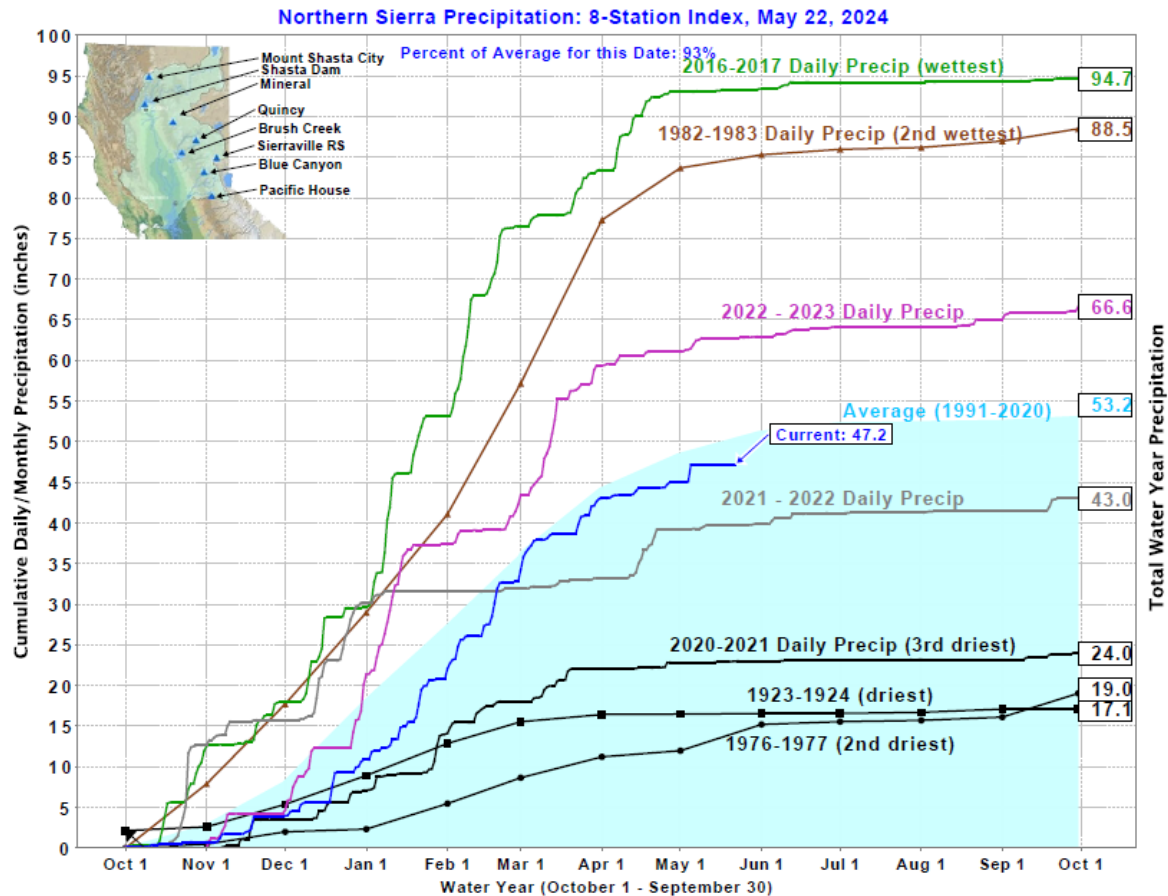




Sacramento River Temperature Task Group Meeting Packet

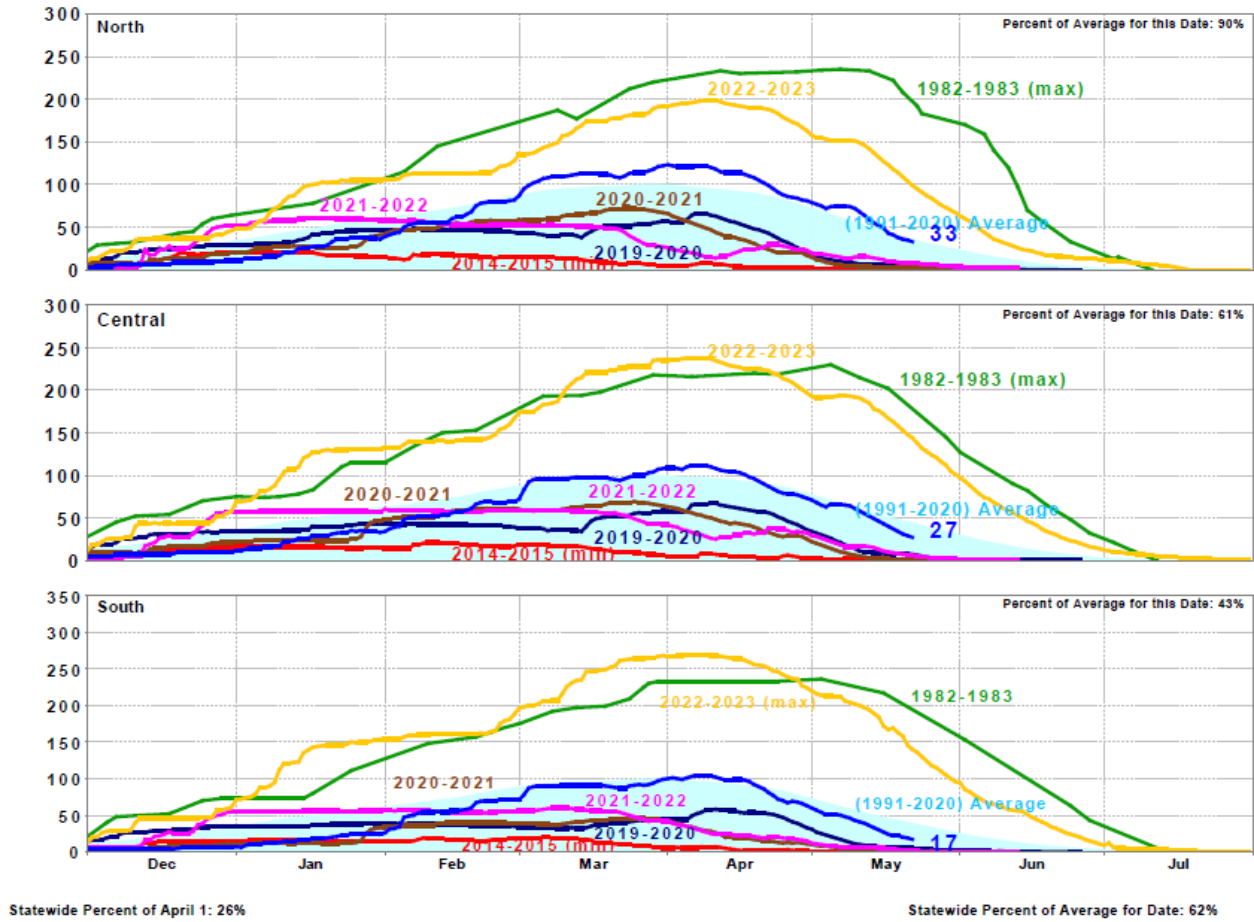
May 23, 2024



Northern Sierra Precipitation: 8-Station Index, May 22, 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 (93% 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).

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



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

This figure shows three line graphs of percent snow water content for North, Central, and Southern California December – July. The graph shows 90%, 61%, and 43% 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

May 21, 2024

Run Date: May 22, 2024

Reservoir Releases in Cubic Feet Per Second

Reservoir	Dam	WY 2023	WY 2024	15-Year Median
Trinity	Lewiston	1,467	3,212	2,004
Sacramento	Keswick	13,000	12,017	8,838
Feather	Oroville (SWP)	13,000	6,450	2,500
American	Nimbus	12,036	4,198	3,001
Stanislaus	Goodwin	1,500	2,132	1,500
San Joaquin	Friant	10,058	371	1,101

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	1,707	1,137	2,119	124
Shasta	4,552	3,665	4,459	4,378	119
Folsom	977	790	910	926	117
New Melones	2,420	1,499	1,692	2,092	140
Fed. San Luis	966	632	951	802	127
Total North CVP	11,363	8,292	9,149	10,317	124
Millerton	521	343	201	519	151
Oroville (SWP)	3,538	2,665	3,397	3,524	132

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	1,322	562	1,662	894	148
Shasta	4,703	2,630	7,702	3,893	121
Folsom	1,825	878	4,947	2,040	89
New Melones	705	N/A	1,571	726	97
Millerton	1,171	515	1,693	925	127

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	35.72	21.75	37.91	28.89 (64)	124	0.00
Sacramento at Shasta Dam	63.62	32.91	83.60	56.71 (69)	112	0.00
American at Blue Canyon	50.55	N/A	112.31	62.08 (50)	81	0.00
Stanislaus at New Melones	28.92	N/A	36.55	26.16 (47)	111	0.00
San Joaquin at Huntington LK	31.99	11.50	65.40	38.67 (51)	83	0.00

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	
Apr	51.7	50.5	48.0	51.4	51.8	52.4	53.9	55.0	56.0	52.0	51.2	49.9	50.7	7319	76	7221	62.2	58.4	59.9	
05/01	53.5	52.2	48.1	53.0	53.4	54.0	55.6	56.8	57.9	52.4	C	48.1	C	5956	44	6045	67.5	62.4	64.6	
05/02	52.9	52.4 A	48.1	53.8	54.0	54.7	56.2	57.4	58.5	52.4	C	48.5	C	6282	44	6107	65.0	60.4	64.8	
05/03	53.3	52.3 A	48.2	53.7	54.3	55.2	56.9	57.9	59.1 A	53.0	C	48.6	C	6069	44	6122	67.5	61.8	65.2	
05/04	52.3	50.6	48.1	53.3	53.2	53.5	55.0	56.7	58.1	51.7	C	48.1	C	6058	44	6203	57.5	52.1	53.4	
05/05	52.3	51.2	48.1	52.6	53.2	53.8	54.0	53.9	54.7	51.4	C	47.6	C	5539	44	6104	53.5	51.0	52.4	
05/06	52.4 A	51.5	48.2	52.2	52.6	53.1	54.7	55.7	56.8	51.7	C	47.4	C	5538	44	5939	59.0	56.3	57.8	
05/07	54.6	51.9	48.3	52.3	52.6	52.9	54.5	55.6	56.9	52.5	C	48.0	C	8521	44	10944	62.0	58.5	61.1	
05/08	54.5	52.7	48.4	53.1	53.2	53.4	54.4	55.2	56.3	52.8	C	48.4	C	10748	44	10991	68.5	65.3	66.7	
05/09	54.4	53.0	48.4	54.1	54.4	54.8	56.1	56.7	57.5	53.6 A	C	48.9	C	11415	44	11009	75.5	70.0	70.0	
05/10	54.7	53.3	49.9	54.3	54.7	55.2 A	56.9	57.9	59.2	54.1	C	49.5	C	11643	105	10848	86.0	70.7	73.2	
05/11	54.2	52.7	50.5	54.4	54.9	55.5	57.5	58.6	60.0	54.4	C	49.6	C	10419	210	9485	87.5	70.9	73.6	
05/12	53.3 X	51.6	48.8	53.9	54.5	55.3	57.7	59.3	61.1	54.7	C	49.8	C	8774	44	8351	73.5	71.3	72.7	
05/13	52.7	50.7	48.6	53.9 A	54.7	55.7	58.4	60.2	61.9	54.8	C	50.0	C	7832	44	7174	76.5	73.2	74.0	
05/14	51.8	50.8 A	48.6	53.3 A	54.1	55.1	58.2	60.6	62.7	54.8	C	50.1	C	6484	44	6304	79.0	74.0	75.3	
05/15	51.4	51.0 A	51.1	53.0	54.0	55.1	58.5	61.0	62.9	55.0	C	50.3	C	5466	730	6152	82.5	75.6	76.8	
05/16	51.8	51.0 A	50.9	52.6	53.7	54.8	58.4	61.1	63.1	54.5	C	50.6	C	5524	328	6193	74.0	70.5	71.2	
05/17	52.0	51.1 A	50.4	52.8 A	53.6	54.6	58.2	61.0	63.1	53.5	C	50.5	C	6236	130	6219	76.5	73.4	73.5	
05/18	51.5	50.2 A	48.8	52.9	53.7	54.7	57.8	60.4	62.8	52.4	C	50.7	C	4919	44	6397	74.5	71.4	73.1	
05/19	51.4	50.3 A	50.9	52.8	53.6	54.5	57.1	59.4	61.7	52.1	C	50.1	C	5093	269	6385	69.5	67.8	70.3	
05/20	52.3	50.9 A	49.3	52.6	53.3	54.0	56.3	58.2	60.0	52.1	C	50.2	C	6970	49	6425	72.5	68.8	70.4	
05/21	52.5	51.4	48.9	52.4	52.7	53.2	55.2	57.1	59.0	52.7	C	50.2	C	11873	44	12017	77.0	69.3	72.7	
May	52.8	51.6	49.1	53.2	53.7	54.4	56.6	58.1	59.7	53.2	N/A	49.3	N/A	7493	116	7686	71.7	66.4	68.2	
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 CFS	157359	2437	161414	N/A	N/A	N/A

