



State Water Resources Control Board
 Temporary Urgency Change Orders (10/31/2024)
 Russian River Hydrologic & Water Quality Report
 December 13, 2024 - December 19, 2024

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

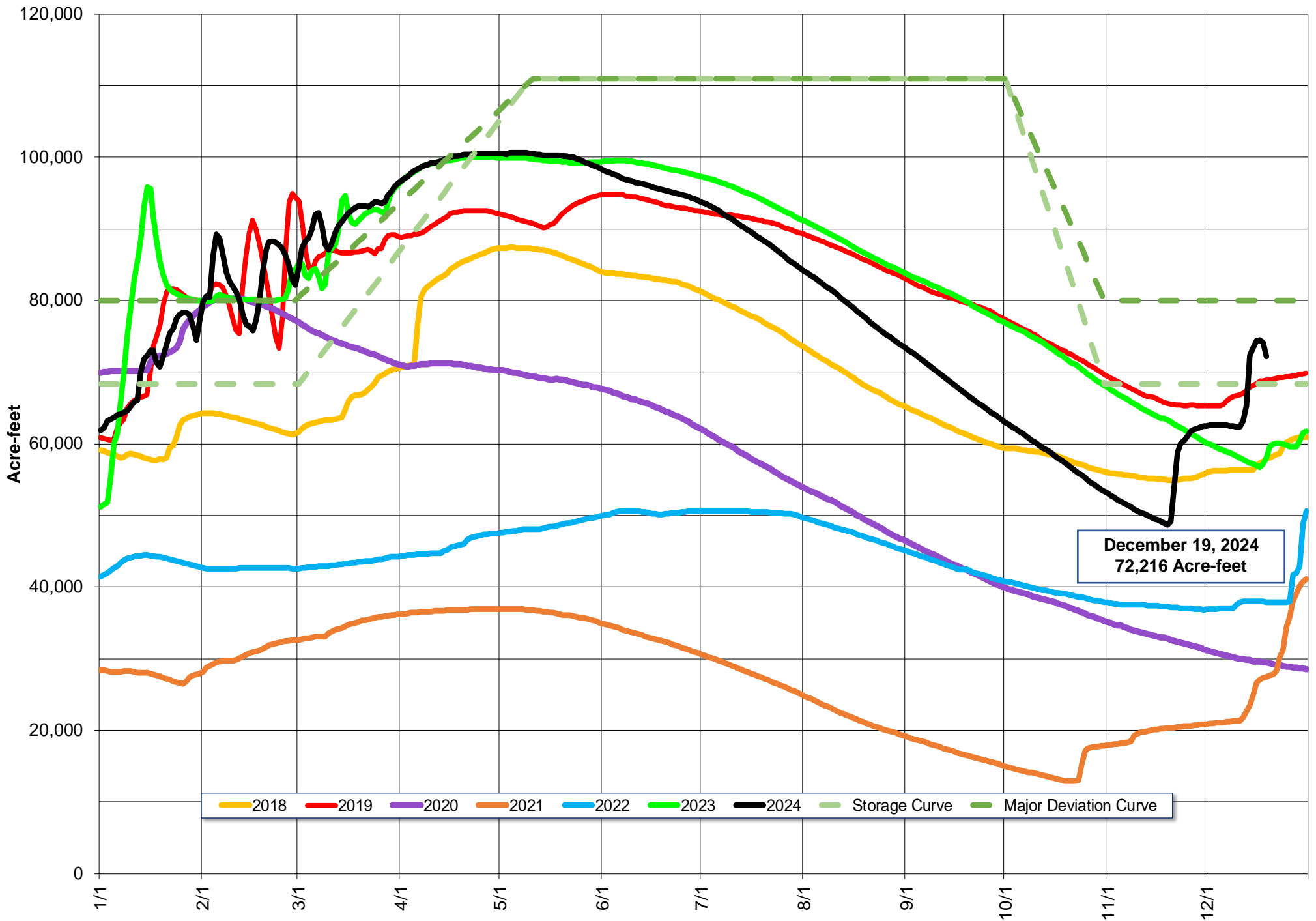
Instream Flow Requirements as of December 19, 2024

Basis	Reach	Instantaneous (cfs)	5-day Average (cfs)
Modified Per Order: Normal Condition	Upper Russian River	150	-
Modified Per Order: Normal Condition	Dry Creek	105	-
Modified Per Order: Normal Condition	Lower Russian River	125	-

Upper and Lower Russian River are based on criteria as established in the Order issued 10/31/2024.

