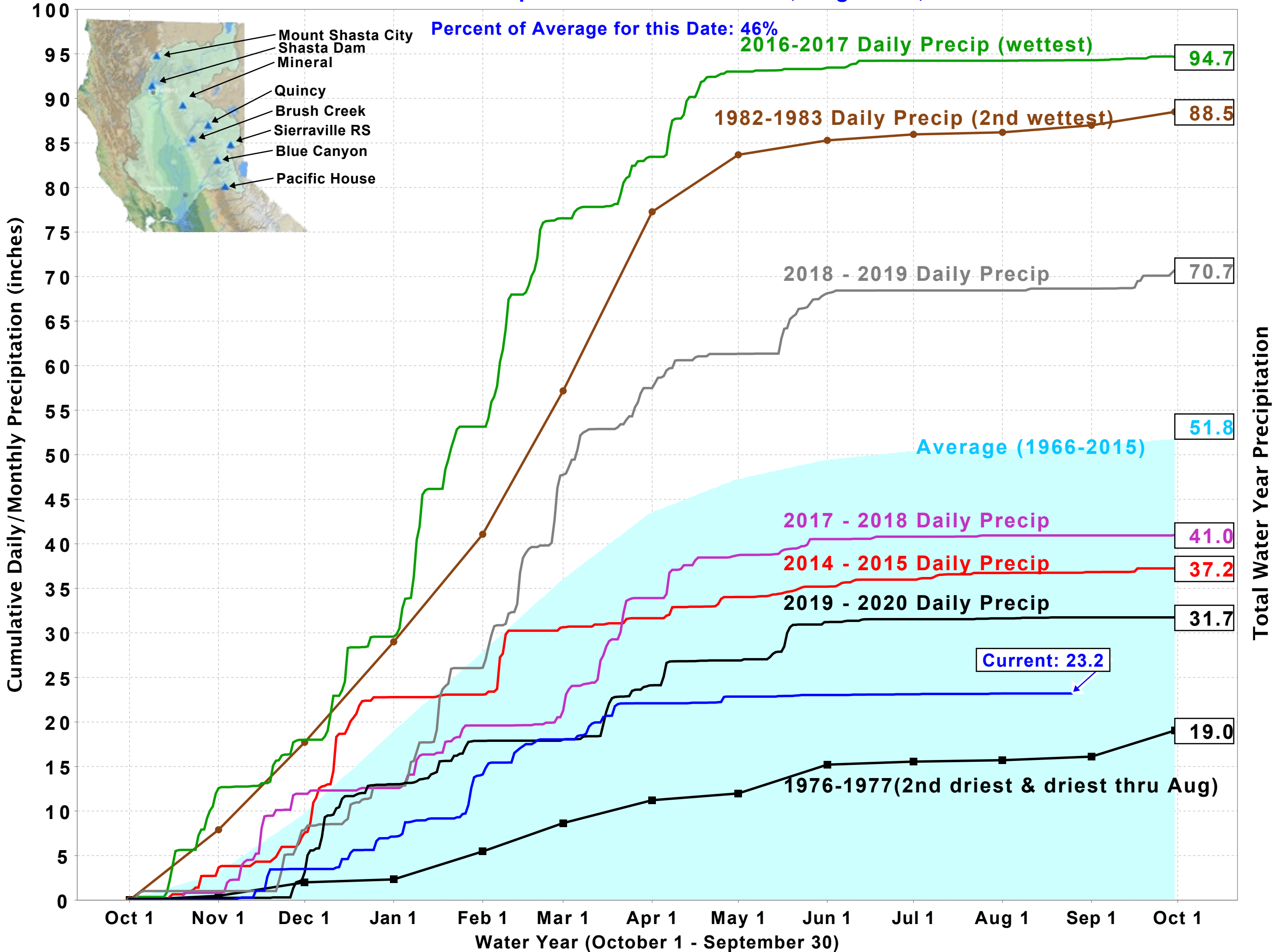


# Northern Sierra Precipitation: 8-Station Index, August 25, 2021



UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

**DAILY CVP WATER SUPPLY REPORT**

AUGUST 24, 2021

RUN DATE: August 25, 2021

**RESERVOIR RELEASES IN CUBIC FEET/SECOND**

RESERVOIR	DAM	WY 2020	WY 2021	15 YR MEDIAN
TRINITY	LEWISTON	473	461	468
SACRAMENTO	KESWICK	8,736	7,281	9,638
FEATHER	OROVILLE (SWP)	2,100	1,250	4,000
AMERICAN	NIMBUS	2,520	786	2,311
STANISLAUS	GOODWIN	203	354	232
SAN JOAQUIN	FRIANT	434	260	350

**STORAGE IN MAJOR RESERVOIRS IN THOUSANDS OF ACRE-FEET**

RESERVOIR	CAPACITY	15 YR AVG	WY 2020	WY 2021	% OF 15 YR AVG
TRINITY	2,448	1,460	1,527	878	60
SHASTA	4,552	2,564	2,403	1,266	49
FOLSOM	977	496	490	232	47
NEW MELONES	2,420	1,324	1,586	923	70
FED. SAN LUIS	966	229	222	-22	-10
TOTAL NORTH CVP	11,363	6,073	6,228	3,277	54
MILLERTON	520	294	224	230	78
OROVILLE (SWP)	3,538	1,797	1,717	805	45

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

RESERVOIR	CURRENT WY 2021	WY 1977	WY 1983	15 YR AVG	% OF 15 YR AVG
TRINITY	335	205	2,843	1,016	33
SHASTA	2,274	2,346	10,440	4,507	50
FOLSOM	792	326	6,356	2,305	34
NEW MELONES	331	----	2,680	914	36
MILLERTON	551	317	4,457	1,392	40

**ACCUMULATED PRECIPITATION FOR WATER YEAR TO DATE IN INCHES**

RESERVOIR	CURRENT WY 2021	WY 1977	WY 1983	AVG (N YRS)	% OF AVG	LAST 24 HRS
TRINITY AT FISH HATCHERY	16.21	12.12	56.20	31.25 ( 59)	52	0.00
SACRAMENTO AT SHASTA DAM	23.66	17.42	114.16	60.76 ( 64)	39	0.00
AMERICAN AT BLUE CANYON	31.62	15.64	103.88	65.29 ( 46)	48	0.00
STANISLAUS AT NEW MELONES	16.80	----	45.73	27.10 ( 43)	62	0.00
SAN JOAQUIN AT HUNTINGTON LK	17.68	17.50	83.00	40.94 ( 46)	43	0.00

DATE	MDWT TCD <sup>1</sup>	MDWT SHD	MDWT SPP <sup>1</sup>	MDWT KWK	MDWT SAC <sup>2</sup>	MDWT CCR	MDWT BSF	MDWT JLF	MDWT BND	MDWT RDB	MDWT IGO	MDWT LWS	MDWT DGC <sup>3</sup>	MDWT NFH	MDR Shasta Generation	MDR Spring Creek P.P.	MDR Keswick Total	MDAT RDD	MDAT BSF	MDAT RDB
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
08/01	53.1	52.1	- <sup>C</sup>	54.9	55.7	56.5	-B	59.5	60.6	62.2	58.6	51.1	- <sup>C</sup>	64.7	6400	1966	9052	88.0	-	83.0
08/02	53.5	52.2	- <sup>C</sup>	54.8	55.4	56.1	-B	59.2	60.2	61.8	58.1	51.1	- <sup>C</sup>	61.6	6832	1960	9054	84.0	-	77.2
08/03	54.1	52.8 <sup>A</sup>	- <sup>C</sup>	54.9	55.5	56.1	57.5 <sup>A</sup>	58.7	59.7	61.0	57.7	50.8	- <sup>C</sup>	60.5	6848	1950	9043	82.0	78.3	78.4
08/04	54.1	52.7	- <sup>C</sup>	55.2	55.7	56.4	57.8	59.0	59.8	61.2	57.9	50.6	- <sup>C</sup>	59.7	5921	2070	9040	83.0	77.4	79.0
08/05	54.0	52.8	- <sup>C</sup>	55.4	55.7	56.3	57.7	58.9	59.8	61.1	56.8	50.0	- <sup>C</sup>	59.7	5819	1940	8793	75.5	72.3	72.3
08/06	53 <sup>X</sup>	52.4	- <sup>C</sup>	55.1	55.7	56.4	57.5	58.5	59.3	60.3	57.4	50.6	- <sup>C</sup>	58.8	6625	1959	8785	84.5	76.4	79.2
08/07	53.3	52.3 <sup>A</sup>	- <sup>C</sup>	54.7	55.2	55.9	57.2	58.5	59.4	60.6	56.8	50.0	- <sup>C</sup>	58.2	6572	1807	8747	81.0	75.4	75.3
08/08	54.0	53.3	- <sup>C</sup>	54.2	54.7	55.3	56.5	57.8	58.8	60.2	57.0	49.9	- <sup>C</sup>	58.3	6666	1954	8744	82.0	76.3	77.0
08/09	53.9	53.3	- <sup>C</sup>	54.9	55.4	56.1	57.3	58.3	59.0	60.2	57.8	50.2	- <sup>C</sup>	61.1	6584	1879	8752	84.5	78.8	79.2
08/10	53.6	53.0	- <sup>C</sup>	55.2	55.6	56.3	57.6	58.9	59.8	61.1	57.4	50.2	- <sup>C</sup>	62.9	5970	1956	8542	86.0	80.7	81.5
08/11	54.2	53.4	- <sup>C</sup>	55.1	55.6	56.3	57.5	58.6	59.5	60.7	57.5	50.4	- <sup>C</sup>	62.6	6103	1878	8555	87.0	79.8	83.3
08/12	54.5 <sup>X</sup>	53.6	- <sup>C</sup>	55.0	55.5	56.1	57.3	58.5	59.4	60.5	57.1	50.3	- <sup>C</sup>	60.7	5693	1959	8546	88.5	81.1	80.6
08/13	53.2 <sup>X</sup>	52.6 <sup>A</sup>	- <sup>C</sup>	55.2	55.5	56.1	57.2	58.4	59.4	60.7	56.5	50.0	- <sup>C</sup>	58.2	6127	2055	8553	83.5	78.3	80.2
08/14	52.7	51.8	- <sup>C</sup>	54.7	55.4	56.2	57.6	58.7	59.5	60.6	57.2	49.9	- <sup>C</sup>	57.9	6068	2020	8550	89.0	83.8	85.0
08/15	52.9	52.1 <sup>A</sup>	- <sup>C</sup>	54.1	54.7	55.4	56.7	58.2	59.3	61.0	57.1	49.7	- <sup>C</sup>	58.6	6160	1943	8550	94.5	85.9	85.8
08/17	53.5	52.7 <sup>A</sup>	- <sup>C</sup>	54.0	54.4	55.0	55.9	57.0	57.8	58.9	56.7	49.7	- <sup>C</sup>	59.0	6126	1936	8523	84.0	79.5	76.4
08/18	53.8	53.1 <sup>A</sup>	- <sup>C</sup>	54.4	54.9	55.5	56.5	57.4	58.1	58.6	56.7	50.0	- <sup>C</sup>	58.5	5755	1913	8270	81.5	79.0	80.1
08/19	53.7	53.0	- <sup>C</sup>	54.6	55.2	55.9	57.0	58.1	59.0	60.0	57.0	50.4	- <sup>C</sup>	58.3	5782	1874	8002	84.5	79.5	83.2
08/20	53.9	53.3	- <sup>C</sup>	54.5	55.1	55.9	57.1	58.1	59.0	60.0	57.0	50.5	- <sup>C</sup>	58.0	5690	1934	7962	79.5	72.8	72.3
08/21	54.2	53.5	- <sup>C</sup>	54.8	55.2	55.9	57.1	58.1	59.0	60.0	56.8	50.3	- <sup>C</sup>	58.1	5377	1913	7767	74.5	69.3	69.1
08/22	54.3	53.7	- <sup>C</sup>	54.8	55.4	56.1	57.2	58.2	59.1	60.1	56.7	50.1	- <sup>C</sup>	56.9	5474	1963	7530	74.5	70.1	70.2
08/23	54.5	54.0	- <sup>C</sup>	55.0	55.6	56.3	57.5	58.5	59.3	60.3	56.9	50.4	- <sup>C</sup>	58.0	5164	1912	7524	75.5	70.3	71.2
08/24	54.6	54.3	- <sup>C</sup>	55.2	55.8	56.5	57.7	58.8	59.7	60.7	56.7	50.6	- <sup>C</sup>	60.3	5037	1784	7281	74.5	69.8	71.3
08/25																				
08/26																				
08/27																				
08/28																				
08/29																				
08/30																				
08/31																				
Aug	53.7	52.9	-	54.8	55.3	56.0	57.2	58.4	59.3	60.5	57.2	50.3	-	59.6	6062	1941	8446	82.9	77.1	78.0

