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, May 16, 2024**

## Agenda

1. Introductions
2. Announcements
3. Housekeeping
    a. Meeting will be recorded for notetaking purposes
    b. Potential in person meeting in June
4. Presentation
    a. Close-Kin Mark-Recapture Study
5. Fisheries Update
    a. CDFW
    b. CFS
    c. PSMFC
6. Operations Forecast
    a. SMUD
    b. PCWA
7. Central Valley Operations
8. Discussion
9. Next Meetings:
    a. Thursday, June 1, 1:30-3:30pm

## Lower American River 2024 Stranding Survey Summary

A total of three stranding pools containing juvenile salmonids were observed during the 29 April and 1 May surveys following a flow reduction of approximately 1,000 cubic feet per second. Based on a combination of seining, dip-netting, and visual observation, the crew estimated that a total of approximately 600 juvenile Chinook Salmon and size juvenile steelhead were stranded in the isolated pools, which had a combined total area of approximately 877 m² (Table 2). The stranding pool at Rossmoor Bar could not be seined due to thick trees and brush, which also made precise quantification of observed stranded juvenile salmonids challenging. All juvenile salmonids able to be captured were rescued and returned to the river.

Table 1. Salmonids and environmental conditions in isolated pools during the 29 April and 1 March 2024 stranding surveys. *Rescues not conducted.

| Location (river mile) | Date | Species - Chinook | Species - Steelhead | Special – Unidentified Salmonids | Total Pool Area ($m^2$) | Densityu (#fish/ $m^2$) | Tempera-ture (°C) | DO (mg/L) |
|---|---|---|---|---|---|---|---|---|
| Rossmoor Bar (17)* | 4/29/2024 | 30 | 0 | 0 | 68 | 5.5 | 14.4 | 8.5 |
| William B Pond (13) | 4/29/2024 | 200 | 4 | 0 | 77 | 0.39 | 14.5 | 2.2 |
| William B Pond (13) | 5/1/2024 | 370 | 2 | 0 | 732 | 2.28 | 15.4 | 7.8 |
| TOTAL | N/A | 600 | 0 | 0 | 877 | N/A | N/A | N/A |

**Updated 5/12/24**

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

| Fall | Late Fall | Spring | Winter |
|---|---|---|---|
| 82,374 | 83 | 41 | 12 |

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

Table 3: Unmarked Juvenile O. mykiss (lifestage):

| Fry | Parr | Smolt | Adult |
|---|---|---|---|
| 109 | 20 | 0 | 0 |

**Lower American River RSTs at Watt Avenue:**

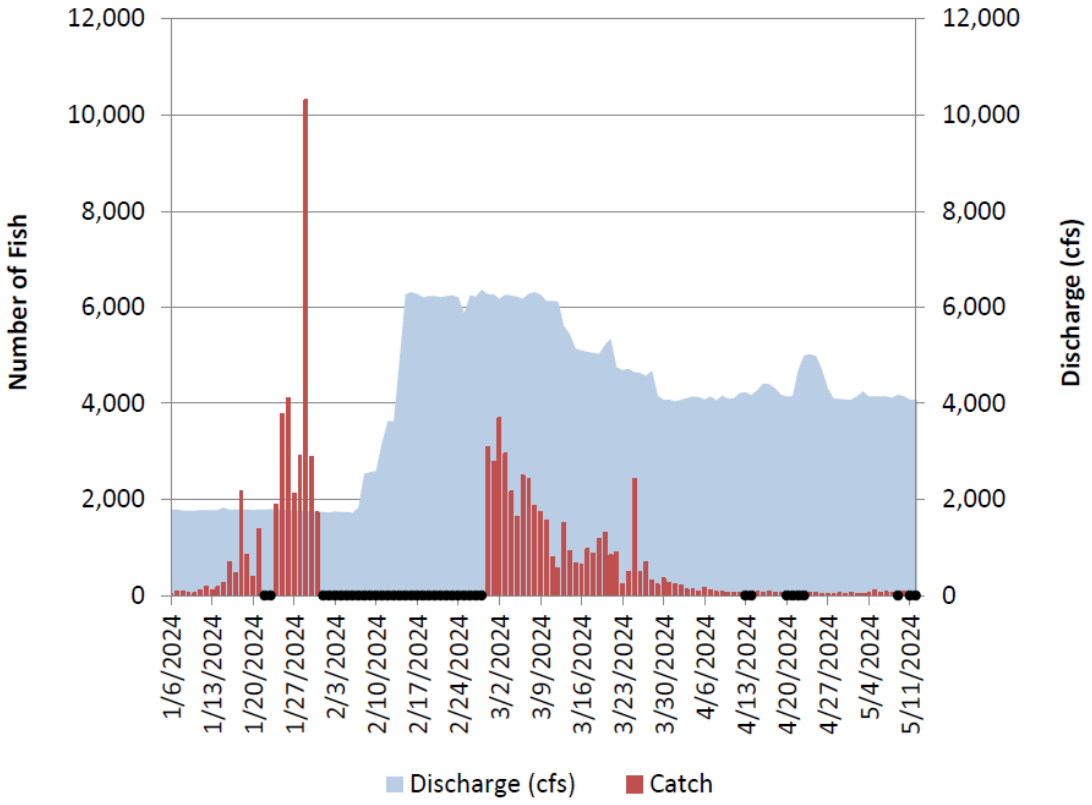


Figure 1: Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2024 Lower American River rotary screw trap sampling season.

Figure 1 is a bar graph of the daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2024 Lower American River rotary screw trap sampling season from 1/6/24 to 5/11/24. Discharge is measured in cubic feet per second and the number the daily catch reached its high point on 1/29 at a count of over 10,000.

**Lower American River RSTs at Watt Avenue:**

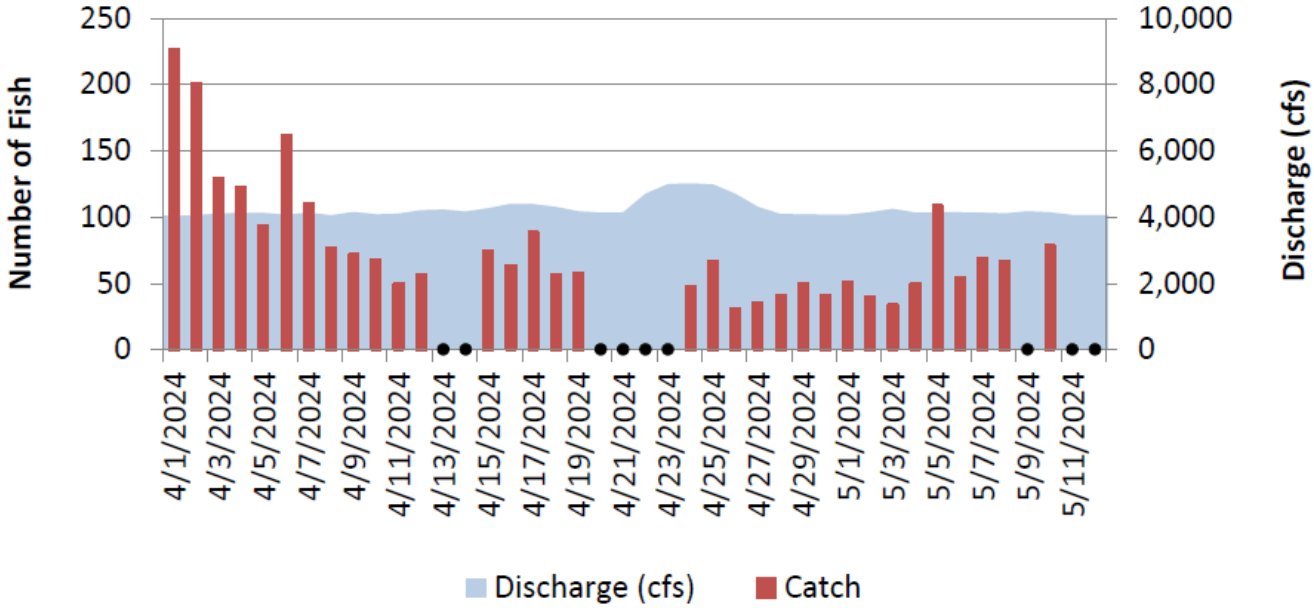


Figure 2. Daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks from April 1st to May 12th during the 2024 Lower American River rotary screw trap sampling season.

Figure 2 is a bar graph of the daily catch of unmarked Chinook Salmon and daily average discharge at Fair Oaks during the 2024 Lower American River rotary screw trap sampling season from 4/1/24 to 5/11/24. Discharge is measured in cubic feet per second and the number the daily catch reached its high point on 4/1 at a count of over 225.

**Lower American River RSTs at Watt Avenue:**

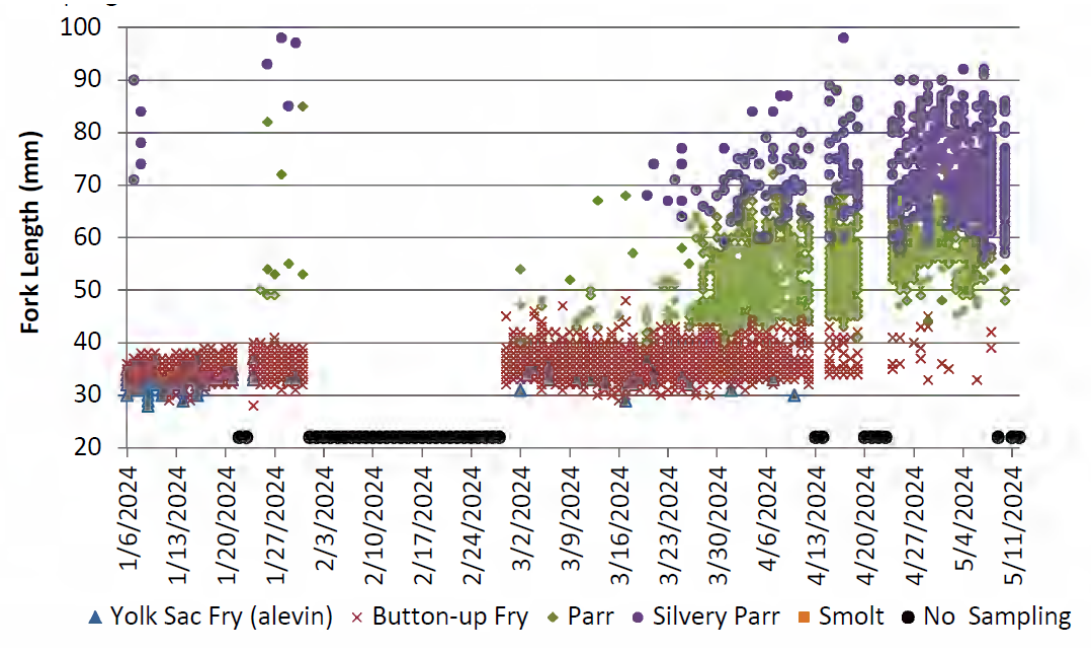


Figure 3: Daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2024 Lower American River rotary screw trap sampling season.

Figure 3 is a boxplot of the daily fork length distribution by life stage of unmarked Chinook Salmon measured during the 2024 Lower American River rotary screw trap sampling season from 1/6/24 to 5/11/24. Fork length is measured in millimeters from 20 to 100, and the life stages observed include the Yolk Sac Fry (alevin), Button-up Fry, Parr, Silvery Parr, and Smolt.

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

# SMUD Upper American River Project Update 05/14/2024

## Fresh Pond Precipitation

May precipitation through 5/14/2024 is 2.22 inches, which is 74.7% of the May average of 2.97 inches. Precipitation for the water year to date is 49.05 inches which is 91.5% of average to date (53.60 inches) and 85.6% of the entire water year average of 57.32 inches.

