



**State Water Resources Control Board
 Temporary Urgency Change Orders (6/6/2024)
 Russian River Hydrologic & Water Quality Report
 September 20, 2024 - September 26, 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).

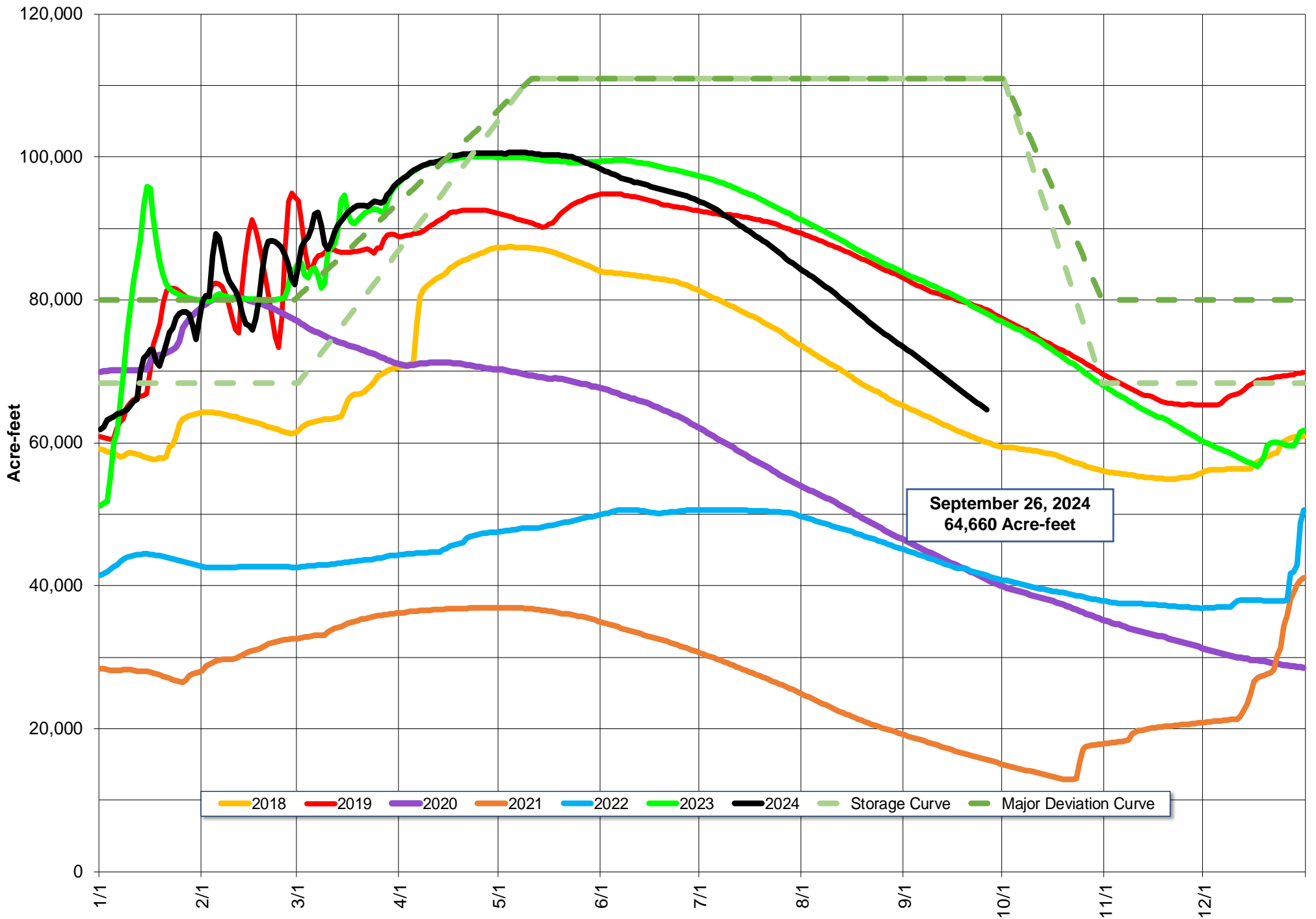
Instream Flow Requirements as of September 26, 2024

Basis	Reach	Instantaneous (cfs)	5-day Average (cfs)
Modified Per Order: Normal Condition	Upper Russian River	110	125
D-1610: Normal Condition	Dry Creek	80	-
Modified Per Order: Normal Condition	Lower Russian River	60	70

Upper and Lower Russian River are based on criteria as established in the Order issued 6/6/2024.

Lake Mendocino

Lake Mendocino Storage 2018 - 2024 and Storage Curve



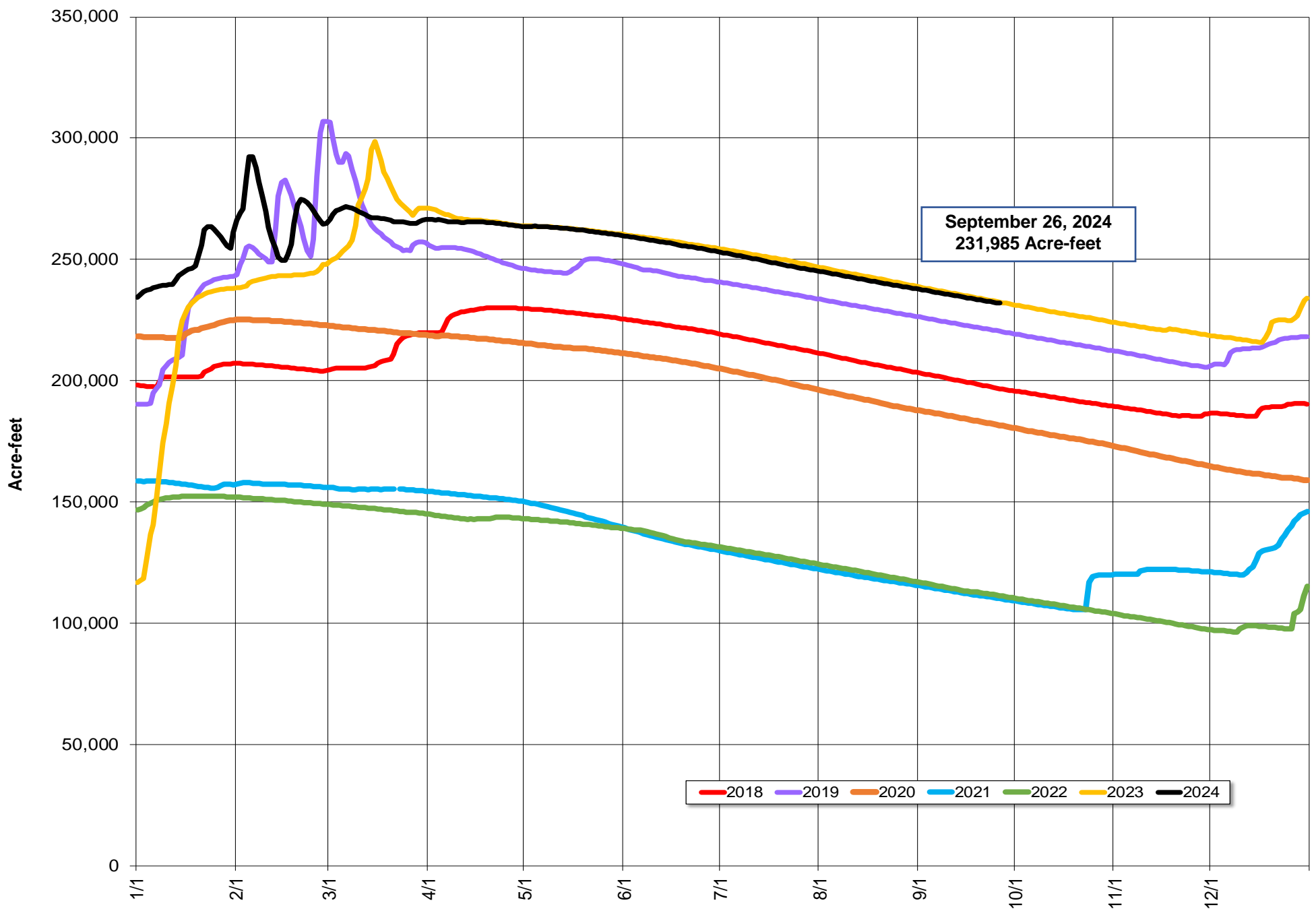
Storage (acre-feet)	September 26, 2024	64,660	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-10,236	-341
	Last 7 days	-1,924	-275
Daily Inflow (cfs)	Last 7 days	Min	29
		Max	44
		Mean	40
Release (cfs)	Last 7 days	Min	189
		Max	189
		Mean	189

Lake Sonoma



Todd Schram, February 10, 2024

Lake Sonoma Storage 2018-2024



Storage (acre-feet)	September 26, 2024	231,985	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-6,857	-229
	Last 7 days	-1,529	-218
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	18
		Mean	4
Release (cfs)	Last 7 days	Min	97
		Max	97
		Mean	97

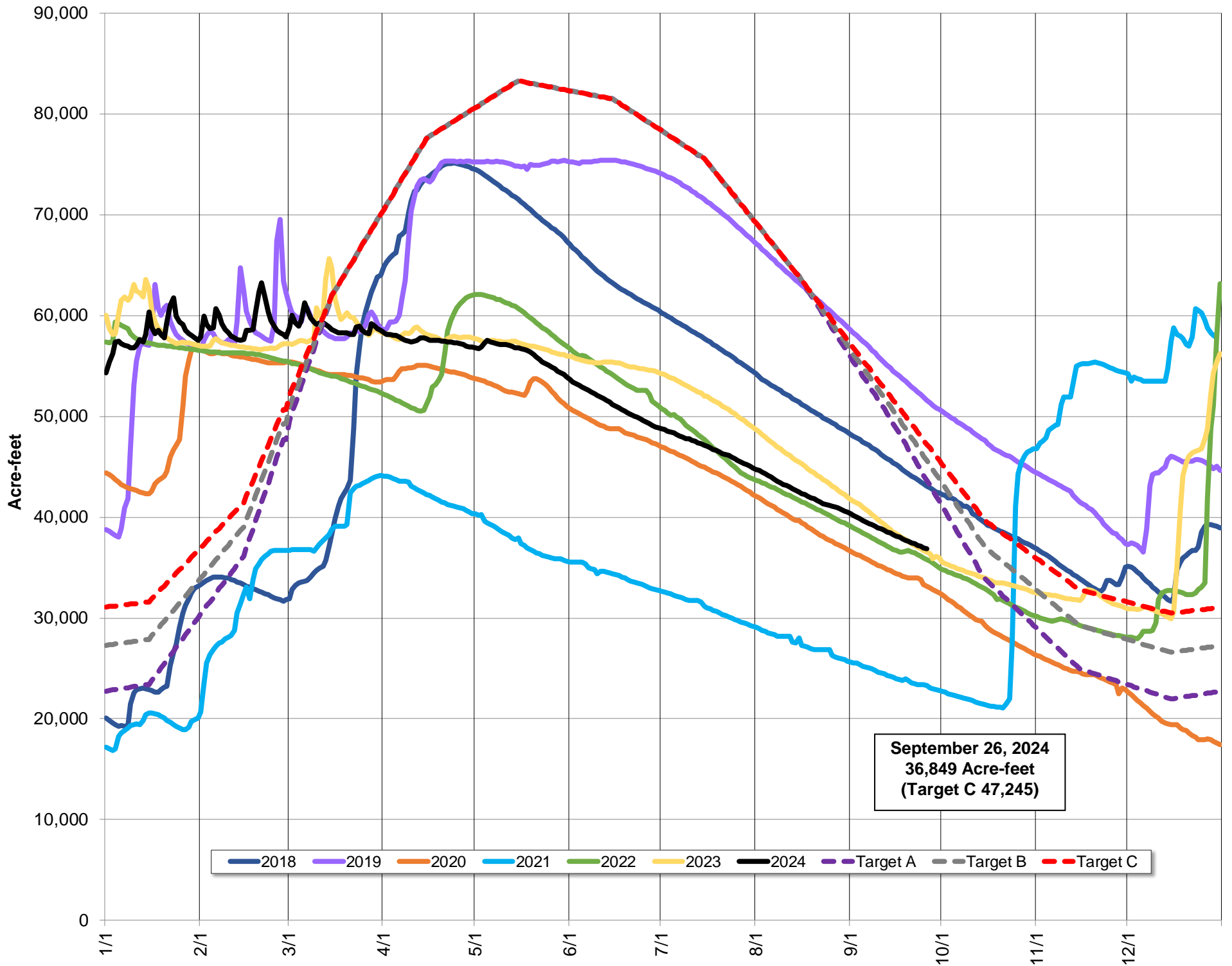
Potter Valley Project

PVP Diversion (cfs)	September 26, 2024	46
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Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2023 - September 26, 2024	487,723	1,347
	Last 7 days	189	27

