BUREAU OF RECLAMATION

American River Group

1:30 PM – 3:30 PM
Conference Line: +1 (321) 209-6143; Access Code: 985 598 947#
In-Person: 3310 El Camino Ave., Rm. 302, Sacramento, CA 95821
Webinar: Join Microsoft Teams Meeting

Thursday, July 18, 2024

Agenda

1. Introductions
2. Announcements
3. Housekeeping
    a. Meeting will be recorded for notetaking purposes
4. Fisheries Update
    a. CDFW
    b. CFS
        i. Dissolved Oxygen (DO) Monitoring Update
    c. PSMFC
5. Operations Forecast
    a. SMUD
    b. PCWA
6. Central Valley Operations
7. Discussion
    a. Temperature Modeling Presentation, Kleinschmidt Group
8. Next Meetings:
    a. Thursday, August 15, 1:30-3:30pm

Updated 6/26/24

Table 1: Unmarked Juvenile Chinook Salmon (length-at-date):

Fall	Late Fall	Spring	Winter
83,072	84	41	12

Additionally, the RSTs captured 1 adipose clipped Chinook Salmon at 77 mm on 1/26. Currently, it is suspected that this fish was a hatchery-origin winter-run from the Livingston Stone/Coleman release on the Sacramento River near Shasta Dam.

Table 2: Unmarked Juvenile O. mykiss (lifestage):

Fry	Parr	Smolt	Adult
110	53	0	0

Lower American River RSTs at Watt Avenue:

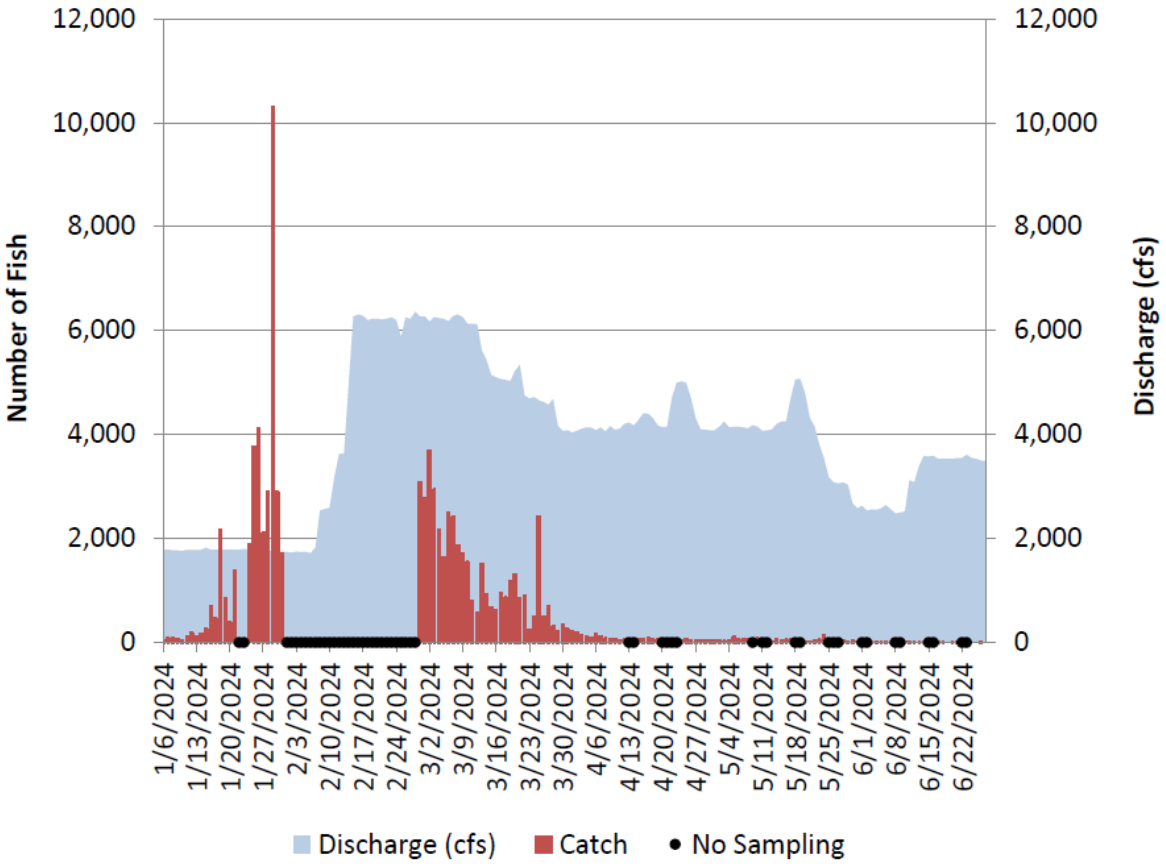

Figure 1. Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2024 Lower American River rotary screw trap sampling season.

Figure 1 is a bar graph of the daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2024 Lower American River rotary screw trap sampling season from 1/6/24 to 6/22/24. Discharge is measured in cubic feet per second and the number the daily catch reached its high point on 1/29 at a count of over 10,000.

Lower American River RSTs at Watt Avenue:

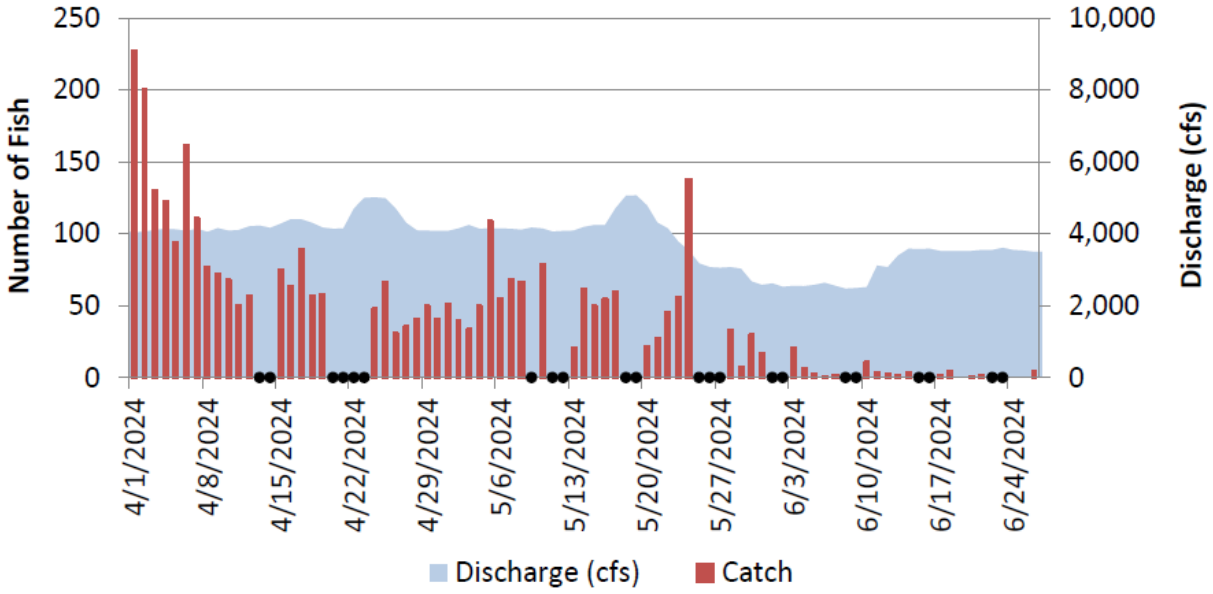

Figure 2. Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks from April 1st to June 26th during the 2024 Lower American River rotary screw trap sampling season.

