



Sonoma Water

**State Water Resources Control Board
 Temporary Urgency Change Order (12/11/2021)
 Russian River Hydrologic Report
 April 8, 2022 - April 14, 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).

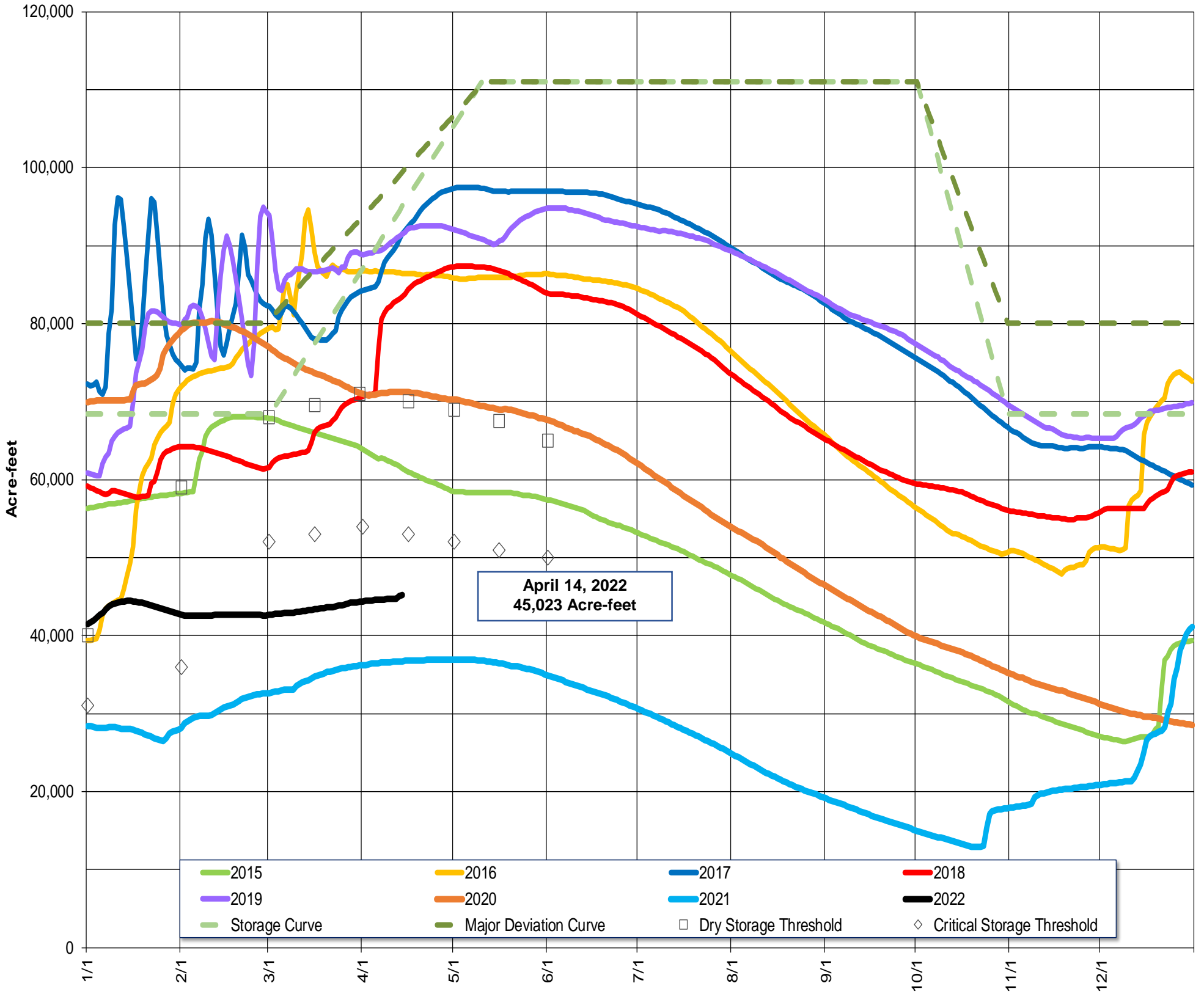
Instream Flow Requirements as of April 14, 2022

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



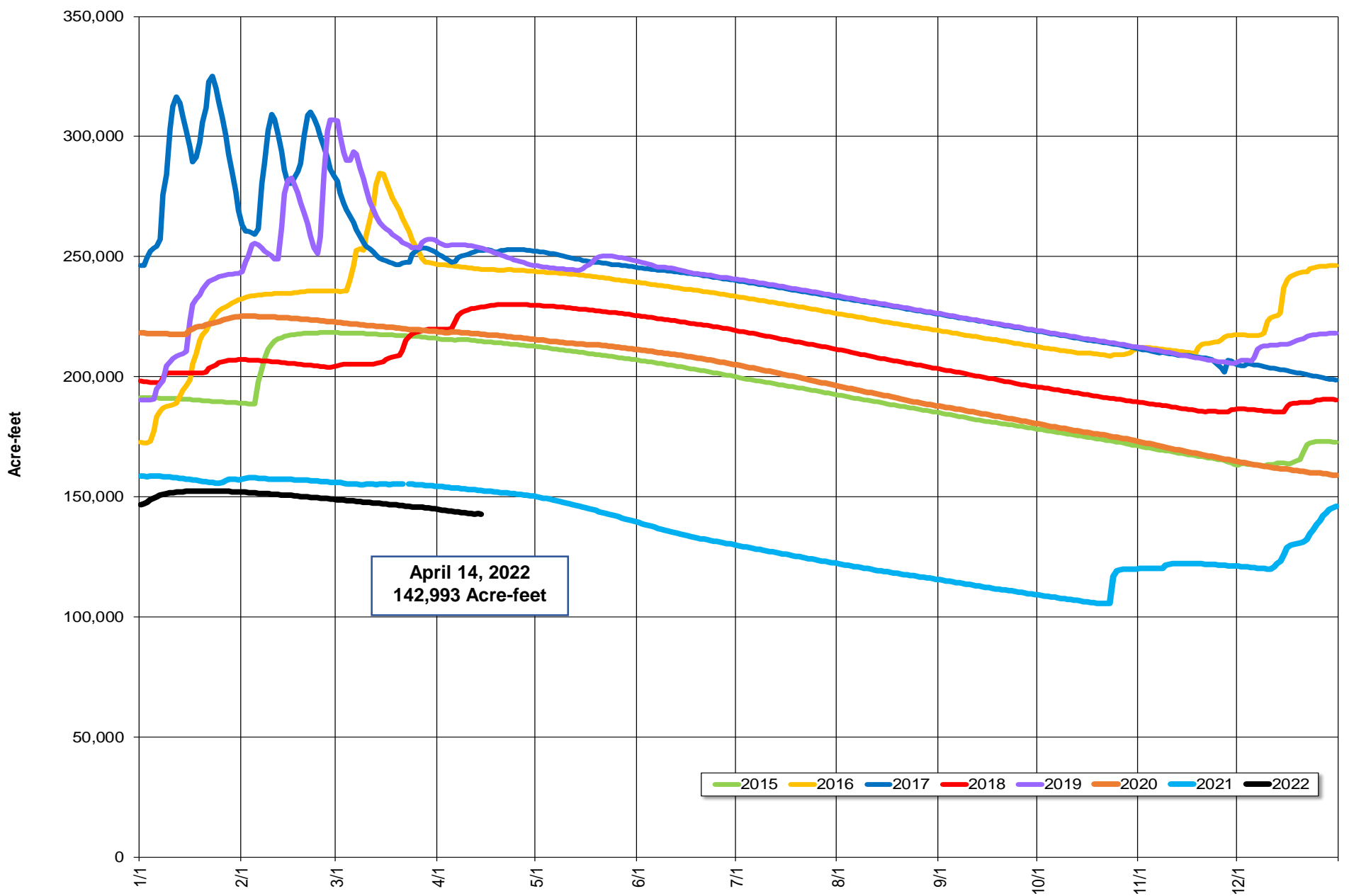
Storage (acre-feet)	April 14, 2022	45,023	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	1,922	64
	Last 7 days	418	60
Daily Inflow (cfs)	Last 7 days	Min	45
		Max	176
		Mean	77
Release (cfs)	Last 7 days	Min	28
		Max	56
		Mean	35

