

# Northern CVP Water Temperature Report

## May - 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 <sup>2</sup>	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	
Apr	50.2	52.3	50.1	52.8	53.4	54.0	55.6	56.6	57.4	57.9	51.4	50.3	53.9	53.3	3024	142	5927	62.2	60.6	62.4	
05/01	49.5	57.3	51.0	57.9	58.3	58.8	60.4	61.3	61.9	62.8	52.8	49.4	52.0	54.3	29	77	7472	68.5	68.6	68.6	
05/02	49.6	58.4	51.0	58.1	58.4	58.9	60.3	61.2	61.9	62.8	52.7	49.8	52.4	54.3	25	77	7877	70.0	69.2	69.6	
05/03	49.3	59.1	51.0	58.8	58.9	59.3	60.3	61.0	61.6	62.3	52.7	50.5	52.7	54.6	31	77	7822	75.0	70.4	73.1	
05/04	49.4	58.9	51.1	59.7	59.9	60.5	61.6	62.3	62.8	63.2	53.1	50.2	53.1	55.2	29	77	7817	78.0	71.4	73.9	
05/05	49.4	58.8	51.2	59.8	60.2	60.8	62.1	63.0	63.6	64.4	53.1	50.1	53.1	55.1	29	53	7824	74.0	70.6	73.5	
05/06	50.9	57.7	51.5	59.9	60.1	60.7	62.1	63.1	63.7	64.7	53.1	50.0	53.0	54.9	818	38	8405	71.0	68.4	72.1	
05/07	52.0	58.7	51.6	58.8	59.4	59.8	61.3	62.2	62.9	63.8	52.7	50.2	52.6	53.7	784	39	8460	69.5	66.3	68.1	
05/08	51.6	59.5	51.6	59.1	59.1	59.3	59.9	60.4	60.9	61.9	51.6	50.4	52.6	54.0	776	38	8932	72.0	70.1	71.2	
05/09	52.6	60.1	51.7	60.0	60.1	60.6	60.9	61.5	61.9	62.0	51.3	50.2	52.7	54.6	819	37	8963	74.5	71.9	73.9	
05/10	51.4	60.3	51.9	60.4	60.5	60.9	61.1	61.6	62.1	62.8	51.3	50.5	52.8	54.8	670	37	8965	76.0	73.7	75.1	
05/11	51.2	57.0	51.8	60.7	61.0	61.6	62.0	62.6	63.0	63.5	51.4	50.4	53.1	55.4	3572	37	9018	77.5	71.0	74.1	
05/12	51.6	56.3	51.9	58.7	59.5	60.3	61.5	62.5	63.1	64.3	51.6	50.4	53.2	55.7	4001	37	9019	74.5	70.9	73.1	
05/13	52.1	56.8	51.9	57.3	58.0	58.5	60.3	61.6	62.3	63.8	52.5	50.5	53.6	55.9	4305	37	8827	76.0	72.8	75.3	
05/14	52.7	54.4	51.9	57.5	58.1	58.5	59.7	60.7	61.4	62.9	53.0	50.6	53.7	55.7	6314	60	8823	73.5	70.5	72.5	
05/15	52.6	?	54.7	51.6	55.6	56.4	56.8	58.8	60.0	60.9	62.1	53.2	50.8	53.9	6760	76	8737	72.0	68.8	67.1	
05/16	52.5	54.4	51.6	55.4	56.2	56.7	58.4	59.5	60.1	61.3	53.7	50.7	53.7	56.1	6222	84	8819	72.0	68.5	67.9	
05/17	52.6	54.4	51.6	55.5	56.1	56.6	58.5	59.7	60.5	61.8	53.9	50.5	54.0	56.5	6575	76	8815	71.0	68.5	67.6	
05/18	53.0	54.6	51.7	55.4	56.0	56.5	58.5	59.8	60.5	61.7	53.4	50.8	53.9	55.8	6510	81	8822	70.5	70.6	69.7	
05/19	53.1	54.9	51.6	55.6	55.9	56.2	57.8	58.9	59.6	60.9	52.9	51.0	53.6	54.6	6330	76	8700	66.0	63.6	65.5	
05/20	54.5	56.1	51.7	55.6	55.9	56.1	57.2	58.0	58.5	?	59.1	52.2	51.1	53.0	6648	76	8674	59.5	58.5	60.0	
05/21	54.6	54.2	51.2	56.3	56.3	56.5	57.4	58.0	58.4	58.9	52.6	51.2	52.6	53.6	7361	392	8838	60.5	59.5	62.0	
05/22	54.2	53.7	51.4	55.7	56.2	56.6	58.3	59.1	59.5	59.9	52.8	50.3	52.7	54.1	7377	419	8419	65.0	64.2	66.4	
05/23	54.2	53.0	51.6	55.2	55.9	56.4	58.2	59.1	59.7	60.7	53.5	49.8	52.4	54.5	7696	150	8524	68.5	66.3	65.9	
05/24	54.6	54.1	52.0	54.8	55.5	55.9	57.8	59.0	59.7	60.9	53.4	49.9	52.8	55.1	8071	85	8516	69.5	67.2	70.1	
05/25	54.6	53.3	51.9	55.3	55.8	56.2	57.8	59.0	59.8	61.0	53.7	50.3	53.1	55.8	8170	75	8530	69.5	68.0	71.1	
05/26	54.9	53.8	51.5	55.4	56.1	56.7	58.7	59.7	60.5	61.2	?	54.0	50.8	53.6	6911	184	7682	75.0	70.5	71.4	
05/27	54.7	53.5	52.2	55.5	56.2	56.8	58.5	59.8	60.8	62.0	54.5	50.7	54.2	57.0	6637	75	7141	70.5	69.9	71.2	
05/28	54.3	53.1	52.0	55.7	56.6	57.4	59.4	60.7	61.5	?	62.4	55.8	50.9	54.2	6939	75	7103	80.5	74.4	75.7	
05/29	53.9	52.1	52.2	55.5	56.5	57.2	59.5	61.0	62.1	63.6	55.6	51.1	54.1	56.7	5779	76	7076	80.5	77.3	76.0	
05/30	54.6	53.4	51.6	55.1	56.2	57.0	59.6	61.3	62.4	63.8	56.0	51.2	54.6	57.9	7150	228	7060	83.0	81.0	82.0	
05/31	53.9	53.0	51.6	55.1	56.1	56.8	59.4	61.2	62.4	64.0	56.7	51.3	55.3	59.3	6290	614	7023	↑	94.0	85.8	87.1
May	52.6	55.8	51.6	57.1	57.6	58.1	59.6	60.6	61.3	62.3	53.3	50.5	53.3	55.4	4504	115	8281	72.8	69.9	71.3	
															Total CFS	139628	3563	256703			
															Total AF	276946	7067	509160			

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
05/01	54	89	71.5	54	84	69.0	52	82	67.0	51	87	69.0	52	89	70.5	55	93	74.0	56	85	70.5	46	75	60.5	50	76	63.0	52	84	68.0	54	82	68.0	54	86	70.0
05/02	52	85	68.5	58	82	70.0	53	87	70.0	53	89	71.0	51	93	72.0	54	82	68.0	45	74	59.5	45	80	62.5	53	81	67.0	53	83	68.0	54	86	70.0	57	87	72.0
05/03	57	83	70.0	62	85	73.5	57	89	73.0	54	92	73.0	54	80	67.0	45	77	61.0	46	81	63.5	48	82	65.0	57	82	69.5	54	87	70.5	56	88	72.0	59	88	73.5
05/04	62	88	75.0	66	89	77.5	55	92	73.5	55	82	68.5	46	76	61.0	48	80	64.0	51	82	66.5	52	89	70.5	57	87	72.0	53	87	70.0	53	87	70.0	57	88	72.5
05/05	66	90	78.0	56	93	74.5	57	86	71.5	49	80	64.5	51	85	68.0	54	86	70.0	54	89	71.5	56	94	75.0	55	91	73.0	57	94	75.5	58	92	75.0	59	90	74.5
05/06	54	94	74.0	57	85	71.0	50	81	65.5	50	85	67.5	53	85	69.0	55	89	72.0	55	93	74.0	56	95	75.5	58	91	74.5	58	93	75.5	58	91	74.5	59	90	74.5
05/07	55	87	71.0	59	81	70.0	51	86	68.5	53	84	68.5	53	89	71.0	56	94	75.0	57	94	75.5	58	93	75.5	59	92	75.5	58	93	75.5	59	91	75.0	58	88	73.0
05/08	58	81	69.5	58	85	71.5	55	84	69.5	54	89	71.5	55	95	75.0	58	95	76.5	58	94	76.0	57	88	72.5	57	78	67.5	53	83	68.0	55	86	70.5	55	85	70.0
05/09	58	86	72.0	64	86	75.0	57	90	73.5	57	95	76.0	56	96	76.0	58	94	76.0	57	92	74.5	57	89	73.0	57	89	73.0	57	91	74.0	58	89	73.5	59	89	74.0
05/10	64	85	74.5	65	89	77.0	57	94	75.5	57	96	76.5	58	96	77.0	58	93	75.5	55	86	70.5	52	90	71.0	60	93	76.5	60	95	77.5	58	87	72.5	58	87	72.5
05/11	64	88	76.0	67	93	80.0	56	96	76.0	59	96	77.5	58	92	75.0	58	92	75.0	57	96	76.5	58	92	75.0	60	91	75.5	58	90	74.0	55	81	68.0	53	79	66.0
05/12	62	93	77.5	57	96	76.5	58	96	77.0	59	92	75.5	59	92	75.5	59	94	76.5	58	88	73.0	54	82	68.0	56	84	70.0	55	81	68.0	53	80	66.5	58	84	71.0
05/13	55	94	74.5	58	95	76.5	58	92	75.0	60	87	73.5	57	93	75.0	58	88	73.0	56	85	70.5	55	83	69.0	53	82	67.5	53	84	68.5	58	86	72.0	57	81	69.0
05/14	57	95	76.0	57	90	73.5	60	83	71.5	56	88	72.0	59	91	75.0	57	84	70.5	54	76	65.0	47	79	63.0	49	83	66.0	57	84	70.5	58	85	71.5	55	84	69.5
05/15	57	90	73.5	58	84	71.0	54	89	71.5	57	87	72.0	54	86	70.0	53	73	63.0	46	70	58.0	45	74	59.5	51	77	64.0	54	80	67.0	56	85	70.5	58	85	71.5
05/16	58	86	72.0	56	91	73.5	55	87	71.0	52	86	69.0	50	78	64.0	47	70	58.5	46	76	61.0	48	81	64.5	50	86	68.0	57	83	70.0	56	82	69.0	57	86	71.5
05/17	54	90	72.0	57	86	71.5	51	83	67.0	48	77	62.5	47	72	59.5	46	75	60.5	49	80	64.5	55	82	68.5	58	89	73.5	59	92	75.5	60	91	75.5	59	89	74.0
05/18	57	85	71.0	57	84	70.5	48	76	62.0	46	71	58.5	45	77	61.0	50	80	65.0	52	84	68.0	54	90	72.0	58	91	74.5	59	93	76.0	61	90	75.5	60	92	76.0
05/19	56	85	70.5	56	76	66.0	44	71	57.5	44	75	59.5	48	78	63.0	50	84	67.0	53	87	70.0	55	89	72.0	63	91	77.0	62	97	79.5	64	95	79.5	62	93	77.5
05/20	54	78	66.0	50	71	60.5	44	75	59.5	47	80	63.5	50	84	67.0	53	88	70.5	54	88	71.0	56	91	73.5	60	95	77.5	61	96	78.5	62	93	77.5	63	94	78.5
05/21	50	69	59.5	46	75	60.5	47	79	63.0	50	83	66.5	53	87	70.0	54	84	69.0	55	86	70.5	54	86	70.0	59	86	72.5	58	94	76.0	60	91	75.5	62	91	76.5
05/22	46	75	60.5	52	80	66.0	51	83	67.0	53	87	70.0	52	84	68.0	53	90	71.5	55	88	71.5	56	89	72.5	64	93	78.5	62	94	78.0	64	94	79.0	64	94	79.0
05/23	52	78	65.0	56	81	68.5	51	85	68.0	50	83	66.5	52	91	71.5	55	91	73.0	57	89	73.0	57	92	74.5	60	96	78.0	61	98	79.5	63	96	79.5	64	93	78.5
05/24	56	81	68.5	52	85	68.5	50	83	66.5	52	90	71.0	54	89	71.5	55	89	72.0	59	92	75.5	59	93	76.0	66	98	82.0	61	93	77.0	62	92	77.0	62	92	77.0
05/25	51	88	69.5	58	83	70.5	53	89	71.0	54	87	70.5	54	91	72.5	57	93	75.0	59	98	78.5	63	102	82.5	65	103	84.0	65	102	83.5	65	96	80.5	64	94	79.0
05/26	55	84	69.5	60	90	75.0	54	87	70.5	54	92	73.0	57	95	76.0	59	100	79.5	64	105	84.5	67	108	87.5	68	103	85.5	64	96	80.0	64	93	78.5	63	92	77.5
05/27	60	90	75.0	54	88	71.0	57	94	75.5	58	98	78.0	61	102	81.5	68	107	87.5	70	108	89.0	72	103	87.5	67	101	84.0	65	99	82.0	65	94	79.5	64	94	79.0
05/28	53	88	70.5	67	94	80.5	64	99	81.5	66	103	84.5	70	107	88.5	72	109	90.5	70	106	88.0	68	103	85.5	67	101	84.0	65	102	83.5	65	96	80.5	62	93	77.5
05/29	67	94	80.5	62	99	80.5	63	104	83.5	69	108	88.5	70	109	89.5	71	105	88.0	68	101	84.5	65	99	82.0	61	89	75.0	58	88	73.0	58	88	73.0	59	88	73.5
05/30	61	100	80.5	63	103	83.0	70	107	88.5	69	107	88.0	69	103	86.0	66	98	82.0	65	97	81.0	65	101	83.0	64	98	81.0	60	90	75.0	60	89	74.5	58	91	74.5
05/31	62	104	83.0	81	108	94.5	68	108	88.0	69	104	86.5	67	101	84.0	65	98	81.5	64	101	82.5	61	96	78.5	65	88	76.5	61	94	77.5	62	94	78.0	64	94	79.0

