



Sonoma Water

**State Water Resources Control Board
 Temporary Urgency Change Order (12/11/2021)
 Russian River Hydrologic Report
 December 17, 2021 - December 23, 2021**

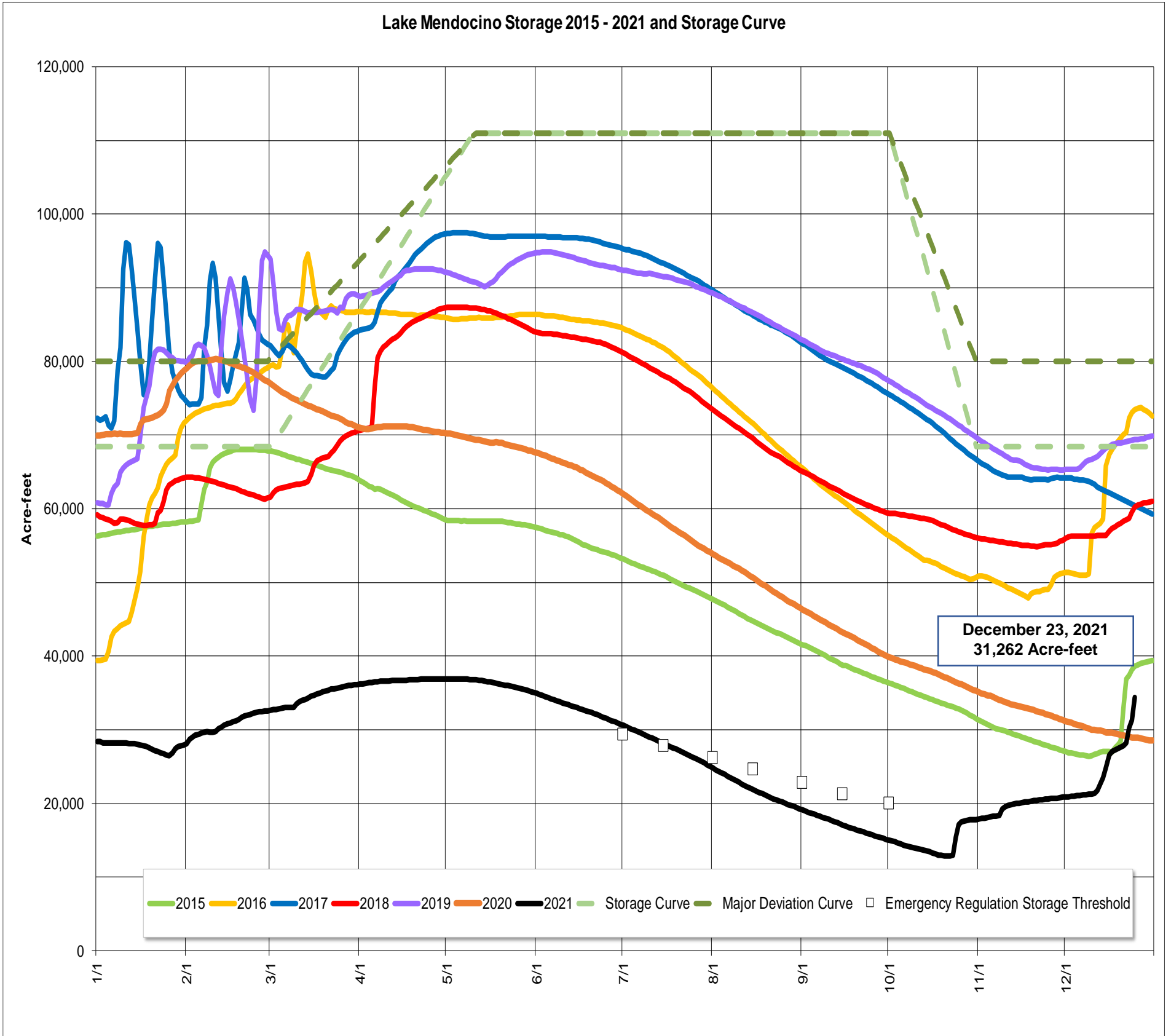
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A, 12949, 12950, and 16596 (Applications 12919A, 15736, 15737, and 19351).

Instream Flow Requirements as of December 23, 2021

Basis	Reach	Instantaneous (cfs)	5-day Average (cfs)
Modified Per Order: Critical Condition	Upper Russian River	25	-
Modified Per Order: Critical Condition	Dry Creek	75	-
Modified Per Order: Critical Condition	Lower Russian River	35	-

Upper Russian River, Dry Creek, Lower Russian River based on criteria as established in the Order issued 12/11/2021.