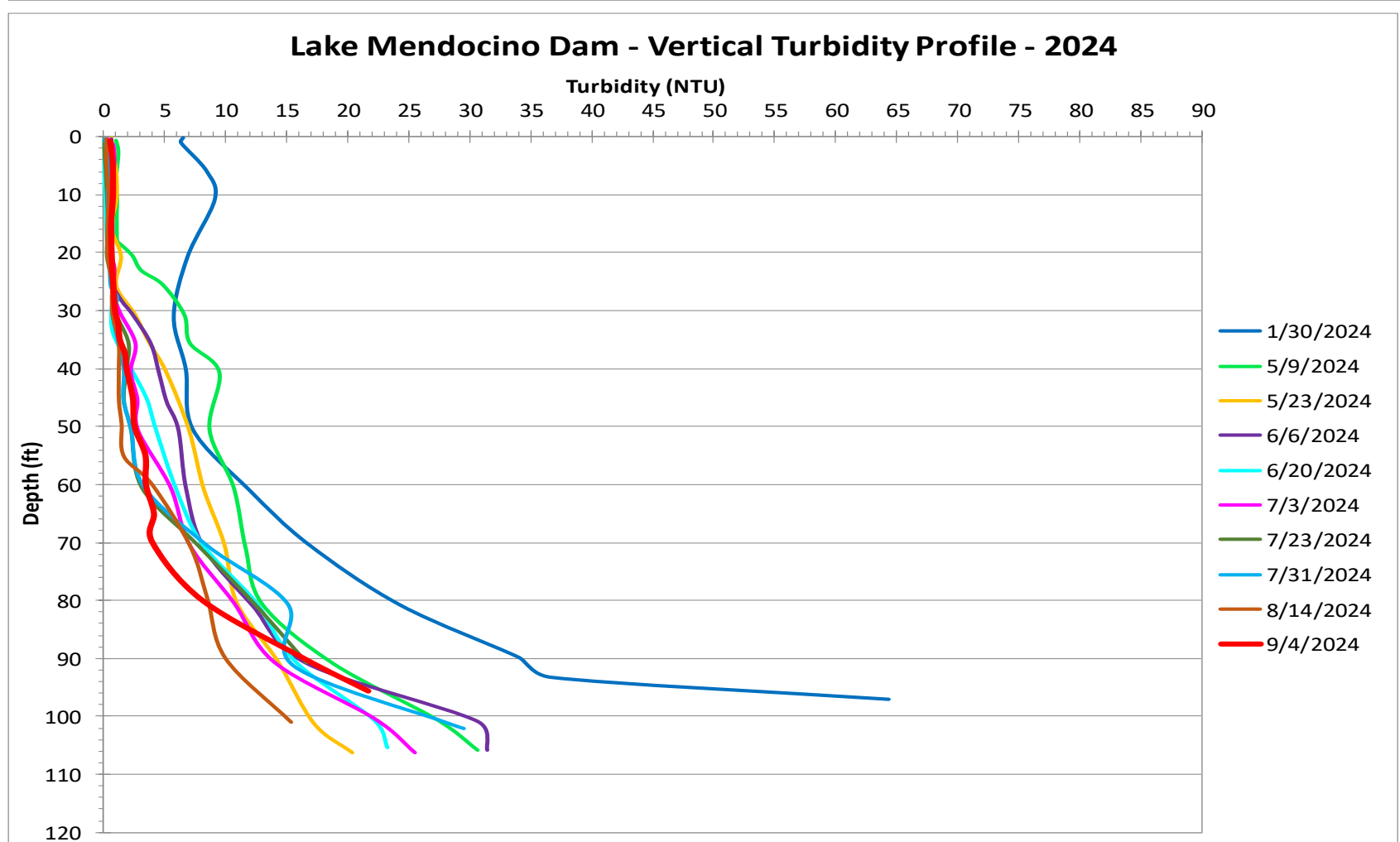
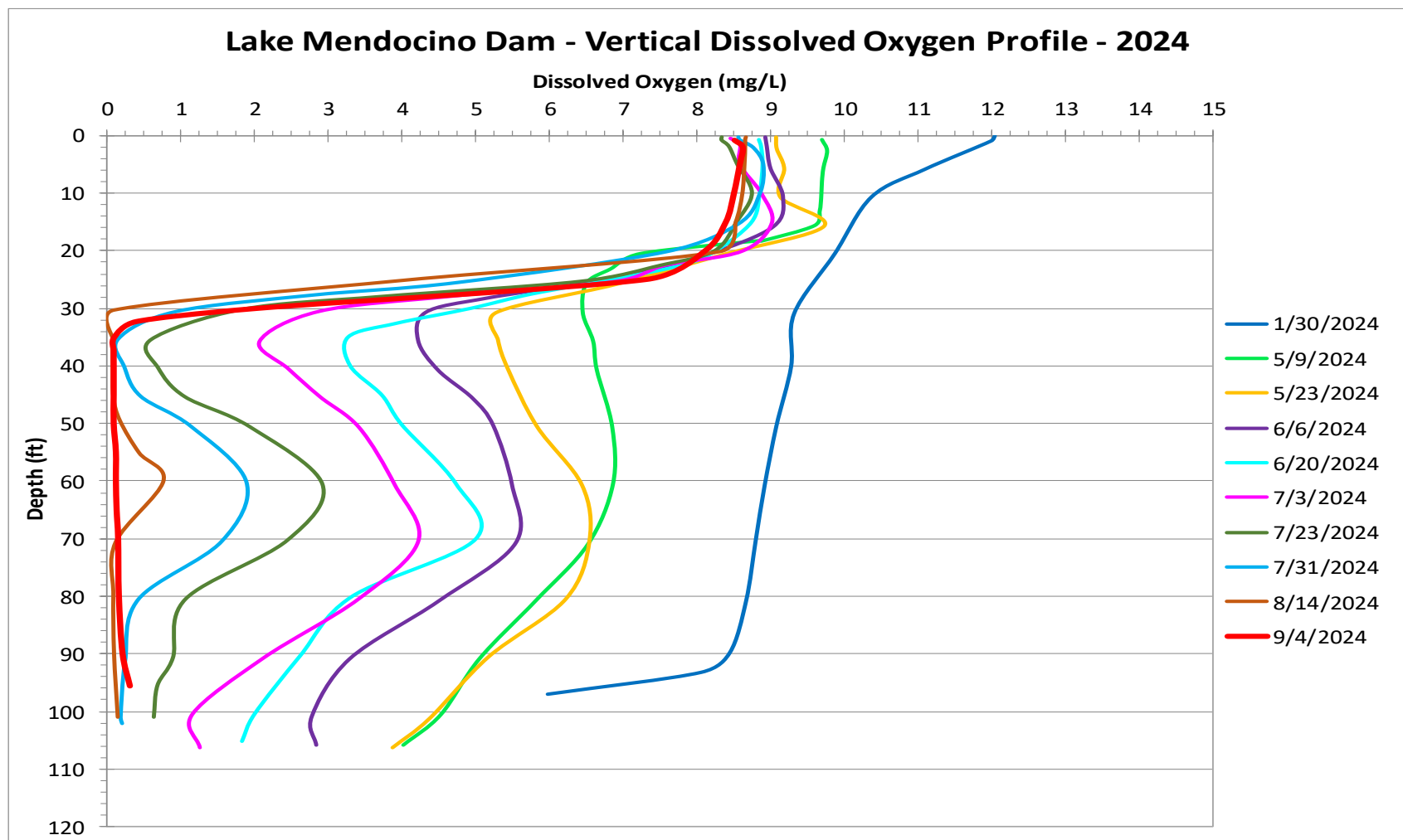
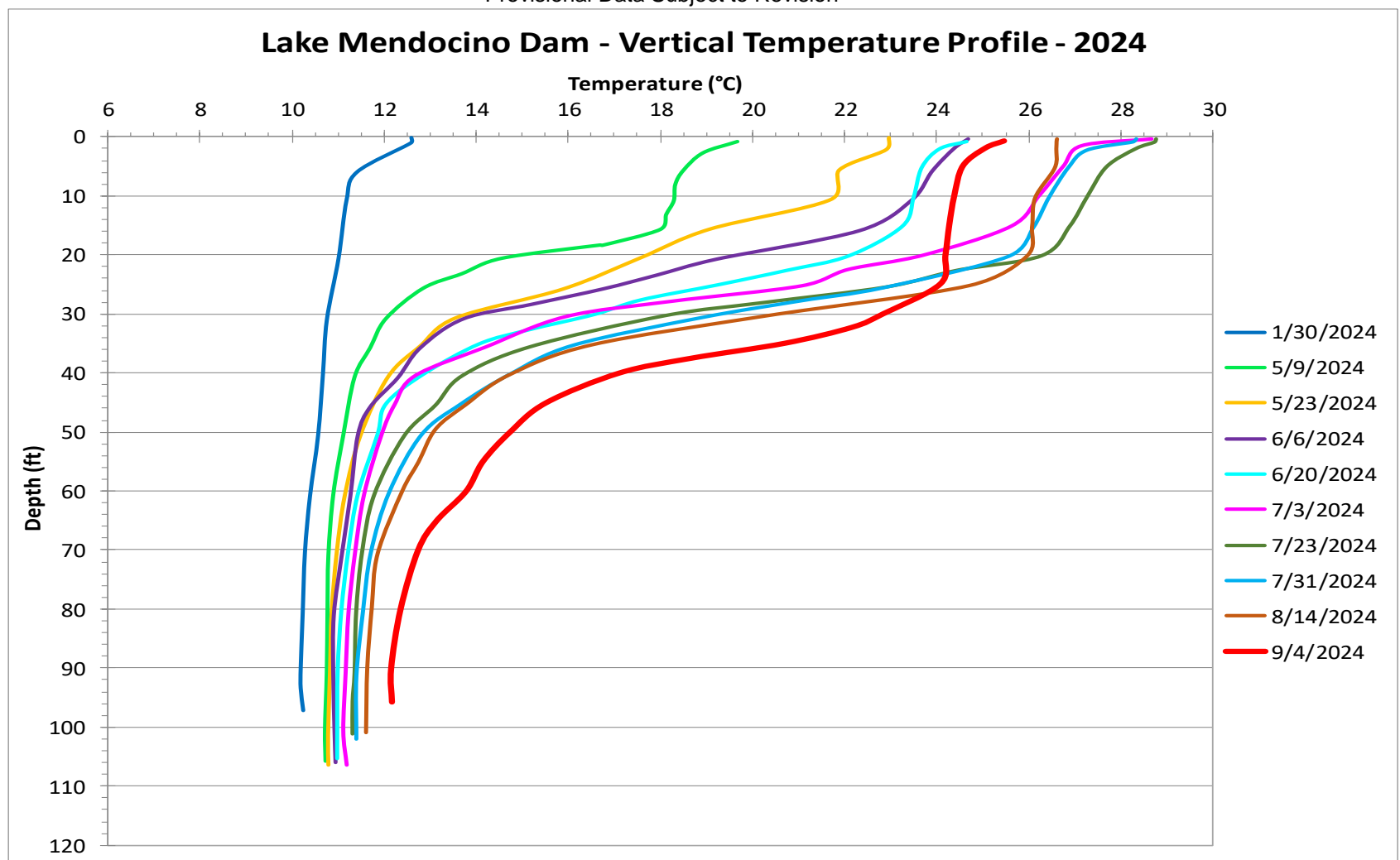
*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2018 - 2024 and Target Storage Scenarios



Lake Mendocino Water Quality Vertical Profiles (January 30 – September 4, 2024)

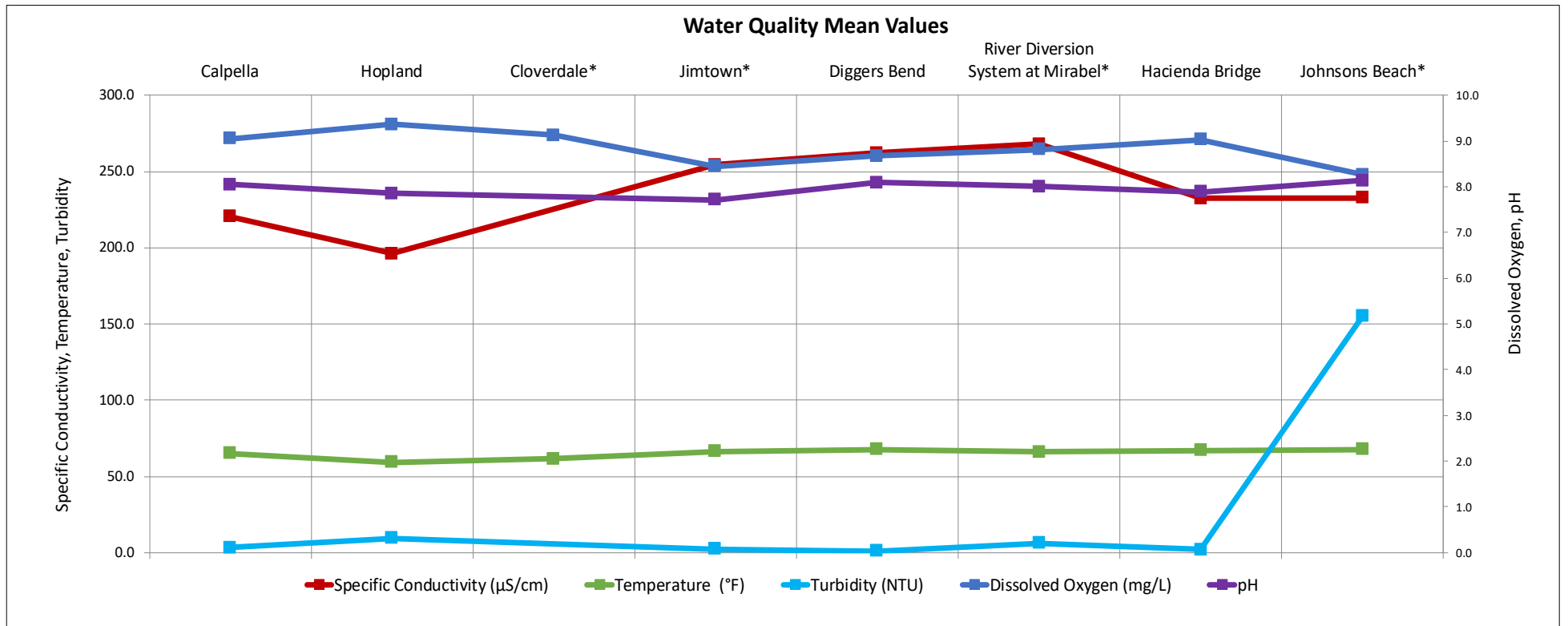
Provisional Data Subject to Revision



Russian River Flows (September 20, 2024 - September 26, 2024)

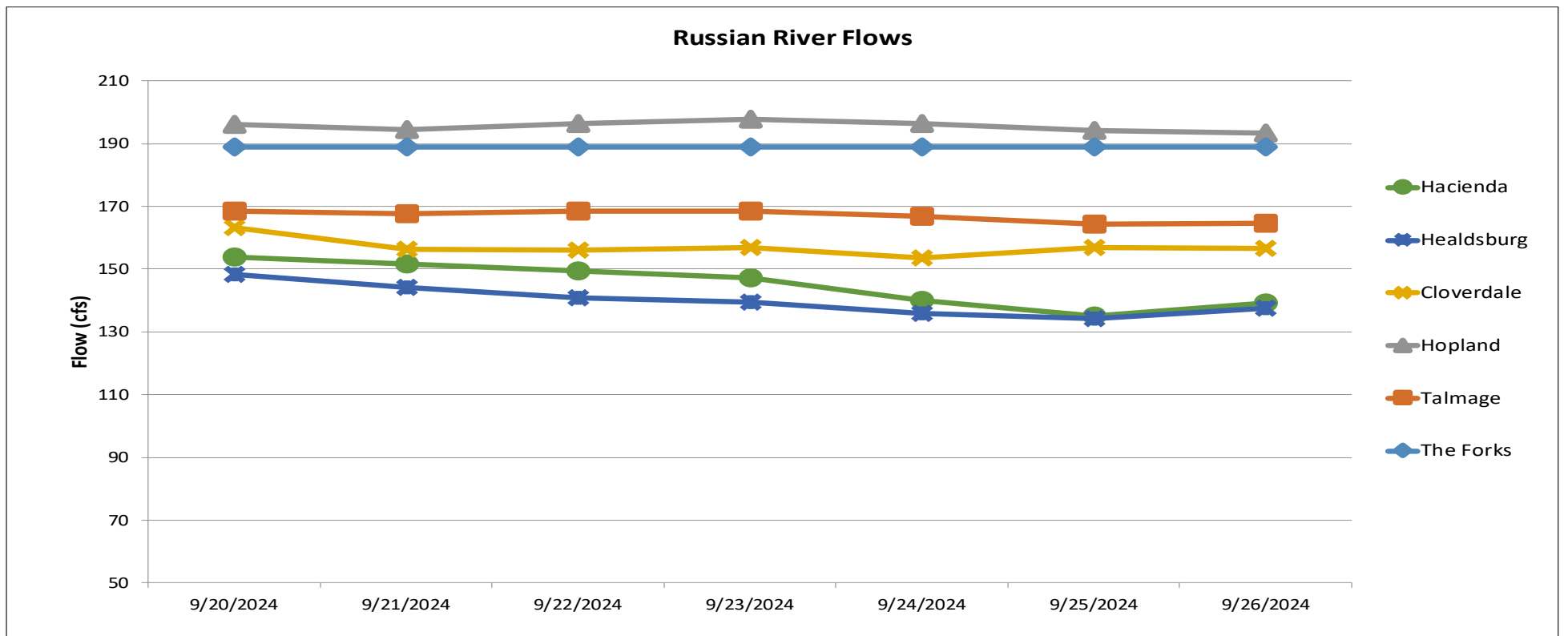
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463000	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	62.1	57.4	59.0	63.7	64.6	65.2	64.2	66.7
	Max	67.6	60.6	64.0	69.8	71.2	67.7	69.8	68.8
	Mean	65.0	59.1	61.6	66.4	67.6	65.9	66.9	67.7
Specific Conductivity (µS/cm)	Min	217.0	195.0		249.0	259.0	256.6	231.0	135.1
	Max	224.0	197.0		257.0	265.0	279.0	234.0	248.8
	Mean	220.5	196.3		254.4	262.3	268.1	232.4	232.9
Dissolved Oxygen (mg/L)	Min	8.5	8.5	8.6	7.2	7.4	8.3	7.7	6.0
	Max	10.0	10.8	10.1	10.5	10.5	9.4	10.2	8.8
	Mean	9.1	9.4	9.1	8.4	8.7	8.8	9.0	8.3
Dissolved Oxygen (% Saturation)	Min	90.5	84.5	87.2	77.1	78.8	90.9	81.8	65.6
	Max	108.0	108.0	105.4	116.6	119.6	100.1	113.9	96.5
	Mean	96.3	93.1	93.4	91.4	95.2	94.8	98.2	90.6
pH	Min	7.9	7.7		7.6	7.8	7.9	7.6	7.9
	Max	8.2	8.1		8.0	8.4	8.1	8.2	8.2
	Mean	8.1	7.9		7.7	8.1	8.0	7.9	8.1
Turbidity (NTU)	Min	2.0	7.5		1.2	0.4	3.7	1.2	8.9
	Max	5.2	11.5		3.1	2.2	32.7	3.0	2951.8
	Mean	3.1	9.2		2.2	1.1	6.1	1.9	155.2

*Station operated seasonally



Gage	24-hr Average Flow (cfs)						
	Sep 20, 2024	Sep 21, 2024	Sep 22, 2024	Sep 23, 2024	Sep 24, 2024	Sep 25, 2024	Sep 26, 2024
The Forks*	189	189	189	189	189	189	189
Talmage USGS 11462080	168	168	169	169	167	164	165
Hopland USGS 11462500	196	195	197	198	196	194	193
Cloverdale USGS 11463000	163	156	156	157	153	157	157
Healdsburg USGS 11464000	148	144	141	139	136	134	137
Hacienda USGS 11467000	154	152	149	147	140	135	139