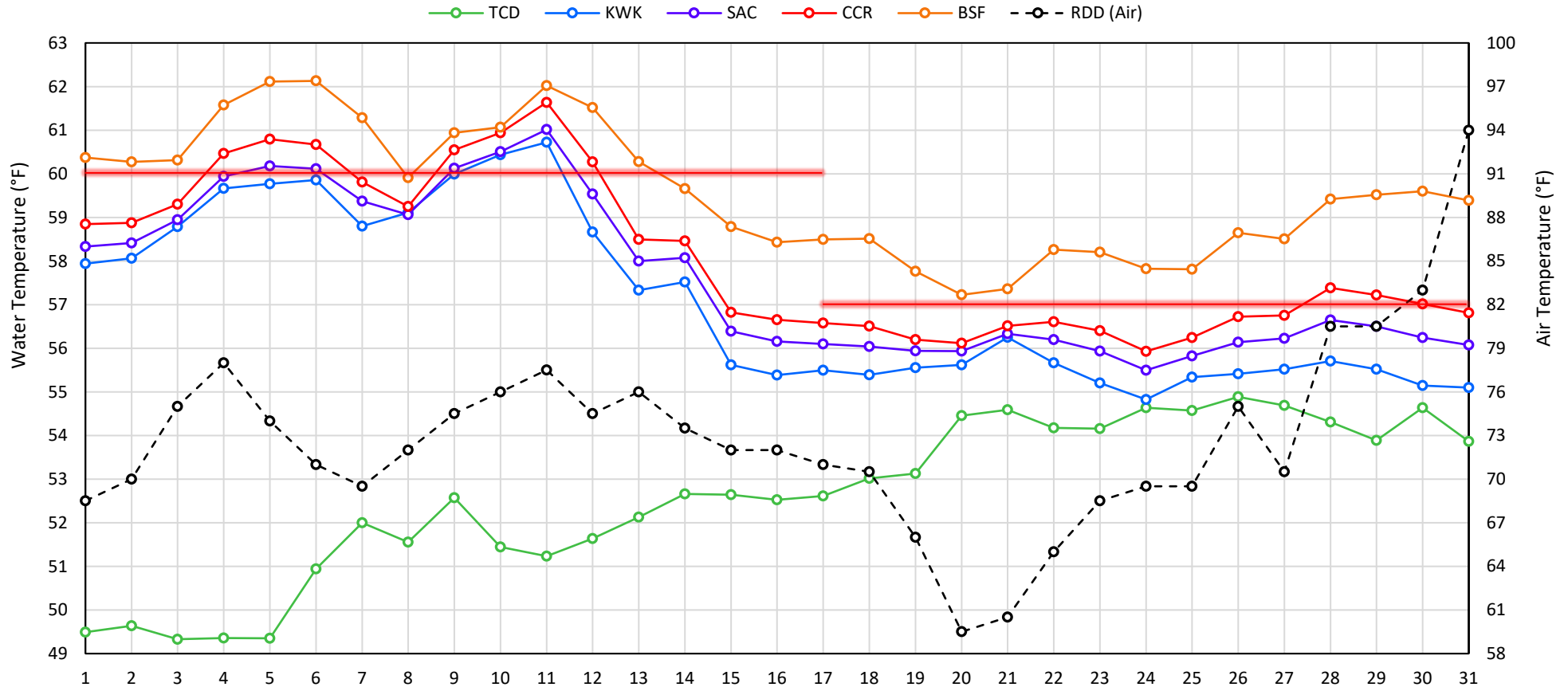
Web Links

- [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	CCR	56	09/21/2020	04/18/2021
Sacramento	CCR	60	04/18/2021	05/17/2021
Sacramento	SAC	57	05/17/2021	TBD
Trinity	DGC	56	09/15/2021	10/01/2021
Trinity	NFH	56	10/01/2021	12/31/2021

### Notes

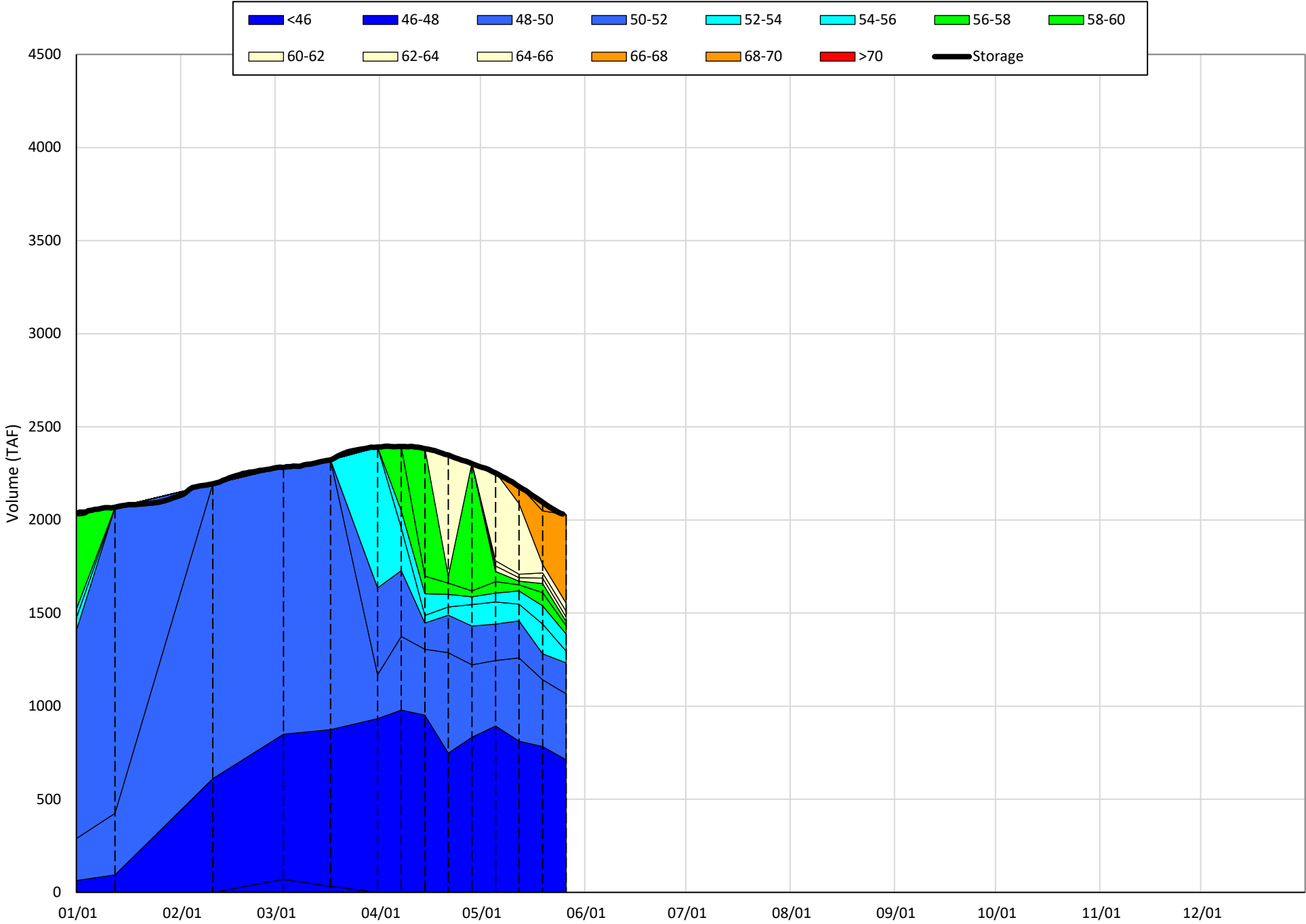
<sup>1</sup> Distances are approximate

# Shasta Lake Isothermobaths & Cold Water Pool Statistics

## 2021

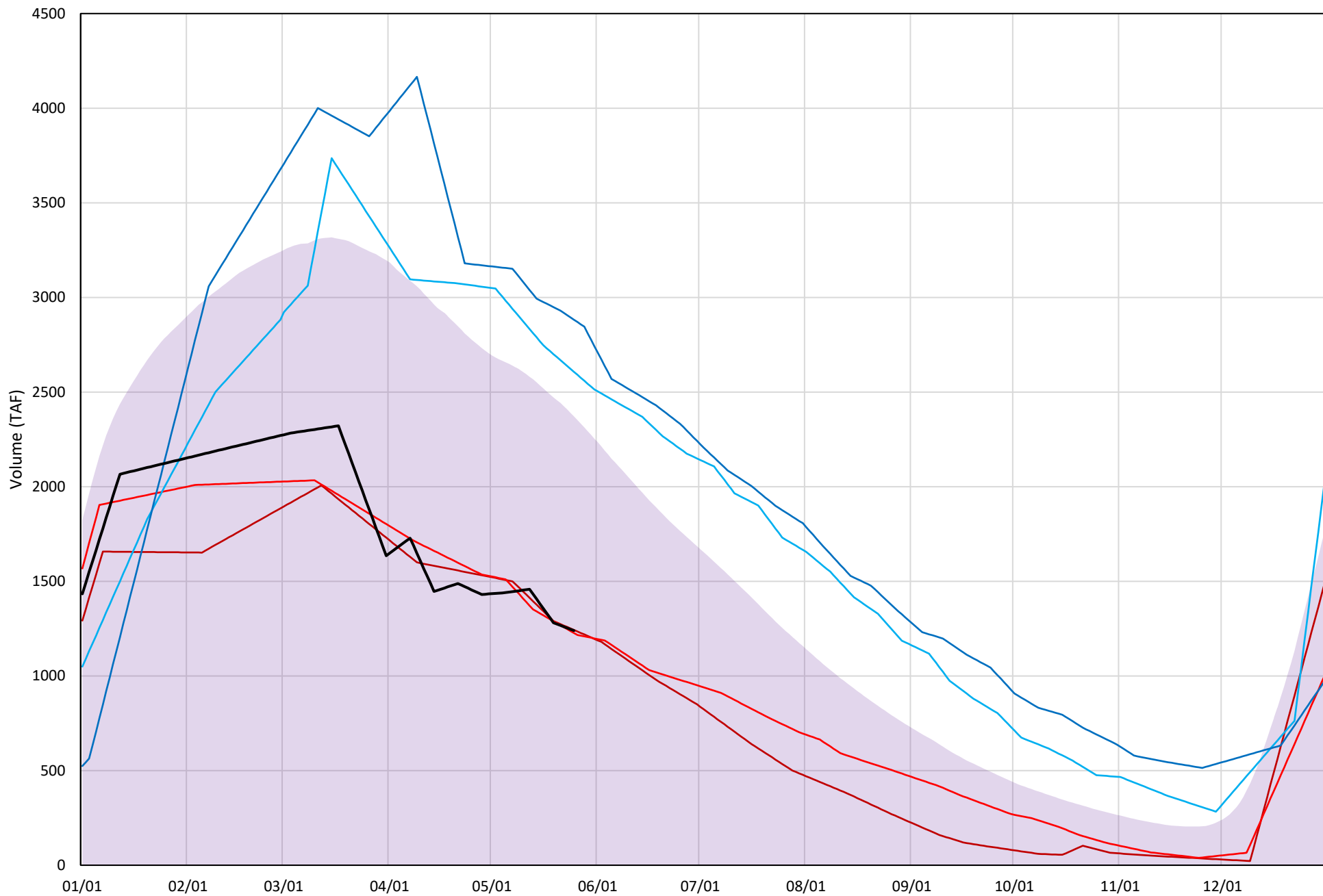
Page	Description
6	- Shasta Lake Isothermobaths Plot
7	- Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$
8	- Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$
9	- Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$
10	- Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$ - 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



