

Northern CVP Water Temperature Report

July - 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 ³	NFH	Shasta Generation	Spring Creek P.P.	Keswick Total	RDD	BSF	RDB			
Jun	53.1	51.7	52.9	54.1	55.1	55.7	58.2	59.6	60.8	62.4	56.6	51.5	59.0	63.5	6271	1023	7693	82.4	78.2	78.1			
07/01	52.2	? 50.6	? 55.0	53.5	54.5	55.2	58.0	!	-	61.0	63.1	57.9	52.6	62.9	69.1	7022	1305	8536	86.0	81.0	79.5		
07/02	51.9	50.6	54.9	53.4	54.4	55.0	57.3	!	-	60.2	62.1	57.3	52.6	62.8	69.3	6563	1707	8448	86.5	82.7	81.0		
07/03	52.4	50.4	? 55.3	53.6	54.7	55.3	57.7	!	-	60.1	61.8	57.2	52.5	62.5	69.0	6962	1868	8452	87.5	83.4	82.8		
07/04	52.6	51.2	55.5	53.4	54.3	54.9	57.3	!	-	60.1	62.1	57.3	52.1	62.7	69.1	7238	2006	9204	87.5	82.3	81.5		
07/05	52.0	50.7	55.8	53.8	54.6	55.2	57.3	!	-	59.7	61.3	57.2	51.6	62.4	68.8	6749	1971	9210	87.5	82.8	81.6		
07/06	52.2	50.9	55.8	53.7	54.6	55.2	? 57.4	? 59.0	59.8	61.4	57.0	51.5	62.1	68.6	7429	2100	9192	85.0	81.2	80.1			
07/07	52.0	51.1	56.1	53.6	54.5	55.0	? 57.0	58.5	59.7	61.4	56.9	51.2	#	-	67.4	7229	2122	9438	86.0	83.4	82.1		
07/08	51.9	? 50.6	? 56.1	53.8	54.7	55.3	57.1	58.4	59.5	61.1	56.8	51.4	#	-	67.3	6983	2044	9335	87.0	82.4	83.1		
07/09	52.1	? 50.7	? 56.1	53.6	54.5	55.2	? 57.2	58.7	59.8	61.4	57.1	50.9	#	-	67.3	7454	1844	9209	91.0	85.3	87.6		
07/10	51.7	? 50.5	? 56.1	53.8	54.6	55.2	57.1	58.6	59.7	61.4	57.3	51.3	#	-	67.9	6606	2169	9302	95.0	89.0	90.4		
07/11	52.1	? 50.4	? 56.3	53.8	54.8	55.5	? 57.5	59.1	60.2	61.8	57.7	51.4	#	-	68.4	6843	1537	9269	94.5	88.6	88.8		
07/12	51.7	50.3	!	-	53.7	54.6	55.2	57.3	58.9	60.1	61.9	57.4	51.5	#	-	68.7	7159	1889	9198	89.0	83.3	82.9	
07/13	52.2	? 50.5	? 56.7	53.6	54.5	55.1	57.2	58.7	59.9	61.6	56.9	51.5	#	-	68.7	7204	1945	9242	86.5	80.8	79.5		
07/14	52.4	? 50.7	? 56.7	53.7	54.6	55.2	? 57.0	58.5	59.6	61.3	56.8	51.5	#	-	68.3	6767	1917	9263	83.5	78.4	77.3		
07/15	52.5	? 50.8	!	-	53.9	54.7	55.3	57.1	58.5	59.5	61.1	56.7	51.5	#	-	68.0	7131	1944	9309	82.0	76.5	77.3	
07/16	52.8	? 50.9	#	-	54.0	54.8	55.3	!	-	58.5	59.6	61.0	56.9	51.4	#	-	67.5	6757	2080	9319	82.0	-	76.9
07/17	52.5	? 50.7	#	-	54.5	55.2	55.7	? 57.3	58.6	59.5	60.9	58.1	51.5	#	-	67.3	6705	1885	9271	83.0	77.8	78.8	
07/18	51.7	50.7	#	-	53.8	54.8	55.4	57.5	58.9	60.0	61.4	58.3	51.6	#	-	67.5	7255	1684	9211	86.0	81.3	83.1	
07/19	52.4	? 50.6	#	-	53.9	54.7	55.3	57.1	58.6	59.7	61.2	58.1	51.3	#	-	66.6	6721	1975	9247	85.5	82.6	82.6	
07/20	52.2	? 50.9	#	-	53.9	54.8	55.3	57.1	58.6	59.7	61.3	58.4	51.2	#	-	66.2	6716	1924	9251	85.0	81.0	81.5	
07/21	? 52.6	? 51.0	#	-	? 53.9	? 54.8	? 55.4	? 57.2	? 58.6	? 59.6	? 61.3	? 58.4	? 51.2	#	-	? 66.1	7212	1911	9257	83.5	80.1	80.1	
07/22	USGS data transmission services offline during this time period.														7010	1955	9255	83.5					
07/23	USGS data transmission services offline during this time period.																	87.0					
07/24	52.2	? 50.9	#	-	53.7	54.2	54.8	55.9	57.0	58.0	59.1	57.1	51.2	#	-	66.2	6274	1859	9254	82.5	75.6	76.2	
07/25	52.2	51.2	#	-	53.5	54.2	54.9	56.3	57.4	58.2	59.1	58.2	50.7	#	-	65.8	7182	1901	9248	86.0	79.9	80.8	
07/26	52.1	? 51.0	#	-	53.9	54.6	55.3	56.6	57.9	58.9	60.2	58.5	51.1	#	-	66.7	6912	2093	9295	86.5	79.3	78.6	
07/27	52.9	? 51.5	#	-	53.8	54.2	54.7	55.7	56.8	57.8	59.1	56.2	50.9	#	-	65.2	7167	2023	9302	74.0	70.6	72.6	
07/28	52.5	? 51.5	#	-	53.7	54.4	55.1	? 56.4	57.4	58.0	58.7	58.4	50.6	#	-	64.1	6835	1813	9305	84.0	80.6	83.6	
07/29	53.2	? 51.7	#	-	54.4	55.3	56.0	57.3	58.5	59.3	60.6	58.8	50.5	#	-	65.6	6695	1941	9056	91.0	84.3	85.9	
07/30	53.2	? 51.9	#	-	54.7	55.3	56.0	? 57.5	59.0	60.1	61.7	58.9	50.7	#	-	65.3	6309	1921	9046	91.5	84.6	85.1	
07/31	53.1	? 52.1	#	-	54.9	55.6	56.5	? 58.2	59.6	60.6	61.9	59.0	51.0	#	-	65.0	6588	1977	9046	92.0	85.3	83.5	
Jul	52.3	50.9	55.9	53.8	54.7	55.3	57.1	58.4	59.6	61.1	57.6	51.4	62.6	67.3	6923	1910	9166	86.4	81.6	81.5			
															Total CFS	207677	57310	274970					
															Total AF	411919	113672	545392					

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)
- ³ Data is currently being collected locally and periodically downloaded.
Once downloaded and certified by USGS, missing data will be added.

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
07/01	76	105	90.5	74	101	87.5	67	104	85.5	70	106	88.0	71	103	87.0	70	104	87.0	69	104	86.5	69	105	87.0	69	101	85.0	66	99	82.5	67	97	82.0	68	99	83.5
07/02	72	100	86.0	70	105	87.5	69	106	87.5	70	104	87.0	70	104	87.0	69	105	87.0	67	102	84.5	67	103	85.0	67	103	85.0	68	104	86.0	72	102	87.0	70	101	85.5
07/03	69	104	86.5	70	105	87.5	70	103	86.5	69	105	87.0	70	103	86.5	66	102	84.0	66	102	84.0	69	105	87.0	71	106	88.5	70	108	89.0	71	102	86.5	70	103	86.5
07/04	69	106	87.5	73	103	88.0	69	105	87.0	69	104	86.5	69	105	87.0	70	106	88.0	69	104	86.5	69	108	88.5	72	108	90.0	70	108	89.0	72	103	87.5	69	102	85.5
07/05	72	103	87.5	71	105	88.0	69	104	86.5	67	104	85.5	68	108	88.0	71	110	90.5	73	111	92.0	74	113	93.5	74	110	92.0	71	105	88.0	70	99	84.5	66	98	82.0
07/06	70	105	87.5	68	102	85.0	66	103	84.5	67	106	86.5	70	110	90.0	73	111	92.0	74	111	92.5	73	110	91.5	70	103	86.5	68	100	84.0	69	96	82.5	67	98	82.5
07/07	68	102	85.0	68	104	86.0	67	106	86.5	70	111	90.5	73	112	92.5	75	113	94.0	74	109	91.5	71	105	88.0	71	105	88.0	68	104	86.0	69	99	84.0	67	99	83.0
07/08	67	105	86.0	68	107	87.5	71	112	91.5	75	115	95.0	78	113	95.5	75	109	92.0	71	106	88.5	68	104	86.0	68	102	85.0	67	100	83.5	68	98	83.0	68	101	84.5
07/09	67	107	87.0	72	111	91.5	74	115	94.5	78	116	97.0	75	111	93.0	70	106	88.0	69	106	87.5	68	103	85.5	68	101	84.5	66	103	84.5	68	98	83.0	67	100	83.5
07/10	71	111	91.0	68	114	91.0	77	115	96.0	75	111	93.0	73	106	89.5	69	104	86.5	67	102	84.5	66	101	83.5	67	101	84.0	66	101	83.5	69	99	84.0	68	101	84.5
07/11	76	114	95.0	72	113	92.5	77	110	93.5	73	107	90.0	69	105	87.0	68	99	83.5	64	98	81.0	64	99	81.5	68	99	83.5	67	102	84.5	69	99	84.0	67	101	84.0
07/12	76	113	94.5	76	109	92.5	68	106	87.0	67	103	85.0	67	98	82.5	64	97	80.5	63	99	81.0	65	101	83.0	65	100	82.5	66	101	83.5	69	99	84.0	66	98	82.0
07/13	71	107	89.0	69	105	87.0	64	101	82.5	65	97	81.0	63	97	80.0	63	98	80.5	64	101	82.5	68	104	86.0	67	107	87.0	70	103	86.5	69	98	83.5	66	98	82.0
07/14	68	105	86.5	66	100	83.0	64	96	80.0	62	97	79.5	63	99	81.0	64	100	82.0	67	103	85.0	70	104	87.0	70	101	85.5	67	101	84.0	67	97	82.0	65	98	81.5
07/15	66	101	83.5	68	97	82.5	64	99	81.5	62	102	82.0	66	104	85.0	70	103	86.5	70	103	86.5	67	102	84.5	68	101	84.5	65	99	82.0	66	95	80.5	63	95	79.0
07/16	67	97	82.0	66	98	82.0	65	102	83.5	64	103	83.5	68	103	85.5	67	102	84.5	67	102	84.5	65	101	83.0	64	97	80.5	65	99	82.0	68	99	83.5	67	101	84.0
07/17	65	99	82.0	65	101	83.0	63	103	83.0	69	100	84.5	67	100	83.5	64	100	82.0	63	100	81.5	63	101	82.0	66	103	84.5	67	102	84.5	70	99	84.5	67	99	83.0
07/18	65	101	83.0	68	105	86.5	69	102	85.5	66	100	83.0	64	99	81.5	63	101	82.0	63	102	82.5	64	104	84.0	68	104	86.0	67	102	84.5	69	97	83.0	66	99	82.5
07/19	66	106	86.0	70	102	86.0	66	100	83.0	63	99	81.0	62	100	81.0	62	101	81.5	65	104	84.5	66	103	84.5	67	100	83.5	65	100	82.5	69	98	83.5	66	100	83.0
07/20	68	103	85.5	71	101	86.0	64	100	82.0	63	102	82.5	64	103	83.5	65	104	84.5	66	103	84.5	66	98	82.0	67	102	84.5	69	102	85.5	70	99	84.5	67	99	83.0
07/21	69	101	85.0	68	100	84.0	64	102	83.0	64	105	84.5	67	106	86.5	67	104	85.5	67	101	84.0	66	99	82.5	70	102	86.0	70	103	86.5	70	101	85.5	67	100	83.5
07/22	67	100	83.5	65	103	84.0	62	105	83.5	66	107	86.5	68	106	87.0	68	103	85.5	68	99	83.5	69	100	84.5	71	105	88.0	70	106	88.0	71	101	86.0	66	99	82.5
07/23	65	102	83.5	67	107	87.0	66	109	87.5	69	106	87.5	69	101	85.0	68	95	81.5	68	101	84.5	68	104	86.0	71	107	89.0	70	105	87.5	70	101	85.5	66	100	83.0
07/24	66	108	87.0	66	109	87.5	71	108	89.5	70	101	85.5	70	91	80.5	67	103	85.0	70	106	88.0	70	105	87.5	72	106	89.0	69	107	88.0	69	101	85.0	66	100	83.0
07/25	66	99	82.5	67	104	85.5	70	99	84.5	67	87	77.0	65	100	82.5	66	105	85.5	70	105	87.5	70	101	85.5	68	103	85.5	65	102	83.5	67	98	82.5	65	99	82.0
07/26	67	105	86.0	72	99	85.5	67	86	76.5	66	102	84.0	69	105	87.0	70	105	87.5	69	103	86.0	69	101	85.0	70	103	86.5	68	101	84.5	67	97	82.0	65	98	81.5
07/27	72	101	86.5	72	90	81.0	65	103	84.0	69	106	87.5	70	107	88.5	71	102	86.5	69	100	84.5	66	98	82.0	69	100	84.5	65	100	82.5	66	96	81.0	65	98	81.5
07/28	68	80	74.0	64	103	83.5	68	105	86.5	70	106	88.0	71	100	85.5	69	97	83.0	66	99	82.5	65	99	82.0	66	99	82.5	65	91	78.0	66	88	77.0	64	93	78.5
07/29	62	106	84.0	74	107	90.5	71	106	88.5	70	100	85.0	68	100	84.0	66	99	82.5	64	99	81.5	63	98	80.5	67	98	82.5	68	95	81.5	67	92	79.5	64	96	80.0
07/30	74	108	91.0	79	107	93.0	71	104	87.5	68	100	84.0	67	99	83.0	64	100	82.0	61	99	80.0	62	100	81.0	67	100	83.5	68	99	83.5	67	94	80.5	65	95	80.0
07/31	78	105	91.5	81	104	92.5	68	102	85.0	66	101	83.5	64	101	82.5	64	100	82.0	63	101	82.0	63	100	81.5	70	95	82.5	66	96	81.0	66	95	80.5	65	96	80.5

