



State Water Resources Control Board
 Temporary Urgency Change Orders (6/6/2024)
 Russian River Hydrologic & Water Quality Report
 September 6, 2024 - September 12, 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).

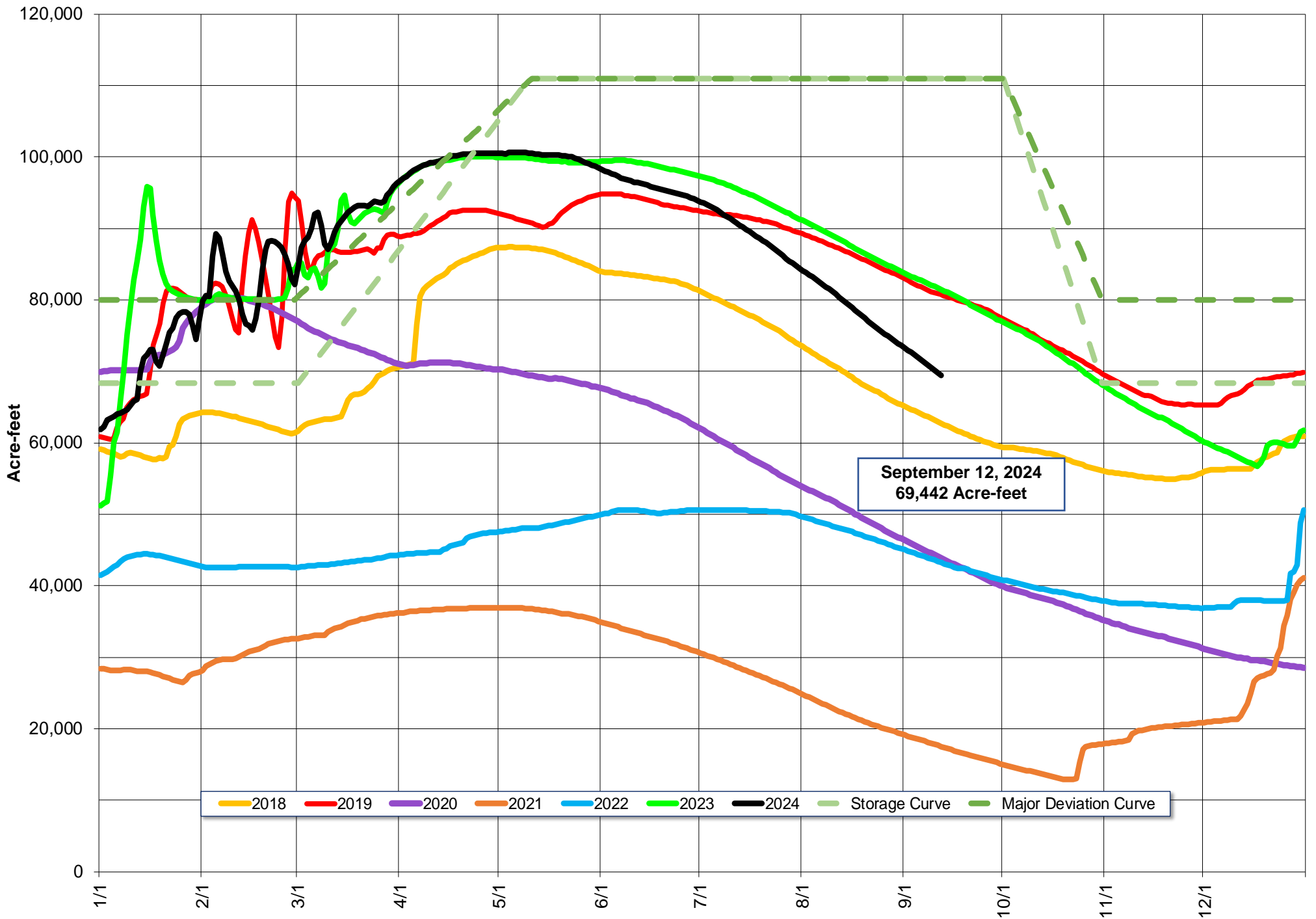
Instream Flow Requirements as of September 12, 2024

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



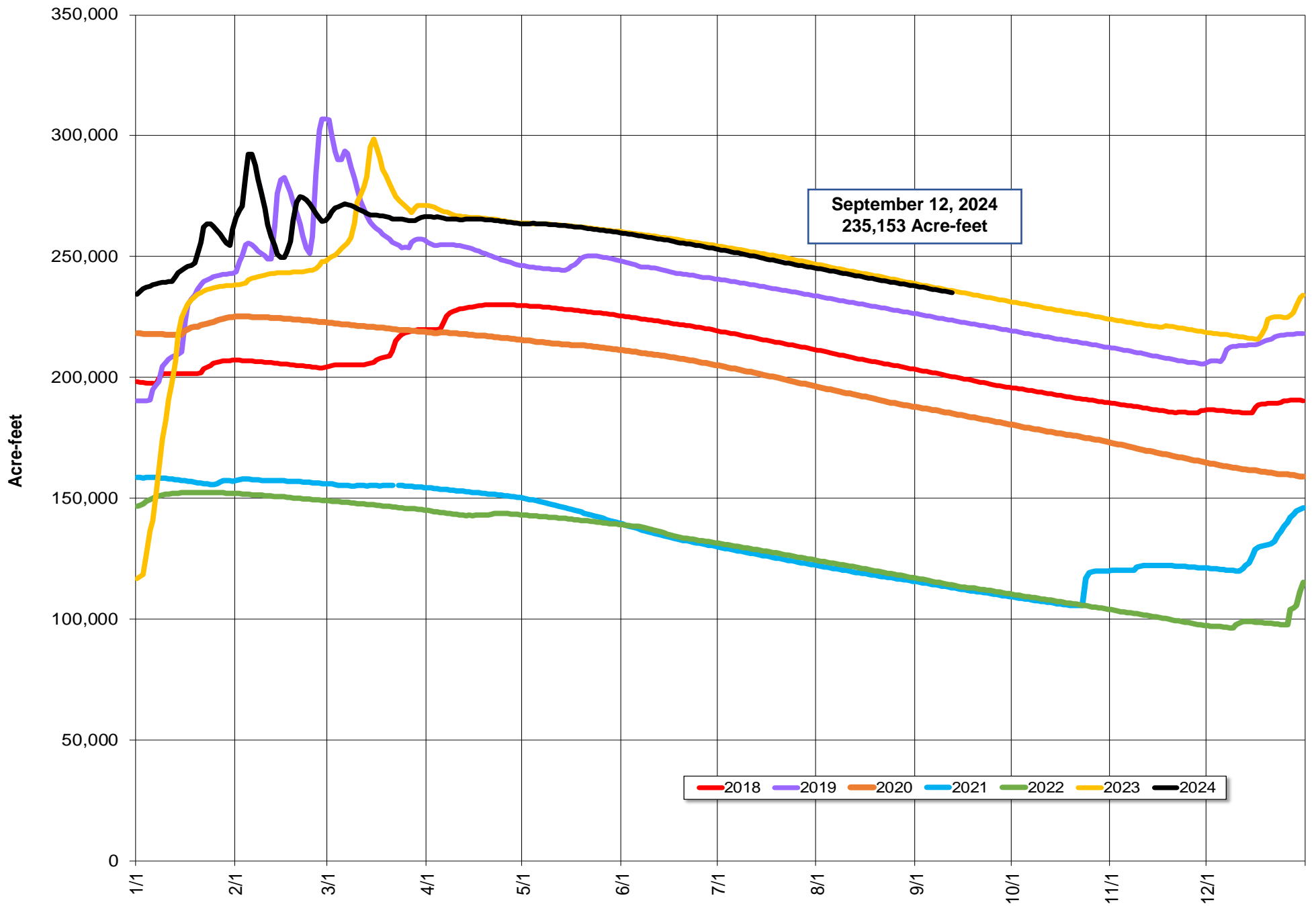
Storage (acre-feet)	September 12, 2024	69,442	
Change in Storage (acre-feet)	Last 30 days	-10,577	-353
	Last 7 days	-2,166	-309
Daily Inflow (cfs)	Last 7 days	Min	30
		Max	65
		Mean	45
Release (cfs)	Last 7 days	Min	202
		Max	210
		Mean	209

Lake Sonoma



Todd Schram, February 10, 2024

Lake Sonoma Storage 2018-2024



Storage (acre-feet)	September 12, 2024		235,153	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate	
		Average Daily Rate	-6,998	-233
	Last 7 days	-1,595	-228	
Daily Inflow (cfs)	Last 7 days	Min	0	
		Max	21	
		Mean	6	
Release (cfs)	Last 7 days	Min	97	
		Max	97	
		Mean	97	

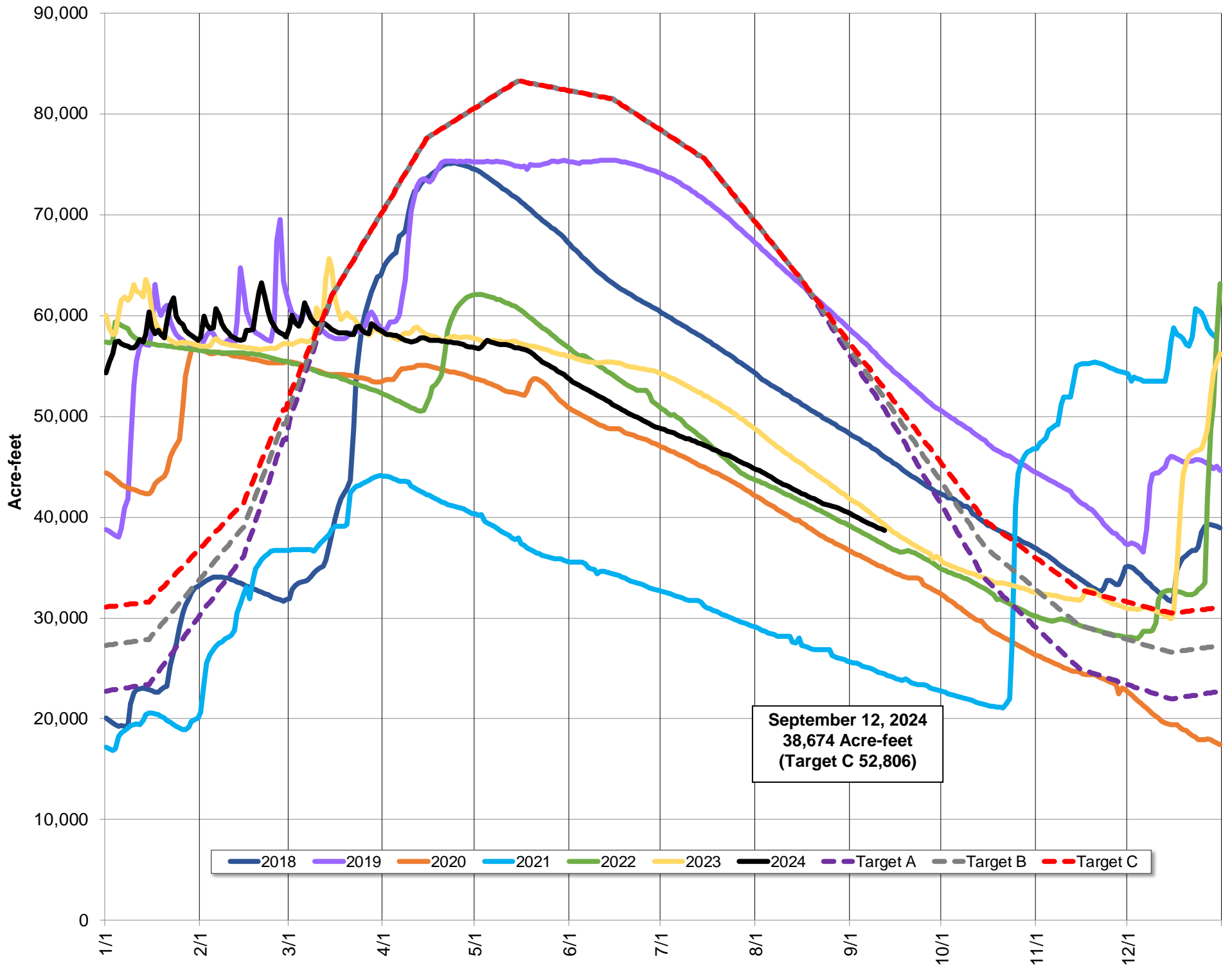
Potter Valley Project

PVP Diversion (cfs)	September 12, 2024	42
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Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2023 - September 12, 2024	487,260	1,400
	Last 7 days	90	13

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2018 - 2024 and Target Storage Scenarios

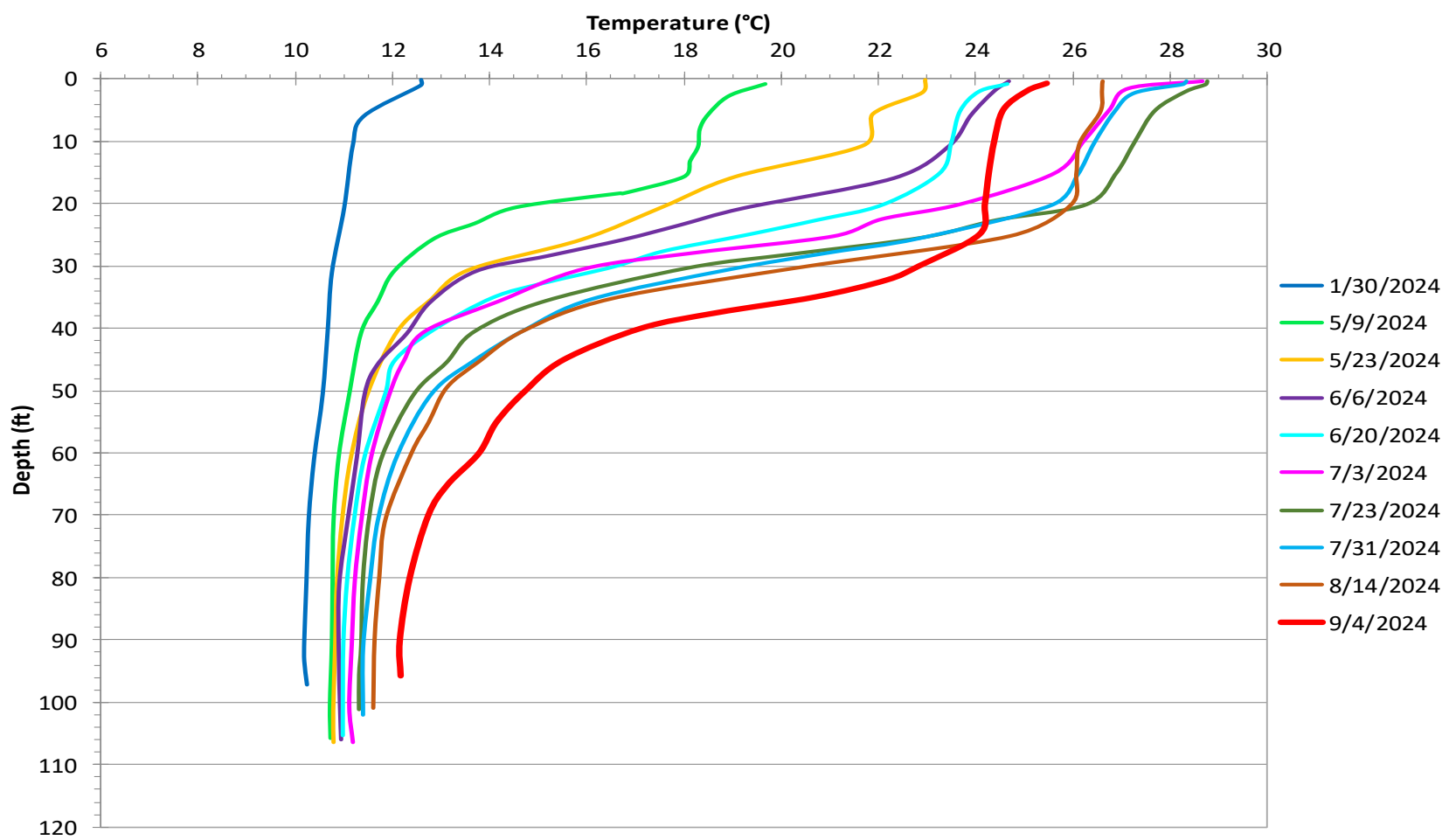


September 12, 2024
38,674 Acre-feet
(Target C 52,806)