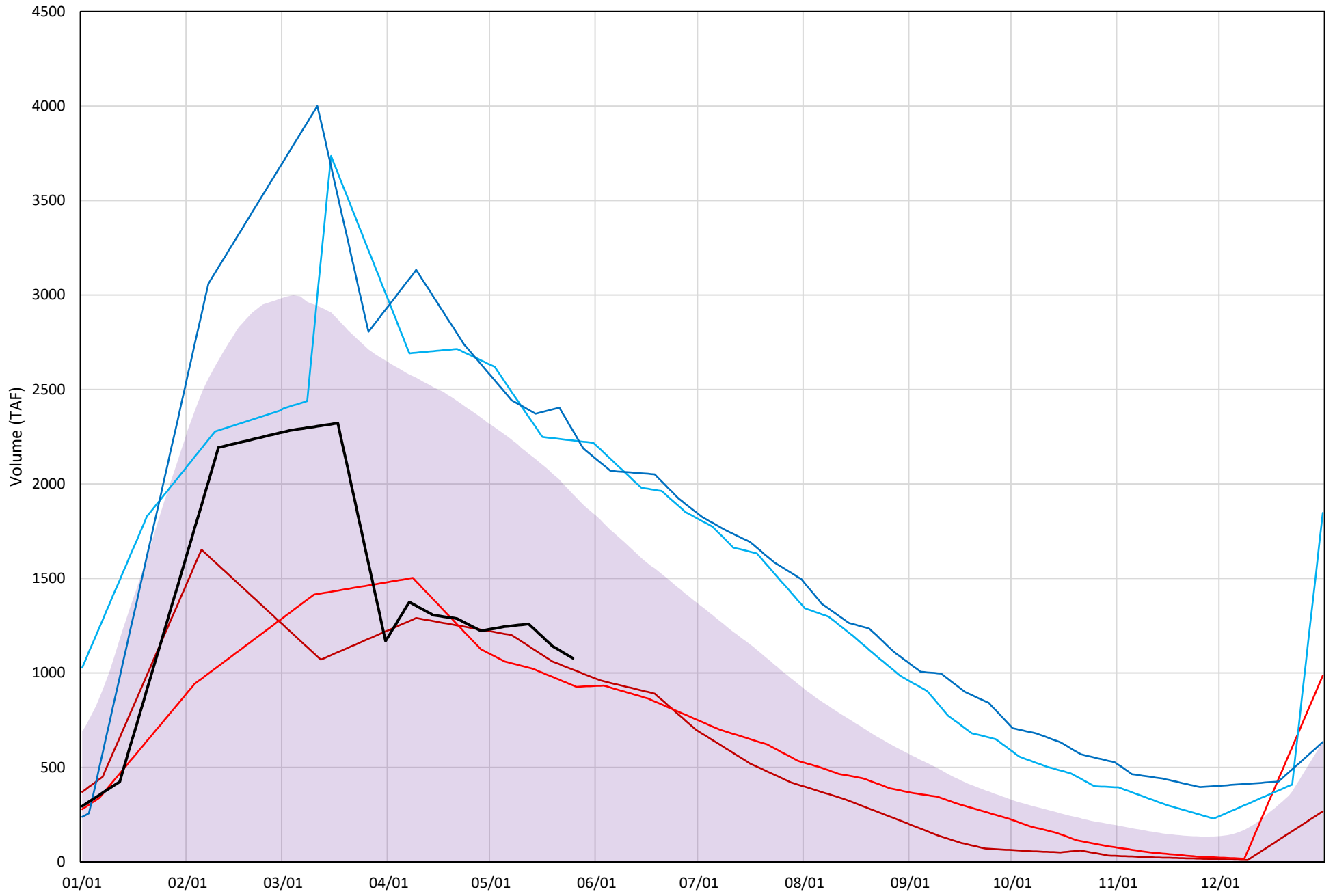
# Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



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

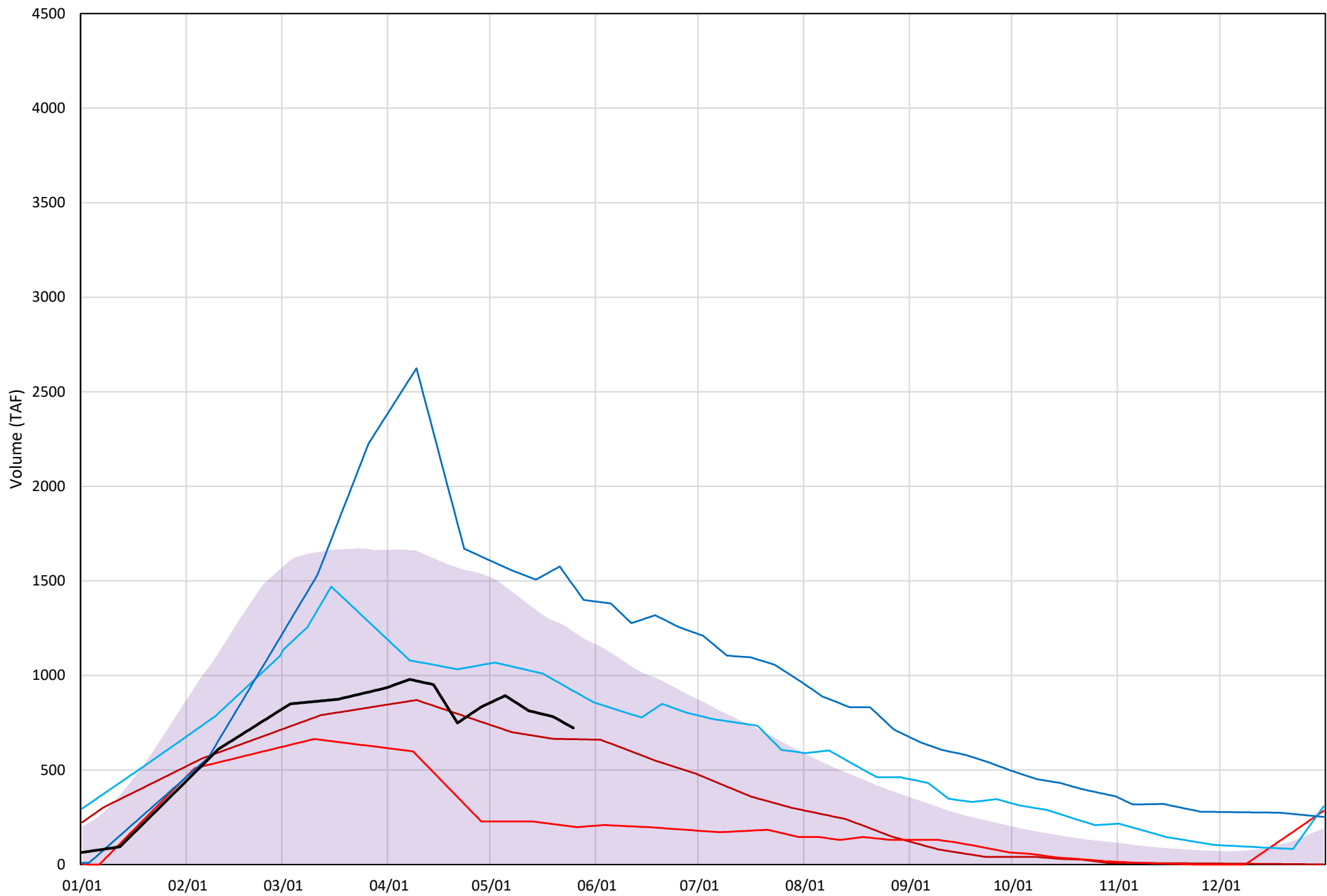
Avg (1998-2020) 2014 2015 2016 2019 2021





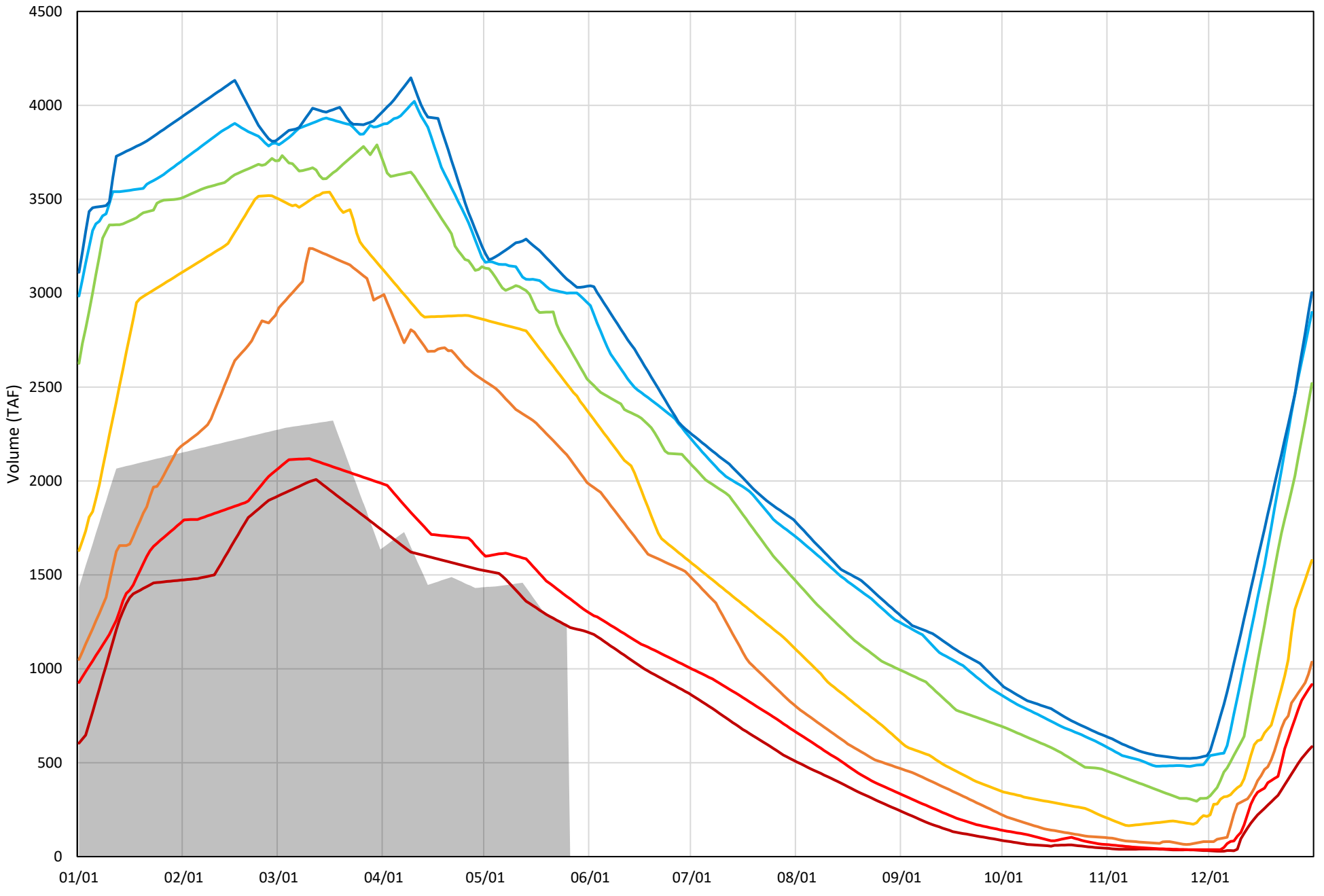
# Shasta Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