**Legend**

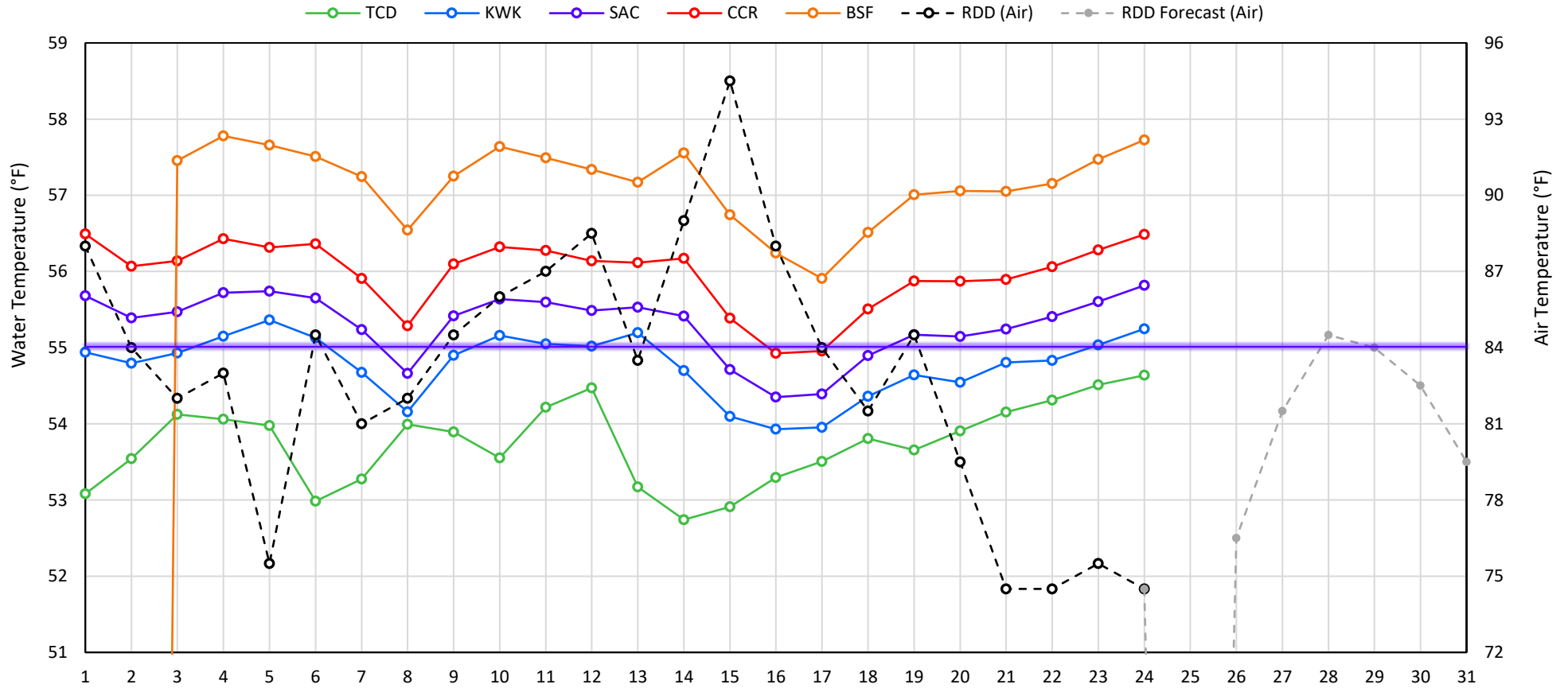
- A = 1-9 hours of data missing (Average includes estimations)
- B = 10 or more hours of data missing (Average not calculated)
- C = Station out of service
- D = Record high air temperature
- E = Record low air temperature
- MDWT = Mean Daily Water Temperature (Fahrenheit)
- MDR = Mean Daily Release (CFS)
- MDAT = Mean Daily Air Temperatures (Fahrenheit)

**Notes**

- <sup>1</sup> Temperatures are weighted averages based on individual penstock flow and temperature
- <sup>X</sup> 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)
- <sup>3</sup> Data is currently being collected locally and periodically downloaded. Once downloaded and certified by USGS, missing data will be added.

Total CFS	145489	46583	202715
Total AF	288571	92395	402077

## Mean Daily Temperatures



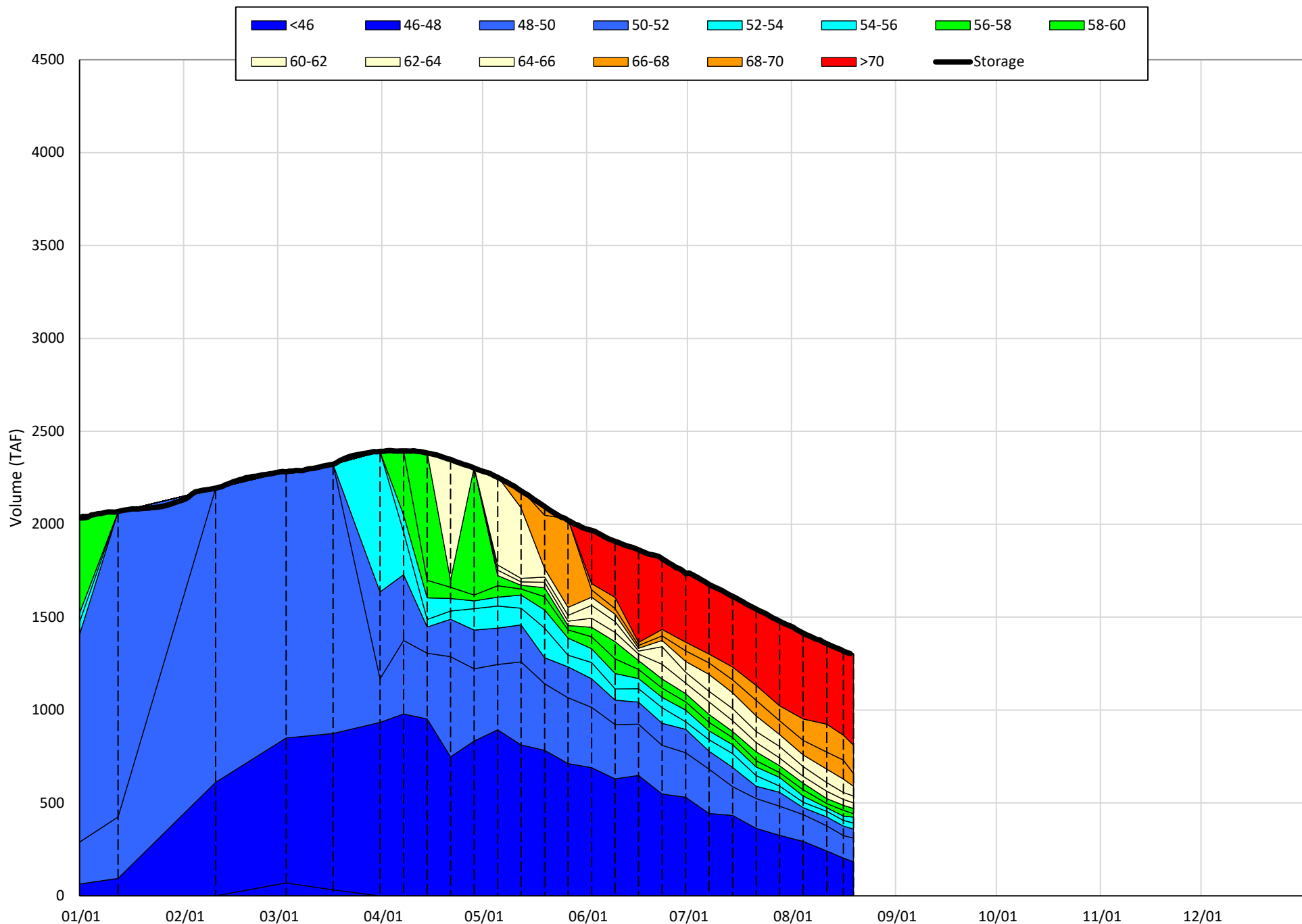
Station Details			
Code	Body of Water	Location <sup>1</sup>	CDEC Link
TCD	N/A	Shasta Power Plant	N/A
SHD	Sacramento River	0.3 miles downstream of Shasta Power Plant	<a href="#">Click Here</a>
SPP	N/A	Spring Creek Power Plant	N/A
KWK	Sacramento River	0.8 miles downstream of Keswick Dam	<a href="#">Click 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	06/15/2021
<b>Sacramento</b>	<b>SAC</b>	<b>55</b>	<b>06/15/2021</b>	<b>TBD</b>
Trinity	DGC	56	09/15/2021	10/01/2021
Trinity	NFH	56	10/01/2021	12/31/2021