Figure 2 is a bar graph of the daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2024 Lower American River rotary screw trap sampling season from 4/1/24 to 6/24/24. Discharge is measured in cubic feet per second and the number the daily catch reached its high point on 4/1 at a count of over 225.

Lower American River RSTs at Watt Avenue:

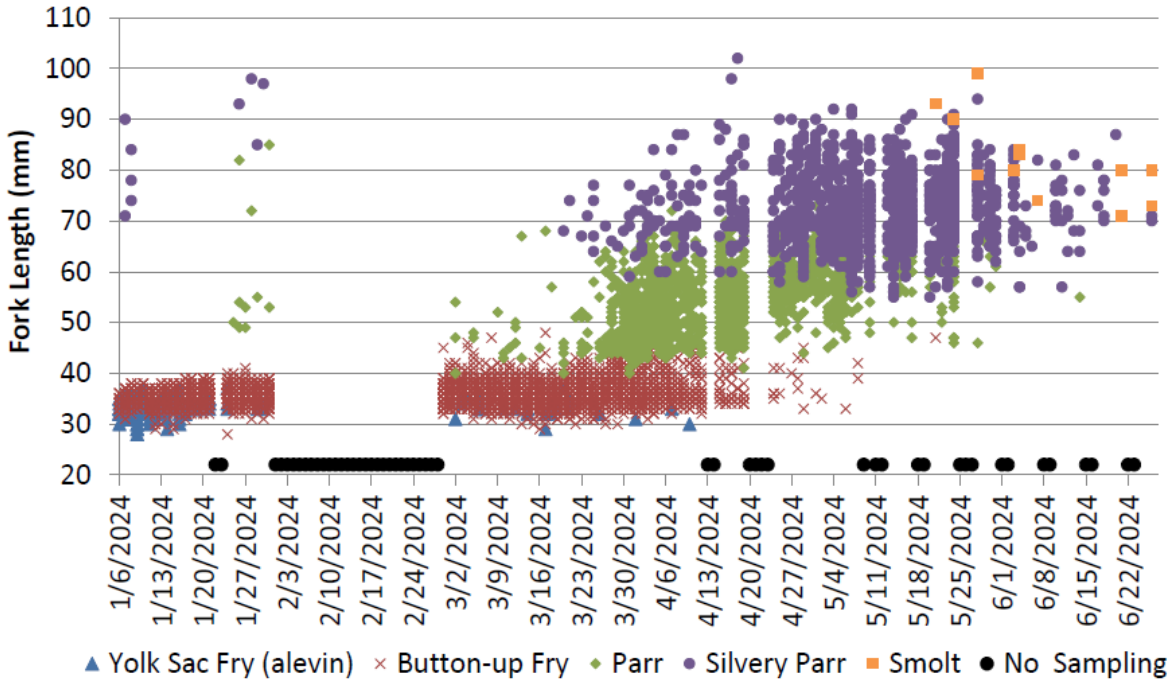

Figure 3. Daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2024 Lower American River rotary screw trap sampling season.

Figure 3 is a boxplot of the daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2024 Lower American River rotary screw trap sampling season from 1/6/24 to 6/22/24. Fork length is measured in millimeters from 20 to 100, and the life stages observed include the Yolk Sac Fry (alevin), Button-up Fry, Parr, Silvery Parr, and Smolt.

Lower American River RST CalFish Webpage: CalFish Lower American River – RST Monitoring

SMUD Upper American River Project Update 07/15/2024

Fresh Pond Precipitation

July precipitation through 7/15/2024 is 0.00 inches, which is 0.0% of the July average of 0.08 inches. Precipitation for the water year to date is 49.05 inches which is 87.5% of average to date (55.06 inches) and 85.6% of the entire water year average of 57.32 inches.

Runoff and Snowpack Water Content

Runoff into the storage reservoir basins is 102.6% of median to date through 7/15/2024. The snowpack is 46.4% of average at selected snow sensors: Robbs PH, Robbs Saddle, Van Vleck, Alpha, and Schneider

Table 3. Fresh Pond Precipitation

Month	Current Water Year	Historical Average	% of Average
October	1.37	3.30	42%
November	3.47	6.87	51%
December	4.86	9.14	53%
January	11.48	9.55	120%
February	9.83	9.50	103%
March	13.62	9.06	150%
April	2.20	4.84	45%
May	2.22	2.97	75%
June	0.00	0.79	0%
July	0.00	0.08	0%
August	0.00	0.20	0%
September	0.00	1.02	0%
Total	49.05	57.32	86%

* Month to date total, full month historical average.

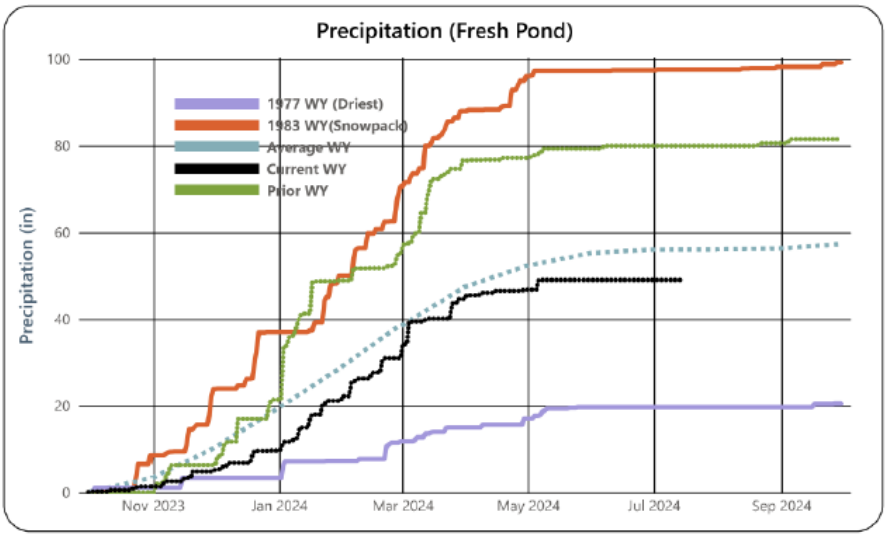

Figure 4. Fresh Pond Precipitation

Figure 4 is a line graph of fresh pond precipitation in inches for November 2023 to September 2024. It includes precipitation data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year. July's precipitation through 07/15/2024 is 0.0 inches, which is 0.0% of the July average of 0.08 inches.

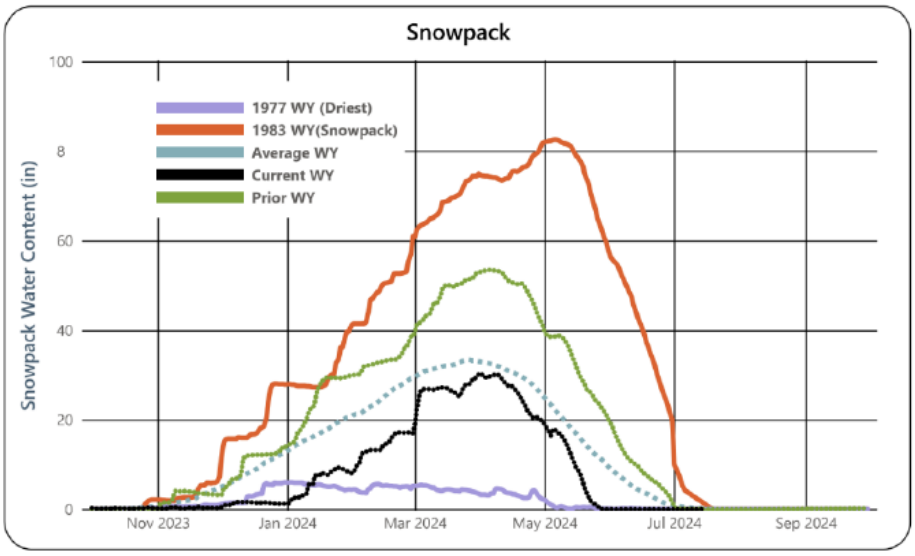

Figure 5. July 15, 2024 Snowpack

Figure 5 is a line graph of snowpack water content in inches for November 2023 to September 2024. It includes data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year. Runoff into the storage reservoir basins is 102.6% of median to date through 7/15/2024.