Lake Mendocino

Lake Mendocino Storage 2018 - 2024 and Storage Curve



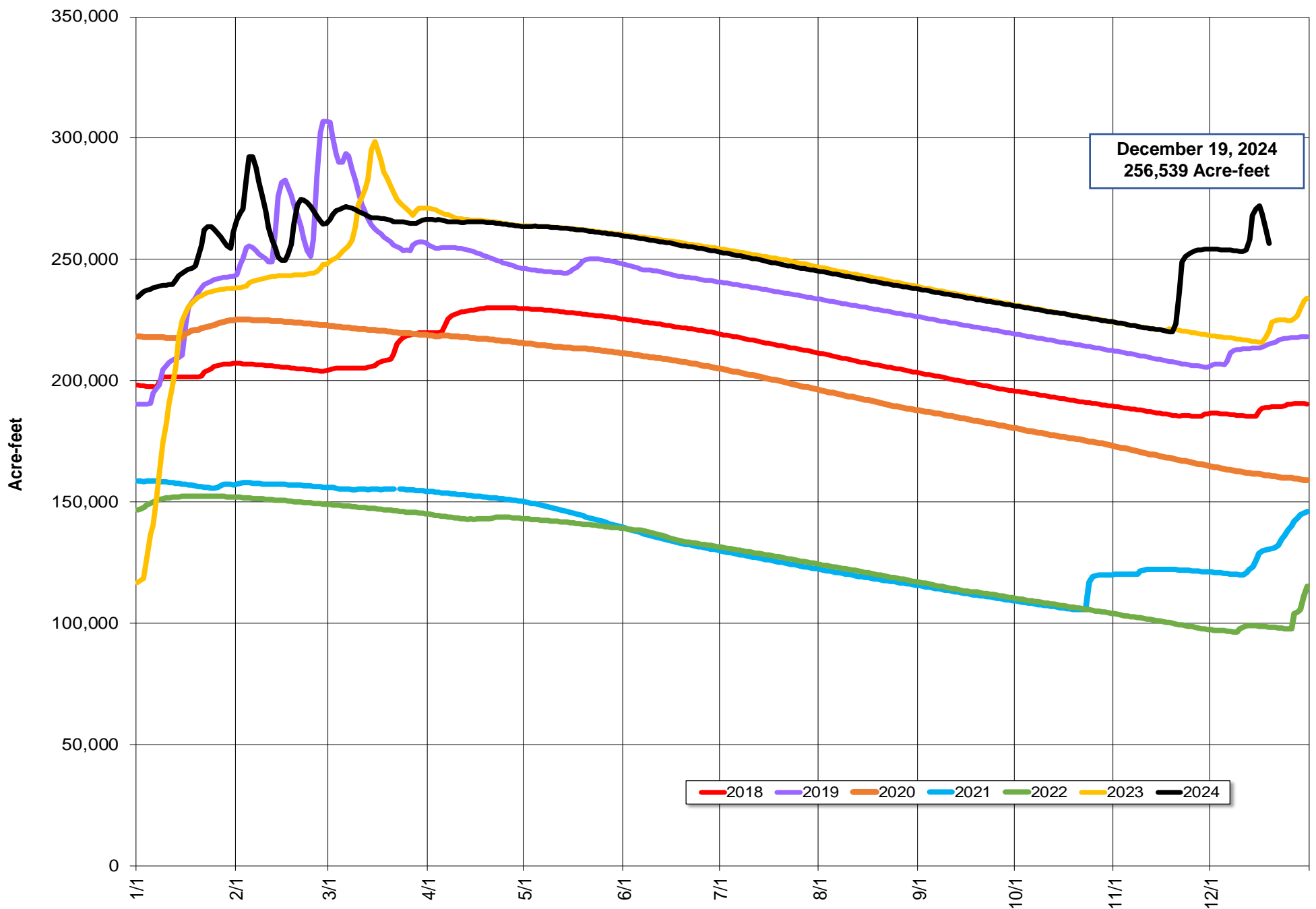
Storage (acre-feet)	December 19, 2024	72,216	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
	Last 7 days	23,554	785
Daily Inflow (cfs)	Last 7 days	6,900	986
		Min	217
		Max	3,563
Release (cfs)	Last 7 days	Mean	993
		Min	48
		Max	1,188
		Mean	339

Lake Sonoma



Todd Schram, February 10, 2024

Lake Sonoma Storage 2018-2024



Storage (acre-feet)	December 19, 2024	256,539	
Change in Storage (acre-feet)	Last 30 days	36,520	1,217
	Last 7 days	-1,554	-222
Daily Inflow (cfs)	Last 7 days	Min	731
		Max	5,278
		Mean	1,774
Release (cfs)	Last 7 days	Min	106
		Max	3,952
		Mean	1,582

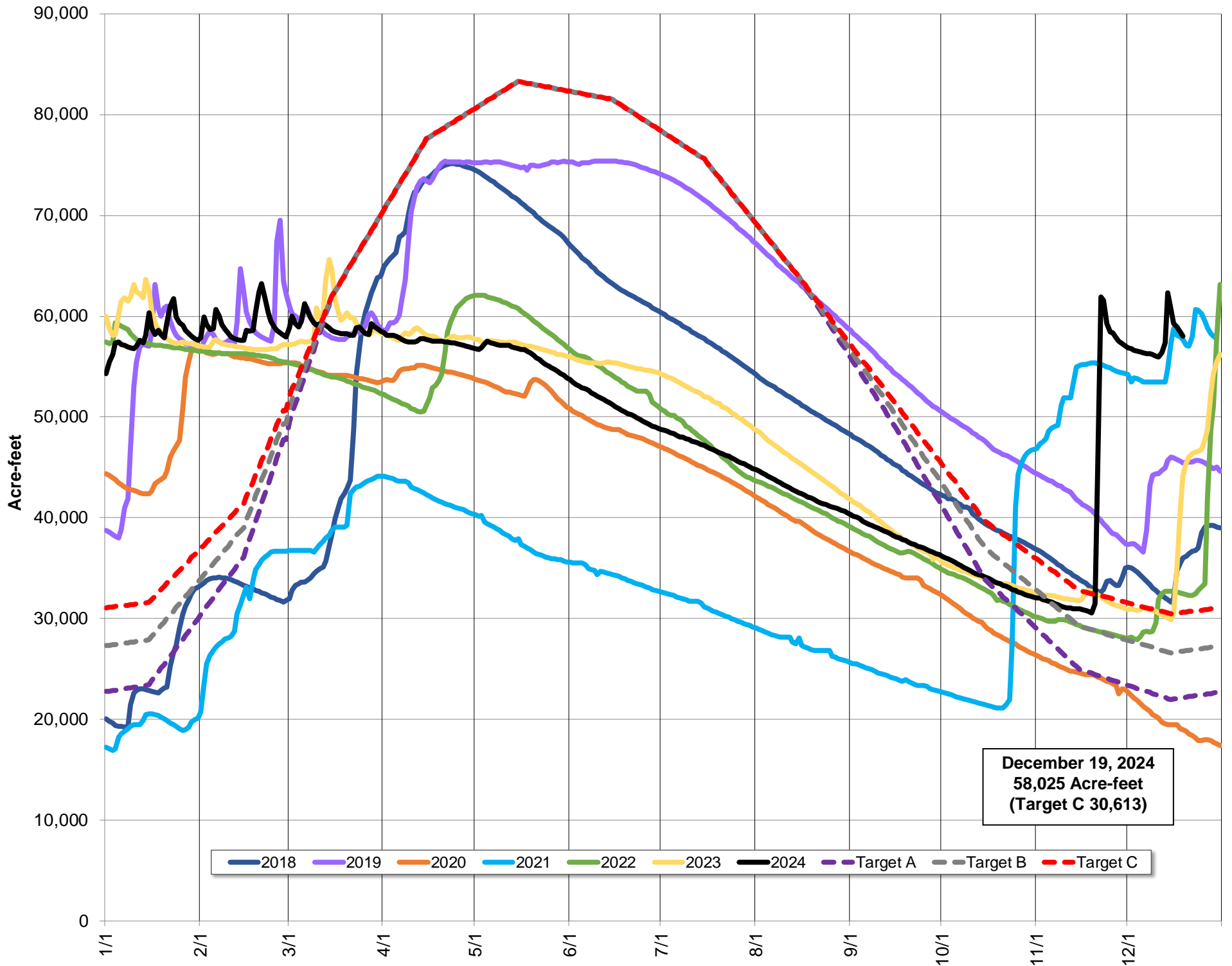
Potter Valley Project

PVP Diversion (cfs)	December 19, 2024	45
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Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2024 - December 19, 2024	115,694	1,446
	Last 7 days	35,534	5,076