## Runoff and Snowpack Water Content

Runoff into the storage reservoir basins is 108.2% of median to date through 5/14/2024. The snowpack is 60.1% 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 Average |
|---|---|---|---|
| October | 1.37 | 3.30 | 42% |
| November | 3.47 | 6.87 | 51% |
| December | 4.86 | 9.14 | 53% |
| January | 11.48 | 9.55 | 120% |
| February | 9.83 | 9.50 | 103% |
| March | 13.62 | 9.06 | 150% |
| April | 2.20 | 4.84 | 45% |
| May | 2.22 | 2.97 | 75% |
| June | 0.00 | 0.79 | 0% |
| July | 0.00 | 0.08 | 0% |
| August | 0.00 | 0.20 | 0% |
| September | 0.00 | 1.02 | 0% |
| Total | 49.05 | 57.32 | 86% |

* Month to date total, full month historical average.

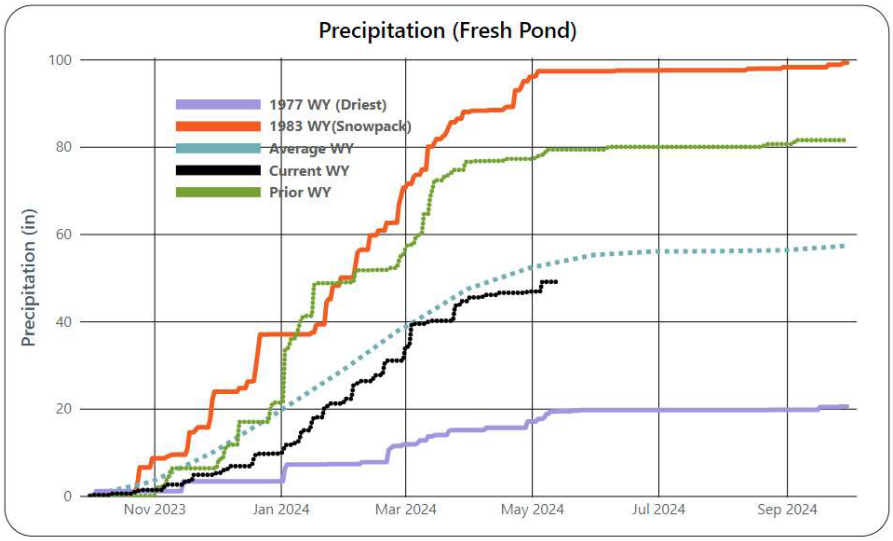


Figure 4. Fresh Pond Precipitation

Figure 4 is a line graph of fresh pond precipitation in inches for November 2023 to September 2024. It includes precipitation data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year. May's precipitation through 05/14/2024 is 2.22 inches, which is 75% of the May average of 2.97 inches.

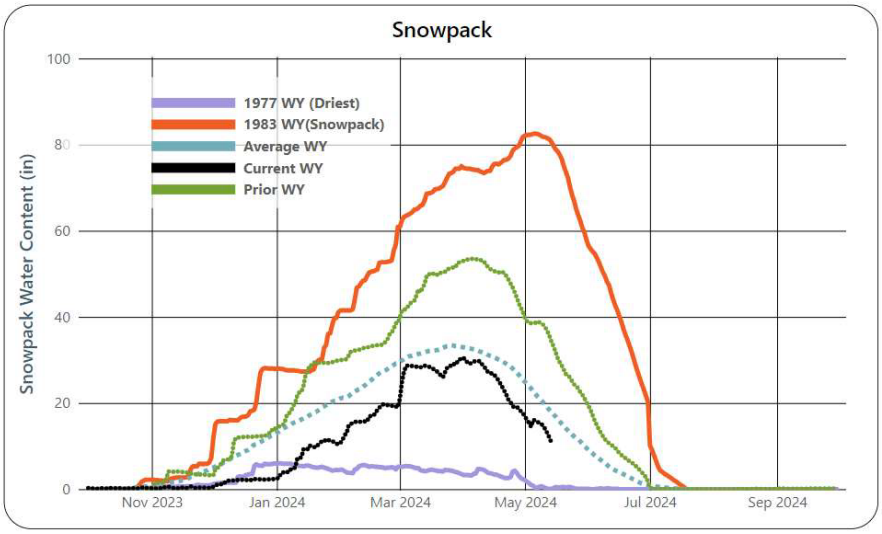


Figure 5. May 14, 2024 Snowpack

Figure 5 is a line graph of snowpack water content in inches for November 2023 to September 2024. It includes data from the driest water year (1977), 1983's water year snowpack, average, current, and prior water year. Runoff into the storage reservoir basins is 108.2% of median to date through 5/14/2024.

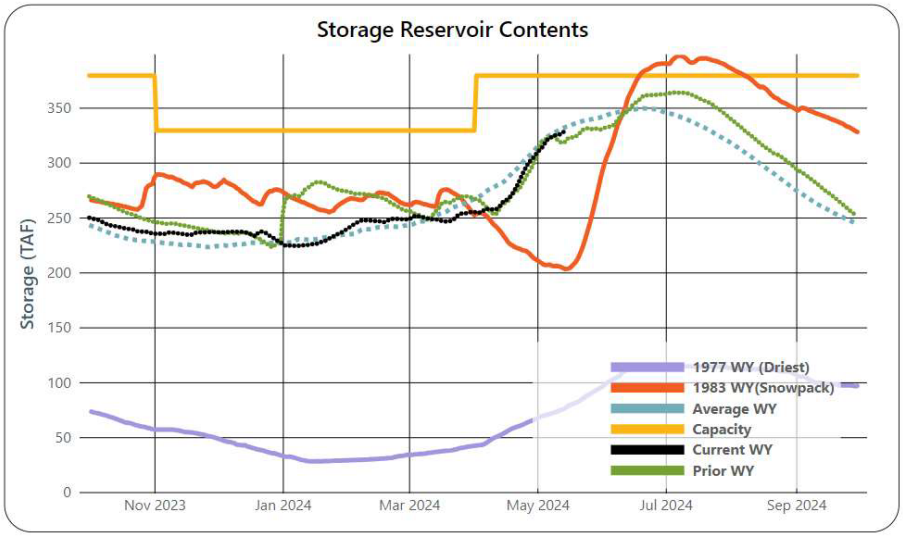


Figure 6. Storage Reservoir Contents

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 | 237, 874 | 89% | 241,058 | 90.5% | 250,676 | 94% | 266,370 | 225,046 |
| Ice House | 36,210 | 83% | 36,170 | 83.1% | 32,037 | 74% | 43,500 | 34,855 |
| Loon Lake | 55,763 | 80% | 52,583 | 75.9% | 35,027 | 51% | 69,310 | 69,310 |
| Total Reservoir Storage | 329,847 | 87% | 329,810 | 87.0% | 317,740 | 84% | 379,180 | 329,211 |

## Chili Bar releases into the South Fork American River

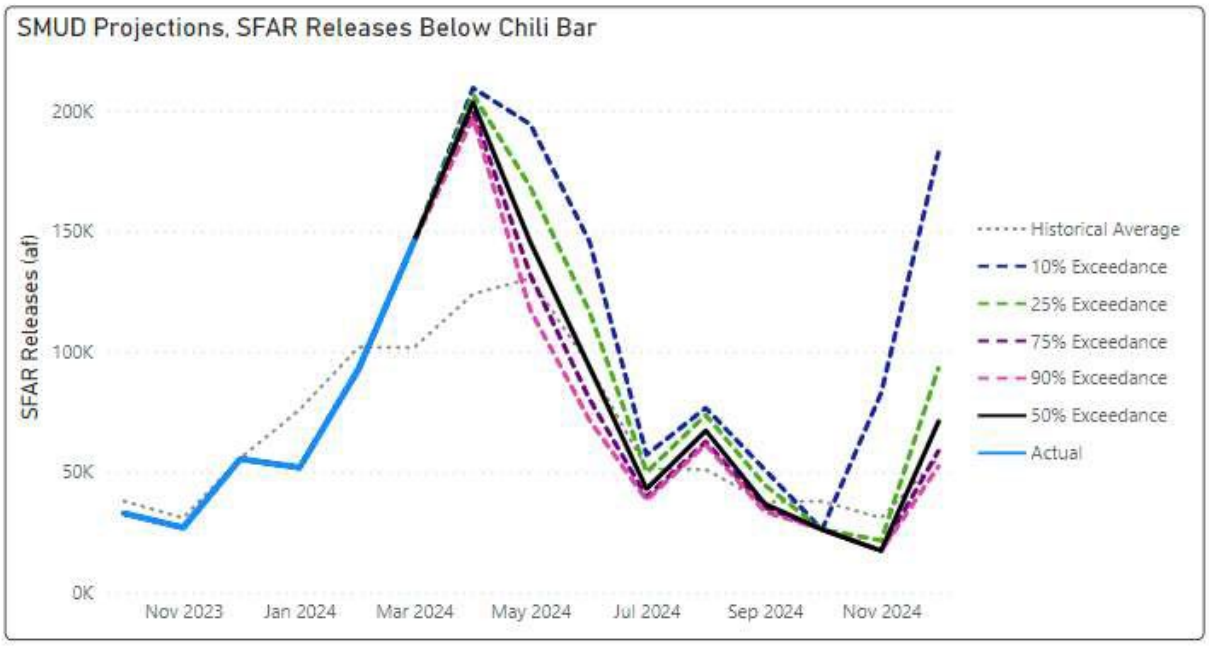


Figure 7. Chili Bar releases into the South Fork American River. Projections based on forecast from 5/14/24.

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

*from 5/14/24 forecast

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 |
| Actuals | Mar-24 | 2,373 | 145,636 |
| Actuals | Apr-24 | 3,107 | 184,572 |
| Forecast | May-24 | 3,396 | 208,429 |
| Forecast | Jun-24 | 1,606 | 95,380 |
| Forecast | Jul-24 | 732 | 44,912 |
| Forecast | Aug-24 | 1,036 | 63,596 |
| Forecast | Sep-24 | 543 | 32,275 |
| Forecast | Oct-24 | 427 | 26,193 |

| Type (Actual or Forecast | Date | Daily Mean Release Rate (cfs) | Monthly Total Release (acre-ft) |
|---|---|---|---|
| Forecast | Nov-24 | 294 | 17,471 |
| Forecast | Dec-24 | 1,230 | 75,481 |

## PCWA MFP Operations Overview for American River Operations Group (Real Time Data as of May 15, 2024)

- French Meadows Storage = 122,000 AF of 136,405 AF = 90% Capacity
    - MFAR above FM Inflow (R24) =7-day AVG ~500 cfs
- Hell Hole Storage = 100,000 AF of 207,590 AF = 48% Capacity
    - Five Lakes Inflow (R23) = 7-day AVG ~350 cfs
    - Rubicon Inflow (R22) = 7-day AVG ~450 cfs
- Combined Storage (FM+HH) = 162,000 AF/342,590 AF = 77% Capacity; ~96% of 15 YR AVG
- MFAR @ R11: 7-day AVG 1,900 cfs
- NFAR @ ARPS: 7-day AVG 3,650 cfs
- Mosquito Ridge Road is set to reopen on Thursday, May 23, 2024, for the recreation season.
- The May 1st B120 was released on May 8th - the current Water Year Forecast for the American at Folsom is 2,375,000 AF. This puts the MFP in the Below Normal (BN) Water Year Type under PCWA's FERC license. The May 1st B120 sets minimum instream flows for the entire MFP project for the period June 1 – October 31. The minimum flow at R11/MFAR below Ralston Afterbay (lowest point of control in MFP) is 245 cfs July 1st through August 31st).

Table 7: American River Unimpaired Flow Below Folsom Lake by Water Year Types.

| Water Year Types | American River Unimpaired Flow Below Folsom Lake (ac-ft) |
|---|---|
| Wet (W) | ≥3,400,000 |
| Above Normal (AN) | 2,400,000–<3,400,000 |
| Below Normal (BN) | 1,500,000–<2,400,000 |
| Dry (D) | 1,000,000–<1,500,000 |
| Critical (C) | 600,000–<1,000,000 |
| Extreme Critical (EC) | <600,000 |

Additionally, the BN Water Year Type provides Recreational Releases 6 days per week (all days except Monday) starting Saturday – May 25th through September 2nd – dropping to five days a week (No Mon/Thur) Sep 3rd through September 30th.