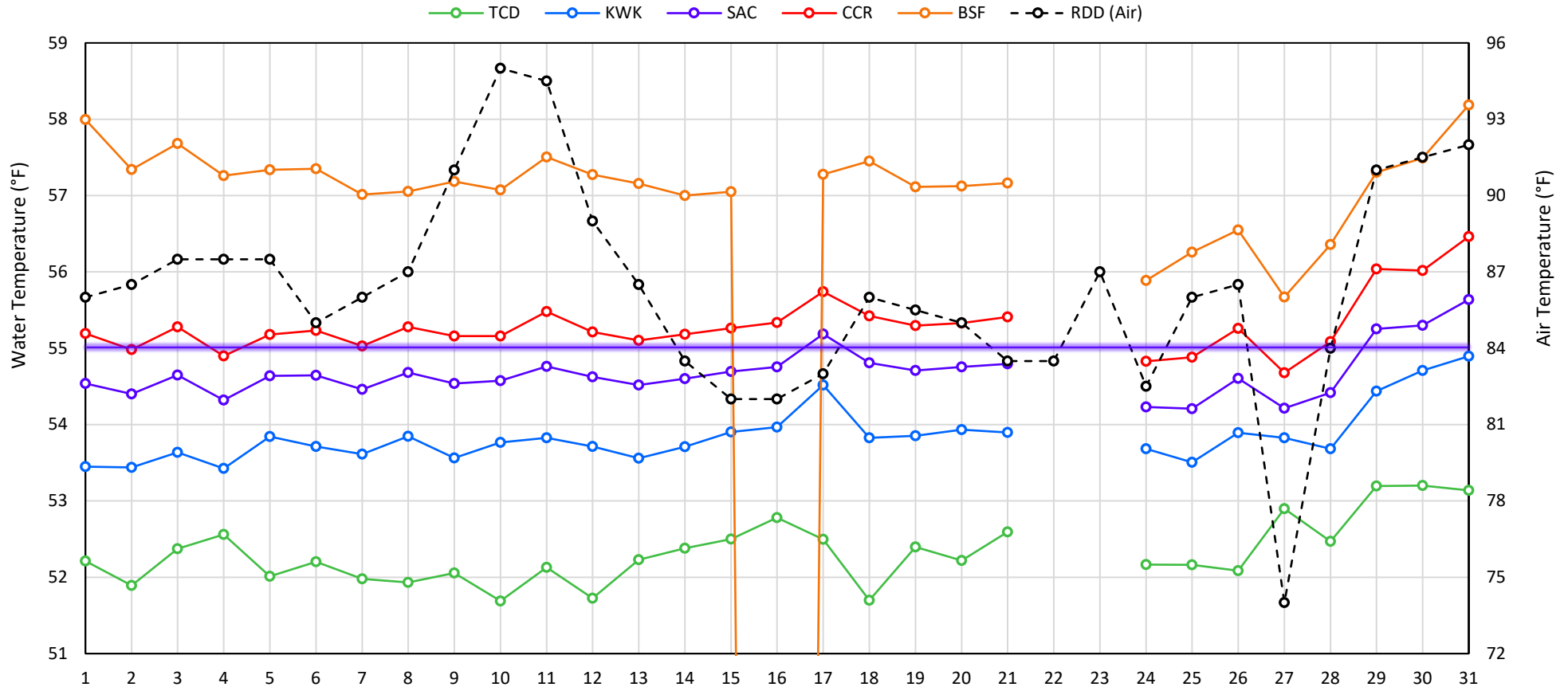
Web Links

- [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

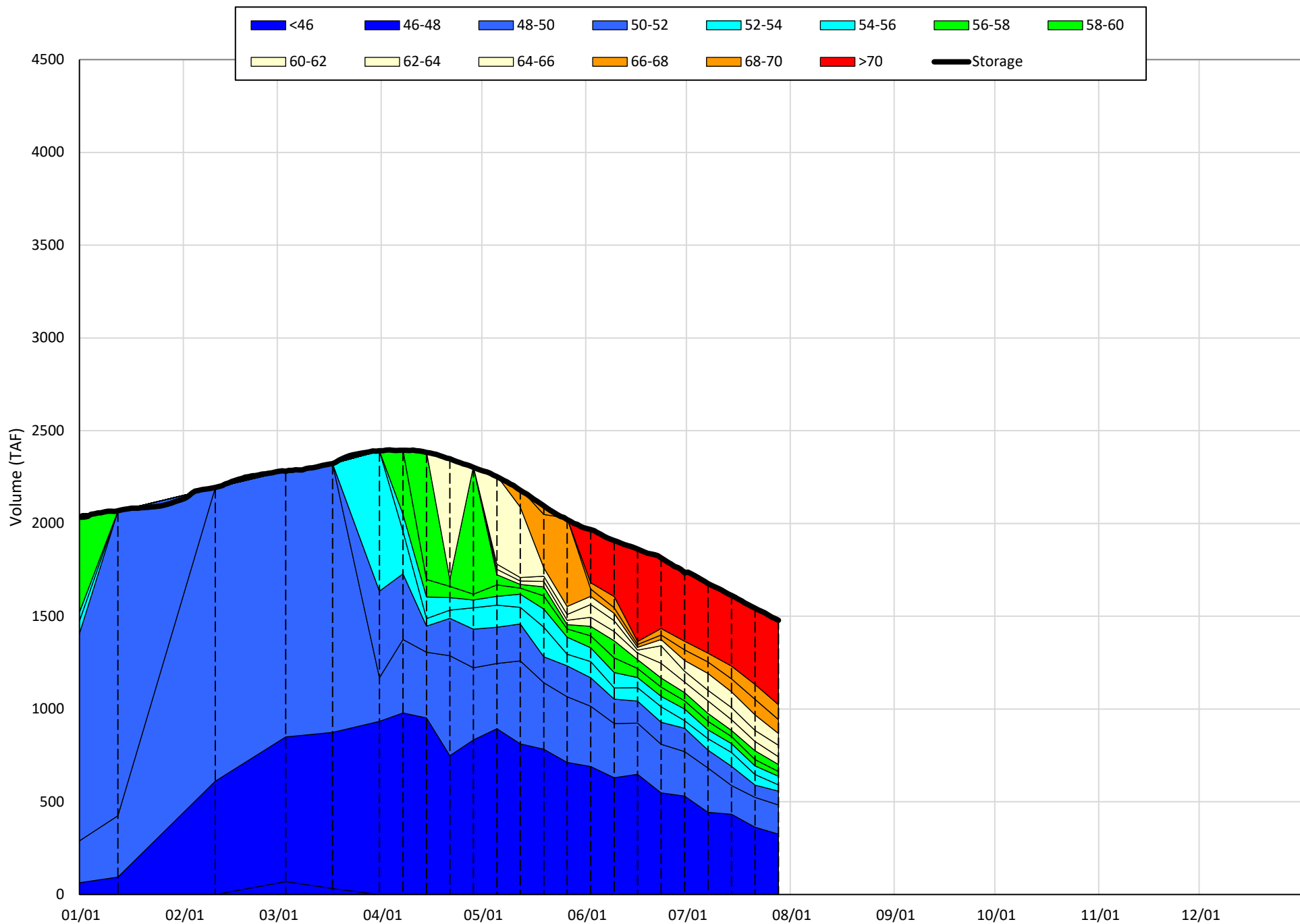
¹ Distances are approximate

Shasta Lake Isothermobaths & Cold Water Pool Statistics

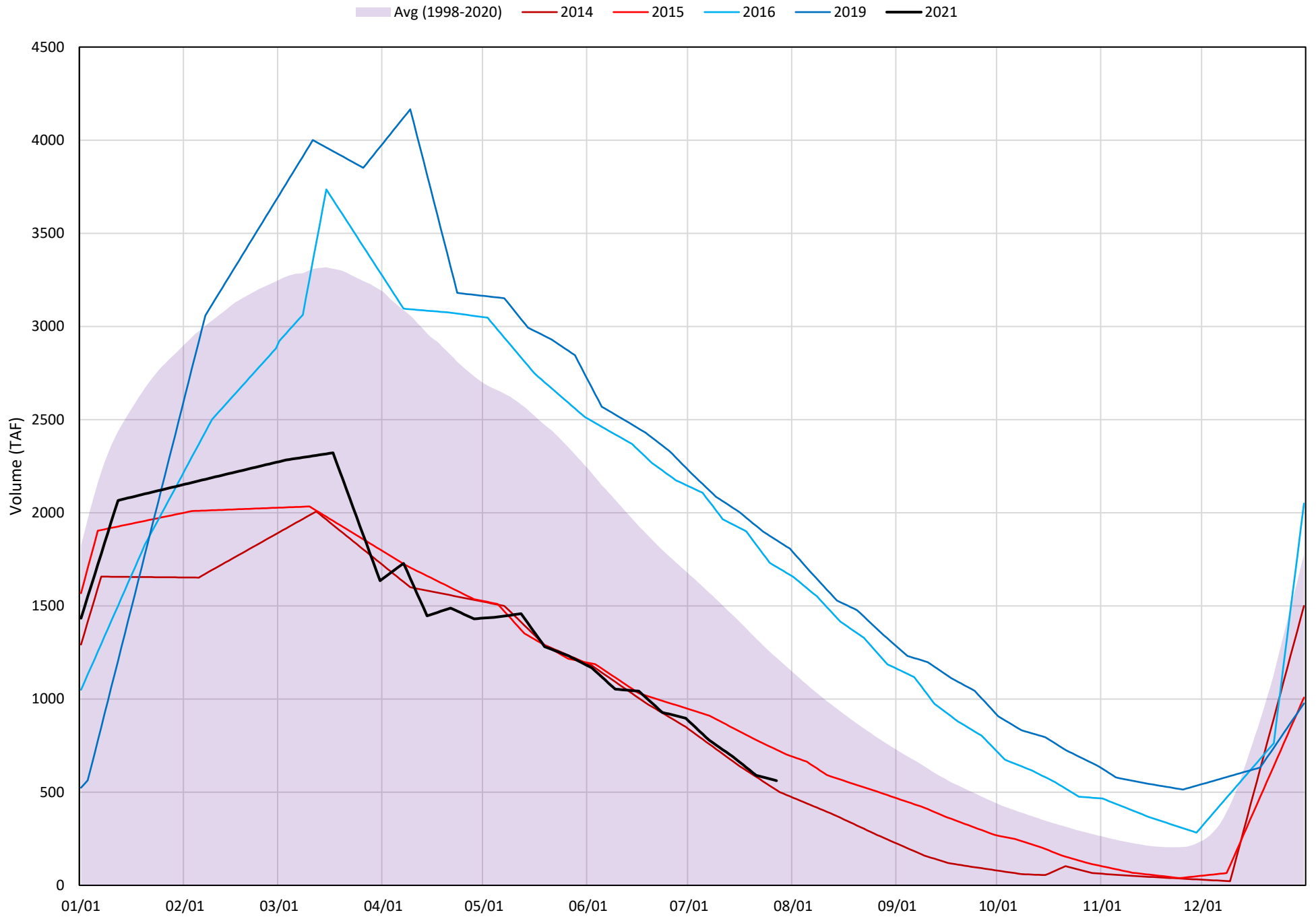
2021

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 $\leq 48^{\circ}\text{F}$
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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

