

# Northern CVP Water Temperature Report

## January - 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 <sup>1</sup>	SHD	SPP <sup>1</sup>	KWK	SAC	CCR <sup>2</sup>	BSF	JLF	BND	RDB	IGO <sup>3</sup>	LWS	DGC	NFH	Shasta Generation	Spring Creek P.P.	Keswick Total	RDD	BSF	RDB					
Dec	54.4	53.7	50.9	53.1	52.8	52.6	51.3	50.8	50.8	50.4	48.6	44.8	43.4	42.5	3066	188	3419	47.8	45.1	47.9					
01/01	52.4	51.8	48.9	51.6	51.5	51.2	50.2	49.7	#	-	49.4	47.4	44.4	44.0	43.9	2723	213	3263	45.5	43.7	45.9				
01/02	52.1	51.4	48.9	51.6	51.5	51.4	50.8	50.6	50.3	50.0	47.7	44.7	44.5	44.5	2871	124	3292	48.5	47.2	47.6					
01/03	51.8	51.1	48.3	51.5	51.4	51.4	50.9	50.8	51.0	50.8	47.7	44.9	45.2	45.3	2477	228	3310	48.0	47.8	48.5					
01/04	52.2	51.4	48.3	51.4	51.4	51.2	50.8	50.8	51.1	50.9	47.5	45.0	45.2	45.6	2738	150	3314	47.5	50.2	50.8					
01/05	52.6	51.9	48.6	51.2	51.2	51.0	49.2	49.3	?	49.6	50.3	46.6	44.9	43.7	44.1	2648	119	3307	46.0	44.2	47.3				
01/06	52.5	51.8	48.4	50.8	50.8	50.4	49.3	49.1	49.2	48.9	46.6	45.0	43.5	43.0	3241	167	3312	41.5	41.2	43.5					
01/07	52.4	51.7	48.7	50.8	50.6	50.2	48.8	48.5	48.6	48.4	46.7	45.3	43.6	43.4	3083	124	3281	44.0	41.0	43.9					
01/08	52.2	51.6	48.0	51.1	51.0	50.9	50.0	49.8	49.8	49.0	47.1	45.3	43.9	43.8	2579	526	3260	47.5	46.6	48.0					
01/09	52.1	51.4	47.8	51.0	50.9	50.7	49.3	49.1	49.2	49.3	46.6	45.3	43.4	43.1	2043	696	3295	47.5	42.6	46.6					
01/10	52.0	51.3	48.8	50.8	50.7	50.6	49.7	49.4	49.4	48.9	47.0	45.5	43.9	43.2	2830	77	3307	45.0	44.2	46.2					
01/11	52.0	51.2	48.5	50.9	50.8	50.7	49.7	49.4	49.5	49.2	47.0	45.6	44.9	44.4	3470	112	3289	45.0	43.7	45.7					
01/12	!	-	51.2	48.6	51.0	50.9	50.8	50.2	50.1	50.2	49.7	47.2	45.6	44.9	44.6	-	77	3257	47.5	46.8	48.0				
01/13	#	-	51.1	48.2	51.2	51.2	51.4	51.0	51.1	51.3	50.8	47.6	45.9	45.8	44.2	-	109	3289	53.0	51.9	53.4				
01/14	51.8	51.2	48.0	51.3	51.3	51.5	50.9	51.1	51.4	51.5	47.2	46.0	46.2	45.5	2470	161	3283	55.5	49.5	54.0					
01/15	51.8	51.1	48.4	51.2	51.1	51.1	50.7	50.7	51.0	50.9	47.3	46.2	45.9	45.6	2929	77	3287	49.5	47.3	50.9					
01/16	51.8	51.2	47.8	51.2	51.3	51.5	50.7	50.7	50.8	50.9	47.6	46.3	46.0	45.8	2456	296	3260	58.5	53.9	59.6					
01/17	51.8	51.2	48.3	51.2	51.3	51.7	51.6	51.8	52.1	51.7	47.8	46.3	46.0	45.9	3012	153	3237	67.5	65.3	67.3					
01/18	51.8	51.1	48.2	51.1	51.2	51.4	51.2	51.4	51.0	51.8	47.4	46.4	45.7	45.7	2960	235	3234	62.0	63.4	64.5					
01/19	51.6	51.0	48.2	50.9	50.8	50.4	49.6	49.7	#	-	50.2	46.7	46.2	43.5	43.6	2803	276	3236	57.0	53.5	55.6				
01/20	51.5	50.8	48.3	50.7	50.7	50.6	49.6	49.3	#	-	49.1	46.6	46.1	42.4	42.0	2929	190	3238	50.0	44.8	50.3				
01/21	51.3	50.7	48.1	50.6	50.6	50.4	49.6	49.4	#	-	49.0	46.8	46.2	43.2	41.8	2836	204	3236	45.5	43.8	46.4				
01/22	51.2	50.7	48.3	50.6	50.6	50.4	49.9	49.8	#	-	49.3	47.0	46.3	44.3	43.2	2927	123	3240	47.5	45.5	45.5				
01/23	51.3	50.6	48.0	50.6	50.6	50.5	49.8	49.8	#	-	49.7	46.5	46.0	44.4	43.6	2804	193	3259	47.0	45.4	48.6				
01/24	51.4	50.5	47.9	50.4	50.2	49.7	48.7	48.5	#	-	48.6	46.2	45.7	43.3	42.5	2768	257	3258	37.5	37.6	40.0				
01/25	51.3	50.3	47.8	50.2	50.1	49.8	48.9	48.6	#	-	48.0	46.2	45.4	42.2	41.5	2893	190	3262	41.5	41.3	43.8				
01/26	51.1	49.9	47.1	?	49.7	49.4	?	48.6	47.3	46.9	#	-	46.8	?	45.0	?	44.9	40.1	38.8	2092	555	3258	33.0	34.1	36.7
01/27	50.6	49.6	47.5	?	48.8	48.5	?	47.4	45.8	45.6	45.2	44.7	?	43.8	?	44.8	39.2	37.7	2980	77	3302	41.5	43.3	44.0	
01/28	50.3	49.6	46.5	48.7	48.3	48.0	45.7	46.0	46.3	46.0	44.5	44.6	42.4	40.6	2502	614	3294	42.5	42.9	45.0					
01/29	50.4	49.6	47.0	48.4	48.2	48.2	45.9	45.9	46.1	45.9	45.4	44.4	43.2	42.5	2744	160	3275	44.5	43.6	45.3					
01/30	50.1	49.6	47.3	48.7	48.7	48.6	47.7	47.8	47.9	47.1	45.6	44.3	43.4	43.1	2733	77	3290	48.0	47.5	48.7					
01/31	50.2	49.6	46.3	49.1	49.1	49.1	48.5	48.7	49.0	48.5	45.6	43.9	43.0	43.1	2934	350	3288	49.0	47.5	48.1					
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					
															Total CFS	80475	6910	101513							
															Total AF	159619	13706	201347							

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

- <sup>1</sup> 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
- <sup>2</sup> 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
01/01	34	58	46.0	38	55	46.5	38	53	45.5	40	55	47.5	43	55	49.0	38	54	46.0	36	52	44.0	35	55	45.0	35	56	45.5	39	57	48.0	37	56	46.5	37	55	46.0
01/02	38	53	45.5	46	51	48.5	41	53	47.0	42	54	48.0	33	54	43.5	34	51	42.5	35	58	46.5	35	58	46.5	39	62	50.5	38	58	48.0	37	55	46.0	39	58	48.5
01/03	46	51	48.5	48	53	50.5	41	54	47.5	32	54	43.0	34	52	43.0	34	58	46.0	35	56	45.5	35	56	45.5	44	57	50.5	39	60	49.5	39	59	49.0	38	61	49.5
01/04	46	50	48.0	47	55	51.0	30	56	43.0	35	49	42.0	34	57	45.5	33	53	43.0	31	55	43.0	33	56	44.5	40	57	48.5	43	58	50.5	43	62	52.5	42	64	53.0
01/05	37	58	47.5	35	58	46.5	33	49	41.0	33	56	44.5	39	54	46.5	34	56	45.0	35	56	45.5	38	54	46.0	40	57	48.5	39	61	50.0	41	65	53.0	42	65	53.5
01/06	33	59	46.0	37	48	42.5	33	55	44.0	38	55	46.5	31	58	44.5	32	60	46.0	36	61	48.5	38	63	50.5	46	67	56.5	44	66	55.0	44	67	55.5	46	63	54.5
01/07	36	47	41.5	34	56	45.0	37	55	46.0	33	59	46.0	33	60	46.5	34	62	48.0	37	63	50.0	40	68	54.0	45	69	57.0	42	66	54.0	41	66	53.5	43	63	53.0
01/08	32	56	44.0	44	54	49.0	33	59	46.0	35	59	47.0	35	61	48.0	35	60	47.5	40	67	53.5	40	70	55.0	44	69	56.5	37	64	50.5	38	63	50.5	39	63	51.0
01/09	39	56	47.5	34	60	47.0	33	58	45.5	33	61	47.0	37	58	47.5	40	66	53.0	41	70	55.5	40	68	54.0	42	68	55.0	45	65	55.0	43	65	54.0	40	62	51.0
01/10	33	62	47.5	36	56	46.0	33	60	46.5	38	54	46.0	41	63	52.0	40	69	54.5	39	68	53.5	39	67	53.0	45	68	56.5	37	67	52.0	39	64	51.5	38	61	49.5
01/11	36	54	45.0	34	59	46.5	42	52	47.0	45	58	51.5	45	68	56.5	40	65	52.5	39	68	53.5	39	67	53.0	42	69	55.5	42	67	54.5	44	66	55.0	41	60	50.5
01/12	33	57	45.0	45	52	48.5	46	59	52.5	41	68	54.5	41	66	53.5	42	67	54.5	41	67	54.0	41	68	54.5	44	68	56.0	40	64	52.0	38	61	49.5	39	56	47.5
01/13	45	50	47.5	49	60	54.5	42	69	55.5	41	67	54.0	42	69	55.5	42	71	56.5	43	67	55.0	39	65	52.0	37	65	51.0	35	60	47.5	34	57	45.5	34	58	46.0
01/14	46	60	53.0	39	70	54.5	40	67	53.5	41	70	55.5	42	71	56.5	42	65	53.5	38	64	51.0	35	65	50.0	38	63	50.5	37	62	49.5	36	58	47.0	37	59	48.0
01/15	38	73	55.5	41	66	53.5	42	70	56.0	43	73	58.0	42	66	54.0	39	63	51.0	36	64	50.0	34	60	47.0	33	52	42.5	34	52	43.0	34	52	43.0	36	52	44.0
01/16	39	60	49.5	51	72	61.5	49	73	61.0	43	66	54.5	40	63	51.5	37	65	51.0	35	61	48.0	33	55	44.0	36	59	47.5	35	59	47.0	36	55	45.5	39	59	49.0
01/17	42	75	58.5	61	75	68.0	46	67	56.5	39	62	50.5	35	64	49.5	34	58	46.0	34	54	44.0	31	56	43.5	40	53	46.5	37	54	45.5	37	53	45.0	39	58	48.5
01/18	58	77	67.5	58	69	63.5	43	63	53.0	36	65	50.5	35	61	48.0	36	54	45.0	32	55	43.5	28	53	40.5	33	53	43.0	34	52	43.0	37	54	45.5	38	58	48.0
01/19	54	70	62.0	50	65	57.5	38	65	51.5	36	60	48.0	39	54	46.5	37	57	47.0	30	50	40.0	30	49	39.5	40	48	44.0	42	51	46.5	39	56	47.5	38	56	47.0
01/20	49	65	57.0	33	66	49.5	35	60	47.5	36	55	45.5	35	59	47.0	33	48	40.5	32	48	40.0	31	47	39.0	39	52	45.5	38	56	47.0	38	58	48.0	39	56	47.5
01/21	32	68	50.0	37	60	48.5	36	52	44.0	32	59	45.5	31	46	38.5	34	50	42.0	29	47	38.0	36	46	41.0	42	53	47.5	39	55	47.0	39	57	48.0	38	59	48.5
01/22	34	57	45.5	42	52	47.0	32	60	46.0	31	46	38.5	28	50	39.0	28	49	38.5	35	45	40.0	38	51	44.5	40	55	47.5	40	52	46.0	37	55	46.0	39	56	47.5
01/23	41	54	47.5	34	60	47.0	30	47	38.5	28	51	39.5	25	46	35.5	34	46	40.0	39	49	44.0	37	52	44.5	39	50	44.5	38	51	44.5	39	54	46.5	41	60	50.5
01/24	33	61	47.0	30	46	38.0	28	51	39.5	24	45	34.5	34	46	40.0	38	48	43.0	38	50	44.0	37	51	44.0	41	50	45.5	40	53	46.5	37	54	45.5	40	64	52.0
01/25	29	46	37.5	38	52	45.0	24	44	34.0	34	47	40.5	39	49	44.0	35	51	43.0	40	51	45.5	42	54	48.0	45	53	49.0	38	54	46.0	36	60	48.0	40	61	50.5
01/26	30	53	41.5	25	41	33.0	32	40	36.0	38	49	43.5	35	50	42.5	37	51	44.0	41	53	47.0	42	53	47.5	43	55	49.0	37	58	47.5	39	61	50.0	41	63	52.0
01/27	24	42	33.0	33	44	38.5	38	48	43.0	35	51	43.0	39	50	44.5	41	52	46.5	42	52	47.0	36	52	44.0	37	53	45.0	41	59	50.0	41	64	52.5	40	68	54.0
01/28	33	50	41.5	40	48	44.0	38	52	45.0	37	50	43.5	39	50	44.5	41	51	46.0	36	51	43.5	29	53	41.0	38	57	47.5	41	61	51.0	41	66	53.5	44	65	54.5
01/29	40	45	42.5	40	51	45.5	38	50	44.0	41	50	45.5	41	51	46.0	38	52	45.0	33	54	43.5	36	58	47.0	37	58	47.5	41	62	51.5	40	60	50.0	41	64	52.5
01/30	40	49	44.5	44	50	47.0	40	50	45.0	41	52	46.5	41	54	47.5	33	56	44.5	37	60	48.5	36	59	47.5	39	59	49.0	43	61	52.0	42	65	53.5	43	64	53.5
01/31	44	52	48.0	45	50	47.5	38	54	46.0	42	54	48.0	32	56	44.0	36	61	48.5	37	62	49.5	37	63	50.0	39	62	50.5	42	64	53.0	43	65	54.0	42	60	51.0

