



**Sonoma
Water**

**State Water Resources Control Board
Temporary Urgency Change Order (12/11/2021)
Russian River Hydrologic Report
April 15, 2022 - April 21, 2022**

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).

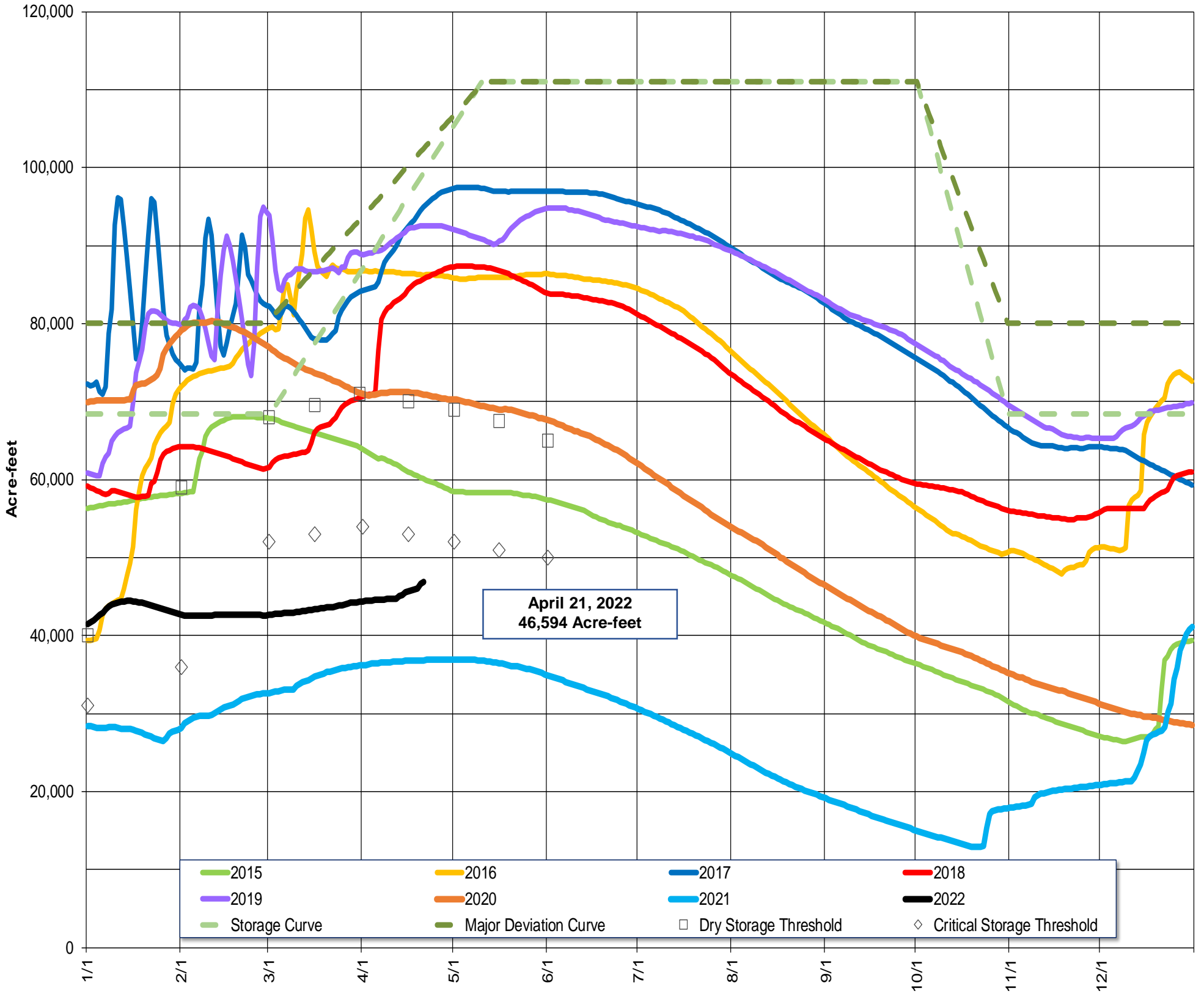
Instream Flow Requirements as of April 21, 2022

Basis	Reach	Instantaneous (cfs)	5-day Average (cfs)
Modified Per Order: Critical Condition	Upper Russian River	25	-
Modified Per Order: Critical Condition	Dry Creek	25	-
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 - 2022 and Storage Curve



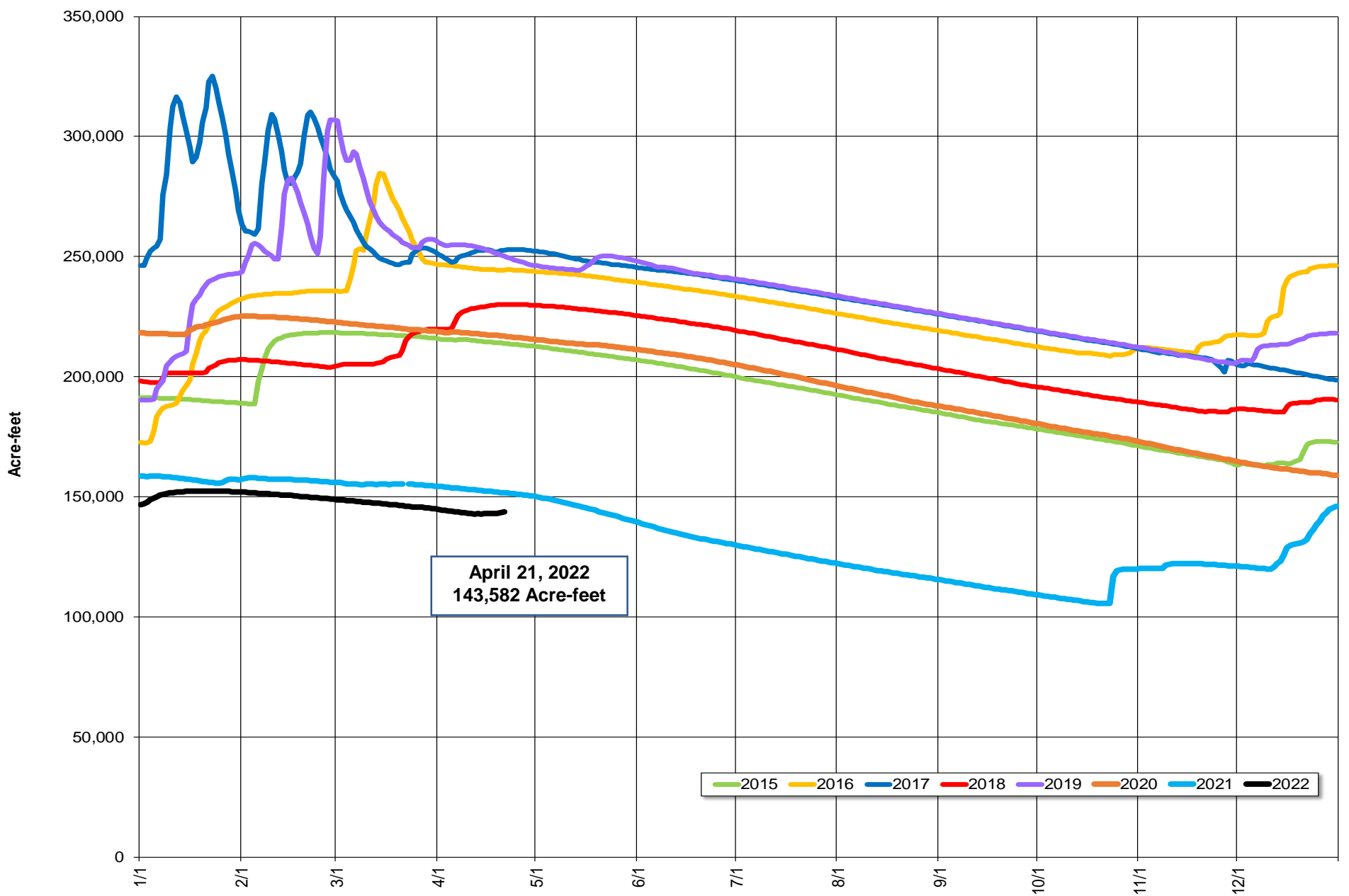
Storage (acre-feet)	April 21, 2022	46,594	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	3,155	105
	Last 7 days	1,398	200
Daily Inflow (cfs)	Last 7 days	Min	89
		Max	303
		Mean	146
Release (cfs)	Last 7 days	Min	28
		Max	29
		Mean	28