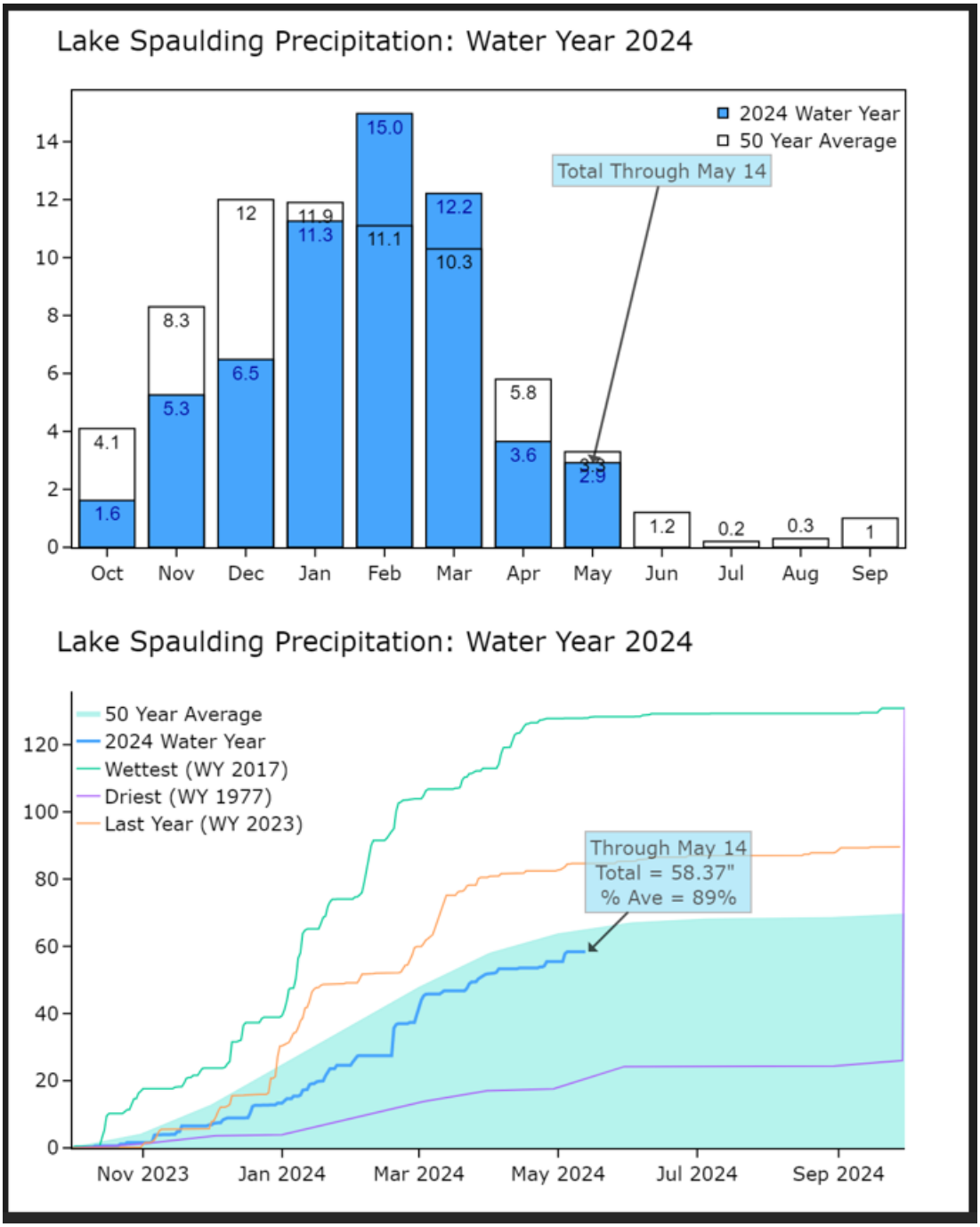


Figure 8. Lake Spaulding Precipitation: Water Year 2024

Figure 8 consists of two graphs that show the precipitation levels in Lake Spaulding from bar graph and a line graph showing precipitation levels in Lake Spaulding during Water Year 2024.

The first graph is a bar graph showing the precipitation totals and the 50 year average in percent from October 2023 to September 2024. The total through May 14 is 2.9 with a 50-year average of 3.2.

The second graph is a line graph showing the precipitation totals and the 50-year average from October 2023 to September 2024. The total through May 14 is 58.37 inches which is 89% of the 50-year average.

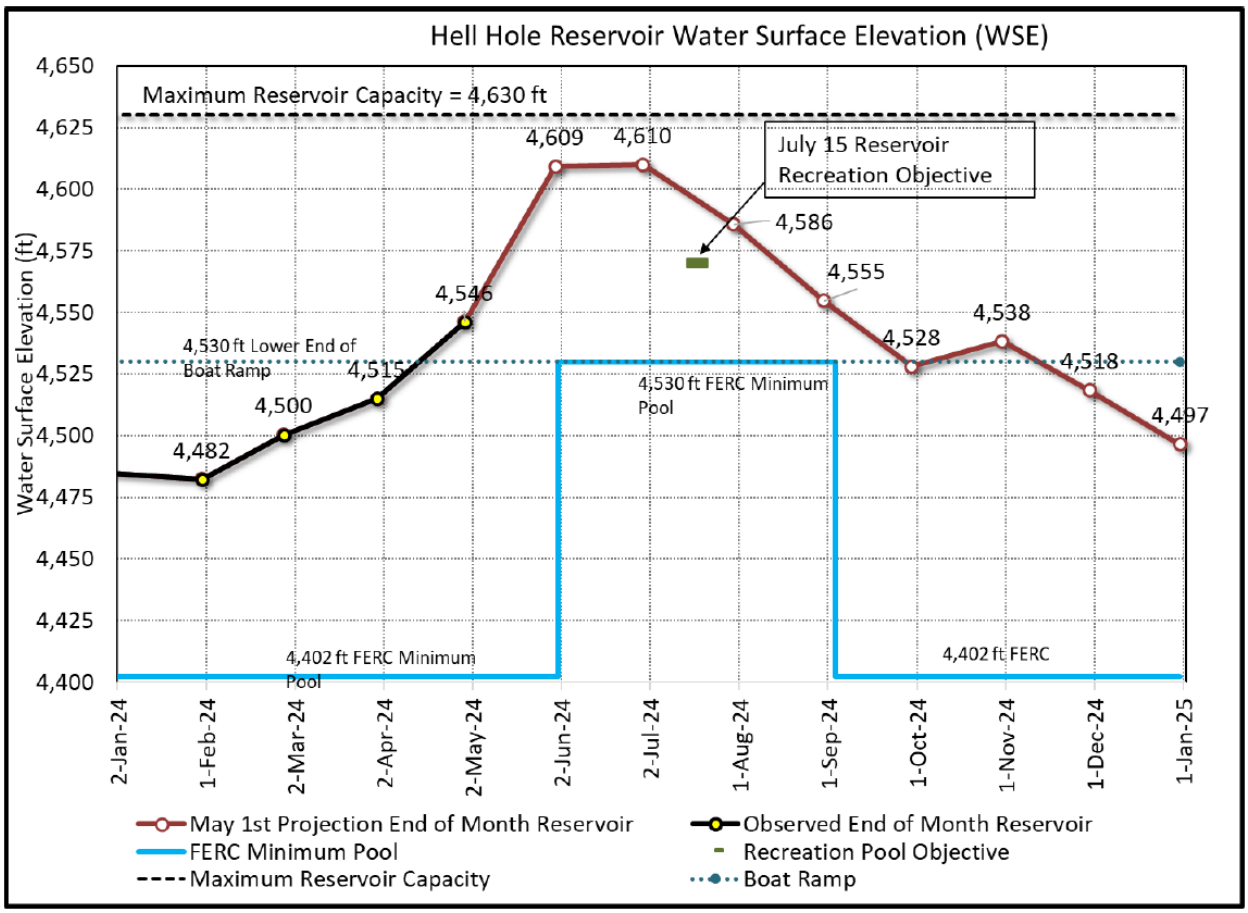


Figure 9. Hell Hole Reservoir Water Surface Elevation from January 2, 2024 through January 1, 2025.

Figure 9 charts the water surface elevation at Hell Hole Reservoir from January 2, 2024, through January 1, 2025, showing the projected water surface elevation expected to increase from 4,546 feet on May 2, 2024, to 4,609 feet on June 2, 2024.

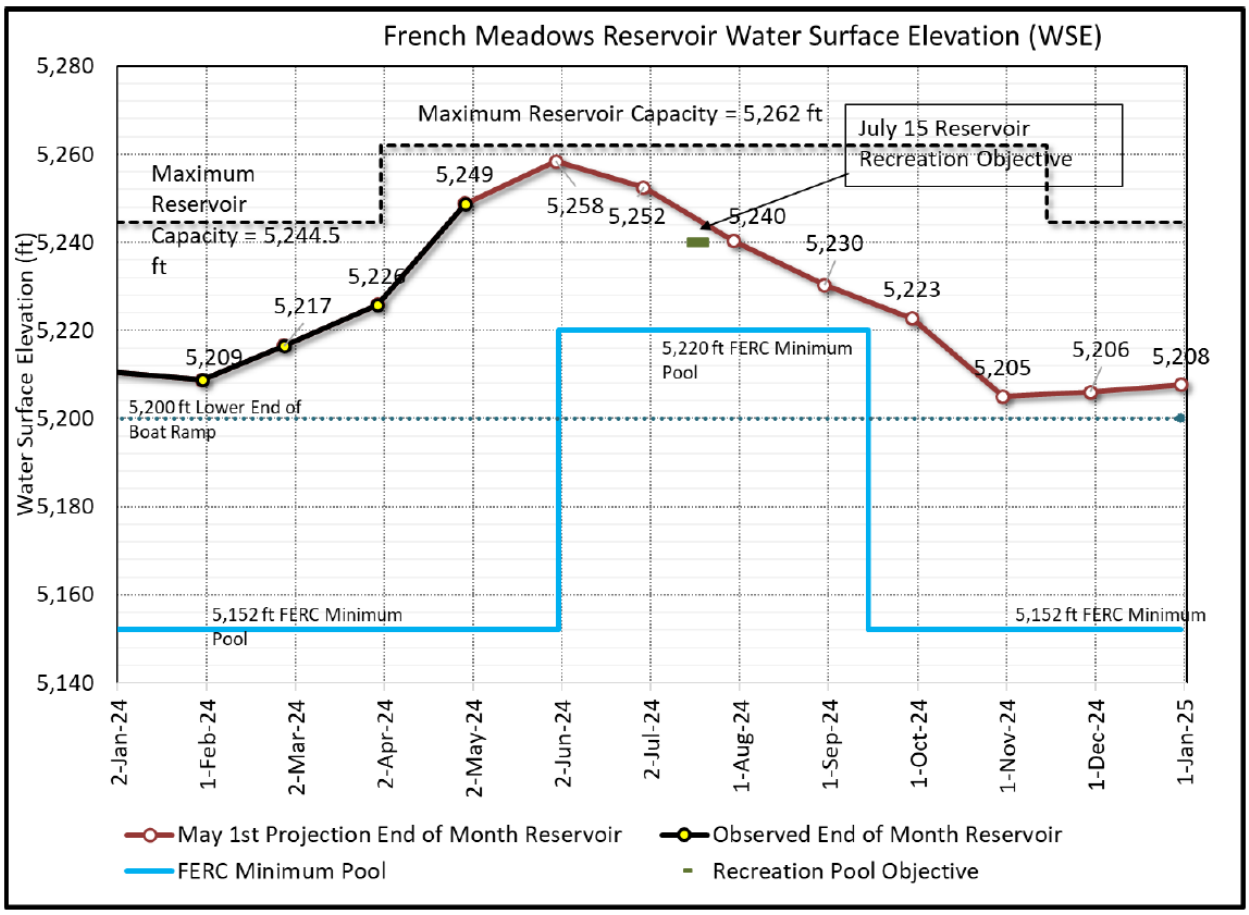


Figure 10. French Meadows Reservoir Water Surface Elevation from January 2, 2024, through January 1, 2025.

