



Sacramento River Temperature Task Group Meeting Packet

June 27, 2024

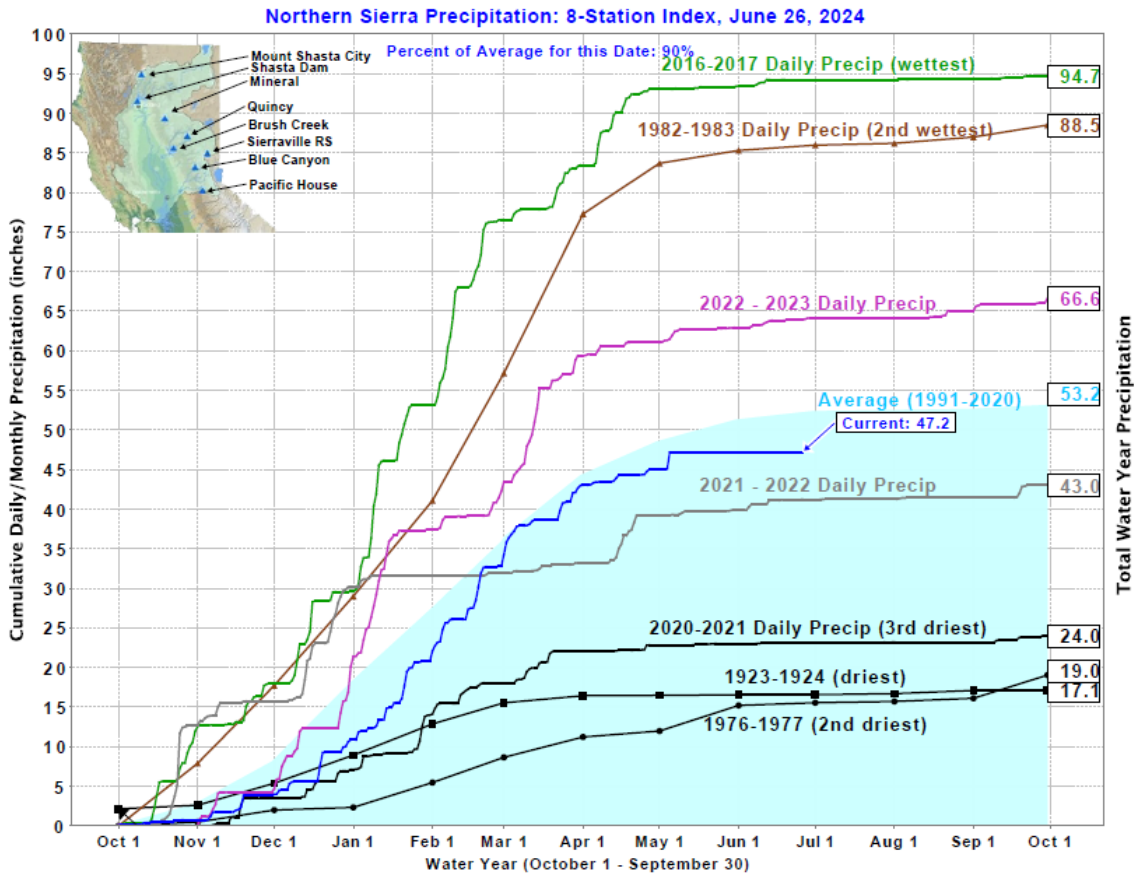


Figure 1: Northern Sierra Precipitation: 8-Station Index, June 26, 2024

This figure shows a line graph precipitation at the Northern Sierra 8-station Index. The graph includes the current cumulative daily and monthly precipitation, 47.2 (90% average for this date), in inches, average for 1991-2020 (53.2), daily precipitation for 2016-2017 (94.7 wettest), 1982-1983 (88.5 2nd wettest), 2018-2019 (70.7), 2021-2022 (43.0), 2019-2020 (31.7), 2020-2021 (24.0 3rd driest), 1976-1977 (19.0 2nd driest), and 1923-1924 (17.1 driest).

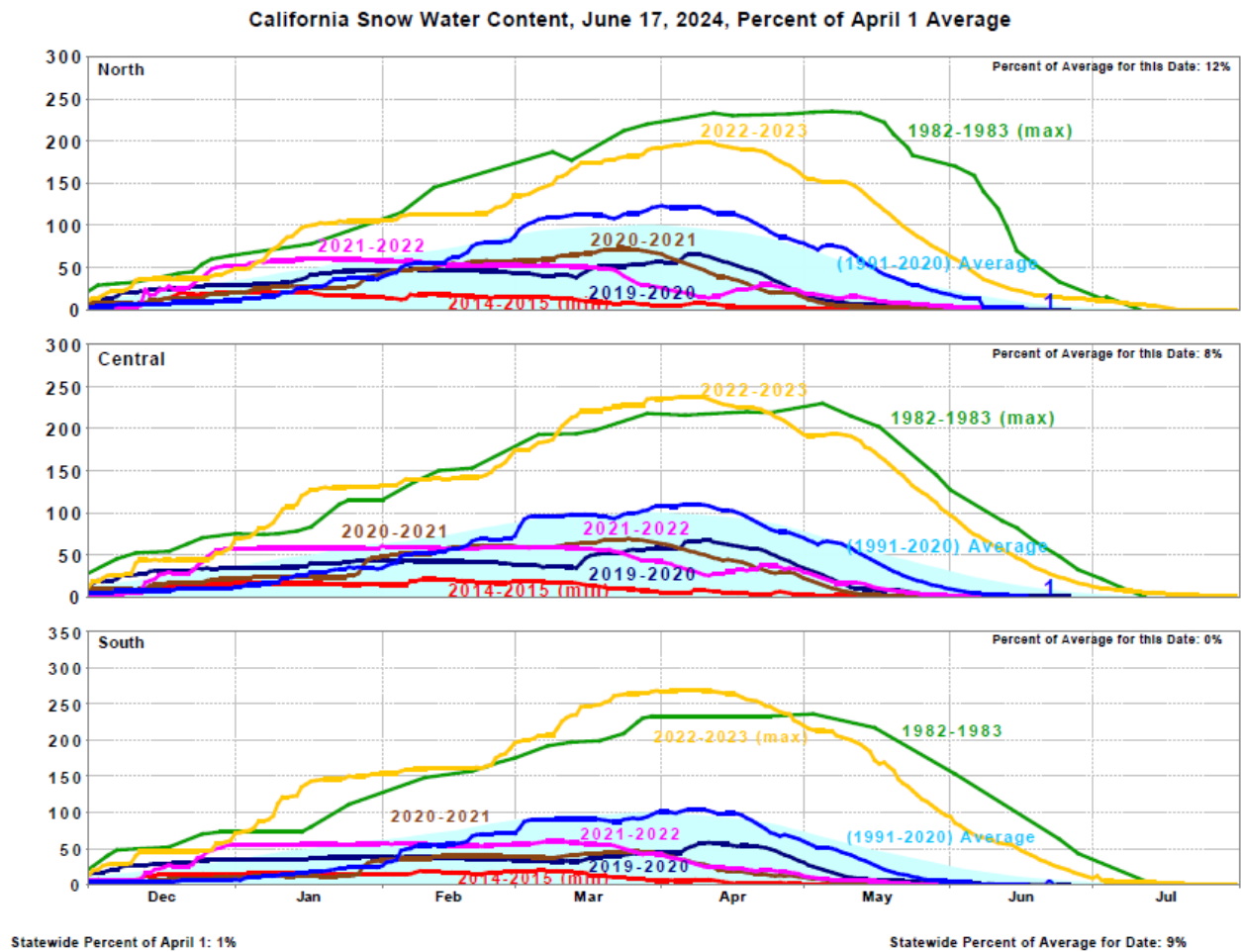


Figure 2: California Snow Water Content, May 22, 2024, Percent of April 1 Average

This figure is three line graphs showing the percent snow water content for North, Central, and Southern California December – July. The graph shows 12%, 8%, and 0% of current April 1 average for North, Central, and Southern California, respectively. The graph also shows 1991–2020 average, 1982–1983 (max), 2014–2015 (minimum), 2018–2019, 2019–2020, 2020–2021, and 2021–2022.

Daily Central Valley Project Water Supply Report

United States Department of the Interior

U.S. Bureau of Reclamation, Central Valley Project

California Daily CVP Water Supply Report

June 25, 2024

Run Date: June 26, 2024

Table 1: Reservoir Releases in Cubic Feet Per Second

Reservoir	Dam	WY 2023	WY 2024	15-Year Median
Trinity	Lewiston	452	1,395	629
Sacramento	Keswick	9,498	9,905	9,942
Feather	Oroville (SWP)	3,500	4,500	3,500
American	Nimbus	4,023	3,409	3,409
Stanislaus	Goodwin	1,501	2,501	1,253
San Joaquin	Friant	3,004	0	425

Table 2: Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15-Yr Avg	WY 2023	WY 2024	% O 15 Yr Avg
Trinity	2,448	1,668	1,420	2,063	124
Shasta	4,552	3,428	4,328	4,088	119
Folsom	977	767	927	902	118
New Melones	2,420	1,508	2,021	2,030	135
Fed. San Luis	966	493	962	679	138
Total North CVP	11,363	7,863	9,658	9,762	124
Millerton	521	398	438	0	0
Oroville (SWP)	3,538	2,560	3,523	3,419	134

Table 3: Accumulated Inflow for water Year to Date in Thousands of Acre-Feet

Reservoir	Current WY 2024	WY 1977	WY 1983	15-Yr Avg	% O 15 Yr Avg
Trinity	1,485	640	1,894	1,044	142
Shasta	5,043	2,892	8,191	4,245	119
Folsom	2,042	931	5,546	2,345	87
New Melones	832	N/A	1,930	908	92
Millerton	1,517	586	2,318	1,298	117

Table 4: Accumulated Precipitation for Water Year to Date in Inches

Reservoir	Current WY 2024	WY 1977	WY 1983	Avg (N Yrs)	% of Avg	Last 24 Hours
Trinity at Fish Hatchery	35.27	21.79	38.87	29.76 (64)	119	0.00
Sacramento at Shasta Dam	63.62	32.94	83.71	58.19 (69)	109	0.00
American at Blue Canyon	50.55	N/A	112.31	63.49 (50)	80	0.00
Stanislaus at New Melones	28.92	N/A	36.55	26.64 (47)	109	0.00
San Joaquin at Huntington LK	32.16	11.50	65.60	39.49 (51)	81	0.00

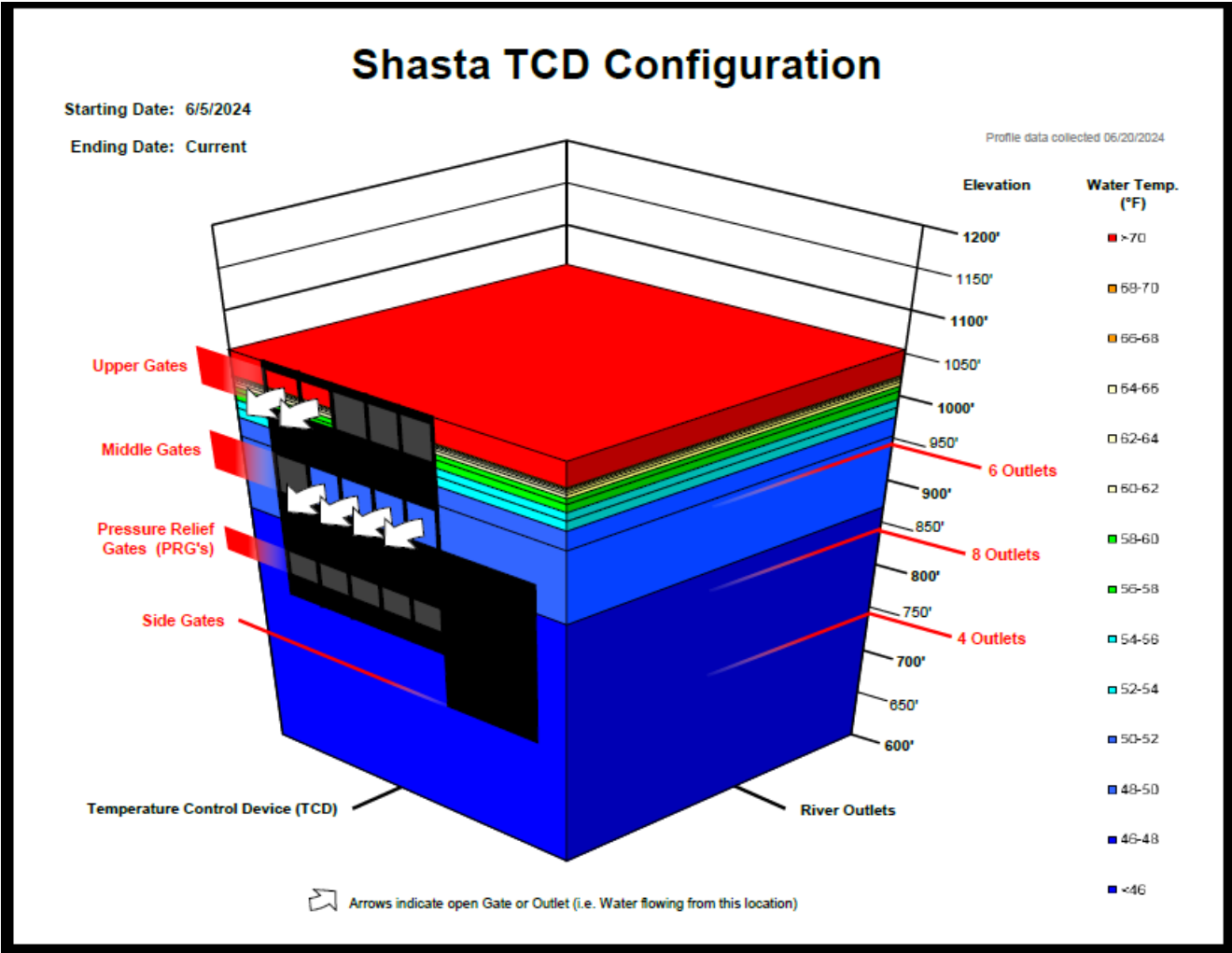


Figure 3: Shasta Temperature Control Device Configuration, June 5, 2024

This figure represents the Shasta Reservoir Temperature Control Device (TCD) configuration. It shows lake elevation between 600 and 1200 feet and volume of water temperature between 46 and 70 degrees Fahrenheit. The figure also show which Upper, Middle, Pressure Relief, and Side gates are open.

