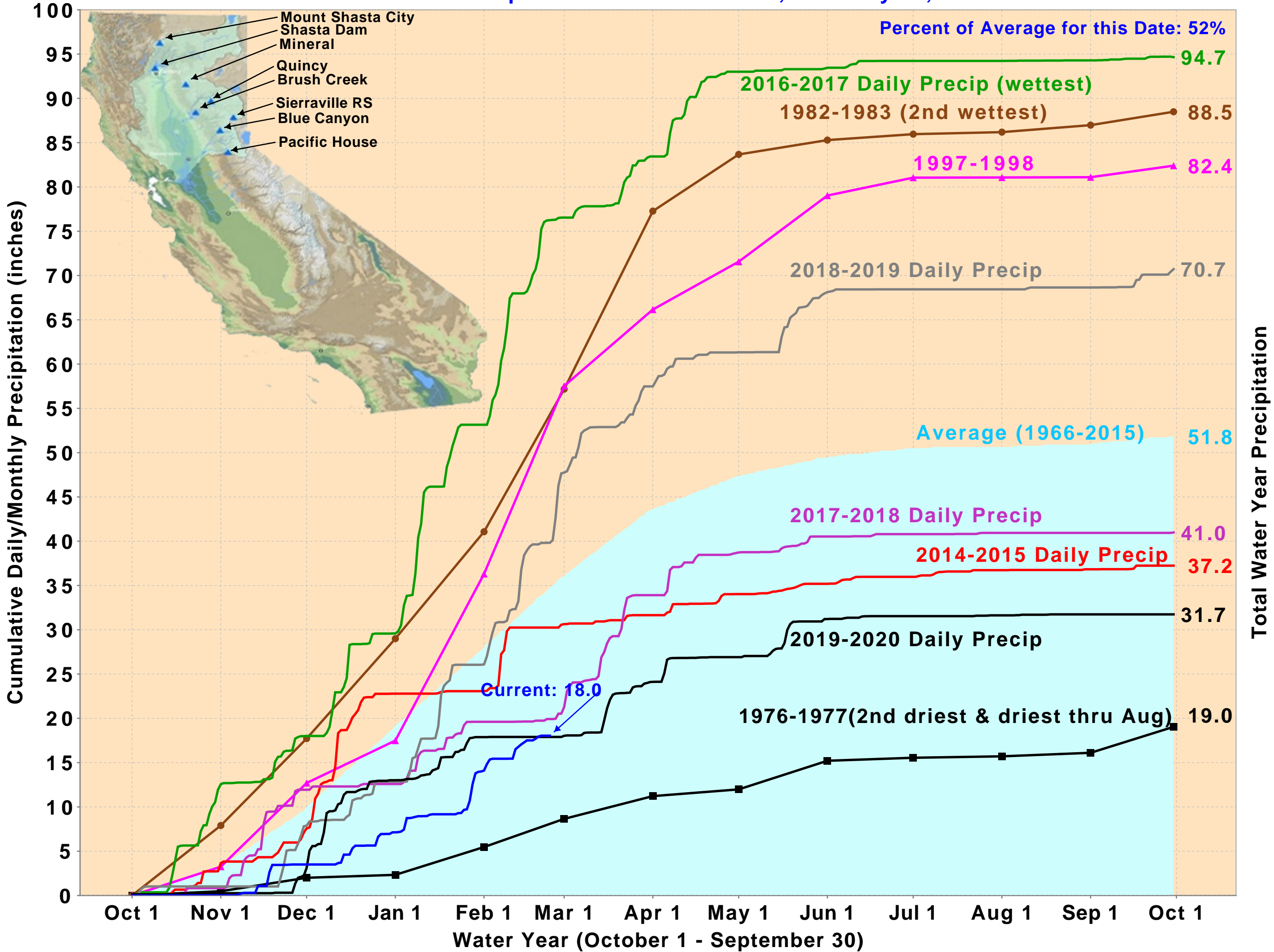
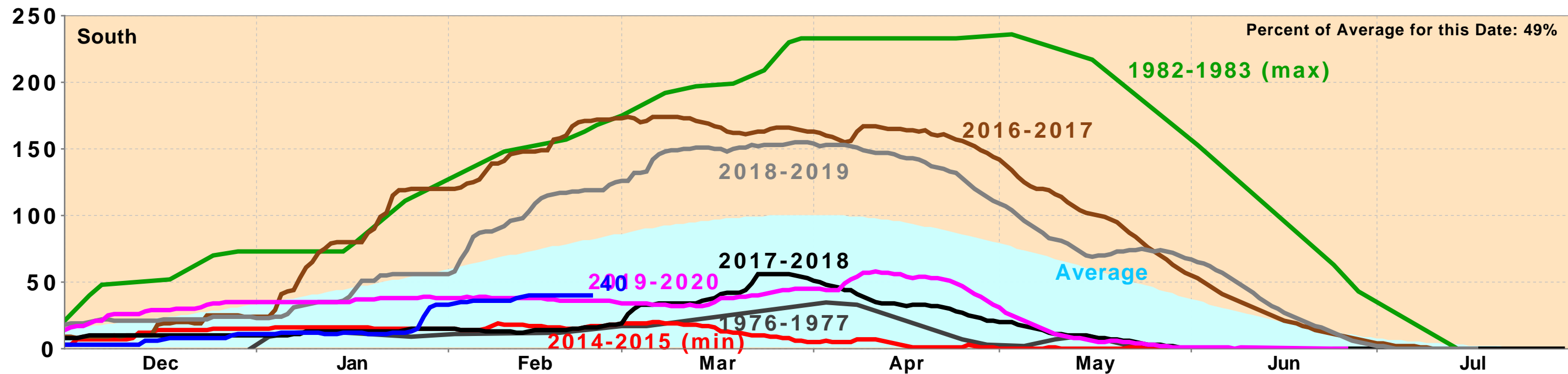
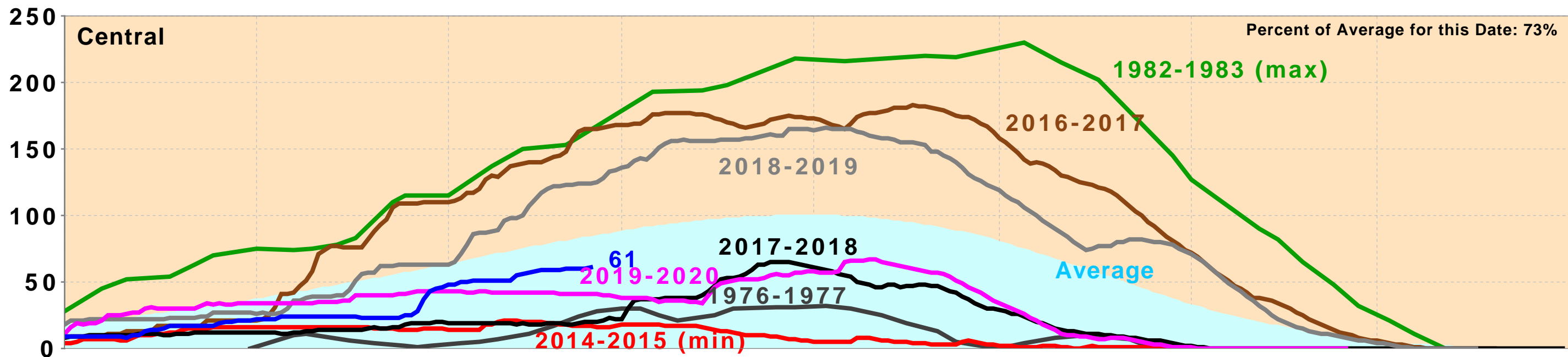
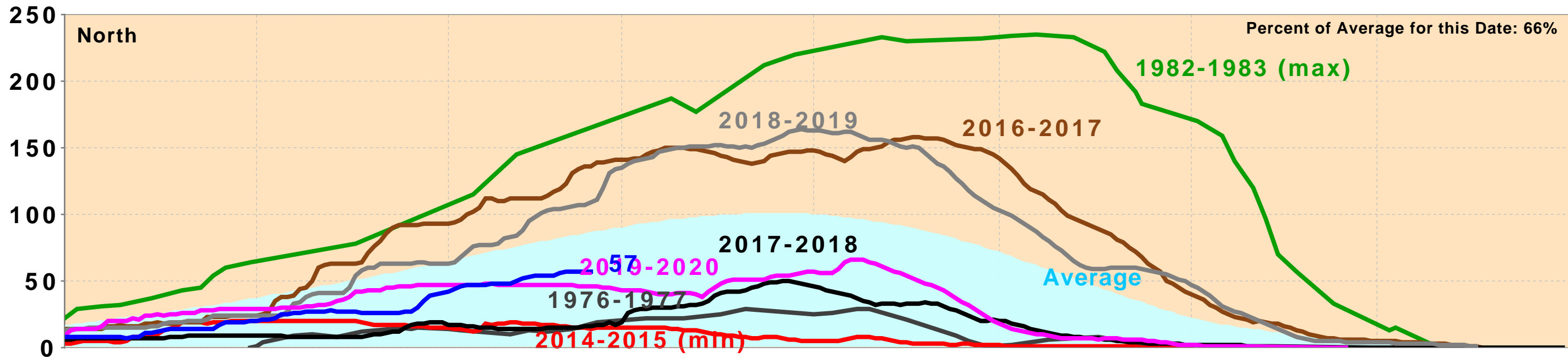