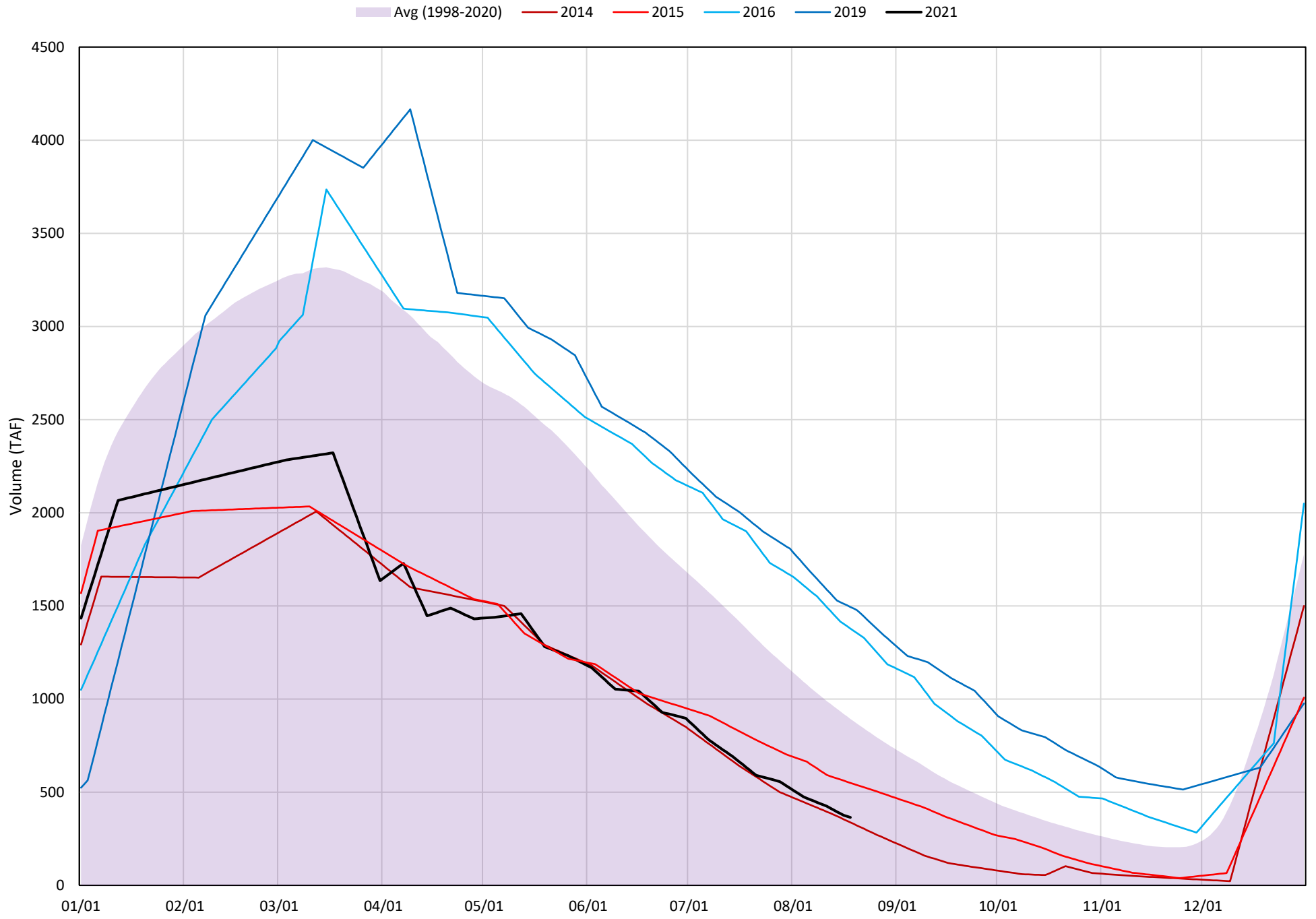
### Notes

<sup>1</sup> Distances are approximate

Shasta Lake Isothermobaths Plot - 2021

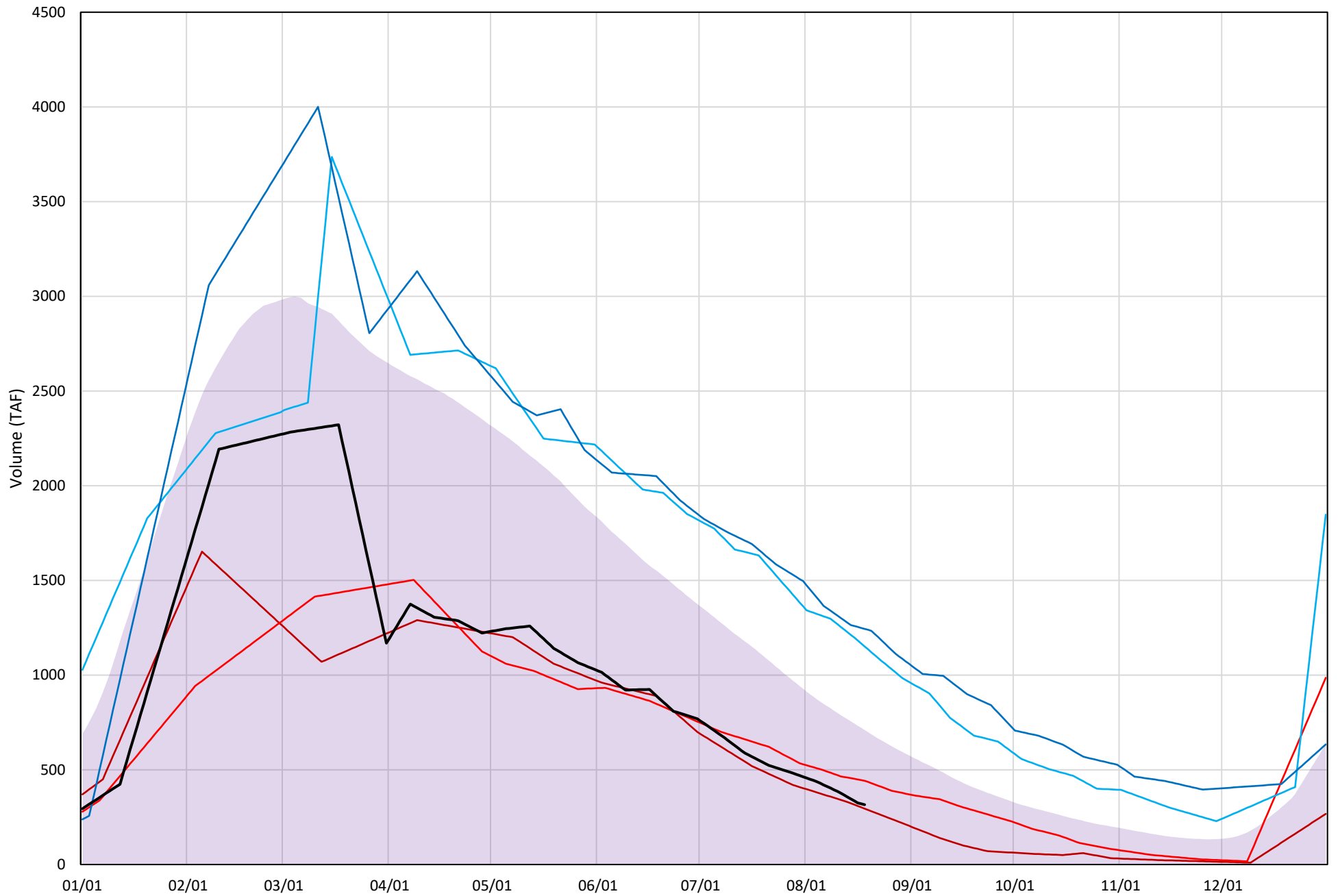


# Shasta Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$



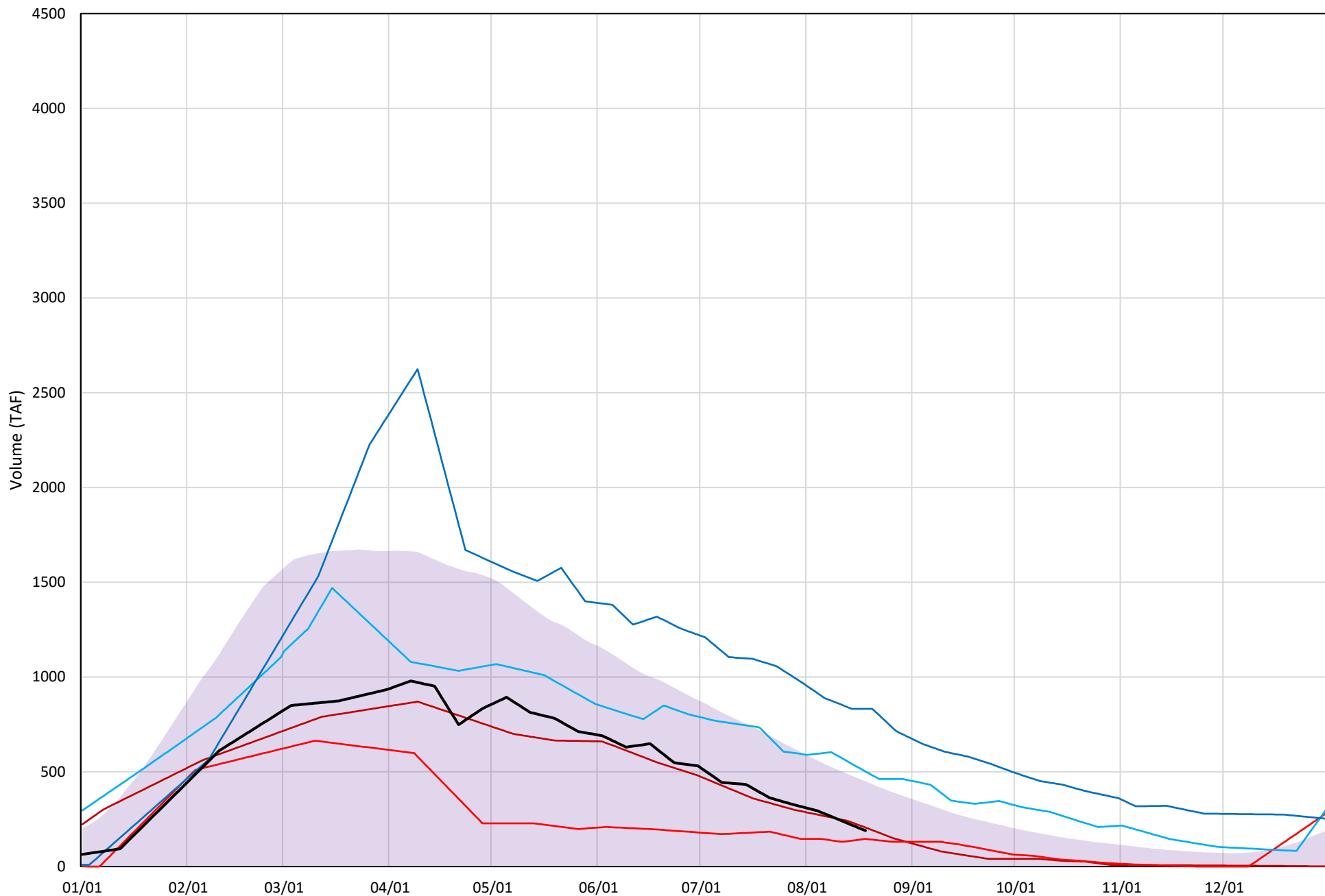
# Shasta Lake Cold Water Pool Volume $\leq 50^{\circ}\text{F}$

Avg (1998-2020) 2014 2015 2016 2019 2021



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

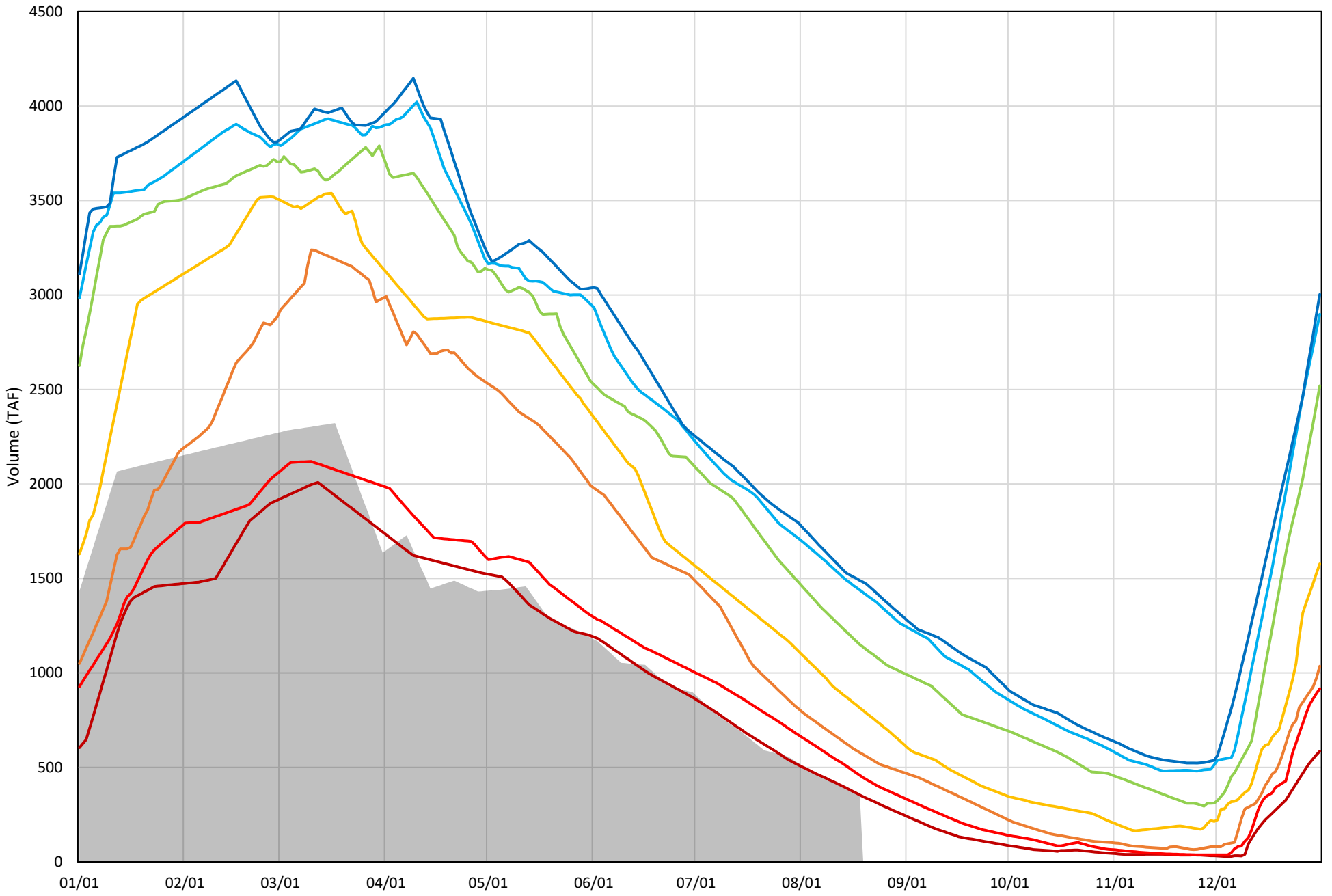
Avg (1998-2020) 2014 2015 2016 2019 2021