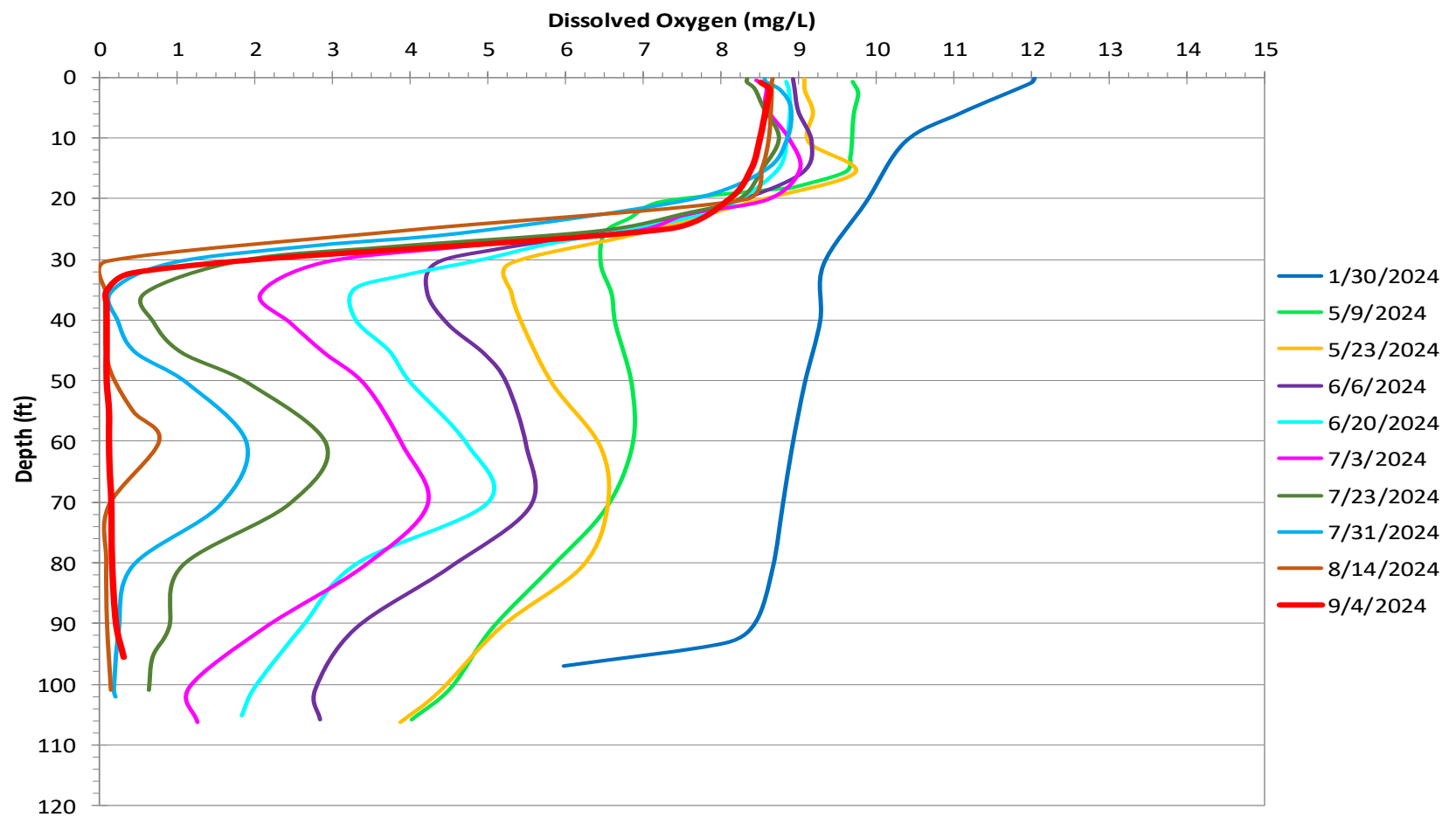
Lake Mendocino Water Quality Vertical Profiles (January 30 – September 4, 2024)

Provisional Data Subject to Revision

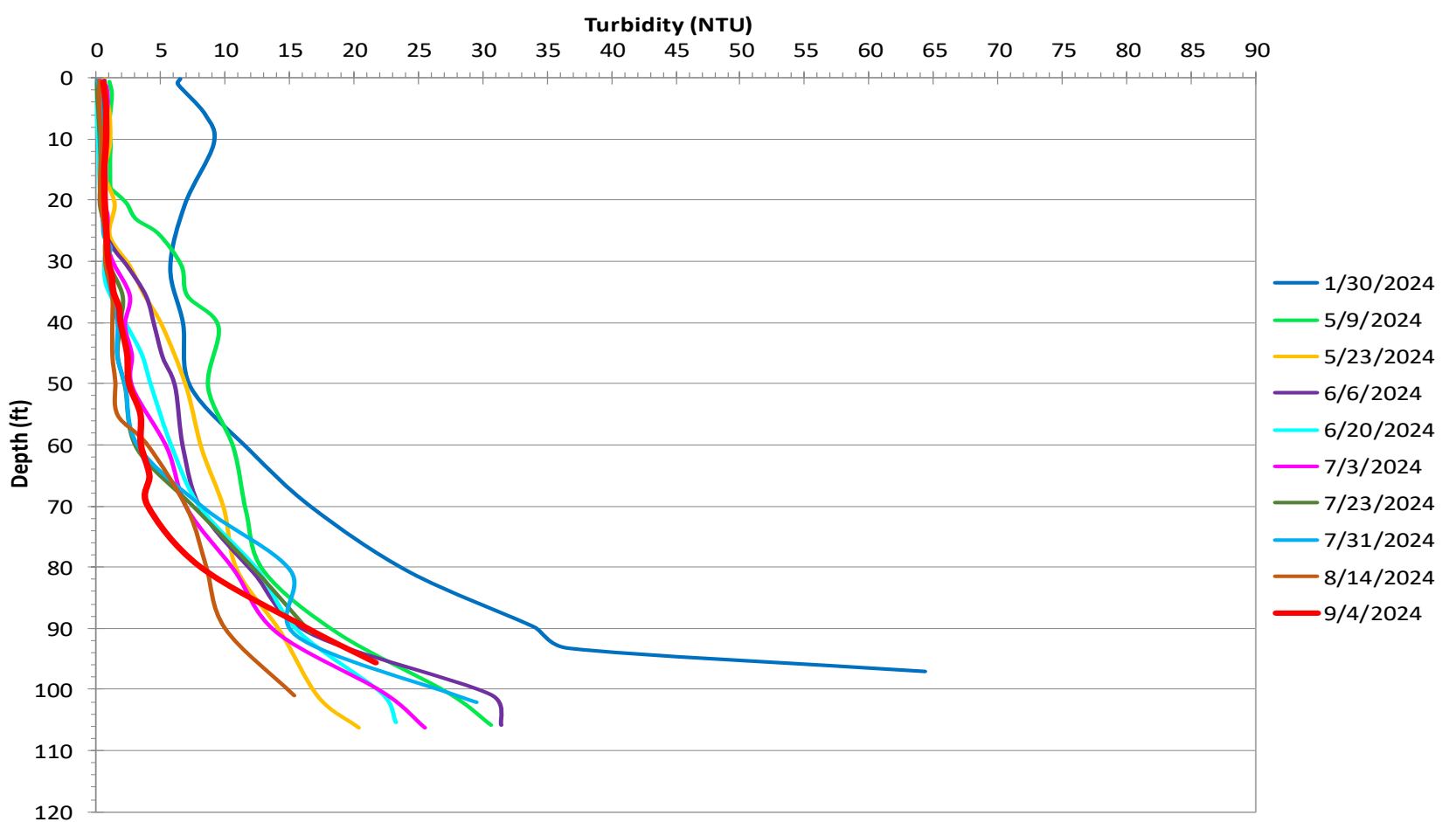
Lake Mendocino Dam - Vertical Temperature Profile - 2024



Lake Mendocino Dam - Vertical Dissolved Oxygen Profile - 2024



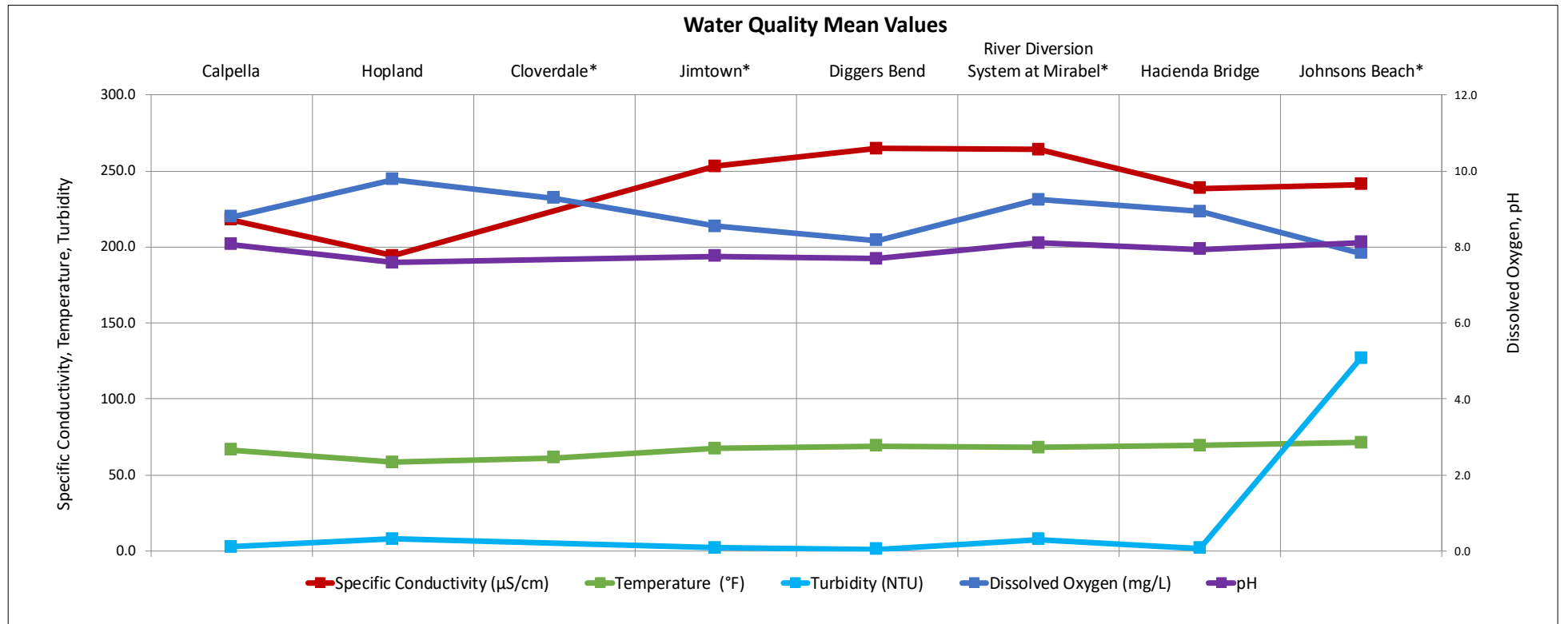
Lake Mendocino Dam - Vertical Turbidity Profile - 2024



Russian River Flows (September 6, 2024 - September 12, 2024)

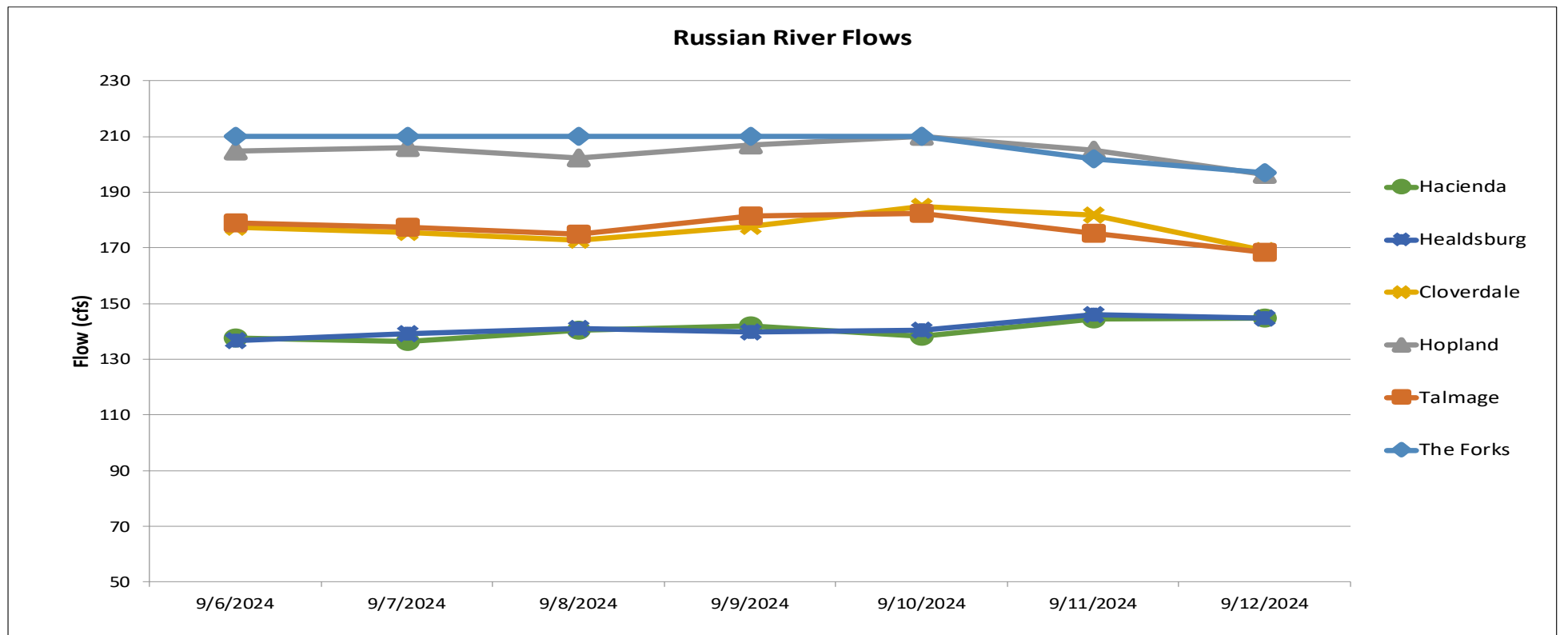
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463000	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	63.0	55.6	58.8	64.2	65.1	65.9	65.7	68.9
	Max	70.0	59.9	64.2	71.1	73.0	70.3	72.7	73.0
	Mean	66.3	58.2	61.2	67.2	68.9	68.1	69.3	71.1
Specific Conductivity (µS/cm)	Min	213.0	193.0		251.0	262.0	248.0	234.0	137.5
	Max	222.0	196.0		258.0	269.0	290.8	250.0	258.6
	Mean	218.0	194.3		253.3	265.0	264.3	238.7	241.1
Dissolved Oxygen (mg/L)	Min	8.0	8.9	8.7	7.2	7.2	8.6	7.7	5.7
	Max	10.2	11.1	10.4	10.8	9.7	9.9	10.0	8.3
	Mean	8.8	9.8	9.3	8.6	8.2	9.2	8.9	7.8
Dissolved Oxygen (% Saturation)	Min	87.3	87.3	88.2	77.0	78.2	95.3	84.0	65.3
	Max	110.4	110.8	107.5	122.6	109.0	109.0	114.6	95.7
	Mean	94.9	96.1	94.6	93.4	90.8	101.7	99.7	89.2
pH	Min	7.9	7.4		7.6	7.5	8.0	7.6	7.9
	Max	8.3	7.9		8.1	7.9	8.2	8.2	8.2
	Mean	8.1	7.6		7.8	7.7	8.1	7.9	8.1
Turbidity (NTU)	Min	1.7	6.4		1.1	0.3	4.5	0.9	5.1
	Max	4.1	9.3		2.9	1.9	18.0	2.8	2400.7
	Mean	2.6	7.6		2.0	0.9	7.5	1.8	126.9

*Station operated seasonally



Gage	24-hr Average Flow (cfs)						
	Sep 6, 2024	Sep 7, 2024	Sep 8, 2024	Sep 9, 2024	Sep 10, 2024	Sep 11, 2024	Sep 12, 2024
The Forks*	210	210	210	210	210	202	197
Talmage USGS 11462080	179	178	175	181	182	175	168
Hopland USGS 11462500	205	206	202	207	210	205	196
Cloverdale USGS 11463000	177	175	173	178	185	182	169
Healdsburg USGS 11464000	137	139	141	140	141	146	145
Hacienda USGS 11467000	138	136	140	142	138	145	145

