

Northern CVP Water Temperature Report

November - 2021

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— BUREAU OF —
RECLAMATION

All Data in this Report is Preliminary and Subject to Change

DATE	Mean Daily Water Temperatures (°F)														Mean Daily Release (CFS)			Mean Daily Air Temperatures (°F)			
	TCD ¹	SHD	SPP ¹	KWK	SAC ²	CCR	BSF	JLF	BND	RDB	IGO	LWS	DGC	NFH	Shasta Generation	Spring Creek P.P.	Keswick Total	RDD	BSF	RDB	
Oct	61.4	60.6	-	59.2	59.2	59.4	59.4	59.4	59.7	59.6	55.0	52.9	52.7	54.0	4926	1179	6453	61.3	58.5	60.4	
11/01	59.3	59.0	# -	58.9	58.9	59.0	59.2	59.3	59.7	59.6	55.2	54.4	53.2	53.8	4968	410	4829	57.5	57.3	57.3	
11/02	59.4	59.2	# -	58.7	59.0	59.5	59.4	59.3	59.6	59.4	56.4	54.5	53.6	53.4	3006	1493	4617	61.0	59.8	60.6	
11/03	59.2	59.1	# -	58.3	58.4	58.6	58.8	58.9	59.5	59.4	55.2	54.4	52.7	52.8	3316	674	4412	57.5	56.1	59.3	
11/04	59.0	58.8	# -	58.4	58.6	59.0	59.2	59.2	59.7	59.5	56.0	54.7	53.7	52.6	3430	512	4221	59.5	60.8	61.0	
11/05	59.1	58.6	# -	58.5	58.3	58.1	58.0	57.9	58.3	58.3	54.7	54.5	52.4	51.4	2666	641	4003	52.0	50.4	51.5	
11/06	59.0	58.4	# -	58.2	58.1	58.0	57.7	57.4	57.8	57.2	54.5	54.4	51.8	51.3	3197	500	3884	51.5	52.5	53.4	
11/07	58.6	58.2	# -	57.8	57.6	57.4	56.6	56.1	56.4	56.2	53.2	53.9	50.2	49.9	3111	229	3806	48.5	44.9	48.0	
11/08	58.6	58.0	# -	57.6	57.3	56.9	55.9	55.2	55.4	55.0	53.2	53.8	49.1	48.1	3707	251	3706	45.5	45.3	48.7	
11/09	58.3	57.7	# -	57.4	56.9	56.7	54.7	54.5	54.8	54.4	53.8	53.9	49.6	48.9	3511	75	3607	51.5	52.6	52.8	
11/10	58.4	58.1	# -	57.5	57.5	57.6	56.5	55.8	56.1	55.0	54.9	53.9	51.2	50.6	1730	1178	3506	56.5	54.9	55.3	
11/11	57.9	57.6	# -	57.3	57.4	57.8	57.5	57.0	57.4	56.7	55.1	53.5	52.3	51.0	2908	411	3409	63.0	56.6	58.4	
11/12	57.8	57.2	# -	57.4	57.5	57.7	57.4	56.9	57.5	57.1	54.7	53.1	52.4	? 51.9	3490	76	3307	57.0	52.3	52.2	
11/13	57.6	57.3	# -	57.7	57.7	57.9	57.5	57.1	57.4	57.0	54.5	53.0	51.8	? 52.0	2623	164	3257	65.0	57.2	55.7	
11/14	57.5	57.0	# -	57.5	57.6	57.8	57.7	57.4	57.9	57.3	54.5	53.2	51.6	51.8	2938	76	3262	58.0	53.8	54.0	
11/15	57.2	56.7	# -	57.3	57.3	57.1	57.1	56.9	57.4	57.1	54.1	53.4	51.8	51.8	2860	272	3262	52.0	52.0	52.3	
11/16	57.4	56.8	# -	57.3	57.2	57.1	57.1	56.8	57.0	56.6	53.8	53.4	51.4	51.6	2458	401	3258	58.5	57.2	58.7	
11/17	57.4	56.8	# -	56.8	56.8	56.5	55.8	55.4	55.7	55.8	52.9	53.1	49.2	49.7	2883	75	3254	56.0	52.3	54.3	
11/18	57.1	56.4	# -	56.4	56.3	55.8	55.4	54.9	55.2	54.7	53.0	53.2	48.3	48.0	2883	75	3254	48.5	47.9	49.6	
11/19	57.0	56.1	# -	56.2	56.2	56.1	55.7	55.1	55.3	54.6	53.9	53.5	50.0	49.6	2935	307	3277	53.5	50.9	51.5	
11/20	56.7	56.1	# -	56.1	56.0	55.7	55.0	54.5	54.6	54.5	53.1	53.1	50.5	49.9	3025	200	3274	61.0	52.3	54.9	
11/21	56.7	56.0	# -	56.0	55.9	55.7	54.7	54.0	!	-	53.7	52.8	52.6	48.7	48.5	2768	74	3245	56.5	48.6	54.0
11/22	56.4	55.8	# -	55.7	55.6	55.4	54.5	53.8	!	-	53.4	52.4	52.3	47.6	47.0	2830	74	3268	50.5	46.0	50.5
11/23	56.1	55.5	# -	55.5	55.4	55.1	54.5	53.9	!	-	53.4	52.5	52.2	47.3	47.0	2543	74	3279	52.5	49.2	52.7
11/24	56.1	55.5	# -	55.3	55.2	54.6	53.7	53.1	!	-	52.8	52.0	51.6	46.5	45.9	2718	74	3275	55.5	51.7	53.4
11/25	56.0	55.2	# -	55.1	54.9	54.6	53.4	52.6	!	-	52.2	51.9	51.5	46.0	45.1	3121	74	3278	47.0	44.1	49.0
11/26	55.6	55.0	# -	55.0	55.0	54.8	54.0	53.2	!	-	52.5	52.3	51.5	47.1	46.1	3474	74	3283	54.0	49.1	52.4
11/27	55.6	54.9	# -	55.0	55.0	54.9	54.2	53.7	!	-	53.2	53.0	51.3	47.6	46.9	2900	74	3294	56.0	51.0	52.9
11/28	55.6	54.7	# -	55.0	55.1	55.2	54.7	54.3	!	-	53.7	52.8	51.4	48.8	48.3	2998	74	3304	57.5	51.7	53.5
11/29	55.5	54.4	# -	55.0	55.0	55.0	54.6	54.2	!	-	54.1	52.3	51.3	49.2	48.9	3275	74	3308	57.0	50.6	54.2
11/30	55.6	54.7	# -	54.9	55.0	55.1	54.4	54.0	!	-	54.0	52.2	51.2	48.4	48.5	2708	88	3307	↑ 60.0	52.4	57.0
-																					
Nov	57.4	56.8	-	56.8	56.8	56.7	56.2	55.7	57.1	55.6	53.7	53.1	50.1	49.7	3033	292	3542	55.3	52.0	54.0	
															Total CFS	90980	8774	106246			
															Total AF	180455	17403	210735			

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)

D A T E	Redding (RDD) Daily Air Temperatures (°F)																																				
	Actual			Forecasted																																	
	Previous Day			Current Day			1 Day			2 Days			3 Days			4 Days			5 Days			6 Days			7 Days			8 Days			9 Days			10 Days			
	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	↓	↑	Avg	
11/01	51	65	58.0	56	59	57.5	50	65	57.5	44	67	55.5	49	63	56.0	43	63	53.0	43	62	52.5	44	61	52.5	48	63	55.5	47	59	53.0	45	62	53.5	41	66	53.5	
11/02	55	60	57.5	57	64	60.5	43	67	55.0	50	63	56.5	41	63	52.0	42	60	51.0	44	59	51.5	43	56	49.5	45	59	52.0	43	60	51.5	42	62	52.0	42	67	54.5	
11/03	53	69	61.0	47	67	57.0	53	64	58.5	41	62	51.5	46	59	52.5	40	58	49.0	37	53	45.0	42	54	48.0	46	66	56.0	46	68	57.0	46	70	58.0	47	68	57.5	
11/04	47	68	57.5	60	64	62.0	41	61	51.0	45	58	51.5	37	58	47.5	38	56	47.0	40	52	46.0	43	57	50.0	43	71	57.0	45	71	58.0	48	71	59.5	45	69	57.0	
11/05	50	69	59.5	47	59	53.0	46	58	52.0	35	58	46.5	34	54	44.0	41	53	47.0	43	57	50.0	44	64	54.0	47	72	59.5	51	73	62.0	49	70	59.5	47	62	54.5	
11/06	47	57	52.0	49	57	53.0	35	59	47.0	34	54	44.0	41	54	47.5	42	58	50.0	41	65	53.0	43	70	56.5	48	72	60.0	48	73	60.5	47	71	59.0	47	69	58.0	
11/07	42	61	51.5	35	59	47.0	37	57	47.0	44	54	49.0	42	59	50.5	41	69	55.0	44	73	58.5	44	72	58.0	46	71	58.5	45	69	57.0	46	66	56.0	45	65	55.0	
11/08	35	62	48.5	35	58	46.5	42	54	48.0	45	57	51.0	45	69	57.0	45	71	58.0	45	72	58.5	47	71	59.0	45	72	58.5	44	66	55.0	47	67	57.0	45	63	54.0	
11/09	35	56	45.5	47	56	51.5	46	60	53.0	44	70	57.0	45	71	58.0	49	73	61.0	49	72	60.5	47	67	57.0	50	66	58.0	48	63	55.5	46	62	54.0	43	62	52.5	
11/10	48	55	51.5	52	61	56.5	45	71	58.0	45	73	59.0	48	74	61.0	48	73	60.5	46	68	57.0	47	62	54.5	44	71	57.5	43	63	53.0	46	63	54.5	43	65	54.0	
11/11	50	63	56.5	50	73	61.5	46	73	59.5	47	75	61.0	47	71	59.0	46	67	56.5	45	62	53.5	41	61	51.0	42	61	51.5	43	62	52.5	39	64	51.5	42	64	53.0	
11/12	50	76	63.0	45	74	59.5	48	75	61.5	48	72	60.0	47	68	57.5	46	62	54.0	42	62	52.0	40	61	50.5	42	63	52.5	44	61	52.5	42	64	53.0	45	64	54.5	
11/13	45	69	57.0	47	76	61.5	48	73	60.5	48	68	58.0	48	66	57.0	44	61	52.5	43	61	52.0	39	60	49.5	41	69	55.0	46	68	57.0	43	66	54.5	42	61	51.5	
11/14	46	83	64.5	49	80	64.5	47	67	57.0	48	66	57.0	43	64	53.5	45	57	51.0	42	60	51.0	39	62	50.5	44	70	57.0	46	71	58.5	47	69	58.0	45	64	54.5	
11/15	49	67	58.0	50	62	56.0	45	65	55.0	42	64	53.0	44	59	51.5	45	58	51.5	42	63	52.5	42	67	54.5	47	70	58.5	44	66	55.0	46	67	56.5	44	65	54.5	
11/16	49	55	52.0	48	66	57.0	43	64	53.5	43	60	51.5	46	59	52.5	42	64	53.0	40	67	53.5	39	63	51.0	43	68	55.5	42	67	54.5	43	66	54.5	42	63	52.5	
11/17	48	69	58.5	54	66	60.0	40	59	49.5	45	59	52.0	42	65	53.5	41	67	54.0	40	65	52.5	40	63	51.5	42	67	54.5	37	65	51.0	40	62	51.0	40	59	49.5	
11/18	43	69	56.0	45	57	51.0	45	59	52.0	41	66	53.5	40	66	53.0	38	64	51.0	39	62	50.5	39	62	50.5	38	65	51.5	43	64	53.5	41	58	49.5	39	59	49.0	
11/19	44	53	48.5	50	60	55.0	42	66	54.0	41	67	54.0	37	64	50.5	39	60	49.5	38	61	49.5	39	61	50.0	47	67	57.0	44	67	55.5	44	67	55.5	44	63	53.5	
11/20	46	61	53.5	53	66	59.5	40	66	53.0	37	65	51.0	38	59	48.5	36	62	49.0	37	63	50.0	41	65	53.0	46	69	57.5	45	67	56.0	43	64	53.5	44	61	52.5	
11/21	53	69	61.0	56	70	63.0	36	65	50.5	38	61	49.5	37	63	50.0	38	64	51.0	41	67	54.0	44	65	54.5	44	68	56.0	40	65	52.5	41	59	50.0	38	57	47.5	
11/22	41	72	56.5	35	69	52.0	39	62	50.5	38	63	50.5	37	63	50.0	40	68	54.0	43	68	55.5	43	67	55.0	41	70	55.5	40	67	53.5	42	64	53.0	42	68	55.0	
11/23	34	67	50.5	42	62	52.0	39	65	52.0	38	64	51.0	41	67	54.0	42	68	55.0	43	68	55.5	42	65	53.5	41	70	55.5	41	67	54.0	44	66	55.0	40	58	49.0	
11/24	39	66	52.5	44	64	54.0	38	64	51.0	40	67	53.5	43	69	56.0	43	69	56.0	43	68	55.5	43	66	54.5	46	72	59.0	44	69	56.5	42	68	55.0	42	66	54.0	
11/25	44	67	55.5	33	62	47.5	39	67	53.0	44	72	58.0	44	70	57.0	43	69	56.0	43	70	56.5	43	69	56.0	43	72	57.5	43	67	55.0	43	63	53.0	39	61	50.0	
11/26	33	61	47.0	37	68	52.5	43	71	57.0	45	70	57.5	44	69	56.5	43	72	57.5	44	71	57.5	43	69	56.0	42	71	56.5	43	66	54.5	44	66	55.0	41	64	52.5	
11/27	37	71	54.0	41	74	57.5	45	70	57.5	45	70	57.5	44	72	58.0	45	71	58.0	44	70	57.0	45	68	56.5	45	71	58.0	44	68	56.0	44	64	54.0	35	66	50.5	
11/28	40	72	56.0	43	71	57.0	44	70	57.0	44	73	58.5	51	76	63.5	47	72	59.5	45	71	58.0	43	65	54.0	47	67	57.0	36	60	48.0	33	58	45.5	33	61	47.0	
11/29	43	72	57.5	40	71	55.5	45	74	59.5	48	74	61.0	44	71	57.5	43	69	56.0	42	65	53.5	42	66	54.0	44	64	54.0	47	61	54.0	39	61	50.0	37	59	48.0	
11/30	39	75	57.0	40	77	58.5	48	75	61.5	45	72	58.5	43	69	56.0	41	68	54.5	41	69	55.0	42	61	51.5	46	65	55.5	40	67	53.5	42	59	50.5	43	52	47.5	
-																																					