Figure 10 charts the water surface elevation at French Meadors Reservoir from January 2, 2024, through January 1, 2025, with the projected water surface elevation expected to increase from 5,249 feet on May 2, 2024 to 5,258 feet on June 2, 2024.

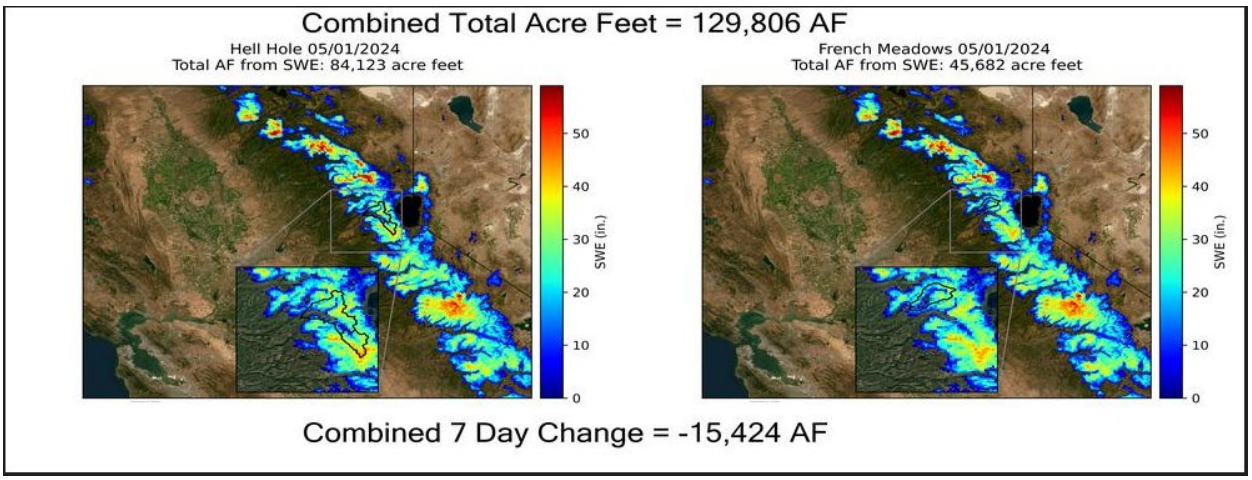


Figure 11. Combined Total Acre Feet and 7 Day Storage Change at Hell Hole and French Meadows on May 1, 2024.

Figure 11 is an image of two heat maps. They show the combined total storage at Hell Hole (84,123) and French Meadows (76,195) in acre-feet at 129,806. The total combined seven day change is -15,424 acre-feet.

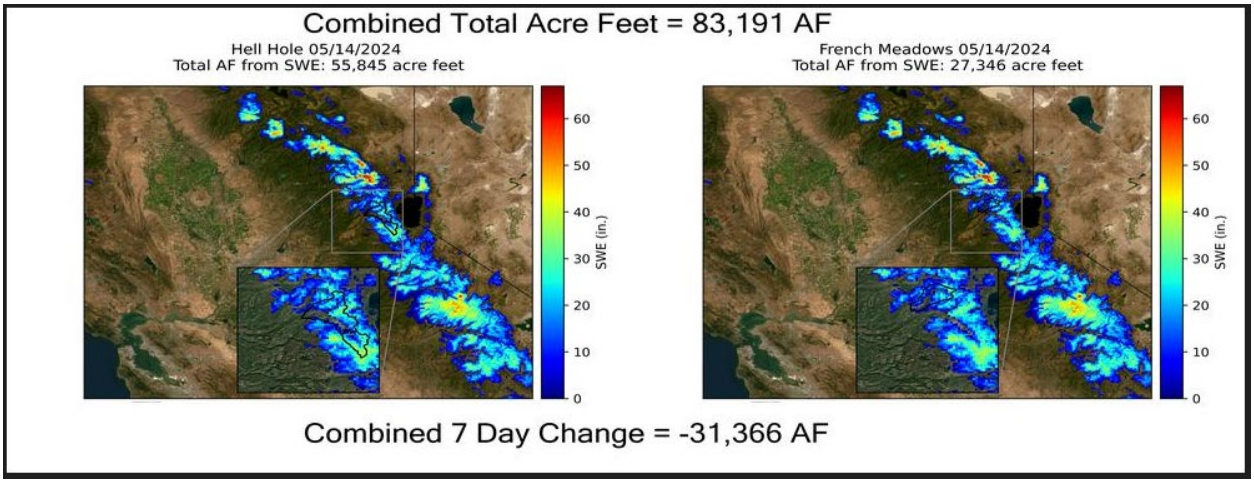


Figure 12. Combined Total Acre Feet and 7 Day Storage Change at Hell Hole and French Meadows on May 14, 2024.

Figure 12 is an image of two heat maps. They show the combined total storage at Hell Hole (55,845) and French Meadows (27,346) in acre-feet from SWE at 83,191. The total combined seven day change is -31,366 acre-feet.

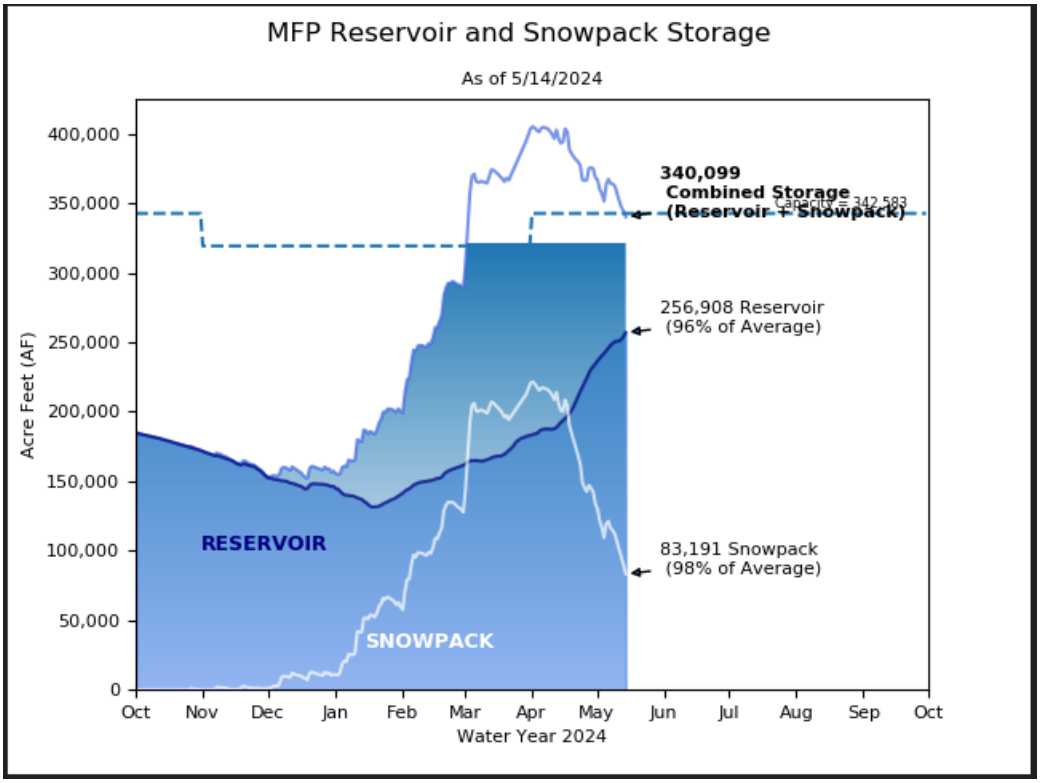


Figure 13. Snow Data Assimilation System Snow Water Equivalent combined storage for 4/17/2024.

Figure 13 is a line graph of the combined storage in acre feet of the Snow Data Assimilation System's Snow Water Equivalent for 4/17/24. The graph includes the last 20 year average, the 20 year minimum (2015), the 20 year maximum (2023), and current combined storage.

Table 8: Middle Fork American River Project Recreational Releases from May 2024 through September 2024. Designated release times and flow magnitude reference the point of release at Oxbow Powerhouse. *Signifies Class II Early Releases.

Table 8.a: May 2024 Middle Fork American River Project Recreational Releases

| Day/Date | Class II Run | Class IV Run |
|---|---|---|
| Sat 25-May | N/A | 8:00am-12:00pm 1000cfs |
| Sun 26-May | N/A | 8:00am-12:00pm 1000cfs |
| Mon 27-May | N/A | 9:00am-12:00pm 1000cfs |
| Tue 28-May | N/A | 9:00am-12:00pm 1000cfs |
| Wed 29-May | N/A | 9:00am-12:00pm 1000cfs |
| Thu 30-May | N/A | 9:00am-12:00pm 1000cfs |
| Fri 31-May | N/A | 9:00am-12:00pm 1000cfs |

Table 8.b: June 2024 Middle Fork American River Project Recreational Releases

| Day/Date | Class II Run | Class IV Run |
|---|---|---|
| Saturday June 1 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday June 2 | N/A | 8:00am-12:00pm 1000cfs |
| Monday June 3 | N/A | N/A |
| Tuesday June 4 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday June 5 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday June 6 | N/A | 9:00am-12:00pm 1000cfs |
| Friday June 7 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday June 8* | 4:00am-8:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday June 9 | N/A | 8:00am-12:00pm 1000cfs |
| Monday June 10 | N/A | N/A |
| Tuesday June 11 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday June 12 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday June 13 | N/A | 9:00am-12:00pm 1000cfs |
| Friday June 14 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday June 15 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday June 16 | N/A | 8:00am-12:00pm 1000cfs |
| Monday June 17 | N/A | N/A |
| Tuesday June 18 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday June 19 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday June 20 | N/A | 9:00am-12:00pm 1000cfs |
| Friday June 21 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday June 22* | 4:00am-8:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday June 23 | N/A | 8:00am-12:00pm 1000cfs |
| Monday June 24 | N/A | N/A |
| Tuesday June 25 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday June 26 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday June 27 | N/A | 9:00am-12:00pm 1000cfs |
| Friday June 28 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday June 29 | 4:00am-7:00am 1000cfs | 8:00am-12:00pm 1000cfs |
| Sunday June 30 | N/A | 8:00am-12:00pm 1000cfs |

Table 8.c: July 2024 Middle Fork American River Project Recreational Releases

| Day/Date | Class II Run | Class IV Run |
|---|---|---|
| Monday July 1 | N/A | N/A |
| Tuesday July 2 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday July 3 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday July 4 | N/A | 9:00am-12:00pm 1000cfs |
| Friday July 5 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday July 6* | 4:00am-8:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday July 7 | N/A | 8:00am-12:00pm 1000cfs |
| Monday July 8 | N/A | N/A |
| Tuesday July 9 | N/A | 8:00am-12:00pm 1000cfs |
| Wednesday July 10 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday July 11 | N/A | 9:00am-12:00pm 1000cfs |
| Friday July 12 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday July 13* | 4:00am-8:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday July 14 | N/A | 8:00am-12:00pm 1000cfs |
| Monday July 15 | N/A | N/A |
| Tuesday July 16 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday July 17 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday July 18 | N/A | 9:00am-12:00pm 1000cfs |
| Friday July 19 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday July 20 | 4:00am-7:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday July 21 | N/A | 8:00am-12:00pm 1000cfs |
| Monday July 22 | N/A | N/A |
| Tuesday July 23 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday July 24 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday July 25 | N/A | 9:00am-12:00pm 1000cfs |
| Friday July 26 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday July 27 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday July 28 | N/A | 8:00am-12:00pm 1000cfs |
| Monday July 29 | N/A | N/A |
| Tuesday July 30 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday July 31 | N/A | 9:00am-12:00pm 1000cfs |