Lake Mendocino

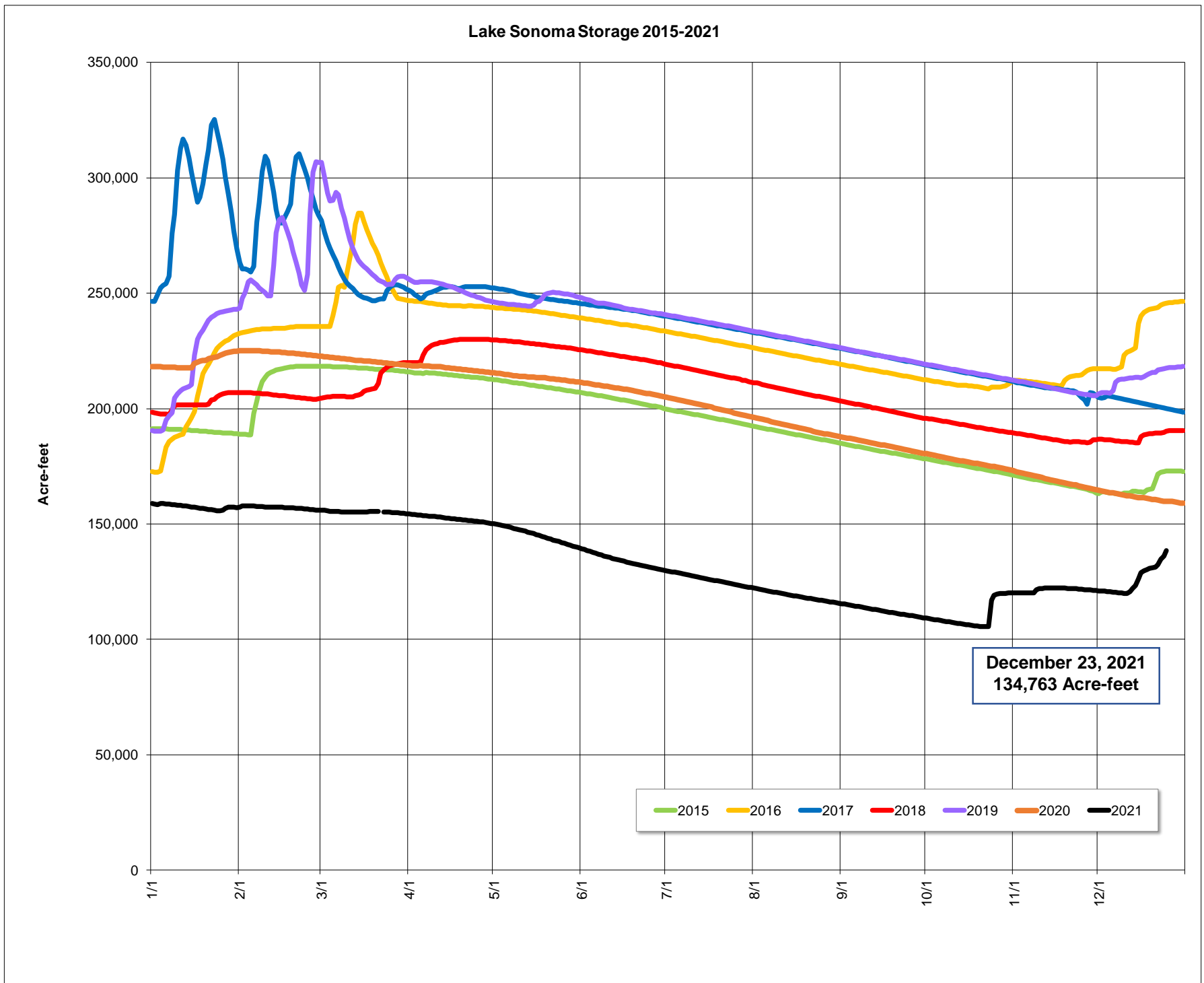


Storage (acre-feet)	December 23, 2021	31,262	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	9,684	323
	Last 7 days	3,187	455
Daily Inflow (cfs)	Last 7 days	Min	111
		Max	1,014
		Mean	292
Release (cfs)	Last 7 days	Min	29
		Max	29
		Mean	29

Lake Sonoma



Nathan Baskett, March 3, 2011



Storage (acre-feet)	December 23, 2021	134,763	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	12,871	429
	Last 7 days	4,968	710
Daily Inflow (cfs)	Last 7 days	Min	207
		Max	1,352
		Mean	500
Release (cfs)	Last 7 days	Min	75
		Max	77
		Mean	75

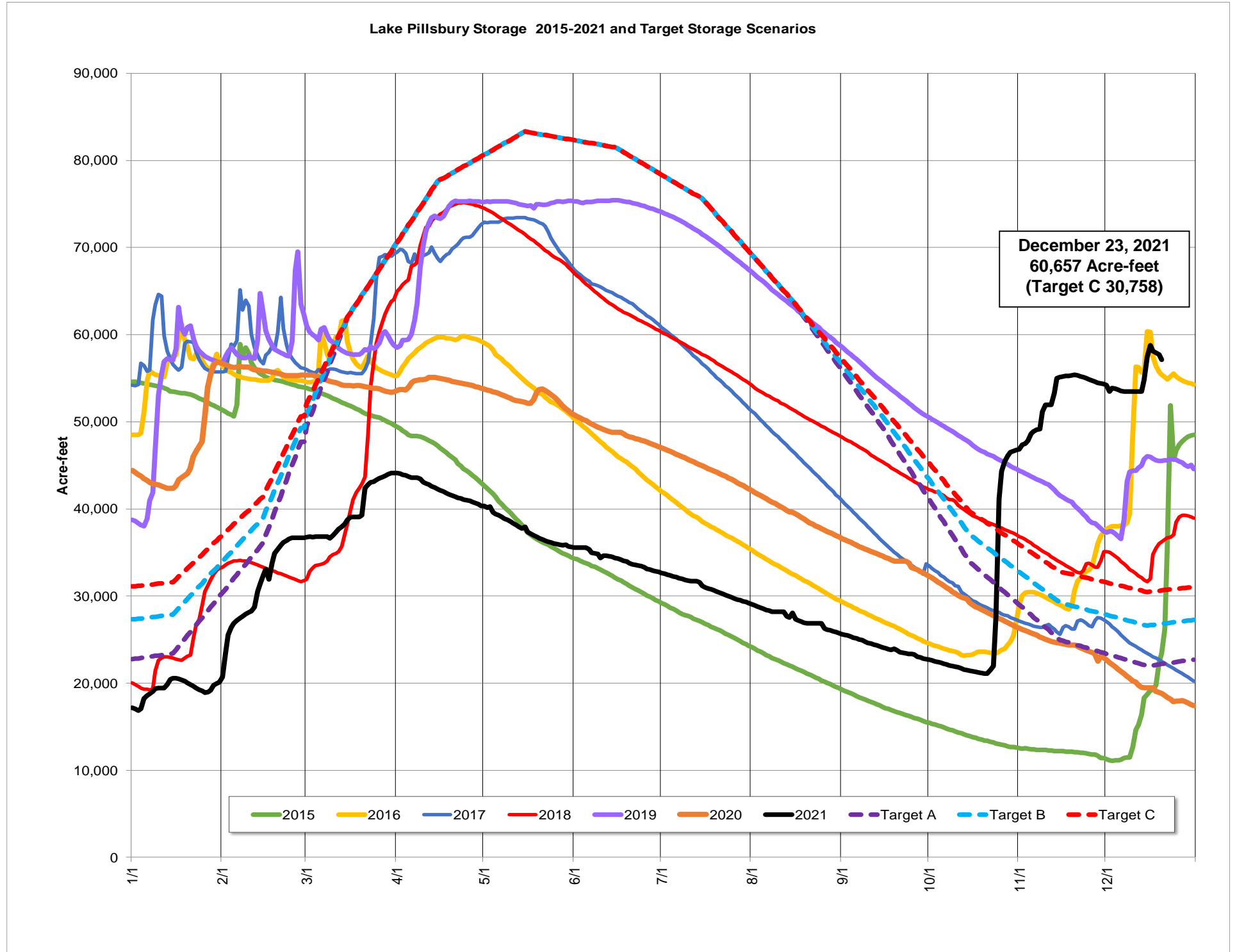
Potter Valley Project

PVP Diversion (cfs)	December 23, 2021	44
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2021 - December 23, 2021	85,863	1034
	Last 7 days	19,777	2,825

