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, March 21, 2024

Agenda

1. Introductions
2. Announcements
3. Housekeeping
    a. Meeting will be recorded for notetaking purposes
4. Fisheries Update
    a. CDFW
        i. Nimbus Hatchery Operations Update
    b. CFS
    c. PSMFC
5. Operations Forecast
    a. SMUD
    b. PCWA
6. Central Valley Operations
7. Discussion
    a. Annual Report Update
8. Next Meetings:
    a. Thursday, April 18, 1:30-3:30pm

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

CDFW Update – March ARG

- Live update on Nimbus Fish Hatchery Operations

(No formal packet items this month)

Lower American River 2024 Steelhead Spawning Survey Summary

Table 1. Steelhead and Chinook salmon redd counts during 2024 steelhead spawning surveys.

Dates	Steelhead	Chinook	Total
Jan 9 – 11	20	3	23
Jan 24 – 26	7	0	7
Feb 7 – 9	13	0	13
Feb 21 – 23	14	0	14
Mar 6 – 8	6	0	6
Total	60	3	63

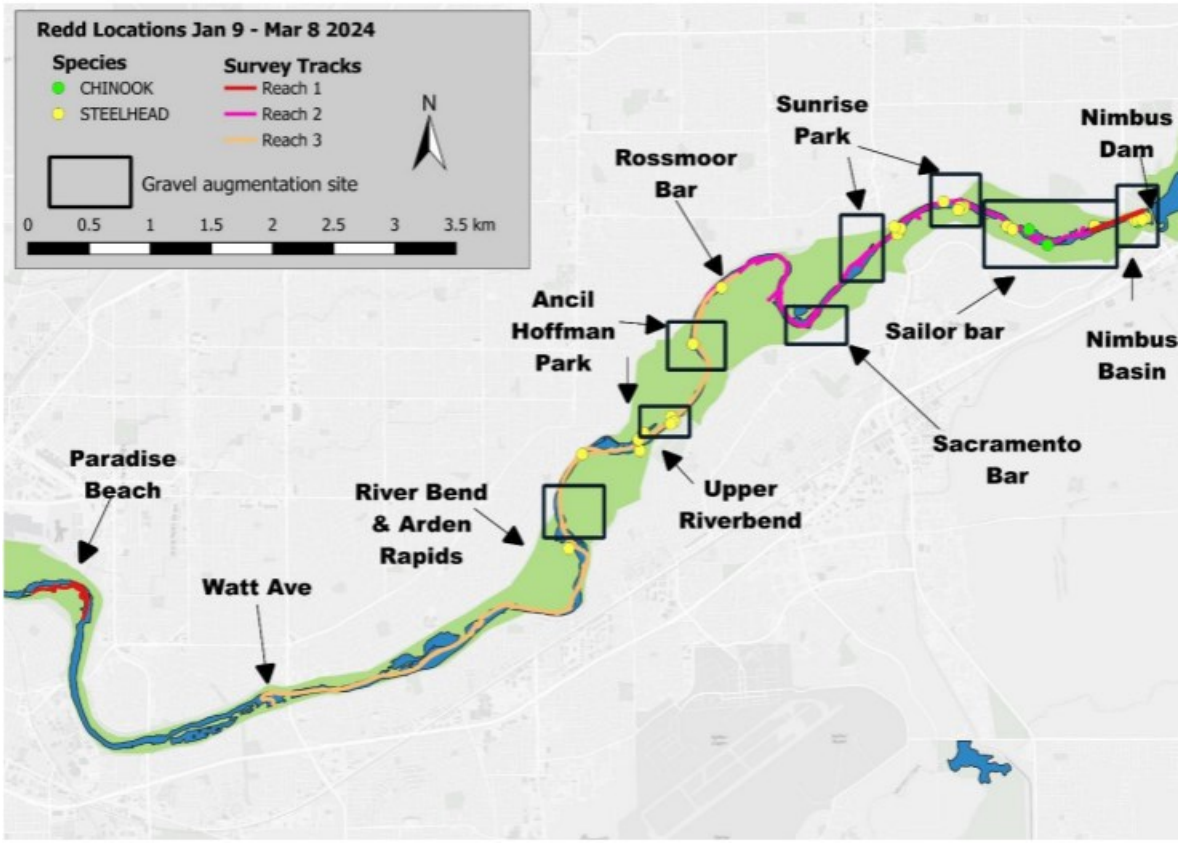


Figure 1. Locations of redds identified during the 2024 steelhead spawning surveys along the Lower American River through March 8 2024. The black boxes represent areas where gravel augmentation occurred.

Figure 1 is a map of the lower American River. It shows the location of Chinook and steelhead redds by different colors and marks survey tracks in reaches 1-3.

Spawning and stranding surveys are occurring this week (20 – 22 Mar).

Table 2. Unmarked Juvenile Chinook Salmon (length-at-date):

Fall	Late Fall	Spring	Winter
70,164	0	9	12

Additionally, the RSTs captured 1 adipose clipped Chinook Salmon at 77mm 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 3. Unmarked Juvenile O. mykiss (life stage):

Fry	Parr	Smolt	Adult
48	0	0	0

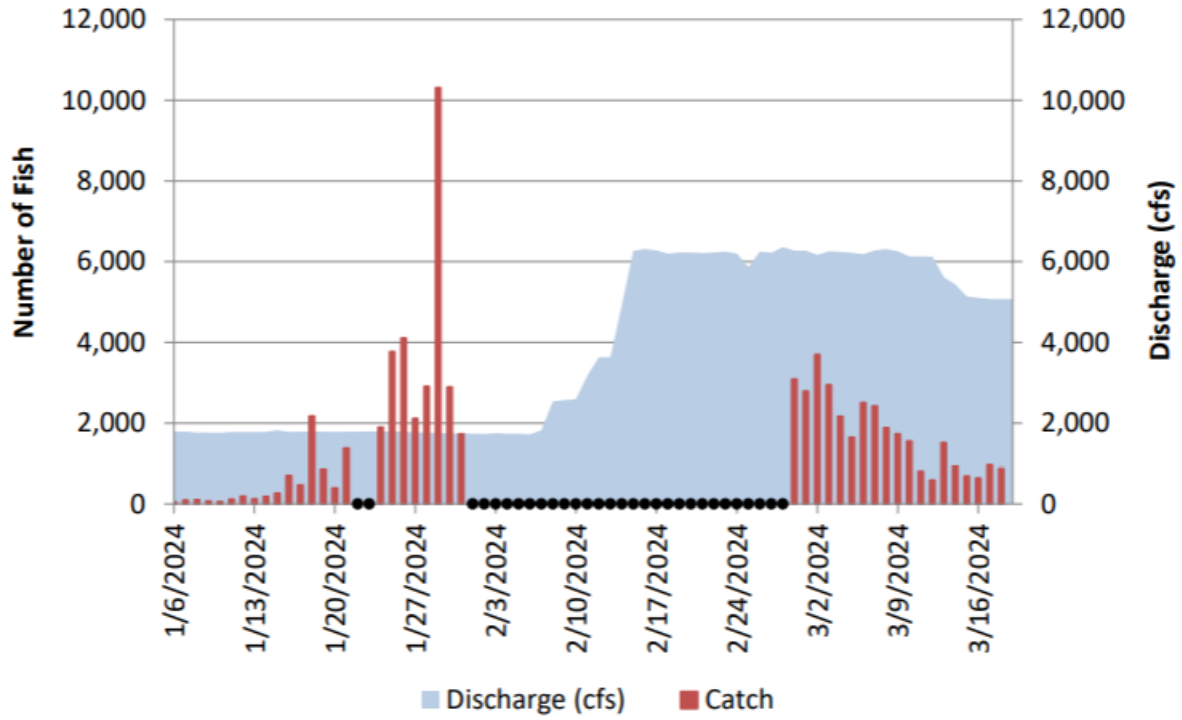


Figure 2. Lower American River RSTs at Watt Avenue: Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2024 Lower American River rotary screw trap sampling season.

Figure 2 is a bar graph. It shows the number of fish caught January 6, 2024 to March 16, 2024 with red lines and total discharge in cfs in a blue area on the graph.