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2018 - 2024 and Target Storage Scenarios



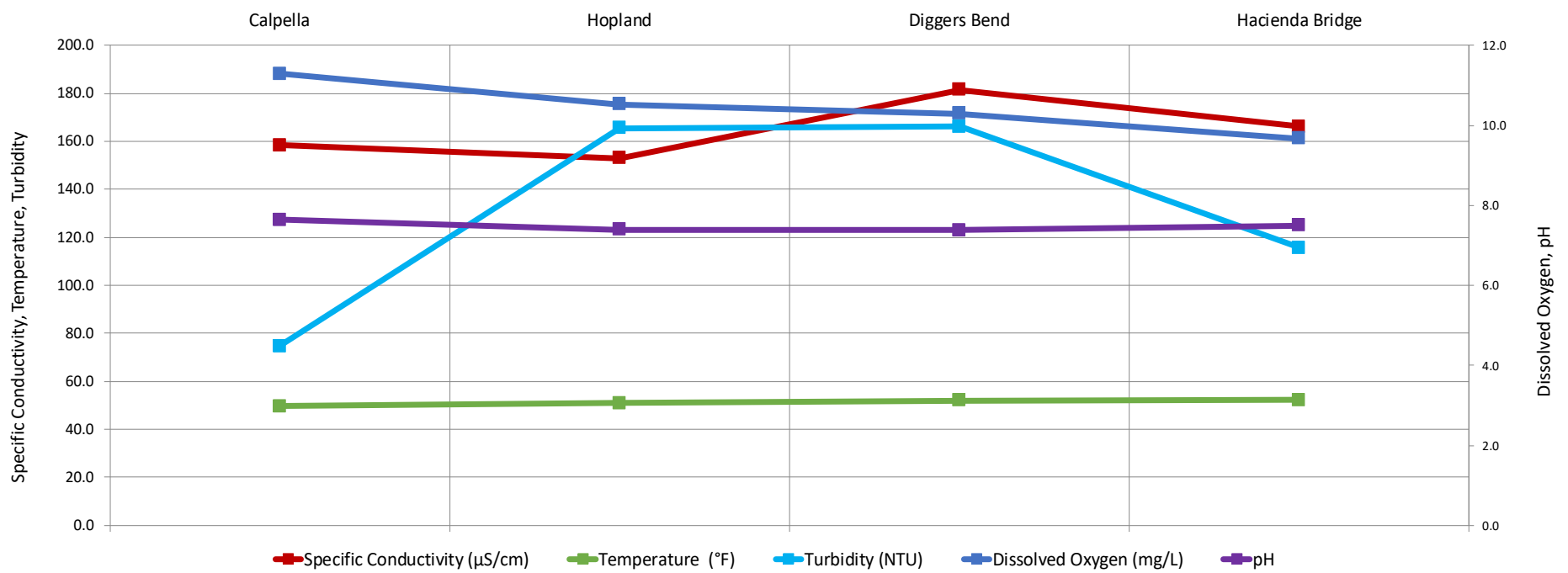
December 19, 2024
58,025 Acre-feet
(Target C 30,613)

Russian River Flows (December 13, 2024 - December 19, 2024)

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	48.2	49.3		50.4	51.1		51.4	
	Max	51.4	52.2		53.2	53.2		53.1	
	Mean	49.7	51.0		51.9	52.1		52.3	
Specific Conductivity (µS/cm)	Min	62.0	114.0			104.0		105.0	
	Max	210.0	168.0			288.0		269.0	
	Mean	158.4	153.1			181.4		166.2	
Dissolved Oxygen (mg/L)	Min	10.9	9.7			9.9		9.0	
	Max	11.6	10.9			10.6		10.3	
	Mean	11.3	10.5			10.3		9.7	
Dissolved Oxygen (% Saturation)	Min	97.2	86.9			91.2		81.4	
	Max	101.9	99.3			96.3		93.8	
	Mean	99.6	94.6			93.7		88.2	
pH	Min	7.0	7.3			7.2		7.4	
	Max	7.8	7.6			7.7		7.8	
	Mean	7.6	7.4			7.4		7.5	
Turbidity (NTU)	Min	13.8	33.0			12.8		15.0	
	Max	672.0	3190.0			919.0		359.0	
	Mean	74.7	165.5			166.2		115.7	