Lake Sonoma



Nathan Baskett, March 3, 2011

Lake Sonoma Storage 2015-2022



Storage (acre-feet)	April 21, 2022	143,582	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	-2,484	-83
	Last 7 days	699	100
Daily Inflow (cfs)	Last 7 days	Min	26
		Max	254
		Mean	120
Release (cfs)	Last 7 days	Min	62
		Max	75
		Mean	72

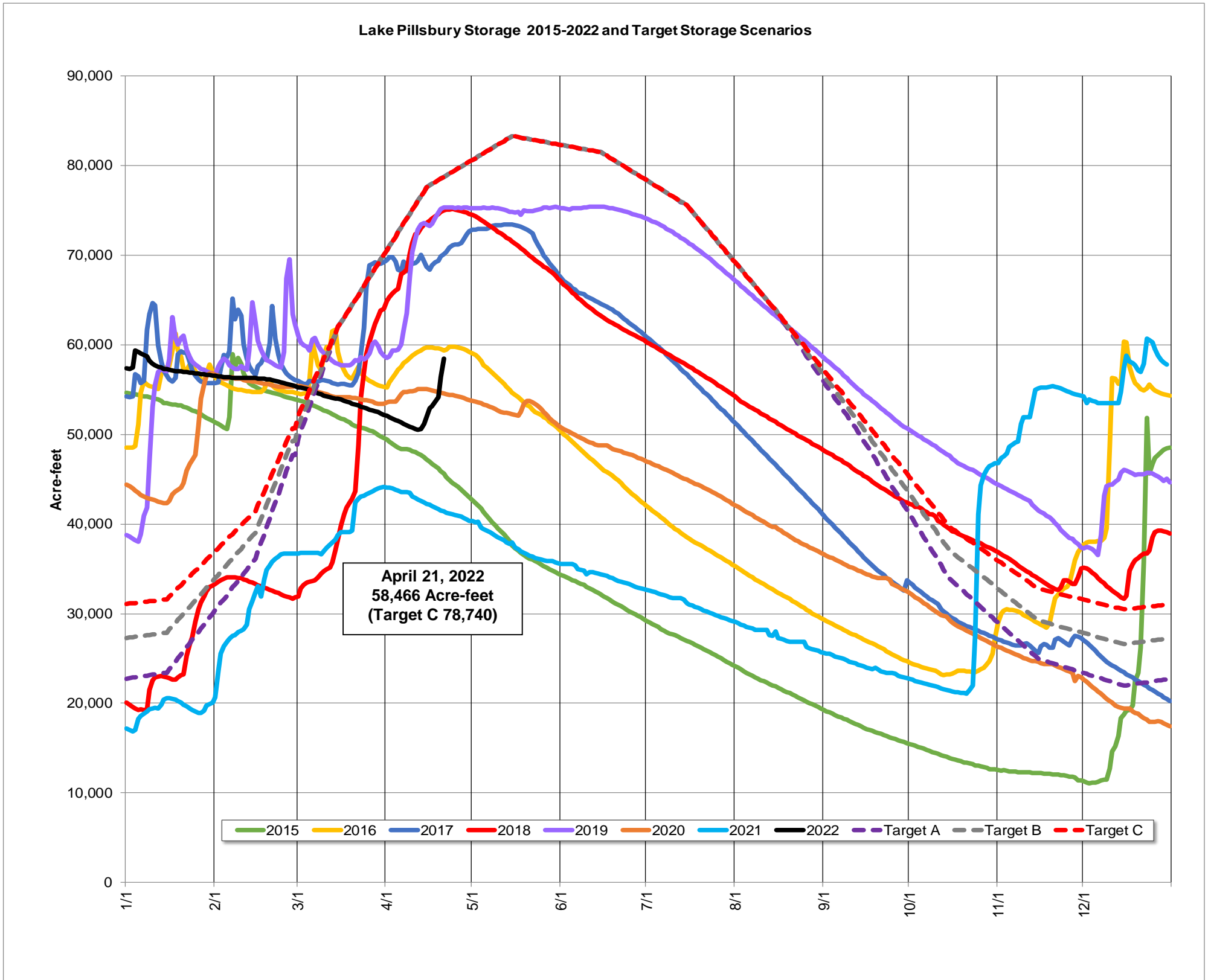
Potter Valley Project

PVP Diversion (cfs)	April 21, 2022	49
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2021 - April 21, 2022	204,628	1,013
	Last 7 days	8,412	1,202