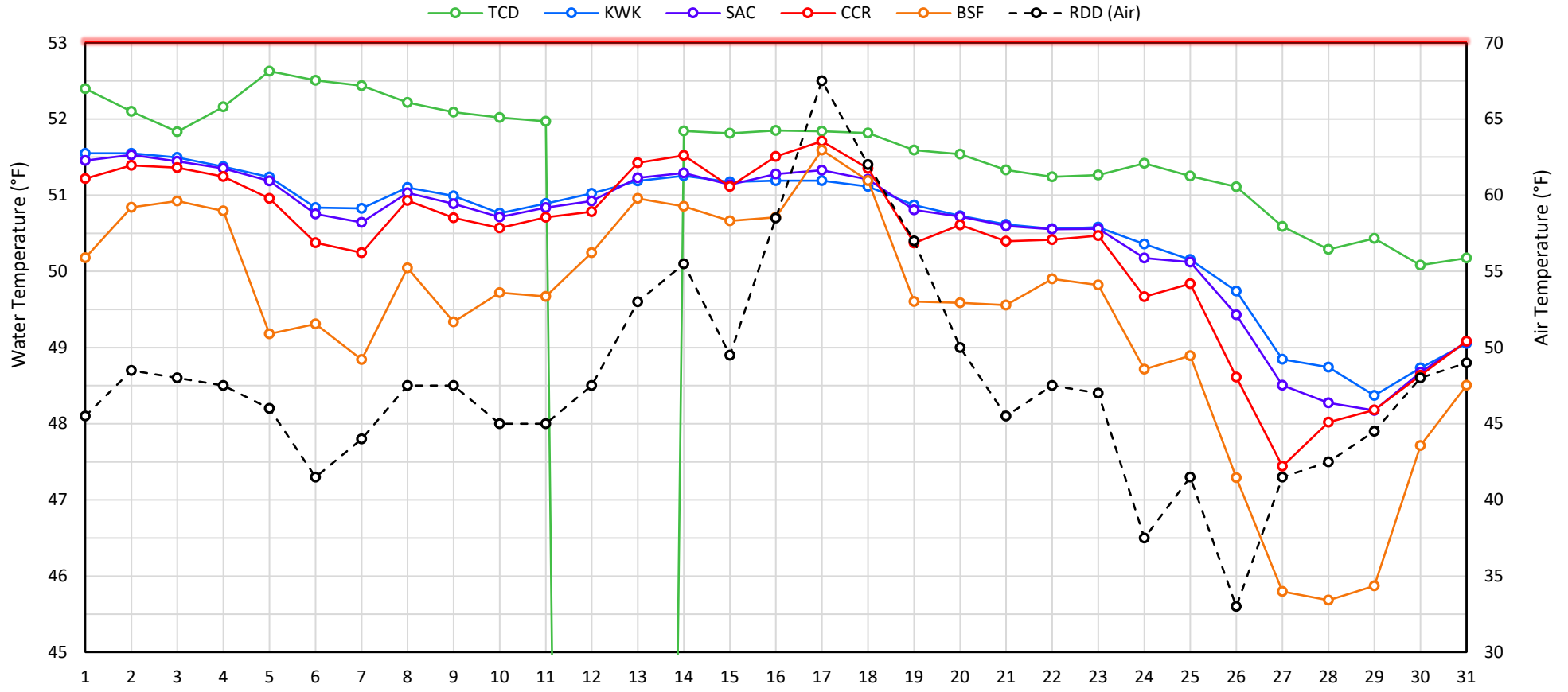
Web Links

- [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 <sup>1</sup>	CDEC Link
TCD	N/A	Shasta Power Plant	N/A
SHD	Sacramento River	0.3 miles downstream of Shasta Power Plant	<a href="#">Click Here</a>
SPP	N/A	Spring Creek Power Plant	N/A
KWK	Sacramento River	0.8 miles downstream of Keswick Dam	<a href="#">Click Here</a>
SAC	Sacramento River	4.8 miles downstream of Keswick Dam	<a href="#">Click Here</a>
CCR	Sacramento River	9.7 miles downstream of Keswick Dam	<a href="#">Click Here</a>
BSF	Sacramento River	25 miles downstream of Keswick Dam	<a href="#">Click Here</a>
JLF	Sacramento River	34 miles downstream of Keswick Dam	<a href="#">Click Here</a>
BND	Sacramento River	41 miles downstream of Keswick Dam	<a href="#">Click Here</a>
RDB	Sacramento River	58 miles downstream of Keswick Dam	<a href="#">Click Here</a>
IGO	Clear Creek	7.3 miles downstream of Whiskeytown Dam	<a href="#">Click Here</a>
LWS	Trinity River	1.1 miles downstream of Lewiston Dam	<a href="#">Click Here</a>
DGC	Trinity River	19 miles downstream of Lewiston Dam	<a href="#">Click Here</a>
NFH	Trinity River	38 miles downstream of Lewiston Dam	<a href="#">Click Here</a>

### Water Right Temperature Control Points

River	Point	Temp. (°F)	Begin Date	End Date
Sacramento	BSF	56	05/15/2019	09/20/2020
Sacramento	CCR	56	09/21/2020	TBD
Trinity	DGC	56	09/15/2020	10/01/2020
Trinity	NFH	56	10/01/2020	12/31/2020

### Notes

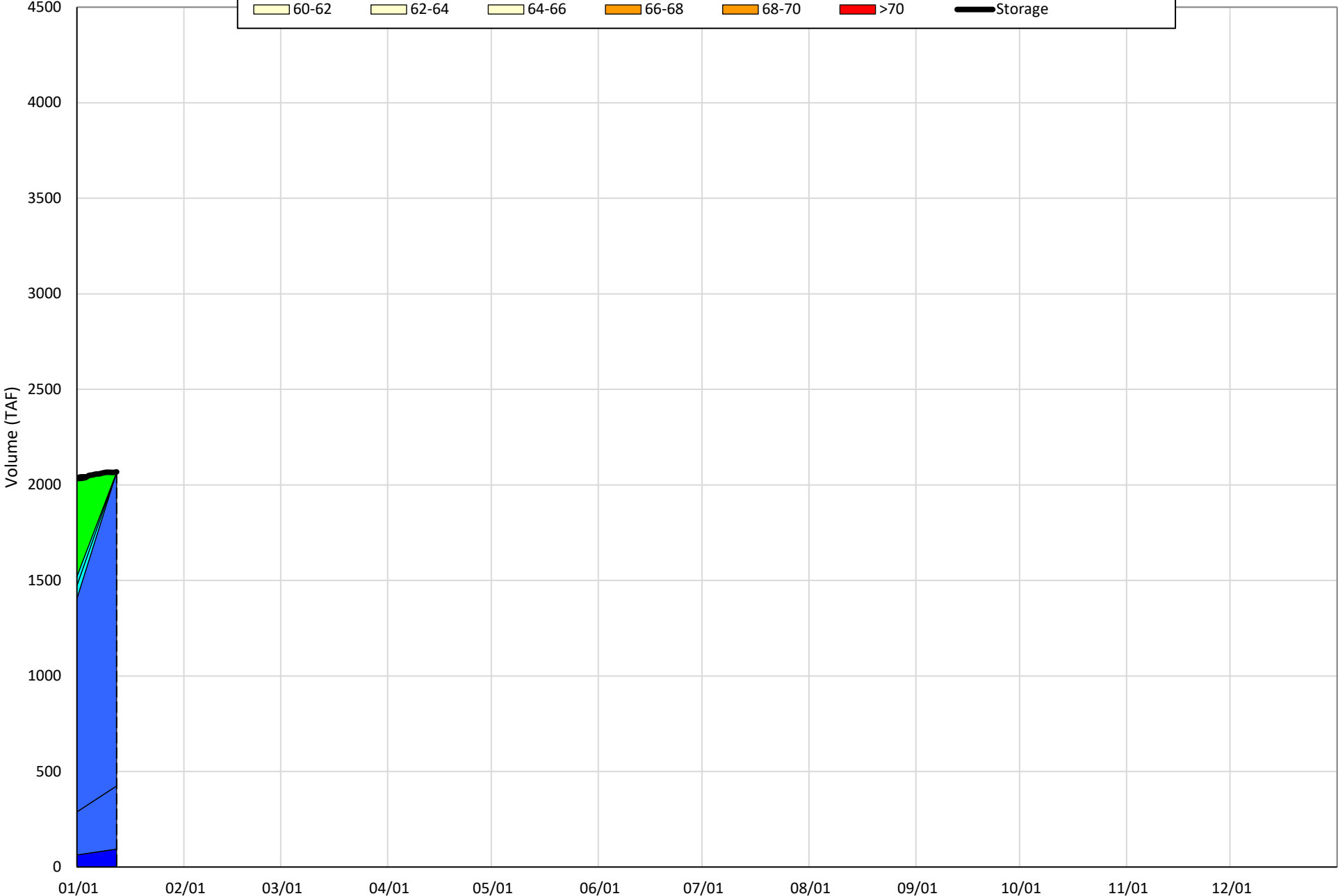
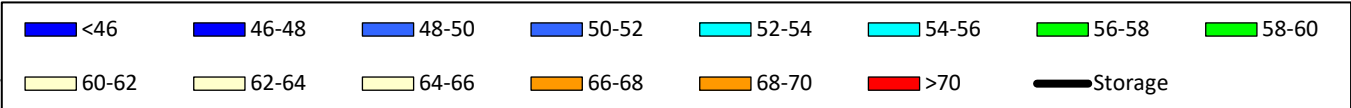
<sup>1</sup> Distances are approximate

