



**Sonoma
Water**

**State Water Resources Control Board
Temporary Urgency Change Order (12/11/2021)
Russian River Hydrologic Report
December 10, 2021 - December 16, 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).

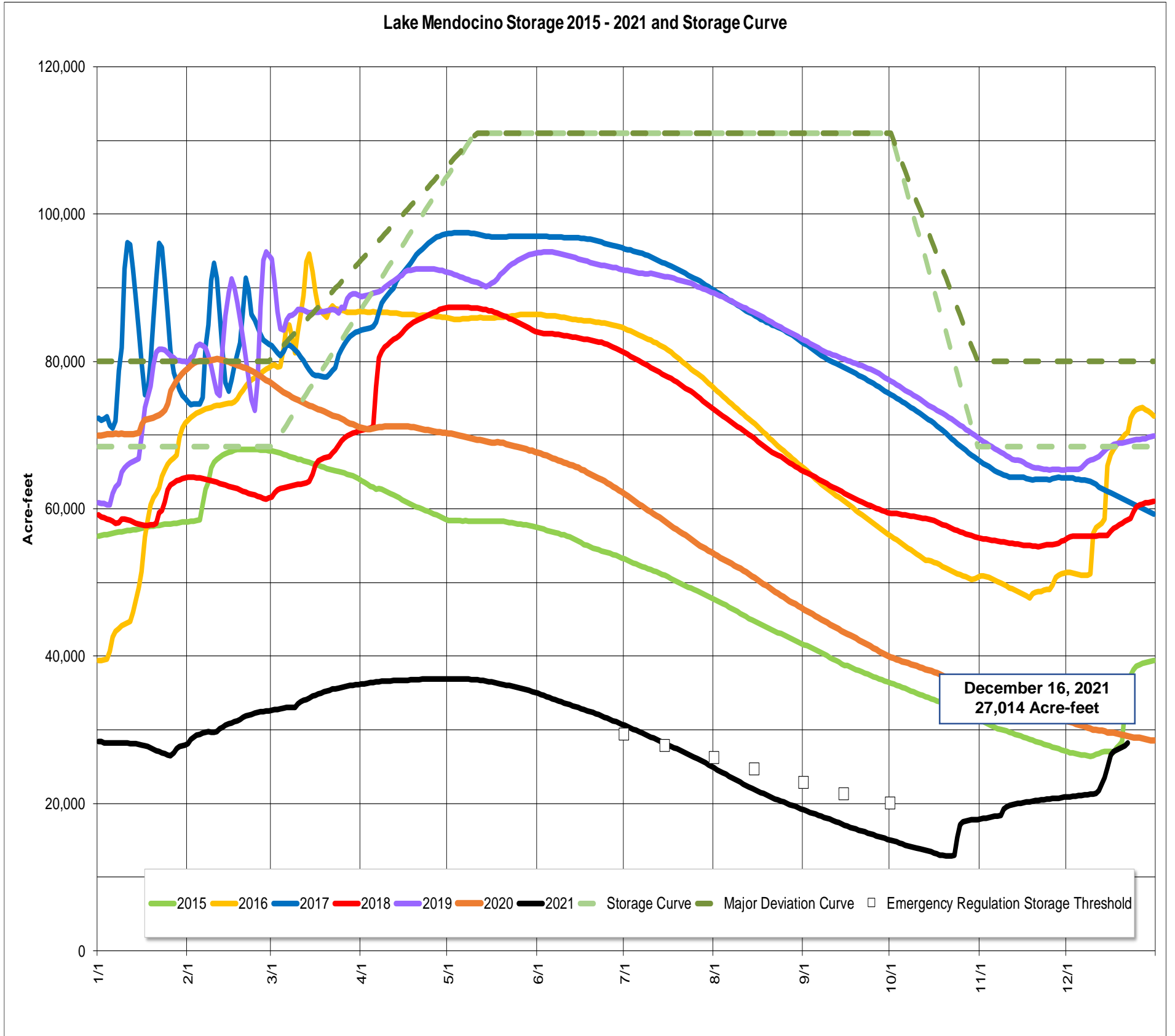
Instream Flow Requirements as of December 16, 2021