Table 5: Sacramento River Station Temperature Summary Report

Date	MDWT TCD ¹	MDWT SHD	MDWT SPP ¹	MDWT KWK	MDWT SAC ²	MDWT CCR	MDWT BSF	MDWT BND	MDWT RBD	MDWT IGO	MDWT LWS	MDWT DGC ³	MDWT NFH	MDR Shasta Genera- tion	MDR Spring Creek PP	MDR Keswick Total	MDAT RDD	MDAT BSF	MDAT RDB
May	52.5	51.2	49.8	52.9	53.4	54.1	56.2	57.8	59.4	53.5	48.2	49.7	52.8	8168	217	8387	72.1	67.3	68.9
06/01	50.4	49.5	52.5	51.4	52.1	52.7	55.3	57.7	59.9	55.6	48.1	51.1	53.4	8441	977	8729	78.0	74.7	76.5
06/02	50.5	49.2 A	52.6	51.3	51.9	52.6	54.9	57.1	59.3	55.7	48.4	51.0	53.1	6874	1124	8560	75.0	72.6	73.8
06/03	50.5	49.5 A	52.8	51.5	52.1	52.9	55.3	57.2	59.0	55.9	48.6	51.6	53.6	7794	1073	8576	76.5	75.9	74.0
06/04	50.7	49.7 A	52.7	51.6	52.3	53.2	55.6	57.7	59.7	56.8	48.8	52.0	53.8	7764	1419	8436	81.0	78.0	81.2
06/05	50.0	49.0 A	52.9	51.9	52.6	53.6	56.4	58.7	61.0	57.8	48.5	52.1	54.9	7574	1529	8490	90.0	83.3	85.2
06/06	50.2	49.1 A	53.1	51.7	52.6	53.6	56.5	59.2	61.6	57.9	48.5	52.3	55.1	6937	1628	8498	88.5	83.5	84.5
06/07	50.2	49.0	53.1	51.3	52.2	53.2	56.2	59.1	61.7 A	58.1	48.4	52.3	55.2	7497	1586	9267	87.5	82.3	82.2
06/08	50.3	49.0 A	53.2	51.3	52.2	53.2	56.2	59.0	61.5	57.9	48.5	52.4	55.1	7348	1094	8313	83.5	78.0	76.8
06/09	50.3	49.1 A	53.4	51.3	52.2	53.1	56.0	58.9	61.4	57.7	48.8	52.6	55.3	7002	1077	8408	83.0	77.9	76.5
06/10	50.2	49.1 A	53.5	51.4	52.2	53.1	55.9	58.6	61.0	57.8	B	B	B	7939	1138	8491	86.5	81.5	81.9
06/11	50.2	49.1	53.7	51.2	52.0	52.9	55.6	58.4	61.0	57.8	48.8	52.9	56.1	8252	1156	9013	88.5	84.1	85.0
06/12	50.2	49.2 A	53.7	51.1	52.0	52.9	55.5	58.1	60.5	58.1	48.8	52.9	56.0	8119	1016	8894	91.0	84.3	85.2
06/13	50.3	49.1 A	53.8	51.1	51.8	52.8	55.4	58.1	60.6	57.0	48.9	52.8	55.8	8319	1307	8857	85.0	79.0	78.0
06/14	50.3	49.1 A	54.0	51.3	51.9	52.8	55.3	57.7	60.2	54.4	48.8	52.4	55.2	8288	1047	8891	80.5	75.9	75.7
06/15	50.3	49.2 A	54.0	51.0	51.6	52.3	54.5	56.6	58.6	53.2	49.0	52.1	54.3	8518	904	8876	76.5	69.4	73.8
06/16	50.1	49.2 A	54.3	50.9	51.5	52.1	53.9	55.7	57.7	53.2	48.9	52.0	54.2	7562	1036	8895	75.5	72.8	75.1
06/17	50.2	49.0 A	54.3	50.9	51.5	52.2	54.0	55.5	57.2	53.3	49.2	52.0	54.1	7236	991	8916	73.5	68.3	70.7
06/18	49.8	49.1	54.1	50.5	51.2	52.0	54.1	55.8	57.6	54.1	48.8	52.3	54.9	8361	538	8999	76.0	72.1	73.0
06/19	49.9	49.4	54.4	50.8	51.4	52.2	54.0	55.7	57.6	55.2	48.5	52.0	54.7	8408	913	8786	76.0	70.9	71.6
06/20	50.0	49.5	54.5	50.8	51.4	52.3	54.1	56.0	58.0	55.5	48.4	52.2	55.1	8663	978	9406	80.0	73.6	73.0
06/21	50.0	49.4	54.5	50.9	51.6	52.5	54.6	56.5	58.5	56.5	48.5	52.7	56.1	9790	999	9912	85.5	79.9	79.2
06/22	50.1	49.4	54.6	51.1	51.7	52.7	54.8	56.9	59.2	57.1	48.6	53.3	57.2	9567	1282	9922	87.0	81.3	81.2

Date	MDWT TCD ¹	MDWT SHD	MDWT SPP ¹	MDWT KWK	MDWT SAC ²	MDWT CCR	MDWT BSF	MDWT BND	MDWT RBD	MDWT IGO	MDWT LWS	MDWT DGC ³	MDWT NFH	MDR Shasta Genera- tion	MDR Spring Creek PP	MDR Keswick Total	MDAT RDD	MDAT BSF	MDAT RDB
06/23	50.2	49.6	54.6	51.1	51.9	52.8	55.0	57.2	59.5	57.1	48.8	53.5	57.4	9703	960	9975	86.5	81.1	82.6
06/24	50.0	49.4	54.8	51.2	51.9	52.8	54.9	57.0	59.3	57.5	49.1	53.9	57.8	8821	1021	9969	84.5	78.7	79.3
06/25	50.1	49.5	54.7	51.1	51.7	52.5	54.3	56.4	58.5	56.8	49.2	53.3	B	9104	1030	9905	81.5	75.8	77.4
Jun	50.2	49.3	53.7	51.2	51.9	52.8	55.1	57.4	59.6	56.3	48.7	52.4	55.2	8155	1113	8999	N/A	82.3	77.4
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 CFS	203881	27823	224984	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	Total AF	404390	55186	446247	N/A	N/A	N/A

Legend

- A = 1-9 hours of data missing (Average includes estimations)
- B = 10 or more hours of data missing (Average not calculated)
- C = Station out of service
- D = Record high air temperature
- E = Record low air temperature
- MDWT = Mean Daily Water Temperature (Fahrenheit)
- MDR = Mean Daily Release (CFS)
- MDAT = Mean Daily Air Temperatures (Fahrenheit)

Notes

- 1 Temperatures are weighted averages based on individual penstock flow and temperature
- X Highlighted cells in the TCD column indicate a TCD change was made on that day
- 2 Current Sacramento River control point (see page 4 for more details)
- 3 Data is currently being collected locally and periodically downloaded.
Once downloaded and certified by USGS, missing data will be added.

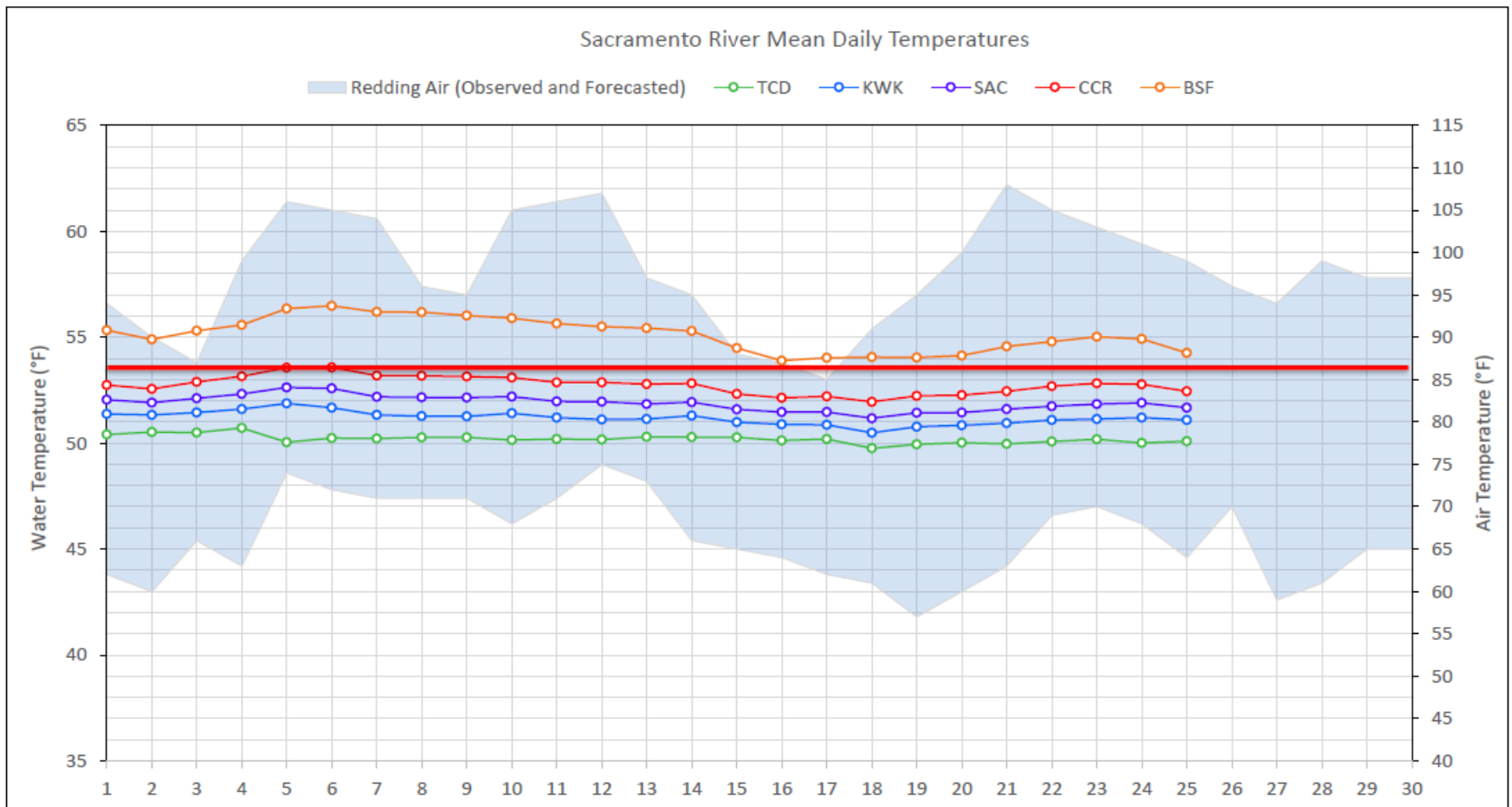


Figure 4: Sacramento River Mean Daily Temperatures

This figure shows mean Sacramento River daily temperatures in degrees Fahrenheit at Shasta Power Plant and various stations 0.8, 4.8, 9.7, and 25 miles downstream of Keswick Dam for the past 21 days. It also includes a shaded area depicting observed and forecasted air temperatures in degrees Fahrenheit in Redding California.

Table 6: Station Details

Code	Body of Water	Location ¹
TCD	N/A	Shasta Power Plant
SHD	Sacramento River	0.3 miles downstream of Shasta Power Plant
SPP	N/A	Spring Creek Power Plant
KWK	Sacramento River	0.8 miles downstream of Keswick Dam
SAC	Sacramento River	4.8 miles downstream of Keswick Dam
CCR	Sacramento River	9.7 miles downstream of Keswick Dam
BSF	Sacramento River	25 miles downstream of Keswick Dam
JLF	Sacramento River	34 miles downstream of Keswick Dam
BND	Sacramento River	41 miles downstream of Keswick Dam
RDB	Sacramento River	58 miles downstream of Keswick Dam
IGO	Clear Creek	7.3 miles downstream of Whiskeytown Dam

Table 7: Water Right Temperature Control Points

River	Point	Temp (°F)	Begin Date	End Date
Sacramento	CCR	53.5	05/24/2024	TBD

Notes: ¹ Distances are approximate

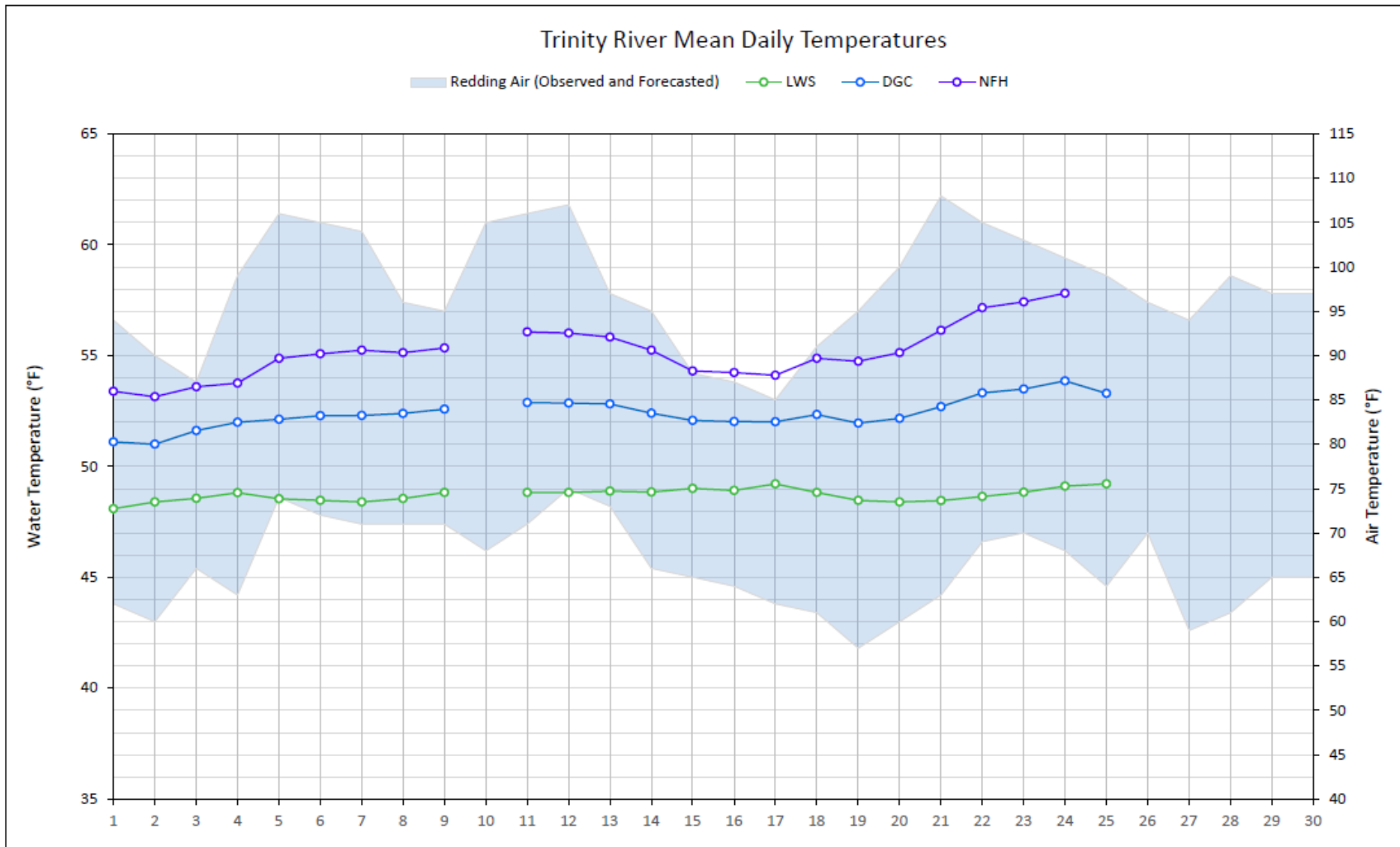


Figure 5: Trinity River Mean Daily Temperatures

This figure shows the mean Trinity River daily temperatures in degrees Fahrenheit at stations 1.1, 19, and 38 miles downstream of Lewiston Dam for the past 21 days. It also includes a shaded area depicting observed and forecasted air temperatures in degrees Fahrenheit in Redding California.