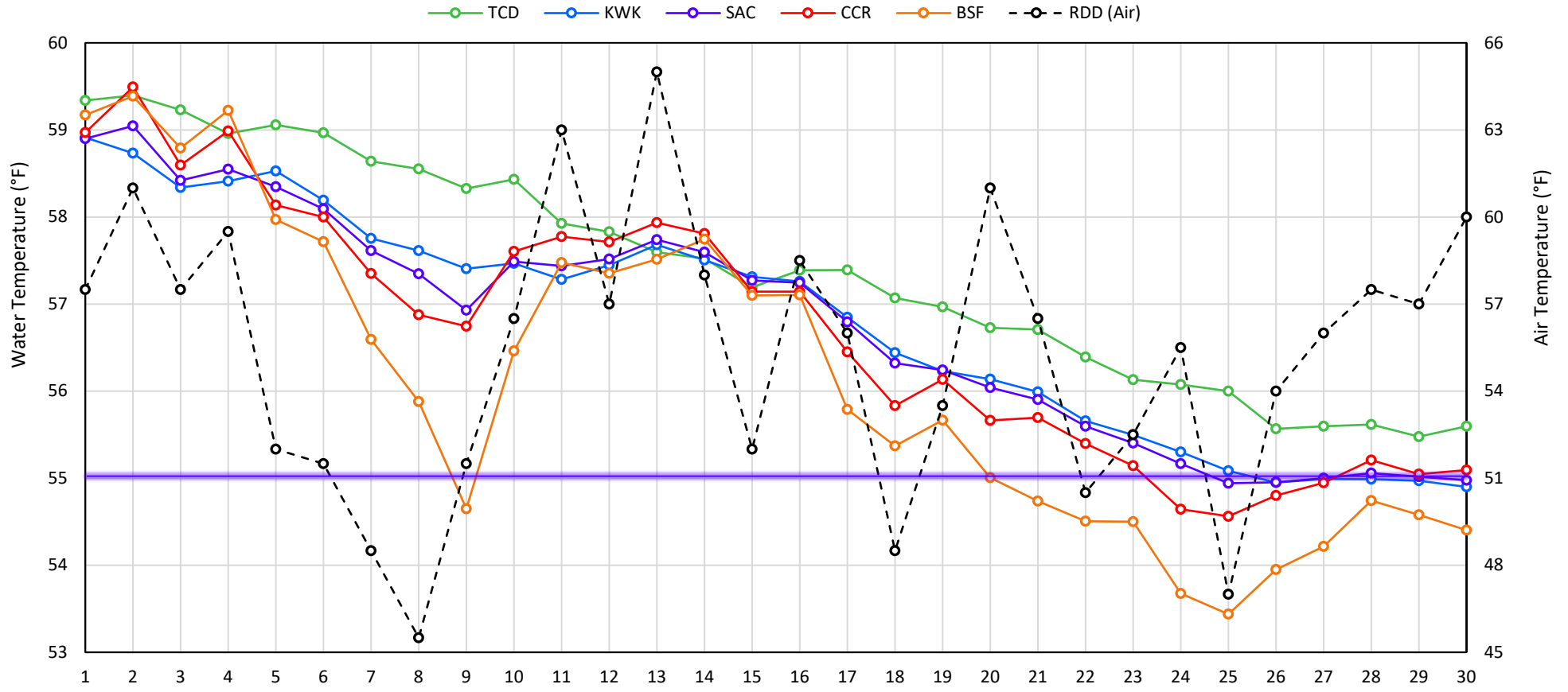
Web Links

- [10-Day Min/Max Forecast](#)
- [Previous Days Min/Max Actuals](#)

Legend

- NR = Forecasted temperatures not recorded
- 100** = Previous day actual temperatures in red and bolded indicate a record temperature for that date

Mean Daily Temperatures



Station Details			
Code	Body of Water	Location ¹	CDEC Link
TCD	N/A	Shasta Power Plant	N/A
SHD	Sacramento River	0.3 miles downstream of Shasta Power Plant	Click Here
SPP	N/A	Spring Creek Power Plant	N/A
KWK	Sacramento River	0.8 miles downstream of Keswick Dam	Click Here
SAC	Sacramento River	4.8 miles downstream of Keswick Dam	Click Here
CCR	Sacramento River	9.7 miles downstream of Keswick Dam	Click Here
BSF	Sacramento River	25 miles downstream of Keswick Dam	Click Here
JLF	Sacramento River	34 miles downstream of Keswick Dam	Click Here
BND	Sacramento River	41 miles downstream of Keswick Dam	Click Here
RDB	Sacramento River	58 miles downstream of Keswick Dam	Click Here
IGO	Clear Creek	7.3 miles downstream of Whiskeytown Dam	Click Here
LWS	Trinity River	1.1 miles downstream of Lewiston Dam	Click Here
DGC	Trinity River	19 miles downstream of Lewiston Dam	Click Here
NFH	Trinity River	38 miles downstream of Lewiston Dam	Click Here

Water Right Temperature Control Points				
River	Point	Temp. (°F)	Begin Date	End Date
Sacramento	CCR	56	09/21/2020	04/18/2021
Sacramento	CCR	60	04/18/2021	05/17/2021
Sacramento	SAC	57	05/17/2021	06/15/2021
Sacramento	SAC	55	06/15/2021	TBD
Trinity	DGC	56	09/15/2021	10/01/2021
Trinity	NFH	56	10/01/2021	12/31/2021

Notes

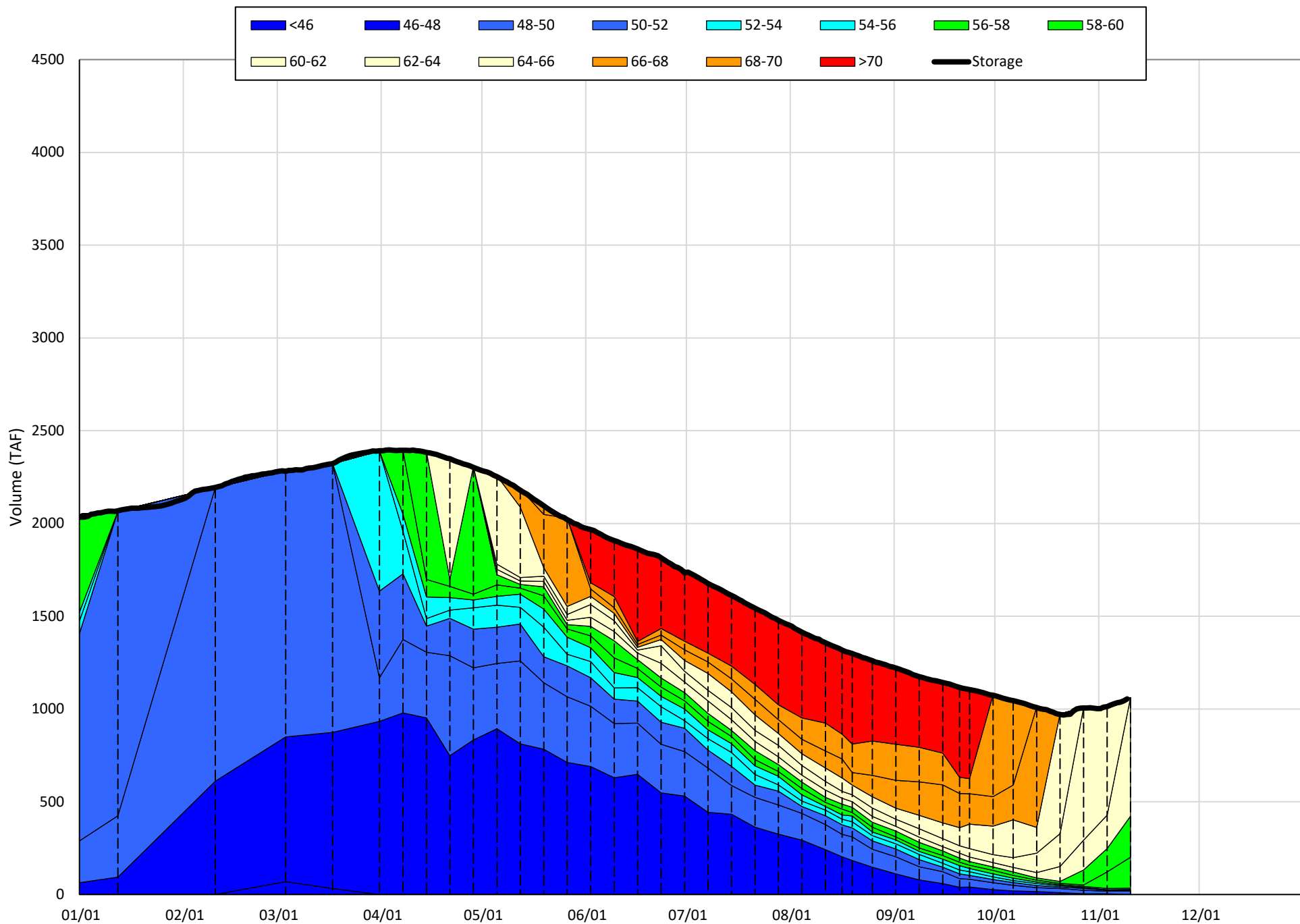
¹ Distances are approximate

Shasta Lake Isothermobaths & Cold Water Pool Statistics

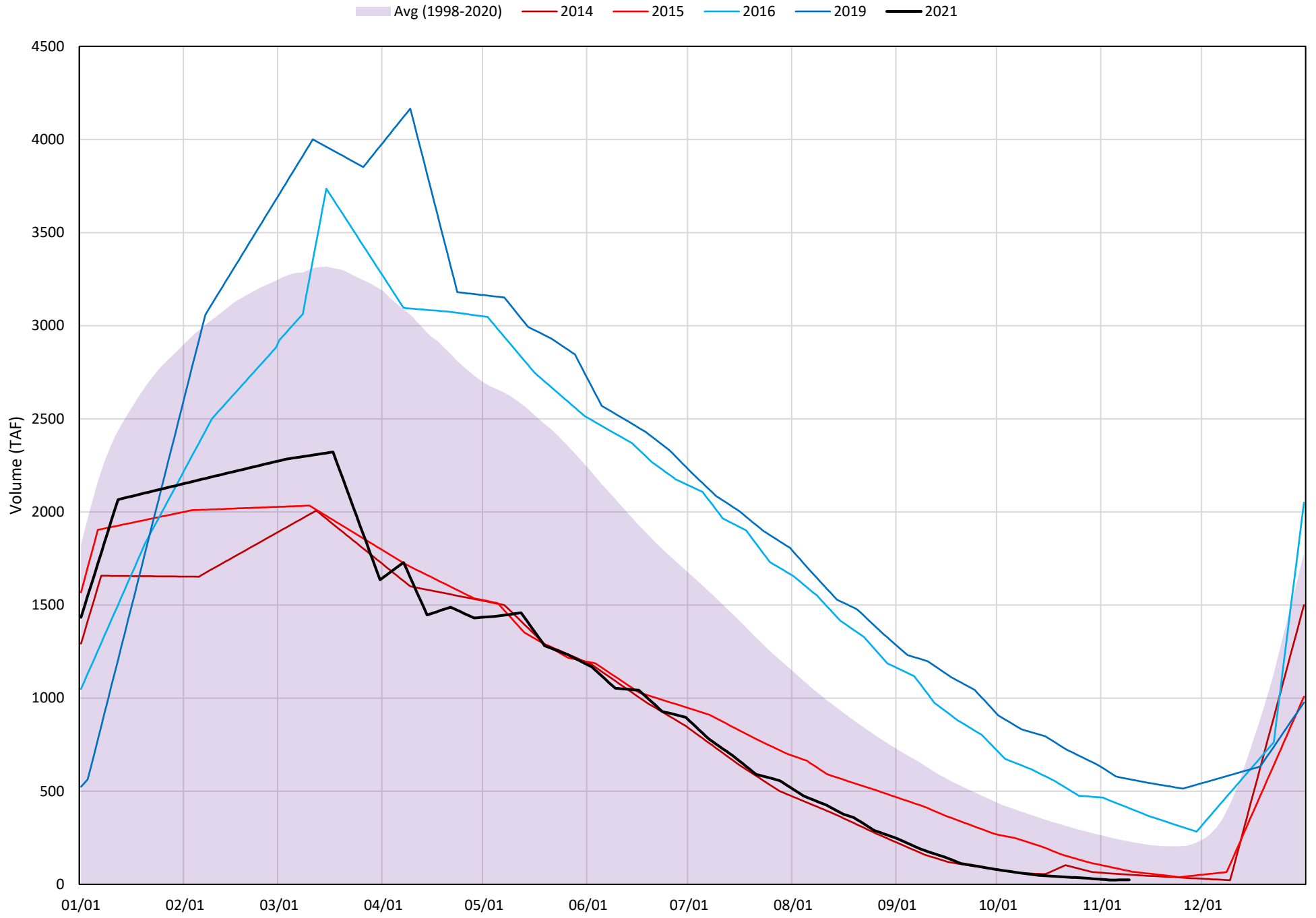
2021

Page	Description
6	- Shasta Lake Isothermobaths Plot
7	- Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$
8	- Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$
9	- Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$
10	- Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances
11	- Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$ - Percent Exceedances
12	- Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$ - Percent Exceedances
13	- Shasta Lake Cold Water Pool Comparison by Year