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

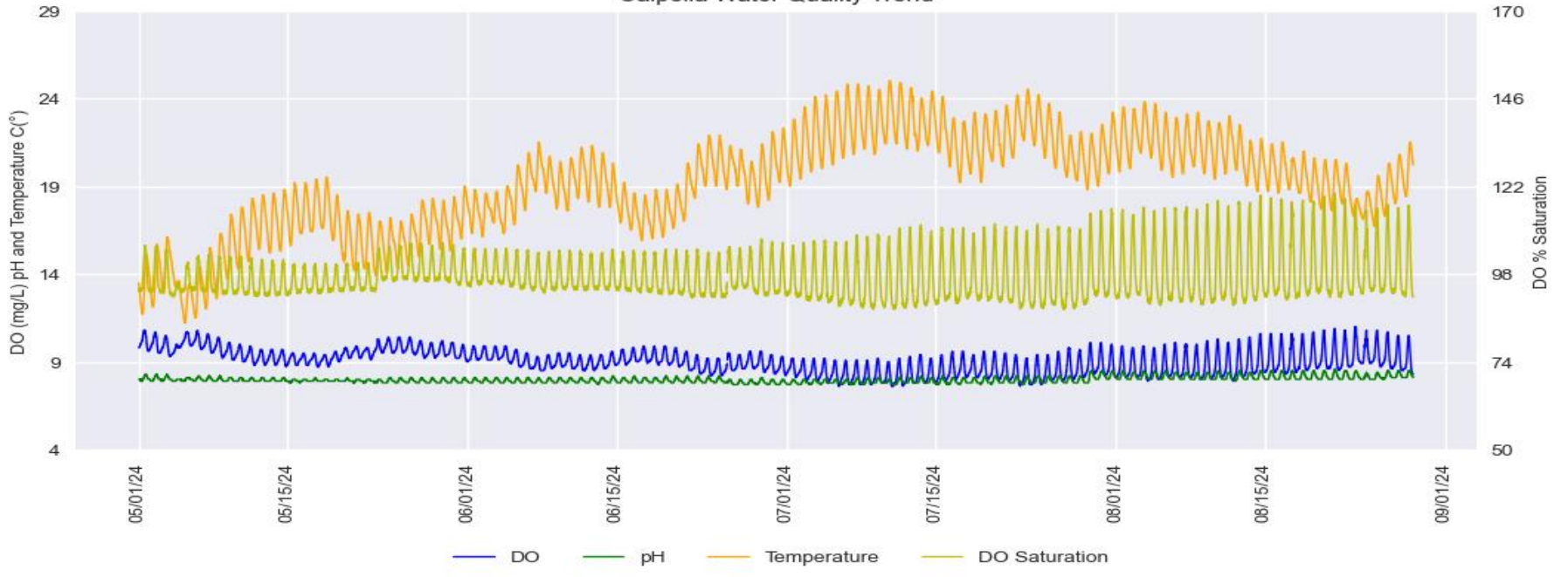


Russian River Water Quality May 1, 2024 – September 12, 2024

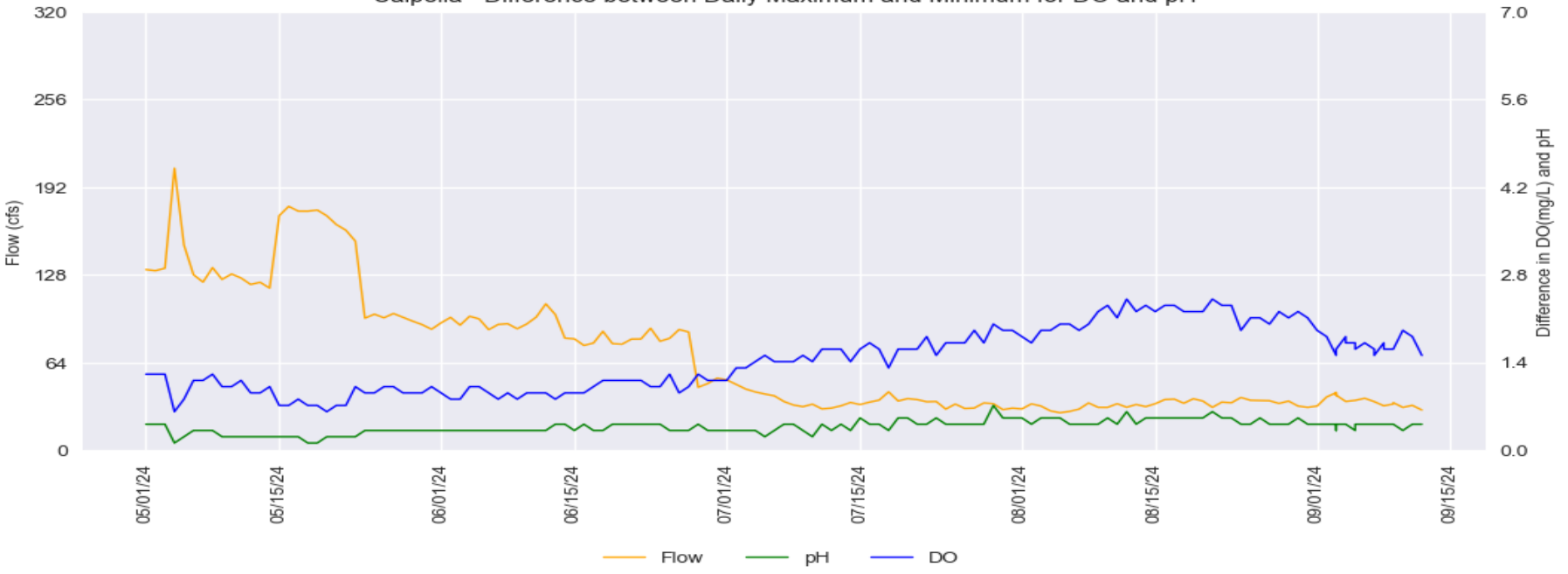
Provisional Data Subject to Revision

Calpella

Calpella Water Quality Trend

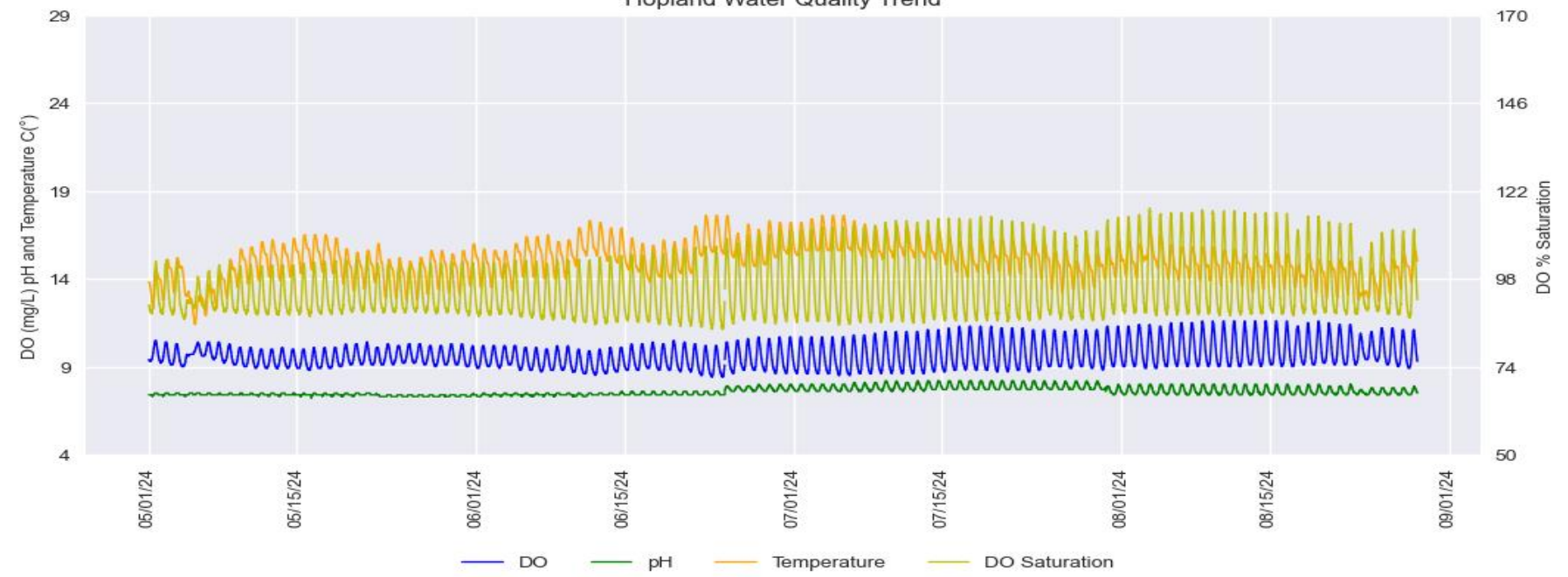


Calpella - Difference between Daily Maximum and Minimum for DO and pH

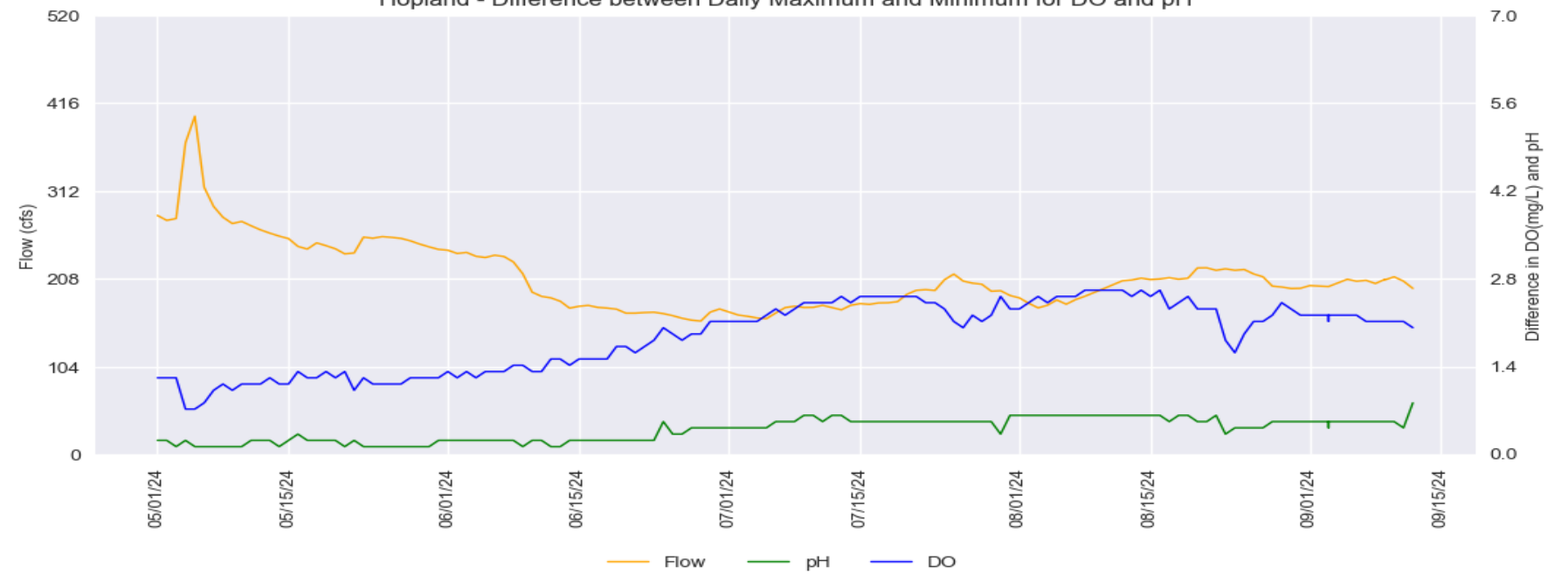


Hopland

Hopland Water Quality Trend



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

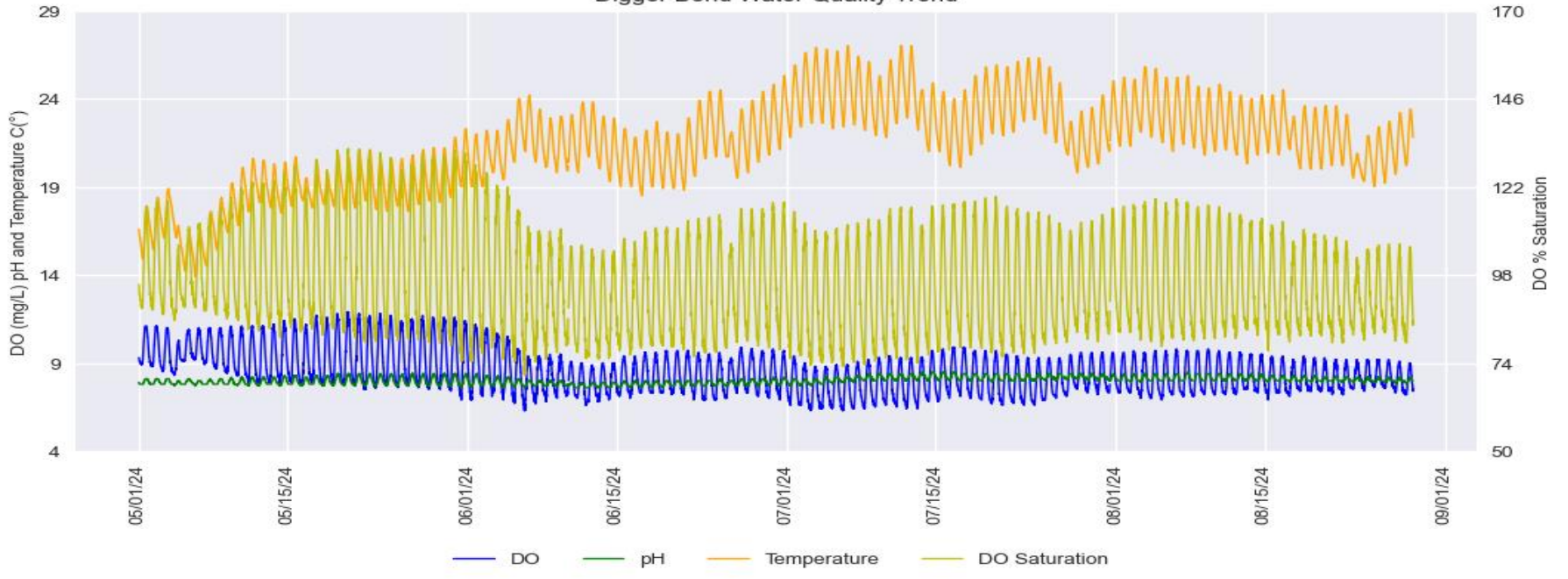


Russian River Water Quality May 1, 2024 – September 12, 2024

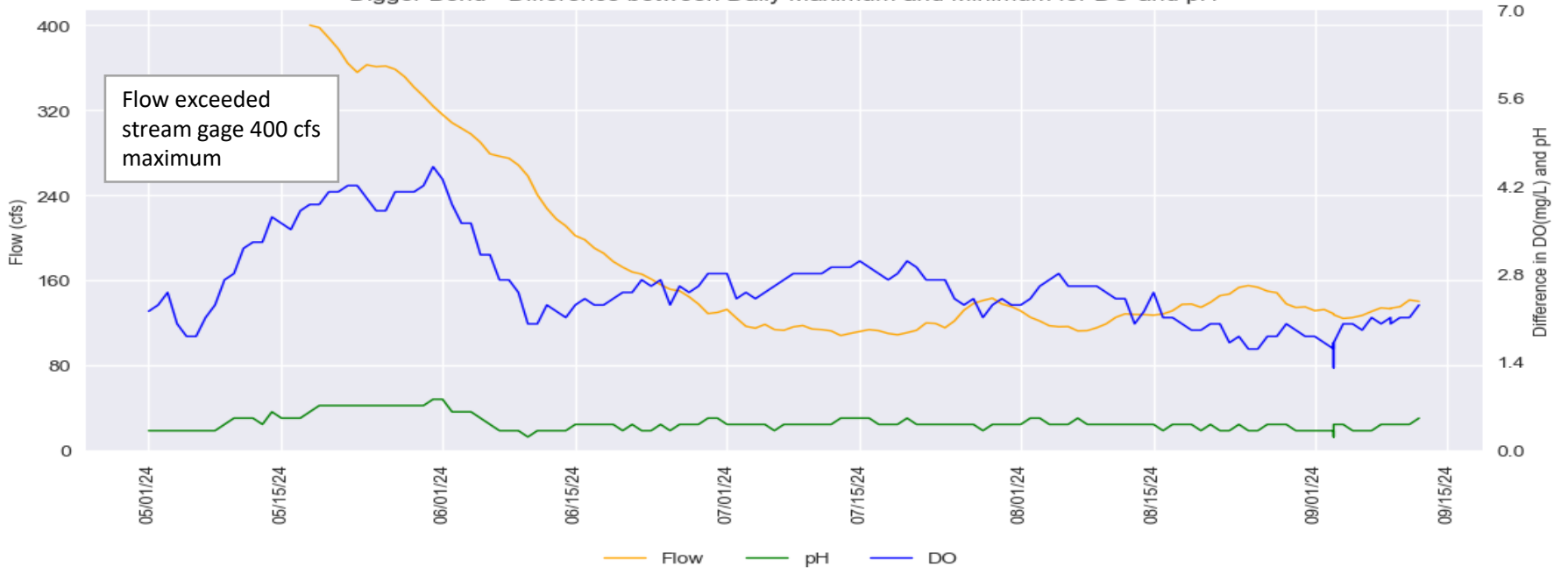
