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

Thursday, January 16, 2025

Agenda

1. Introductions
2. Announcements
3. Housekeeping
    a. Meeting will be recorded for notetaking purposes
    b. Revisiting October Ad hoc Meeting Summary
4. Fisheries Update
    a. CDFW
    b. CFS
5. Operations Forecast
    a. SMUD
    b. PSMFC
    c. PCWA
6. Central Valley Operations
7. Discussion
8. Next Monthly Meeting:
    a. Thursday, February 20, 1:30-3:30pm

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

Provisional Data Subject to Revision

Fall-Run Chinook Salmon Carcass Survey

Presented by Jenny O'Brien, CDFW, 916-282-8710, Jennifer.obrien@wildlife.ca.gov

Table 1. Preliminary count of Chinook Salmon carcasses processed during the 2024 lower American River escapement survey.

Survey Period	Dates	Nimbus Basin	Section 1A	Section 1B	Section 2	Section 3	Total Carcasses Processed
1	Oct 14 - 17, 2024	2	11	3	1	0	17
2	Oct 21 - 24, 2024	0	5	3	0	0	8
3	Oct 28 -31, 2024	1	11	2	3	0	17
4	Nov 4 - 7, 2024	4	51	20	14	2	91
5	Nov 11 - 14, 2024	20	183	123	35	Not Surveyed	361
6	Nov 18 - 22, 2024	40	512	278	345	67	1242
7	Nov 25 - 27, 2024	96	914	443	355	Not Surveyed	1808
8	Dec 2 - 6, 2024	210	1671	788	476	291	3436
9	Dec 9 - 13, 2024	265	1474	854	616	315	3524
10	Dec 16 - 20, 2024	148	1282	555	535	177	2697
11	Dec 22 - 23, 2024	84	776	280	Not Surveyed	Not Surveyed	1140
12	Dec. 30, 2024 – Jan. 3, 2025	152	634	221	264	Not Surveyed	1271
13	Jan 6 - 9, 2025	83	318	122	71	33	627
Totals	N/A	1105	7842	3692	2715	885	16239

Table 2. Preliminary count of female Chinook Salmon carcasses assessed for spawning conditions during the 2023 lower American River escapement survey.

Date	Survey Period	Mean Weekly Temp (F) at Fair Oaks	Unspawned Females (n)	Unspawned Females (%)	Partially Spawned Females (n)	Partially Spawned Females (%)	Spawned Females (n)	Spawned Females (%)	Total Females
Oct.14 - 17	1	65.1	2	50	1	25	1	25	4
Oct. 21 - 24	2	60.4	2	100	0	0	0	0	2
Oct. 28 -31	3	60.3	2	40	0	0	3	60	5
Nov. 4 - 7	4	60.2	12	41	3	10	14	48	29
Nov. 11 - 14	5	59.0	18	19	6	6	73	75	97
Nov. 18 - 22	6	56.9	23	11	20	10	164	79	207
Nov. 25 - 27	7	56.1	22	8	20	8	220	84	262
Dec. 2 - 6	8	55.0	37	10	26	7	293	82	356
Dec. 9 - 13	9	53.6	26	11	12	5	190	83	228
Dec. 16 - 20	10	52.5	20	10	6	3	175	87	201
Dec. 22 - 23	11	52.4	15	11	5	4	112	85	132
Dec. 30 - Jan. 3	12	51.3	3	5	4	6	57	89	64
Jan.6 - 9	13	50.1	1	5	3	14	18	82	22
Total	N/A	N/A	183	11%	106	7%	1320	82%	1609

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

Provisional Data Subject to Revision

Fall-Run Chinook Salmon Carcass Survey

Presented by Nick Bauer, CDFW, 916-282-8598, nick.bauer@wildlife.ca.gov

Table 3. Preliminary count of Chinook Salmon redds surveyed during the 2024 season.

Survey Period	Dates	Nimbus Basin	Section 1A	Section 1B	Section 2	Section 3	Total Carcasses Processed
1	Oct 30	5	0	1	Not Surveyed	Not Surveyed	6
2	Nov 4 - Nov 6	15	20	6	0	1	42
3	Nov 13	25	62	Not Surveyed	Not Surveyed	Not Surveyed	87
4	Nov 18 - Nov 20	Not Surveyed	95	100	Not Surveyed	Not Surveyed	195
5	Nov 25 - Nov 27	42	186	Not Surveyed	44	Not Surveyed	272
6	Dec 2 - Dec 4	73	93	93	Not Surveyed	24	283
7	Dec 9 - Dec 11	Not Surveyed	207	60	27	Not Surveyed	294
8	Dec 16 - Dec 19	42	34	31	12	Not Surveyed	119
9	Dec 23	Not Surveyed	27	Not Surveyed	Not Surveyed	24	51
10	Jan 1 - Jan 2	Not Surveyed	24	9	Not Surveyed	Not Surveyed	30
11	Jan 8	9	Not Surveyed	Not Surveyed	Not Surveyed	0	9
Total	N/A	N/A	N/A	N/A	N/A	N/A	1388

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

Provisional Data Subject to Revision

Nimbus Fish Hatchery

Presented by Emily Fisher, CDFW, 916-272-4113, emily.fisher@wildlife.ca.gov

- Steelhead spawning began on December 31, 2024

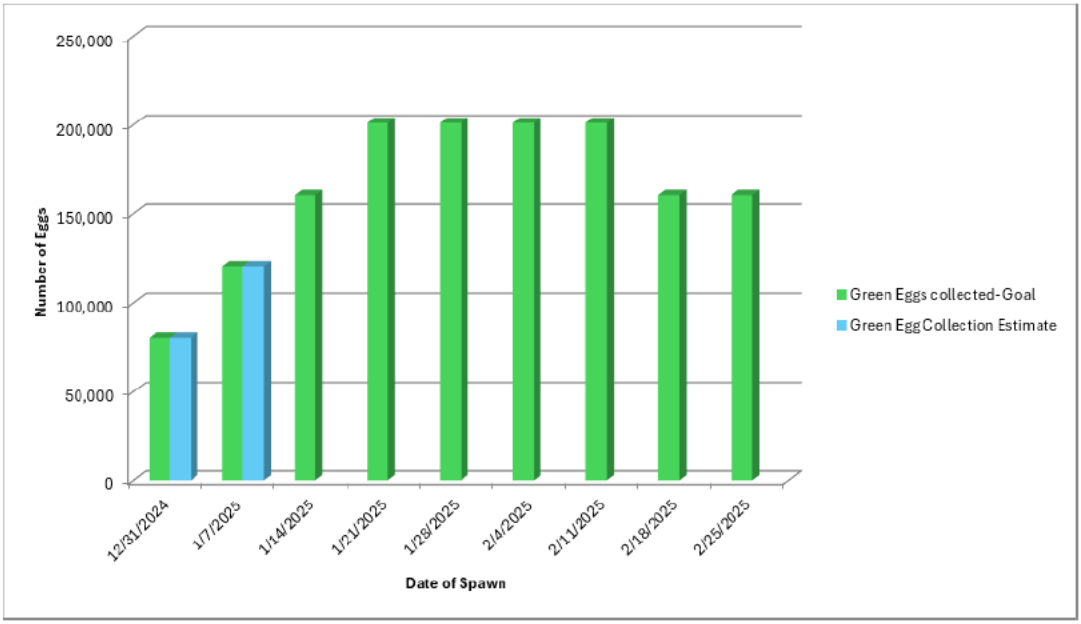

Figure 1. Graph of green eggs collected at Nimbus Fish Hatchery compared to the green egg collection goal for BY 2025 steelhead. Egg collection estimate is based on a historical average of 6,700 eggs per female.

Figure 1 is a bar graph comparing the number of green eggs collected compared to the collection goal from December 2024 to February 2025.

Lower American River Spawning Surveys

Chinook Salmon redd counts through January 9, 2025

Table 4. Summary of Chinook Salmon redds at project and associated control reaches. Only redds observed with Chinook Salmon or identified as Chinook Salmon using DFA model are included in the table below. Older, previously unmarked, redds are included in the table.

Survey	Week	Nimbus Basin-Post-Project	Sailor Bar Control	Lower Sailor Bar Post-Project	Upper River-bend Post-Project	Upper Riverbend Control	Lower River-bend Post-Project	Lower Riverbe-nd-Control	Total
1	10/28/2024	5	0	3	0	0	0	0	8
2	11/18/2024	68	25	182	20	33	9	52	389
3	12/2/2024	149	146	178	30	92	26	41	662
4	12/16/2024	101	71	96	21	18	9	12	328
5	1/6/2025	6	1	5	0	0	0	0	12
Total	N/A	329	243	464	71	143	44	105	1399

