



— 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, October 19, 2023

Agenda

1. Introductions
2. Announcements
 - a. Power Bypass Approved
 - b. Welcome to Santiago Vazquez Garcia who will be taking over meeting packets and note taking. Santiago can be reached at svazquezgarcia@kearnswest.com.
Please copy Santiago on all American River Group (ARG) related items.
3. Housekeeping
 - a. Meeting will be recorded for notetaking purposes
4. Fisheries Update
 - a. CDFW
 - b. CFS
 - c. PSMFC
5. Operations Forecast
 - a. SMUD
 - b. PCWA
6. Central Valley Operations
7. Discussion
 - a. Annual Report Update
 - b. Hybrid Meeting Survey Results
8. Next Meetings:
 - a. Thursday, November 16th, 1:30-3:30pm

Provisional Data Subject to Revision

JUVENILE SALMONID MONITORING

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

- 195 juvenile Chinook Salmon and 36 steelhead trout observed thus far
- Each site was sampled once a month
- Seine and snorkel sites were variable based on river conditions
- Monitoring ended on September 27, 2023

Provisional Data Subject to Revision

Table 1: Juvenile salmonids observed during Lower American River juvenile salmonid monitoring seine and snorkel surveys

Mon.	Cat.	Upper Reach - Nimbus Basin Main	Upper Reach- Nimbus Basin Side	Upper Reach- Upper Sunrise / Sailor Bar Main	Upper Reach- Upper Sunrise / Sailor Bar Side	Upper Reach- Lower Sunrise Main/ Sacramento Bar	Upper Reach - Lower Sunrise Side	Upper Reach- Rossmoor	Middle Reach- Riverbend Main	Middle Reach- Riverbend Side	Middle Reach- Gristmill	Lower Reach -Watt	Lower Reach- Paradise Beach/ Howe Avenue
April	CS	***	0	1	1	0	***	2	0	16	30	2	0
April	SH	***	4	0	0	0	***	1	0	2	1	0	0
May	CS	***	***	***	***	3	***	10	***	***	1	16	0
May	SH	***	***	***	***	0	***	0	***	***	3	0	0
June	CS	***	0	0	0	85	2*	3	***	0	0	21	0
June	SH	***	0	0	0	2	9*	0	***	0	0	8	0
July	CS	***	0	0	1	1	0	0	0	0	0	0	0
July	SH	***	0	0	1	2	0	0	0	0	0	1	0
Aug	CS	***	0	0	0	0	0	0	0	0	0	0	0
Aug	SH	***	0	0	0	2	0	0	0	0	0	0	0
Sept	CS	***	0	0	0	0	0	0	0	***	0	0	0
Sept	SH	***	0	0	0	0	0	0	0	***	0	0	0

*Samples were collected from isolated pools located near the side channel. Salmon were relocated back to the LAR.

*** Unable to sample due to high flows

Table 2: Summary of total salmonids observed during juvenile monitoring in the Lower American River

Category	Upper Reach	Middle Reach	Lower Reach	Total
Chinook Salmon	109	47	39	195
Steelhead trout	21	6	9	36

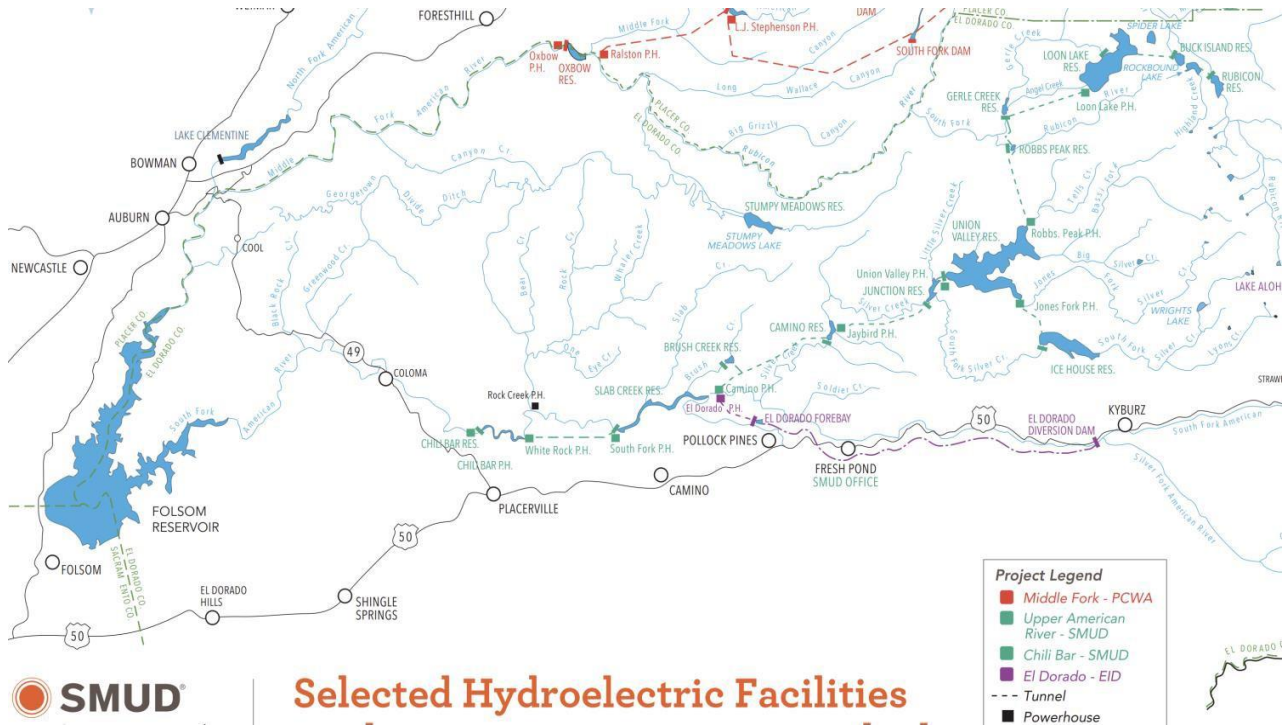


Figure 1 Sacramento Municipal Utility District (SMUD) Hydroelectric Facilities – Upper American River Project

Figure 1 is a map of the SMUD Upper American River Project hydroelectric facilities. It notes down, major roadways, and SMUD projects on the Upper American River, and Chili Bar, including tunnels, and powerhouses. The Placer County Water Agency Middle Fork Project and El Dorado Irrigation District El Dorado Project are also pictured.

