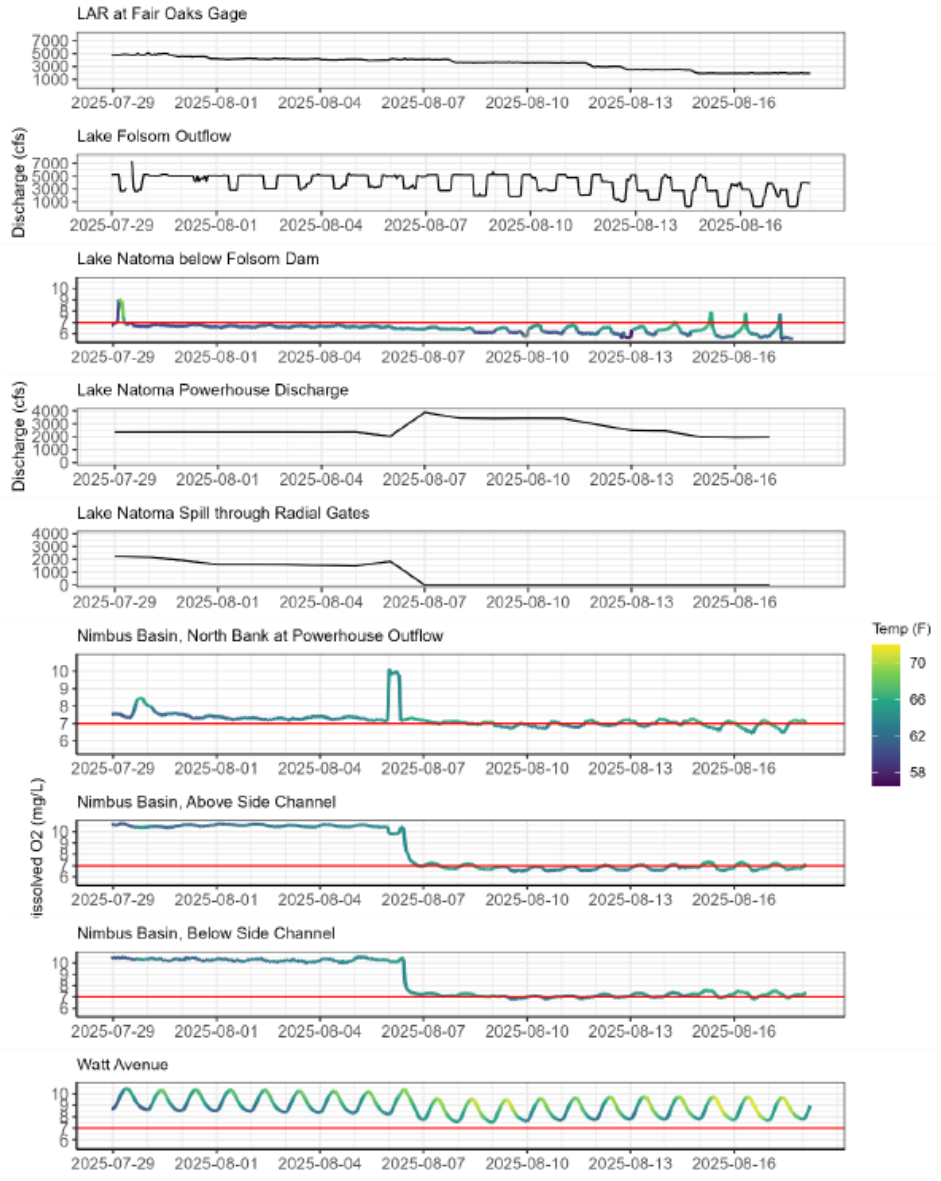

Figure 1. Dissolved oxygen through August 16 2025

Figure 1 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 have steadily decreased on the LAR and are currently at or below 7 mg/L in Nimbus Basin. In Lake Natoma, dissolved oxygen levels fluctuate with daily releases at Folsom Dam, reaching levels as low as 5.5 mg/L. On 7 August, Nimbus Dam flow releases switched from a combined spill through the radial gates and powerhouse to only through the powerhouse (radial gate spill went to 0 cfs). This resulted in a short term spike in dissolved oxygen below the powerhouse, but an overall decrease of dissolved oxygen in Nimbus Basin. Total discharge from Nimbus Dam decreased from 8 August through 14 August, however dissolved oxygen levels have remained steady at 7 mg/L following the cessation of spill through the radial gates.

The next DO logger download is scheduled for 3 September 2025.

Steelhead Spawning and Stranding Surveys

Spawning and stranding surveys through 2025 have been uploaded to EDI, and links are provided below. Spawning surveys (Includes annual spawning and stranding reports):

Sweeney, J. and J. Hannon. 2025. Lower American River steelhead spawning surveys (Chinook and lamprey data included), California, 2002 to 2025 ver 2. Environmental Data Initiative. https://doi.org/10.6073/pasta/1e5b04181efe3f1c745f1c45af535c72 (Accessed 2025-08-19)

Stranding surveys:

Sweeney, J. and J. Hannon. 2025. Lower American River steelhead and Chinook stranding surveys, California, 2016 - 2025 ver 3. Environmental Data Initiative. https://doi.org/10.6073/pasta/4c77e4bd63cb68f444b59db0203e1867 (Accessed 2025-08-19).

Pacific States Marine Fisheries Commission (PSMFC)

No updates at this time.