# Shasta Lake Isothermobaths & Cold Water Pool Statistics

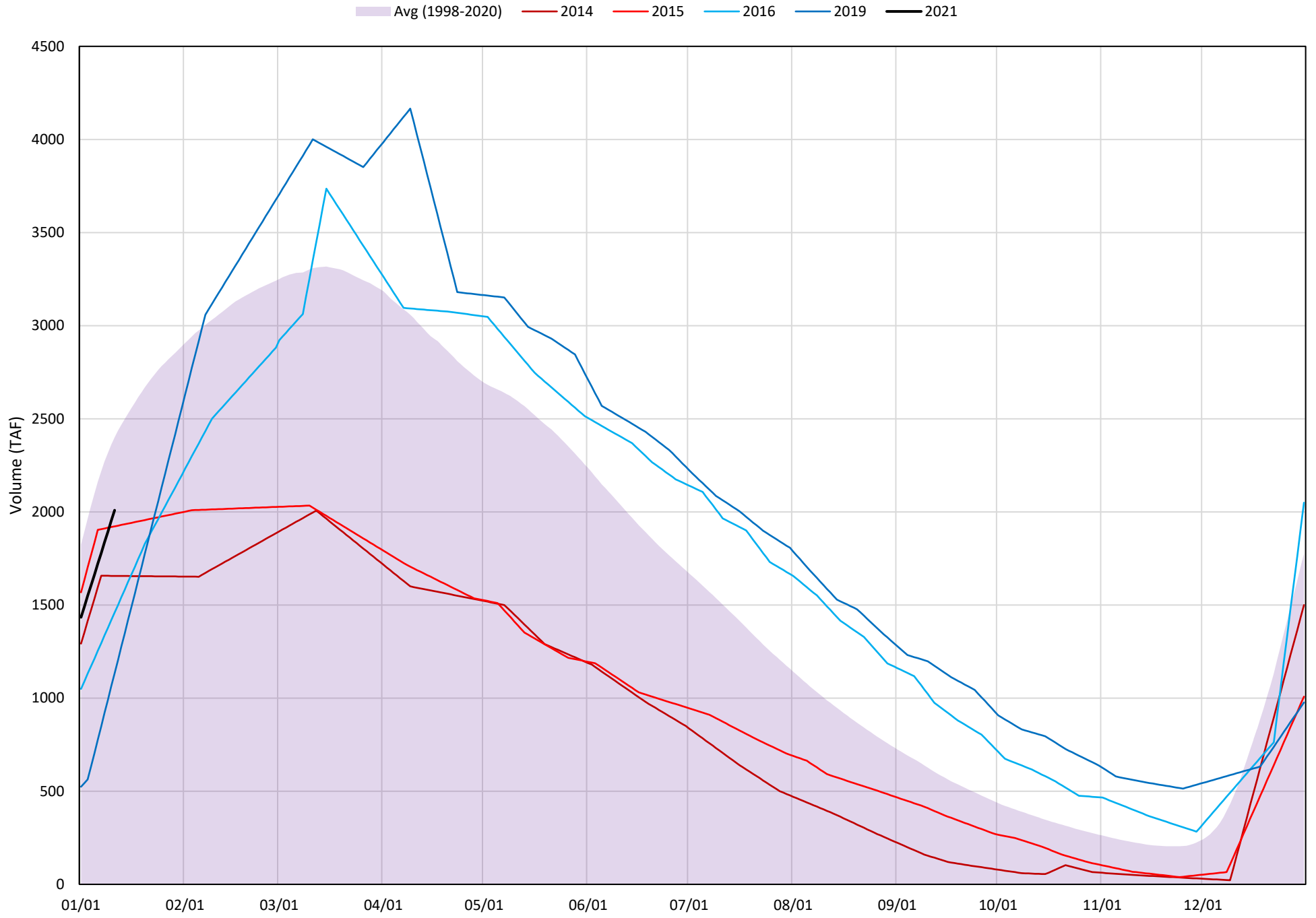
## 2021

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

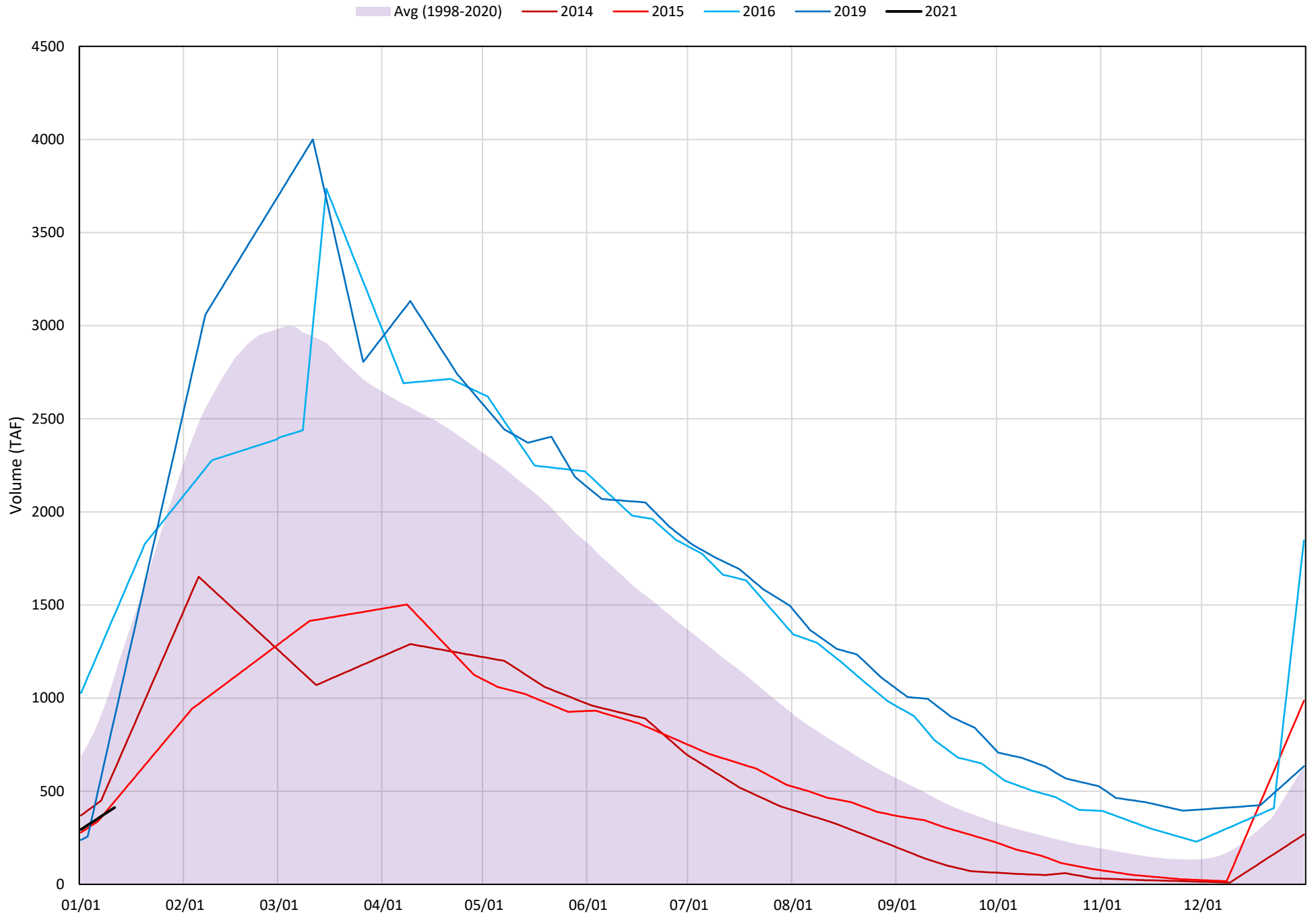
# Shasta Lake Isothermobaths Plot - 2021



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



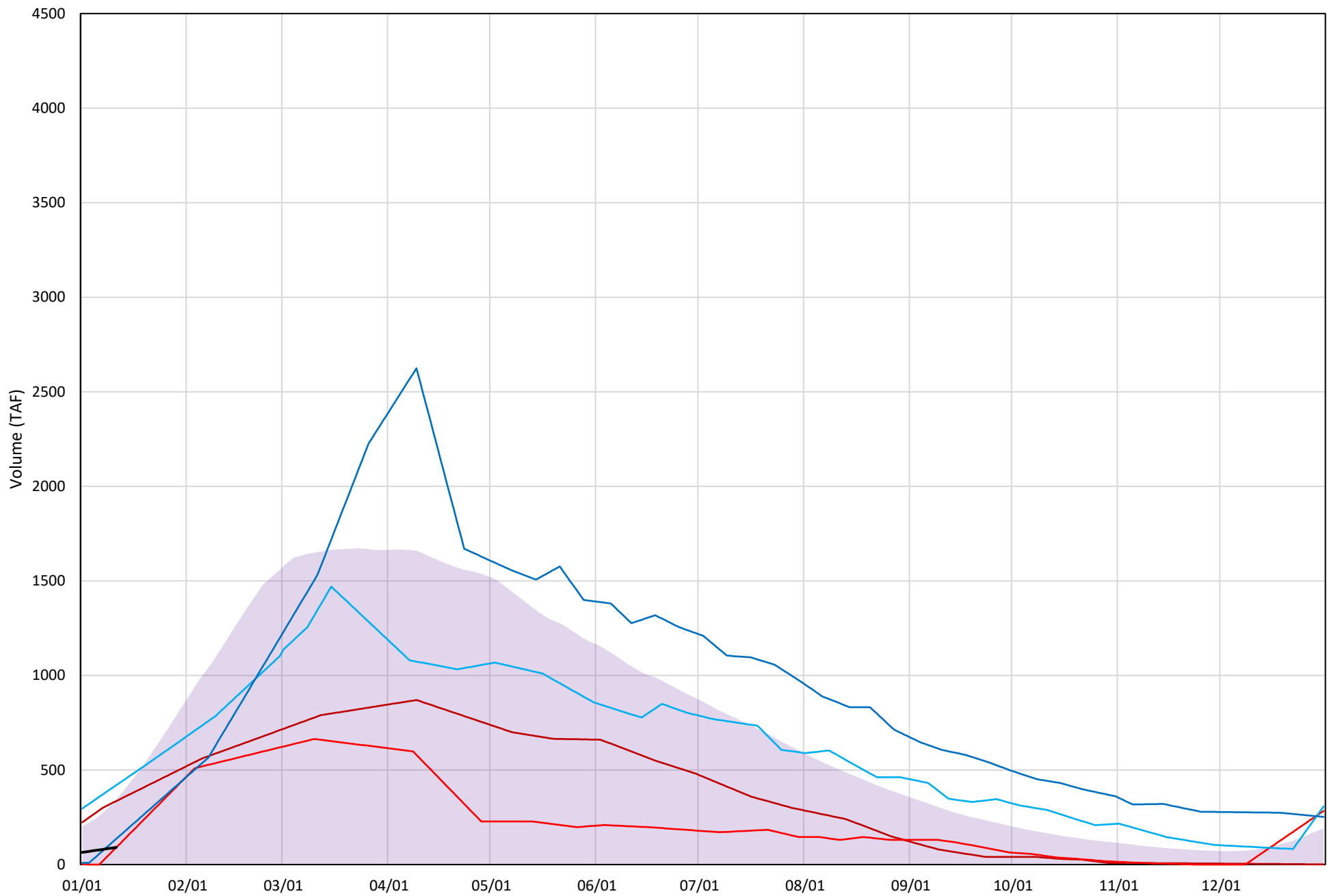
# Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$





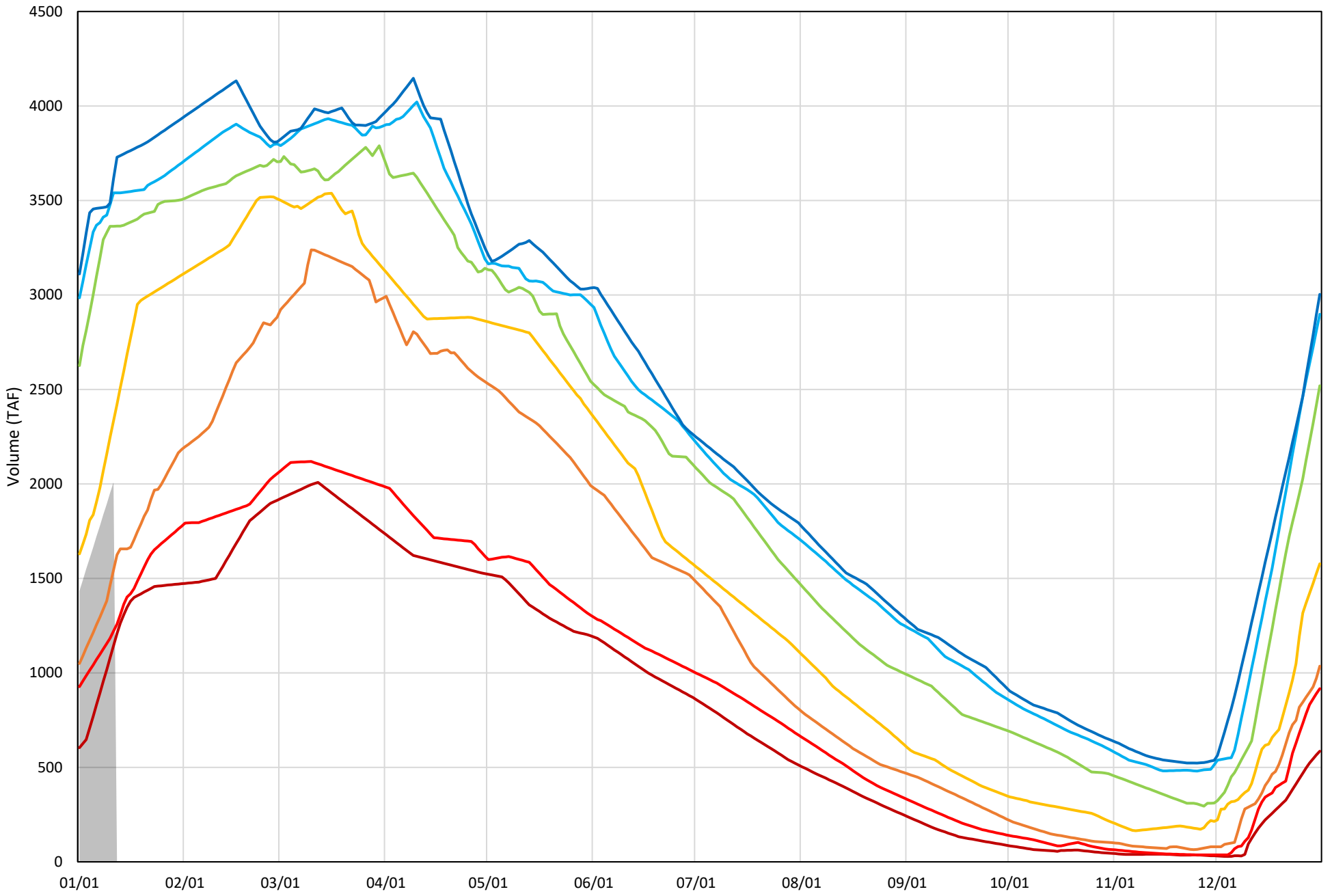
# Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