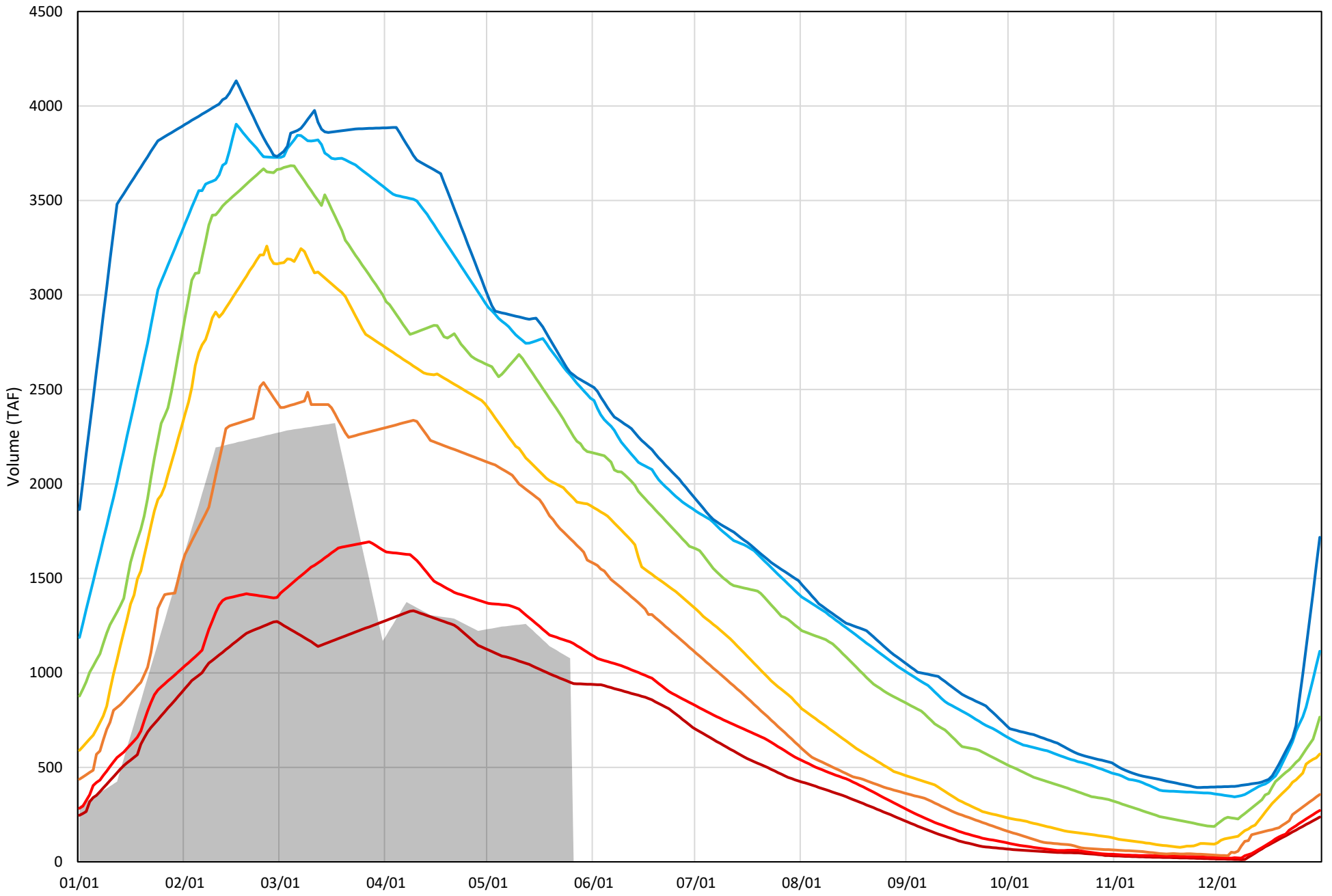
Shasta Lake Cold Water Pool Volume  $\leq 52^{\circ}\text{F}$  - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5



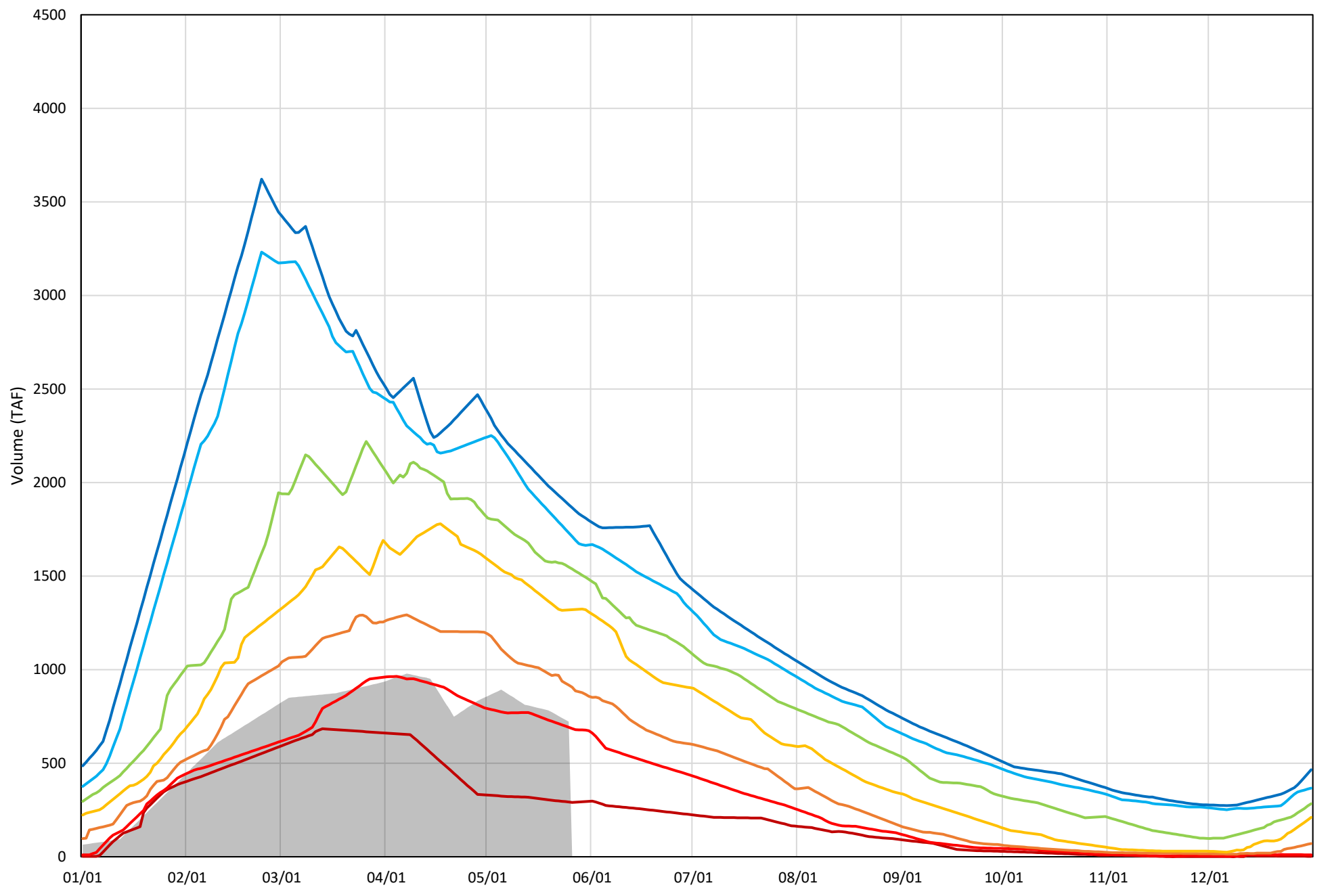
Shasta Lake Cold Water Pool Volume  $\leq 50^{\circ}\text{F}$  - Percent Exceedances (1998-2020)

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)

May-26 2021	$\Delta$ TAF				% $\Delta$			
	$\leq 52^\circ$	$\leq 50^\circ$	$\leq 48^\circ$	Abs. Avg.	$\leq 52^\circ$	$\leq 50^\circ$	$\leq 48^\circ$	Abs. Avg.
1998	1854	1482	923	1420	150	138	128	138
1999	1332	1196	1067	1198	107	111	148	122
2000	1236	691	270	732	100	64	37	67
2001	948	865	762	858	76	80	106	87
2002	1278	1093	827	1066	103	102	114	106
2003	1404	804	155	788	113	75	22	70
2004	900	713	558	724	73	66	77	72
2005	1092	634	155	627	88	59	21	56
2006	1362	1215	750	1109	110	113	104	109
2007	963	874	703	847	78	81	97	85
2008	360	313	418	364	29	29	58	39
2009	480	307	384	390	39	29	53	40
2010	1759	1513	842	1371	142	140	117	133
2011	1762	1513	1184	1486	142	141	164	149
2012	1613	1480	885	1326	130	137	123	130
2013	827	776	658	754	67	72	91	77
2014	3	-60	-59	41	0	-6	-8	5
2015	-13	-143	-522	226	-1	-13	-72	29
2016	1367	1153	196	905	110	107	27	82
2017	1491	831	597	973	120	77	83	93
2018	1348	933	203	828	109	87	28	74
2019	1642	1204	753	1200	132	112	104	116
2020	1007	602	14	541	81	56	2	46
2021	0	0	0	0	0	0	0	0