Operations Forecast

Sacramento Municipal Utility District (SMUD) – Update as of 08/18/2025

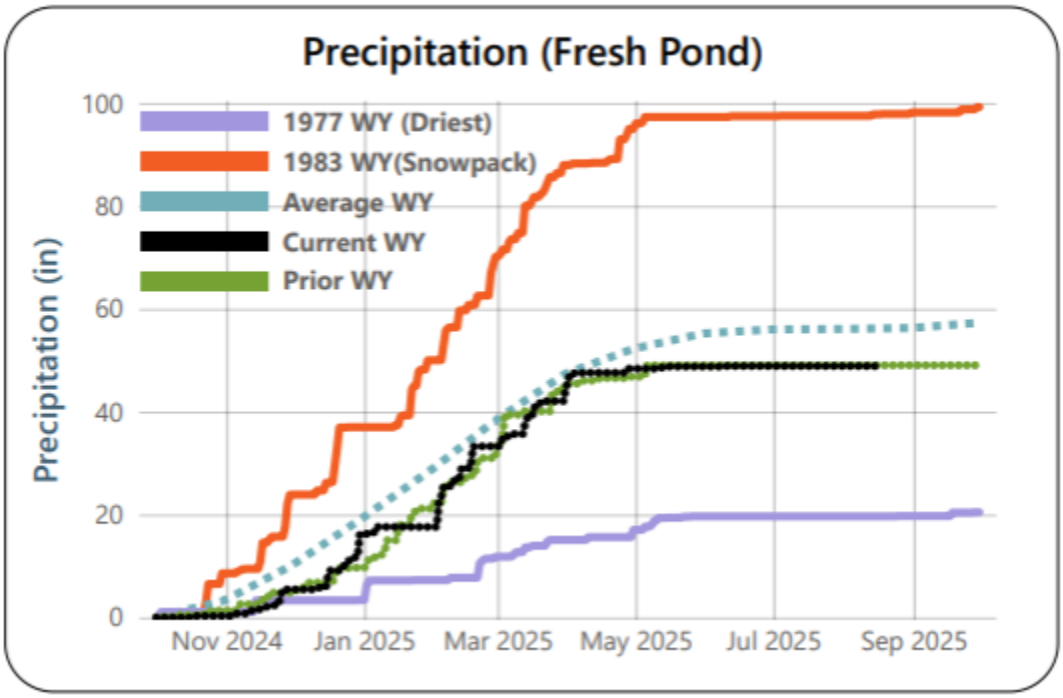

Figure 2. Fresh Pond Precipitation

Figure 2 is a line graph of fresh pond precipitation in inches for November 2024 – September 2025. 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% average to date and 85.3 water year average percentage.

Table 1. 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%

Month	Current Water Year	Historical Average	% of Historical Average
August	0.00	0.20	0%
September	0.00	1.02	0%
Total	48.89	57.32	85%

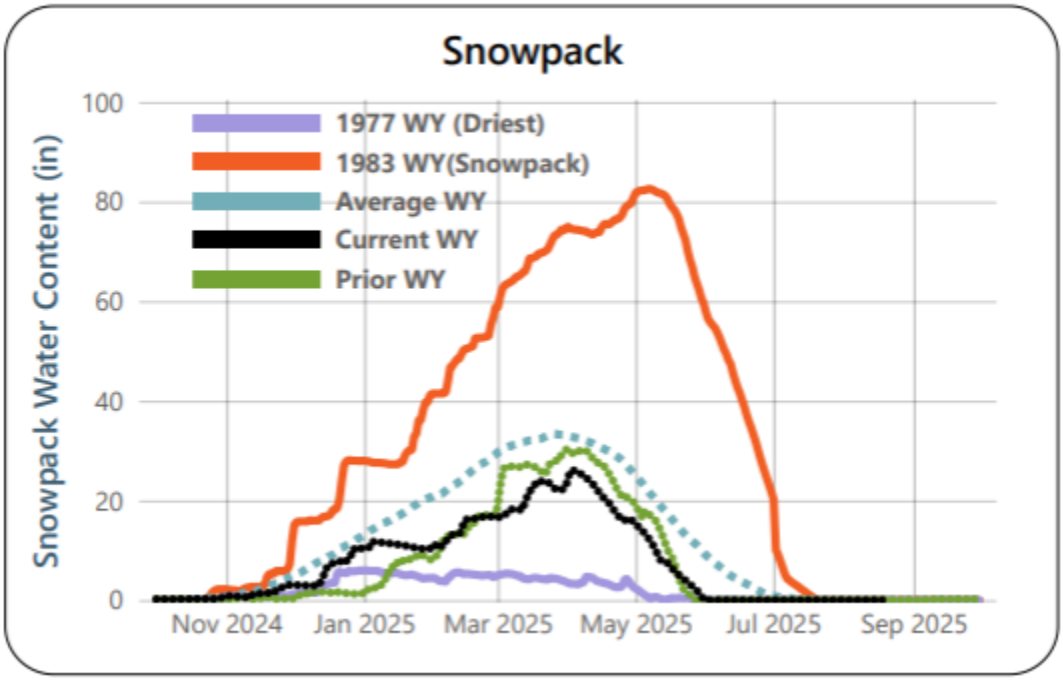

Figure 3. August 2025 Snowpack

Figure 3 is a line graph of snowpack water content in inches for November 2024-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 0.0% average to date with a 0.1% April 1 average.