*Station operated seasonally

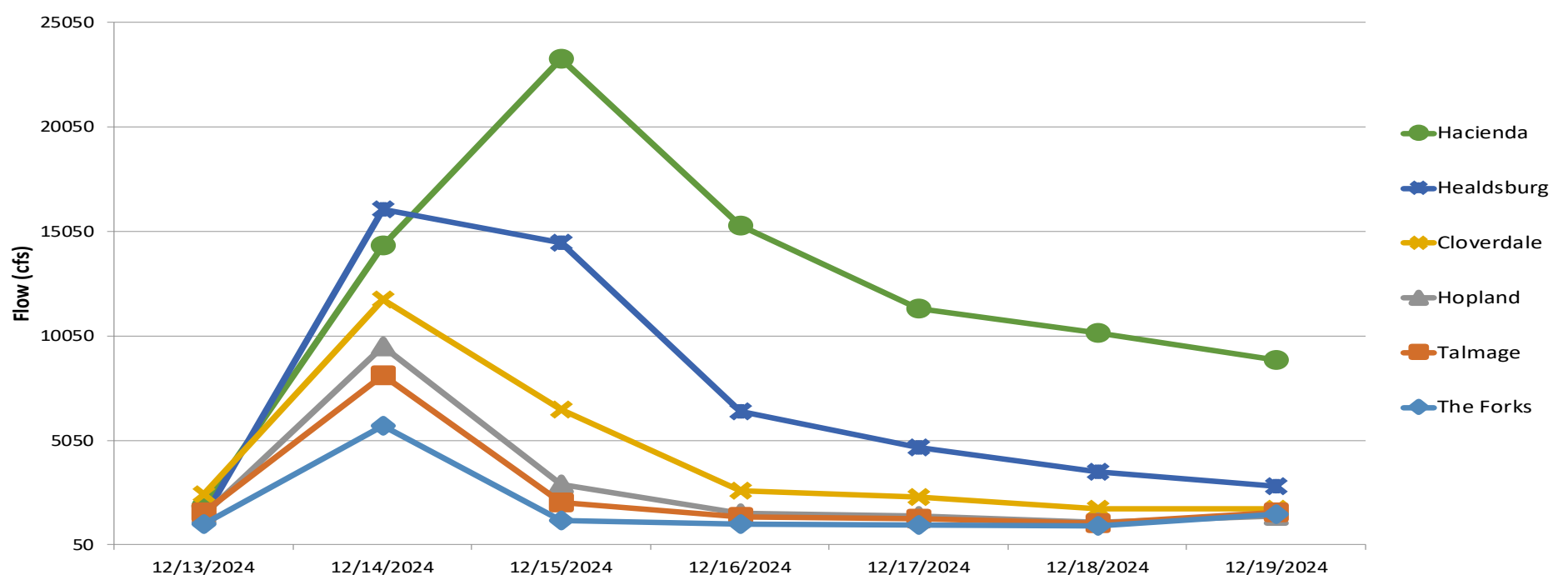
Water Quality Mean Values



Gage	24-hr Average Flow (cfs)						
	Dec 13, 2024	Dec 14, 2024	Dec 15, 2024	Dec 16, 2024	Dec 17, 2024	Dec 18, 2024	Dec 19, 2024
The Forks*	1032	5750	1204	1020	1008	951	1498
Talmage USGS 11462080	1601	8173	2078	1397	1274	1089	1583
Hopland USGS 11462500	1467	9533	2922	1549	1421	1132	1442
Cloverdale USGS 11463000	2451	11770	6538	2651	2340	1771	1774
Healdsburg USGS 11464000	1334	16119	14515	6418	4720	3522	2869
Hacienda USGS 11467000	1882	14381	23299	15314	11335	10168	8884