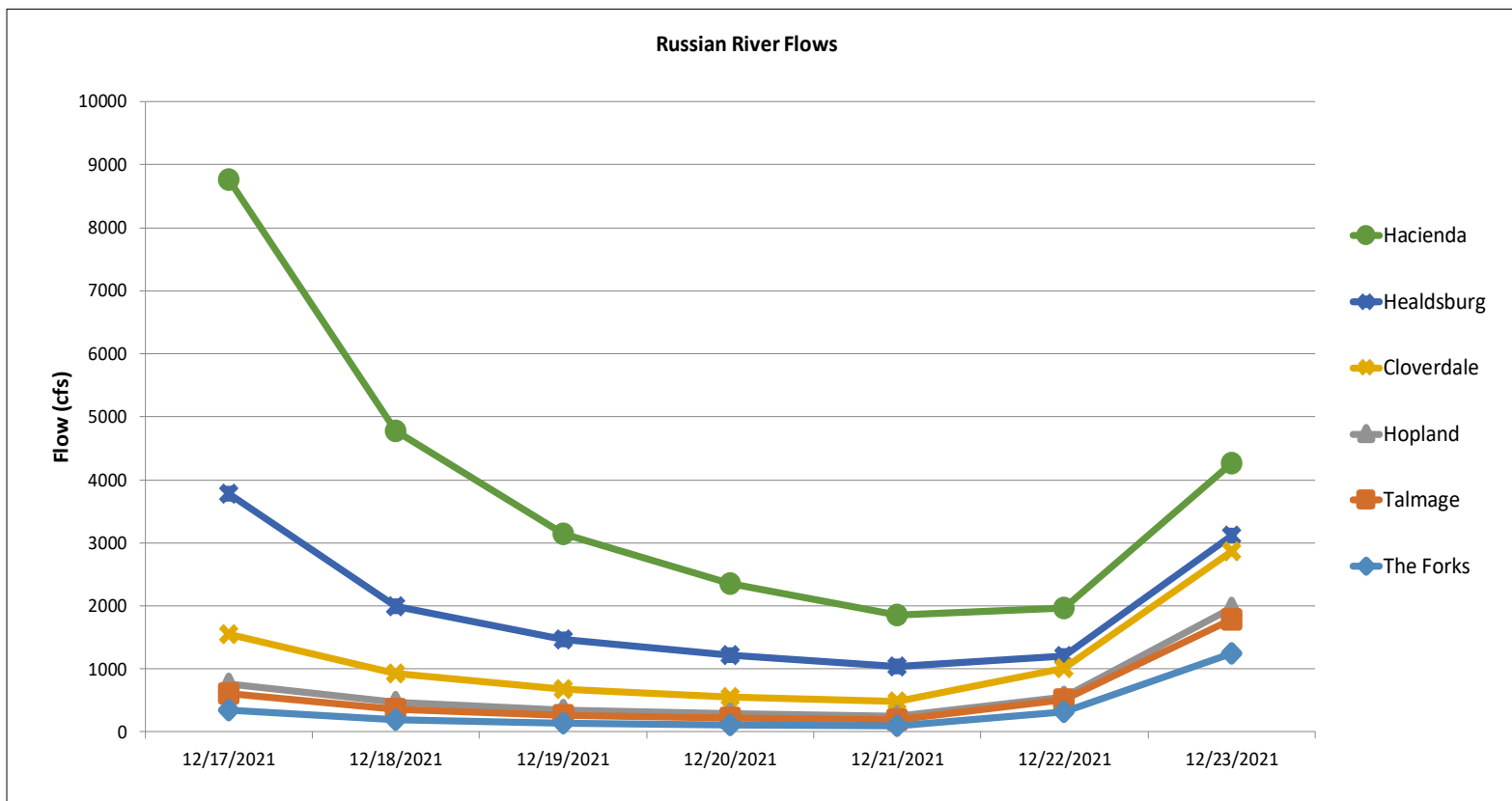
*Inflow calculation based on criteria established in D1610



Russian River Flows (December 17 - December 23, 2021)

Gage	24-hr Average Flow (cfs)						
	Dec 17, 2021	Dec 18, 2021	Dec 19, 2021	Dec 20, 2021	Dec 21, 2021	Dec 22, 2021	Dec 23, 2021
The Forks*	344	199	141	111	99	317	1249
Talmage USGS 11462080	605	362	268	217	187	511	1790
Hopland USGS 11462500	764	474	352	285	246	550	1960
Cloverdale USGS 11463000	1555	924	684	555	486	1006	2866
Healdsburg USGS 11464000	3780	2000	1470	1220	1040	1210	3110
Hacienda USGS 11467000	8770	4770	3140	2350	1850	1970	4270

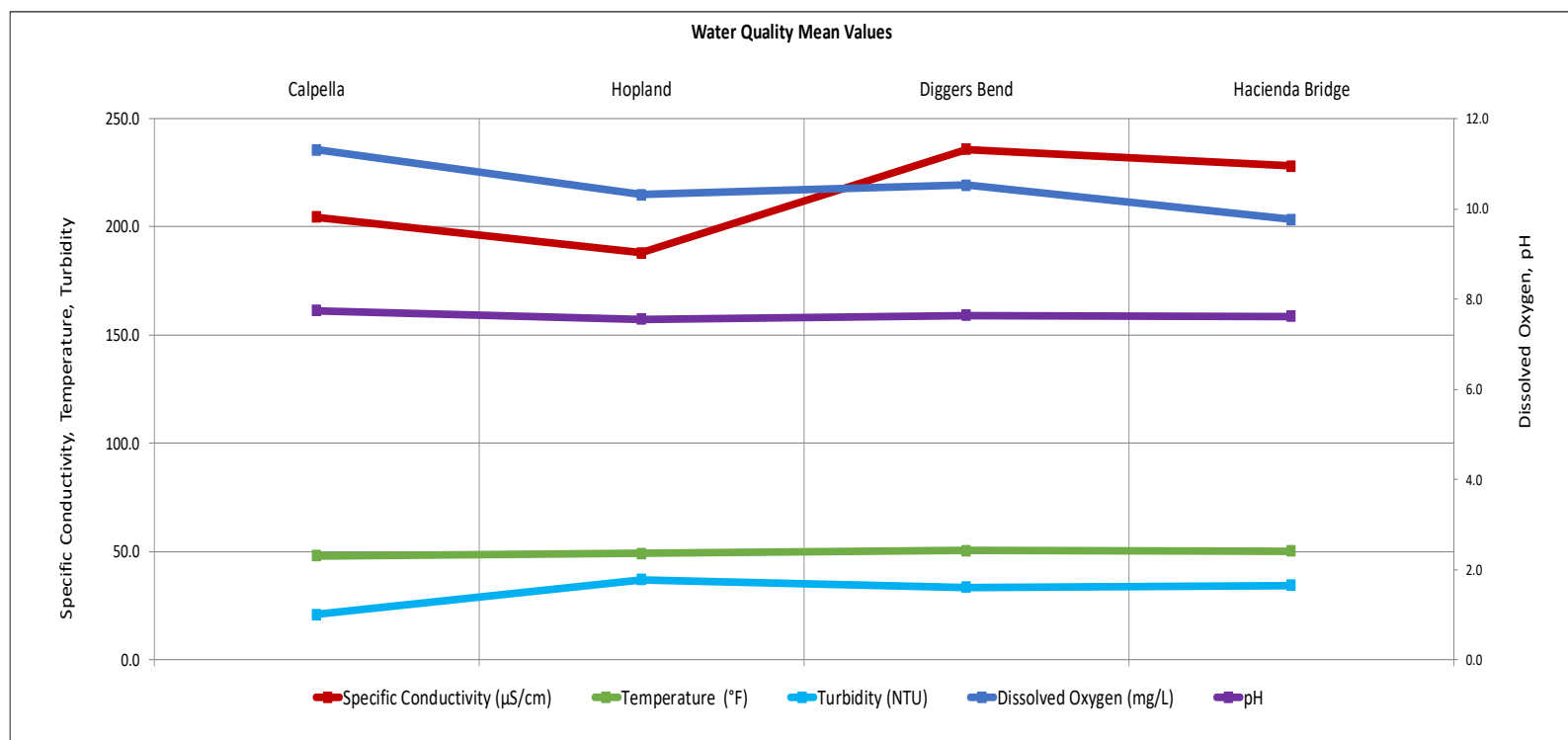
*West Fork (USGS 11461000) + East Fork (Coyote Valley Dam Release)



Russian River Water Quality (December 17 - December 23, 2021)