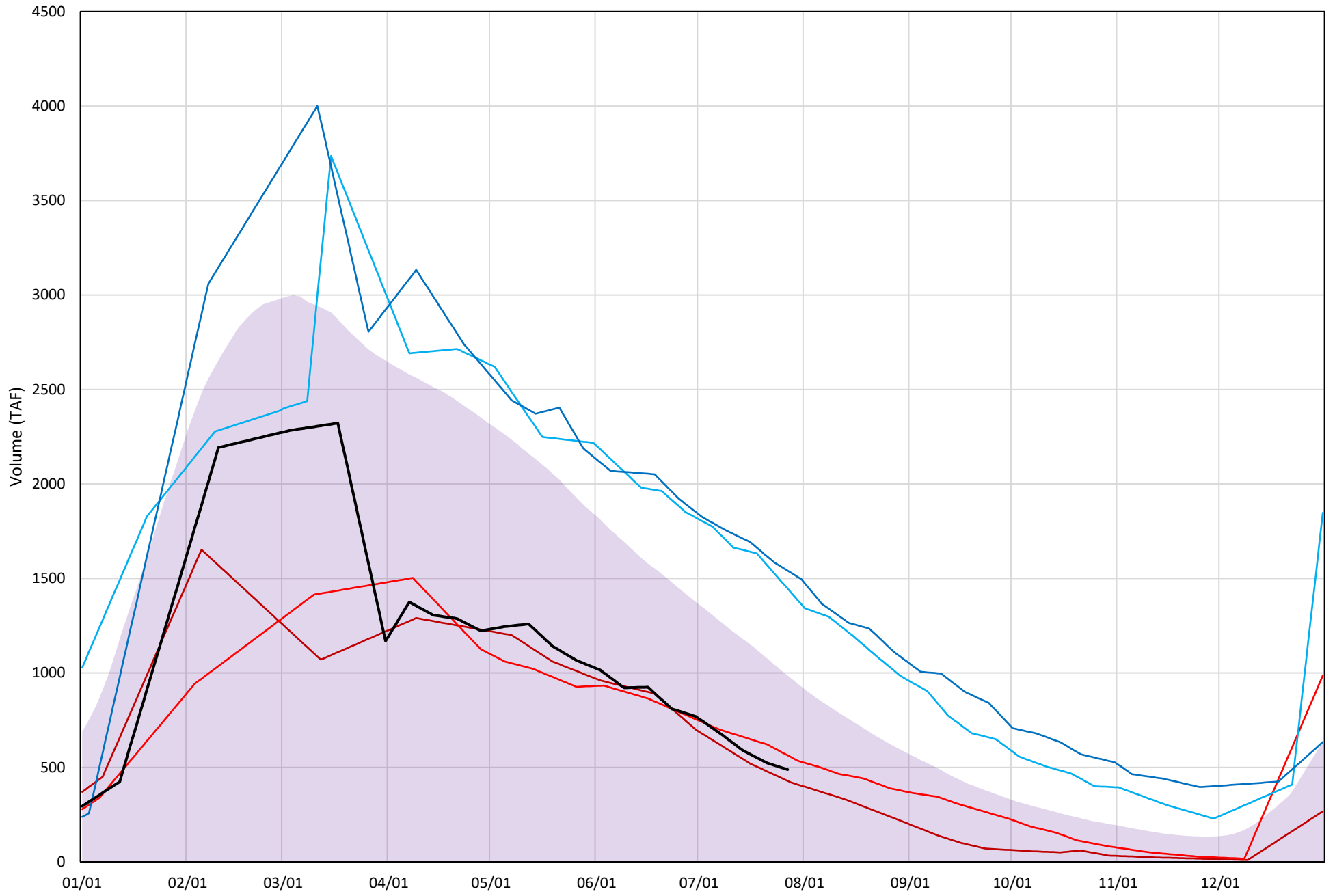


Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$



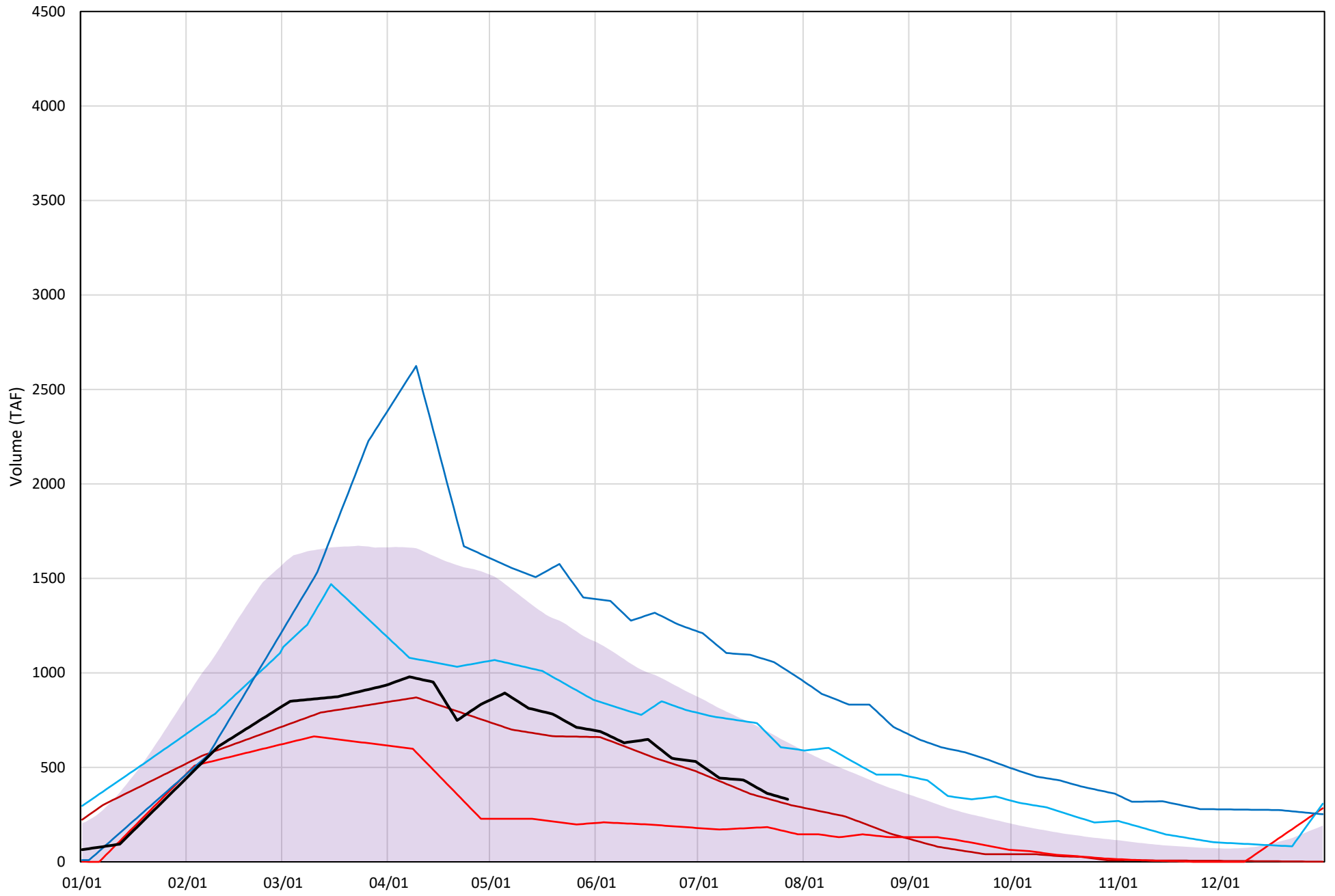
Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



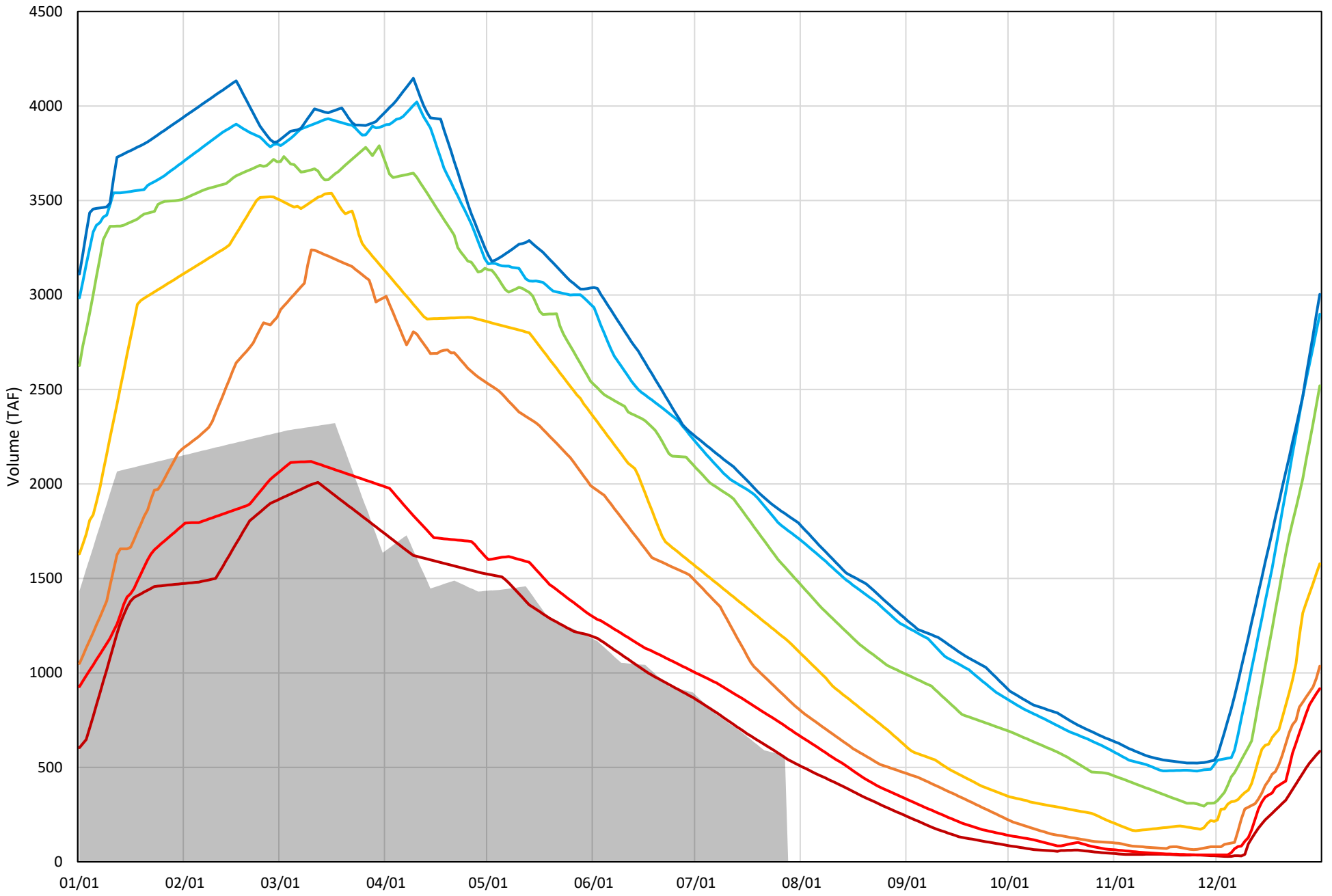
Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