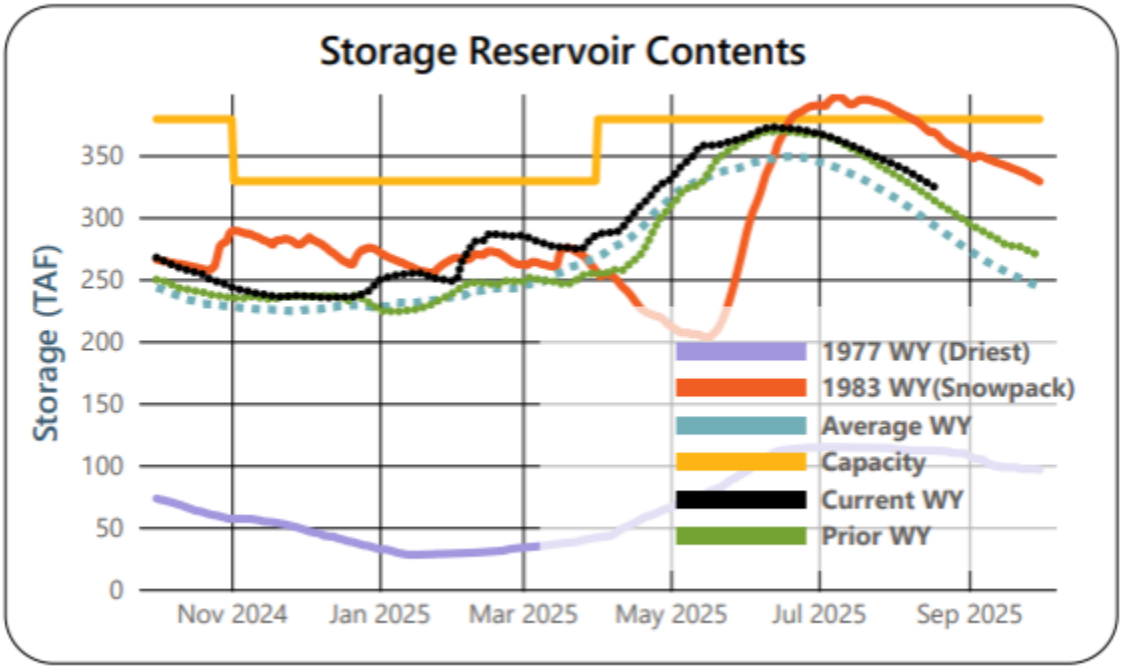

Figure 4. Storage Reservoir Contents

Figure 4 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 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	58.891	85.0%	53,888	78%	52,506	76%
Ice House Reservoir	43,500	36,256	83.3%	36,236	83%	33,950	78%
Union Valley Reservoir	266,370	228,285	85.7%	223,675	84%	207,976	78%
Total Reservoir Storage	379,180	323,432	85.3%	313,800	83%	294.432	78%

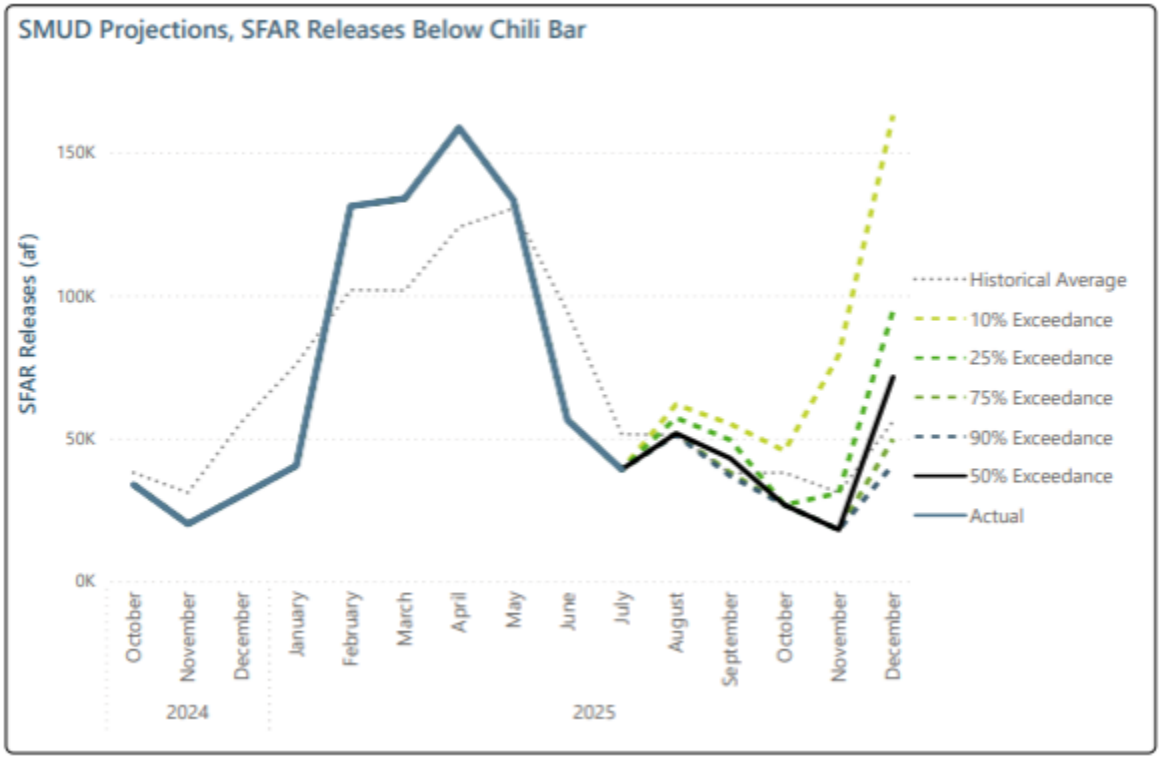

Figure 5. Chili Bar releases into the South Fork American River

Figure 5 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 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-24	550	33,751	33,751	33,751
Actual	Nov-24	337	20,015	20,015	20,015
Actual	Dec-24	491	30,111	30,111	30,111
Actual	Jan-25	659	40,419	40,419	40,419
Actual	Feb-25	2,367	131,224	131,224	131,224
Actual	Mar-25	2,182	133,933	133,933	133,933
Actual	Apr-25	2,671	158,666	158,666	158,666
Actual	May-25	2,174	133,433	133,433	133,433
Actual	Jun-25	948	56,321	56,321	56,321
Actual	Jul-25	637	39,104	39,104	39,104
Forecast	Aug-25	843	51,746	51,262	61,866
Forecast	Sep-25	724	42,996	36,784	55,034

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	Oct-25	434	26,667	26,667	45,620
Forecast	Nov-25	303	17,991	17,991	79,078
Forecast	Dec-25	1,193	71,456	40,802	163,042