Northern Sierra Precipitation: 8-Station Index, February 24, 2021



California Snow Water Content, February 24, 2021, Percent of April 1 Average



Statewide Percent of April 1: 54%

Statewide Percent of Average for Date: 64%

DAILY CVP WATER SUPPLY REPORT

FEBRUARY 23, 2021

RUN DATE: February 24, 2021

RESERVOIR RELEASES IN CUBIC FEET/SECOND

RESERVOIR	DAM	WY 2020	WY 2021	15 YR MEDIAN
TRINITY	LEWISTON	298	313	307
SACRAMENTO	KESWICK	4,993	3,304	3,318
FEATHER	OROVILLE (SWP)	2,250	1,250	1,750
AMERICAN	NIMBUS	1,914	991	1,765
STANISLAUS	GOODWIN	2,002	406	402
SAN JOAQUIN	FRIANT	583	315	286

STORAGE IN MAJOR RESERVOIRS IN THOUSANDS OF ACRE-FEET

RESERVOIR	CAPACITY	15 YR AVG	WY 2020	WY 2021	% OF 15 YR AVG
TRINITY	2,448	1,541	2,020	1,272	83
SHASTA	4,552	3,029	3,551	2,262	75
FOLSOM	977	473	462	340	72
NEW MELONES	2,420	1,483	1,952	1,554	105
FED. SAN LUIS	966	658	514	475	72
TOTAL NORTH CVP	11,363	7,185	8,499	5,903	82
MILLERTON	520	285	295	169	59
OROVILLE (SWP)	3,538	1,977	2,254	1,335	68

ACCUMULATED INFLOW FOR WATER YEAR TO DATE IN THOUSANDS OF ACRE-FEET

RESERVOIR	CURRENT WY 2021	WY 1977	WY 1983	15 YR AVG	% OF 15 YR AVG
TRINITY	99	54	694	332	30
SHASTA	1,110	1,109	3,966	1,982	56
FOLSOM	322	155	2,184	845	38
NEW MELONES	157	---	730	297	53
MILLERTON	185	97	1,081	303	61

ACCUMULATED PRECIPITATION FOR WATER YEAR TO DATE IN INCHES

RESERVOIR	CURRENT WY 2021	WY 1977	WY 1983	AVG (N YRS)	% OF AVG	LAST 24 HRS
TRINITY AT FISH HATCHERY	13.92	6.18	32.03	21.90 (59)	64	0.00
SACRAMENTO AT SHASTA DAM	18.50	7.79	61.55	41.24 (64)	45	0.00
AMERICAN AT BLUE CANYON	25.35	11.07	65.39	43.46 (46)	58	0.00
STANISLAUS AT NEW MELONES	13.56	---	27.75	18.03 (43)	75	0.00
SAN JOAQUIN AT HUNTINGTON LK	13.29	7.60	52.30	26.62 (46)	50	0.00

DATE	Mean Daily Water Temperatures (°F)														Mean Daily Release (CFS)			Mean Daily Air Temperatures (°F)				
	TCD ¹	SHD	SPP ¹	KWK	SAC	CCR ²	BSF	JLF	BND	RDB	IGO ³	LWS	DGC	NFH	Shasta Generation	Spring Creek P.P.	Keswick Total	RDD	BSF	RDB		
Jan	51.6	50.9	48.0	50.6	50.5	50.4	49.4	49.3	49.5	49.2	46.6	45.4	43.9	43.4	2775	223	3275	47.9	46.5	48.7		
02/01	50.3	49.5	46.1	49.0	49.1	49.2	48.9	49.2	49.4	49.2	45.8	44.1	43.2	43.0	2333	564	3290	50.5	49.1	50.2		
02/02	50.2	49.4	46.4	49.2	49.4	49.8	49.1	49.8	?	50.3	50.4	46.3	44.3	43.7	3040	290	3284	47.0	50.7	53.4		
02/03	50.0	49.3	46.3	49.1	49.1	49.0	47.6	48.0	48.3	48.6	45.1	44.2	43.4	43.6	2756	282	3263	45.0	44.2	44.9		
02/04	49.8	49.3	46.4	49.1	49.2	49.1	47.6	47.5	47.7	47.6	45.0	44.2	43.0	43.3	1754	578	3285	53.0	48.9	49.8		
02/05	#	-	!	46.7	49.0	49.2	49.5	48.6	48.5	48.5	48.2	45.7	44.3	42.8	2885	167	3292	56.5	51.3	53.1		
02/06	#	-	#	47.3	49.0	49.2	49.5	49.2	49.4	49.5	49.4	46.0	44.4	43.3	2938	77	3291	↑	58.5	53.8	54.3	
02/07	#	-	#	47.2	49.1	49.3	49.5	49.1	49.4	49.6	49.8	45.9	44.4	43.5	3089	124	3292	53.5	48.1	50.6		
02/08	#	-	!	47.5	49.2	49.3	49.4	49.0	49.2	49.4	49.5	45.7	44.6	43.0	2917	77	3295	49.5	46.6	48.9		
02/09	50.0	49.1	47.3	49.3	49.5	49.8	49.7	50.0	50.2	50.1	46.3	44.8	44.0	43.5	2723	77	3295	52.0	50.3	53.5		
02/10	49.6	49.1	47.3	49.4	49.7	50.0	50.0	50.4	50.7	50.9	46.3	44.9	44.4	44.3	2927	77	3282	52.0	49.7	53.5		
02/11	49.6	49.0	47.2	49.5	49.5	49.5	49.8	50.3	50.6	50.7	46.1	45.0	44.2	43.9	3251	77	3261	48.0	47.8	48.8		
02/12	49.7	49.0	46.7	49.4	49.7	50.1	49.6	49.9	50.2	50.3	?	46.3	45.2	44.0	3117	134	3290	51.0	50.3	51.7		
02/13	49.7	48.9	46.9	49.5	49.8	50.3	50.6	50.8	51.2	51.2	46.8	45.4	45.5	45.6	3078	77	3262	52.0	52.3	54.6		
02/14	49.8	49.0	?	47.2	49.4	49.5	49.5	49.4	49.8	50.3	50.7	?	46.1	45.4	43.2	43.7	3149	77	3265	47.5	45.3	48.1
02/15	49.4	48.9	?	46.6	49.4	49.6	49.6	49.2	49.4	49.7	49.8	46.9	45.7	44.0	43.9	2157	542	3231	48.0	47.7	48.9	
02/16	49.5	49.0	46.7	49.1	49.4	49.6	49.2	49.3	49.5	49.5	46.1	45.7	44.4	44.7	2802	330	3213	47.5	45.0	48.7		
02/17	49.8	49.0	46.7	49.1	49.3	49.4	49.1	49.2	49.4	49.6	46.0	45.8	44.3	44.1	2603	234	3224	47.0	46.5	49.3		
02/18	49.5	48.9	?	46.5	48.9	48.9	48.7	48.4	48.5	48.8	48.9	45.7	45.7	43.2	43.4	2573	510	3249	42.5	41.6	44.4	
02/19	49.3	48.8	?	46.6	48.6	48.9	48.9	48.4	48.4	48.5	48.4	46.3	45.8	43.3	43.2	2629	586	3293	48.0	45.2	47.0	
02/20	49.2	48.8	#	-	48.6	49.0	49.3	49.1	49.4	49.5	49.3	46.5	45.9	44.6	?	44.4	2592	374	3301	50.0	48.4	50.8
02/21	49.7	48.9	#	-	48.9	49.2	49.4	49.5	49.8	50.2	50.3	46.7	45.9	44.9	44.9	2726	612	3304	53.0	52.2	54.4	
02/22	49.7	48.9	!	-	49.0	49.4	49.9	50.4	50.7	50.9	51.0	47.4	46.0	45.9	45.9	3209	161	3295	62.0	58.0	58.9	
02/23	49.5	49.0	47.9	49.2	49.6	50.1	50.9	51.6	52.0	52.0	47.5	46.1	46.4	46.5	3007	77	3304	60.0	58.6	61.0		
02/24																						
02/25																						
02/26																						
02/27																						
02/28																						
-																						
-																						
-																						
Feb	49.7	49.0	46.9	49.1	49.3	49.5	49.2	49.5	49.8	49.8	46.2	45.1	44.0	44.0	2794	265	3277	51.0	49.2	51.2		
															Total CFS	64255	6104	75361				
															Total AF	127447	12107	149475				