Table 8.d: August 2024 Middle Fork American River Project Recreational Releases

| Day/Date | Class II Run | Class IV Run |
|---|---|---|
| Thursday August 1 | N/A | 9:00am-12:00pm 1000cfs |
| Friday August 2 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday August 3 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday August 4 | N/A | 8:00am-12:00pm 1000cfs |
| Monday August 5 | N/A | N/A |
| Tuesday August 6 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday August 7 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday August 8 | N/A | 9:00am-12:00pm 1000cfs |
| Friday August 9 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday August 10* | 4:00am-8:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday August 11 | N/A | 8:00am-12:00pm 1000cfs |

| Day/Date | Class II Run | Class IV Run |
|---|---|---|
| Monday August 12 | N/A | N/A |
| Tuesday August 13 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday August 14 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday August 15 | N/A | 9:00am-12:00pm 1000cfs |
| Friday August 16 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday August 17 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday August 18 | N/A | 8:00am-12:00pm 1000cfs |
| Monday August 19 | N/A | N/A |
| Tuesday August 20 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday August 21 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday August 22 | N/A | 9:00am-12:00pm 1000cfs |
| Friday August 23 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday August 24* | 4:00am-8:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday August 25 | N/A | 8:00am-12:00pm 1000cfs |
| Monday August 26 | N/A | N/A |
| Tuesday August 27 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday August 28 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday August 29 | N/A | 9:00am-12:00pm 1000cfs |
| Friday August 30 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday August 31 | N/A | 8:00am-12:00pm 1000cfs |

Table 8.e: September 2024 Middle Fork American River Project Recreational Releases

| Day/Date | Class II Run | Class IV Run |
|---|---|---|
| Sunday September 1 | N/A | 8:00am-12:00pm 1000cfs |
| Monday September 2 | N/A | 9:00am-12:00pm 1000cfs |
| Tuesday September 3 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday September 4 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday September 5 | N/A | N/A |
| Friday September 6 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday September 7 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday September 8 | N/A | 8:00am-12:00pm 1000cfs |
| Monday September 9 | N/A | N/A |
| Tuesday September 10 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday September 11 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday September 12 | N/A | N/A |
| Friday September 13 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday September 14 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday September 15 | N/A | 8:00am-12:00pm 1000cfs |
| Monday September 16 | N/A | N/A |
| Tuesday September 17 | N/A | 9:00am-12:00pm 1000cfs |
| Wednesday September 18 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday September 19 | N/A | N/A |
| Friday September 20 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday September 21* | 4:00am-8:00am 800cfs | 8:00am-12:00pm 1000cfs |
| Sunday September 22 | N/A | 8:00am-12:00pm 1000cfs |
| Monday September 23 | N/A | N/A |
| Tuesday September 24 | N/A | 9:00am-12:00pm 1000cfs |

| Day/Date | Class II Run | Class IV Run |
|---|---|---|
| Wednesday September 25 | N/A | 9:00am-12:00pm 1000cfs |
| Thursday September 26 | N/A | N/A |
| Friday September 27 | N/A | 9:00am-12:00pm 1000cfs |
| Saturday September 28 | N/A | 8:00am-12:00pm 1000cfs |
| Sunday September 29 | N/A | 8:00am-12:00pm 1000cfs |
| Monday September 30 | N/A | N/A |

## Reservoir Releases in Cubic Feet/Second

| Reservoir | Dam | WY 2023 | WY 2024 | 15 Yr Median |
|---|---|---|---|---|
| Trinity | Lewiston | 1,732 | 3,519 | 2,481 |
| Sacramento | Keswick | 13,078 | 6,304 | 8,360 |
| Feather | Oroville (SWP) | 15,000 | 6,950 | 3,000 |
| American | Nimbus | 7,922 | 4,024 | 3,980 |
| Stanislaus | Goodwin | 1,506 | 1,861 | 1,506 |
| San Joaquin | Friant | 6,086 | 1,327 | 773 |

## 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 | 1,703 | 998 | 2,095 | 123 |
| Shasta | 4,552 | 3,682 | 4,451 | 4,379 | 119 |
| Folsom | 977 | 774 | 851 | 905 | 117 |
| New Melones | 2,420 | 1,497 | 1,602 | 2,068 | 138 |
| Fed. San Luis | 966 | 655 | 952 | 817 | 125 |
| Total North CVP | 11,363 | 8,311 | 8,854 | 10,264 | 123 |
| Millerton | 521 | 331 | 169 | 507 | 153 |
| Oroville (SWP) | 3,538 | 2,683 | 3,389 | 3,521 | 131 |

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

| Reservoir | Current WY 2024 | WY 1977 | WY 1983 | 15 Yr Avg | % of 15 Yr Avg |
|---|---|---|---|---|---|
| Trinity | 1,248 | 527 | 1,594 | 846 | 148 |
| Shasta | 4,605 | 2,564 | 7,566 | 3,800 | 121 |
| Folsom | 1,736 | 860 | 4,792 | 1,960 | 89 |
| New Melones | 643 | N/A | 1,488 | 686 | 94 |
| Millerton | 1,065 | 505 | 1,579 | 860 | 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 | 35.72 | 21.75 | 37.91 | 28.54 (61) | 125 | 0.00 |

| Reservoir | Current WY 2024 | WY 1977 | WY 1983 | Average (N Years) | % of Average | Last 24 Hours |
|---|---|---|---|---|---|---|
| Sacramento at Shasta Dam | 64.77 | 32.91 | 83.60 | 56.06 (69) | 116 | 0.00 |
| American at Blue Canyon | 50.55 | N/A | 112.31 | 61.01 (50) | 83 | 0.00 |
| Stanislaus at New Melones | 29.52 | N/A | 36.55 | 25.86 (47) | 114 | 0.00 |
| San Joaquin at Huntington Lk | 31.98 | 11.50 | 65.30 | 38.16 (51) | 84 | 0.00 |

April 2024 | Folsom Lake Daily Operations | Run Date: 04/17/2024

| Day | Elev | Storage (1000 Acre-Feet) in Lake | Storage (1000 Acre-Feet) Change | Compu-ted* Inflow C.F.S. | Release - C.F.S. River Power | Release - C.F.S. River Spill | Release - C.F.S. River Outlet | Pump-ing Plant | Evap. - C.F.S. | Evap. - Inches | Precip Inches |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N/A | N/A | 848.9 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1 | 454.44 | 851.6 | 2.7 | 5,962 | 3,482 | 598 | 0 | 137 | 97 | 0.28 | 0.00 |
| 2 | 454.74 | 854.8 | 3.2 | 5,843 | 4,027 | 0 | 0 | 146 | 80 | 0.23 | 0.00 |
| 3 | 455.01 | 857.6 | 2.8 | 5,943 | 4,260 | 1 | 0 | 156 | 94 | 0.27 | 0.00 |
| 4 | 455.56 | 863.4 | 5.8 | 7,102 | 4,026 | 5 | 0 | 139 | 0 | 0.00 | 0.98 |
| 5 | 456.07 | 868.8 | 5.4 | 6,565 | 3,663 | 0 | 0 | 115 | 67 | 0.19 | 0.00 |
| 6 | 456.32 | 871.5 | 2.7 | 5,643 | 3,875 | 246 | 0 | 119 | 63 | 0.18 | 0.00 |
| 7 | 456.45 | 872.9 | 1.4 | 5,053 | 3,581 | 560 | 0 | 123 | 92 | 0.26 | 0.00 |
| 8 | 456.66 | 875.1 | 2.2 | 5,510 | 3,521 | 582 | 0 | 130 | 152 | 0.43 | 0.00 |
| 9 | 457.06 | 879.3 | 4.3 | 6,396 | 3,958 | 0 | 0 | 176 | 117 | 0.33 | 0.00 |
| 10 | 457.52 | 884.3 | 4.9 | 6,861 | 4,058 | 9 | 0 | 199 | 117 | 0.33 | 0.00 |
| 11 | 457.94 | 888.7 | 4.5 | 6,939 | 4,368 | 9 | 0 | 189 | 110 | 0.31 | 0.00 |
| 12 | 458.42 | 893.9 | 5.2 | 6,888 | 3,996 | 0 | 0 | 184 | 110 | 0.31 | 0.00 |
| 13 | 458.94 | 899.5 | 5.6 | 7,138 | 4,026 | 0 | 0 | 185 | 110 | 0.31 | 0.00 |
| 14 | 459.47 | 905.2 | 5.7 | 7,277 | 4,099 | 0 | 0 | 194 | 111 | 0.28 | 0.00 |
| Totals | N/A | N/A | 56.4 | 88,850 | 54,940 | 2,010 | 0 | 2,192 | 1,310 | 3.71 | 0.98 |
| Acre-Feet | N/A | N/A | 56,400 | 176,234 | 108,973 | 3,987 | 0 | 4,348 | 2,598 | N/A | N/A |

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

Summary: Release (acre-feet)

| | |
|---|---|
| Power | 108,973 |
| Spill | 3,987 |
| Outlet | 0 |
| Pumping Plant | 4,348 |
| Total Releases | 117,308 |

Summary: Precipitation (Month/Inches)

| | |
|---|---|
| This month | 0.98 |
| October 1, 2022 to date | 20.57 |

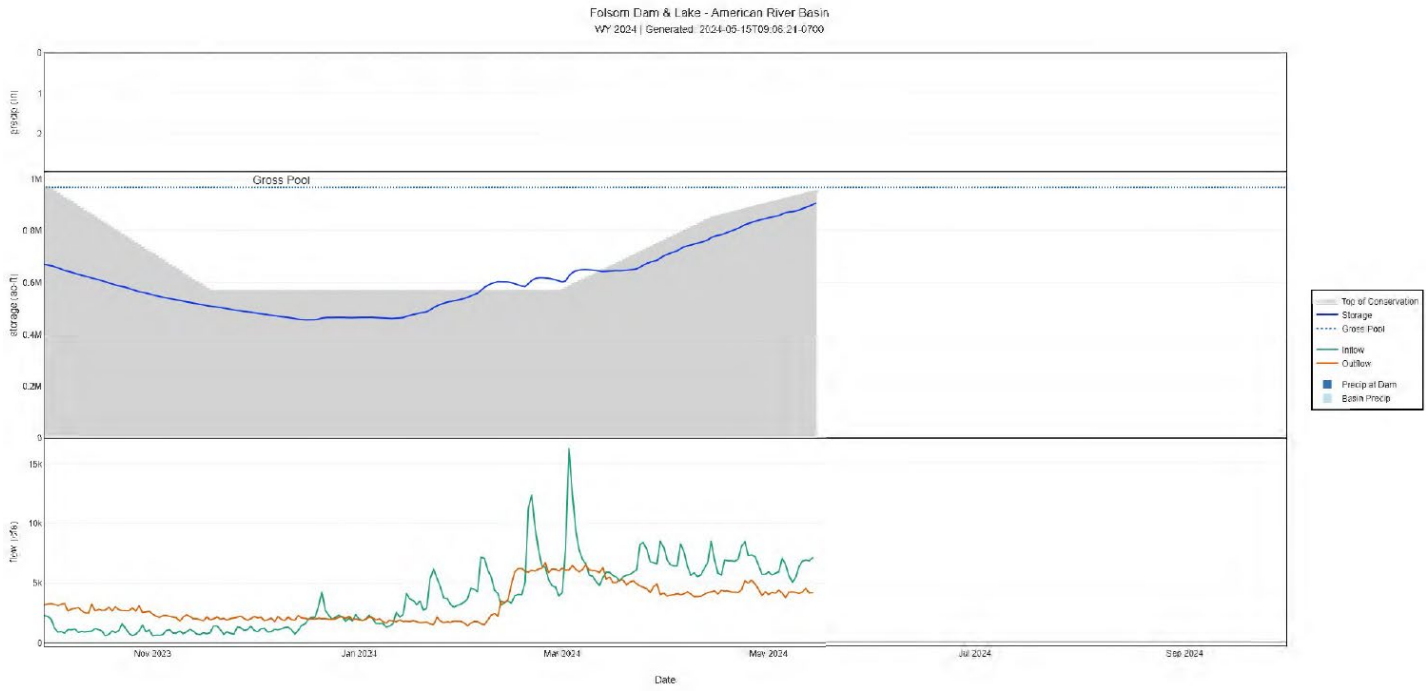


Figure 14. Folsom Dam & Lake – American River Basin WY 2024

Figure 14 is a graph that compares the flow, storage, and precipitation over time for the American River Basin.

