

American River Group

1:30 p.m.-3:30 p.m.

Conference Line: +1 (321) 209-6143; Access Code: 985 598 947#

Webinar: Join MicrosoftTeams Meeting

Thursday, October 20, 2022

Agenda

- 1. Introductions
- 2. Announcements
- 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. Power Bypass
- 8. Next Meetings:
 - a. Thursday, November 17th, 1:30 p.m.–3:30 p.m.



Provisional Data Subject to Revision

JUVENILE SALMONID MONITORING

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

- Last month of juvenile monitoring for the season
- No new salmonids have been observed so far this month
- Staff were not able to safely access the Nimbus Basin main channel
- Redd surveys begin Friday

Month	Category	Nimbus Main Channel	Nimbus Side Channel	Upper Sunrise Main Channel	Upper Sunrise Side Channel	Lower Sunrise Main Channel	Lower Sunrise Side Channel	Rossmo or Main Channel	Gristmill Main Channel	River- bend Main Channel	River- bend Side Channel	Watt Avenue Main Channel	Paradise Beach Main Channel
March	SH	1	*	7	N/A	7	3	3	0	0	N/A	1	0
March	CS	0	*	0	N/A	8	76	8 (+1 UNID)	2	4	N/A	0	0
April	SH	2	8	5	N/A	3	33	0	0	0	N/A	1	0
April	CS	1	160	2	N/A	3	461	6	0	0	N/A	0	0
May	SH	1	2	***	***	0	0	0	1	0	N/A	0	3
May	CS	1	25	***	***	1	0	0	0	0	N/A	0	1
June	SH	0	0	0	0	0	0	1	0	0	0	0	0
June	CS	0	2	0	0	0	0	0	0	0	0	0	0
July	UNID	0	0	0	0	0	0	2	0	0	0	0	0
Aug	SH	NA	0	0	NA	0	0	0	0	0	N/A	0	N/A
Aug	CS	N/A	0	0	N/A	0	0	0	0	0	N/A	0	N/A

Month	Category	Nimbus Main Channel	Nimbus Side	Upper Sunrise Main Channel	Upper Sunrise Side Channel	Lower Sunrise Main Channel	Lower Sunrise Side Channel	Rossmo or Main Channel	Gristmill	Main	River- bend Side Channel	Watt Avenue Main Channel	Paradise Beach Main Channel
Sept	SH	N/A	0	0	N/A	0	0	0	0	0	N/A	0	N/A
Sept	CS	N/A	0	0	N/A	0	0	0	0	0	N/A	0	N/A
Oct	SH	NA	0	***	***	***	***	0	0	***	***	0	***
Oct	CS	NA	0	***	***	***	***	0	0	***	***	0	***

[•] NA: Side channel no longer present, salmonids were salvaged from isolated pools in the upper Sunrise side channel in March

^{• *:} Not able to seine due to presence of steelhead redds

^{• **:} Lower Sunrise Side Channel is not connected at the upstream end

^{• ***:} Not seined at this time

SMUD Upper American River Project Update

Conditions - Tuesday 18 October 2022

Happy new water year! No precipitation or runoff in October in the UARP / Crystal Basin so far. Potential for light snows this weekend (Oct 22-23). Cloud seeding will resume November 15.

Combined reservoir storage for Loon Lake, Union Valley and Ice House Reservoirs

• 254,511 acre feet

• 67.1% full

• 110% of historical average (18 October historical average: 232,080 AF)

Individual Reservoir Storage

• Loon Lake: 45,620 AF

• Ice House: 29,745 AF

• Union Valley: 179,146 AF

Last year (on October 18, 2021), storage was at 45% (169,426 AF). **Total capacity:* 329,210 AF.

Chili Bar releases into the South Fork American River

(Previous month) September 2022 releases:

• Daily average flow: 837 cfs

• Total releases: 49,801 AF

(Current month) October 2022 releases (October 1-17

• Daily average flow so far: 559 cfs

• Total releases so far: 18,854 AF)

Table 1. South Fork American River Natural Runoff Forecast (in cfs, daily average forecasted flow, forecast 2022-10-18)

Basin	Fri Oct 21	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
SFA above Slab	37	90	70	54	49	114
Slab Creek Reservoir	48	50	49	48	49	52
Combined South Fork	85	140	119	103	98	166