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

Lake Mendocino Storage 2015 - 2021 and Storage Curve

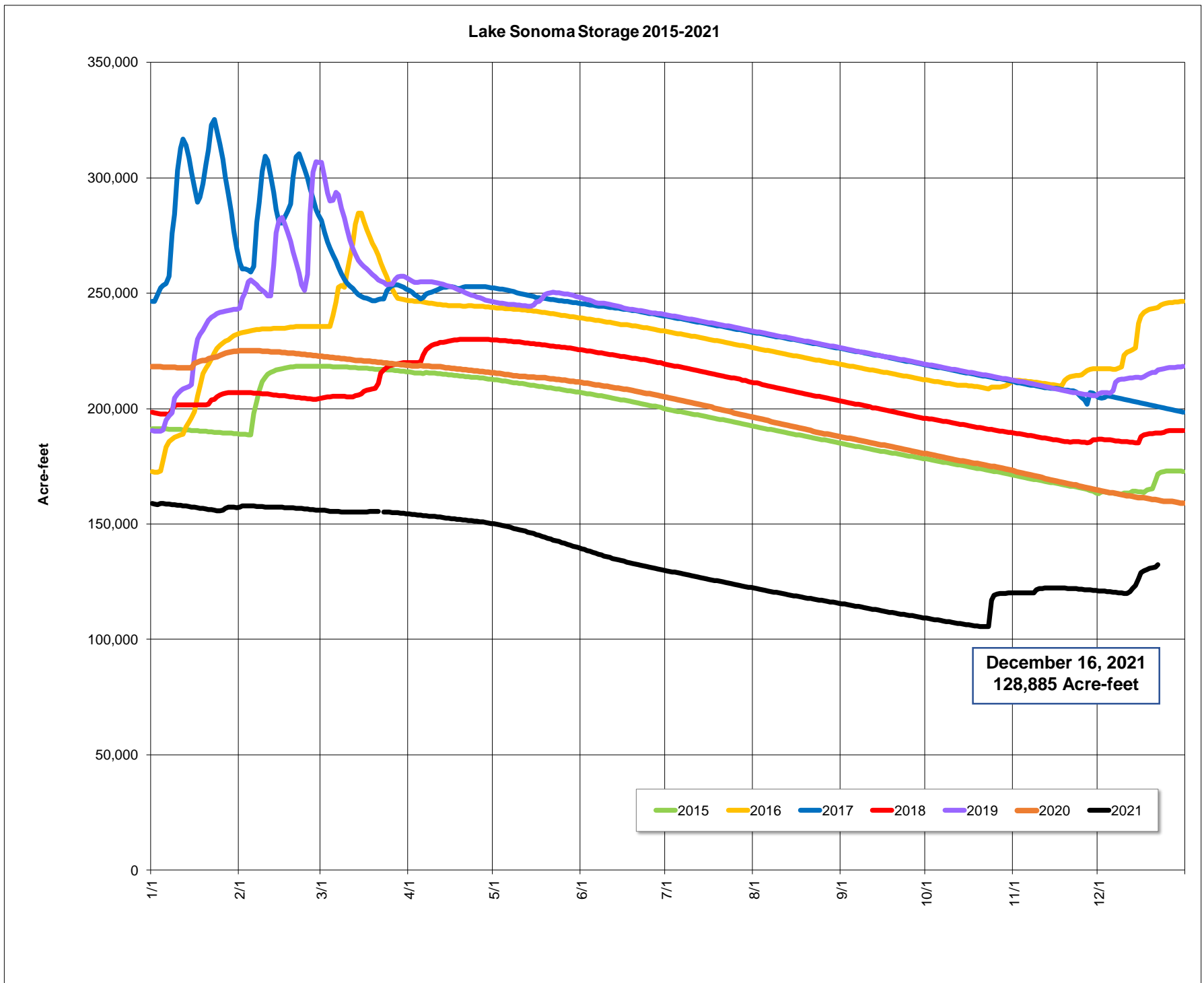


Storage (acre-feet)	December 16, 2021	27,014	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	6,451	215
	Last 7 days	5,265	752
Daily Inflow (cfs)	Last 7 days	Min	48
		Max	884
		Mean	411
Release (cfs)	Last 7 days	Min	26
		Max	29
		Mean	28

Lake Sonoma



Nathan Baskett, March 3, 2011



Storage (acre-feet)	December 16, 2021	128,885	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	6,564	219
	Last 7 days	8,864	1,266
Daily Inflow (cfs)	Last 7 days	Min	10
		Max	1,589
		Mean	705
Release (cfs)	Last 7 days	Min	74
		Max	77
		Mean	75

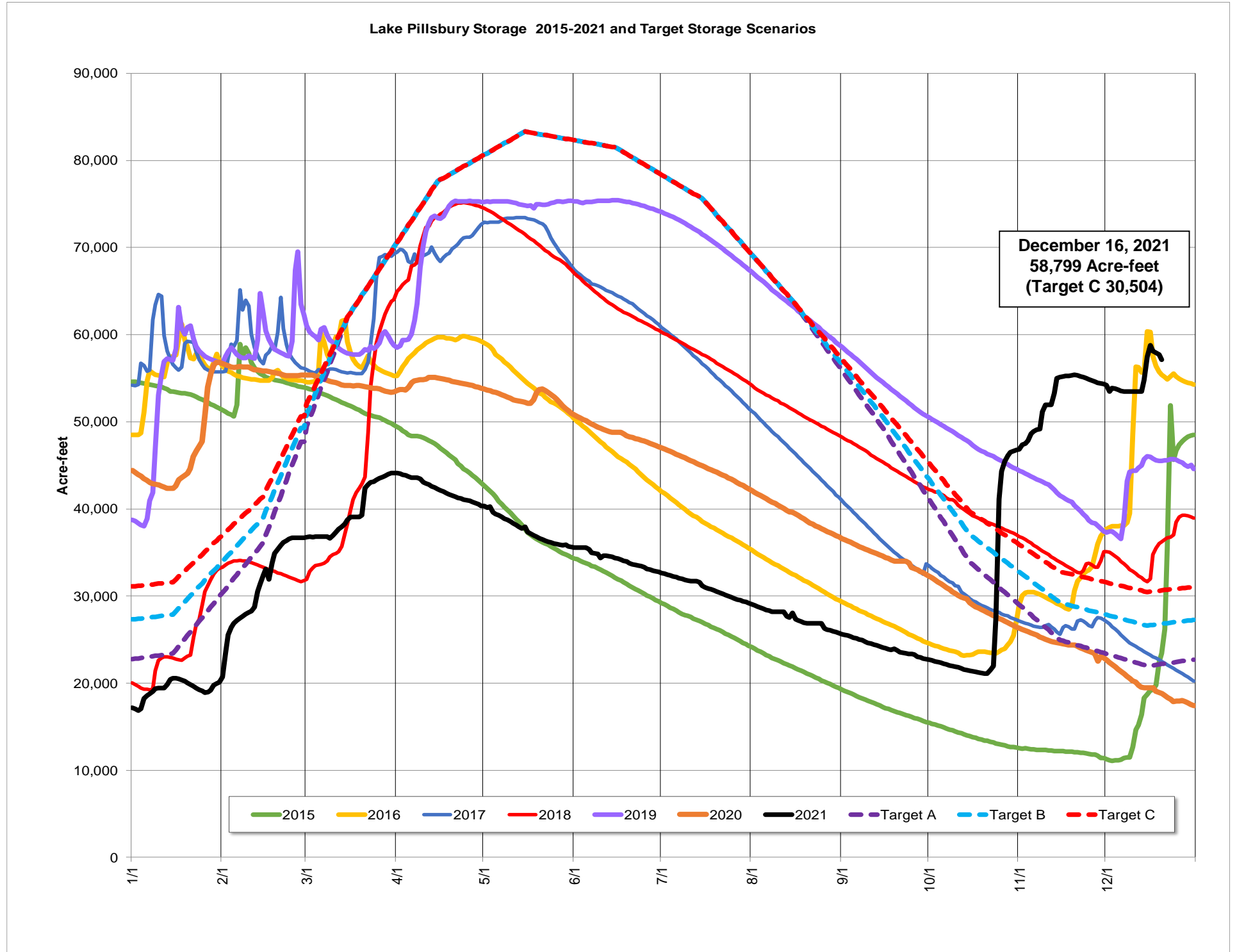
Potter Valley Project

PVP Diversion (cfs)	December 16, 2021	45
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2021 - December 19, 2021	64,102	843
	Last 7 days	12,773	1,825