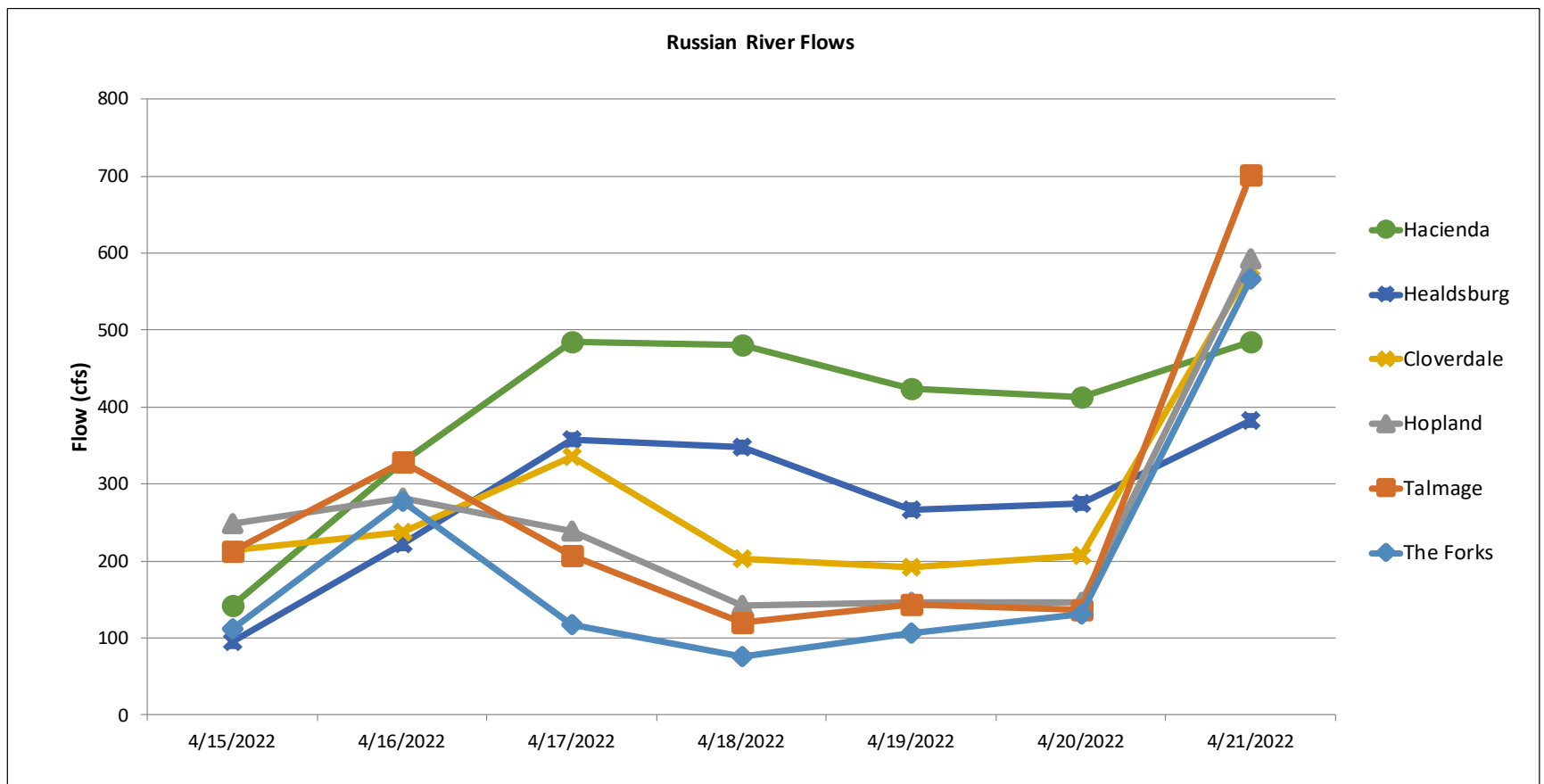
*Inflow calculation based on criteria established in D1610



Russian River Flows (April 15, 2022 - April 21, 2022)

Gage	24-hr Average Flow (cfs)						
	Apr 15, 2022	Apr 16, 2022	Apr 17, 2022	Apr 18, 2022	Apr 19, 2022	Apr 20, 2022	Apr 21, 2022
The Forks*	111	278	117	76	106	131	566
Talmage USGS 11462080	212	328	207	120	144	136	702
Hopland USGS 11462500	248	281	239	142	146	147	592
Cloverdale USGS 11463000	214	237	336	202	192	207	579
Healdsburg USGS 11464000	94	222	357	348	267	275	382
Hacienda USGS 11467000	142	329	484	481	424	413	485

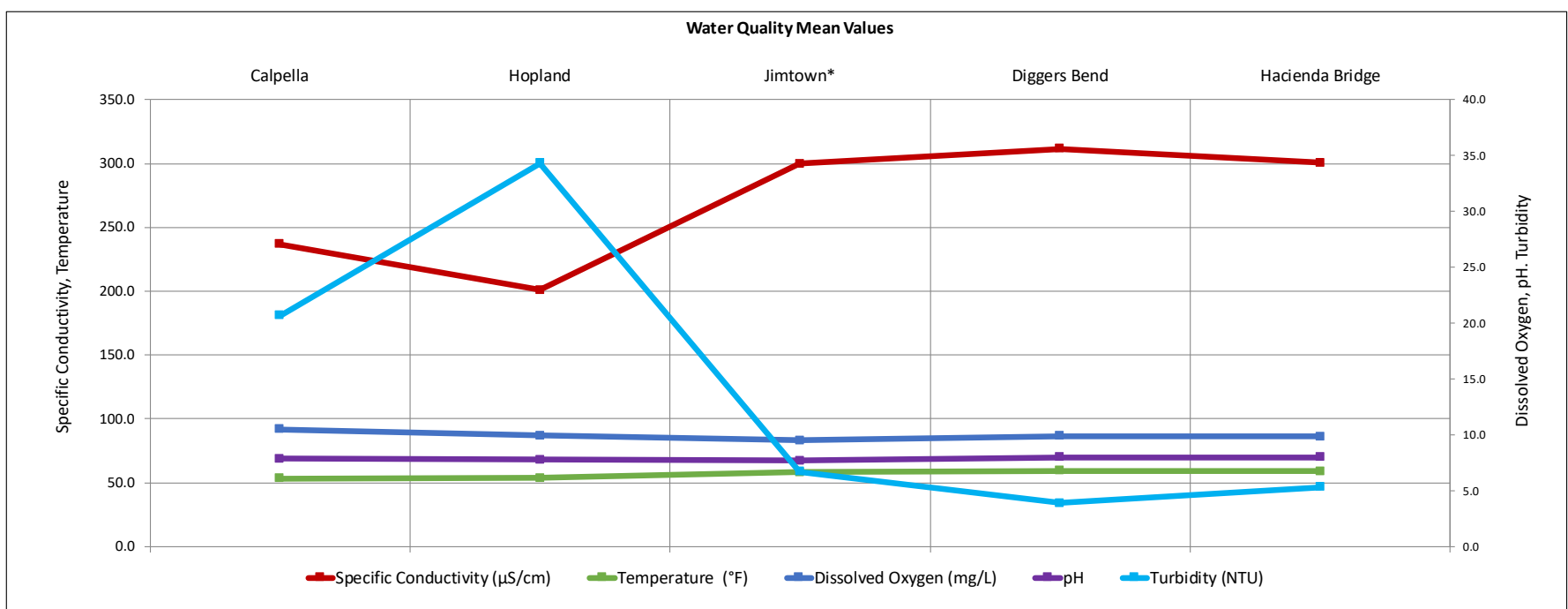
*West Fork (USGS 11461000) + East Fork (Coyote Valley Dam Release)



Russian River Water Quality (April 15, 2022 - April 21, 2022)