Shasta Lake Isothermobaths Plot - 2021

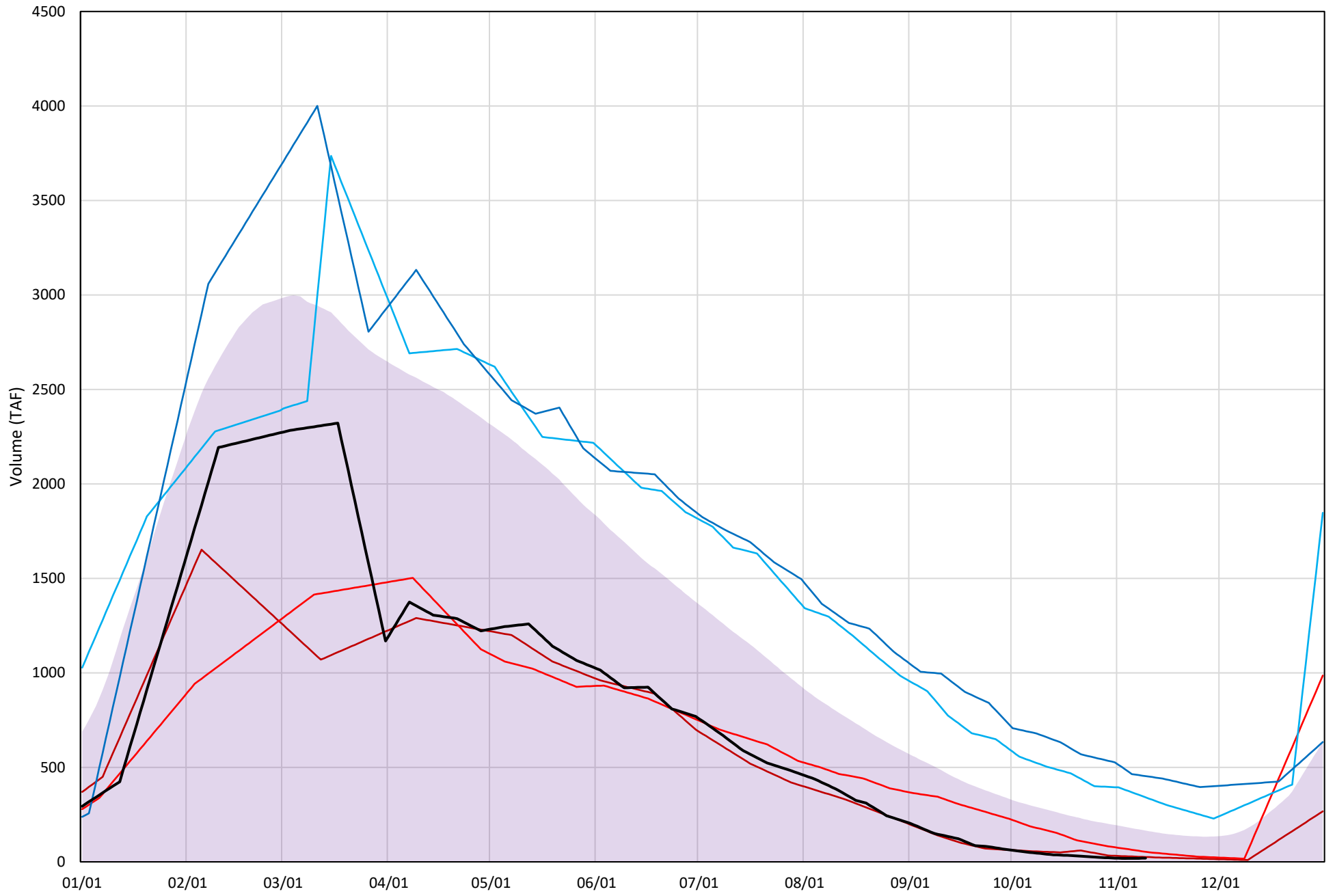


Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$



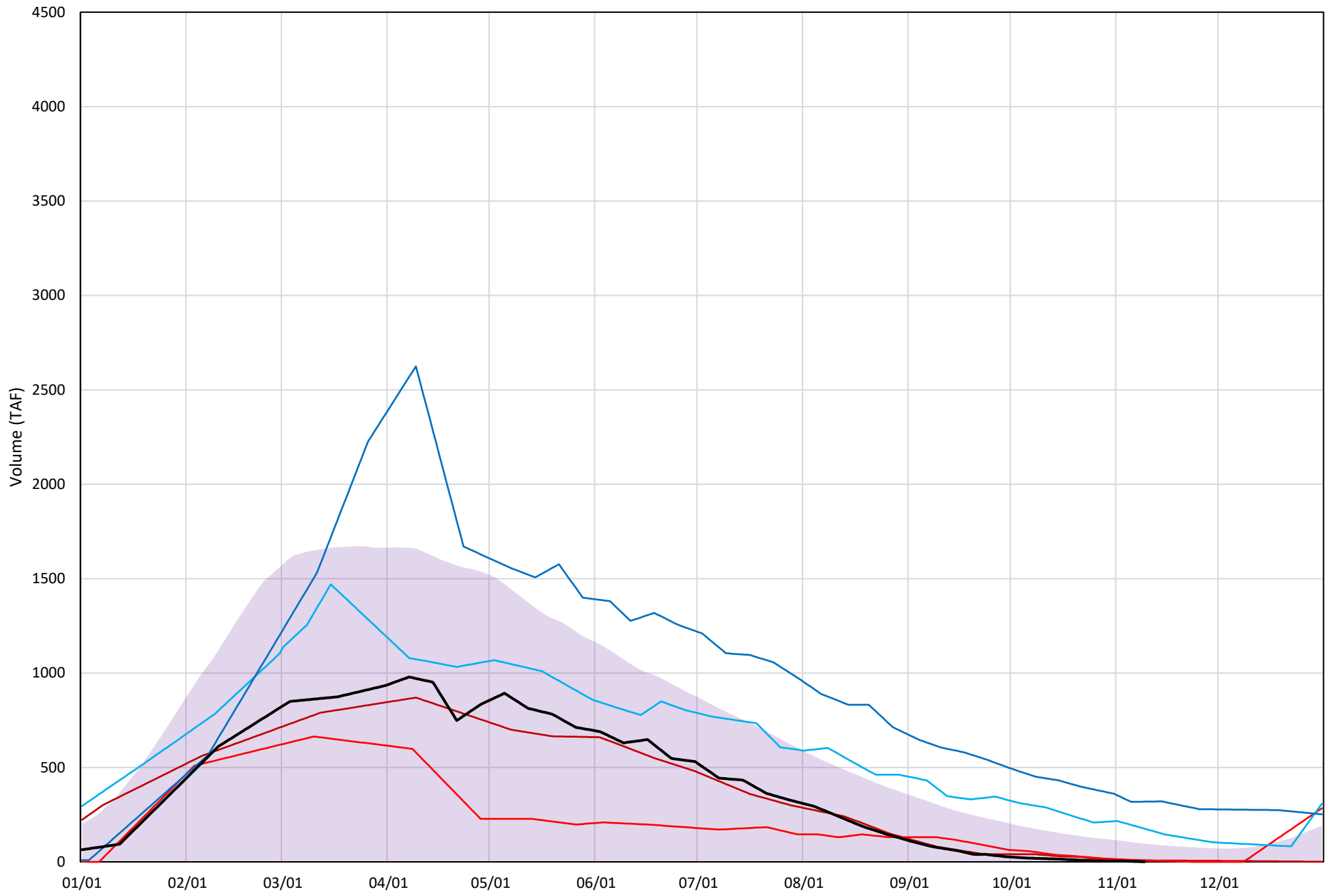
Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



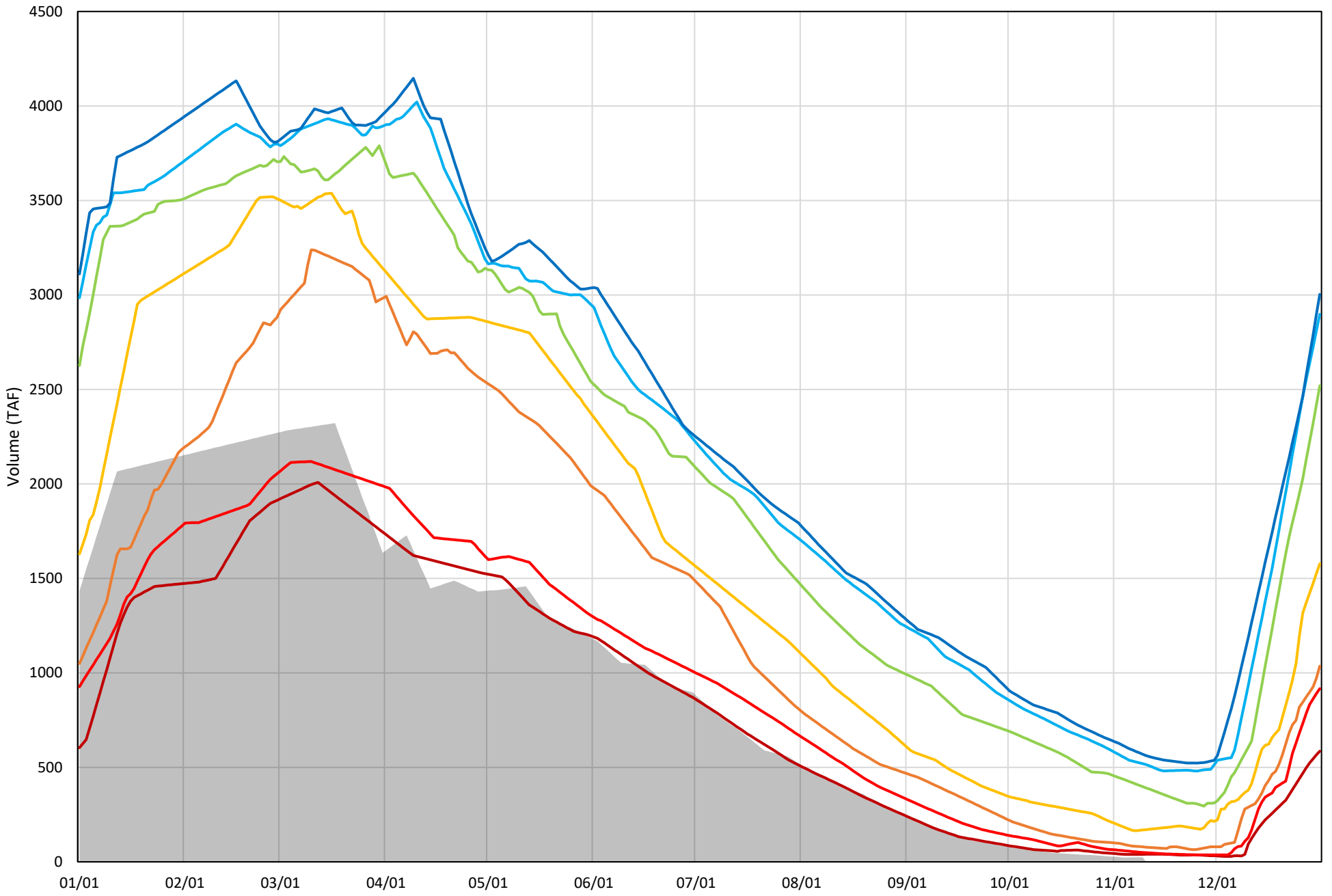
Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