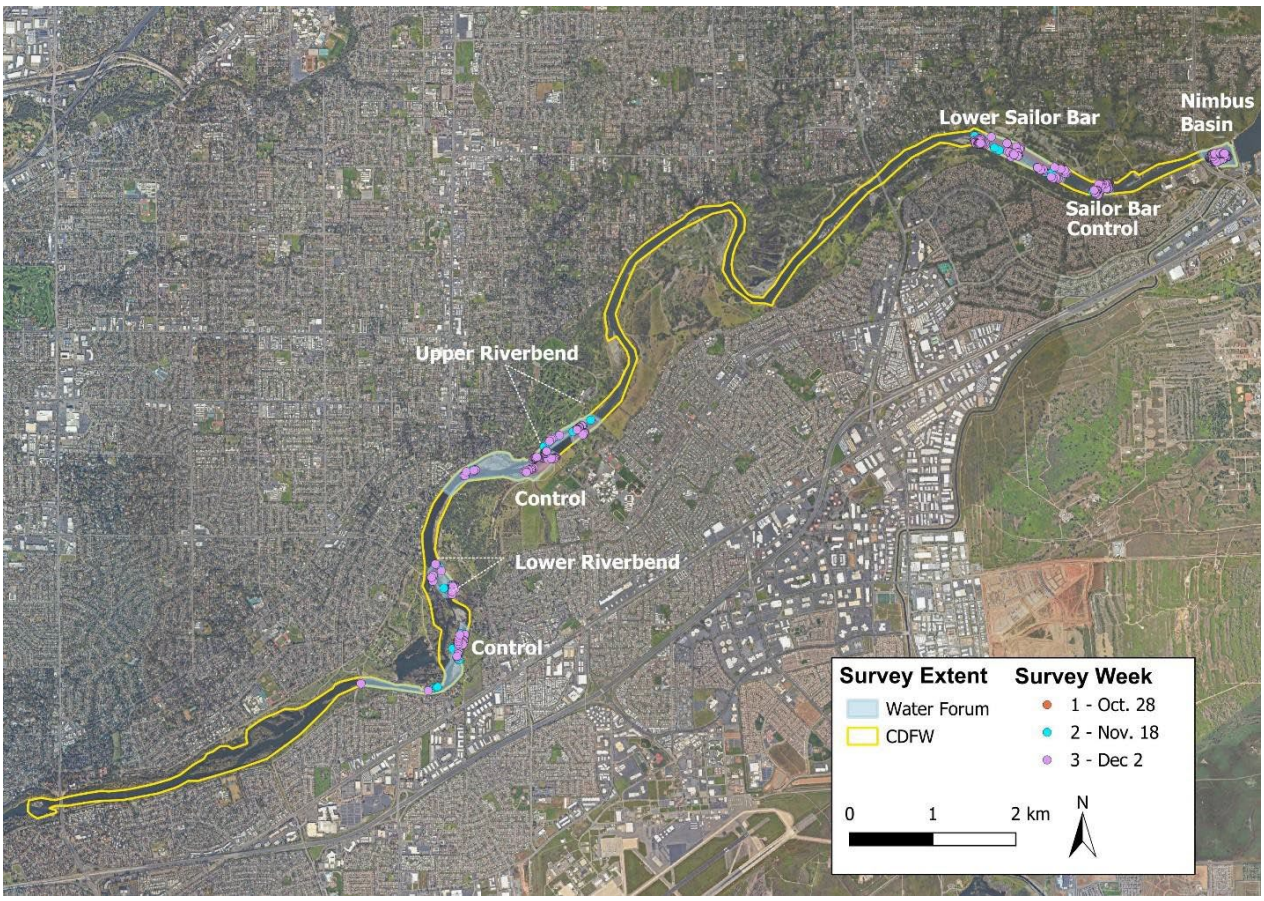

Figure 2. Locations of redds during the 2024/2025 Chinook Salmon spawning reaches. Blue polygons represent areas surveyed. Steelhead redds observed in survey area also included in the map.

Figure 2 is a satellite image of the 2024-2025 Chinook salmon ground survey reaches. The map shows the location of the Lower Riverbend, Upper Riverbend, Lower Sailor Bar, Sailor Bar, and Nimbus Basin. The Upper Reach and Lower Reach launch and takeout sections are identified. The survey extent for the Water Forum and California Department of Fish and Wildlife are highlighted. Survey weeks on October 28 and November 18 are identified.

Targeted Chinook spawning surveys in project and control reaches have concluded for the 2024 spawning season.

Steelhead Redd Counts through January 9, 2025

Table 5. Steelhead and Chinook salmon redd counts during 2025 steelhead spawning surveys. Only new, freshly built redds with clean rocks and no algae colonization are included in the table.

Dates	Steelhead	Chinook	Unknown[1]	Total
Jan 7 – 10	14	10	2	26

[1] Redd measurements unable to be collected due to angler activity, thus remained classified as "unknown".

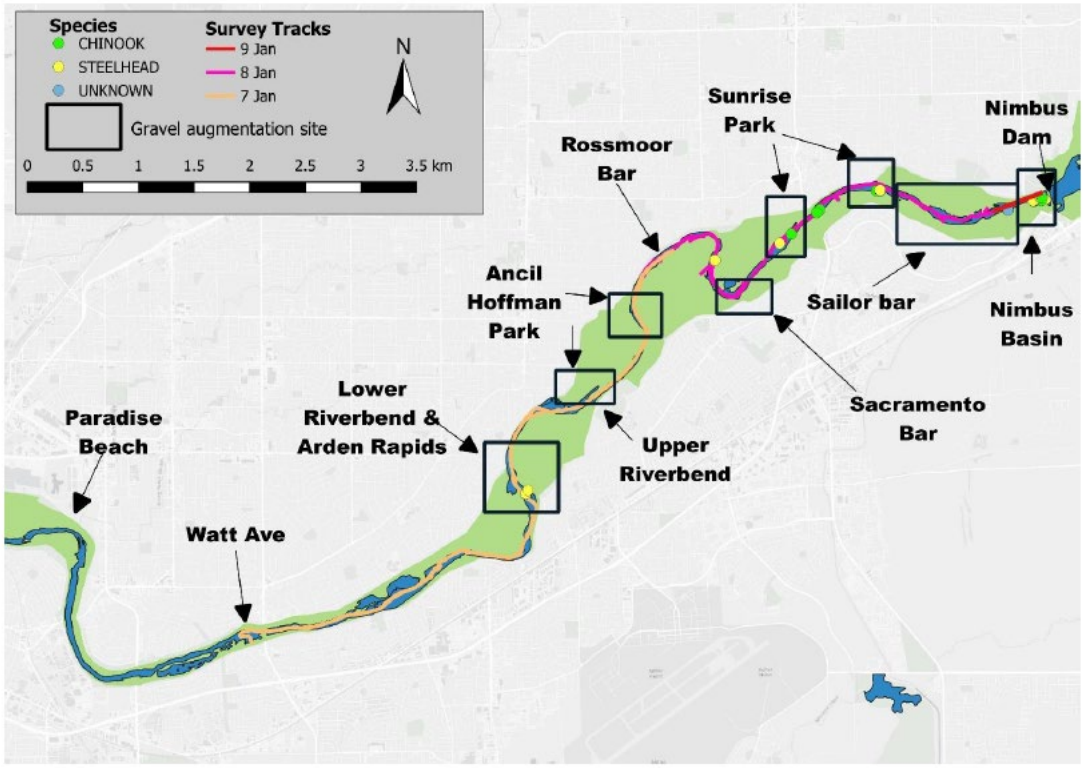

Figure 3. Locations of new redds identified during the 7-9 January 2025 steelhead spawning survey along the Lower American River. The gravel augmentation boxes represent general areas where gravel augmentation has occurred.

Figure 3 is a map of the locations of new redds at spawning survey spots along the Lower American River during January 7 – 9, 2025.

The majority of steelhead and Chinook Salmon redds were observed in Nimbus Basin with both species actively observed constructing redds (eight steelhead; four Chinook).

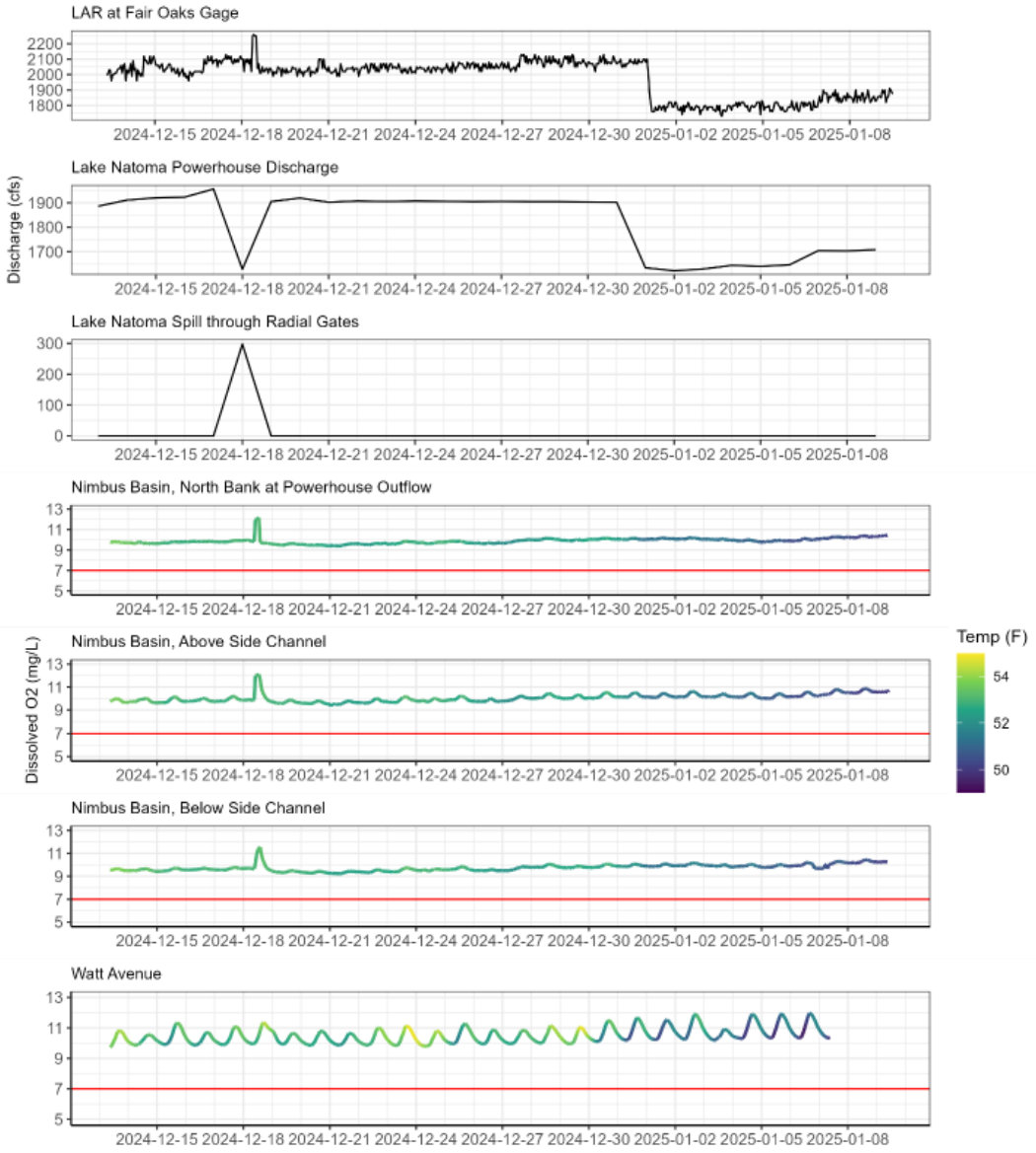

Figure 4. Discharge and dissolved oxygen data from Lower American River loggers from December 13, 2024 to January 9, 2025.