SMUD Upper American River Project Update 10/17/23

Fresh Pond Precipitation

October precipitation through 10/17/2023 is 0.34 inches, which is 10.3% of the October average of 3.3 inches. Precipitation for the water year to date is .34 inches which is 18.9% of average to date (1.80 inches) and 0.6% of the entire water year average of 57.32 inches.

Runoff and Snowpack Water Content

Runoff into storage reservoir basins is 100.4% of median to date through 10/17/2023. The snowpack is 136.7% of average at selected snow sensors: Robbs PH, Robbs Saddle, Van Vleck, Alpha, and Schneider.

Table 3. Fresh Pond Precipitation

Month	Current WY	Hist. Avg	% of Avg.
Oct	0.34	3.30	10%
Nov	0.00	6.87	0%
Dec	0.00	9.14	0%
Jan	0.00	9.55	0%
Feb	0.00	9.50	0%
Mar	0.00	9.06	0%
Apr	0.00	4.84	0%
May	0.00	2.97	0%
Jun	0.00	0.79	0%
Jul	0.00	0.08	0%
Aug	0.00	0.20	0%
Sep	0.00	1.02	0%
Total	0.34	57.32	1%

*Month to date total, full month historical average

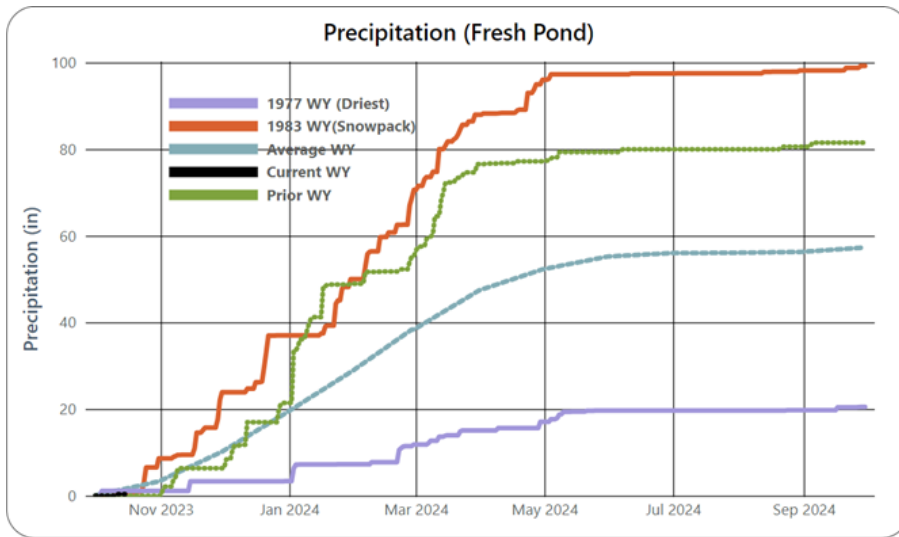


Figure 2. WY 2024 Precipitation (Fresh Pond)

Figure 2 is a line graph of fresh pond precipitation in inches for October 2023-2024. It includes precipitation data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year. October precipitation through 10/17/2023 is 0.34 inches, which is 10% of the October historical average of 3.30 inches. Precipitation for the water year to date is .34 inches which is 1% of the historical water year average of 57.32 inches.

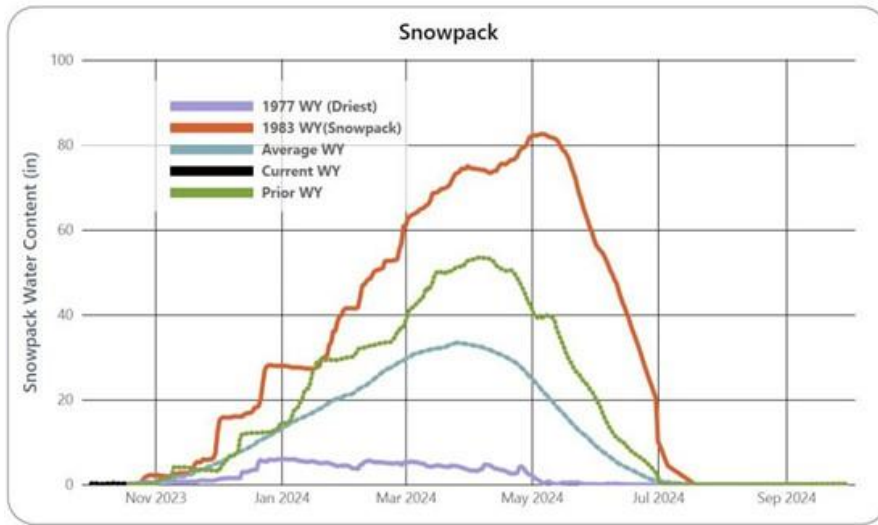


Figure 3. WY 2024 snowpack

Figure 3 is a line graph of snowpack water content in inches for October 2023-2024. It includes data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year. Runoff into storage reservoir basins is 100.4% of median to date through 10/17/2023. The snowpack is 136.7% of average at selected snow sensors: Robbs PH, Robbs Saddle, Van Vleck, Alpha, and Schneider.