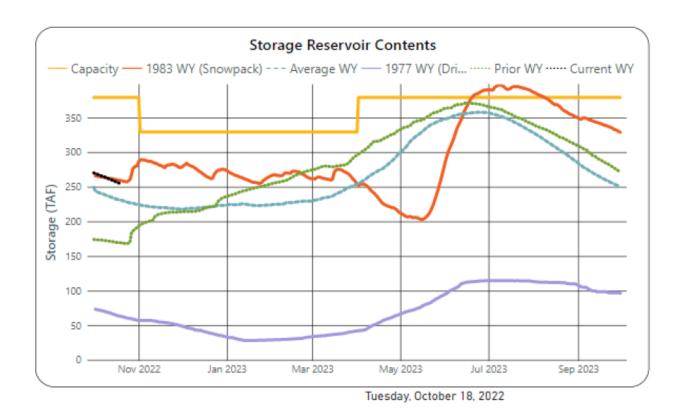
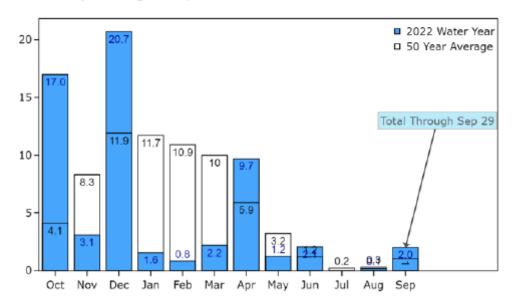


Figure 1. October 18, 2022 reservoir storage

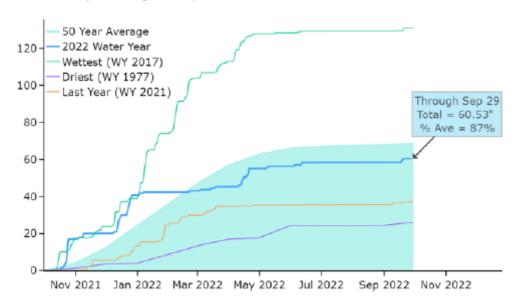
PCWA MFP Operations Overview for American River Operations Group (Real Time Data as of October 19, 2022)

- French Meadows Storage = 79,000 AF of 136,405 AF = 58% Capacity
 - MFAR above FM Inflow (R24) = 7-day AVG \sim 1 cfs
- Hell Hole Storage = 96,000 AF of 207,590 AF = 46% Capacity
 - Five Lakes Inflow (R23) = 7-day AVG \sim 5 cfs
 - Rubicon Inflow (R22) = 7-day AVG \sim 5 cfs
- Combined Storage (FM+HH) = 175,000 AF/342,590 AF = 51% Capacity; 95% of AVG YTD
 - 14 Day Change = -2,000 AF
- MFAR @ R11: 7-day AVG 210 cfs
- NFAR @ ARPS: 7-day AVG 230 cfs

Lake Spaulding Precipitation: Water Year 2022



Lake Spaulding Precipitation: Water Year 2022



Lake Spaulding Precipitation: Water Year 2022

Bureau of Reclamation Historical Archive and Report Database Daily CVP Water Supply

October 17, 2022 | Reservoir Releases in Cubic Feet/Second | Run Date: 10/18/2022

Reservoir	Dam	WY 2022	WY 2023	15 Yr Median
Trinity	Lewiston	308	298	311
Sacramento	Keswick	6,795	3,954	6,506
Feather	Oroville (SWP)	1,250	2,400	2,400
American	Nimbus	550	1,404	1,506
Stanislaus	Goodwin	931	440	920
San Joaquin	Friant	230	450	365

Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15 Yr Avg	WY 2022	WY 2023	% of 15 Yr Avg
Trinity	2,448	1,227	648	541	44
Shasta	4,552	2,181	988	1,456	67
Folsom	977	402	218	318	79
New Melones	2,420	1,208	829	601	50
Fed. San Luis	966	299	22	212	71
Total North CVP	11,363	5,317	2,705	3,128	59
Millerton	521	267	305	332	124
Oroville (SWP)	3,538	1,484	790	1,170	79

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

Reservoir	Current WY 2023	WY 1977	WY 1983	15 Yr Avg	% of 15 Yr Avg
Trinity	0	7	12	4	7
Shasta	65	131	157	101	64
Folsom	30	9	80	33	92
New Melones	11		27	22	50
Millerton	27	4	58	33	82