Bureau of Reclamation
Historical Archive and Report Database
Daily CVP Water Supply
August 19, 2025 | Run Date: 08/20/2025

Reservoir Releases in Cubic Feet/Second

Reservoir	Dam	WY 2024	WY 2025	15 Yr Median
Trinity	Lewiston	444	449	450
Sacramento	Keswick	11,464	9,488	9,563
Feather	Oroville(SWP)	8,000	7,000	5,500
American	Nimbus	3,422	2,001	2,749
Stanislaus	Goodwin	268	226	268
San Joaquin	Friant	434	250	352

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	1,494	1,864	2,002	134
Shasta	4,552	2,736	3,159	2,964	108
Folsom	977	534	536	490	92
New Melones	2,420	1,402	1,889	1,674	119
Fed. San Luis	966	314	427	251	80
Total North CVP	11,363	6,481	7,875	7,381	114
Millerton	521	303	270	260	86
Oroville (SWP)	3,425	2,010	2,471	2,470	123

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	1,611	202	2,836	1,100	147
Shasta	6,429	2,323	10,395	4,663	138
Folsom	2,175	320	6,328	2,561	85
New Melones	630	N/A	2,671	1,009	62
Millerton	1,128	307	4,412	1,568	72

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	35.89	12.11	55.19	30.27 (65)	119	0.00
Sacramento at Shasta Dam	66.79	17.42	112.58	58.97 (70)	113	0.00

Reservoir	Current WY 2025	WY 1977	WY 1983	Average (N Years)	% of Average	Last 24 Hours
American at Blue Canyon	69.66	15.64	103.88	63.99 (51)	109	0.00
Stanislaus at New Melones	19.54	N/A	45.34	26.66 (48)	73	0.00
San Joaquin at Huntington Lk	29.44	17.50	82.80	39.82 (52)	74	0.00

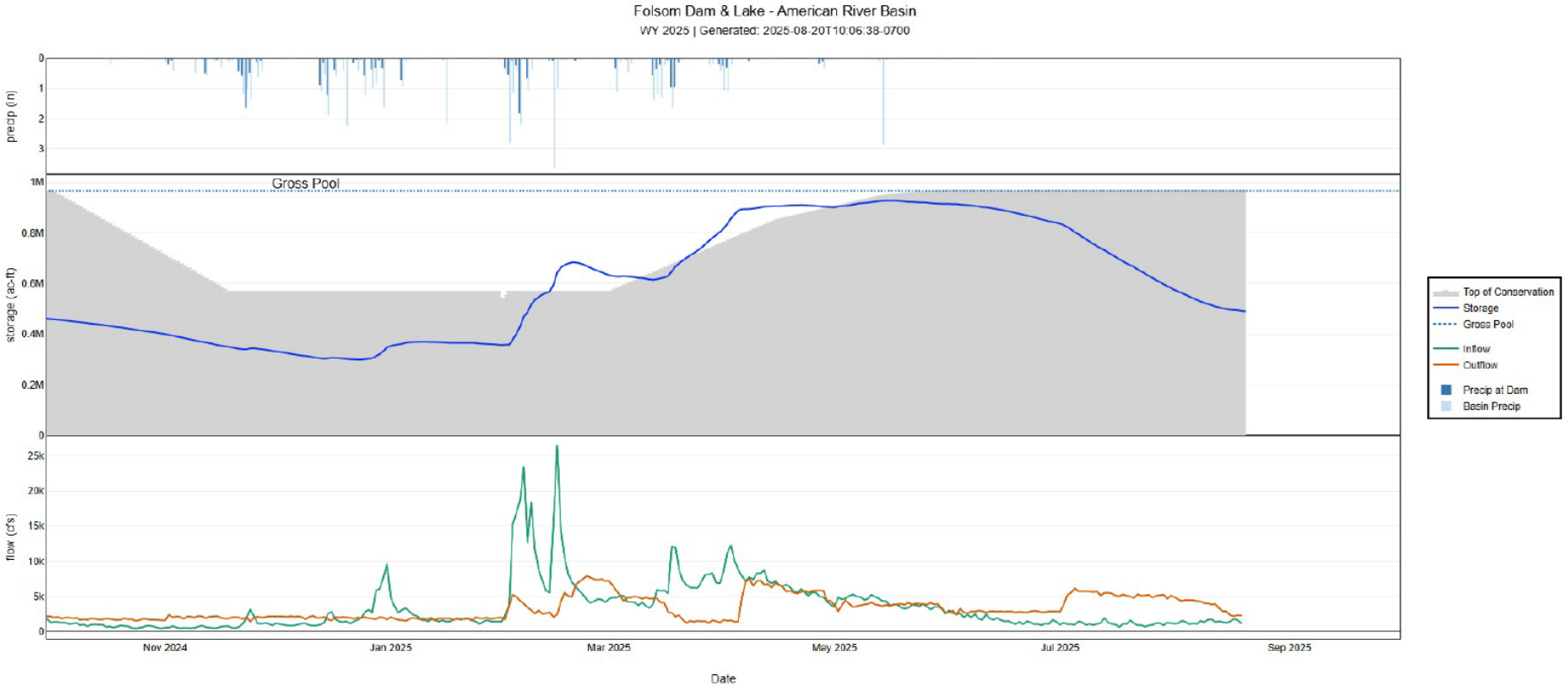

Figure 6. Folsom Dam and Lake Flow, Storage, and Precipitation Totals

Figure 6 is a graph that compares the flow, storage, and precipitation over time for the American River Basin.