Table 8: Station Details

Code	Body of Water	Location ¹
LWS	Trinity River	1.1 miles downstream of Lewiston Dam
DGC	Trinity River	19 miles downstream of Lewiston Dam
NEH	Trinity River	38 miles downstream of Lewiston Dam

Table 9: Water Right Temperature Control Points

River	Point	Temp (°F)	Begin Date	End Date
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A

Notes: ¹ Distances are approximate

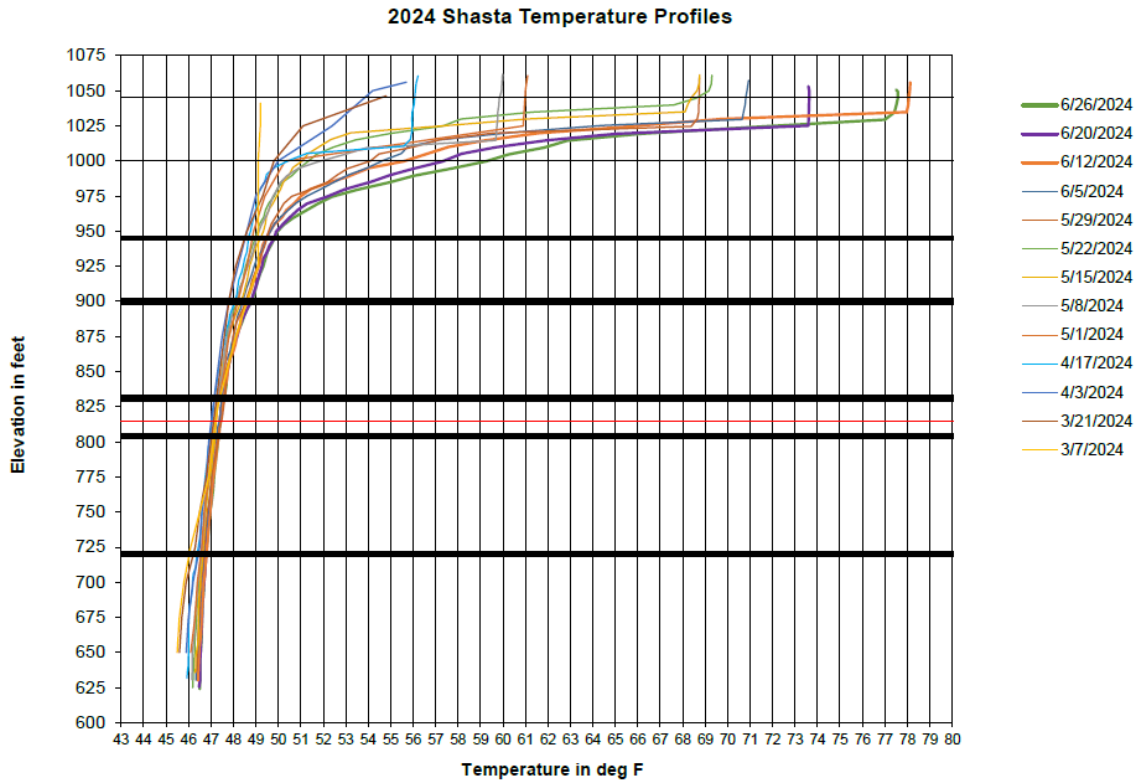


Figure 6: 2024 Shasta Temperature Profiles

This figure is a multiple line graph showing Shasta Lake temperature profiles from 03/07-06/26 with lake elevation 625-1075' and lake temperatures from 46-78 degrees Fahrenheit.

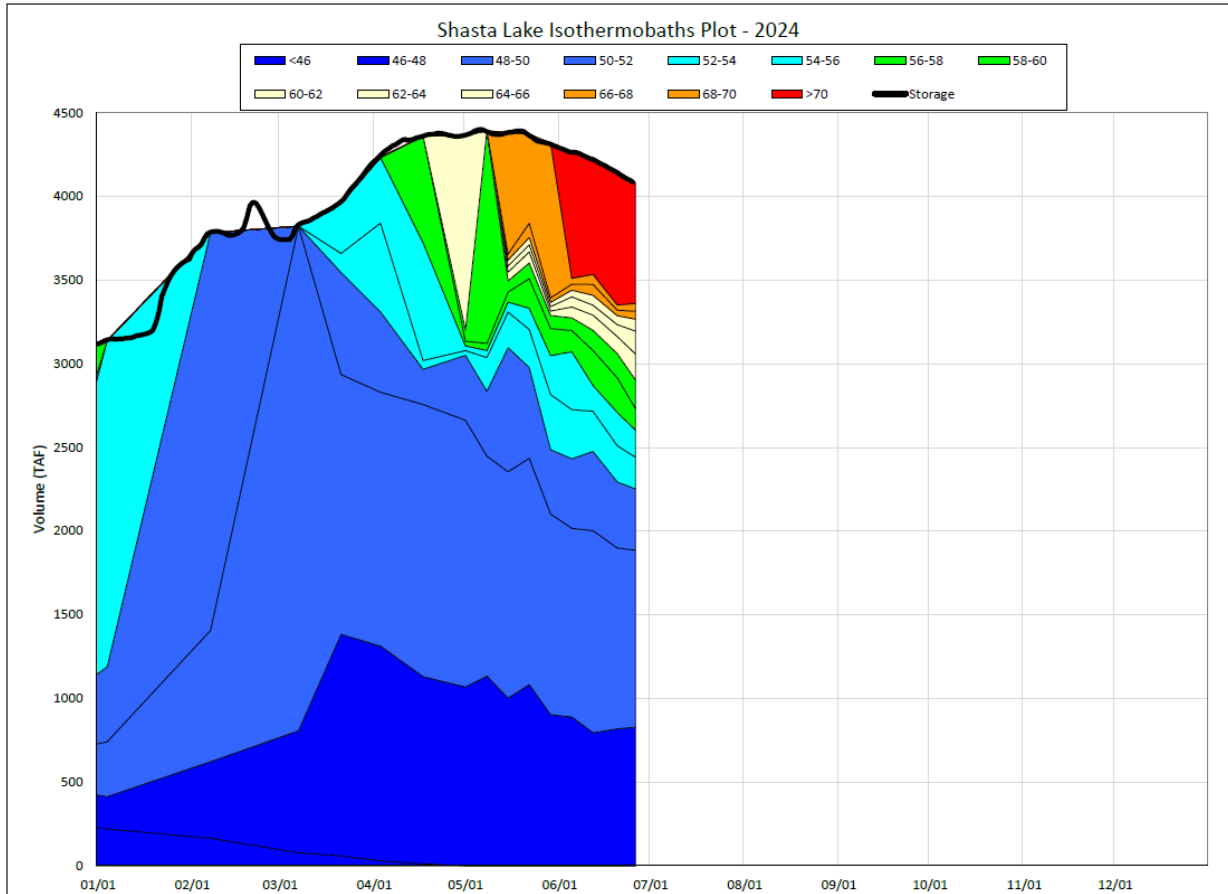


Figure 7: Shasta Lake Isothermobaths Plot - 2024

This figure is a chart showing Shasta Lake Isothermobaths with volume in Thousand Acre-Feet from 0-4500; with dates 01/01-12/01.

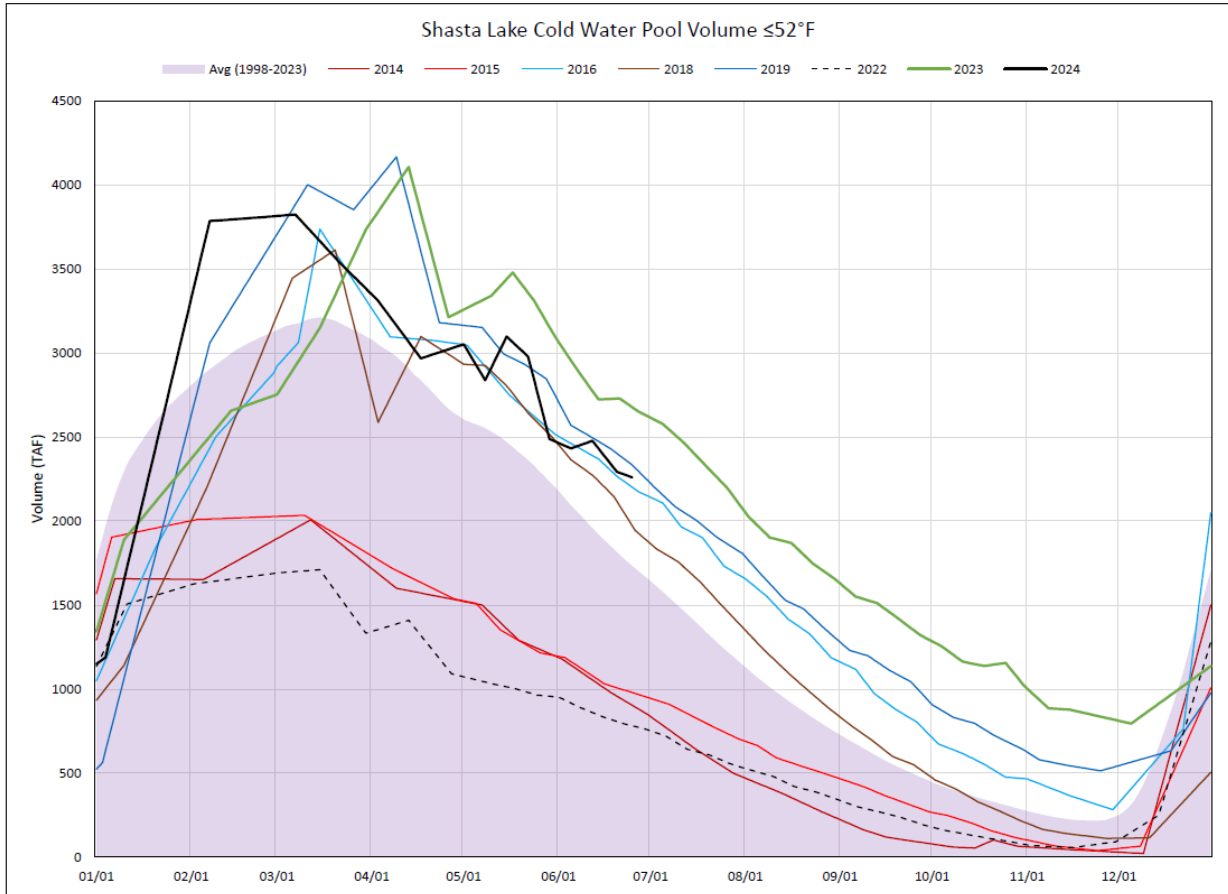


Figure 8: Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$

This figure is a line graph showing Shasta Lake Cold Water Pool Volume equal to or less than 52 degrees Fahrenheit from 01/01 to 12/01.

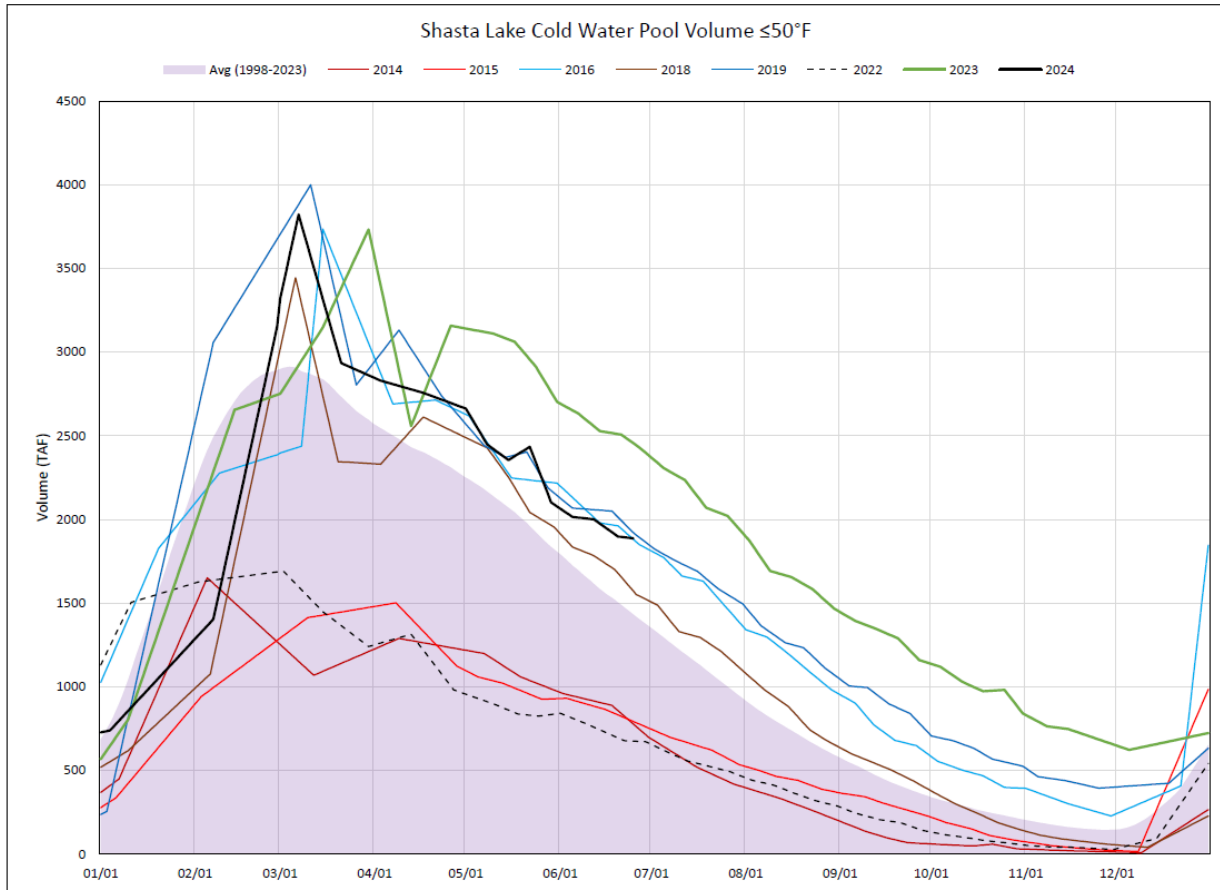


Figure 9: Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$

This figure is a line graph showing Shasta Lake Cold Water Pool Volume equal to or less than 50 degrees Fahrenheit from 01/01 to 12/01.