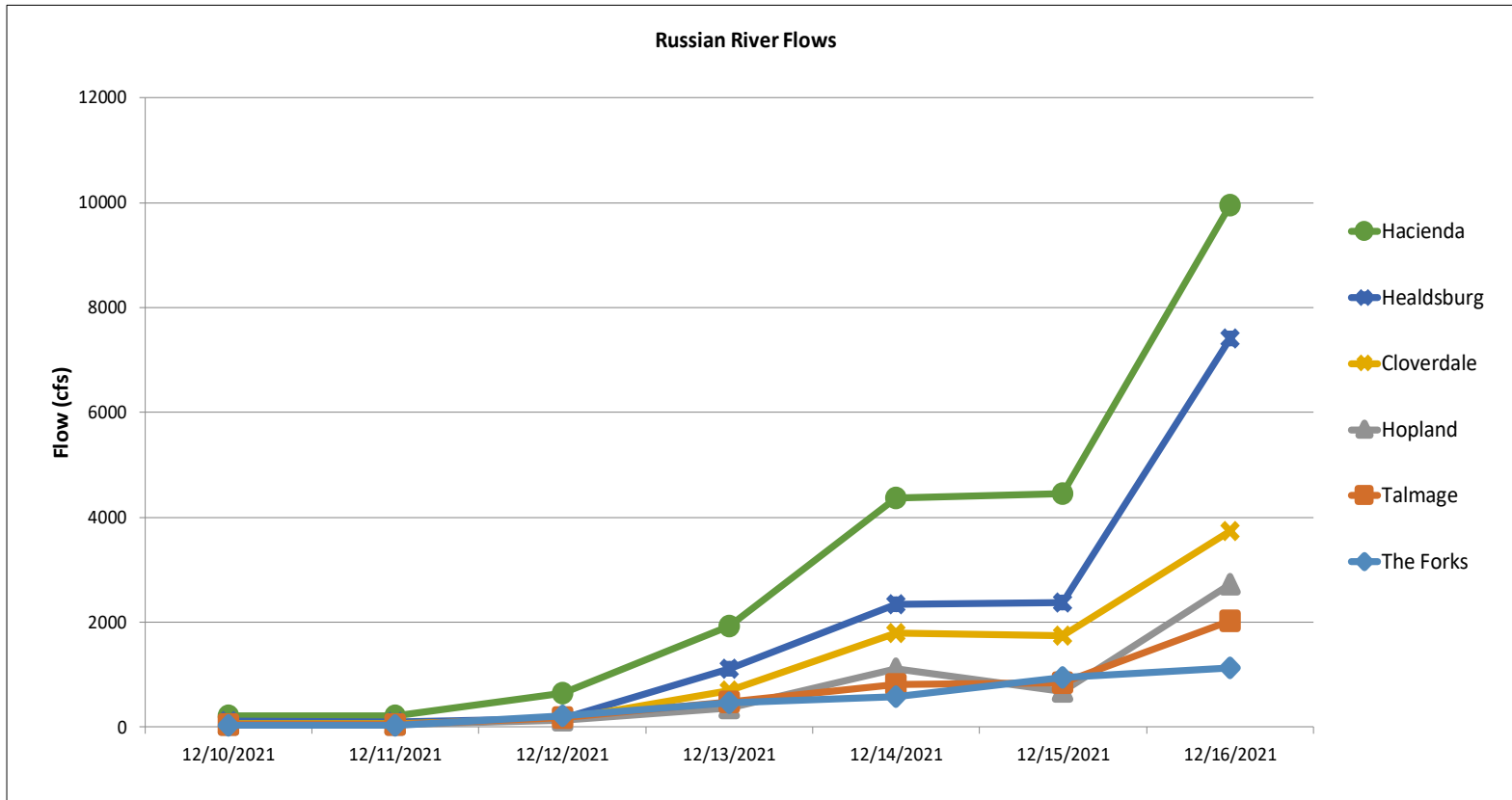
*Inflow calculation based on criteria established in D1610



Russian River Flows (December 10 - December 16, 2021)

Gage	24-hr Average Flow (cfs)						
	Dec 10, 2021	Dec 11, 2021	Dec 12, 2021	Dec 13, 2021	Dec 14, 2021	Dec 15, 2021	Dec 16, 2021
The Forks*	25	25	195	455	567	950	1129
Talmage USGS 11462080	53	52	186	479	808	845	2020
Hopland USGS 11462500	46	45	125	373	1120	685	2720
Cloverdale USGS 11463000	64	64	142	703	1789	1741	3735
Healdsburg USGS 11464000	109	104	161	1120	2340	2370	7410
Hacienda USGS 11467000	217	212	649	1930	4370	4450	9950

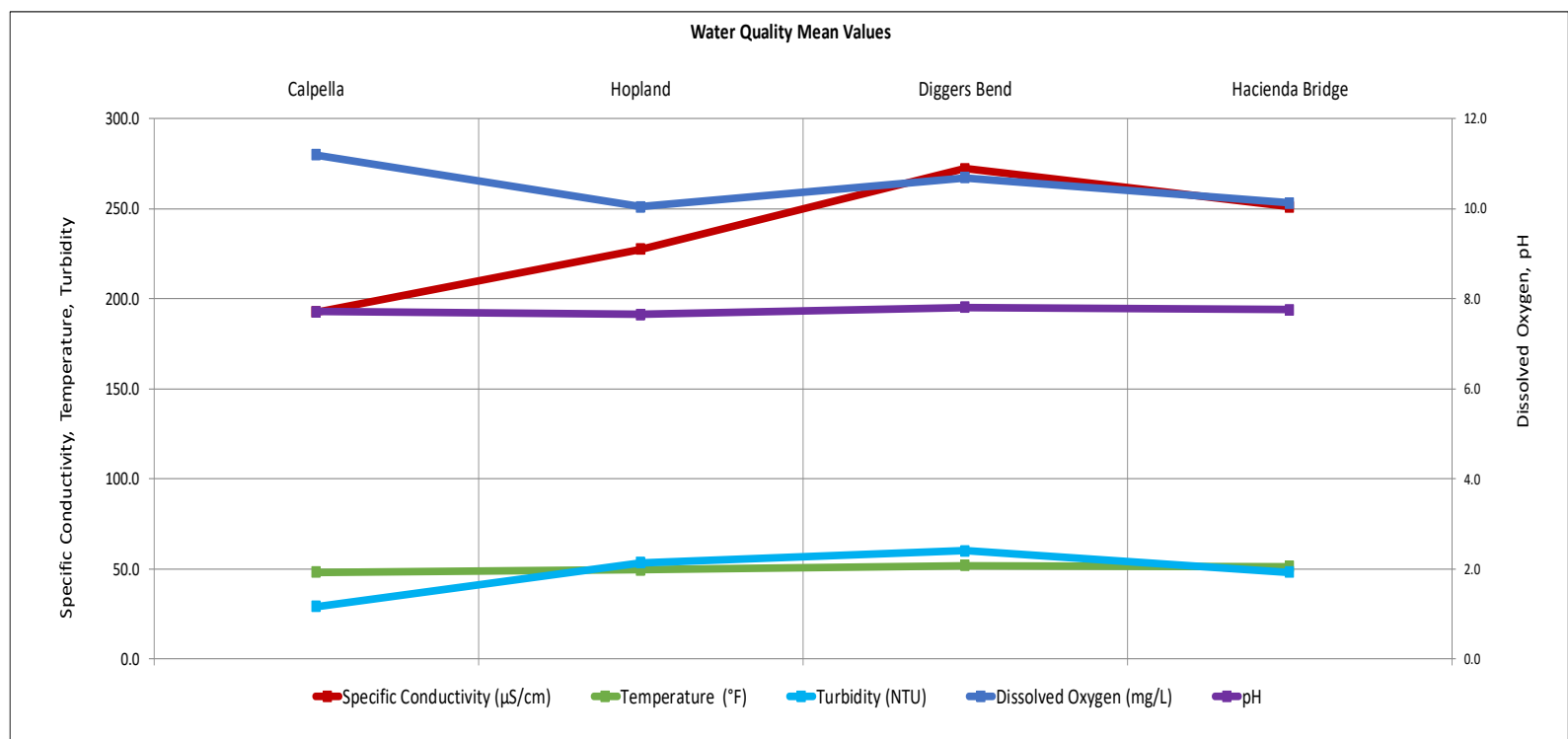
*West Fork (USGS 11461000) + East Fork (Coyote Valley Dam Release)



Russian River Water Quality (December 10 - December 16, 2021)