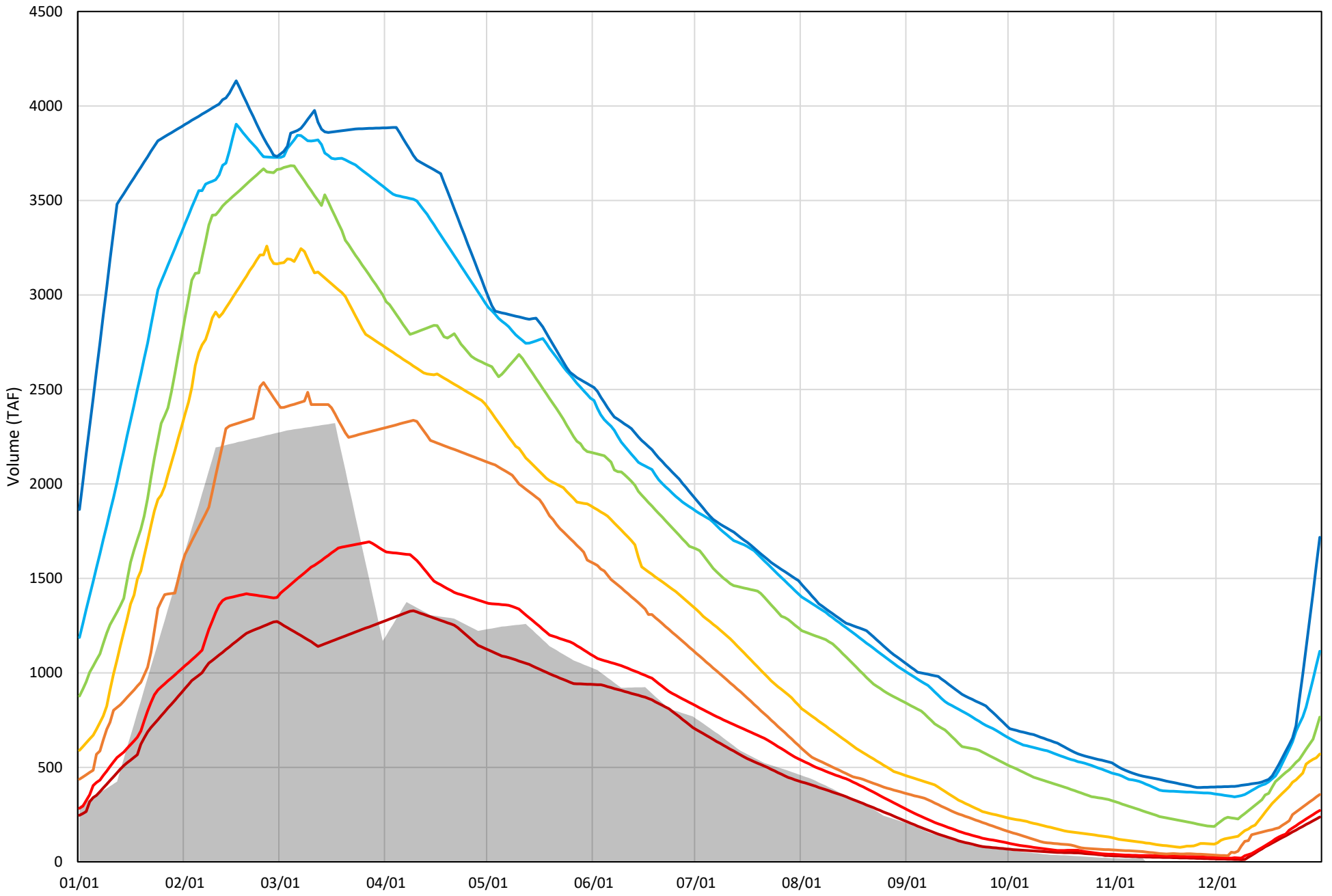
Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5



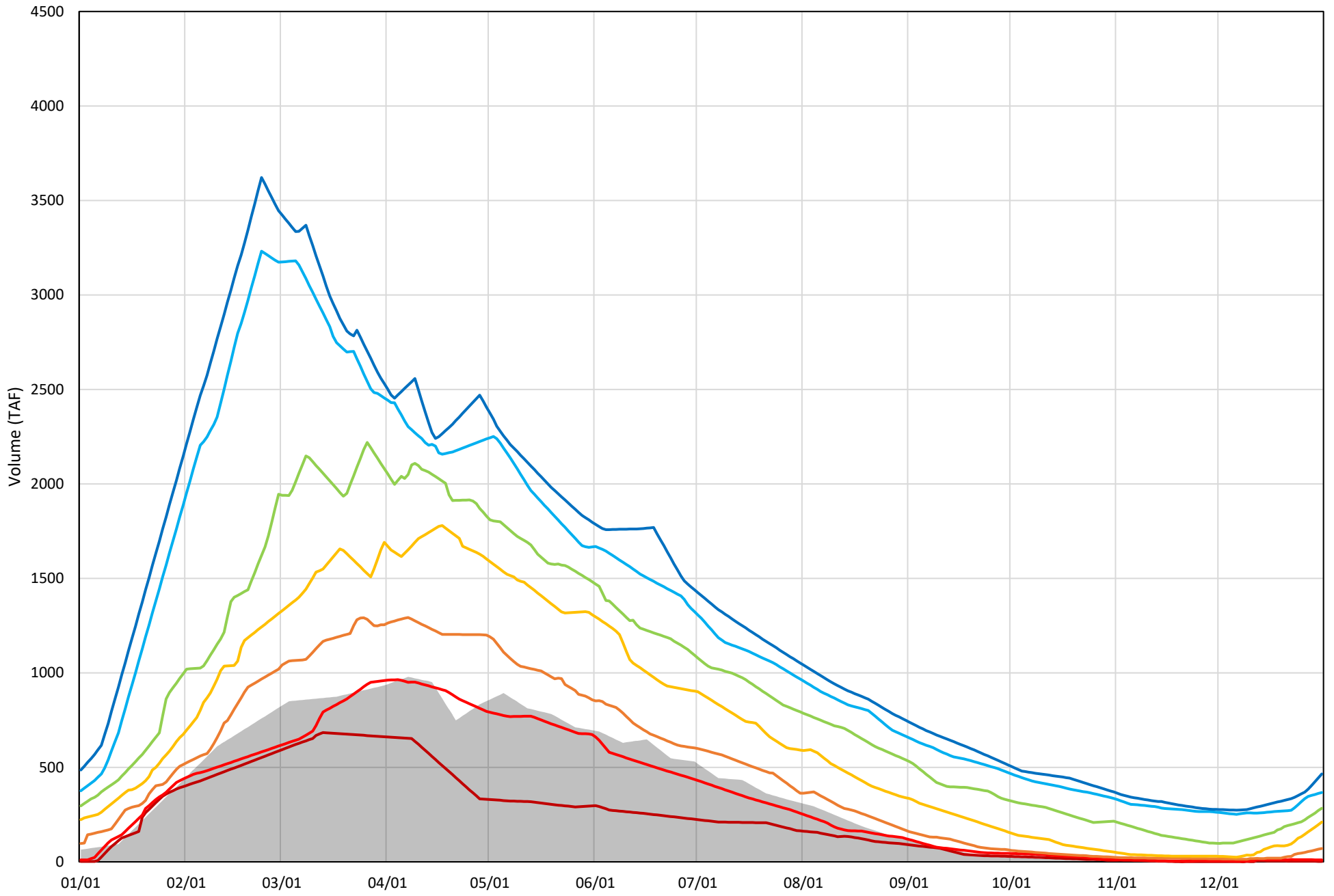
Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$ - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5



Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$ - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5



Shasta Lake Cold Water Pool Comparison by Year (for Specified Date)

Nov-10 2021	Δ TAF				% Δ			
	≤52°	≤50°	≤48°	Abs. Avg.	≤52°	≤50°	≤48°	Abs. Avg.
1998	145	26	5	58	604	134	754	497
1999	374	314	247	312	1564	1632	38272	13822
2000	192	86	28	102	804	449	4416	1889
2001	84	59	49	64	349	308	7532	2730
2002	228	171	108	169	952	891	16693	6179
2003	241	83	20	114	1005	433	3051	1496
2004	55	35	29	40	231	181	4453	1622
2005	65	35	26	42	273	184	3962	1473
2006	278	222	134	211	1160	1153	20856	7723
2007	25	20	29	25	104	104	4492	1567
2008	14	11	19	15	57	56	3005	1039
2009	42	36	35	38	174	190	5444	1936
2010	412	243	123	259	1719	1263	19052	7345
2011	547	432	332	437	2284	2249	51602	18712
2012	299	251	166	239	1250	1305	25771	9442
2013	96	73	57	75	401	381	8864	3216
2014	28	6	8	14	118	33	1178	443
2015	47	34	7	29	198	177	1057	477
2016	385	322	175	294	1608	1677	27144	10143
2017	427	351	266	348	1785	1827	41304	14972
2018	132	85	29	82	553	441	4509	1834
2019	541	434	318	431	2259	2260	49409	17976
2020	90	39	13	48	377	205	2008	863
2021	0	0	0	0	0	0	0	0