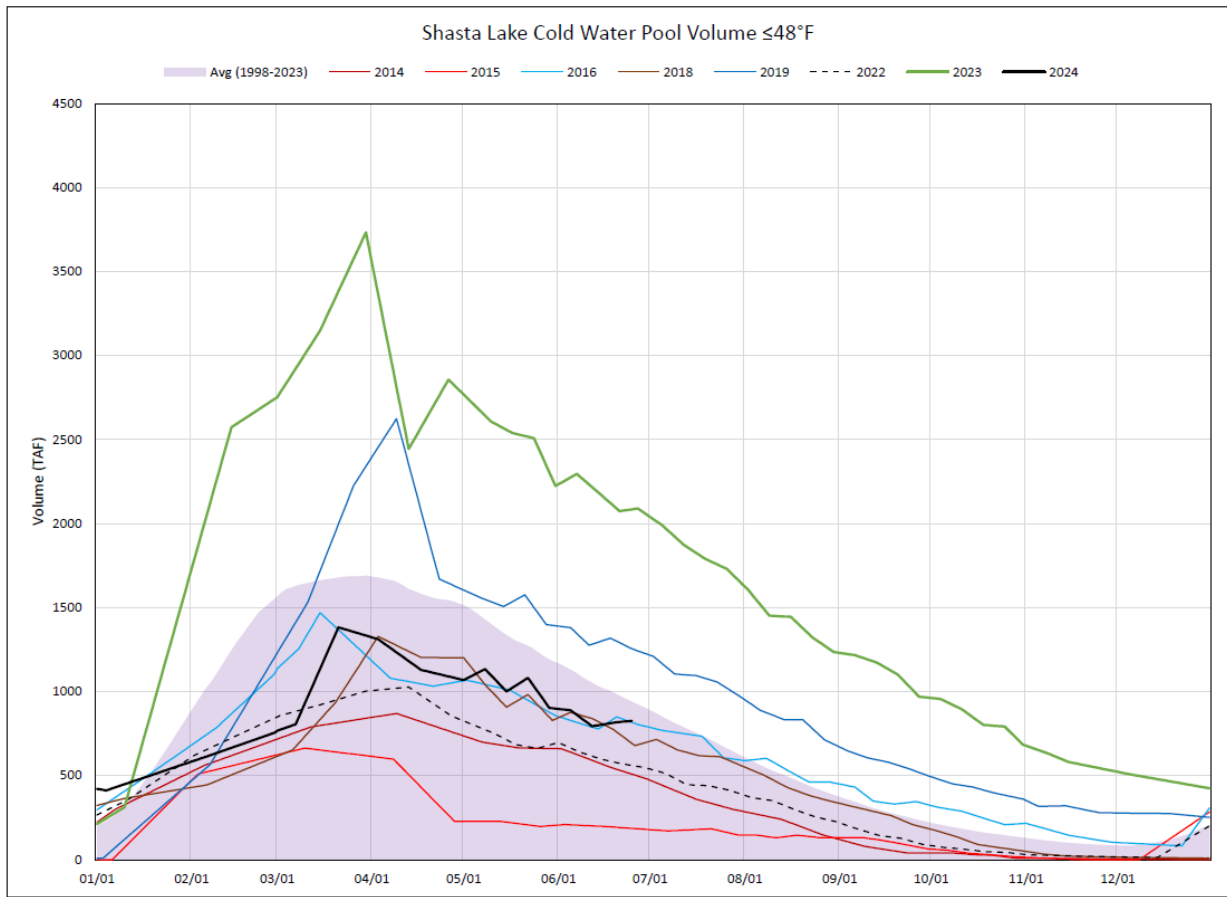


Figure 10: Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

This figure is a line graph showing Shasta Lake Cold Water Pool Volume equal to or less than 48 degrees Fahrenheit from 01/01 to 12/01.

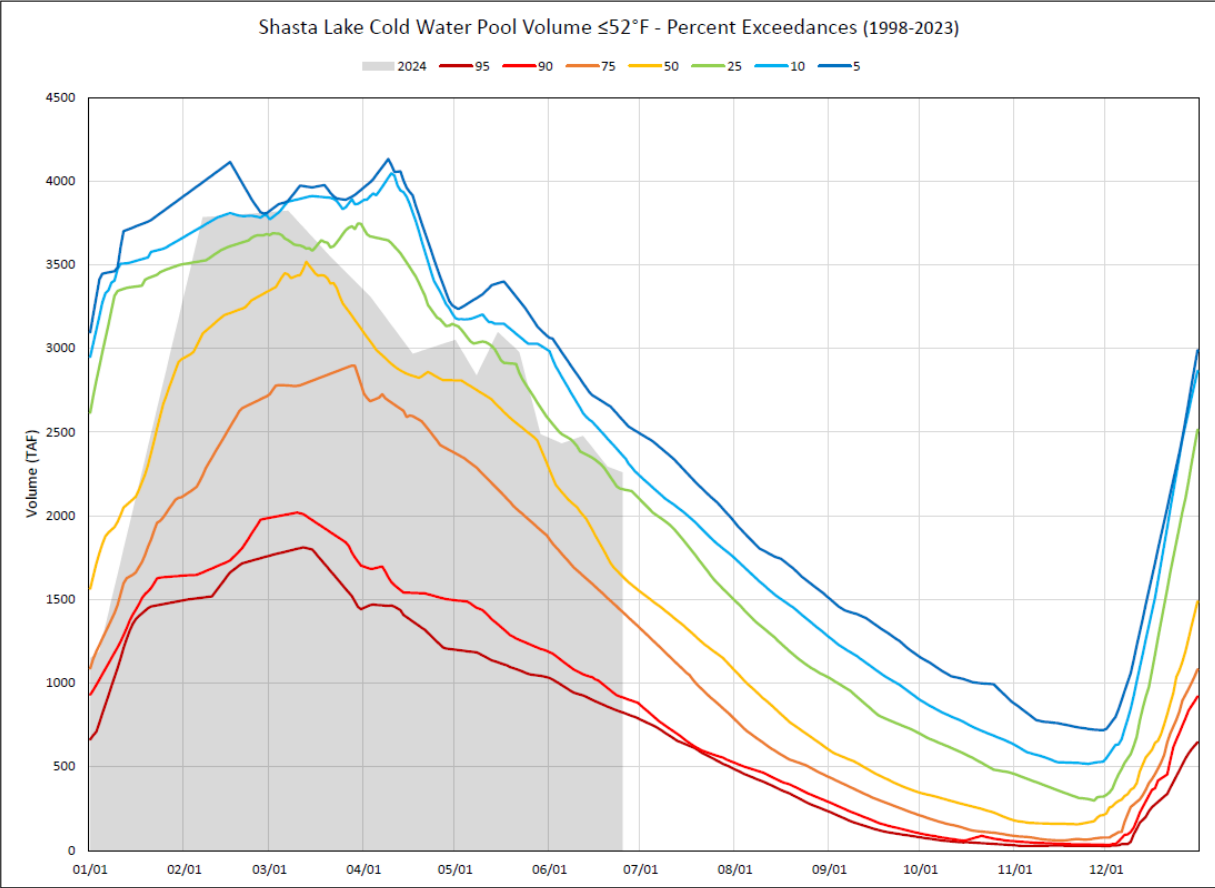


Figure 11: Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

This figure is a line graph showing Shasta Lake Cold Water Pool Volume less than or equal to 52 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

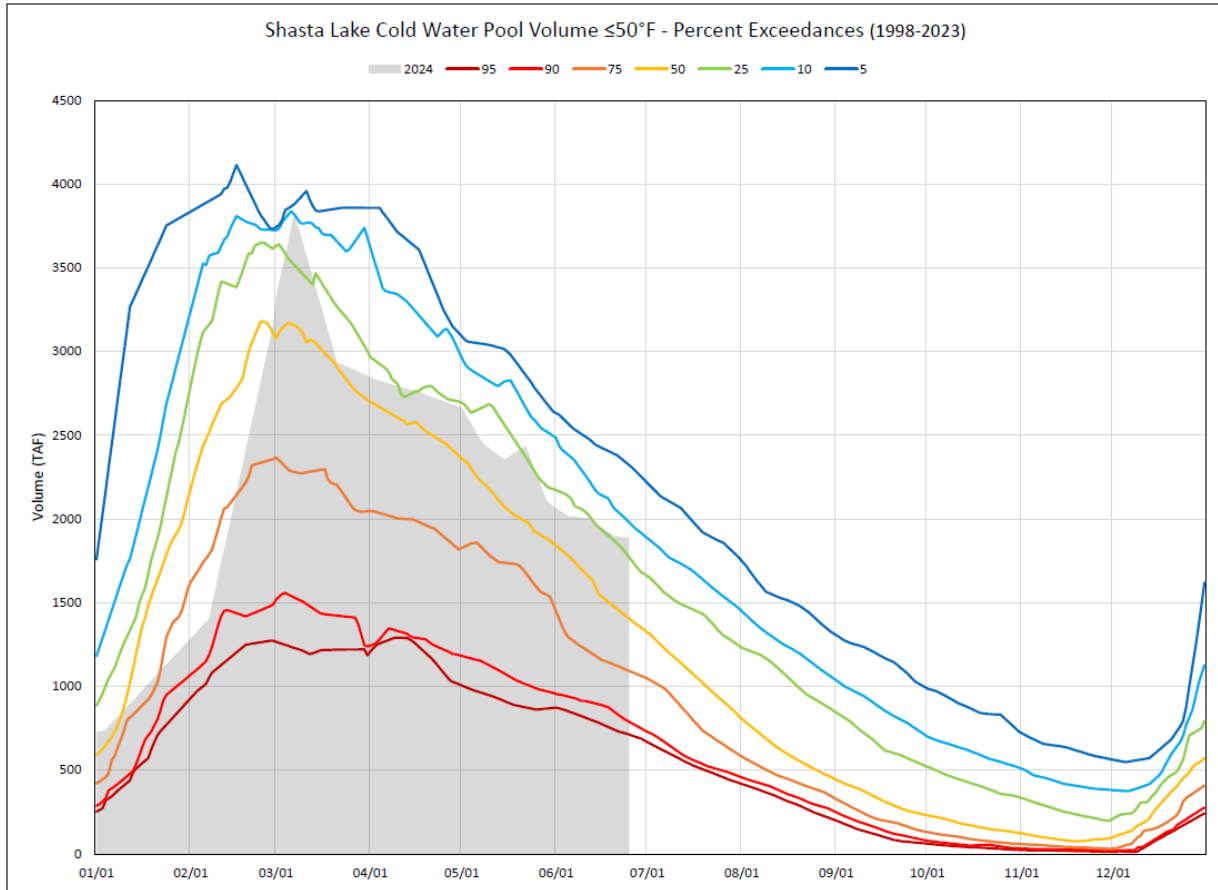


Figure 12: Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

This figure is a line graph showing Shasta Lake Cold Water Pool Volume less than or equal to 50 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

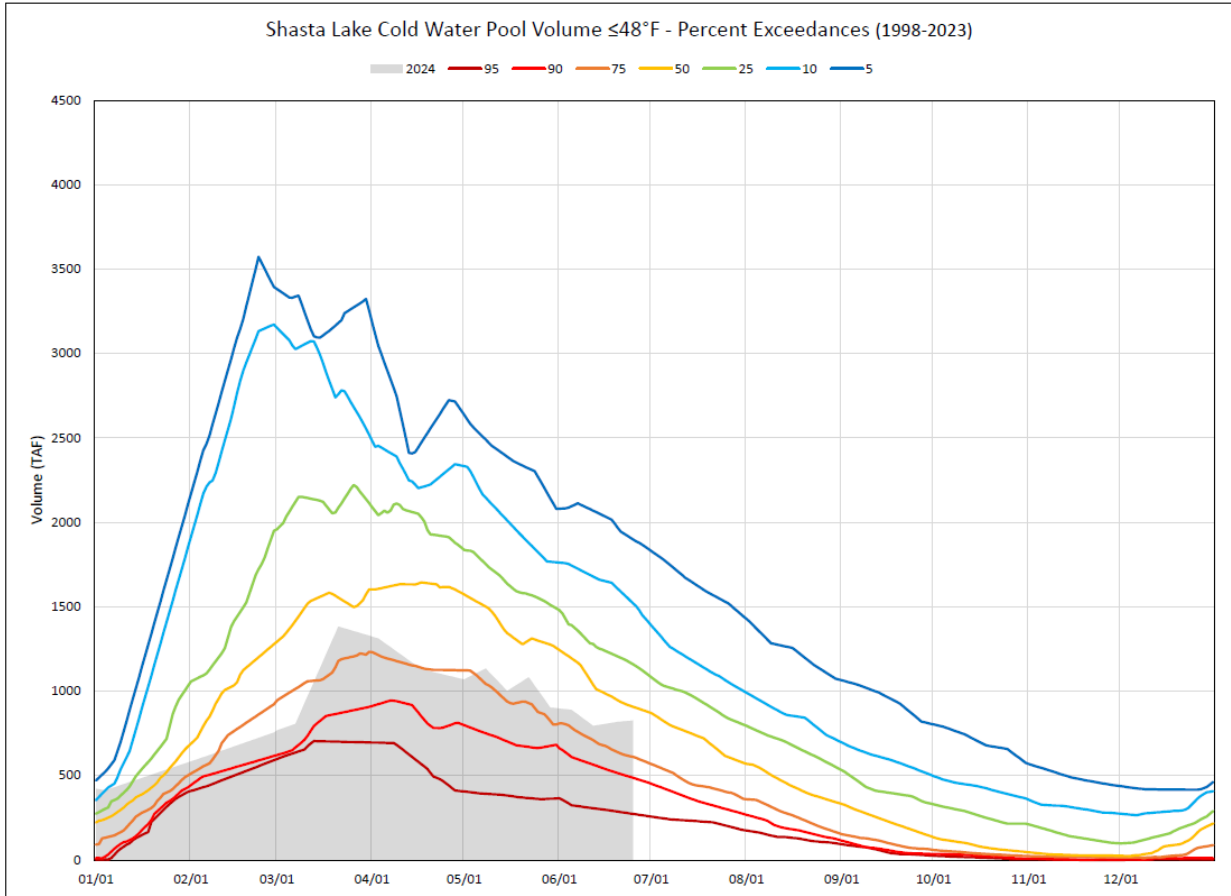


Figure 13: Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

This figure is a line graph showing Shasta Lake Cold Water Pool Volume less than or equal to 48 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