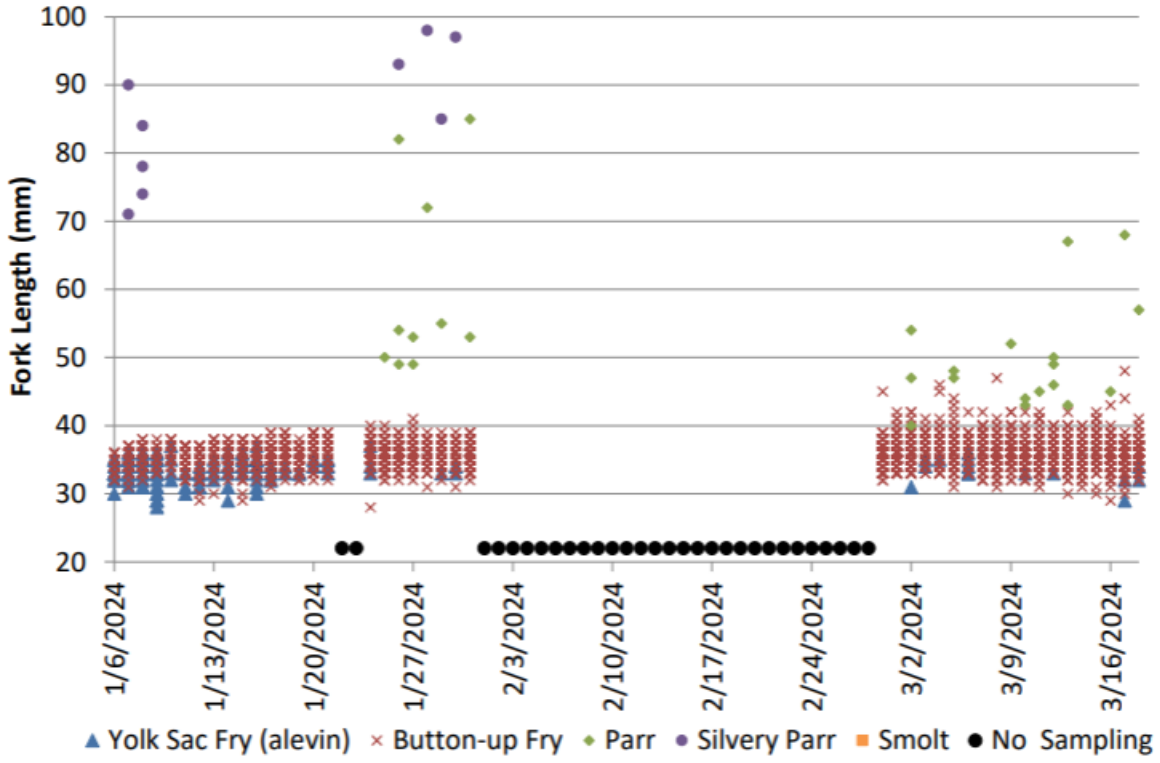


Figure 3. Lower American River RSTs at Watt Avenue: Daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2024 Lower American River rotary screw trap sampling season.

Figure 3 is a plotted chart. It shows the fork length in mm for fish caught January 1, 2024 to March 16, 2024. The life stage, Yolk Sac Fry (alevin), Button-up Fry, Parr, Silvery Parr, and Smolt is depicted by different shapes on the graph.

Additional information can be found on the Lower American River RST CalFish Webpage.

SMUD Upper American River Project Update 03/19/2024

Fresh Pond Precipitation

March precipitation through 3/19/2024 is 9.10 inches, which is 100.4% of the March average of 9.05 inches. Precipitation for the water year to date is 40.11 inches which is 91.3% of average to date (43.91 inches) and 70.0% of the entire water year average of 57.32 inches.

Runoff and Snowpack Water Content

Runoff into storage reservoir basins is 74.0% of median to date through 3/19/2023. The snowpack is 83.6% of average at selected snow sensors: Robbs PH, Robbs Saddle, Van Vleck, Alpha, and Schneider.

Table 4. Fresh Pond Precipitation

Month	Current Water Year	Historical Average	% of Historical 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	9.10	9.06	100%
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	40.11	57.32	70%

* Month to date total, full month historical average.

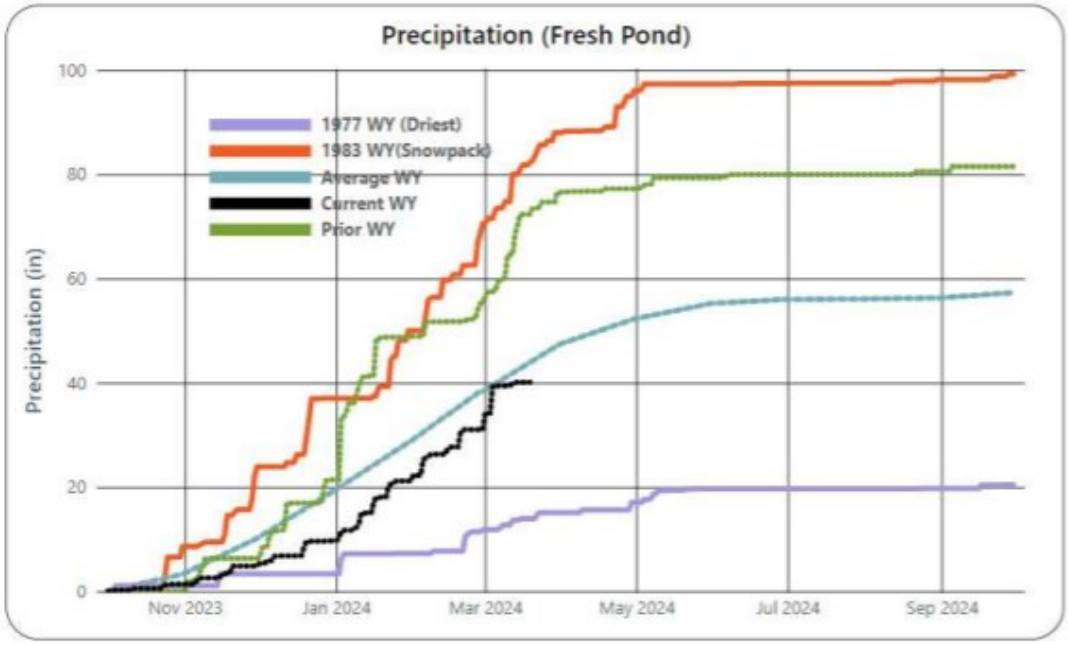


Figure 4. Fresh Pond Precipitation

Figure 4 is a line graph of fresh pond precipitation in inches for November 2023 – September 2024. It includes precipitation data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year.

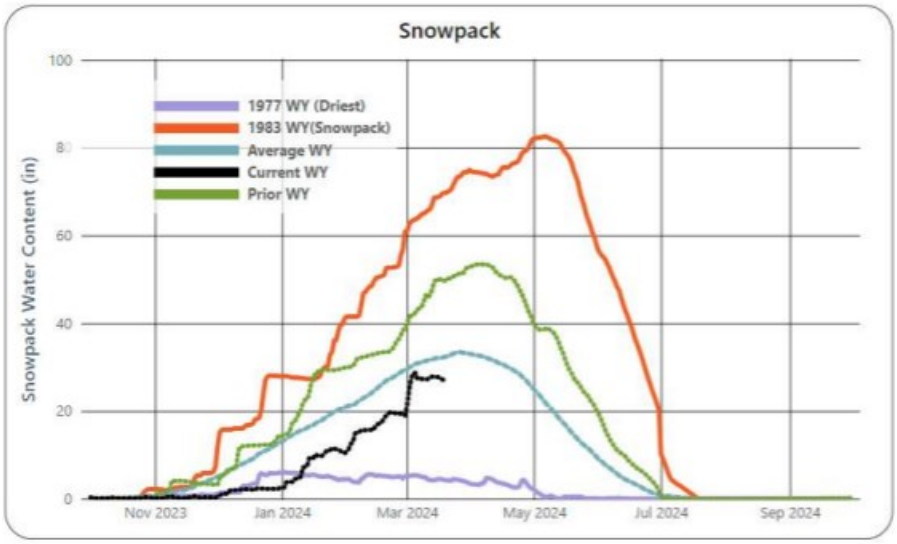


Figure 5. March 19, 2024 snowpack

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 (2015), 1983's water year

snowpack, average, current, and prior water year. Runoff into the storage reservoir basins is 74.0% of median to date through 3/19/2024.