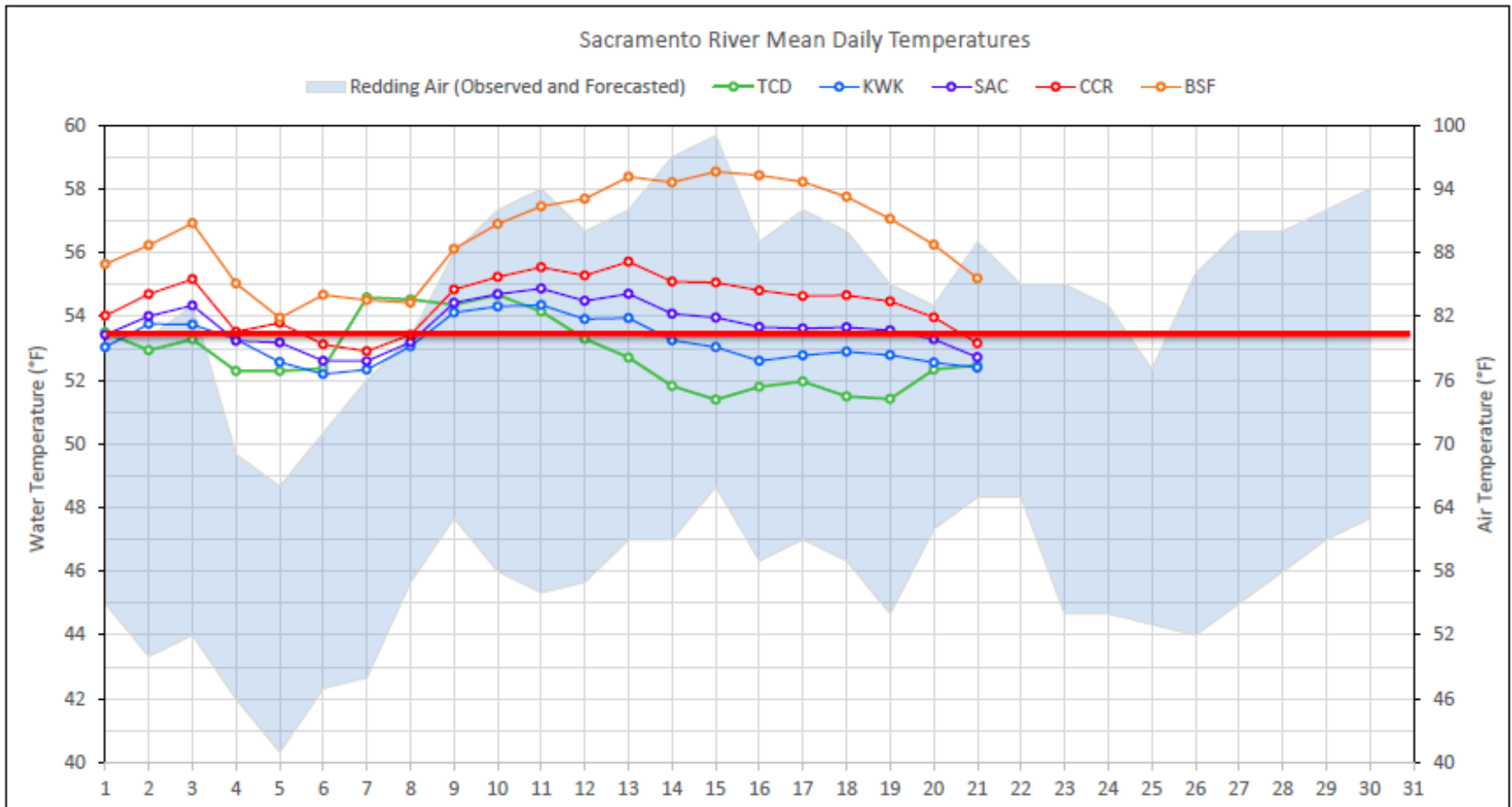
Date	MDWT TCD ¹	MDWT SHD	MDWT SPP ¹	MDWT KWK	MDWT SAC ²	MDWT CCR	MDWT BSF	MDWT BND	MDWT RBD	MDWT IGO	MDWT LWS	MDWT DGC ³	MDWT NFH	MDR Shasta Genera- tion	MDR Spring Creek PP	MDR Keswick Total	MDAT RDD	MDAT BSF	MDAT RDB
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Total AF	312115	4834	320158	N/A	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.



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.

Station Details

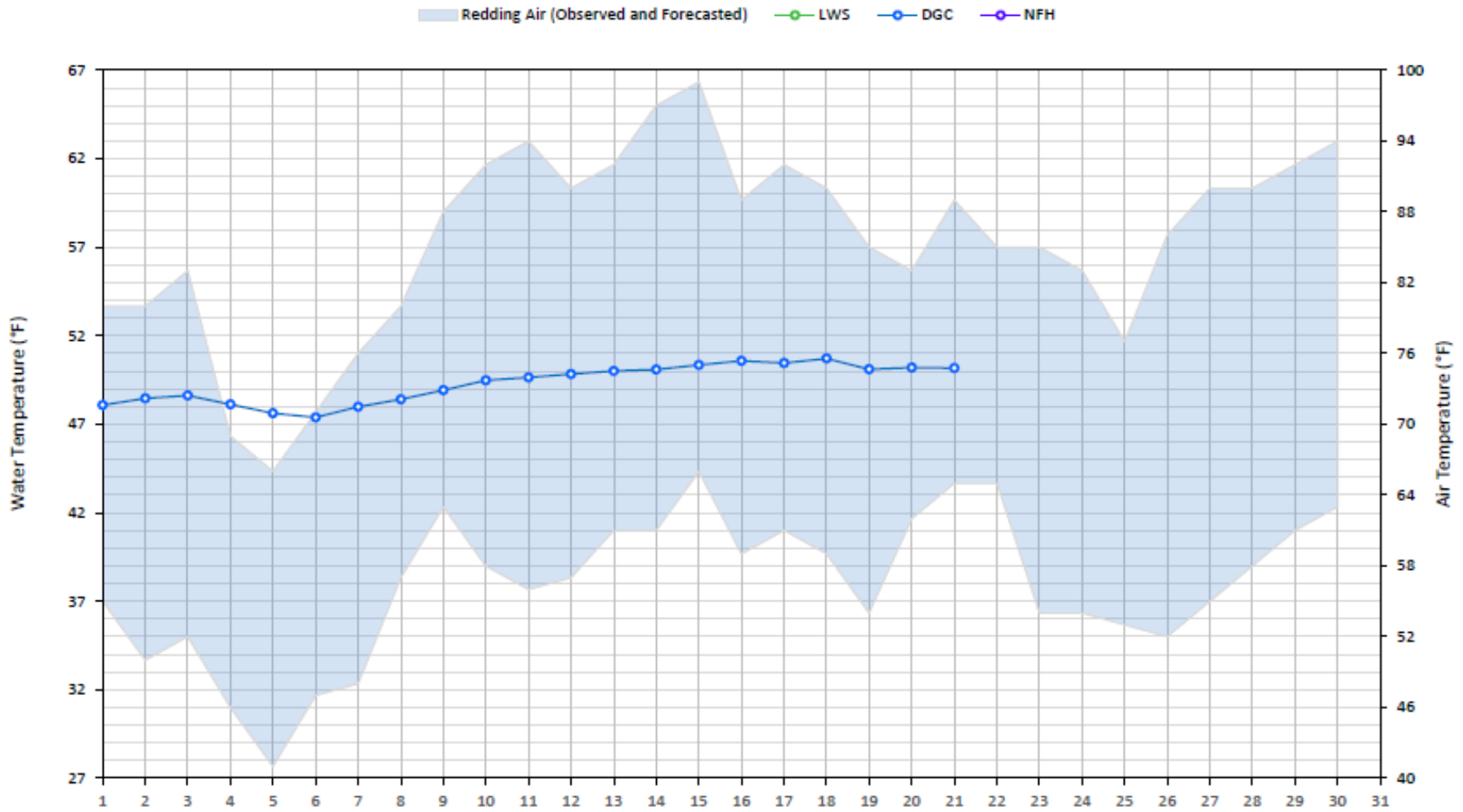
Code	Body of Water	Location ¹
TCD	N/A	Shasta Power Plant
SHD	Sacramento River	0.3 miles downstream of Shasta Power Plant
SPP	N/A	Spring Creek Power Plant
KWK	Sacramento River	0.8 miles downstream of Keswick Dam
SAC	Sacramento River	4.8 miles downstream of Keswick Dam
CCR	Sacramento River	9.7 miles downstream 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

Water Right Temperature Control Points

River	Point	Temp (°F)	Begin Date	End Date
Sacramento	CCR	53.5	05/14/2023	TBD

Notes: ¹ Distances are approximate

Trinity River Mean Daily Temperatures



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.

Station Details

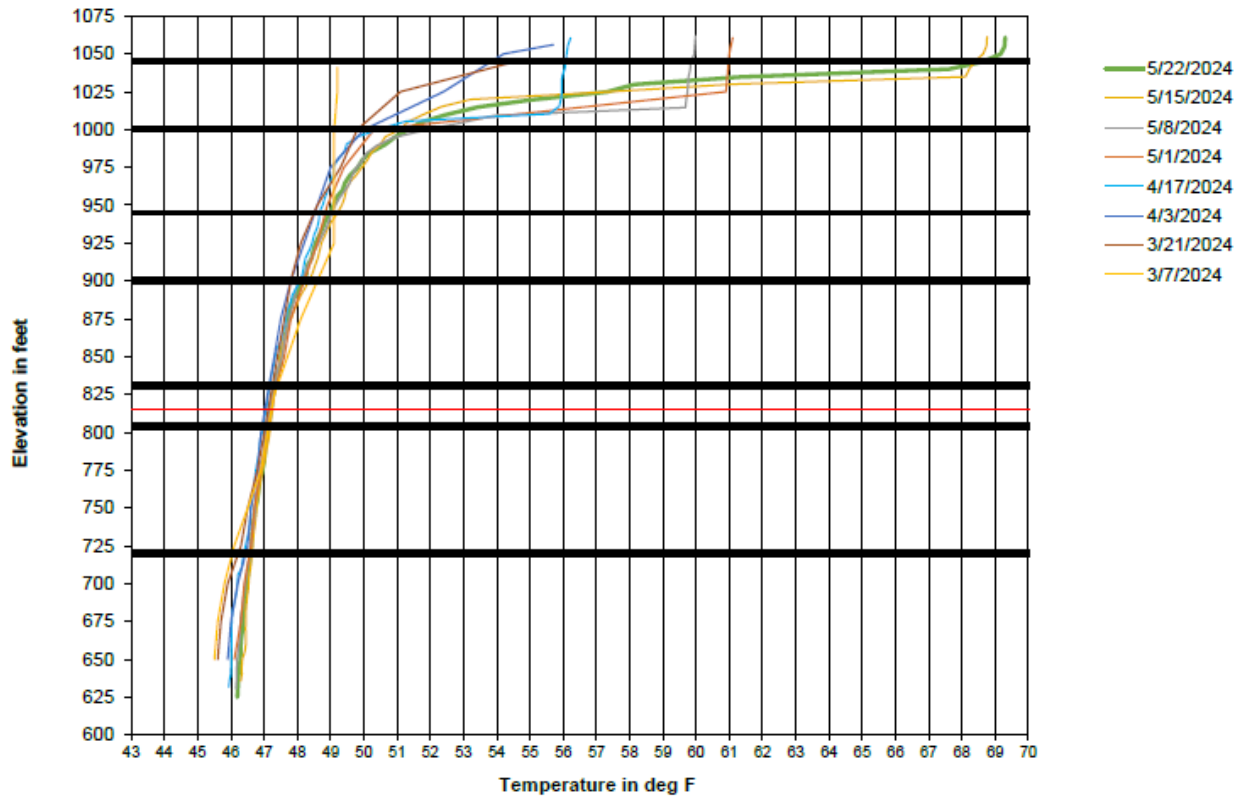
Code	Body of Water	Location ¹
LWS	Trinity River	1.1 miles downstream of Lewiston Dam
DGC	Trinity River	19 miles downstream of Lewiston Dam
NEH	Trinity River	38 miles downstream of Lewiston Dam