Figure 3 is a series of line graphs that show dissolved oxygen downloads from loggers in the American River. The graphs proceed from upstream to downstream with flow data from the United States Geological Survey AFO gage, Lake Natoma discharge through Nimbus Dam, and Folsom Dam.

SMUD Upper American River Project Update 01/13/2025

Fresh Pond Precipitation

January precipitation through 1/13/2025 is 1.34 inches, which is 14% of the Janaury average of 9.55 inches. Precipitation for the water year to date is 17.63 inches which is 75.6% of average to date (23.32 inches) and 30.8% of the entire water year average of 57.32 inches.

Runoff and Snowpack Water Content

Runoff into storage reservoir basins is 95.3% of median to date through 1/13/2025. The snowpack is 65.9% of average at selected snow sensors: Robbs PH, Robbs Saddle, Van Vleck, Alpha, and Schneider.

Table 6. Fresh Pond Precipitation

Month	Current Water Year	Historical Average	% of Historical Average
October	0.31	3.30	9%
November	5.71	6.87	75%
December	10.81	9.14	118%
January	1.34	9.55	14%
February	0.00	9.29	0%
March	0.00	9.27	0%
April	0.00	4.84	0%
May	0.00	2.97	0%
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	2.60	57.32	31%

* Month to date total, full month historical average.

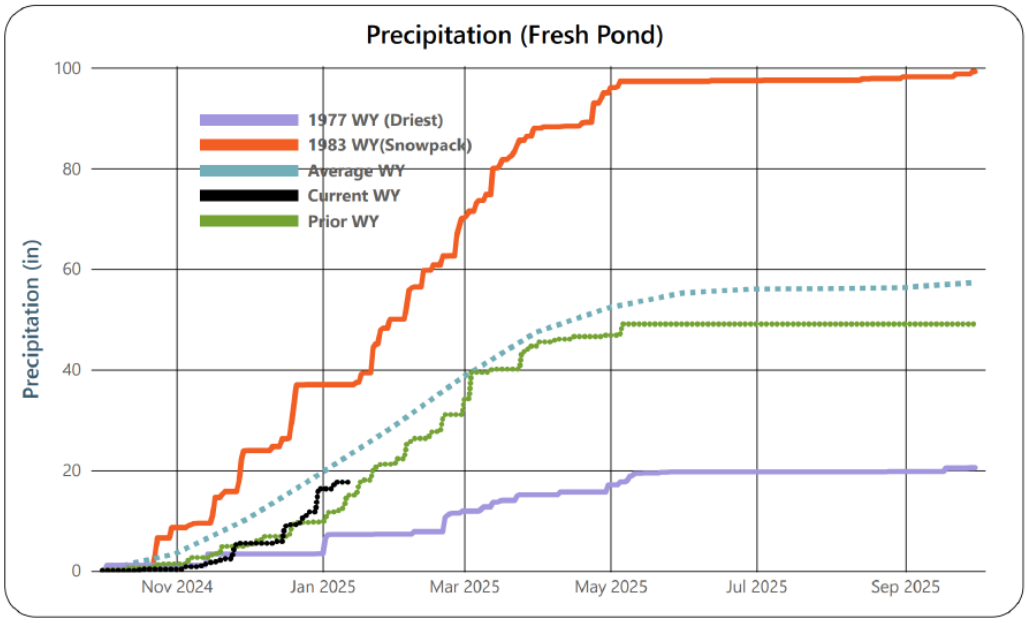

Figure 5. Fresh Pond Precipitation

Figure 5 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. January precipitation through 1/13/2025 is 1.34 inches, which is 14% of the January average of 9.55 inches.

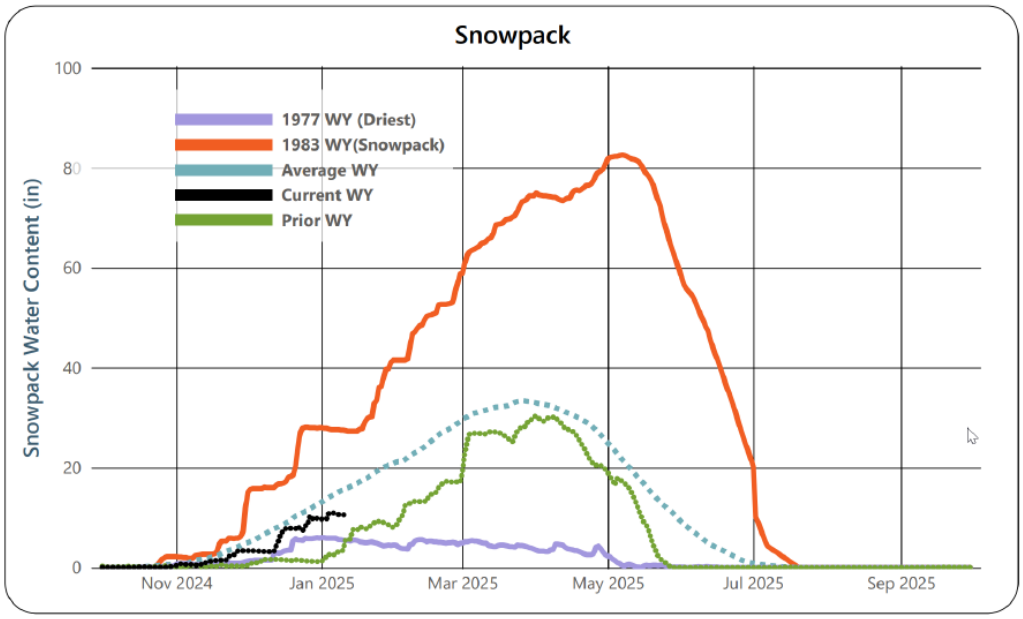

Figure 6. Snowpack

Figure 6 is a line graph of snowpack water content in inches for January 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 95.3% of median to date through 1/13/2025.

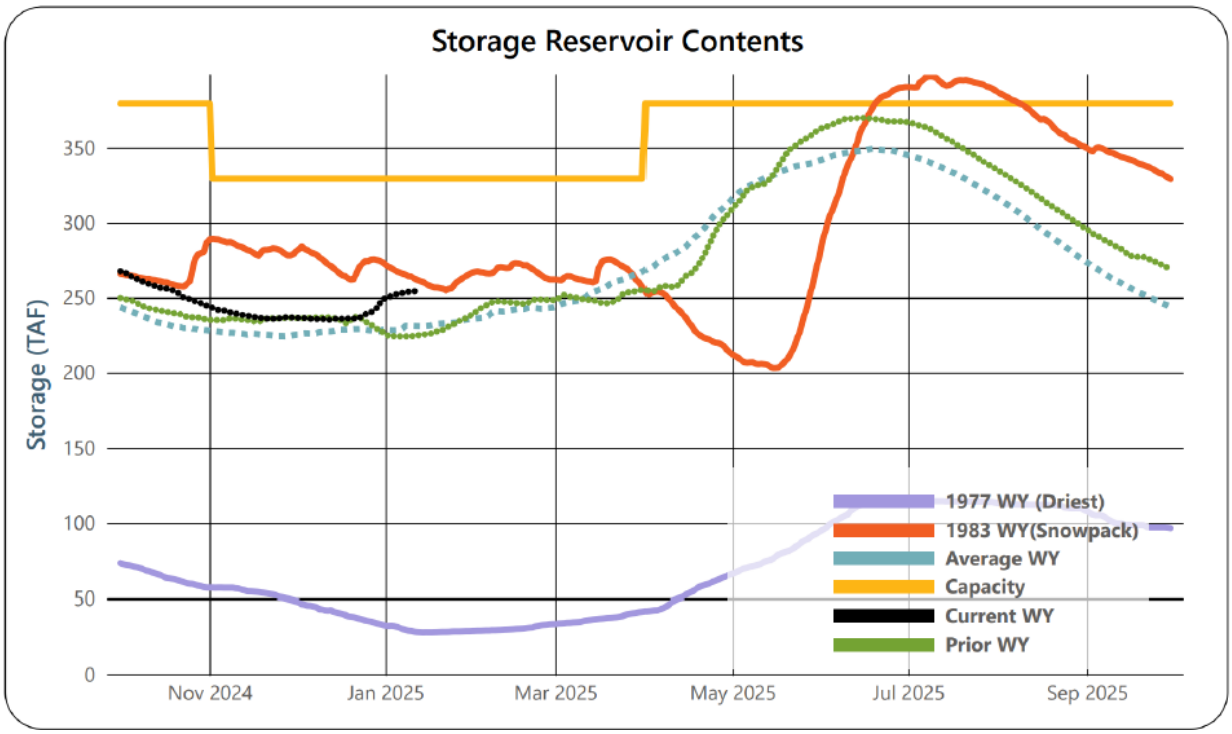

Figure 7. Storage Reservoir Contents

Figure 7 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 7. 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 Reservoir	41,021	59%	49,636	71.6%	45,737	66%	69,310	69,310
Union Valley Reservoir	163,988	62%	173,497	65.1%	150,220	56%	266,370	255,046
Ice House Reservoir	27,893	64%	31,687	72.8%	29,167	67%	43,500	34,855
Total Reservoir Storage	232,902	61%	254,820	67.2%	225,123	59%	379,180	329,211