Provisional Data Subject to Revision

Digger Bend

Digger Bend Water Quality Trend

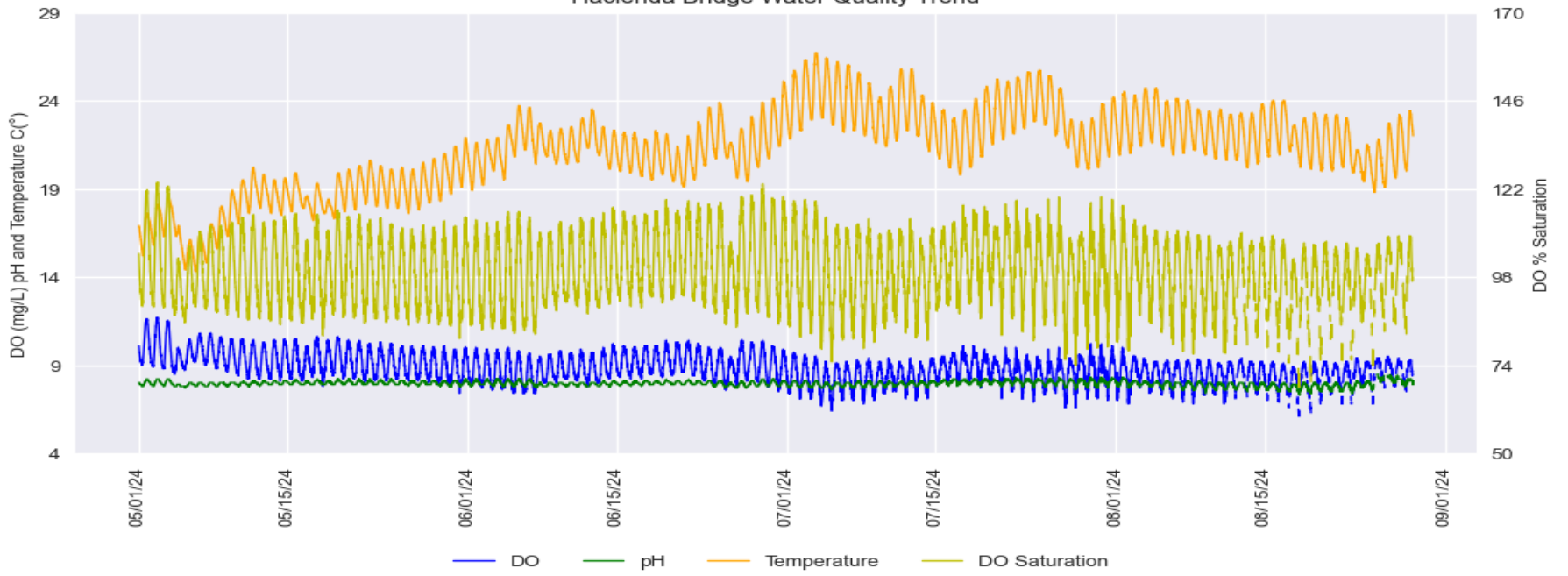


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH

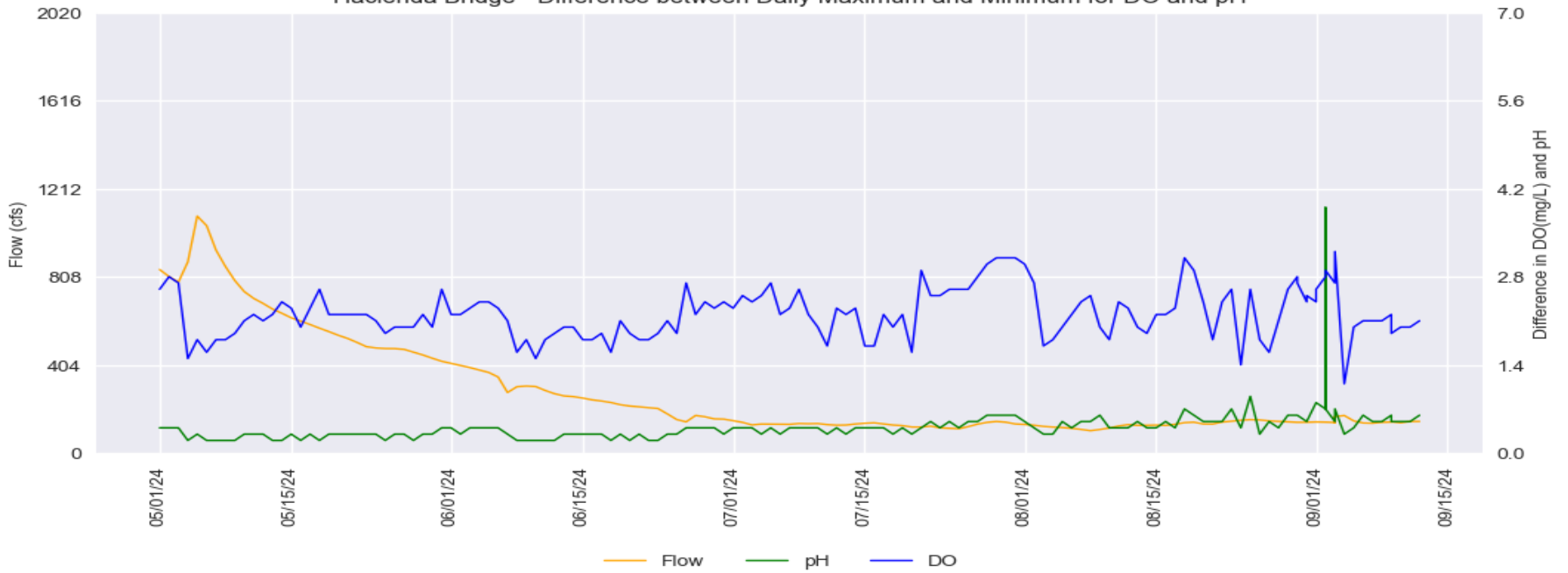


Hacienda Bridge

Hacienda Bridge Water Quality Trend



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

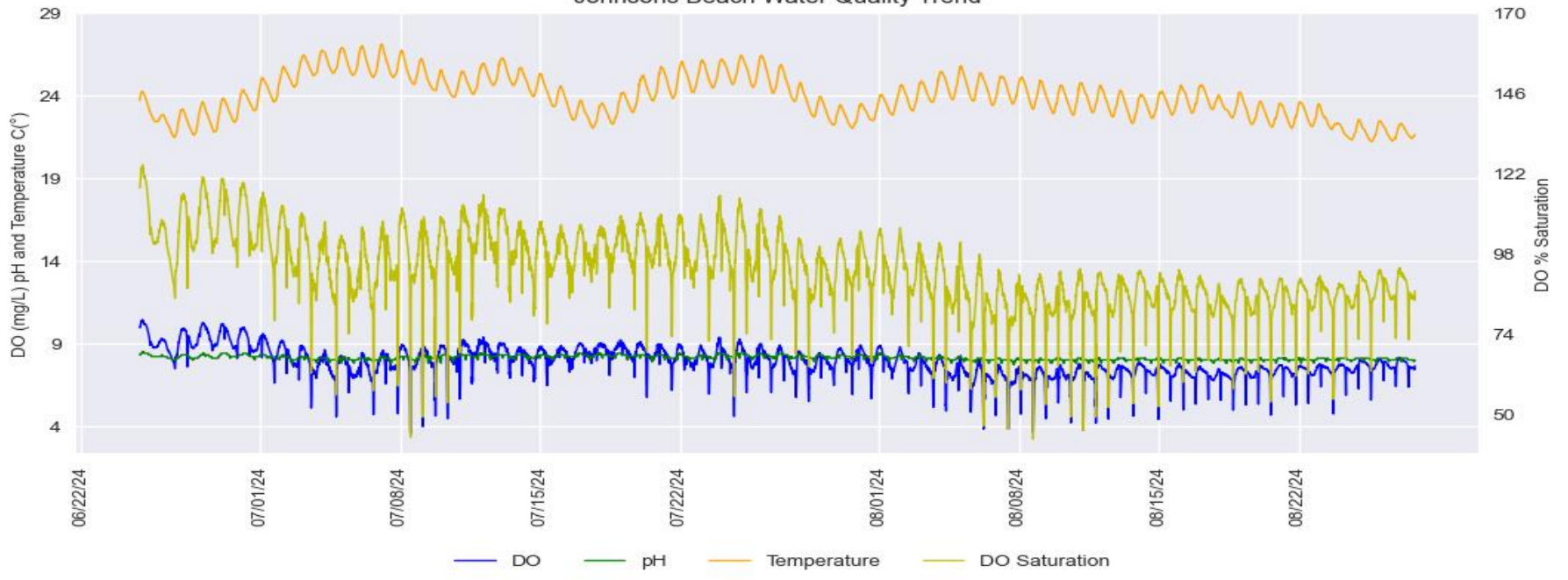


Russian River Water Quality June 24, 2024 – September 12, 2024

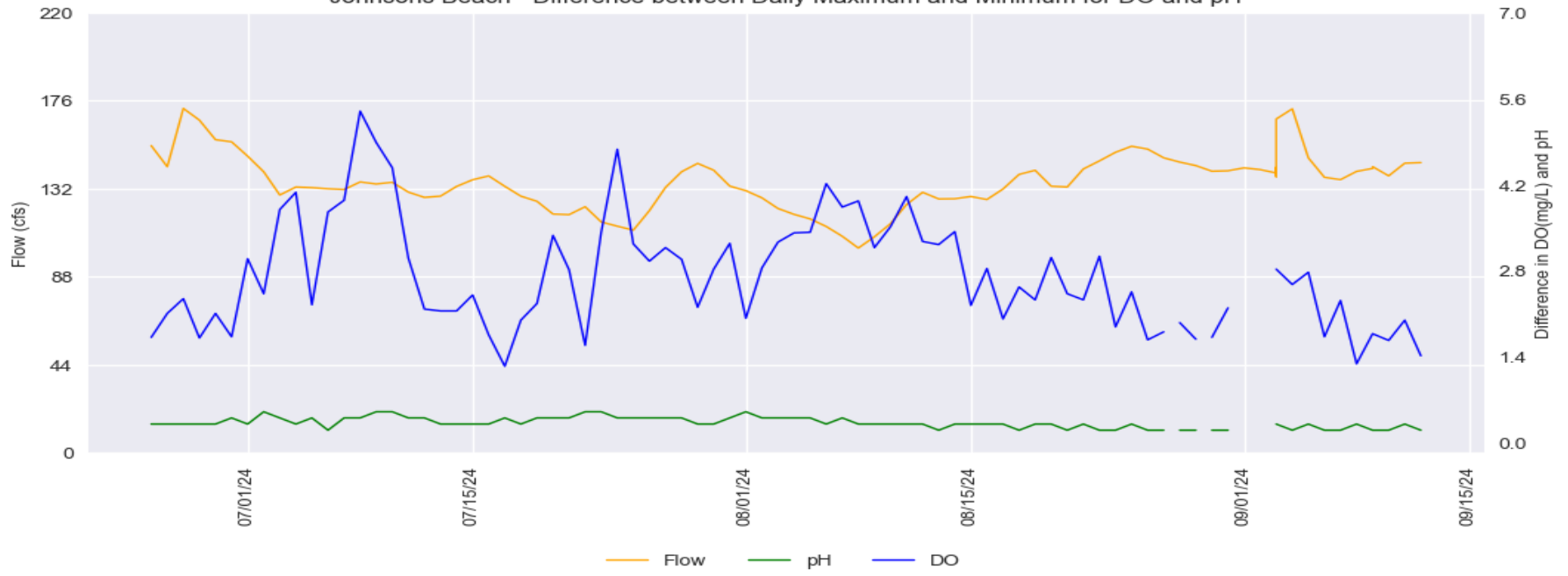
Provisional Data Subject to Revision

Johnsons Beach

Johnsons Beach Water Quality Trend

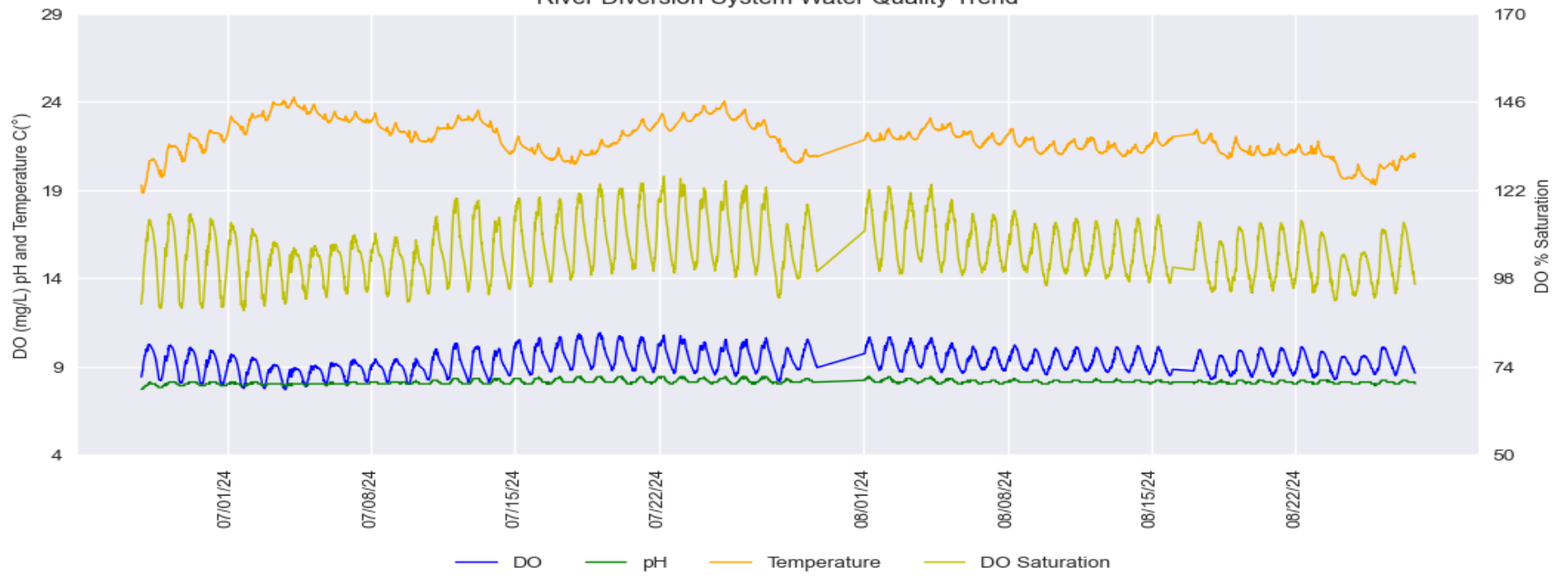


Johnsons Beach - Difference between Daily Maximum and Minimum for DO and pH