Table 4. 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 release2 (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)	4	13.6 (SRI)	1,750	1,400	N/A	1,750	1,761
February	February ARI (90% exceedance)	200	1,276	1,074	1,215	1,400	1,400	4,838
March	March ARI (90% exceedance)	293	1,510	1,306	N/A	1,215	1,306	3,075
April	April ARI (90% exceedance)	528	1,897	1,319	N/A	1,215	1,319	5,085
May	May ARI (90% exceedance)	586	1,672	1,215	N/A	1,215	1215	3,428
June	May ARI[3] (90% exceedance)	586	1,614	1,155	N/A	N/A	1,155	2,463
July	May ARI[3] (90% exceedance)	586	1,614	1,636	N/A	N/A	1,636	4,769
August	May ARI[3] (90% exceedance)	586	1,614	1,636	N/A	N/A	1,636	N/A
September	May ARI[3] (90% exceedance)	586	1,614	1,636	N/A	N/A	1,636	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

August 2025 | Folsom Lake Daily Operations | Run Date: 08/20/2025

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	574.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	424.77	567.9	-6.9	1,169	4,295	0	0	254	83	0.29	0.00
2	424.10	562.2	-5.7	1,545	4,087	0	0	255	85	0.30	0.00
3	423.34	555.8	-6.4	1,341	4,240	0	0	249	96	0.34	0.00
4	422.51	548.8	-7.0	1,030	4,211	0	0	243	96	0.34	0.00
5	421.70	542.0	-6.8	1,140	4,214	0	0	242	95	0.34	0.00
6	420.90	535.4	-6.6	1,070	4,084	0	0	246	86	0.31	0.00
7	420.20	529.6	-5.8	1,495	4,061	0	0	247	91	0.33	0.00
8	419.52	524.1	-5.6	1,312	3,768	0	0	254	93	0.34	0.00
9	418.93	519.3	-4.8	1,666	3,733	0	0	260	96	0.35	0.00
10	418.39	514.9	-4.4	1,731	3,582	0	0	253	95	0.35	0.00
11	417.72	509.5	-5.4	1,318	3,678	0	0	255	103	0.38	0.00
12	417.24	505.7	-3.8	1,442	3,053	6	0	229	91	0.34	0.00
13	416.83	502.4	-3.3	1,332	2,660	0	0	237	83	0.31	0.00
14	416.40	499.0	-3.4	1,225	2,637	0	0	243	64	0.24	0.00
15	416.15	497.0	-2.0	1,413	2,068	0	0	247	98	0.37	0.00
16	416.02	496.0	-1.0	1,764	1,954	0	0	247	82	0.31	0.00
17	415.82	494.4	-1.6	1,621	2,079	0	0	245	90	0.34	0.00
18	415.52	492.1	-2.4	1,172	2,038	1	0	247	74	0.28	0.00
19	415.31	490.4	-1.6	1,534	2,040	1	0	240	84	0.32	0.00
Totals	N/A	N/A	-84.5	26,320	62,482	8	0	4,693	1,685	6.18	0.00
Acre-Feet	N/A	N/A	-84,500	52,206	123,933	16	0	9,309	3,342	N/A	N/A

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

Summary: Release (acre-feet)

Power	123,933
Spill	16
Outlet	0
Pumping Plant	9,309
Total Releases	133,257

Summary: Precipitation (Month/Inches)

This month	0.00
October 1, 2024 to date	17.90

Isobath 08/01–08/19 (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[1]	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
July	68.2	69.6	60.3	62.0	63.2	64.2	72.8	4769	N/A	N/A	N/A	N/A
08/01	67.0	69.2	60.7	61.9	63.4	64.3	73.8	4012	568	A 50	A 0	A 50
08/02	65.7	68.2	61.2	62.3	63.6	64.6	73.8	4013	562	A 50	A 0	A 50
08/03	65.2	67.5	61.6	62.8	64.1	65.0	73.7	4000	556	A 50	A 0	A 50
08/04	66.0	67.3	62.2	63.1	64.3	65.1	72.2	3944	549	A 50	A 0	A 50
08/05	66.8	67.1	62.6	63.5	64.7	65.5	73.1	3913	542	A 50	A 0	A 50
08/06	66.4	66.4	63.0	64.1	65.1	66.0	78.0	3940	535	A 50	A 0	A 50
08/07	65.7	67.2	63.4	64.5	65.7	66.7	80.0	3953	530	A 61	A 0	A 39
08/08	65.2	67.3	62.2	65.1	66.4	67.4	81.8	3504	524	M 42	T 0	T 58
08/09	64.2	67.5	60.2	64.3	66.4	67.8	83.4	3482	519	M 42	T 0	T 58
08/10	63.5	67.4	60.8	63.0	64.7	66.1	80.9	3494	515	M 41	T 0	T 59
08/11	64.1	67.2	61.3	63.0	64.5	65.7	76.1	3488	510	M 39	T 0	T 61
08/12	63.8	67.7	61.6	63.4	64.9	65.8	76.1	2998	506	M 38	T 0	T 62
08/13	62.0	67.6	60.9	63.8	65.3	66.3	70.7	2541	502	M 49	T 0	T 50
08/14	63.0	67.9	63.3	63.6	65.4	66.7	70.3	2493	499	M 25	T 0	T 74
08/15	63.6	66.8	63.6	64.9	66.7	67.6	76.7	2045	497	M 24	T 0	T 76
08/16	62.8	65.5	63.2	64.9	67.0	68.3	73.8	2001	496	M 29	T 0	T 70

Date	MDT, Water NFA	MDT, Water ARP	MDT, Water AFD[1]	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
08/17	63.0	64.9	61.1	65.4	67.0	68.3	71.6	2014	494	M 57	T 0	T 43
08/18	62.5	64.5	60.9	65.2	66.9	67.9	70.6	2005	492	M 68	T 0	T 32
08/19	62.4	64.2	60.4	63.7	66.0	67.6	73.0	2001	490	M 73	T 0	T 27
Aug Avg.	64.4	66.9	61.8	63.8	65.4	66.5	75.2	3150	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	**Total**	**AF**	**118,692**	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