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

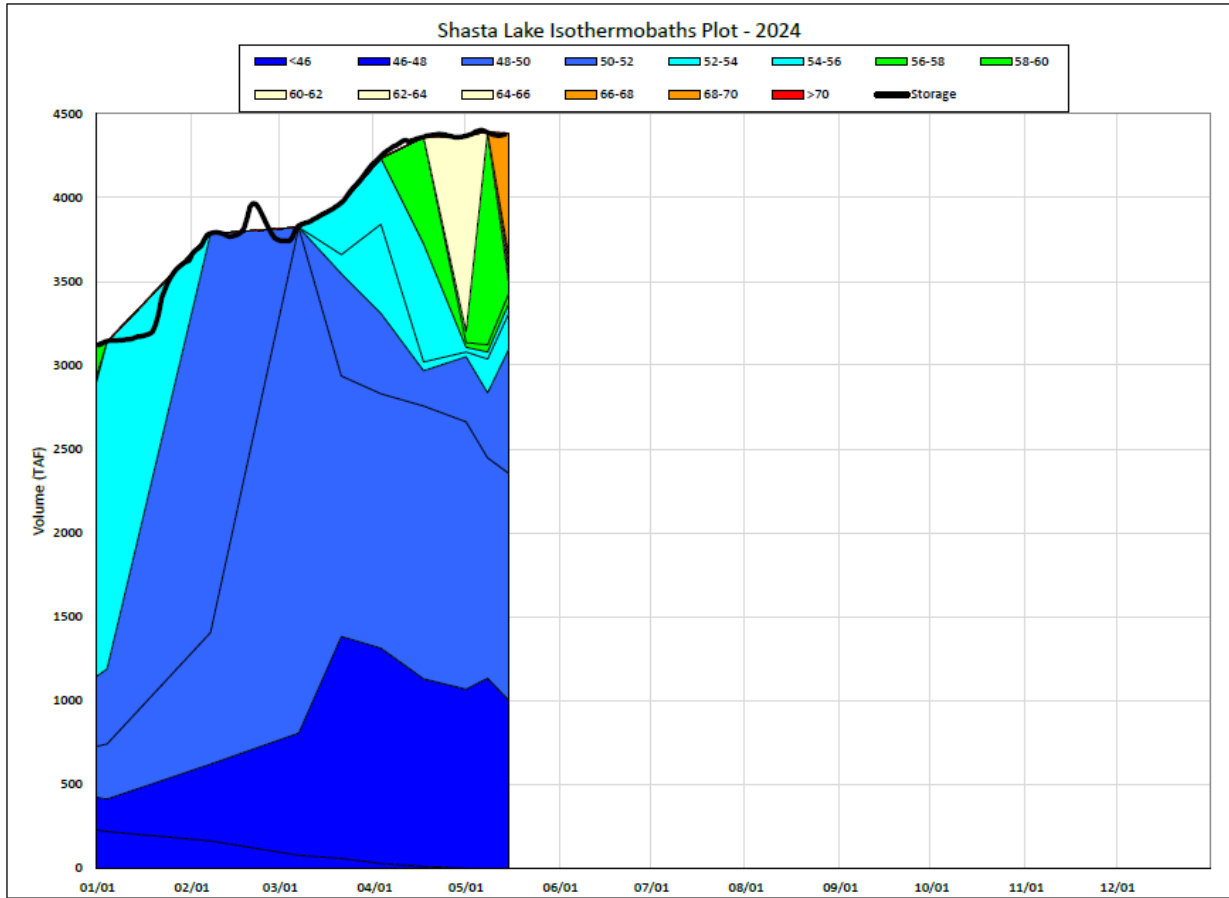
Notes: ¹ Distances are approximate

2024 Shasta Temperature Profiles



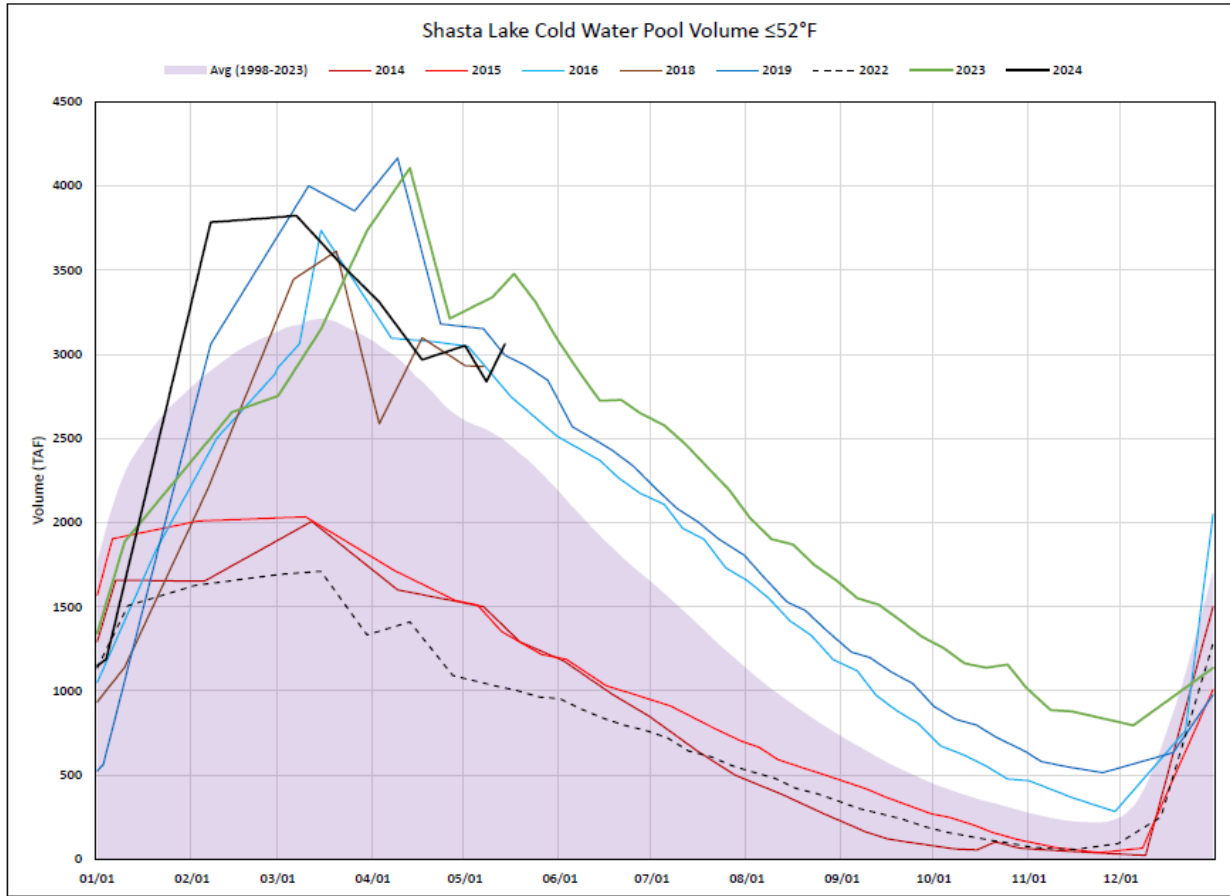
2024 Shasta Temperature Profiles

This figure is a multiple line graph showing Shasta Lake temperature profiles from 03/07-05/22 with lake elevation 600-1075' and lake temperatures from 43-70 degrees Fahrenheit.



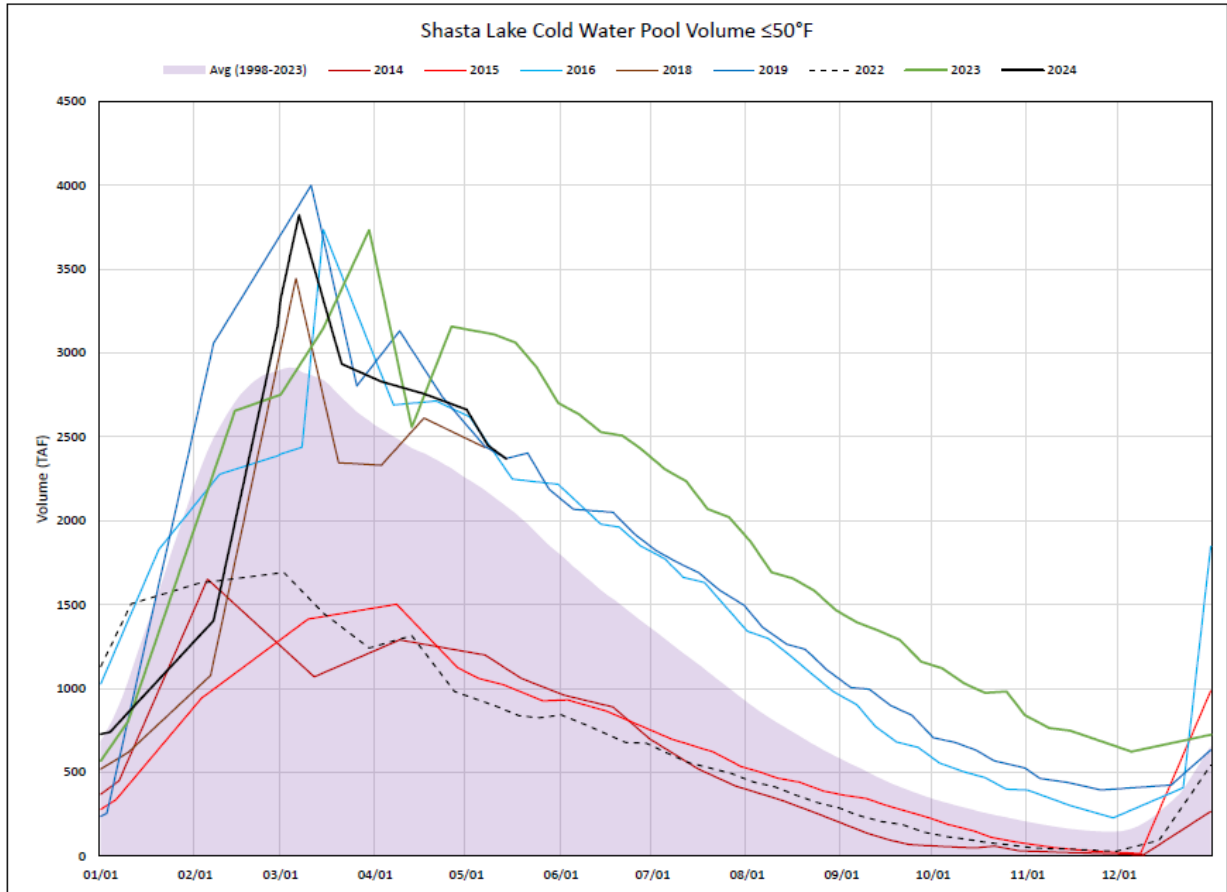
Shasta Lake Isothermobaths Plot - 2024

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



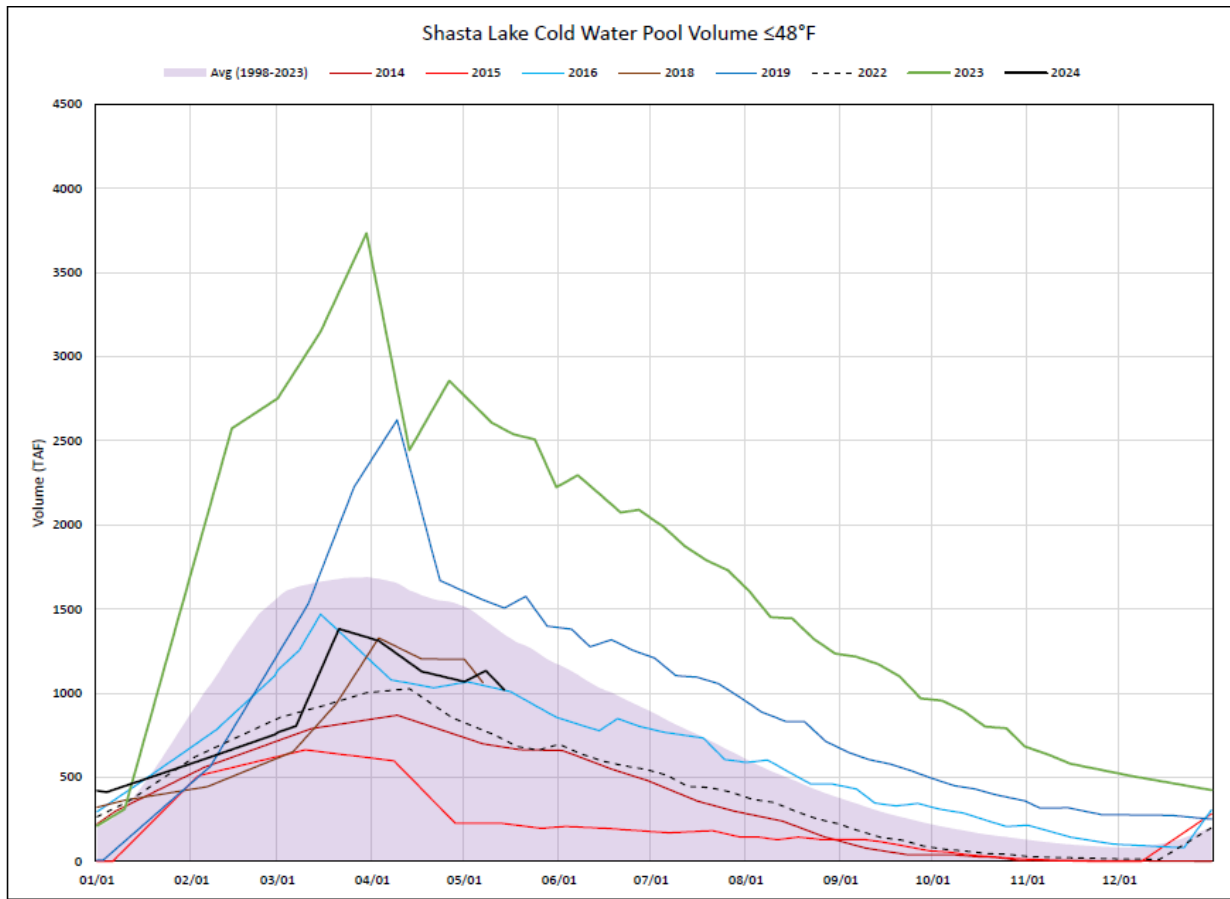
Shasta Lake Cold Water Pool Volume ≤52°F

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.



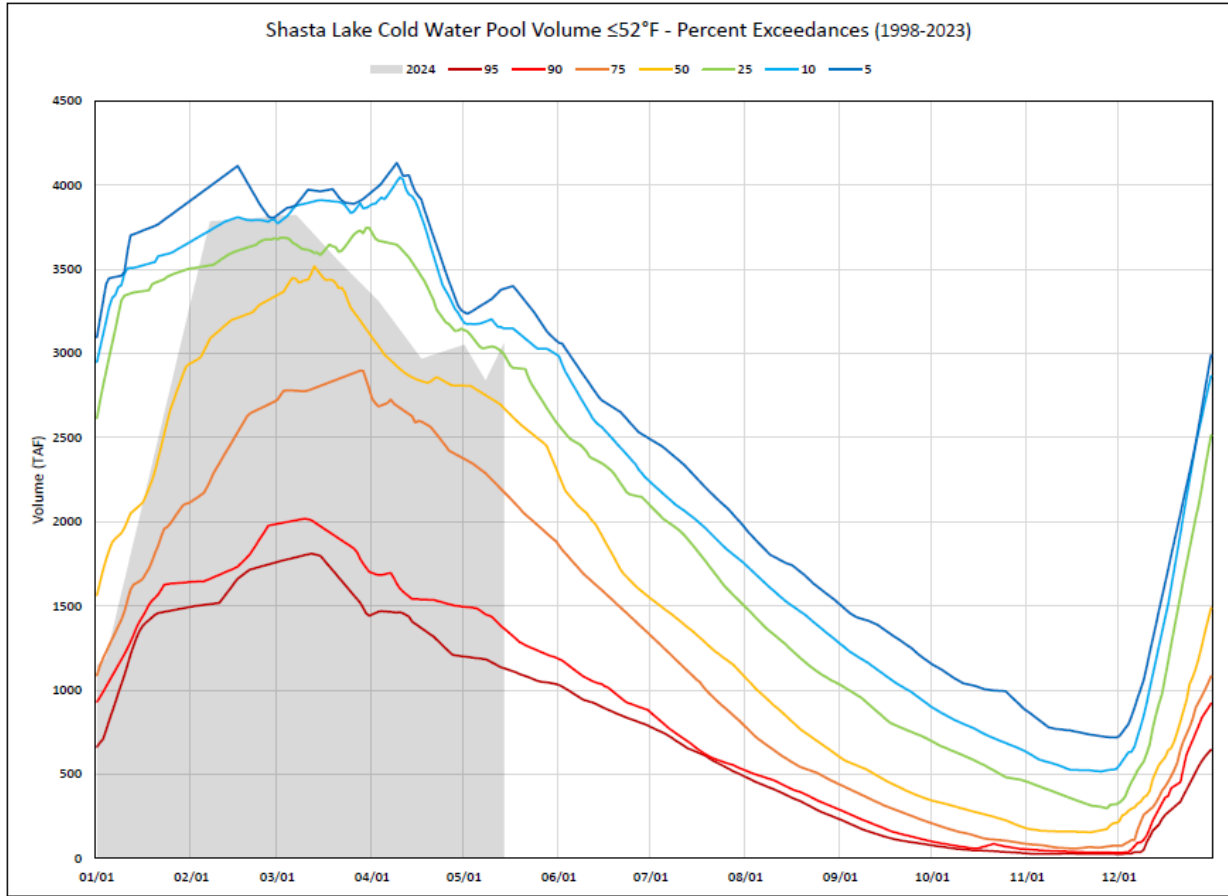
Shasta Lake Cold Water Pool Volume ≤50°F

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.