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

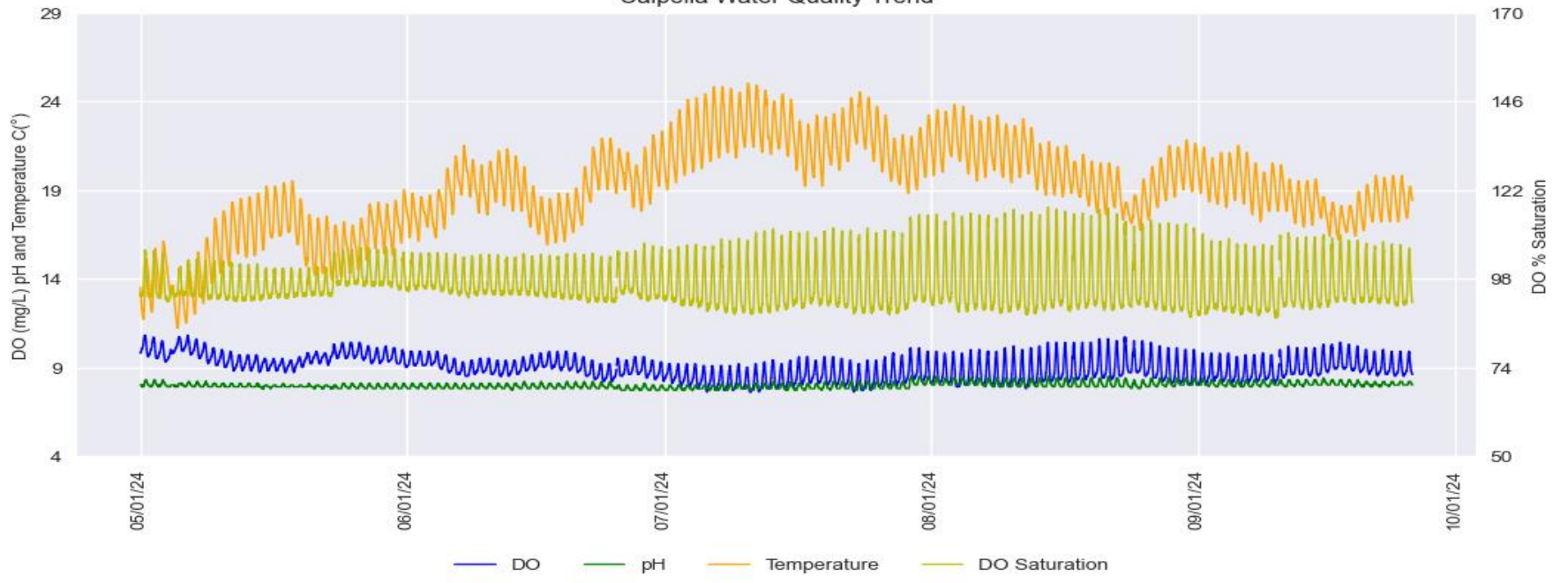


Russian River Water Quality May 1, 2024 – September 26, 2024

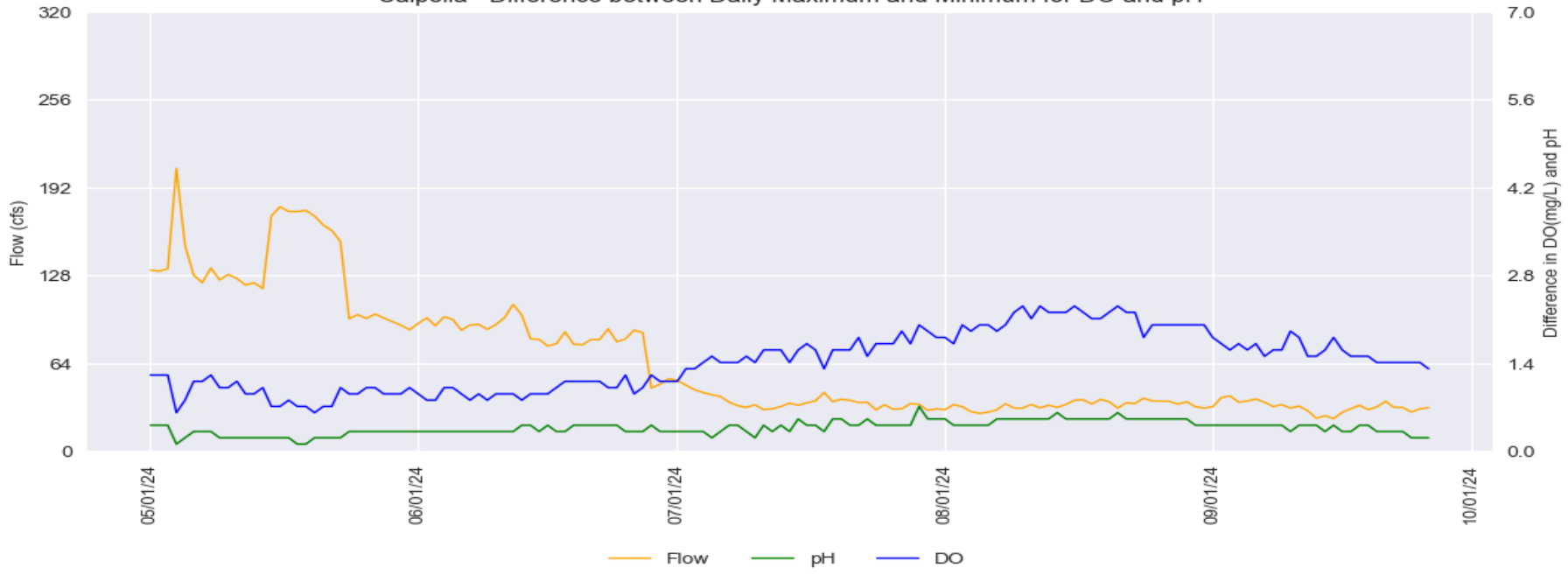
Provisional Data Subject to Revision

Calpella

Calpella Water Quality Trend

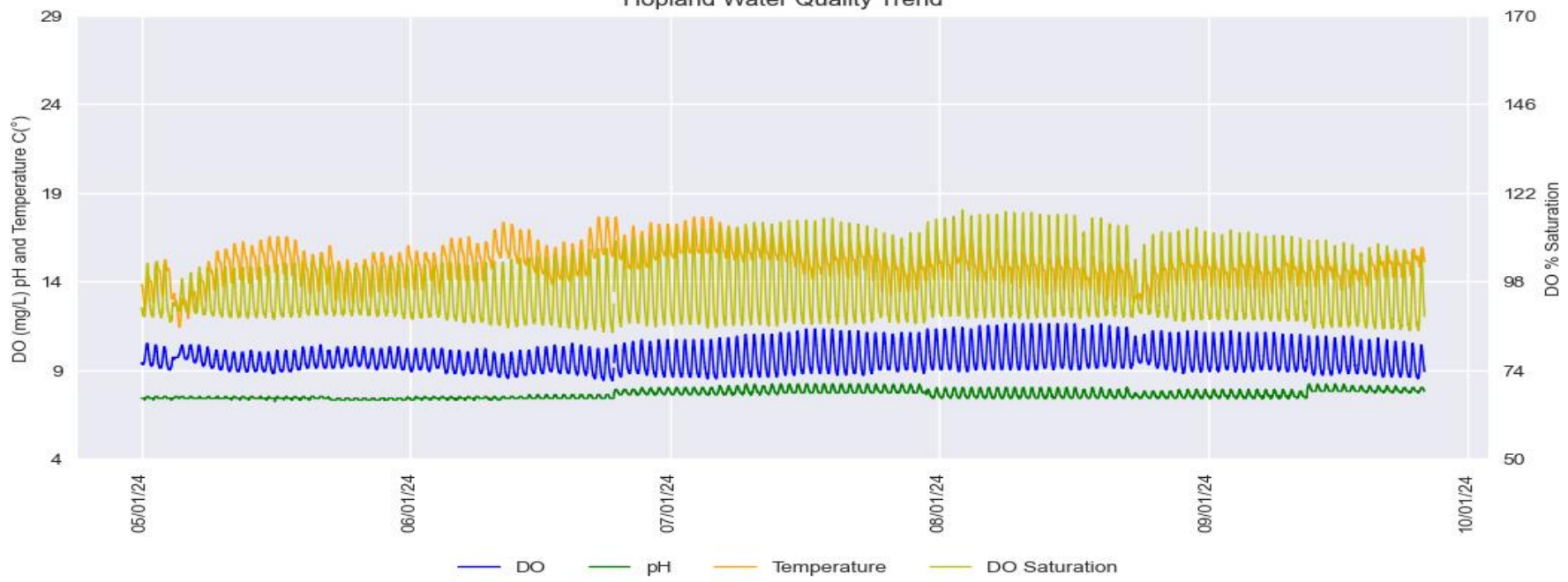


Calpella - Difference between Daily Maximum and Minimum for DO and pH

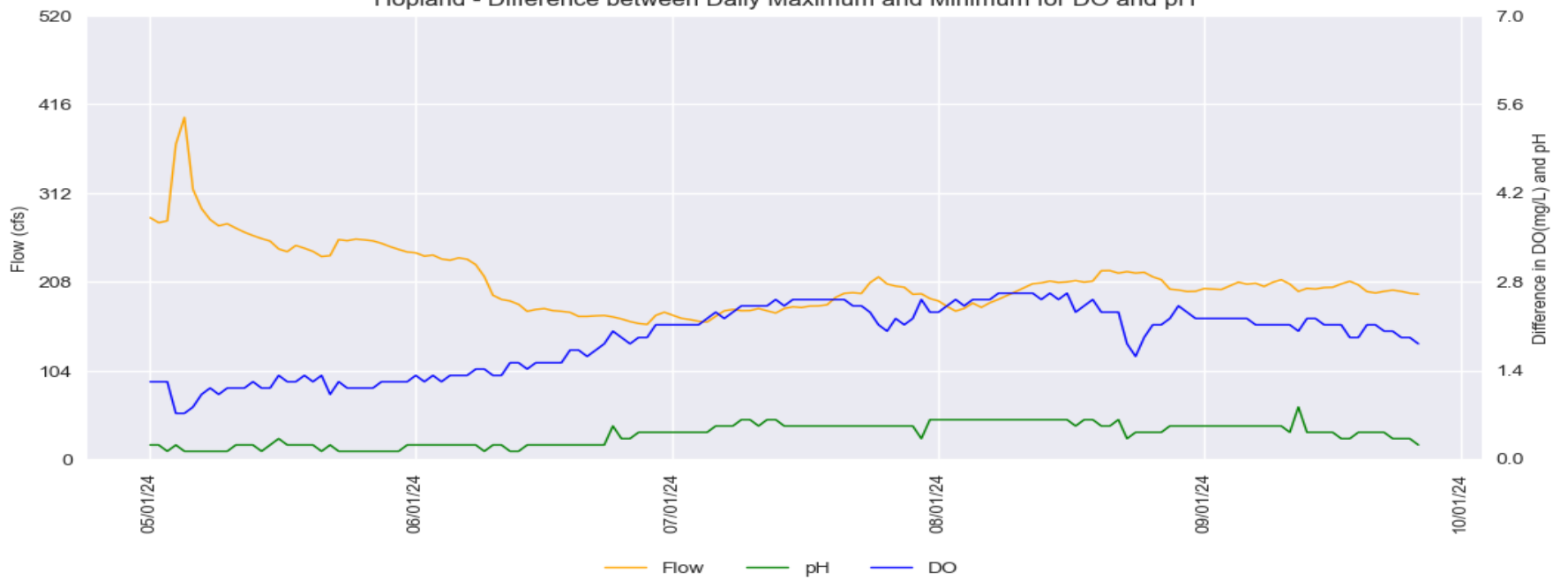


Hopland

Hopland Water Quality Trend



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

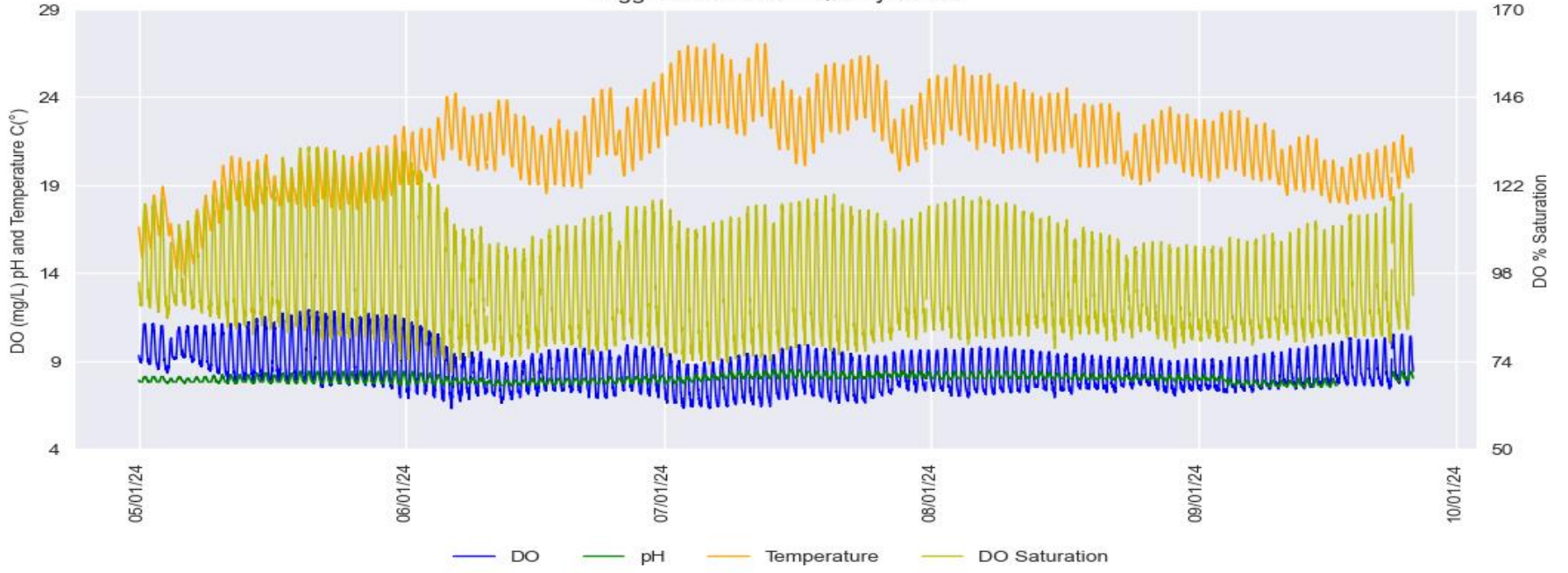


Russian River Water Quality May 1, 2024 – September 26, 2024

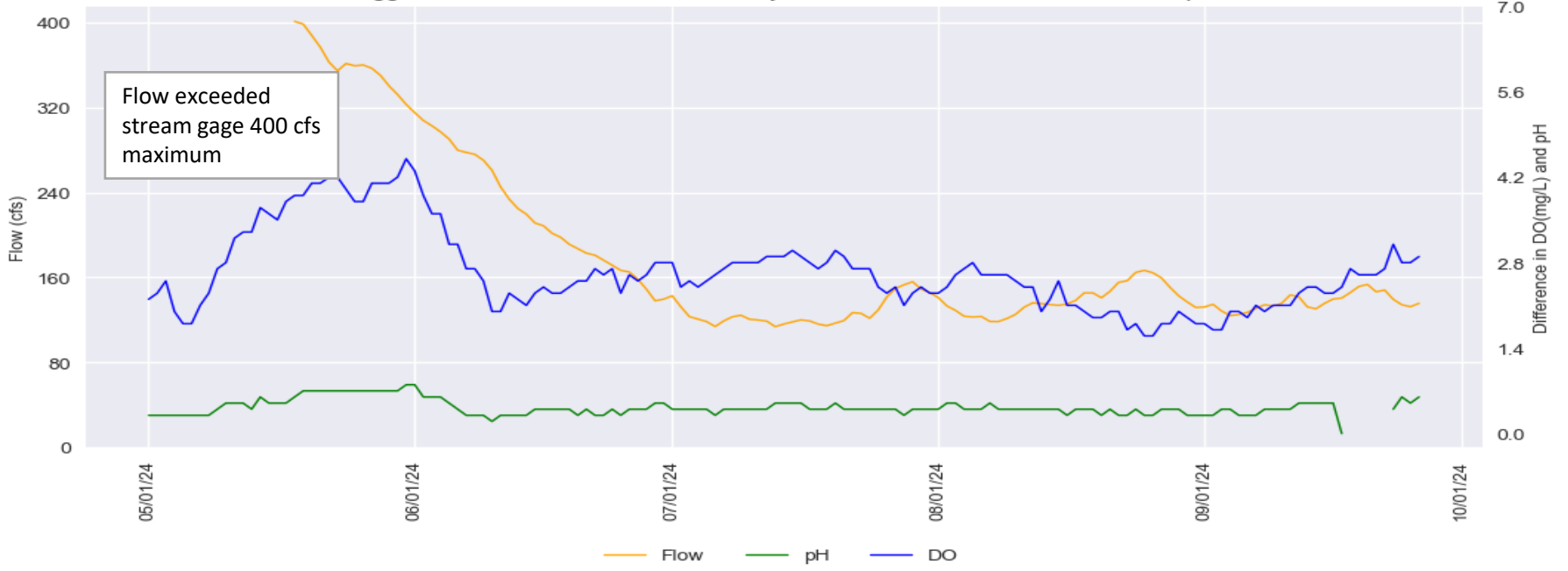