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

Russian River Flows

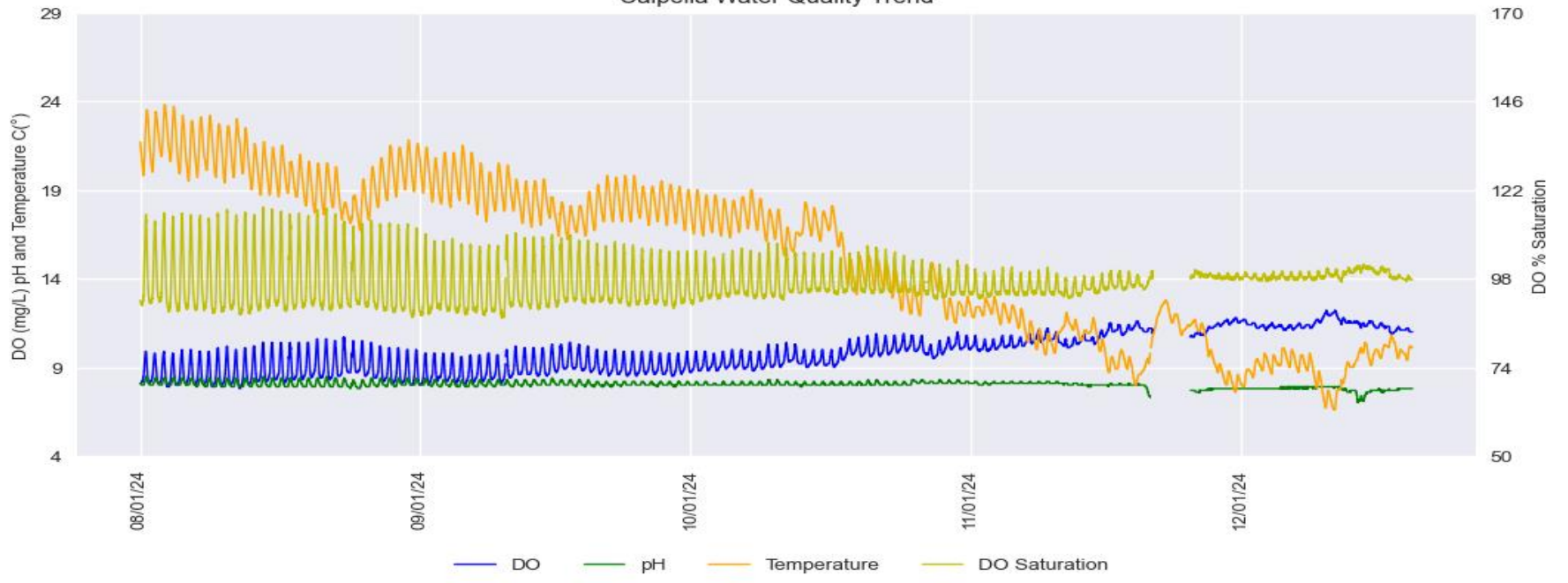


Russian River Water Quality August 1, 2024 – December 19, 2024

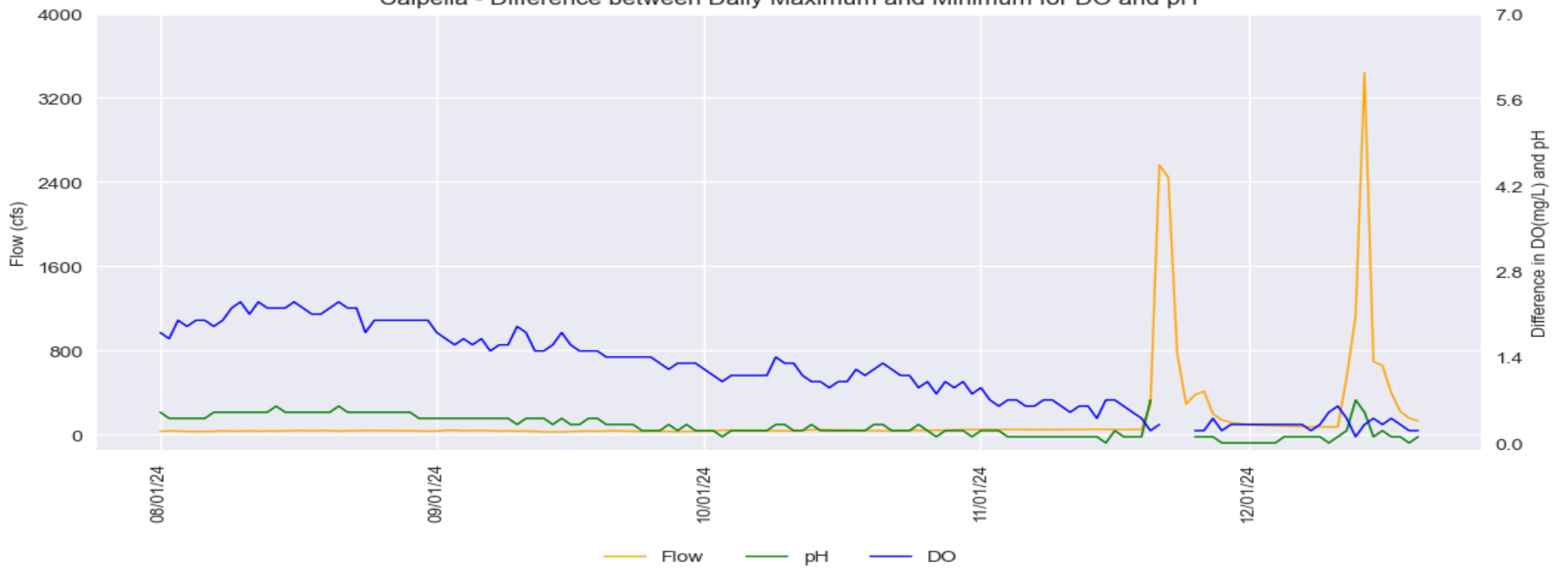
Provisional Data Subject to Revision

Calpella

Calpella Water Quality Trend

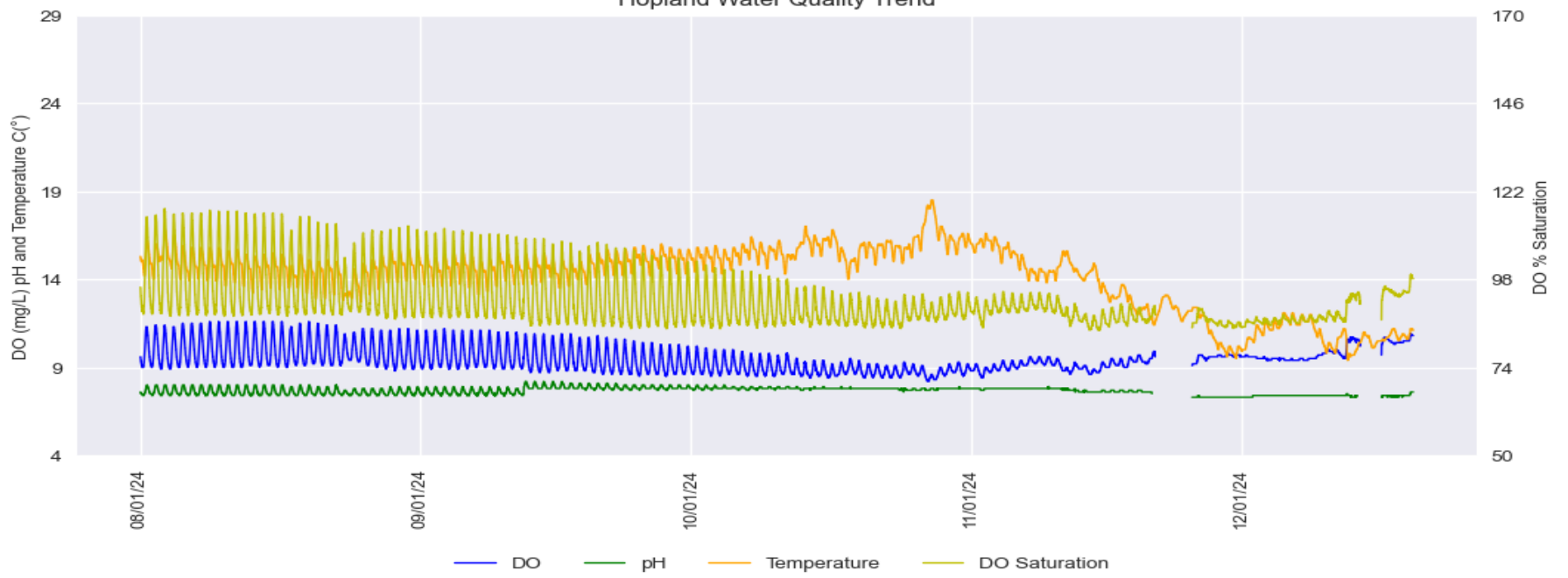


Calpella - Difference between Daily Maximum and Minimum for DO and pH

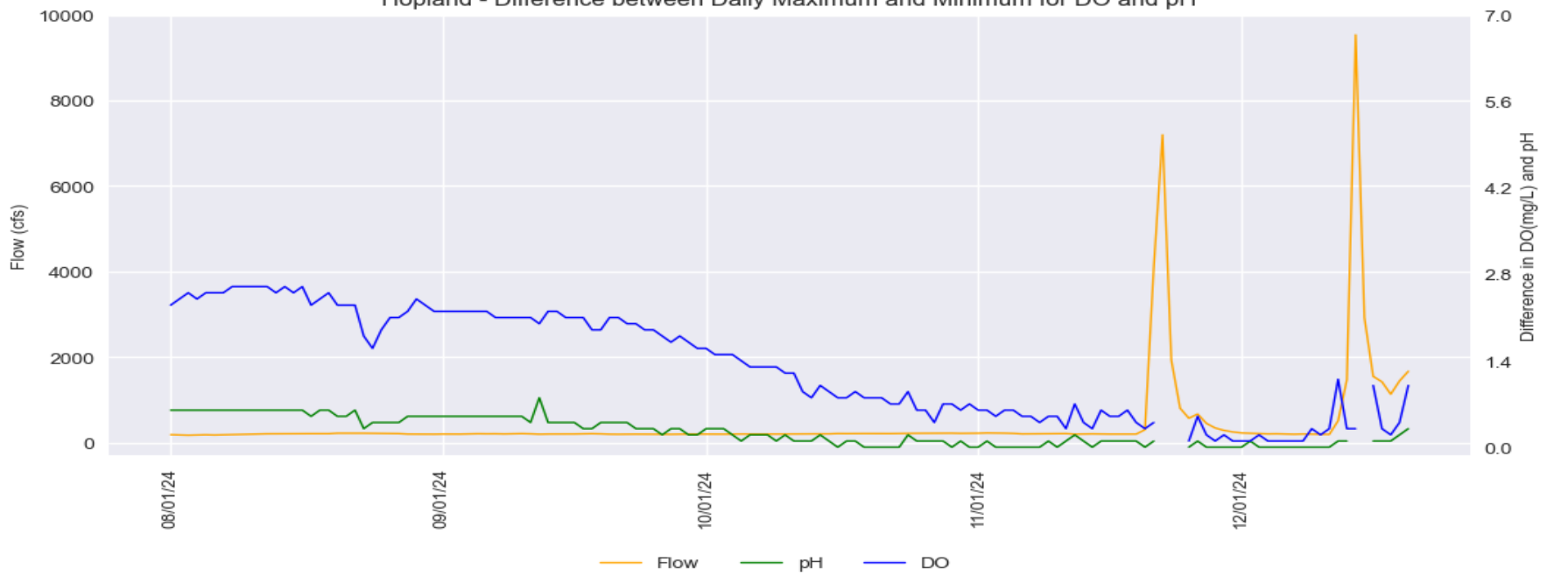


Hopland

Hopland Water Quality Trend



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