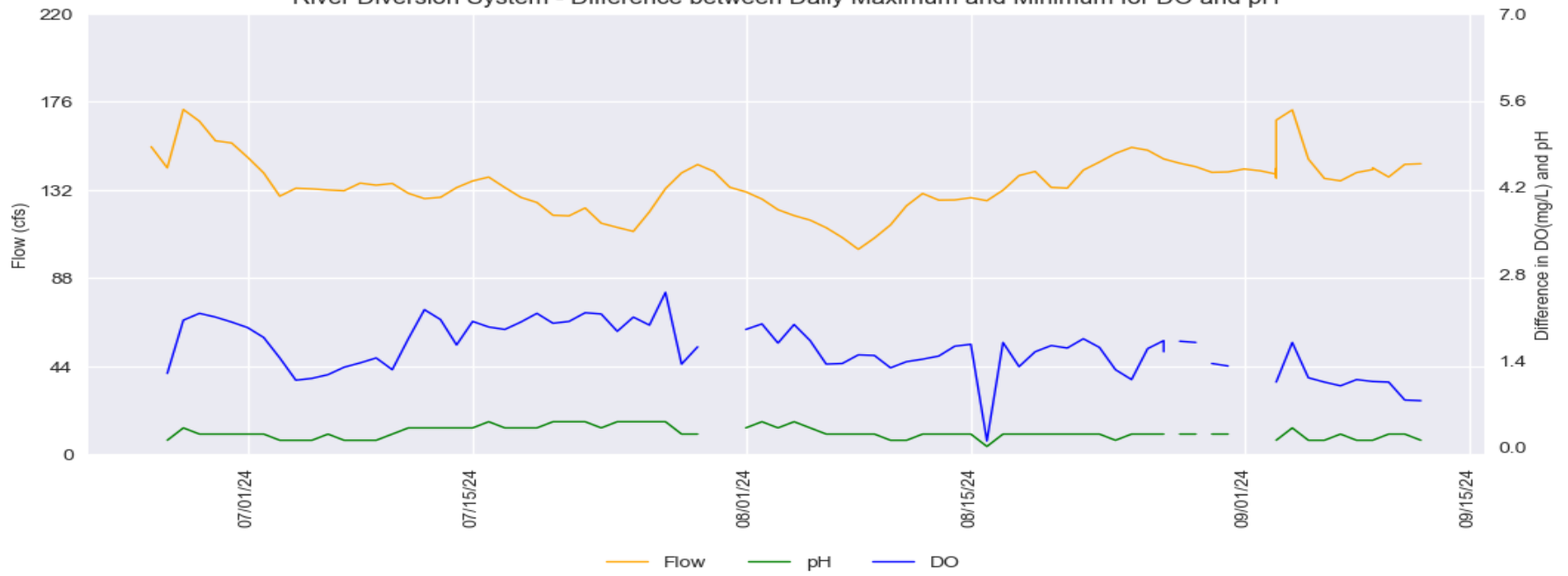


River Diversion System at Mirabel

River Diversion System Water Quality Trend



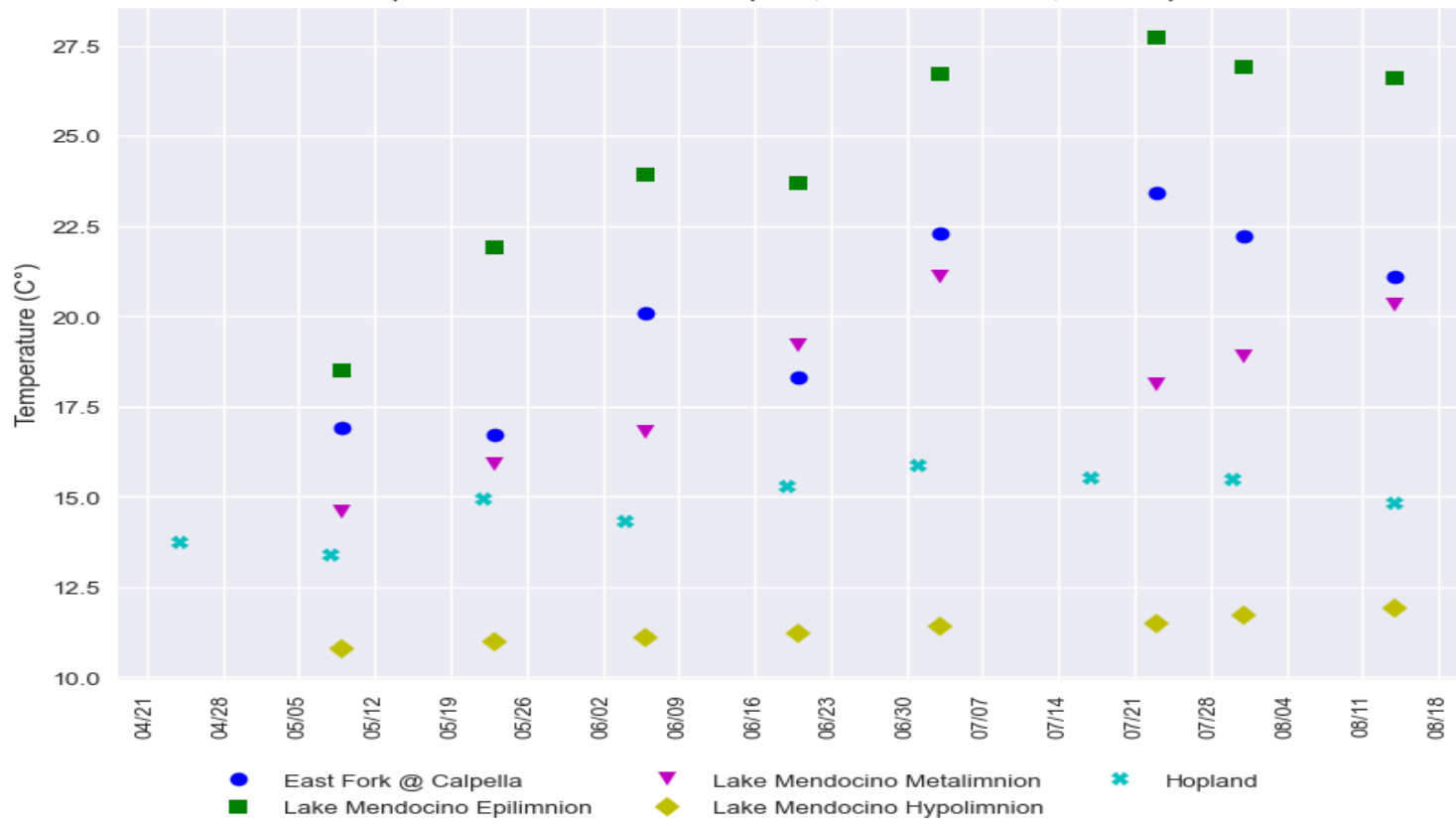
River Diversion System - Difference between Daily Maximum and Minimum for DO and pH



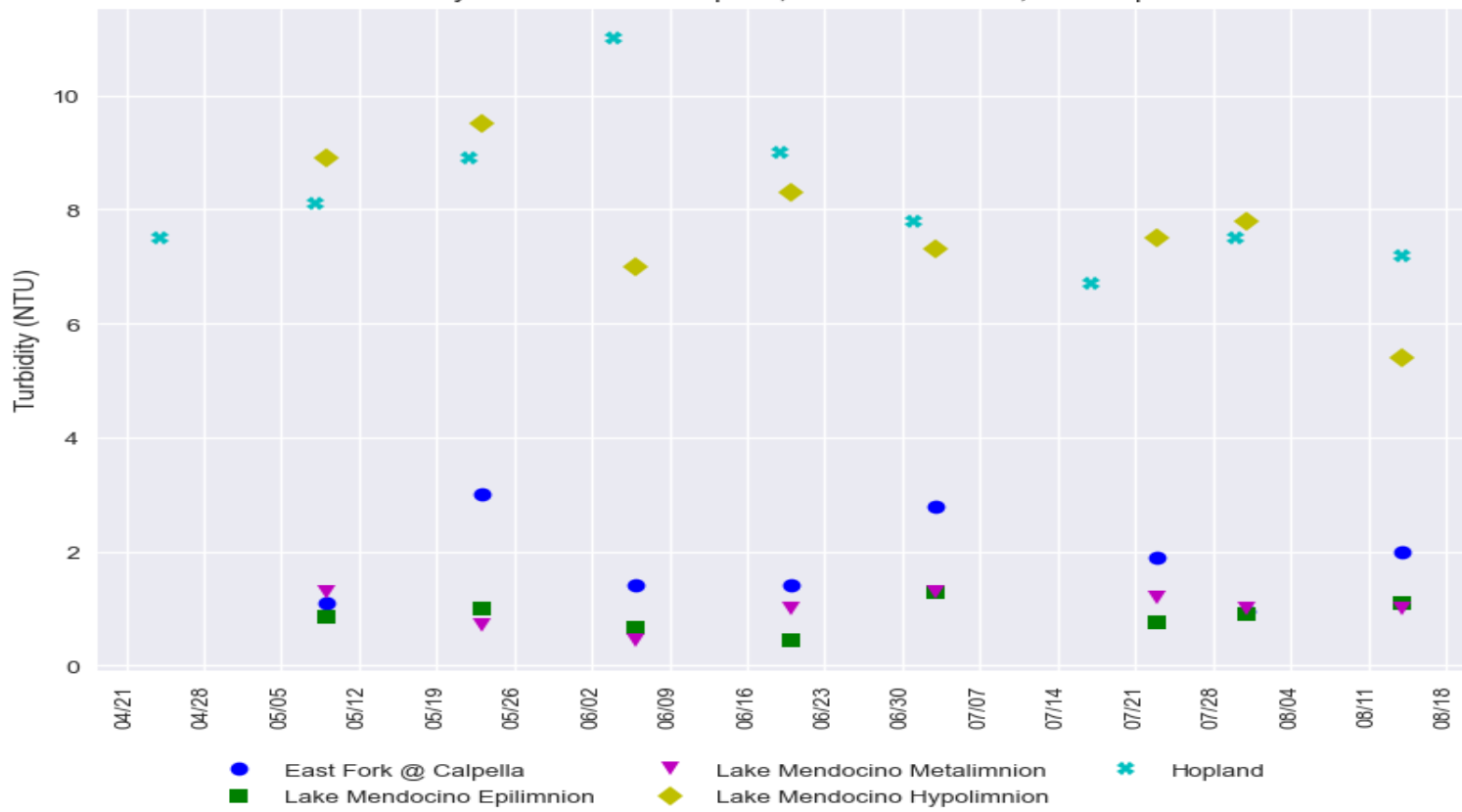
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision

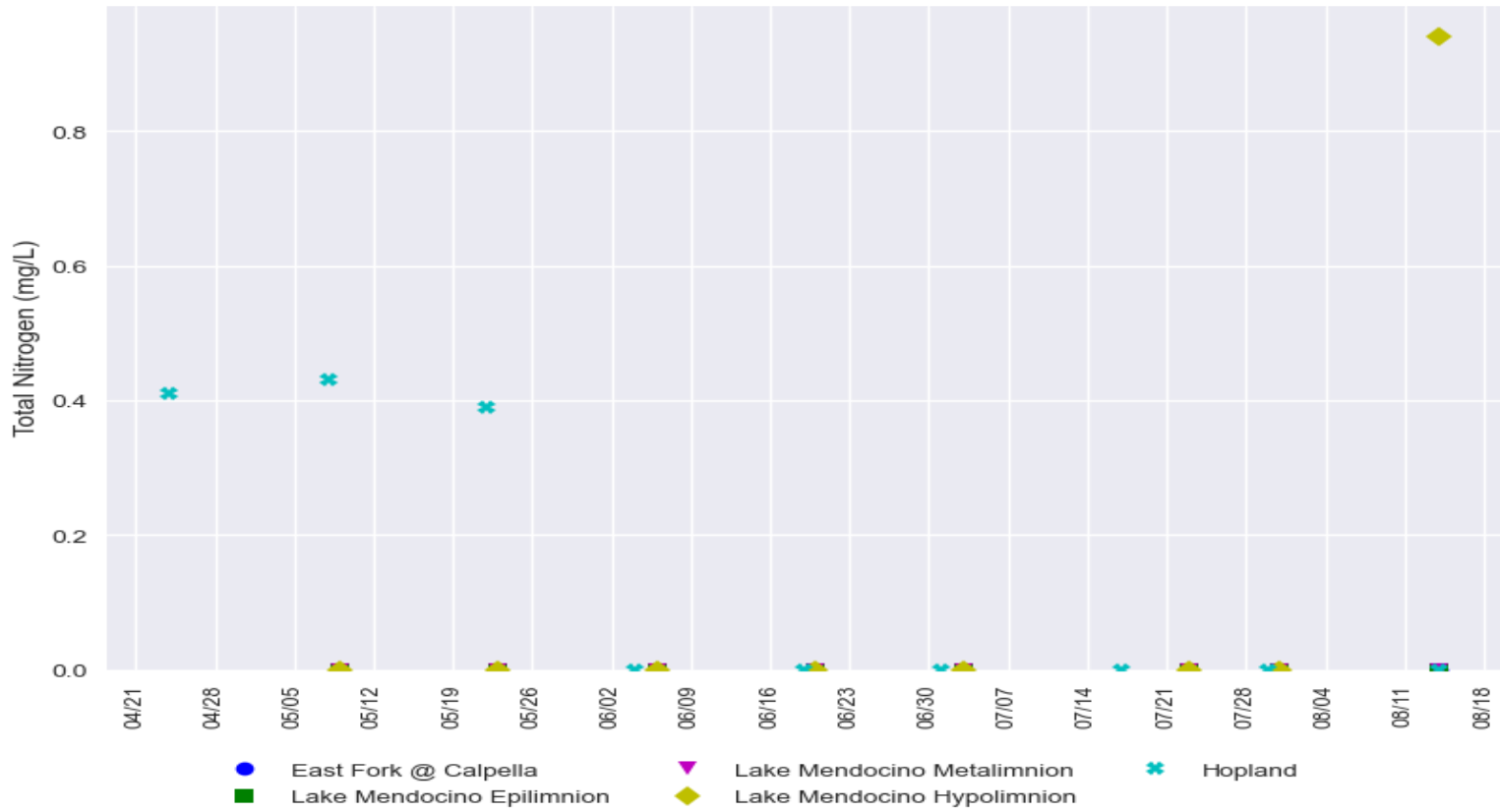
Temperature - East Fork at Calpella, Lake Mendocino, and Hopland



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



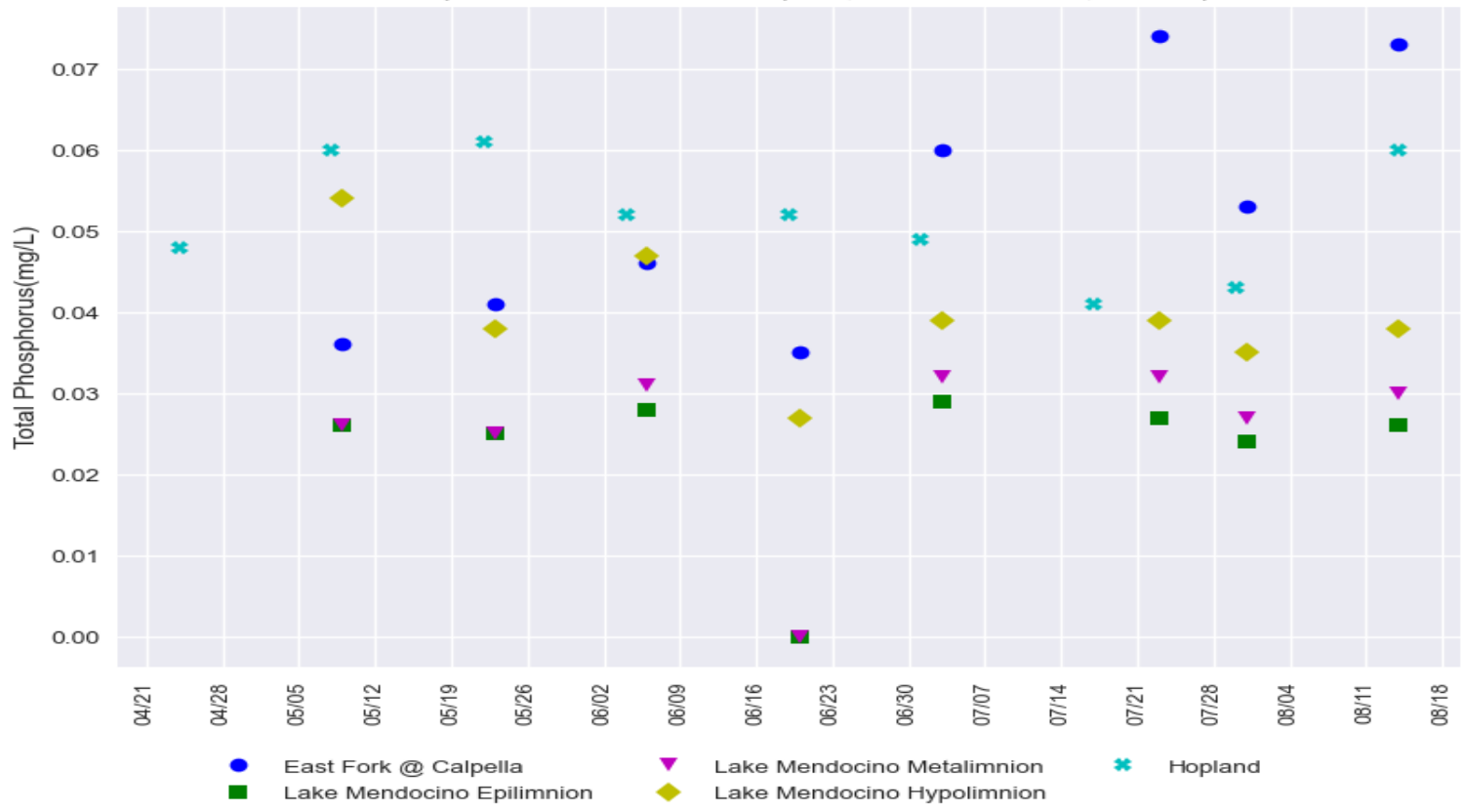
Total Nitrogen (mg/L) - East Fork at Calpella, Lake Mendocino, and Hopland