Provisional Data Subject to Revision

Digger Bend

Digger Bend Water Quality Trend

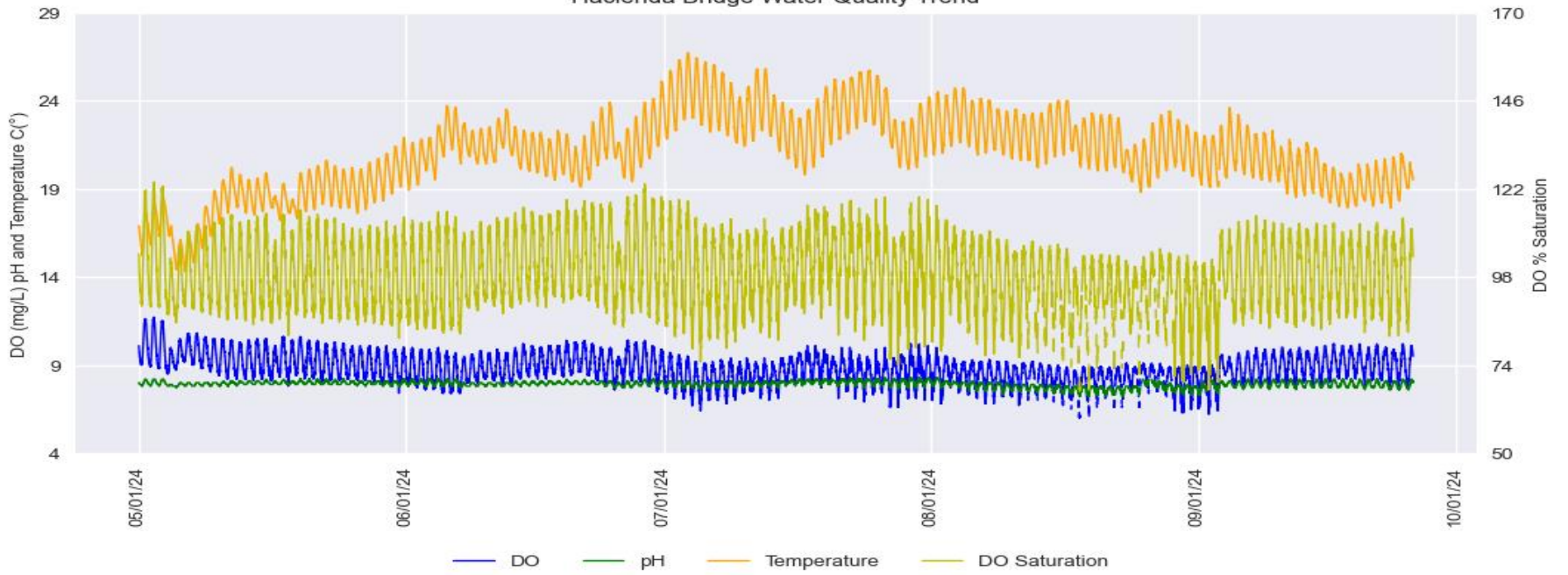


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH

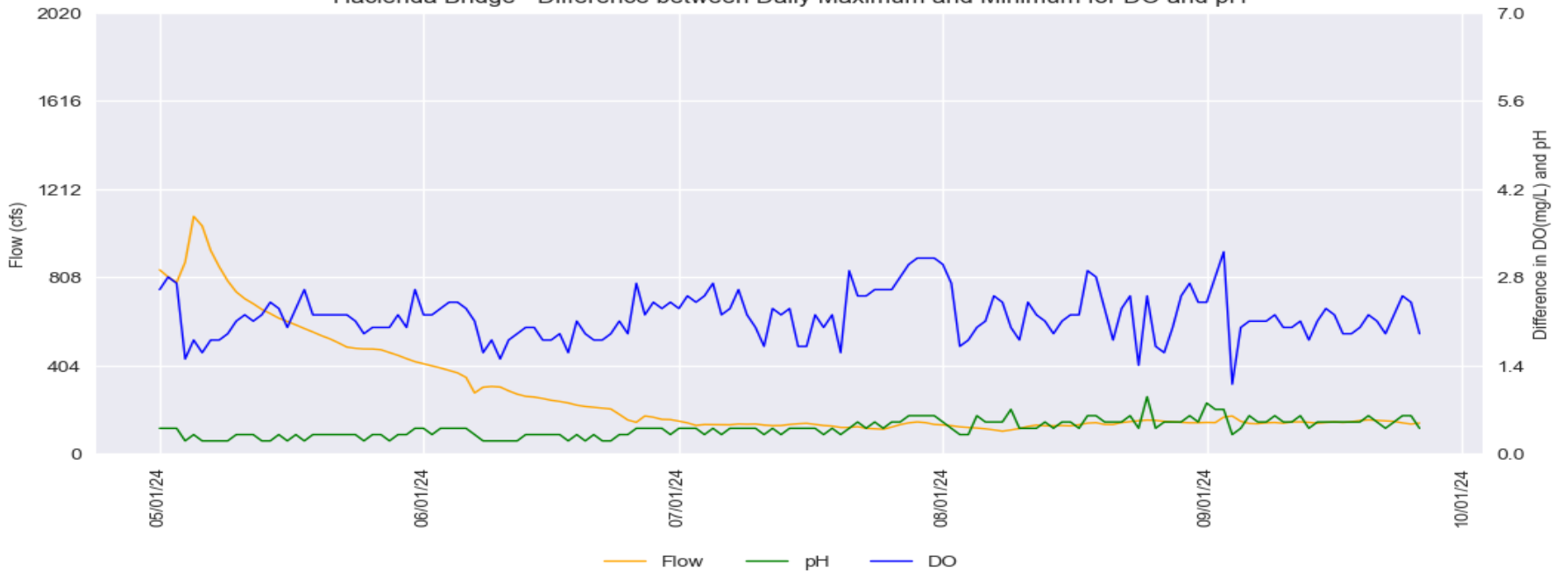


Hacienda Bridge

Hacienda Bridge Water Quality Trend



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

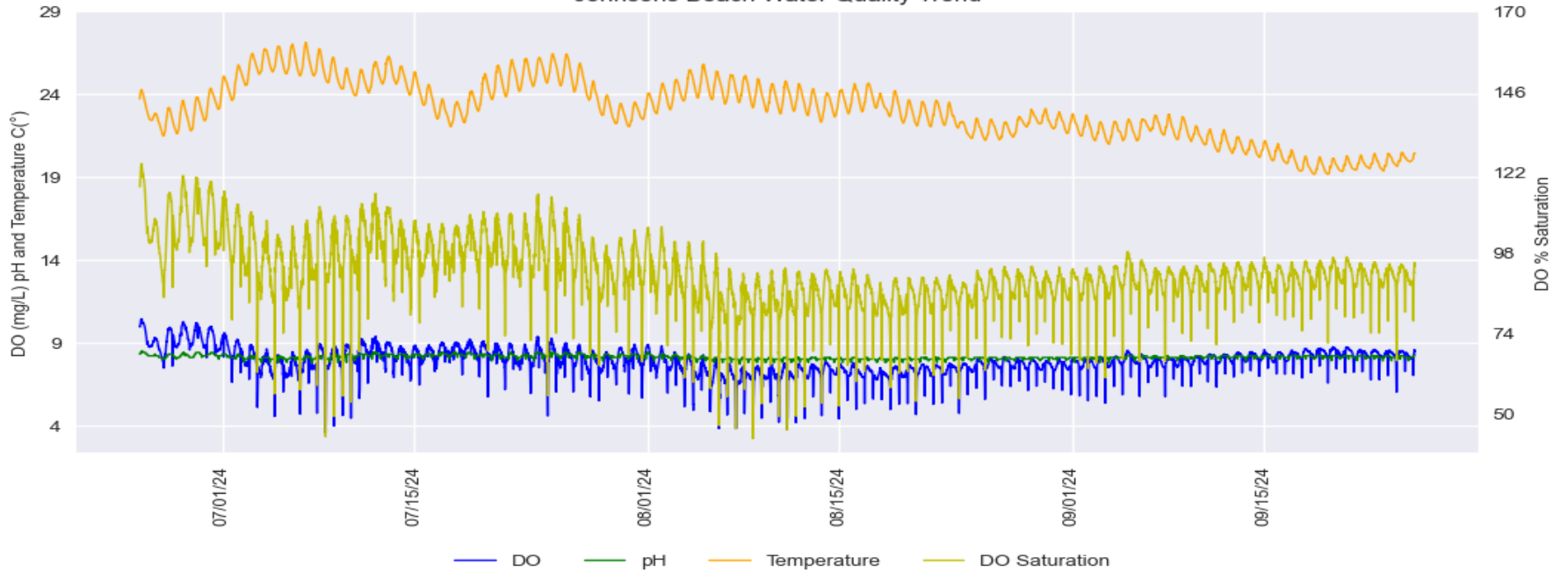


Russian River Water Quality June 24, 2024 – September 26, 2024

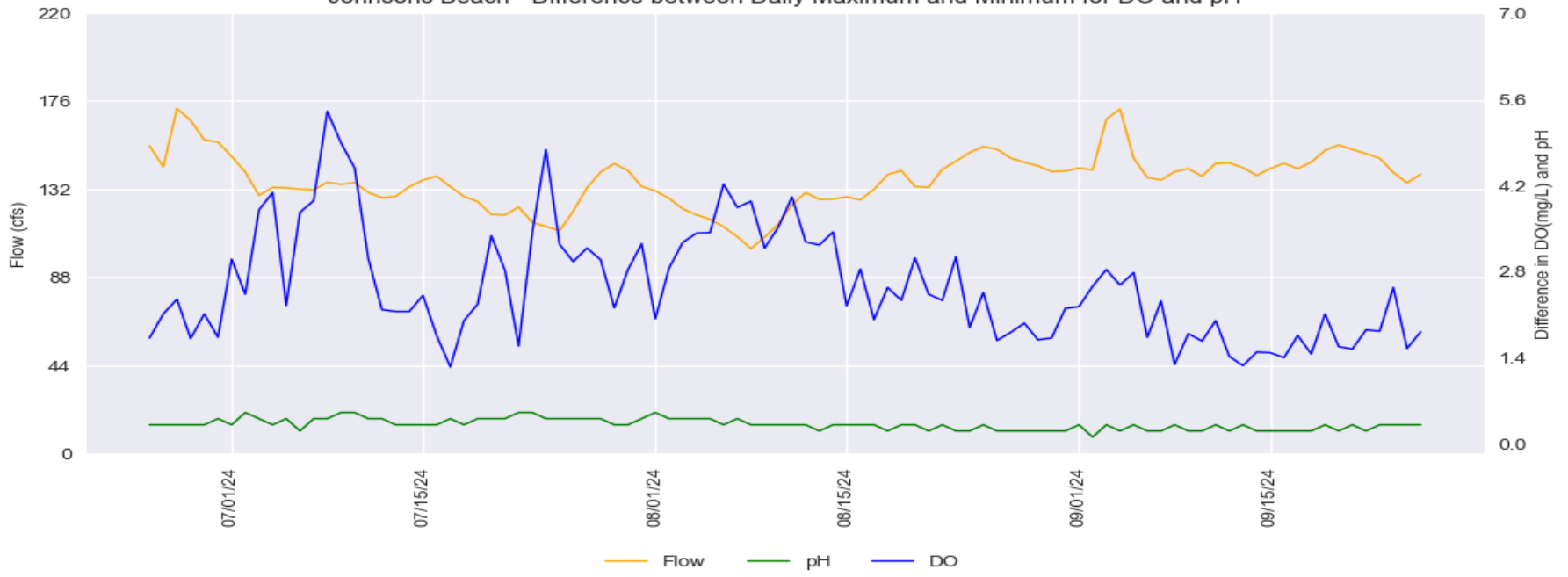
Provisional Data Subject to Revision

Johnsons Beach

Johnsons Beach Water Quality Trend

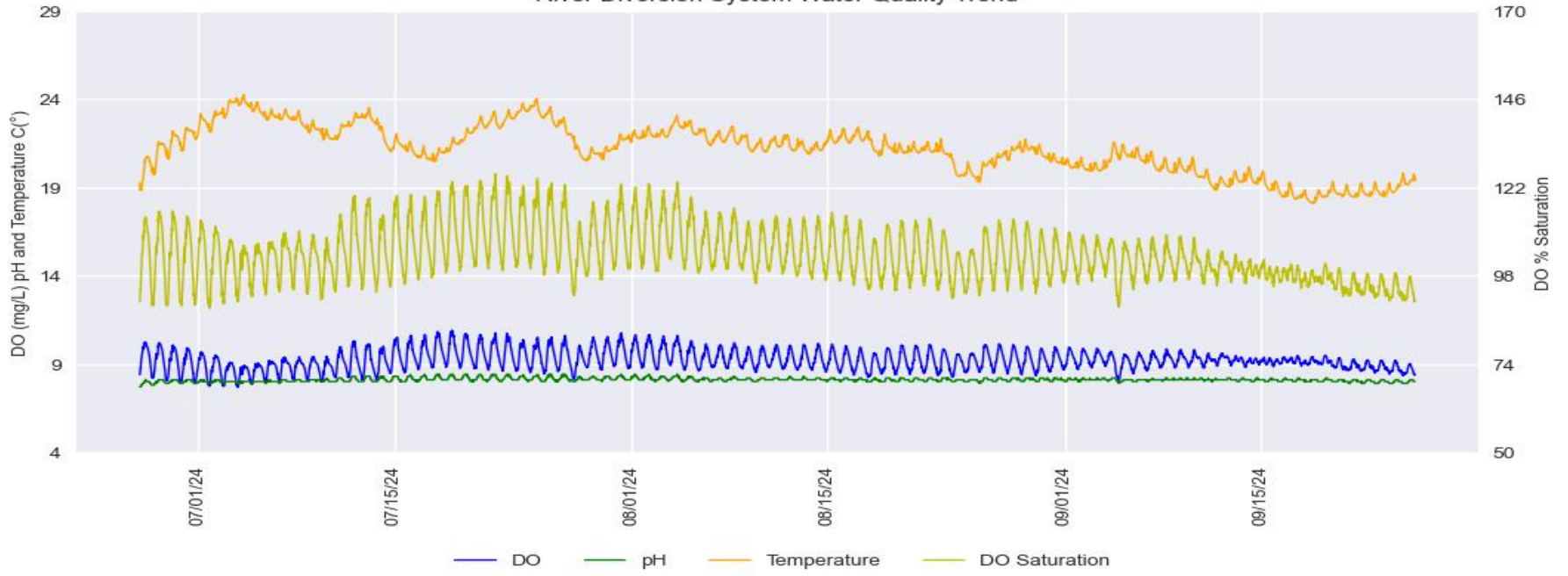


Johnsons Beach - Difference between Daily Maximum and Minimum for DO and pH