Historic - Current

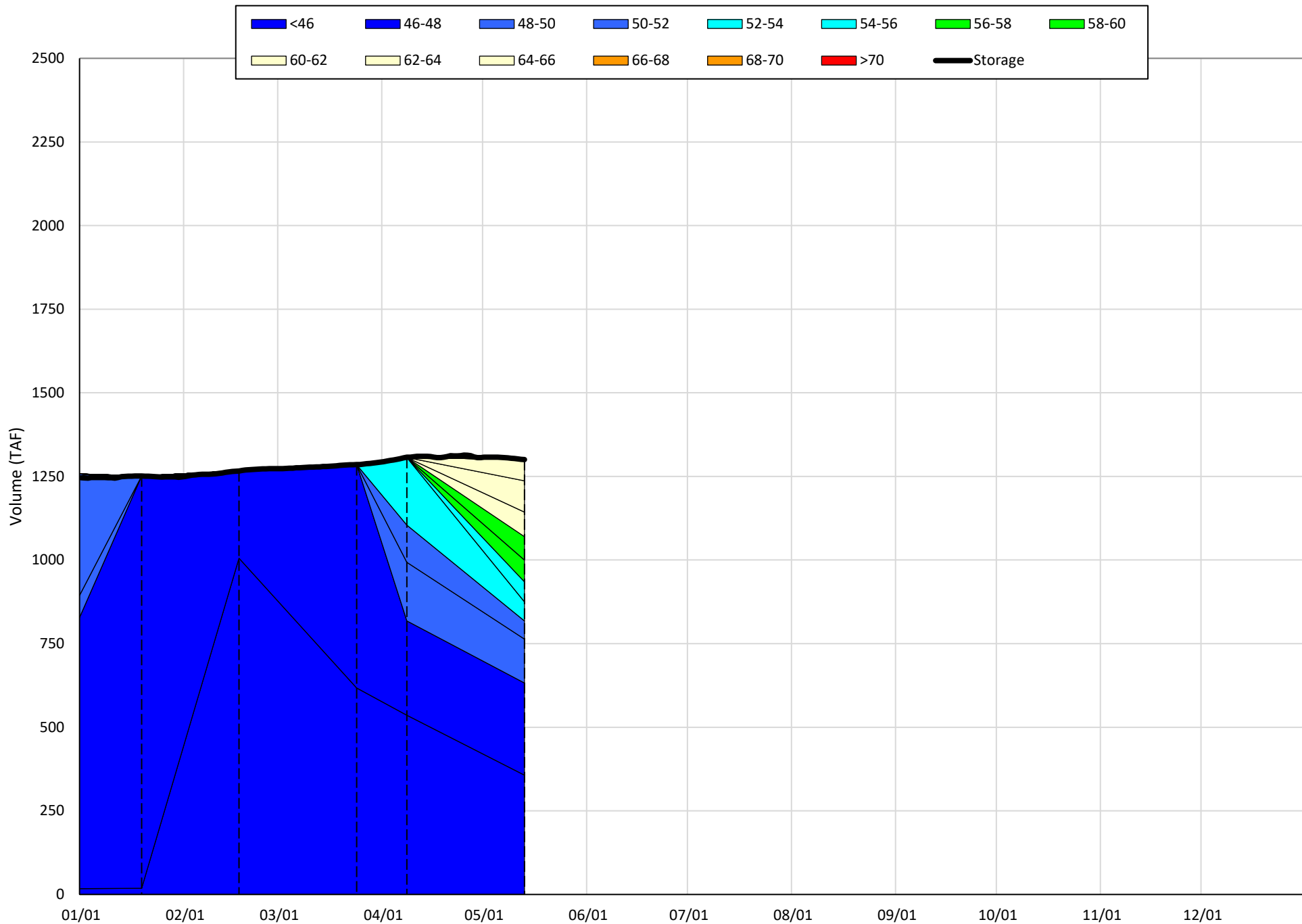
(Historic - Current) / Current

# Trinity Lake Isothermobaths & Cold Water Pool Statistics

## 2021

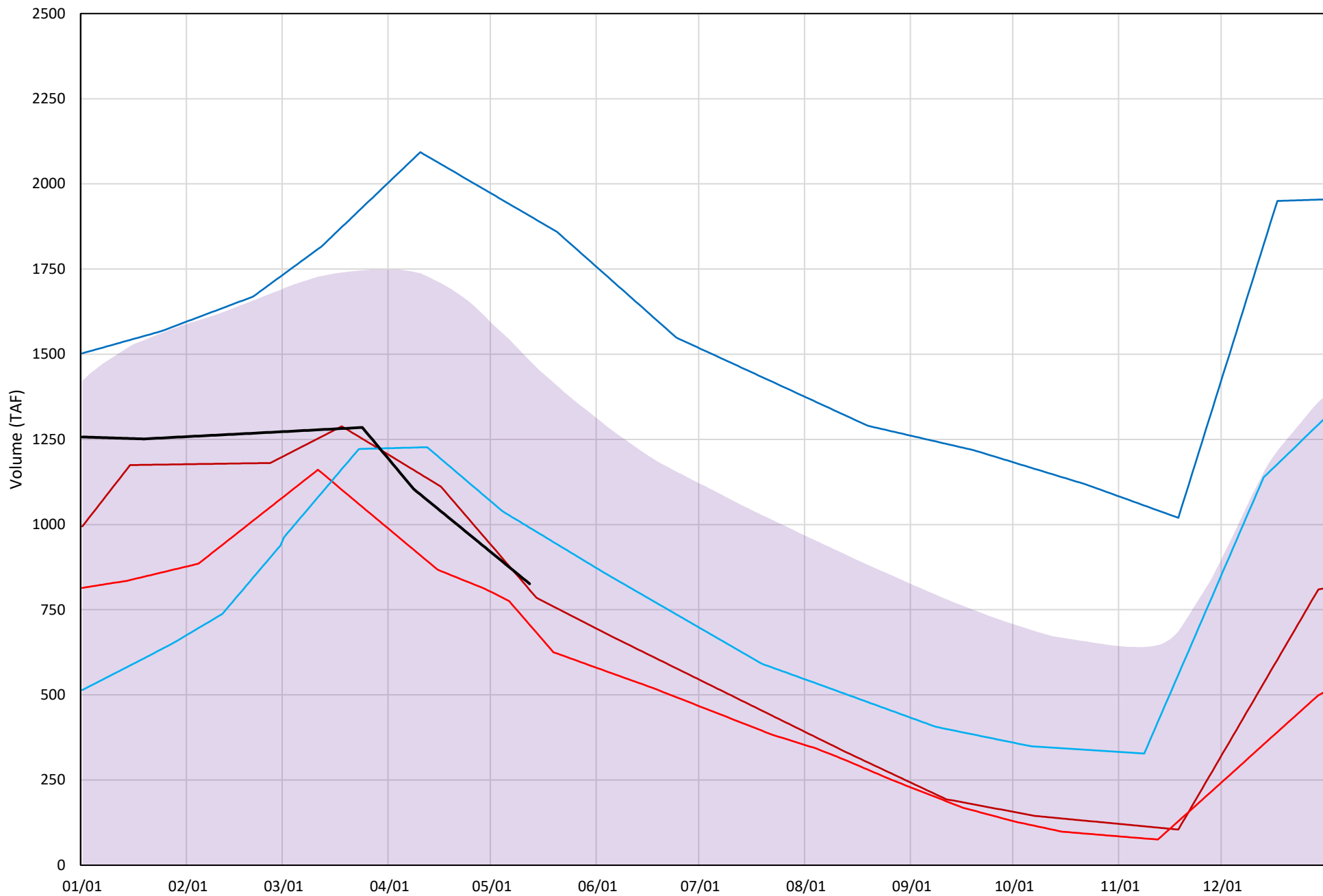
Page	Description
15	- Trinity Lake Isothermobaths Plot
16	- Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$
17	- Trinity Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$
18	- Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$
19	- Trinity Lake Cold Water Pool Volume $\leq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

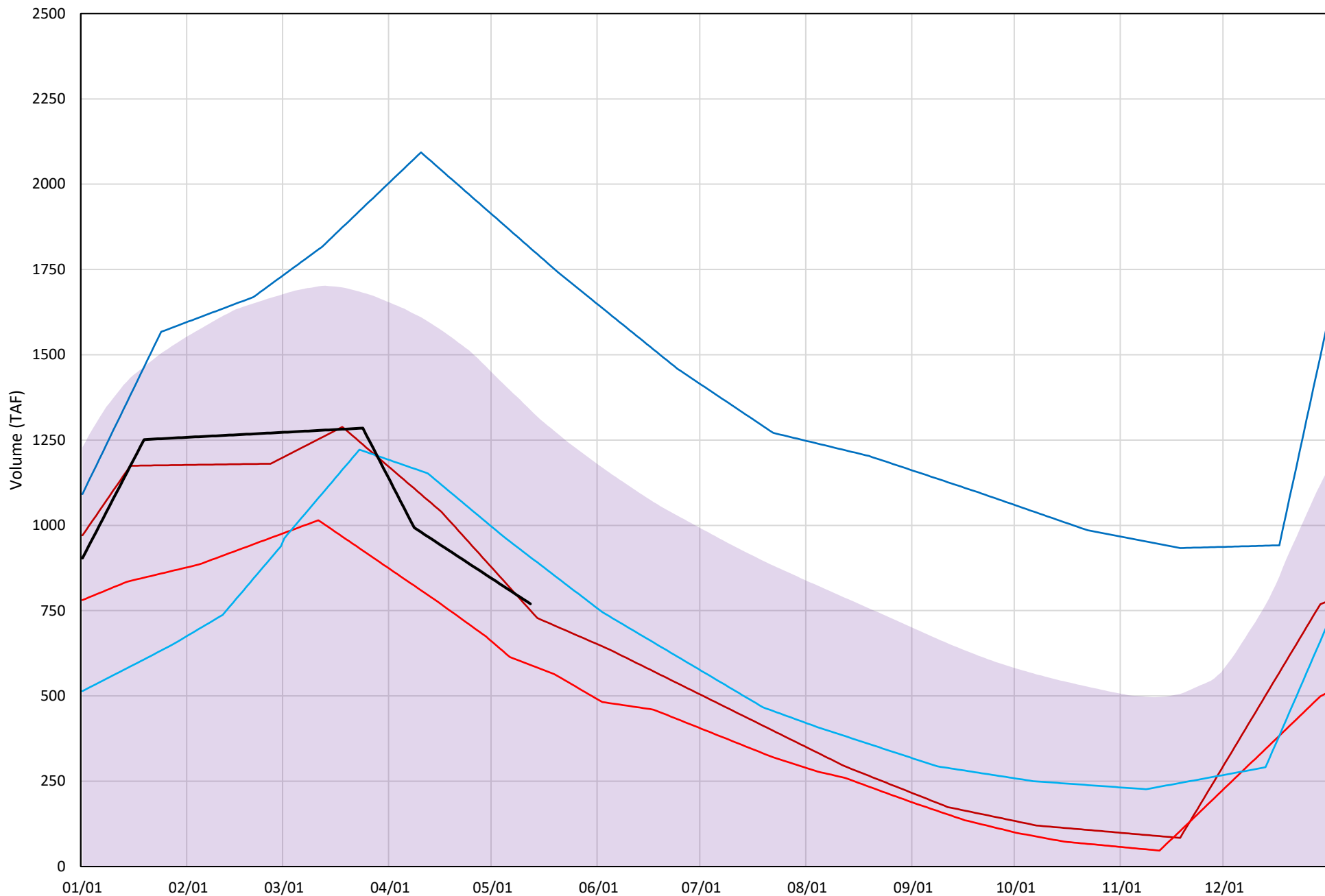
Avg (2000-2020) 2014 2015 2016 2019 2021





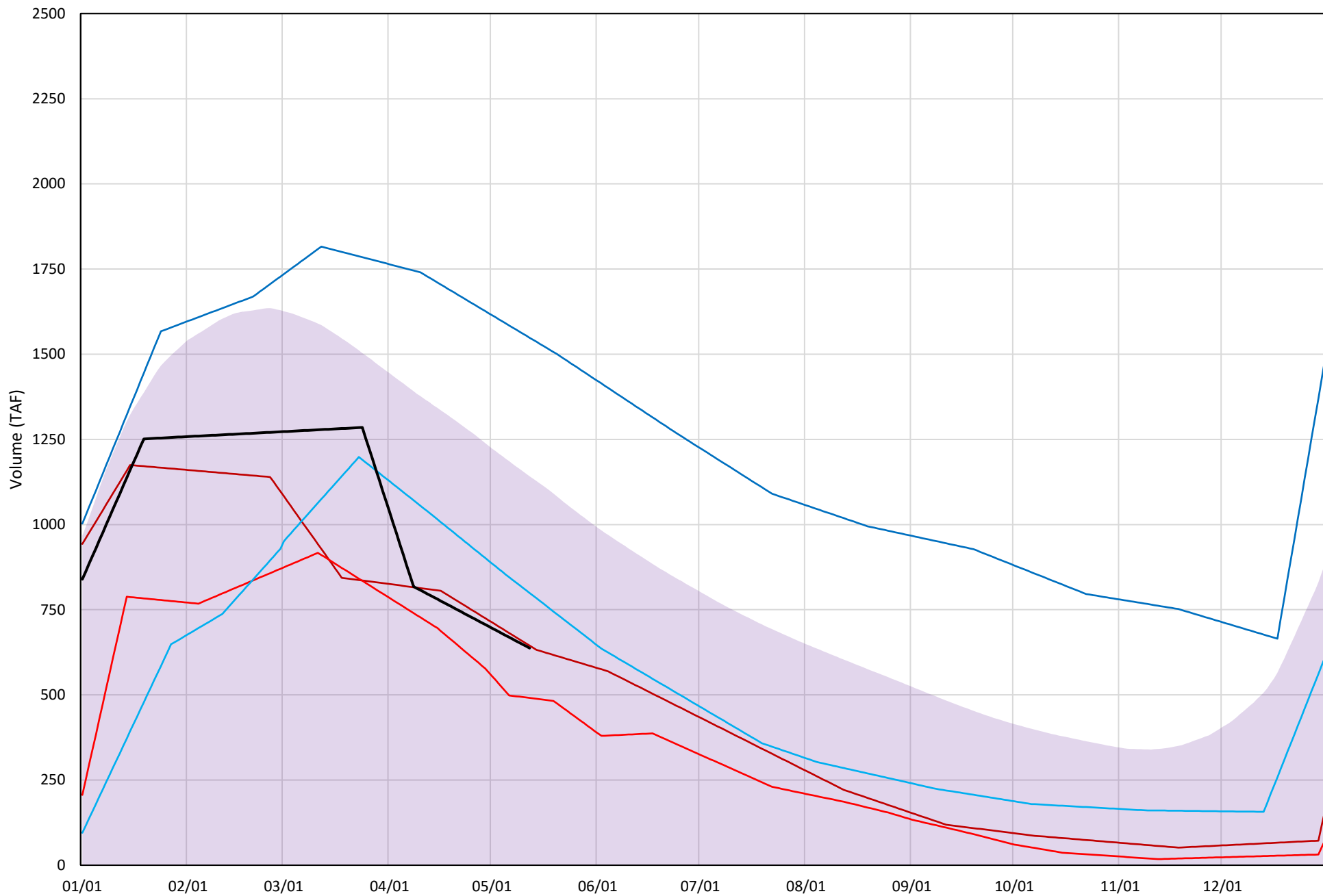
# Trinity Lake Cold Water Pool Volume ≤50°F

Avg (2000-2020) 2014 2015 2016 2019 2021



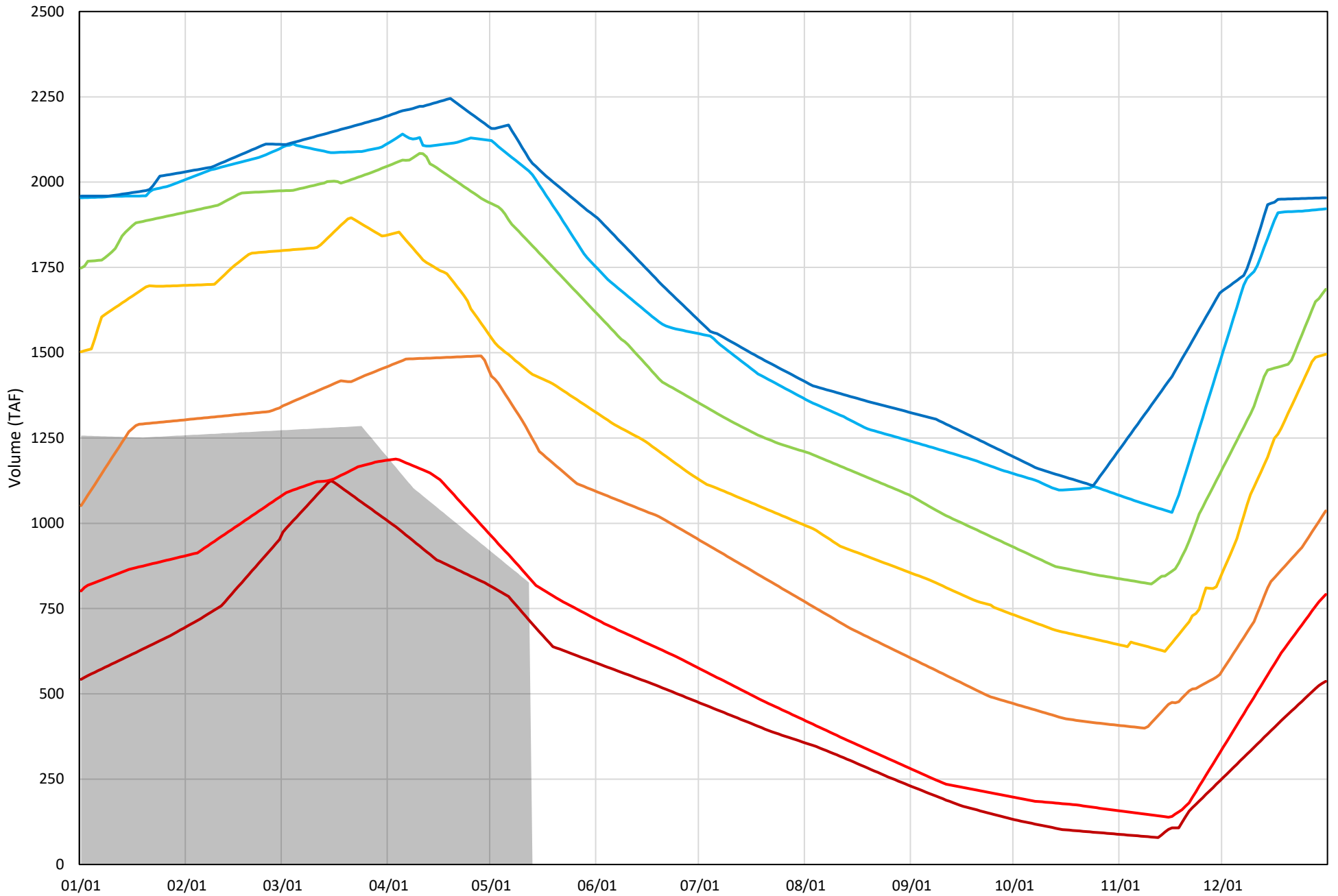
# Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