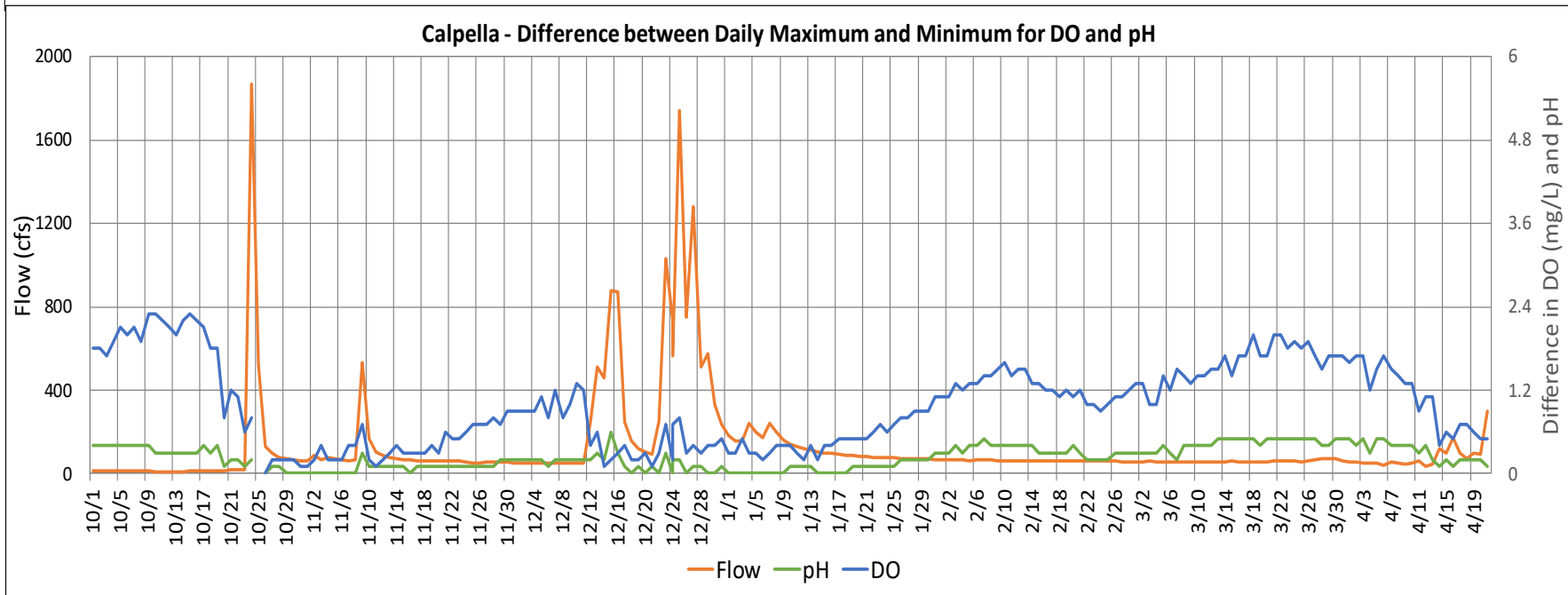
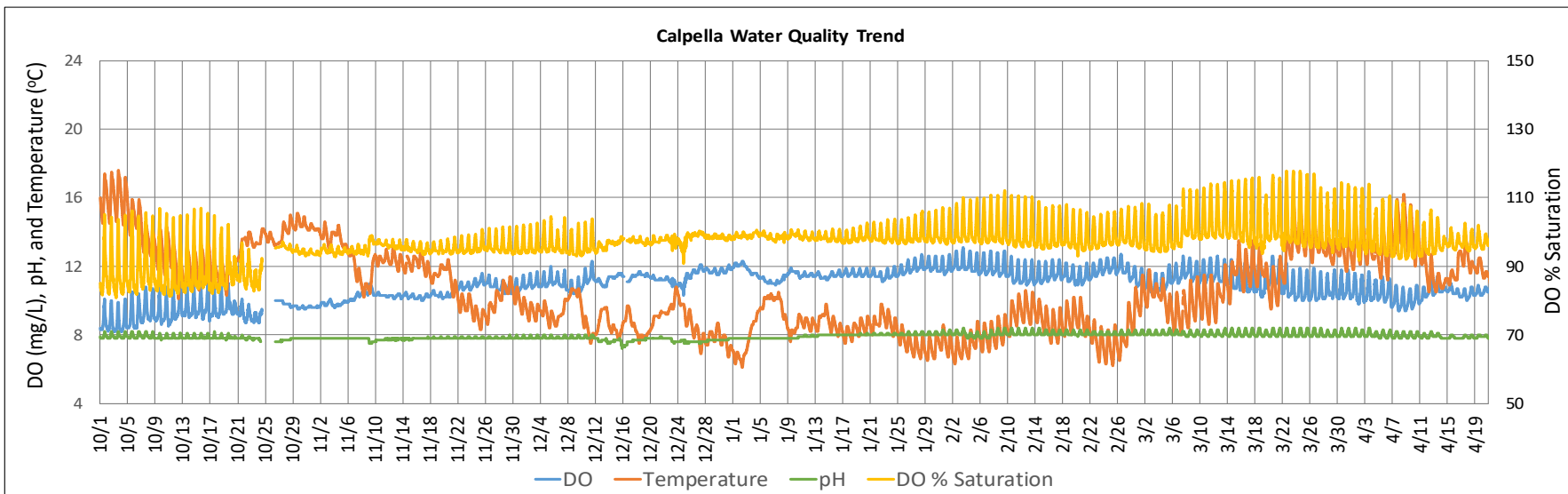
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463000	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	51.4	51.1		55.6	56.5		56.7	
	Max	56.8	56.7		62.2	63.5		61.2	
	Mean	53.4	53.5		58.2	59.3		58.9	
Specific Conductivity (µS/cm)	Min	192.0	129.0		245.0	275.0		269.0	
	Max	253.0	230.0		377.0	375.0		352.0	
	Mean	236.7	201.1		300.1	311.6		300.7	
Dissolved Oxygen (mg/L)	Min	10.0	9.4		7.4	8.4		8.9	
	Max	11.0	10.7		13.2	12.8		12.8	
	Mean	10.5	9.9		9.5	9.9		9.9	
Dissolved Oxygen (% Saturation)	Min	94.4	85.4		72.4	81.8		87.9	
	Max	102.6	101.2		135.5	132.2		129.1	
	Mean	97.2	92.1		93.6	98.7		97.7	
pH	Min	7.7	7.7		7.3	7.6		7.8	
	Max	8.0	8.0		8.2	8.4		8.4	
	Mean	7.9	7.8		7.7	8.0		8.0	
Turbidity (NTU)	Min	5.2	7.4		1.2	0.2		1.6	
	Max	93.0	160.0		15.7	9.8		8.4	
	Mean	20.7	34.3		6.7	3.9		5.3	