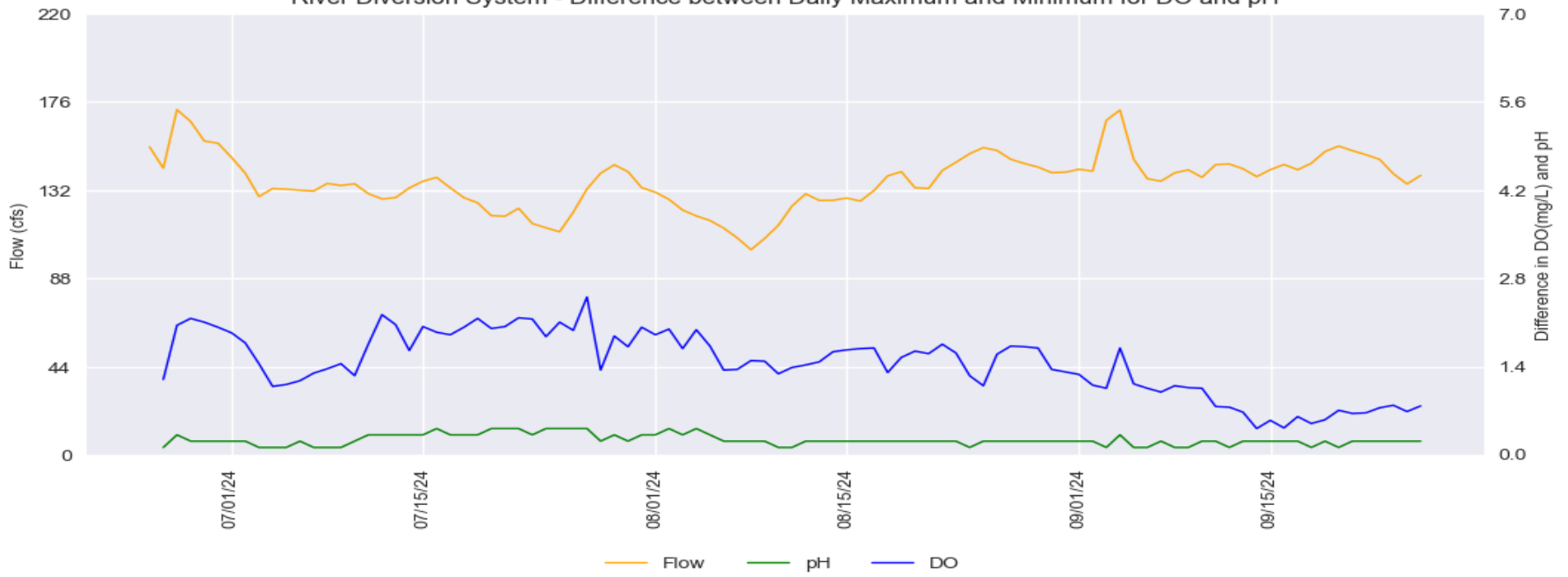


River Diversion System at Mirabel

River Diversion System Water Quality Trend



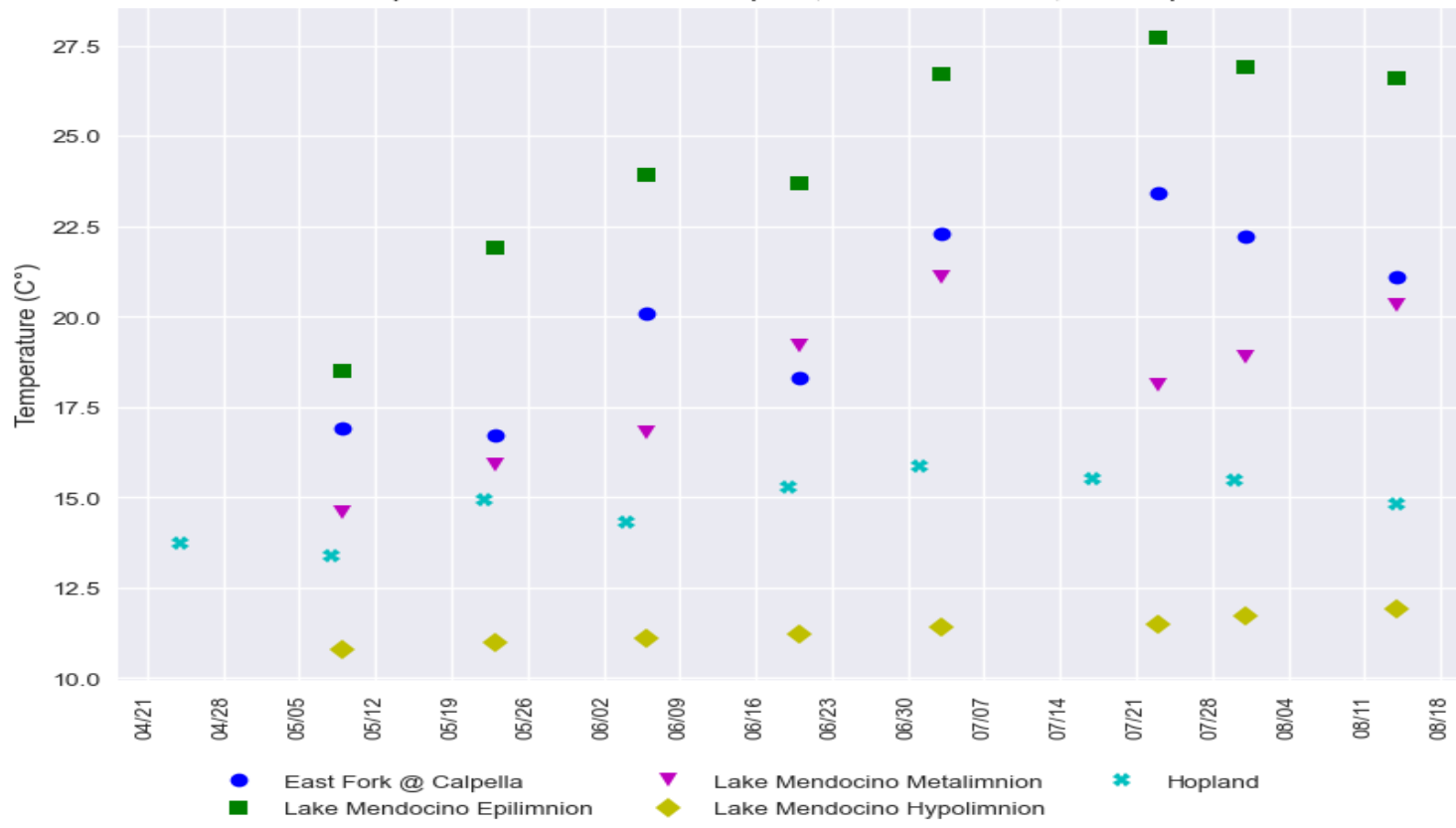
River Diversion System - Difference between Daily Maximum and Minimum for DO and pH



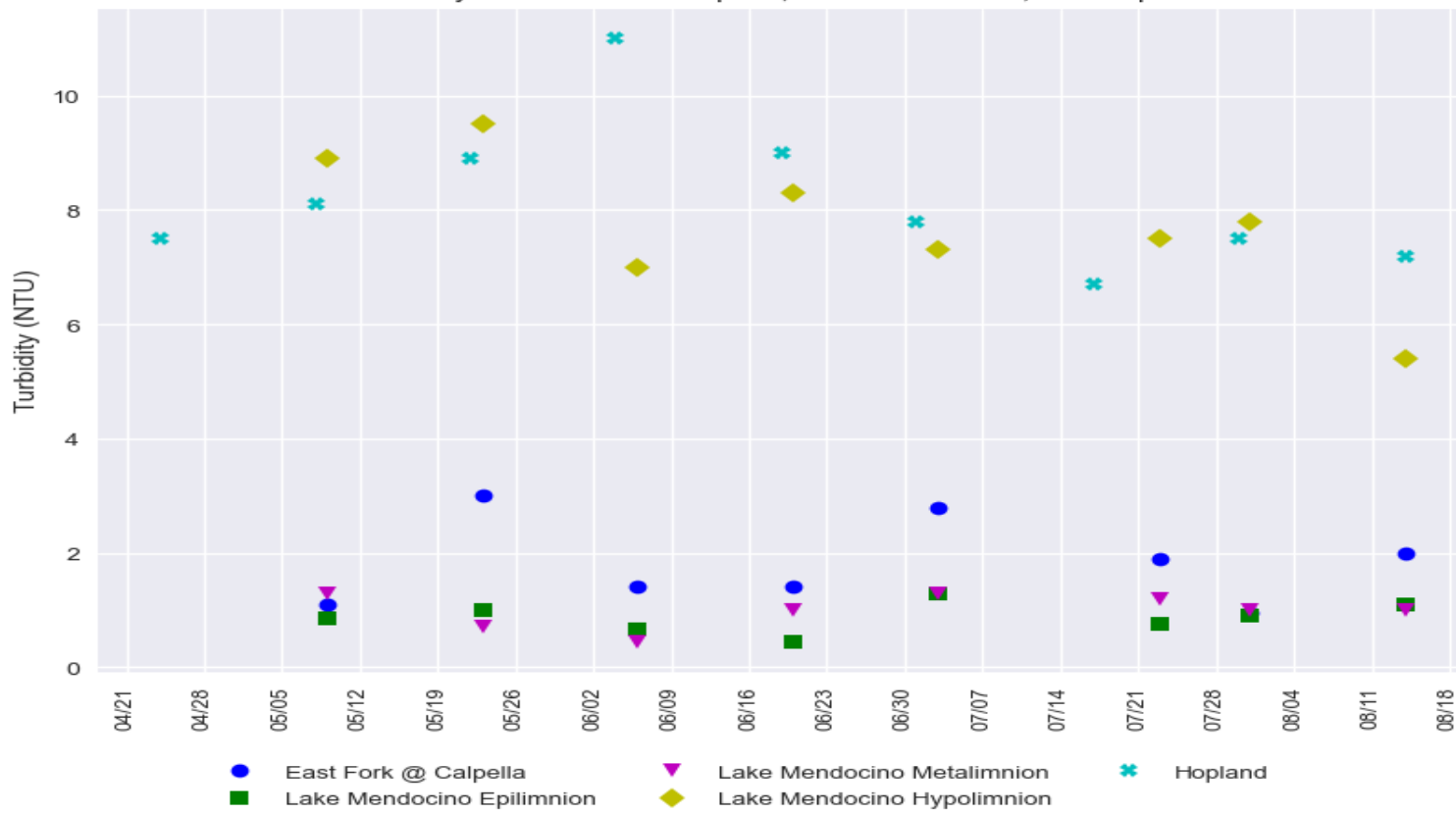
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision

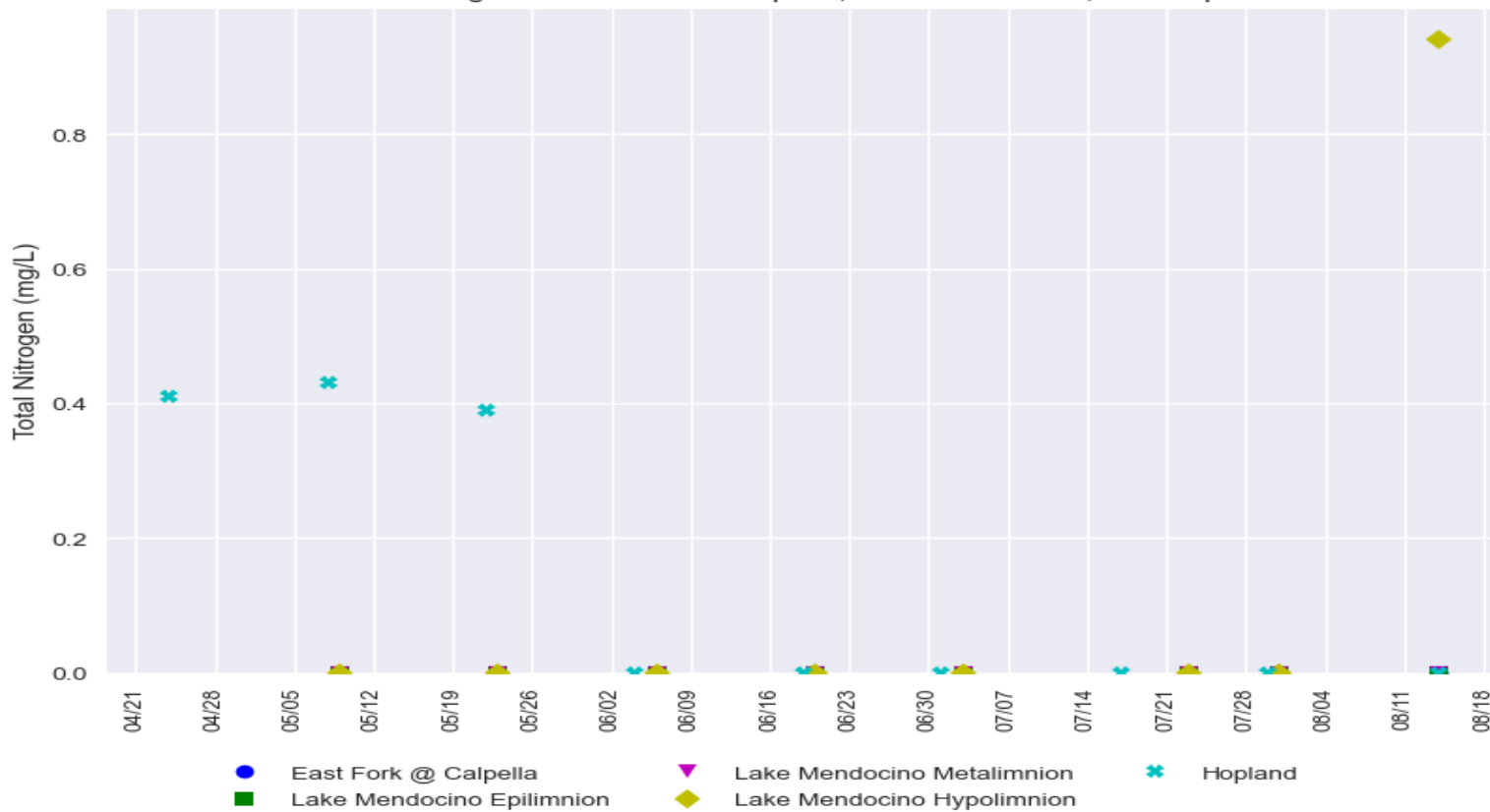
Temperature - East Fork at Calpella, Lake Mendocino, and Hopland



Turbidity - East Fork at Calpella, Lake Mendocino, and Hopland



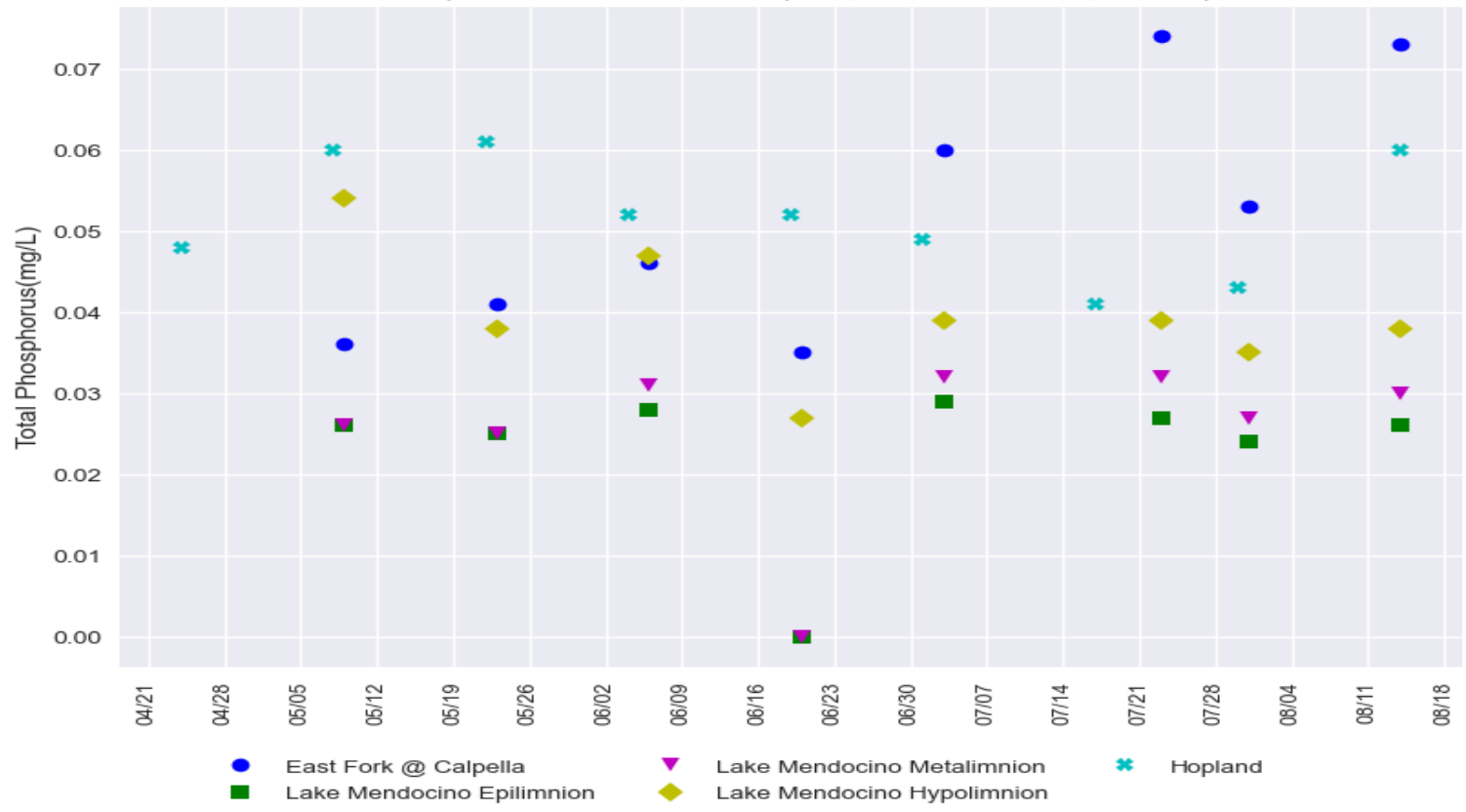
Total Nitrogen (mg/L) - East Fork at Calpella, Lake Mendocino, and Hopland