Lake Sonoma



Nathan Baskett, March 3, 2011

Lake Sonoma Storage 2015-2022



Storage (acre-feet)	April 14, 2022	142,993	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	-4,246	-142
	Last 7 days	-754	-108
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	146
		Mean	22
Release (cfs)	Last 7 days	Min	78
		Max	81
		Mean	81

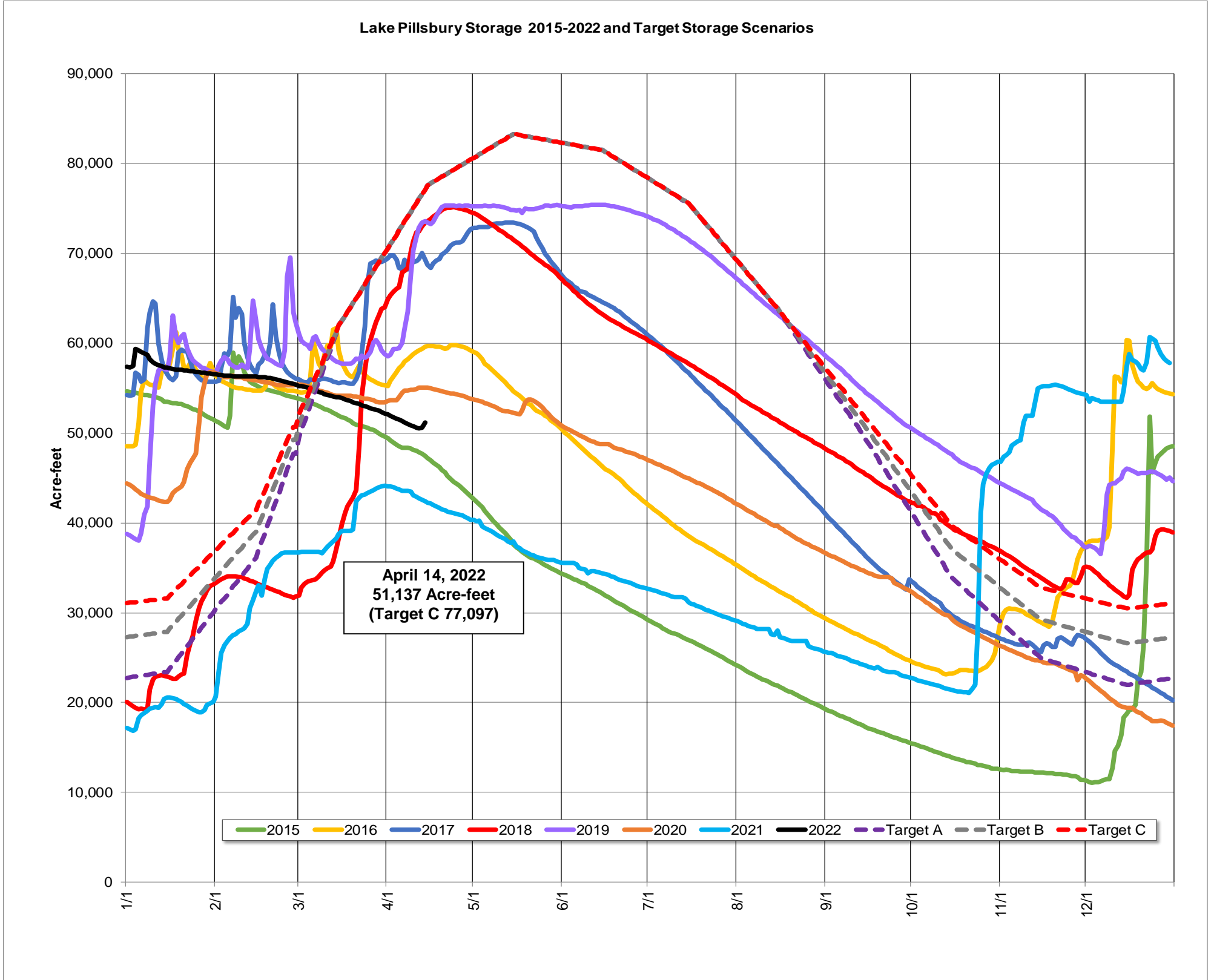
Potter Valley Project

PVP Diversion (cfs)	April 14, 2022	65
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2021 - April 14, 2022	195,322	1002
	Last 7 days	1,716	245