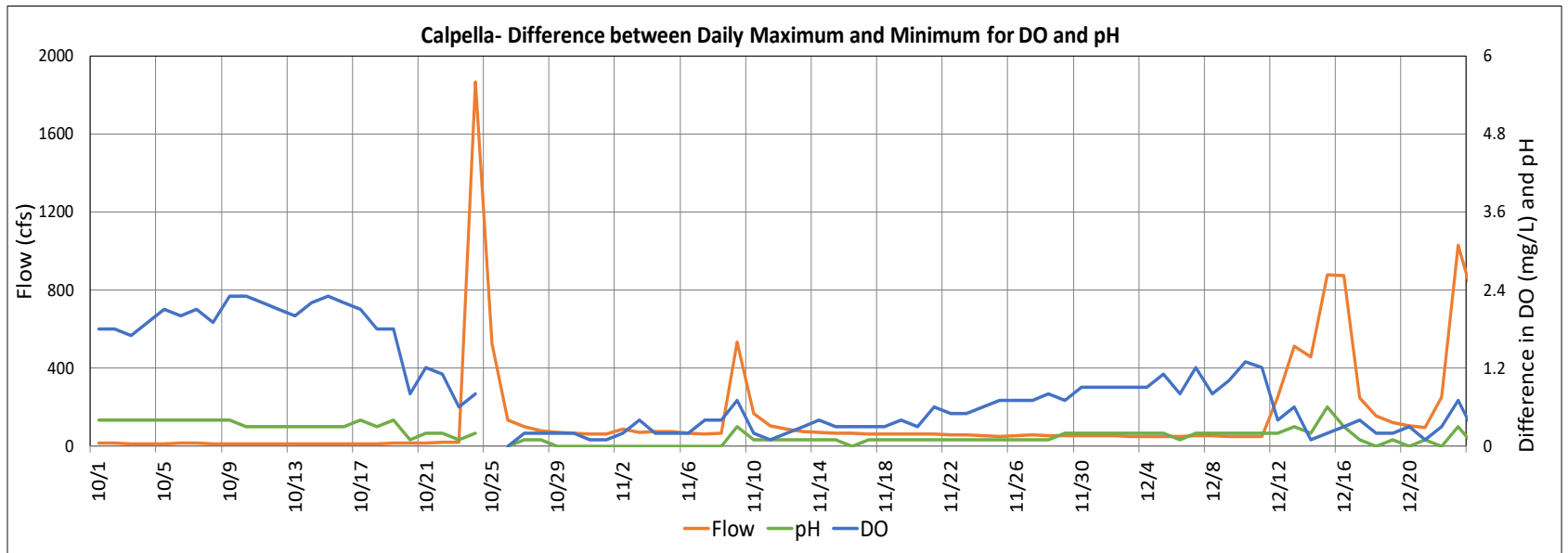
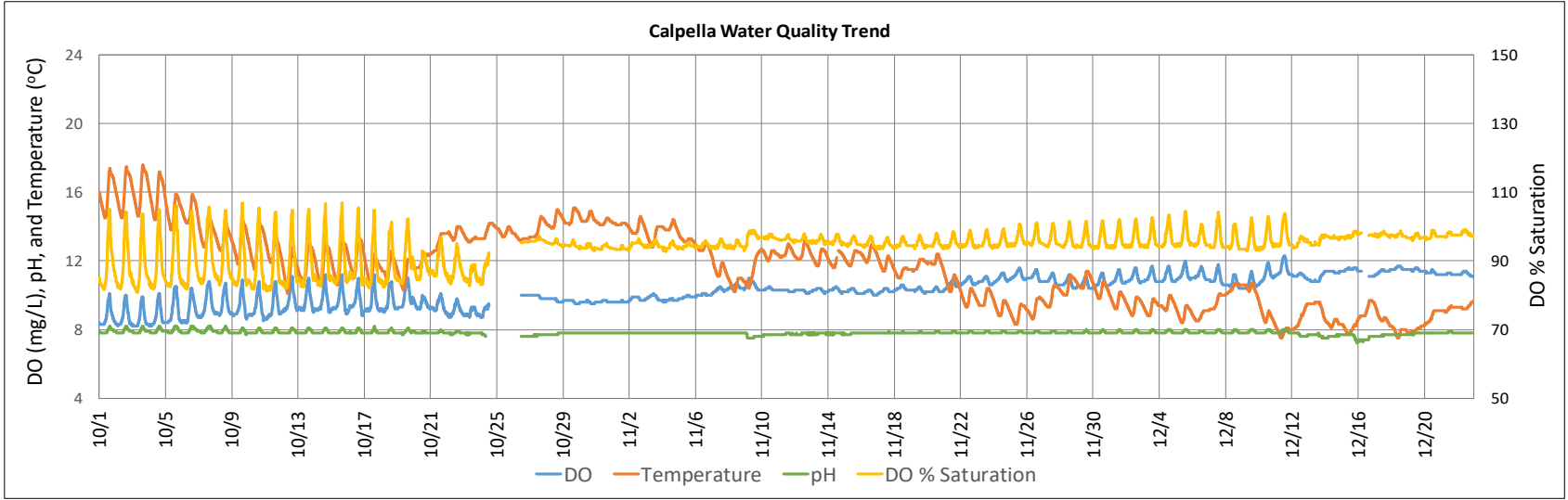
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	45.5	46.9			48.2		48.9	
	Max	51.4	51.4			52.5		52.2	
	Mean	47.9	49.1			50.4		50.1	
Specific Conductivity (µS/cm)	Min	126.0	111.0			134.0		151.0	
	Max	230.0	233.0			283.0		267.0	
	Mean	204.5	188.0			235.8		228.0	
Dissolved Oxygen (mg/L)	Min	10.6	9.9			10.1		9.4	
	Max	11.7	10.8			11.0		10.1	
	Mean	11.3	10.3			10.5		9.8	
Dissolved Oxygen (% Saturation)	Min	94.5	86.7			91.6		82.1	
	Max	99.4	95.2			97.0		91.4	
	Mean	97.5	90.3			93.7		86.6	
pH	Min	7.5	7.3			7.6		7.5	
	Max	7.9	7.8			7.8		7.8	
	Mean	7.7	7.6			7.6		7.6	
Turbidity (NTU)	Min	5.9	9.4			6.7		11.1	
	Max	267.0	198.0			193.0		151.0	
	Mean	20.9	37.0			33.4		34.3	