Historic - Current

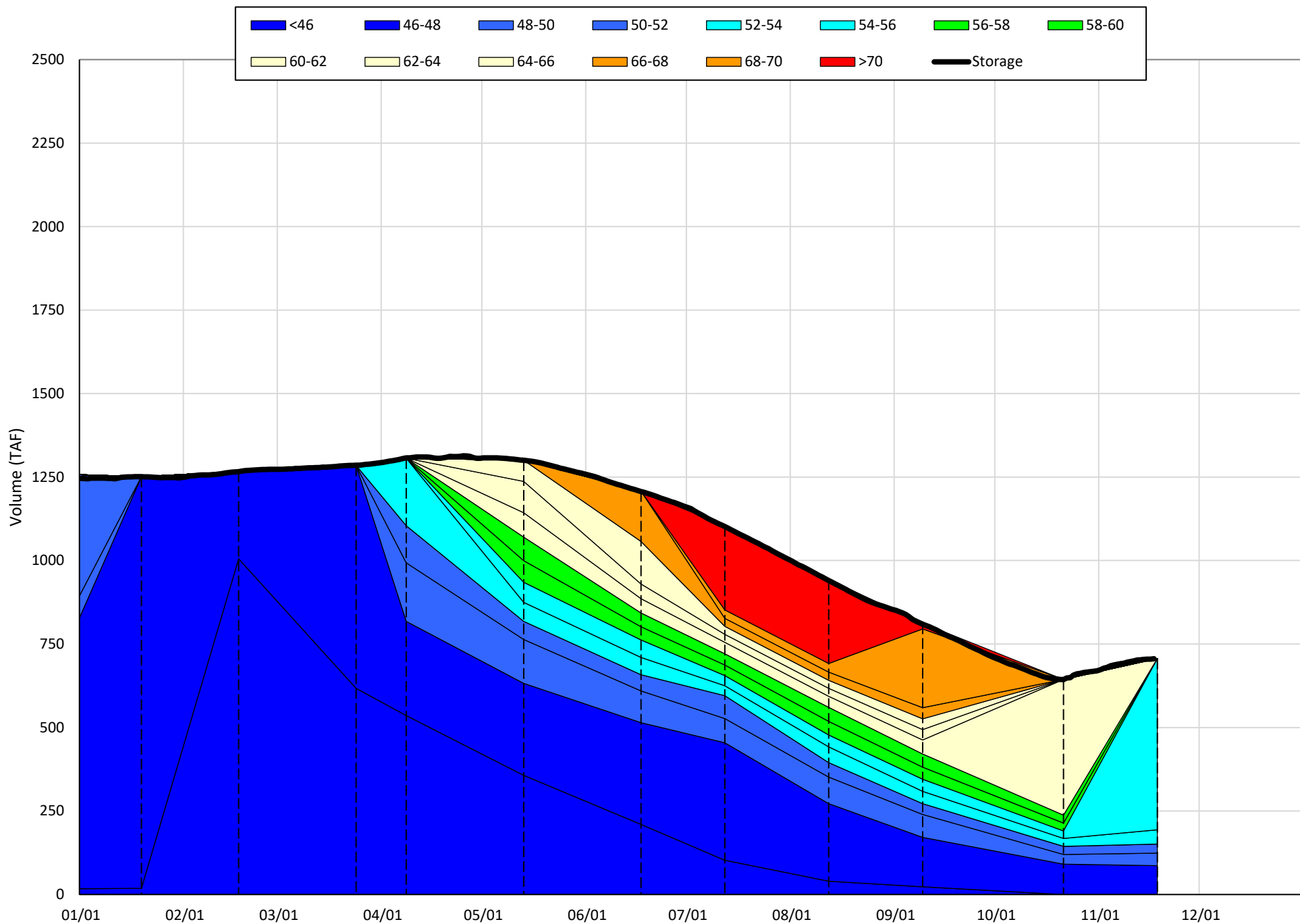
(Historic - Current) / Current

Trinity Lake Isothermobaths & Cold Water Pool Statistics

2021

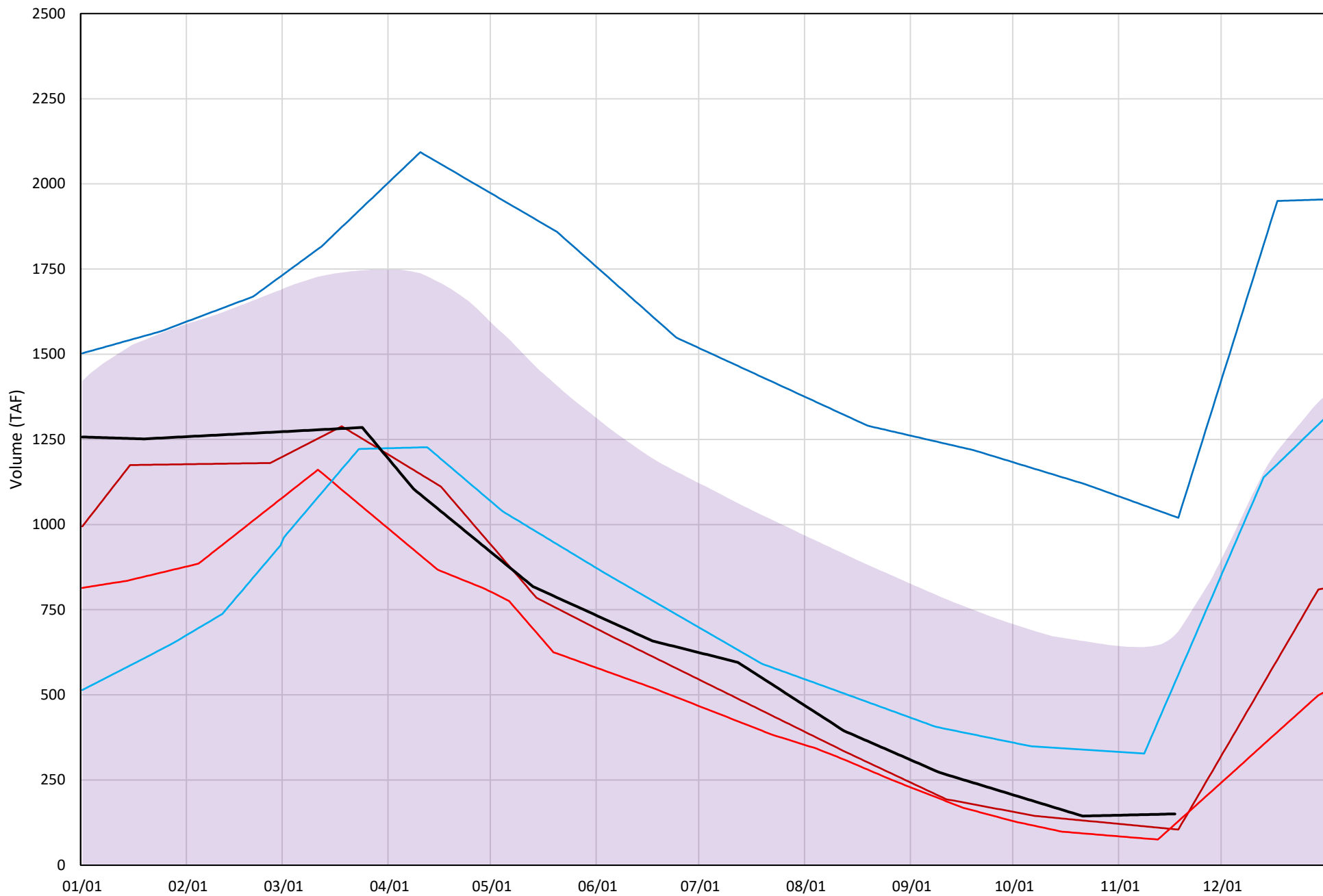
Page	Description
15	- Trinity Lake Isothermobaths Plot
16	- Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$
17	- Trinity Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$
18	- Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$
19	- Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances
20	- Trinity Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$ - Percent Exceedances
21	- Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$ - Percent Exceedances
22	- Trinity Lake Cold Water Pool Comparison by Year

Trinity Lake Isothermobaths Plot - 2021



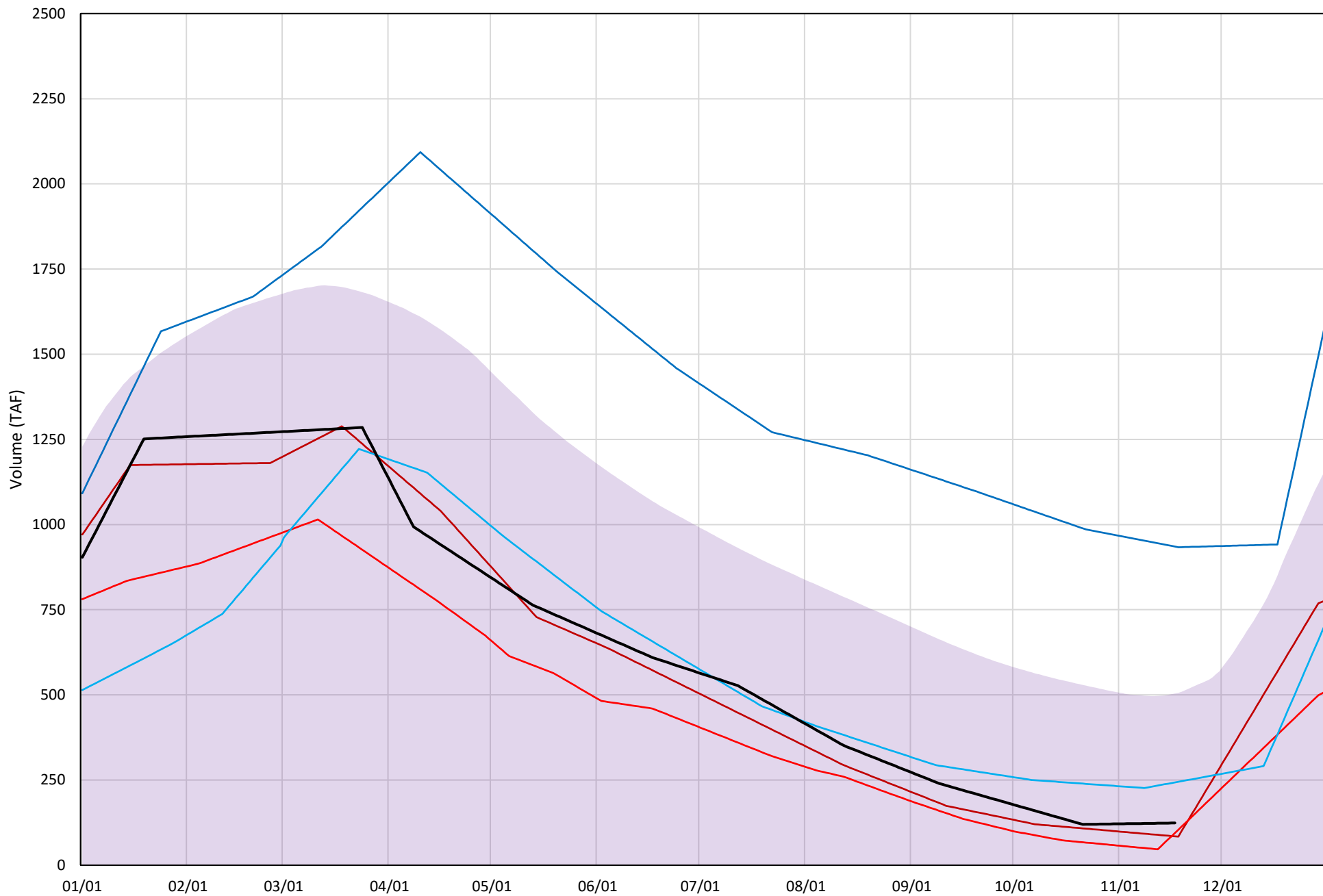
Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



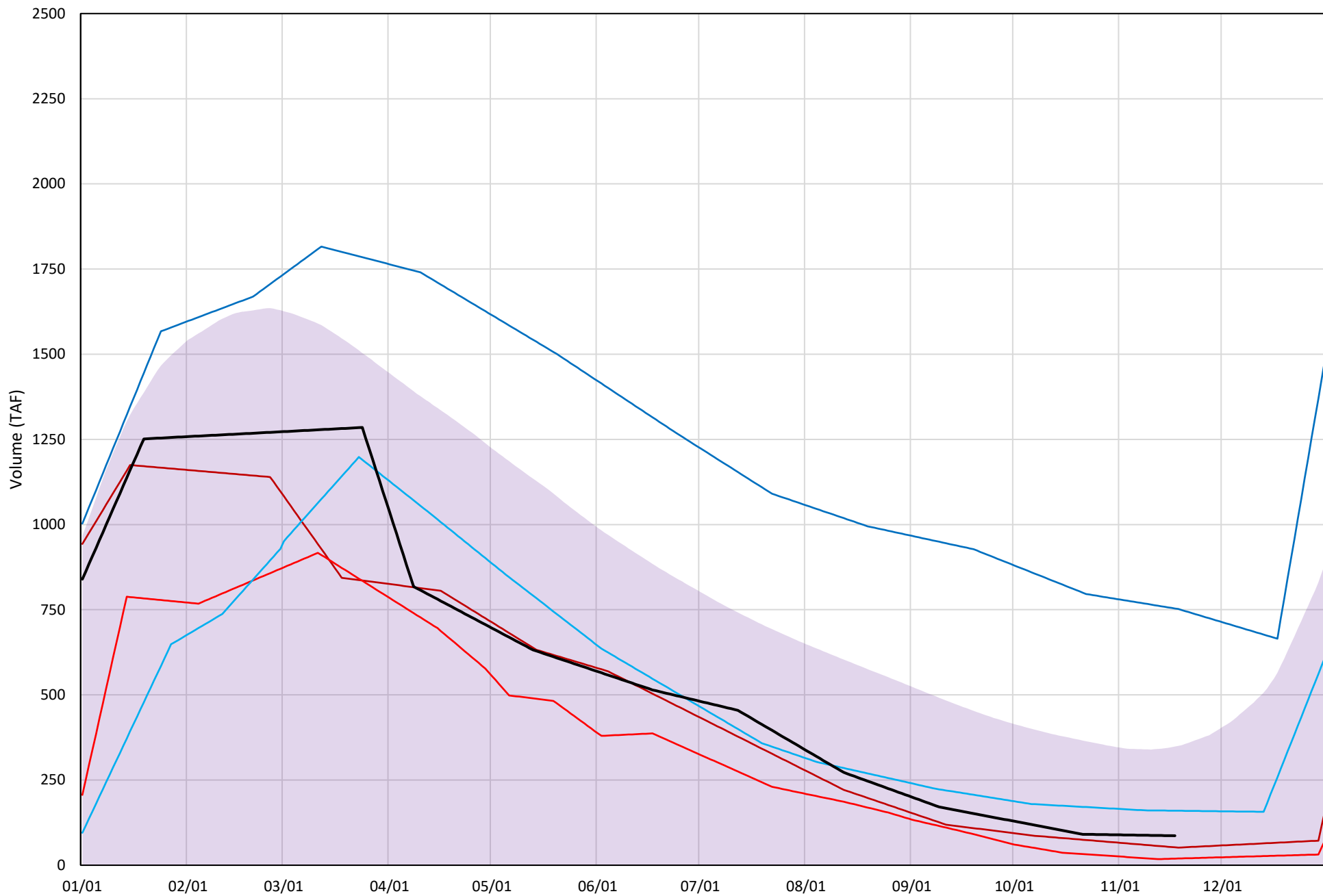
Trinity Lake Cold Water Pool Volume ≤50°F