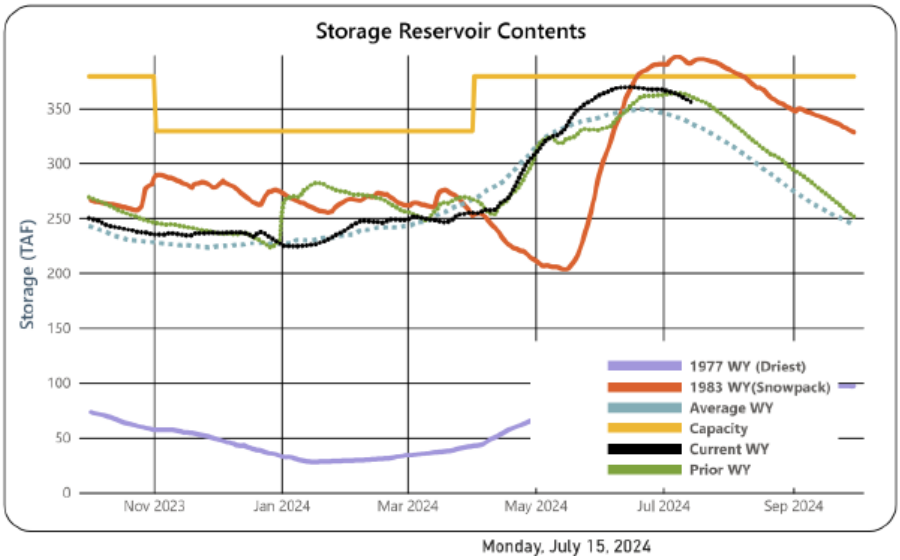

Figure 6. Storage Reservoir Contents

Figure 12 is a line graph of SMUD storage reservoir contents for November 2023 to September 2024. 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 5. SMUD Storage Reservoirs

Reservoir	Hist. Avg (Acre-ft)	Hist. Avg (% full)	Current Acre-ft	Current % Full	Prior Year Acre-ft	Prior Year % Full	Capacity Acre-ft	Winter Acre-ft
Loon Lake	61,734	89%	62,881	90.7%	63,420	92%	69,310	69,310
Ice House	38,474	88%	38,957	89.6%	40,872	94%	43,500	34,855
Union Valley	235,312	88%	252,457	94.8%	256,270	96%	266,370	225,046
Total Reservoir Storage	335,520	88%	354,294	93.4%	360,562	95%	379,180	329,211

Chili Bar releases into the South Fork American River

Table 6. Chili Bar releases into the South Fork American River

Observation	Year	Month	Daily Mean Release Rate (cfs)	Monthly Total Release (ac-ft)	Monthly Total Release (90% Exceedance)	Monthly Total Release (10% Exceedance)
Actual	2023	October	537	32,977	32,977	32,977
Actual	2023	November	454	26,994	26,994	26,994
Actual	2023	December	905	55,544	55,544	55,544
Actual	2024	January	846	51,913	51,913	51,913
Actual	2024	February	1,618	92,878	92,878	92,878
Actual	2024	March	2,373	145,636	145,636	145,636
Actual	2024	April	3,107	184,572	184,572	184,572
Actual	2024	May	3,175	194,875	194,875	194,875
Forecast	2024	June	3,175	188,589	188,589	188,589
Forecast	2024	July	2,103	129,053	128,245	131,919
Forecast	2024	August	879	53,962	50,006	61,308
Forecast	2024	September	455	27,030	27,030	38,402
Forecast	2024	October	427	26,193	26,193	26,193
Forecast	2024	November	294	17,471	17,471	94,636
Forecast	2024	December	1,036	63,592	38,408	180,366

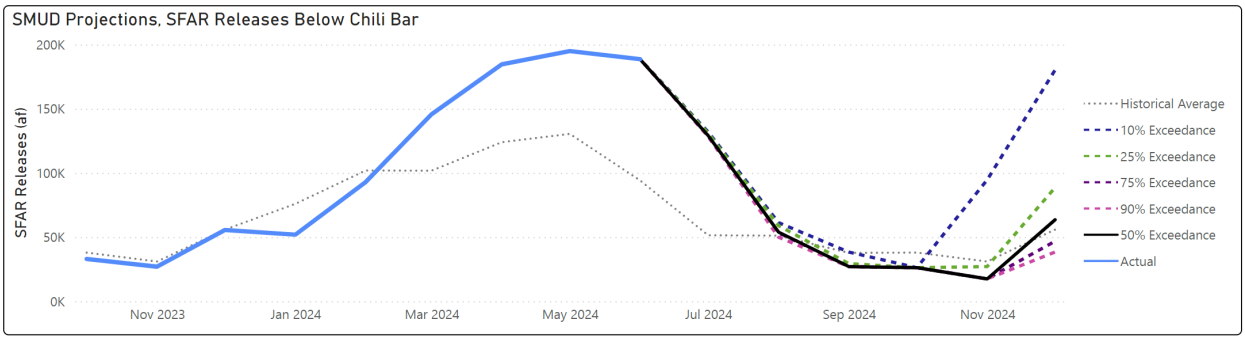

Figure 7. Chili Bar releases into the South Fork American River. Projections based on forecast from 7/15/24.

Figure 7 is a line graph of observed and projected releases below Chili Bar from November 2023 to November 2024. The graph includes a last 10-year average, actual prior water year data, and projections of 90%, 75%, 50%, 25%, and 10% likelihood.

PCWA MFP Operations Overview for American River Operations Group (Real Time Data as of July 18, 2024)

- French Meadows Storage = 110,000 AF of 136,405 AF = 81% Capacity
    - MFAR above FM Inflow (R24) =7-day AVG ~15 cfs
- Hell Hole Storage = 167,000 AF of 207,590 AF = 80% Capacity
    - Five Lakes Inflow (R23) = 7-day AVG ~15 cfs
    - Rubicon Inflow (R22) = 7-day AVG ~15 cfs
- Combined Storage (FM+HH) = 278,000 AF/342,590 AF = 81% Capacity; ~109% of 15 YR AVG
- MFAR @ R11: 7-day daily average ~900 cfs
- NFAR @ ARPS: 7-day daily average ~975 cfs
- Tevis Cup this Saturday 7/20 – Early recreational releases (4am-7am)