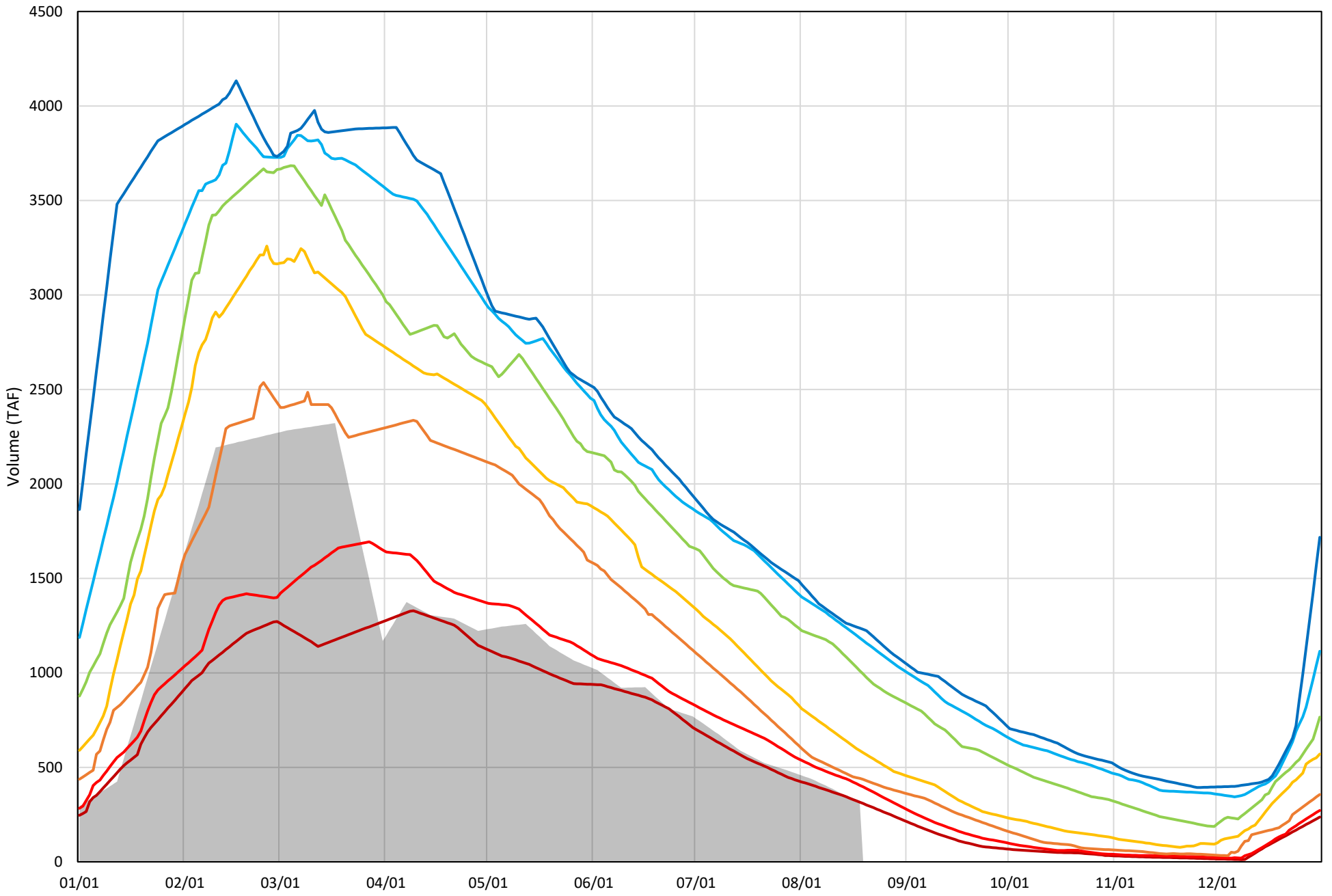
Shasta Lake Cold Water Pool Volume  $\leq 52^{\circ}\text{F}$  - Percent Exceedances (1998-2020)

2021 95 90 75 50 25 10 5



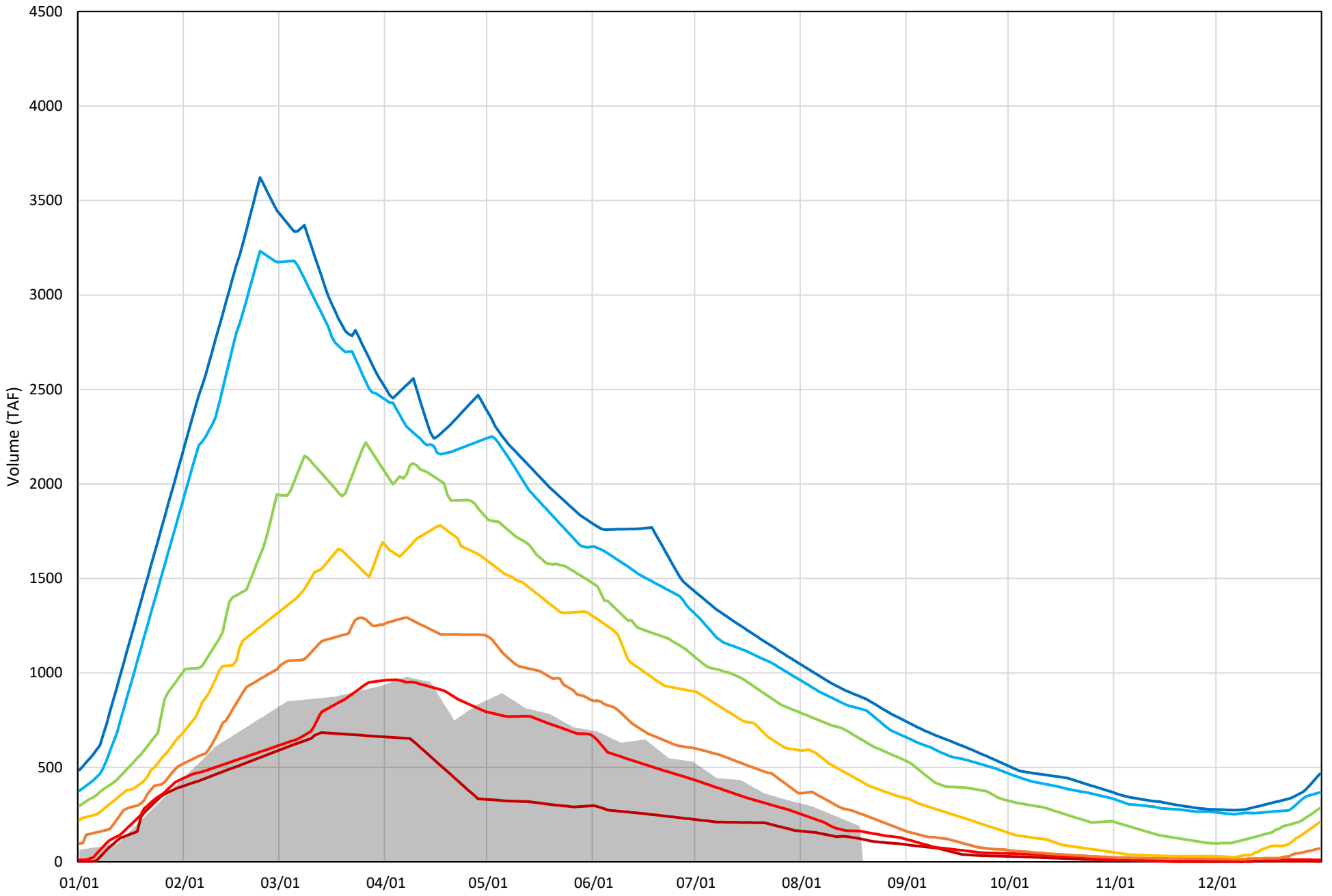
Shasta Lake Cold Water Pool Volume  $\leq 50^{\circ}\text{F}$  - Percent Exceedances (1998-2020)

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)

Aug-19 2021	Δ TAF				% Δ			
	≤52°	≤50°	≤48°	Abs. Avg.	≤52°	≤50°	≤48°	Abs. Avg.
1998	450	174	-2	209	123	55	-1	60
1999	786	674	588	683	216	214	310	246
2000	352	178	40	190	97	56	21	58
2001	278	226	240	248	76	72	126	91
2002	582	484	370	479	160	153	195	169
2003	485	121	-73	226	133	38	-38	70
2004	146	101	90	113	40	32	47	40
2005	214	116	66	132	59	37	35	43
2006	676	473	324	491	185	150	170	169
2007	312	273	282	289	86	87	149	107
2008	57	82	165	102	16	26	87	43
2009	188	145	180	171	52	46	95	64
2010	1023	776	496	765	281	246	261	262
2011	1107	892	696	898	303	283	366	318
2012	785	696	463	648	215	221	243	226
2013	353	298	280	311	97	95	147	113
2014	-27	-20	15	21	-7	-6	8	7
2015	185	127	-44	119	51	40	-23	38
2016	1014	836	312	720	278	265	164	236
2017	1000	742	520	754	274	235	274	261
2018	683	508	219	470	187	161	115	154
2019	1130	928	642	900	310	294	338	314
2020	385	245	102	244	106	78	53	79
2021	0	0	0	0	0	0	0	0