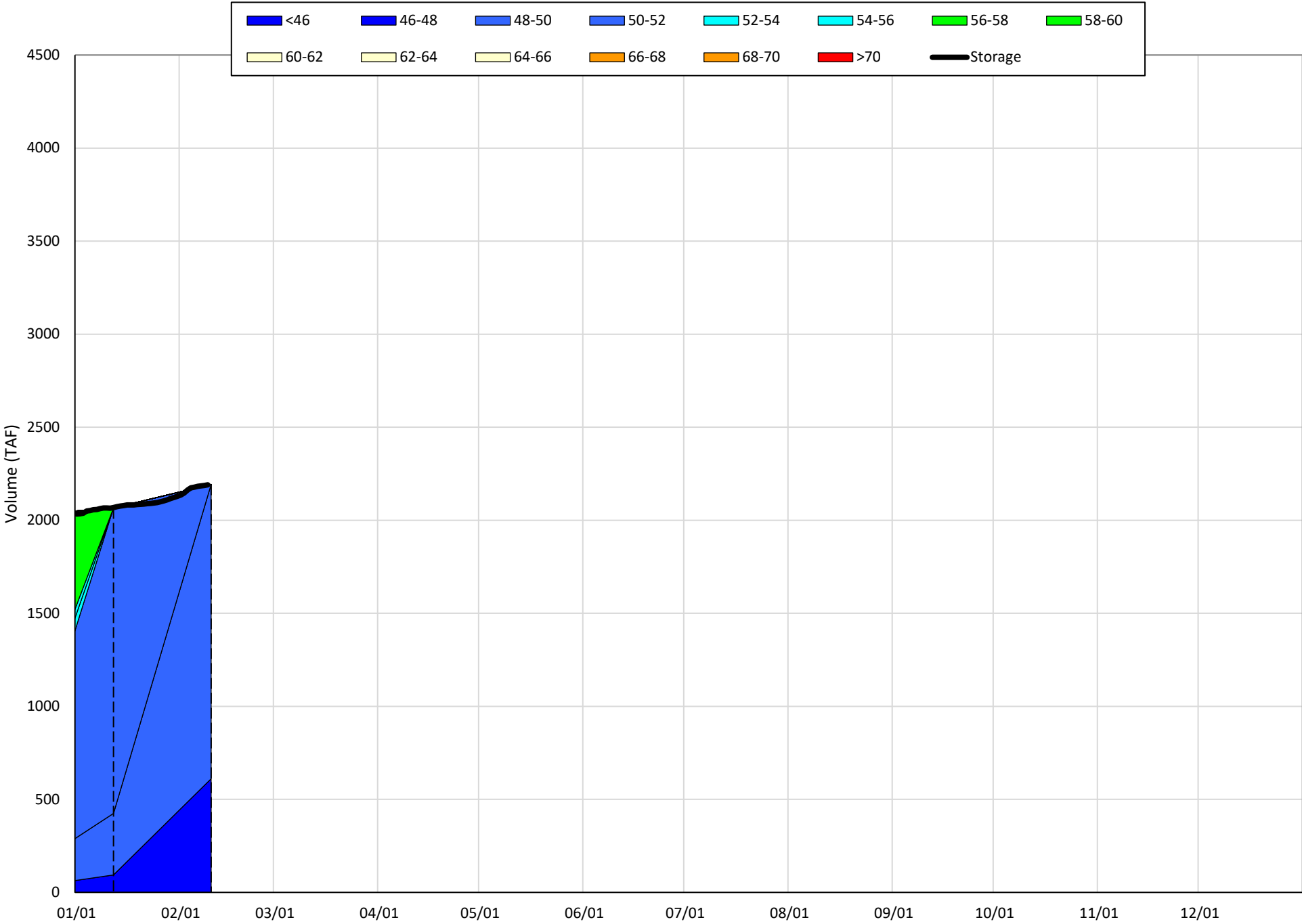
Legend

- ? = 1-9 hours of data missing (Average includes estimations)
- ! = 10 or more hours of data missing (Average not calculated)
- # = Station out of service
- ↑ = Record high air temperature
- ↓ = Record low air temperature
- = Monthly Averages

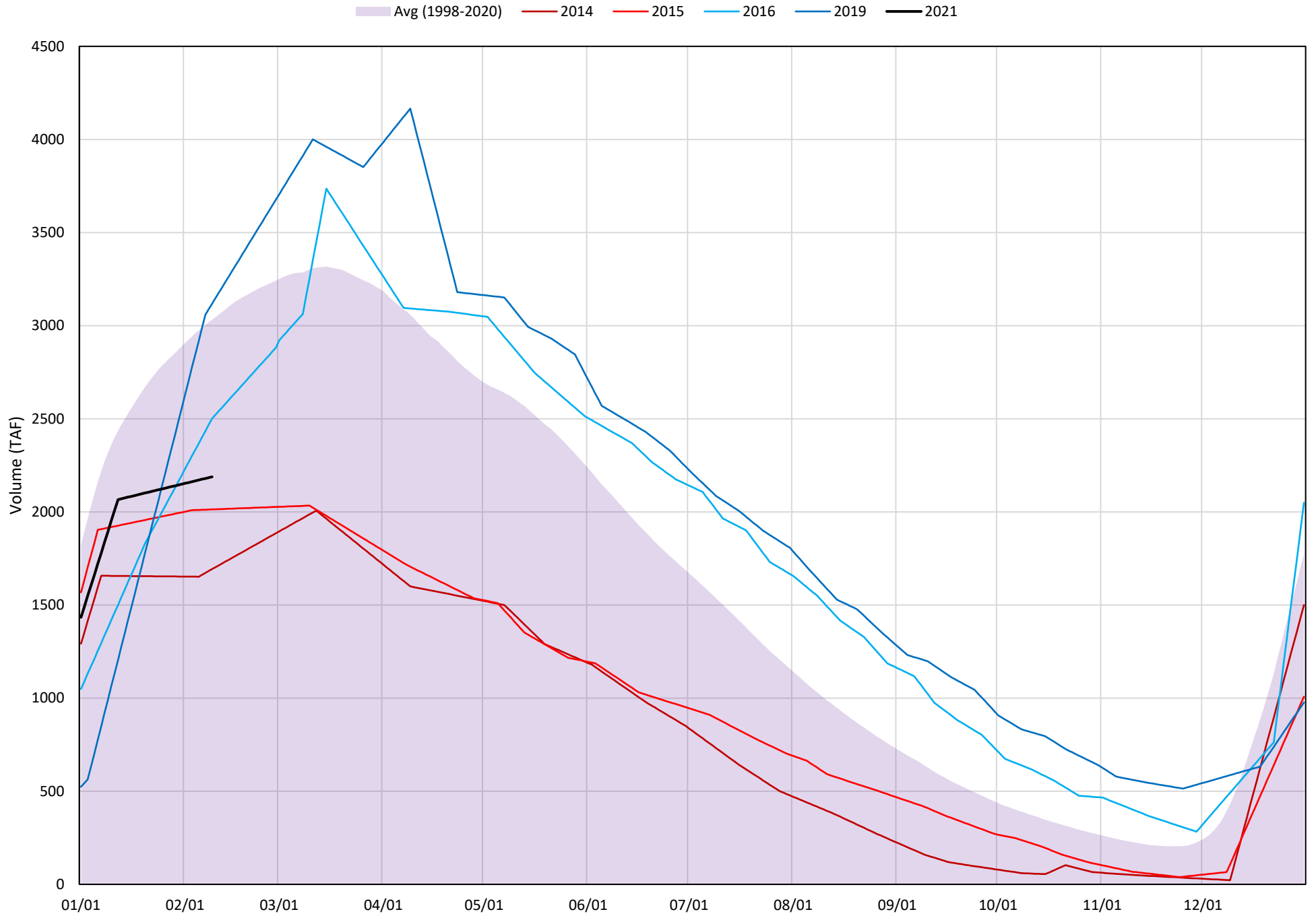
Notes

- ¹ Temperatures are weighted averages based on individual penstock flow and temperature
- 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)