Accumulated Precipitation for Water Year to Date in Inches

	Current			Average	% of	Last 24
Reservoir	WY 2023	WY 1977	WY 1983	(N Years)	Average	Hours
Trinity at Fish Hatchery	0.00	0.00	0.09	31.77 (60)	0	0.00
Sacramento at Shasta Dam	0.00	0.00	0.06	61.63 (65)	0	0.00
American at Blue Canyon	0.00	N/A	N/A	67.76 (46)	0	0.00
Stanislaus at New Melones	0.00		0.24	27.89 (43)	0	0.00
San Joaquin at Huntington Lk	0.00	0.30	0.20	42.20 (47)	0	0.00

Folsom Lake Daily Operations, October 2022, Run Date: 10/18/2022

Day	Elev	Storage in Lake 1000 Acre- Feet	Storage Change 1000 Acre- Feet	Computed* 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	345.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	394.54	344.2	-1.1	1,146	1,537	0	0	138	38	0.18	0.00
2	394.38	343.2	-1.0	1,066	1,405	0	0	134	31	0.15	0.00
3	394.14	341.7	-1.5	900	1,483	0	0	144	29	0.14	0.00
4	393.80	339.6	-2.1	817	1,705	0	0	142	33	0.16	0.00
5	393.58	338.3	-1.4	1,062	1,563	0	0	157	27	0.13	0.00
6	393.28	336.4	-1.9	803	1,604	0	0	106	27	0.13	0.00
7	393.06	335.1	-1.4	961	1,438	0	0	151	57	0.28	0.00
8	392.85	333.8	-1.3	1,020	1,468	0	0	143	57	0.28	0.00
9	392.66	332.6	-1.2	1,040	1,449	0	0	136	39	0.19	0.00
10	392.38	330.9	-1.7	975	1,640	0	0	143	53	0.26	0.00
11	392.05	328.9	-2.0	703	1,528	0	0	152	38	0.19	0.00
12	391.77	327.2	-1.7	831	1,504	0	0	146	34	0.17	0.00
13	391.34	324.6	-2.6	680	1,879	0	0	83	24	0.12	0.00
14	391.09	323.1	-1.5	811	1,382	0	0	151	38	0.19	0.00
15	390.77	321.2	-1.9	835	1,658	0	0	132	8	0.04	0.00
16	390.52	319.7	-1.5	830	1,401	0	0	124	55	0.28	0.00
17	390.20	317.8	-1.9	671	1,502	0	0	117	12	0.06	0.00
Totals		N/A	-27.6	15,151	26,146	0	0	2,299	600	2.95	0.00
Acre- Feet		N/A	-27,550	30,052	51,861	0	0	4,560	1,190	N/A	N/A

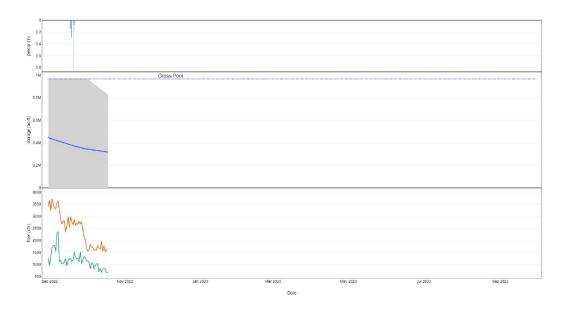
^{*} Computed inflow is the sum of change in storage, releases, pumping and evaporation

Summary: Release (acre-feet)

Power 51,861 Spill 0 Outlet 0 Pumping Plant 4,560 Total Releases 56,421

Summary: Precipitation (Month/Inches)

This Month 0.00 October 1, 2022 0.00





Folsom Dam & Lake - American River Basin 2022-10-18T16:06:24-0700

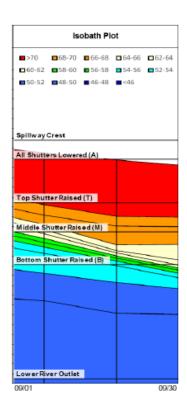


Figure 1. Isobath Plot 09/01-09/30

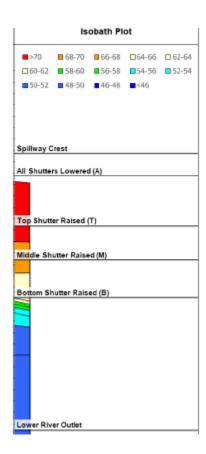


Figure 2. Isobath Plot 10/01-10/31

Table 1. Isobath Plot 09/01-09/30 Mean Daily Temperatures (°F) = MDT, Unit Shutter Position = USP, Load Percentage = LP, A= All Shutters Lowered, B= Bottom Shutter Raised, and T= Top Shutter Raised