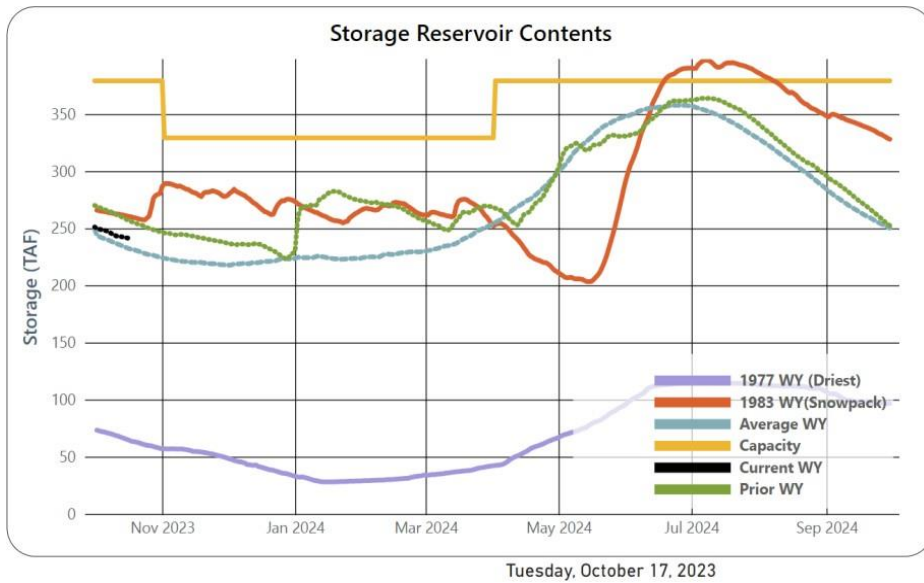


Figure 4. WY 2024 Cumulative Runoff into Storage Reservoirs

Figure 4 is a line graph of SMUD storage reservoir contents for October 2023-2024. It includes data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year. Total capacity of the reservoir network is also shown.

Table 4. SMUD Storage Reservoirs

Reservoir Storage	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	42,232	61%	44,542	64.3%	45,690	66%	69,310	69,310
Ice House Reservoir	28,683	66%	30,228	69.5%	29,978	69%	43,500	34,855
Union Valley Reservoir	159,061	60%	165,817	62.3%	180,284	68%	266,370	255,046
Total Reservoir Storage	229,976	61%	240,587	63.4%	255,952	68%	379,180	329,211

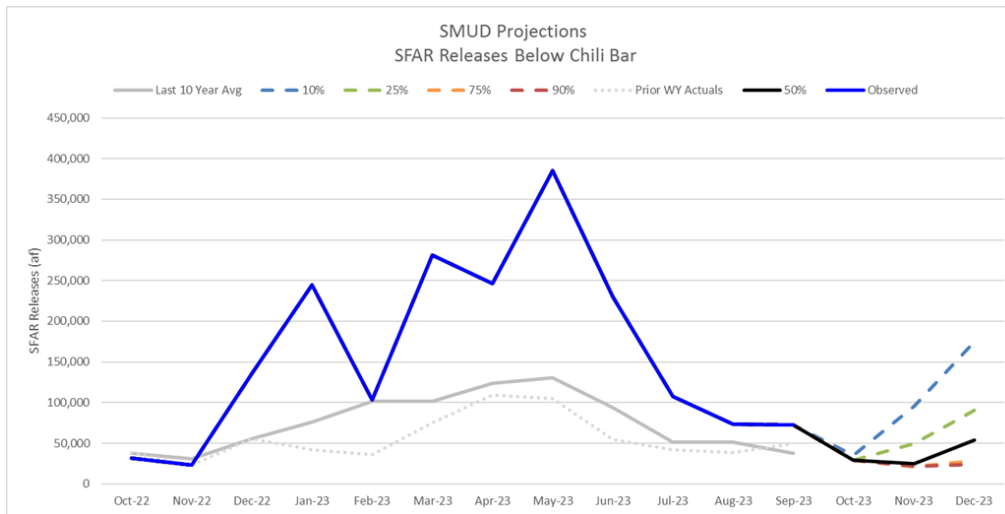


Figure 5. Chili Bar releases into the South Fork American River based on forecast from 10/17/2023.

Figure 5 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.

Table 8. Releases below Chili Bar Dam

Observed/Forecast	Month	Daily Mean Release Rate (cfs)	Monthly Total Release (ac-ft)
Observed	Oct-22	520	31,977
Observed	Nov-22	386	22,966
Observed	Dec-22	2,207	135,729
Observed	Jan-23	3,980	244,747
Observed	Feb-23	1,862	103,424
Observed	Mar-23	4,573	281,182
Observed	Apr-23	4,142	246,460
Observed	May-23	6,264	385,181
Observed	Jun-23	3,874	230,517
Observed	Jul-23	1,755	107,923
Observed	Aug-23	1,191	73,247
Observed	Sep-23	1,220	72,585
Forecast	Oct-23	478	29,382
Forecast	Nov-23	412	24,488
Forecast	Dec-23	875	53,803