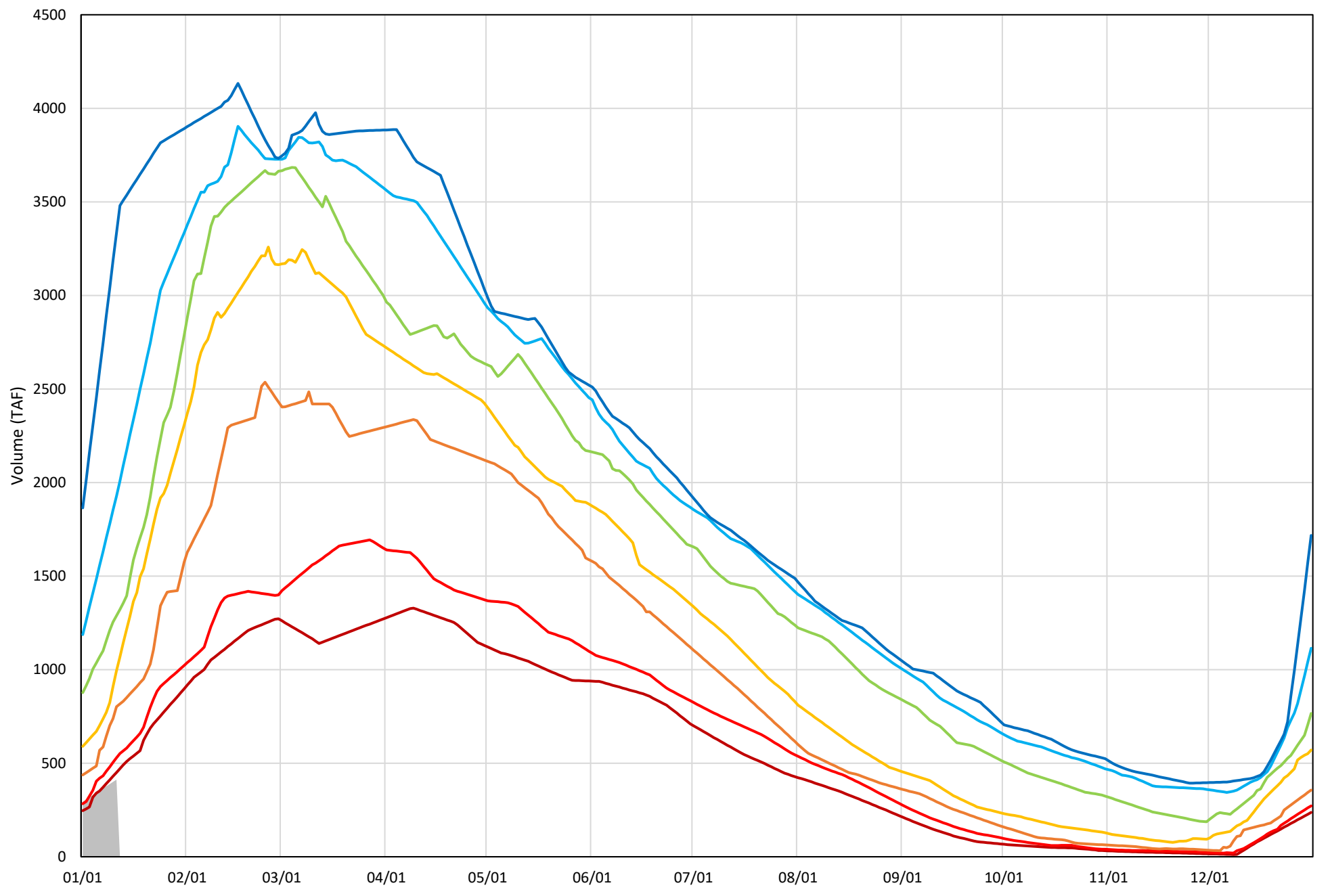
Shasta Lake Cold Water Pool Volume  $\leq 52^{\circ}\text{F}$  - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5



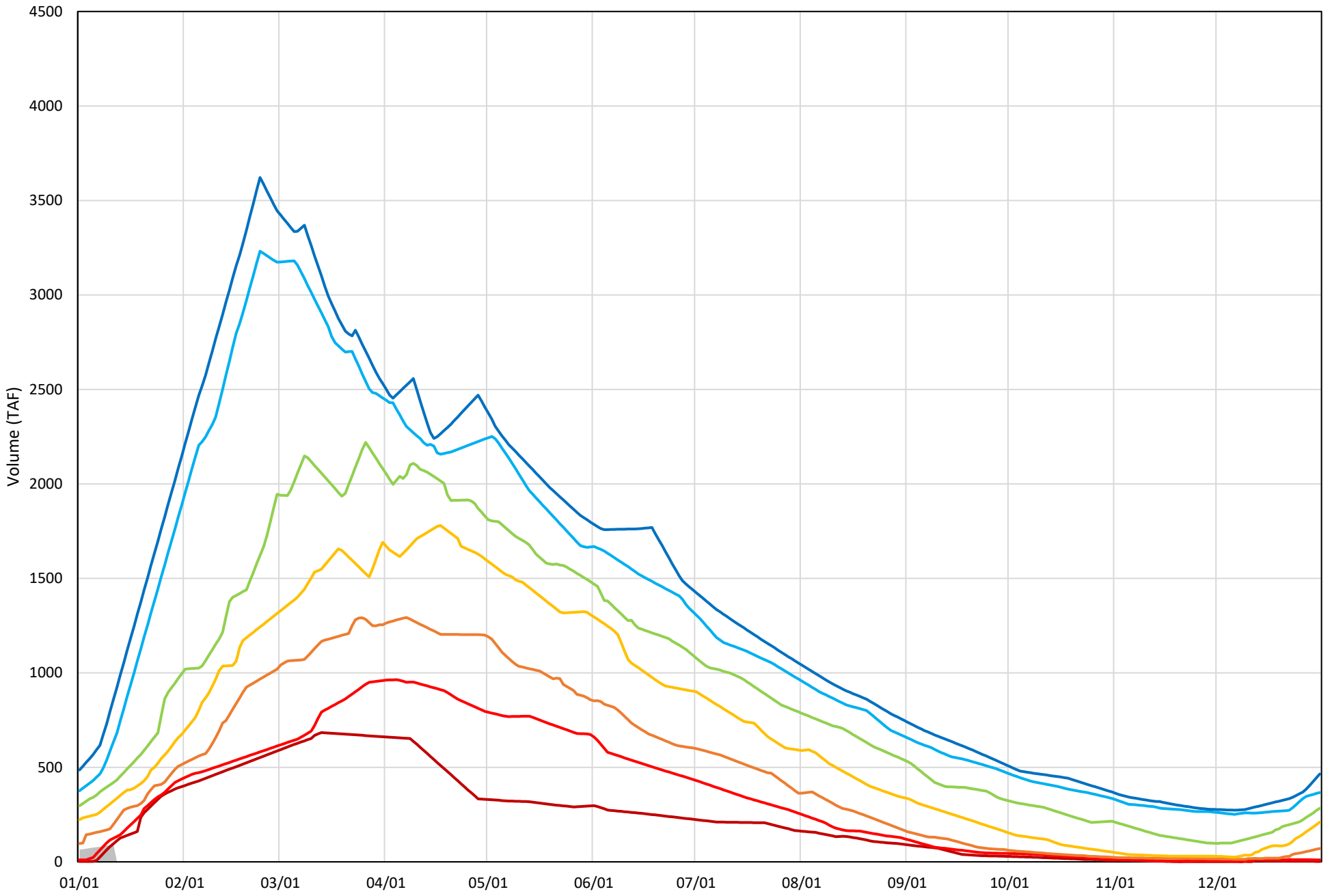
Shasta Lake Cold Water Pool Volume  $\leq 50^{\circ}\text{F}$  - Percent Exceedances (1998-2020)

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)

Jan-12 2021	Δ TAF				% Δ			
	≤52°	≤50°	≤48°	Abs. Avg.	≤52°	≤50°	≤48°	Abs. Avg.
1998	-729	830	164	574	-36	201	180	139
1999	1337	908	818	1021	67	220	900	395
2000	740	378	178	432	37	92	196	108
2001	375	59	26	153	19	14	29	21
2002	324	1832	324	827	16	444	356	272
2003	1314	617	294	741	65	150	323	179
2004	1451	582	51	695	72	141	56	90
2005	-263	1038	231	511	-13	252	254	173
2006	1576	588	138	767	78	143	152	124
2007	1355	406	206	656	67	98	227	131
2008	-101	404	579	361	-5	98	637	247
2009	-720	876	86	561	-36	213	95	114
2010	-3	582	264	283	0	141	290	144
2011	1465	467	109	680	73	113	119	102
2012	1060	433	409	634	53	105	450	203
2013	1379	695	397	824	69	169	436	225
2014	-352	204	245	267	-18	49	270	112
2015	-86	33	0	40	-4	8	0	4
2016	-550	1037	329	638	-27	251	362	214
2017	1613	3193	493	1766	80	775	542	466
2018	-828	224	276	443	-41	54	304	133
2019	-875	485	45	469	-44	118	50	70
2020	-465	390	217	358	-23	95	239	119
2021	0	0	0	0	0	0	0	0