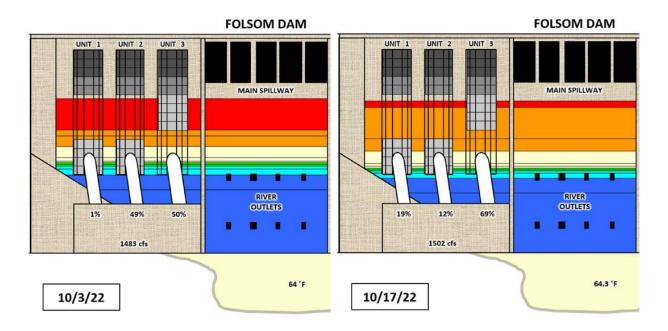
Date	MDT Water NFA	MDT Water ARP	MDT Water AFD	MDT Water AFO	MDT Water AWP	MDT Water AWB	MDT Air CSU	Release (CFS) Nimbus	Storage (TAF) Folsom	USP Unit 1	LP Unit 1	USP Unit 2	LP Unit 2	USP Unit 3	LP Unit 3
Aug	63.0	66.6	61.8	64.5	65.2	66.4	76.7	3451	N/A	N/A	N/A	N/A	N/A	N/A	N/A
09/01	65.4	66.6	61.8	65.2	66.3	67.8	82.2	3208	438	М	48	0	1	М	51
09/02	63.5	65.2	62.2	64.6	65.6	67.1	83.1	3208	434	М	49	0	1	М	50
09/03	61.4	64.3	62.7	64.9	65.6	67.0	80.9	3206	430	М	62	0	1	М	36
09/04	61.6	63.9	63.1	65.3	66.0	67.2	84.1	3212	427	М	64	0	1	М	35
09/05	61.6	63.9	63.1	65.3	66.0	67.2	84.1	3212	427	М	64	М	N/A	В	-
09/06	62.0	63.5	63.7	66.1	67.2	68.6	93.4	3207	420	М	61	0	0	М	39
09/07	61.9	61.1	61.8	66.3	67.1	68.5	91.1	3205	417	М	50	М	10	В	40
09/08	63.5	64.2	60.8	65.6	67.0	68.5	90.3	3015	413	М	47	М	13	В	40
09/09	66.5	62.3	62.8	64.2	65.2	66.6	87.3	2784	409	М	41	М	37	В	22
09/10	66.0	60.4	61.5	64.2	65.0	66.0	76.4	2525	406	М	0	М	60	В	39
09/11	66.4	61.1	63.2	64.0	65.0	66.2	78.1	2506	402	М	0	М	74	В	26
09/12	67.1	61.1	62.6	64.8	65.3	66.3	76.8	2506	399	М	0	М	68	В	32
09/13	67.6	59.1	63.4	64.4	65.0	66.0	68.5	2507	397	М	58	М	13	В	28
08/14	68.0	60.8	63.2	64.8	65.2	65.9	66.5	2509	392	М	0	М	68	В	32
09/15	68.2	60.7	64.4	64.7	65.2	66.0	66.6	2491	389	М	1	М	76	В	23
09/16	67.5	58.4	64.9	65.2	65.8	66.5	68.4	2543	385	М	1	М	77	В	22
09/17	66.7	57.8	65.7	65.4	65.6	66.1	65.8	2480	382	М	1	М	90	В	9
09/18	65.7	58.0	65.1	66.3	65.8	65.8	64.7	2482	378	М	1	М	78	В	21