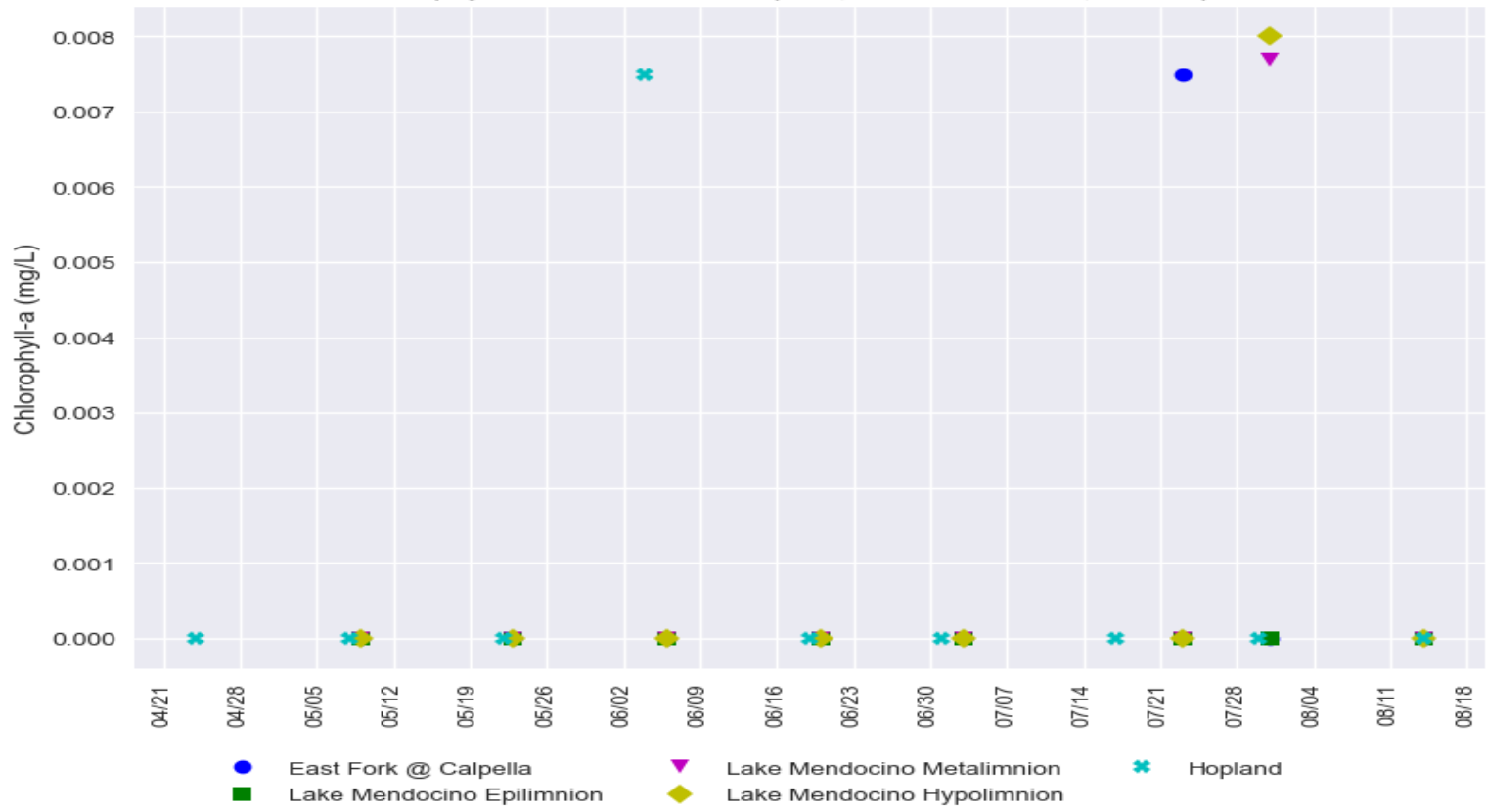
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision

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

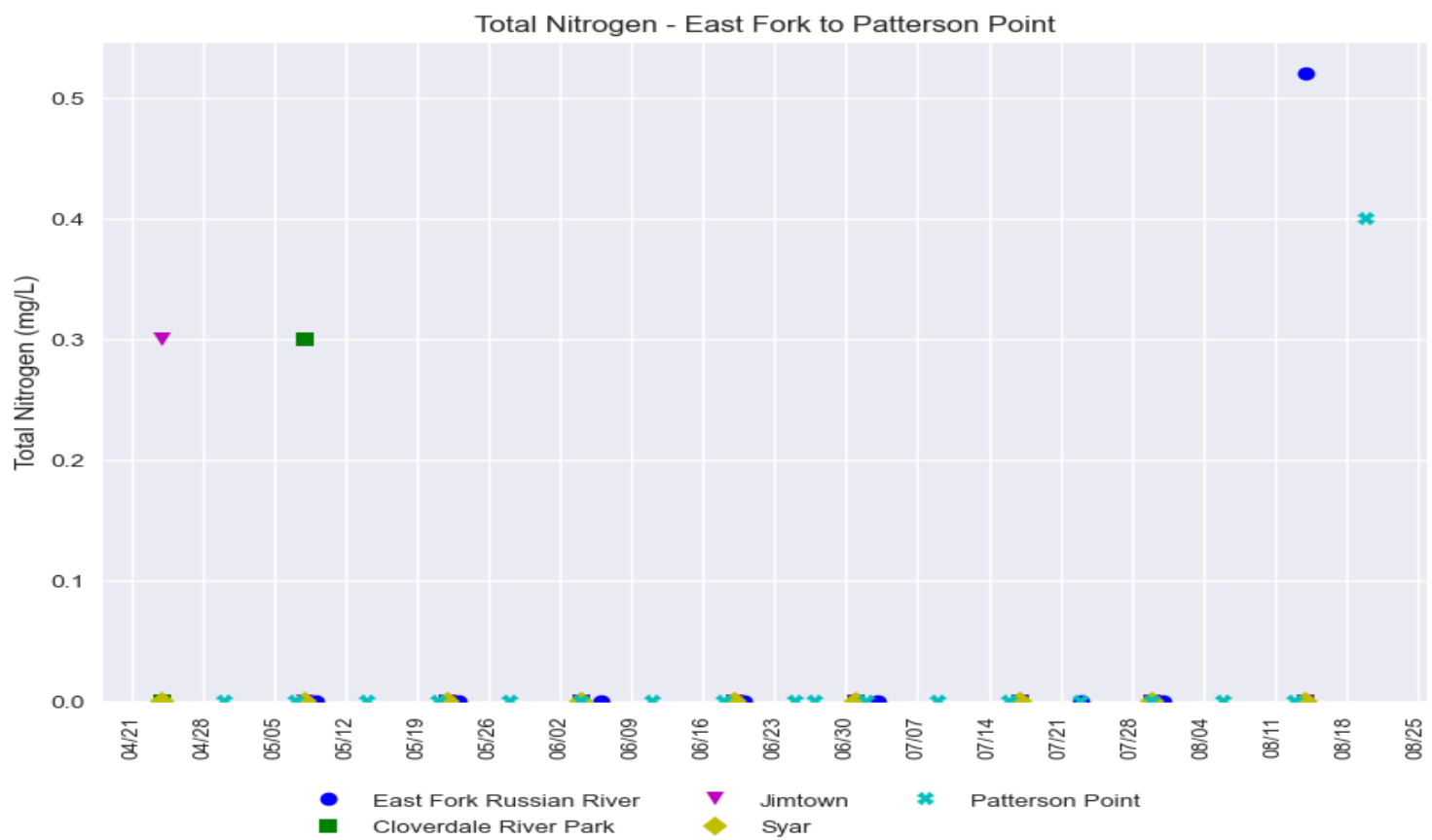
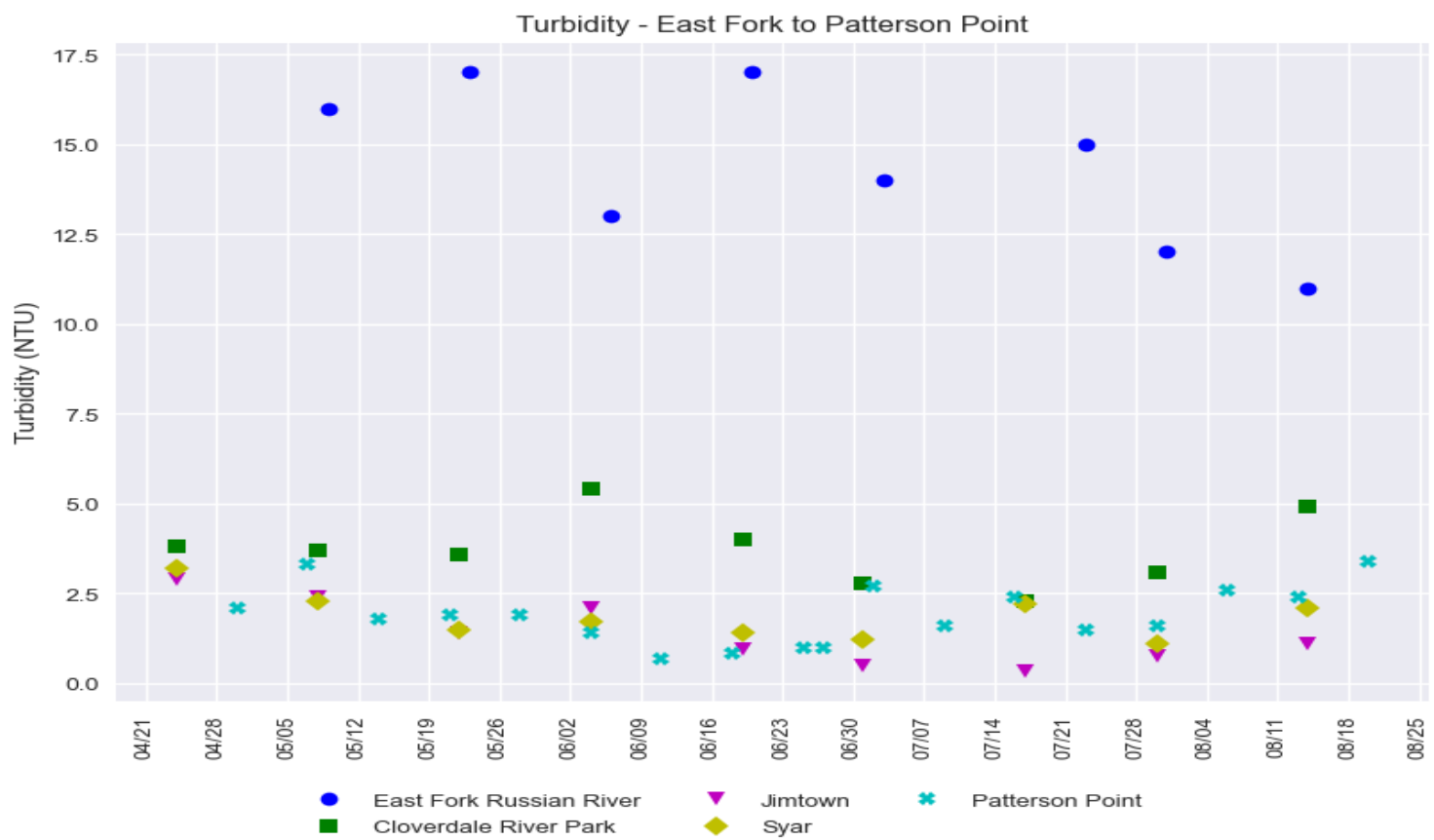
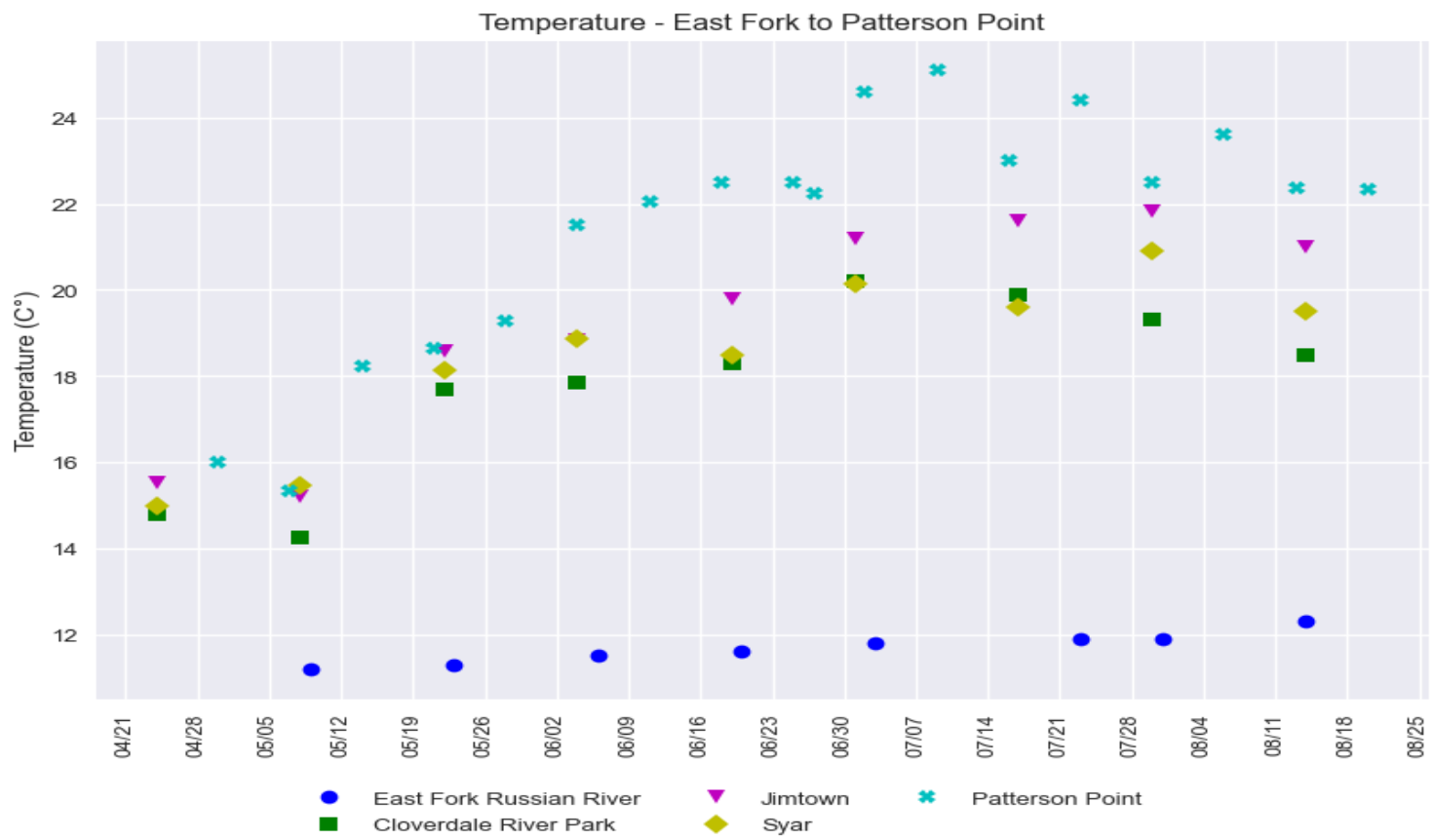