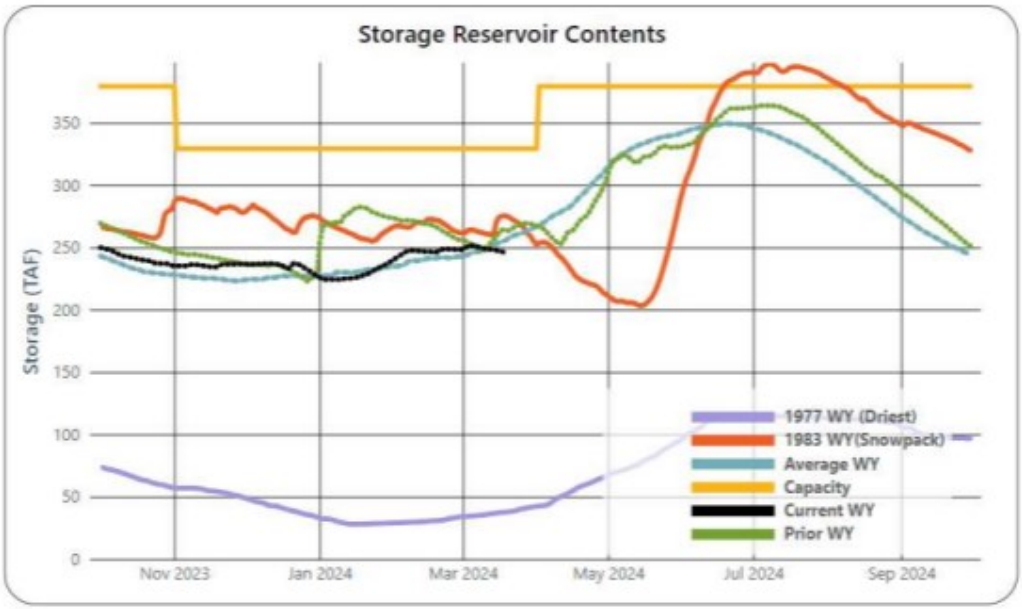


Figure 6. Storage Reservoir Contents

Figure 6 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
Union Valley	186,971	70%	175,673	66.0%	198,437	74%	266,370	225,046
Ice House	28,349	65%	29,794	68.5%	30,359	70%	43,500	34,855
Loon Lake	40,953	59%	40,578	58.5%	35,162	51%	69,310	69,310
Total Reservoir Storage	256,273	68%	246,045	64.9%	263,958	70%	379,180	329,211

Data listed here are always % of maximum capacity with gates closed As of today, Union Valley gates are OPEN, Ice House gates are OPEN, Robbs Peak gates are OPEN.

Chili Bar Releases into the South Fork American River

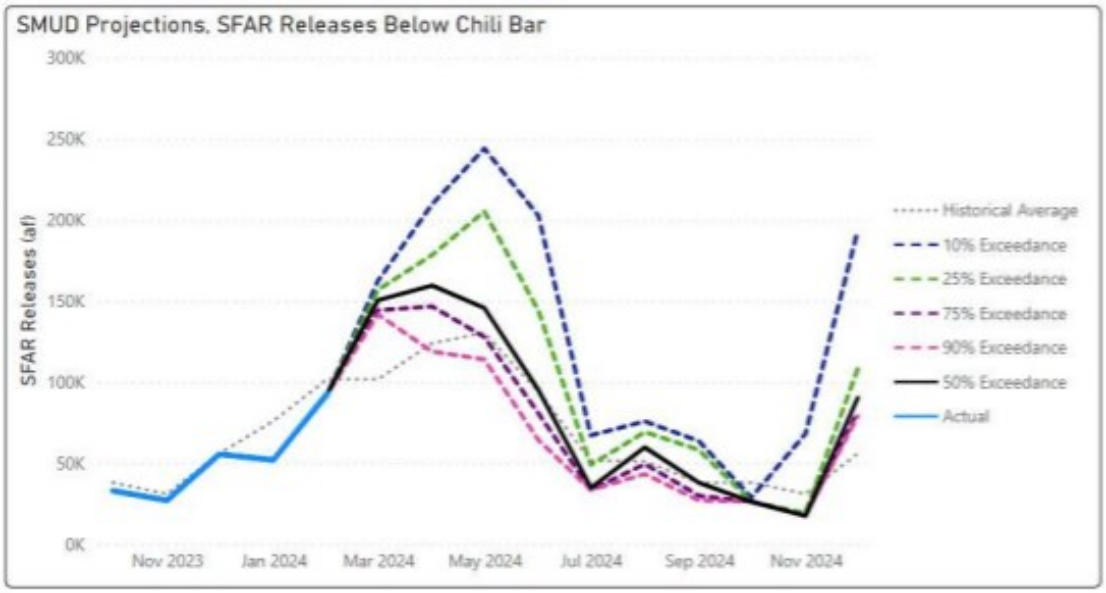


Figure 7. Chili Bar releases into the South Fork American River. Projections based on forecast from 3/18/24.

Figure 7 is a line graph of observed and projected releases below Chili Bar from October 2022 to December 2023. The graph includes a last 10-year average, actual prior water year data, and projections of 90%, 75%, 50%, 25%, and 10% likelihood.

* Month to date total, full month historical average.

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

Type (Actual or Forecast	Date	Daily Mean Release Rate (cfs)	Monthly Total Release (acre-ft)
Actuals	Oct-23	537	32,977
Actuals	Nov-23	454	26,994
Actuals	Dec-23	905	55,544
Actuals	Jan-24	846	51,913
Actuals	Feb-24	1,618	92,878
Forecast	Mar-24	2,453	150,563
Forecast	Apr-24	2,686	159,559
Forecast	May-24	2,374	145,695
Forecast	Jun-24	1,599	94,970
Forecast	Jul-24	568	34,845

Type (Actual or Forecast	Date	Daily Mean Release Rate (cfs)	Monthly Total Release (acre-ft)
Forecast	Aug-24	973	59,752
Forecast	Sep-24	638	37,893
Forecast	Oct-24	427	26,193
Forecast	Nov-24	294	17,471
Forecast	Dec-24	1,470	90,223

PCWA MFP Operations Overview for American River Operations Group (Real Time Data as of March 20, 2024)

- French Meadows Storage = 83,000 AF of 136,405 AF = 61% Capacity
    - MFAR above FM Inflow (R24) =7-day AVG ~100 cfs
- Hell Hole Storage = 88,000 AF of 207,590 AF = 42% Capacity
    - Five Lakes Inflow (R23) = 7-day AVG ~60 cfs
    - Rubicon Inflow (R22) = 7-day AVG ~130 cfs
- Combined Storage (FM+HH) = 171,000 AF/342,590 AF = 50% Capacity; ~100% of AVG YTD
- MFAR @ R11: 7-day AVG 2,200 cfs
- NFAR @ ARPS: 7-day AVG 3,150 cfs
- MFP is operating under conservation of storage mode.

Table 7. Current NFAR Flow (Below ARPS) for North Fork American River above Folsom (in Acre-Feet)

% Exceedance Future Precipitation	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
10%	29,734	32,553	43,630	101,601	174,973	410,442	448,301	488,952	338,355	83,202	72,956	106,576	173,327	454,726
25%	29,734	32,553	43,630	101,601	174,973	356,974	361,903	407,374	260,654	74,488	61,413	28,772	115,856	202,104
50%	29,734	32,553	43,630	101,601	174,973	289,488	290,401	319,575	167,861	52,094	37,893	25,594	49,328	102,627
75%	29,734	32,553	43,630	101,601	174,973	263,260	249,786	282,354	126,680	44,115	33,699	18,642	33,715	57,352
90%	29,734	32,553	43,630	101,601	174,973	236,088	217,225	242,709	103,708	38,557	28,553	18,332	31,923	53,507