*Station operated seasonally



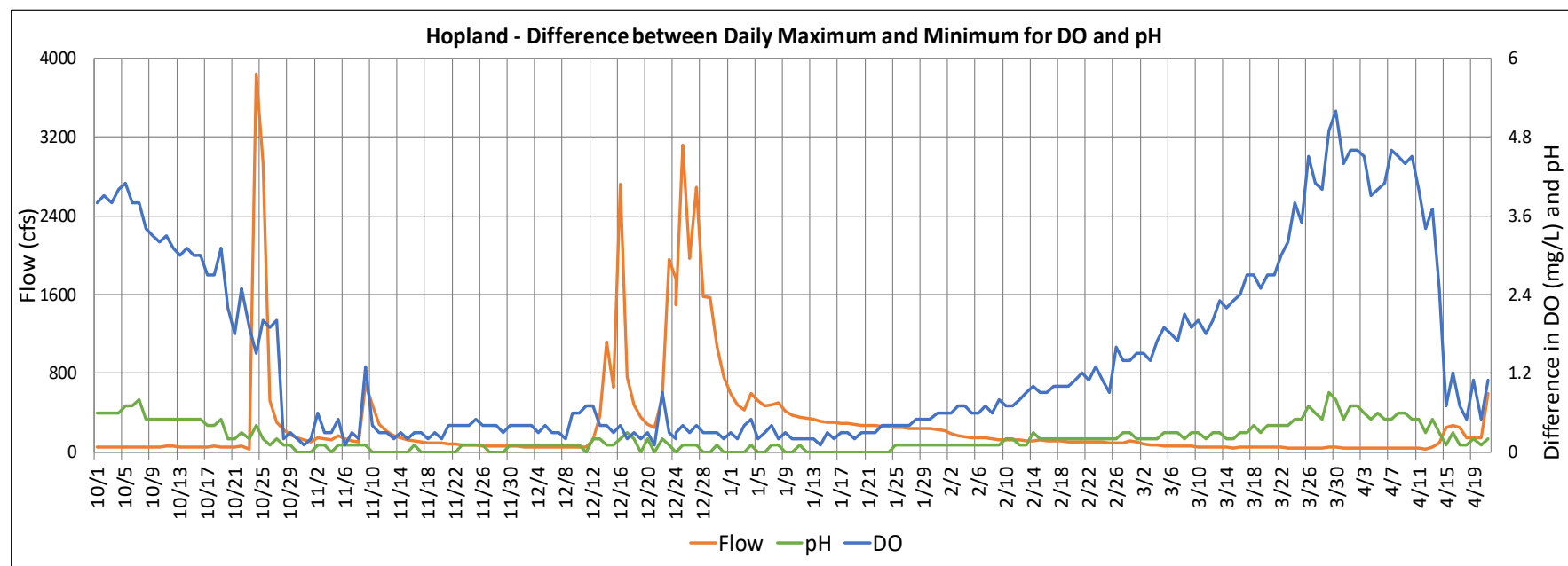
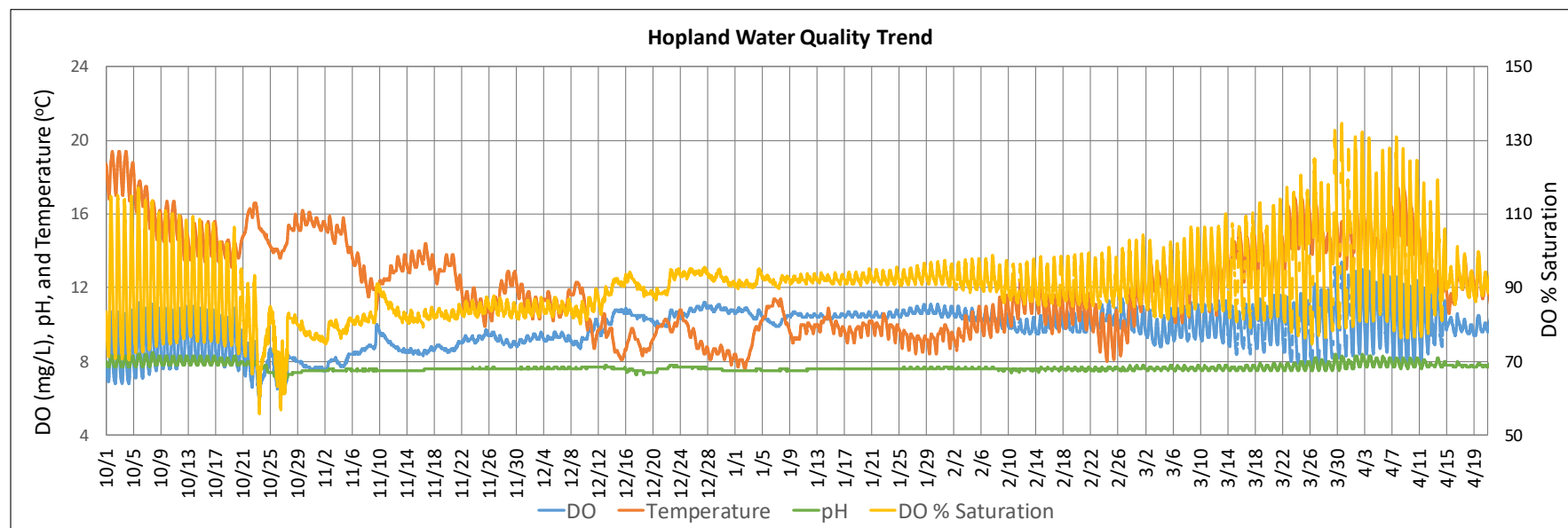
Russian River Water Quality (October 1, 2021 - April 21, 2022)

Calpella (East Fork Russian River)



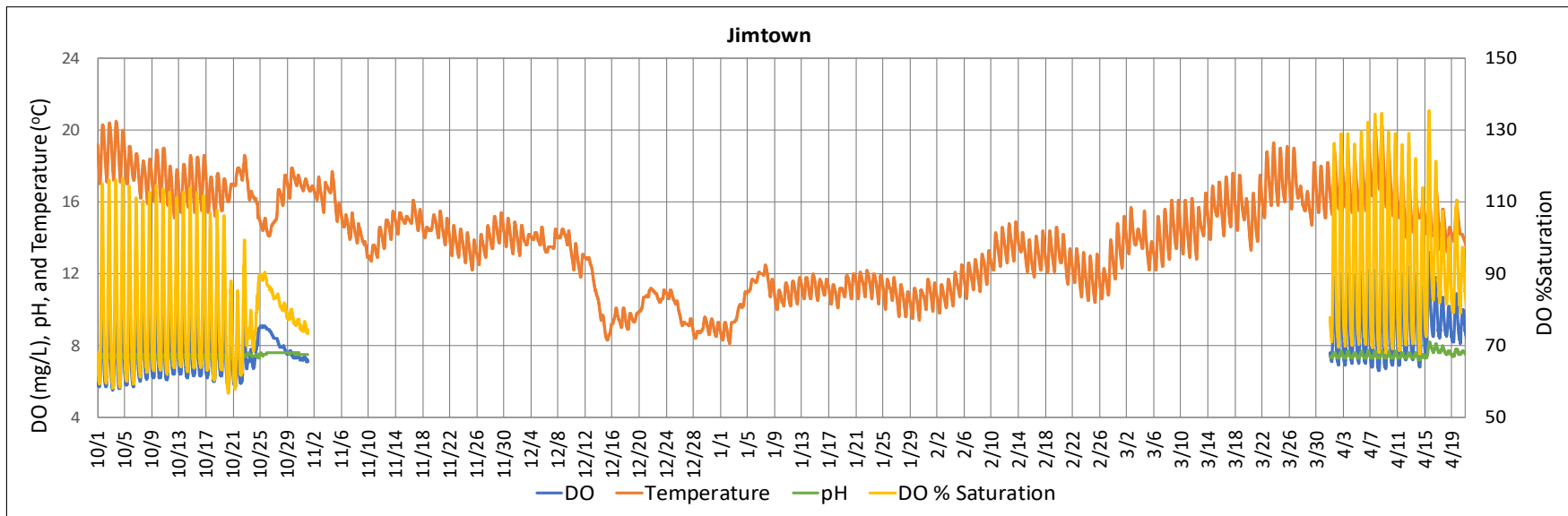
Russian River Water Quality (October 1, 2021 - April 21, 2022)