Chlorophyll-a - East Fork at Calpella, Lake Mendocino, and Hopland



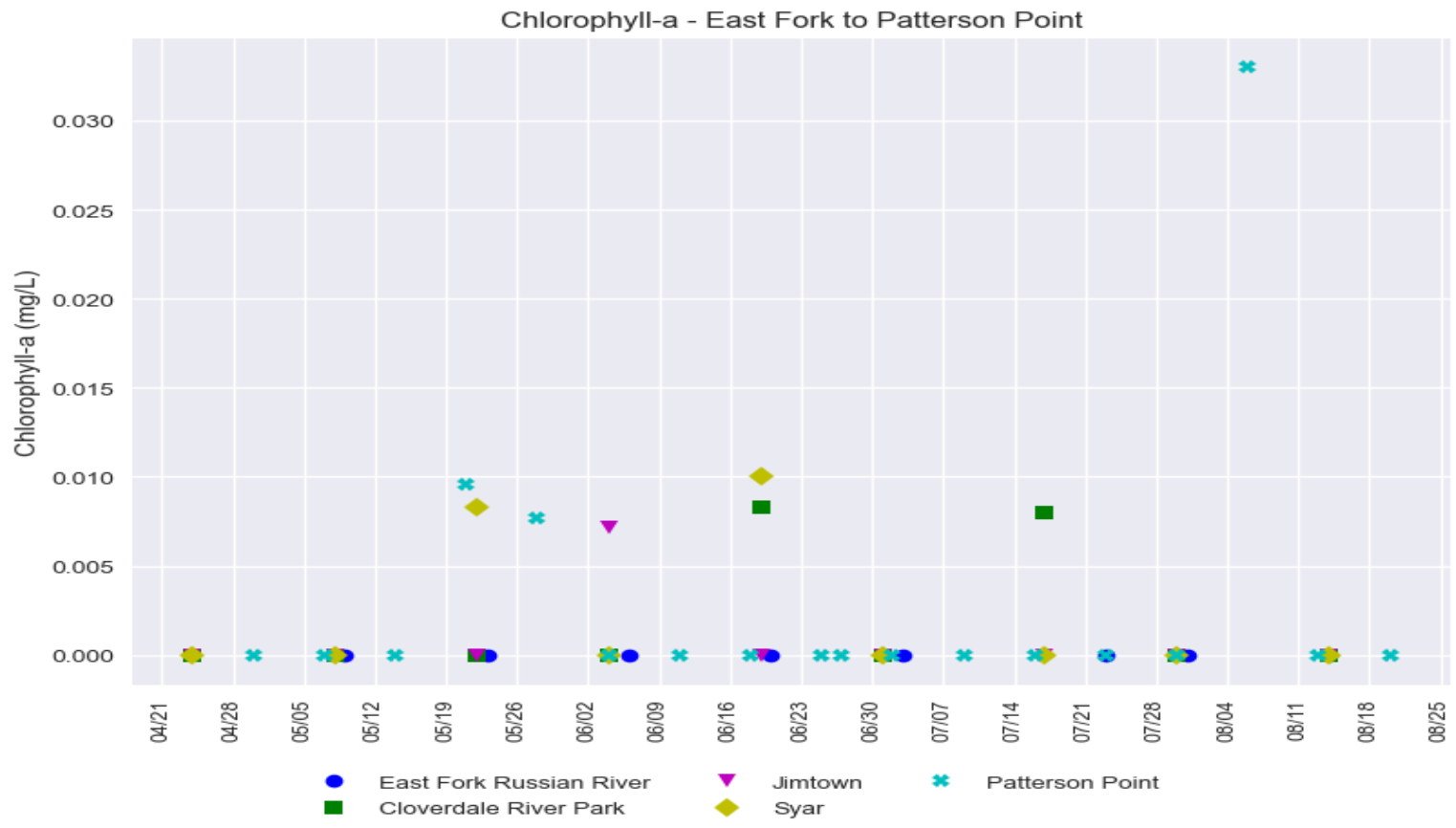
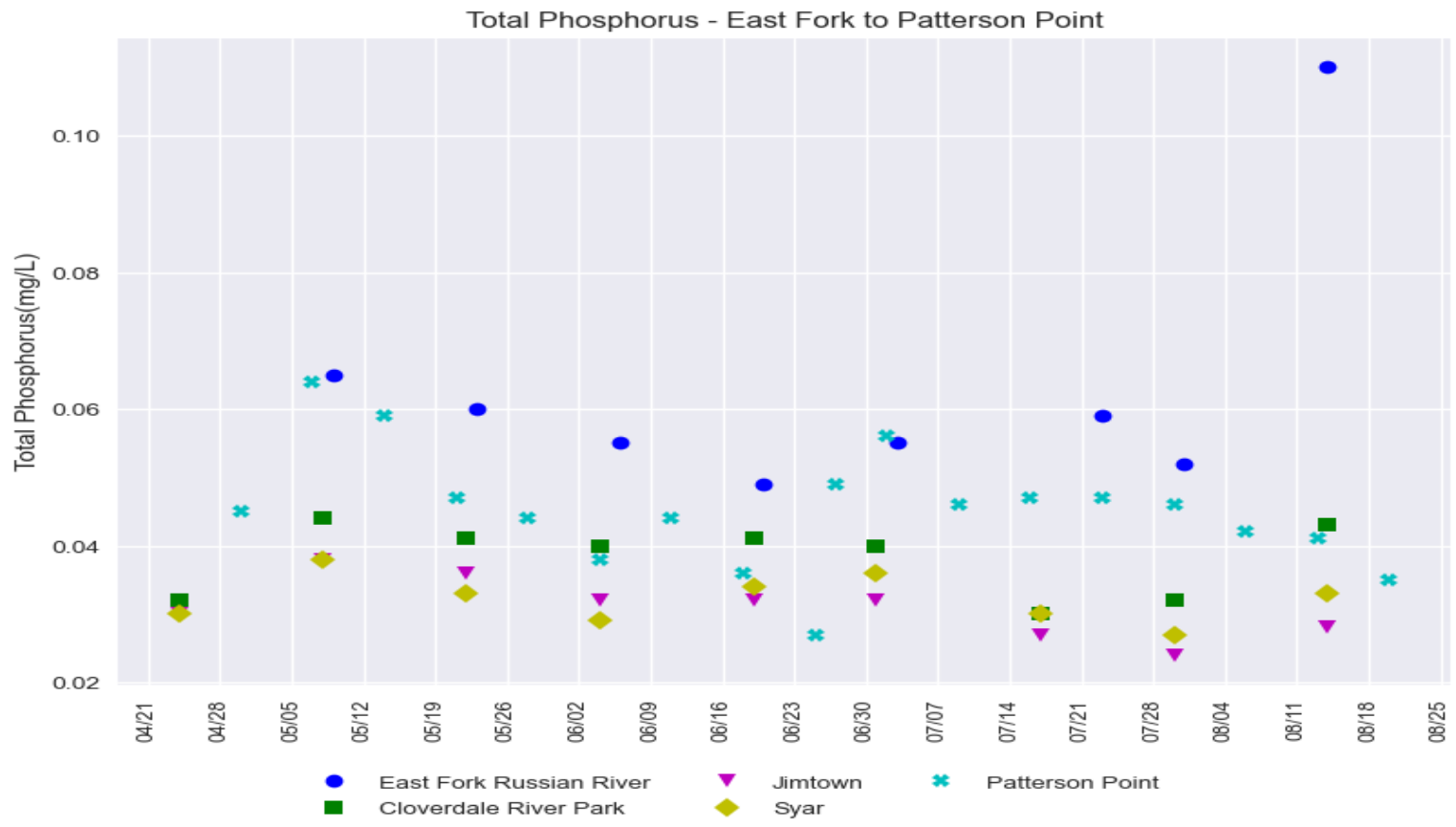
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



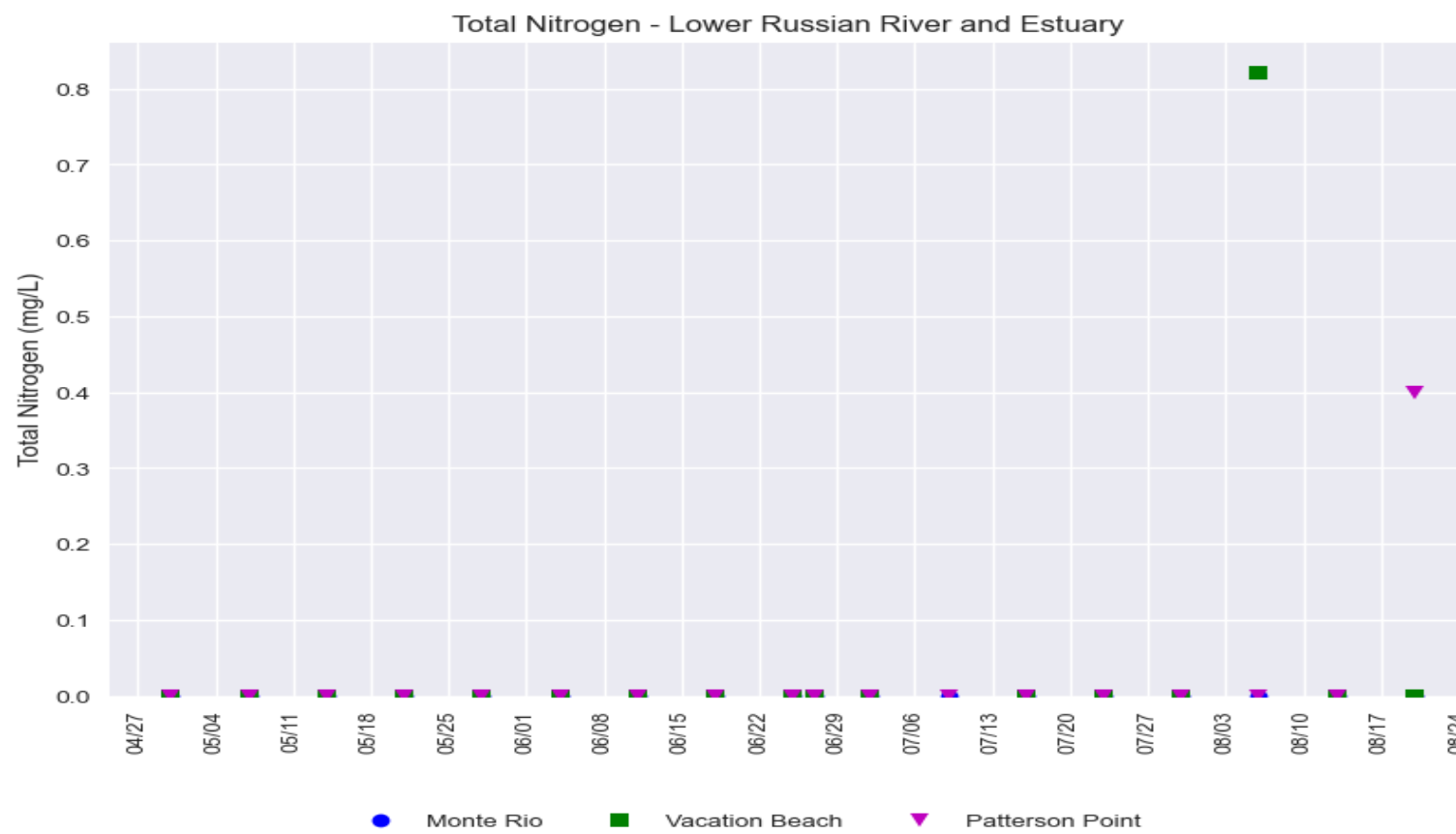
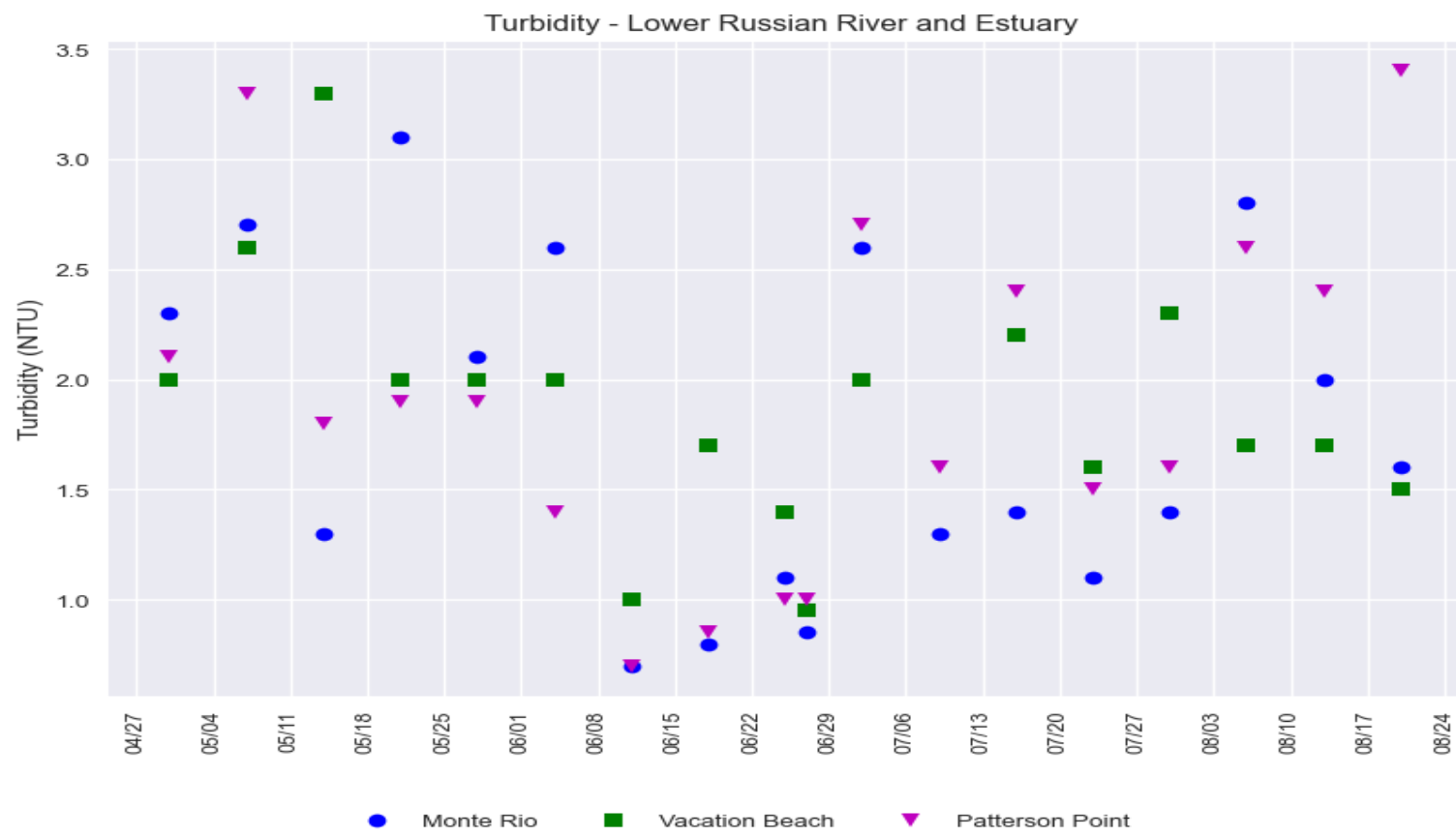
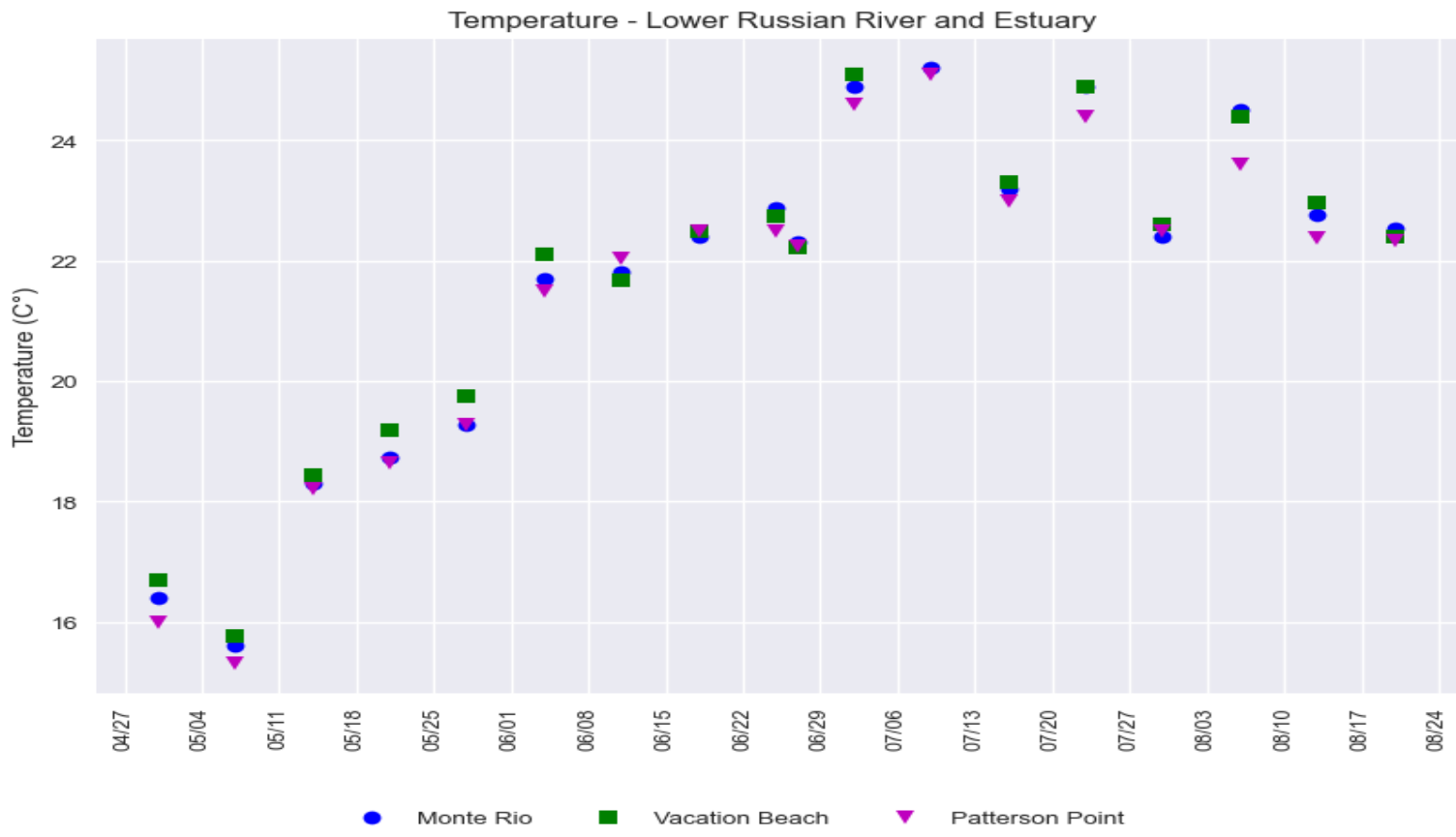
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