Chili Bar Releases into the South Fork American River

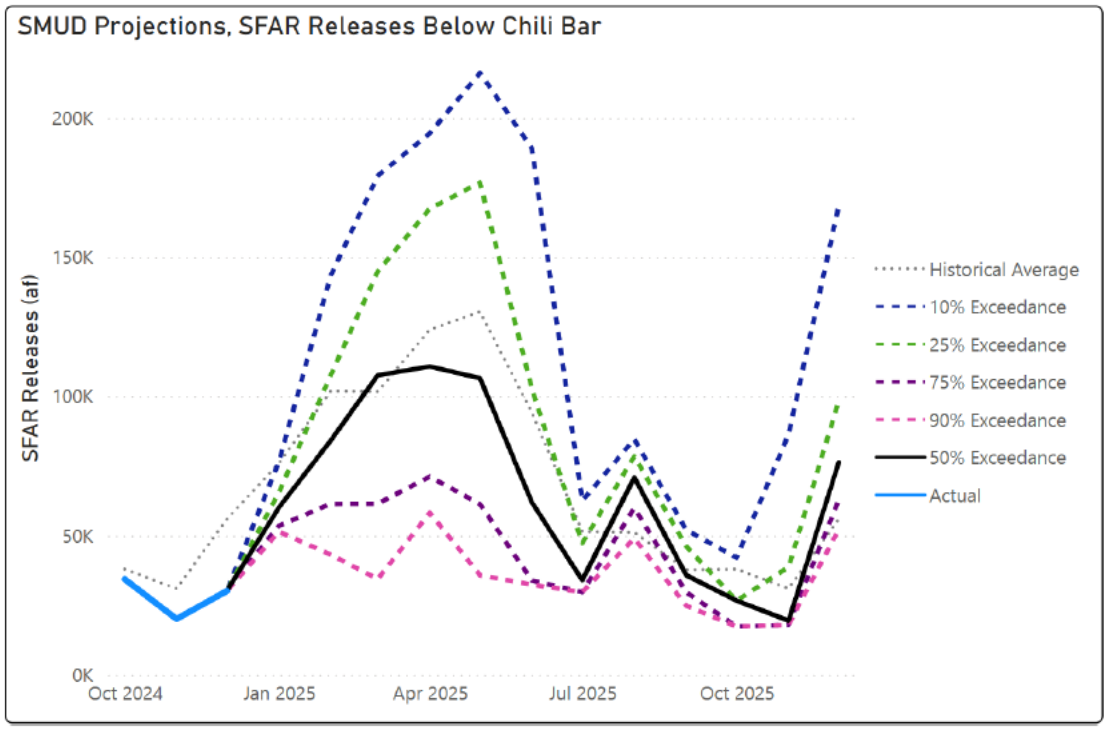

Figure 8. Chili Bar releases into the South Fork American River. Projections based on forecast from January 13, 2025.

Figure 8 is a line graph of observed and projected releases below Chili Bar from October 2024 to October 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 8. 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 2024	560	34,393	34,393	34,393
Actual	Nov 2024	338	20,076	20,076	20,076
Actual	Dec 2024	491	30,134	30,134	30,134
Forecast	Jan 2025	978	60,059	51,416	76,461
Forecast	Feb 2025	1,518	84,167	43,145	143,444
Forecast	Mar 2025	1,753	107,585	34,397	179,221
Forecast	Apr 2025	1,863	110,689	58,233	194,444
Forecast	May 2025	1,735	106,505	35,765	216,181

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	Jun 2025	1,043	61,943	32,411	188,988
Forecast	Jul 2025	554	33,994	29,706	62,507
Forecast	Aug 2025	1,154	70,862	49,055	84,641
Forecast	Sep 2025	602	35,759	24,797	52,029
Forecast	Oct 2025	434	26,667	17,378	42,093
Forecast	Nov 2025	328	19,467	17,991	86,348
Forecast	Dec 2025	1,244	76,362	52,252	168,499

PSMFC - Updated 1/13/25

RST Operations:

- RSTs were lowered on January 5th to begin the 2025 sampling season.
- RSTs are expected to be continuously operated 7 days a week.

Table 9. Unmarked Juvenile Chinook Salmon (length-at-date):

Fall	Late Fall	Spring	Winter
484	0	0	6

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.

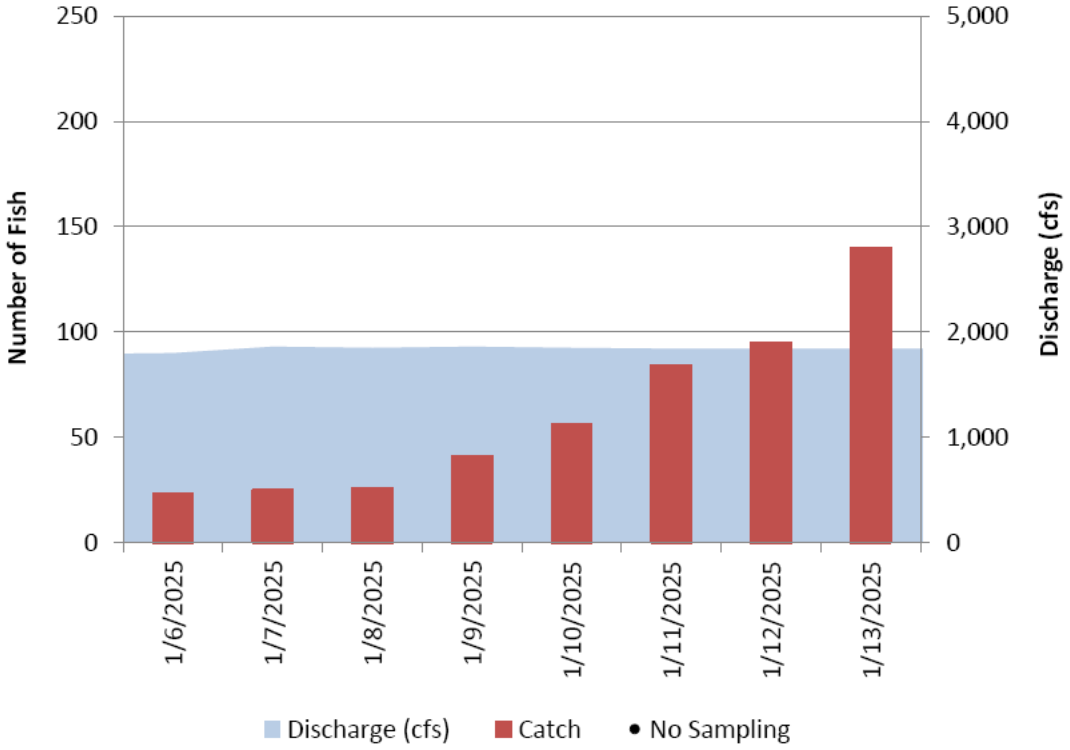

Figure 9. Lower American River RSTs at Watt Avenue – Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2025 Lower American River rotary screw trap sampling season.

Figure 9 is a bar graph that compares discharge (cfs), catch from January 6, 2025, to January 13, 2025.

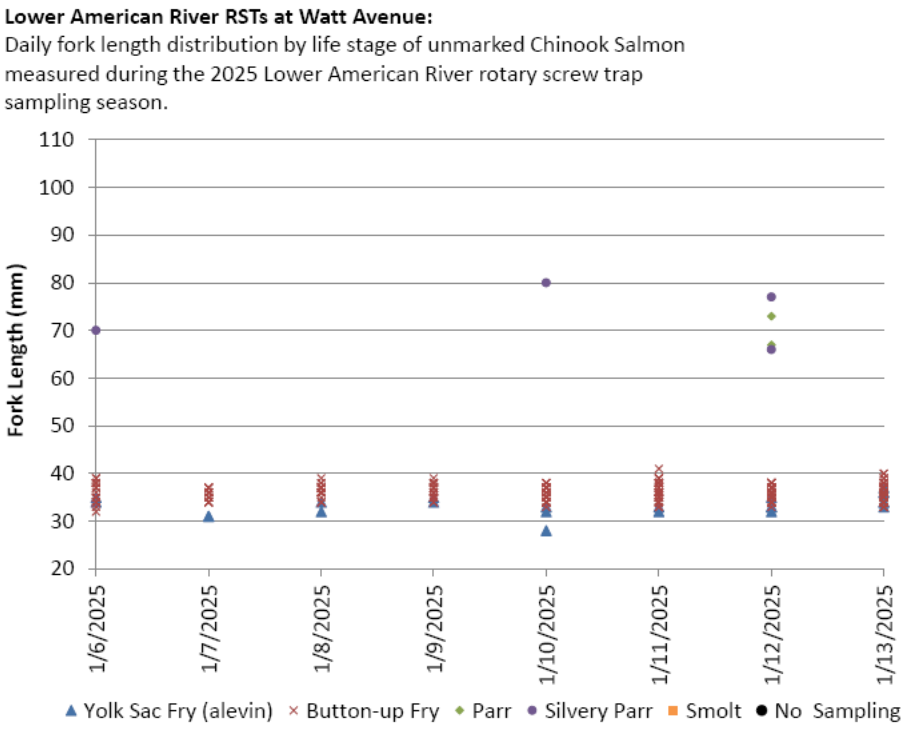

Figure 10. Lower American River RSTs at Watt Avenue – Daily fork length distribution by life stages of unmarked Chinook Salmon measured during the 2025 Lower American River rotary screw trap season.

Figure 10 is a bar graph that compares fork length (mm) from January 6, 2025, to January 13, 2025.

Visit Lower American River RST CalFish Webpage for more information.

PCWA MFP Operations Overview for American River Operations Group (Real Time Data as of January 16, 2025)

- French Meadows Storage = 65,000 AF of 136,405 AF = 48% Capacity
    - MFAR above FM Inflow (R24) =7-day AVG ~38 cfs
- Hell Hole Storage = 84,000 AF of 207,590 AF = 40% Capacity
    - Five Lakes Inflow (R23) = 7-day AVG ~30 cfs
    - Rubicon Inflow (R22) = 7-day AVG ~40cfs
- Combined Storage (FM+HH) = 149,000 AF/342,590 AF = 44% Capacity; ~86% of 15 YR AVG
- MFAR @ R11: 7-day daily average ~415 cfs
- NFAR @ ARPS: 7-day daily average ~835 cfs
- Currently operating MFP in storage conservation mode.
- Combined storage over the last two weeks => +5 TAF

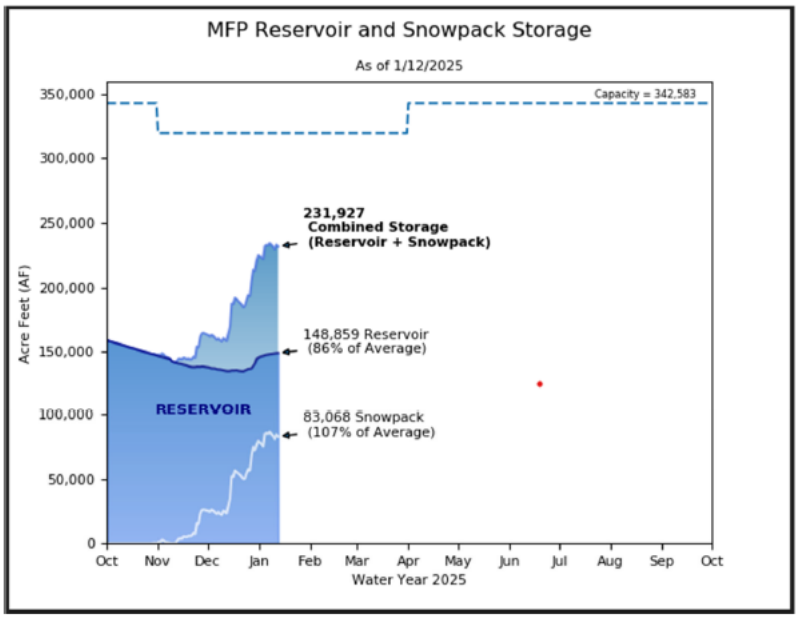

Figure 11. MFP Reservoir and Snowpack Storage

Figure 11 is a bar graph of MFP reservoir and snowpack storage as of January 12, 2025. The graph shows snowpack as 83,068 acres-feet, reservoir storage as 148,859 acres-feet, and combined storage of 231,927 acres-feet from October 2024 to January 2025.