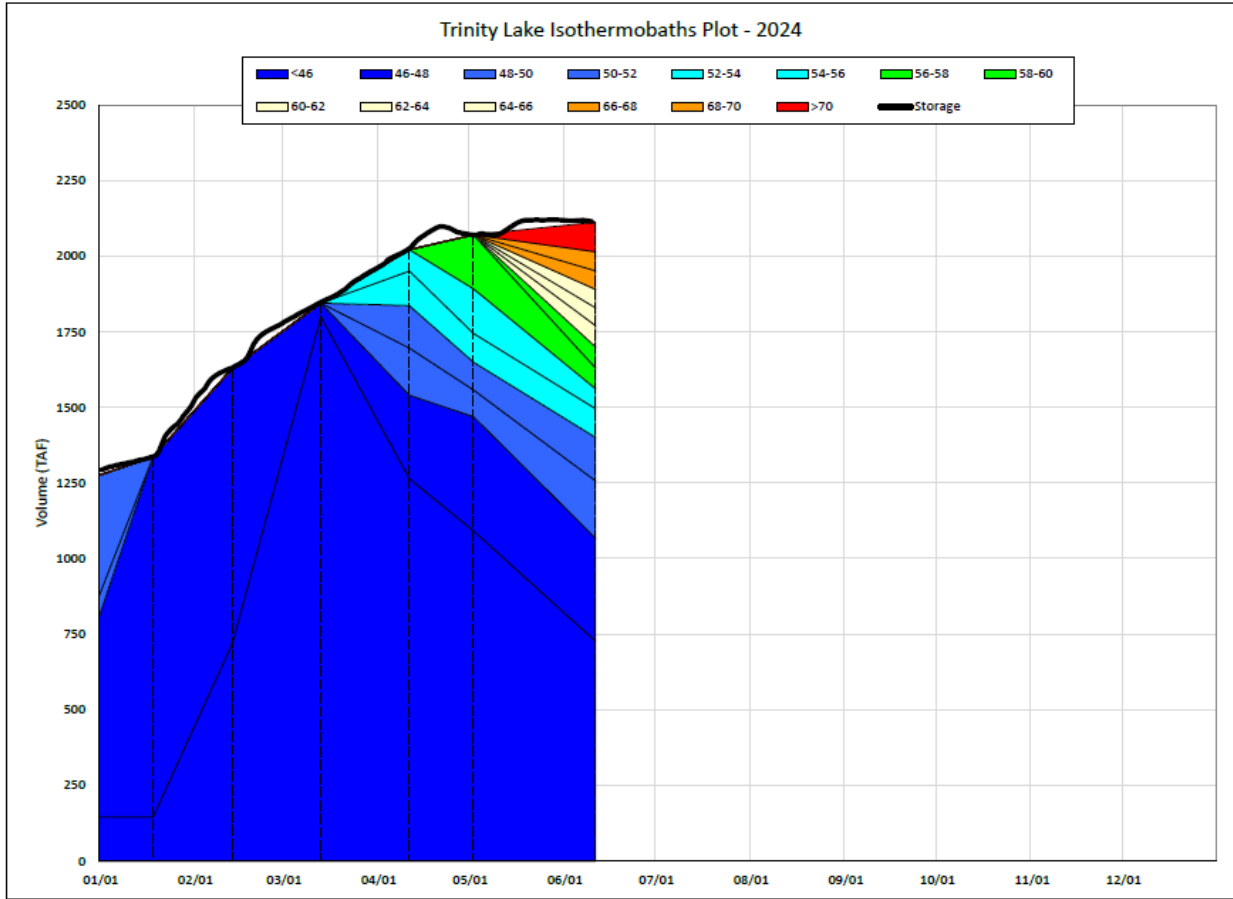


Figure 14: Trinity Lake Isothermobaths Plot – 2024

This figure is a chart showing Trinity Lake Isothermobaths with volume in Thousand Acre-Feet from 0-2500; with dates 01/01-12/01.

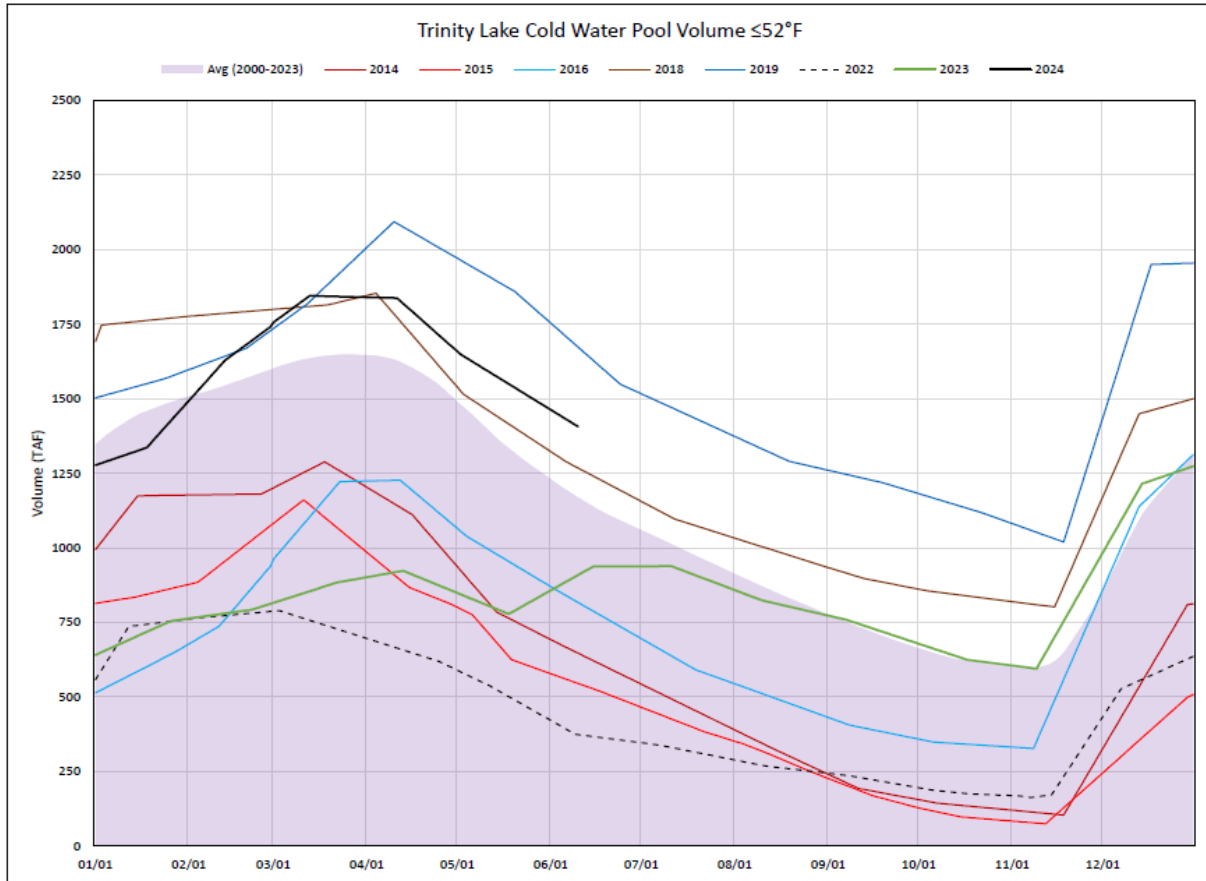


Figure 15: Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

This figure is a line graph showing Trinity Lake Cold Water Pool Volume less than or equal to 52 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

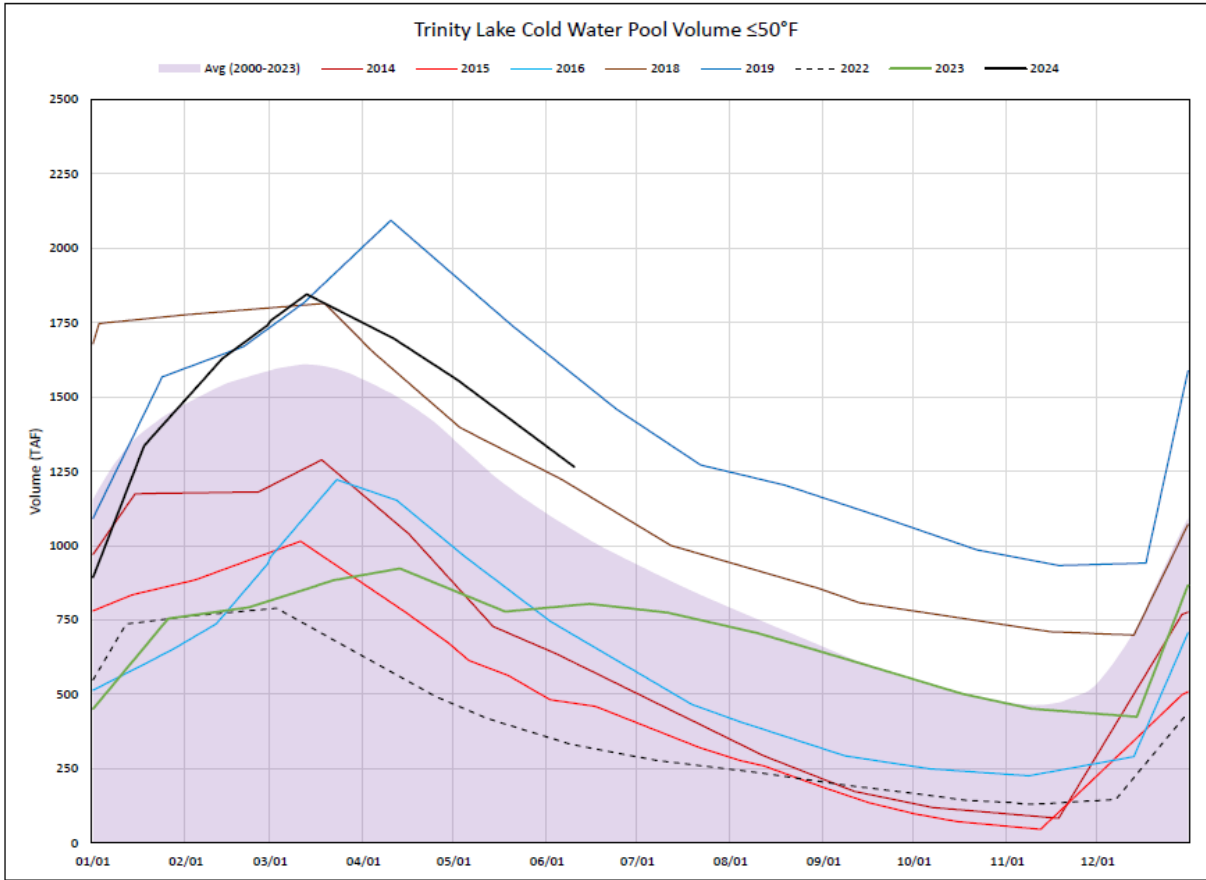


Figure 16: Trinity Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

This figure is a line graph showing Trinity Lake Cold Water Pool Volume less than or equal to 50 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

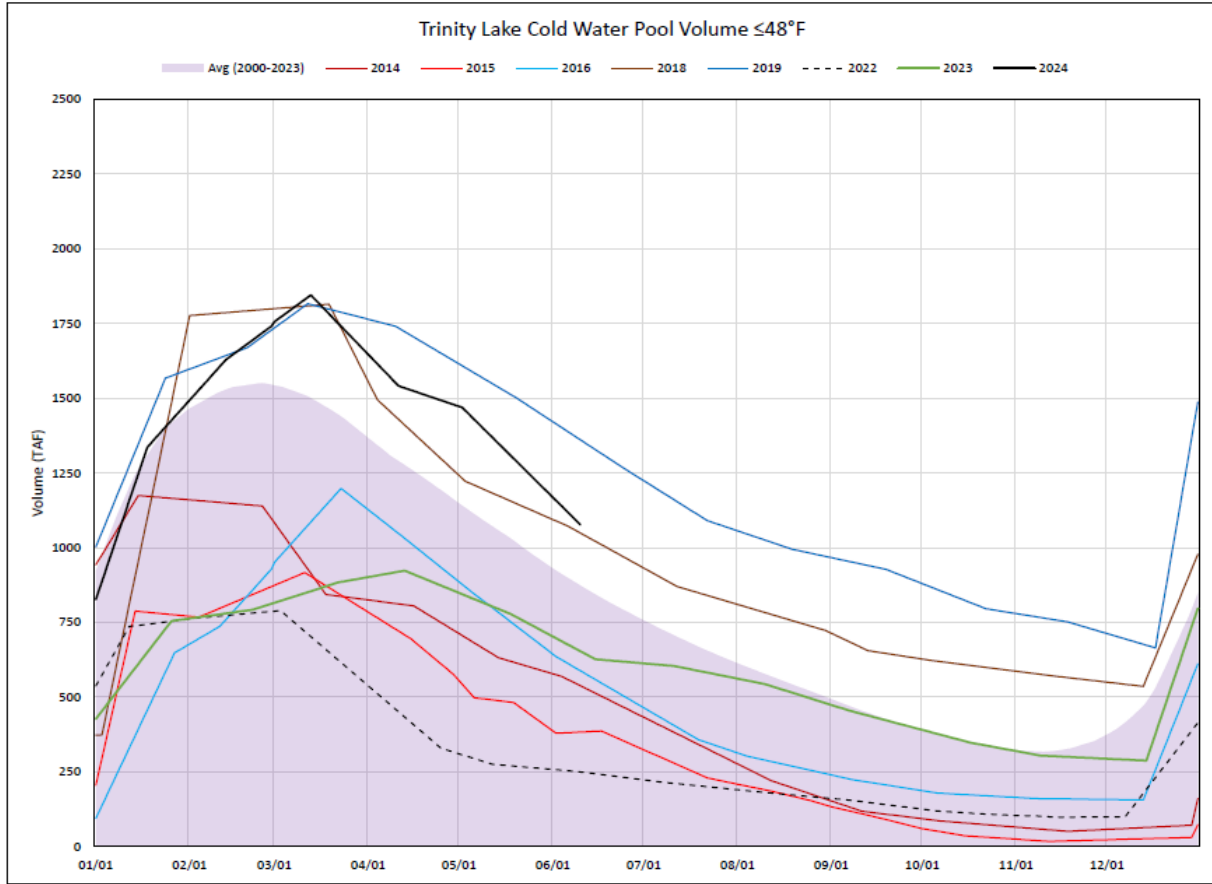


Figure 17: Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

This figure is a line graph showing Trinity Lake Cold Water Pool Volume less than or equal to 48 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