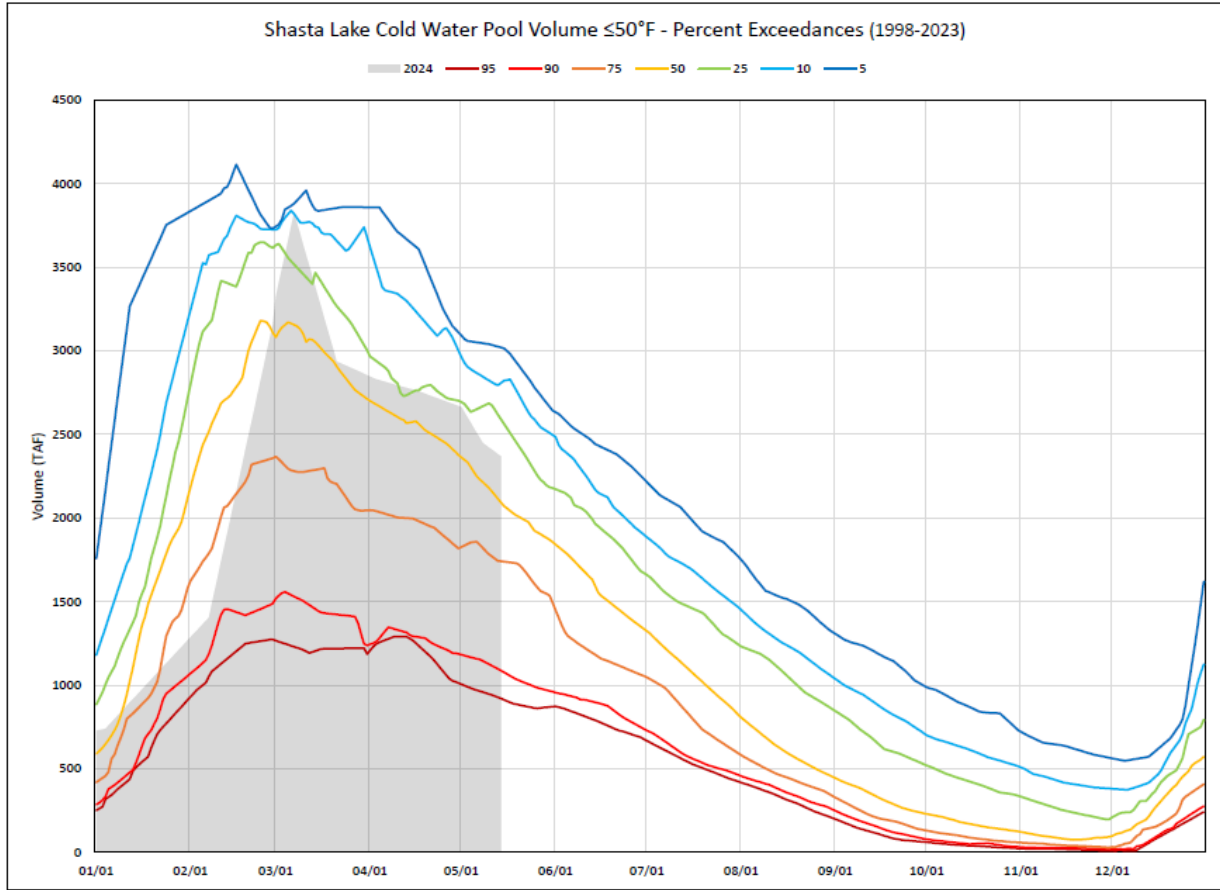
Shasta Lake Cold Water Pool Volume ≤48°F

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.



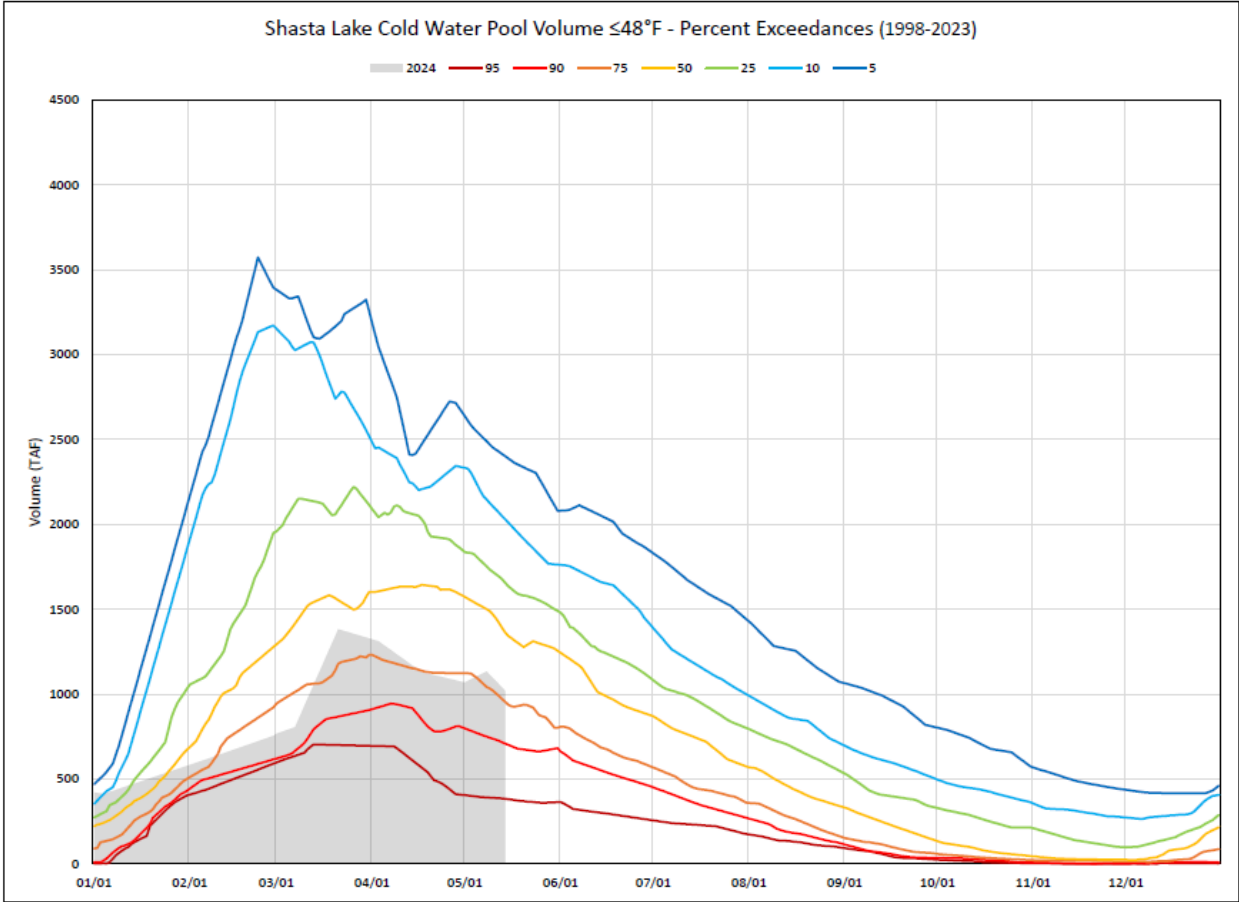
Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

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.



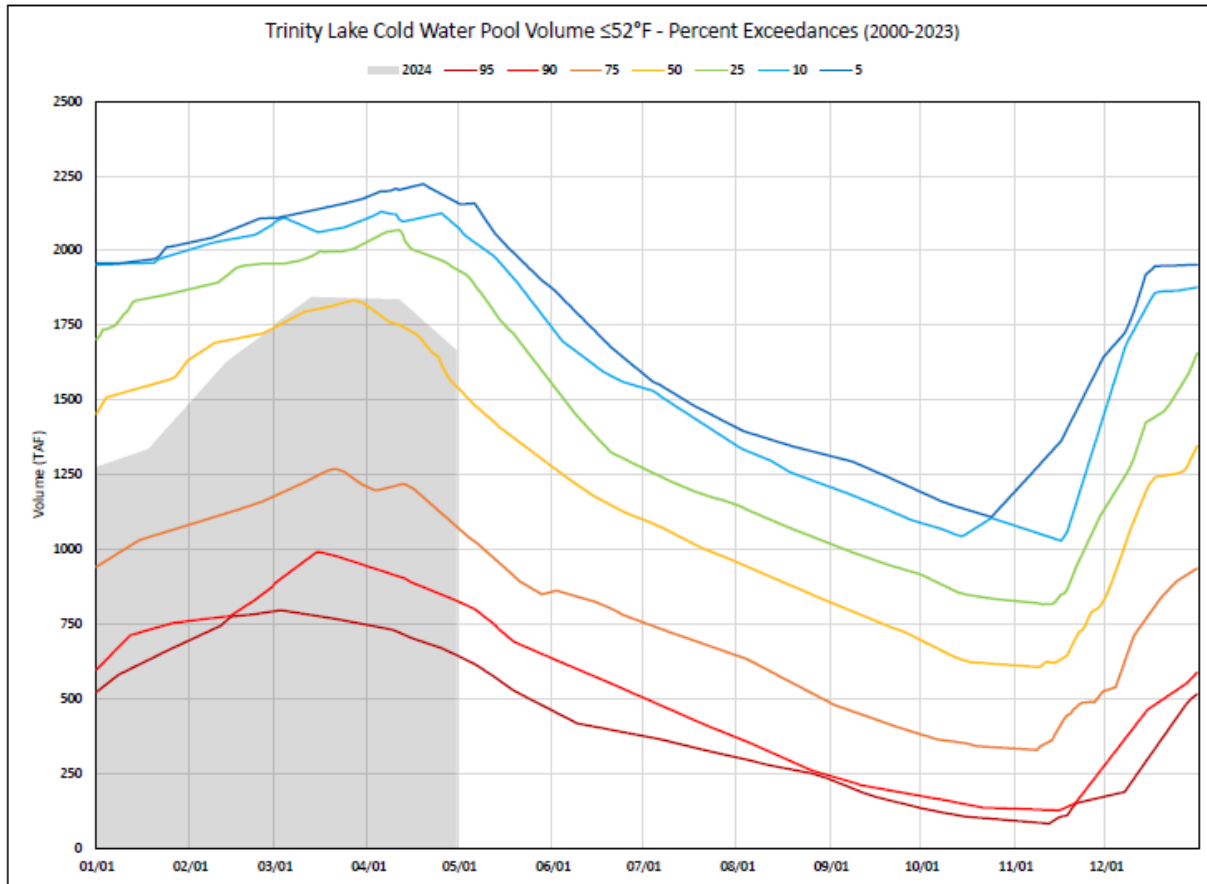
Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

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.



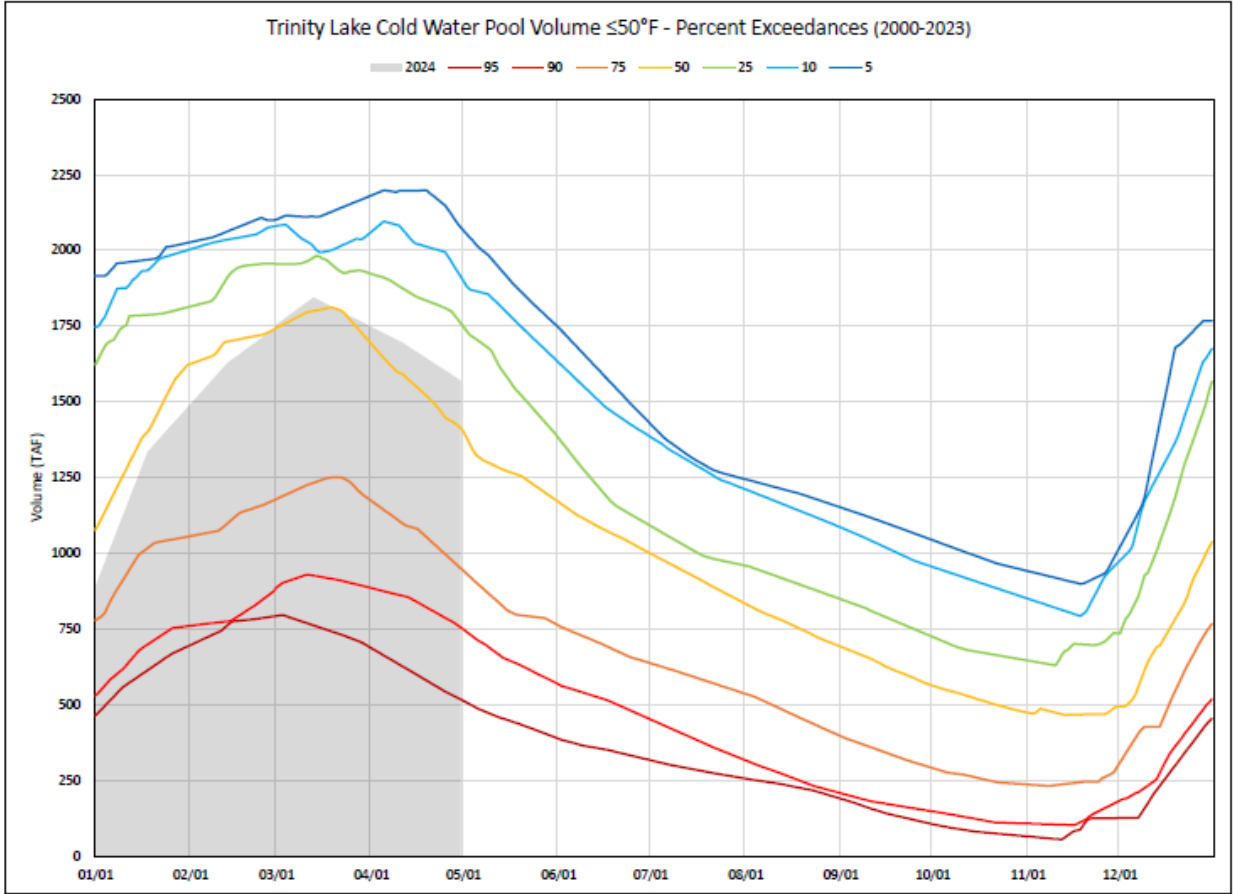
Shasta Lake Cold Water Pool Volume ≤48°F - Percent Exceedances (1998-2023)

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.