Date	MDT Water NFA	MDT Water ARP	MDT Water AFD	MDT Water AFO	MDT Water AWP	MDT Water AWB	MDT Air CSU	Release (CFS) Nimbus	Storage (TAF) Folsom	USP Unit 1	LP Unit 1	USP Unit 2	LP Unit 2	USP Unit 3	LP Unit 3
09/19	65.7	58.1	65.2	66.0	66.3	66.5	66.0	2458	375	М	1	М	78	В	21
09/20	66.7	58.3	65.2	66.3	66.9	67.3	66.2	2412	372	М	2	М	77	В	21
09/21	66.7	57.0	63.3	66.1	66.4	66.8	66.4	2403	369	М	1	М	55	В	44
09/22	65.9	56.5	63.7	65.4	66.2	67.1	67.8	2446	366	М	6	М	47	В	46
09/23	66.3	57.3	64.3	65.3	65.8	66.6	71.6	2510	363	М	22	М	37	В	41
09/24	67.2	57.9	64.1	65.8	66.4	67.2	74.5	2502	360	М	35	М	24	В	41
09/25	67.8	56.7	64.2	66.0	66.7	67.6	75.5	2513	358	М	13	М	47	В	41
09/26	68.9	57.6	64.0	65.8	66.6	67.4	72.3	2509	354	М	7	М	52	В	41
09/27	69.6	57.8	63.7	65.9	66.4	67.0	67.7	2509	351	М	13	М	37	В	50
09/28	68.8	57.3	63.9	65.4	66.0	66.6	69.9	2287	348	М	11	М	40	В	49
09/29	67.8	56.8	63.9	65.7	66.2	66.9	71.5	2076	347	М	42	М	7	В	50
09/30	67.5	56.2	63.4	65.8	66.8	67.4	71.5	1806	345	М	11	М	24	В	65
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	N/A	N/A	N/A
Sep	66.0	60.0	63.5	65.4	66.0	66.9	75.1	2641	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	N/A	TOTAL AF	157167	N/A	N/A	N/A	N/A	N/A	N/A	N/A

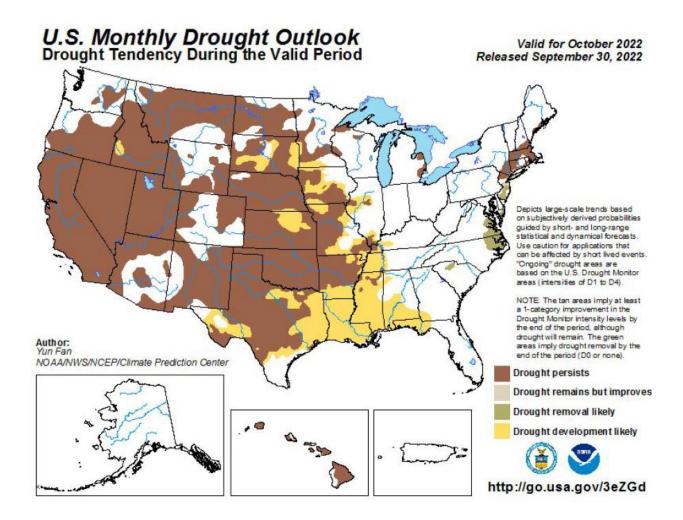
Table 2. Isobath Plot 10/01-10/31 Mean Daily Temperatures (°F) = MDT, Unit Shutter Position = USP, Load Percentage = LP, A= All Shutters Lowered, B= Bottom Shutter Raised, and T= Top Shutter Raised