}

Historic - Current

}

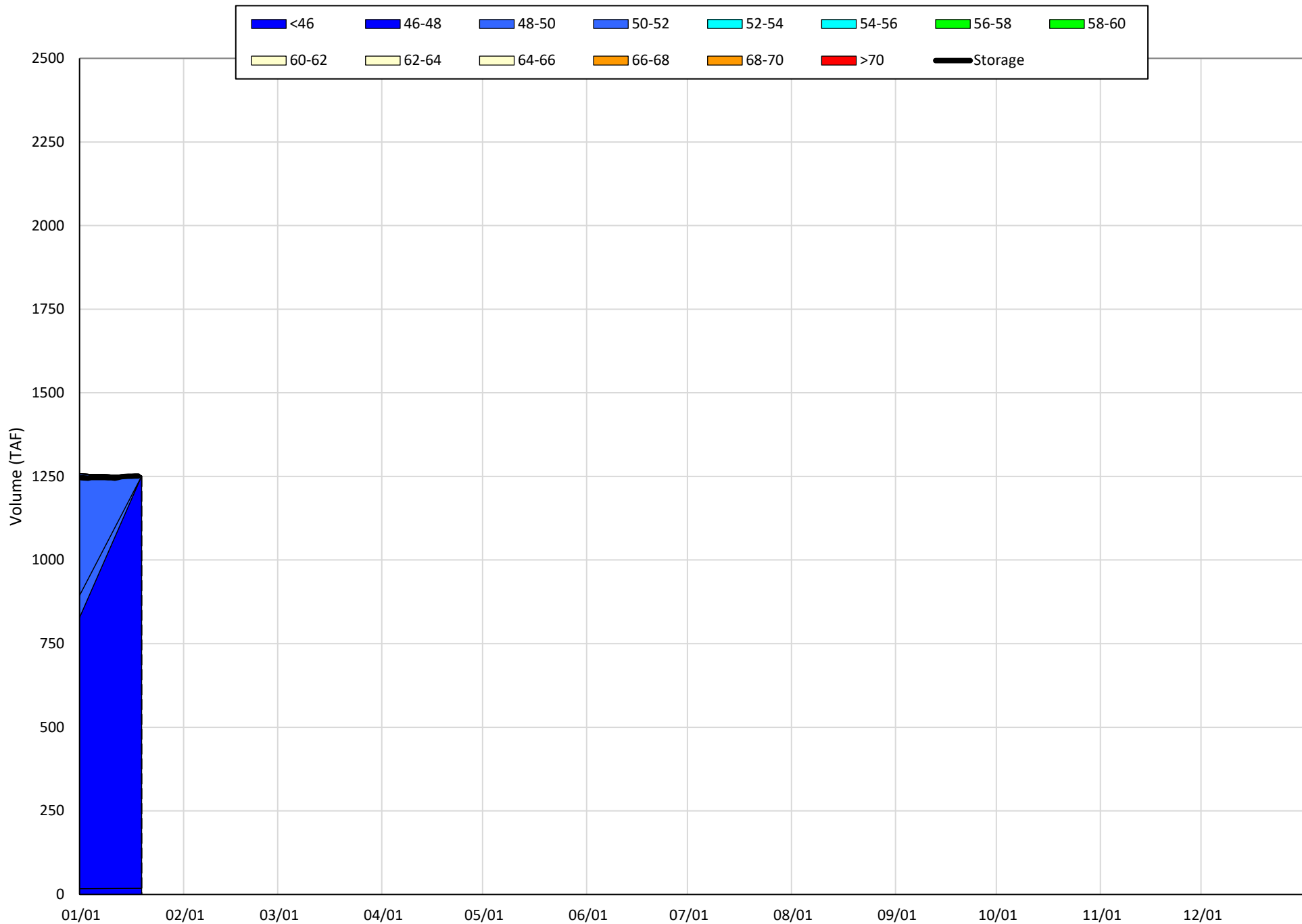
(Historic - Current) / Current

# Trinity Lake Isothermobaths & Cold Water Pool Statistics

## 2021

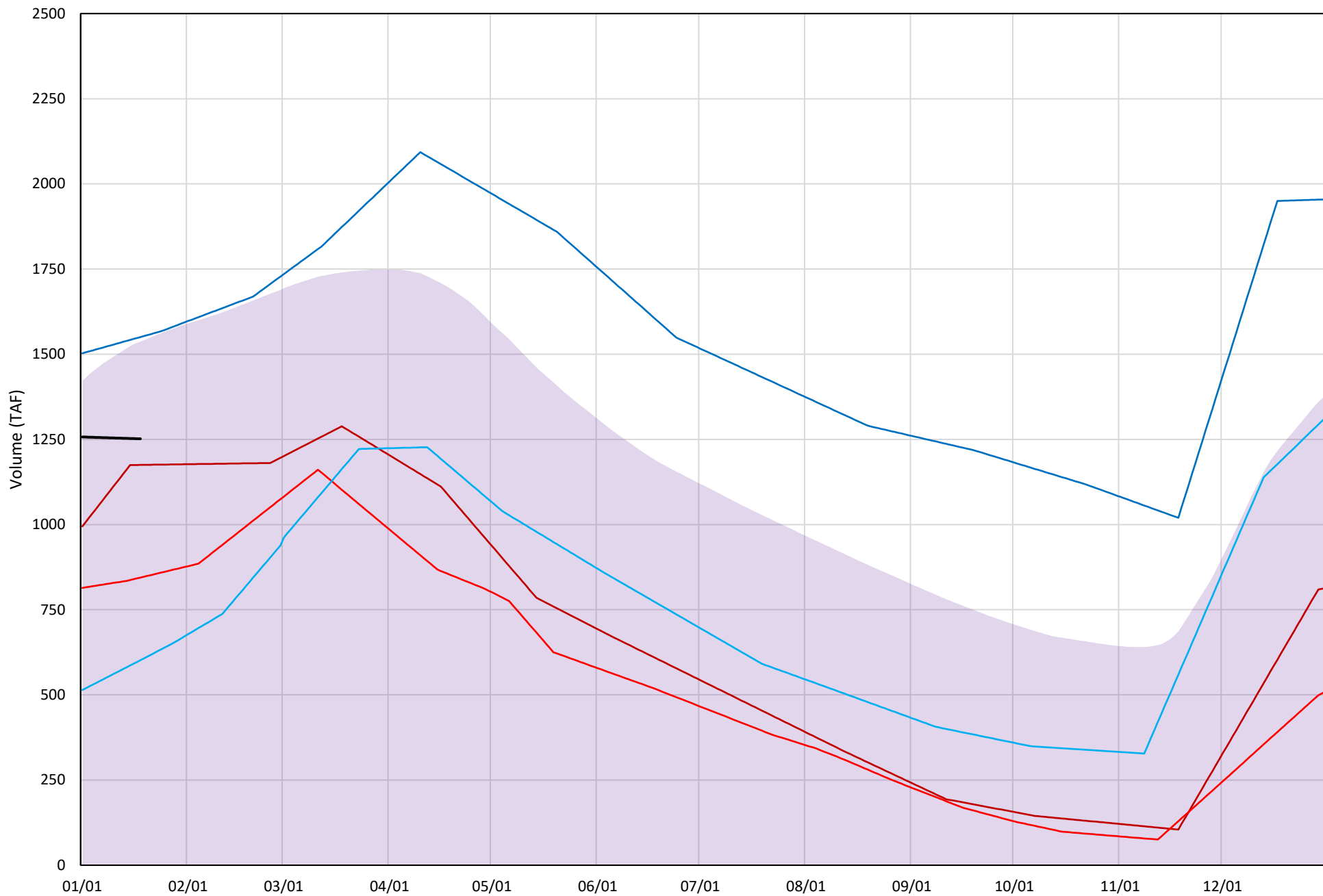
Page	Description
15	- Trinity Lake Isothermobaths Plot
16	- Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$
17	- Trinity Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$
18	- Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$
19	- Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - 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 $\leq 52^{\circ}\text{F}$

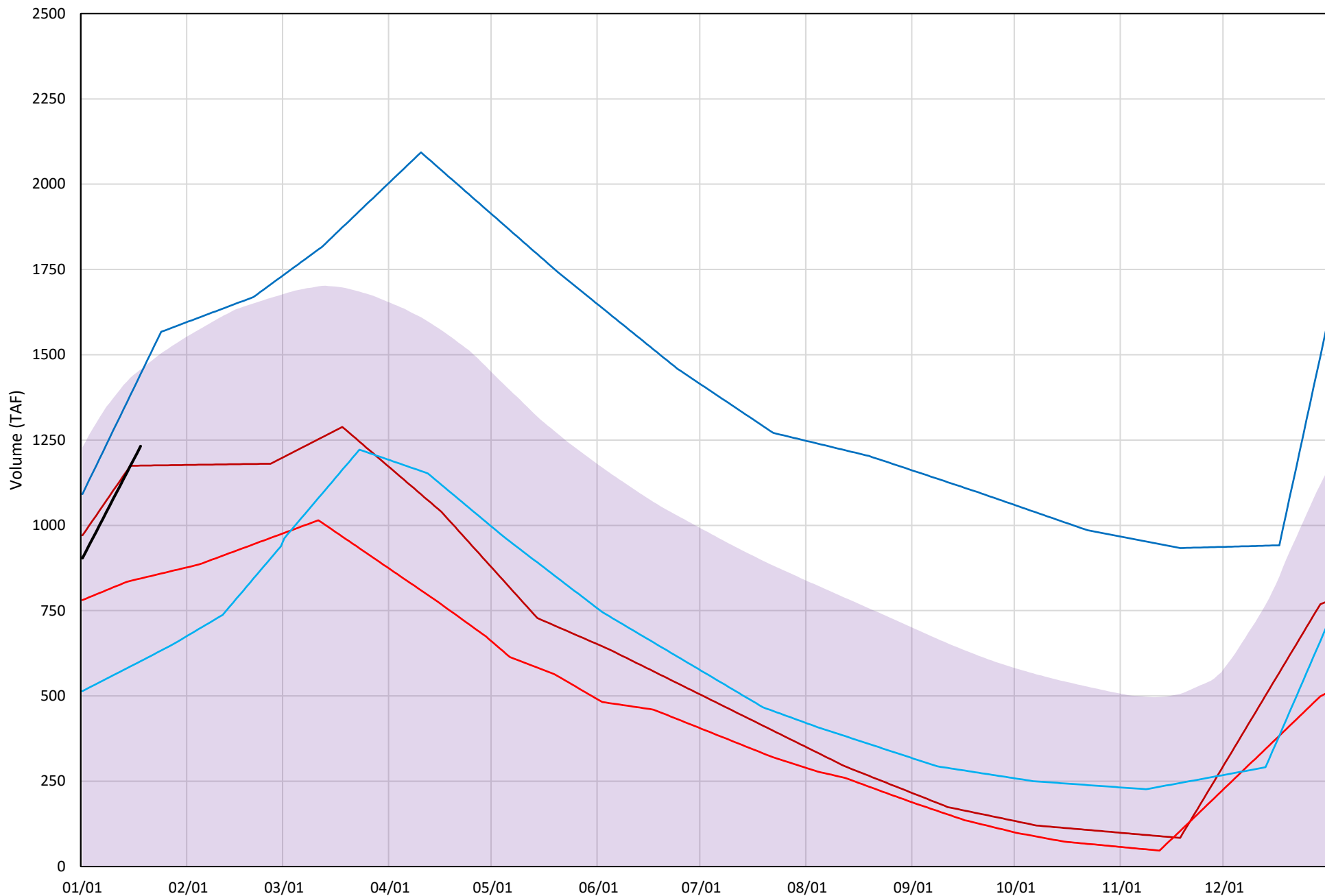
Avg (2000-2020) 2014 2015 2016 2019 2021





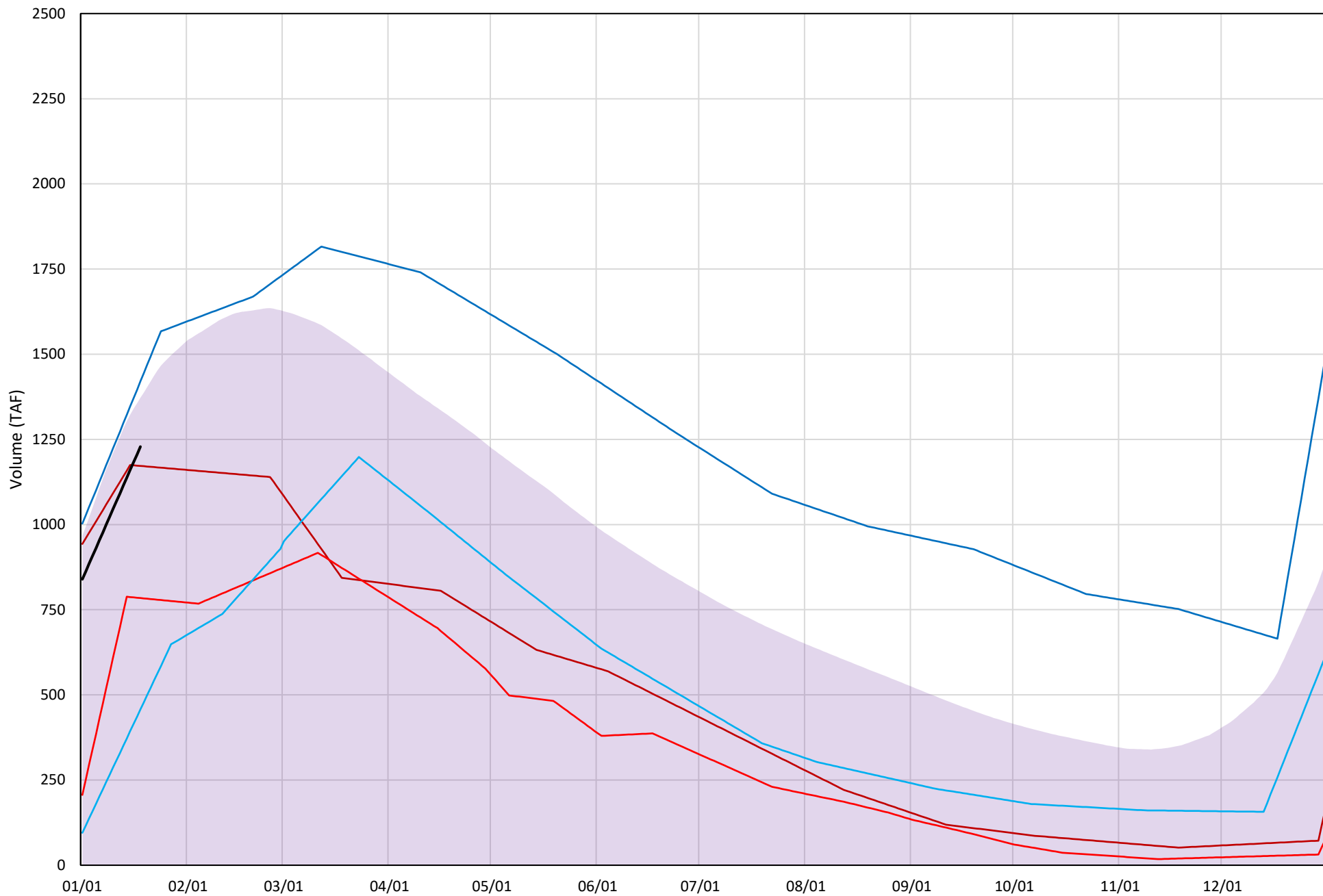
# Trinity Lake Cold Water Pool Volume ≤50°F