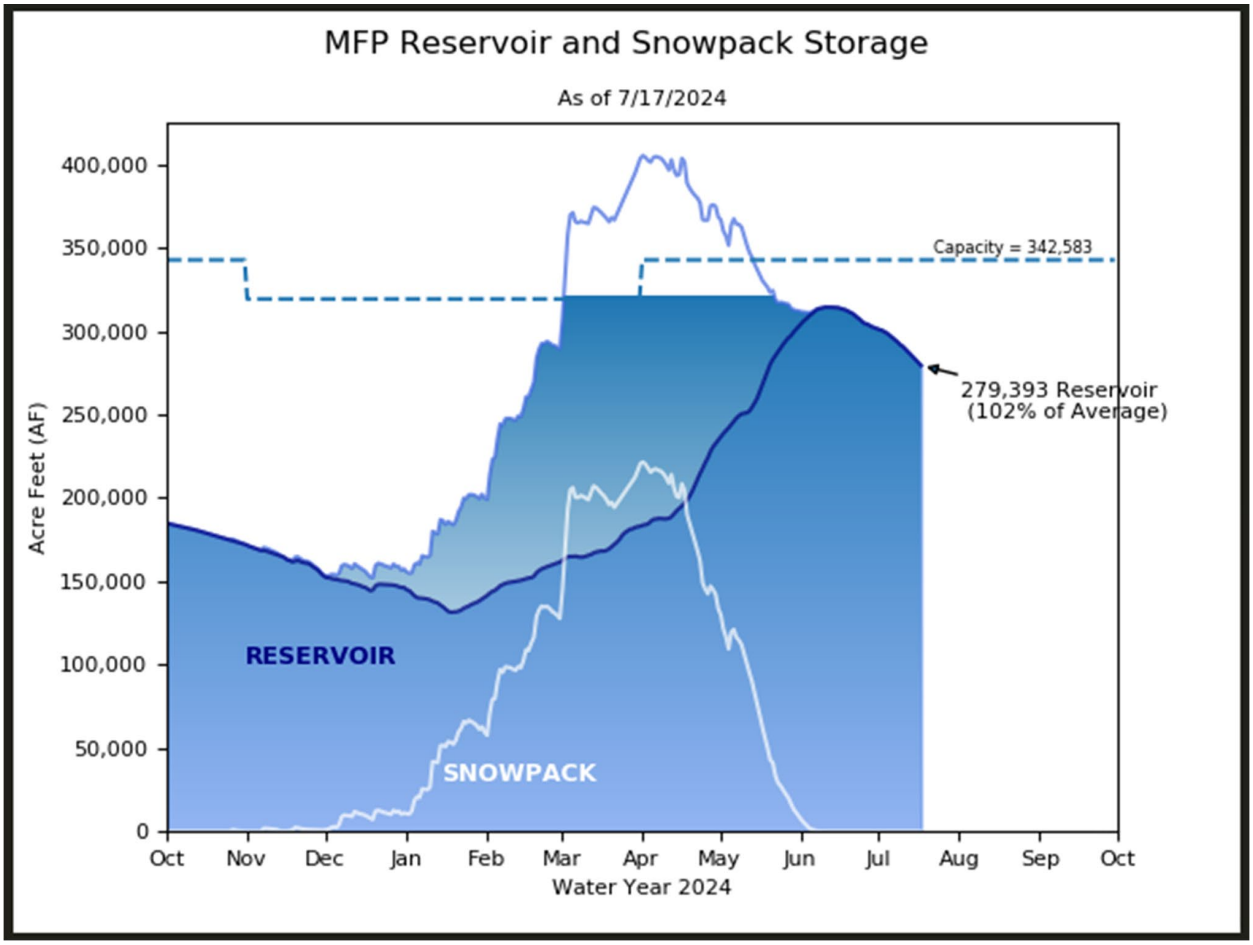

Figure 8. MFP Reservoir and Snowpack Storage

Figure 8 is a line graph that shows the MFP Reservoir and Snowpack Storage from October 2023 to October 2024. As of July 17, 2024, the reservoir holds 279,393 acre feet which is 102% of the average.

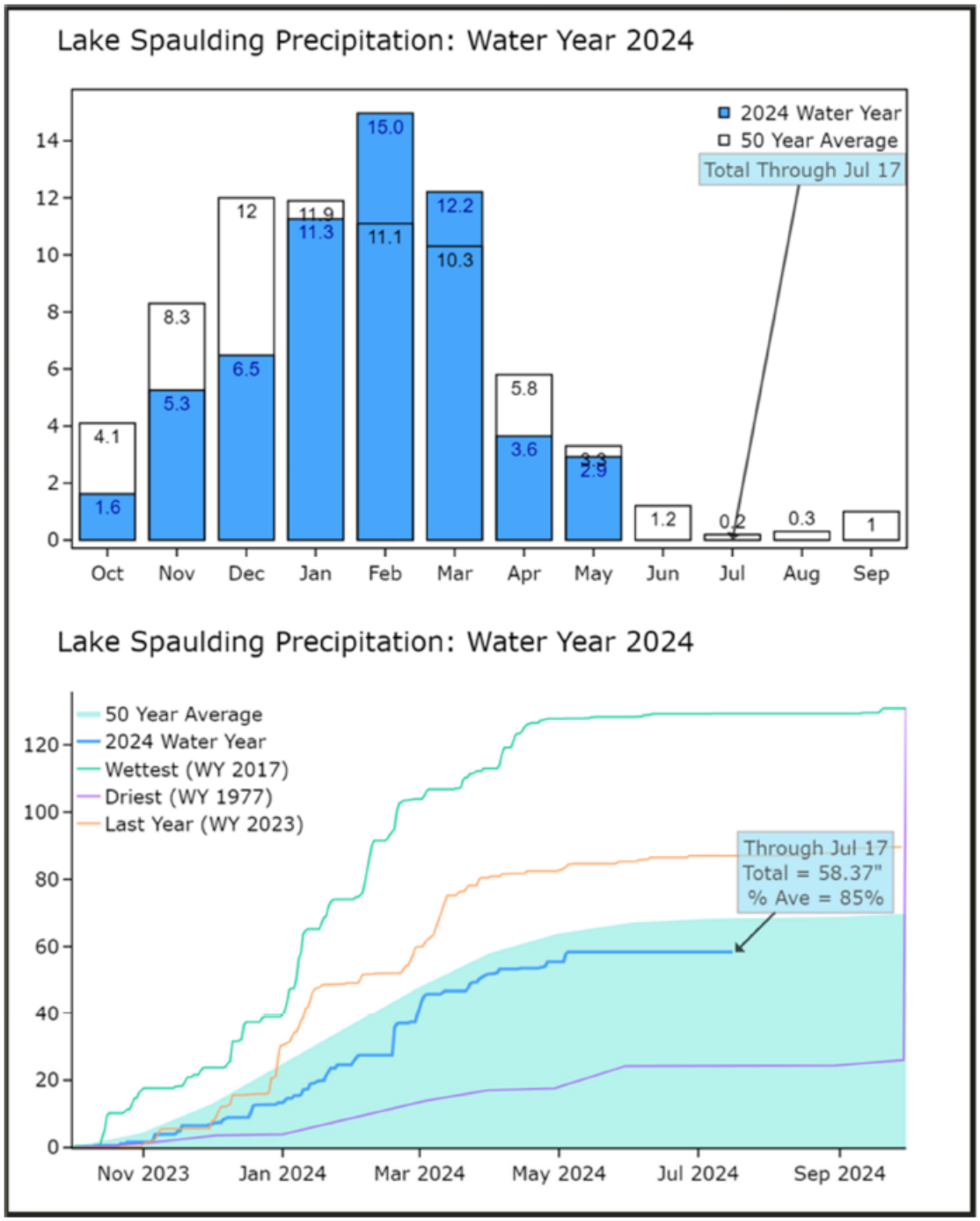

Figure 9. Lake Spaulding Precipitation: Water Year 2024

Figure 9 consists of two graphs that show the precipitation levels in Lake Spaulding from bar graph and a line graph showing precipitation levels in Lake Spaulding during Water Year 2024. The first graph is a bar graph showing the precipitation totals and the 50 year average in percent from October 2023 to September 2024. The total through July 17 is 0.0 with a 50-year average of 0.2. The second graph is a line graph showing the precipitation totals and the 50-year average from November 2023 to September 2024. The total through July 17 is 58.37 inches which is 85% of the 50-year average.