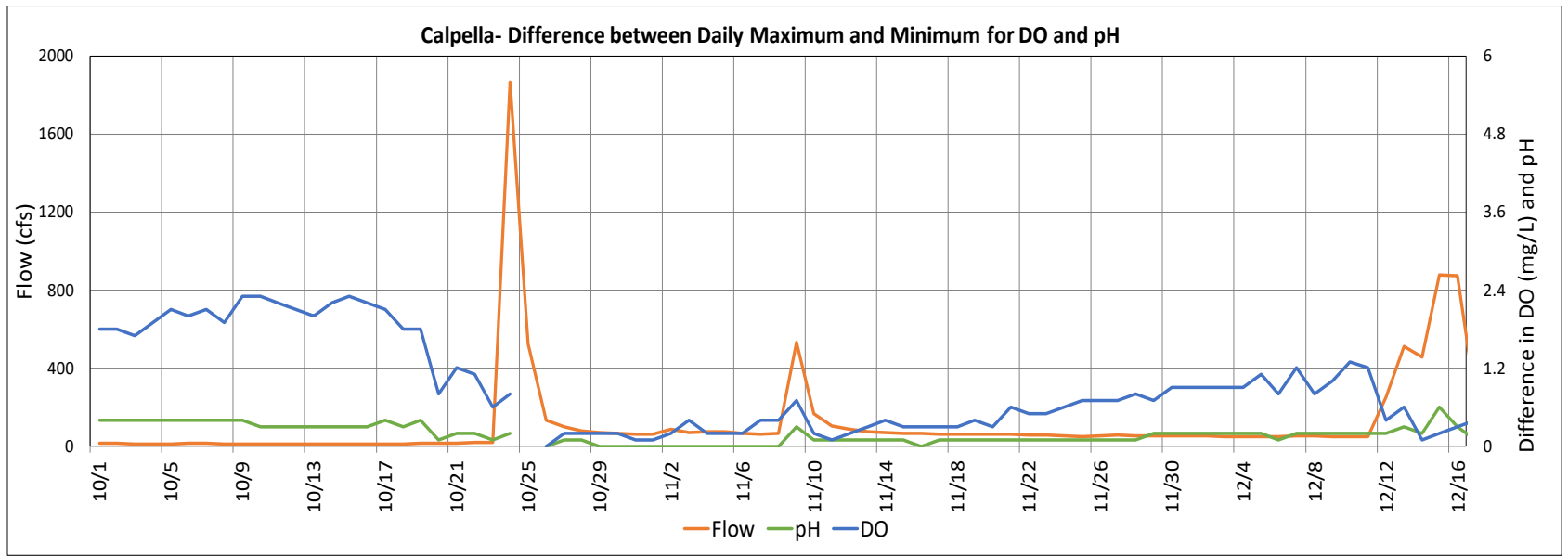
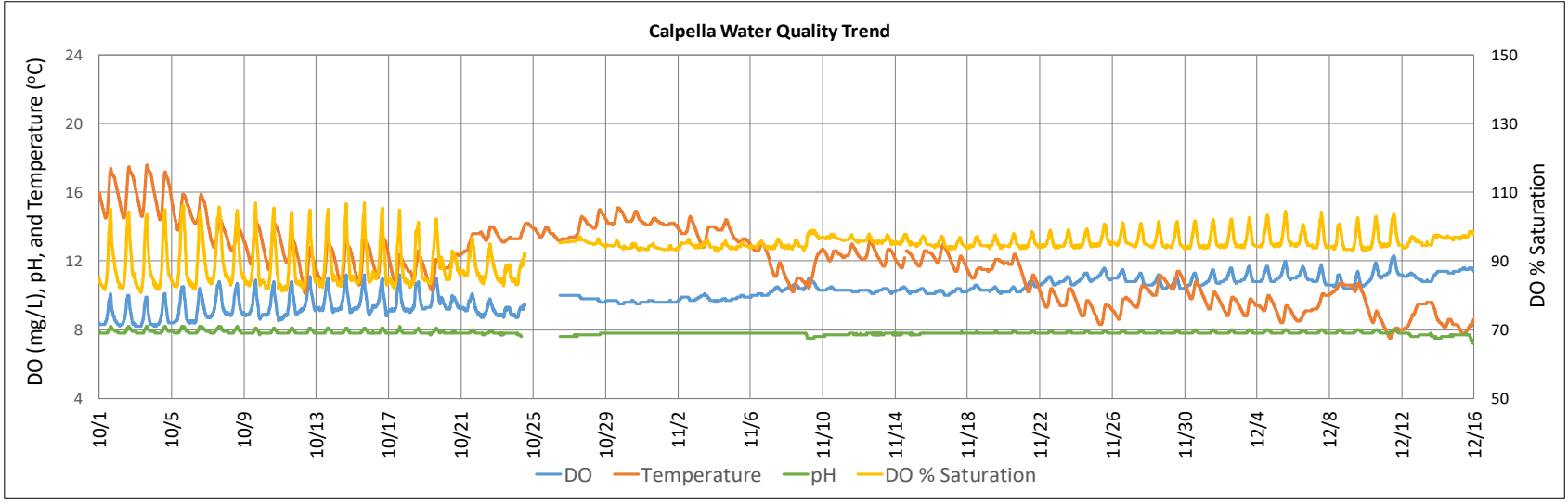
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	45.5	46.6			47.1		48.6	
	Max	51.3	54.0			56.5		55.0	
	Mean	47.9	49.4			51.8		51.3	
Specific Conductivity (µS/cm)	Min	50.0	88.0			78.0		139.0	
	Max	232.0	305.0			365.0		328.0	
	Mean	192.4	227.4			272.1		251.0	
Dissolved Oxygen (mg/L)	Min	10.4	8.7			9.2		8.8	
	Max	12.3	10.9			13.5		11.9	
	Mean	11.2	10.0			10.7		10.1	
Dissolved Oxygen (% Saturation)	Min	93.0	80.1			87.1		82.4	
	Max	103.9	94.3			123.8		106.6	
	Mean	96.4	88.1			96.9		91.1	
pH	Min	7.2	7.4			7.5		7.4	
	Max	8.0	7.8			8.3		8.2	
	Mean	7.7	7.7			7.8		7.8	
Turbidity (NTU)	Min	1.9	2.7			0.6		2.3	
	Max	266.0	426.0			530.0		329.0	
	Mean	29.0	53.2			60.1		47.9	