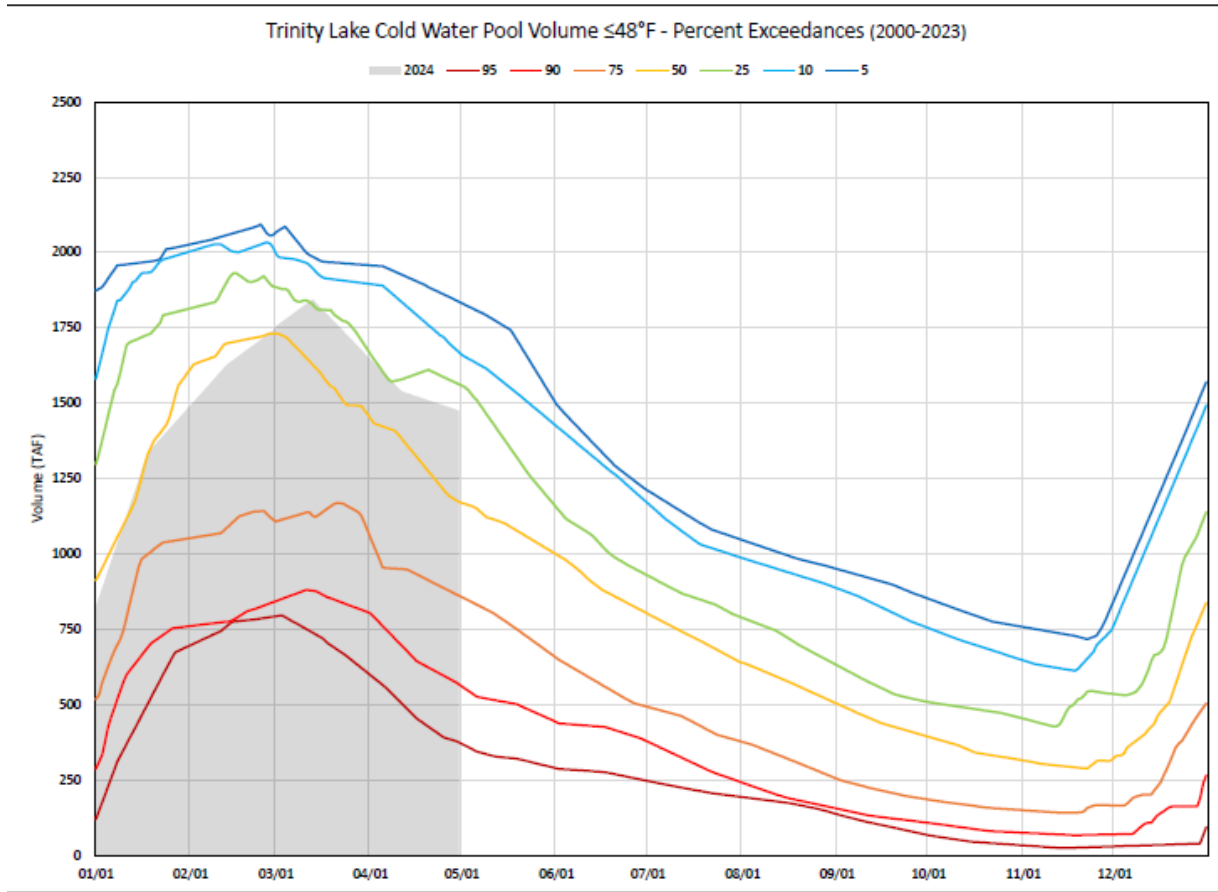
Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2023)

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.



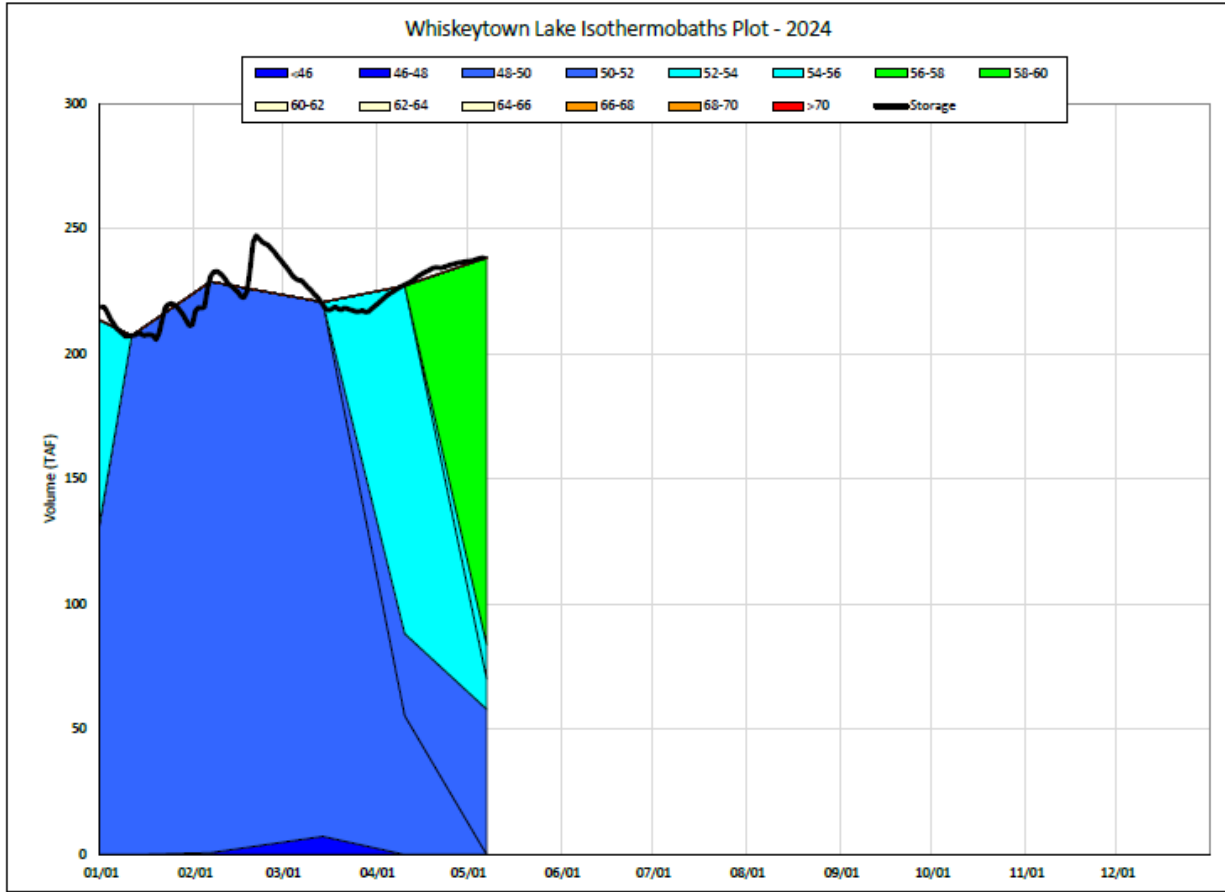
Trinity Lake Cold Water Pool Volume ≤50°F - Percent Exceedances (1998-2023)

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.



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.

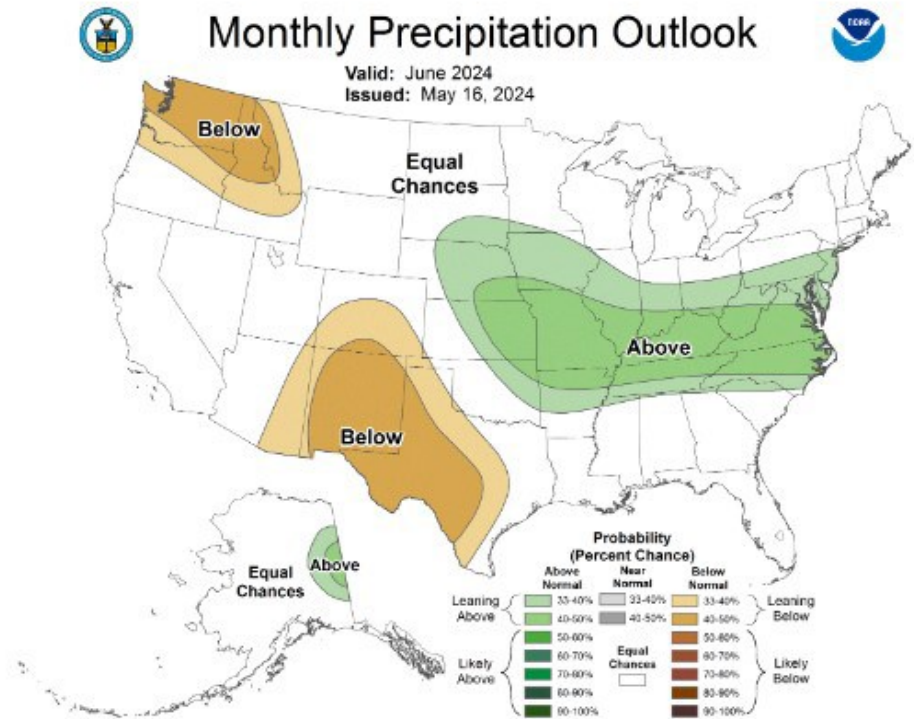
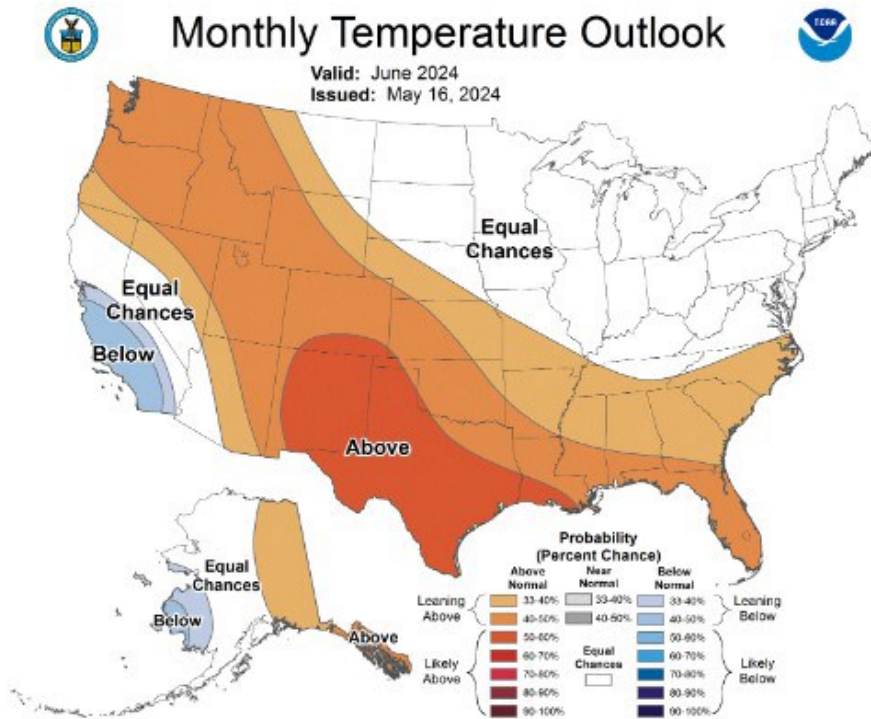