Reservoir Releases in Cubic Feet/Second

Reservoir	Dam	WY 2023	WY 2024	15 Yr Median
Trinity	Lewiston	451	692	471
Sacramento	Keswick	10,988	13,508	10,988
Feather	Oroville (SWP)	5,000	8,000	4,500
American	Nimbus	4,081	4,961	3,974
Stanislaus	Goodwin	940	402	360
San Joaquin	Friant	2,264	417	444

Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15 Yr Avg	WY 2023	WY 2024	% of 15 Yr Avg
Trinity	2,448	1,597	1,422	1,997	125
Shasta	4,552	3,183	4,091	3,713	117
Folsom	977	685	902	739	108
New Melones	2,420	1,474	2,066	1,970	134
Fed. San Luis	966	410	941	580	142
Total North CVP	11,363	7,349	9,422	8,999	122
Millerton	521	388	526	371	96
Oroville (SWP)	3,538	2,358	3,422	3,003	127

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

Reservoir	Current WY 2024	WY 1977	WY 1983	15 Yr Avg	% of 15 Yr Avg
Trinity	1,511	658	1,952	1,077	140
Shasta	5,182	3,036	8,411	4,390	118
Folsom	2,099	968	5,721	2,443	86
New Melones	864	N/A	2,037	971	89
Millerton	1,625	622	2,589	1,463	111

Accumulated Precipitation for Water Year to Date in Inches

Reservoir	Current WY 2024	WY 1977	WY 1983	Average (N Years)	% of Average	Last 24 Hours
Trinity at Fish Hatchery	35.27	21.82	40.07	29.97 (64)	118	0.00
Sacramento at Shasta Dam	63.62	32.94	86.50	58.58 (69)	109	0.00
American at Blue Canyon	50.55	N/A	113.32	63.68 (50)	79	0.00
Stanislaus at New Melones	28.92	N/A	36.75	26.72 (47)	108	0.00
San Joaquin at Huntington Lk	32.28	11.50	67.00	39.72 (51)	81	0.00

July 2024 | Folsom Lake Daily Operations | Run Date: 07/17/2024

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	863.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	454.82	855.6	-7.8	1,266	4,753	0	0	300	153	0.44	0.00
2	454.20	849.1	-6.5	1,489	4,318	0	0	297	160	0.46	0.00
3	453.44	841.1	-8.0	1,548	5,012	73	0	308	166	0.48	0.00
4	452.72	833.6	-7.5	1,704	5,027	0	0	311	152	0.44	0.00
5	451.94	825.5	-8.1	1,449	5,101	0	0	299	134	0.39	0.00
6	451.22	818.1	-7.4	1,706	5,019	0	0	290	147	0.43	0.00
7	450.46	810.3	-7.8	1,646	5,123	0	0	305	160	0.47	0.00
8	449.67	802.2	-8.1	1,434	5,065	0	0	303	146	0.43	0.00
9	448.88	794.1	-8.1	1,492	5,139	0	0	290	125	0.37	0.00
10	448.00	785.2	-8.9	1,088	5,172	0	0	292	124	0.37	0.00
11	447.25	777.6	-7.6	1,962	5,313	0	0	289	170	0.51	0.00
12	446.56	770.7	-6.9	2,037	5,072	0	0	306	150	0.45	0.00
13	445.84	763.5	-7.2	2,009	5,181	0	0	320	136	0.41	0.00
14	444.99	755.1	-8.5	1,438	5,293	0	0	302	105	0.32	0.00
15	444.21	747.3	-7.7	1,539	5,007	0	0	294	125	0.38	0.00
16	443.37	739.1	-8.3	1,335	5,075	0	0	295	130	0.40	0.00
Totals	N/A	N/A	-124	25,142	80,670	73	0	4,801	2,283	6.75	0.00
Acre-Feet	N/A	N/A	124,400	49,869	160,009	145	0	9,523	4,528	N/A	N/A

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

Summary: Release (acre-feet)

Power	160,009
Spill	145
Outlet	0
Pumping Plant	9,523
Total Releases	169,677

Summary: Precipitation (Month/Inches)

This month	0.00
October 1, 2022 to date	20.57

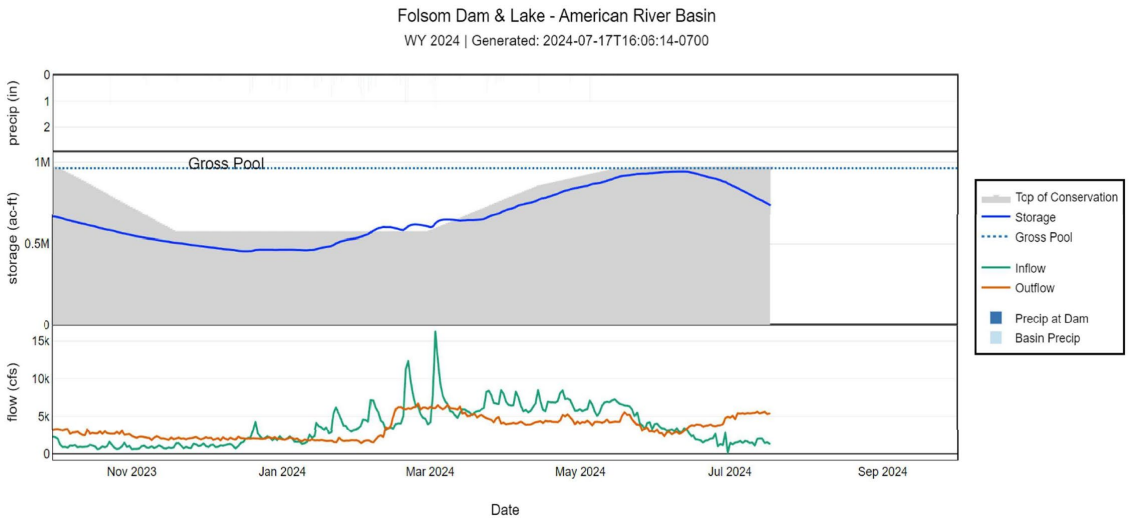

Figure 10. Folsom Dam & Lake – American River Basin WY 2024

Figure 10 is a graph that compares the flow, storage, and precipitation over time for the American River Basin.