## Isobath 04/01–04/30 (Mean Daily Temperature, Release, Storage, Unit Shutter Position/Load Percentage

MDT = Mean Daily Temperature (°F)
USP/LP = Unit Shutter Position/Load Percentage

| Date | MDT, Water, NFA | MDT, Water, ARP | MDT, Water, AFD[1] | MDT, Water, AFO | MDT, Water, AWP | MDT, Water, AWB | MDT, Air, CSU | Release (CFS) Nimbus | Storage (TAF) Folsom | USP/LP Unit 1 | USP/LP Unit 2 | USP/LP Unit 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mar | 48.1 | 47.1 | 50.9 | 51.4 | 51.9 | 51.8 | 54.7 | 655 | N/A | N/A | N/A | N/A |
| 04/01 | 48.6 | 47.7 | 52.0 | 53.1 | 53.9 | 54.0 | 58.3 | 4036 | 713 | A 50 | A 40 | A 10 |
| 04/02 | 50.0 | 47.9 | 51.6 | 53.4 | 54.4 | 54.7 | 61.9 | 4034 | 717 | A 56 | A 33 | A 11 |
| 04/03 | 51.8 | 48.6 | 51.0 | 53.3 | 54.3 | 54.7 | 57.9 | 4029 | 722 | A 57 | A 34 | A 10 |
| 04/04 | 51.1 | 47.3 | 50.5 | 52.5 | 52.7 | 52.4 | 44.8 | 4072 | 730 | A 56 | A 32 | A 13 |
| 04/05 | 46.7 | 47.4 | 51.5 | 50.6 | 51.0 | 50.9 | 45.5 | 4066 | 737 | A 34 | A 12 | A 54 |
| 04/06 | 46.0 | 47.2 | 51.4 | 51.9 | 52.3 | 52.0 | 49.1 | 4018 | 741 | A 50 | A 36 | A 14 |
| 04/07 | 46.7 | 47.2 | 51.7 | 52.5 | 53.0 | 53.0 | 52.1 | 4057 | 744 | A 34 | B 54 | A 12 |
| 04/08 | 47.7 | 47.3 | 52.0 | 52.9 | 53.5 | 53.4 | 58.6 | 3983 | 748 | A 51 | A 33 | A 16 |
| 04/09 | 48.9 | 47.7 | N/A | 53.2 | 54.2 | 54.4 | 61.2 | 3889 | 751 | A 48 | A 40 | A 12 |
| 04/10 | 50.7 | 48.6 | 51.9 | 53.7 | 54.6 | 55.0 | 65.2 | 3944 | 755 | A 34.8 | A 56.2 | A 9 |
| 04/11 | 52.4 | 49.7 | 51.9 | 53.6 | 54.9 | 55.5 | 68.8 | 3955 | 759 | A 48.6 | A 51.8 | A 0 |
| 04/12 | 52.8 | 50.4 | 51.3 | 53.6 | 54.5 | 55.0 | 60.4 | 4066 | 764 | A 56.8 | A 34.2 | A 9 |
| 04/13 | 51.3 | 49.4 | 52.0 | 52.7 | 53.0 | 50.2 | 49.2 | 4098 | 772 | A 58.0 | A 33.0 | A 9 |
| 04/14 | 48.8 | 49.3 | 51.9 | 52.0 | 52.3 | 52.1 | 51.4 | 4020 | 777 | A 57.6 | A 34.0 | A 8 |
| 04/15 | 49.0 | 49.9 | 52.1 | 53.0 | 53.9 | 54.0 | 58.2 | 4082 | 781 | A 51.8 | A 37.6 | A 11 |
| 04/16 | 51.0 | 50.3 | 52.2 | 53.5 | 54.5 | 54.8 | 61.7 | 4163 | 783 | A 48.8 | A 41.4 | A 10 |
| 04/17 | 52.6 | 49.9 | 52.0 | 53.8 | 54.8 | 55.2 | 65.9 | 4159 | 789 | A 45.3 | A 45.8 | A 9 |
| 04/18 | 53.0 | 50.8 | 51.9 | 53.6 | 55.0 | 55.5 | 67.5 | 4085 | 794 | A 50.0 | A 30.9 | A 19 |
| 04/19 | 53.8 | 51.8 | 51.7 | 53.7 | 55.1 | 55.6 | 64.5 | 4002 | 798 | A 57.8 | A 31.3 | A 11 |
| 04/20 | 54.4 | 52.5 | 52.5 | 53.8 | 55.1 | 55.7 | 64.3 | 3974 | 803 | A 49.0 | A 13.8 | A 37 |
| 04/21 | 54.7 | 52.9 | 52.0 | 54.4 | 55.6 | 56.1 | 68.7 | 3972 | 809 | A 44.0 | A 36.1 | A 20 |
| 04/22 | 54.7 | 52.6 | 51.9 | 54.0 | 55.4 | 56.1 | 69.0 | 4539 | 816 | A 53.5 | A 15.3 | A 31 |
| 04/23 | 53.7 | 51.9 | 51.9 | 53.6 | 54.2 | 54.5 | 59.7 | 5012 | 822 | A 38.5 | A 38.4 | A 23 |
| 04/24 | 52.5 | 51.8 | 52.1 | 53.2 | 54.0 | 54.1 | 60.4 | 5027 | 827 | A 37.6 | A 24.8 | A 38 |
| 04/25 | 52.7 | 52.0 | 51.9 | 53.4 | 54.1 | 54.3 | 58.2 | 5013 | 831 | A 37.8 | A 38.0 | A 24 |
| 04/26 | 52.6 | 51.6 | 52.6 | 53.3 | 54.2 | 54.5 | 59.1 | 4653 | 835 | A 37.5 | A 37.2 | A 25 |
| 04/27 | 51.7 | 51.9 | 53.3 | 53.9 | 54.8 | 54.9 | 59.7 | 4158 | 839 | A 40.5 | A 40.1 | A 19 |
| 04/28 | 52.3 | 52.1 | 52.3 | 54.9 | 56.1 | 56.4 | 62.6 | 3930 | 843 | A 42.4 | A 41.3 | A 16 |
| 04/29 | 53.3 | 51.8 | 53.3 | 54.6 | 55.6 | 56.2 | 62.9 | 3914 | 845 | A 43.7 | A 43.8 | A 13 |
| 04/30 | 53.1 | 51.8 | 53.0 | 55.0 | 55.9 | 56.2 | 63.4 | 3912 | 849 | A 53.2 | A 36.4 | A 10 |
| 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[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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Apr** | **51.3** | **50.0** | **52.0** | **53.4** | **54.2** | **54.5** | **59.7** | **783** | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | Total | AF | 247659 | 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

**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

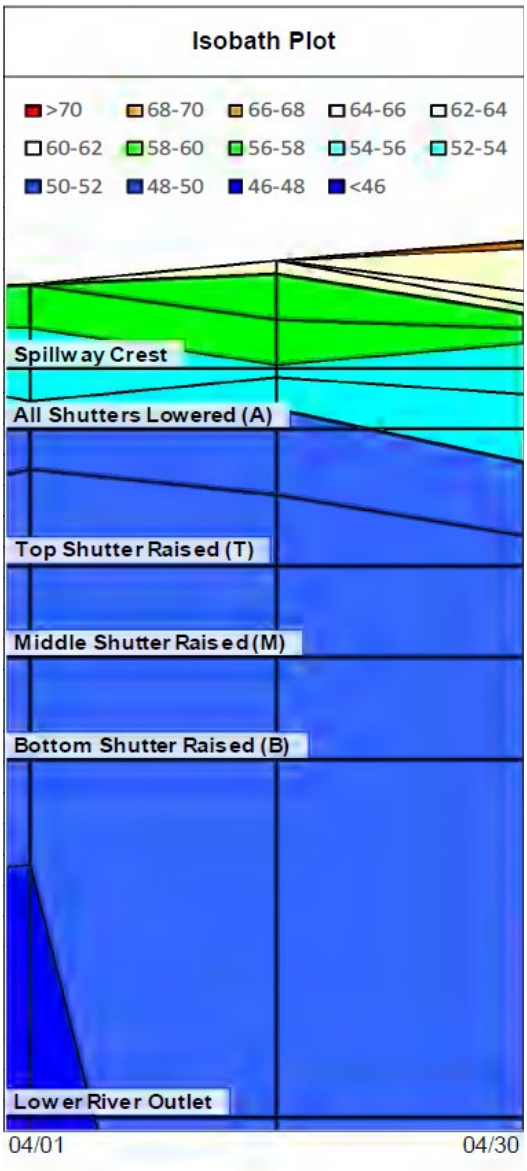


Figure 15. Isobath Plot 4/01-4/30

Figure 15 is an Isobath Plot for the month of April showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet

## Isobath 05/01–05/31 (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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apr | 51.3 | 50.0 | 52.0 | 53.4 | 54.2 | 54.5 | 59.7 | 783 | N/A | N/A | N/A | N/A |
| 05/01 | 52.7 | 52.0 | 53.8 | 55.1 | 56.0 | 56.3 | 66.0 | 3916 | 852 | A 45 | A 40 | A 15 |
| 05/02 | 53.0 | 51.7 | 52.7 | 55.2 | 56.2 | 56.7 | 68.8 | 3955 | 855 | A 11 | A 31 | A 58 |
| 05/03 | 53.7 | 52.1 | 52.5 | 54.6 | 56.1 | 56.8 | 67.6 | 4048 | 858 | A 49 | A 11 | A 40 |
| 05/04 | 52.4 | 50.7 | 52.4 | 54.1 | 54.4 | 54.4 | 53.6 | 3959 | 863 | A 57 | A 34 | A 9 |
| 05/05 | 49.8 | 51.5 | 52.9 | 53.1 | 53.9 | 54.0 | 52.8 | 3968 | 869 | A 51 | A 37 | A 12 |
| 05/06 | 49.7 | 51.0 | 52.8 | 53.9 | 54.9 | 55.0 | 56.5 | 3967 | 871 | A 37 | A 36 | A 27 |
| 05/07 | 51.2 | 50.5 | 53.5 | 54.9 | 56.0 | 56.1 | 61.0 | 3961 | 873 | A 44 | A 45 | A 11 |
| 05/08 | 53.0 | 50.8 | 54.5 | 55.4 | 56.3 | 56.5 | 67.0 | 3959 | 875 | A 48 | A 34 | A 18 |
| 05/09 | 54.4 | 51.4 | 53.6 | 55.9 | 57.0 | 57.5 | 72.5 | 3993 | 879 | A 57 | A 34 | A 9 |
| 05/10 | 54.5 | 52.0 | 53.4 | 55.9 | 57.4 | 58.2 | 74.2 | 3964 | 884 | A 56.4 | A 32.6 | A 11 |
| 05/11 | 54.7 | 52.5 | 53.2 | 55.5 | 57.2 | 57.9 | 74.3 | 3895 | 889 | A 49.9 | A 25.4 | A 25 |
| 05/12 | 55.6 | 53.2 | 53.2 | 55.4 | 56.9 | 57.6 | 69.7 | 3916 | 894 | A 43.5 | A 44.7 | A 12 |
| 05/13 | 56.8 | 53.7 | 53.2 | 55.4 | 56.8 | 57.5 | 67.7 | 3921 | 899 | A 45.3 | A 45.0 | A 10 |
| 05/14 | 57.0 | 54.2 | 53.2 | 55.5 | 56.8 | 57.6 | 68.7 | 4024 | 905 | A 57.3 | A 33.0 | A 8 |
| 05/15 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/17 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/18 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/19 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/20 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/21 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/22 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/23 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/24 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/25 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/26 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/27 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/28 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/29 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/30 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 05/31 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

| Date | MDT, Water, NFA | MDT, Water, ARP | MDT, Water, AFD[1] | MDT, Water, AFO | MDT, Water, AWP | MDT, Water, AWB | MDT, Air, CSU | Release (CFS) Nimbus | Storage (TAF) Folsom | USP/LP Unit 1 | USP/LP Unit 2 | USP/LP Unit 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **May** | **53.5** | **52.0** | **53.2** | **55.0** | **56.1** | **56.6** | **65.7** | **876** | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | Total | AF | 109975 | 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