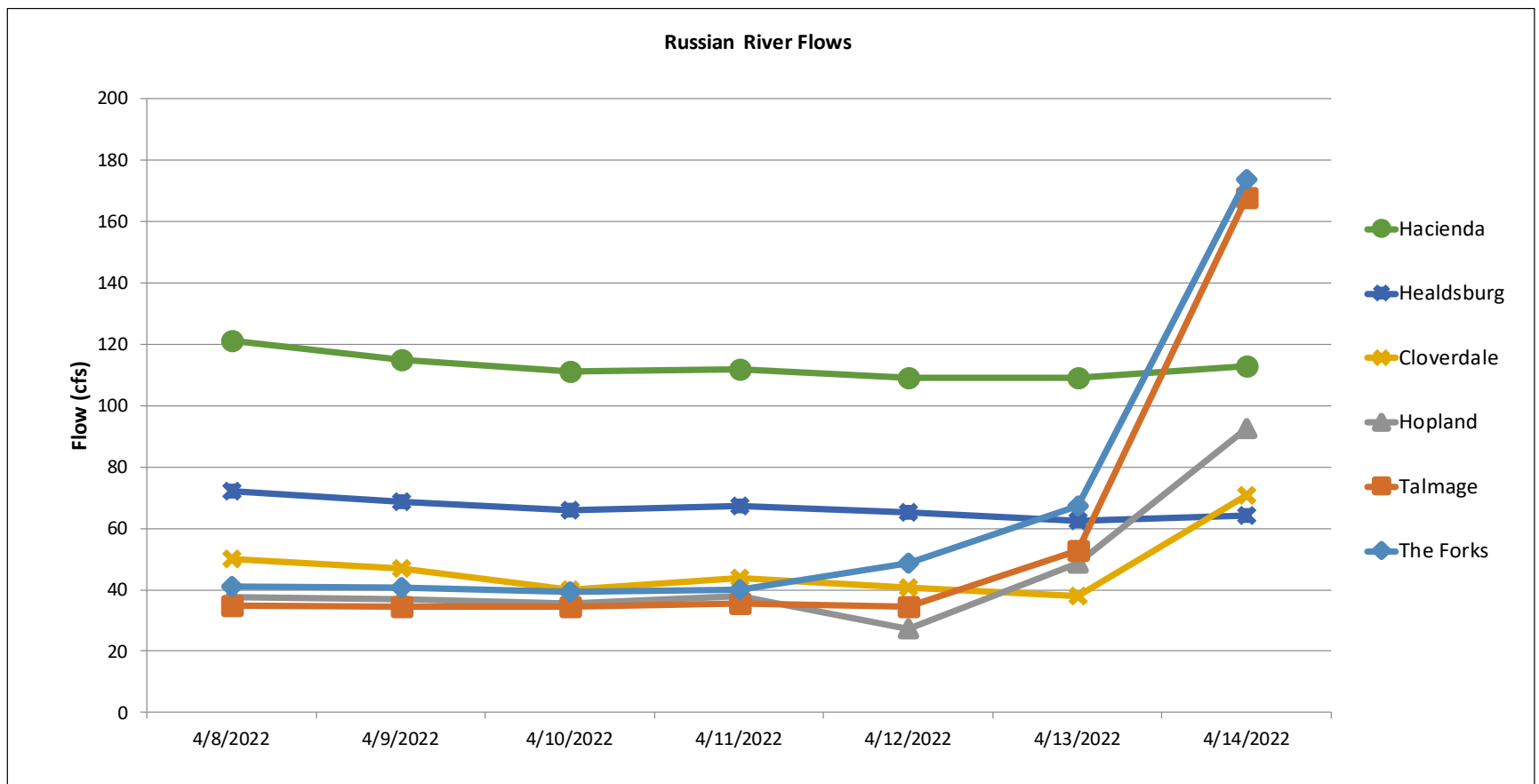
*Inflow calculation based on criteria established in D1610



Russian River Flows (April 8, 2022 - April 14, 2022)

Gage	24-hr Average Flow (cfs)						
	Apr 8, 2022	Apr 9, 2022	Apr 10, 2022	Apr 11, 2022	Apr 12, 2022	Apr 13, 2022	Apr 14, 2022
The Forks*	41	41	39	40	48	67	174
Talmage USGS 11462080	35	34	34	36	35	53	168
Hopland USGS 11462500	38	37	36	38	27	49	92
Cloverdale USGS 11463000	50	47	40	44	41	38	71
Healdsburg USGS 11464000	72	69	66	67	65	63	64
Hacienda USGS 11467000	121	115	111	112	109	109	113

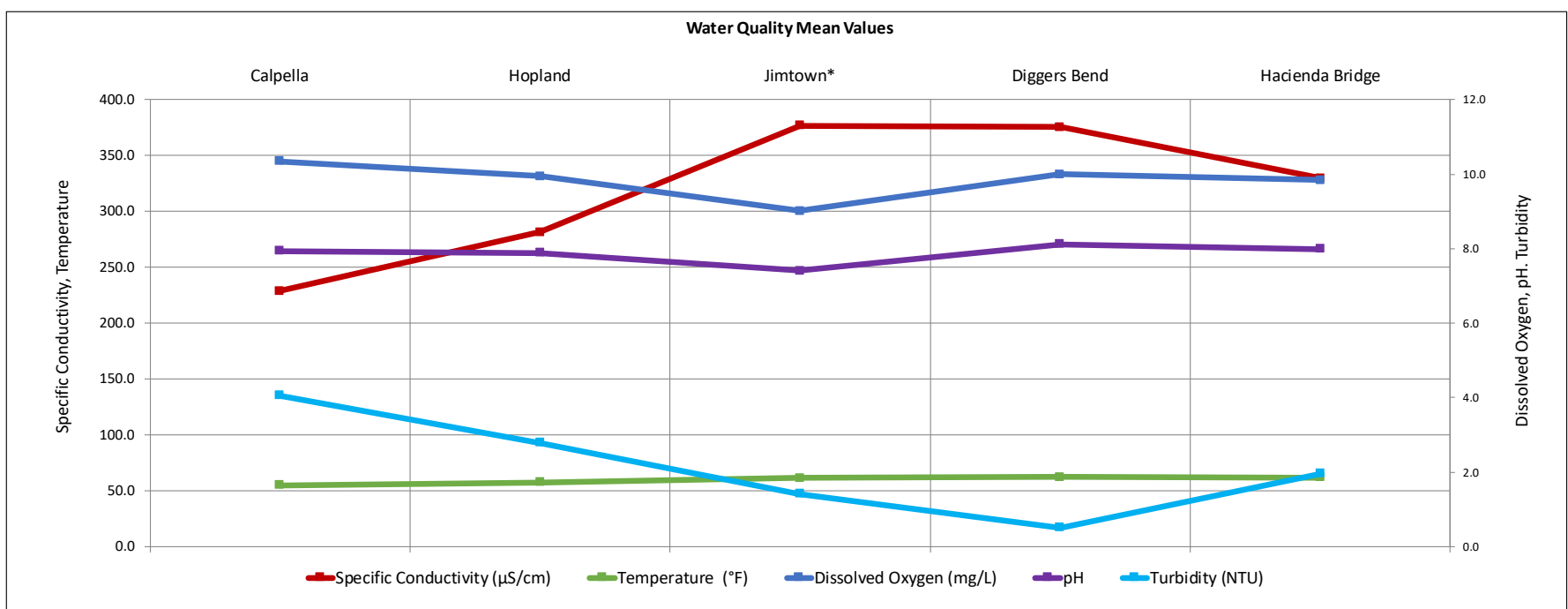
*West Fork (USGS 11461000) + East Fork (Coyote Valley Dam Release)



Russian River Water Quality (April 8, 2022 - April 14, 2022)