Isobath 06/01–06/30 (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
May	57.2	54.6	53.7	55.7	57.0	57.6	66.8	904	N/A	A	A	A
06/01	64.1	59.6	54.6	56.9	59.2	60.4	69.8	2554	939	A 42	A 43	A 15
06/02	64.9	60.5	54.7	57.8	59.7	60.6	70.5	2468	940	A 42	A 43	A 16
06/03	65.1	59.4	54.6	57.5	59.7	60.9	71.2	2475	942	A 43	A 43	A 14
06/04	65.6	61.0	54.8	58.5	60.5	61.6	79.3	2473	942	A 44	A 44	A 11
06/05	67.2	61.8	55.0	58.4	61.4	63.0	85.8	2501	942	A 51	A 34	A 15
06/06	68.8	62.2	55.1	58.0	61.0	62.6	83.0	2497	943	A 43	A 19	A 38
06/07	69.5	62.6	55.1	58.2	60.8	62.1	72.6	2482	944	A 70	A 18	A 12
06/08	67.9	62.4	55.1	58.4	60.5	61.6	67.9	2417	944	A 37	A 39	A 24
06/09	67.2	63.0	54.9	58.2	60.4	61.6	69.7	2431	945	A 36	A 35	A 29
06/10	67.9	63.5	55.3	58.4	60.7	61.9	73.0	2454	944	A 51.1	A 17.5	A 31
06/11	68.0	63.7	55.5	58.7	60.7	62.2	82.0	2794	945	A 56.2	A 30.7	A 13
06/12	68.2	64.0	55.6	58.4	61.2	62.5	78.8	2855	944	A 56.7	A 34.1	A 9
06/13	68.2	64.2	55.8	58.4	59.9	61.1	68.0	3259	942	A 53.1	A 32.6	A 14
06/14	68.5	65.6	55.8	58.7	60.2	61.0	69.0	3455	939	A 54.5	A 12.2	A 33
06/15	67.5	64.7	56.0	58.9	60.1	60.8	71.2	3457	936	A 51.1	A 35.8	A 13
06/16	65.8	64.7	55.9	58.3	59.9	60.8	74.5	3439	932	A 37.4	A 32.6	A 30
06/17	65.4	65.6	56.9	58.6	59.8	60.4	71.6	3402	928	A 36.3	A 34	A 30
06/18	63.8	64.4	56.4	58.7	60.0	60.5	73.5	3410	924	A 35.9	A 35.9	A 28
06/19	63.0	65.3	56.7	58.5	59.9	60.7	70.6	3408	919	A 53.1	A 30.6	A 16
06/20	63.2	66.6	56.8	58.8	60.0	60.7	68.6	3404	915	A 53.4	A 15.8	A 31
06/21	62.8	67.1	56.9	59.0	60.5	61.3	72.4	3409	911	A 54.0	A 30.7	A 15
06/22	62.5	68.6	57.1	59.4	61.1	62.0	81.7	3412	907	A 54.7	A 15.3	A 30
06/23	63.4	69.0	57.2	59.4	61.3	62.3	83.0	3414	903	A 54.9	A 29.2	A 16
06/24	? 63.0	? 68.0	? 57.5	? 59.7	? 61.4	? 62.2	81.0	3409	907	A 55.4	A 15.5	A 29
06/25	62.2	68.7	57.6	60.0	61.5	62.3	81.4	3409	902	A 56.3	A 31.0	A 13
06/26	65.3	69.0	57.9	60.0	61.5	62.3	73.7	3408	890	A 62.0	A 20.3	A 18
06/27	66.3	69.0	58.1	60.4	61.6	62.4	73.5	3718	889	A 53.3	A 26.8	A 20
06/28	66.1	69.6	58.2	60.3	61.6	62.3	77.9	4247	880	A 50.4	A 18.6	A 31
06/29	66.7	69.7	58.3	60.3	61.6	62.3	78.8	4506	870	A 43.6	A 29.4	A 27
06/30	68.4	70.0	58.5	60.5	61.8	62.6	81.8	4487	863	A 36.1	A 34.7	A 29

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
June	**65.9**	**65.1**	**56.3**	**58.8**	**60.7**	**61.6**	**75.2**	**922**	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	Total	AF	188536	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

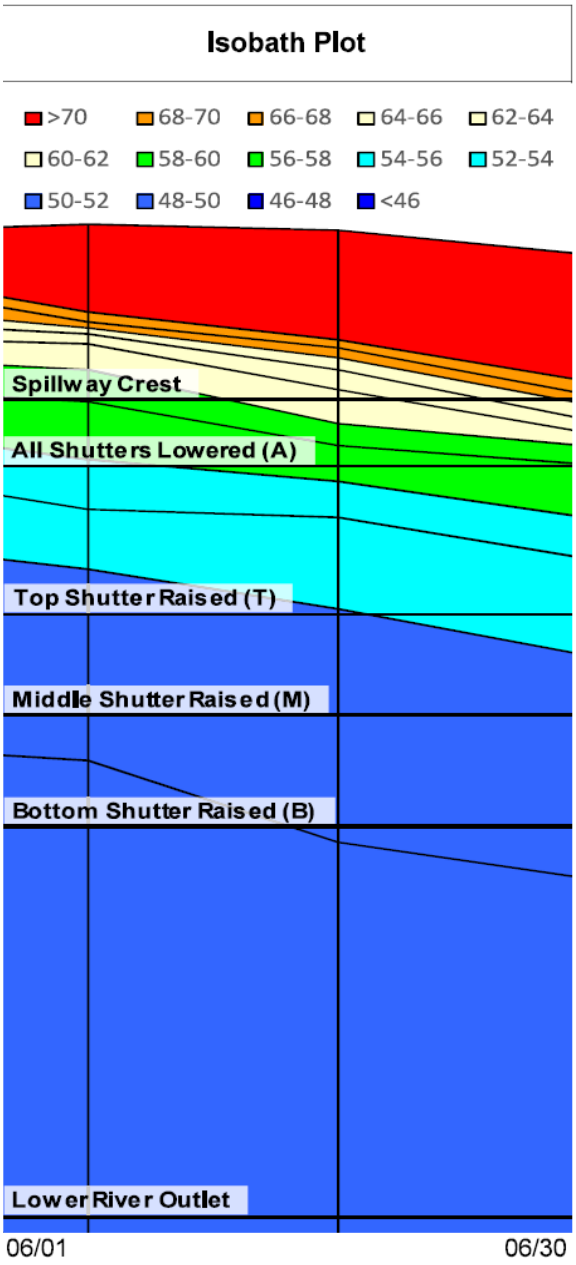

Figure 11. Isobath Plot 6/01-6/30

Figure 11 is an Isobath Plot for the month of June showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet

Isobath 07/01–07/31 (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
June	65.9	65.1	56.3	58.8	60.7	61.6	75.2	922	N/A	A	A	A
07/01	69.0	70.8	59.0	60.9	62.2	62.8	82.7	4386	856	A 42	A 16	A 42
07/02	69.9	70.9	59.3	61.3	62.6	63.2	87.6	4579	849	A 51	A 30	A 19
07/03	70.1	70.9	59.6	61.5	62.7	63.4	89.2	4775	841	A 43	A 43	A 14
07/04	68.5	72.8	59.9	61.5	62.9	63.6	86.9	4910	834	A 40	A 19	A 40
07/05	66.4	73.6	60.3	61.9	63.2	63.8	86.4	4936	826	A 40	A 20	A 40
07/06	66.7	73.5	60.5	62.1	63.5	64.1	89.2	4950	818	A 40	A 20	A 40
07/07	66.8	73.6	60.8	62.3	63.7	64.4	84.8	4961	810	A 39	A 23	A 38
07/08	66.3	74.0	61.2	62.7	64.1	64.6	80.1	4912	802	A 38	A 25	A 37
07/09	65.6	73.3	61.6	63.1	64.2	64.7	75.5	4956	794	A 39	A 23	A 38
07/10	65.6	74.1	59.6	63.6	64.7	65.1	81.8	4960	785	A 39.6	A 21.5	A 39
07/11	64.5	73.1	61.3	63.8	65.0	65.5	90.5	4982	778	C 37.7	T 24.7	C 38
07/12	63.7	70.8	60.8	62.9	64.5	65.3	89.1	5011	771	C 39.2	T 25.9	C 35
07/13	62.4	68.9	61.1	62.4	63.4	63.9	80.0	4961	764	0.0 38.7	0.0 25.7	0.0 36
07/14	62.7	68.3	61.6	62.5	63.3	63.6	77.5	4957	755	C 37.8	T 24.6	C 38
07/15	60.9	68.6	61.4	62.8	63.8	64.1	73.1	4956	747	C 37.3	T 25.6	C 37
07/16	63.3	70.7	62.5	63.2	64.0	64.3	71.1	4961	739	C 41.3	T 17.5	C 41
07/17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
07/30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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
07/31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
July	**65.8**	**71.8**	**60.7**	**62.4**	**63.6**	**64.1**	**82.8**	**798**	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	Total	AF	155013	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