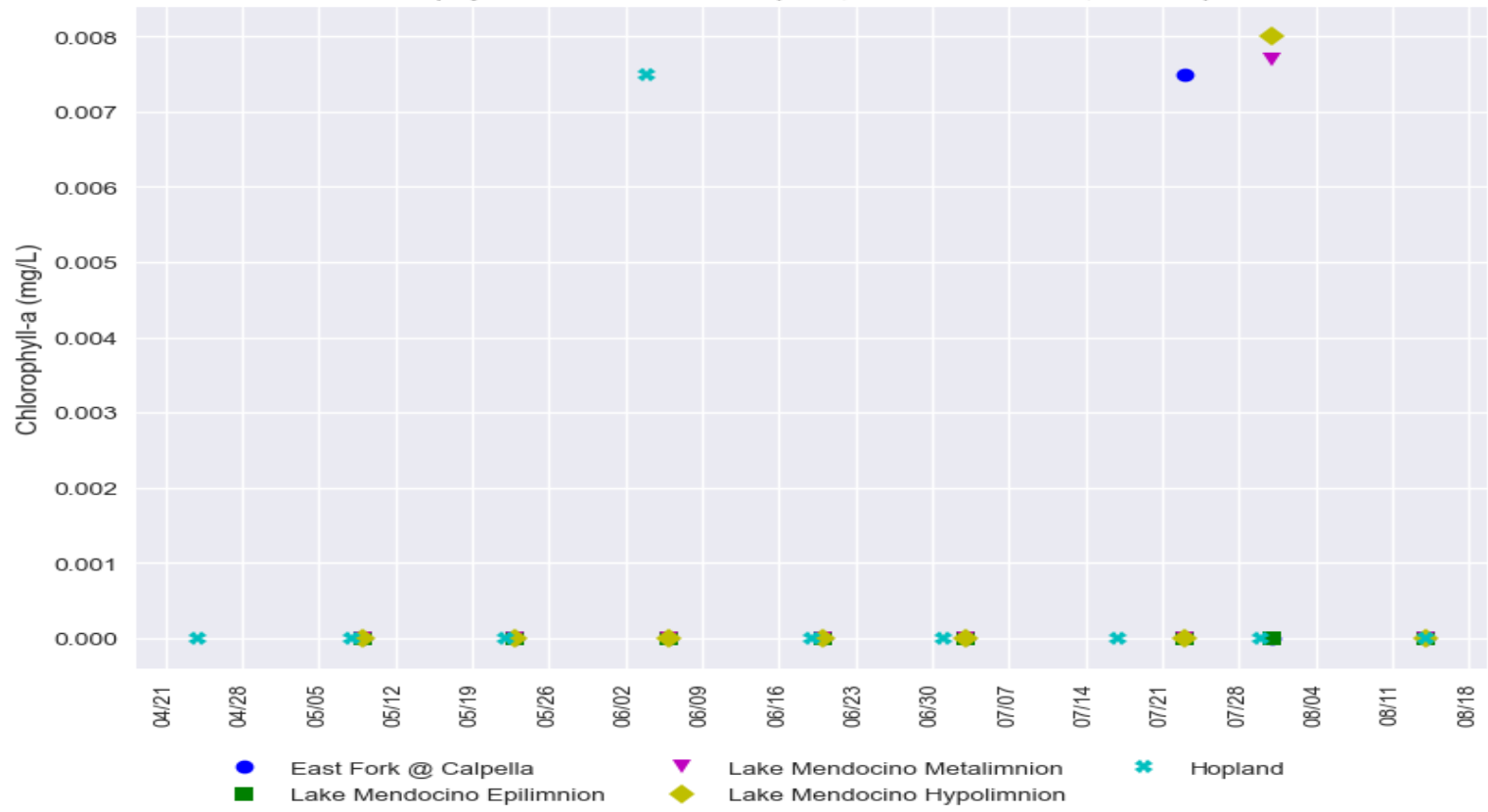
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision

Total Phosphorus - East Fork at Calpella, Lake Mendocino, and Hopland

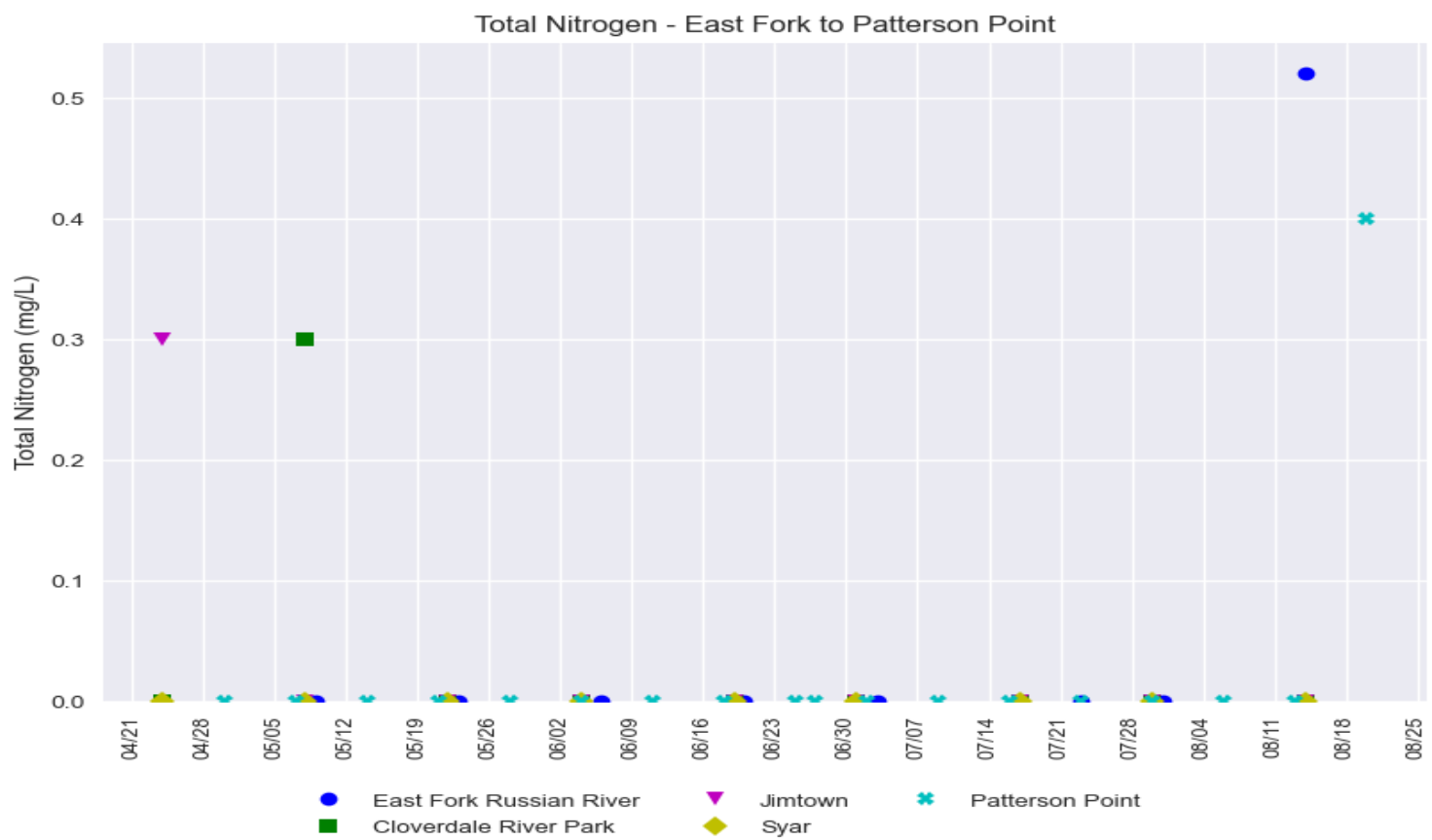
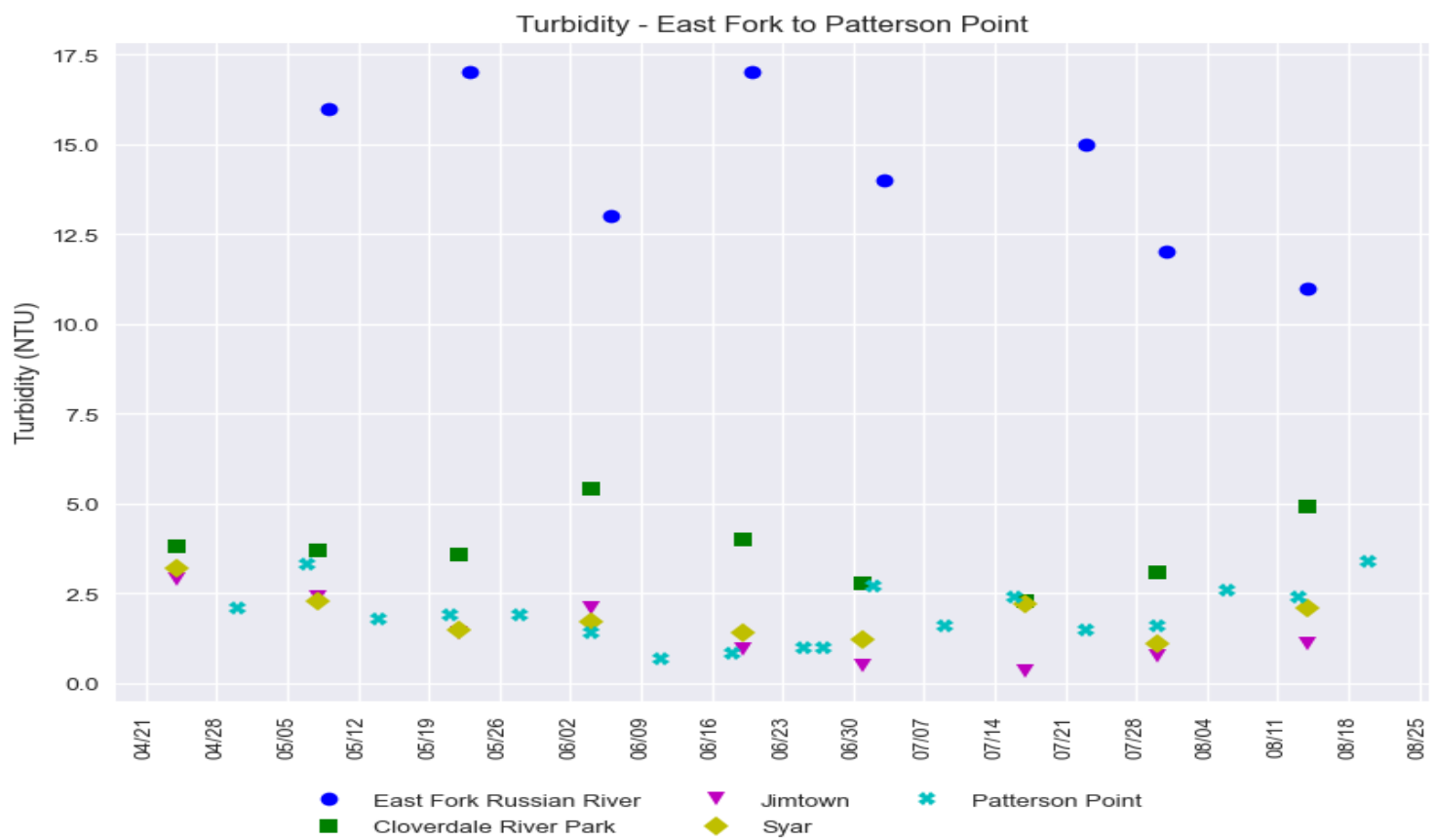
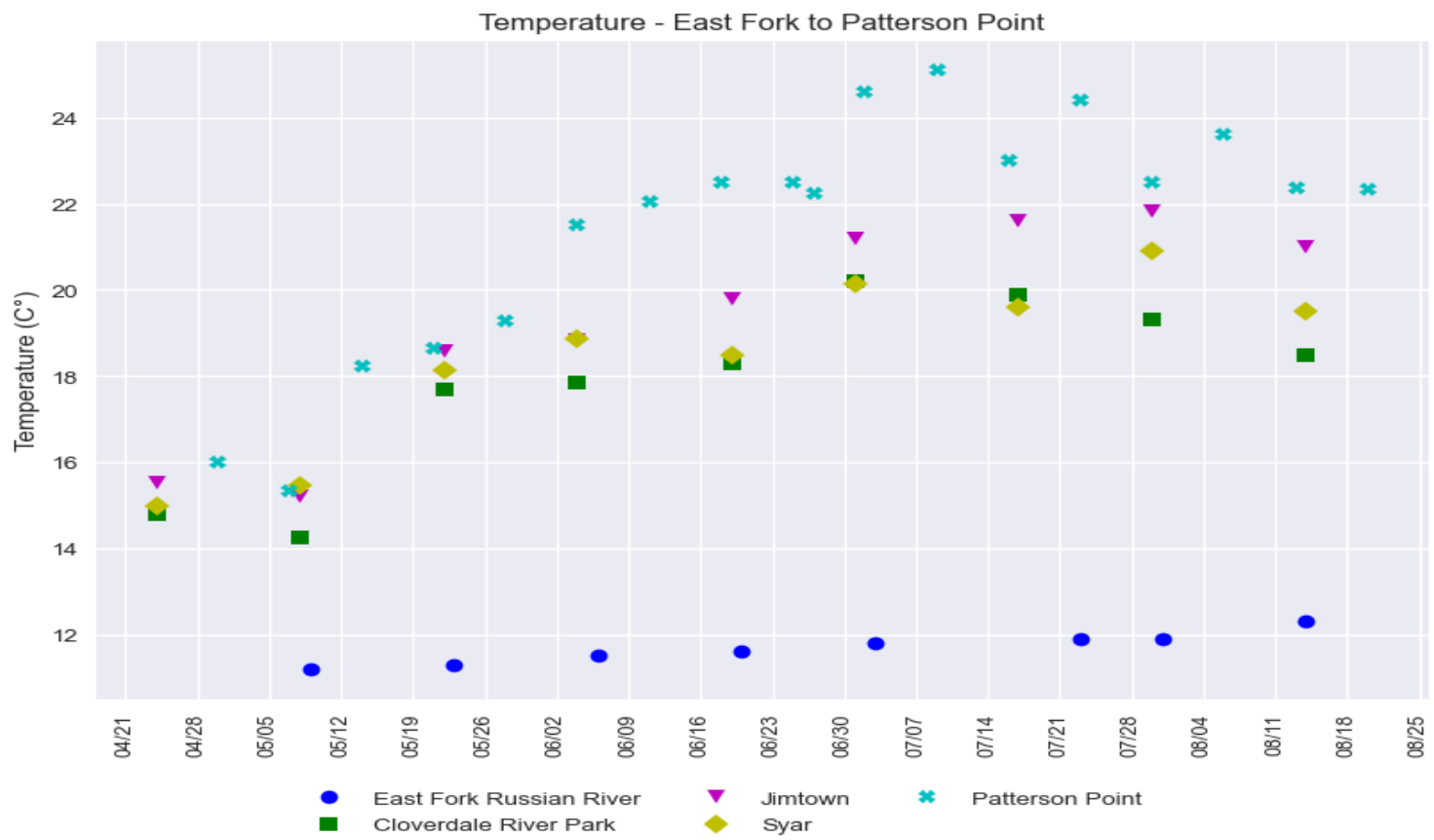