*Station operated seasonally



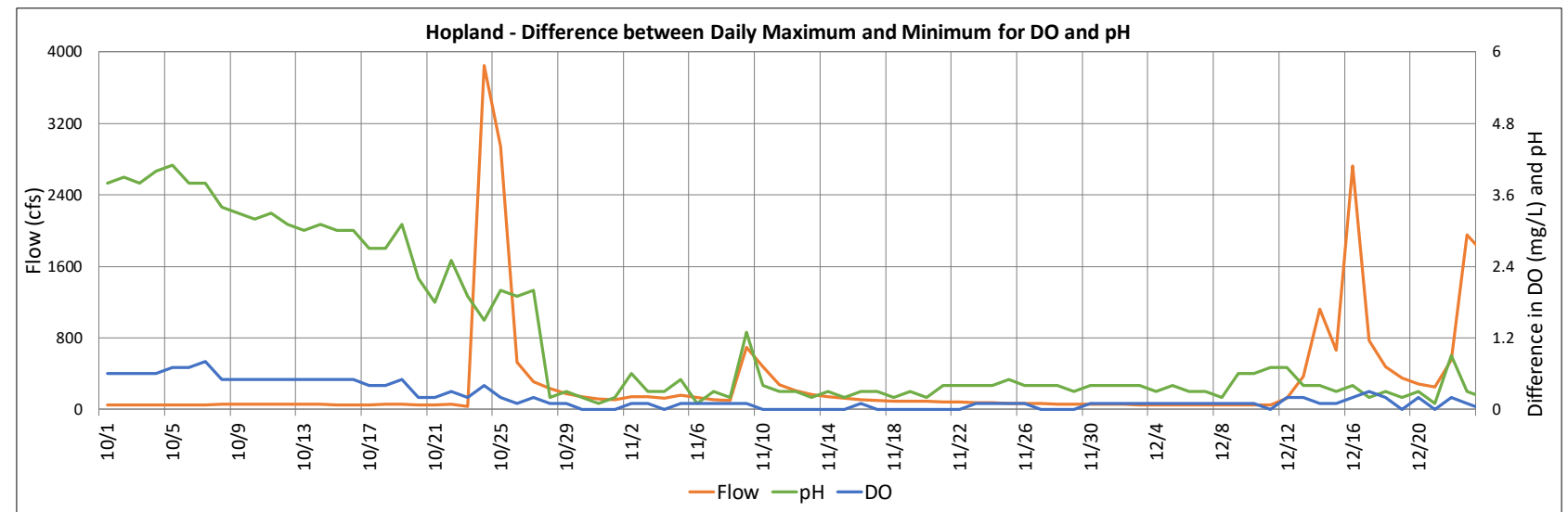
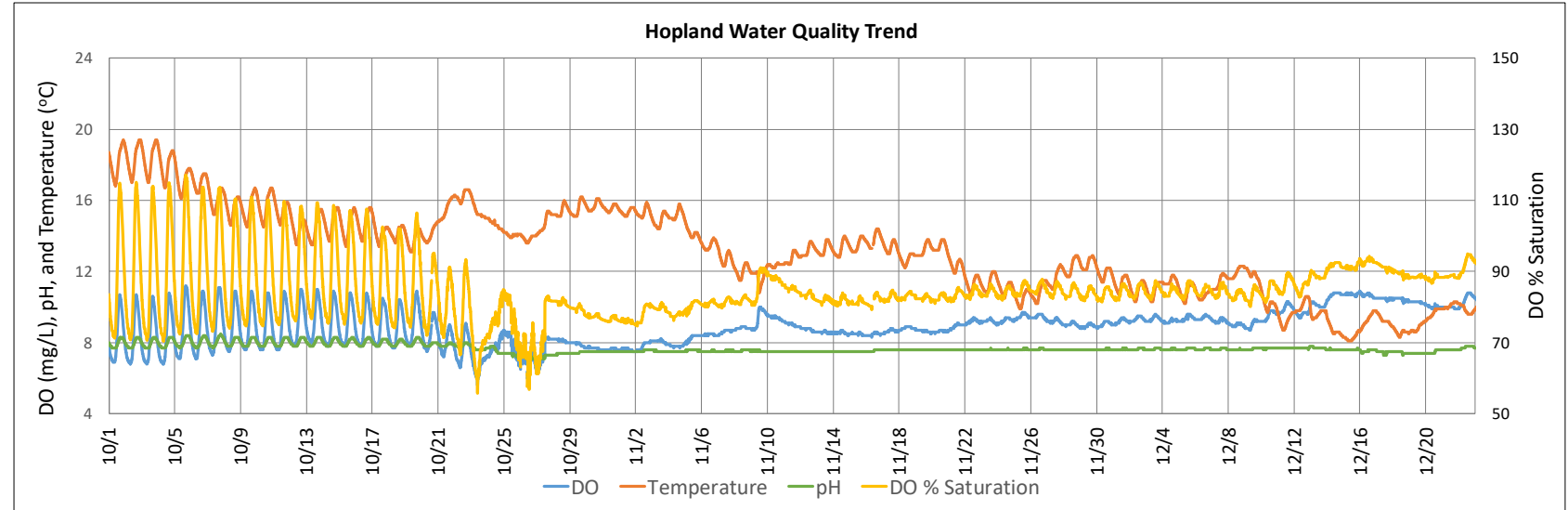
Russian River Water Quality (October 1 - December 23, 2021)

Calpella (East Fork Russian River)



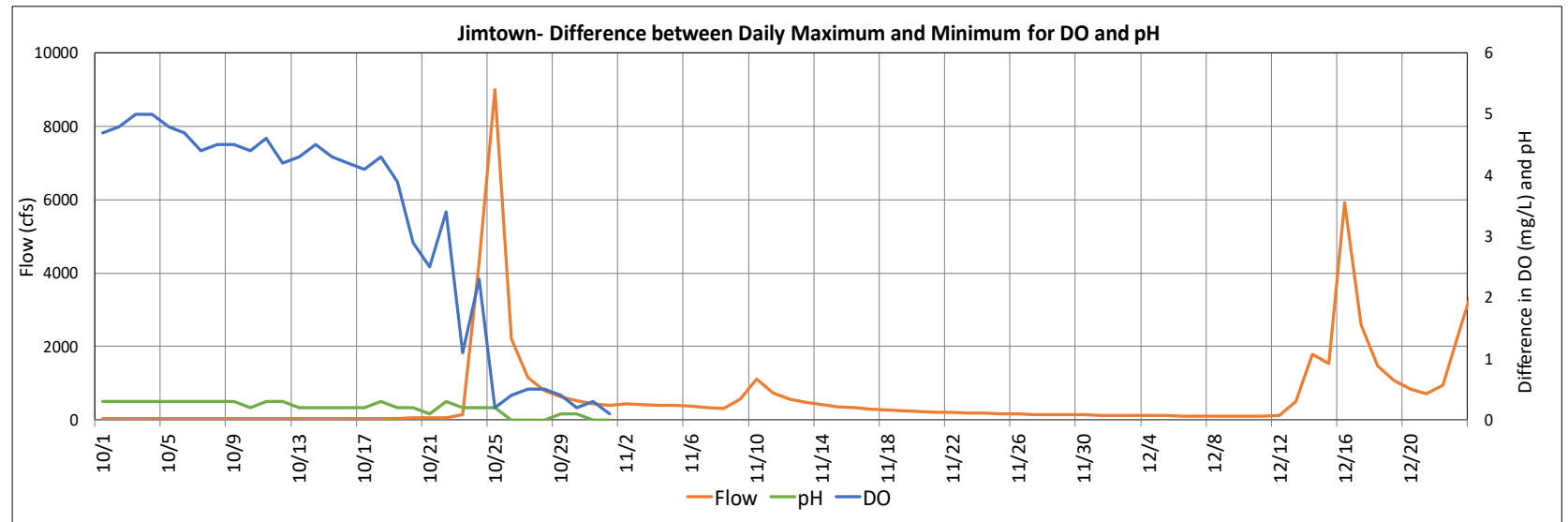
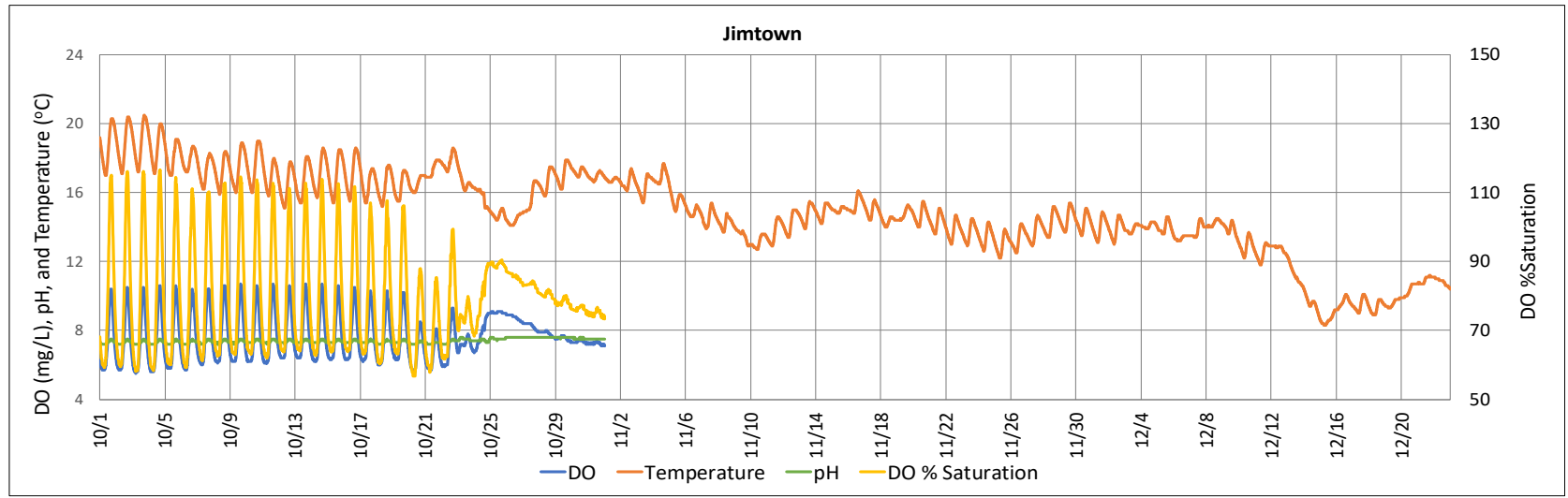
Russian River Water Quality (October 1 - December 23, 2021)