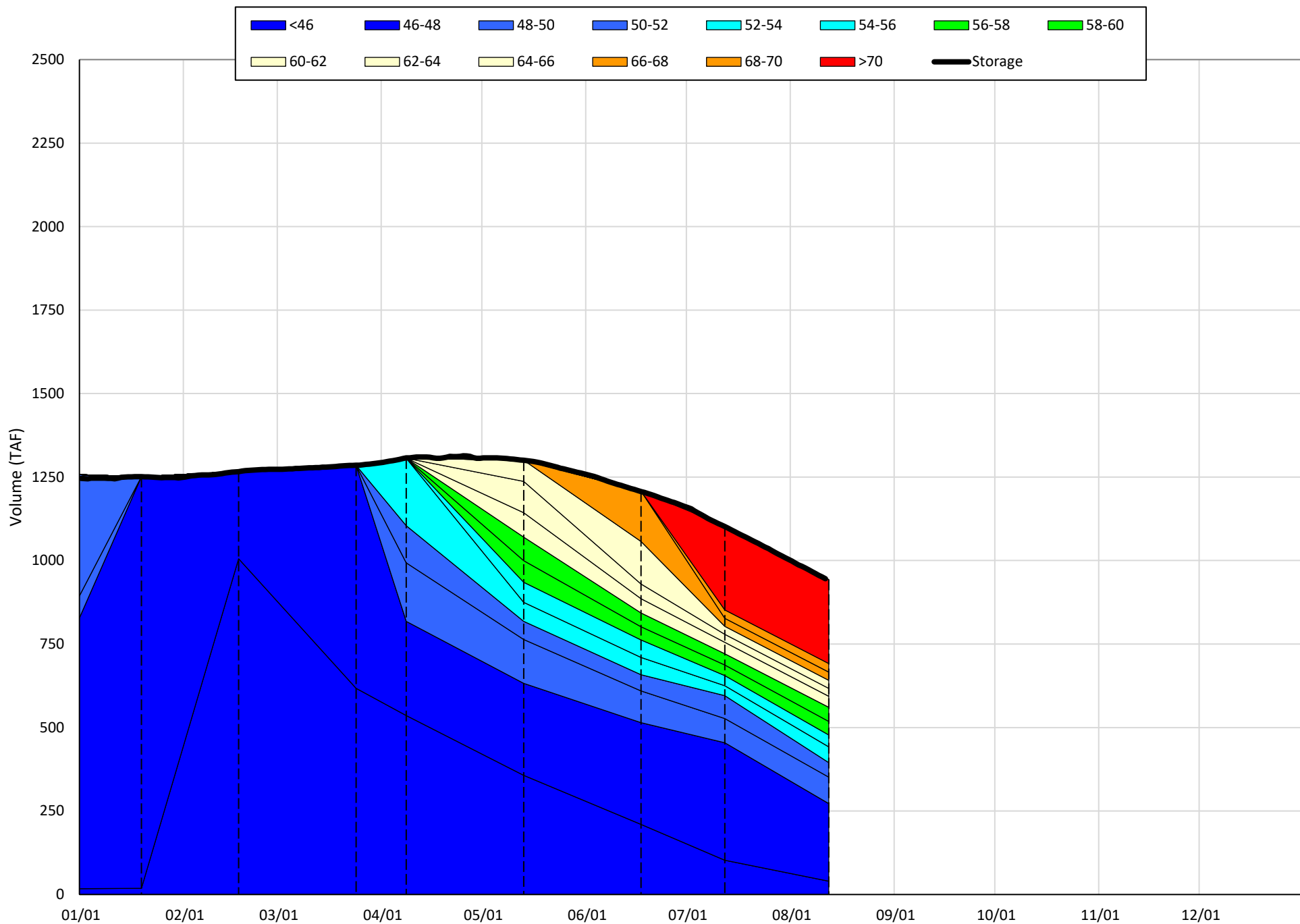
}

Historic - Current

}

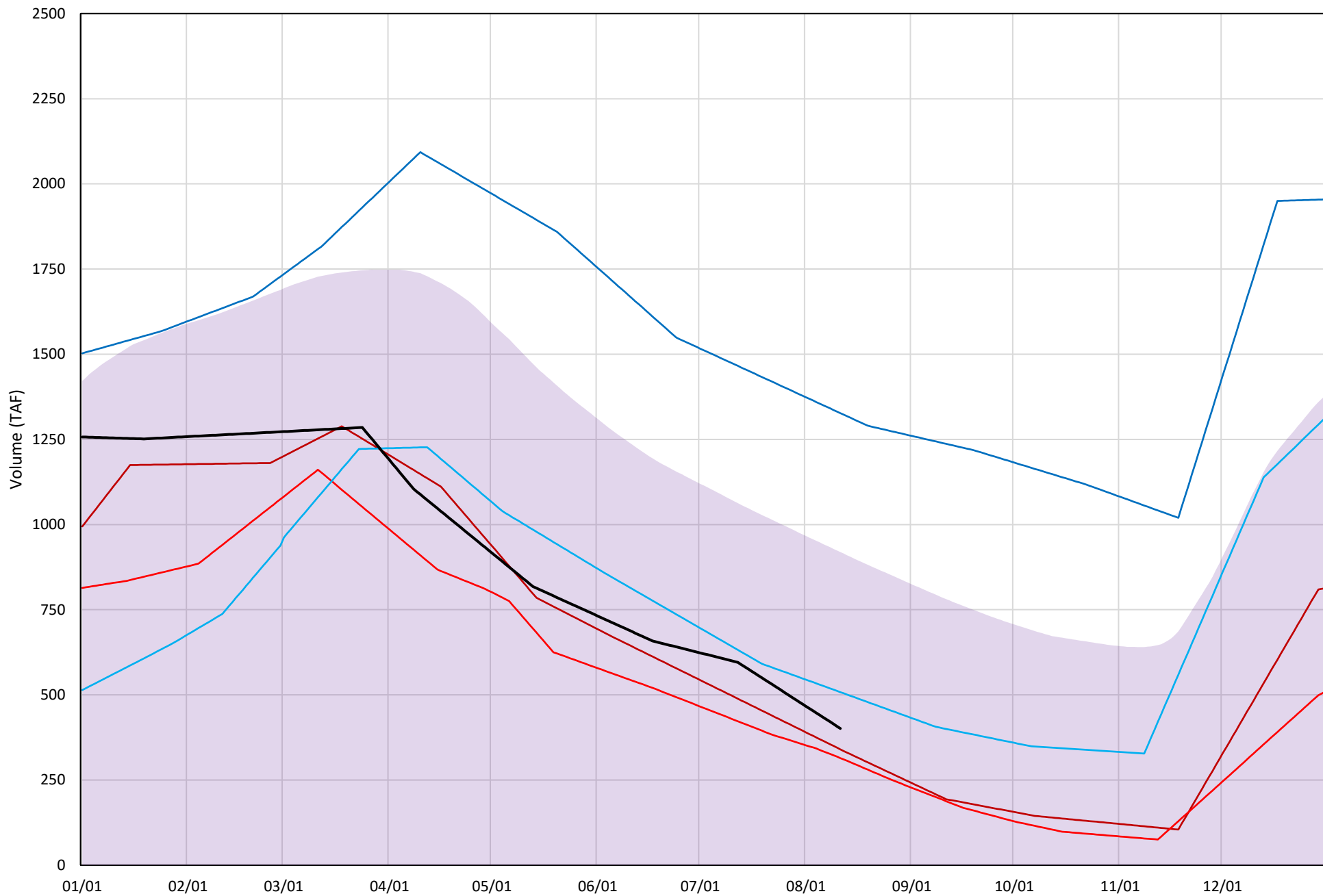
(Historic - Current) / Current

Trinity Lake Isothermobaths Plot - 2021



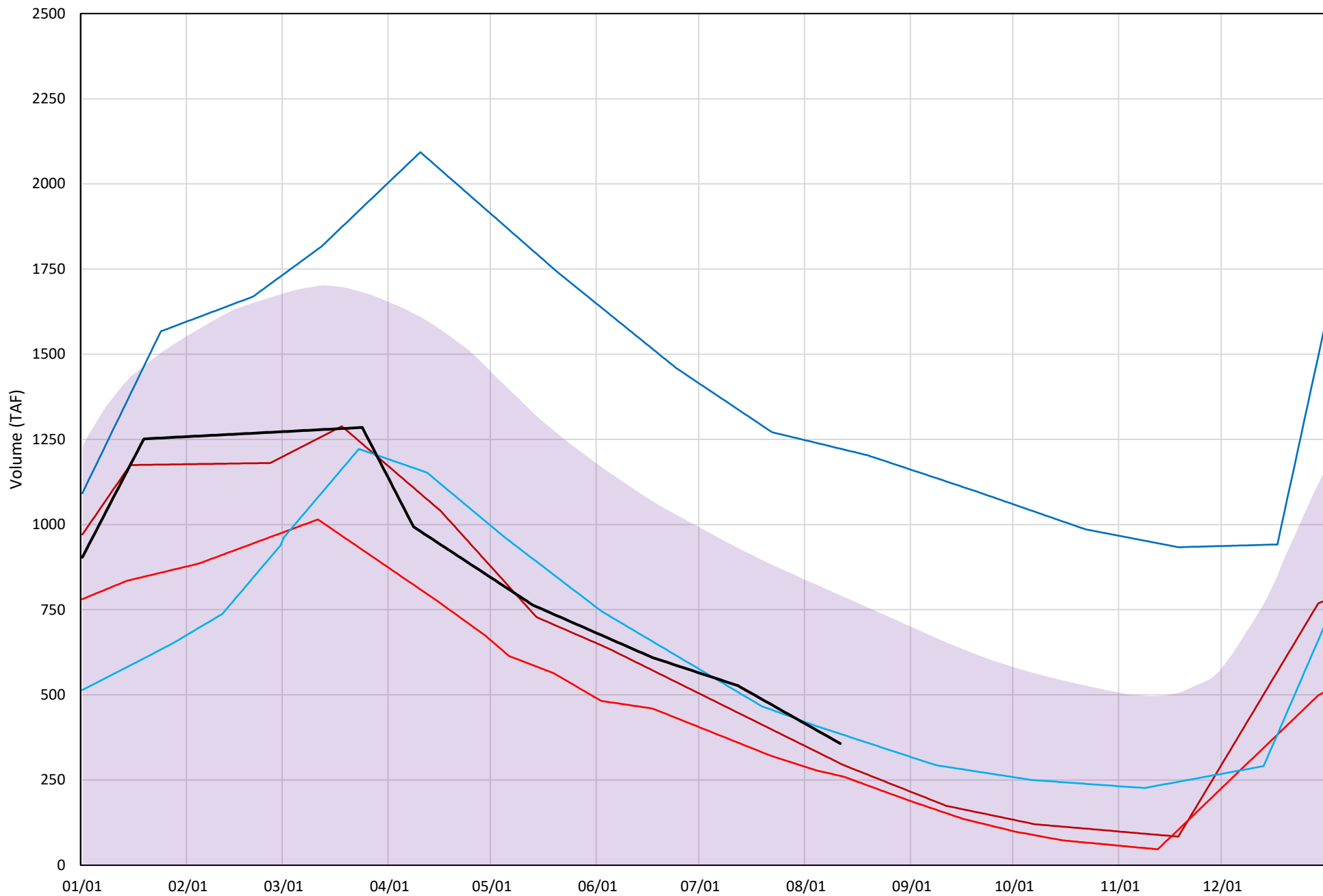
# Trinity Lake Cold Water Pool Volume $\leq 52^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



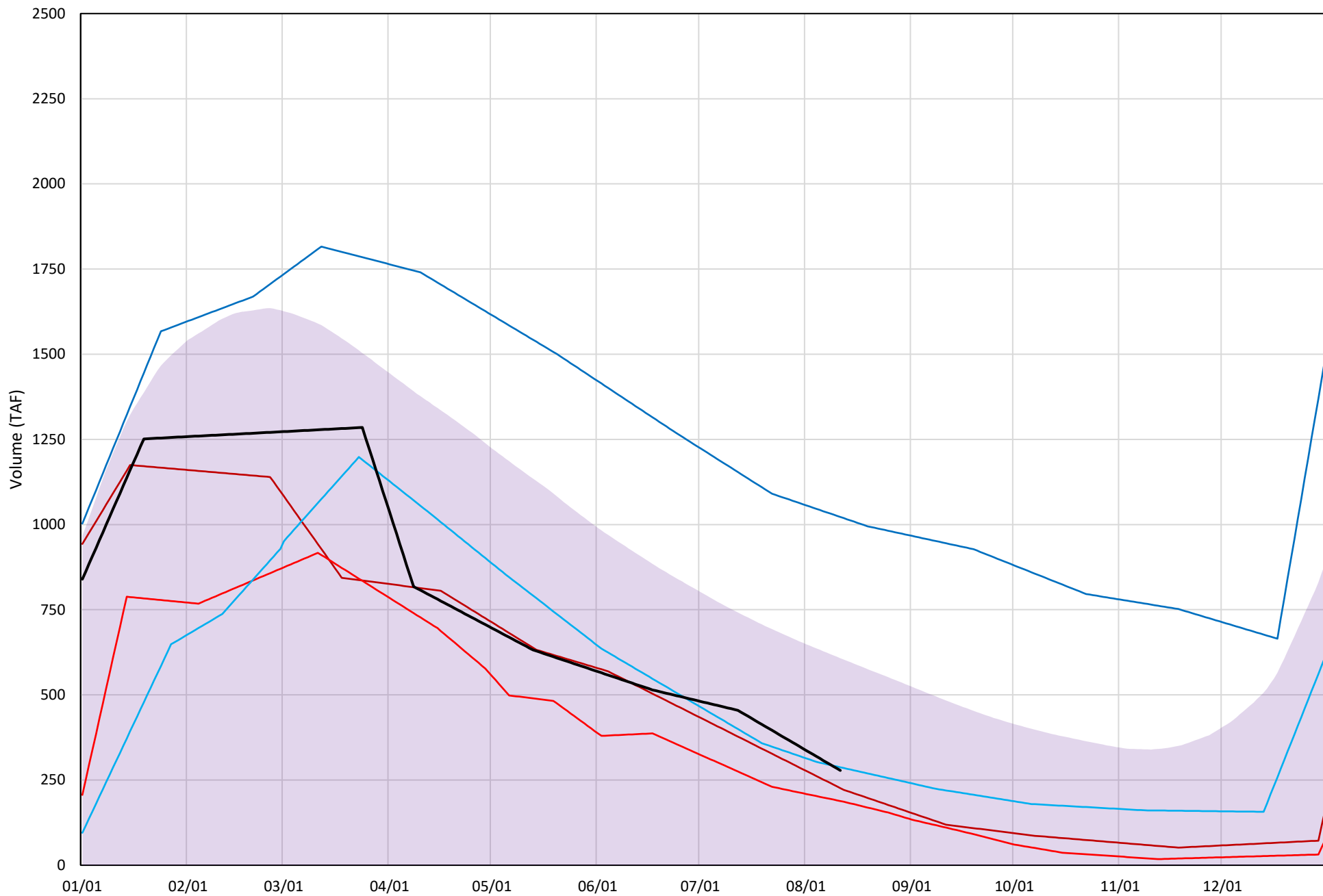
# Trinity Lake Cold Water Pool Volume ≤50°F

Avg (2000-2020) 2014 2015 2016 2019 2021



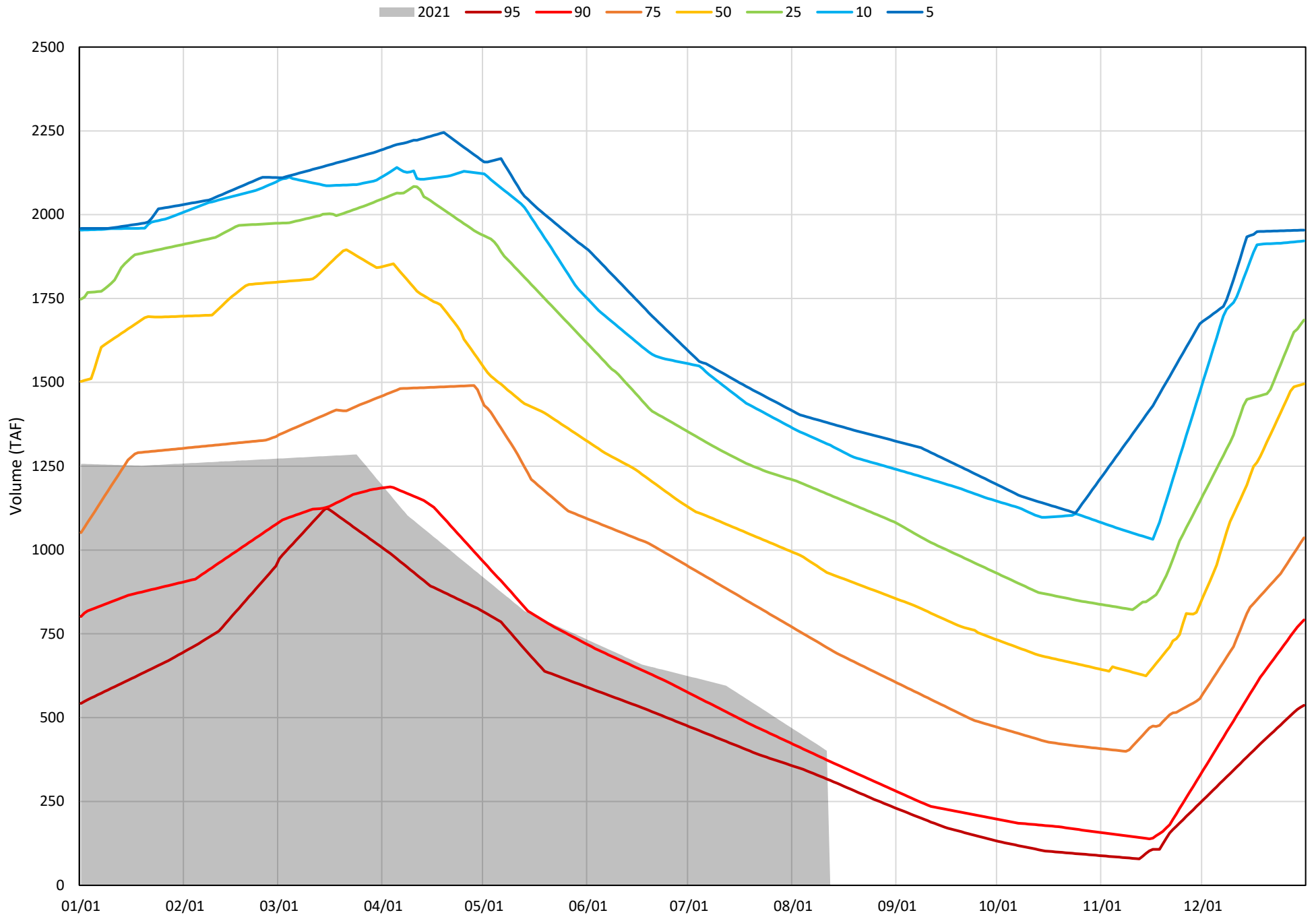
# Trinity Lake Cold Water Pool Volume $\leq 48^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021