Shasta Lake Isothermobaths Plot - 2021

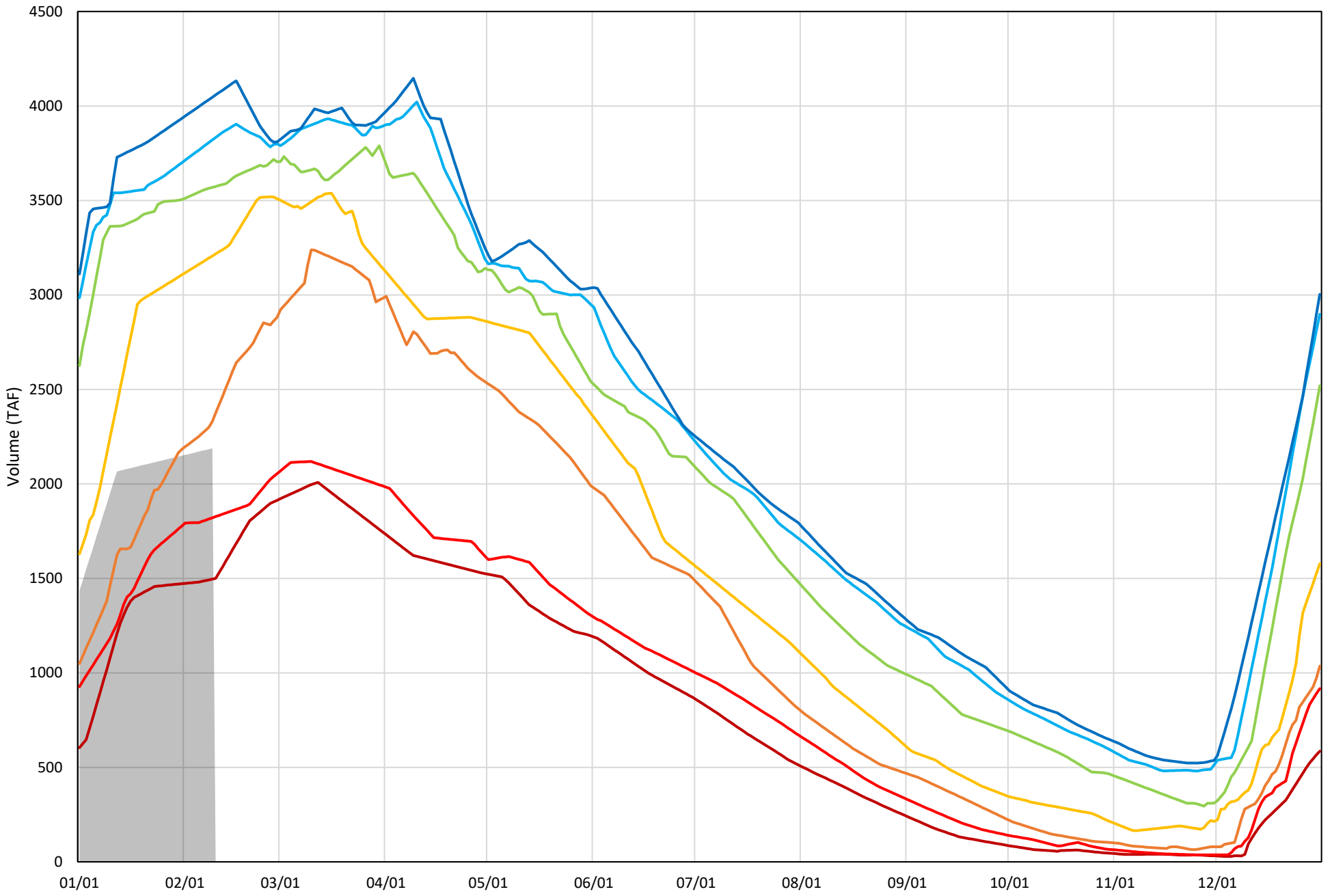


Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$

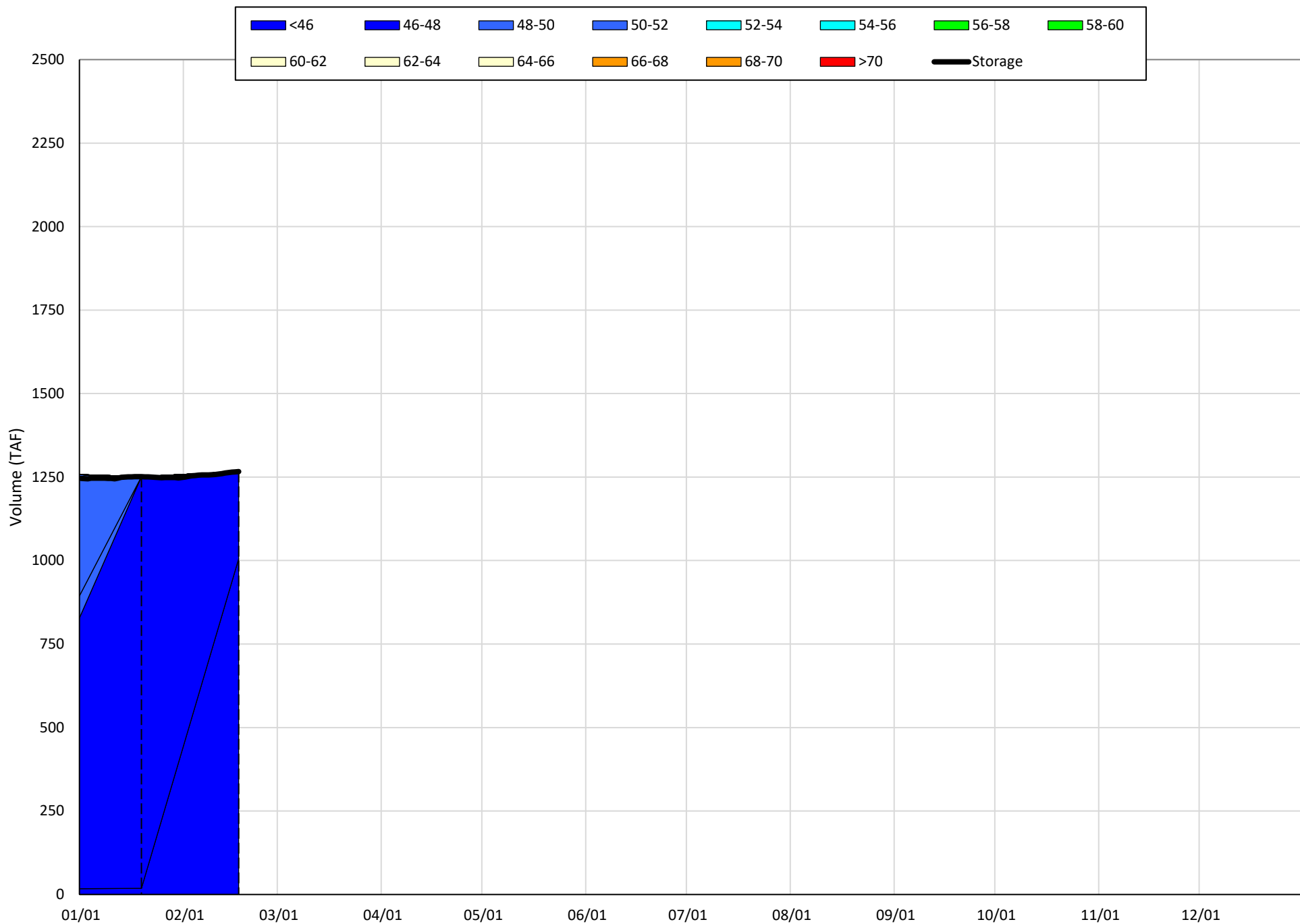


Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5