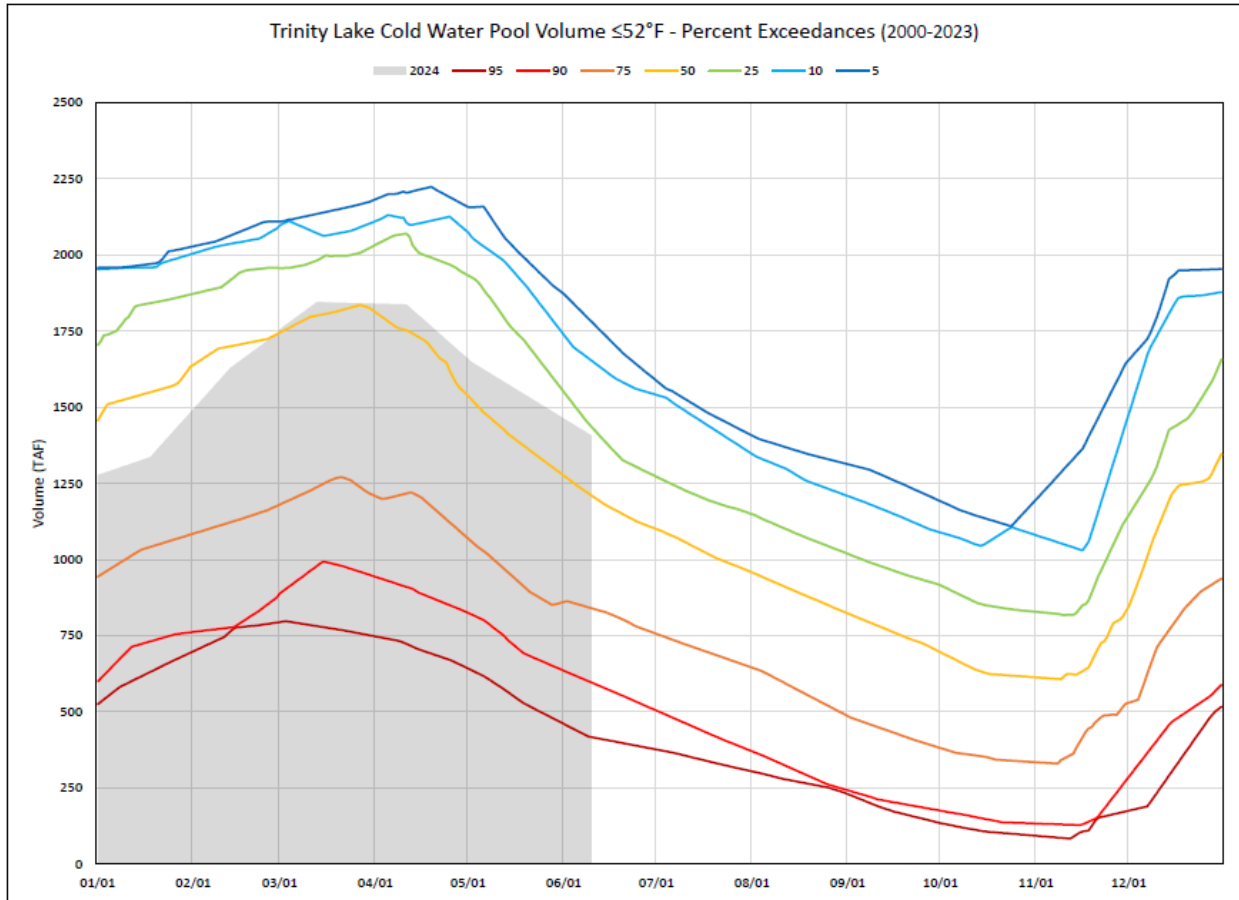


Figure 18: Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

This figure is a line graph showing Trinity Lake Cold Water Pool Volume less than or equal to 52 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

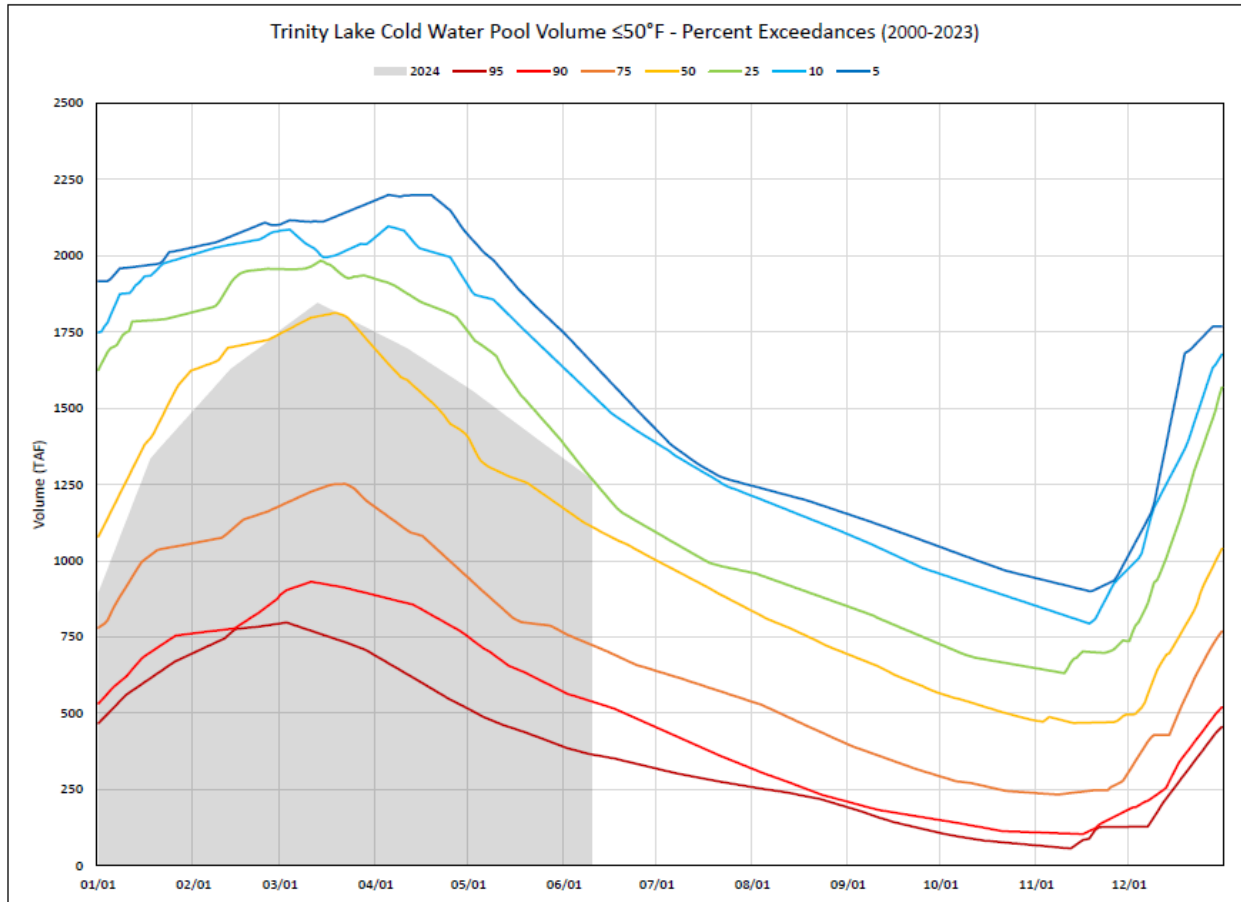


Figure 19: Trinity Lake Cold Water Pool Volume ≤50°F - Percent Exceedances (1998-2023)

This figure is a line graph showing Trinity Lake Cold Water Pool Volume less than or equal to 50 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

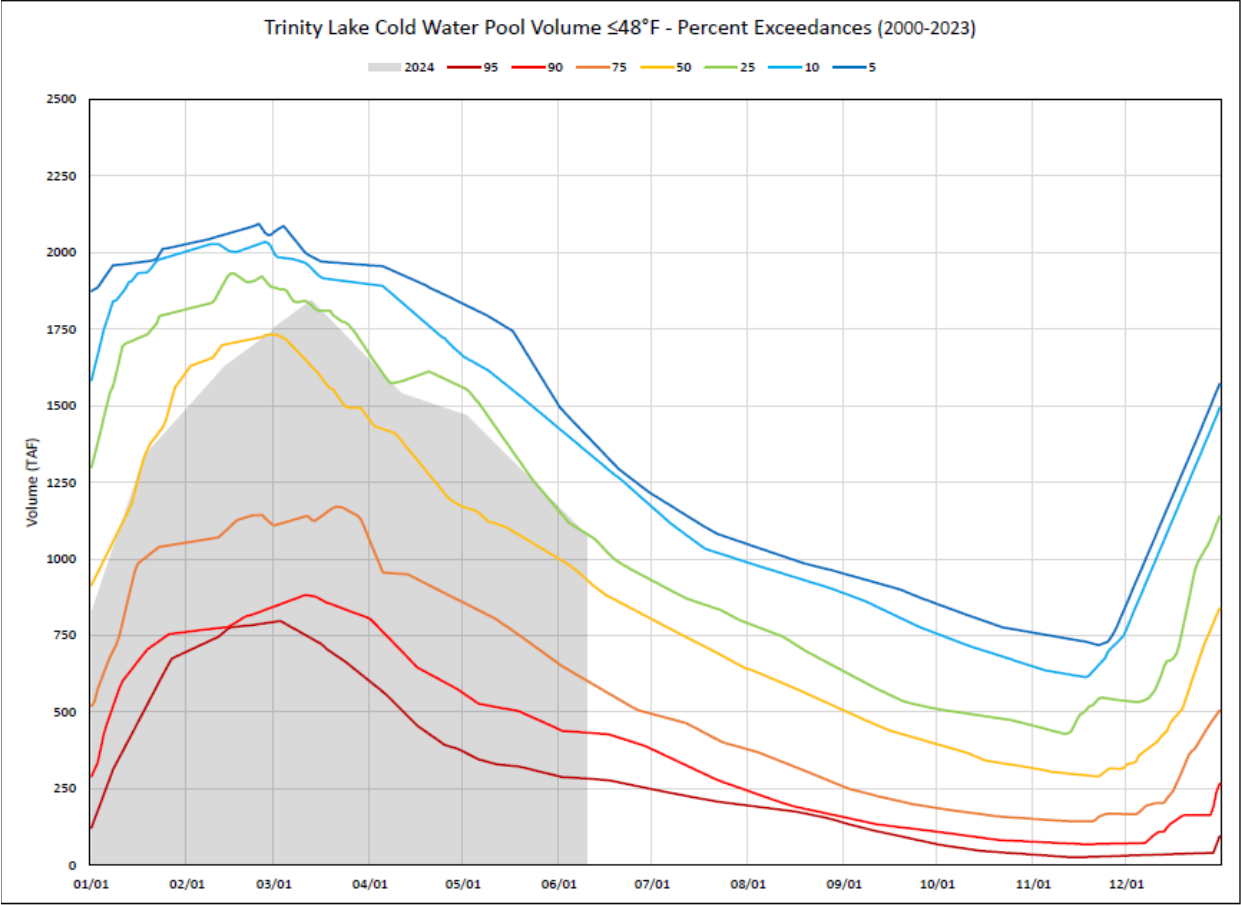


Figure 20: Trinity Lake Cold Water Pool Volume ≤48°F - Percent Exceedances (1998-2023)

This figure is a line graph showing Trinity Lake Cold Water Pool Volume less than or equal to 48 degrees Fahrenheit as percent exceedances from 01/01 to 12/01.

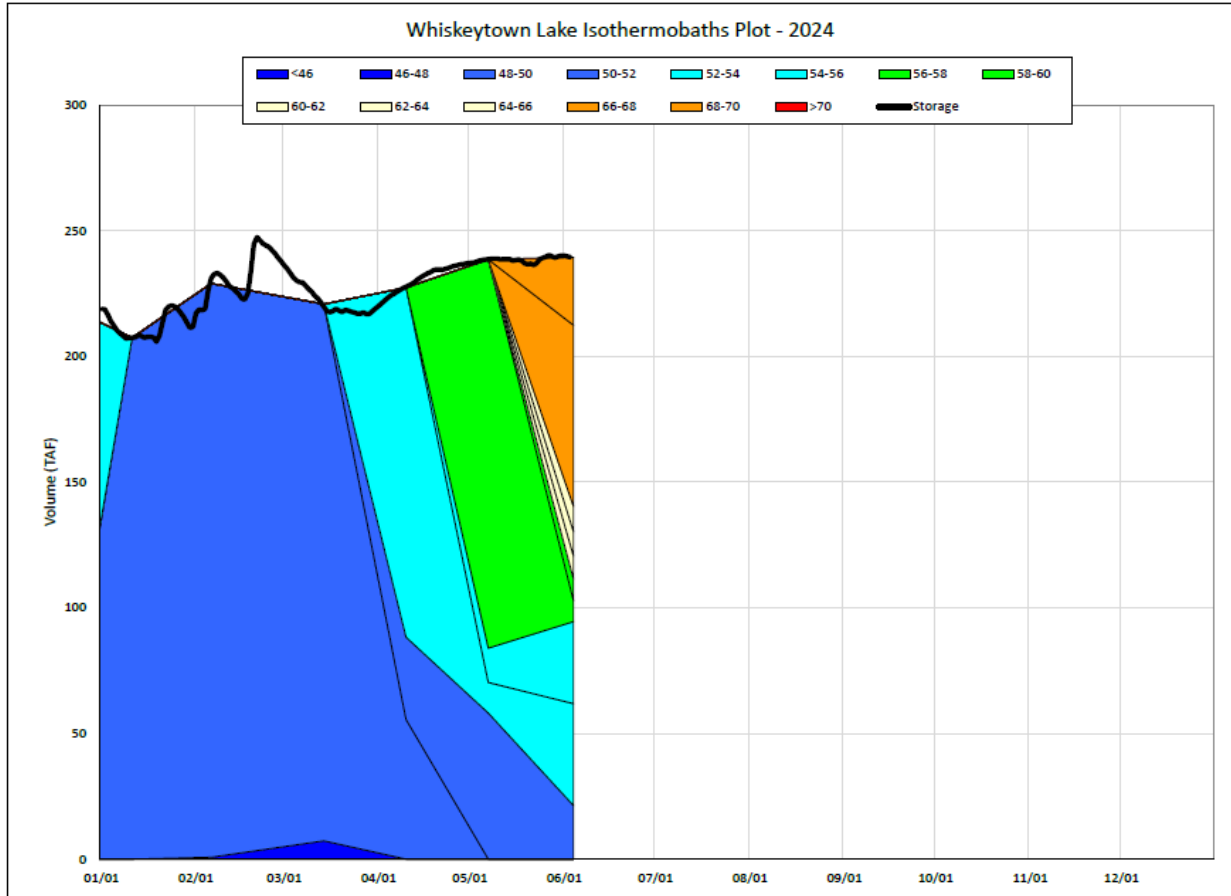


Figure 21: Whiskeytown Lake Isothermobaths Plot – 2024

This figure is a chart showing Whiskeytown Lake Isothermobaths with volume in Thousand Acre-Feet from 0-300; with dates 01/01-12/01.