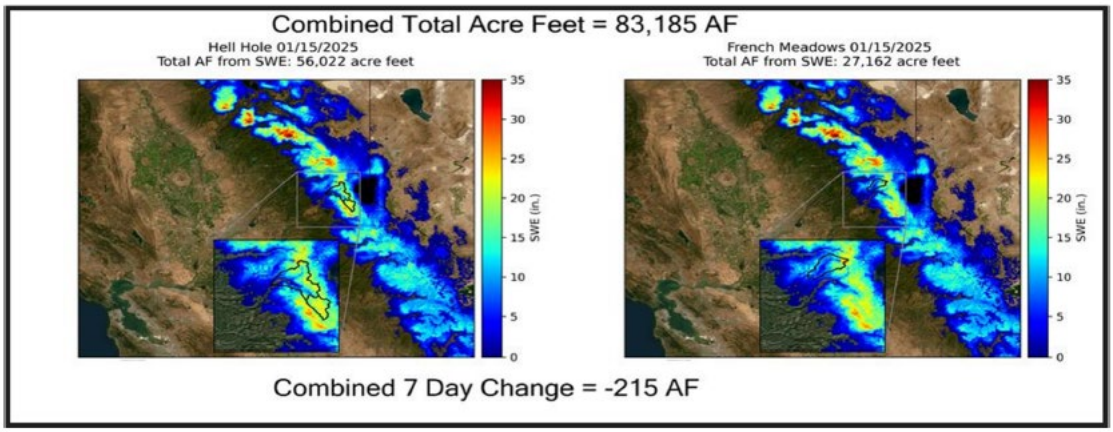

Figure 12. Combined Seven Day Storage Change

Figure 12 is an image of two heat maps. They show the combined total storage at Hell Hole (56,022 acre feet) and French Meadows (27,162 acre-feet). The total combined seven-day change is -215 acre-feet.

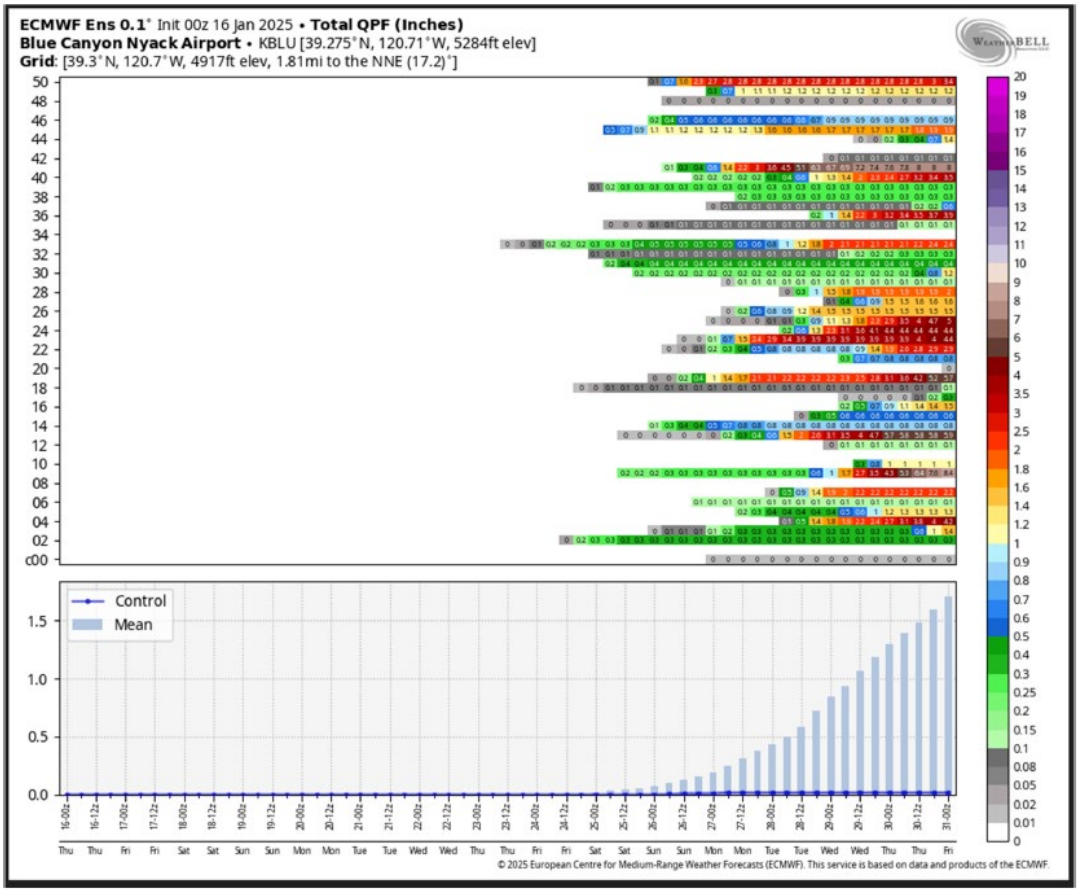

Figure 13. Quantitative Precipitation Forecasts in Inches at Blue Canyon Nyack Airport

Figure 13 is a stacked color-coded table and corresponding line graph. The table depicts quantitative precipitation forecasts color coded for amount in inches at Blue Canyon Nyack Airport. The line graph shows the control and mean for various days.

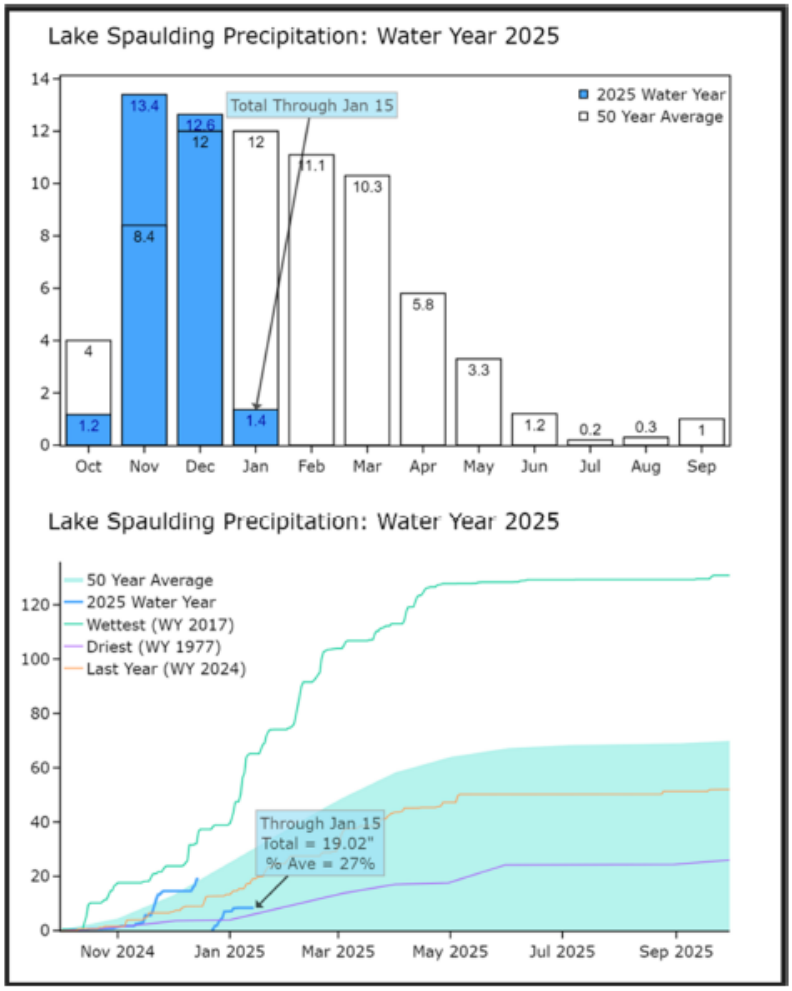

Figure 14. Lake Spaulding Precipitation: Water Year 2025

Figure 14 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 January 15 are 1.4 with a 50-year average of 19.02 inches.