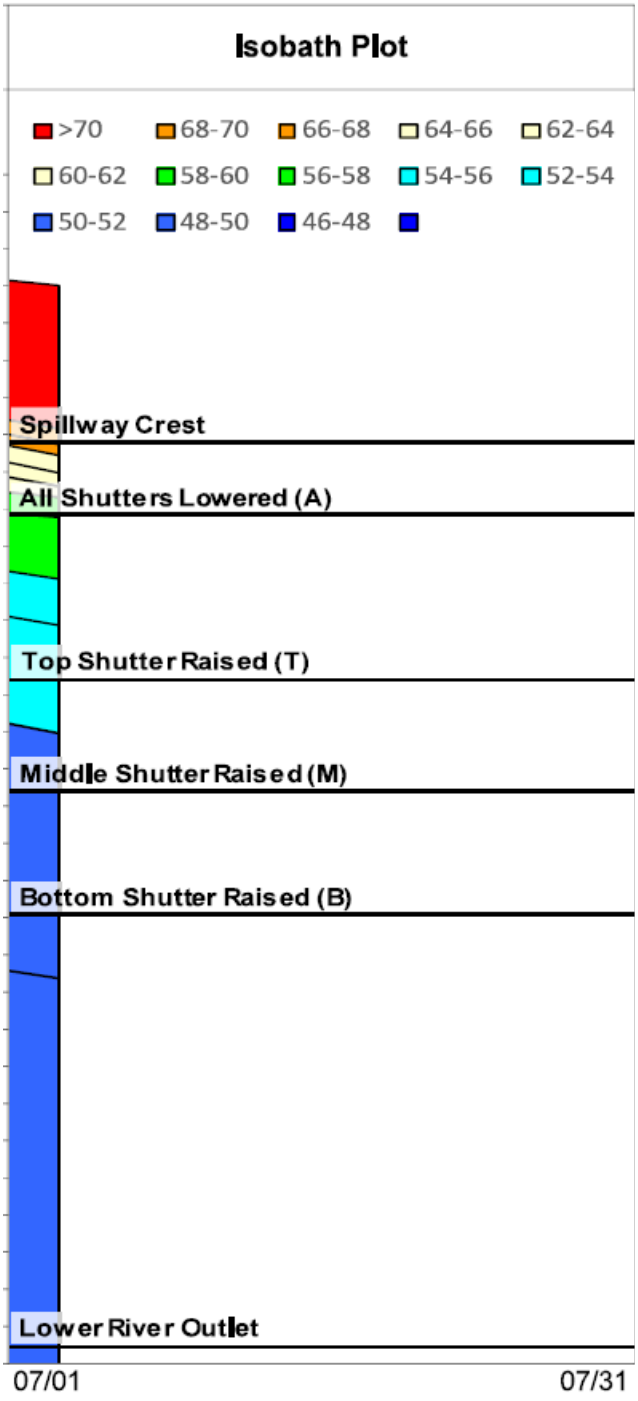

Figure 12. Isobath Plot 7/01-7/31

Figure 12 is an Isobath Plot for the month of June showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet

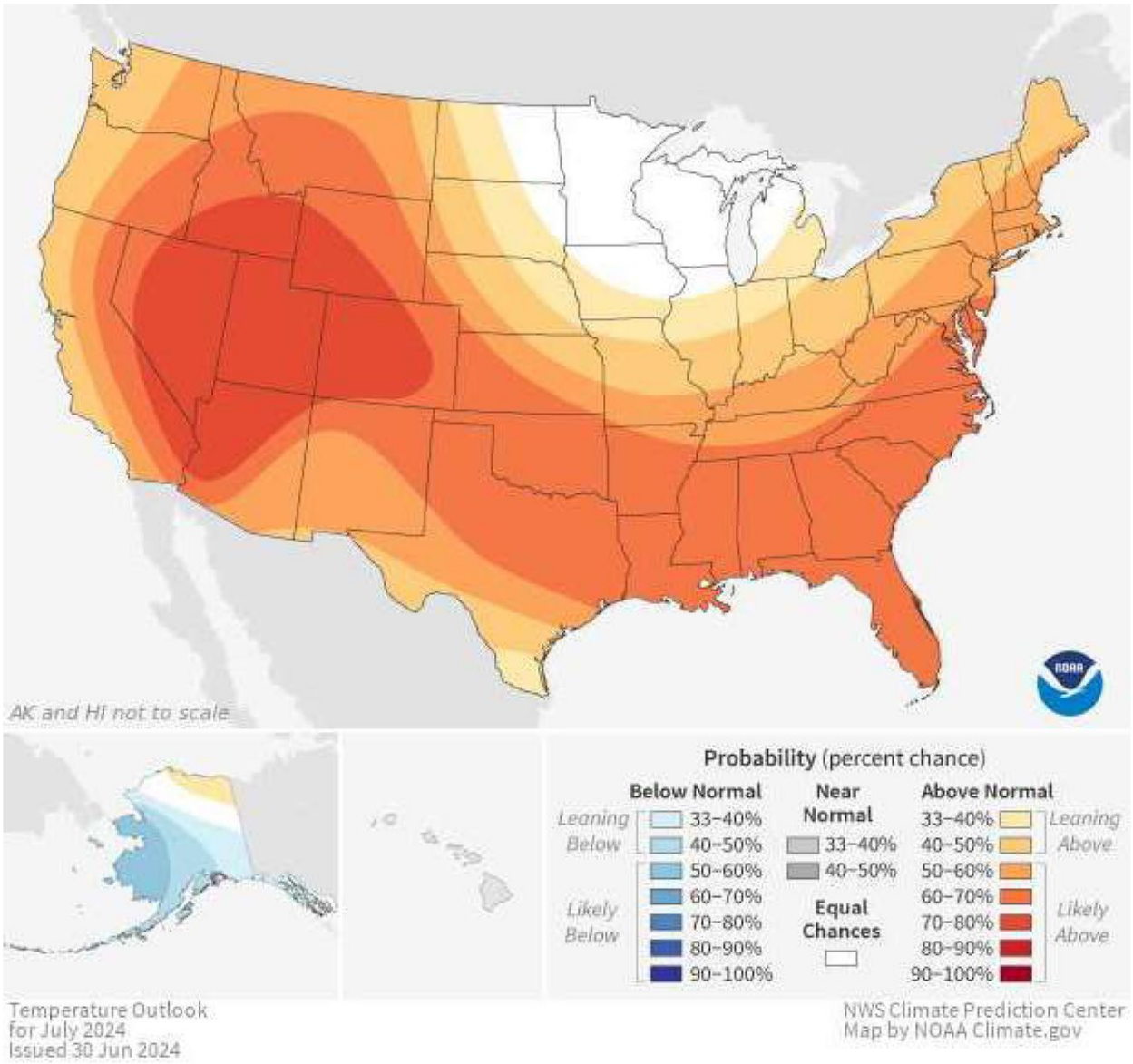

Figure 13. U.S. Seasonal Temperature Outlook

Figure 13 is a map of the United States showing the seasonal temperature outlook during the time period from May 2024 to July 2024; The map was issued on April 18, 2024.