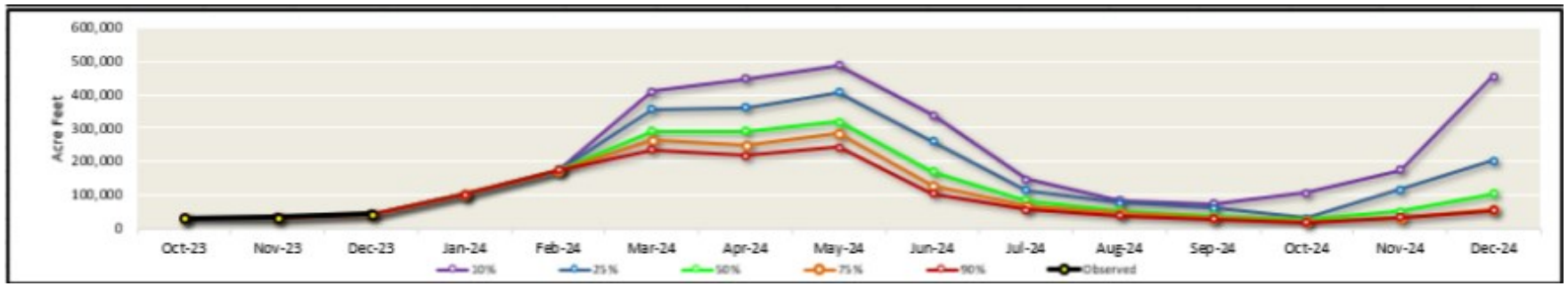
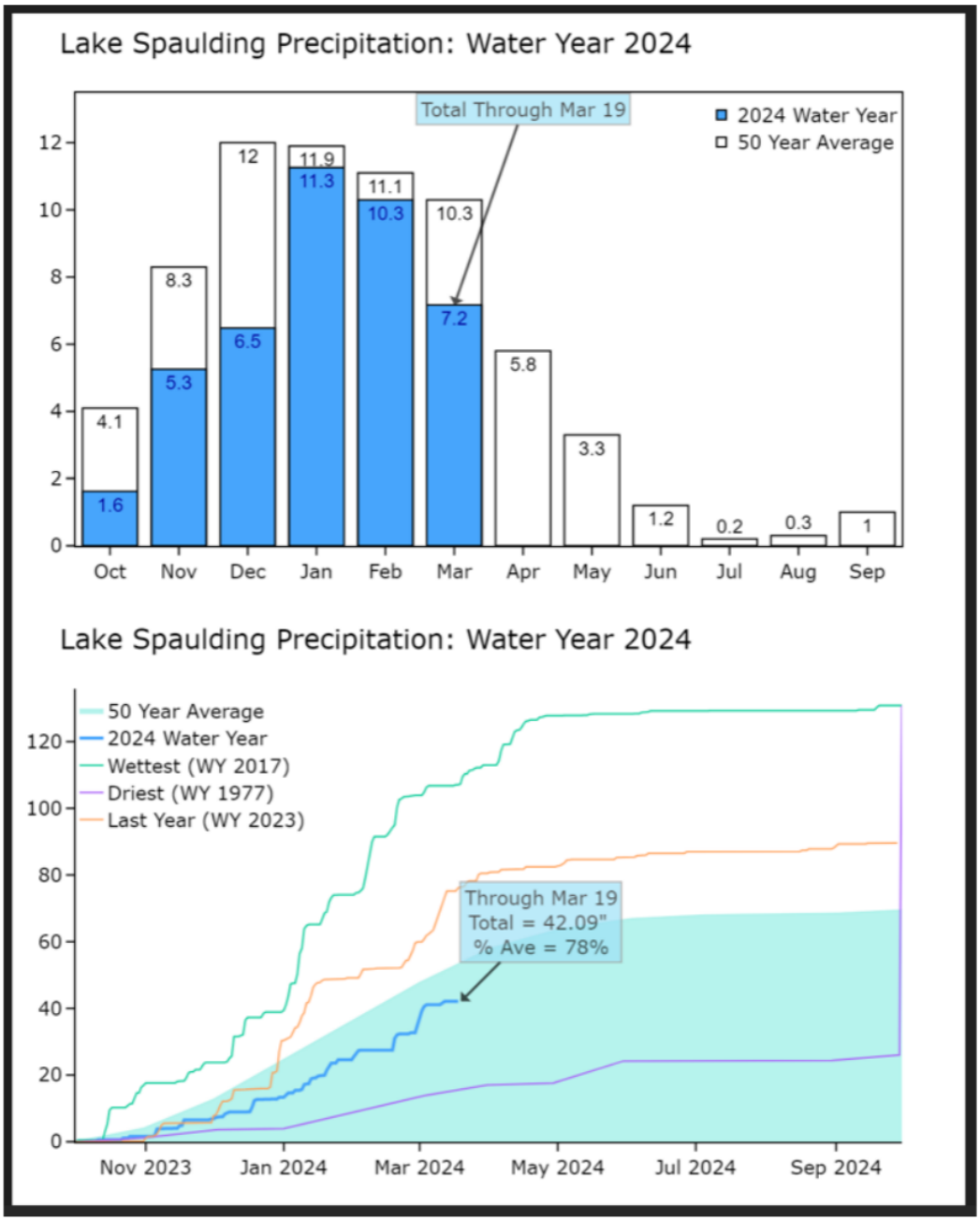


Figure 8. Current NFAR Flow (Below ARPS) for North Folk American River above Folsom.

Figure 8 is a line graph. It shows observed and 10%, 25%, 50%, 75%, and 90% exceedances of future precipitation for October 2023 to December 2024 with different colored lines.



Lake Spaulding Precipitation: Water Year 2024 – Total through Nov 19 are 7.2 with a 50-year average of 10.3.

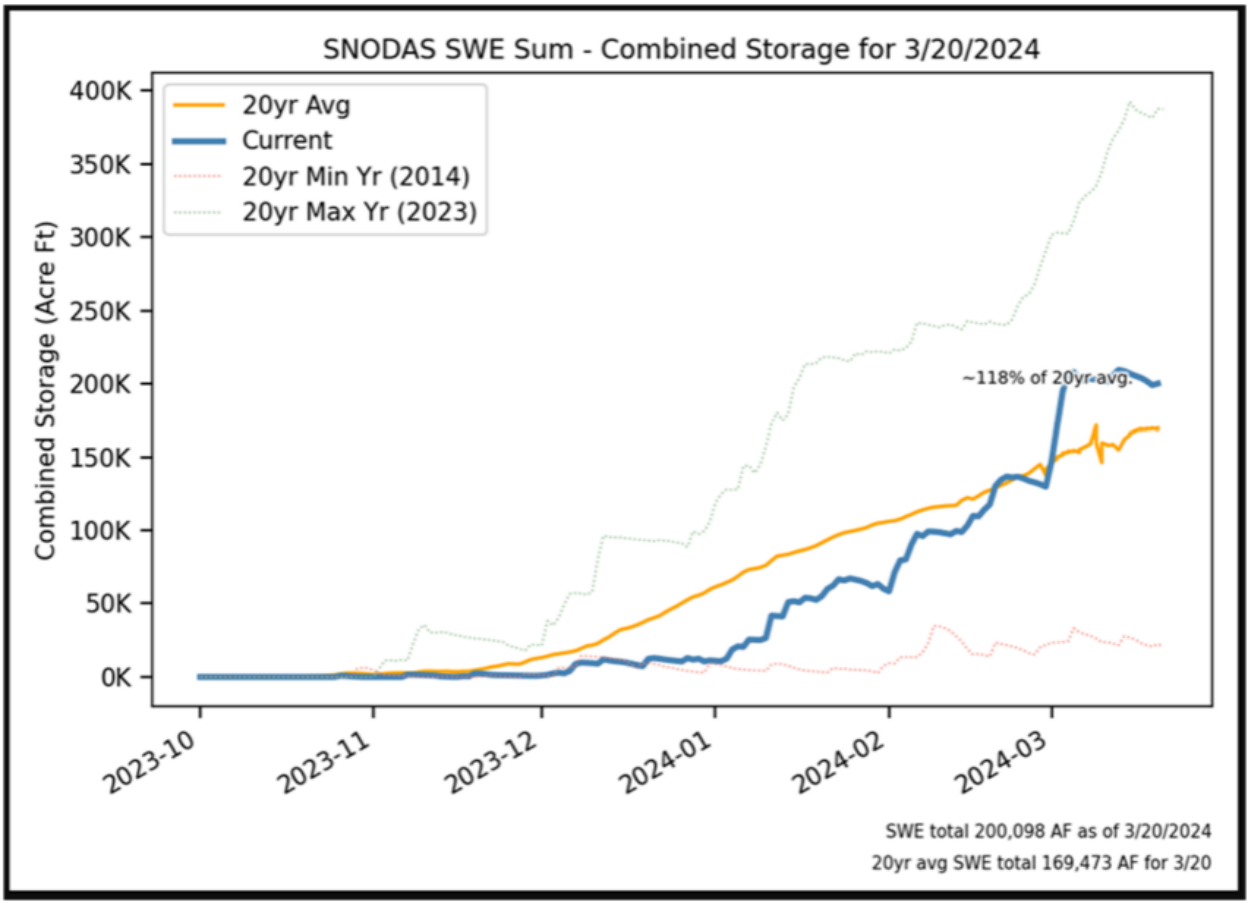


Figure 9. SNODAS SWE Sum – Combined Storage for 3/20/2024.