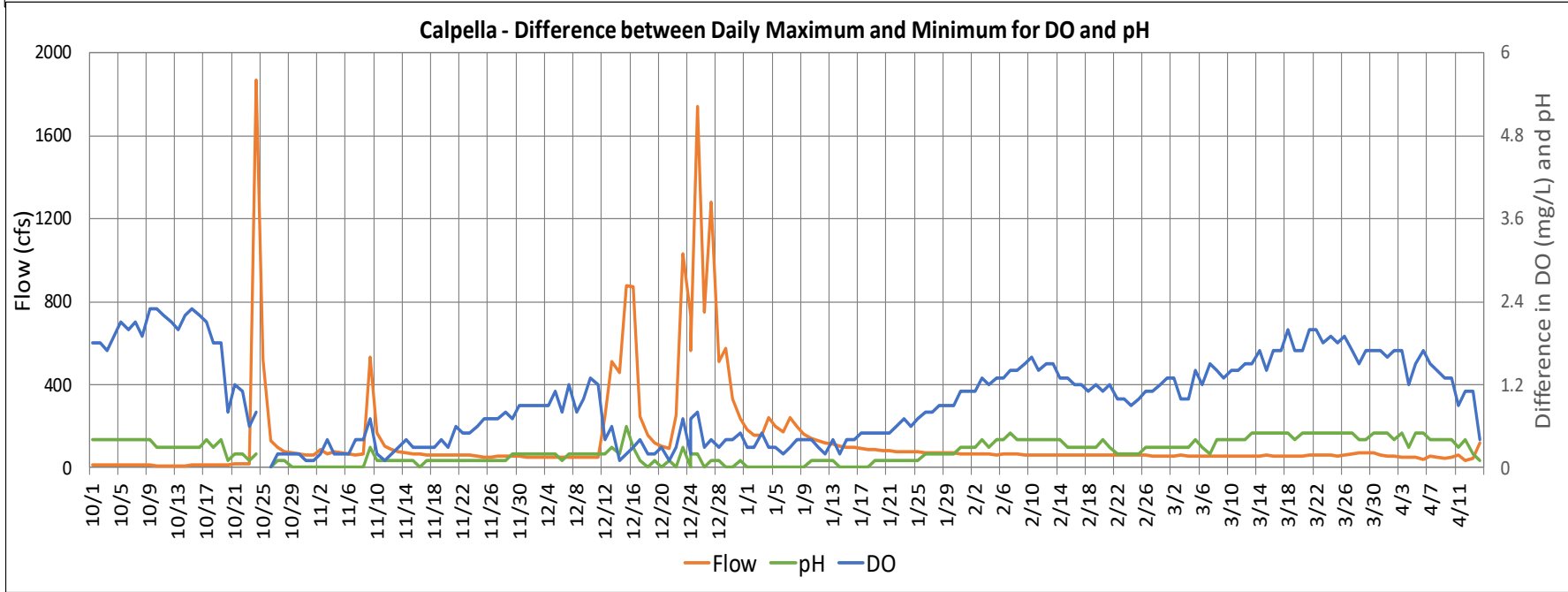
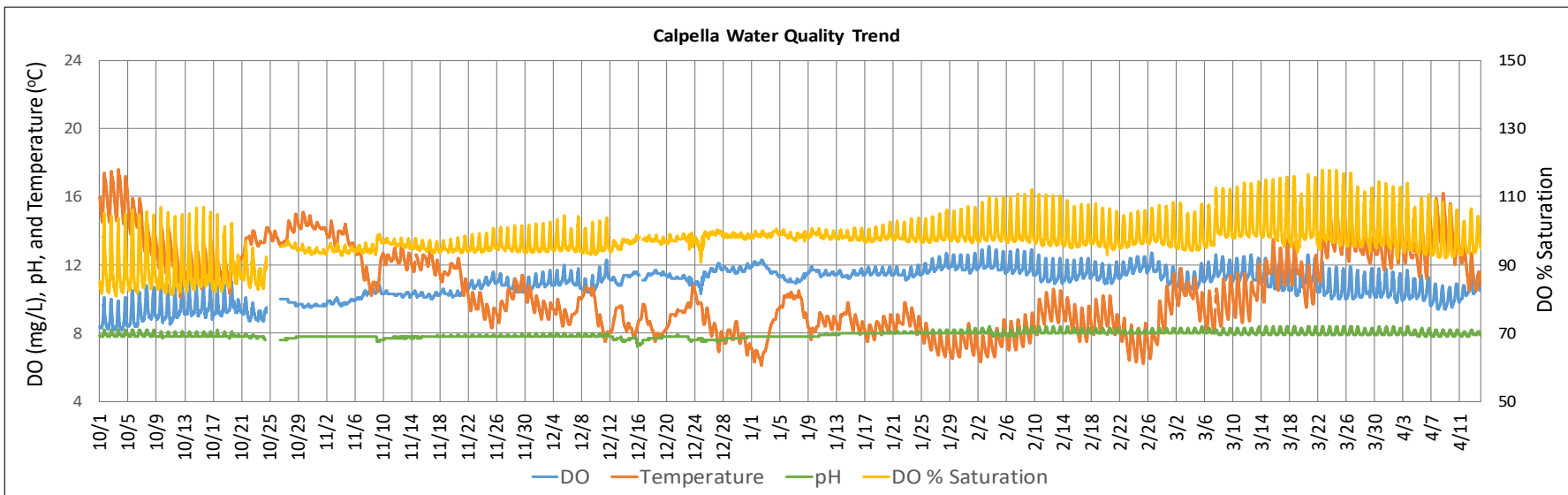
Parameter	Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
	USGS 11461500	USGS 11462500	USGS 11463000	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	50.9	53.1		57.2	57.0		56.5
	Max	61.2	63.7		68.5	70.3		67.5
	Mean	54.6	57.4		61.5	62.1		61.7
Specific Conductivity (µS/cm)	Min	216.0	212.0		372.0	371.0		316.0
	Max	240.0	291.0		379.0	379.0		344.0
	Mean	228.7	281.3		377.0	375.5		329.8
Dissolved Oxygen (mg/L)	Min	9.4	7.7		6.6	7.8		7.5
	Max	11.4	12.6		12.4	12.8		12.4
	Mean	10.3	9.9		9.0	10.0		9.8
Dissolved Oxygen (% Saturation)	Min	92.0	76.4		67.6	80.0		77.6
	Max	108.4	127.8		134.7	141.0		123.5
	Mean	97.1	96.8		92.3	103.1		100.6
pH	Min	7.8	7.6		7.2	7.8		7.8
	Max	8.2	8.2		7.7	8.5		8.4
	Mean	7.9	7.9		7.4	8.1		8.0
Turbidity (NTU)	Min	1.4	1.2		1.1	0.1		1.2
	Max	35.1	34.1		2.0	1.7		3.2
	Mean	4.1	2.8		1.4	0.5		2.0