**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

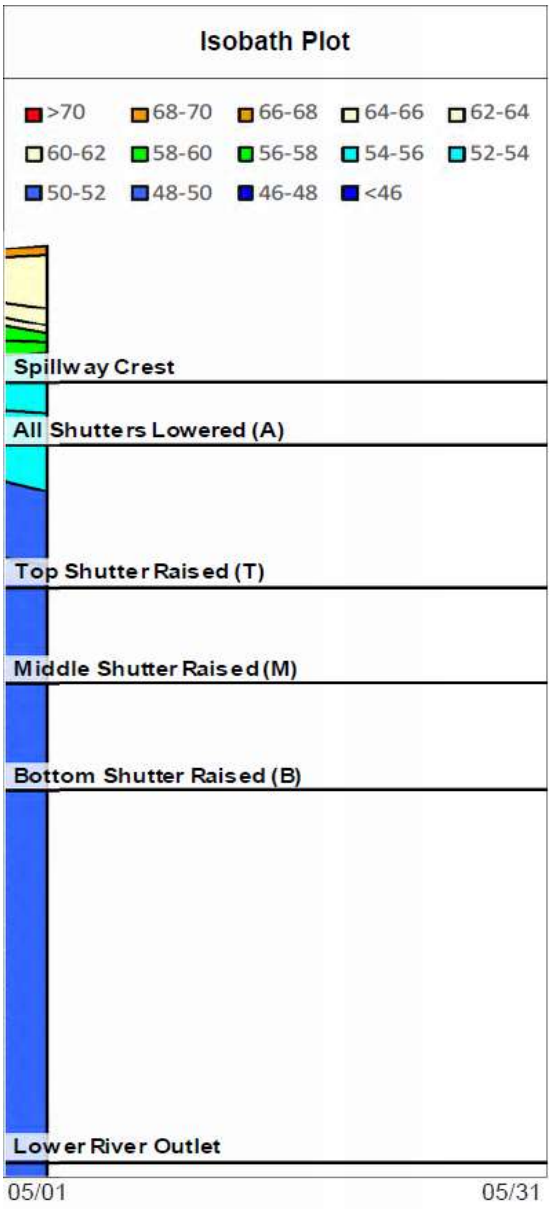


Figure 16. Isobath Plot 5/01-5/31

Figure 16 is an Isobath Plot for the month of May showing Spillway Crest, All Shutters Lowered (A), Top Shutter Raised (T), Middle Shutter Raised (M), Bottom Shutter Raised (B), and Lower River Outlet

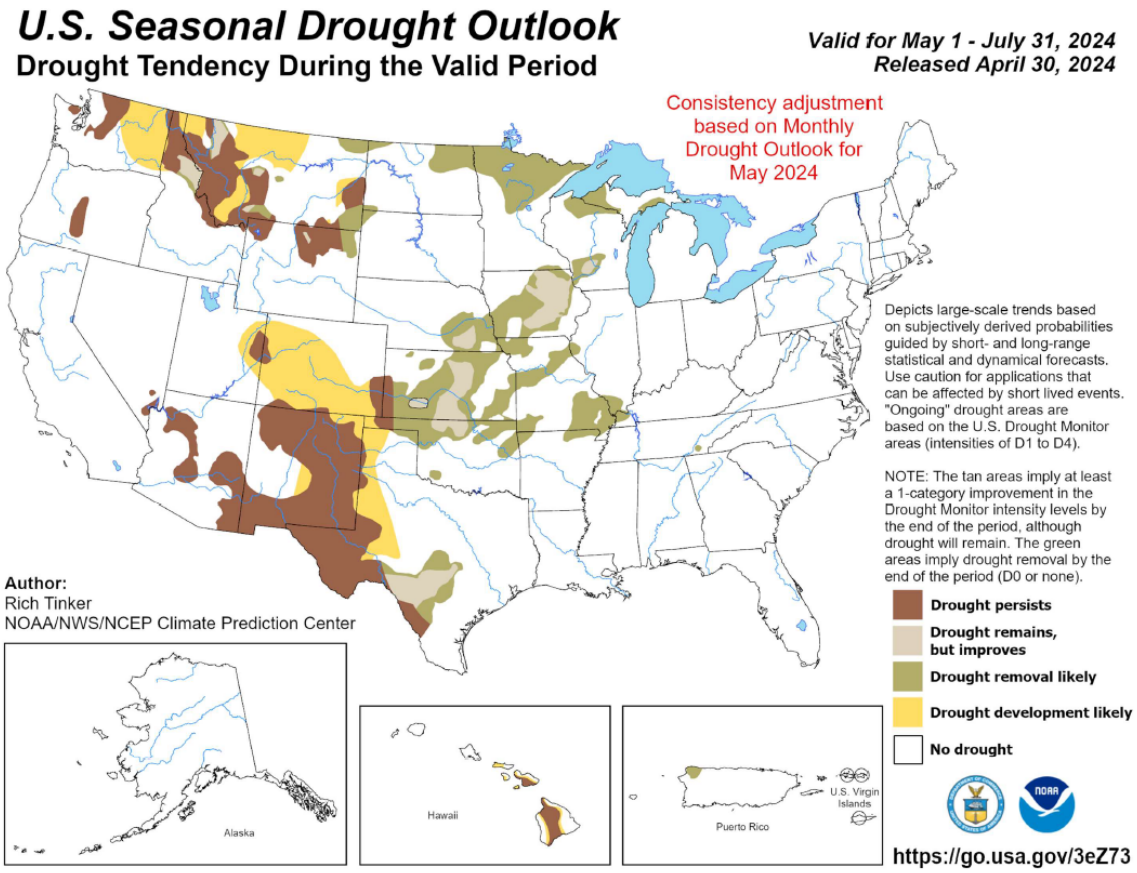


Figure 17. U.S. Seasonal Drought Outlook

Figure 17 is a map of the United States showing the seasonal drought tendency during the time period from May 1, 2024 to July 31, 2024. The map was issued on April 30, 2024.