Chlorophyll-a - East Fork at Calpella, Lake Mendocino, and Hopland



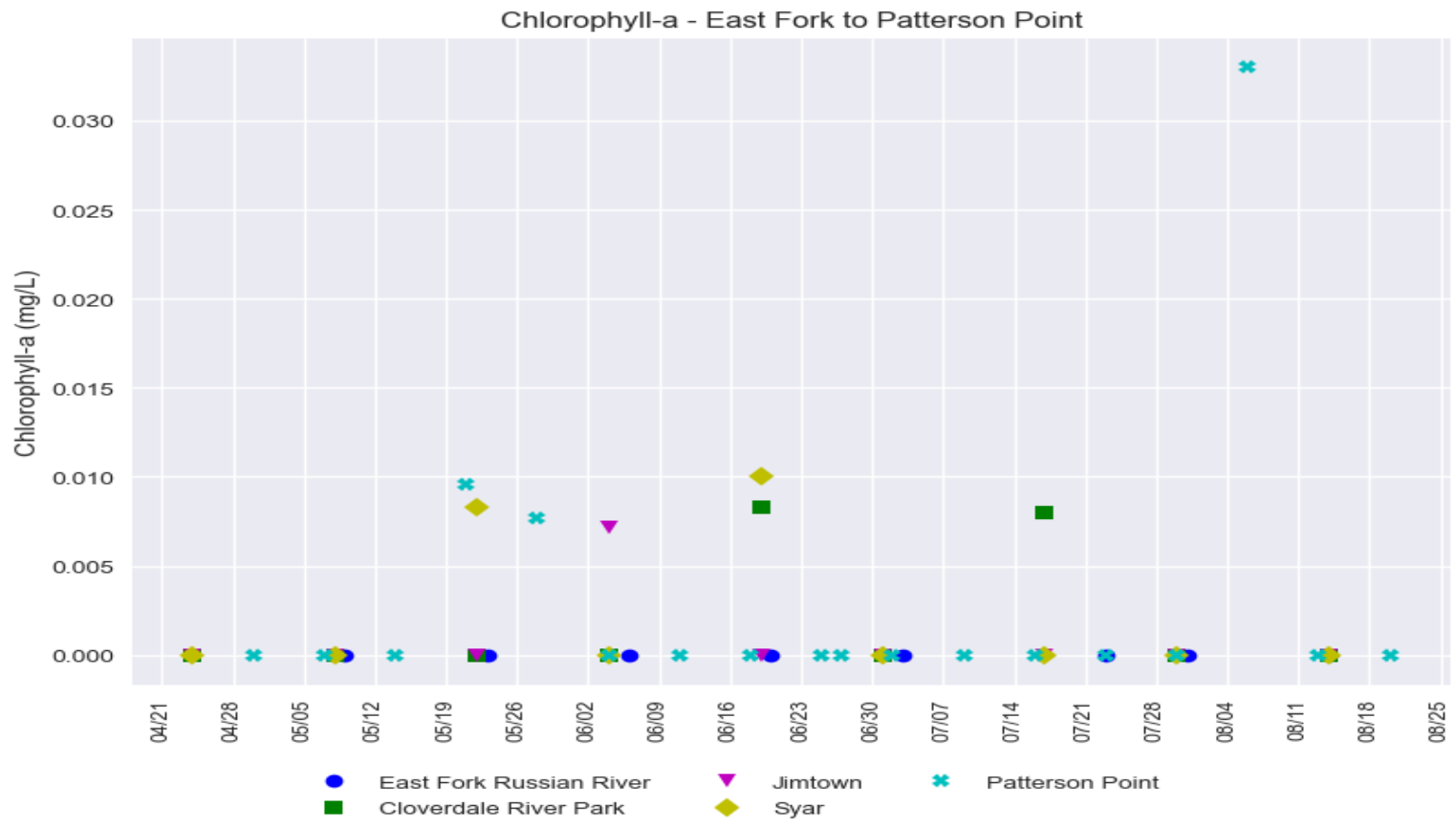
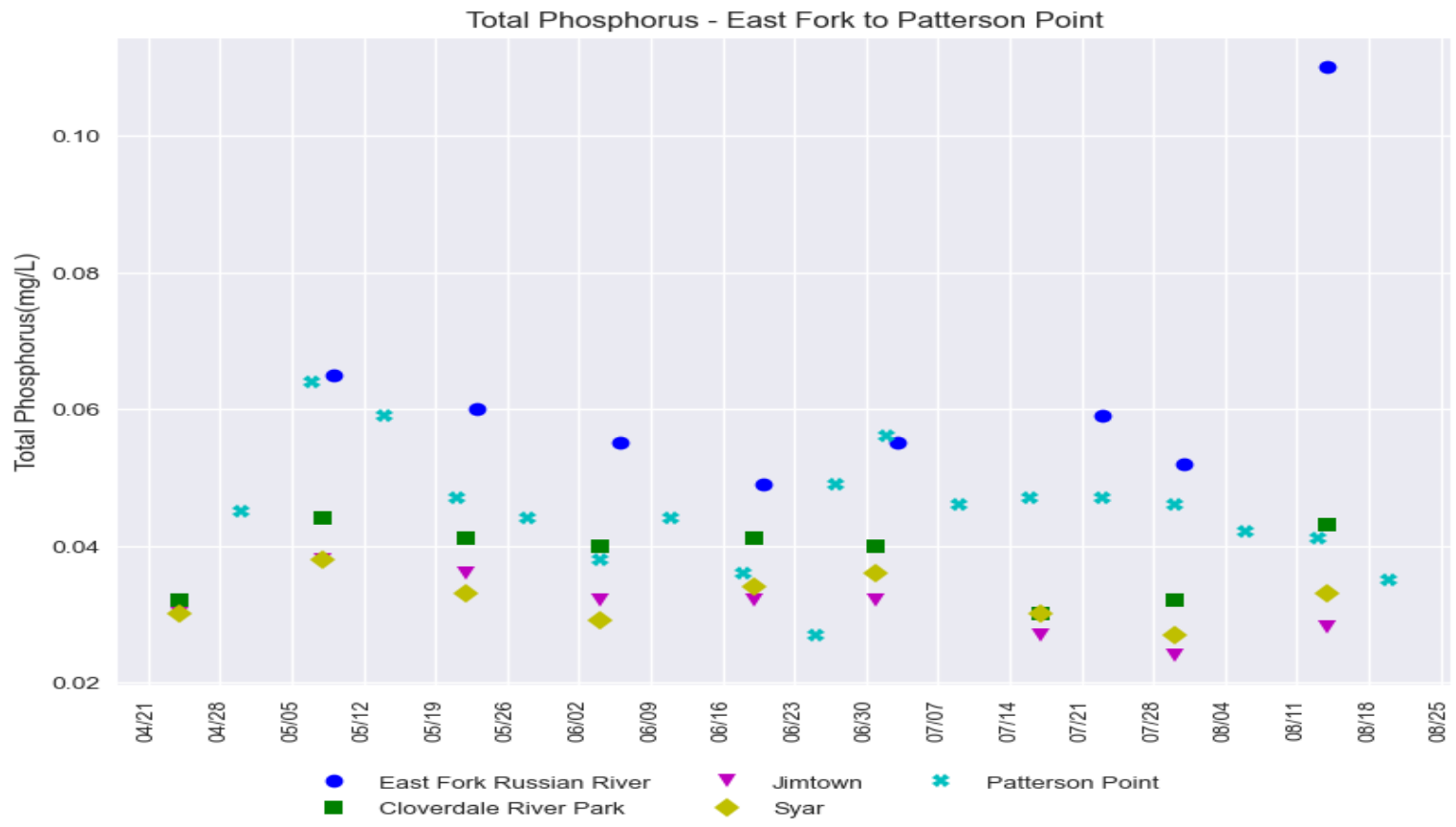
Russian River Water Quality Grab Samples

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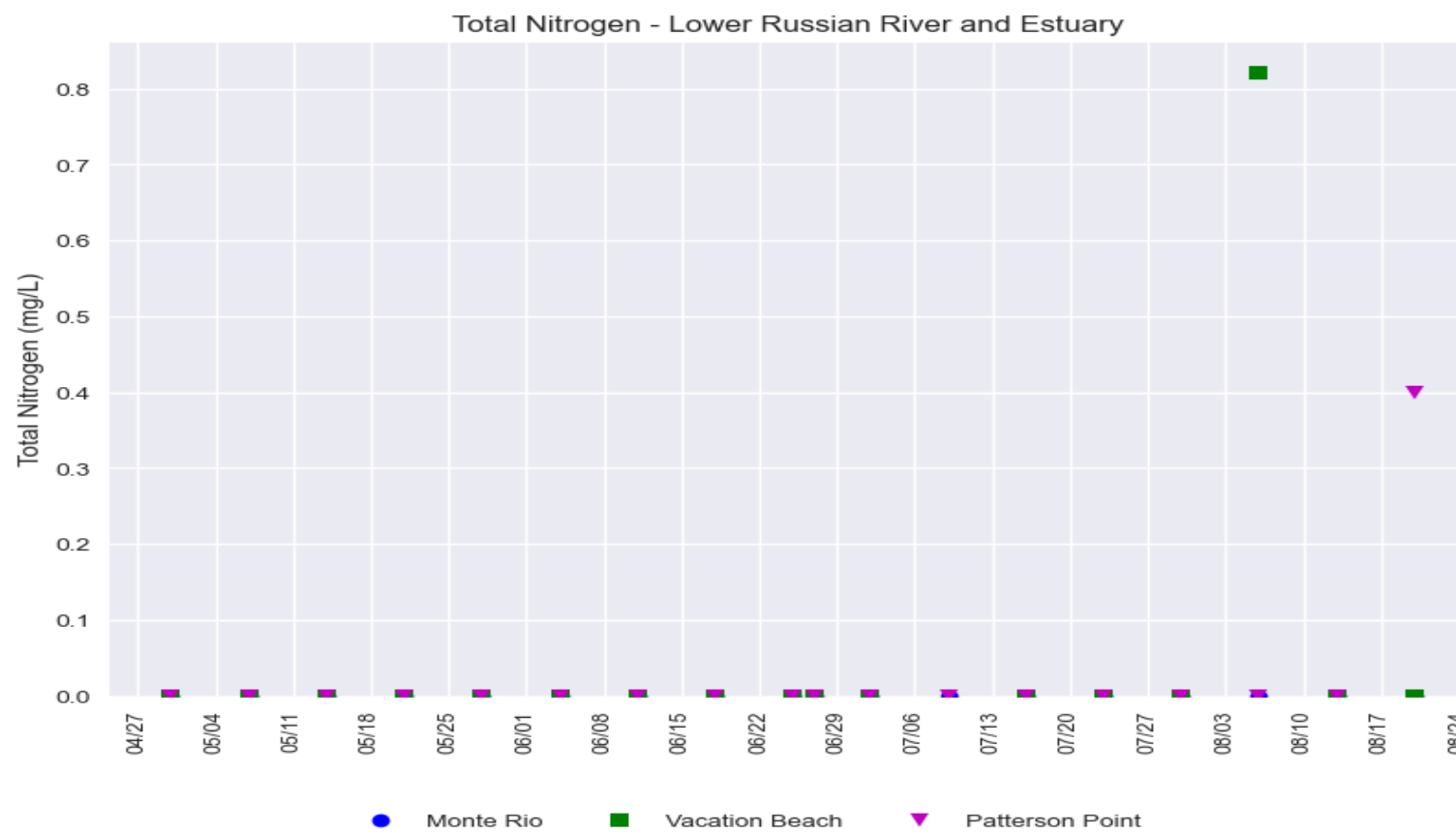
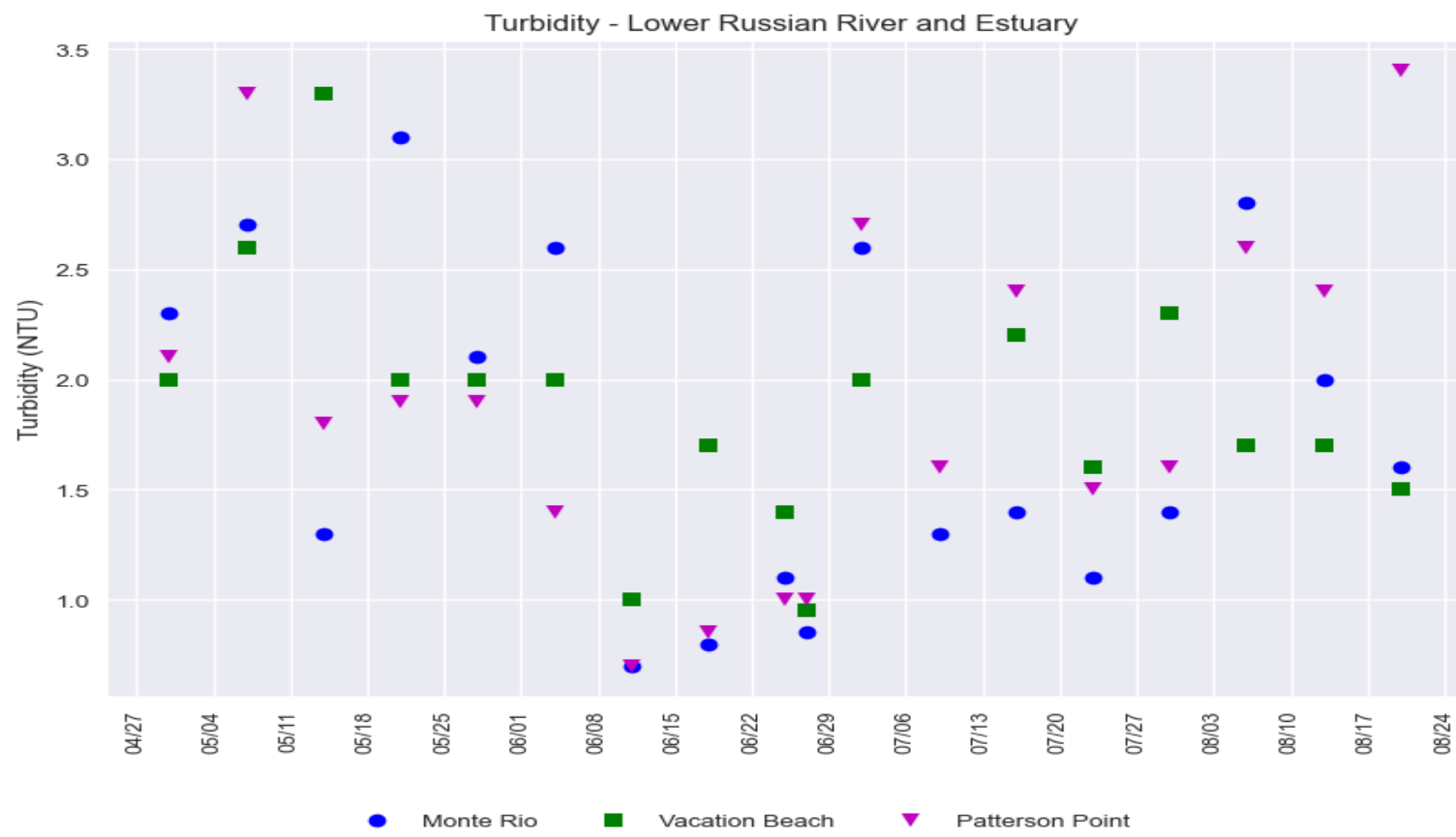
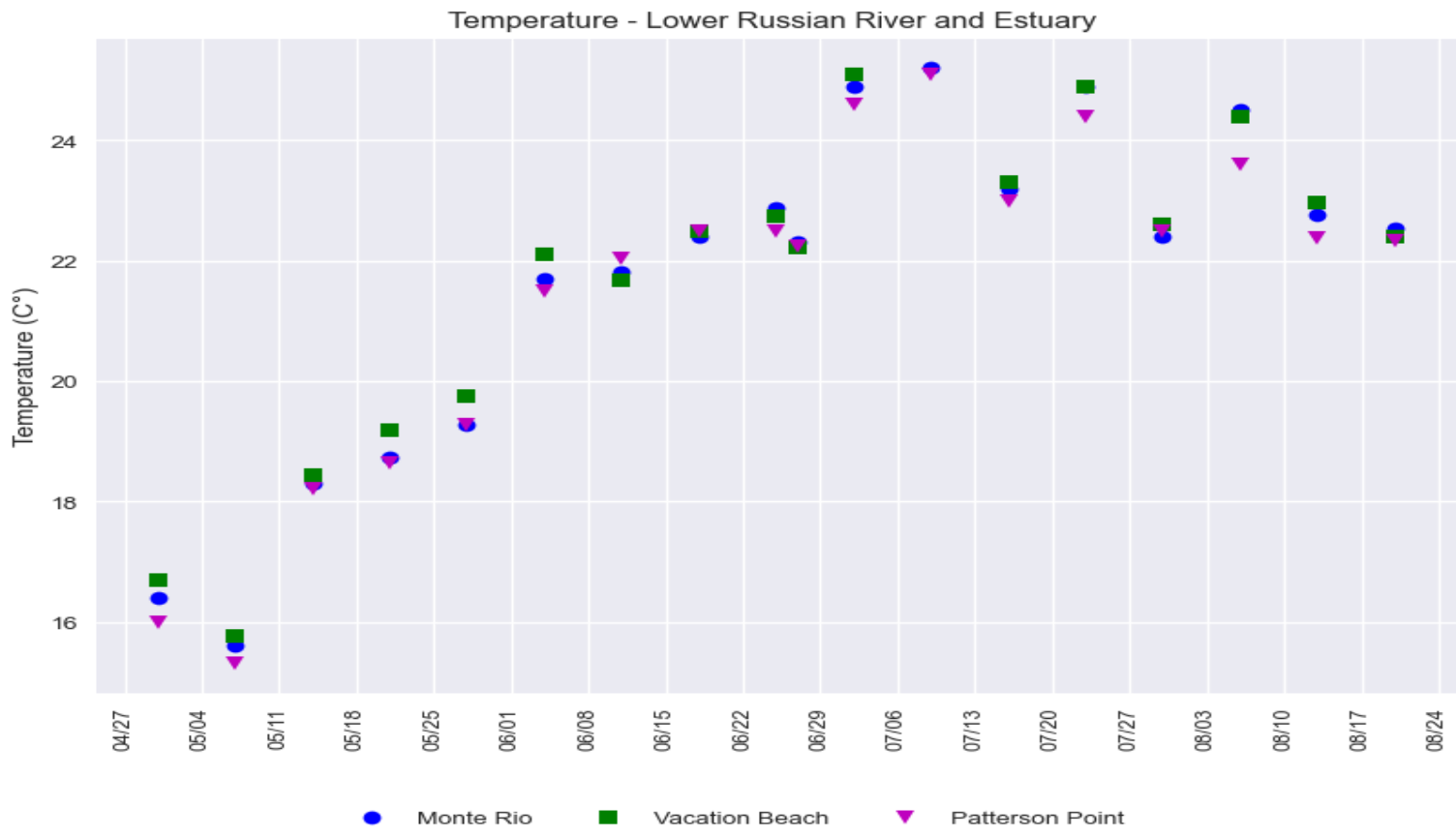
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