Avg (2000-2020) 2014 2015 2016 2019 2021

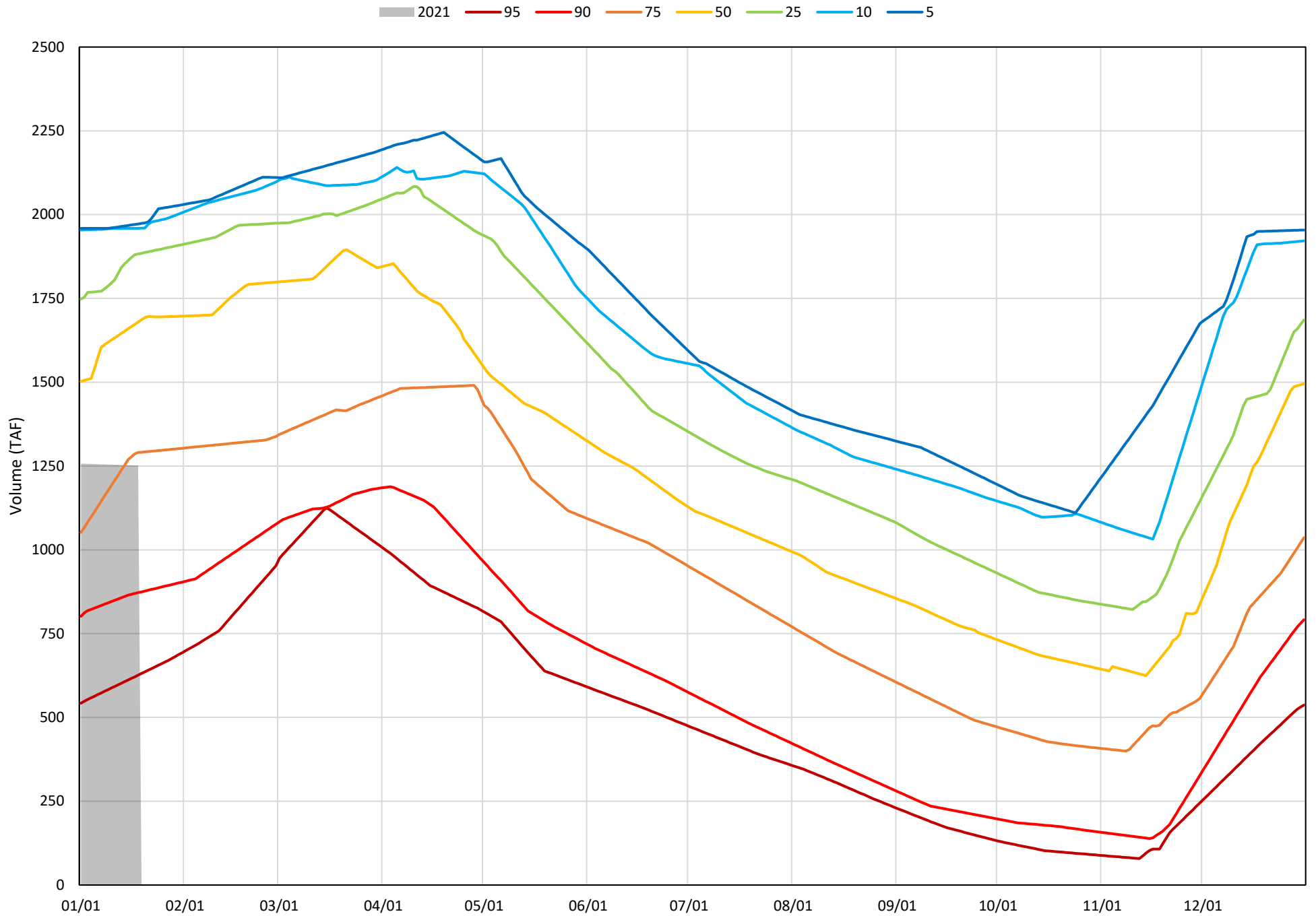


# Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

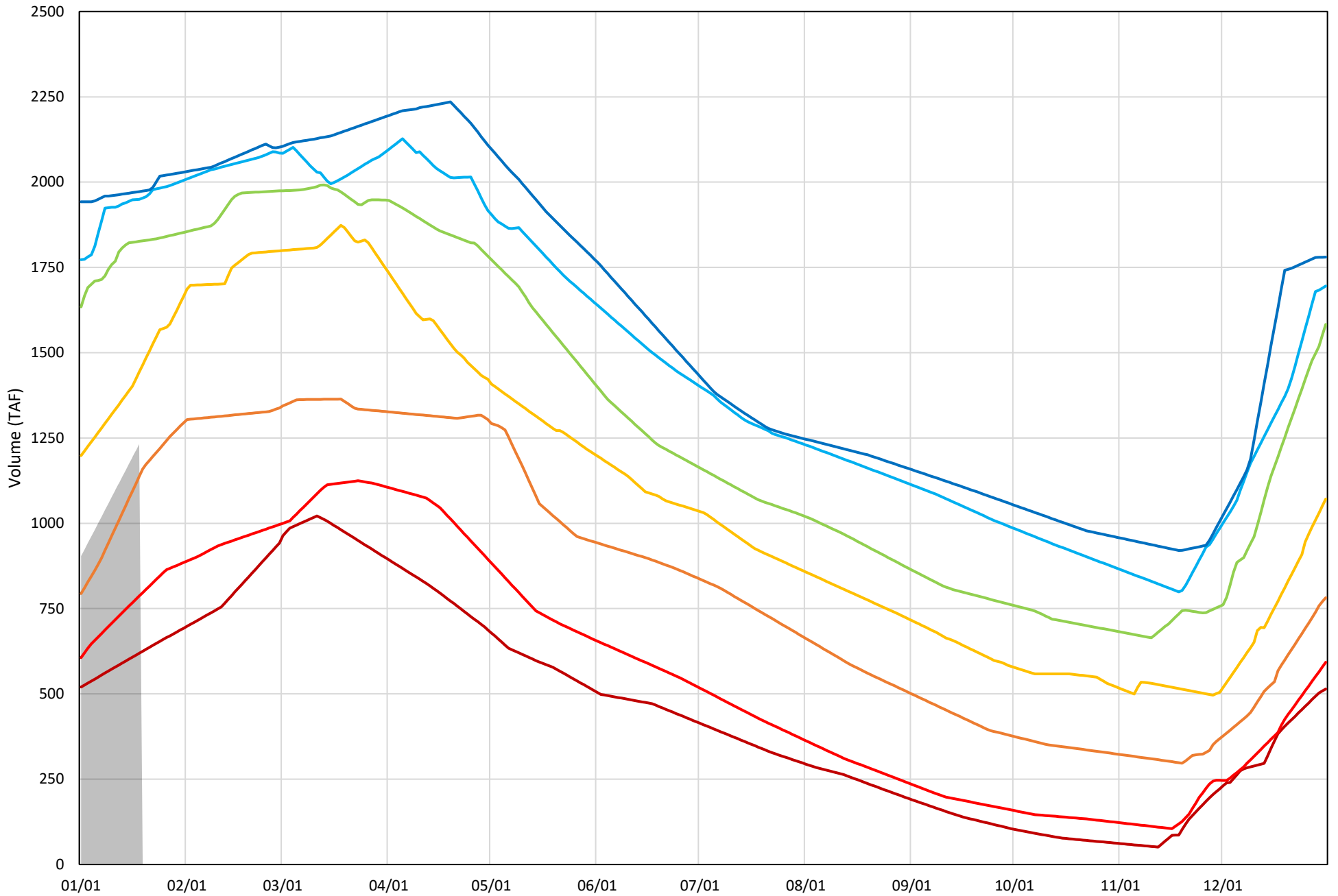


Trinity Lake Cold Water Pool Volume  $\leq 52^{\circ}\text{F}$  - Percent Exceedances (2000-2020)

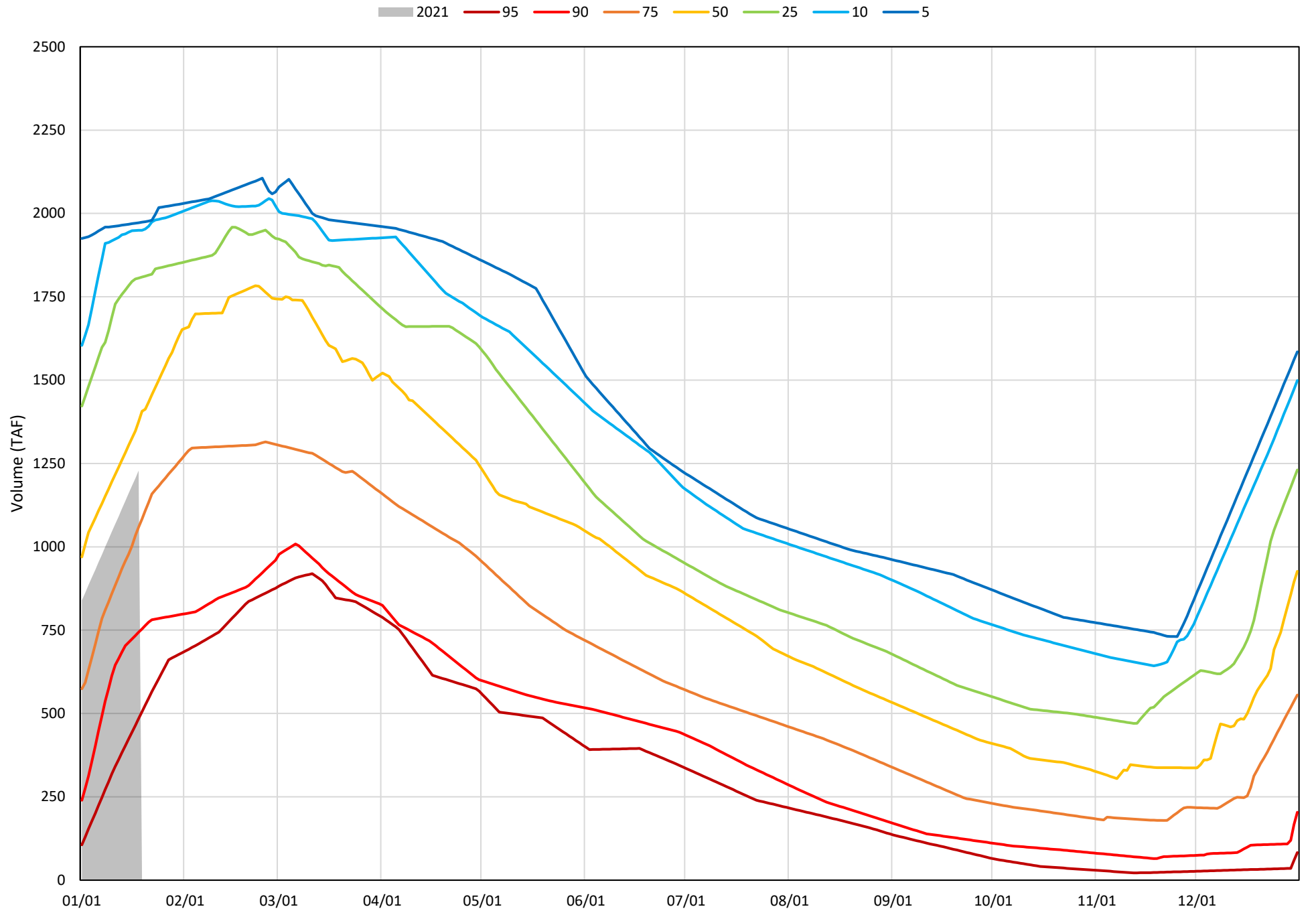


Trinity Lake Cold Water Pool Volume  $\leq 50^{\circ}\text{F}$  - Percent Exceedances (2000-2020)

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)

Jan-19 2021	Δ TAF				% Δ			
	≤52°	≤50°	≤48°	Abs. Avg.	≤52°	≤50°	≤48°	Abs. Avg.
2000	707	727	731	722	57	59	59	58
2001	446	466	147	353	36	38	12	28
2002	165	166	141	157	13	13	11	13
2003	428	447	415	430	34	36	34	35
2004	604	624	627	618	48	51	51	50
2005	296	-81	-177	185	24	-7	-14	15
2006	673	678	657	670	54	55	54	54
2007	545	565	382	497	44	46	31	40
2008	153	173	177	168	12	14	14	14
2009	-268	-248	-244	253	-21	-20	-20	20
2010	-255	-460	-495	403	-20	-37	-40	33
2011	505	525	528	519	40	43	43	42
2012	707	168	67	314	56	14	5	25
2013	657	677	680	672	53	55	55	54
2014	-77	-57	-57	63	-6	-5	-5	5
2015	-407	-388	-444	413	-33	-31	-36	33
2016	-650	-630	-772	684	-52	-51	-63	55
2017	235	-108	-162	169	19	-9	-13	14
2018	510	530	-129	390	41	43	-11	31
2019	299	211	191	234	24	17	16	19
2020	722	741	745	736	58	60	61	59
2021	0	0	0	0	0	0	0	0