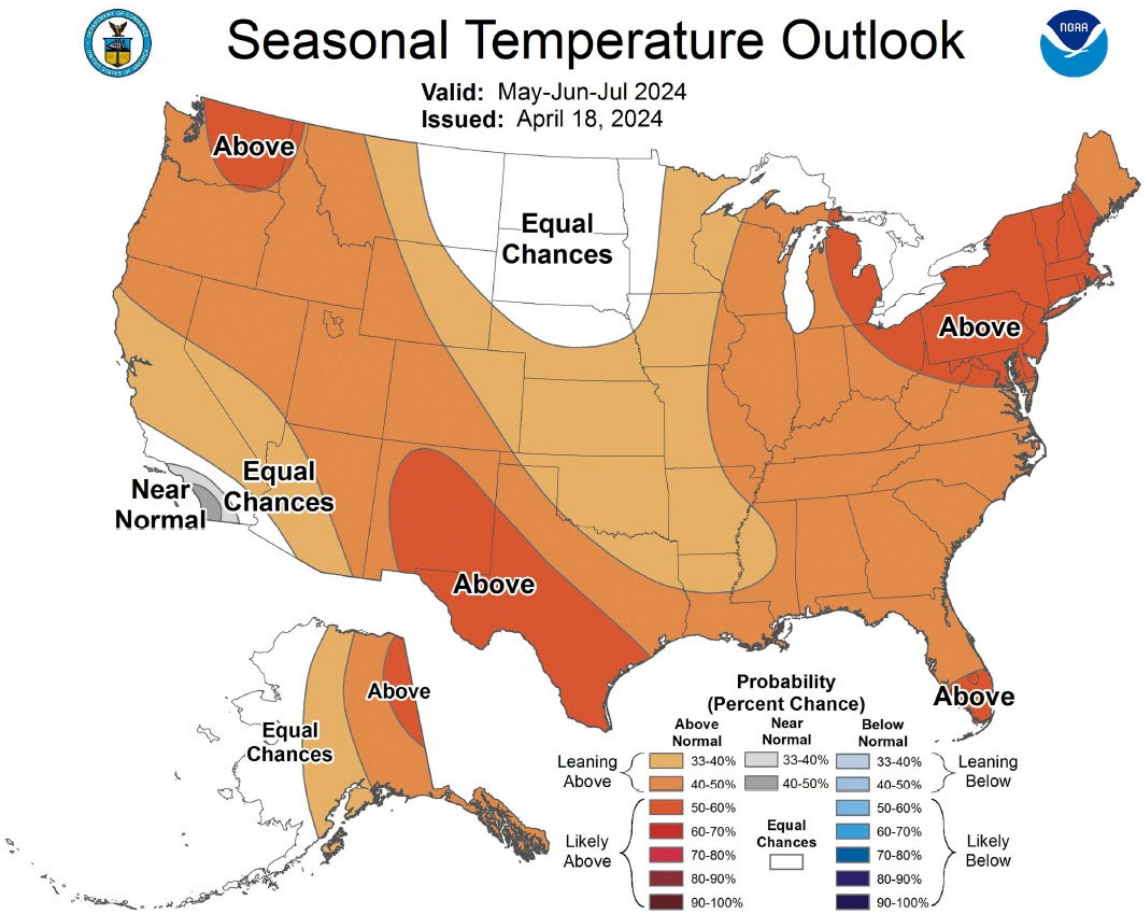


Figure 18. U.S. Seasonal Temperature Outlook

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

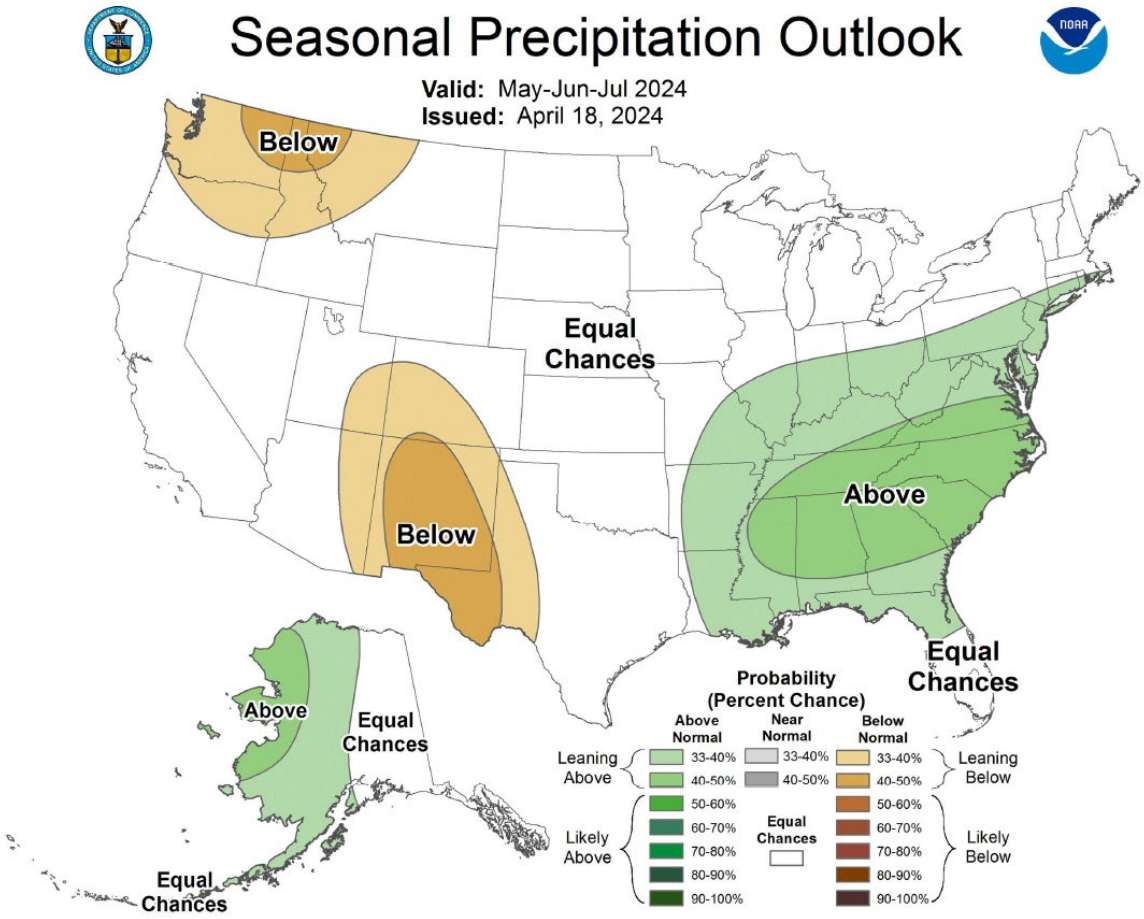


Figure 19. U.S. Seasonal Precipitation Outlook

Figure 19 is a map of the United States showing the seasonal precipitation outlook during the time period from May 2024 to July 2024. The map was issued on April 18, 2024.

# American River Daily Average Water and Air Temperatures

<=58=549 TAF
<=56=497 TAF
<=54=424 TAF

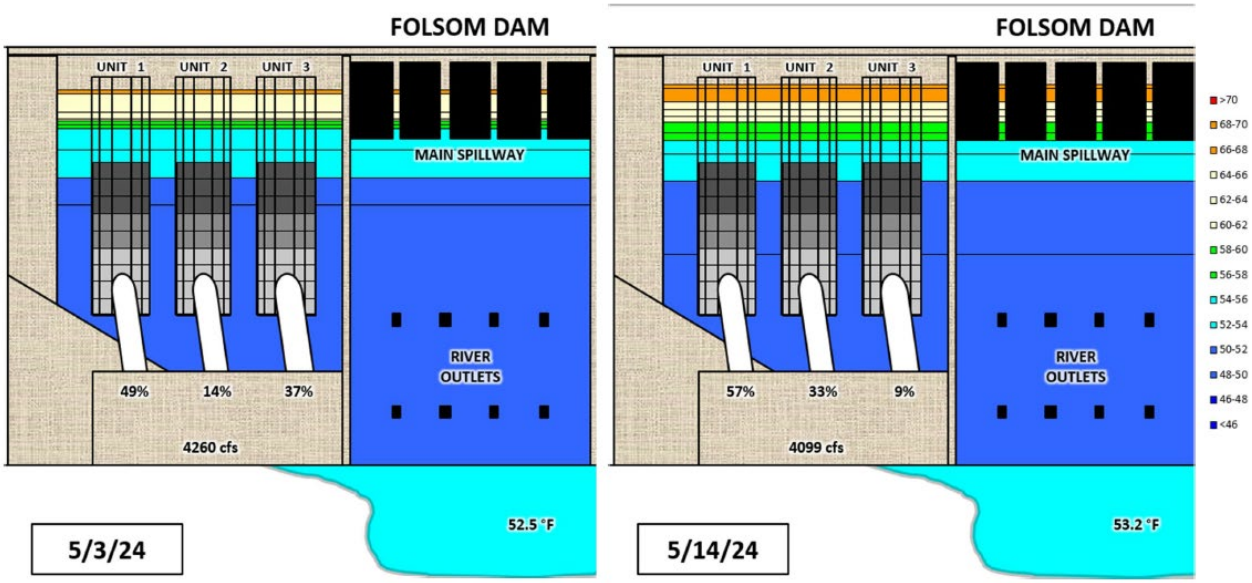


Figure 20. Folson Dam Daily Average Water and Air Temperatures

Figure 20 is a graphic showing Folsom Dam on 05/03/24 with a temperature of 52.5 ˚F and 05/14/24 with a temperature of 53.2 ˚F.

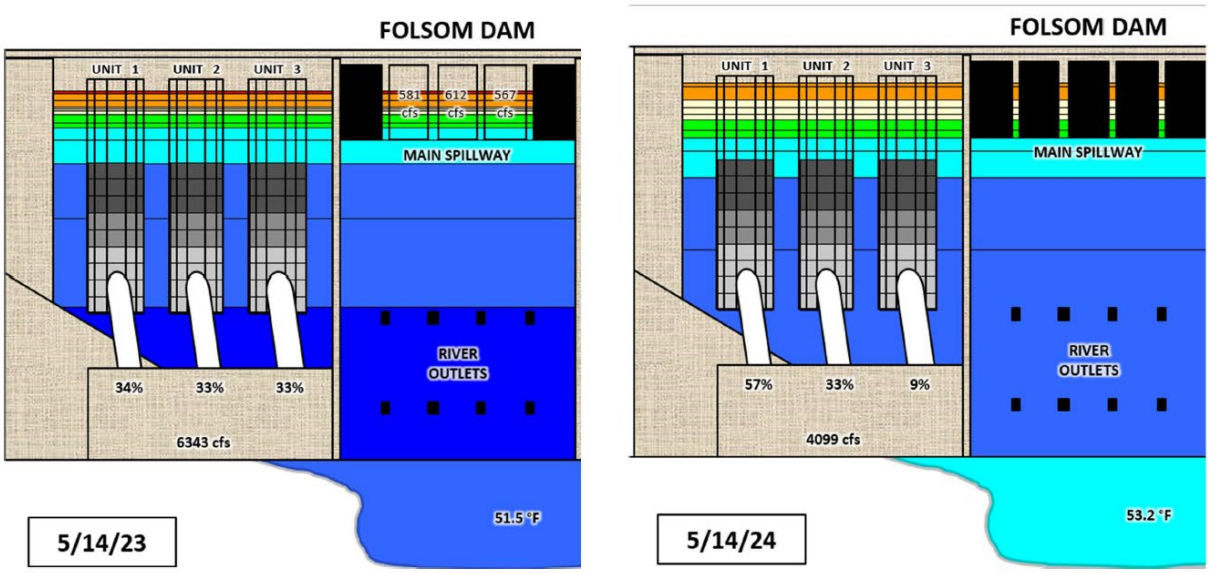


Figure 21. Folsom Dam Daily Average Water and Air Temperatures

Figure 21 is a graphic showing the Folsom Dam on 05/14/23 with a temperature of 51.5 ˚F and 05/14/24 with a temperature of 53.2 ˚F.

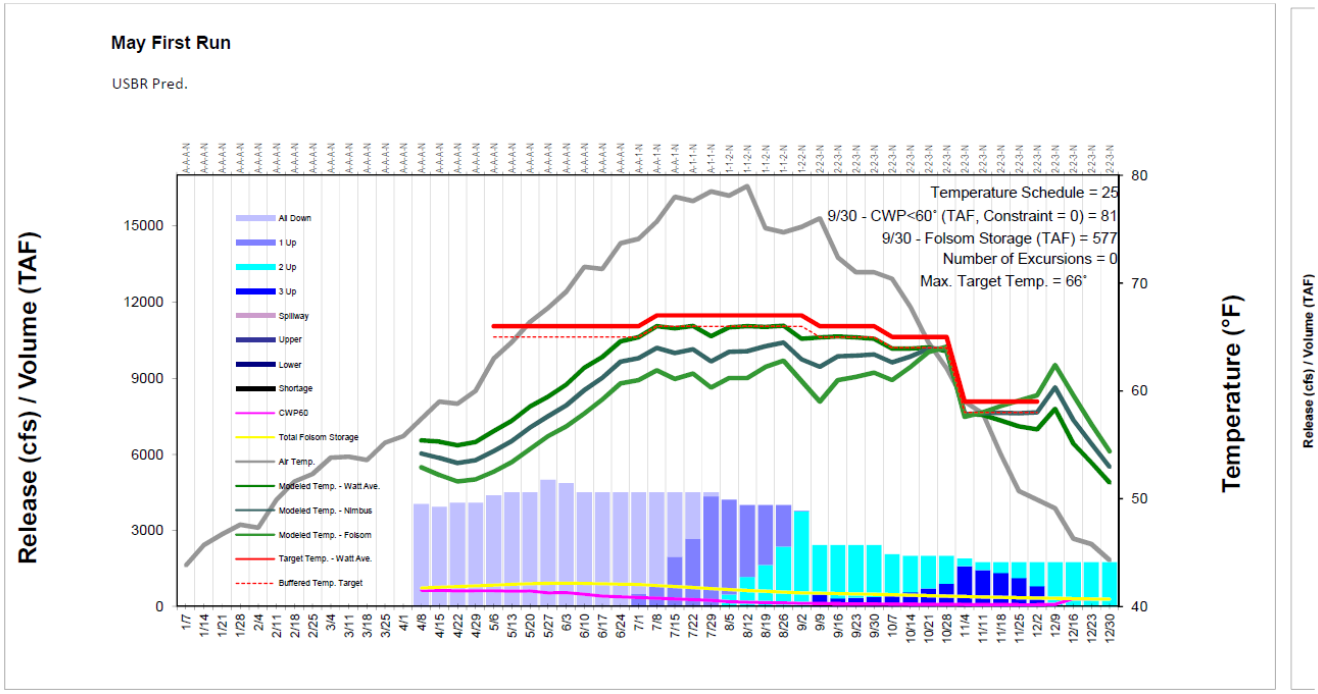


Figure 22. Temperature schedule at Watt Avenue

Figure 22 is a line graph of a temperature schedule showing release in cfs and volume in taf by temperature from 1/7/2024 until 12/30/2024 that shows a target temperature of 68 degrees until 10/14/2024 and 65 degrees at Watt Avenue.

# American River Summary Conditions – May (On-going)

### Release Management Conditions

- Releases are currently at 4,000 cfs
- Increase release to 5,000 cfs on Friday, May 17, 2024

### Temperature Management

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

Middle Shutters: Units 1, 2 – lowered

Bottom Shutters: Units 1, 2 – lowered

### Folsom Shutter Configuration and Changes

Next change will be for temperature management

# Storages

### May 90% Exceedance

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

| Facility | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|
| Folsom Storage | 966 | 910 | 661 | 432 | 388 | 336 | 290 | 261 |
| Folsom Elevation | 465 | 460 | 435 | 408 | 401 | 393 | 385 | 380 |

Monthly River Release (TAF/cfs)

| Facility | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|
| Folsom Storage | 246 | 202 | 338 | 315 | 122 | 92 | 89 | 92 |
| Folsom Elevation | 4000 | 3389 | 5506 | 5131 | 2052 | 1502 | 1500 | 1500 |

### May 50% Exceedance

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

| Facility | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|
| Folsom Storage | 966 | 931 | 746 | 590 | 526 | 483 | 471 | 476 |
| Folsom Elevation | 465 | 462 | 444 | 427 | 420 | 414 | 413 | 413 |

Monthly River Release (TAF/cfs)

| Facility | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|
| Folsom Storage | 246 | 226 | 282 | 251 | 149 | 123 | 105 | 108 |
| Folsom Elevation | 4000 | 3800 | 4586 | 4088 | 2507 | 2000 | 1772 | 1750 |

## American River Baseflow Table

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

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

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