American River Daily Average Water and Air Temperature

<=58=277 TAF
<=56=238 TAF
<=54=185 TAF

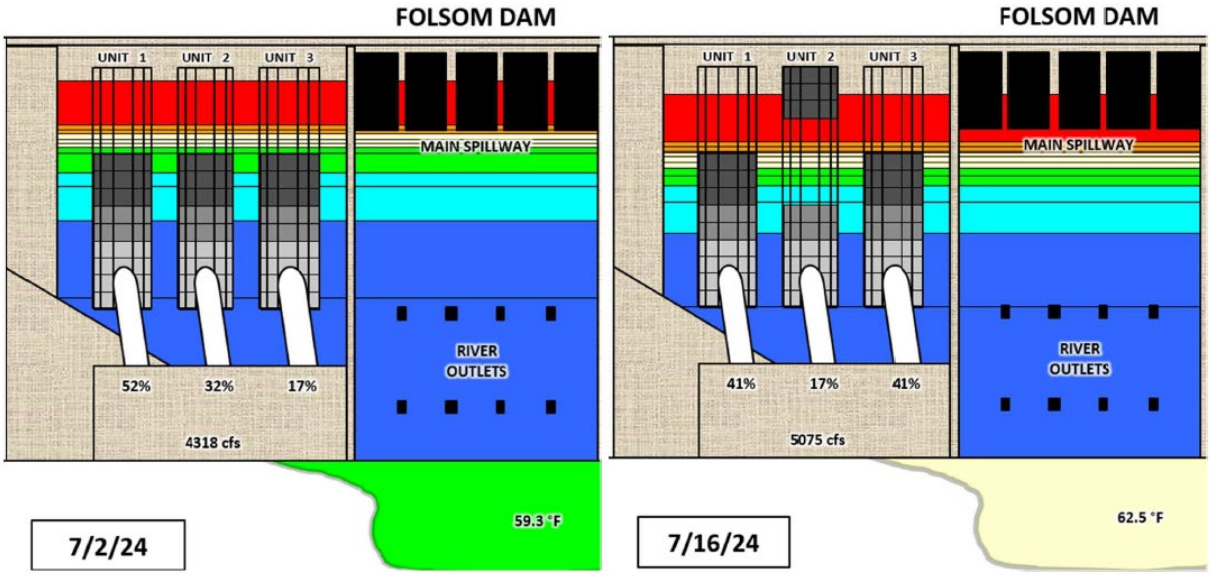

Figure 14. Folson Dam Daily Average Water and Air Temperatures

Figure 14 is a graphic showing Folsom Dam on 07/2/24 with a temperature of 59.3 ˚F and 7/16/24 with a temperature of 62.5 ˚F.

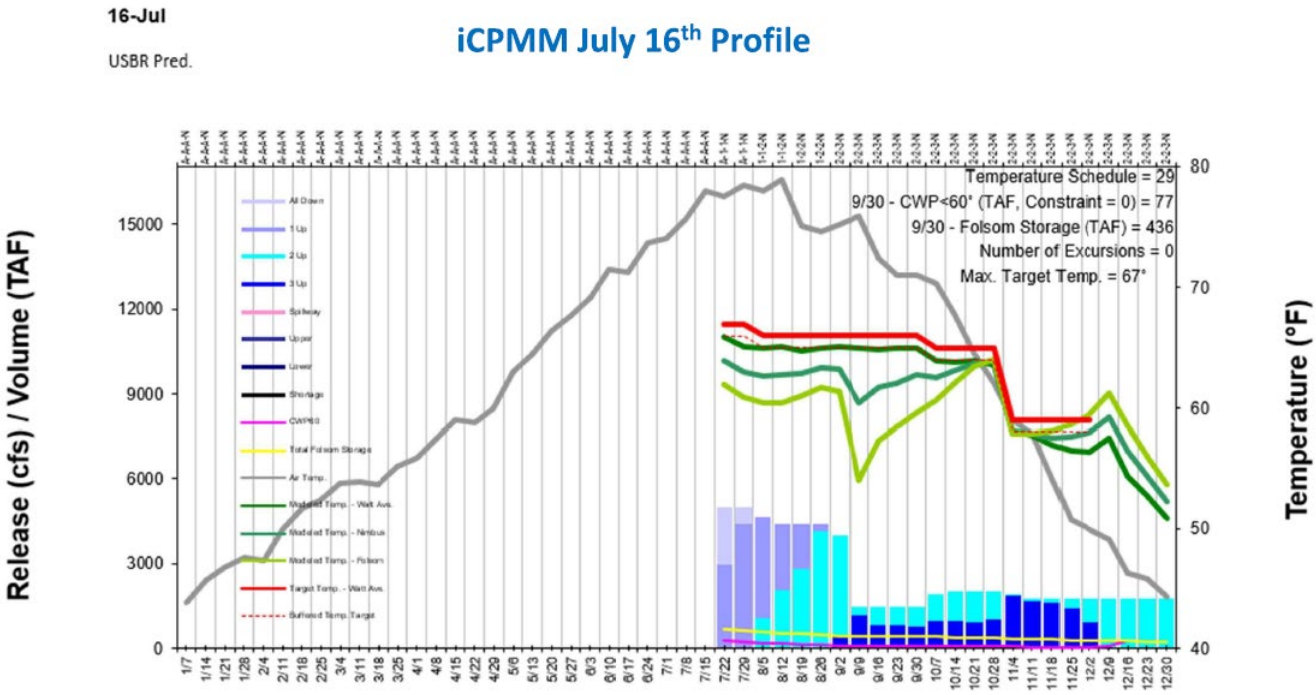

Figure 15. Temperature schedule at Watt Avenue

Figure 15 is a line graph of a temperature schedule showing release in cfs and volume in taf by temperature from 1/7/2024 until 12/30/2024.

American River Summary Conditions – July (On-going)

Release Management Conditions

- Releases are currently at 5,000 cfs

Temperature Management

Top Shutters: Units 1 and 3 – lowered, Unit 2 – raised

Middle Shutters: Units 1, 2, & 3 – lowered

Bottom Shutters: Units 1, 2, & 3 – lowered

Folsom Shutter Configuration and Changes

Unit 2 Top Shutters were raised/opened on July 11th

Storages

June 90% Exceedance

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

Facility	Jun	Jul	Aug	Sep	Oct	Nov	Dec
N/A	N/A	7	8	9	10	11	12
Folsom Storage	863	628	444	432	381	335	306
Folsom Elevation	N/A	432	409	408	400	393	388

Monthly River Releases (TAF/cfs)

Facility	Jun	Jul	Aug	Sep	Oct	Nov	Dec
American	N/A	307	271	90	92	89	92
cfs	N/A	5000	4402	1505	1500	1500	1500

American River Baseflow Table

Month	Index Used for Index-based MRR	Index Based MRR	RDPB-based MRR for fall-run Chinook salmon (applicable in Jun and Feb)	RDPB-based MRR for steelhead (applicable Feb to May)	Controlling MRR	Actual Average Monthly Nimbus releases[1]
October	May ARI[2] (50% exceedance)	1,500 cfs	Not applicable	Not applicable	1,500 cfs	2,574 cfs
November	May ARI[2] {50% exceedance)	2,000 cfs	Not applicable	Not applicable	2,000 cfs	2,062 cfs
December	May ARI[2] {50% exceedance)	2,000 cfs	Not applicable	Not applicable	2,000 cfs	2,041 cfs
January	January SRI {75% exceedance)	1,390 cfs	1,400 cfs	Not applicable	1,400 cfs	1,792 cfs
February	February ARI (50% exceedance)	1,750 cfs	1,400 cfs	1,750 cfs	1,750 cfs	4,278 cfs
March	March ARI (50% exceedance)	1,750 cfs	1,750 cfs	1,750 cfs	1,750 cfs	5,188 cfs
April	April ARI (50% exceedance)	1,150 cfs	Not applicable	1,500 cfs	1,500 cfs	4,145 cfs
May	April ARI (90% exceedance)	1,500 cfs	Not applicable	1,500 cfs	1,500 cfs	3,799 cfs
June	May ARI[2] (50% exceedance)	1,500 cfs	Not applicable	Not applicable	1,500 cfs	3,168 cfs
July	May ARI[2] (50% exceedance)	1,700 cfs	Not applicable	Not applicable	1,750 cfs	N/A

MRR= Minimum Release Requirements; RDPA= Redd Dewatering Protective Adjustment; ARI= American River Index; SRI= Sacramento River Index

[1] Average of daily release over the month from NAT station on CDEC.