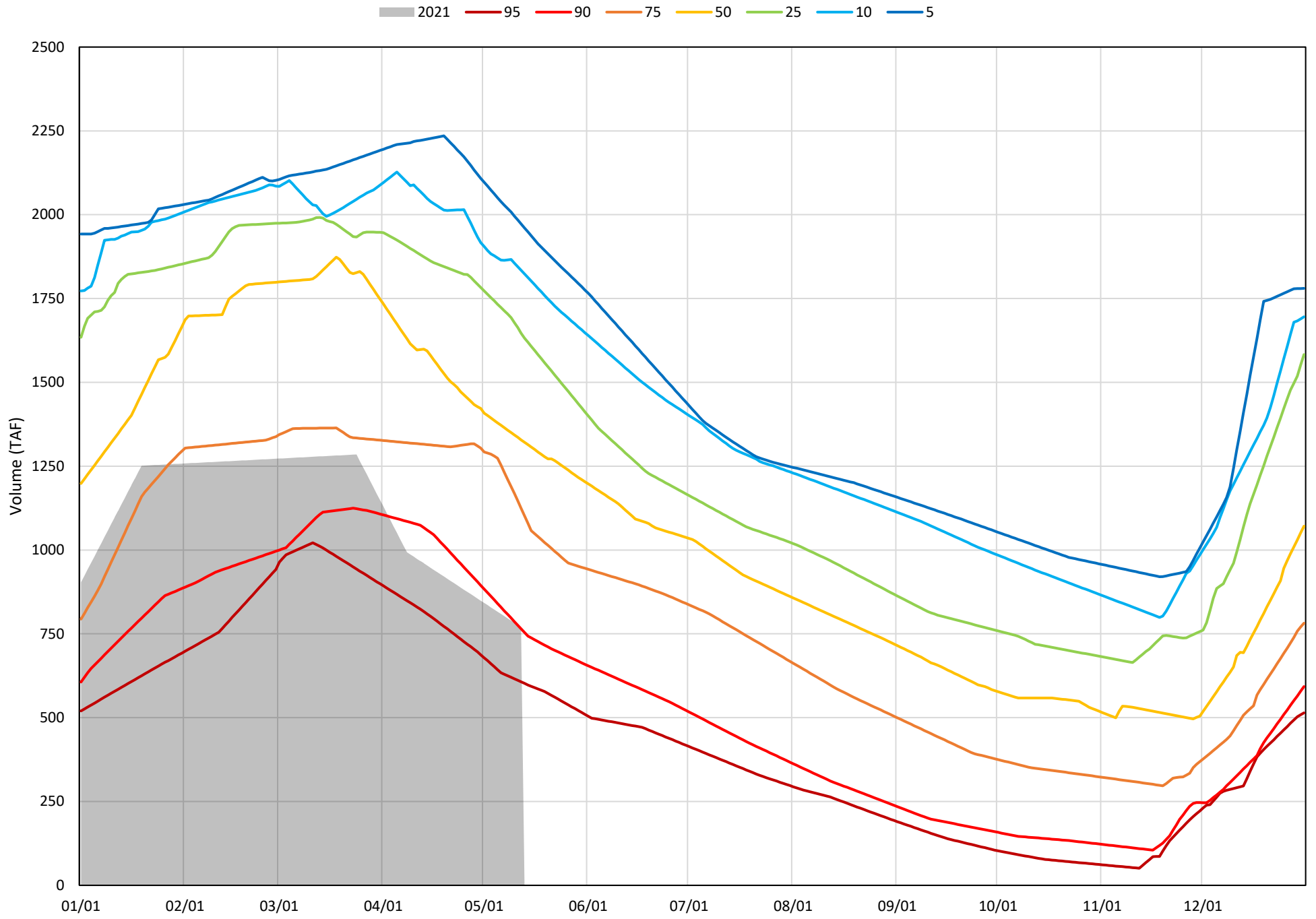


Trinity Lake Cold Water Pool Volume ≤52°F - Percent Exceedances (2000-2020)

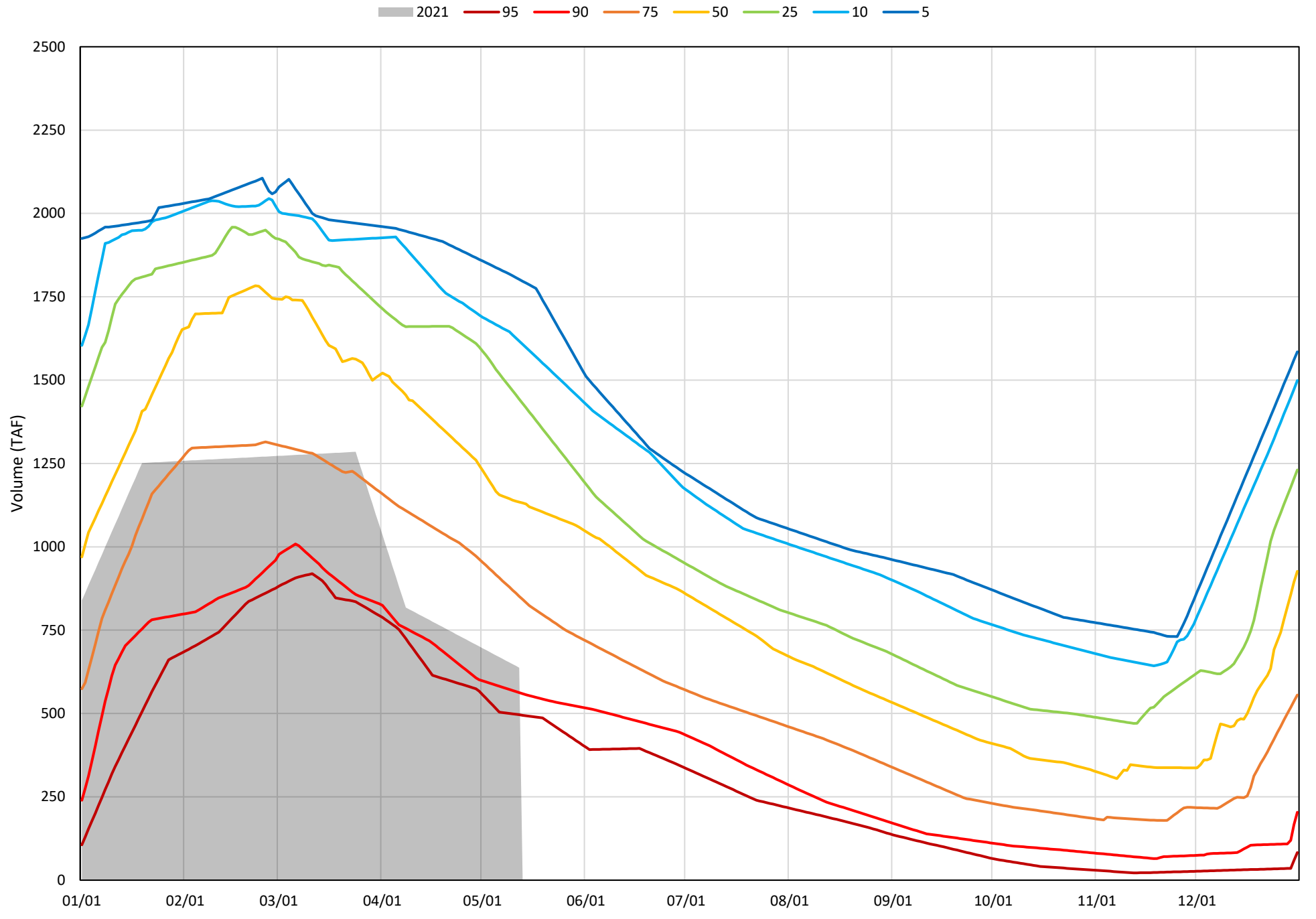
2021 95 90 75 50 25 10 5



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



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)

May-13 2021	Δ TAF				% Δ			
	≤52°	≤50°	≤48°	Abs. Avg.	≤52°	≤50°	≤48°	Abs. Avg.
2000	934	861	762	852	113	112	120	115
2001	615	567	495	559	74	74	78	75
2002	618	559	576	584	75	73	90	79
2003	1243	856	792	964	150	111	124	129
2004	888	750	647	762	108	97	101	102
2005	757	502	276	512	92	65	43	67
2006	1238	1217	1183	1213	150	158	186	165
2007	583	445	458	495	71	58	72	67
2008	379	288	191	286	46	37	30	38
2009	144	51	-95	97	17	7	-15	13
2010	500	420	237	386	61	55	37	51
2011	1004	896	879	927	122	116	138	125
2012	1043	1070	997	1036	126	139	156	141
2013	509	473	408	463	62	61	64	62
2014	-18	-19	7	15	-2	-2	1	2
2015	-120	-179	-146	149	-15	-23	-23	20
2016	165	137	162	155	20	18	25	21
2017	991	893	818	901	120	116	128	121
2018	629	581	545	585	76	75	86	79
2019	1080	1043	911	1011	131	135	143	136
2020	596	530	497	541	72	69	78	73
2021	0	0	0	0	0	0	0	0