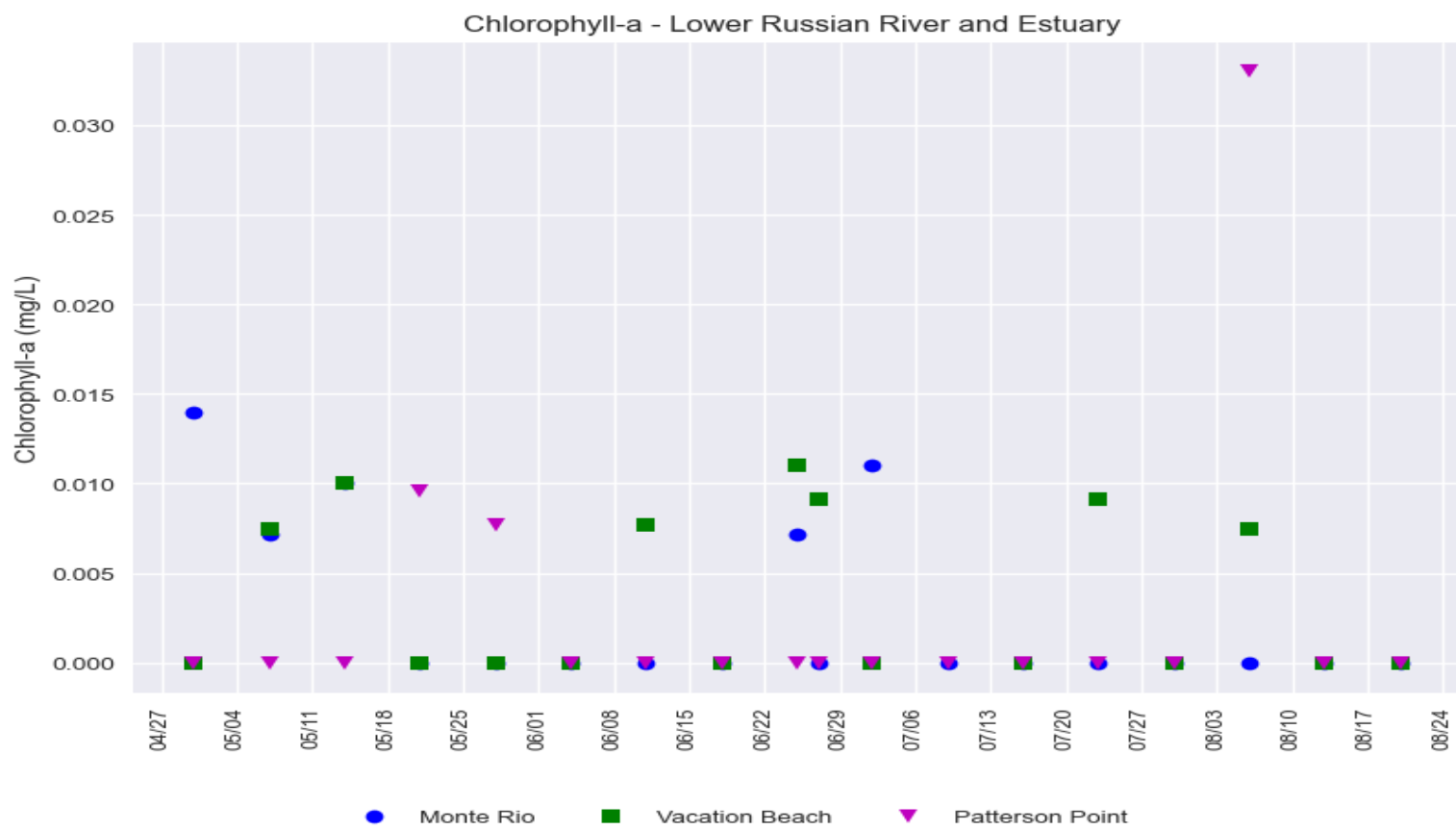
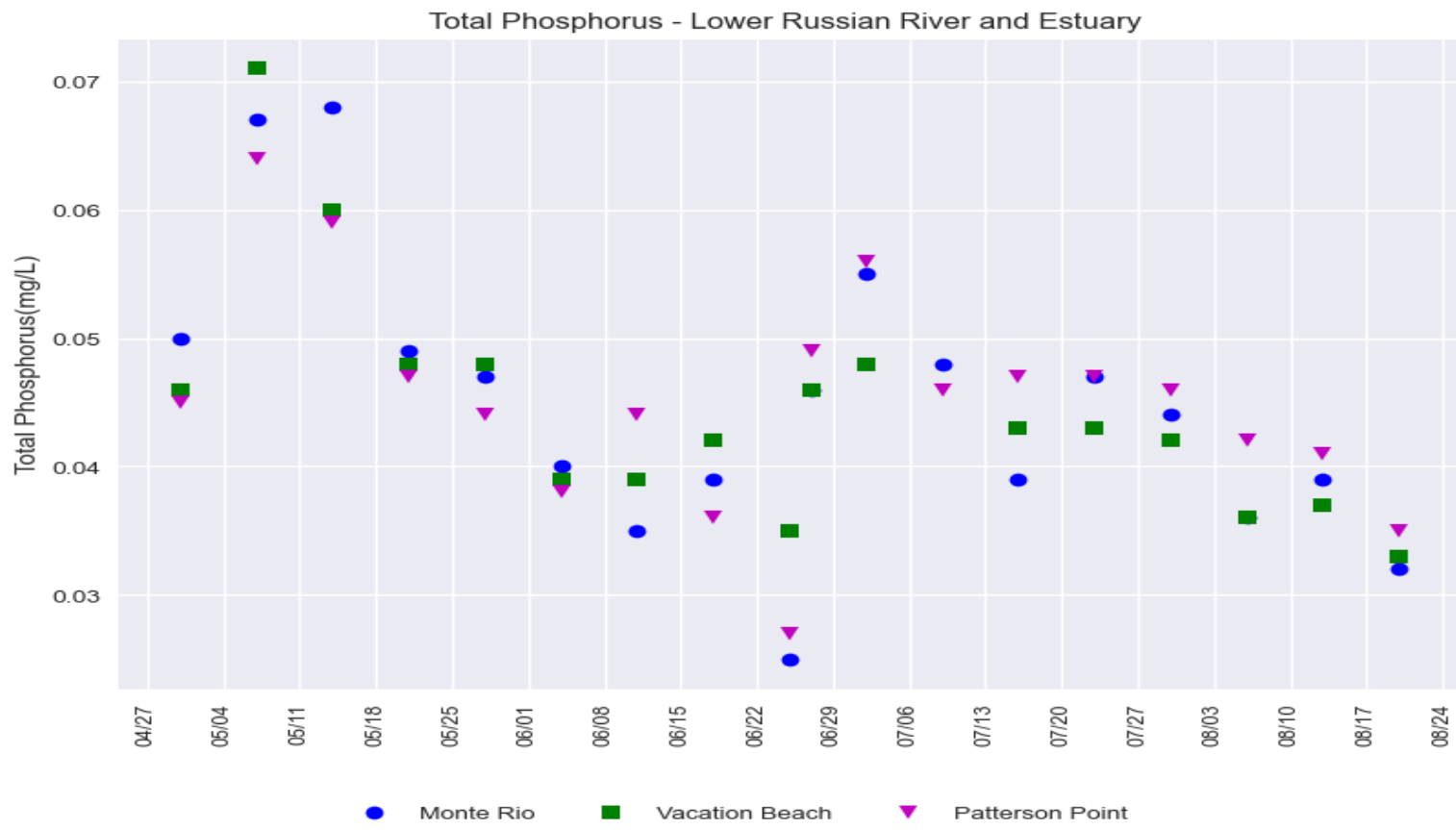
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



Russian River Water Quality Grab Samples (July 16 - September 3, 2024) Provisional Data Subject to Revision

Russian River Estuary Standard Bacterial Indicators

Parameter***	CDPH Guidance*	Date	Patterson Point	Monte Rio	Vacation Beach
Total Coliforms MPN/100 mL	10,000	7/16/2024	6131**	3076**	2909**
		7/23/2024	3448**	3255**	1789**
		7/30/2024	1299.7	1732.9	1553.1
		8/6/2024	1789**	2282**	1553**
		8/13/2024	1732.9	1732.9	1553.1
		8/20/2024	2382**	1153**	1187**
		8/27/2004	1299.7	1986.3	1732.9
		9/3/2024	2419.6	2419.6	980.9
E. Coli MPN/100 mL	235	7/16/2024	21.1	4.1	16
		7/23/2024	29.2	25.9	14.6
		7/30/2024	21.1	21.1	20
		8/6/2024	20.1	6.3	6.3
		8/13/2024	18.5	6.3	6.3
		8/20/2024	52	13.4	8.6
		8/27/2004	26.2	8.6	19.5
		9/3/2024	28.5	12.2	12.1
Enterococcus MPN/100 mL****	61	7/16/2024	5.2	1	3.1
		7/23/2024	21.3	9.7	1
		7/30/2024	14.5	5.2	7.5
		8/6/2024	6.3	1	<1.0
		8/13/2024	17.6	1	5.2
		8/20/2024	51.2	8.6	18.9
		8/27/2004	55.7	8.6	12.2
		9/3/2024	21.1	8.6	2

*California Department of Public Health (CDPH) Guidance for Fresh Water Beaches - Single Sample Values:
Freshwater beaches include Patterson Point, Monte Rio, and Vacation Beach

Beach posting is recommended when indicator organisms exceed any of the above corresponding levels

**Sample diluted 1:10

***Method Detection Limit for all parameters = 2 MPN/100 mL or 20 MPN/100 mL if sample diluted

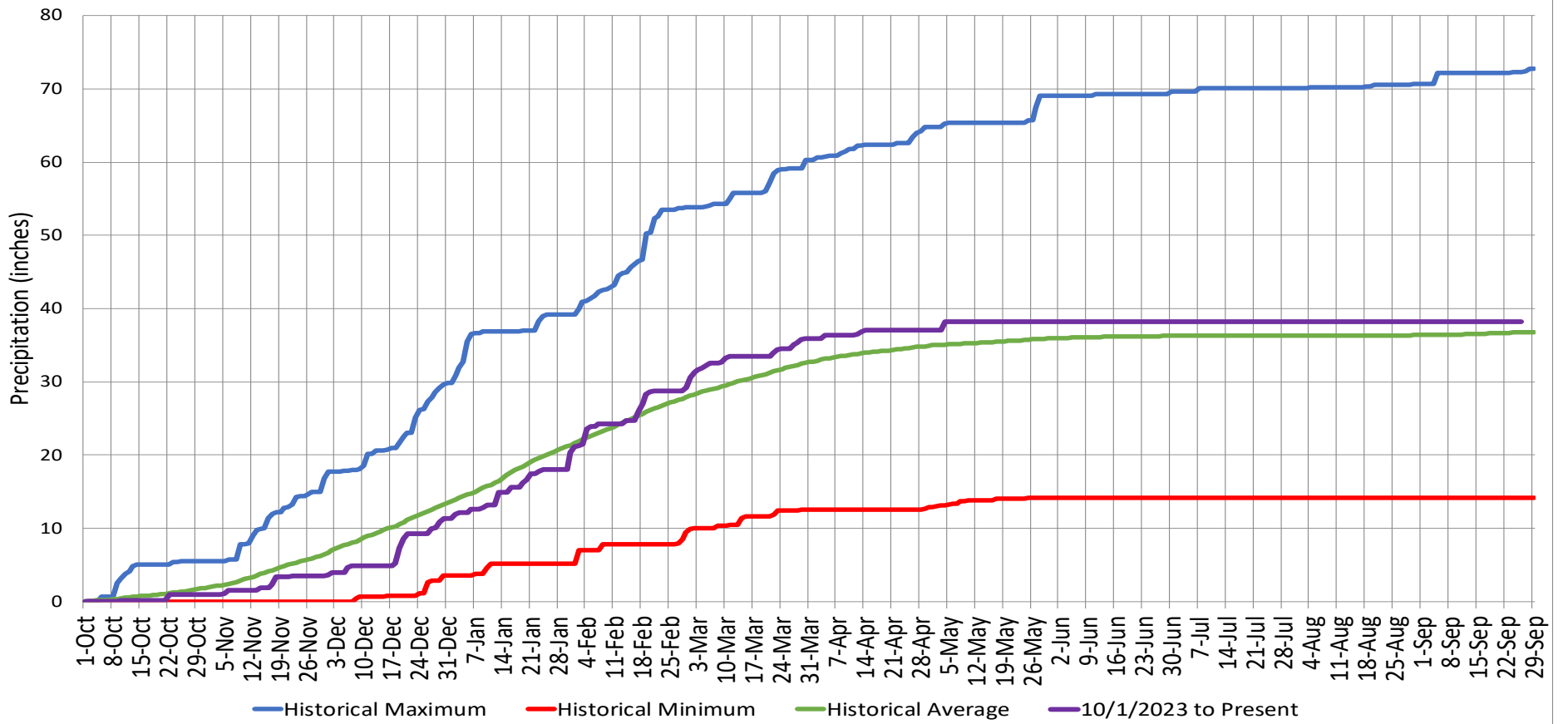
****We continue to collect enterococcus data, however it is not a reliable fecal indicator bacteria in freshwater

Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))

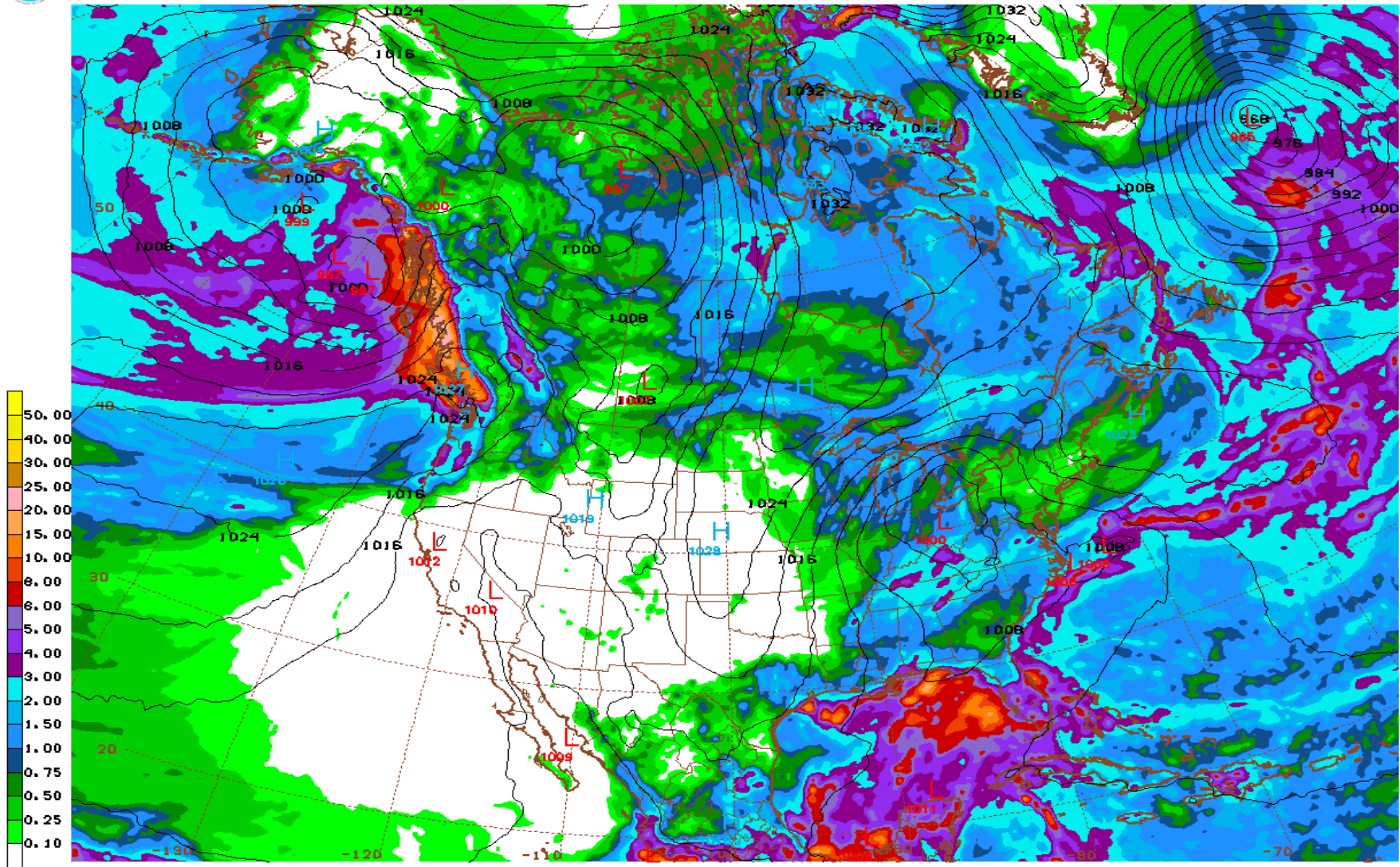
Date Range	Cumulative (inches)
Oct 1, 2023 - Sep 26, 2024	38.22
Last 7 Days*	0.00

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

GFS 09/30/24 12UTC 384HR FCST VALID WED 10/16/24 12UTC NOAA/NWS/NCEP



GFS WED 241016/1200V384 EMSL (4MB), 384HR ACCUMULATED PRECIP (IN)

Date Range
Sep 30 - Oct 16, 2024

Forecasted Cumulative (inches)
0.00

Russian River Fisheries Monitoring



Sonoma Water installed the underwater video camera at the Mirabel dam to monitor adult salmon returns to the Russian River. Video monitoring began on September 1, 2024. The first adult Chinook salmon for the 2024 return year was observed on September 14. No other adult salmonids have been observed.