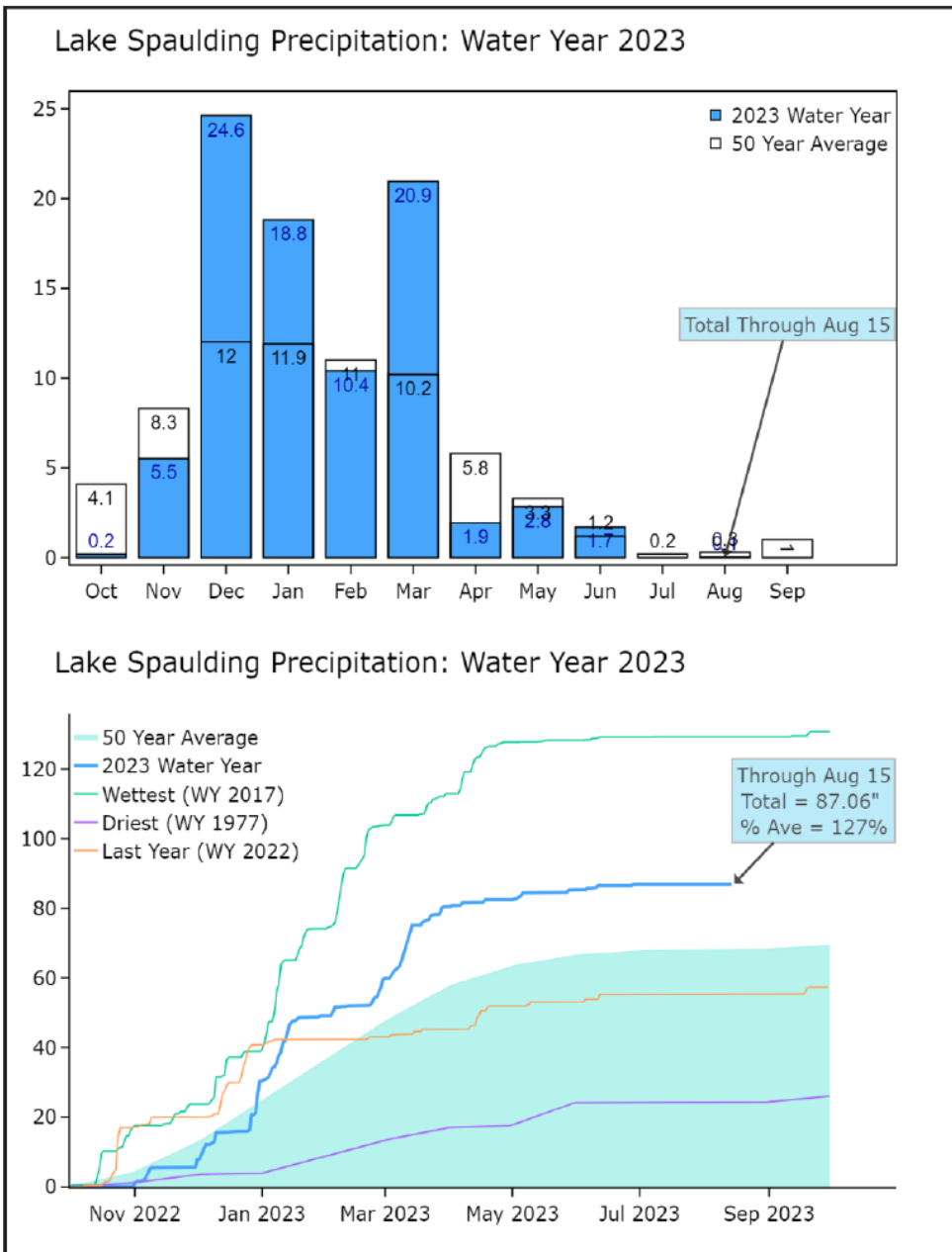


Figure 6. Lake Spaulding Precipitation: Water Year 2023 – Total through Aug 15 are 0.3 with a 50-Year average of 0.3

Figure 6 is a bar graph and a line graph of precipitation at Lake Spaulding from October 2022 to September 2023. The line graph includes a 50-year average, data from the wettest water year (2017), the driest water year (1977), water year 2022 and 2023. The bar graph includes a 50-year average and data from water year 2023 organized by month.

PCWA MFP Operations Overview for American River Operations Group

(Real Time Data as of October 17, 2023)

- French Meadows Storage = 90,000 AF of 136,405 AF = 66% Capacity
 - MFAR above FM Inflow (R24) = 7-day AVG ~2 cfs
- Hell Hole Storage = 88,000 AF of 207,590 AF = 42% Capacity
 - Five Lakes Inflow (R23) = 7-day AVG ~10 cfs
 - Rubicon Inflow (R22) = 7-day AVG ~10 cfs
- Combined Storage (FM+HH) = 178,000 AF/342,590 AF = 52% Capacity; 96% of AVG YTD
 - 7 Day Change = -3,000 AF
- MFAR @ R11: 7-day AVG ~300 cfs
- NFAR @ ARPS: 7-day AVG ~440 cfs
- MFP annual maintenance outage runs through November 20th
- FERC Wet Year Minimum Flows at R11 (below Ralston Afterbay):
 - 200 cfs in October
 - 250 cfs in November
- Total projected releases from MFP October 1st through November 30th:
 - 6,000 AF October 18th through 31st; and
 - 30,000 AF in November.

Reservoir Releases in Cubic Feet/Second

Reservoir	Dam	WY 2023	WY 2024	15 Yr Median
Trinity	Lewiston	298	295	308
Sacramento	Keswick	3,954	6,098	6,135
Feather	Oroville (SWP)	2,400	2,450	2,400
American	Nimbus	1,404	2,436	1,523
Stanislaus	Goodwin	440	302	920
San Joaquin	Friant	450	0	376

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	1,238	541	1,244	101
Shasta	4,552	2,307	1,456	3,231	140
Folsom	977	426	318	602	141
New Melones	2,420	1,261	601	1,892	150
Fed. San Luis	966	345	212	755	219
Total North CVP	11,363	5,576	3,128	7,724	139
Millerton	521	273	332	0	0
Oroville (SWP)	3,538	1,578	1,170	2,489	158

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	8	4	5	5	174
Shasta	96	124	132	101	95
Folsom	35	37	59	33	105
New Melones	35	N/A	28	23	149
Millerton	65	19	94	36	180

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	0.20	0.13	0.39	0.62 (.63)	32	0.00
Sacramento at Shasta Dam	0.40	0.07	0.24	1.11 (.68)	36	0.00
American at Blue Canyon	0.00	0.87	0.73	1.21 (.49)	0	0.00
Stanislaus at New Melones	0.29	---	0.30	0.48 (.46)	60	0.00
San Joaquin at Huntington Lk	0.11	1.20	0.00	0.90 (.50)	12	0.00

October 2023 | Folsom Lake Daily Operations | Run Date: 10/18/2023

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
		667.0									
1	435.56	664.4	-2.6	1,997	3,088	0	0	192	31	0.10	0.00
2	435.12	660.3	-4.1	1,198	3,012	0	0	205	46	0.15	0.00
3	434.63	655.7	-4.5	898	2,918	0	0	205	62	0.20	0.00
4	434.12	651.0	-4.7	921	3,043	0	0	196	58	0.19	0.00
5	433.57	646.0	-5.1	806	3,093	0	0	194	67	0.22	0.00
6	433.22	642.8	-3.2	1,105	2,446	0	0	207	70	0.23	0.00
7	432.82	639.1	-3.7	1,078	2,625	0	0	215	82	0.27	0.00
8	432.43	635.6	-3.6	1,156	2,673	0	0	203	70	0.23	0.00
9	431.96	631.3	-4.3	862	2,775	0	0	194	48	0.16	0.00
10	431.57	627.8	-3.5	948	2,509	0	0	189	27	0.09	0.00
11	431.21	624.5	-3.3	898	2,335	0	0	176	27	0.09	0.00
12	430.86	621.4	-3.2	938	2,320	0	0	165	42	0.14	0.00
13	430.35	616.8	-4.6	976	3,065	0	0	172	45	0.15	0.00
14	430.01	613.7	-3.0	1,185	2,485	0	0	192	45	0.15	0.00
15	429.62	610.3	-3.5	1,098	2,606	0	0	194	47	0.16	0.00
16	429.22	606.7	-3.6	986	2,546	0	0	187	47	0.16	0.00
17	428.73	602.4	-4.3	594	2,565	0	0	167	50	0.17	0.00
Totals			-64.8	17,644	46,104	0	0	3,253	864	2.86	0.00
Acre- Feet			-64,800	34,997	91,447	0	0	6,452	1,714		