Avg (2000-2020) 2014 2015 2016 2019 2021

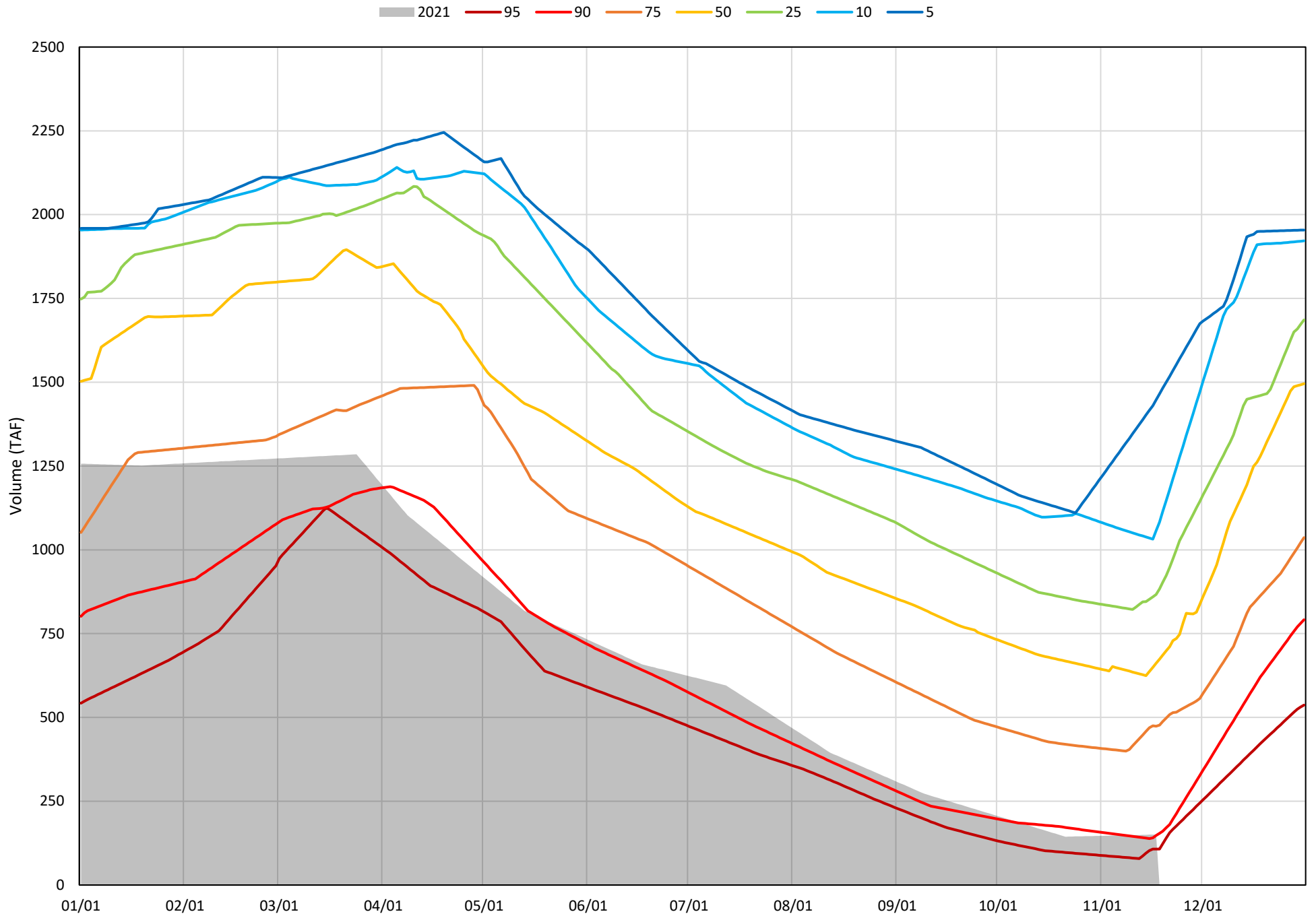


Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

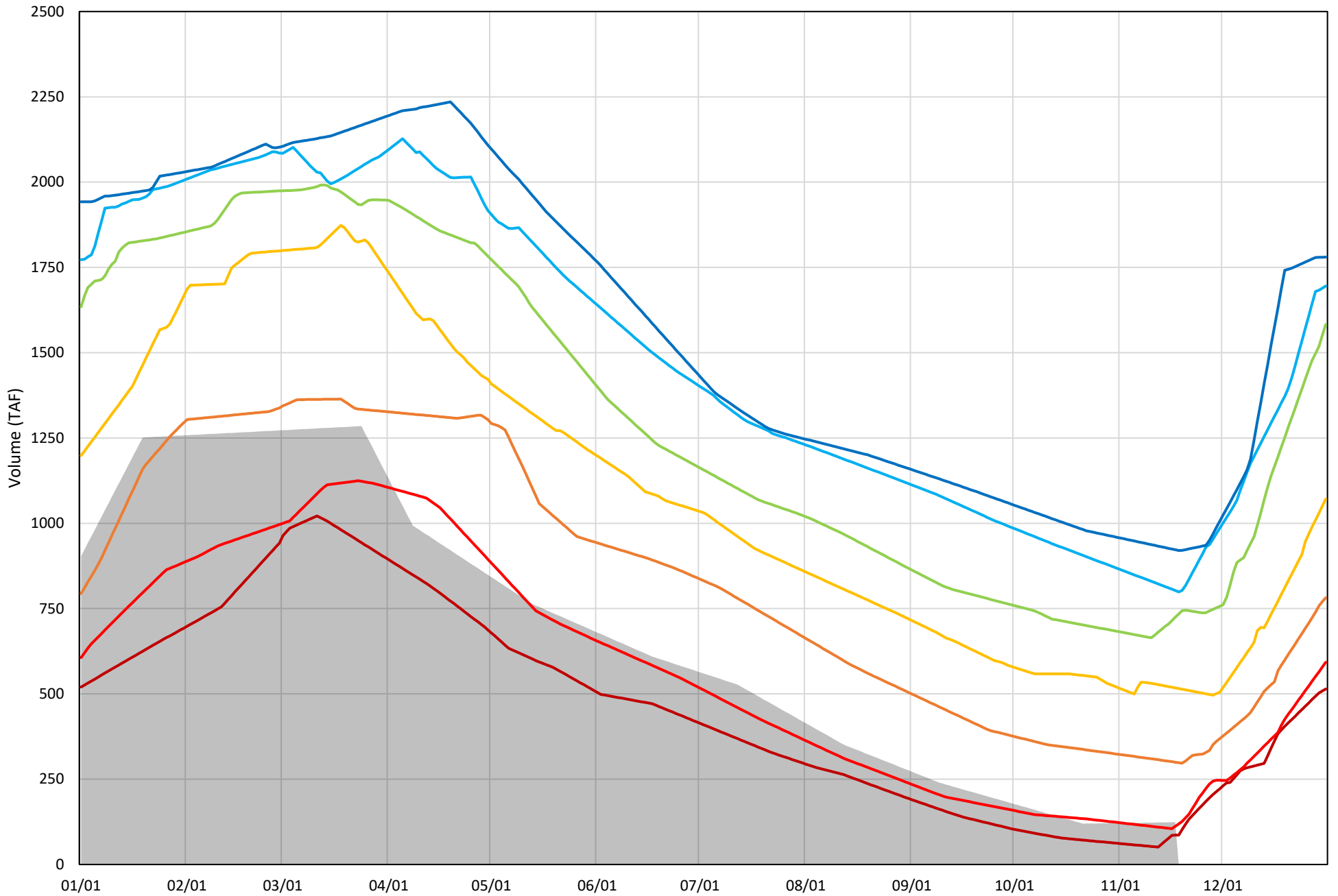


Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (2000-2020)

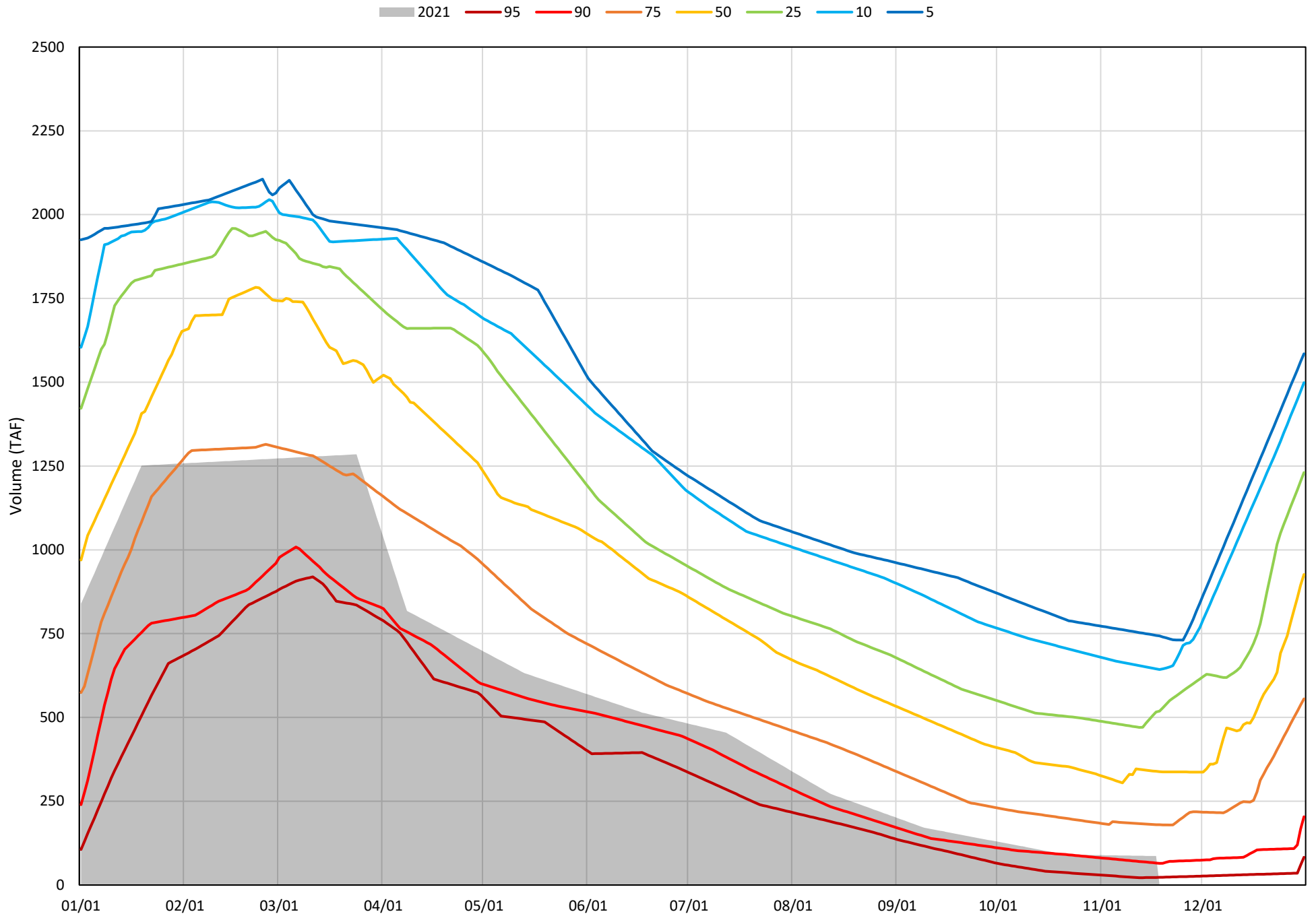


Trinity Lake Cold Water Pool Volume ≤50°F - Percent Exceedances (2000-2020)

2021 95 90 75 50 25 10 5



Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$ - Percent Exceedances (2000-2020)



Trinity Cold Water Pool Comparison by Year (for Specified Date)

Nov-18 2021	Δ TAF				% Δ			
	≤52°	≤50°	≤48°	Abs. Avg.	≤52°	≤50°	≤48°	Abs. Avg.
2000	581	394	202	392	386	318	234	312
2001	352	287	185	275	234	232	213	226
2002	398	341	261	333	264	275	301	280
2003	669	349	159	392	444	282	184	303
2004	352	249	113	238	234	201	131	189
2005	782	643	401	609	519	519	463	500
2006	1339	555	415	770	889	448	480	606
2007	511	465	391	455	339	375	451	389
2008	106	56	32	65	71	45	36	51
2009	280	127	52	153	186	102	61	116
2010	727	615	448	597	483	496	517	499
2011	915	683	444	680	608	551	512	557
2012	705	665	578	649	468	537	668	557
2013	295	225	149	223	196	181	172	183
2014	-45	-39	-34	39	-30	-32	-39	34
2015	-30	-29	-67	42	-20	-24	-78	40
2016	386	119	73	193	256	96	85	146
2017	667	482	301	483	443	389	347	393
2018	698	586	480	588	463	473	555	497
2019	873	811	667	784	580	655	771	668
2020	468	399	253	373	311	322	292	308
2021	0	0	0	0	0	0	0	0