Whiskeytown Lake Isothermobaths Plot – 2024

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

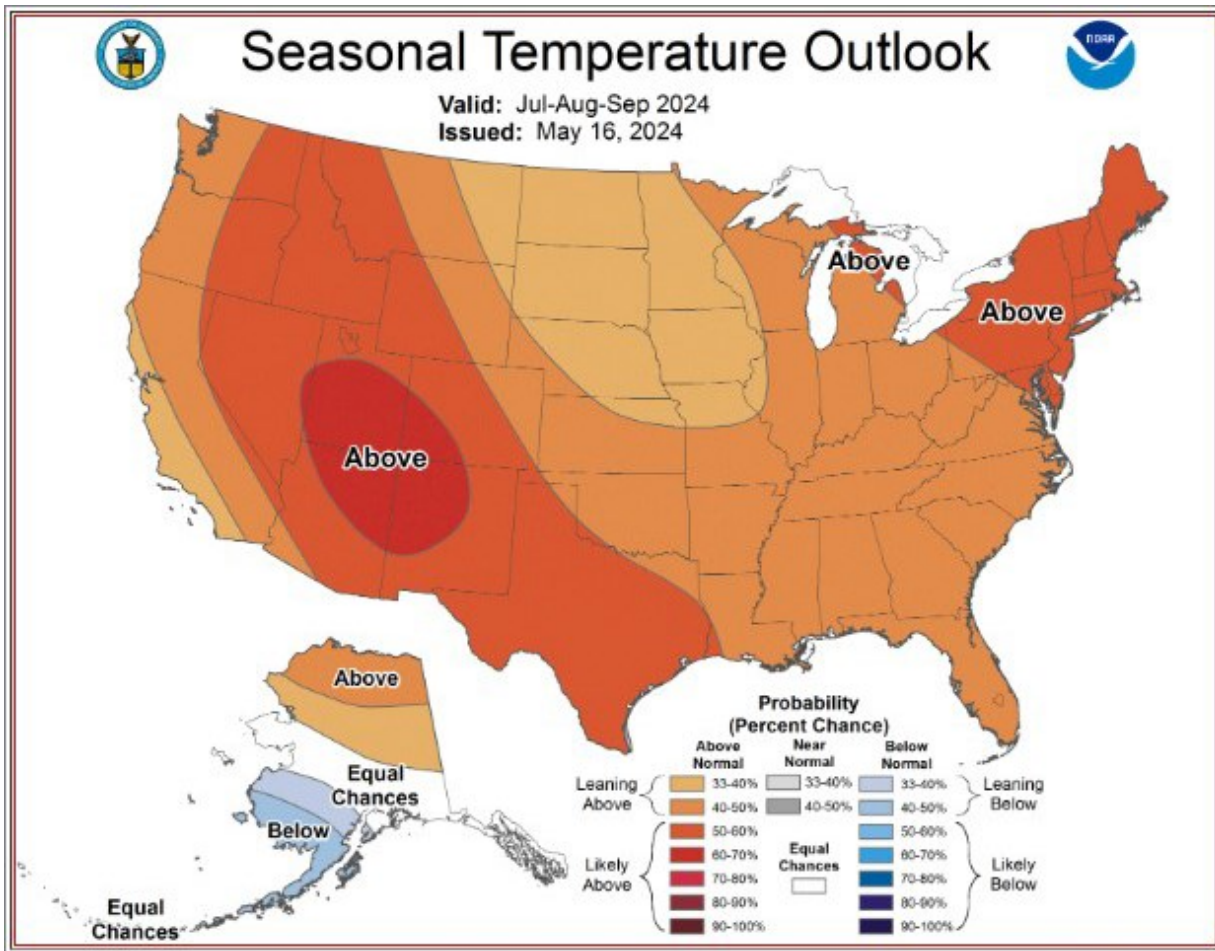
OFFICIAL 30-Day Forecasts

Issued: May 16, 2024



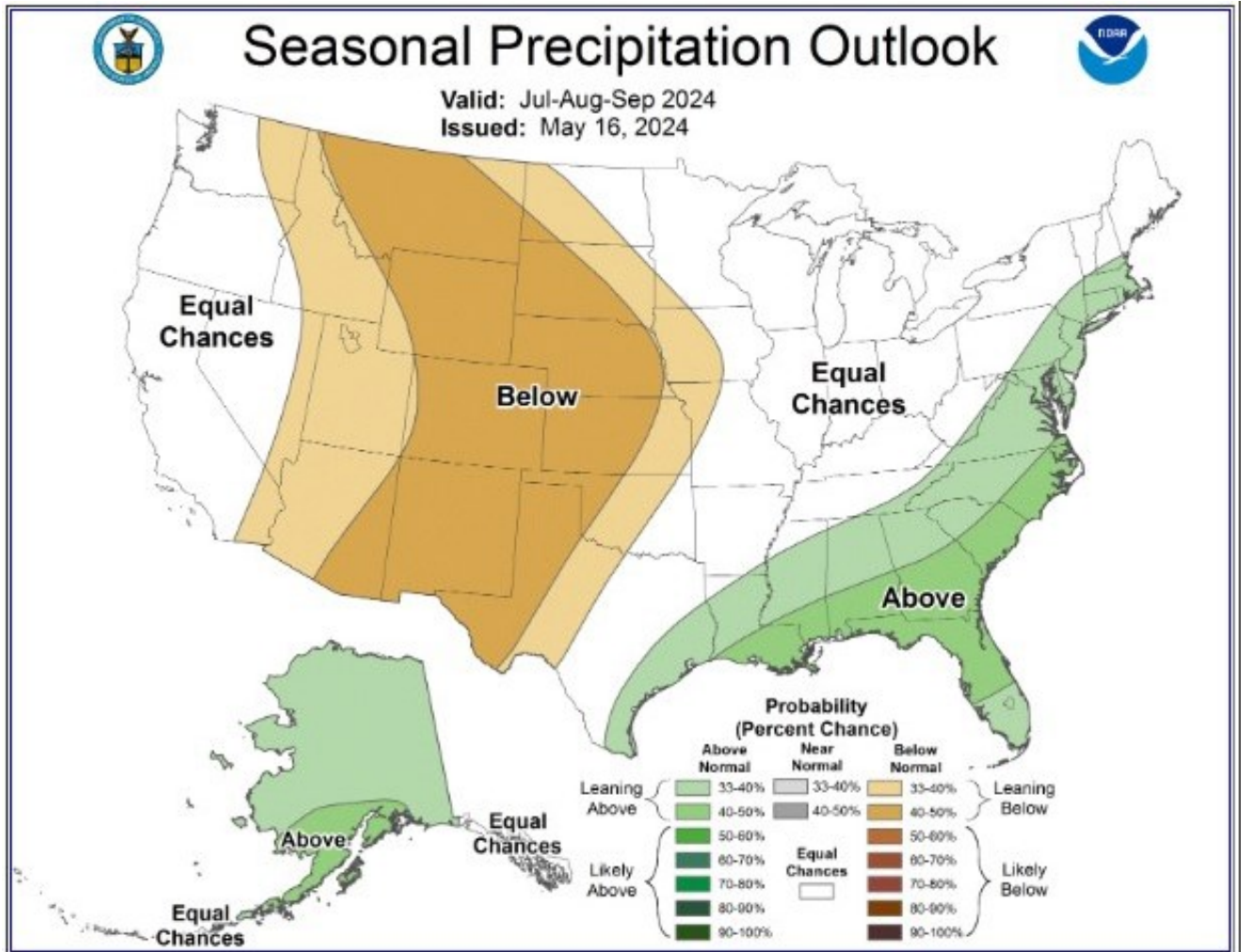
Official Monthly Temperature and Precipitation Outlook

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 Jun 2024 and was issued on May 16, 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 June 2024 and was issued on May 16, 2024.



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 May 16, 2024.



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 July to September 2024 and was issued on May 16, 2024.

Estimated CVP Operations 90% Exceedance

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

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Trinity	2073	2117	2020	1885	1762	1633	1610	1606	1627	1639	1675	1739	1813
Trinity Elev.	N/A	2349	2342	2333	2324	2314	2312	2312	2313	2314	2317	2322	2328
Whiskeytown	237	238	238	238	238	238	206	206	206	206	206	206	238
Whiskeytown Elev.	N/A	1209	1209	1209	1209	1209	1199	1199	1199	1199	1199	1199	1209
Shasta	4364	4381	4064	3466	3053	2812	2717	2726	2798	2869	3024	3293	3496
Shasta Elev.	N/A	1061	1050	1027	1010	999	995	995	999	1002	1009	1020	1029
Folsom	849	966	898	642	446	411	360	327	314	300	326	422	554
Folsom Elev.	N/A	465	459	433	410	405	397	392	390	387	392	406	423
New Melones	2056	2068	2062	2003	1947	1903	1838	1845	1853	1857	1859	1880	1766
New Melones Elev.	N/A	1058	1058	1053	1047	1043	1037	1038	1039	1039	1039	1041	1030
Fed. San Luis	891	747	461	332	256	308	358	412	466	636	593	550	468
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	10470	10516	9743	8567	7702	7304	7089	7122	7264	7506	7683	8090	8335

State End of the Month Reservoir Storage (TAF)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Oroville	3461	3519	3408	2837	2330	1829	1628	1540	1513	1551	1638	1809	1879
Oroville Elev.	N/A	899	892	852	812	766	745	735	732	736	746	764	771
State San Luis	539	428	247	411	583	826	807	928	1140	1175	1185	1281	1237
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)	1430	1175	708	743	839	1134	1165	1340	1606	1811	1778	1831	1705

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Total San Luis Elev.	N/A	470	422	426	436	466	469	485	508	526	523	527	517

Monthly River Releases (TAF/cfs)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Trinity (TAF)	N/A	215	107	45	53	52	23	18	18	18	17	18	32
Trinity (cfs)	N/A	3,500	1,800	735	857	870	373	300	300	300	300	300	540
Clear Creek (TAF)	N/A	18	13	9	9	9	12	12	12	12	11	22	12
Clear Creek (cfs)	N/A	296	224	150	150	150	200	200	200	200	200	363	200
Sacramento (TAF)	N/A	449	625	851	645	476	338	238	246	246	222	246	238
Sacramento (cfs)	N/A	7300	10500	13850	10500	8000	5500	4000	4000	4000	4000	4000	4000
American (TAF)	N/A	246	214	345	283	113	92	75	77	77	76	77	74
American (cfs)	N/A	4000	3598	5616	4599	1893	1500	1263	1250	1250	1377	1250	1250
Stanislaus (TAF)	N/A	76	71	15	15	15	48	12	12	14	12	12	91
Stanislaus (cfs)	N/A	1242	1200	250	250	250	774	200	200	226	221	200	1537
Feather (TAF)	N/A	215	107	479	452	556	215	104	108	77	111	108	143
Feather (cfs)	N/A	3500	1800	7800	7350	9350	3500	1750	1750	1250	2000	1750	2400

Trinity Diversions (TAF)

Diversion Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Carr PP	N/A	24	91	100	81	80	8	6	1	1	1	3	29
Spring Creek PP	N/A	20	80	90	70	70	30	0	0	0	0	0	0

Delta Summary (TAF)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Tracy	N/A	123	150	259	229	260	190	140	110	220	44	55	57
USBR Banks	N/A	0	0	18	18	18	0	0	0	0	0	0	0
Contra Costa	N/A	12.0	10.0	11.0	12.0	13.0	14.0	14.0	14.0	13.0	14.0	12.0	12.0
Total USBR	N/A	135	160	288	259	291	204	154	124	233	58	67	69
State Export	N/A	37	37	393	397	396	125	221	278	160	111	183	62
Total Export	N/A	172	197	681	656	687	329	375	402	393	169	250	132
COA Balance	N/A	0	6	0	0	-69	-69	-53	-53	-53	-52	-53	-53
Vernalis (TAF)	N/A	322	131	54	52	57	107	74	75	77	82	98	148
Vernalis (cfs)	N/A	5243	2209	884	852	956	1734	1242	1225	1251	1482	1599	2496
Old/Middle River calc.	N/A	-383	-2146	-8722	-8424	-9052	-3931	-4885	-5074	-4950	-2267	-3002	-1170
Computed DOI	N/A	17195	7884	8004	6539	7497	7808	4505	7353	7890	11400	11403	22592
Excess Outflow	N/A	4636	0	0	0	0	309	0	2847	3384	0	0	13095
% Export/Inflow	N/A	12%	21%	47%	50%	53%	35%	52%	44%	46%	20%	26%	8%
% Export/inflow std.	N/A	35%	35%	65%	65%	65%	65%	65%	65%	65%	45%	35%	35%

Hydrology

Statistic	Trinity	Shasta	Folsom	New Melones
Water Year Inflow (TAF)	1587	5604	2413	1095
Year to Date + Forecasted % of mean	130%	101%	89%	104%

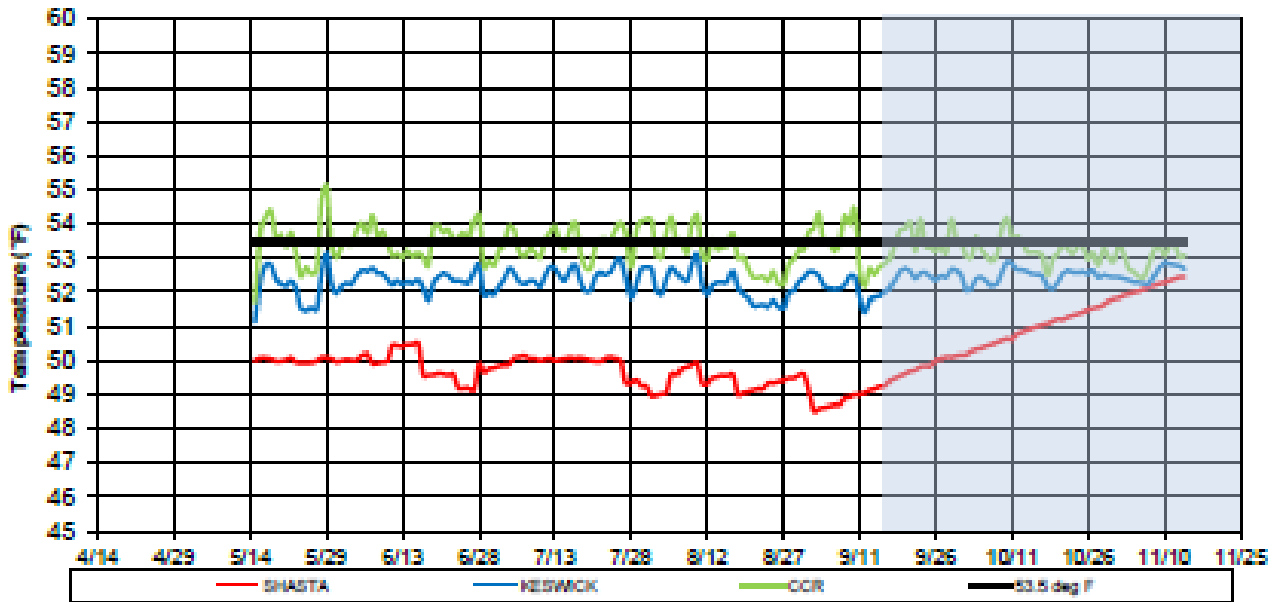
CVP actual operations do not follow any forecasted operation or outlook; actual operations are based on real-time conditions.

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.

**Sacramento River Modeled Temperature
2024 May 90%-Exceedance Water Outlook - L3MTO May 25% Meteorology**



Sacramento River Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure shows Sacramento River modeled temperature in degrees Fahrenheit at Shasta and Keswick Dams, and above Clear Creek from 4/14 to 11/25 in percent exceedances. It also shows the desired degree range between 53.5 and 56 degrees Fahrenheit.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Shasta	Keswick	CCR	Igo	Trinity	Lewiston
June	49.9	52.4	53.5	53.1	45.3	48.2
July	49.9	52.4	53.5	56.7	45.6	49.8
August	49.4	52.1	53.1	57.4	45.7	49.2
September	49.3 A	52.3 A	53.4 A	57.0	45.9	49.0
October	50.9 A	52.4 A	53.2 A	55.2	46.0	49.9
November	52.4 A	52.7 A	53.0 A	53.1	46.0	48.0

Legend

A = Denotes period of model limitations.