Figure 9 is a line graph. It shows the 20 year average, 20 year minimum (based off 2014 modeling), 20 year maximum (based off 2023 modeling), and current combined storage from October 2023 to March 20, 2024. The current combined storage is 118% of the 20 year average.

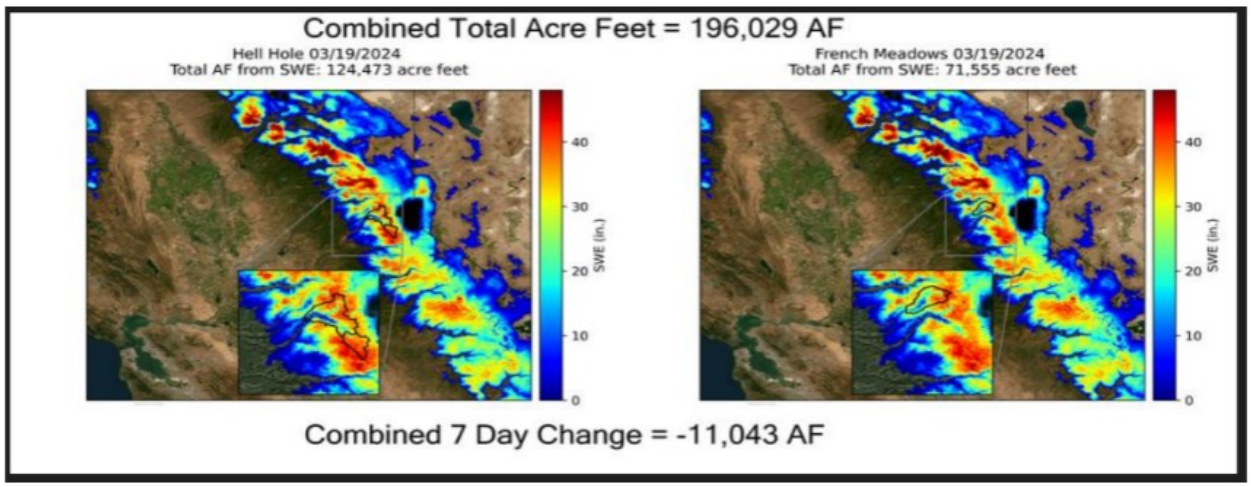


Figure 10. Combined 7 Day Storage Change

Figure 10 is an image of two heat maps. They show the combined total storage at Hell Hole (124,473) and French Meadows (71,555) in acre-feet from SWE. The total combined seven day change is -11,043 acre-feet.

Reservoir Releases in Cubic Feet/Second

Reservoir	Dam	WY 2023	WY 2024	15 Yr Median
Trinity	Lewiston	1,139	303	307
Sacramento	Keswick	4,042	6,132	4,042
Feather	Oroville (SWP)	35,000	10,000	1,750
American	Nimbus	16,077	5,004	1,531
Stanislaus	Goodwin	1,505	1,503	303
San Joaquin	Friant	8,262	00	368

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	1,564	871	1,877	120
Shasta	4,552	3,310	3,394	3,944	119
Folsom	977	554	624	647	117
New Melones	2,420	1,482	1,311	2,004	135
Fed. San Luis	966	691	829	965	140
Total North CVP	11,363	7,601	7,029	9,437	124
Millerton	521	309	416	0	0
Oroville (SWP)	3,538	2,319	2,916	3,017	130

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	760	263	1,146	486	156
Shasta	3,381	1,873	5,270	2,663	127
Folsom	990	675	3,068	1,246	79
New Melones	389	N/A	828	426	91
Millerton	578	387	732	464	124

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	31.25	18.30	34.10	24.52 (61	127	0.00

Reservoir	Current WY 2024	WY 1977	WY 1983	Average (N Years)	% of Average	Last 24 Hours
Sacramento at Shasta Dam	54.97	27.06	67.41	47.58 (69)	116	0.00
American at Blue Canyon	49.89	N/A	90.96	51.33 (50)	97	0.00
Stanislaus at New Melones	21.51	N/A	29.27	21.58 (47)	100	0.00
San Joaquin at Huntington Lk	22.96	11.50	51.00	31.17 (51)	74	0.00

March 2024 | Folsom Lake Daily Operations | Run Date: 3/20/2024

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
		601.8									0.64
1	429.07	605.4	3.5	7,879	6,038	11	0	48	0	0.00	0.22
2	431.33	625.6	20.2	16,281	6,037	0	0	49	0	0.00	0.09
3	432.66	637.7	12.1	12,558	6,422	0	0	55	0	0.00	0.00
4	433.36	644.1	6.4	9,386	4,522	1,512	61	54	12	0.04	0.00
5	433.75	647.6	3.6	7,771	5,682	3	28	54	21	0.07	0.00
6	433.93	649.3	1.7	6,996	6,087	0	0	56	21	0.07	0.00
7	433.94	649.4	0.1	6,606	4,579	1,905	0	55	21	0.07	0.00
8	433.85	648.5	-0.8	5,689	3,947	2,077	0	57	24	0.08	0.00
9	433.74	647.5	-1.0	5,573	3,981	2,019	0	57	24	0.08	0.00
10	433.54	645.7	-1.8	5,113	3,840	2,116	0	58	24	0.08	0.00
11	433.30	643.5	-2.2	4,793	2,926	2,893	0	60	24	0.08	0.00
12	433.11	641.8	-1.7	5,452	3,293	2,953	0	60	24	0.08	0.10
13	433.22	642.8	1.0	5,911	5,291	0	0	59	52	0.17	0.00
14	433.29	643.4	0.6	5,901	5,221	223	0	63	70	0.23	0.00
15	433.41	644.5	1.1	5,657	4,942	7	0	77	76	0.25	0.00
16	433.50	645.3	0.8	5,509	4,961	5	0	87	40	0.13	0.00
17	433.47	645.1	-0.3	5,166	4,527	649	0	92	37	0.12	0.00
18	433.52	645.5	0.5	5,531	5,180	0	0	89	31	0.10	0.00
19	433.69	647.1	1.6	5,676	4,771	0	0	82	37	0.12	0.00
Totals			45.4	133,448	92,427	16,373	89	1,212	538	1.77	1.05
Acre-Feet			45,400	264,694	183,329	32,476	177	2,404	1,067		

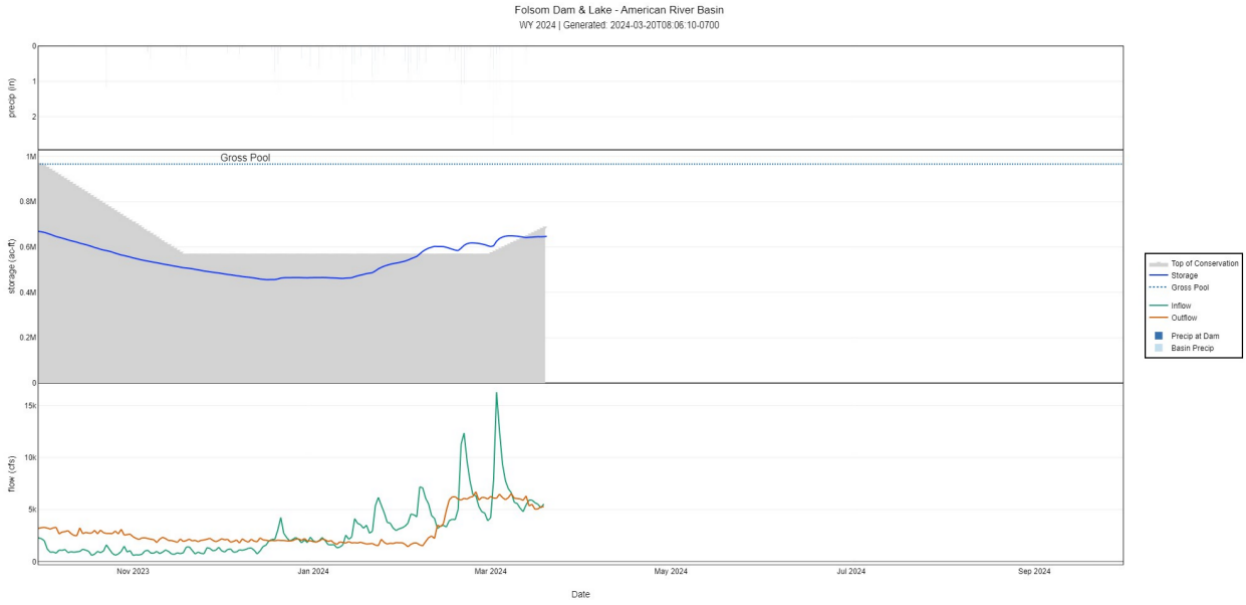
* Computed inflow is the sum of change in storage, releases, pumping, and evaporation