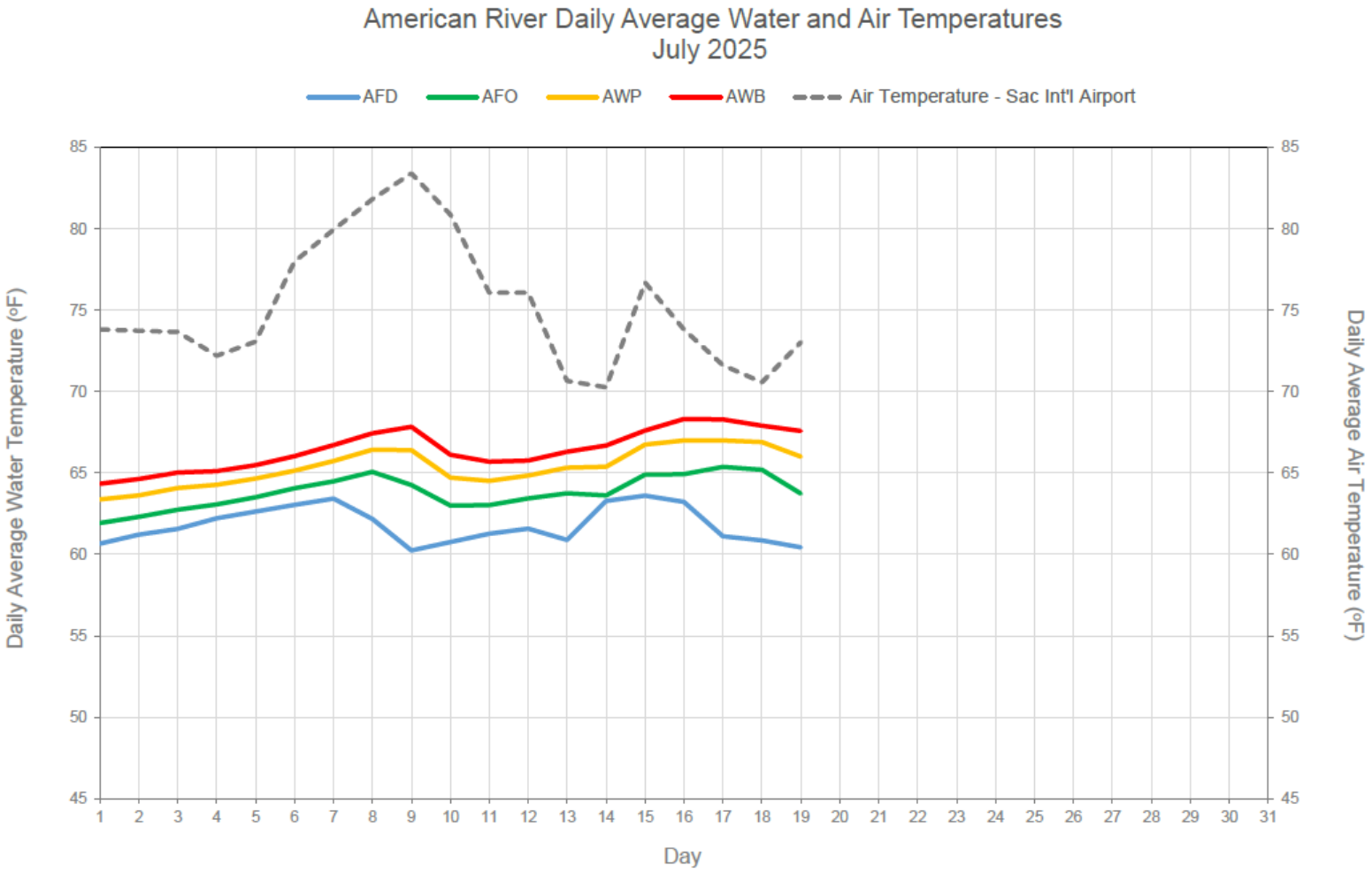

Figure 11. American River Daily Average Water and Air Temperatures

Figure 11 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.