Hopland



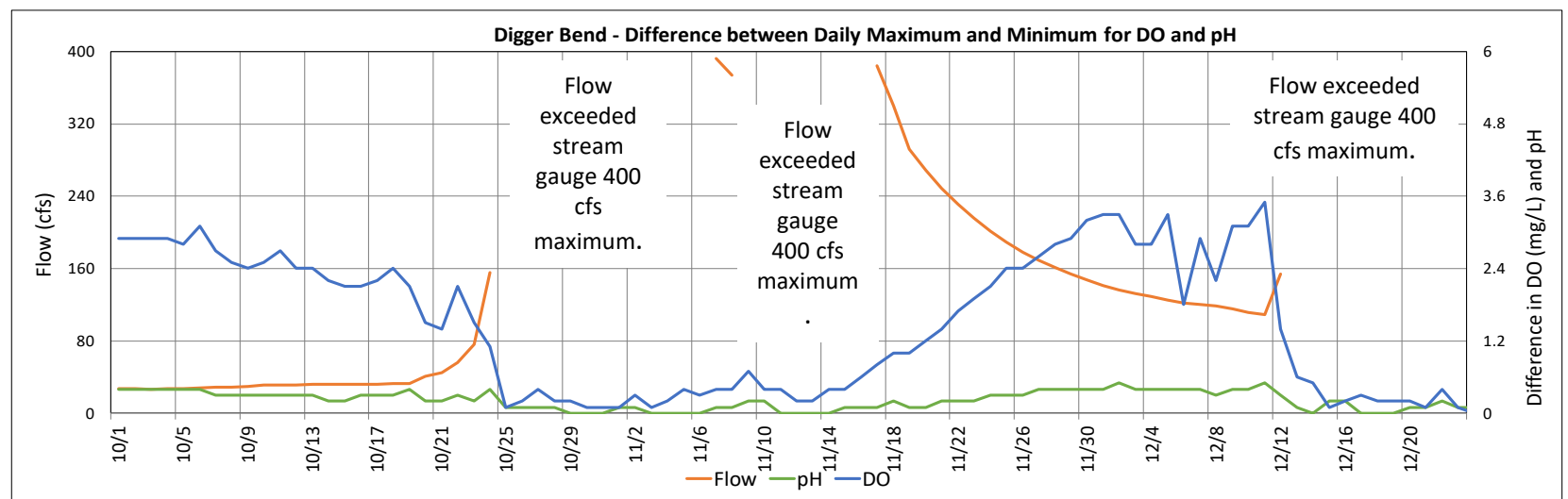
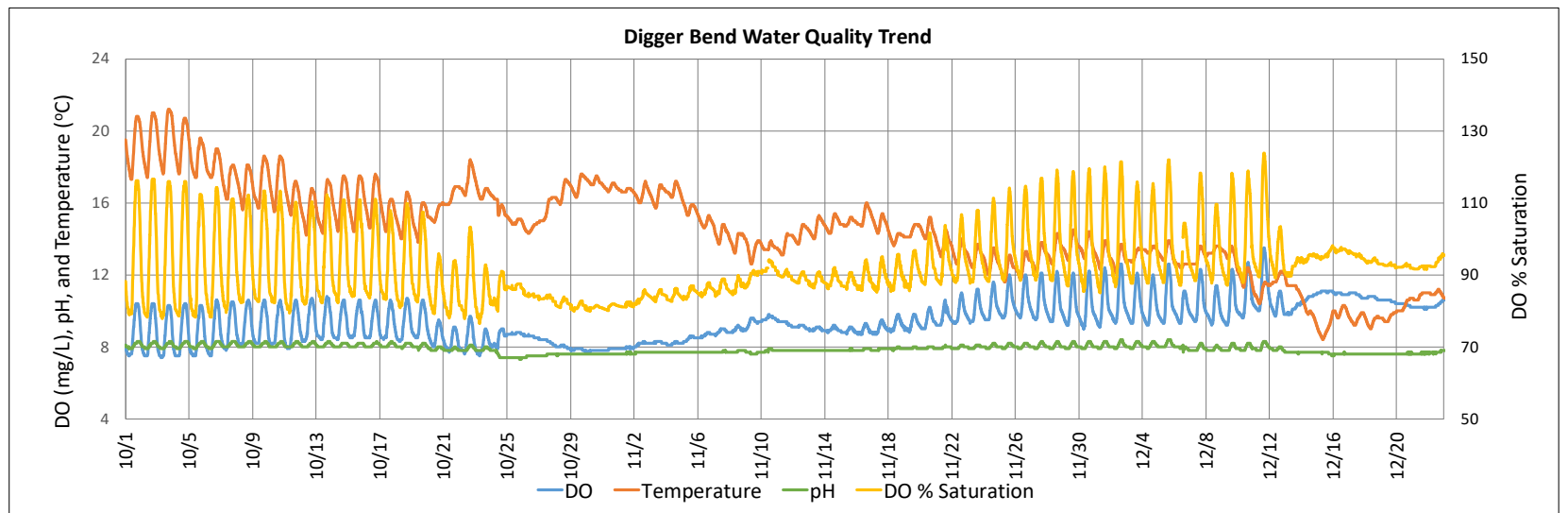
Russian River Water Quality (October 1 - December 23, 2021)