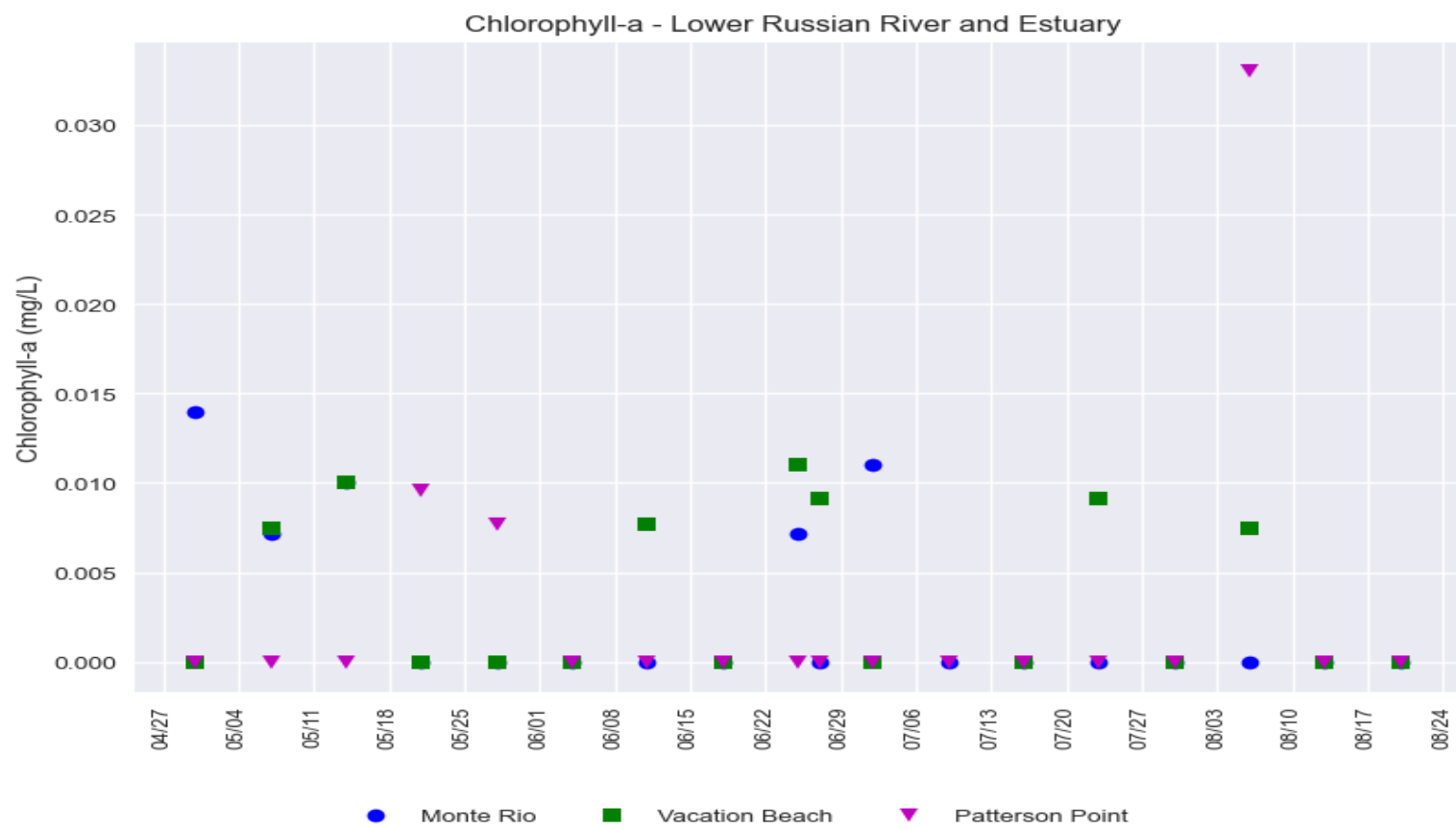
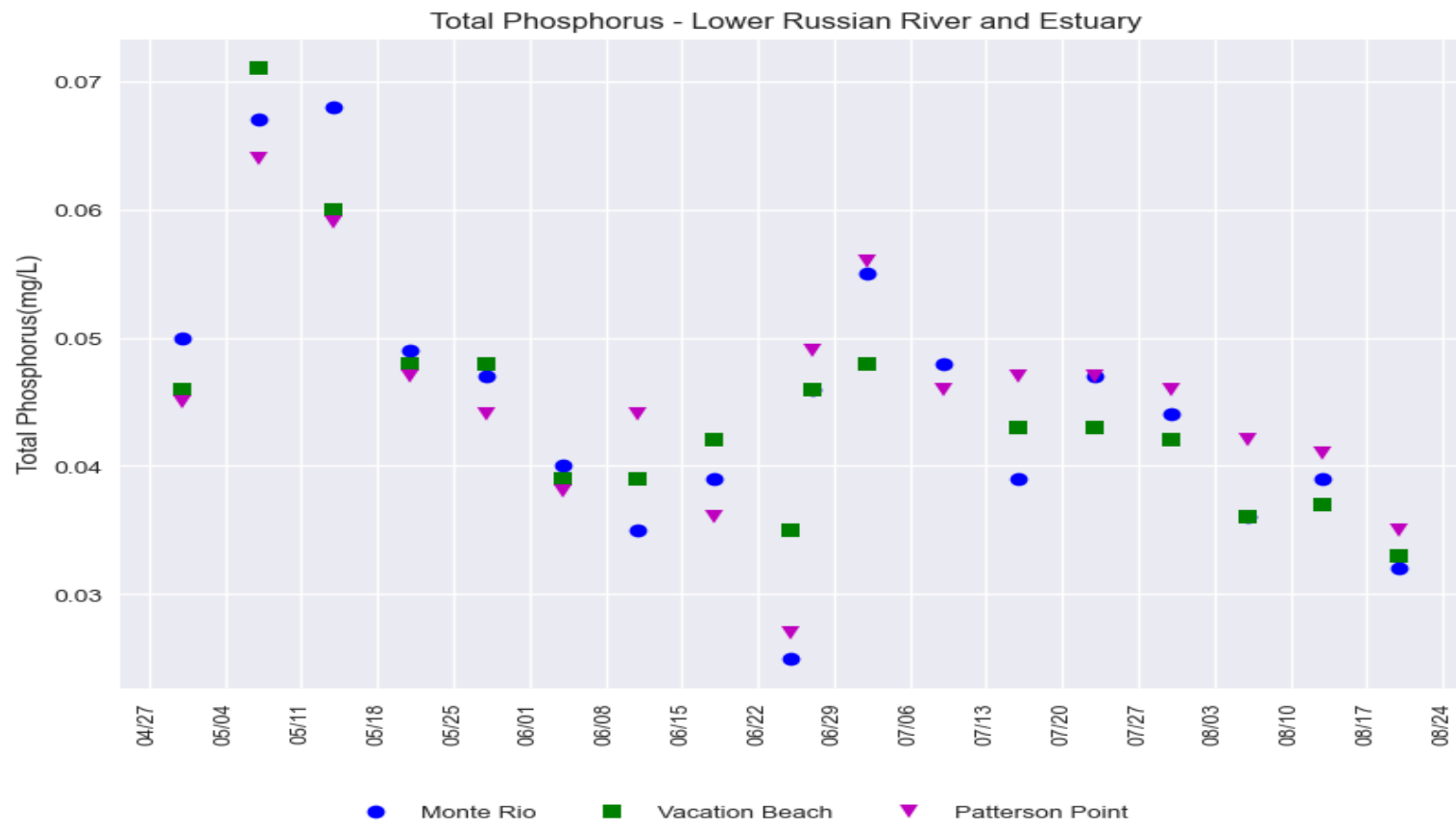
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



Russian River Water Quality Grab Samples

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

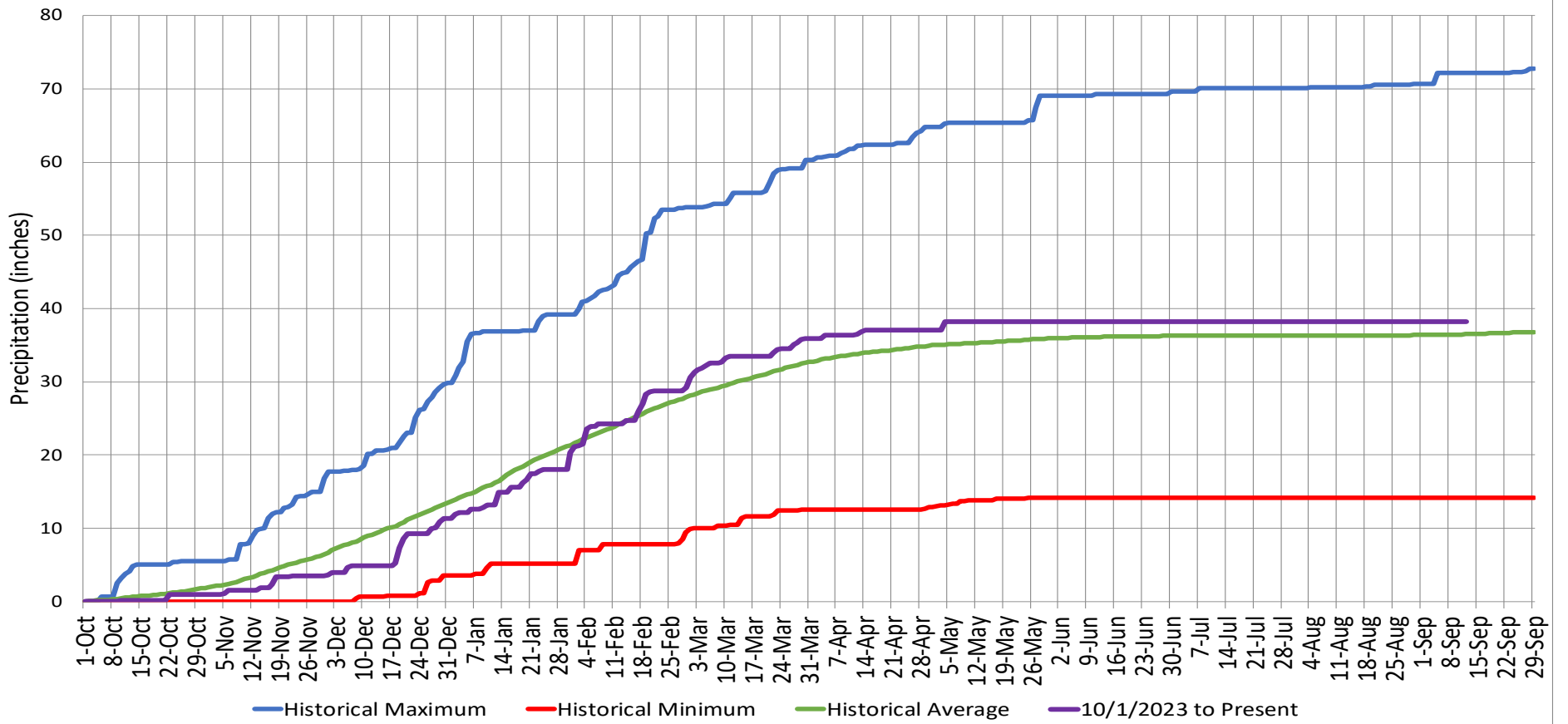
****We continue to collect enterococcus data, however it is not a reliable fecal indicator bacteria in freshwater

Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))

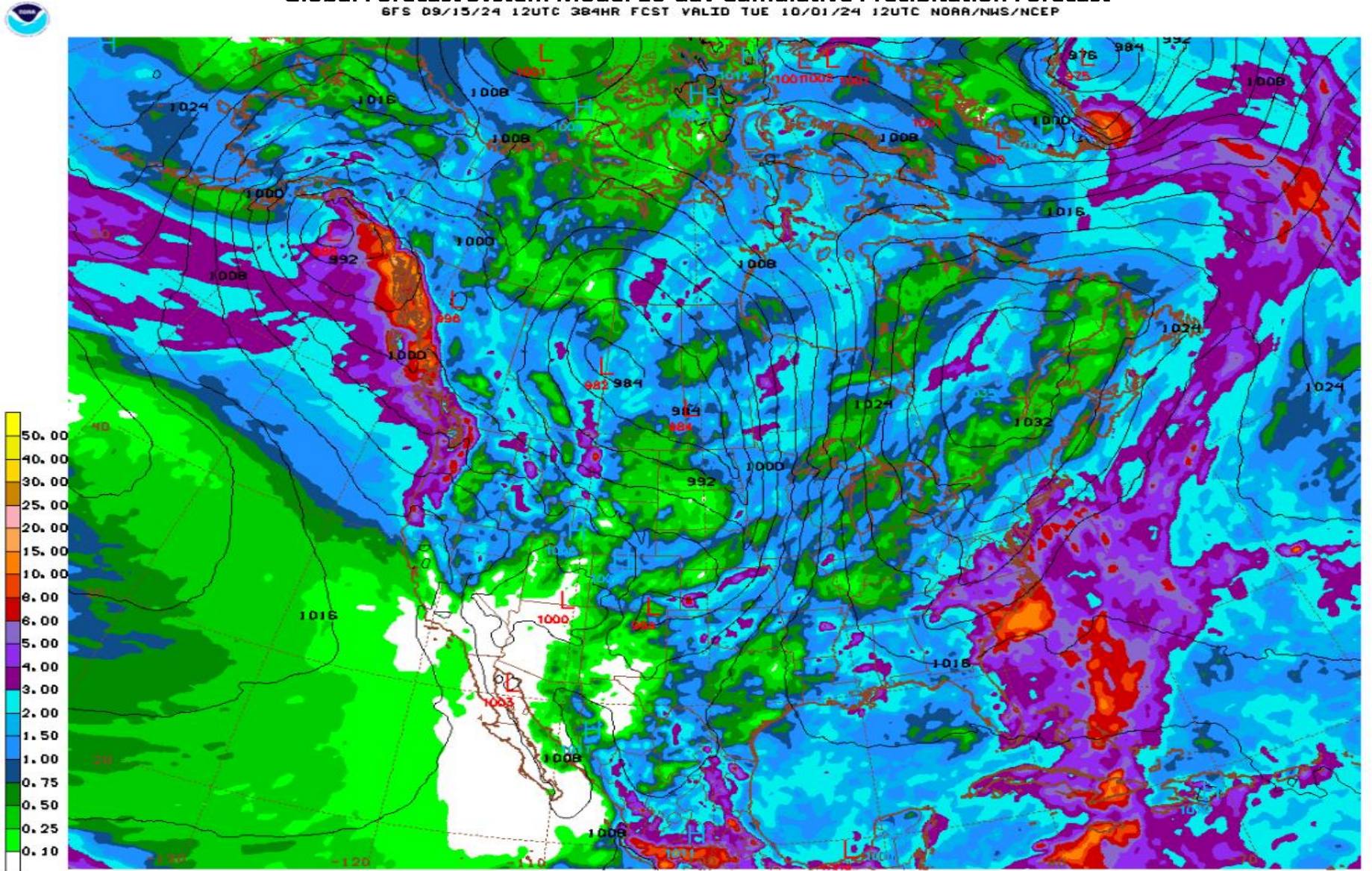
Date Range	Cumulative (inches)
Oct 1, 2023 - Sep 12, 2024	38.22
Last 7 Days*	0.00

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

6FS 09/15/24 12UTC 384HR FCST VALID TUE 10/01/24 12UTC NOAA/NWS/NCEP



6FS TUE 241001/1200V384 EMSL (4MB), 384HR ACCUMULATED PRECIP (IN)

Date Range
Sep 15 - Oct 1, 2024

Forecasted Cumulative (inches)
0.10