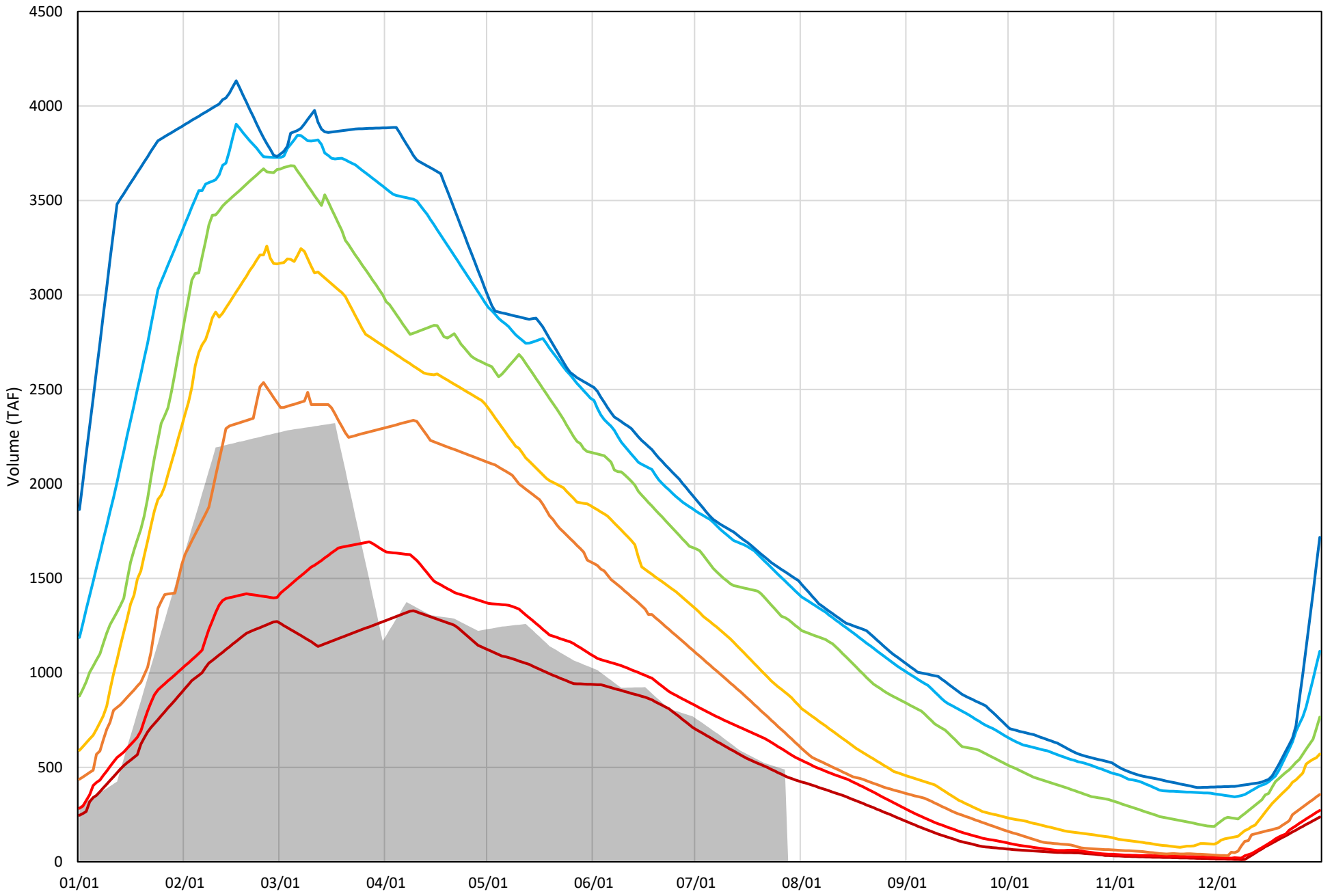
Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5



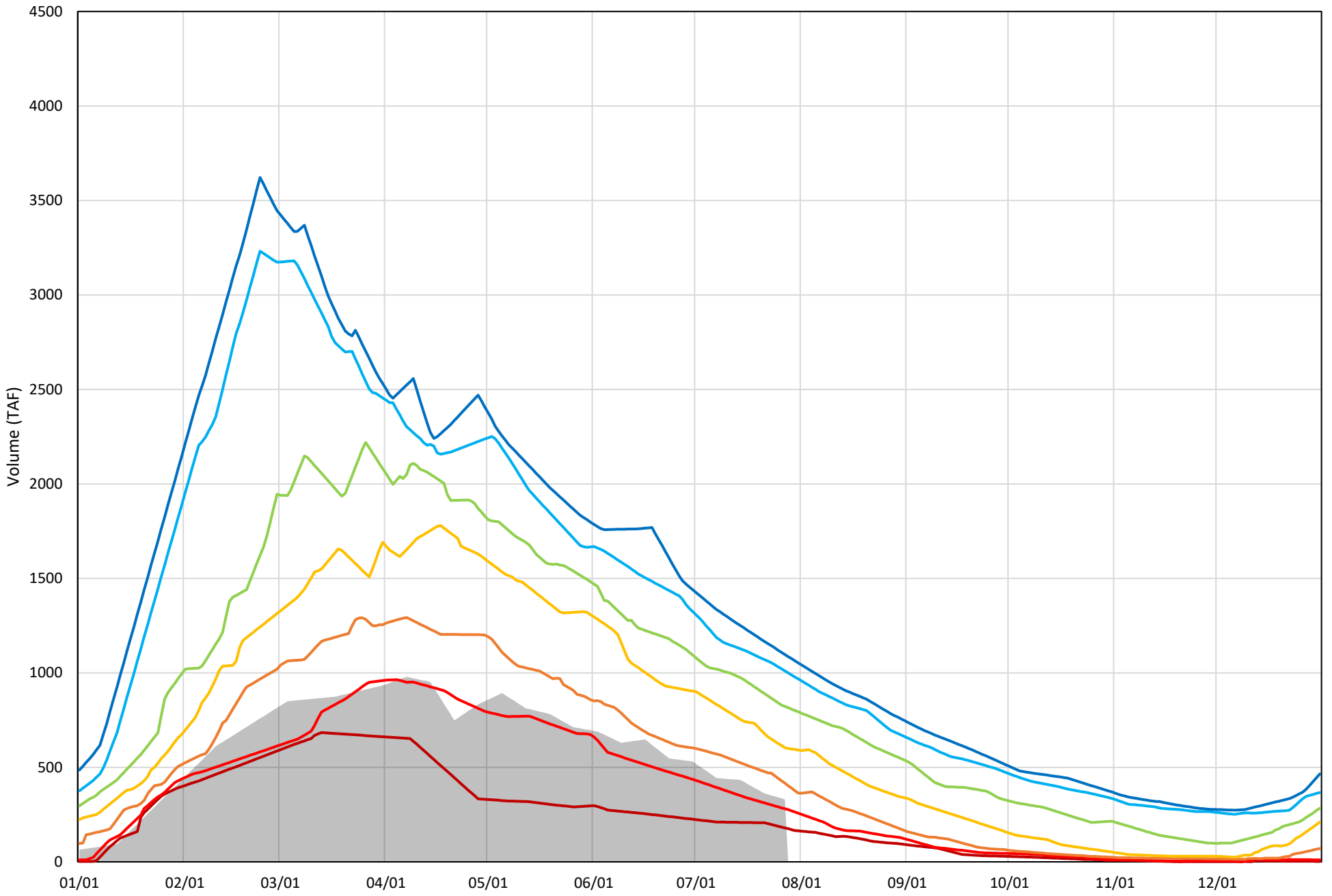
Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$ - Percent Exceedances (1998-2020)

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)

Jul-28 2021	Δ TAF				% Δ			
	≤52°	≤50°	≤48°	Abs. Avg.	≤52°	≤50°	≤48°	Abs. Avg.
1998	668	332	85	362	119	68	26	71
1999	880	764	679	774	157	157	205	173
2000	528	294	21	281	94	60	6	54
2001	436	400	376	404	78	82	113	91
2002	691	597	455	581	123	122	137	128
2003	621	144	-66	277	110	29	-20	53
2004	291	195	164	217	52	40	50	47
2005	308	155	16	160	55	32	5	30
2006	882	677	437	665	157	139	132	143
2007	478	418	372	423	85	86	112	94
2008	152	136	196	161	27	28	59	38
2009	315	263	273	284	56	54	82	64
2010	1086	804	491	794	193	165	148	169
2011	1242	1027	787	1019	221	210	238	223
2012	998	933	591	841	178	191	178	182
2013	467	410	365	414	83	84	110	92
2014	-50	-60	-26	45	-9	-12	-8	10
2015	166	75	-173	138	30	15	-52	32
2016	1148	957	270	792	204	196	82	161
2017	1114	808	526	816	198	165	159	174
2018	883	674	258	605	157	138	78	124
2019	1291	1052	679	1008	230	216	205	217
2020	582	387	138	369	104	79	42	75
2021	0	0	0	0	0	0	0	0