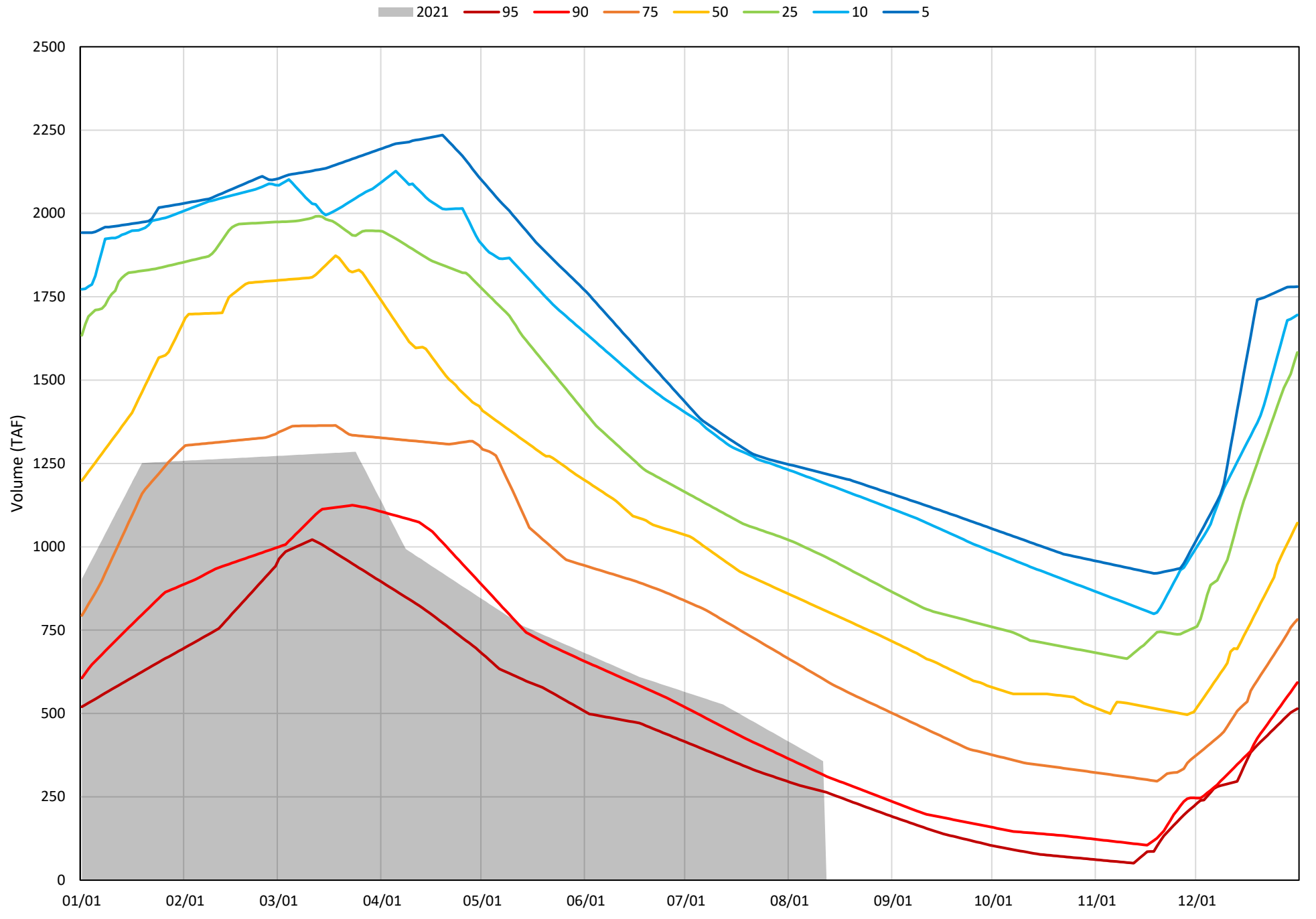




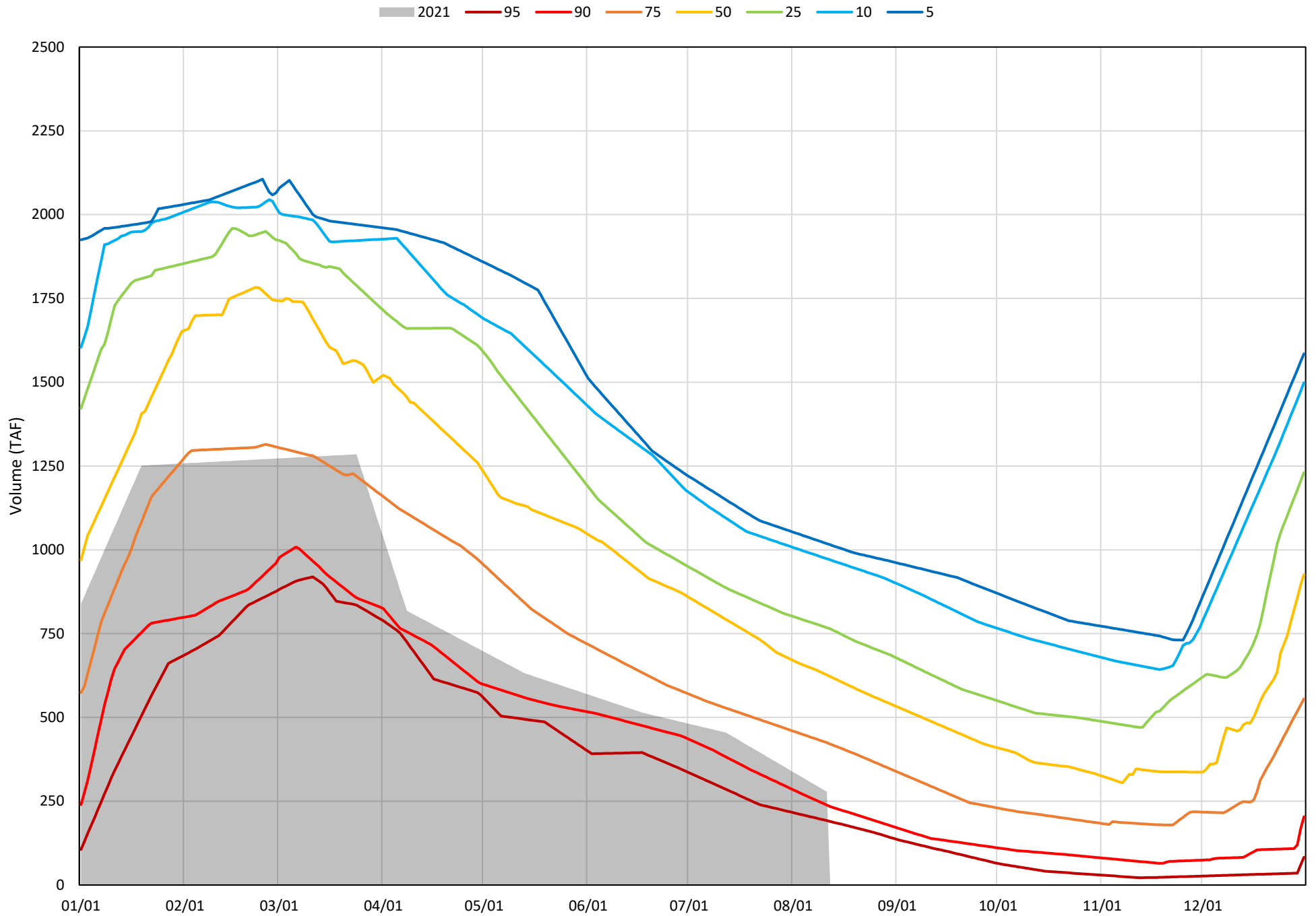
Trinity Lake Cold Water Pool Volume  $\leq 52^{\circ}\text{F}$  - Percent Exceedances (2000-2020)



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



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



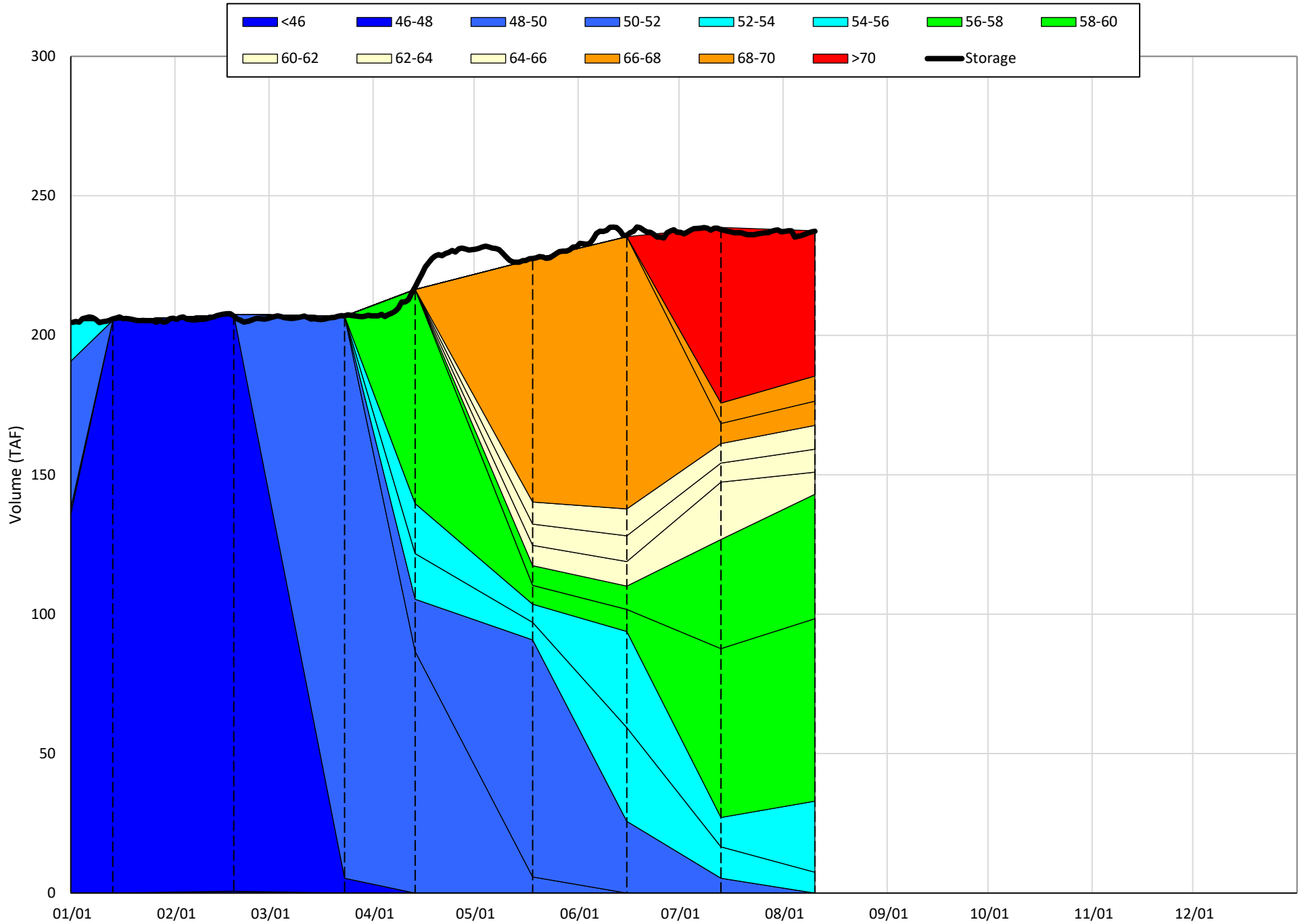
### Trinity Cold Water Pool Comparison by Year (for Specified Date)