Historic - Current

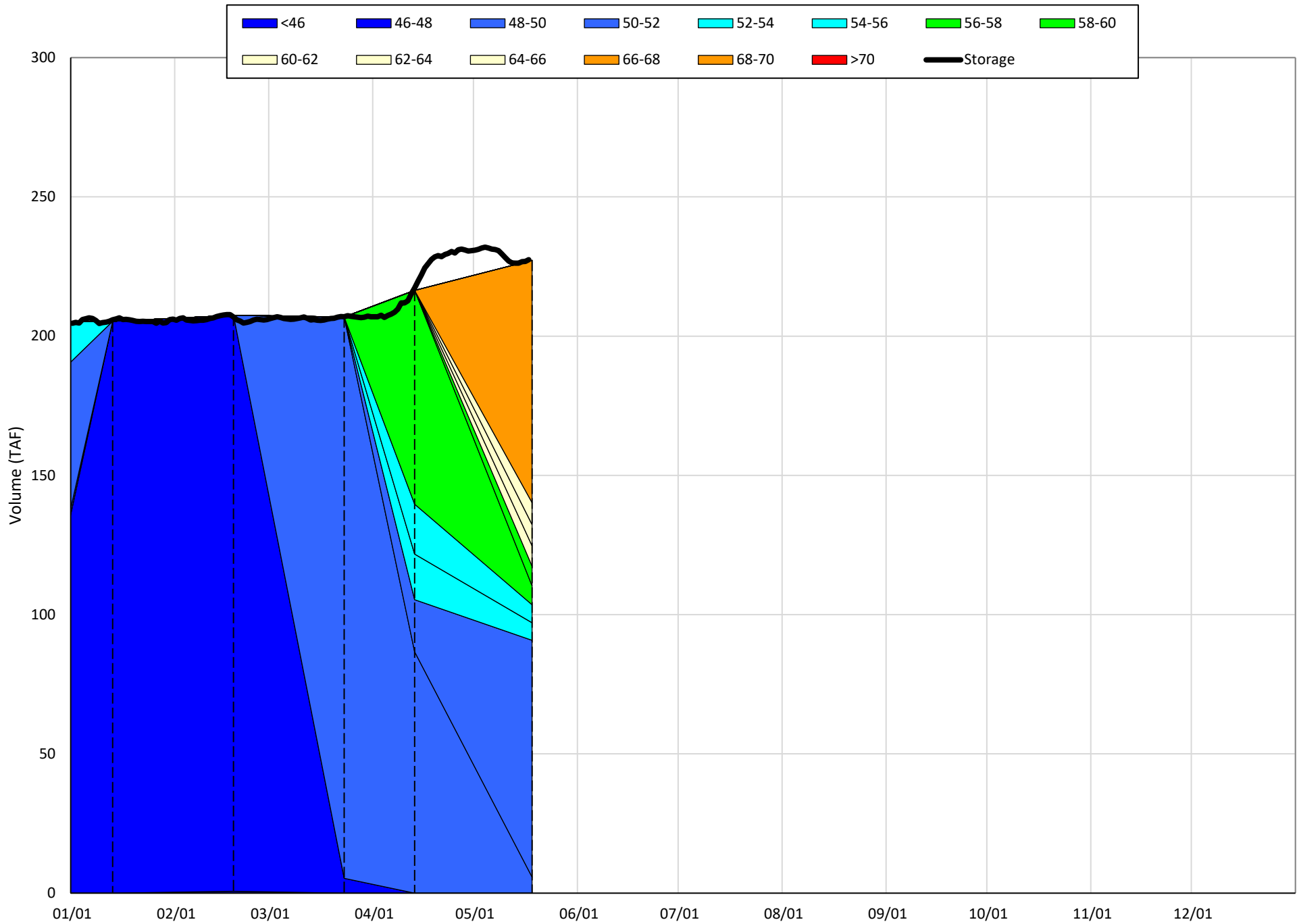
(Historic - Current) / Current

# 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

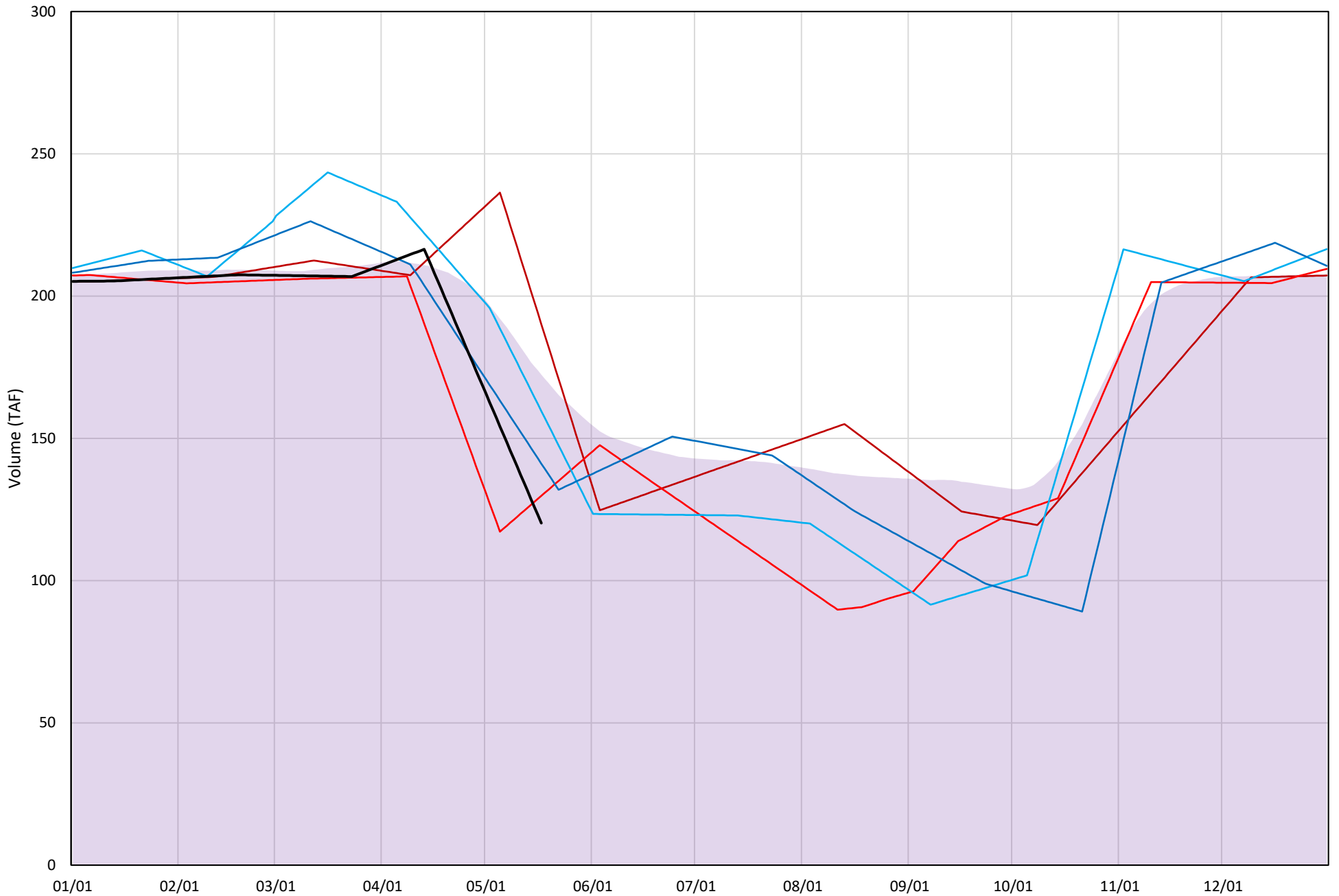
# Whiskeytown Lake Isothermobaths Plot - 2021





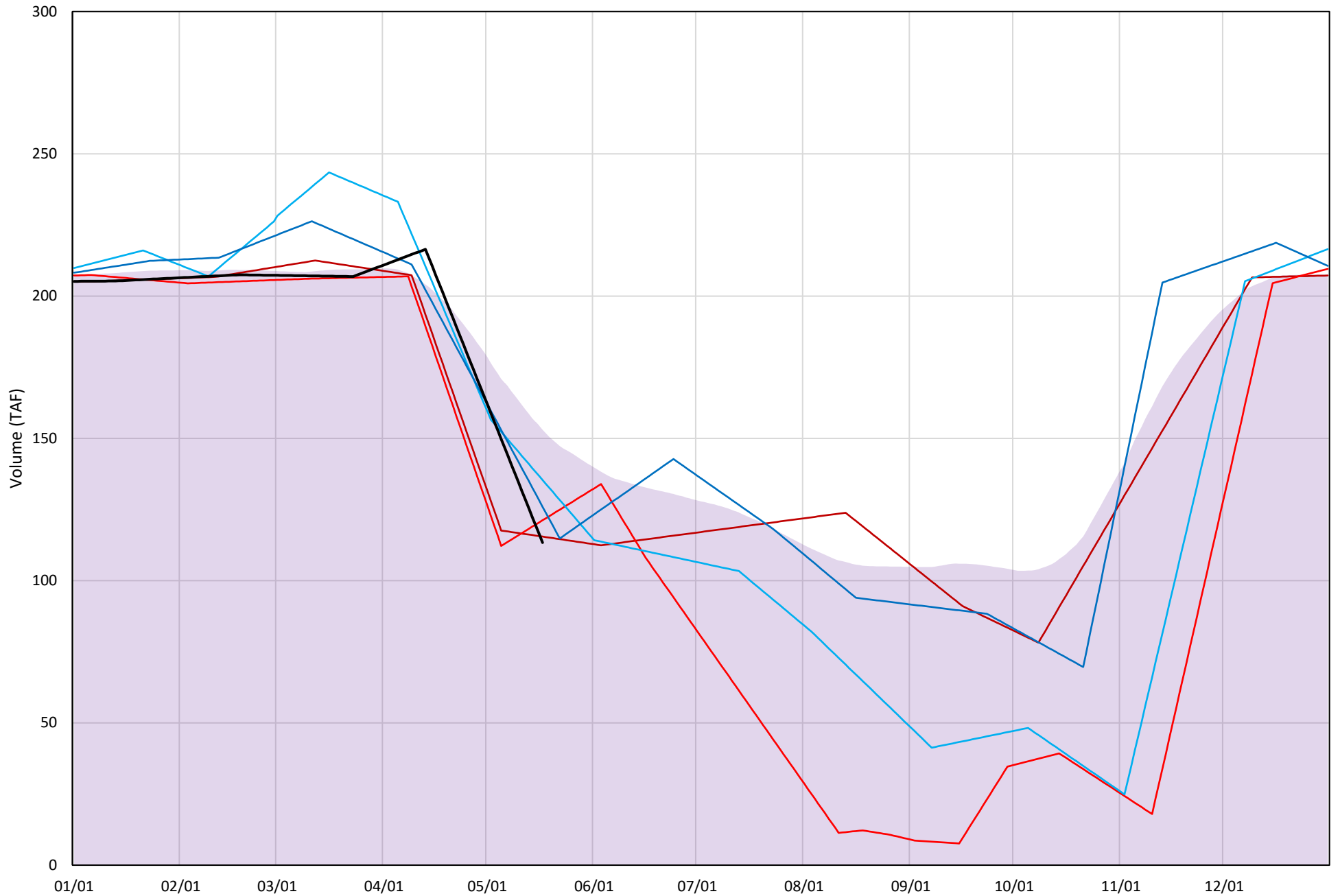
# Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



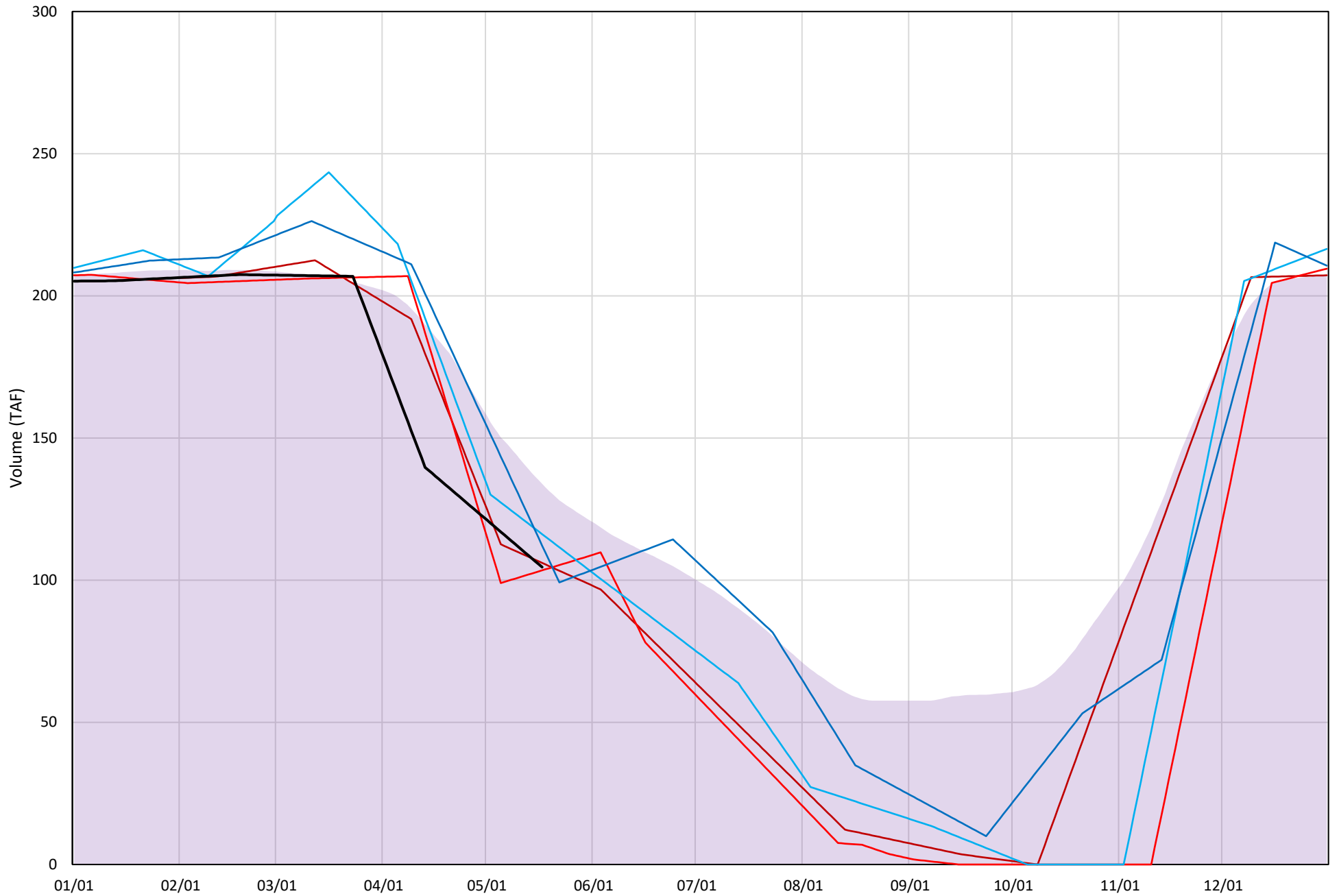
# Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