Historic - Current

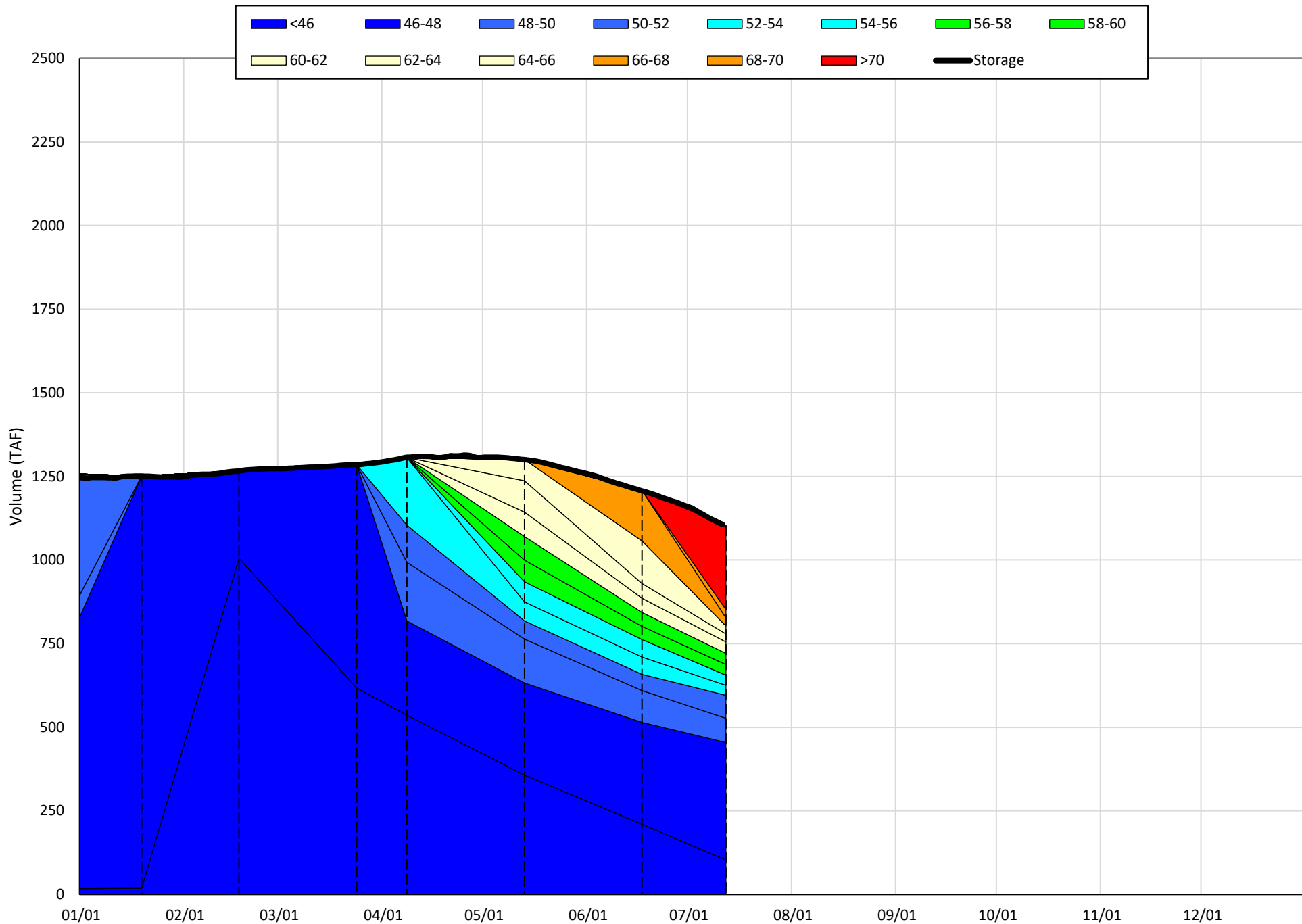
(Historic - Current) / Current

Trinity Lake Isothermobaths & Cold Water Pool Statistics

2021

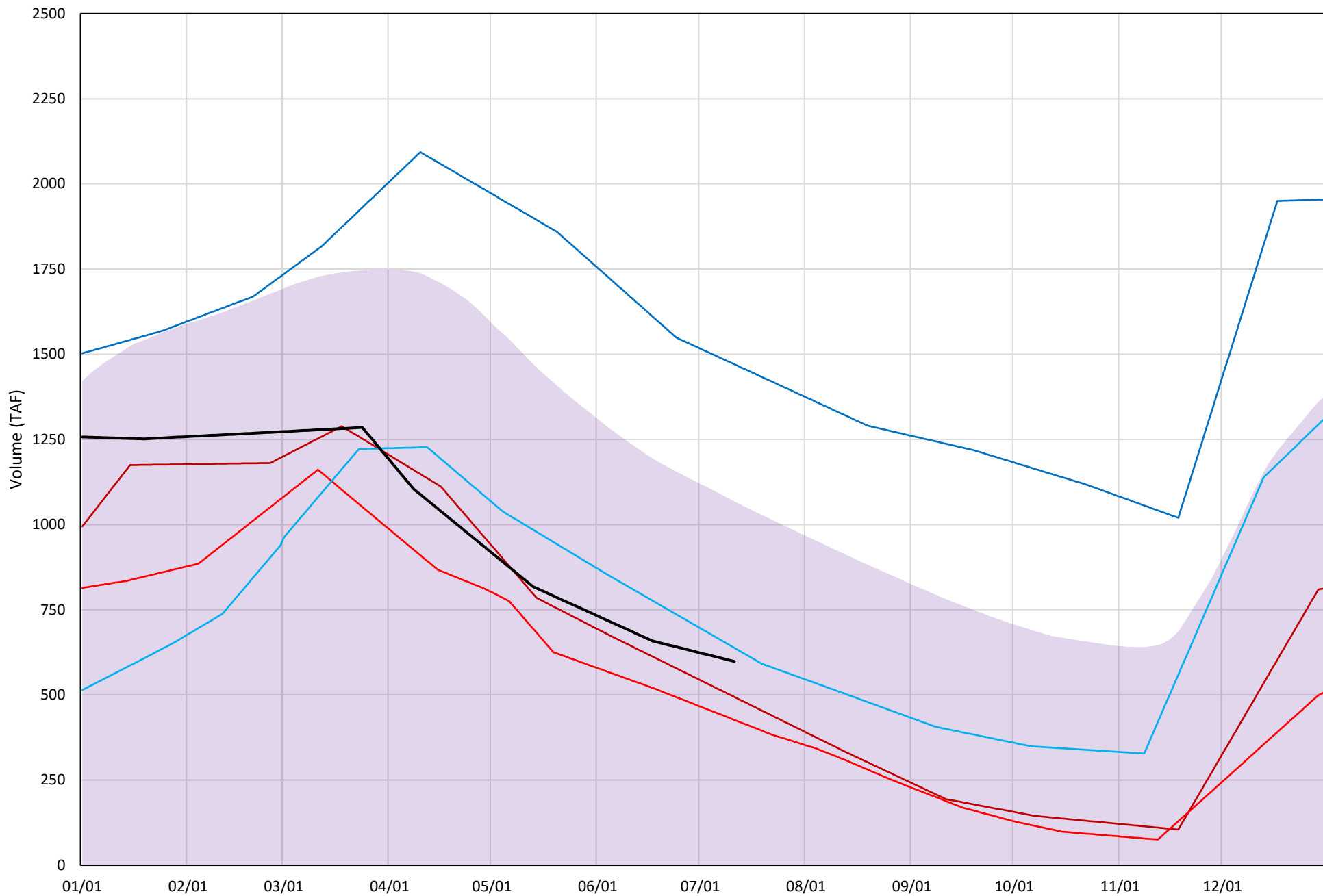
Page	Description
15	- Trinity Lake Isothermobaths Plot
16	- Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$
17	- Trinity Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$
18	- Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$
19	- Trinity Lake Cold Water Pool Volume $\leq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



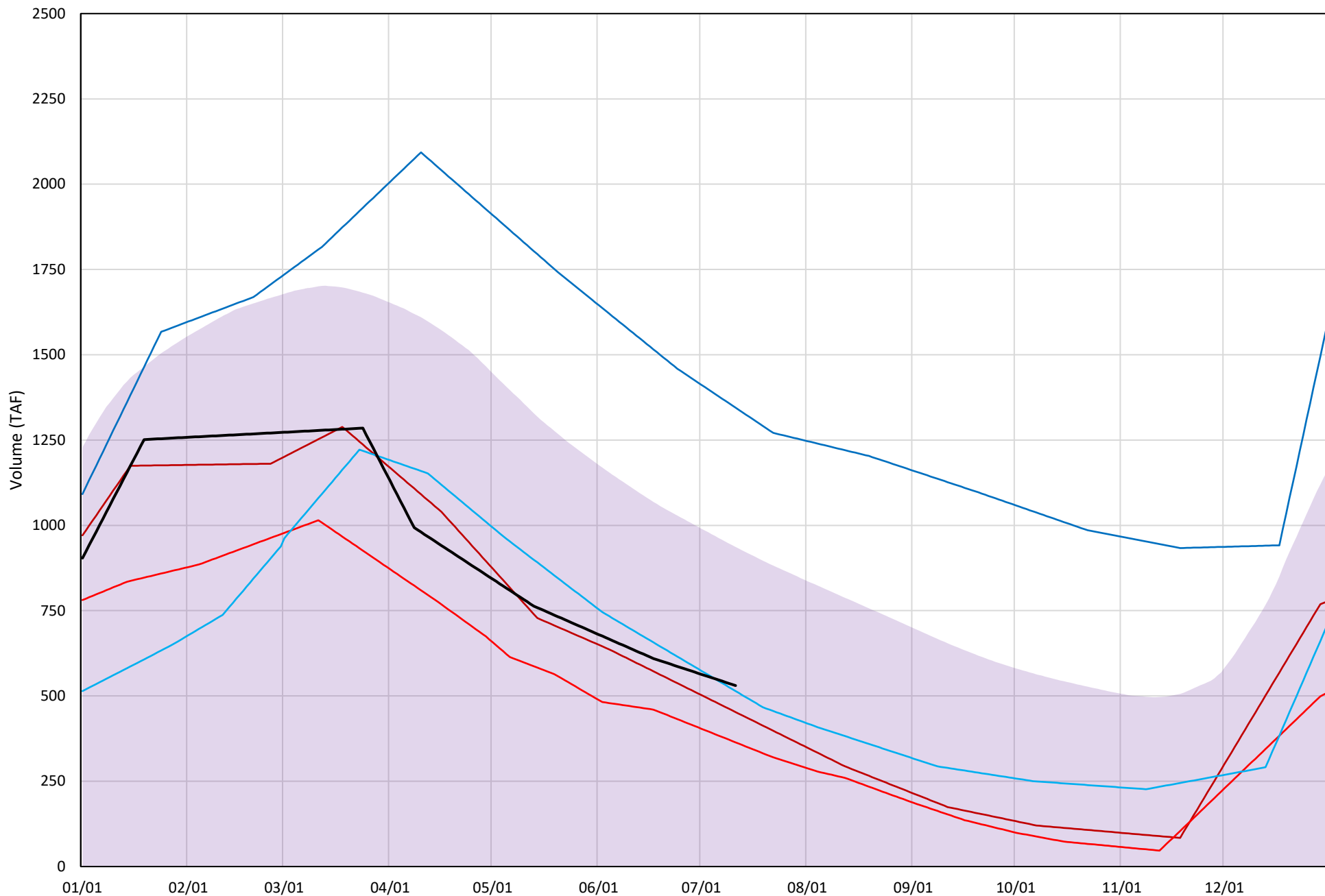
Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



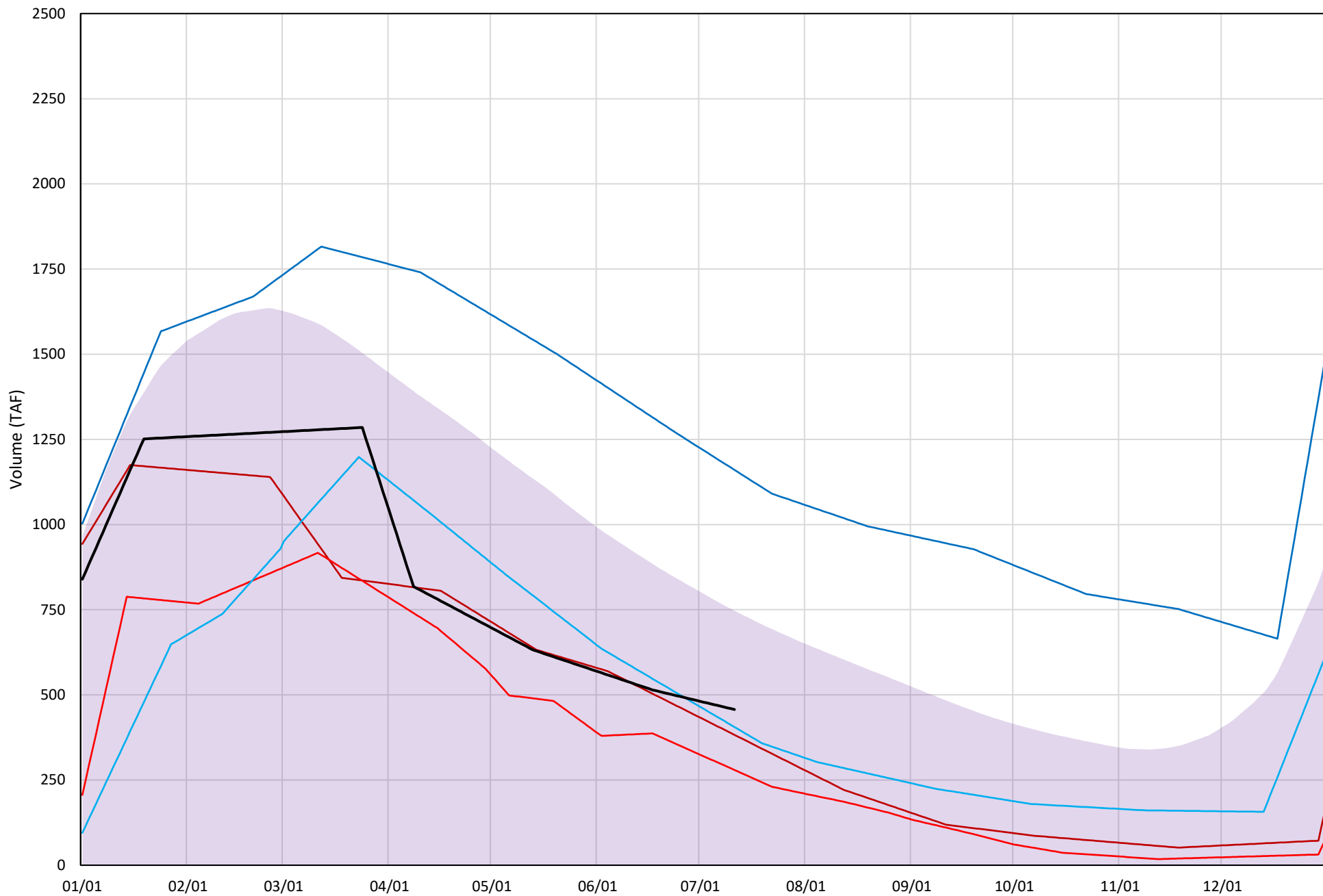
Trinity Lake Cold Water Pool Volume ≤50°F