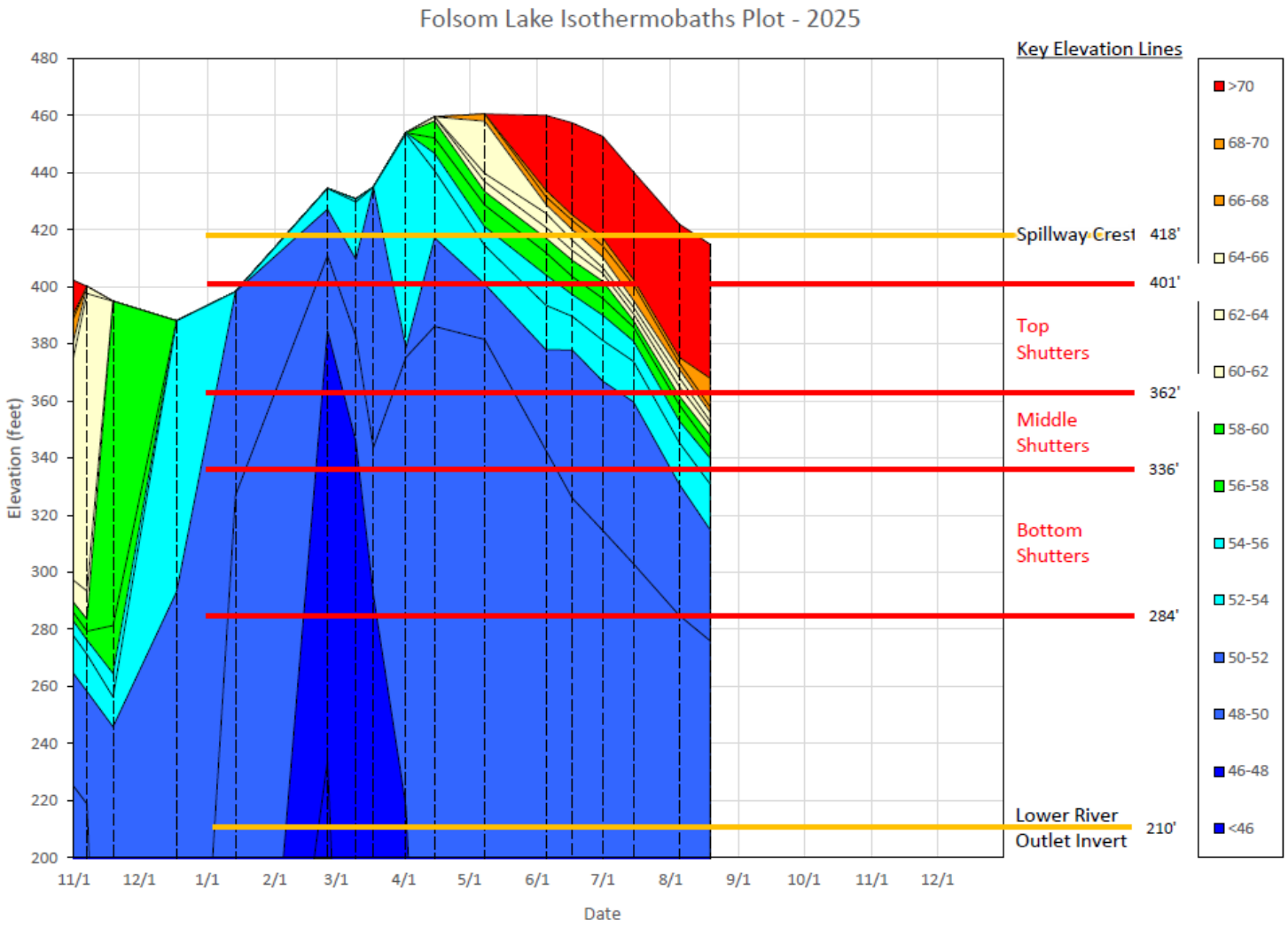

Figure 12. Folsom Lake Isothermobaths Plot

Figure 12 is a shaded chart of the Folsom Lake Isothermobaths plot for 2025 from November 1st to August 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.

Draft July 2025 Outlook

50% Inflow/Runoff Exceedance Hydrology

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

Facility	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Folsom Storage	575	454	390	363	352	358	418	537	726	854	936	930	754
Folsom Elevation	N/A	411	402	398	396	397	406	421	442	455	462	462	445

Monthly River Release (TAF/cfs)

Facility	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
American TAF	N/A	166	107	108	104	108	92	144	123	297	381	227	295
American cfs	N/A	2700	1800	1750	1750	1750	1500	2600	2000	5000	6200	3822	4800

90% Inflow/Runoff Exceedance Hydrology

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

Facility	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Folsom Storage	575	454	390	370	353	345	346	394	504	651	764	687	563
Folsom Elevation	N/A	411	402	399	396	395	395	402	417	434	446	438	424

Monthly River Release (TAF/cfs)

Facility	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
American TAF	N/A	166	107	62	59	61	61	56	61	59	61	149	184
American cfs	N/A	2703	1800	1003	1000	1000	1000	1000	1000	1000	1000	2504	3000