*Station operated seasonally



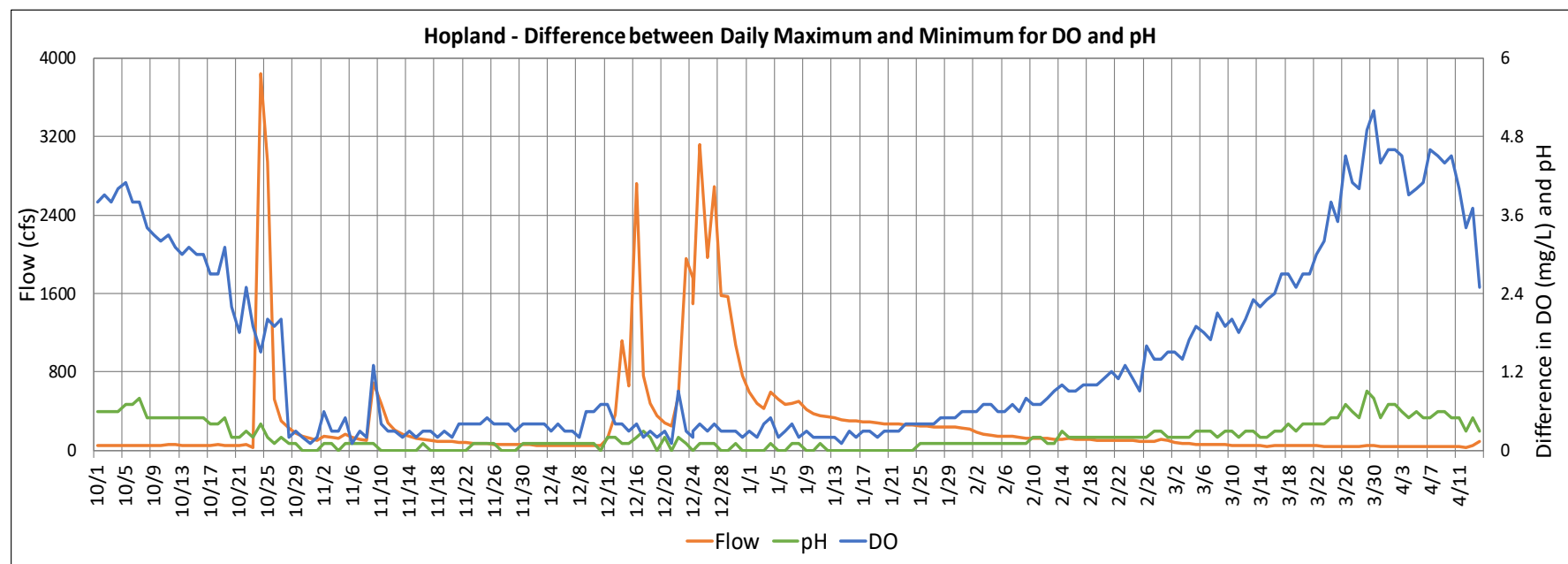
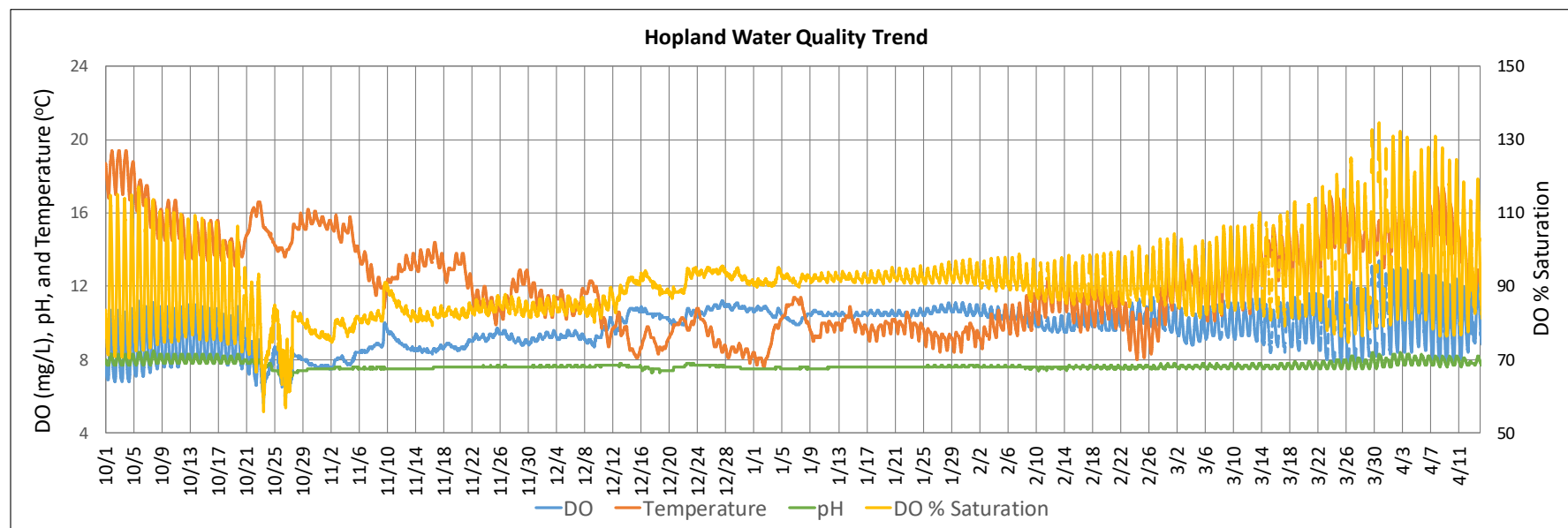
Russian River Water Quality (October 1, 2021 - April 14, 2022)

Calpella (East Fork Russian River)



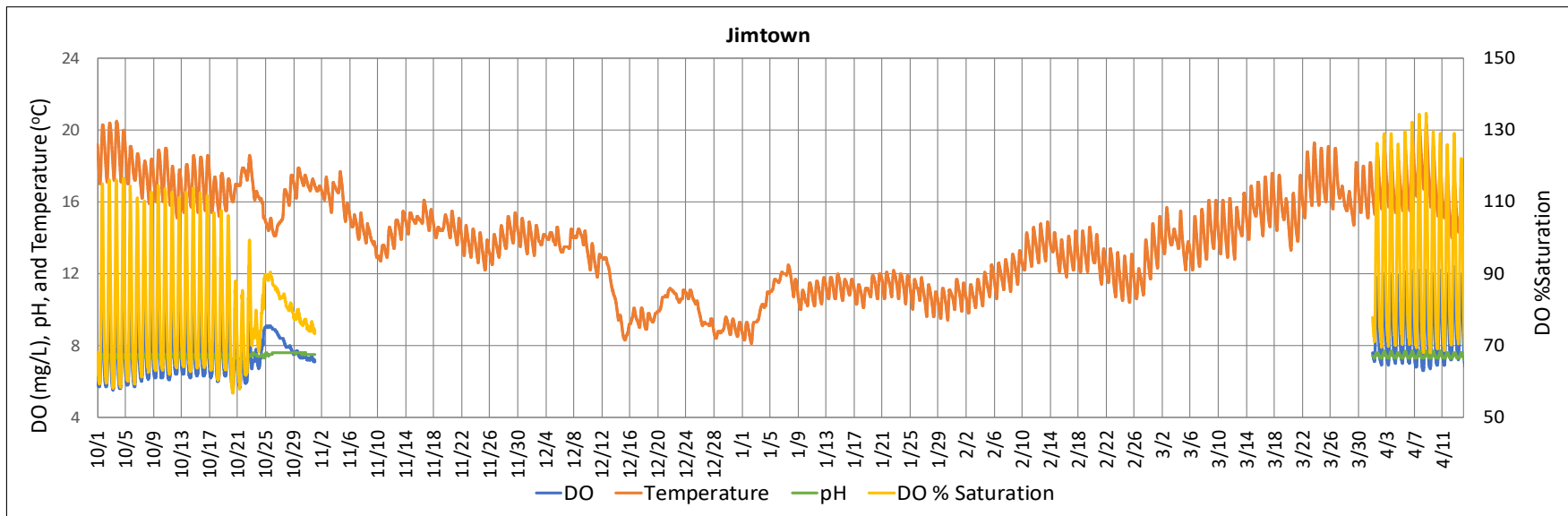
Russian River Water Quality (October 1, 2021 - April 14, 2022)