Summary: Release (acre-feet)

Power	183,329
Spill	32,476
Outlet	177
Pumping Plant	2,404
Total Releases	218,385

Summary: Precipitation (Month/Inches)

This month	1.05
October 1, 2022 to date	16.44



Folsom Dam & Lake – American River Basin
WY 2024 2024-03-20T08:06:10-0700

Isobath 02/01–02/29 (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
Jan	46.0	45.3	50.7	51.0	51.3	51.0	50.6	487				
02/01	48.7	47.5	50.2	50.6	51.9	51.7	52.6	1734	542	T 70	B 2	B 28
02/02	48.0	47.7	50.1	50.8	51.3	51.4	50.8	1736	548	T 62	B 1	B 37
02/03	46.9	46.4	50.1	50.8	50.7	50.4	48.8	1740	553	T 66	B 1	B 33
02/04	46.4	47.6	49.9	50.9	51.3	51.1	52.8	1739	558	T 32	B 1	B 67
02/05	46.8	47.9	50.4	51.1	51.8	51.8	53.8	1740	569	T 64	B 1	B 35
02/06	47.0	47.0	50.4	51.1	51.6	51.5	51.4	1741	580	T 36	B 1	B 63
02/07	46.7	45.7	50.2	50.4	50.6	50.1	45.3	1797	589	T 29	B 25	B 46
02/08	45.9	45.1	50.0	50.0	50.6	50.2	45.1	2327	595	T 1	B 36	B 63
02/09	45.0	44.5	49.9	50.2	50.3	49.9	44.7	2445	599	T 1	B 77	B 22
02/10	44.5	44.3	49.6	50.1	50.3	50.1	49.5	2469	603	T 0.8	B 18.3	B 81
02/11	44.3	44.4	49.7	50.0	50.3	50.2	48.1	3036	602	T 12.3	B 45.8	B 42
02/12	44.4	43.8	49.8	50.2	50.2	50.0	48.2	3491	602	T 47.2	B 10.9	B 42
02/13	44.8	43.7	49.8	50.2	50.5	50.2	49.8	3494	602	T 54.4	T 22.2	A 23
02/14	45.3	44.3	49.4	49.8	50.3	50.1	52.1	4767	599	T 41.6	T 13.6	A 45
02/15	46.2	44.6	49.5	49.8	50.2	50.1	54.5	6042	595	T 36.3	T 36.7	A 27
02/16	46.4	44.0	49.8	49.8	50.0	49.7	52.8	6035	590	T 38.4	T 38.9	A 23
02/17	46.7	44.0	49.6	50.0	50.0	49.7	52.8	6029	586	T 38.8	T 38.8	A 22
02/18	47.5	44.6	49.2	50.3	50.5	50.4	57.2	5991	584	T 24.6	T 37.6	A 38
02/19	48.4	50.1	49.7	50.4	50.8	50.7	56.2	6032	595	T 38.6	T 38.4	A 23
02/20	48.2	48.6	49.9	50.6	50.8	50.7	55.0	5988	607	T 38.8	T 38.9	A 22
02/21	48.3	48.1	50.1	50.5	51.0	50.8	53.4	5971	615	T 38.8	T 38.7	A 22
02/22	47.8	47.3	50.0	50.3	50.9	50.8	51.5	5974	618	T 21.9	T 39.8	A 38
02/23	47.4	46.8	50.0	50.5	50.7	50.5	53.0	5994	618	T 38.6	T 23.6	A 38
02/24	47.6	46.7	50.3	50.5	50.9	50.8	55.7	5958	617	T 26.7	T 36.4	A 37
02/25	48.0	46.3	50.2	50.8	51.2	51.1	55.8	6021	616	T 35.4	T 31.1	A 34
02/26	48.4	46.0	50.1	50.8	51.2	51.1	55.3	6011	613	T 43.5	T 43.9	A 13
02/27	48.8	46.3	50.7	50.6	50.9	50.8	51.6	5663	610	T 45.9	T 46.7	A 7
02/28	48.8	46.6	50.1	51.1	51.4	51.1	53.6	6085	606	T 43.3	T 12.7	A 44
02/29	48.5	46.9	49.7	50.4	50.8	50.6	52.8	6013	602	T 45.1	T 9.6	A 45

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
Feb	47.0	46.2	49.9	50.5	50.8	50.6	51.9	594				
						Total	AF	246074				

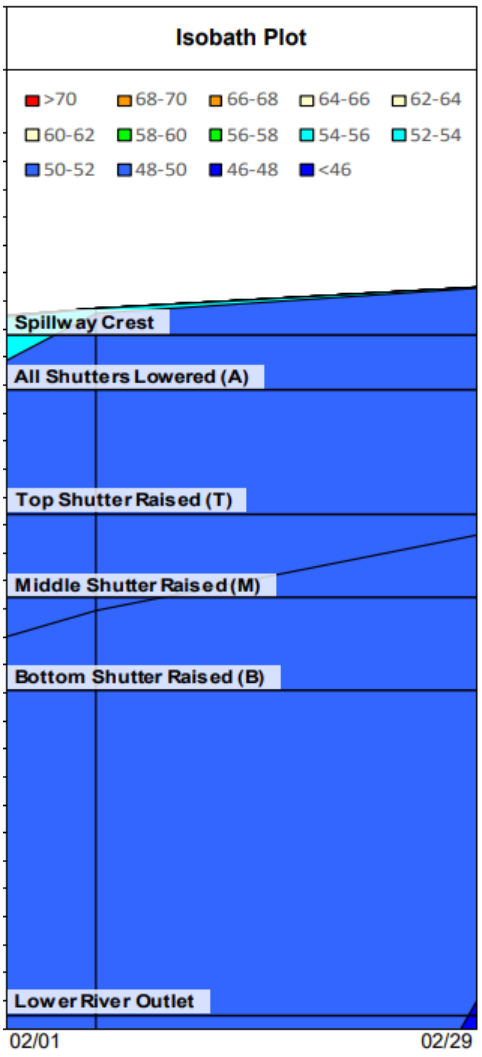
Legend:

? = 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



Isobath Plot 02/01-02/29 (Showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet)

Isobath 03/01–03/31 (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
Feb	47.0	46.2	49.9	50.5	50.8	50.6	51.9	594				
03/01	47.7	47.6	49.6	50.0	50.4	50.3	52.1	6037	605	A 38	A 38	A 23
03/02	46.0	47.9	49.7	49.8	50.0	49.7	47.3	5949	626	A 38	A 23	A 39
03/03	44.9	47.2	50.0	49.8	50.0	49.6	46.7	6055	638	A 35	A 35	A 30
03/04	45.0	46.1	50.3	50.0	50.1	49.8	48.3	6022	644	A 34	A 34	A 32
03/05	45.7	45.7	50.1	50.6	50.8	50.5	53.1	5976	648	A 35	A 27	A 38
03/06	46.8	45.7	50.2	50.5	50.9	50.7	54.3	5904	649	A 38	A 38	A 25
03/07	47.0	45.2	50.6	50.6	51.1	50.9	53.5	6022	649	A 35	A 30	A 35
03/08	47.4	45.7	50.6	51.2	51.5	51.4	54.0	6036	649	A 33	A 34	A 33
03/09	47.9	45.7	50.4	51.1	51.5	51.3	53.5	5999	648	A 34	A 33	A 33
03/10	48.1	45.8	50.5	50.9	51.3	51.2	54.1	5873	646	A 33.7	A 32.1	A 34
03/11	48.5	46.4	50.9	51.2	51.6	51.5	55.9	5864	644	A 49.4	A 0.6	A 50
03/12	48.7	46.4	50.5	51.3	51.7	51.5	54.6	5866	642	A 43.7	A 13.0	A 43
03/13	48.5	46.4	50.7	51.0	51.5	51.4	53.9	5390	643	A 38.0	A 36.5	A 25
03/14	48.0	46.4	51.0	51.2	51.6	51.4	57.4	5260	643	A 33.9	A 29.2	A 37
03/15	47.9	46.8	51.1	51.7	52.3	52.2	62.3	4945	645	A 45.2	A 27.5	A 27
03/16	48.3	46.9	51.0	51.9	52.6	52.7	59.0	4918	645	A 38.4	A 36.1	A 26
03/17	49.0	47.2	51.1	51.9	52.7	52.9	58.8	4941	645	A 35.9	A 34.9	A 29
03/18	50.2	47.5	51.3	52.1	52.9	53.0	61.0	4976	646	A 38.1	A 24.2	A 38
03/19												
03/20												
03/21												
03/22												
03/23												
03/24												
03/25												
03/26												
03/27												
03/28												
03/29												
03/30												
03/31												
Mar	47.5	46.5	50.5	50.9	51.4	51.2	54.4	642				
						Total AF		202378				