OFFICIAL 30-Day Forecasts

Issued: June 20, 2024

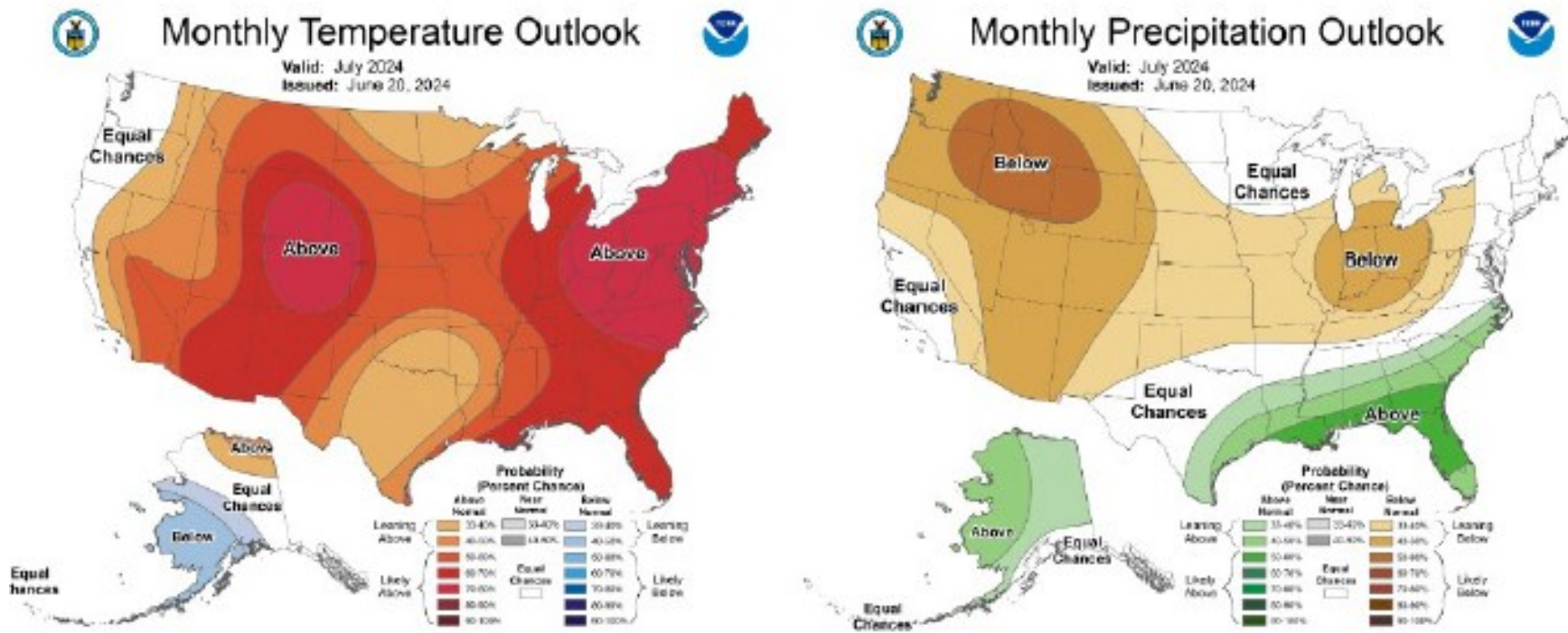


Figure 22: Official Monthly Temperature and Precipitation Outlook

The first figure shows a monthly temperature outlook with the percent probability of near normal, below, or above normal temperatures for all of the United States. The figure is valid for July 2024 and was issued on June 20, 2024. The second figure shows a seasonal precipitation outlook with the percent probability of near normal, below, or above normal temperatures for all of the United States. The figure is valid for July 2024 and was issued on June 20, 2024.

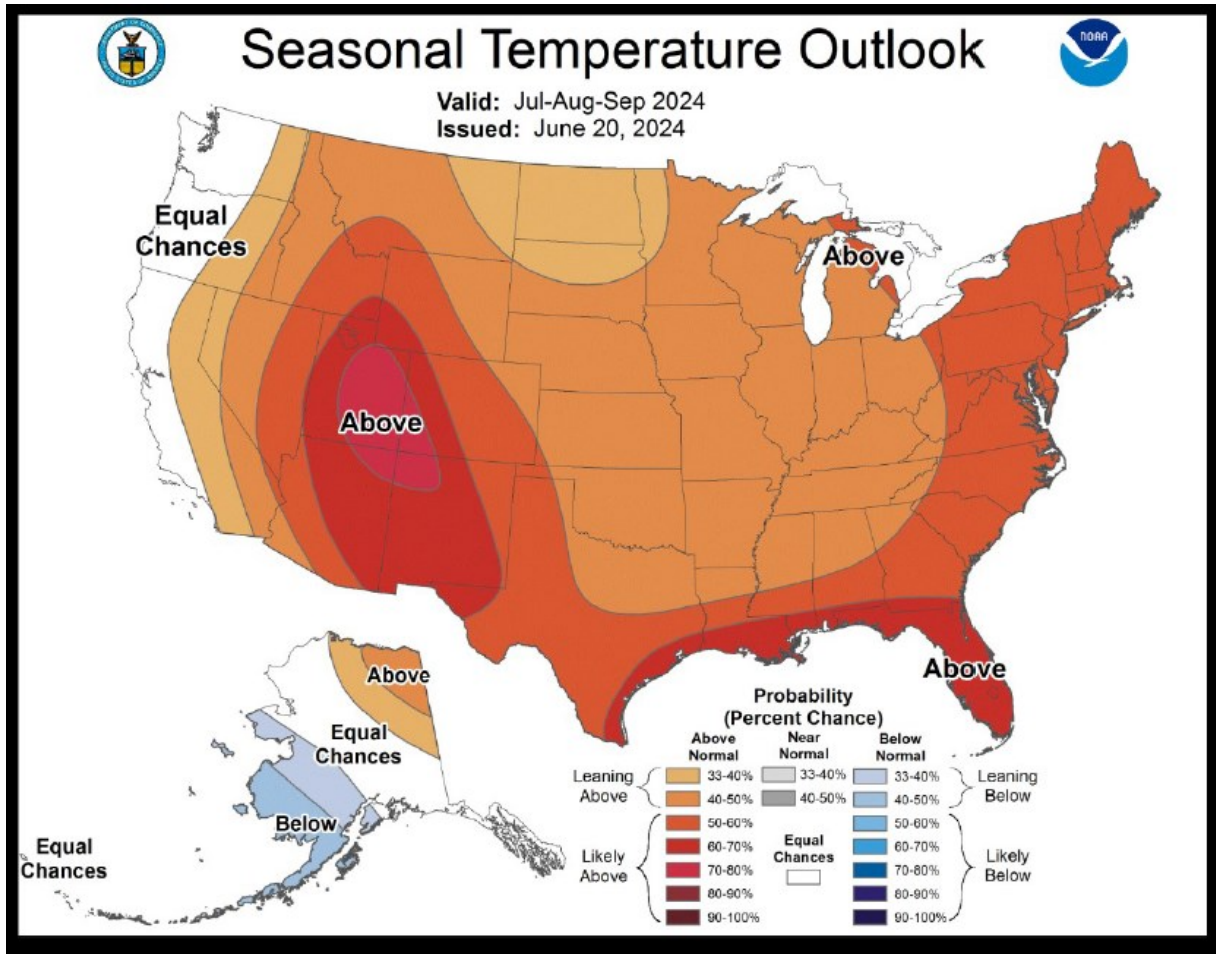


Figure 23: Seasonal Temperature Outlook

This figure shows a seasonal temperature outlook with the percent probability of near normal, below, or above normal temperatures for all of the United States. The figure is valid from July to September 2024 and was issued on June 20, 2024.

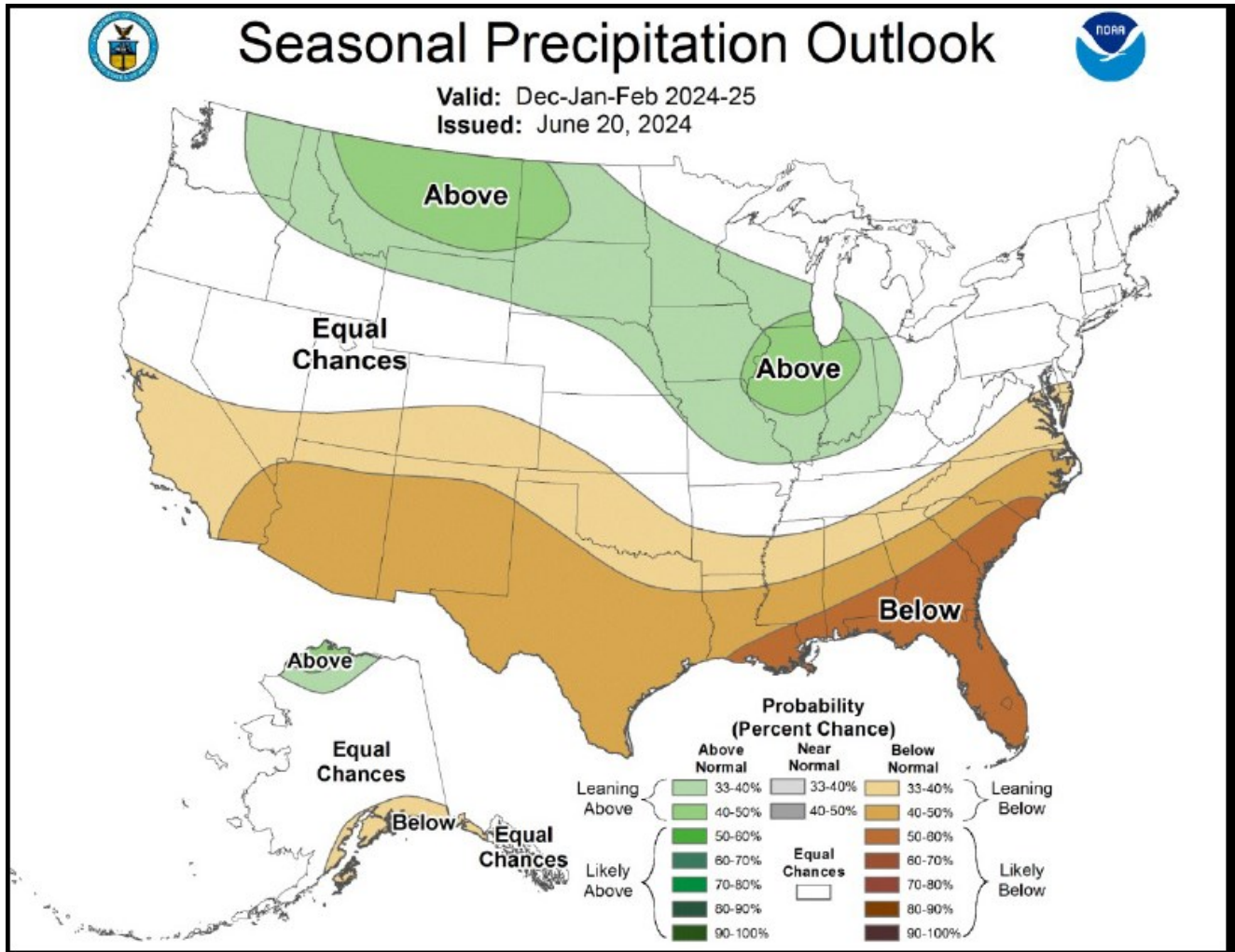


Figure 24: Seasonal Precipitation Outlook

This figure shows a seasonal precipitation outlook with the percent probability of near normal, below, or above normal precipitation for all of the United States. The figure is valid from December to February 2024 and was issued on June 20, 2024.

Estimated CVP Operations 50% Exceedance

Table 10: Storages – Federal End of the Month Storage/Elevation (TAF/Feet)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Trinity	2119	2056	1952	1820	1702	1651	1658	1696	1759	1871	1999	2103	2034
Trinity Elev.	0	2345	2338	2328	2319	2315	2316	2319	2324	2332	2341	2348	2343
Whiskeytown	240	238	238	238	238	206	206	206	206	206	206	238	238
Whiskeytown Elev.	N/A	1209	1209	1209	1209	1199	1199	1199	1199	1199	1199	1209	1209
Shasta	4298	4026	3563	3206	2974	2898	2927	3033	3365	3654	3983	4164	4250
Shasta Elev.	N/A	1049	1031	1017	1007	1003	1004	1009	1023	1035	1047	1054	1057
Folsom	938	882	713	562	510	499	472	463	523	591	780	926	990
Folsom Elev.	N/A	457	441	424	418	416	413	412	419	427	448	461	467
New Melones	2096	2045	1993	1940	1897	1846	1858	1876	1910	1897	1897	1868	1933
New Melones Elev.	N/A	1056	1052	1047	1043	1038	1039	1041	1044	1043	1043	1040	1046
Fed. San Luis	783	526	308	199	198	226	390	553	732	827	819	720	507
Fed. San Luis Elev.	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	10474	9774	8768	7964	7518	7325	7511	7825	8496	9046	9684	10019	9952

Table 11: State End of the Month Reservoir Storage (TAF)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Oroville	3532	3372	2880	2432	1948	1707	1620	1592	1741	2092	2432	2854	3021
Oroville Elev.	N/A	890	856	821	778	753	744	741	757	791	821	854	866
State San Luis	428	352	472	611	846	965	1061	1061	1061	1062	1062	989	832
State San Luis Elev.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total San Luis (TAF)	1211	878	781	810	1044	1191	1452	1614	1793	1889	1881	1709	1339
Total San Luis Elev.	N/A	440	430	433	457	471	495	509	524	532	531	517	485

Table 12: Monthly River Releases (TAF/cfs)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Trinity (TAF)	N/A	107	45	53	52	23	18	18	18	17	18	80	258
Trinity (cfs)	N/A	1,800	735	857	870	373	300	300	300	300	300	1,347	4,189
Clear Creek (TAF)	N/A	14	9	9	9	12	12	12	12	11	22	12	18
Clear Creek (cfs)	N/A	242	150	150	150	200	200	200	200	200	363	200	291
Sacramento (TAF)	N/A	565	738	615	476	369	268	277	277	472	492	428	400

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Sacramento (cfs)	N/A	9500	12000	10000	8000	6000	4500	4500	4500	8500	8000	7200	6500
American (TAF)	N/A	202	267	246	137	92	119	123	92	194	123	280	400
American (cfs)	N/A	3400	4337	4000	2300	1503	2000	2000	1500	3500	2000	4700	6500
Stanislaus (TAF)	N/A	89	15	15	15	39	12	12	13	83	92	91	76
Stanislaus (cfs)	N/A	1500	250	250	250	635	200	200	219	1500	1500	1537	1242
Feather (TAF)	N/A	272	450	448	561	255	104	108	129	97	108	104	123
Feather (cfs)	N/A	4572	7320	7287	9430	4150	1750	1750	2100	1750	1750	1750	2000

Table 13: Trinity Diversions (TAF)

Diversion Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Carr PP	N/A	67	79	80	69	38	5	1	1	1	1	20	24
Spring Creek PP	N/A	60	70	70	60	60	0	4	23	34	16	0	20

Table 14: Delta Summary (TAF)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Tracy	N/A	230	265	265	251	175	258	225	240	193	106	57	58
USBR Banks	N/A	0	0	0	0	0	0	0	0	0	0	0	0
Contra Costa	N/A	9.8	11.1	12.7	14.0	14.0	16.0	18.0	14.0	14.0	12.7	12.7	12.7
Total USBR	N/A	240	276	278	265	189	274	243	254	207	119	69	71
State Export	N/A	146	379	370	395	271	212	74	107	102	87	33	35
Total Export	N/A	386	655	648	660	460	486	317	361	309	206	102	106
COA Balance	N/A	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1
Vernalis (TAF)	N/A	239	80	71	74	117	99	103	118	307	329	255	352
Vernalis (cfs)	N/A	4021	1307	1161	1242	1904	1662	1680	1927	5534	5355	4278	5718
Old/Middle River calc.	N/A	-3,774	-8,207	-8,181	-8,574	-5,495	-6,132	-3,805	-4,244	-2,385	-757	15	656
Computed DOI	N/A	12271	8004	6621	8859	7499	5480	13177	17504	31608	31526	22273	25344
Excess Outflow	N/A	4387	0	81	1362	0	975	8670	11501	20207	20123	10876	17845

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
% Export/Inflow	N/A	29%	46%	49%	47%	43%	54%	26%	25%	15%	9%	6%	5%
% Export/inflow std.	N/A	35%	65%	65%	65%	65%	65%	65%	65%	45%	35%	35%	35%

Table 15: Hydrology

Statistic	Trinity	Shasta	Folsom	New Melones
Water Year Inflow (TAF)	1560	5706	2407	1071
Year to Date + Forecasted % of mean	129%	103%	88%	101%

CVP actual operations do not follow any forecasted operation or outlook; actual operations are based on real-time conditions.