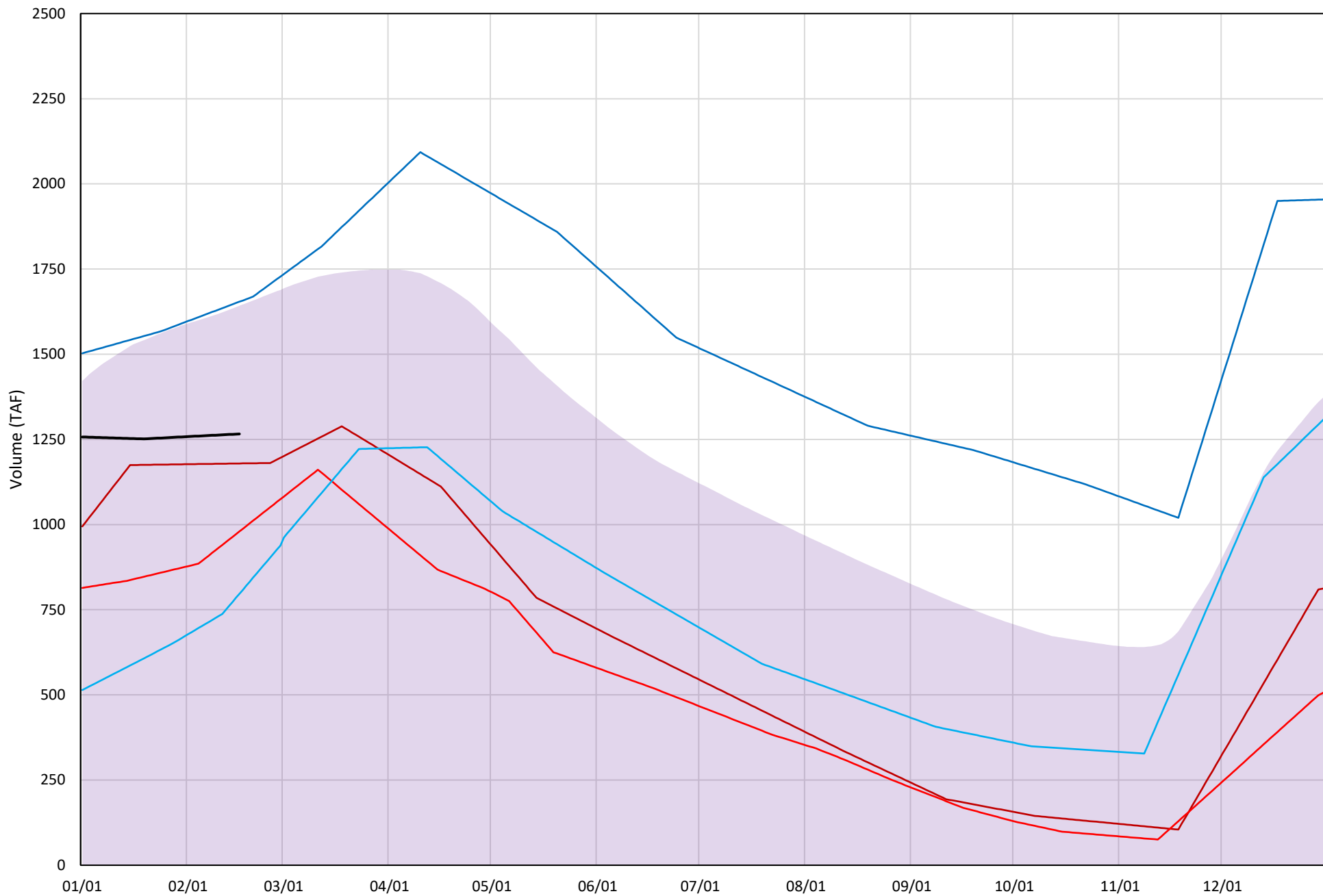


Trinity Lake Isothermobaths Plot - 2021

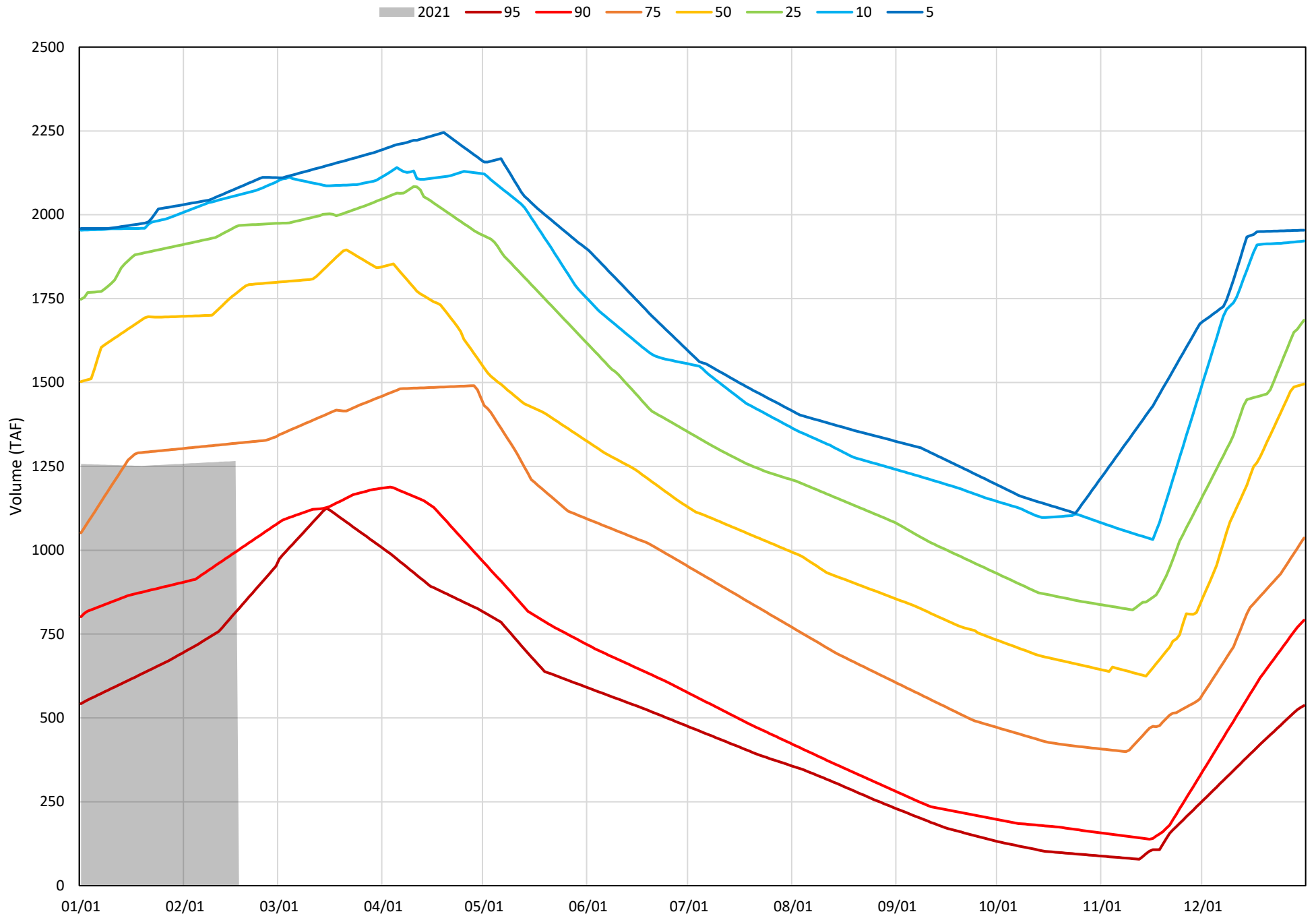


Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$

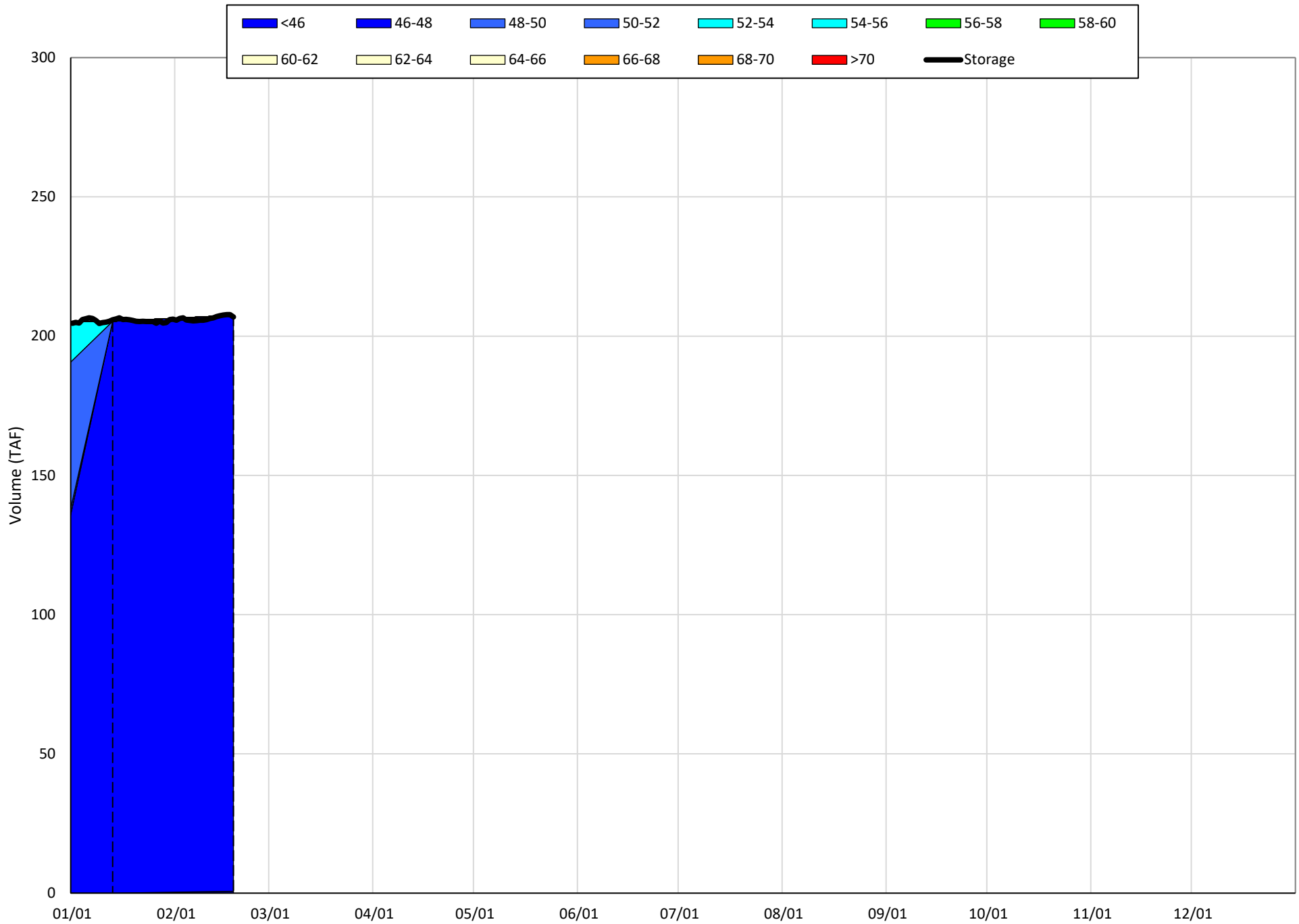
Avg (2000-2020) 2014 2015 2016 2019 2021