Hopland

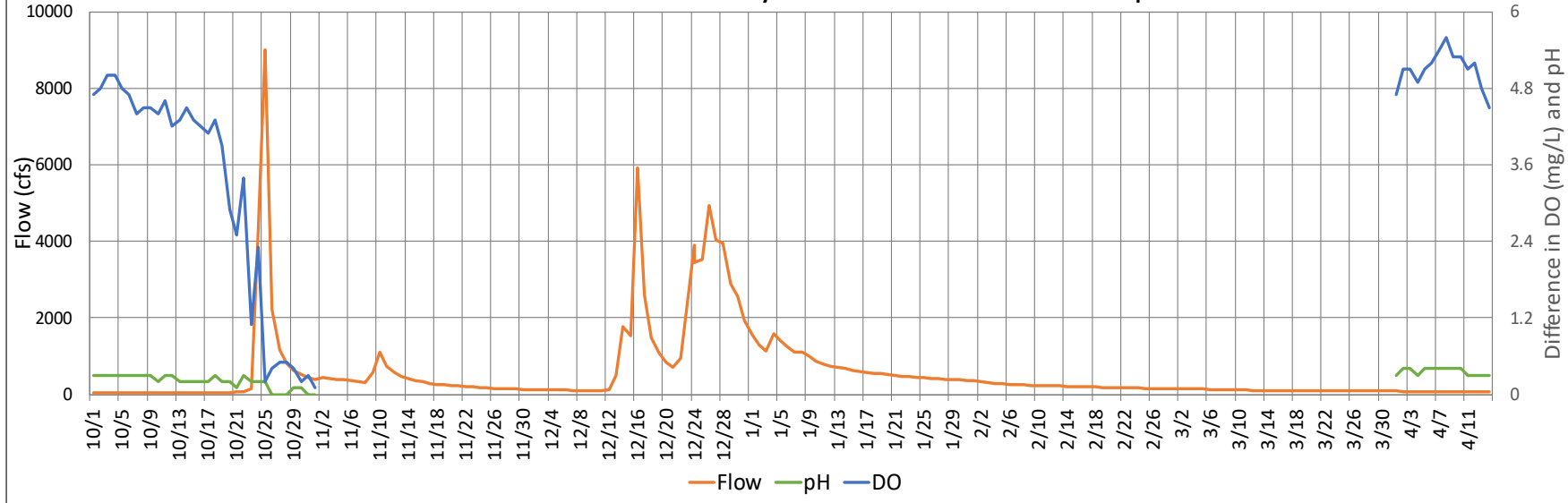


Russian River Water Quality (October 1, 2021 - April 14, 2022)

Jimtown



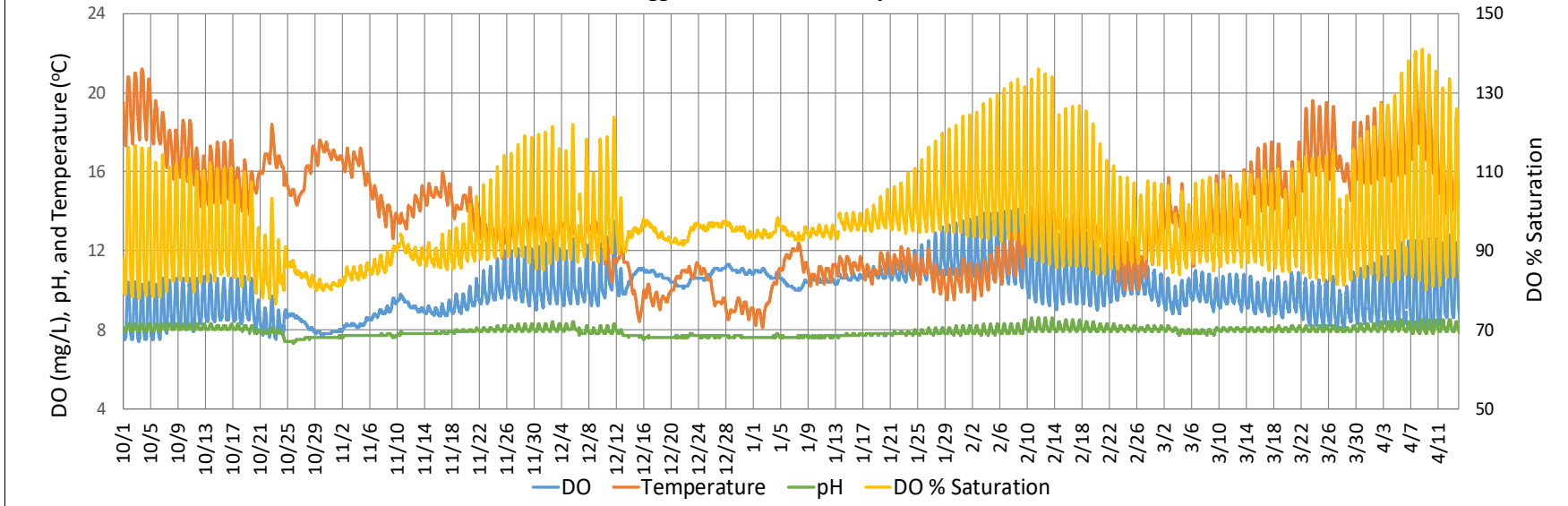
Jimtown - Difference between Daily Maximum and Minimum for DO and pH



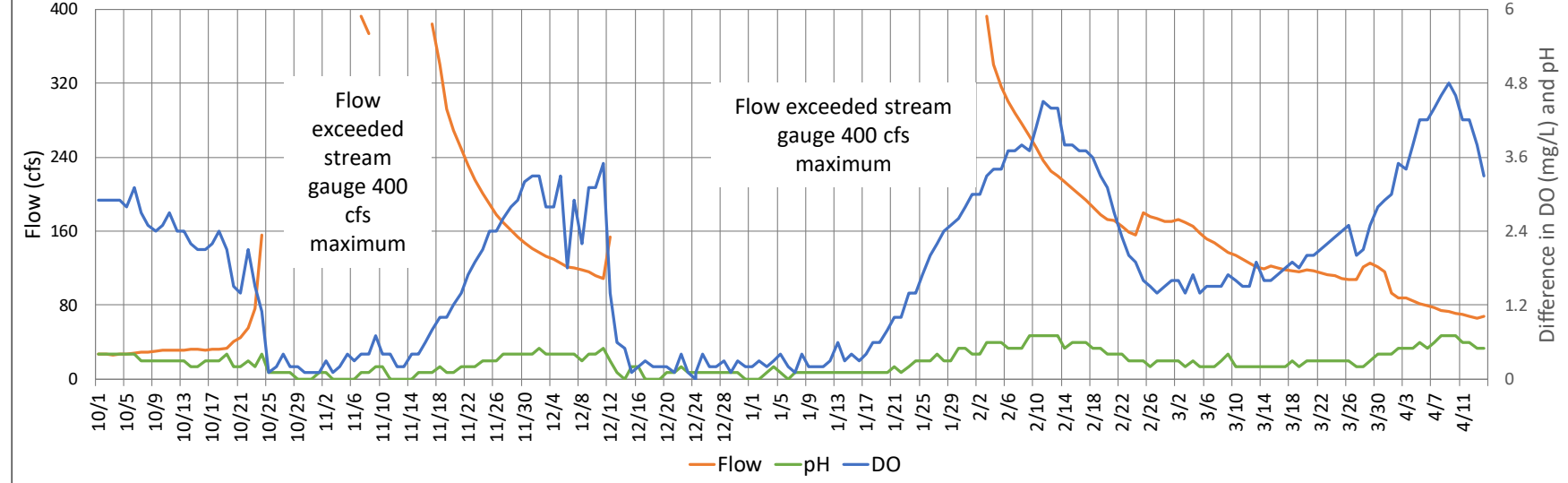
Russian River Water Quality (October 1, 2021 - April 14, 2022)