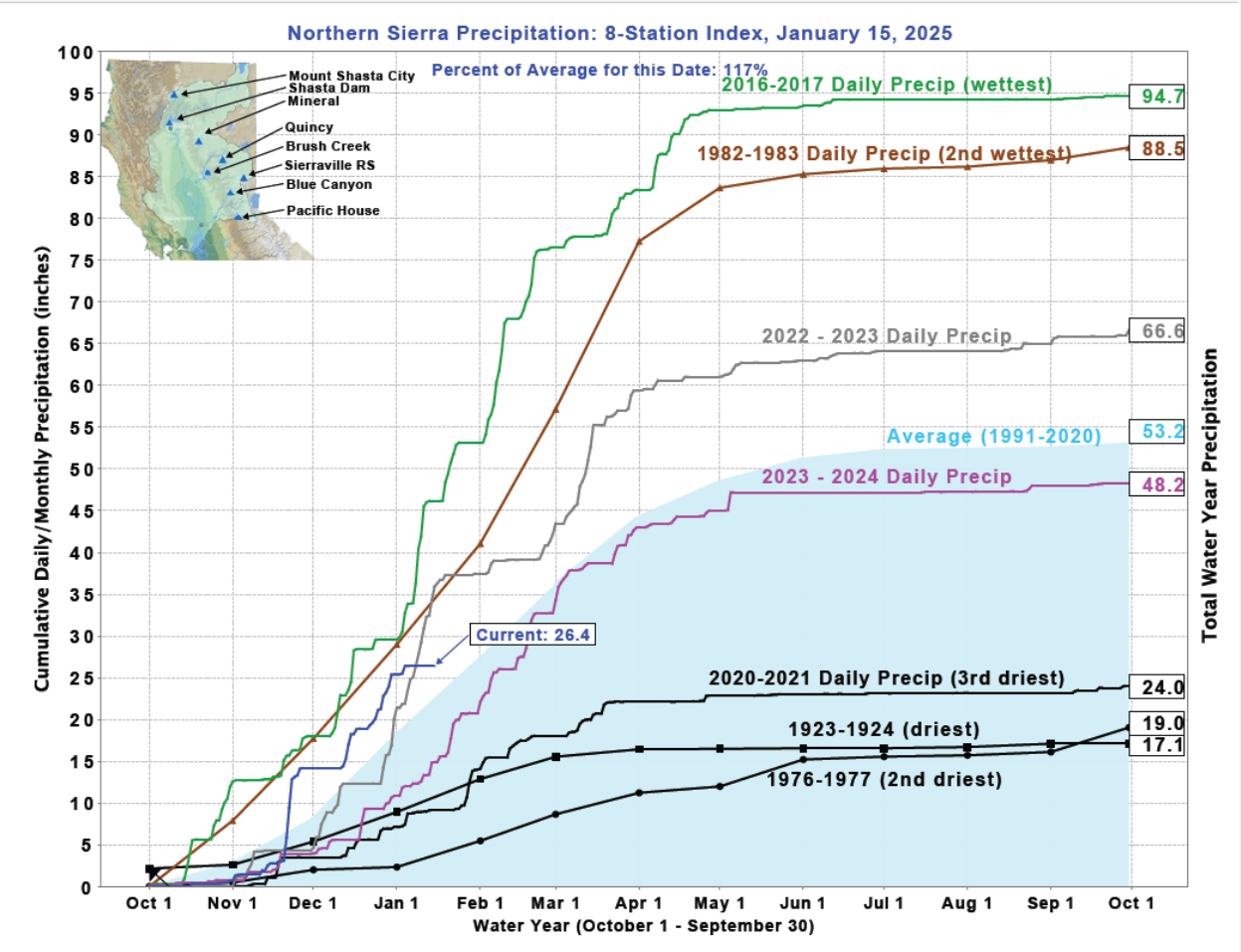

Figure 15. Northern Sierra Precipitation: 8-Station Index, January 15, 2025

Figure 15 is a line graph comparing the cumulative daily and monthly precipitation (inches) from October 2024 to October 2025. The line graph compares the total water year precipitation of the 1976-1977 (2nd driest, 1923 -1924 (direst), 2020 – 2021 (3rd driest), 2023 – 2024 daily precipitation, 2022- 2023 daily precipitation, 1982-1983 daily precipitation (2nd wettest), and 2015 -2017 (wettest). The current water year (2025) has a total water year precipitation of 26.4.

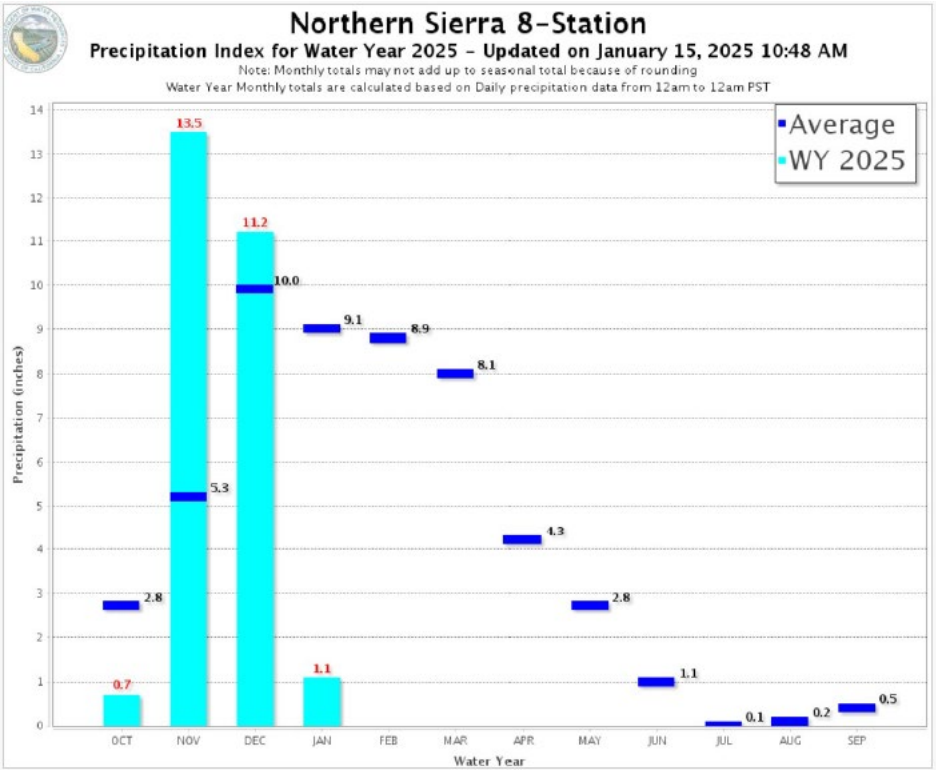

Figure 16. Northern Sierra – 8 Station. Precipitation Index for Water Year 2025, updated January 15, 2025 at 10:48 a.m.

Figure 16 is a bar graph showing the average precipitation for each month, and the recorded Water Year 2025 precipitation. October 2024 and January 2025 thus far have been below their monthly average, whereas November and December 2024 were above their monthly averages.

Bureau of Reclamation
Historical Archive and Report Database
Daily CVP Water Supply
January 14, 2025 | Run Date: 1/15/2025

Reservoir Releases in Cubic Feet/Second

Reservoir	Dam	WY 2024	WY 2025	15 Yr Median
Trinity	Lewiston	313	1,495	304
Sacramento	Keswick	5,060	12,944	4,304
Feather	Oroville (SWP)	1,750	1,750	1,750
American	Nimbus	1,770	1,781	1,781
Stanislaus	Goodwin	1,005	204	281
San Joaquin	Friant	427	425	423

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	1,373	1,327	1,902	139
Shasta	4,552	2,687	3,170	3,492	130
Folsom	977	426	469	368	86
New Melones	2,420	1,396	1,983	1,863	133
Fed. San Luis	966	554	816	591	107
Total North CVP	11,363	6,435	7,765	8,216	128
Millerton	521	292	258	232	79
Oroville (SWP)	3,425	1,874	2,463	2,505	134

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	417	34	287	198	211
Shasta	1,909	806	1,661	1,202	159
Folsom	311	130	1,218	530	59
New Melones	132	---	427	195	68
Millerton	151	76	595	224	68

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	19.16	4.40	18.99	14.53 (65)	132	0.00
Sacramento at Shasta Dam	36.95	5.34	30.17	25.92 (70)	143	0.00
American at Blue Canyon	29.98	7.61	40.78	28.03 (51)	107	0.00
Stanislaus at New Melones	6.49	N/A	14.53	11.03 (48)	59	0.00
San Joaquin at Huntington Lk	8.04	4.80	29.20	15.74 (52)	51	0.00

January 2025 | Folsom Lake Daily Operations | Run Date: 1/15/2025

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	353.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	396.62	357.4	3.5	3,605	1,766	0	0	61	6	0.03	0.00
2	396.94	359.4	2.0	2,696	1,597	0	0	62	6	0.03	0.00
3	397.39	362.3	2.9	3,069	1,545	0	0	61	0	0.00	0.71
4	397.94	365.9	3.6	3,306	1,446	0	0	60	9	0.04	0.01
5	398.29	368.2	2.3	2,898	1,674	0	0	65	9	0.04	0.00
6	398.42	369.0	0.8	2,399	1,893	0	0	69	9	0.04	0.00
7	398.53	369.7	0.7	2,227	1,769	0	0	63	33	0.15	0.00
8	398.56	369.9	0.2	1,829	1,652	0	0	67	11	0.05	0.00
9	398.64	370.5	0.5	1,838	1,495	0	0	69	11	0.05	0.00
10	398.53	369.7	-0.7	1,434	1,711	0	0	70	15	0.07	0.00
11	398.45	369.2	-0.5	1,725	1,882	0	0	70	37	0.17	0.00
12	398.50	369.5	0.3	1,686	1,430	0	0	71	20	0.09	0.00
13	398.35	368.6	-1.0	1,408	1,807	0	0	77	18	0.08	0.00
14	398.26	368.0	-0.6	1,591	1,806	0	0	68	13	0.06	0.00
Totals	N/A	N/A	14.0	31,711	23,473	0	0	933	197	0.90	0.72
Acre-Feet	N/A	N/A	14,000	62,899	46,559	0	0	1,851	391	N/A	N/A

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

Summary: Release (acre-feet)

Power	46559
Spill	0
Outlet	0
Pumping Plant	1851
Total Releases	48409

Summary: Precipitation (Month/Inches)

This month	0.72
October 1, 2022 to date	9.29

Isobath 10/01–10/31 (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 AFD1	MDT, Water AFO	MDT, Water AWP	MDT Water AWB	MDT, Air, CSU	Release (CFS) Nimbus	Stor-age (TAF) Folso m	USP /LP Unit 1	USP / LP Unit 2	USP /LP Unit 3
Dec	46.4	46.0	53.3	53.1	53.3	52.8	49.9	314	N/A	B	B	B
01/01	45.8	45.5	50.9	50.9	51.1	50.7	47.9	1751	357	B 62	B 20	B 18
01/02	46.3	46.6	50.6	51.1	51.7	51.3	50.8	1739	359	B 58	B 21	B 21
01/03	46.7	46.3	50.4	51.0	51.2	50.9	50.4	1741	362	B 58	B 30	B 12
01/04	47.3	47.0	50.4	50.8	51.1	50.5	47.5	1751	366	B 70	B 29	B 1
01/05	46.7	45.8	50.3	50.5	50.9	50.4	47.8	1747	368	B 74	B 25	B 1
01/06	46.2	45.6	50.2	50.3	50.7	50.3	49.7	1753	369	B 79	B 20	B 1
01/07	45.7	45.1	50.4	50.3	50.7	50.3	55.4	1811	370	B 61	B 32	B 7
01/08	45.2	44.9	50.2	49.9	50.4	50.0	52.2	1810	370	B 57	B 36	B 7
01/09	44.6	44.3	49.8	50.0	50.2	49.8	50.6	1815	370	B 55	B 34	B 12
01/10	44.5	44.3	49.9	50.1	50.5	50.0	49.9	1807	370	B 66	B 23	B 11
01/11	44.1	43.9	50.2	49.9	50.1	49.8	52.3	1786	369	B 65	B 35	B 1
01/12	43.2	42.8	50.0	49.5	49.7	49.2	49.6	1787	370	B 72	B 27	B 1
01/13	42.8	42.6	49.8	49.4	49.6	49.1	48.2	1782	369	B 64	B 22	B 14
01/14	42.6	42.2	49.7	49.5	49.6	49.0	45.8	1781	368	B 60	B 24	B 15.9
01/15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date	MDT, Water NFA	MDT, Water ARP	MDT, Water AFD1	MDT, Water AFO	MDT, Water AWP	MDT Water AWB	MDT, Air, CSU	Release (CFS) Nimbus	Stor-age (TAF) Folsom	USP /LP Unit 1	USP / LP Unit 2	USP /LP Unit 3
01/28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01/31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jan	45.1	44.8	50.2	50.2	50.5	50.1	49.9	367	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	Total AF	49311	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