Jimtown



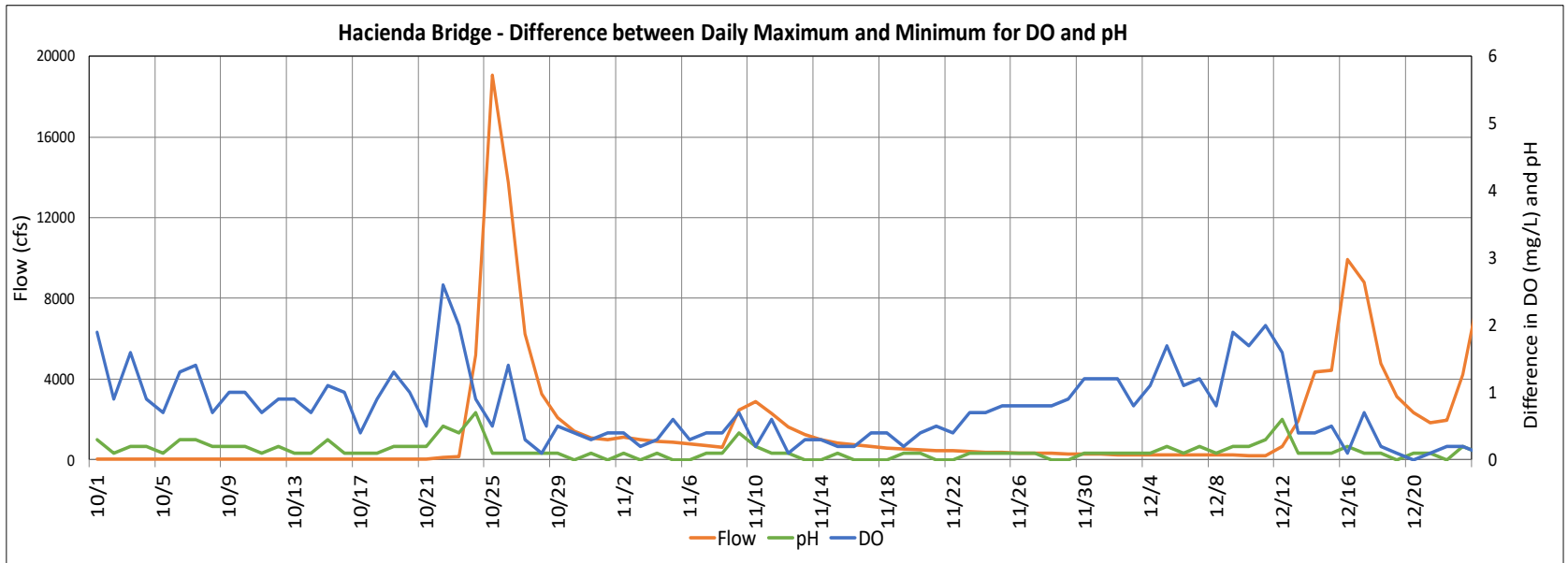
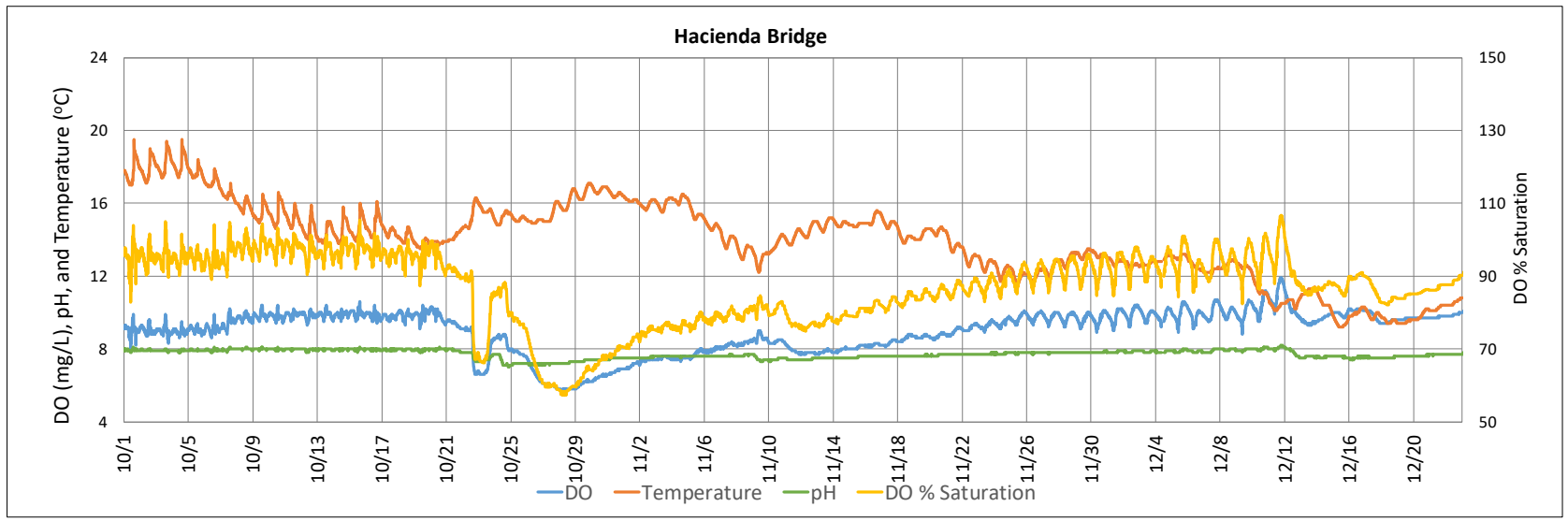
Russian River Water Quality (October 1 - December 23, 2021)