Date	MDT Water NFA	MDT Water ARP	MDT Water AFD	MDT Water AFO	MDT Water AWP	MDT Water AWB	MDT Air CSU	(CFS)	Storage (TAF) Folsom	USP Unit 1	LP Unit 1	USP Unit 2	LP Unit 2	USP Unit 3	LP Unit 3
Sep	66.0	60.0	63.5	65.4	66.0	66.9	75.1	2641	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/01	67.4	57.4	64.6	65.1	66.5	67.3	68.4	1550	344	М	19	М	39	В	43
10/02	67.7	57.4	63.6	65.4	66.2	66.8	66.1	1535	343	М	38	М	7	В	56
10/03	67.2	57.6	64.0	65.7	66.6	67.2	68.0	1538	342	М	1	М	49	В	51
10/04	67.2	58.1	64.6	65.9	67.0	67.7	69.5	1523	340	М	31	М	19	В	50
10/05	67.5	57.7	63.9	65.7	66.8	67.7	72.1	1513	338	М	1	М	44	В	55
10/06	67.6	58.9	63.6	66.3	67.4	68.2	73.7	1513	336	М	28	М	5	В	67
10/07	67.2	58.3	64.1	65.9	67.0	68.0	74.0	1507	335	М	1	М	35	В	65
10/08	66.6	58.1	64.1	65.8	66.9	67.9	74.6	1517	334	М	33	М	1	В	66
10/09	66.2	57.9	64.0	65.6	66.6	67.6	70.9	1504	333	М	2	М	32	В	66
10/10	65.8	57.7	64.0	65.8	66.7	67.3	71.6	1499	331	М	32	М	1	В	68
10/11	65.4	58.1	64.3	65.9	66.7	67.4	70.3	1509	329	М	7	М	29	В	64
10/12	65.1	58.3	64.3	65.7	66.4	67.2	67.2	1512	327	М	27	М	5	В	68
10/13	64.8	58.5	63.5	65.6	66.2	66.8	65.4	1503	325	М	13	М	24	В	63
10/14	64.4	58.2	64.3	65.5	66.3	66.8	67.3	1401	323	М	25	М	1	В	74
10/15	64.1	57.3	64.6	65.6	66.2	66.6	63.8	1413	321	М	14	М	20	В	67
10/16	64.2	57.3	64.5	65.2	65.7	66.0	63.5	1410	320	М	7	М	23	В	70
10/17	63.3	56.3	64.3	65.4	65.6	65.9	62.7	1404	318	М	19	М	12	В	69
10/18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date	MDT Water NFA	MDT Water ARP	MDT Water AFD	MDT Water AFO	MDT Water AWP	MDT Water AWB	MDT Air CSU	Release (CFS) Nimbus	Storage (TAF) Folsom	USP Unit 1	LP Unit 1	USP Unit 2	LP Unit 2	USP Unit 3	LP Unit 3
10/20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oct	66.0	57.8	64.1	65.7	66.5	67.2	68.8	1491	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	N/A	TOTAL AF	50283	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Two figures demonstrating Folsom Dam Temperature Conditions on 10/3/22 and 10/17/22



A map shows the U.S monthly drought outlook

U.S. Drought Monitor

California Nevada RFC

October 11, 2022

(Released Thursday, Oct. 13, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	99.83	96.19	44.88	10.49
Last Week 10-04-2022	0.00	100.00	99.83	96.20	44.93	10.49
3 Month's Ago 07-12-2022	0.00	100.00	99.84	98.19	58.82	17.01
Start of Calendar Year 01-04-2022	0.00	100.00	99.53	67.18	21.33	4.94
Start of Water Year 09-27-2022	0.00	100.00	99.82	96.20	44.93	10.49
One Year Ago	0.00	100.00	100.00	95.21	81.54	39.71

Intensity:	
None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author: Brad Pugh CPC/NOAA