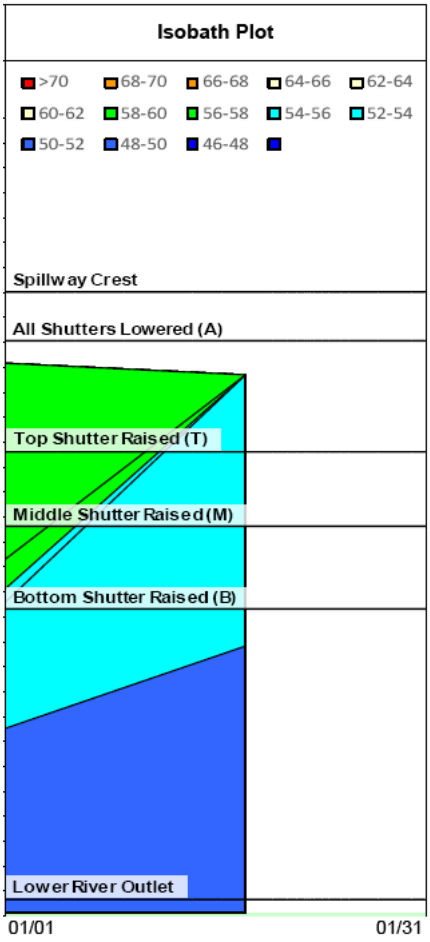

Figure 17. Isobath Plot 1/1-1/31

Figure 10 is an Isobath Plot for the month of January showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet.

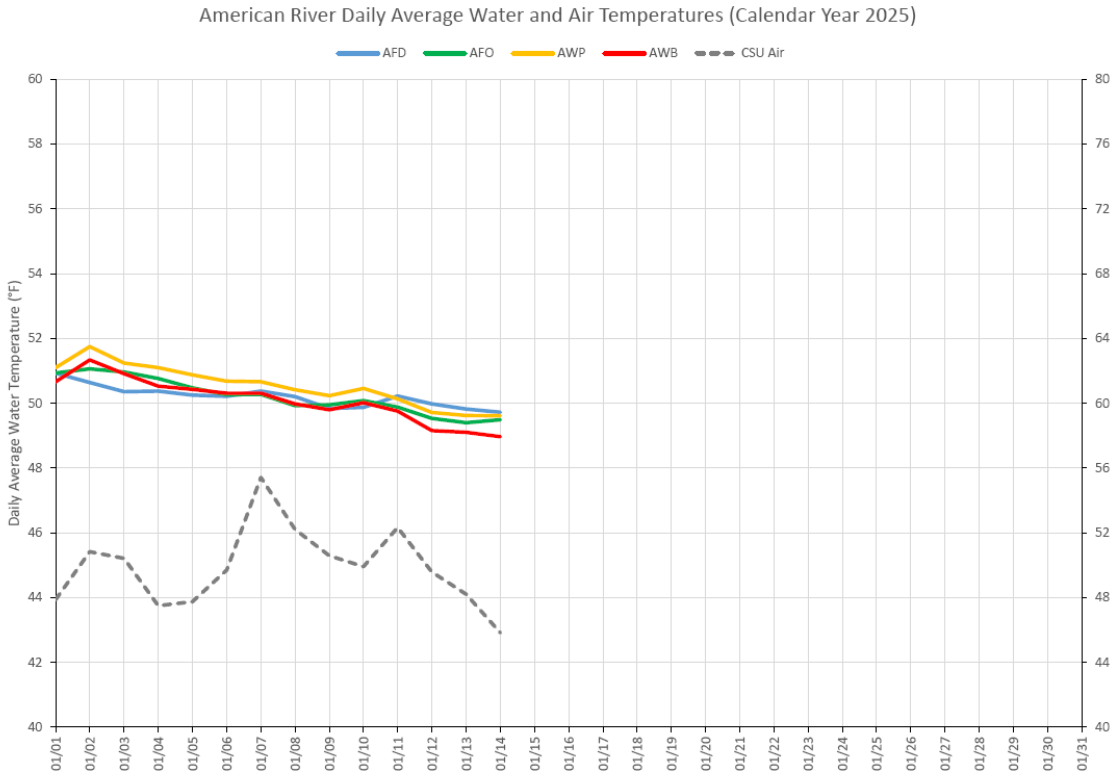

Figure 18. American River Daily Average Water and Air Temperatures (Calendar Year 2024)

Figure 18 is a graph that compares time to the daily average water and air temperatures for the month of December 2024. The lines on the graph demonstrate the categories of the Isobath 12/1-12/31 Table including the NFA, ARP, AFD, AFO, AWP, AWB, and CSU.

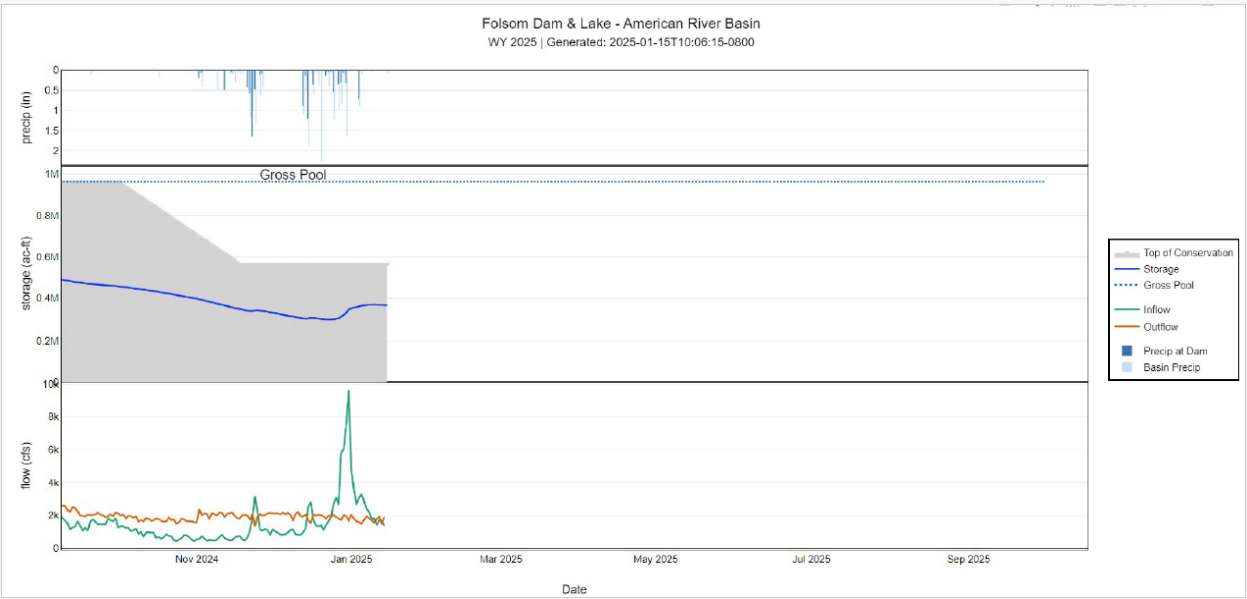

Figure 19. Folsom Dam & Lake – American River Basin for WY2025.

Figure 19 is a graph that compares the flow, storage, and precipitation over time for the American River Basin.

Estimated CVP Operations 50% Exceedance

- CVP actual operations do not follow any forecasted operation or outlook; actual operations are based on real-time conditions.
- CVP operational forecasts or outlooks represent general system-wide dynamics and do not necessarily address specific watershed/tributary details.
- CVP releases or export values represent monthly averages.
- CVP Operations are updated monthly as new hydrology information is made available December through May.

Storages

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

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Trinity Storage	1661	1699	1764	1876	2005	2129	2039	1939	1801	1660	1531	1481	1488
Trinity Elevation	N/A	2319	2324	2332	2341	2350	2344	2337	2327	2316	2306	2302	2302
Whiskeytown Storage	231	206	206	206	206	206	238	238	238	238	238	206	206
Whiskeytown Elevation	N/A	1199	1199	1199	1199	1199	1209	1209	1209	1209	1209	1199	1199
Shasta Storage	2770	3139	3479	3721	4008	4296	4402	4202	3905	3646	3485	3347	3346
Shasta Elevation	N/A	1014	1028	1037	1048	1058	1062	1055	1044	1034	1028	1022	1022
Folsom Storage	332	369	496	564	745	892	945	920	718	664	616	573	547
Folsom Elevation	N/A	398	416	424	444	458	463	461	441	435	430	425	422
New Melones Storage	1819	1848	1893	1943	2021	1952	1925	1903	1833	1774	1725	1664	1676
New Melones Elevation	N/A	1038	1042	1047	1054	1048	1045	1043	1037	1031	1026	1020	1021
Federal San Luis Storage	415	550	750	887	966	863	647	520	267	159	162	259	404

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Federal San Luis Elevation	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	7228	7811	8587	9196	9951	10338	10195	9723	8762	8141	7757	7530	7667