CVP operational forecasts or outlooks represent general system-wide dynamics and do not necessarily address specific watershed/tributary details.

CVP releases or export values represent monthly averages.

CVP Operations are updated monthly as new hydrology information is made available December through May.

Estimated CVP Operations 90% Exceedance

Table 16: Storages – Federal End of the Month Storage/Elevation (TAF/Feet)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Trinity	2119	2043	1907	1779	1650	1627	1623	1644	1656	1692	1756	1830	1782
Trinity Elev.	N/A	2344	2334	2325	2315	2313	2313	2315	2316	2319	2323	2329	2325
Whiskeytown	240	238	238	238	238	206	206	206	206	206	206	238	238
Whiskeytown Elev.	N/A	1209	1209	1209	1209	1199	1199	1199	1199	1199	1199	1209	1209
Shasta	4298	4041	3435	2991	2690	2565	2574	2646	2717	2844	3083	3096	2834
Shasta Elev.	N/A	1049	1026	1007	994	987	988	991	995	1001	1011	1012	1000
Folsom	938	861	631	447	435	380	330	301	287	334	445	592	705
Folsom Elev.	N/A	455	432	410	408	400	392	387	385	393	409	428	440
New Melones	2096	2045	1986	1930	1886	1822	1828	1836	1841	1843	1863	1795	1728
New Melones Elev.	N/A	1056	1051	1046	1042	1036	1036	1037	1037	1038	1040	1033	1027
Fed. San Luis	783	594	379	274	263	273	335	500	668	625	586	483	270
Fed. San Luis Elev.	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	10474	9822	8575	7659	7161	6872	6896	7133	7374	7544	7939	8034	7557

Table 17: State End of the Month Reservoir Storage (TAF)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Oroville	3532	3370	2812	2289	1857	1698	1611	1583	1603	1705	1876	2055	2029
Oroville Elev.	N/A	889	851	809	769	752	743	740	742	753	771	788	785
State San Luis	428	312	439	621	859	856	945	1031	1079	1075	1171	1107	958
State San Luis Elev.	428	312	439	621	859	856	945	1031	1079	1075	1171	1107	958
Total San Luis (TAF)	1211	906	818	895	1122	1129	1279	1531	1747	1699	1756	1590	1228
Total San Luis Elev.	N/A	443	434	442	465	465	480	502	520	516	521	507	473

Table 18: Monthly River Releases (TAF/cfs)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Trinity (TAF)	N/A	107	45	53	52	23	18	18	18	17	18	32	180
Trinity (cfs)	N/A	1,800	735	857	870	373	300	300	300	300	300	540	2,924
Clear Creek (TAF)	N/A	13	9	9	9	12	12	12	12	11	22	12	18
Clear Creek (cfs)	N/A	224	150	150	150	200	200	200	200	200	363	200	296
Sacramento (TAF)	N/A	565	861	676	535	369	238	246	246	250	277	428	590

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Sacramento (cfs)	N/A	9500	14000	11000	9000	6000	4000	4000	4000	4500	4500	7200	9600
American (TAF)	N/A	223	320	271	90	96	93	92	77	56	61	59	61
American (cfs)	N/A	3750	5200	4402	1505	1560	1566	1500	1250	1001	1000	1000	1000
Stanislaus (TAF)	N/A	89	15	15	15	48	12	12	14	12	12	46	39
Stanislaus (cfs)	N/A	1500	250	250	250	774	200	200	226	221	200	767	631
Feather (TAF)	N/A	246	467	467	488	172	104	108	108	97	108	104	108
Feather (cfs)	N/A	4135	7600	7600	8200	2800	1750	1750	1750	1750	1750	1750	1750

Table 19: Trinity Diversions (TAF)

Diversion Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Carr PP	N/A	81	100	81	80	8	6	1	1	1	3	29	12
Spring Creek PP	N/A	75	90	70	70	30	0	0	0	0	0	0	0

Table 20: Delta Summary (TAF)

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Tracy	N/A	224	255	265	244	154	152	225	225	51	70	48	49
USBR Banks	N/A	0	0	0	0	22	22	22	0	0	0	0	0
Contra Costa	N/A	10.0	11.0	12.0	13.0	14.0	14.0	14.0	13.0	14.0	12.0	12.0	12.0
Total USBR	N/A	234	266	277	257	190	188	261	238	65	82	60	61
State Export	N/A	106	386	413	398	149	205	160	155	97	183	42	43
Total Export	N/A	340	652	690	655	339	393	421	393	162	265	101	104
COA Balance	N/A	0	0	0	1	1	1	1	1	1	1	1	1
Vernalis (TAF)	N/A	149	54	52	57	107	74	75	77	82	98	103	100
Vernalis (cfs)	N/A	2509	884	852	956	1734	1242	1225	1251	1482	1599	1725	1631
Old/Middle River calc.	N/A	-3,862	-8,359	-8,849	-8,638	-4,056	-5,118	-5,312	-4,950	-2,170	-3,190	-1,124	-1,161
Computed DOI	N/A	8959	8004	6539	7497	7499	4505	7288	8378	11400	11403	9514	7515
Excess Outflow	N/A	1076	0	0	0	0	0	2782	3872	0	0	17	16

Facility	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
% Export/Inflow	N/A	30%	45%	51%	51%	37%	54%	45%	44%	19%	27%	12%	13%
% Export/inflow std.	N/A	35%	65%	65%	65%	65%	65%	65%	65%	45%	35%	35%	35%

Table 21: Hydrology

Statistic	Trinity	Shasta	Folsom	New Melones
Water Year Inflow (TAF)	1555	5620	2382	1060
Year to Date + Forecasted % of mean	129%	101%	88%	100%

CVP actual operations do not follow any forecasted operation or outlook; actual operations are based on real-time conditions.

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CVP releases or export values represent monthly averages.

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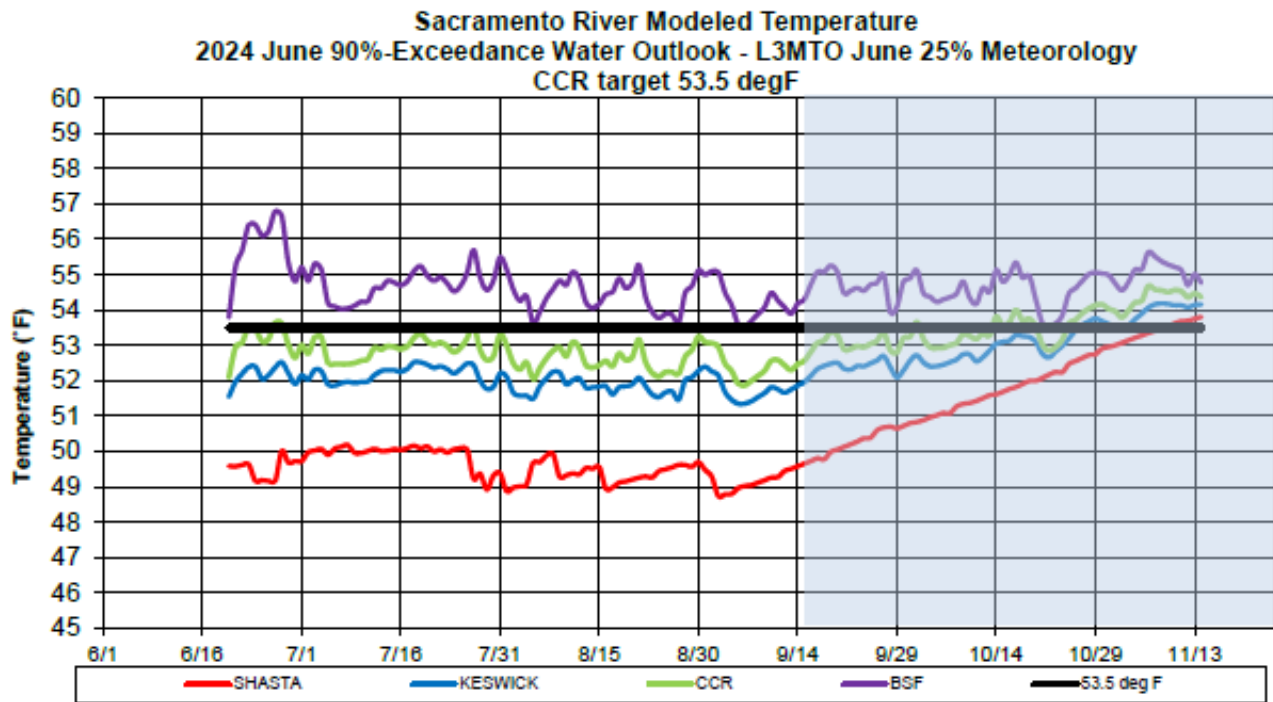


Figure 25: Sacramento River Modeled Temperature – June 2024 90%-Exceedance Water Outlook Historical 25% Meteorology, CCR target 53.5 degree Fahrenheit.

This figure shows Sacramento River modeled temperature in degrees Fahrenheit at Shasta and Keswick Dams, and above Clear Creek from 6/1 to 11/13 in percent exceedances. It also shows the desired degree range between 45 and 60 degrees Fahrenheit.

Table 22: Facility Temperature Outlook in Degrees Fahrenheit

Month	Shasta	Keswick	CCR	Igo	Trinity	Lewiston
June	49.9	52.2	52.9	54.8	49.9	52.2
July	49.4	51.9	52.6	54.5	49.4	51.9
August	49.7	52.1	52.7	54.5	49.7	52.1
September	51.8	53.0	53.4	54.6	51.8	53.0
October	53.8	54.0	54.2	54.4	53.8	54.0
November	49.9	52.2	52.9	54.8	49.9	52.2

Legend

A = Denotes period of model limitations.

Run date: 6/25/24

EOM September Storage: 2.69 MAF

Trinity profile date: 5/2/24

Whiskeytown profile date: 6/4/24

Shasta profile date: 6/20/24

Projected side gates: First August 17 Full September 3

End of September Cold-Water-Pool less than 56 degrees Fahrenheit: 751 TAF

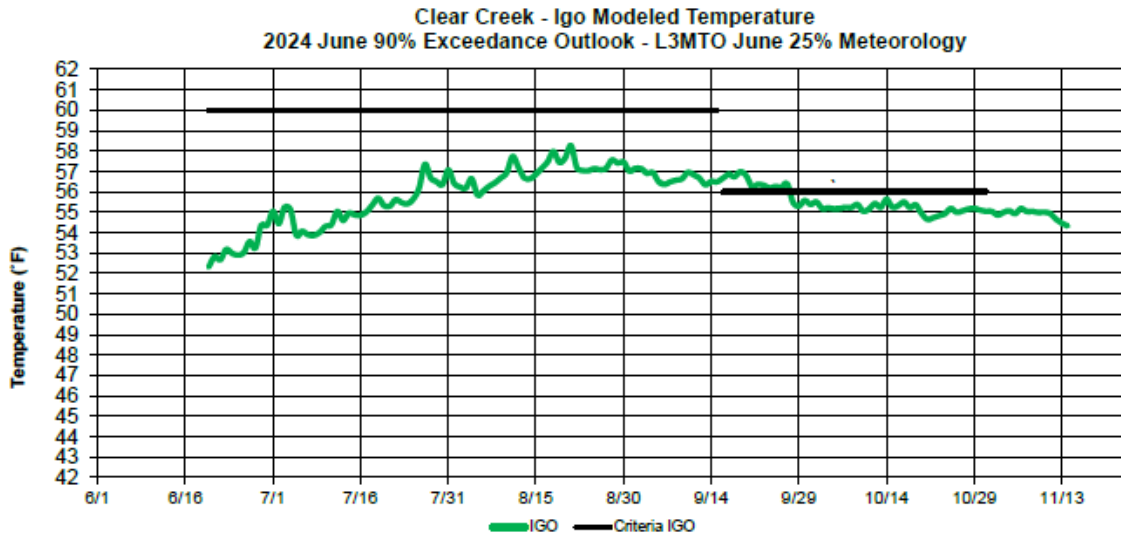


Figure 26: Clear Creek Igo Modeled Temperature – June 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Igo modeled temperature in degrees Fahrenheit at from 06/01 to 11/13.

Table 23: Facility Temperature Outlook in Degrees Fahrenheit

Month	Igo
July	55.2
August	57.0
September	56.5
October	55.2
November	53.5

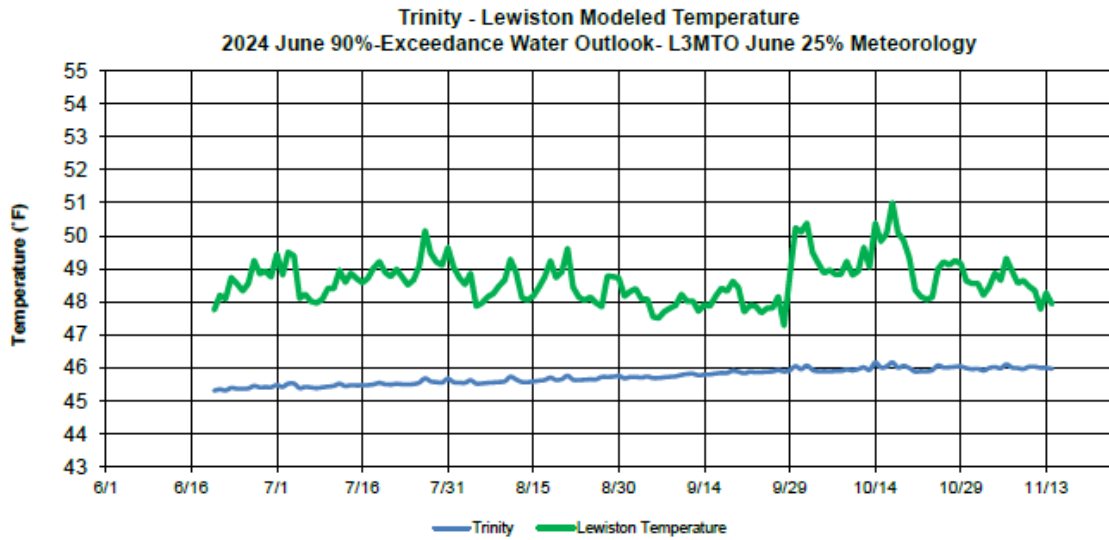


Figure 27: Trinity-Lewiston Modeled Temperature – June 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Trinity - Lewiston modeled temperature in degrees Fahrenheit at from 06/01 to 11/13.

Table 24: Facility Temperature Outlook in Degrees Fahrenheit

Month	Trinity	Lewiston
July	45.5	48.8
August	45.6	48.5
September	45.8	48.1
October	46.0	49.2
November	46.0	47.8