Trinity Lake Cold Water Pool Volume ≤52°F - Percent Exceedances (2000-2020)



Whiskeytown Lake Isothermobaths Plot - 2021



Estimated CVP Operations 90% Exceedance

Storages

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

		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Trinity		1249	1272	1349	1386	1295	1175	1047	893	739	1386	640	638
	Elev.	2283	2290	2293	2285	2274	2260	2243	2223	2216	2211	2208	2208
Whiskeytown		206	206	206	238	238	238	238	238	206	206	206	206
	Elev.	1199	1199	1199	1209	1209	1209	1209	1209	1199	1199	1199	1199
Shasta		2129	2322	2549	2481	2300	2062	1704	1477	1407	1367	1384	1455
	Elev.	975	987	983	974	961	939	924	919	916	917	922	931
Folsom		290	364	487	587	661	577	449	373	352	343	339	341
	Elev.	398	415	427	435	426	410	399	396	394	394	394	396
New Melones		1555	1552	1558	1532	1477	1418	1341	1279	1260	1219	1221	1225
	Elev.	1009	1009	1007	1001	994	985	978	976	971	971	971	972
San Luis		226	285	268	239	205	125	96	77	125	211	315	464
	Elev.	462	457	449	443	437	430	425	430	443	463	492	516
Total		6000	6417	6462	6177	5594	4874	4336	4121	4038	4122	4331	4627

State End of the Month Reservoir Storage (TAF)

Oroville		1329	1477	1530	1512	1281	1008	816	788	806	828	868	950
	Elev.	710	728	734	732	704	665	634	629	632	636	643	656
San Luis		807	777	721	695	718	681	660	653	689	793	956	1082
Total San Luis (TAF)		870	1092	1045	960	843	777	737	778	900	1108	1420	1699

Monthly River Releases (TAF/cfs)

Trinity	TAF	17	18	36	92	47	28	53	52	23	18	18	18
	cfs	300	300	600	1,498	783	450	857	870	373	300	300	300
Clear Creek	TAF	11	17	12	16	11	9	9	9	12	12	12	12
	cfs	200	275	200	265	190	150	150	150	200	200	200	200
Sacramento	TAF	180	200	405	461	532	615	461	297	281	230	200	200
	cfs	3250	3250	6800	7500	8950	10000	7500	5000	4570	3873	3250	3250
American	TAF	53	58	57	59	149	185	138	74	49	48	51	49
	cfs	953	950	950	965	2500	3003	2238	1251	802	800	834	800
Stanislaus	TAF	12	12	27	25	9	9	9	9	39	12	12	13
	cfs	214	200	460	400	150	150	150	150	635	200	200	219
Feather	TAF	70	65	149	77	174	215	154	74	59	57	59	59
	cfs	1261	1057	2500	1250	2925	3500	2500	1243	960	958	960	960

Trinity Diversions (TAF)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Carr PP	9	7	44	25	99	100	101	100	24	30	21	15
Spring Crk. PP	10	10	15	15	90	90	90	90	45	20	12	10

Delta Summary (TAF)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Tracy	118	45	48	88	95	160	145	172	215	161	186	190
USBR Banks	0	0	0	0	0	2	2	2	0	0	0	0
Contra Costa	10.5	10.5	9.5	9.5	9.5	7.4	8.3	9.5	10.5	12.6	13.8	13.7
Total USBR	129	56	57	97	105	169	155	184	226	174	200	204
State Export	228	62	40	90	114	31	36	30	55	108	167	190
Total Export	357	118	97	188	219	200	191	214	281	282	367	394
COA Balance	0	-65	-52	-2	50	66	67	67	50	50	50	50
Vernalis	82	98	84	85	40	42	37	43	98	74	75	76
Vernalis	1475	1599	1418	1375	671	687	605	722	1595	1242	1225	1244
Old/Middle River Std.												
Old/Middle R. calc.	-4,870	-1,342	-1,207	-2,323	-3,116	-2,790	-2,714	-3,029	-3,386	-3,676	-4,633	-4,962
Computed DOI	7096	9744	9111	4002	4001	4002	2993	3009	2993	3496	3497	6133
Excess Outflow	0	0	0	0	0	0	0	0	0	0	0	130
% Export/Inflow	49%	15%	12%	34%	33%	28%	30%	38%	49%	51%	62%	53%
% Export/Inflow std.	45%	35%	35%	35%	35%	65%	65%	65%	65%	65%	65%	65%

Hydrology

Water Year Inflow (TAF)	Trinity	Shasta	Folsom	New Melones
Year to Date + Forecasted	410	2,935	1,168	469
% of mean	34%	53%	43%	44%

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 50% Exceedance

Storages

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

		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
Trinity		1249	1306	1464	1598	1535	1413	1297	1148	997	961	942	953	973
	Elev.	2286	2300	2311	2306	2296	2285	2271	2255	2251	2249	2250	2252	
Whiskeytown		206	206	206	238	238	238	238	238	206	206	206	206	
	Elev.	1199	1199	1209	1209	1209	1209	1209	1209	1199	1199	1199	1199	
Shasta		2129	2441	2806	3020	3116	2837	2496	2228	2160	2082	2070	2186	2383
	Elev.	981	999	1009	1013	1000	984	970	966	962	961	968	978	
Folsom		290	429	630	749	789	736	609	547	478	405	356	325	360
	Elev.	407	432	444	448	443	430	422	414	404	396	391	397	
New Melones		1555	1576	1605	1596	1566	1513	1434	1368	1330	1294	1306	1320	1333
	Elev.	1011	1014	1013	1010	1004	996	988	984	980	981	983	985	
San Luis		266	406	397	318	178	79	46	57	147	268	467	630	777
	Elev.	465	481	467	444	426	414	409	431	449	472	504	526	
Total		6364	7108	7519	7422	6816	6120	5586	5350	5215	5346	5619	6031	

State End of the Month Reservoir Storage (TAF)

Oroville		1239	1448	1703	1993	2062	1886	1686	1563	1433	1447	1509	1609	1763
	Elev.	724	753	782	788	772	751	738	723	724	732	743	759	
San Luis		644	717	897	823	740	664	593	537	641	696	743	928	1043
Total San Luis (TAF)		910	1123	1294	1141	918	743	639	594	788	963	1209	1558	1820
	Elev.	465	481	467	444	426	414	409	431	449	472	504	526	

Monthly River Releases (TAF/cfs)

Trinity	TAF	17	18	36	180	47	28	53	52	23	18	18	18
	cfs	300	300	600	2,924	788	450	857	870	373	300	300	300
Clear Creek	TAF	11	12	12	16	12	9	9	9	12	12	12	25
	cfs	200	200	200	265	200	150	150	150	200	200	200	400
Sacramento	TAF	180	200	268	338	595	615	523	327	338	274	215	200
	cfs	3250	3250	4500	5500	10000	10000	8500	5500	5500	4600	3500	3250
American	TAF	53	59	117	170	155	197	125	134	108	89	92	77
	cfs	950	958	1972	2758	2600	3200	2041	2248	1754	1504	1500	1250
Stanislaus	TAF	12	12	27	25	9	9	9	9	39	12	12	13
	cfs	214	200	460	400	150	150	150	150	635	200	200	213
Feather	TAF	69	65	80	52	161	203	160	190	74	57	59	77
	cfs	1250	1050	1350	850	2700	3300	2600	3200	1200	950	960	1250

Trinity Diversions (TAF)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Carr PP	1	1	55	92	96	99	100	99	23	21	12	15
Spring Crk. PP	35	26	35	90	90	90	90	90	45	15	12	10