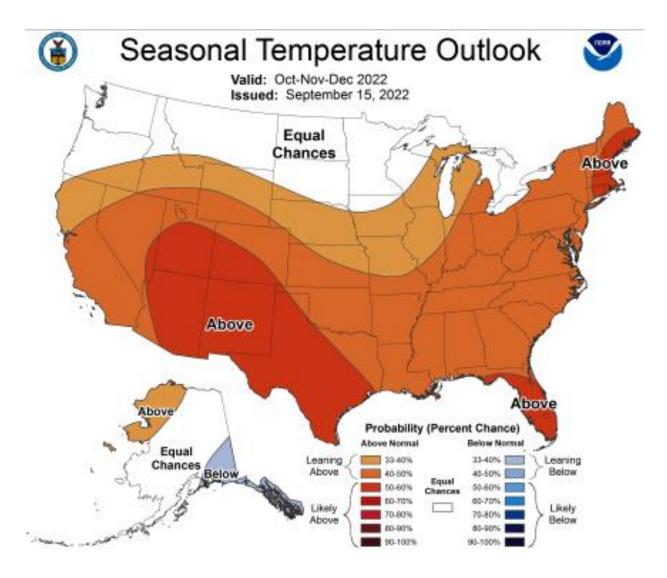




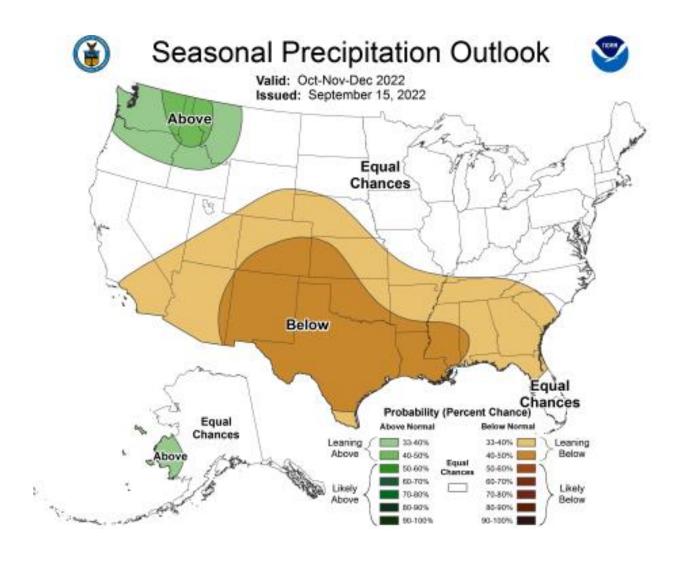


droughtmonitor.unl.edu

A map shows the U.S. Drought Monitor for California and Nevada RFC



A map of U.S. seasonal temperature outlook issued September 2022



A map of U.S. seasonal precipitation outlook issued September 2022

American River Summary Conditions – October (On-going)

Storage/Release Management Conditions

- Releases are currently at 1,400 cfs
 - September 28, 2022, from 2,500 cfs to 2,250 cfs
 - September 29, 2022, from 2,250 to 2,000 cfs
 - September 30, 2022, from 2,000 to 1,750 cfs
 - October 1, 2022, from 1,750 to 1,500 cfs
 - October 14, 2022 from 1,500 to 1,400 cfs

Temperature Management

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

Folsom Shutter Configuration and Changes

Drawing water from Units 1, 2, and 3 (blending Unit 3 with Units 1 and 2)

American River 90% Outlook

October 90% Exceedance

Table 3. Federal End of the Month Storage/Elevation (TAF/Feet)

Facility	Oct	Nov	Dec	Jan	Feb	Mar
Folsom Storage	300	266	239	240	286	397
Folsom Elevation	387	381	376	376	385	403

Table 4. Monthly River Release (TAF/cfs)

Facility	Oct	Nov	Dec	Jan	Feb	Mar
American TAF	86	77	80	61	57	62
American cfs	1400	1302	1303	1000	1033	1002

American River Baseflow Table

Month	Index Used for Index-based MRR	Index Based MRR	RDPA-based MRR for fall- run Chinook salmon (applicable in January and February)	RDPA-based MRR for steelhead (applicable February through May)	Controlling MRR	Actual Average Monthly Nimbus release ¹
October	May ARI ² (50% exceedance)	515 cfs	N/A	N/A	515 cfs	627 cfs
November	May ARI ² (50% exceedance)	515 cfs	N/A	N/A	515 cfs	583 cfs
December	May ARI ² (50% exceedance)	515 cfs	N/A	N/A	515 cfs	890 cfs
January	January SRI (75% exceedance)	1750 cfs	515 cfs	N/A	515 cfs	3787 cfs
February	February ARI (50% exceedance)	1750 cfs	1750 cfs	500 cfs	1750 cfs	2047 cfs
March	March ARI (50% exceedance)	1,7333 cfs	1, 215 cfs	500 cfs	1, 197 cfs	1620 cfs
March	March ARI ³ (90% exceedance)	1,197 cfs	1, 215 cfs	500 cfs	1, 197 cfs	1620 cfs
April	April ARI (50% exceedance)	1142 cfs	Not applicable	1215 cfs	1215 cfs Operating to 1000 cfs) ₃	1037 cfs
April	April ARI ³ (90% exceedance)	1006 cfs	Not applicable	1215 cfs	1215 cfs Operating to 1000 cfs) ₃	1037 cfs
May	May ARI (50% exceedance)	1270 cfs	Not applicable	1215 cfs	1270 cfs	1404 cfs
May	May ARI (90% exceedance)	1209 cfs	N/A	1215 cfs	1270 cfs	1404 cfs
June	May ARI ² (50% exceedance)	1269 cfs	Not applicable	Not applicable	1269 cfs	2516 cfs
Jul	May ARI ² (50% exceedance)	1702 cfs	Not applicable	Not applicable	1702 cfs	4487 cfs
Aug	May ARI ² (50% exceedance)	1702 cfs	Not applicable	Not applicable	1702 cfs	3450 cfs
Sept	May ARI ² (50% exceedance)	1702 cfs	Not applicable	Not applicable	1702 cfs	2582 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 through December of the next water year unless there is an update to the ARI after May.

³ Due to critical CVP system wide ops, MRR 90% was considered and implemented.