Hopland

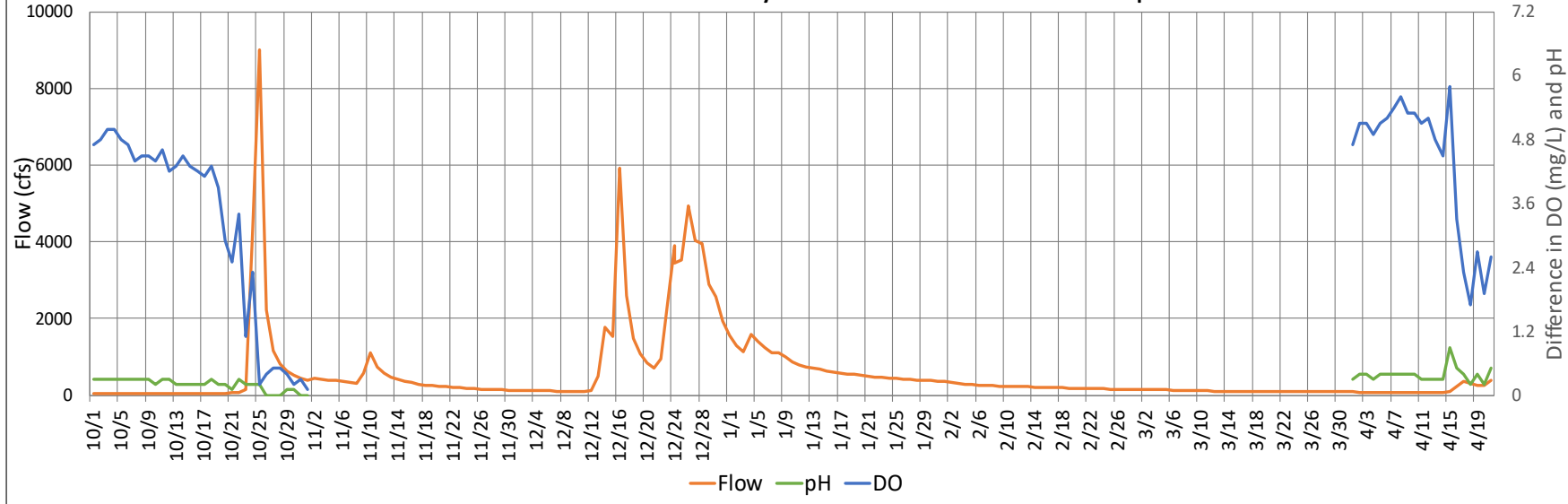


Russian River Water Quality (October 1, 2021 - April 21, 2022)

Jimtown



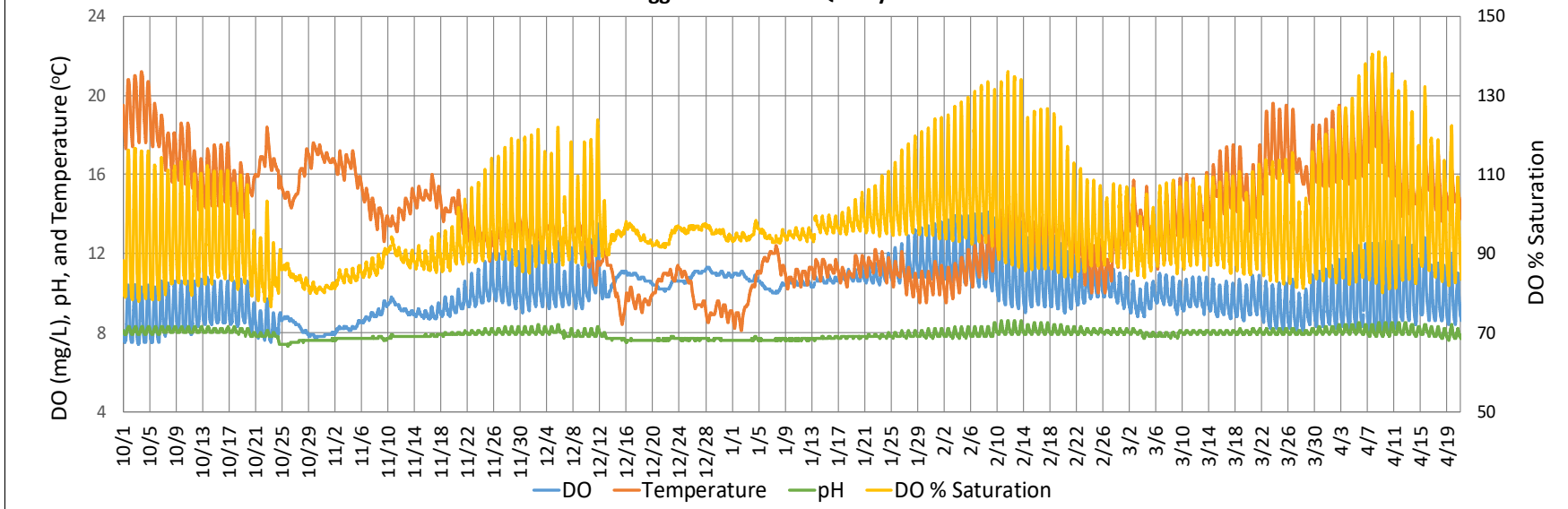
Jimtown - Difference between Daily Maximum and Minimum for DO and pH



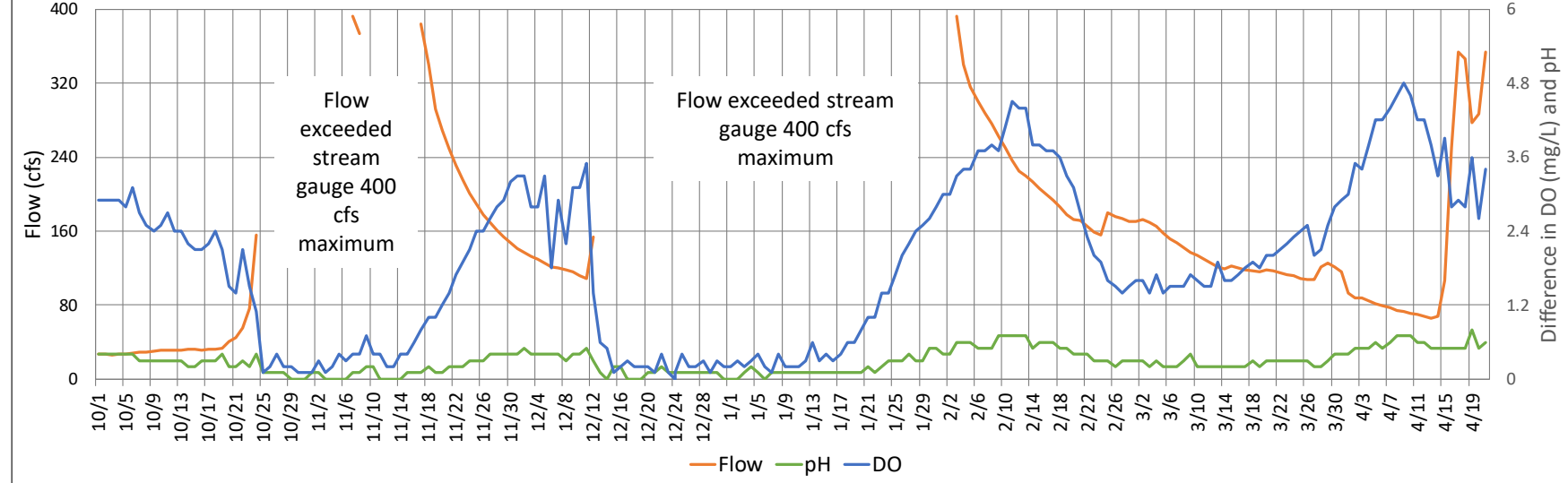
Russian River Water Quality (October 1, 2021 - April 21, 2022)