*Station operated seasonally



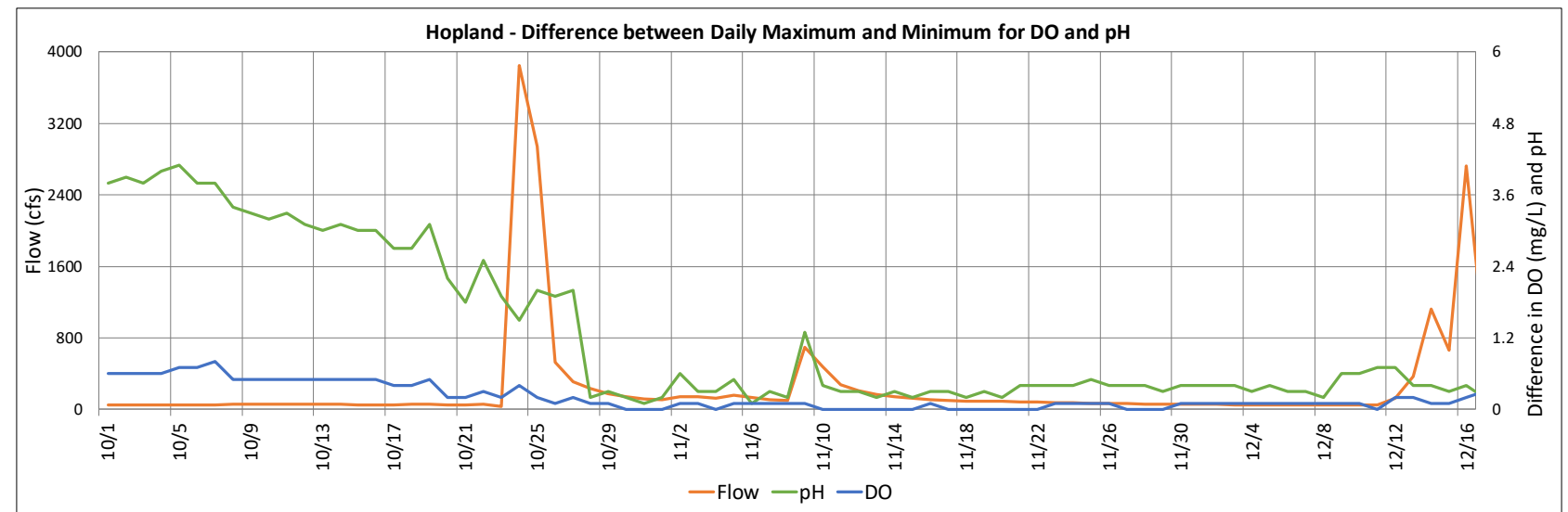
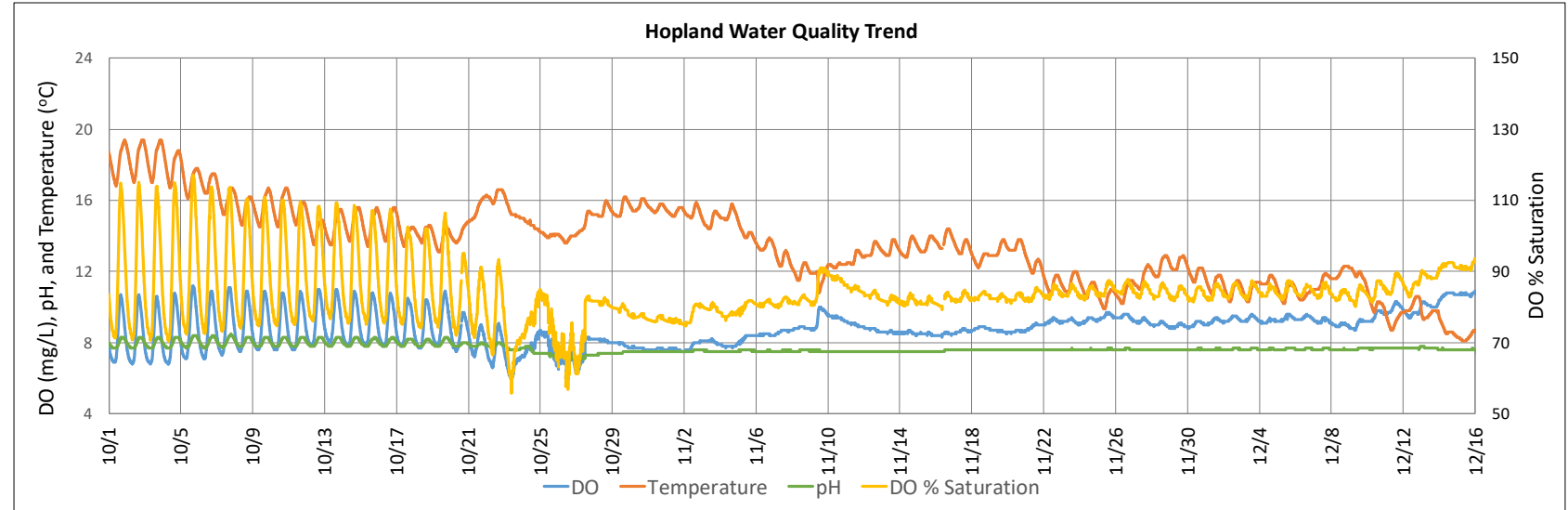
Russian River Water Quality (October 1 - December 16, 2021)

Calpella (East Fork Russian River)



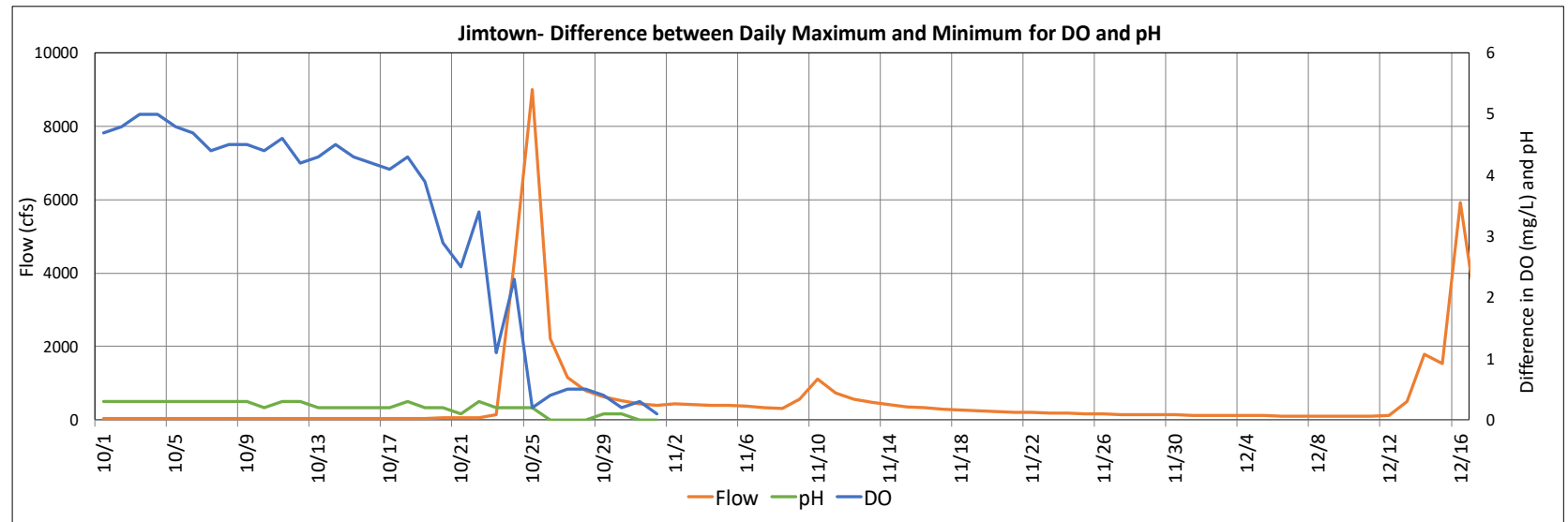
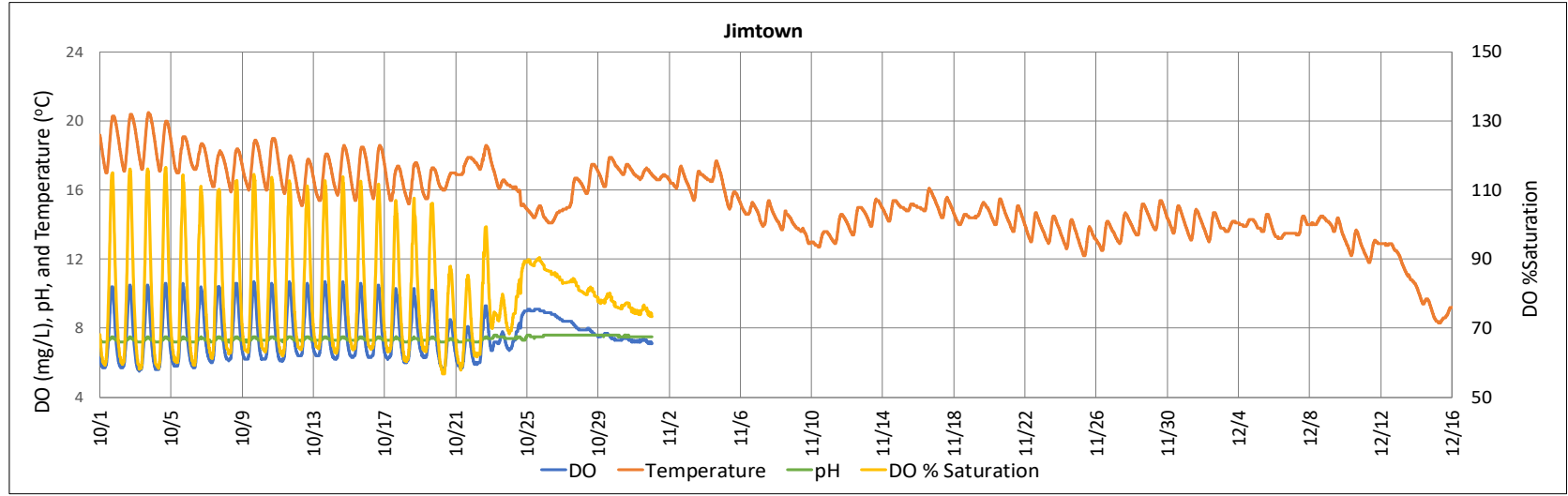
Russian River Water Quality (October 1 - December 16, 2021)