Avg (2000-2020) 2014 2015 2016 2019 2021

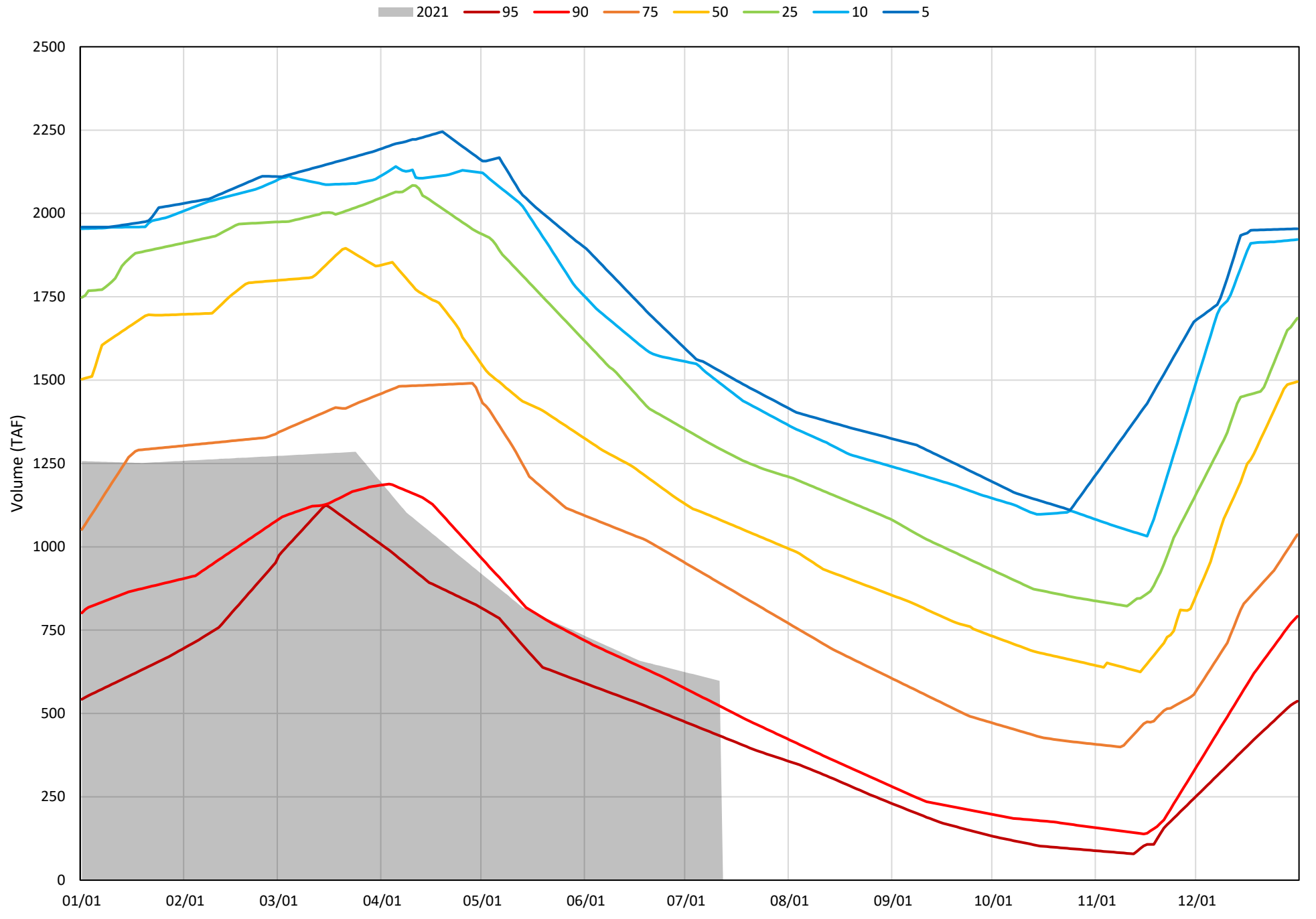


Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

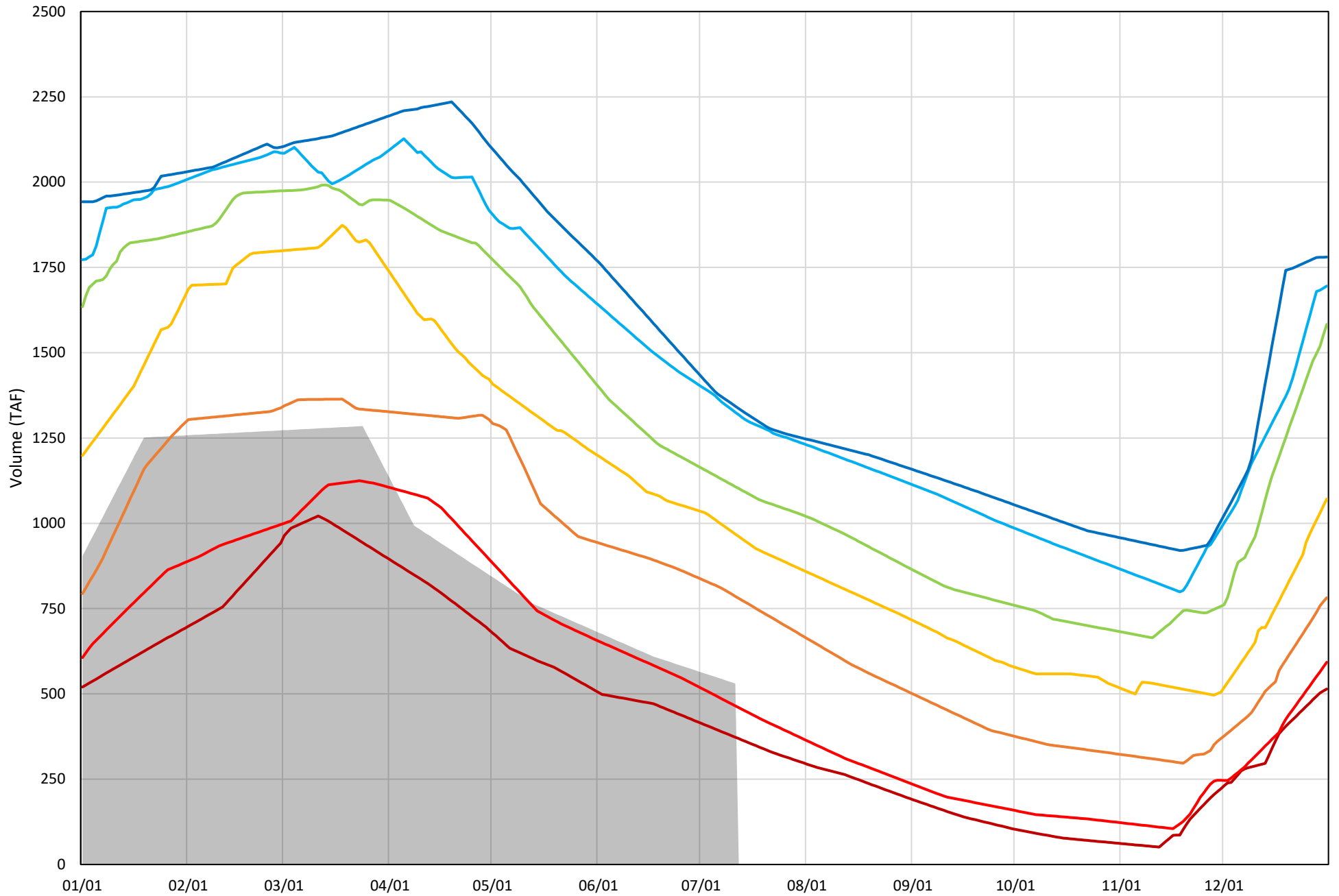


Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - Percent Exceedances (2000-2020)

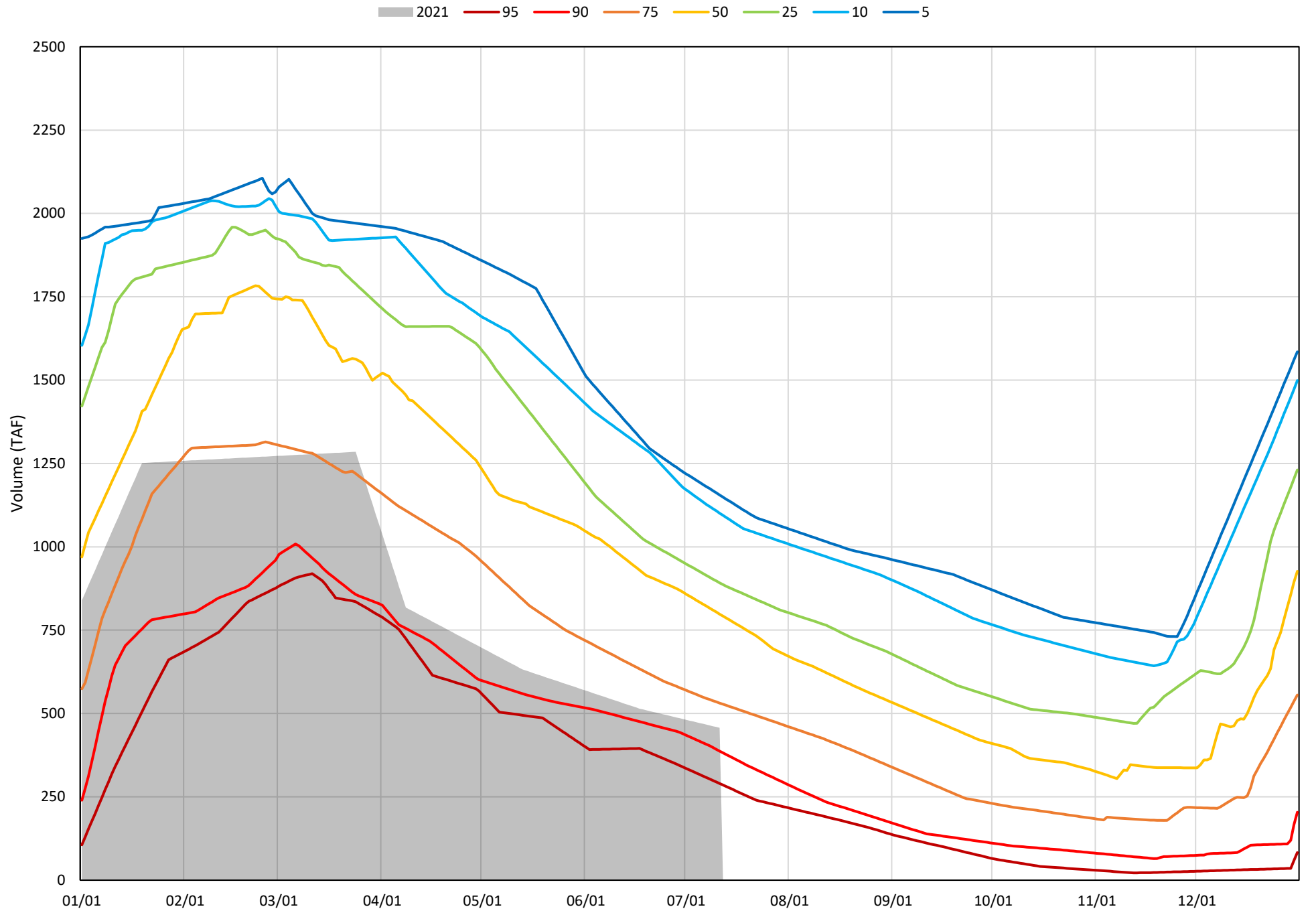


Trinity Lake Cold Water Pool Volume ≤50°F - Percent Exceedances (2000-2020)

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)

Jul-12 2021	Δ TAF				% Δ			
	$\leq 52^\circ$	$\leq 50^\circ$	$\leq 48^\circ$	Abs. Avg.	$\leq 52^\circ$	$\leq 50^\circ$	$\leq 48^\circ$	Abs. Avg.
2000	626	504	361	497	105	95	79	93
2001	464	411	341	405	78	77	75	77
2002	441	423	361	408	74	80	79	77
2003	839	649	450	646	140	122	98	120
2004	529	438	294	420	88	83	64	78
2005	610	480	210	433	102	90	46	79
2006	899	798	602	766	150	151	132	144
2007	483	466	419	456	81	88	92	87
2008	232	178	39	150	39	34	9	27
2009	84	43	-39	55	14	8	-8	10
2010	447	344	110	300	75	65	24	55
2011	933	781	563	759	156	147	123	142
2012	766	756	654	725	128	143	143	138
2013	354	333	241	310	59	63	53	58
2014	-104	-78	-74	86	-17	-15	-16	16
2015	-172	-166	-178	172	-29	-31	-39	33
2016	40	-16	-51	36	7	-3	-11	7
2017	625	497	374	499	104	94	82	93
2018	504	477	419	467	84	90	92	89
2019	872	814	703	797	146	154	154	151
2020	395	400	292	362	66	75	64	68
2021	0	0	0	0	0	0	0	0