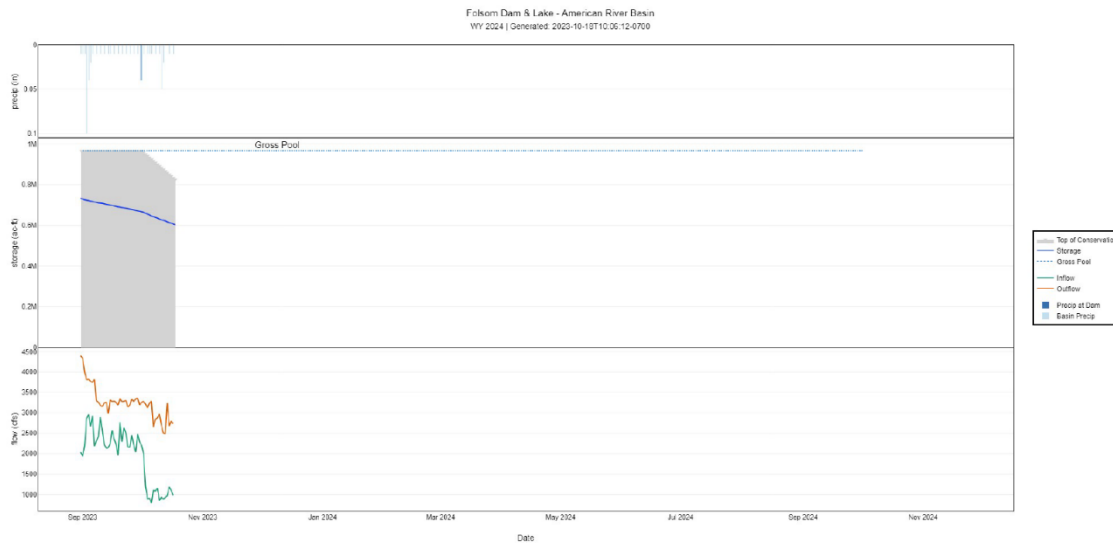
* Computed inflow is the sum of change in storage, releases, pumping, and evaporation

Summary: Release (acre-feet)

Power	91,447
Spill	0
Outlet	0
Pumping Plant	6,452
Total Releases	97,900

Summary: Precipitation (Month/Inches)

This month	0.00
October 1, 2023 to date	0.00



Folsom Dam & Lake – American River Basin
2023-10-18T10:06:12-0700

Isobath 09/01-09/30 (Mean Daily Temperature, Release, Storage, 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
Aug	59.5	62.3	59.2	61.5	62.5	63.5	77.0	789		A	A	A
09/01	58.6	61.6	61.1	62.9	63.3	63.6	68.1	3734	725	A 0.2	A 39.6	A 62
09/02	56.4	58.3	61.1	62.8	63	63.2	67.6	3569	723	A 0.2	A 49.6	A 60
09/03	56.4	57.6	61.2	62.4	63.2	63.8	70.2	3563	721	A 0.2	A 49.8	A 50
09/04	57.6	58.5	61.3	62.9	63.6	64.2	70.5	3567	719	A 0.2	A 49.8	A 50
09/05	58.8	59.7	61.3	63.2	64.1	64.7	73.7	3568	717	A 0.2	A 49.4	A 50
09/06	!	59.1	!	63.3	64	!	72.2	3565	714	A 0.2	A 23.8	A 50
09/07	!	!	!	!	!	!	72.2	3232	712	A 0.2	A 22.6	A 76
09/08	59.4	59.3	61.4	63.6	64.6	65.3	75.8	3038	709	A 0.2	A 22.6	A 77
09/09	59.4	59.3	61.4	63.6	64.6	65.3	75.8	3038	709	A 0.2	A 22.4	A 77
09/10	59.3	59.0	61.5	63.7	64.5	65.1	73.7	3040	708	A 0.2	A 28.1	A 77
09/11	59.2	59.7	62.9	63.6	64.6	65.2	74.7	3034	705	A 0.2	A 34.4	A 72
09/12	59.1	60.2	63.3	64.2	64.8	65.3	72.3	3040	703	A 0.2	A 3.3	A 65
09/13	59.1	61.0	62.2	64.9	65.7	66.1	75.0	3039	701	A 0.2	A 21.8	A 96
09/14	59.3	61.2	62.8	64.9	65.9	66.5	74.1	3040	699	A 0.2	A 32.2	A 78
09/15	59.6	60.1	63.5	64.8	65.7	66.2	71.5	3037	697	A 0.2	A 36.0	A 68
09/16	59.7	59.9	63.4	65.1	65.8	66.3	68.8	3041	695	A 0.2	A 41.2	A 64
09/17	59.9	60.2	63.4	65.3	65.9	66.2	67.7	3034	693	A 0.2	A 43.4	A 59
09/18	59.8	61.3	63.9	65.3	66.0	66.3	#	3042	691	A 0.2	A 42.7	A 56
09/19	59.8	60.2	63.9	65.4	66.0	66.3	69.2	3036	689	A 0.2	A 51.8	A 57
09/20	59.8	59.6	64.2	65.3	65.9	66.3	67.1	3038	687	A 0.2	A 52.6	A 48
09/21	59.6	59.1	64.2	65.7	66.0	66.1	65.7	3021	686	A 0.2	A 55.0	A 47
09/22	58.6	58.3	64.3	65.5	65.8	65.9	66.4	3011	684	A 0.2	A 74.2	A 45
09/23	58.7	59.3	65.1	65.5	65.8	66.0	65.6	3013	682	A 0.2	A 73.9	A 26
09/24	58.7	59.4	64.9	66.0	66.1	66.1	64.7	3009	680	A 0.2	A 73.0	A 26
09/25	58.9	59.0	64.7	66.0	66.4	66.4	65.7	2991	678	A 0.2	A 72.7	A 27
09/26	59.1	58.5	65.0	66.2	66.7	66.9	70.0	2984	676	A 0.2	A 64.0	A 27
09/27	59.5	59.4	64.6	66.3	66.6	66.8	67.9	2981	673	A 0.2	A 64.6	A 36
09/28	59.5	59.1	64.6	66.0	66.5	66.7	68.1	2970	671	A 0.2	A 61.6	A 35
09/29	59.4	58.6	64.0	65.7	66.0	66.0	65.6	2985	669	A 0.2	A 66.9	A 38
09/30	59.6	58.5	64.3	65.2	65.4	65.3	63.1	2983	667	A 0.2	A 39.6	A 33
-										A	A	A
Sep	59.0	59.5	63.2	64.7	65.3	65.6	69.8	696				
						Total	AF	186927				