Historic - Current

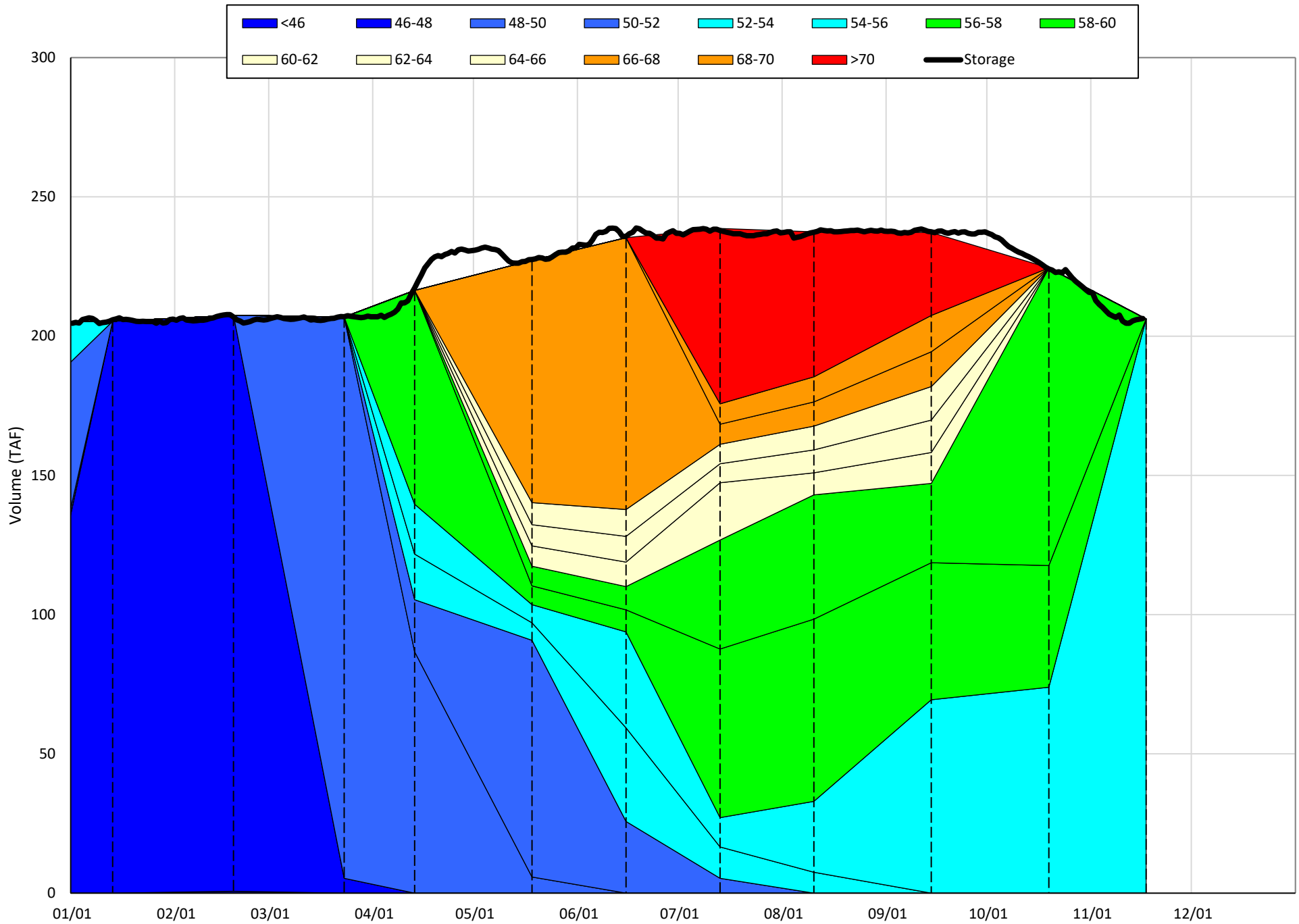
(Historic - Current) / Current

Whiskeytown Lake Isothermobaths & Cold Water Pool Statistics

2021

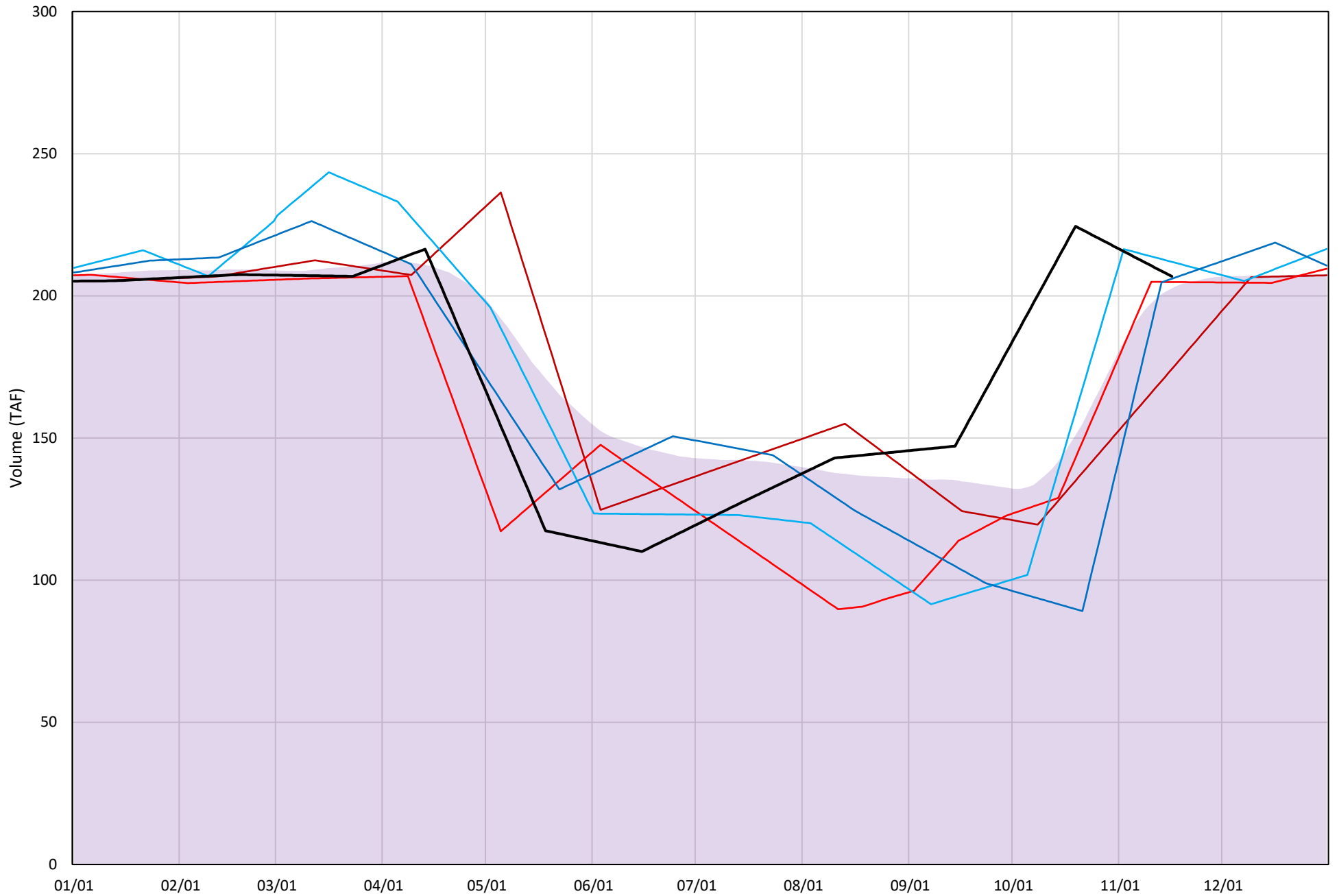
Page	Description
24	- Whiskeytown Lake Isothermobaths Plot
25	- Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$
26	- Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$
27	- Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$
28	- Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$ - Percent Exceedances
29	- Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$ - Percent Exceedances
30	- Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$ - Percent Exceedances
31	- Whiskeytown Lake Cold Water Pool Comparison by Year

Whiskeytown Lake Isothermobaths Plot - 2021



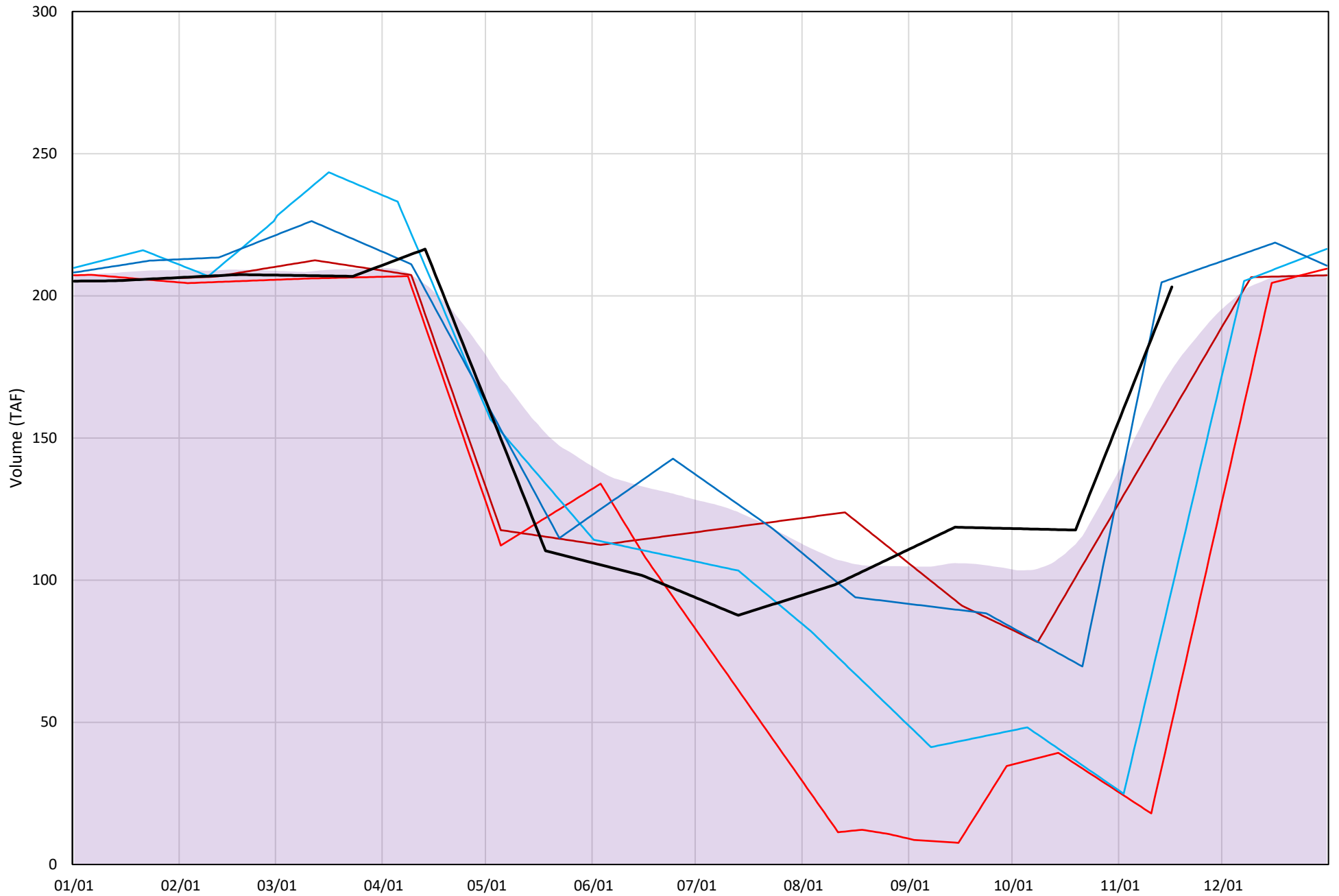
Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



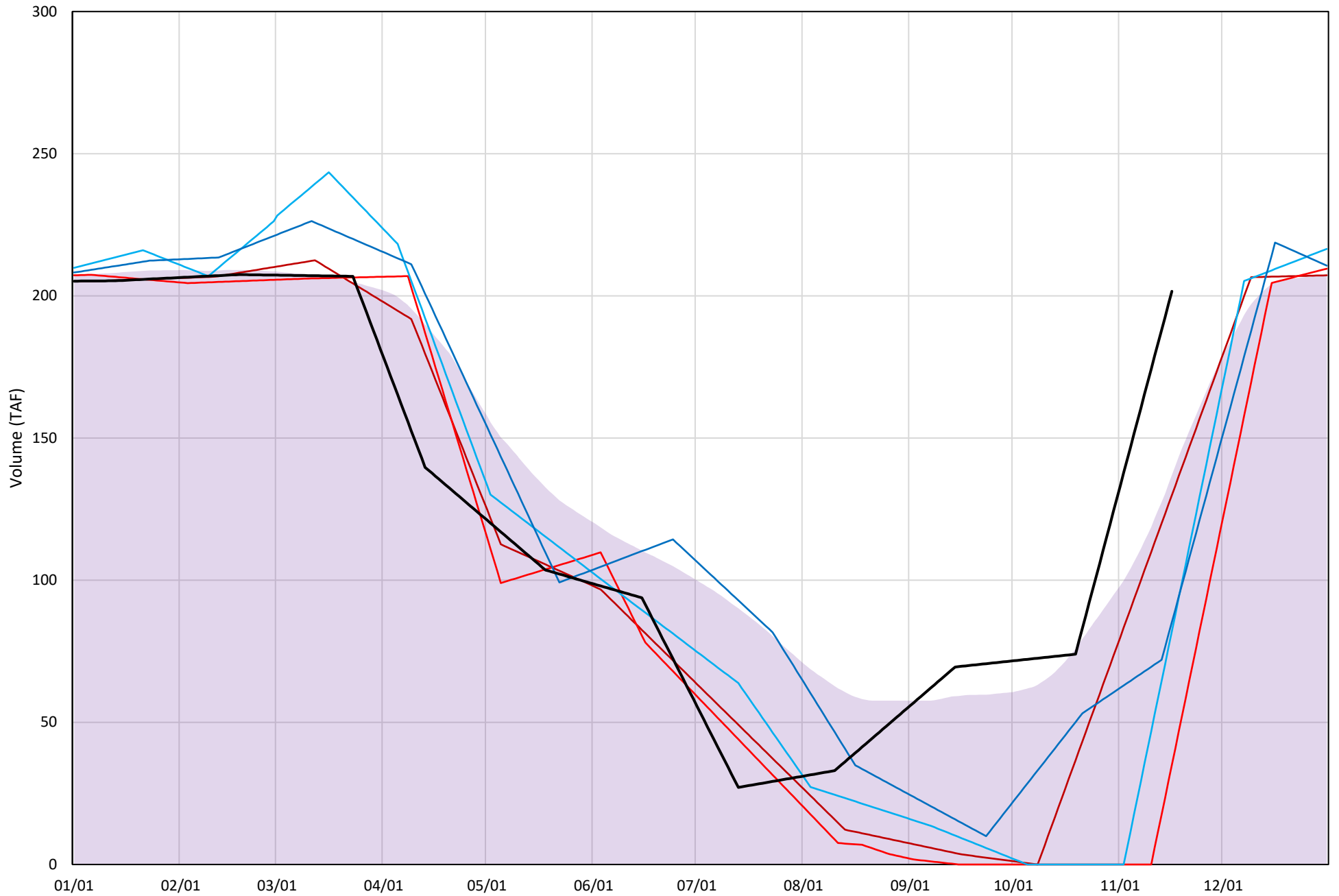
Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