Digger Bend

Digger Bend Water Quality Trend

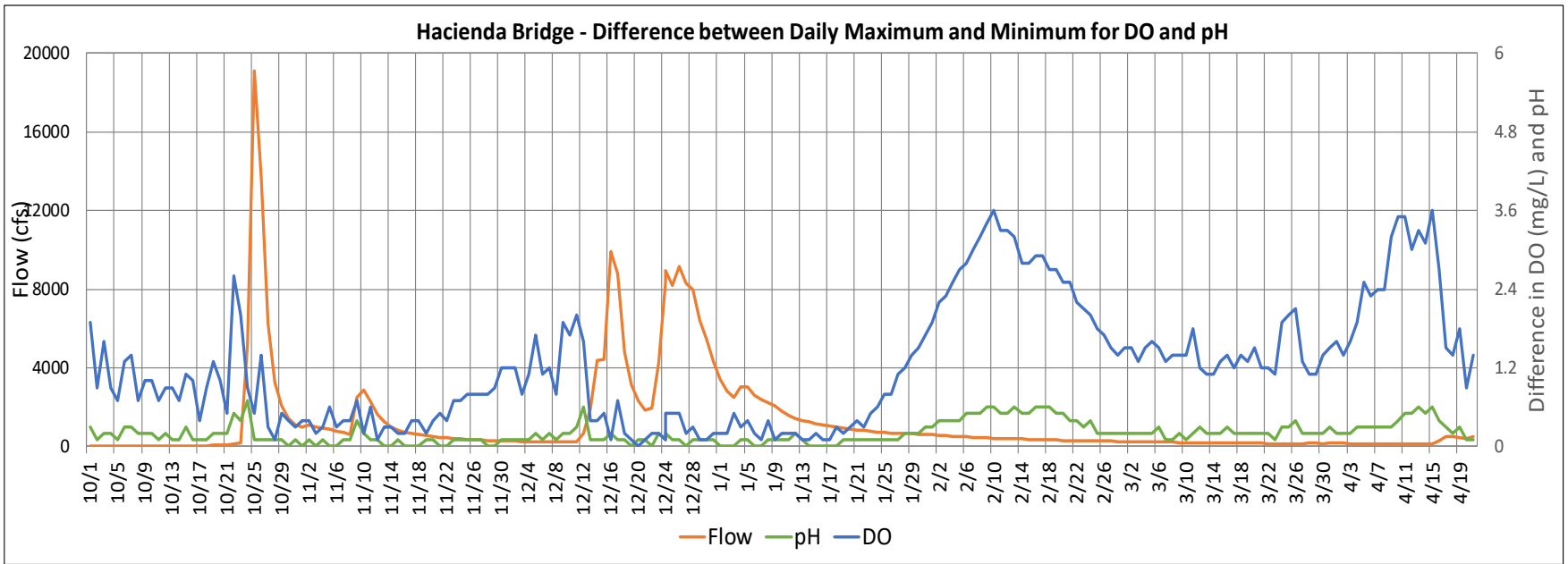
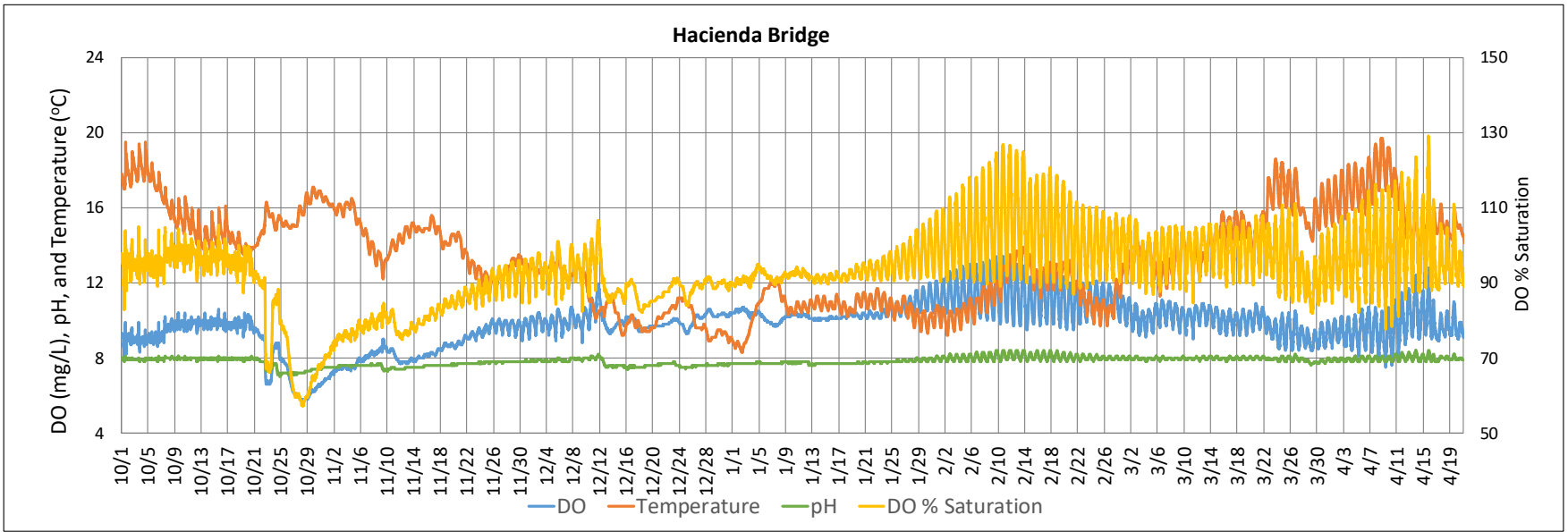


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH



Russian River Water Quality (October 1, 2021 - April 21, 2022)