Digger Bend



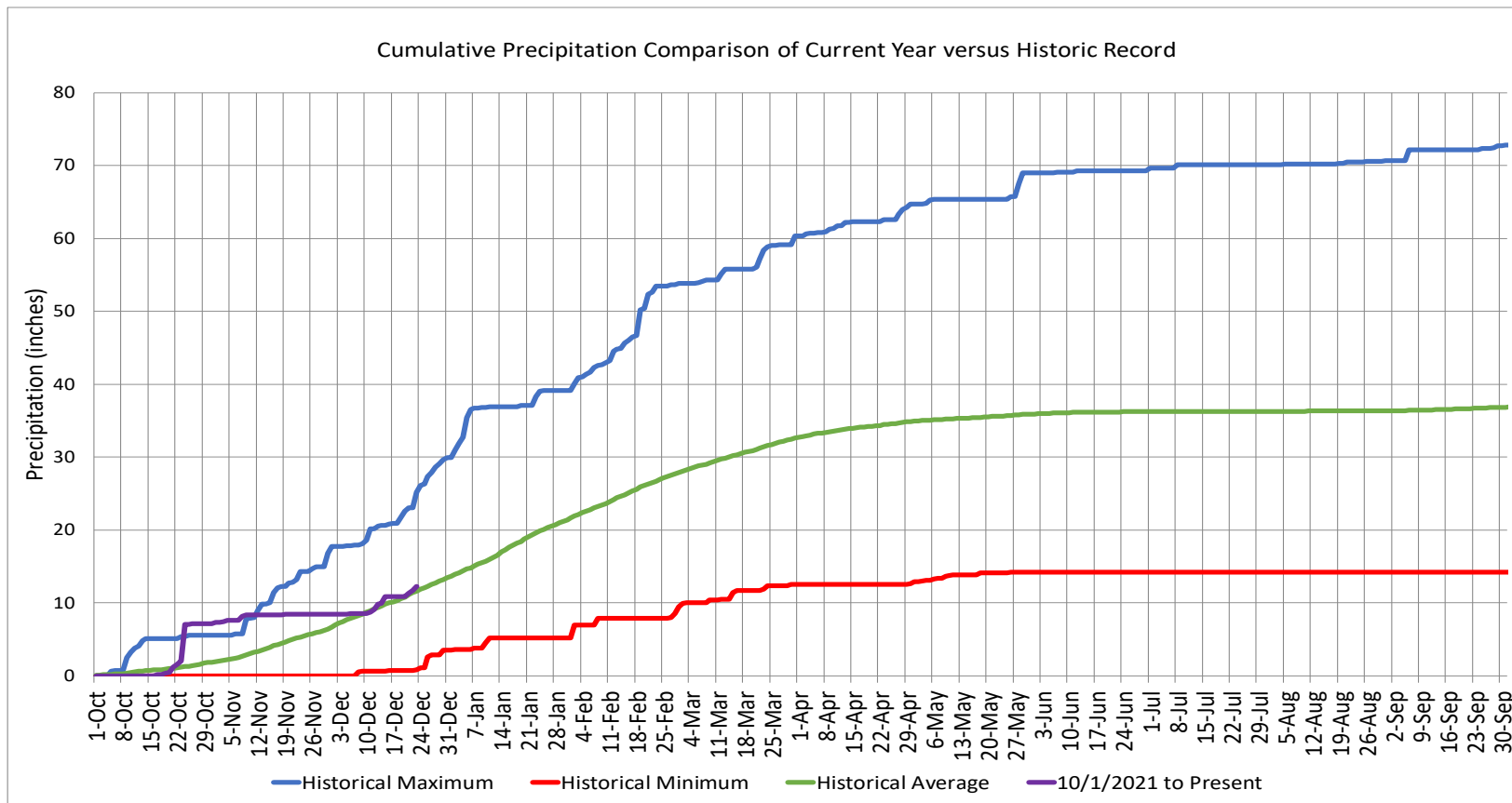
Russian River Water Quality (October 1 - December 23, 2021)

Hacienda Bridge



Precipitation

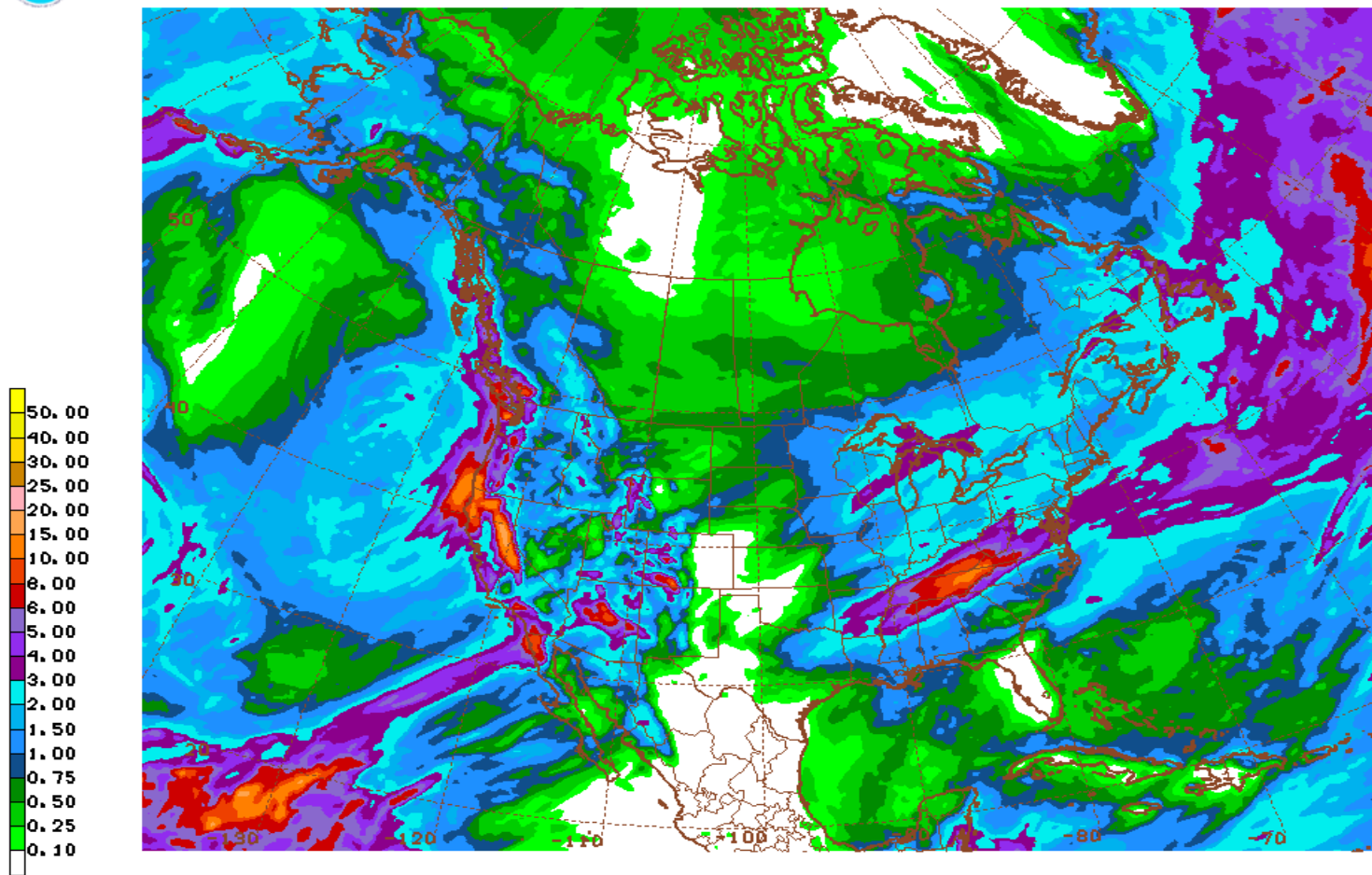
Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2021 - Dec 23, 2021	12.3
Last 7 Days*	1.40



Global Forecast System Model 16-day Cumulative Precipitation Forecast



GFS 12/27/21 12UTC 384HR FCST VALID WED 01/12/22 12UTC NOAA/NWS/NCEP



GFS WED 220112/1200Y384 384HR ACCUMULATED PRECIP (IN)

Date Range	Forecasted Cumulative (inches)
Dec 27 - Jan 12, 2022	6.2