Aug-12 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.
2000	634	489	344	489	158	137	123	139
2001	492	422	348	421	122	118	125	122
2002	503	454	405	454	125	127	145	133
2003	875	659	477	670	218	185	171	191
2004	532	410	259	400	132	115	93	113
2005	719	573	299	530	179	160	107	149
2006	863	736	542	714	215	206	195	205
2007	549	506	460	505	137	142	165	148
2008	263	182	102	182	65	51	37	51
2009	174	123	51	116	43	34	18	32
2010	521	393	191	369	130	110	69	103
2011	985	848	649	827	245	238	233	239
2012	814	781	707	767	203	219	254	225
2013	353	311	241	302	88	87	87	87
2014	-61	-58	-52	57	-15	-16	-19	17
2015	-87	-95	-90	90	-22	-27	-32	27
2016	107	28	9	48	27	8	3	13
2017	655	513	381	516	163	144	137	148
2018	599	556	502	552	149	156	180	162
2019	926	866	744	845	231	242	267	247
2020	458	440	352	417	114	123	126	121
2021	0	0	0	0	0	0	0	0

Historic - Current

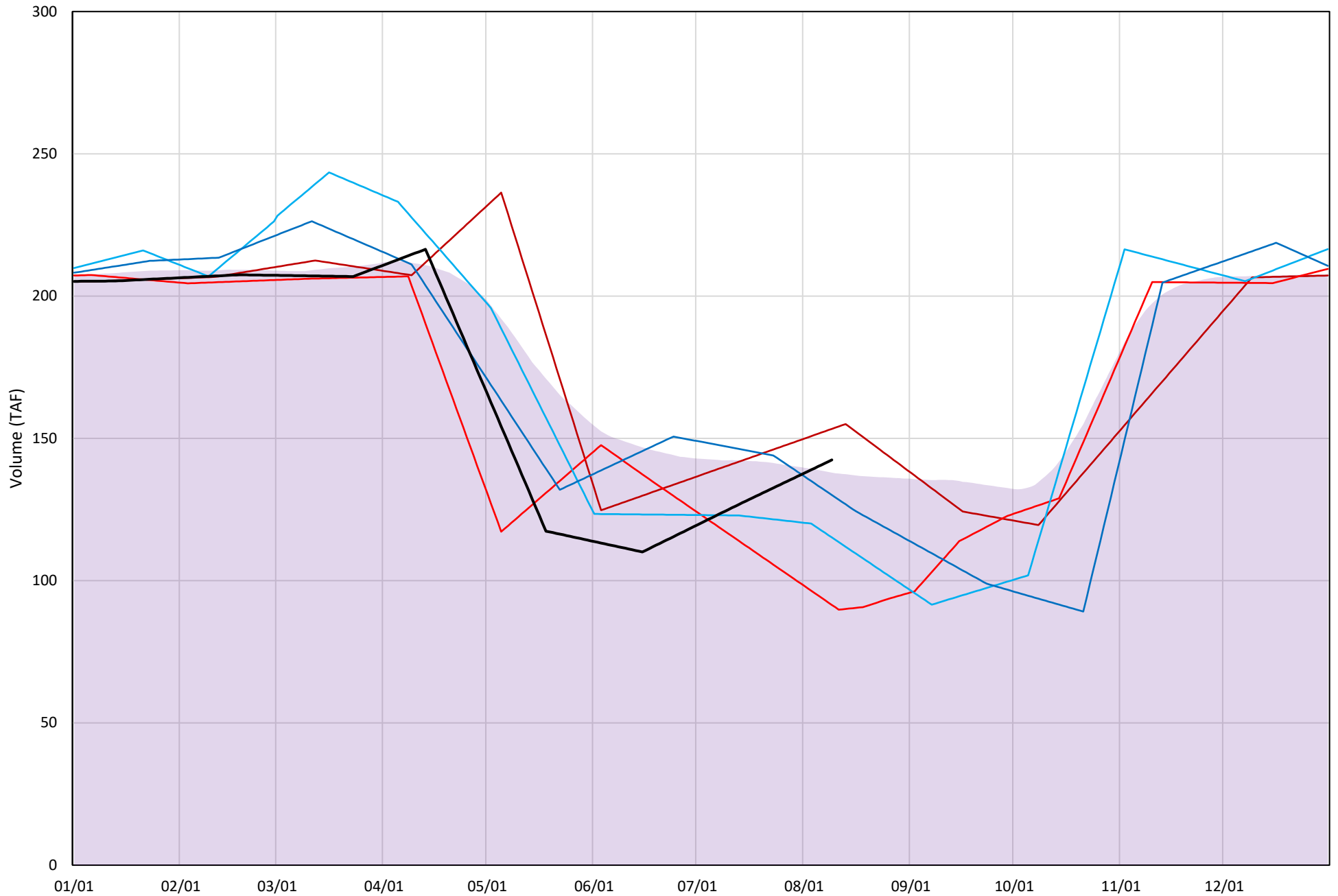
(Historic - Current) / Current

Whiskeytown Lake Isothermobaths Plot - 2021



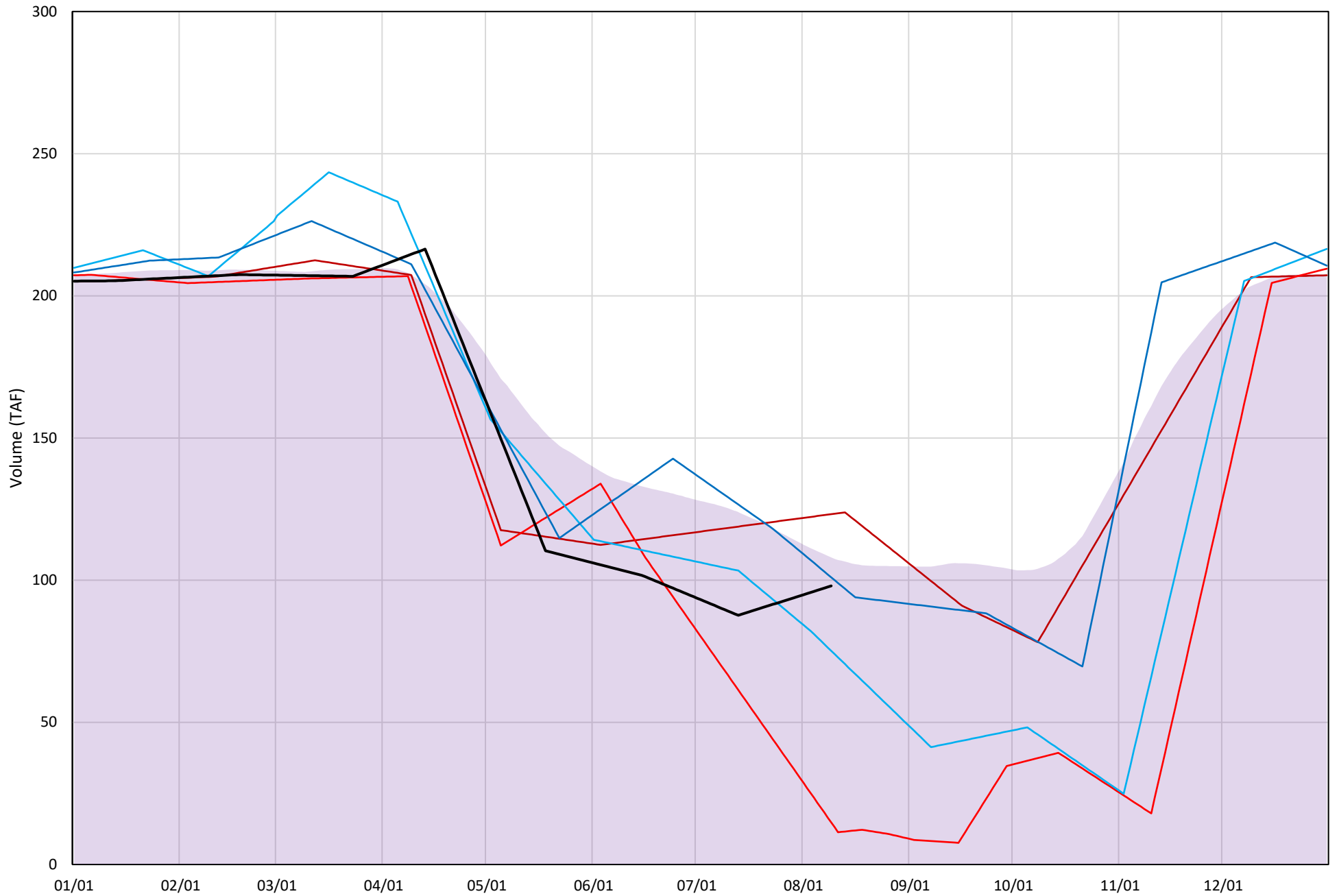
# Whiskeytown Lake Cold Water Pool Volume $\leq 60^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



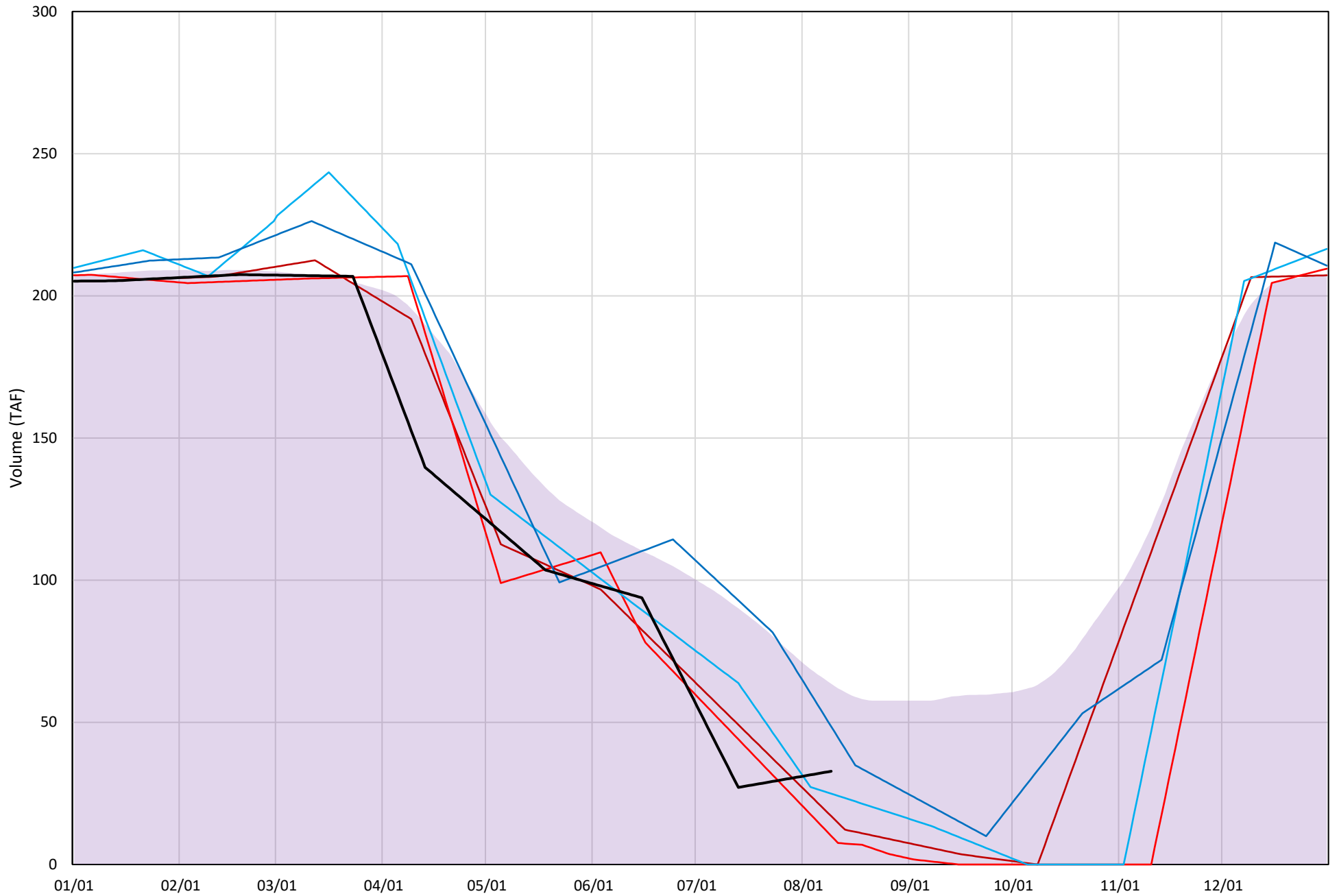
# Whiskeytown Lake Cold Water Pool Volume $\leq 58^{\circ}\text{F}$