Russian River Water Quality August 1, 2024 – December 19, 2024

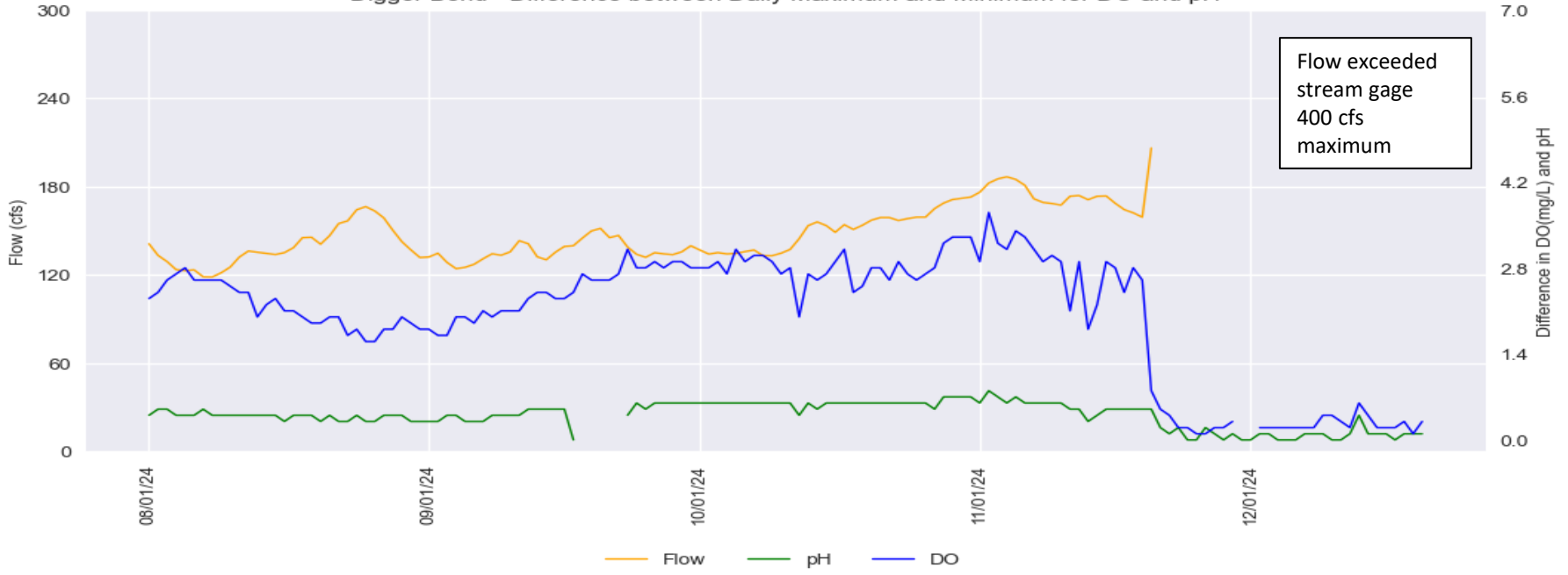
Provisional Data Subject to Revision

Digger Bend

Digger Bend Water Quality Trend

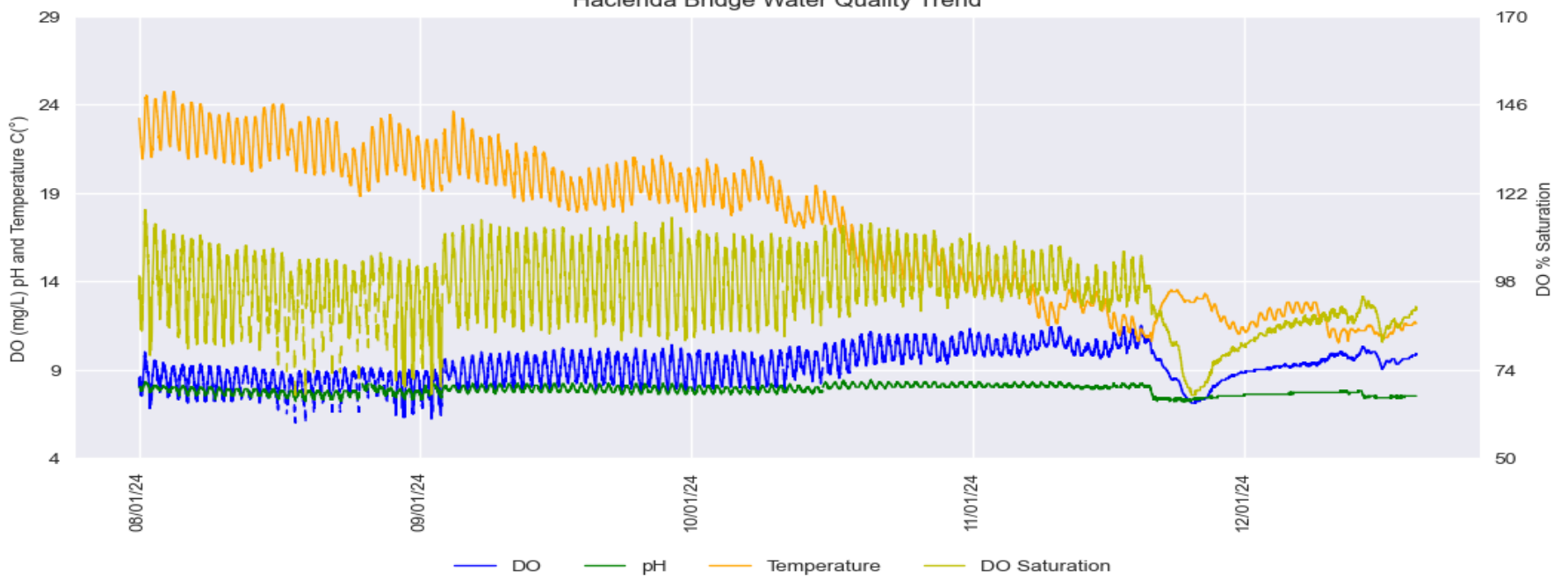


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH

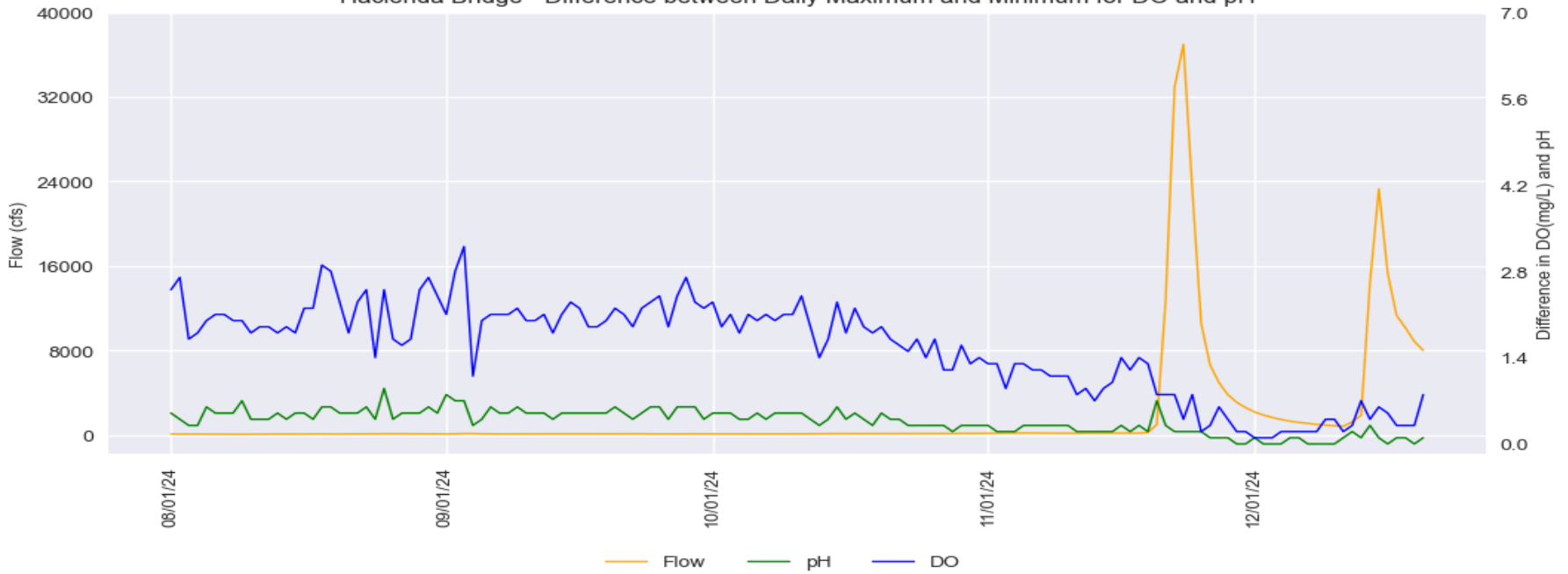


Hacienda Bridge

Hacienda Bridge Water Quality Trend



Hacienda Bridge - Difference between Daily Maximum and Minimum for DO and pH

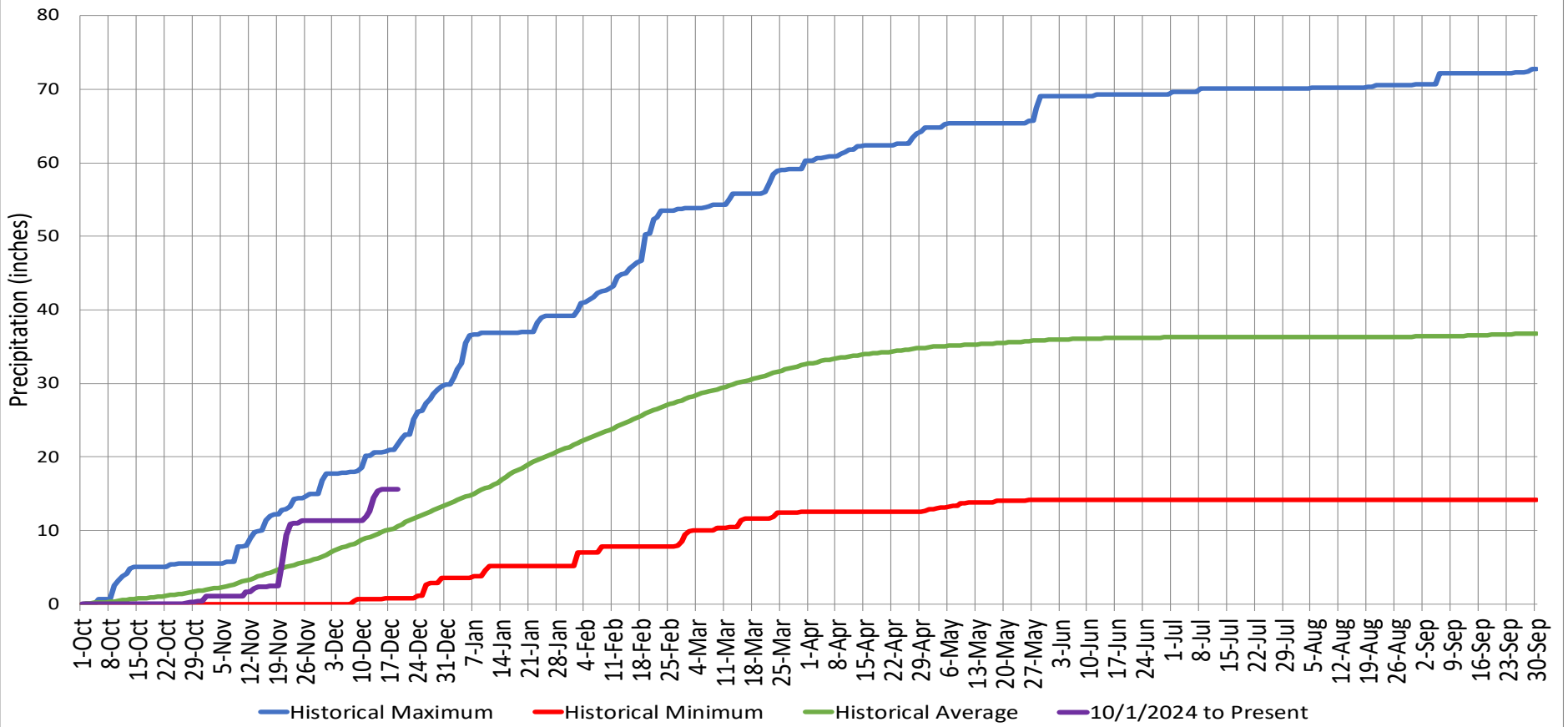


Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))

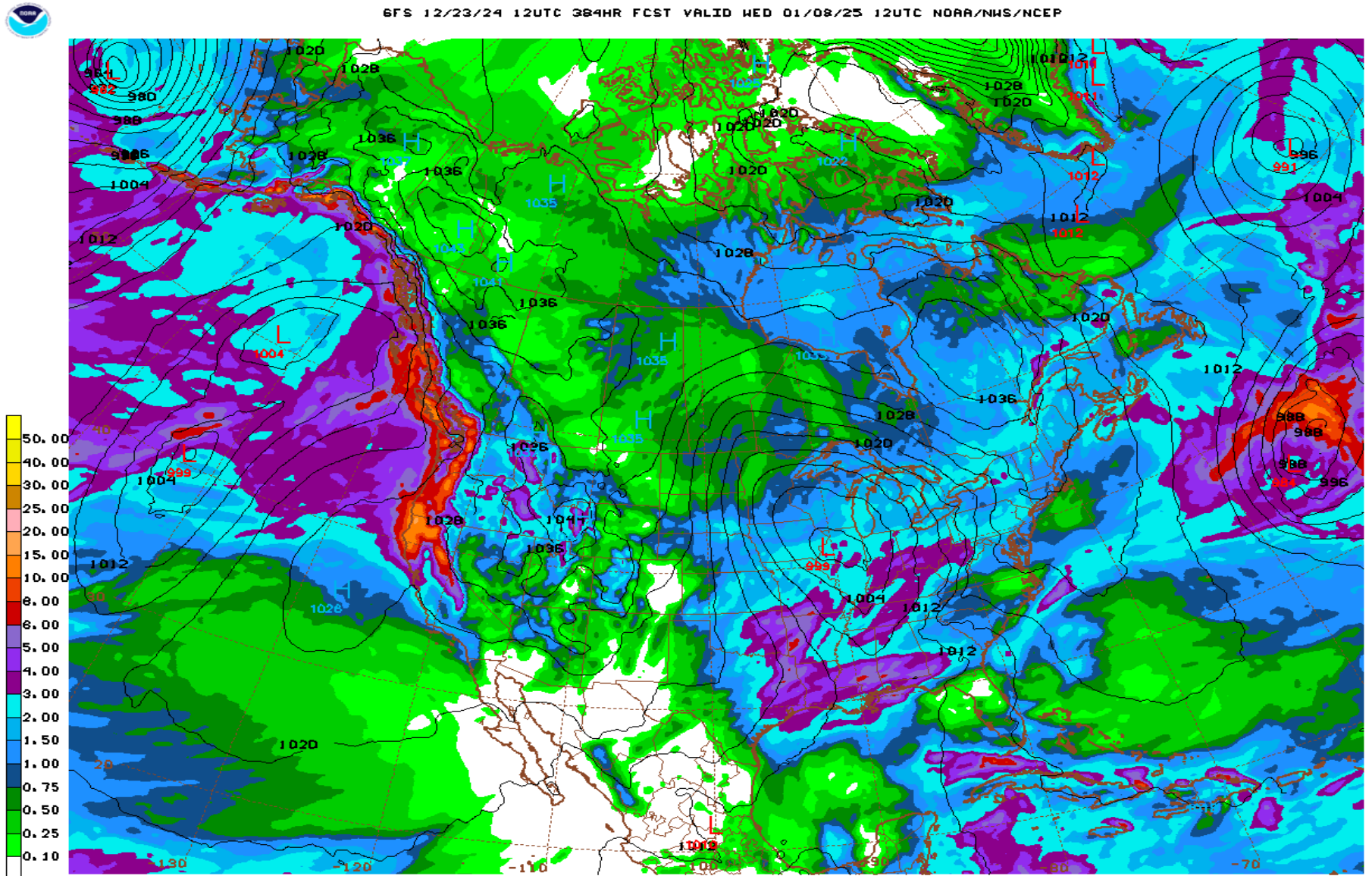
Date Range	Cumulative (inches)
Oct 1, 2024 - Dec 19, 2024	15.66
Last 7 Days*	3.01

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

GFS 12/23/24 12UTC 384HR FCST VALID MED 01/08/25 12UTC NOAA/NWS/NCEP



GFS MED 250108/1200V384 ENSL (4MB), 384HR ACCUMULATED PRECIP (IN)

Date Range
Dec 23 - Jan 8, 2025

Forecasted Cumulative (inches)
5.72

Russian River Fisheries Monitoring



Sonoma Water operates a video camera at the Mirabel Inflatable dam to count the number of adult salmonids returning to the Russian River. Due to an impending storm the dam was deflated on November 19, 2024, and the video equipment was removed for the season. Sonoma Water has completed reviewing the data collected during the 2024 season and the preliminary count is 1,512 adult Chinook. The 2024 count is less than the long-term average of 2,610 Chinook, but the camera was removed earlier in the year than typical, and it is likely that many adult Chinook have returned since removing the camera.