Digger Bend

Digger Bend Water Quality Trend

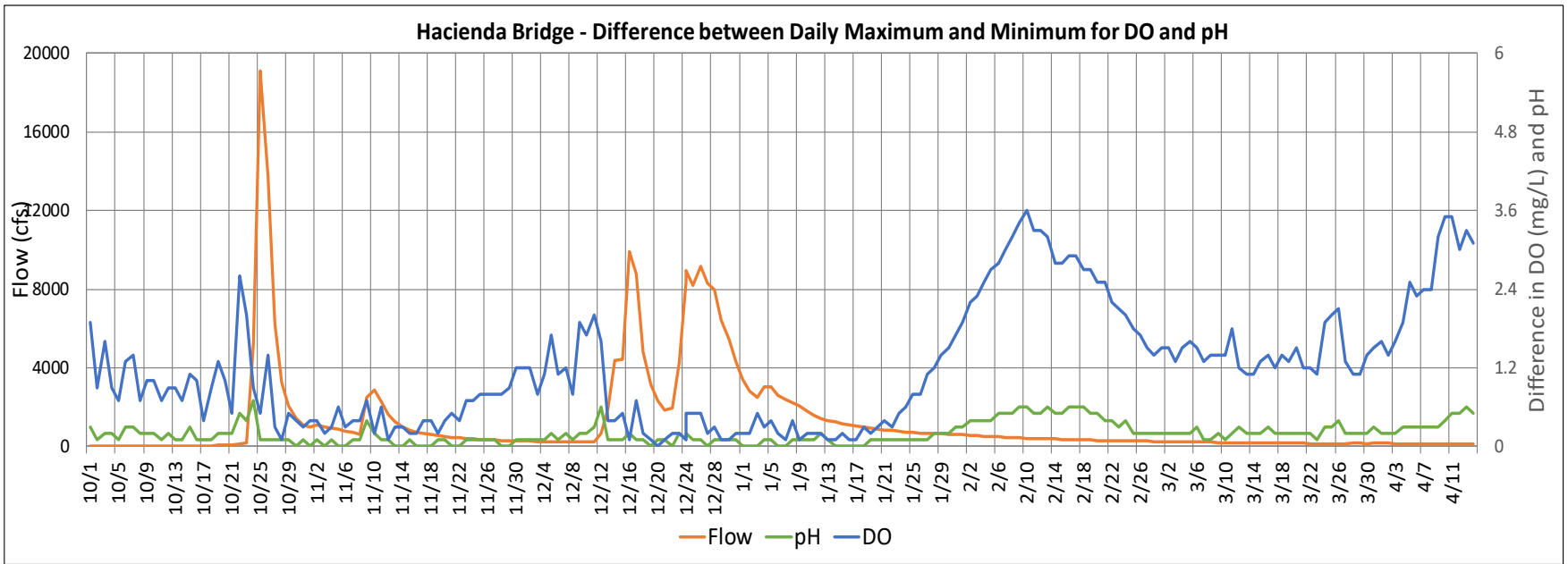
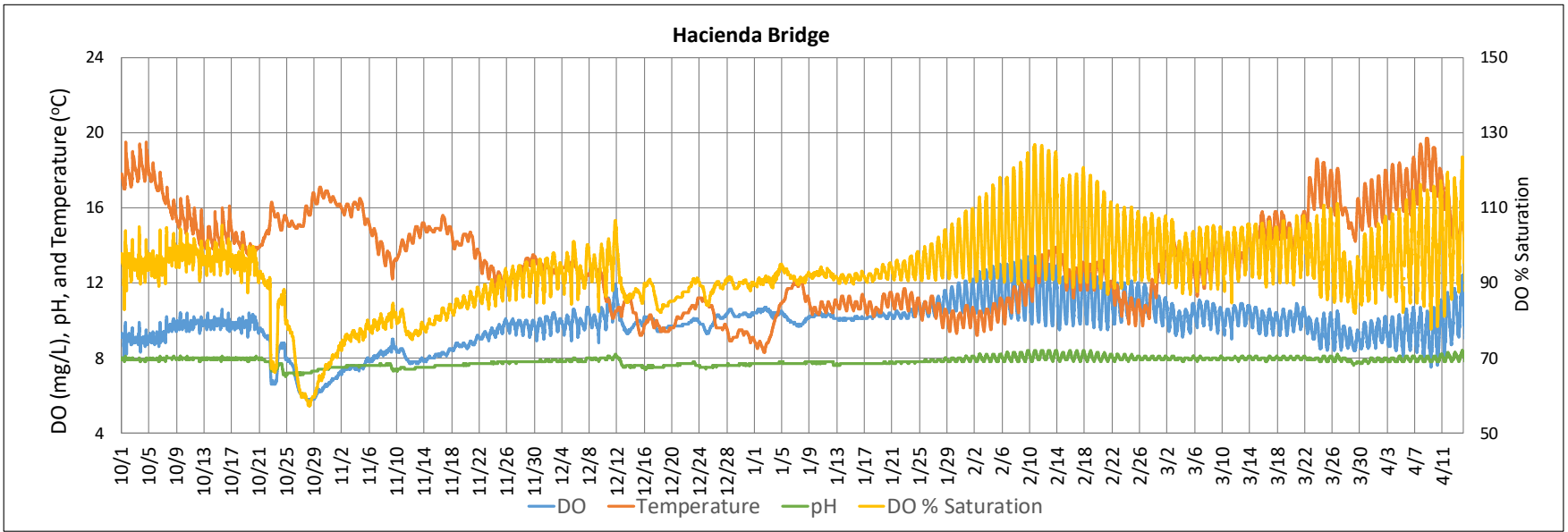


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH



Russian River Water Quality (October 1, 2021 - April 14, 2022)