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

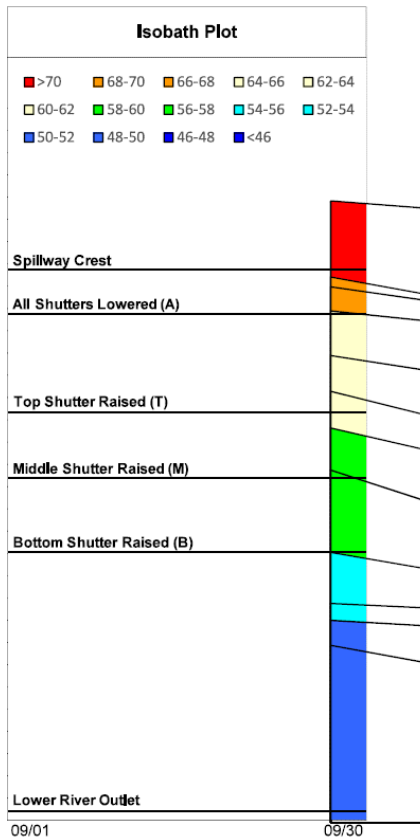
M = Middle Shutter Raised

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 09/01-09/30. Showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet

Isobath 10/01-10/17 (Mean Daily Temperature, Release, Storage, Unit Shutter Position/Load Percentage

MDT = Mean Daily Temperature (°F)

USP/LP = Unit Shutter Position/Load Percentage

Date	MDT, Water, NFA	MDT, Water, ARP	MDT, 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
Sep	59.0	59.6	63.1	64.6	65.2	65.6	70.2	699		A	A	A
10/01	59.1	58.0	64.3	65.0	65.2	65.4	65.1	2984	664	A 0	A 64	A 36
10/02	60.0	58.3	64.3	65.3	65.4	65.4	65.1	2987	660	A 0	A 63	A 37
10/03	61.3	59.8	64.7	65.4	65.6	65.7	67.6	2986	656	A 0	A 76	A 24
10/04	62.2	60.9	64.9	65.9	66.2	66.3	72.0	2990	651	A 0	A 77	A 23
10/05	63.2	62.1	64.9	66.1	66.6	66.8	74.3	2984	646	A 0	A 75	A 25
10/06	63.8	62.0	62.3	66.2	66.8	67.0	74.4	2912	643	T 0	T 3	M 96
10/07	64.1	61.2	62.0	65.2	66.2	66.7	74.7	2501	639	T 2	T 11	M 88
10/08	64.3	60.9	61.6	64.4	65.4	65.9	74.8	2489	636	T 0	T 45	M 55
10/09	63.6	60.0	61.4	63.5	63.7	63.9	63.6	2486	631	T 0	T 25	M 75
10/10	62.8	59.7	61.4	62.7	63.3	63.6	64.5	2553	628	T 3.2	T 26.1	M 71
10/11	61.8	60.3	61.2	63.0	63.1	63.2	61.2	2416	625	T 11.8	M 28.6	M 60
10/12	60.5	59.7	61.2	62.7	62.9	62.9	62.0	2428	621	T 11.7	M 0.8	M 87
10/13	59.3	58.7	60.8	62.2	62.5	62.6	66.0	2500	617	T 8.8	M 55.2	A 36
10/14	59.8	59.5	60.6	62.4	63.0	63.1	68.2	2486	614	T 11.3	M 57.7	A 31
10/15	59.4	58.6	60.3	62.0	62.6	62.9	67.1	2464	610	T 10.3	M 38.8	A 51
10/16	59.3	58.5	60.5	61.8	62.2	62.4	68.1	2436	607	T 10.9	M 44.5	A 45
10/17	59.3	58.5	60.5	61.9	62.3	62.5	68.1	2436	602	T 10.7	M 45.9	A 43
10/18												
10/19												
10/20												
10/21												
10/22												
10/23												
10/24												
10/25												
10/26												
10/27												
10/28												
10/29												
10/30												
10/31												
Oct	61.4	59.8	62.2	63.9	64.3	64.5	68.0	632				
						Total	AF	89331				

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

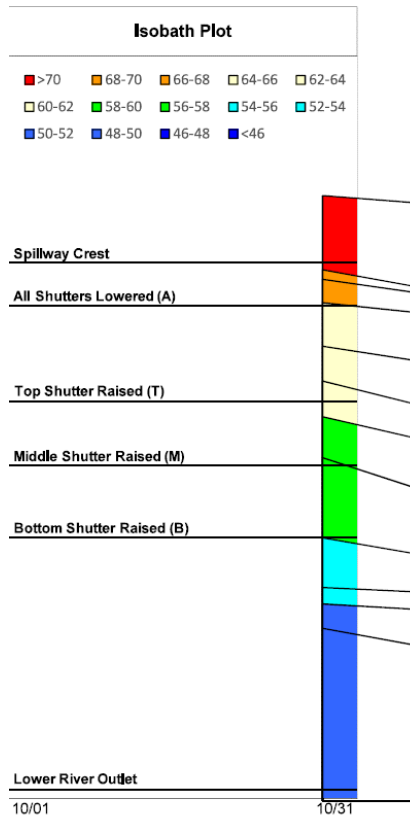
M = Middle Shutter Raised

B = Bottom Shutter Raised

O = Unit Outage

Notes:

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



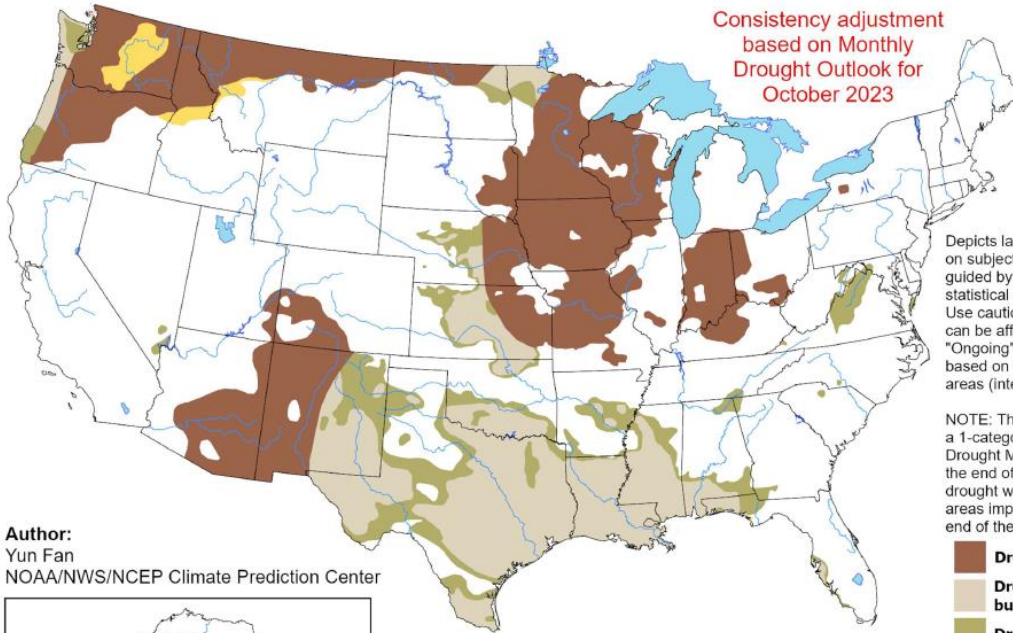
Isobath Plot 10/01-10/31. Showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for October 1 - December 31, 2023
Released September 30, 2023

Consistency adjustment
based on Monthly
Drought Outlook for
October 2023

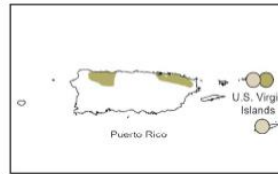
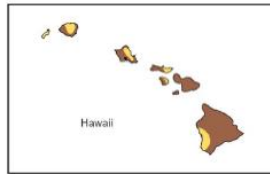


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought

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<https://go.usa.gov/3eZ73>

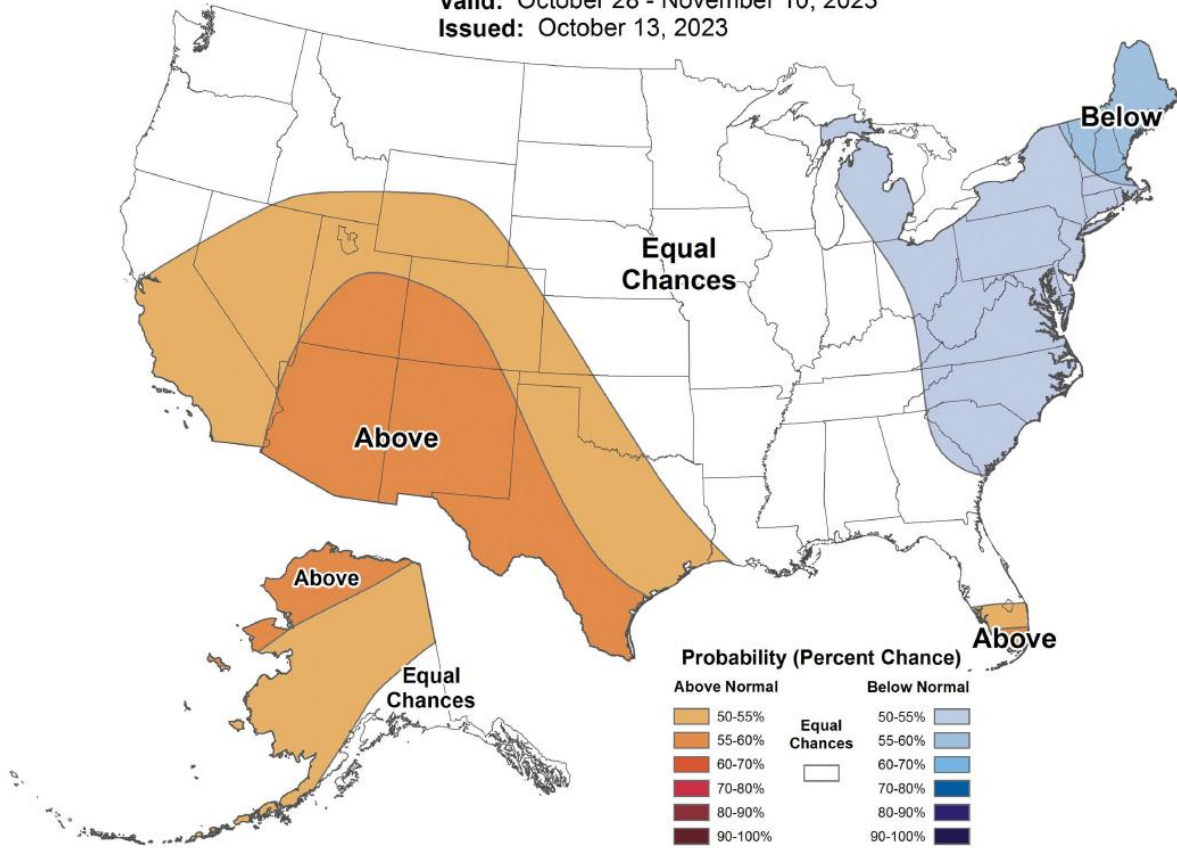
Map – U.S. Seasonal Drought Outlook; Valid October 1 – December 31 2023; Released September 30, 2023