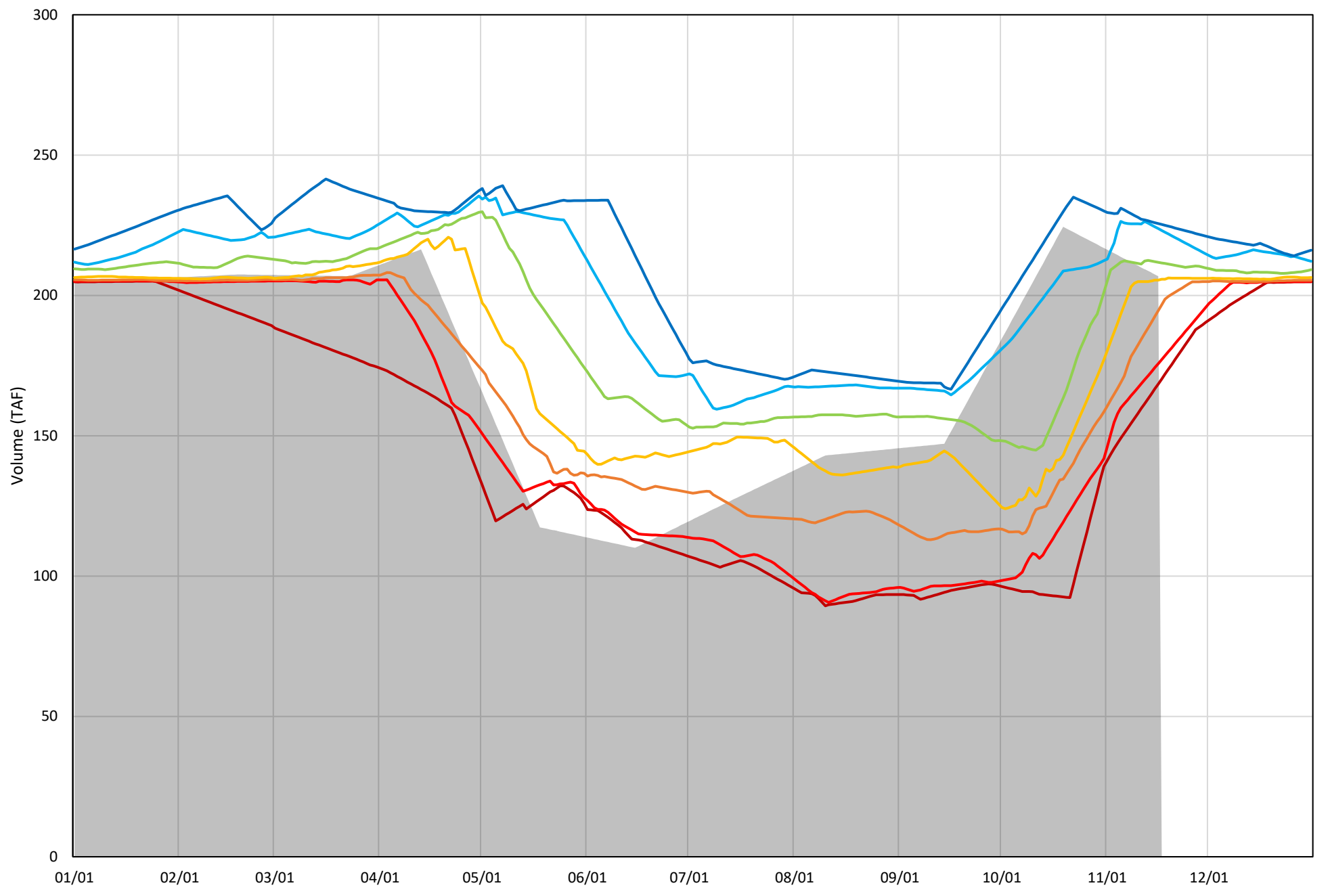
Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



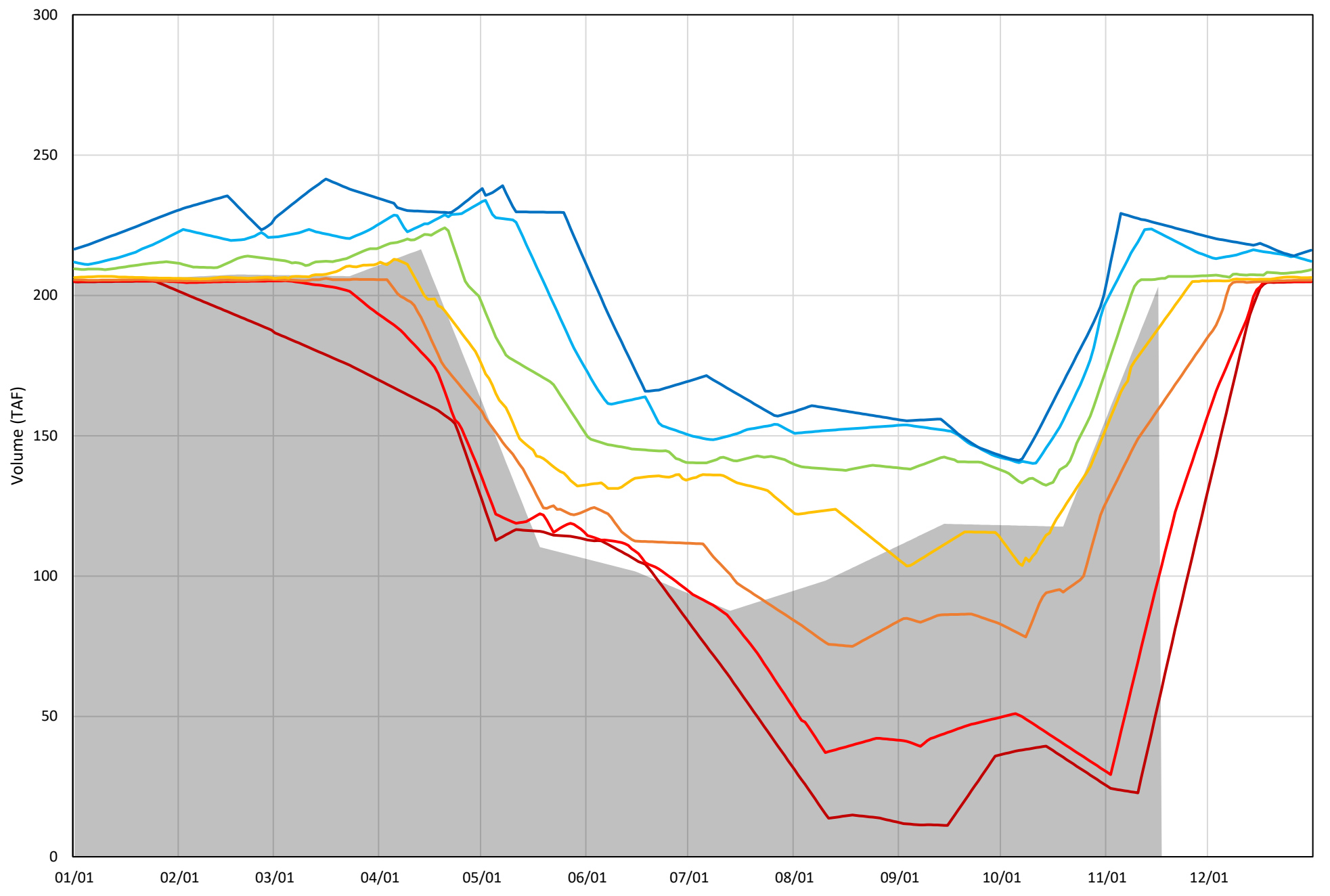
Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$ - Percent Exceedances (2000-2020)

2021 95 90 75 50 25 10 5



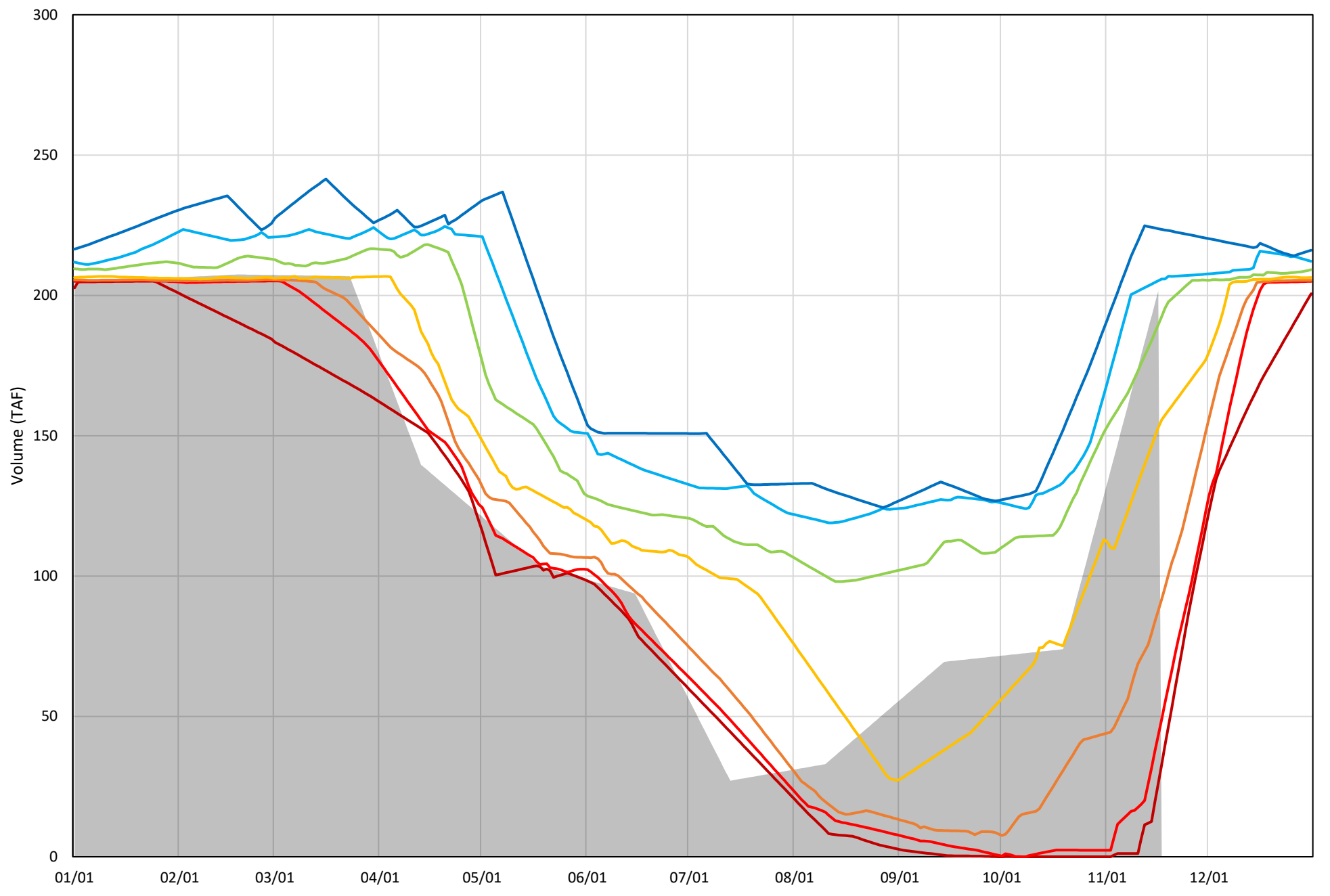
Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$ - Percent Exceedances (2000-2020)

2021 95 90 75 50 25 10 5



Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$ - Percent Exceedances (2000-2020)

2021 95 90 75 50 25 10 5



Whiskeytown Cold Water Pool Comparison by Year (for Specified Date)

Nov-17 2021	Δ TAF				% Δ			
	≤60°	≤58°	≤56°	Abs. Avg.	≤60°	≤58°	≤56°	Abs. Avg.
2000	-31	-33	-35	33	-16	-17	-18	17
2001	0	1	2	1	0	1	1	1
2002	-9	-10	-13	11	-5	-5	-7	5
2003	25	26	-64	38	13	13	-33	19
2004	27	28	30	28	13	14	15	14
2005	7	8	-120	45	4	4	-61	23
2006	-14	-14	-14	14	-7	-7	-7	7
2007	6	7	-101	38	3	4	-51	19
2008	4	5	7	5	2	3	3	3
2009	-18	-22	-43	28	-9	-11	-22	14
2010	13	-88	-96	66	6	-45	-49	33
2011	7	8	10	8	3	4	5	4
2012	6	-91	-106	68	3	-46	-54	34
2013	24	-38	-42	35	12	-19	-21	18
2014	-25	-39	-66	43	-12	-20	-34	22
2015	6	-148	-161	105	3	-75	-82	53
2016	13	-101	-114	76	6	-51	-58	39
2017	9	-30	-32	24	5	-15	-17	12
2018	17	18	-171	69	8	9	-87	35
2019	7	8	-111	42	3	4	-56	21
2020	0	0	0	0	0	0	0	0

Historic - Current

(Historic - Current) / Current