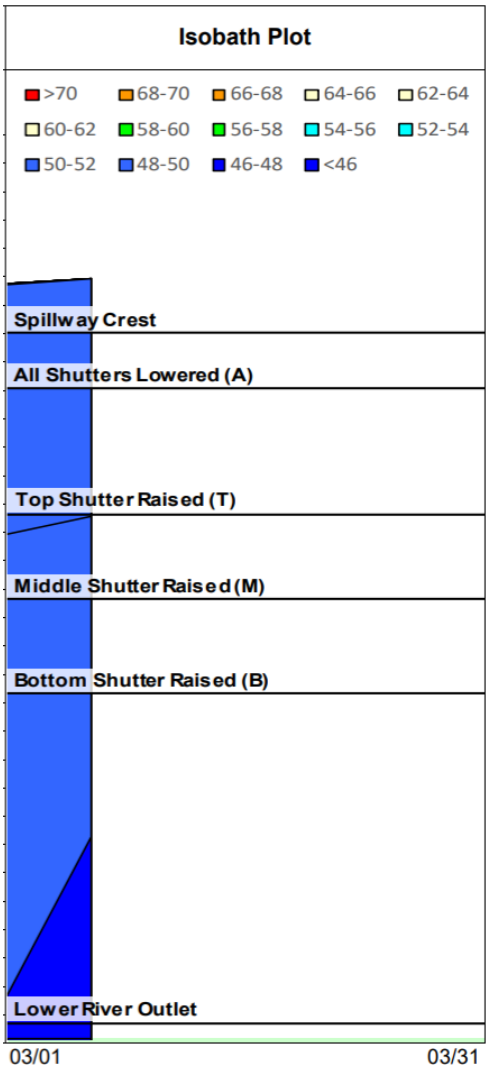
Legend:

? = 1-9 hours of data missing
! = 10 or more hours of data missing
= Station out of service

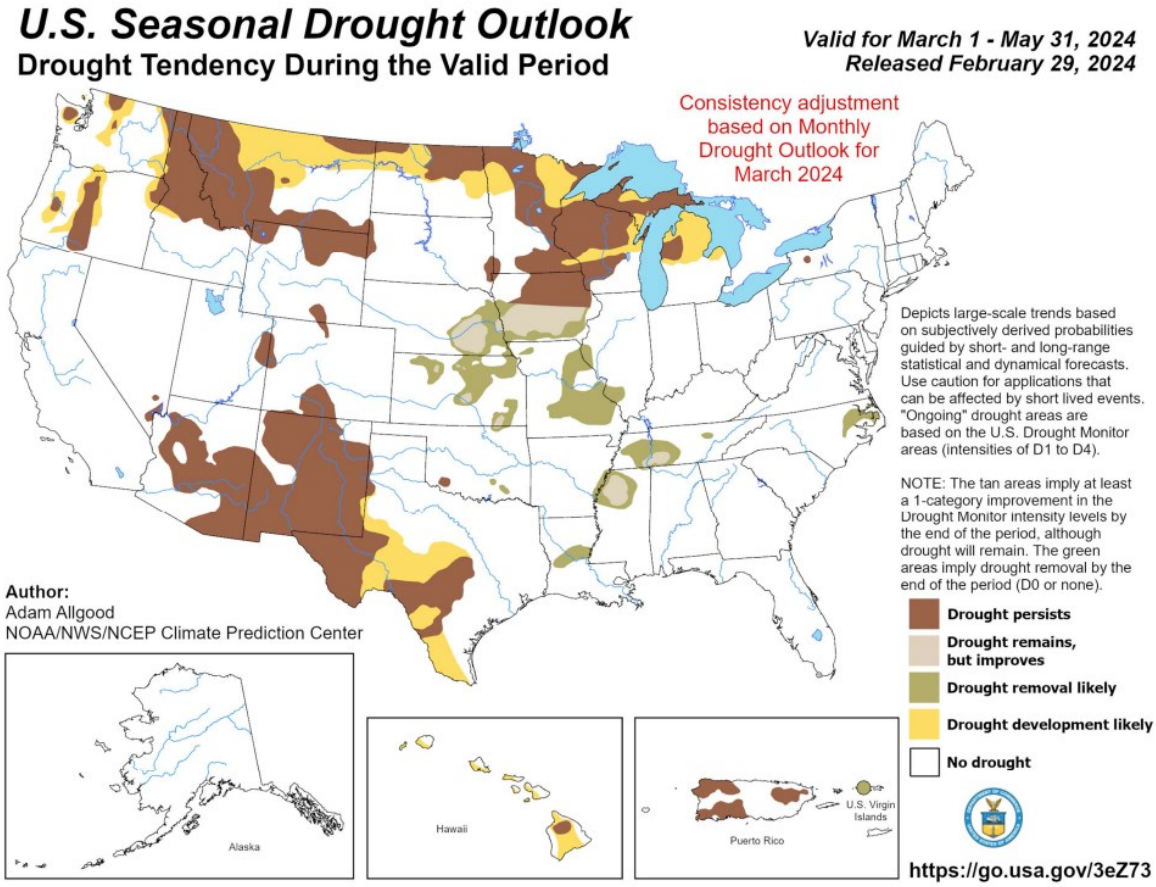
November Monthly Averages

A = All Shutters Lowered
T = Top Shutter Raised
M = Middle Shutter Raised
B = Bottom Shutter Raised
O = Unit Outage

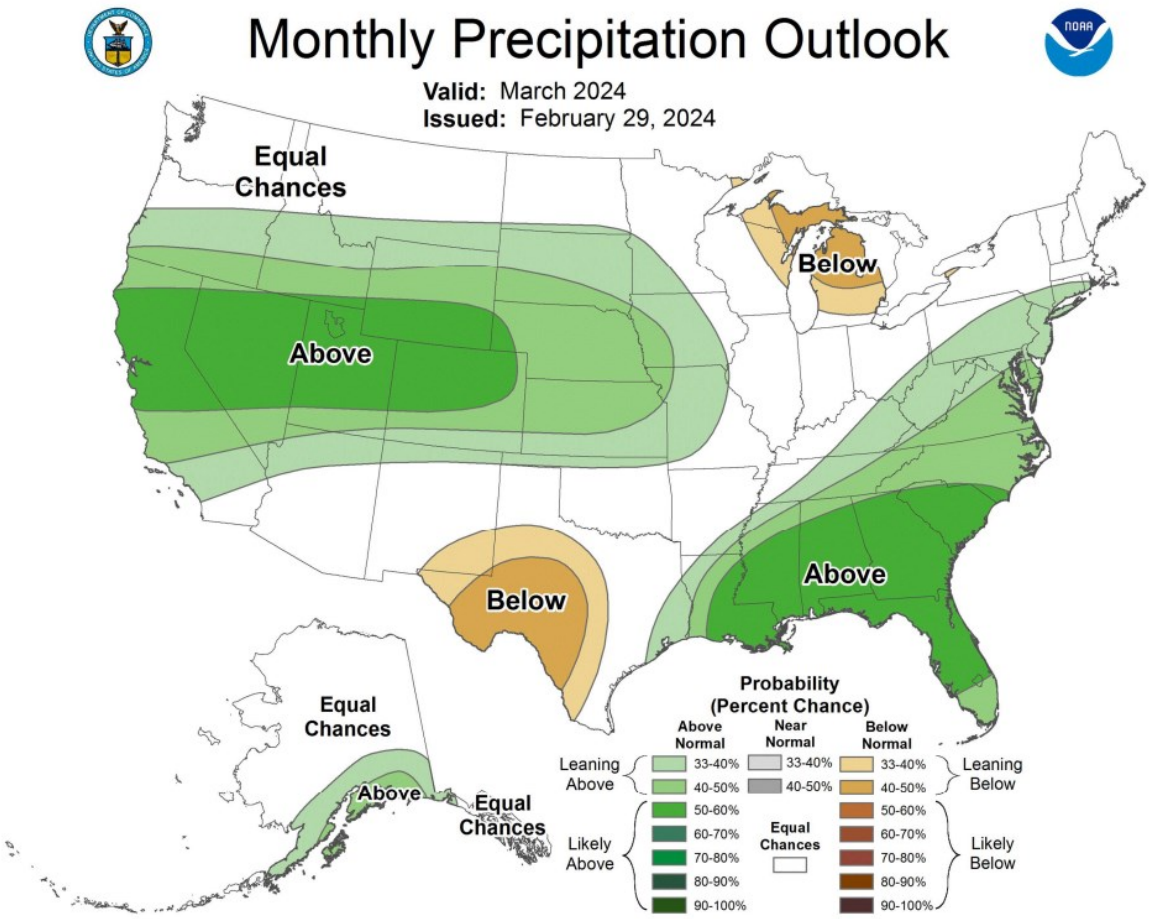
Notes:
[1] AFD is a weighted average based on hourly flow values, including generation, bypass and spill