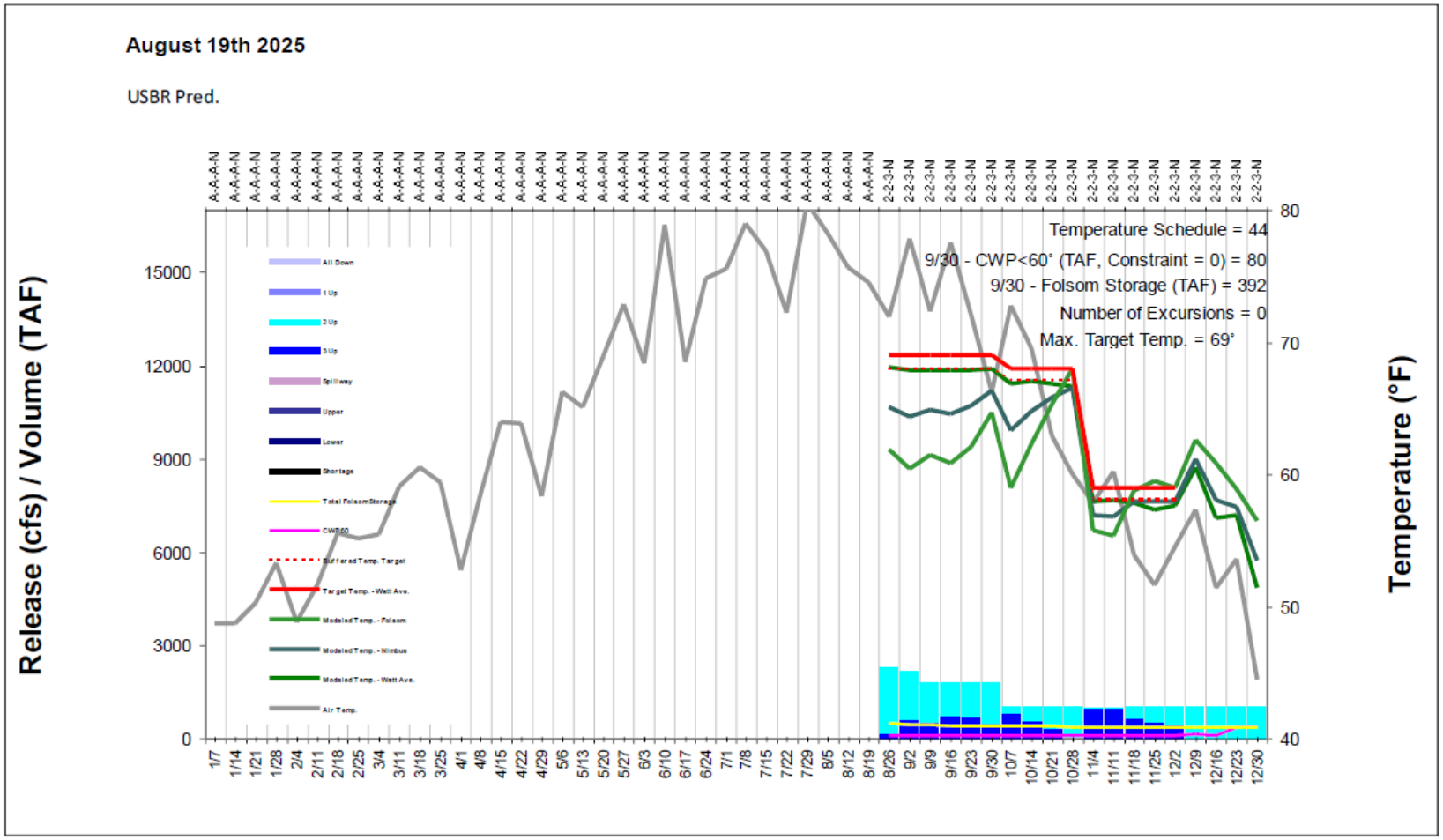

Figure 13. iCPMM 50% Hydrology 2014 Met

Figure 13 shows the iCPMM 50% hydrology based on the 2014 meteorological conditions run on August 19th, 2025. The graph depicts the models temperature, release of different facilities, and temperature schedule from January 7th to December 30th.

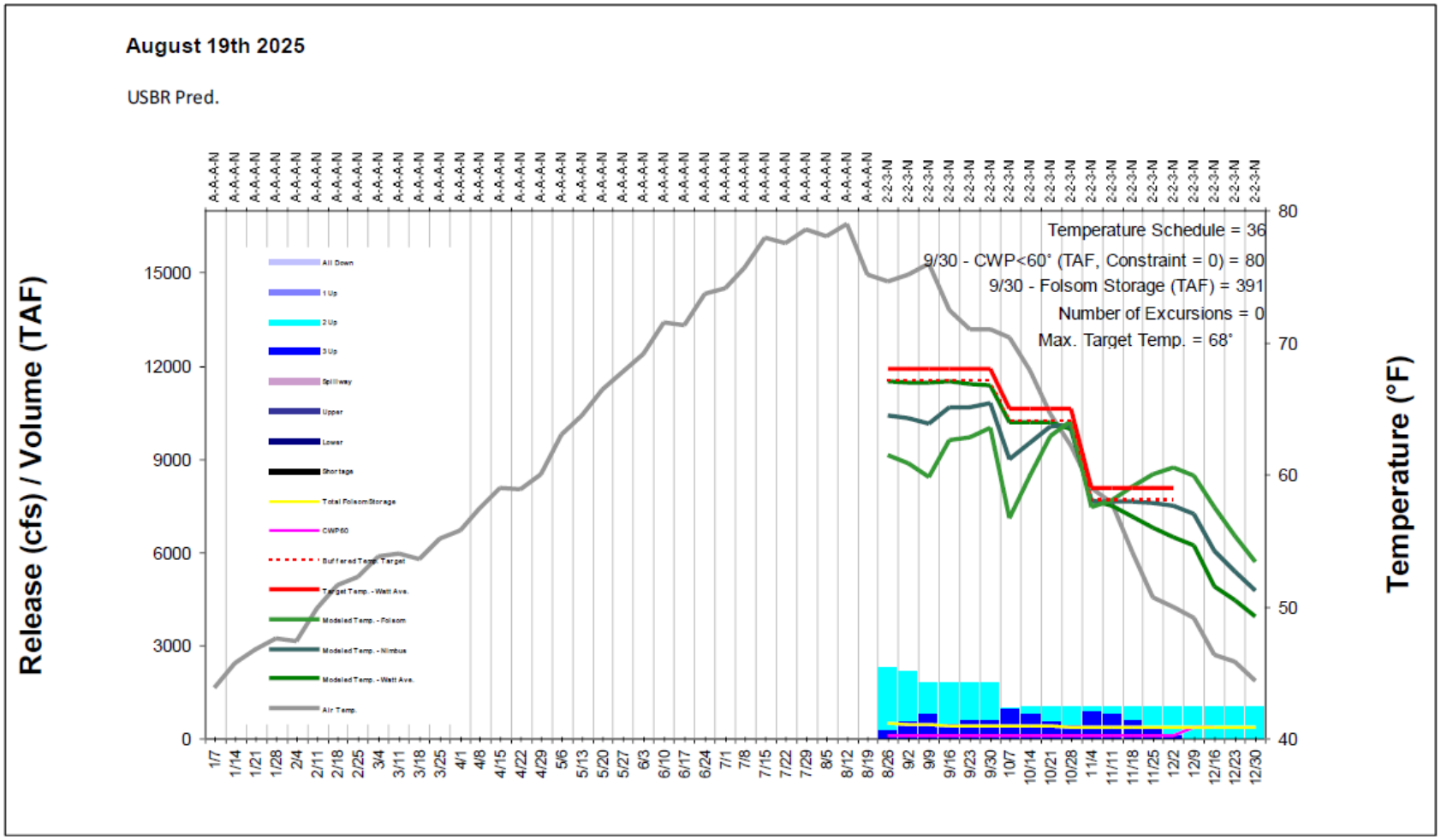

Figure 14. iCPMM 50% Hydrology Ave. Met

Figure 14 shows the iCPMM 90% hydrology based on the average meteorological conditions run on August 19th, 2025. The graph depicts the models temperature, release of different facilities, and temperature schedule from January 7th to December 30th.

Discussion

Temperature Results Update

- N/A

Power Bypass SDM Update (SDM Analyst) Updates

- N/A

Water Temperature Management Plan (WTMP) Updates

- N/A

Next Meetings

- Power Bypass SDM Meeting – Wednesday, August 27, 9:30-12:30pm
- Regular Monthly ARG Meeting - Thursday, September 18, 1:30-3:30pm