Historic - Current

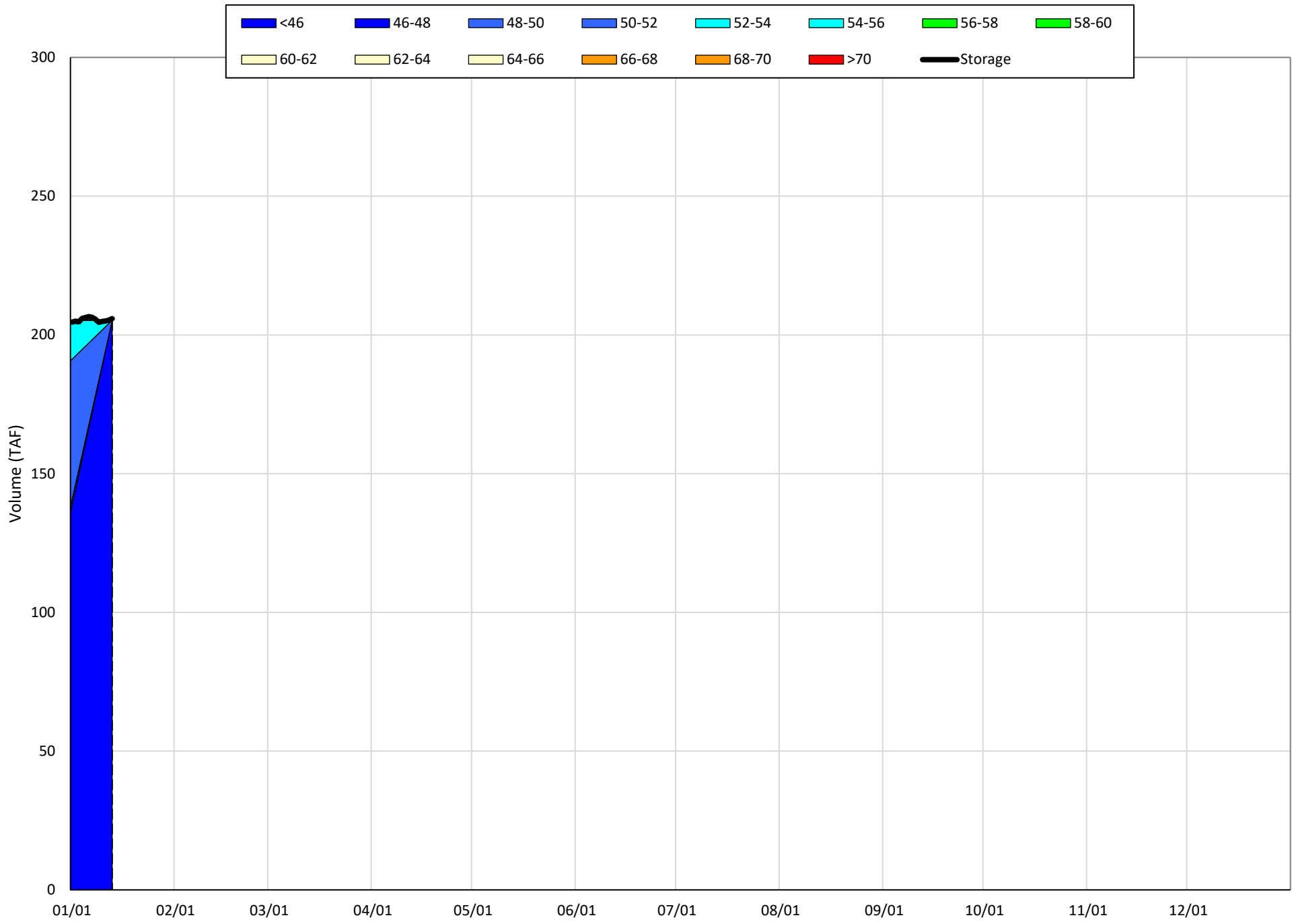
(Historic - Current) / Current

# 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

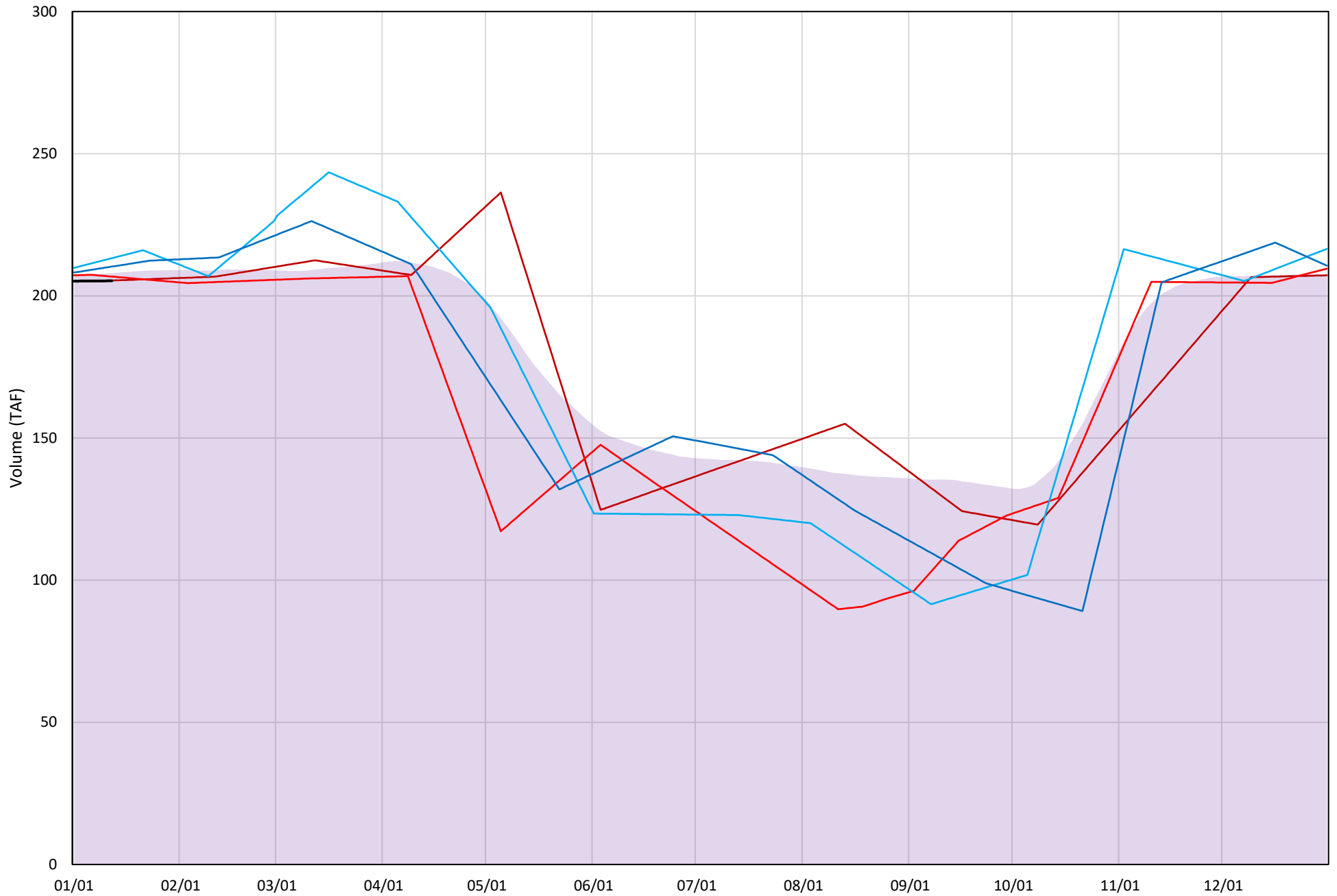
# Whiskeytown Lake Isothermobaths Plot - 2021





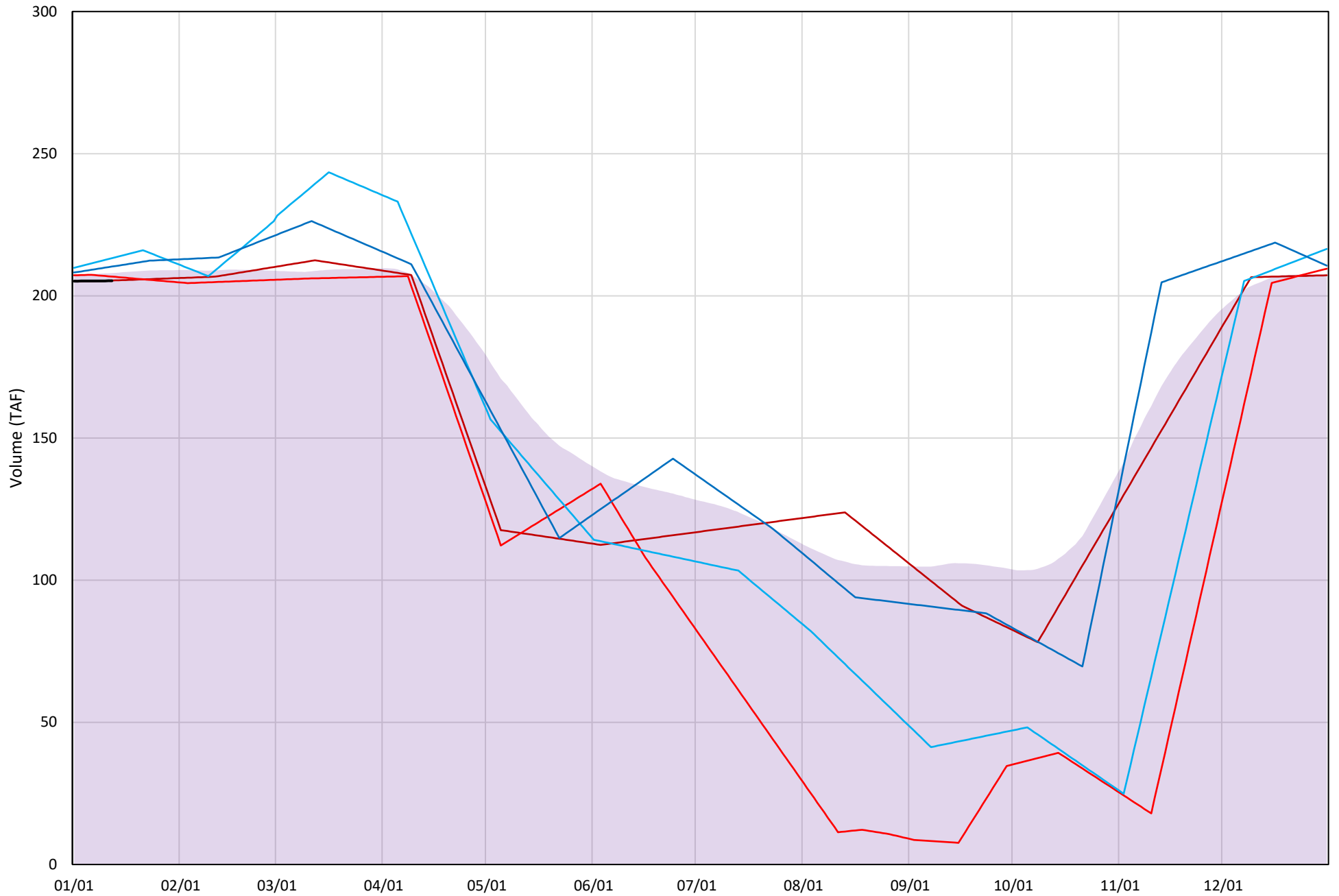
# Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



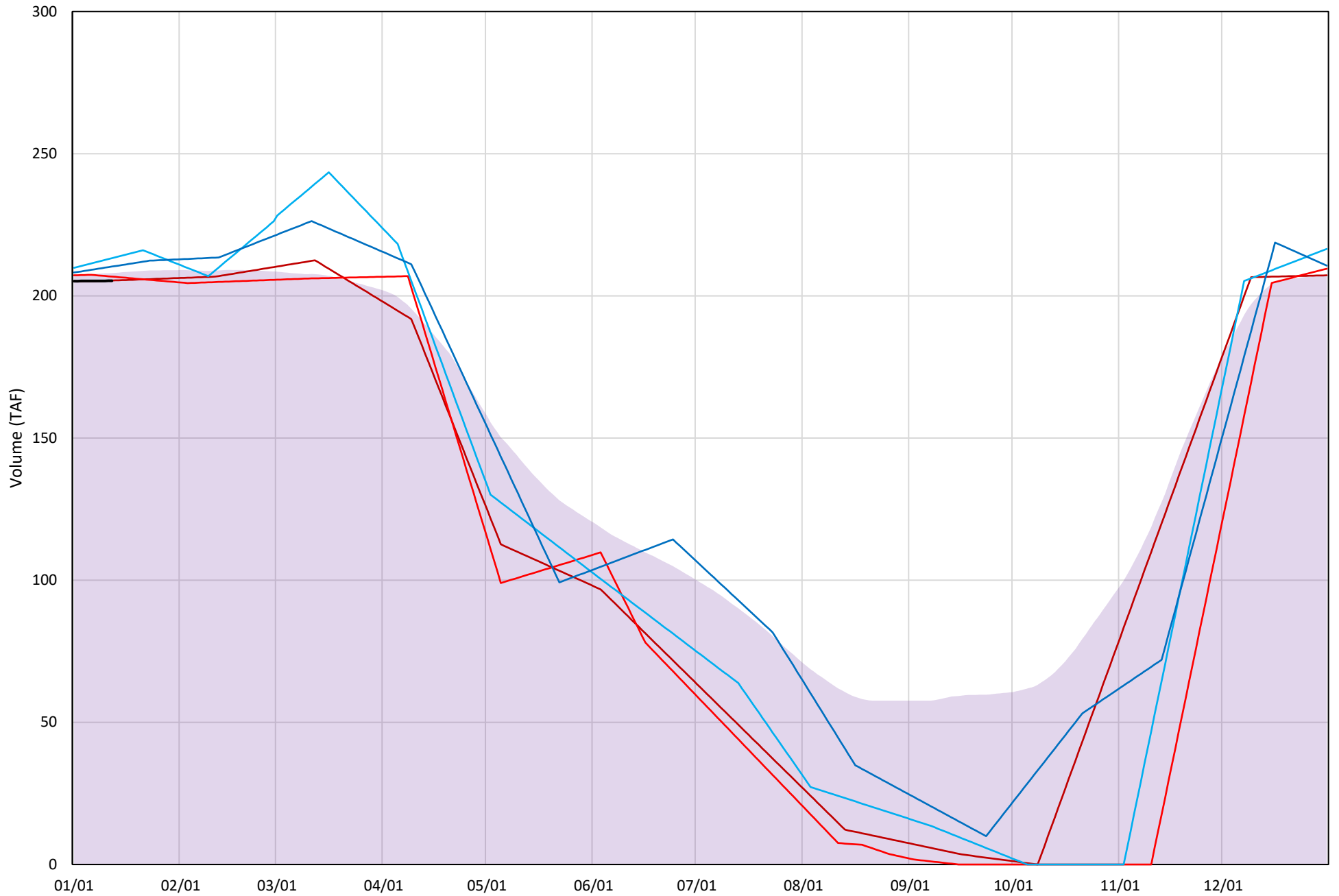
# Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