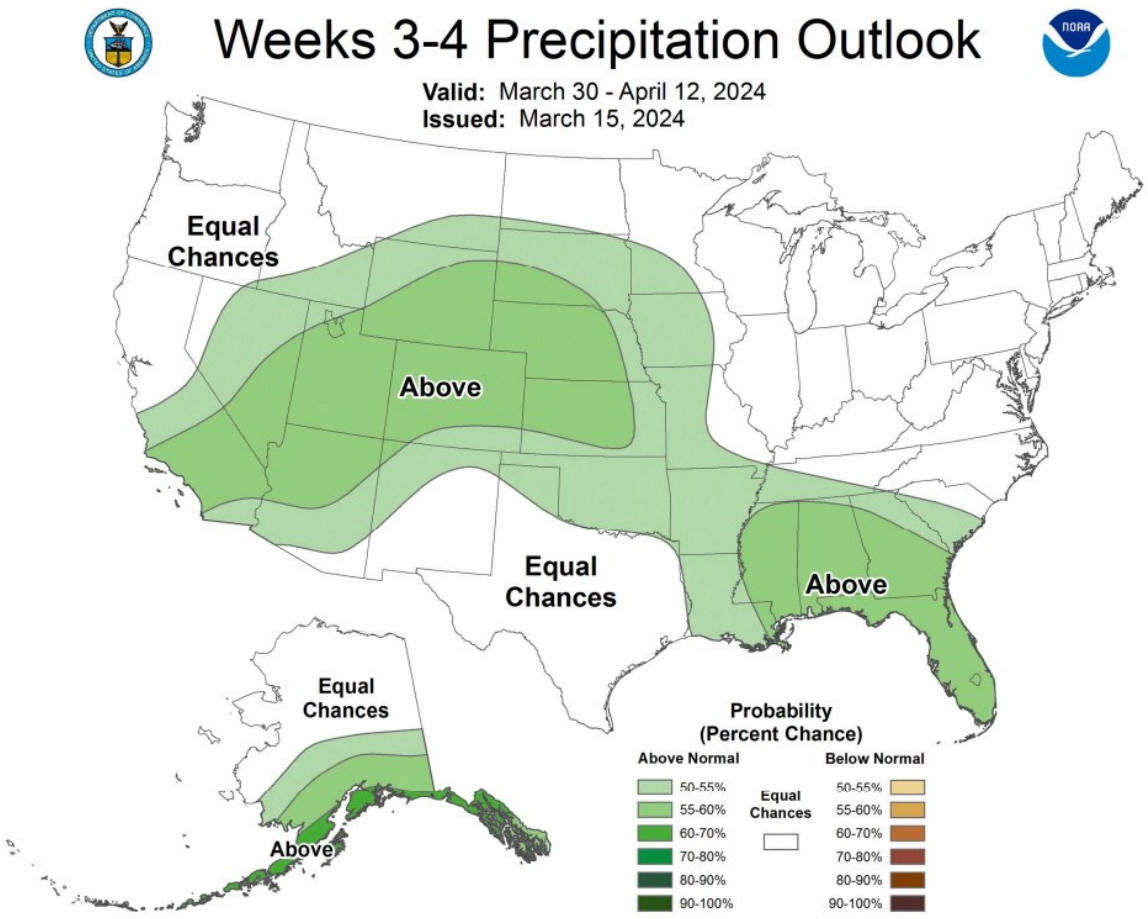
Isobath Plot 03/01-03/31. Showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet



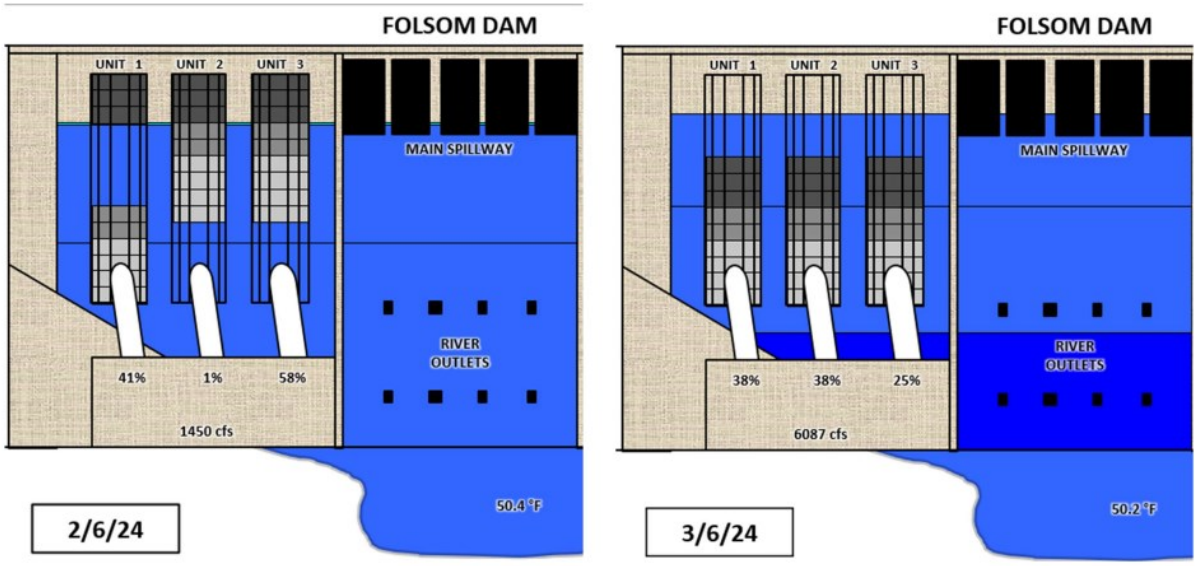
Map – U.S Seasonal Drought Outlook; Valid March 1, 2024 – May 31, 2024; Released February 29, 2024



Map – U.S Monthly Precipitation Outlook; Valid March 2024; Issued February 29, 2024



Map – U.S 3-4 Week Precipitation Outlook; Valid March 30 – April 12, 2024; Issued March 15, 2024



Graphic showing Folsom Dam on 02/06/24 with a temperature of 50.4 ˚F and 03/06/24 with a temperature of 50.2 ˚F.

American River Summary Conditions – March (On-going)

Release Management Conditions

- Releases are currently at 1,750 cfs
    - October 31, 2023, from 2,500 cfs to 2,000 cfs

Temperature Management

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

Middle Shutters: Units 1- and 2 – lowered

Bottom Shutters: Units 1 and 2 – lowered

Folsom Shutter Configuration and Changes

Next change will be for temperature management

Storages

American River March 90% Exceedance

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

Facility	Feb	Mar	Apr	May	Jun	Jul
Folsom Storage	602	677	814	954	899	672
Folsom Elevation	N/A	437	451	464	459	436

Monthly River Release (TAF/cfs)

Facility	Feb	Mar	Apr	May	Jun	Jul
American TAF	N/A	246	146	92	188	311
American cfs	N/A	4000	2451	1500	3161	5054

American River March 50% Exceedance

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

Facility	Feb	Mar	Apr	May	Jun	Jul
Folsom Storage	602	710	890	940	956	790
Folsom Elevation	N/A	440	458	463	464	448

Monthly River Release (TAF/cfs)

Facility	Feb	Mar	Apr	May	Jun	Jul
American TAF	N/A	307	178	338	208	265
American cfs	N/A	5000	3000	5500	3500	4303

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

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]
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	Not applicable
March	March ARI[3] (90% exceedance)	1,750 cfs	1,750 cfs	1,750 cfs	1,750 cfs	Not applicable

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.