Historic - Current

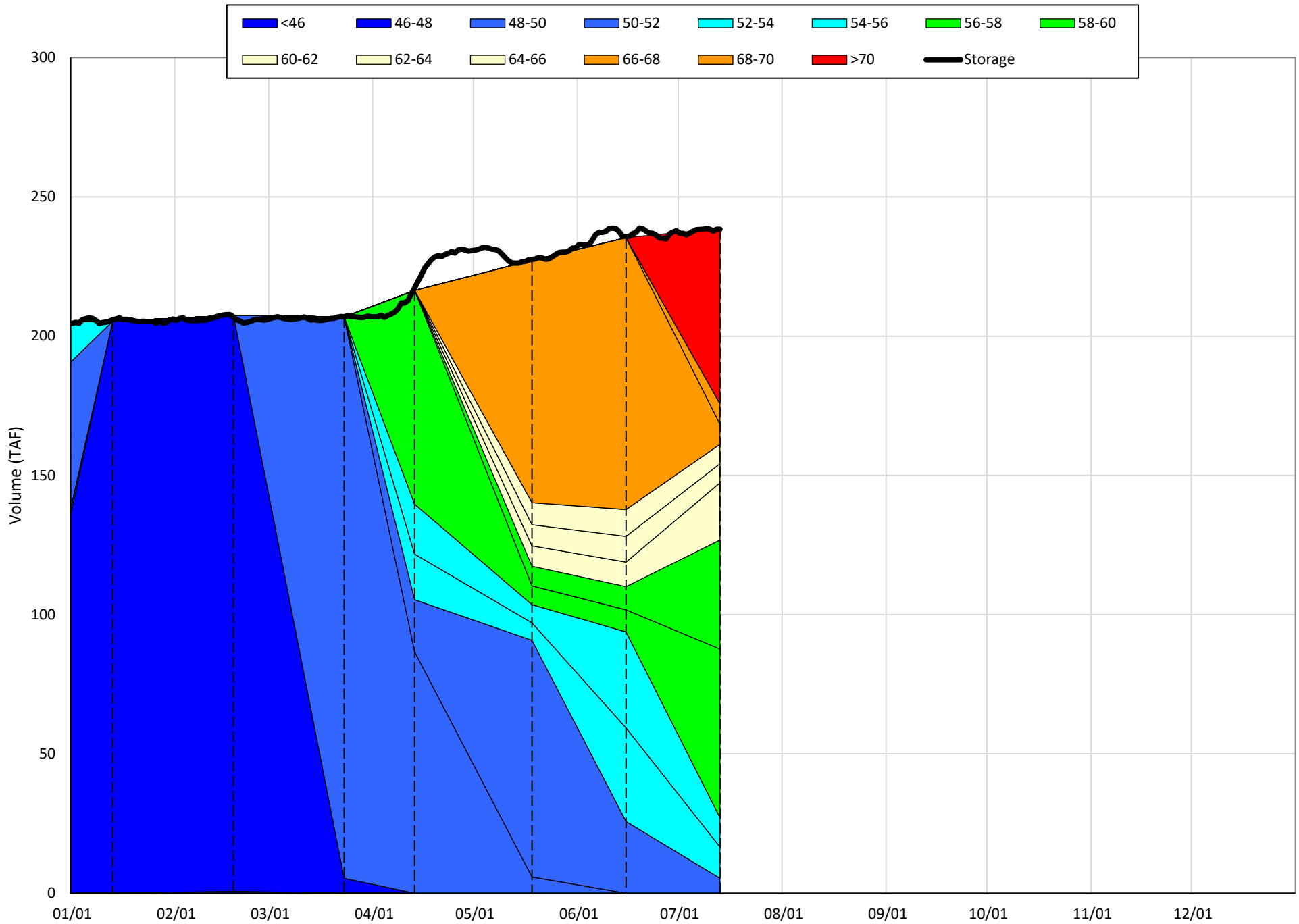
(Historic - Current) / Current

Whiskeytown Lake Isothermobaths & Cold Water Pool Statistics

2021

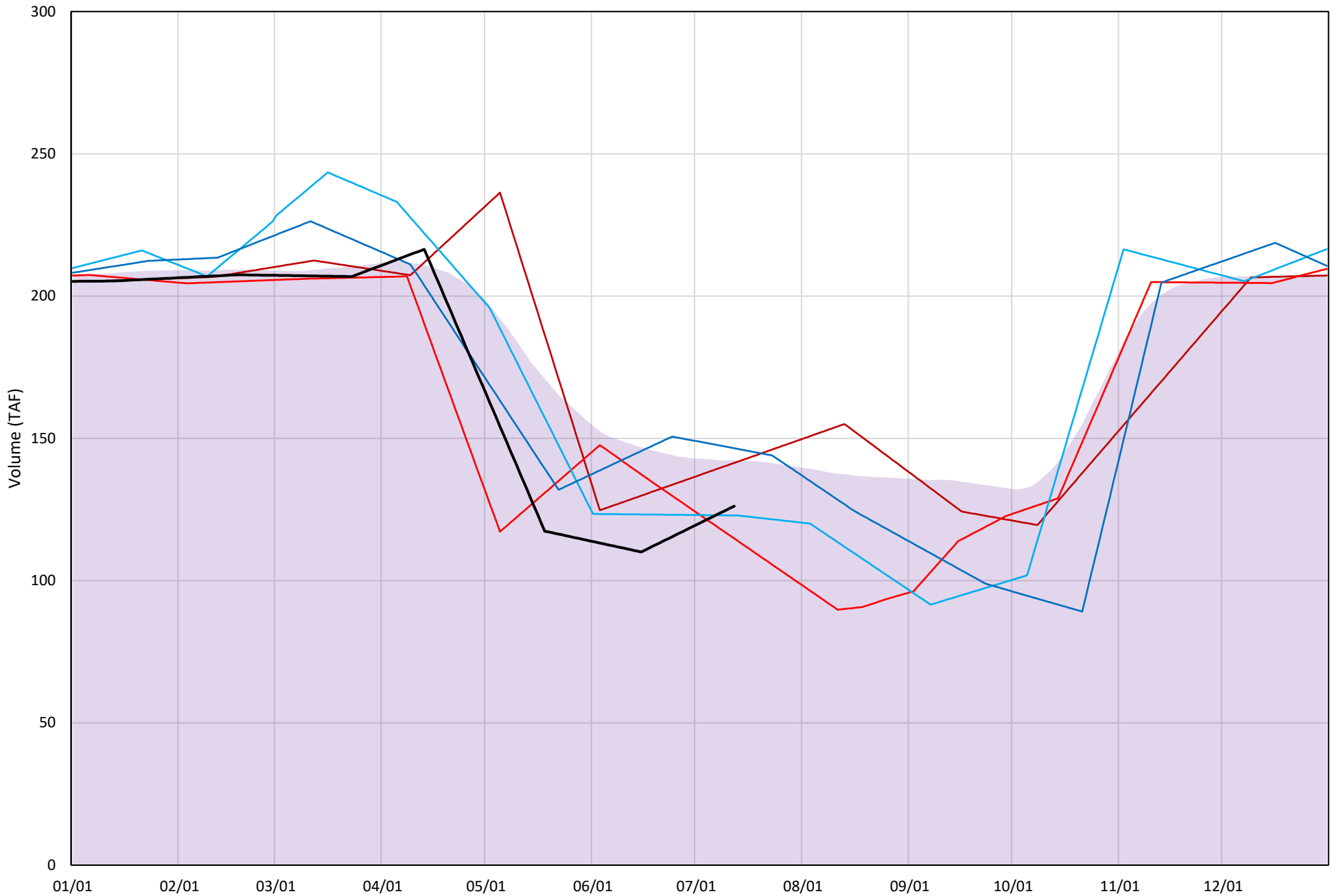
Page	Description
24	- Whiskeytown Lake Isothermobaths Plot
25	- Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$
26	- Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$
27	- Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$
28	- Whiskeytown Lake Cold Water 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



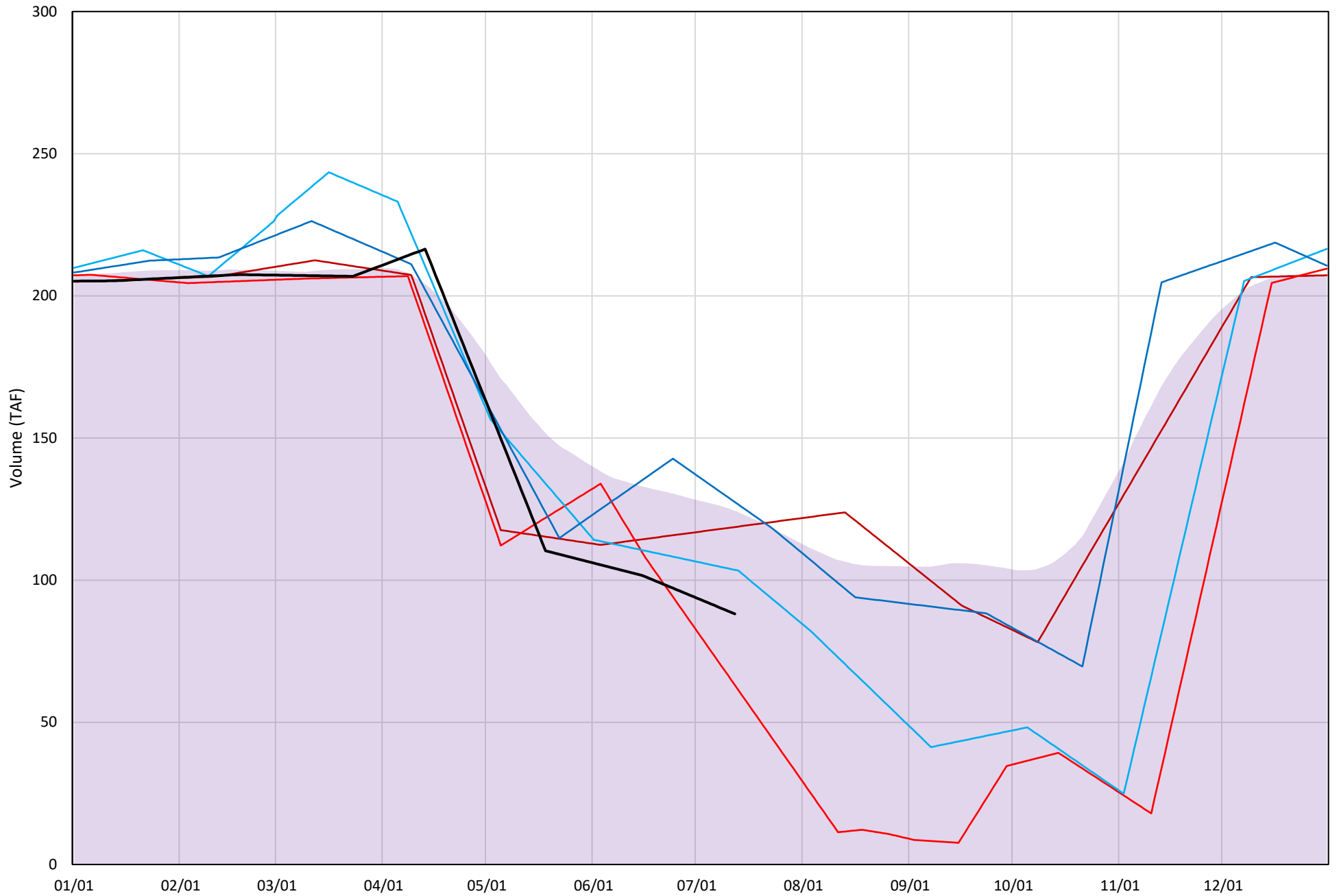
Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



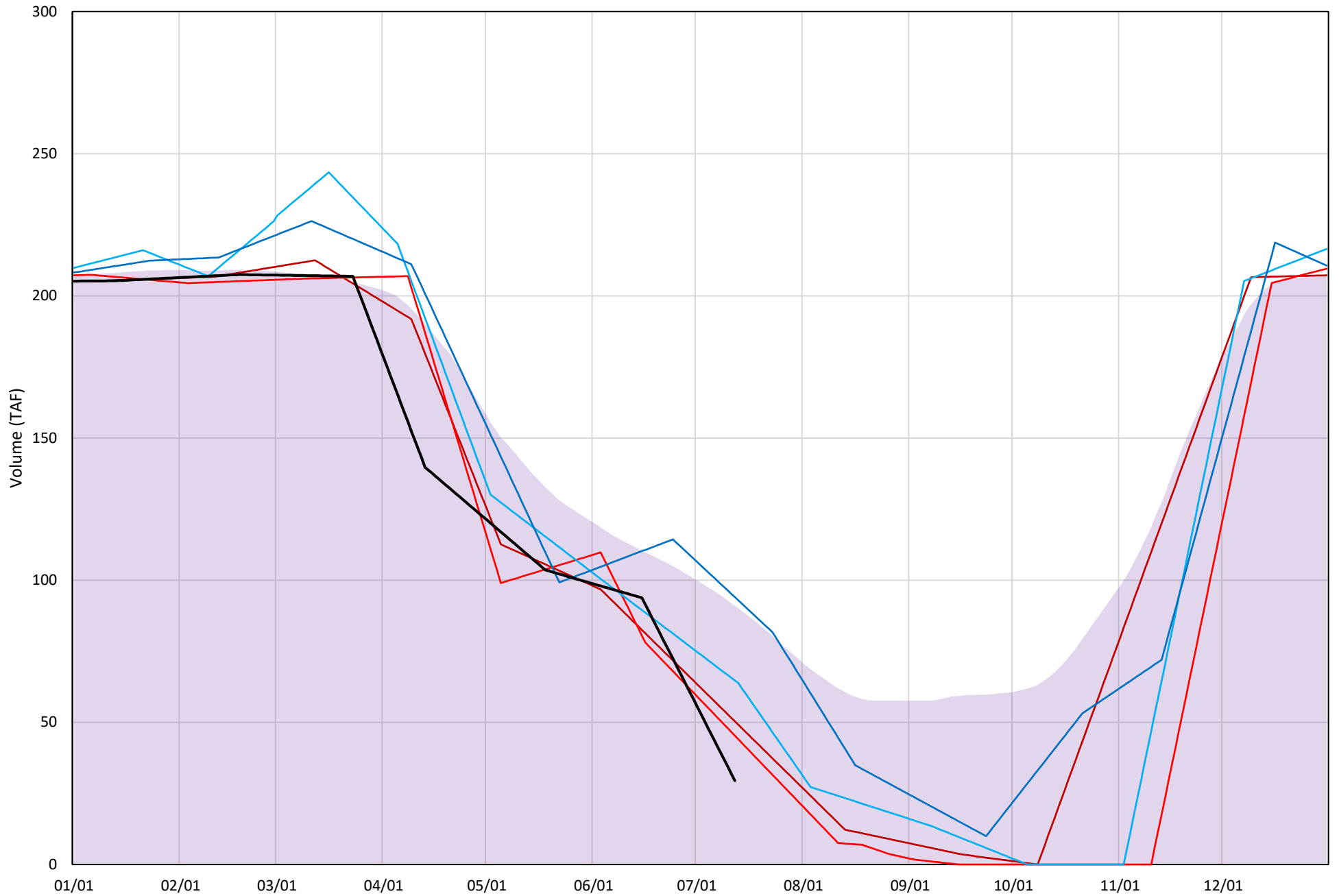
Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