Delta Summary (TAF)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
Tracy	210	87	48	49	170	262	255	259	250	256	200	185	
USBR Banks	0	0	0	0	0	15	15	15	0	0	0	0	
Contra Costa	14.0	12.7	12.7	12.7	9.8	11.1	12.7	14.0	16.8	18.4	18.3	14.0	
Total USBR	224	100	60	62	180	288	283	288	267	274	218	199	
State Export	150	291	18	25	30	29	34	170	100	74	200	185	
Total Export	374	391	78	86	210	317	317	458	367	348	418	384	
COA Balance	0	0	-1	-3	4	7	7	0	33	20	20	20	
Vernalis	TAF	111	120	117	123	56	48	46	51	108	83	92	
Vernalis	cfs	1997	1957	1960	2001	940	784	752	856	1758	1393	1498	
Old/Middle River Std.													
Old/Middle R. calc.	cfs	-4,878	-4,603	-719	-773	-2,882	-4,209	-4,219	-6,133	-4,393	-4,472	-5,220	-4,726
Computed DOI		9239	11403	10825	8492	7245	4002	2993	3009	4880	5043	6637	10753
Excess Outflow		2143	0	0	0	0	0	0	0	0	0	3140	4750
% Export/Inflow		42%	35%	8%	11%	25%	38%	42%	57%	46%	48%	49%	37%
% Export/Inflow std.		45%	35%	35%	35%	35%	65%	65%	65%	65%	65%	65%	65%

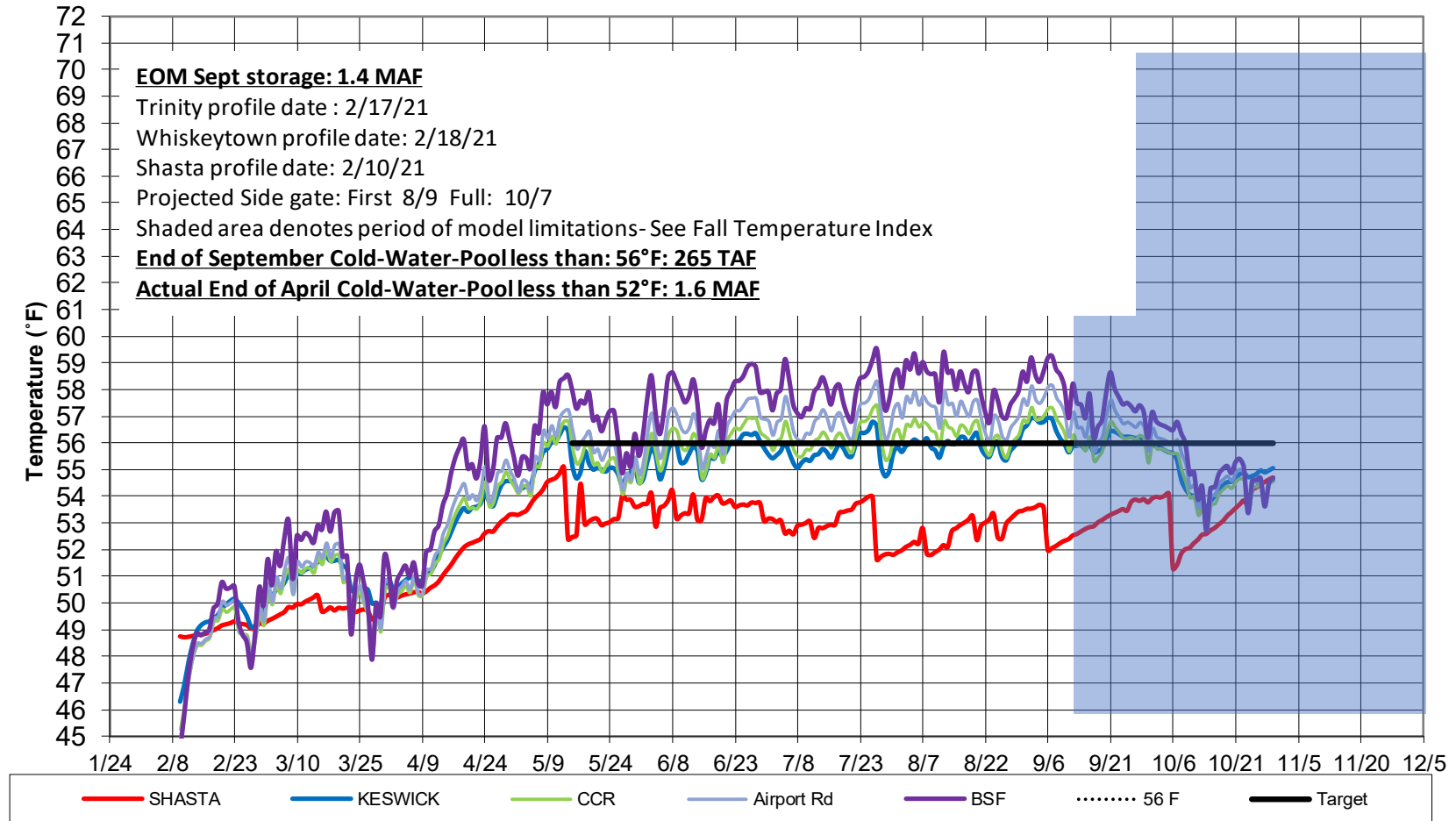
Hydrology

Water Year Inflow (TAF)	Trinity	Shasta	Folsom	New Melones
Year to Date + Forecasted	817.6	3,460	1,575	664
% of mean	68%	62%	58%	63%

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.

Upper Sacramento River Preliminary Temperature Analysis - February 25, 2021

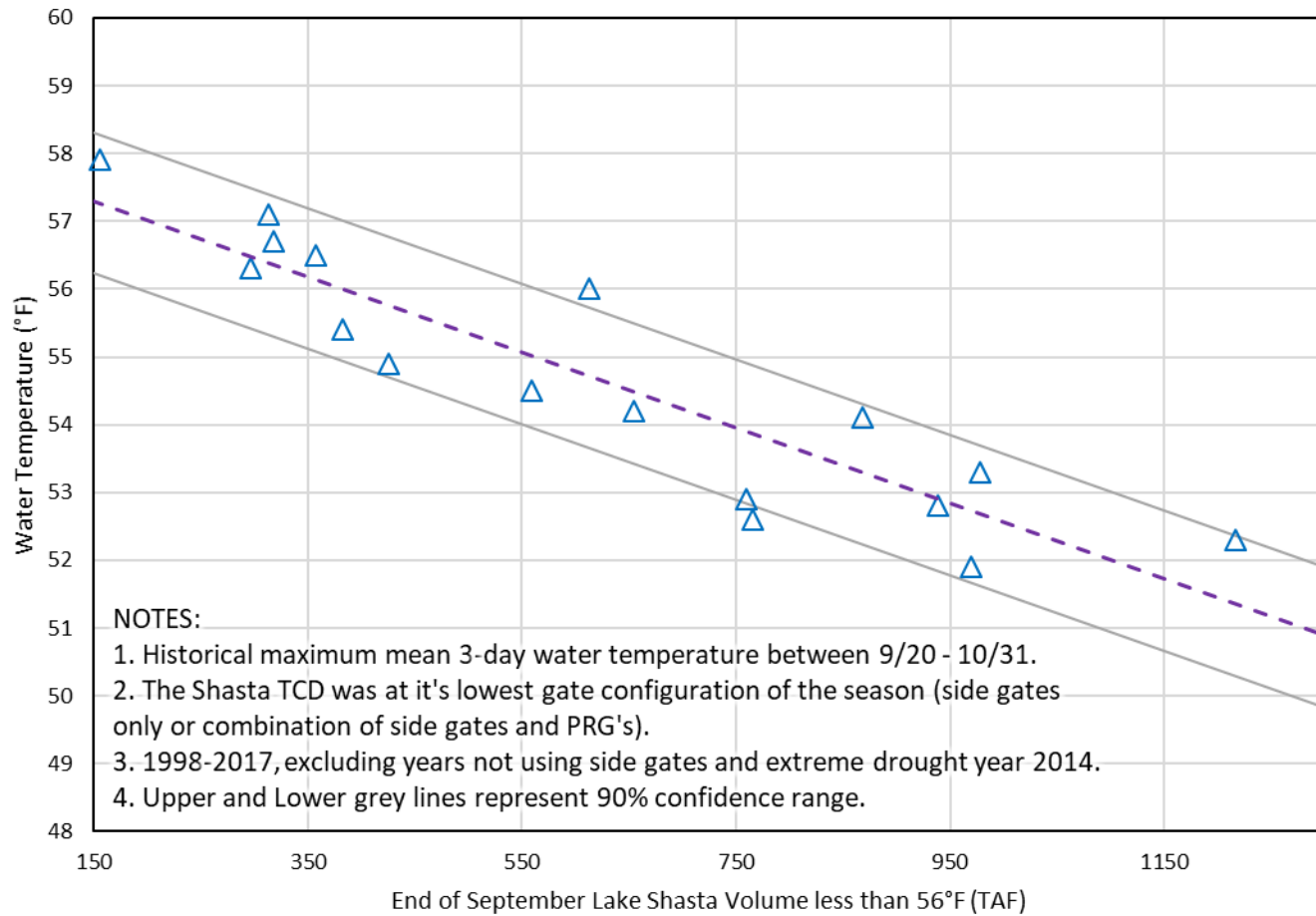
**Sacramento River Modeled Temperature
2021 Feb 90%-Exceedance Water Outlook - 25% Historical Meteorology**