Hopland



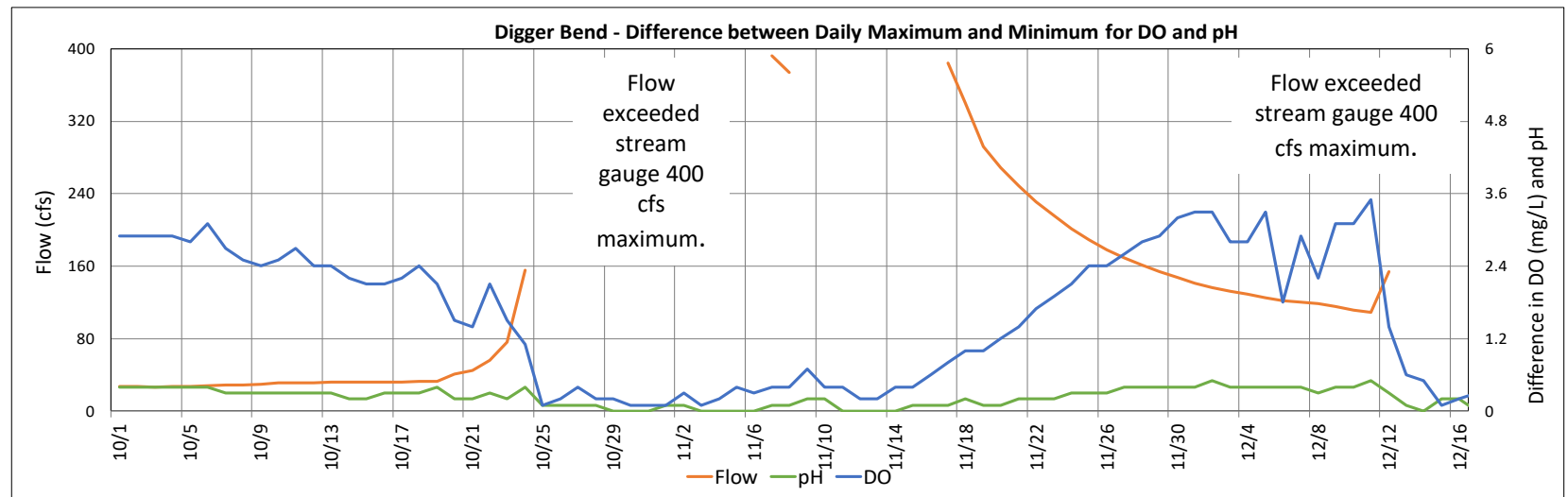
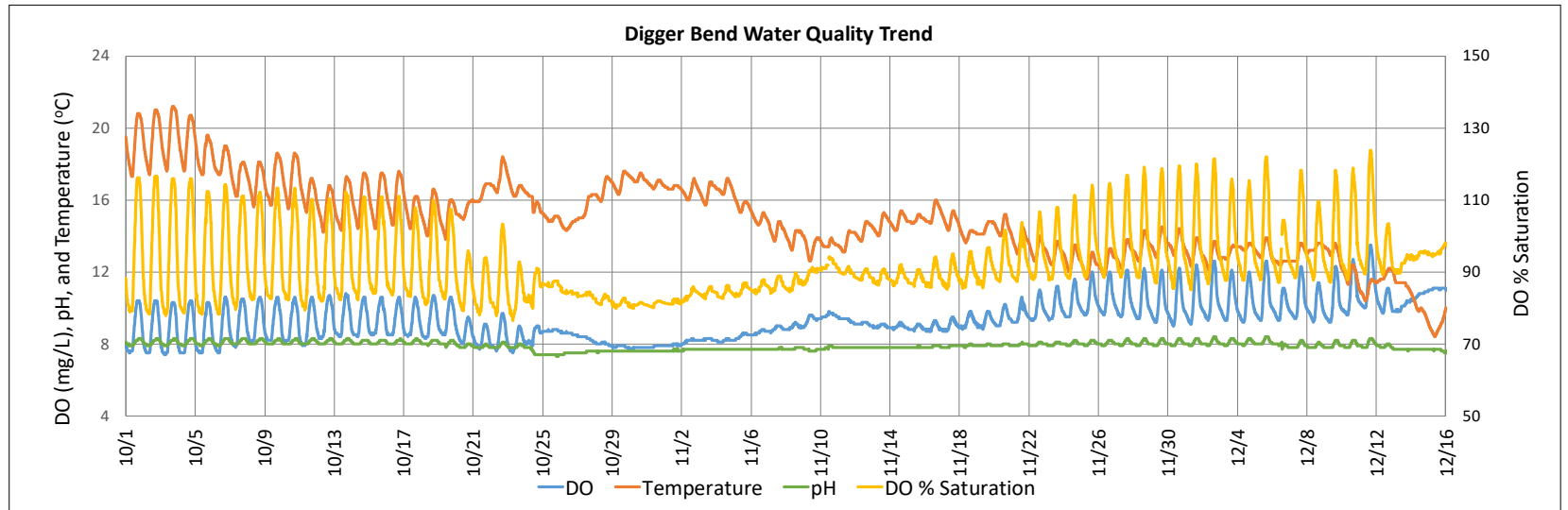
Russian River Water Quality (October 1 - December 16, 2021)