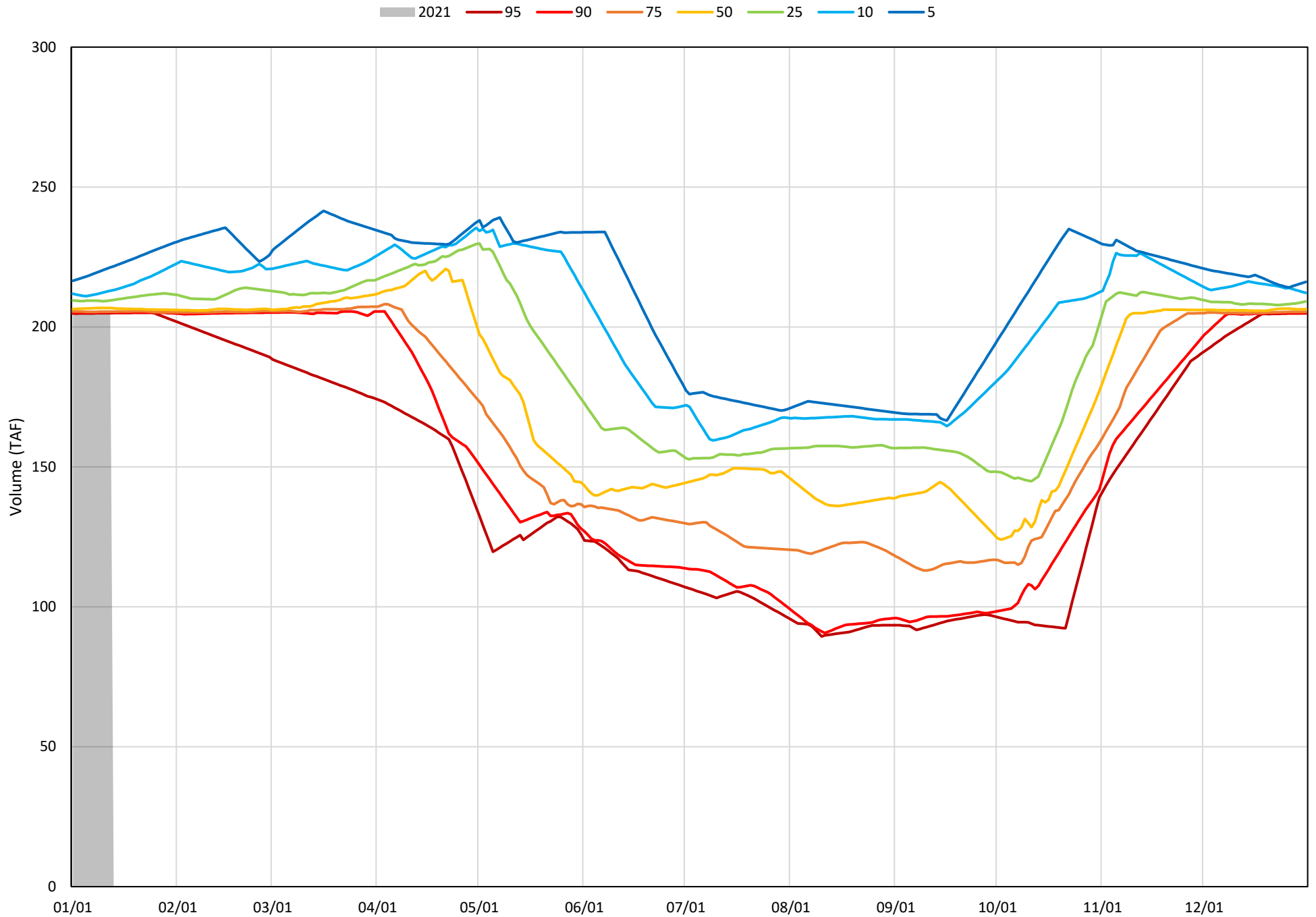


# Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

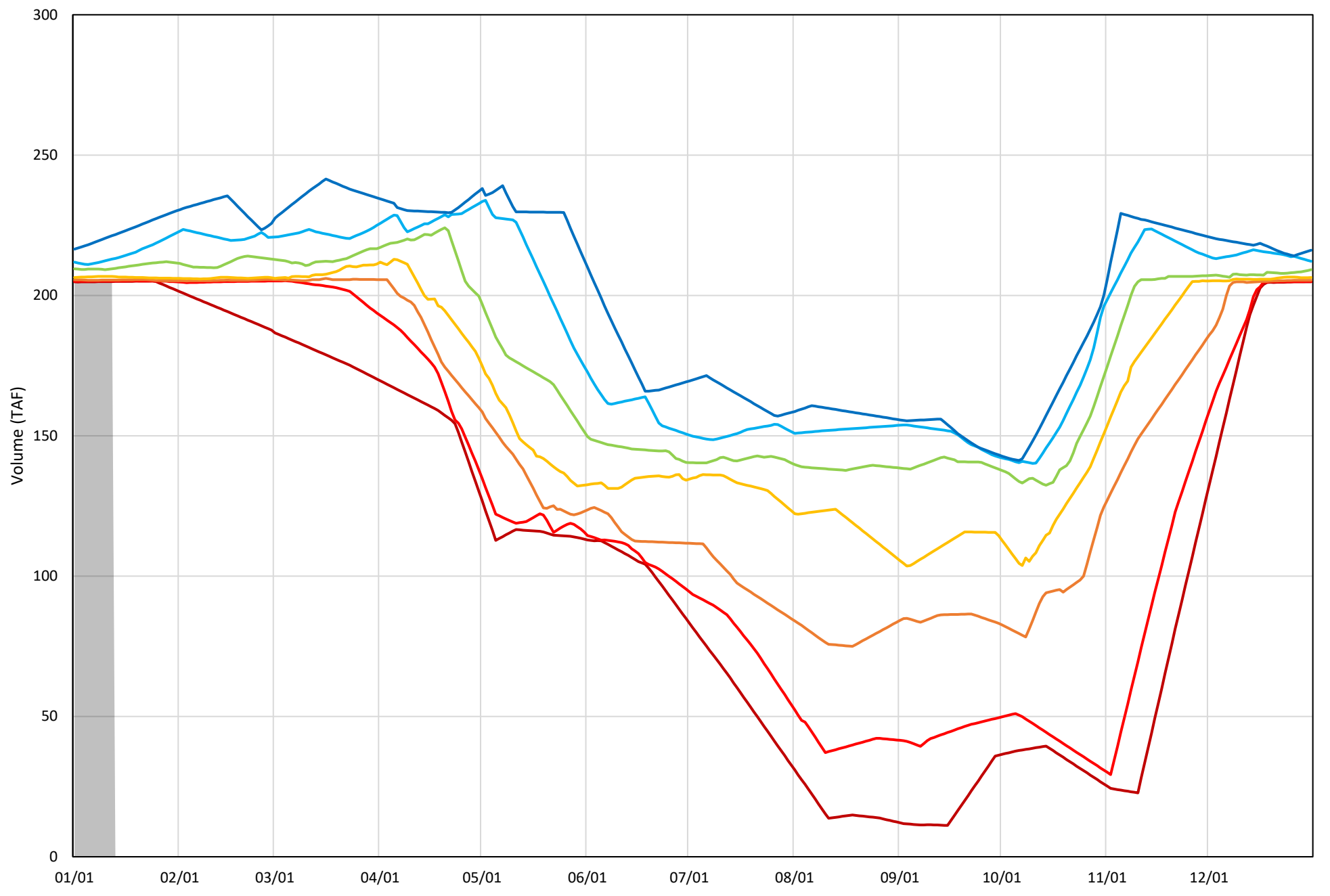


Whiskeytown Lake Cold Water Pool Volume  $\leq 60^{\circ}\text{F}$  - Percent Exceedances (2000-2020)



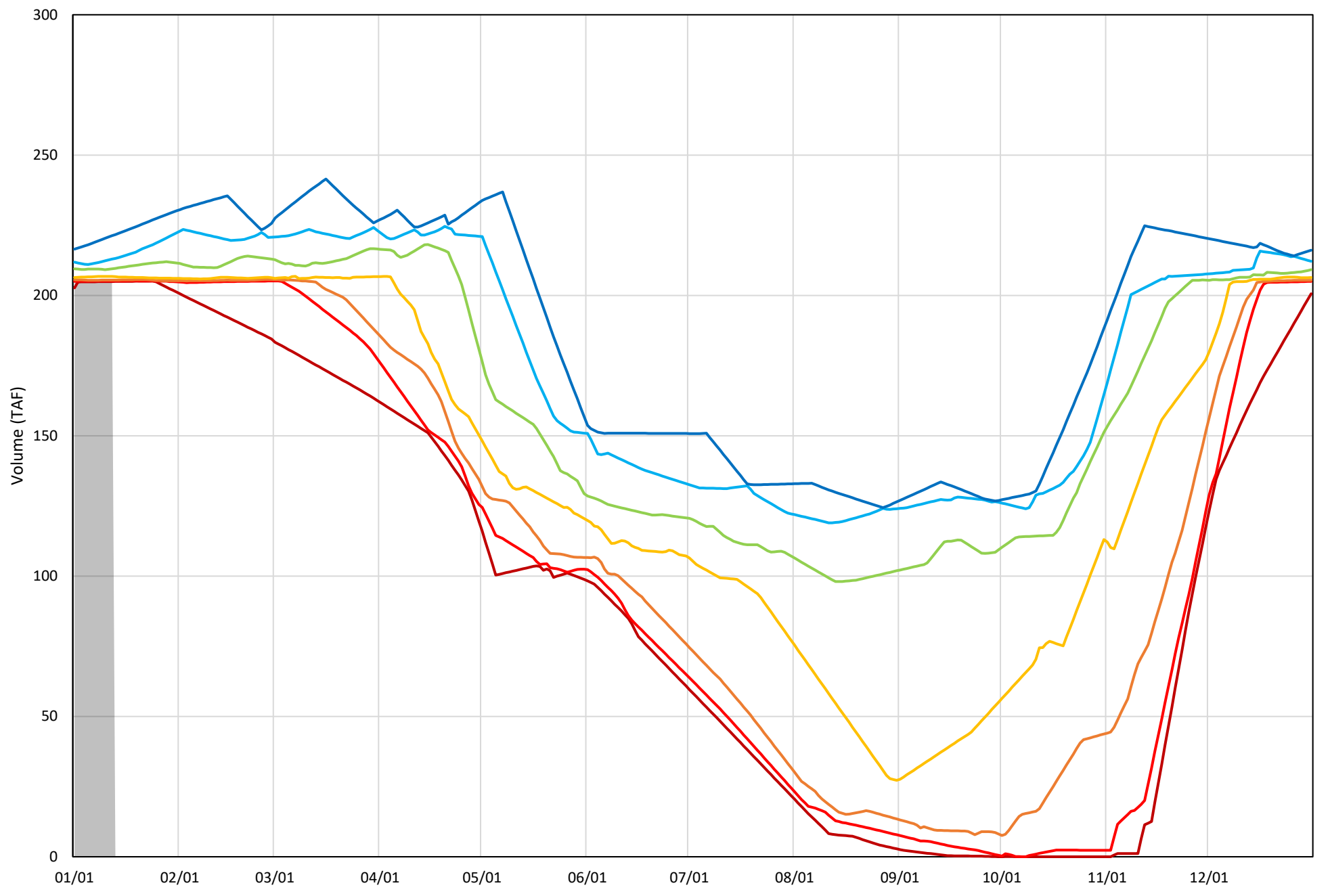
Whiskeytown Lake Cold Water Pool Volume  $\leq 58^{\circ}\text{F}$  - Percent Exceedances (2000-2020)

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)

Dec-31 2021	Δ TAF				% Δ			
	≤60°	≤58°	≤56°	Abs. Avg.	≤60°	≤58°	≤56°	Abs. Avg.
2000	3	3	3	3	2	2	2	2
2001	6	6	6	6	3	3	3	3
2002	1	1	1	1	1	1	1	1
2003	1	1	1	1	0	0	0	0
2004	8	8	8	8	4	4	4	4
2005	1	1	1	1	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	-7	3	0	0	-4	1
2008	1	1	1	1	1	1	1	1
2009	0	0	0	0	0	0	0	0
2010	1	1	1	1	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	3	3	3	3	1	1	1	1
2013	0	0	0	0	0	0	0	0
2014	2	2	2	2	1	1	1	1
2015	4	4	4	4	2	2	2	2
2016	11	11	11	11	5	5	5	5
2017	0	0	0	0	0	0	0	0
2018	3	3	3	3	1	1	1	1
2019	6	6	6	6	3	3	3	3
2020	0	0	0	0	0	0	0	0

Historic - Current

(Historic - Current) / Current