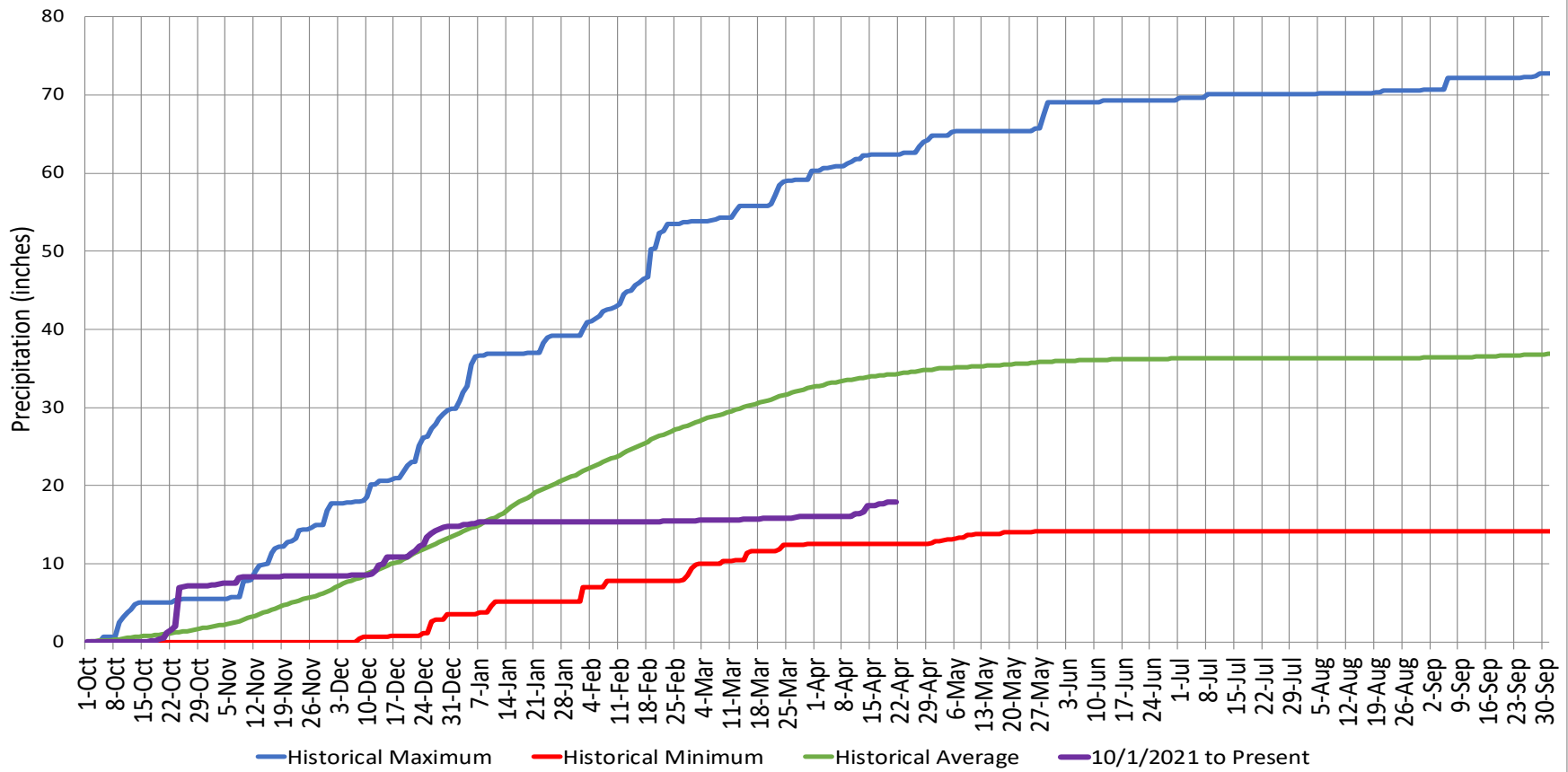
Hacienda Bridge



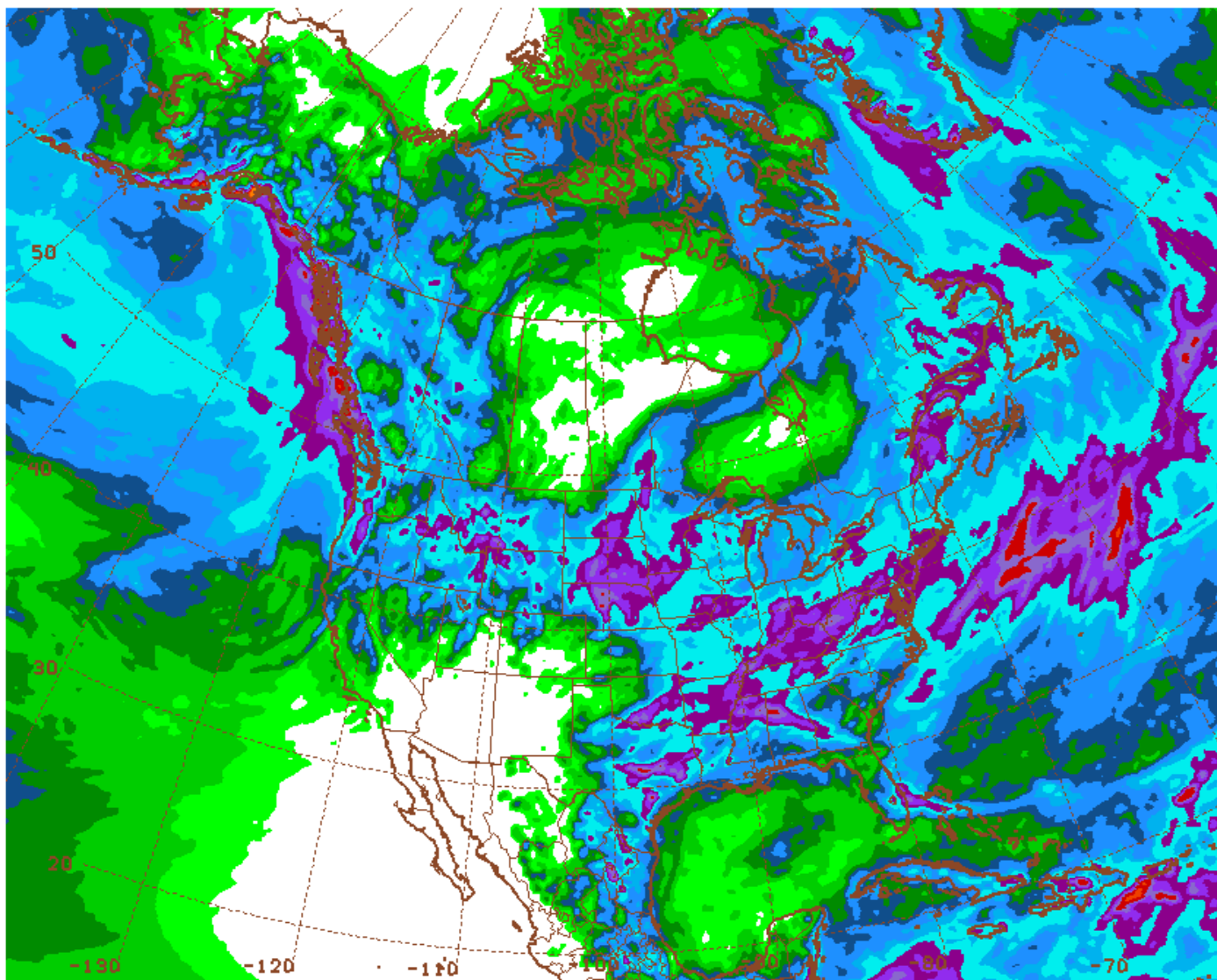
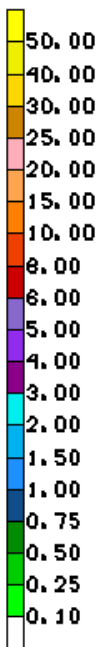
Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2021 - Apr 21, 2022	17.94
Last 7 Days*	0.53

Cumulative Precipitation Comparison of Current Year versus Historic Record



GFS 04/25/22 12UTC 384HR FCST VALID WED 05/11/22 12UTC NOAA/NWS/NCEP



GFS WED 220511/1200V384 384HR ACCUMULATED PRECIP (IN)

Date Range	Forecasted Cumulative (inches)
Apr 25 - May 11, 2022	1.25