Run date: 5/21/24

EOM September Storage: 2.8 MAF (no pulse)

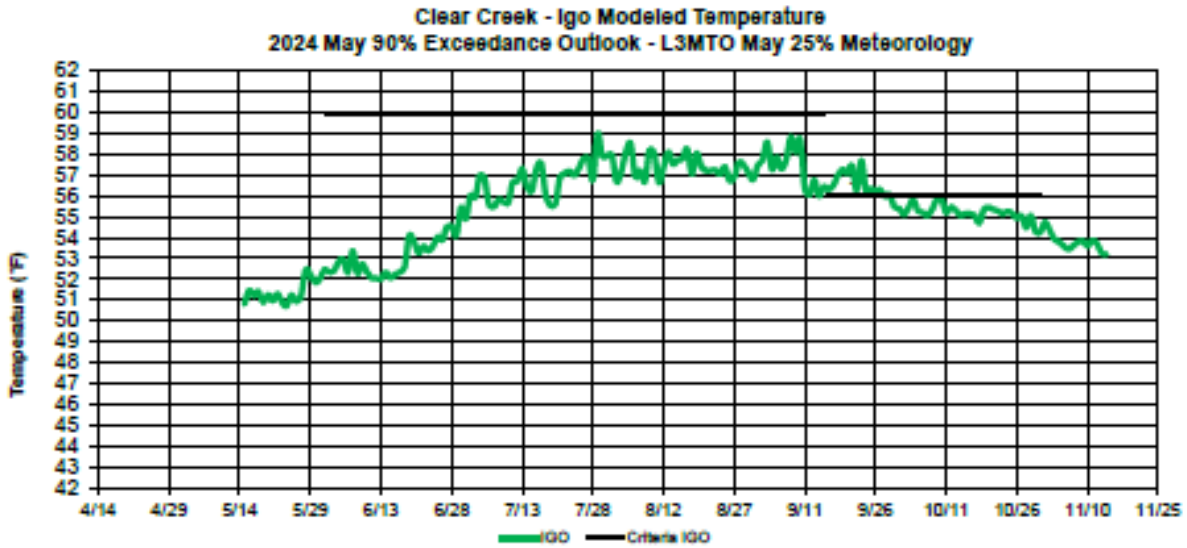
Trinity profile date: 5/2/24

Whiskeytown profile date: 5/7/24

Shasta profile date: 5/15/24

Projected side gates: First August 19 Full September 3

End of September Cold-Water-Pool less than 56 degrees Fahrenheit: 893 TAF

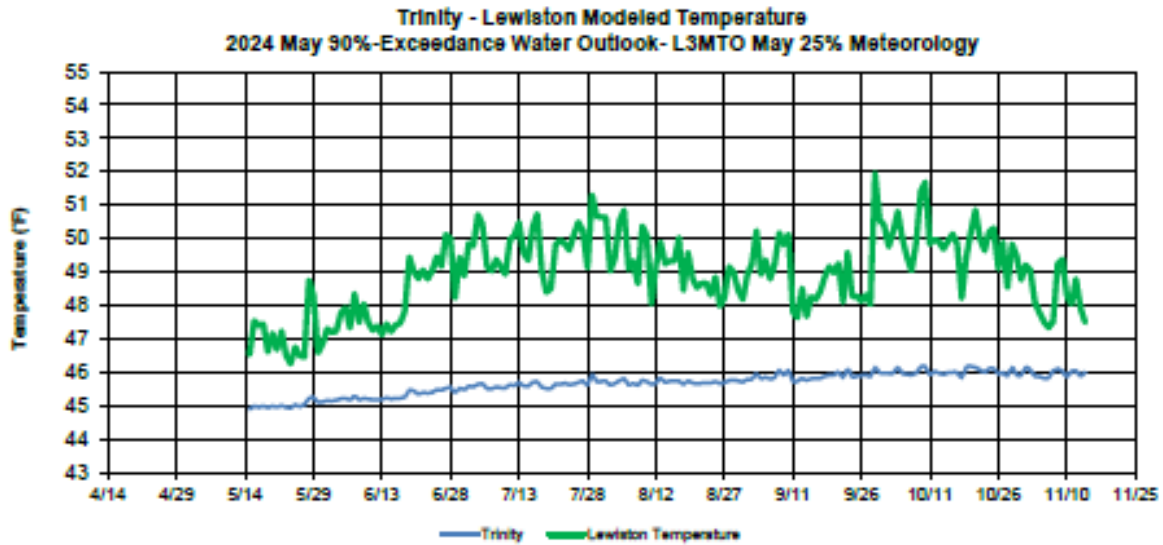


Clear Creek Igo Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Igo modeled temperature in degrees Fahrenheit at from 04/14 to 11/25

Facility Temperature Outlook in Degrees Fahrenheit

Month	Igo
June	53.1
July	56.7
August	57.4
September	57.0
October	55.2
November	53.1

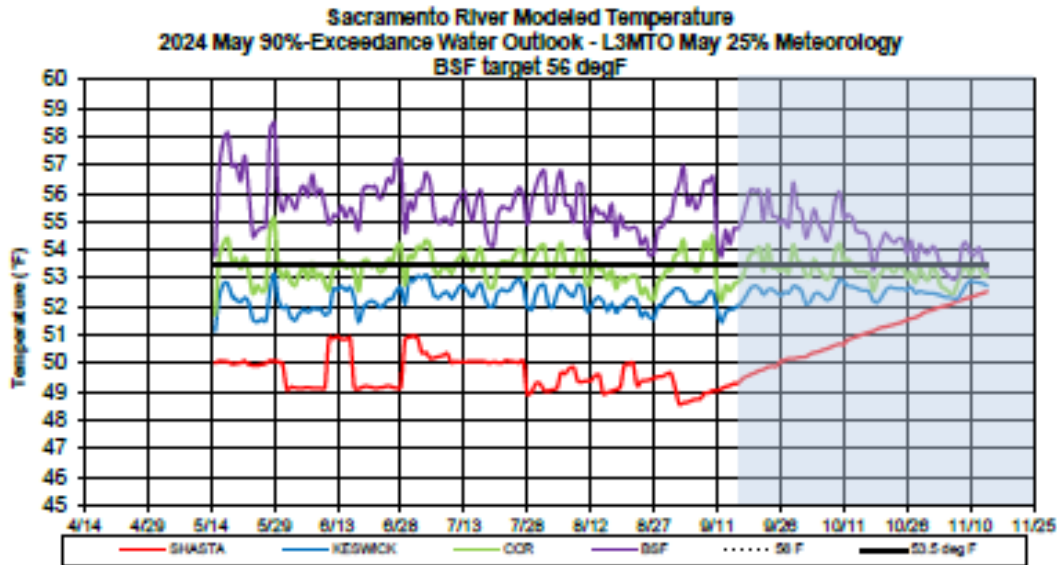


Trinity-Lewiston Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Trinity - Lewiston modeled temperature in degrees Fahrenheit at from 04/14 to 11/25.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Trinity	Lewiston
June	45.3	48.2
July	45.6	49.8
August	45.7	49.2
September	45.9	49.0
October	46.0	49.9
November	46.0	48.0



Sacramento River Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology Balls Ferry Target 56 degrees Fahrenheit.

This figure shows Sacramento River modeled temperature in degrees Fahrenheit at Shasta and Keswick Dams, and above Clear Creek from 4/14 to 11/25 in percent exceedances. It also shows the desired degree range between 53.5 and 56 degrees Fahrenheit.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Shasta	Keswick	CCR	BSF	Igo	Trinity	Lewiston
June	49.6	52.1	53.3	55.8	49.6	52.1	53.3
July	50.0	52.6	53.6	55.6	50.0	52.6	53.6
August	49.4	52.2	53.2	55.2	49.4	52.2	53.2
September	49.4 A	52.3 A	53.5 A	55.5 A	49.4	52.3	53.5
October	51.0 A	52.5 A	53.3 A	54.6 A	51.0	52.5	53.3
November	52.5 A	52.8 A	53.2 A	53.5 A	52.5	52.8	53.2

Legend

A = Denotes period of model limitations.

Run date: 5/21/24

EOM September Storage: 2.76 MAF (with pulse)

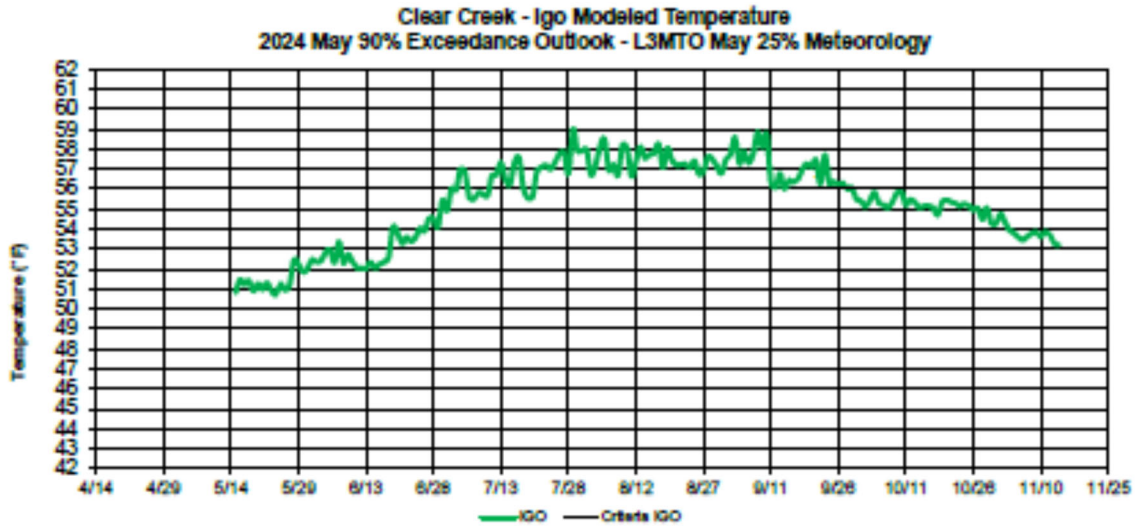
Trinity profile date: 5/2/24

Whiskeytown profile date: 5/7/24

Shasta profile date: 5/15/24

Projected side gates: First August 16 Full September 3

End of September Cold-Water-Pool less than 56 degrees Fahrenheit: 863 TAF

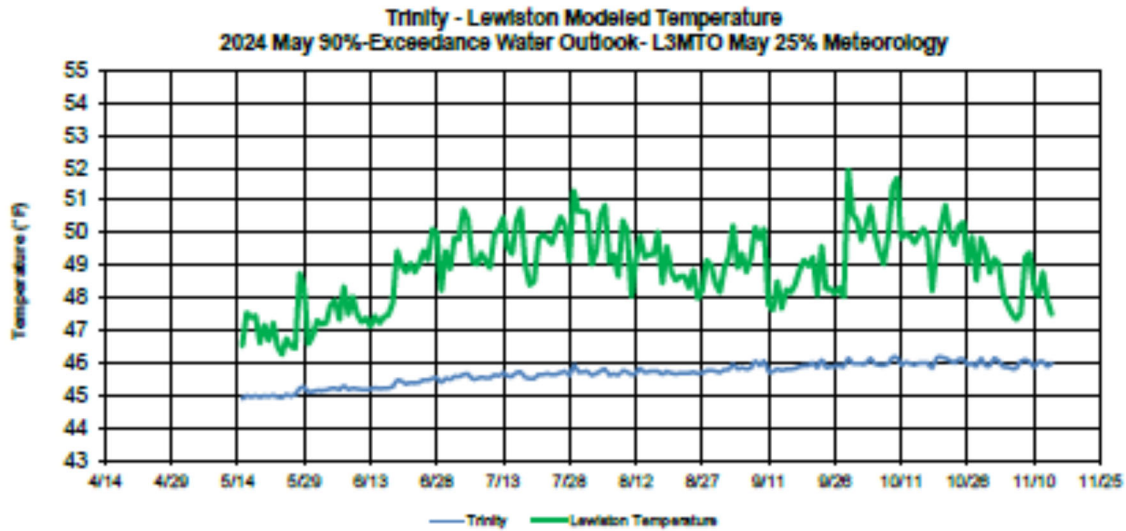


Clear Creek Igo Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Igo modeled temperature in degrees Fahrenheit at from 04/14 to 11/25.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Igo
June	53.1
July	56.7
August	57.4
September	57.0
October	55.2
November	53.1



Trinity-Lewiston Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Trinity - Lewiston modeled temperature in degrees Fahrenheit at from 04/14 to 11/25.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Trinity	Lewiston
June	45.3	48.2
July	45.6	49.8
August	45.7	49.2
September	45.9	49.0
October	46.0	49.9
November	46.0	48.0

Estimated CVP Operations 50% Exceedance

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

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Trinity	2073	2127	2053	1949	1817	1698	1648	1655	1693	1756	1868	1996	2100
Trinity Elev.	0	2350	2345	2337	2328	2319	2315	2316	2319	2323	2332	2341	2348
Whiskeytown	237	238	238	238	238	238	206	206	206	206	206	206	238
Whiskeytown Elev.	N/A	1209	1209	1209	1209	1209	1199	1199	1199	1199	1199	1199	1209
Shasta	4364	4325	4098	3635	3277	3045	2969	2998	3104	3436	3725	4054	4235
Shasta Elev.	N/A	1059	1051	1034	1020	1010	1006	1008	1012	1026	1037	1050	1056
Folsom	849	966	961	773	622	564	521	508	514	559	622	811	956
Folsom Elev.	N/A	465	465	447	431	424	419	418	418	424	431	450	464
New Melones	2056	2068	2112	2059	2006	1963	1912	1924	1941	1976	1962	1962	1934
New Melones Elev.	N/A	1058	1062	1058	1053	1049	1044	1045	1047	1050	1049	1049	1046
Federal San Luis	823	670	431	282	220	258	305	457	625	831	880	880	792
Total	10402	10394	9893	8937	8180	7767	7562	7748	8082	8764	9263	9909	10255

State End of the Month Reservoir Storage (TAF)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Oroville	3461	3526	3434	2955	2475	2056	1772	1720	1692	1903	2255	2595	2943
Oroville Elev.	N/A	900	894	861	824	788	760	755	752	773	806	834	860
State San Luis	539	424	315	473	619	840	970	1131	1105	1103	1103	1103	1030
Total San Luis (TAF)	1362	1094	746	755	838	1099	1275	1589	1729	1934	1983	1983	1822
Total San Luis Elev.	N/A	462	426	427	436	463	479	507	519	536	540	540	526

Monthly River Releases (TAF/cfs)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Trinity (TAF)	N/A	215	107	45	53	52	23	18	18	18	17	18	80
Trinity (cfs)	N/A	3,500	1,800	735	857	870	373	300	300	300	300	300	1,347
Clear Creek (TAF)	N/A	18	14	9	9	9	12	12	12	12	11	22	12
Clear Creek (cfs)	N/A	291	242	150	150	150	200	200	200	200	200	363	200
Sacramento (TAF)	N/A	504	565	738	615	476	369	268	277	277	472	492	428
Sacramento (cfs)	N/A	8200	9500	12000	10000	8000	6000	4500	4500	4500	8500	8000	7200
American (TAF)	N/A	246	196	284	246	143	123	105	108	108	200	123	280

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
American (cfs)	N/A	4000	3300	4621	4000	2406	2008	1772	1750	1750	3600	2000	4700
Stanislaus (TAF)	N/A	76	54	15	15	15	39	12	12	13	83	92	91
Stanislaus (cfs)	N/A	1242	900	250	250	250	635	200	200	219	1500	1500	1537
Feather (TAF)	N/A	307	85	479	479	497	255	104	108	108	97	108	104
Feather (cfs)	N/A	5000	1430	7800	7800	8350	4150	1750	1750	1750	1750	1750	1750