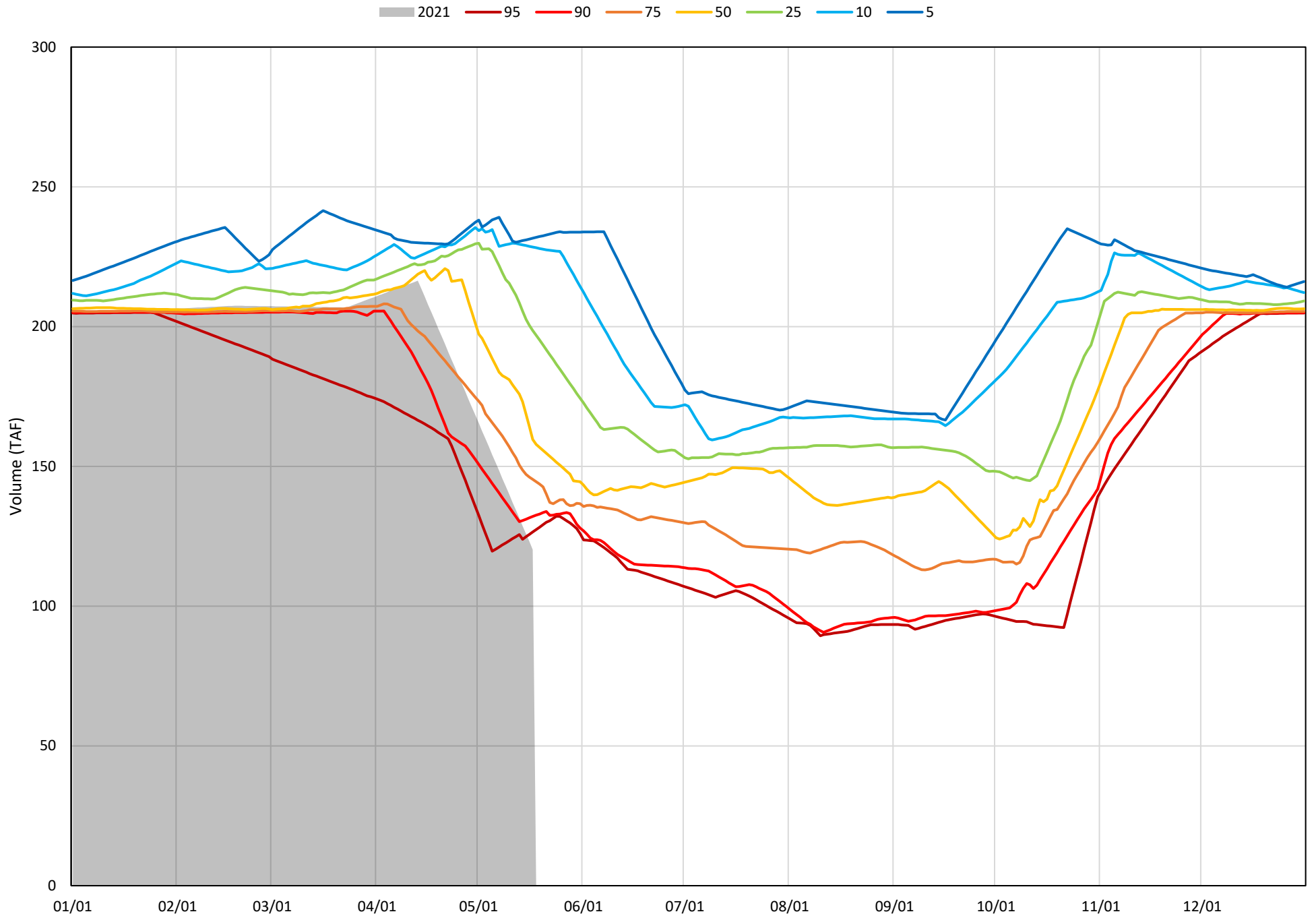


# Whiskeytown Lake Cold Water Pool Volume $\leq 56^{\circ}\text{F}$

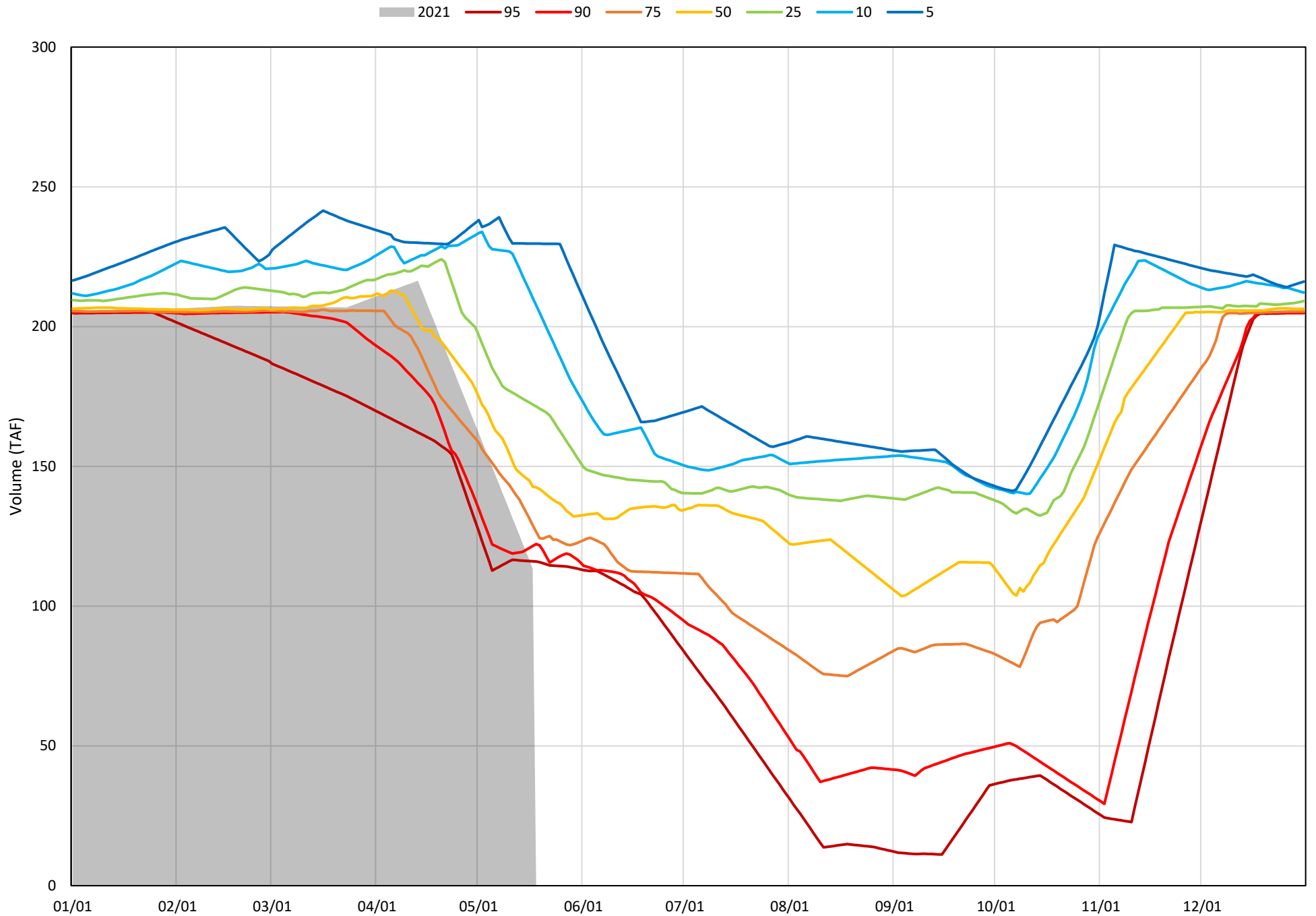
Avg (2000-2020) 2014 2015 2016 2019 2021



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

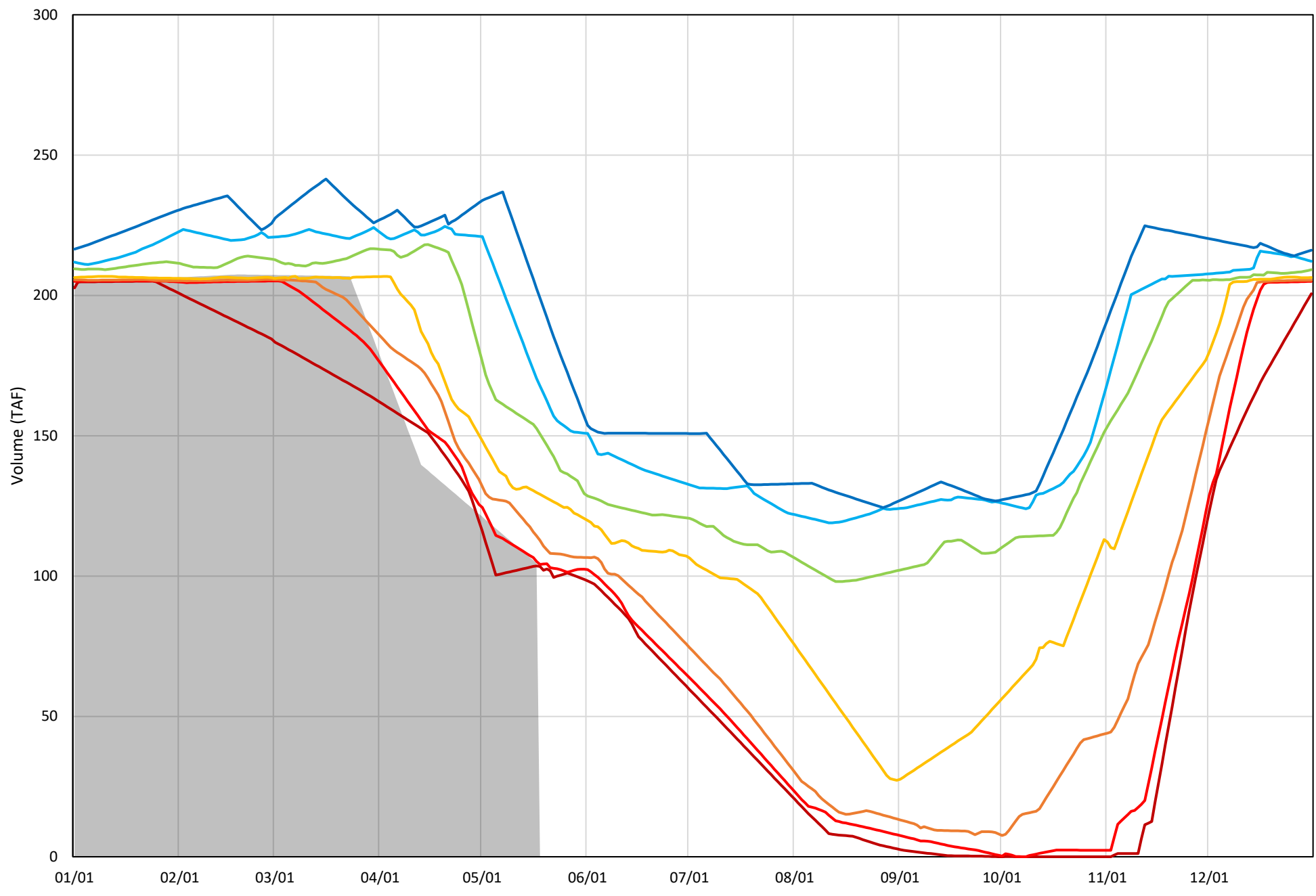


Whiskeytown Lake Cold Water Pool Volume  $\leq 58^{\circ}\text{F}$  - Percent Exceedances (2000-2020)



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)

May-18 2021	Δ TAF				% Δ			
	≤60°	≤58°	≤56°	Abs. Avg.	≤60°	≤58°	≤56°	Abs. Avg.
2000	69	1	-11	27	49	1	-10	20
2001	18	12	-1	10	12	9	-1	8
2002	36	14	12	21	25	11	10	15
2003	74	82	90	82	52	63	77	64
2004	4	13	22	13	3	10	19	11
2005	9	18	25	17	7	14	21	14
2006	52	47	41	47	36	36	36	36
2007	27	24	19	23	19	18	16	18
2008	48	58	58	55	34	45	50	43
2009	2	-2	-3	2	2	-2	-2	2
2010	90	102	40	77	63	78	35	59
2011	89	73	41	68	63	56	35	51
2012	5	11	14	10	3	9	12	8
2013	-16	-7	4	9	-11	-5	4	7
2014	48	-15	-10	24	34	-11	-9	18
2015	-12	-9	-13	11	-9	-7	-11	9
2016	18	5	0	8	12	4	0	6
2017	61	37	18	39	43	28	15	29
2018	17	25	33	25	12	19	28	20
2019	-1	-4	-4	3	-1	-3	-3	2
2020	0	0	0	0	0	0	0	0

}

Historic - Current

}

(Historic - Current) / Current