Jimtown



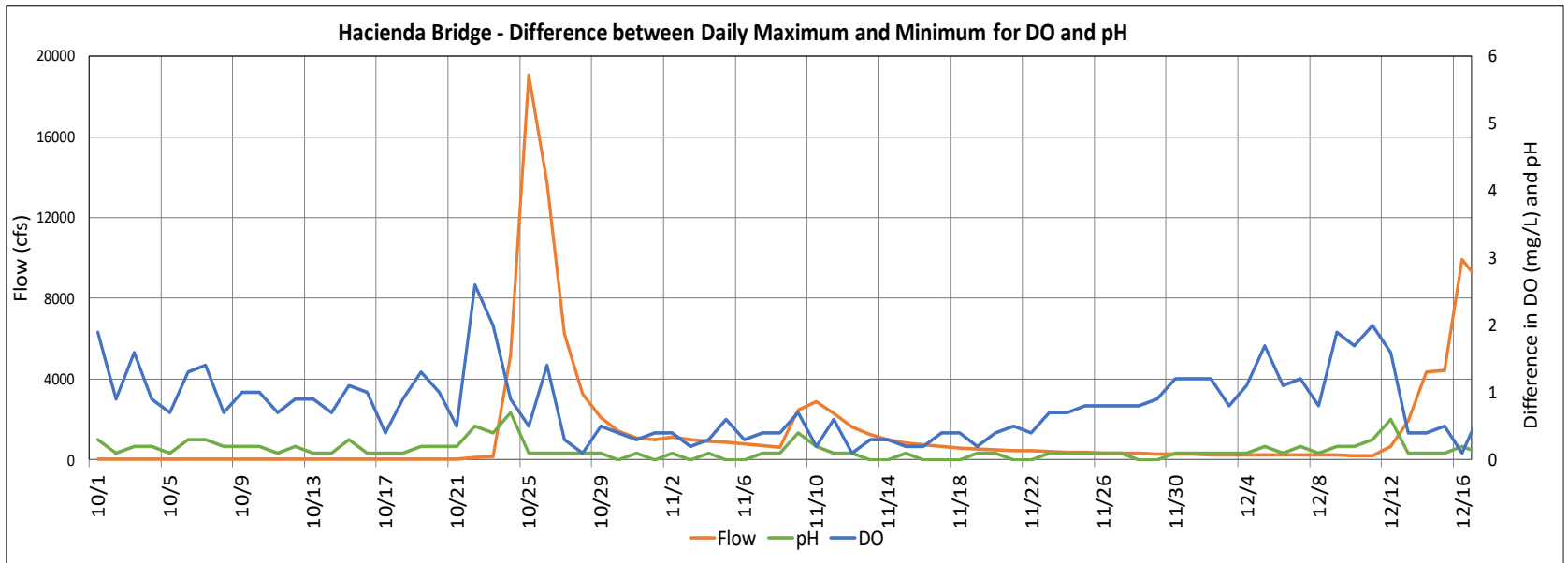
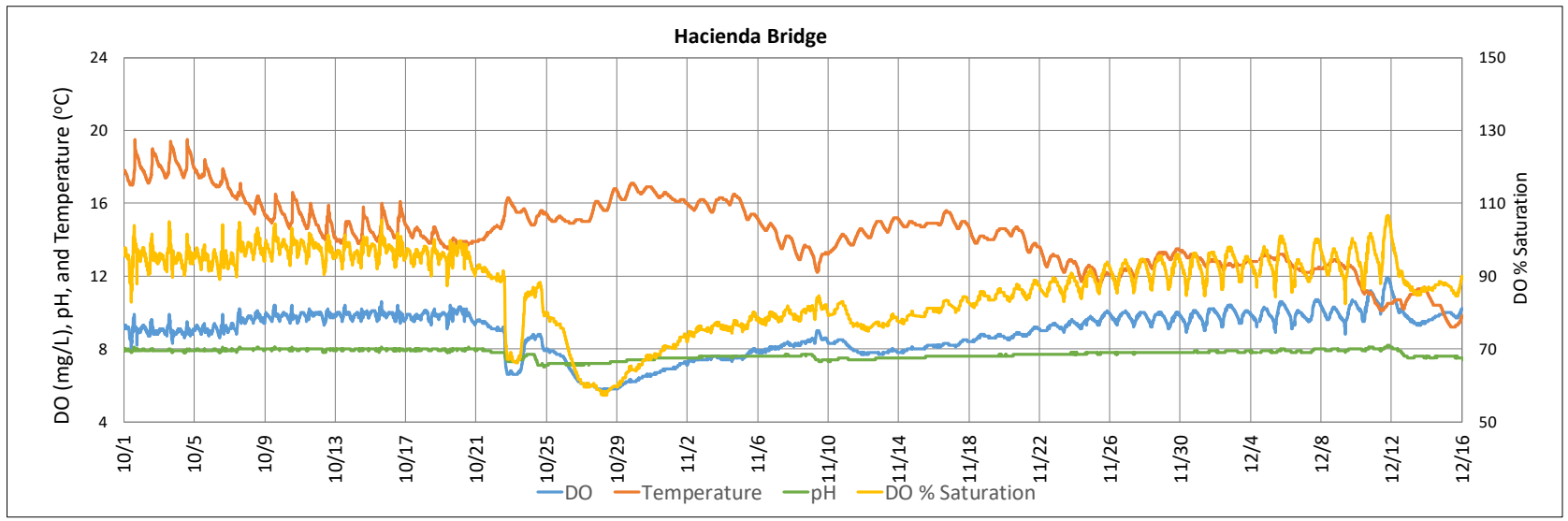
Russian River Water Quality (October 1 - December 16, 2021)