State End of Month Reservoir Storage (TAF/Feet)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Oroville Storage	1902	1982	2359	2498	2708	3007	3228	3228	2728	2281	1984	1796	1730
Oroville Elevation	N/A	781	815	826	843	865	880	880	844	808	781	763	756
State San Luis Storage	757	1035	1062	1062	1062	921	725	547	628	692	829	1046	1172
State San Luis Elevation	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 San Luis (TAF)	1172	1586	1812	1949	2028	1784	1372	1067	895	851	992	1305	1576
Total San Luis Elevation	N/A	507	526	537	543	523	488	459	442	438	452	482	506

Monthly River Releases (TAF/cfs)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Trinity TAF	N/A	18	18	17	18	80	258	126	68	53	52	23	18
Trinity cfs	N/A	300	300	300	300	1347	4189	2120	1102	857	870	373	300
Clear Creek TAF	N/A	12	12	11	22	12	18	14	9	9	9	12	12
Clear Creek cfs	N/A	200	200	200	363	200	291	242	150	150	150	200	200
Sacramento TAF	N/A	246	553	722	799	416	430	595	615	553	446	430	297
Sacramento cfs	N/A	4000	9000	13000	13000	7000	7000	10000	10000	9000	7500	7000	5000
American TAF	N/A	123	108	194	203	178	277	178	297	142	119	123	119
American cfs	N/A	2000	1750	3500	3300	3000	4500	3000	4823	2314	2000	2000	2000

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Stanislaus TAF	N/A	12	14	13	12	91	76	22	15	15	15	48	12
Stanislaus cfs	N/A	200	226	229	200	1537	1242	363	250	250	250	774	200
Feather TAF	N/A	108	108	461	476	173	77	146	501	467	405	215	104
Feather cfs	N/A	1750	1750	8300	7750	2900	1250	2450	8150	7600	6800	3500	1750

Trinity Diversions (TAF)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Carr PP	N/A	0	0	0	0	0	46	68	89	90	79	38	5
Spring Creek PP	N/A	29	22	33	15	12	10	60	80	80	70	60	0

Delta Summary (TAF)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Tracy	N/A	220	260	235	193	54	55	260	230	267	255	266	260
USBR Banks	N/A	0	0	0	0	0	0	0	0	0	0	0	0
Contra Costa	N/A	18.0	14.0	14.0	12.7	12.7	12.7	9.8	11.1	12.7	14.0	14.0	16.0
Total USBR	N/A	238	274	249	206	66	68	270	241	280	269	280	276
State Export	N/A	420	55	87	133	36	38	126	412	411	397	410	297
Total Export	N/A	658	329	336	339	102	106	396	653	691	666	690	573
COA Balance	N/A	0	0	0	0	0	0	0	1	-1	-1	-1	15
Vernalis TAF	N/A	103	119	237	249	255	279	96	80	71	74	126	99
Vernalis cfs	N/A	1680	1934	4263	4055	4278	4543	1607	1307	1161	1242	2043	1662
Old/ Middle River Calc. cfs	N/A	-8076	-3841	-3331	-3008	15	128	-4990	-8182	-8719	-8651	-8313	-7258
Computed DOI cfs	N/A	8752	33657	54229	48167	26559	19635	8842	8004	3872	5497	4750	4505
Excess Outflow	N/A	4246	27654	42828	36764	15162	8654	740	0	0	2488	748	0

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
% Export/Inflow	N/A	53%	13%	10%	10%	5%	7%	35%	45%	57%	56%	61%	62%
%Export/Inflow std.	N/A	65%	65%	45%	35%	35%	35%	35%	65%	65%	65%	65%	65%

Hydrology Water Year Inflow (TAF)

Facility	Year to Date & Forecasted	% of mean
Trinity	1081	89%
Shasta	6394	115%
Folsom	2352	86%
New Melones	876.832647	83%

Estimated CVP Operations 90% Exceedance

- CVP actual operations do not follow any forecasted operation or outlook; actual operations are based on real-time conditions.
- CVP operational forecasts or outlooks represent general system-wide dynamics and do not necessarily address specific watershed/tributary details.
- CVP releases or export values represent monthly averages.
- CVP Operations are updated monthly as new hydrology information is made available December through May.

Storages

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

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Trinity Storage	1661	1664	1677	1713	1780	1883	1803	1725	1598	1444	1292	1231	1215
Trinity Elevation	N/A	2316	2317	2320	2325	2333	2327	2321	2311	2298	2285	2279	2278
Whiskeytown Storage	231	222	217	218	206	206	238	238	238	238	238	206	206
Whiskeytown Elevation	N/A	1204	1202	1202	1199	1199	1209	1209	1209	1209	1209	1199	1199
Shasta Storage	2770	2942	3160	3467	3894	3873	3737	3414	3067	2779	2662	2583	2542
Shasta Elevation	N/A	1005	1015	1027	1044	1043	1038	1025	1011	998	992	988	986
Folsom Storage	332	297	313	353	462	558	580	556	506	462	435	414	398
Folsom Elevation	N/A	387	389	396	412	424	426	423	417	412	408	405	403
New Melones Storage	1819	1824	1833	1839	1860	1792	1709	1628	1546	1484	1432	1381	1393
New Melones Elevation	N/A	1036	1037	1037	1039	1033	1025	1017	1008	1001	996	990	991
Federal San Luis Storage	415	553	757	902	966	895	735	505	214	103	154	213	207
Federal San Luis Elevation	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	7228	7502	7956	8491	9167	9207	8802	8066	7169	6510	6213	6027	5961

State End of Month Reservoir Storage (TAF/Feet)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Oroville Storage	1902	1816	1918	2110	2388	2469	2430	2217	1911	1661	1524	1383	1249
Oroville Elevation	N/A	765	775	793	817	824	821	802	774	748	733	716	700
State San Luis Storage	757	1062	1062	1049	1062	981	873	733	662	634	719	813	942
State San Luis Elevation	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 San Luis (TAF)	1172	1616	1819	1951	2028	1876	1608	1238	876	737	873	1026	1149
Total San Luis Elevation	N/A	509	526	537	543	531	509	476	440	425	440	455	467

Monthly River Releases (TAF/cfs)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Trinity TAF	N/A	18	18	17	18	32	180	47	28	53	52	23	18
Trinity cfs	N/A	300	300	300	300	540	2924	783	450	857	870	373	300
Clear Creek TAF	N/A	12	12	11	22	12	18	13	9	9	9	12	12
Clear Creek cfs	N/A	200	200	200	363	200	296	224	150	150	150	200	200
Sacramento TAF	N/A	246	246	222	246	452	479	625	645	553	387	338	268
Sacramento cfs	N/A	4000	4000	4000	4000	7600	7800	10500	10500	9000	6500	5500	4500
American TAF	N/A	123	86	78	61	59	123	89	105	105	73	62	59
American cfs	N/A	2000	1400	1400	1000	1000	2000	1500	1716	1709	1223	1005	1000
Stanislaus TAF	N/A	12	13	12	12	27	25	9	9	9	9	39	12
Stanislaus cfs	N/A	200	219	214	200	460	400	150	150	150	150	635	200
Feather TAF	N/A	108	108	97	108	158	129	190	221	203	196	148	74
Feather cfs	N/A	1750	1750	1750	1750	2650	2100	3200	3600	3300	3300	2400	1250

Trinity Diversions (TAF)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Carr PP	N/A	0	0	0	0	0	44	81	120	101	100	44	10

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Spring Creek PP	N/A	0	0	0	9	3	0	70	110	90	90	65	0

Delta Summary (TAF)

Facility	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Tracy	N/A	220	260	240	158	57	58	68	64	172	252	203	106
USBR Banks	N/A	0	0	0	0	0	0	0	13	13	13	0	0
Contra Costa	N/A	14.0	14.0	14.0	12.0	12.0	12.0	10.0	11.0	12.0	12.0	14.0	14.0
Total USBR	N/A	234	274	254	170	69	70	78	88	197	277	217	120
State Export	N/A	380	120	47	111	33	34	30	82	129	174	179	179
Total Export	N/A	614	394	301	281	101	104	108	170	326	451	396	299
COA Balance	N/A	0	0	0	0	0	0	0	0	0	0	0	0
Vernalis TAF	N/A	75	76	82	98	84	86	40	42	37	43	98	74
Vernalis cfs	N/A	1225	1244	1475	1599	1418	1400	671	687	605	722	1595	1242
Old/Middle River Calc. cfs	N/A	-7730	-4965	-4100	-3390	-1262	-1265	-1686	-2410	-4401	-6103	-4833	-3901
Computed DOI cfs	N/A	5075	13876	18334	16511	12523	8784	7312	4994	3384	3009	4002	4505
Excess Outflow	N/A	569	7873	6934	5108	1832	1285	67	0	0	0	0	0
% Export/Inflow	N/A	63%	32%	22%	21%	10%	12%	13%	21%	41%	56%	52%	47%
%Export/Inflow std.	N/A	65%	65%	45%	35%	35%	35%	35%	65%	65%	65%	65%	65%

Hydrology Water Year Inflow (TAF)

Facility	Year to Date & Forecasted	% of mean
Trinity	666	55%
Shasta	4323	78%
Folsom	1246	46%
New Melones	433.495382	41%

Table 10. WY 2025 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	1,545 cfs
November	May ARI[2] (50% exceedance)	2,000 cfs	Not applicable	Not applicable	2,000 cfs	1,997 cfs
December	May ARI[2] (50% exceedance)	2,000 cfs	Not applicable	Not applicable	2,000 cfs	2,027 cfs
January	January SRI (90% exceedance)	N/A	N/A	Not applicable	N/A	N/A
February	February ARI (90% exceedance)	N/A	N/A	N/A	N/A	N/A
March	March ARI (90% exceedance)	N/A	Not applicable	N/A	N/A	N/A
April	May ARI (90% exceedance)	N/A	Not applicable	N/A	N/A	N/A
May	May ARI[2] (90% exceedance)	N/A	Not applicable	N/A	N/A	N/A
June	May ARI[2] (90% exceedance)	N/A	Not applicable	Not applicable	N/A	N/A
July	May ARI[2] (90% exceedance)	N/A	Not applicable	Not applicable	N/A	N/A
August	May ARI[2] (90% exceedance)	N/A	Not applicable	Not applicable	N/A	N/A
September	May ARI[2] (90% exceedance)	N/A	Not applicable	Not applicable	N/A	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.
[2] Since new forecasts are usually provided January through May, the May ARI would also be used for June–September of the current water year and October–December of the next water year unless there is an update to the ARI after May.