Model Performance and Fall Temperature Index:

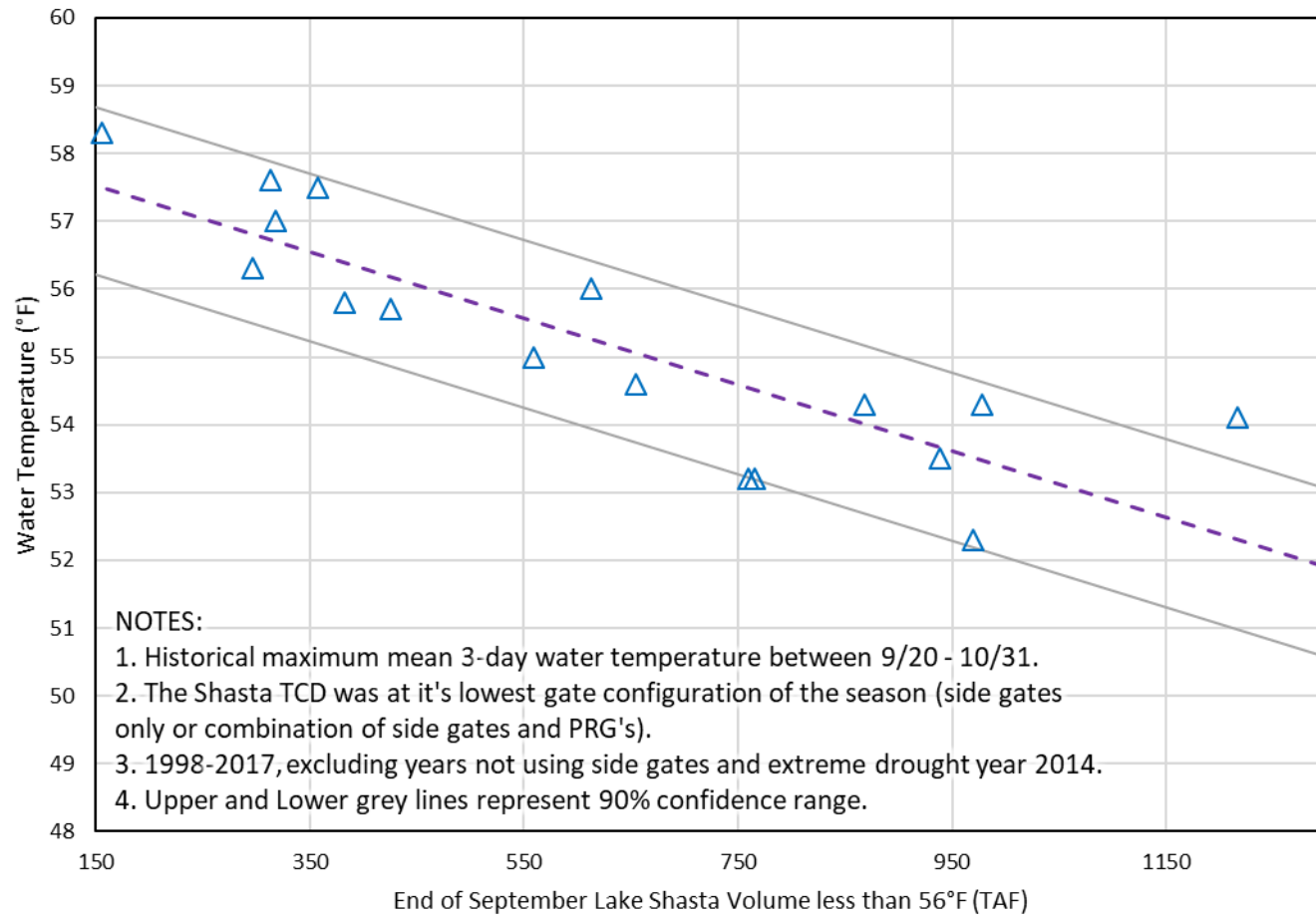
1. Based on past analyses, the temperature model does not perform well in late September and October. One factor is that the modeled release temperatures are cooler than has historically been achieved when all release is through the side gates (lowest gates), especially when there's a large temperature gradient between the pressure relief gates (PRG) and the side gates.
2. Based on historical records, the end-of-September Lake Shasta volume below 56°F is a good indicator of fall water temperature in the river reaches.
3. Based on these records and estimates, the charts below illustrate a range of uncertainty in the expected river temperatures based on the end-of-September lake volume less than 56°F.

Sacramento River - Lake Shasta Early Fall Water Temperature - Keswick (KWK)



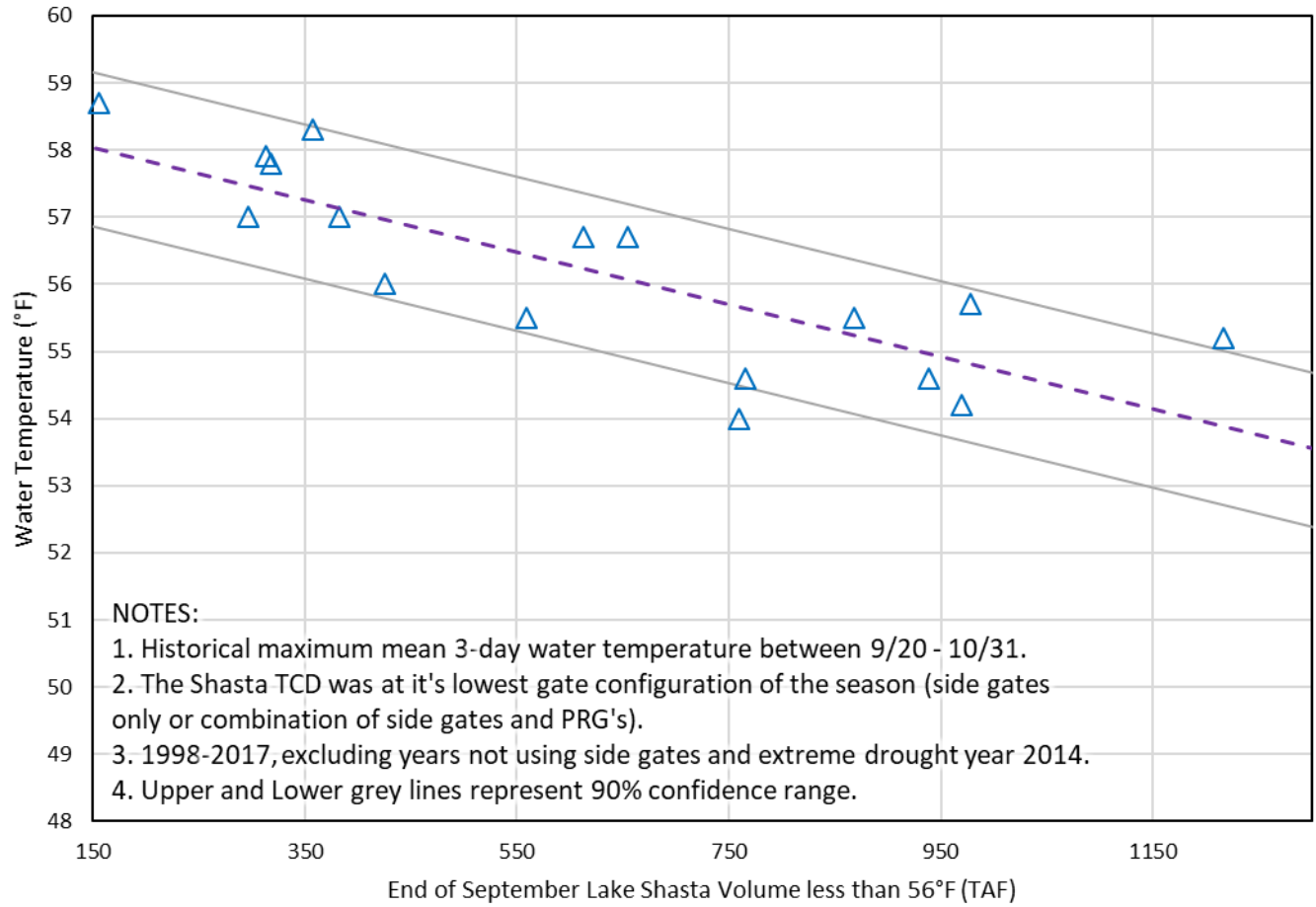
Historical relationship between Lake Shasta cold-water-pool characteristics and early fall Keswick water temperature.

Sacramento River - Lake Shasta Early Fall Water Temperature - Sac River above Clear Creek (CCR)



Historical relationship between Lake Shasta cold-water-pool characteristics and early fall Sacramento River above Clear Creek confluence water temperature.

Sacramento River - Lake Shasta Early Fall Water Temperature - Balls Ferry (BSF)



Historical relationship between Lake Shasta cold-water-pool characteristics and early fall Balls Ferry water temperature.