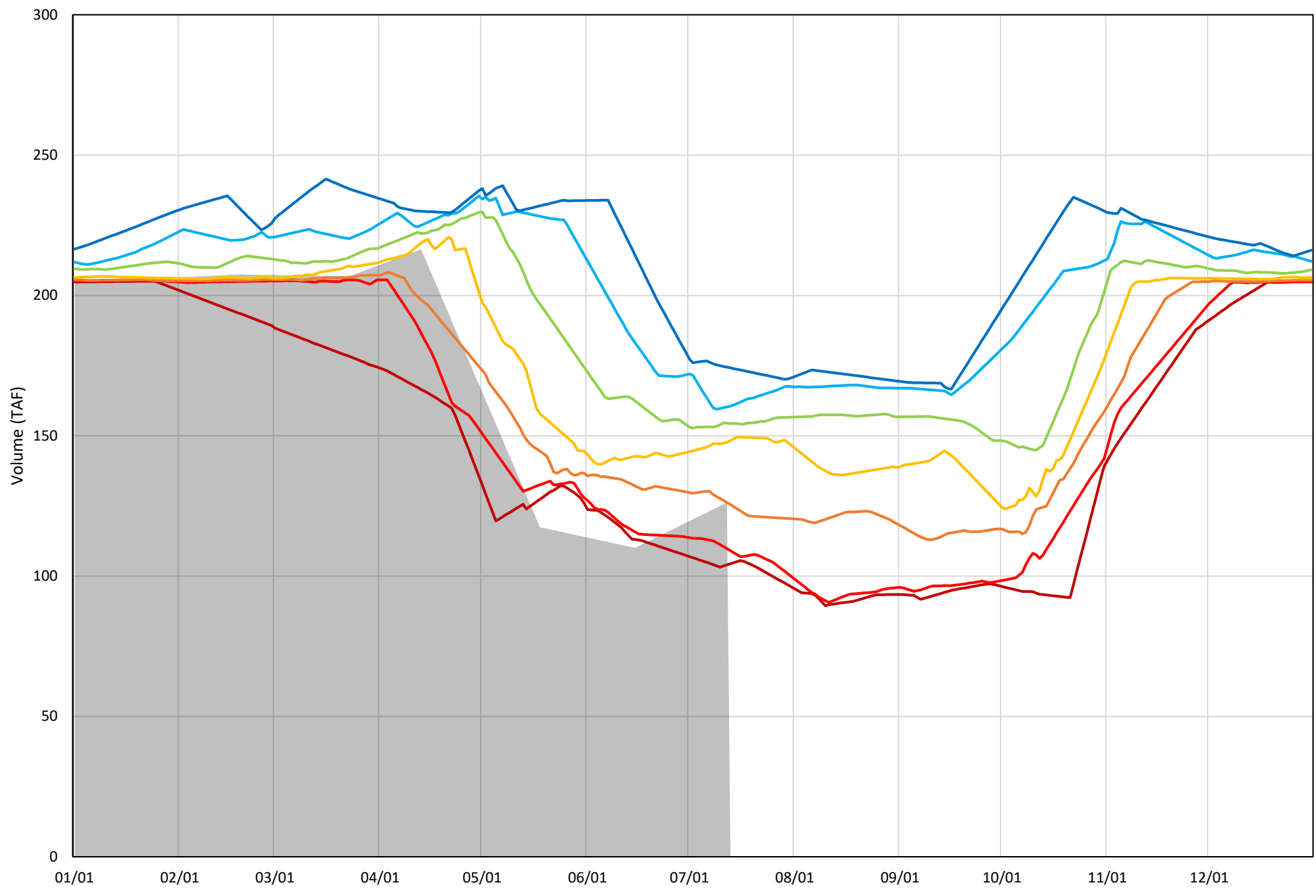
Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



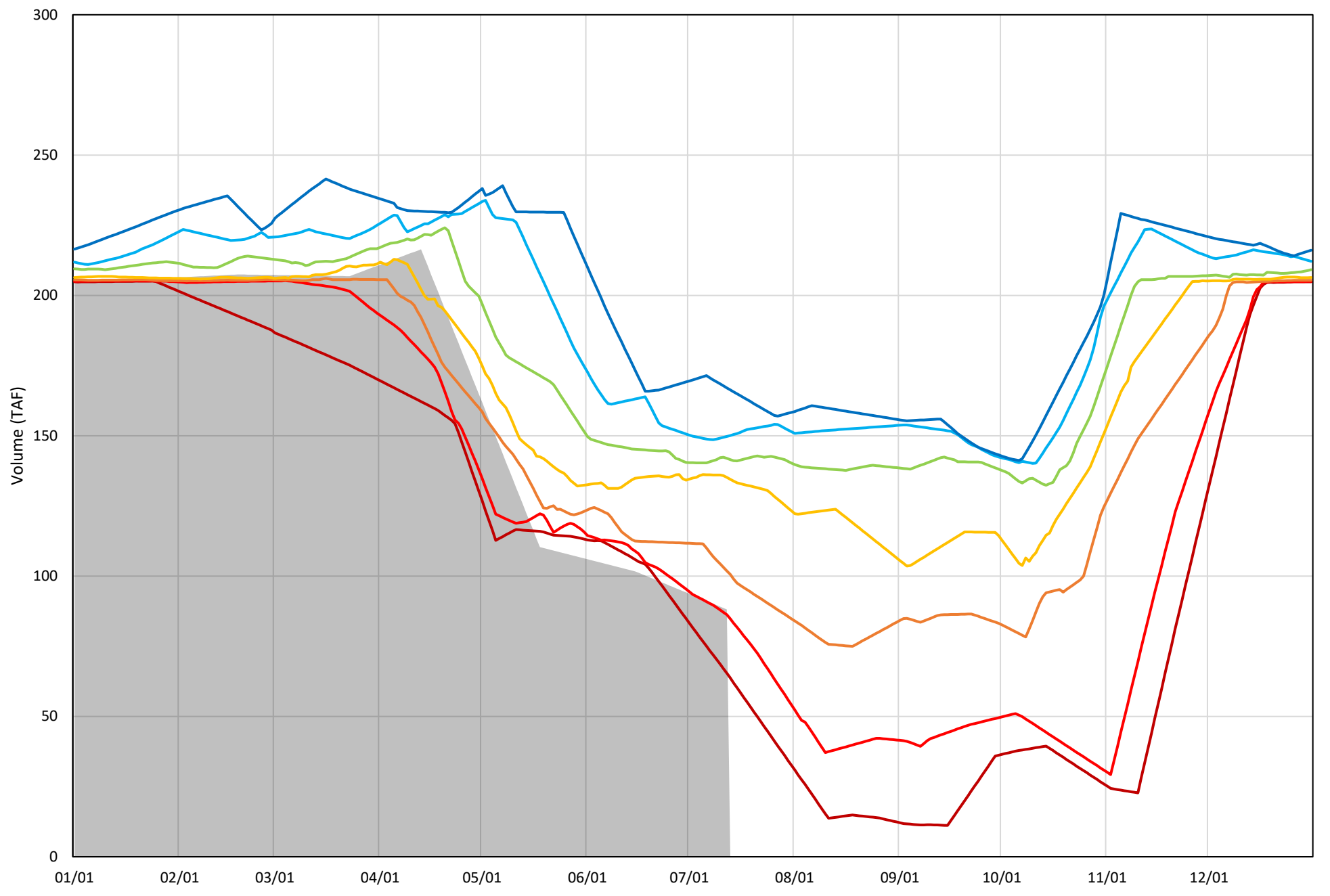
Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$ - Percent Exceedances (2000-2020)

2021 95 90 75 50 25 10 5



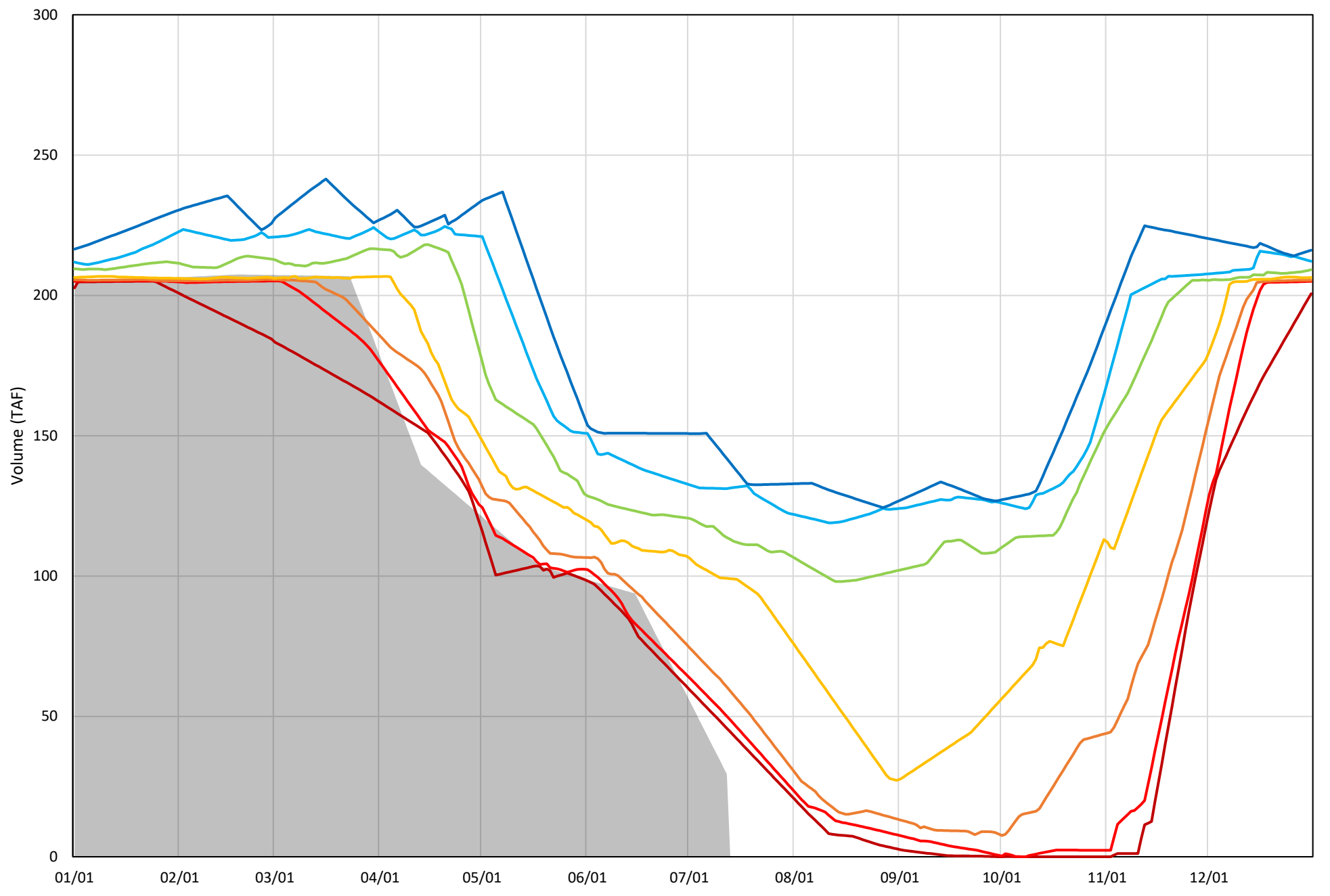
Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$ - Percent Exceedances (2000-2020)

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)

Jul-13 2021	Δ TAF				% Δ			
	≤60°	≤58°	≤56°	Abs. Avg.	≤60°	≤58°	≤56°	Abs. Avg.
2000	52	50	40	47	50	52	46	50
2001	49	46	18	38	48	48	21	39
2002	44	41	14	33	43	43	17	34
2003	48	40	23	37	46	42	27	38
2004	47	44	30	40	45	46	35	42
2005	5	-9	-37	17	5	-9	-42	19
2006	72	74	56	67	70	77	64	71
2007	44	42	12	33	43	44	14	34
2008	48	44	22	38	47	47	25	39
2009	17	-9	-37	21	17	-10	-42	23
2010	26	5	-30	20	25	5	-34	21
2011	54	47	23	41	52	50	26	43
2012	36	22	-23	27	35	23	-27	28
2013	58	55	45	53	56	58	52	55
2014	38	23	-37	33	37	24	-42	34
2015	11	-32	-42	28	11	-34	-48	31
2016	19	8	-22	17	19	9	-26	18
2017	52	52	40	48	51	55	46	51
2018	50	35	-21	35	48	37	-24	36
2019	43	32	7	27	42	34	8	28
2020	0	0	0	0	0	0	0	0

Historic - Current

(Historic - Current) / Current