Weeks 3-4 Temperature Outlook



Valid: October 28 - November 10, 2023
Issued: October 13, 2023



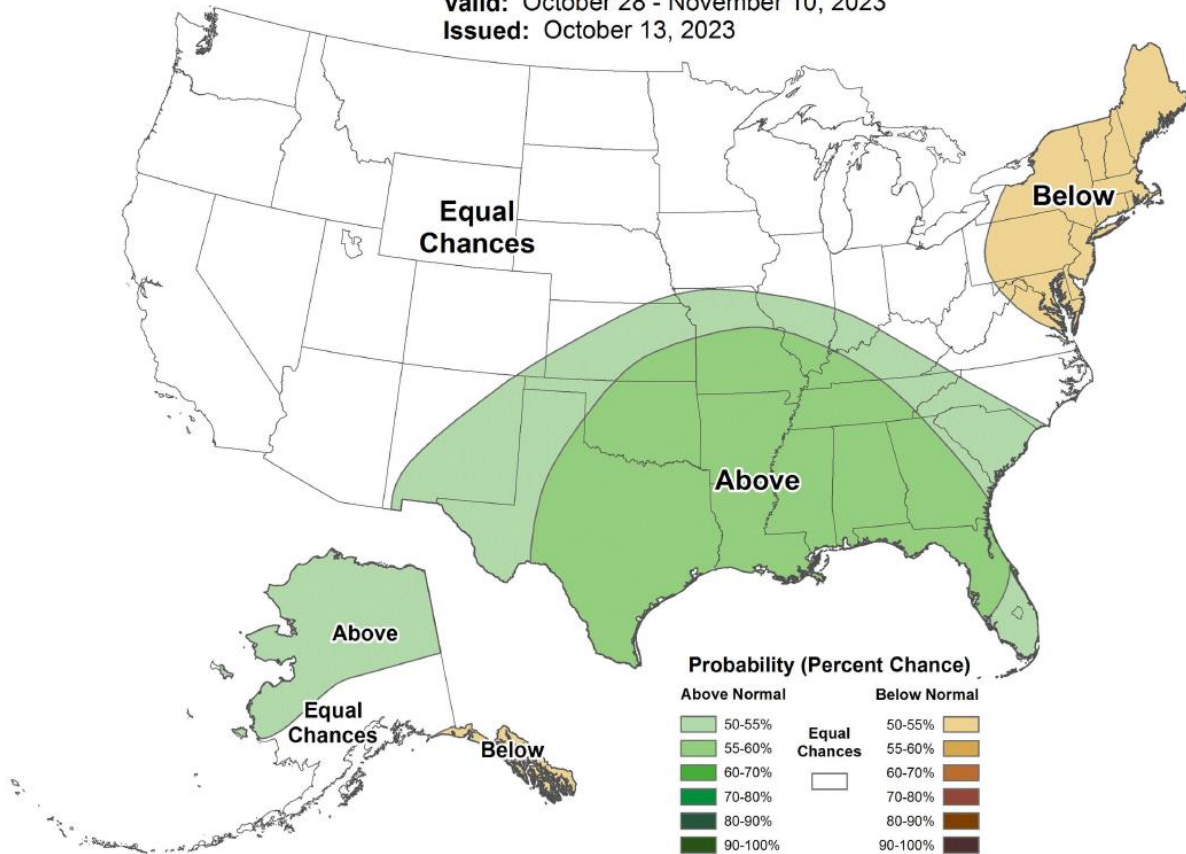
Map – Weeks 3-4 Temperature Outlook; Valid October 28 – November 10 2023; Issued October 13, 2023



Weeks 3-4 Precipitation Outlook



Valid: October 28 - November 10, 2023
Issued: October 13, 2023



Map – Weeks 3-4 Precipitation Outlook; Valid October 28 – November 10 2023; Issued October 13, 2023

American River Summary Conditions – Oct (On-going)

Releases are currently at 3,000 cfs

- October 6, 2023, from 3,000 cfs to 2,600 cfs
- October 7, 2023, from 2,600 cfs to 2,500 cfs

Temperature Management

- Top Shutters: Units 1, 2, and 3 -- raised
- Middle Shutters: Units 1, 2, and 3 -- raised
- Bottom Shutters: Units 1, 2, and 3 -- raised

Folsom Shutter Configuration and Changes:

Next change will be raising up all Folsom Shutters starting on October 30th.

September 50% Exceedance

Storages

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

Facility	Sep	Oct	Nov	Dec	Jan
Folsom Storage	659	585	529	519	549
Folsom Elevation	435	427	420	419	423

Monthly River Release (TAF/cfs)

Facility	Sep	Oct	Nov	Dec	Jan
American Storage	178	154	149	123	123
American cfs	3000	2500	2500	2000	2000

American River Base Flow 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)	1,326 cfs	Not applicable	Not applicable	1,326 cfs	1,462 cfs
November	May ARI ² (50% exceedance)	1,326 cfs	Not applicable	Not applicable	1,326 cfs	1,352 cfs
December	May ARI ² (50% exceedance)	1,326 cfs	Not applicable	Not applicable	1,326 cfs	1,928 cfs
January	January SRI (75% exceedance)	1,750 cfs	1,326 cfs	Not applicable	1,326 cfs	14,060 cfs
February	February ARI (50% exceedance)	1,750 cfs	1,750 cfs	1,750 cfs	1,750 cfs	4,021 cfs
March	March ARI (50% exceedance)	1,750 cfs	1,750 cfs	1,750 cfs	1,750 cfs	12,616 cfs
March	March ARI ³ (90% exceedance)	1,750 cfs	1,750 cfs	1,750 cfs	1,750 cfs	12,616 cfs
April	April ARI (50% exceedance)	1,500 cfs	Not applicable	1,500 cfs	1,500 cfs	7,088 cfs
April	April ARI ³ (90% exceedance)	1,500 cfs	Not applicable	1,500 cfs	1,500 cfs	7,088 cfs
May	May ARI (50% exceedance)	1,500 cfs	Not applicable	1,500 cfs	1,500 cfs	10,890 cfs
May	May ARI ³ (90% exceedance)	1,500 cfs	Not applicable	1,500 cfs	1,500 cfs	10,890 cfs
June	May ARI ² (90% exceedance)	1,500 cfs	Not applicable	Not applicable	1,500 cfs	6,650 cfs
July	May ARI ² (90% exceedance)	1,700 cfs	Not applicable	Not applicable	1,700 cfs	4,011 cfs
Aug	May ARI (50% exceedance)	1,700 cfs	Not applicable	Not applicable	1,700 cfs	4,012 cfs
Sept	May ARI (50% exceedance)	1,700 cfs	Not applicable	Not applicable	1,700 cfs	3,172 cfs

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.