Avg (2000-2020) 2014 2015 2016 2019 2021



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

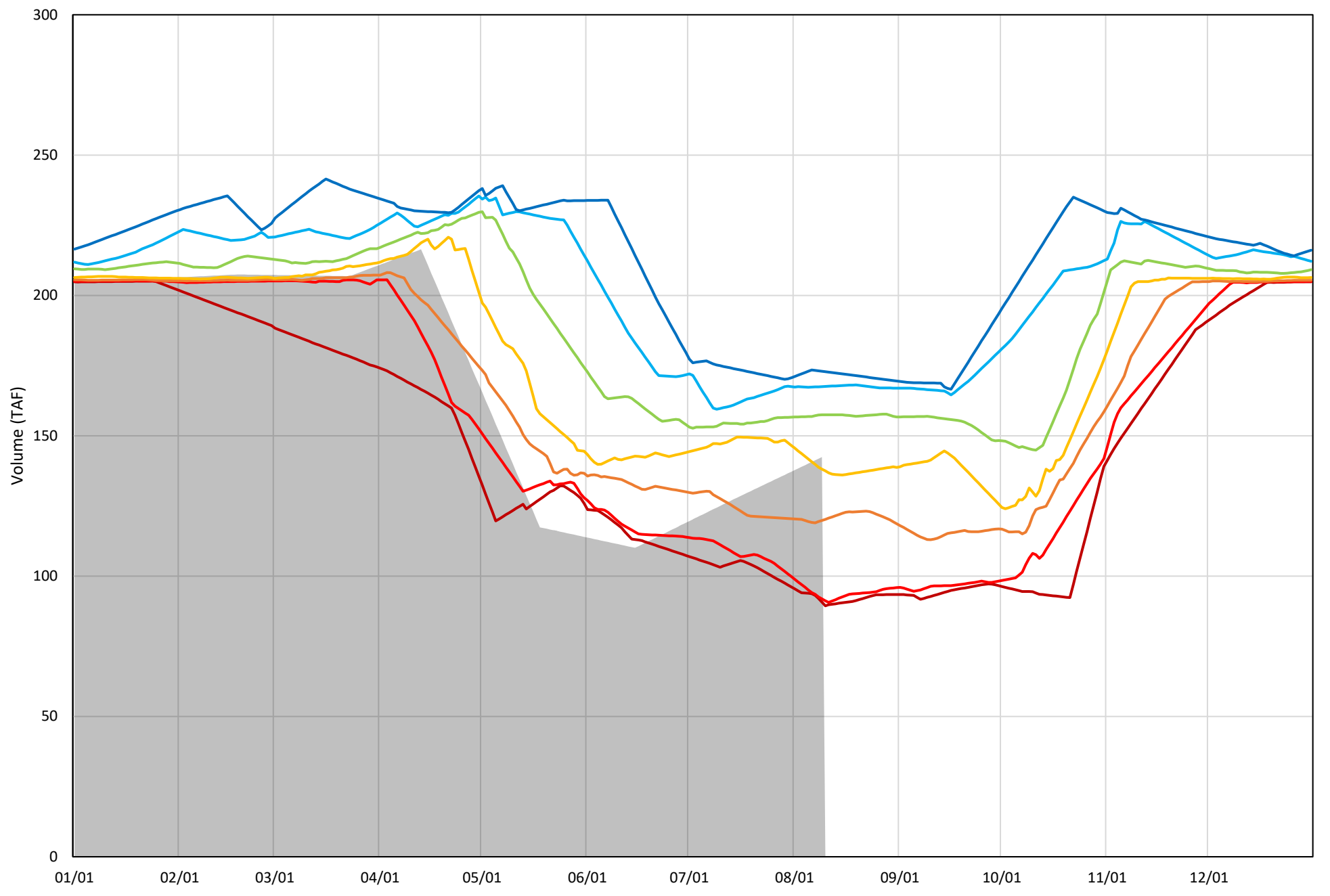
Avg (2000-2020) 2014 2015 2016 2019 2021





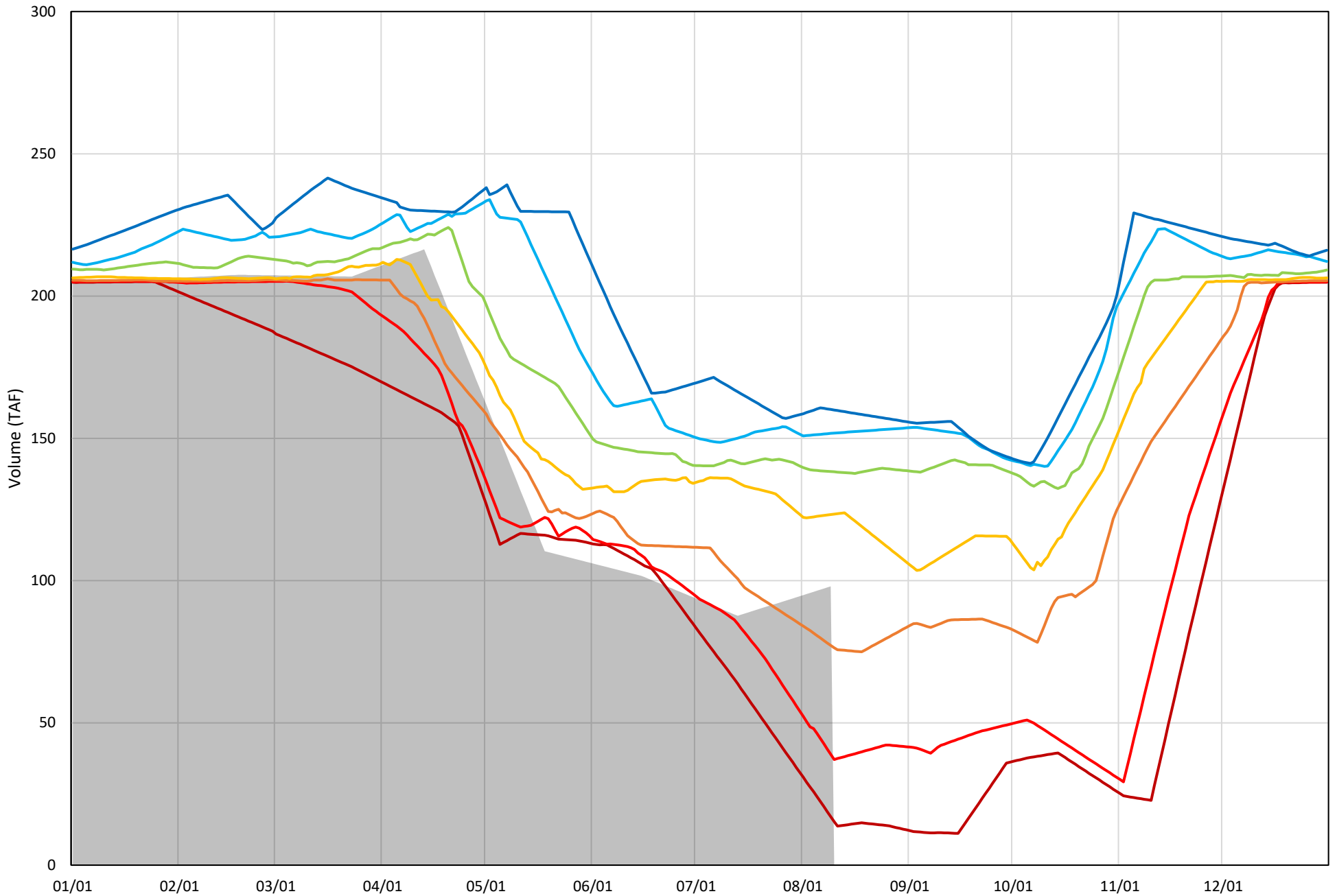
Whiskeytown Lake Cold Water Pool Volume  $\leq 60^{\circ}\text{F}$  - Percent Exceedances (2000-2020)

2021 95 90 75 50 25 10 5



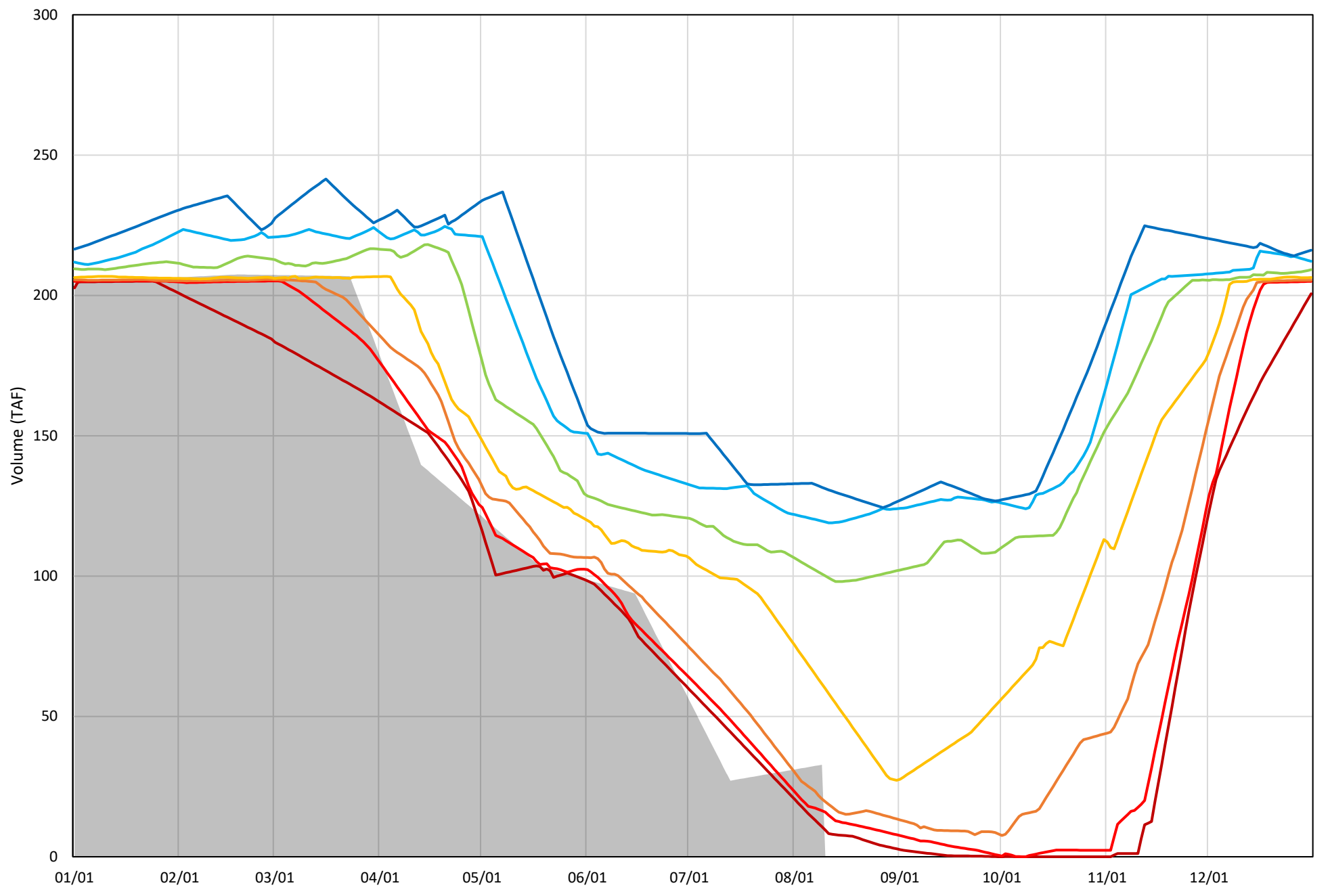
Whiskeytown Lake Cold Water Pool Volume  $\leq 58^{\circ}\text{F}$  - Percent Exceedances (2000-2020)

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)

Aug-10 2021	Δ TAF				% Δ			
	≤60°	≤58°	≤56°	Abs. Avg.	≤60°	≤58°	≤56°	Abs. Avg.
2000	20	53	85	53	17	67	240	108
2001	41	67	83	64	35	85	235	118
2002	38	60	58	52	32	76	166	91
2003	30	47	34	37	26	59	95	60
2004	37	51	42	43	31	64	119	72
2005	-24	-33	-17	25	-21	-41	-48	37
2006	51	74	79	68	43	93	223	120
2007	41	57	59	52	35	72	167	91
2008	43	64	67	58	37	81	190	103
2009	4	-7	-19	10	3	-9	-54	22
2010	-27	-42	-17	29	-23	-53	-49	42
2011	20	35	26	27	17	44	75	45
2012	19	14	-13	15	16	18	-36	23
2013	55	82	98	78	47	103	277	142
2014	35	44	-18	33	30	55	-52	46
2015	-26	-64	-25	39	-22	-81	-71	58
2016	-3	-4	-10	6	-2	-5	-29	12
2017	37	58	64	53	32	73	181	95
2018	17	27	6	16	14	33	17	22
2019	12	22	13	16	10	27	38	25
2020	0	0	0	0	0	0	0	0

}

Historic - Current

}

(Historic - Current) / Current