Digger Bend



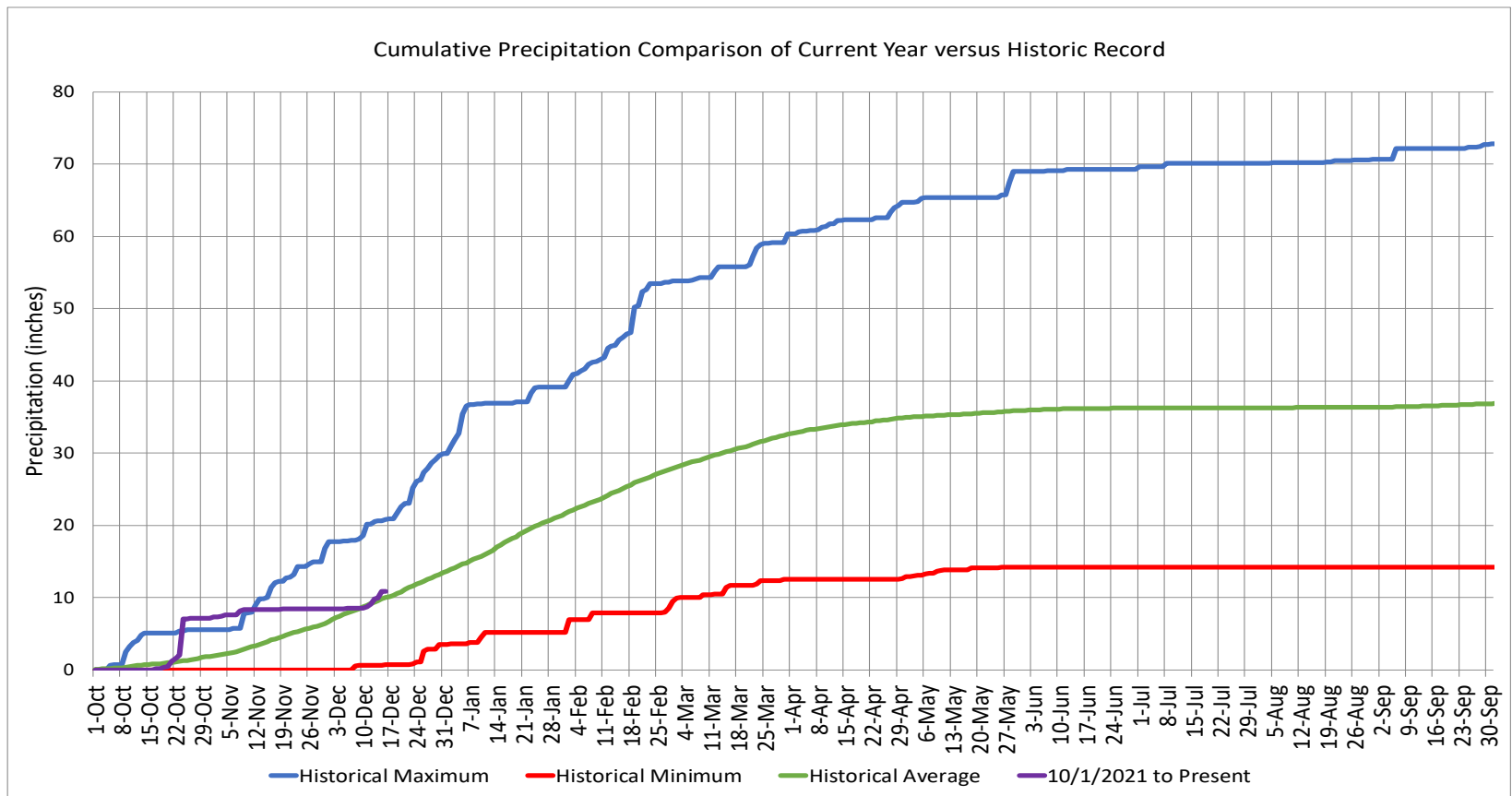
Russian River Water Quality (October 1 - December 16, 2021)

Hacienda Bridge



Precipitation

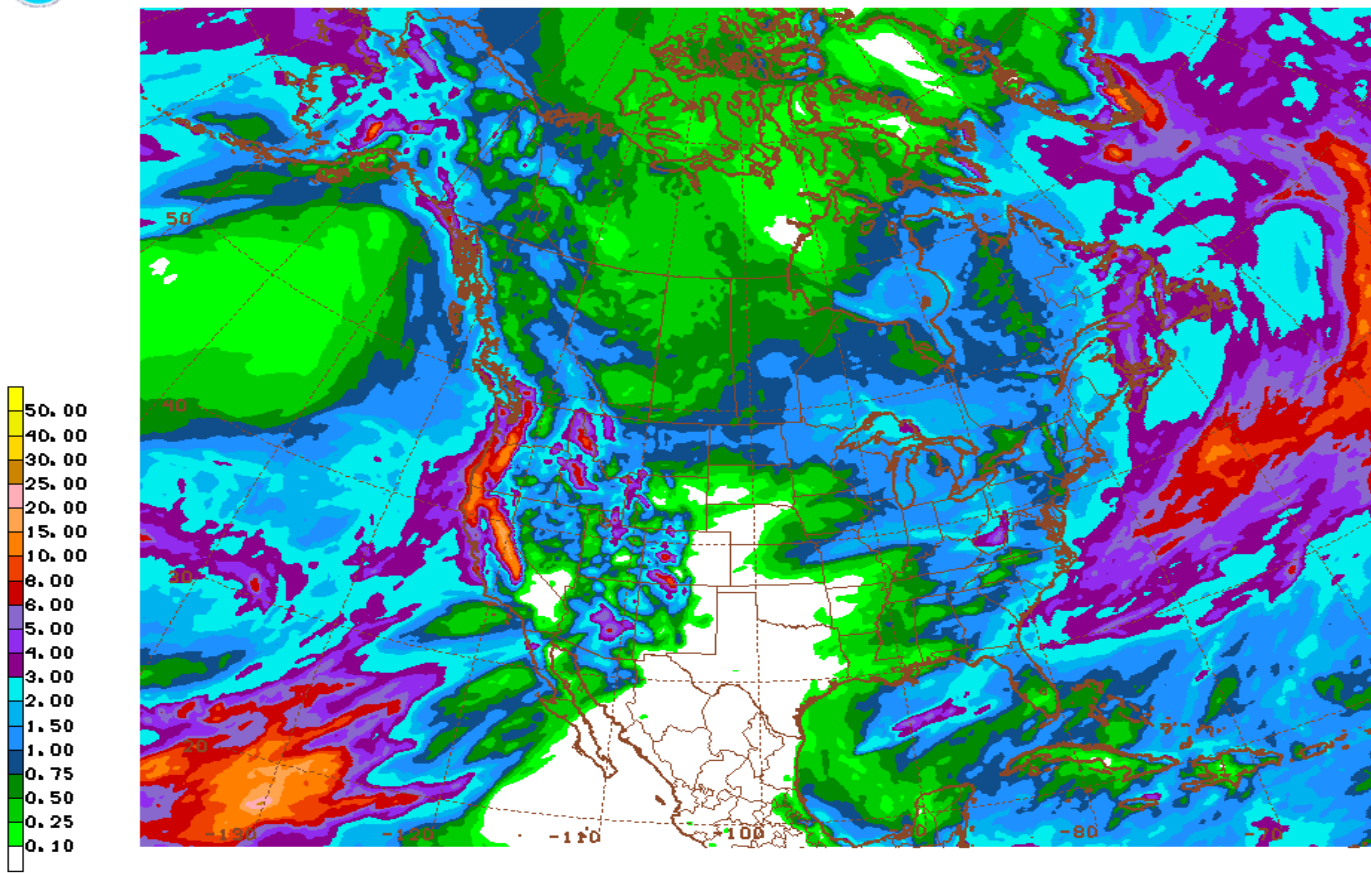
Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2021 - Dec 16, 2021	10.9
Last 7 Days*	2.35



Global Forecast System Model 16-day Cumulative Precipitation Forecast



GFS 12/20/21 12UTC 384HR FCST VALID WED 01/05/22 12UTC NOAA/NWS/NCEP



GFS WED 2201

Date Range
Dec 20 - Jan 5, 2022

IP (IN)

Forecasted Cumulative (inches)
5.1