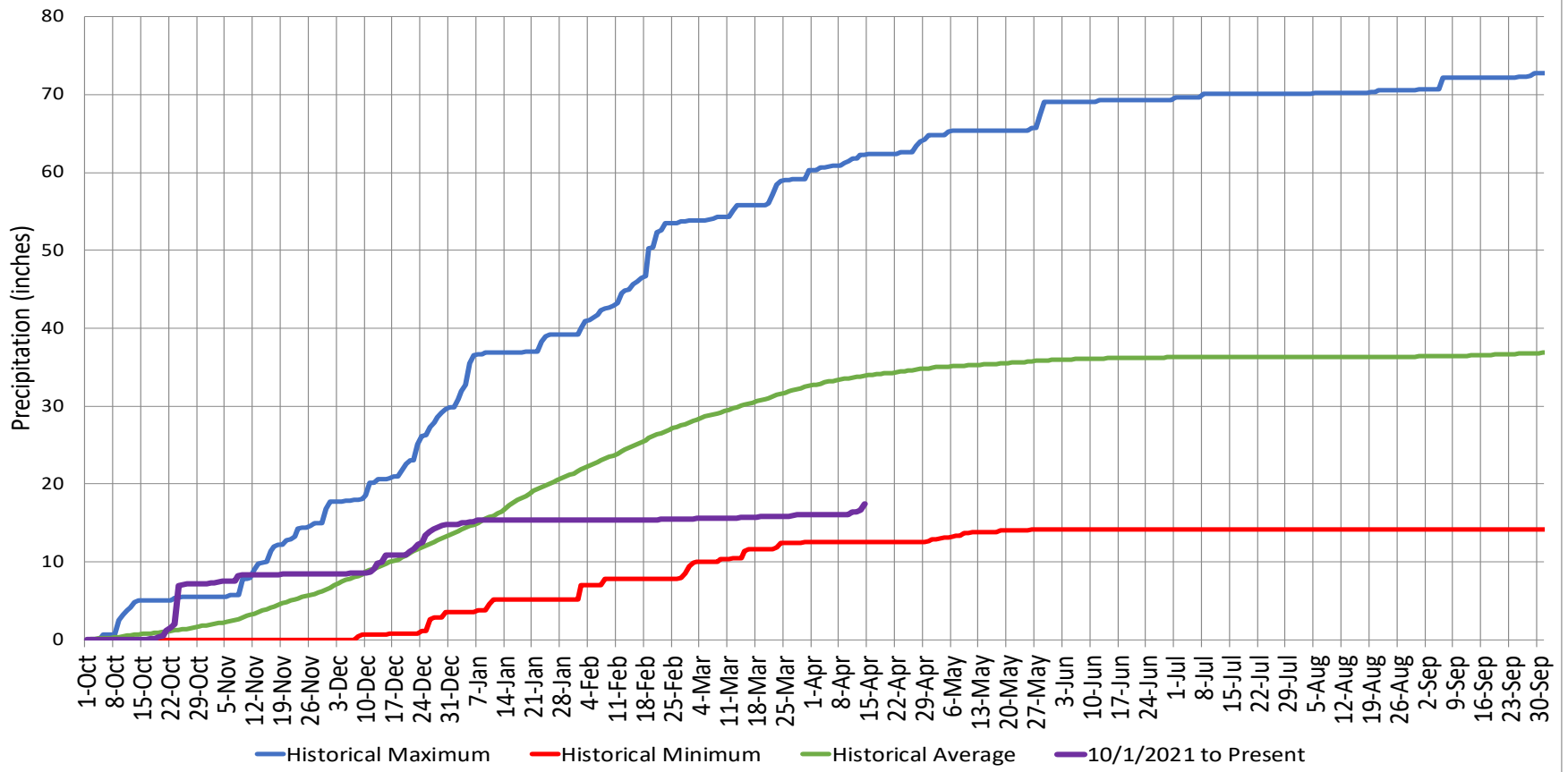
Hacienda Bridge



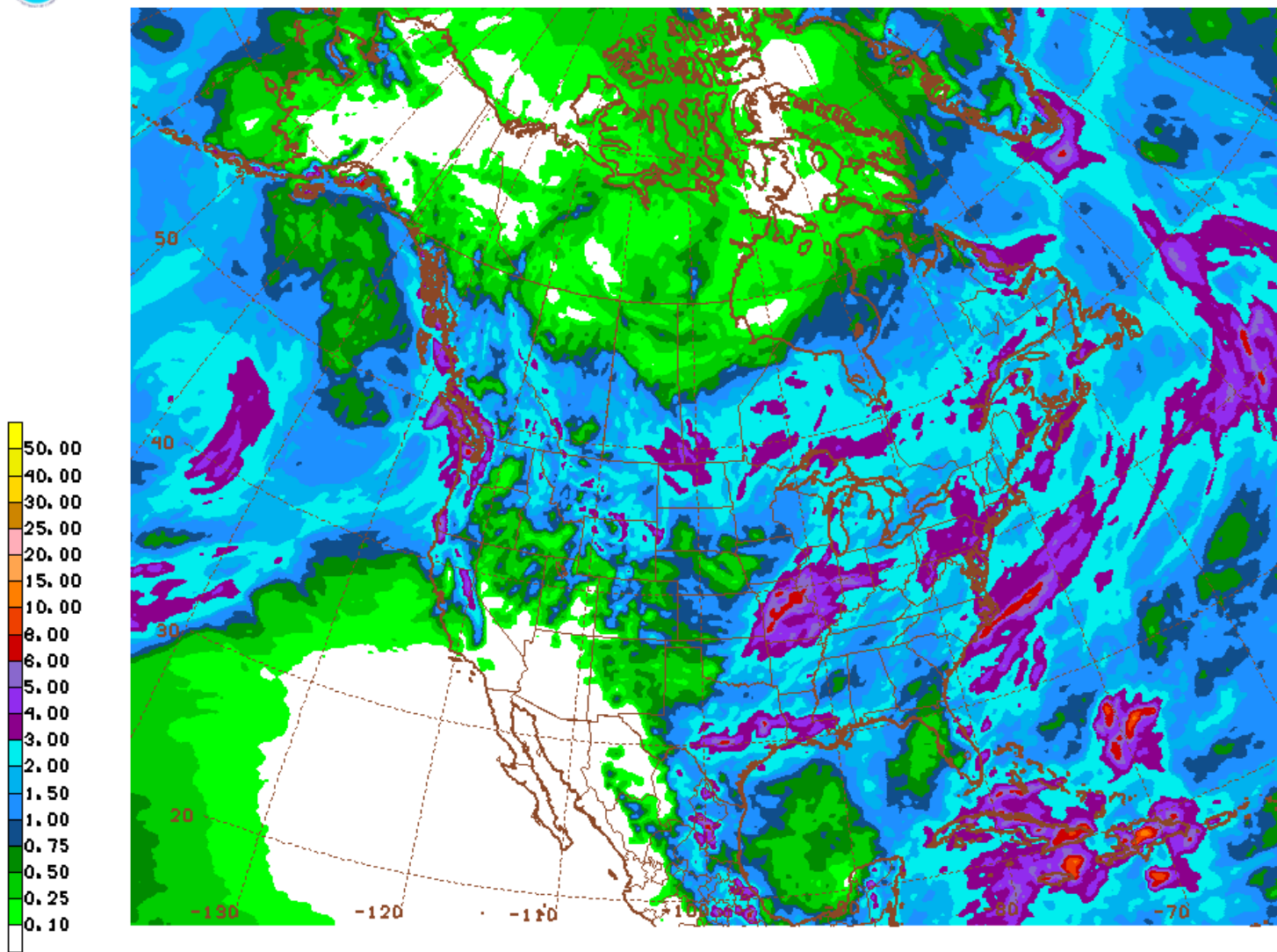
Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2021 - Apr 14, 2022	17.45
Last 7 Days*	1.32

Cumulative Precipitation Comparison of Current Year versus Historic Record



GFS 04/18/22 12UTC 384HR FCST VALID WED 05/04/22 12UTC NOAA/NWS/NCEP



GFS WED 220504/1200Y384 384HR ACCUMULATED PRECIP (IN)

Date Range
Apr 18 - May 4, 2022

Forecasted Cumulative (inches)
0.55