Trinity Diversions (TAF)

Diversion Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Carr PP	N/A	23	68	79	80	69	38	5	1	1	1	1	20
Spring Creek PP	N/A	20	60	70	70	60	60	0	4	23	34	16	0

Delta Summary (TAF)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Tracy	N/A	123	210	265	265	260	189	240	225	260	140	105	57
USBR Banks	N/A	0	0	20	20	20	0	0	0	0	0	0	0
Contra Costa	N/A	12.7	9.8	11.1	12.7	14.0	14.0	16.0	18.0	14.0	14.0	12.7	12.7
Total USBR	N/A	136	220	296	298	294	203	256	243	274	154	118	70
State Export	N/A	38	120	406	386	389	288	274	50	123	102	86	33
Total Export	N/A	174	340	702	684	683	491	530	293	397	256	204	103
COA Balance	N/A	0	41	72	57	48	41	41	41	41	41	41	41
Vernalis (TAF)	N/A	352	204	80	71	74	117	99	103	118	307	329	255
Vernalis (cfs)	N/A	5718	3421	1307	1161	1242	1904	1662	1680	1927	5534	5355	4278
Old/Middle River calc.	N/A	-191	-3,449	-8,796	-8,631	-8,872	-5,883	-6,702	-3,504	-4,695	-1,650	-732	8
Computed DOI	N/A	26434	9195	8004	6539	7497	7499	4505	13323	16820	32653	31559	22256
Excess Outflow	N/A	13876	0	0	0	0	0	0	8817	10818	21252	20155	10859

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
% Export/Inf low	N/A	8%	31%	47%	50%	51%	45%	60%	25%	28%	12%	9%	6%
% Export/inf low std.	N/A	35%	35%	65%	65%	65%	65%	65%	65%	65%	45%	35%	35%

Hydrology

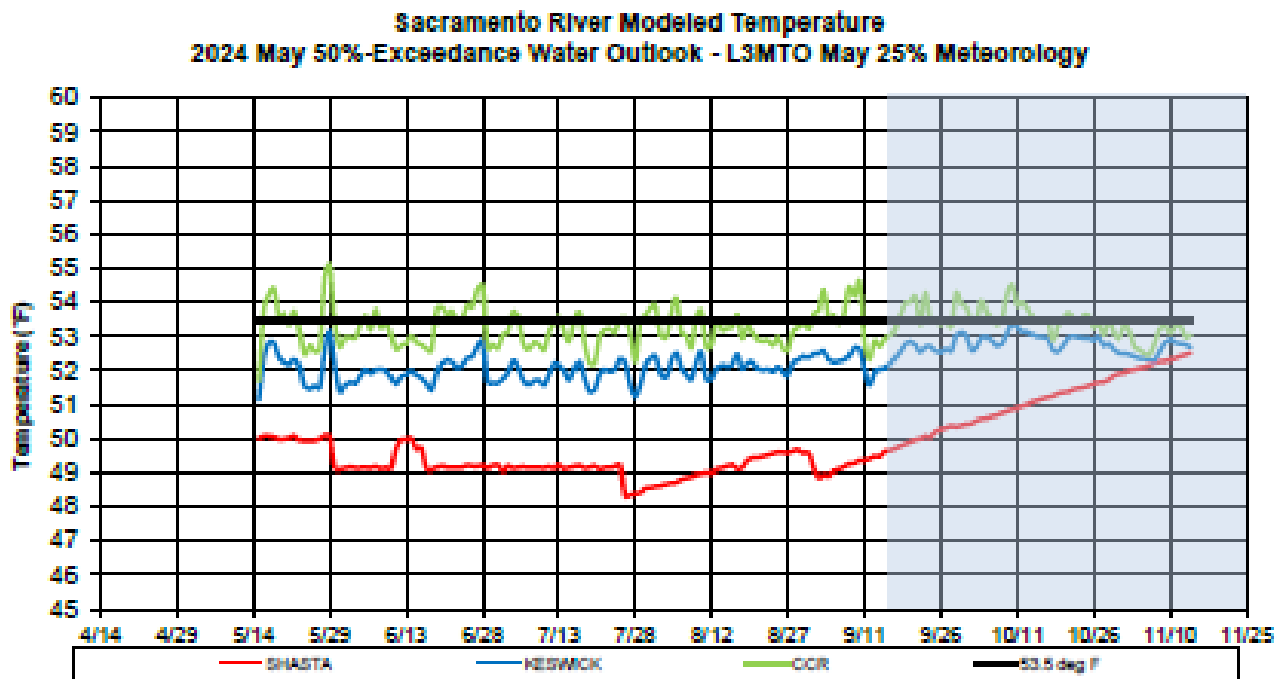
Statistic	Trinity	Shasta	Folsom	New Melones
Water Year Inflow (TAF)	1577	5,740	2,483	1,138
Year to Date + Forecasted % of mean	131%	104%	91%	108%

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.



Sacramento River Modeled Temperature – May 2024 50%-Exceedance Water Outlook Historical 25% Meteorology.

This figure shows Sacramento River modeled temperature in degrees Fahrenheit at Shasta and Keswick Dams, and above Clear Creek from 4/14 to 11/25 in percent exceedances. It also shows the desired degree range between 45 and 60 degrees Fahrenheit.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Shasta	Keswick	CCR	Igo	Trinity	Lewiston
June	49.3	52.0	53.3	52.8	45.3	48.5
July	49.0	51.9	53.1	56.5	45.6	50.2
August	49.2	52.1	53.2	57.5	45.7	49.2
September	49.6 A	52.5 A	53.6 A	57.2	45.8	49.0
October	51.1 A	52.9 A	53.6 A	54.9	45.9	48.5
November	52.5 A	52.8 A	53.1 A	52.7	45.9	48.1

Legend

A = Denotes period of model limitations.

Run date: 5/21/24

EOM September Storage: 3.05 MAF (with pulse)

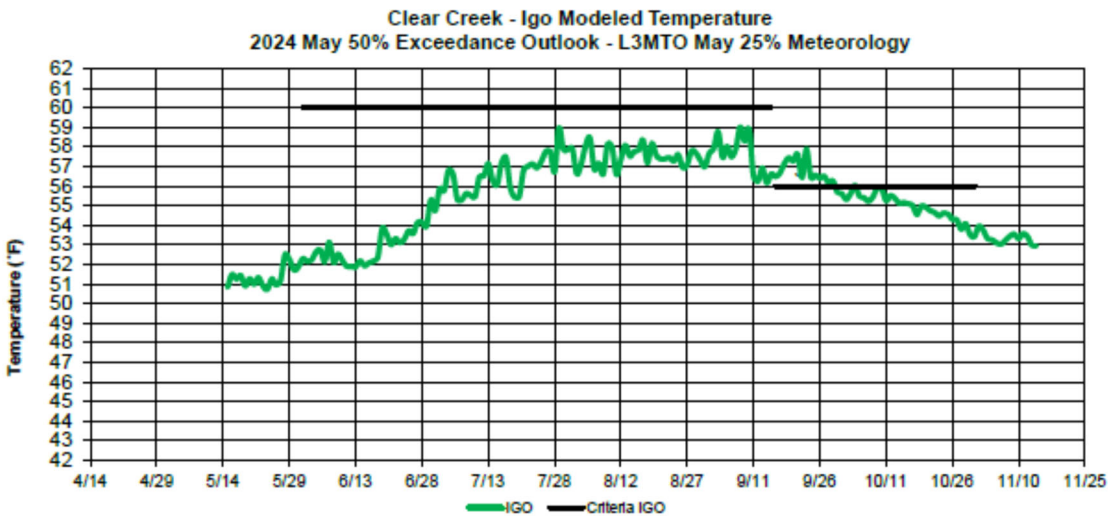
Trinity profile date: 5/2/24

Whiskeytown profile date: 5/7/24

Shasta profile date: 5/15/24

Projected side gates: First July 27 Full September 3

End of September Cold-Water-Pool less than 56 degrees Fahrenheit: 975 TAF

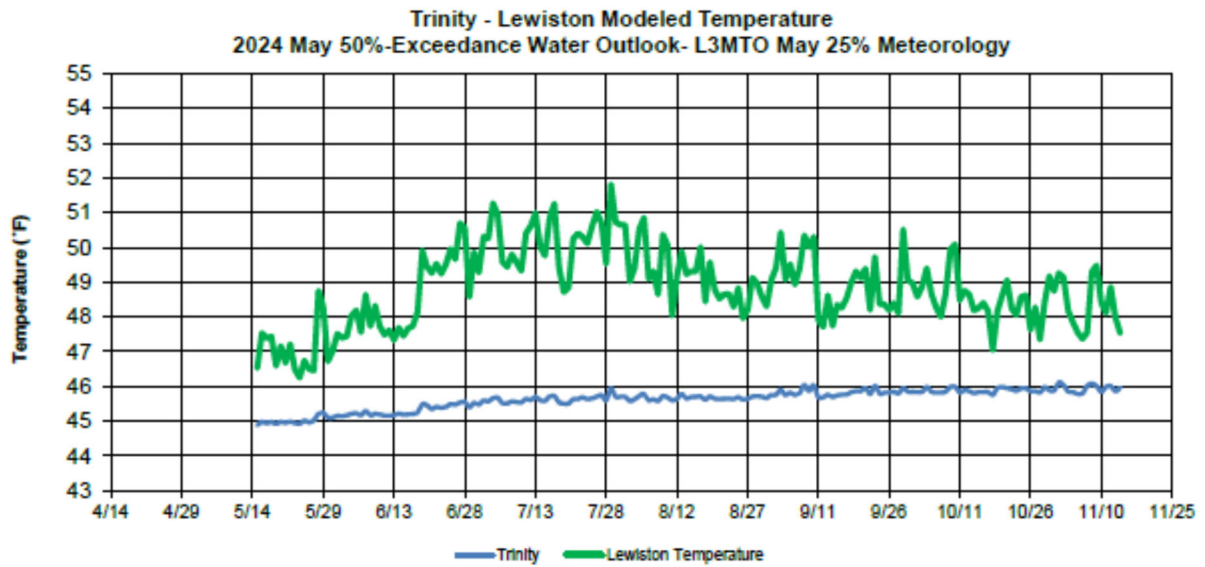


Clear Creek Igo Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Igo modeled temperature in degrees Fahrenheit at from 04/14 to 11/25.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Igo
June	52.8
July	56.5
August	57.5
September	57.2
October	54.9
November	52.7



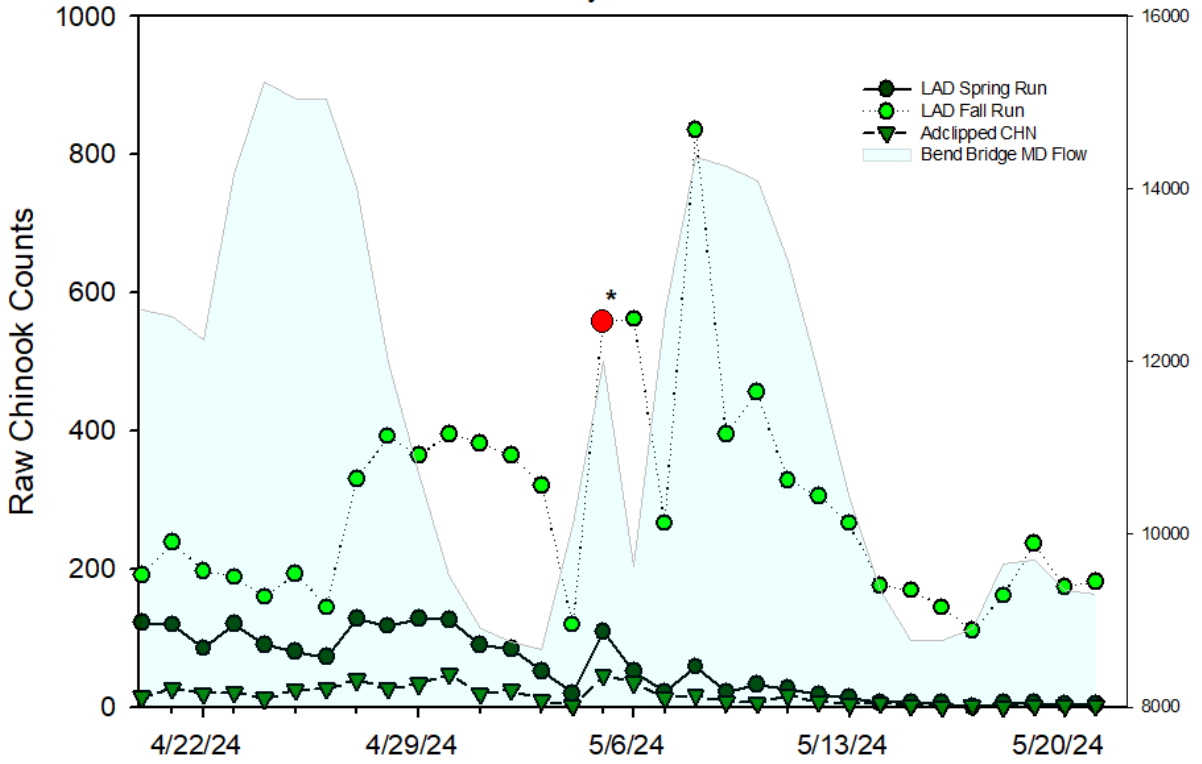
Trinity-Lewiston Modeled Temperature – May 2024 90%-Exceedance Water Outlook Historical 25% Meteorology.

This figure is a line graph showing Trinity-Lewiston modeled temperature in degrees Fahrenheit at from 04/14 to 11/25.

Facility Temperature Outlook in Degrees Fahrenheit

Month	Trinity	Lewiston
June	45.3	48.5
July	45.6	50.2
August	45.7	49.2
September	45.8	49.0
October	45.9	48.5
November	45.9	48.1

Spring Pulse Flows with Raw Catch and Mean Daily Flow at RBDD RST



* Thalweg trap compromised (negative bias raw count)

Spring Pulse Flows with Raw Catch and Mean Daily Flow at RBDD RST.

This figure is a line graph showing preliminary in-situ pulse flow Chinook catch data between April 22 and May 20, 2024.