



State Water Resources Control Board
 Temporary Urgency Change Orders (6/6/2024)
 Russian River Hydrologic & Water Quality Report
 August 23, 2024 - August 29, 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).

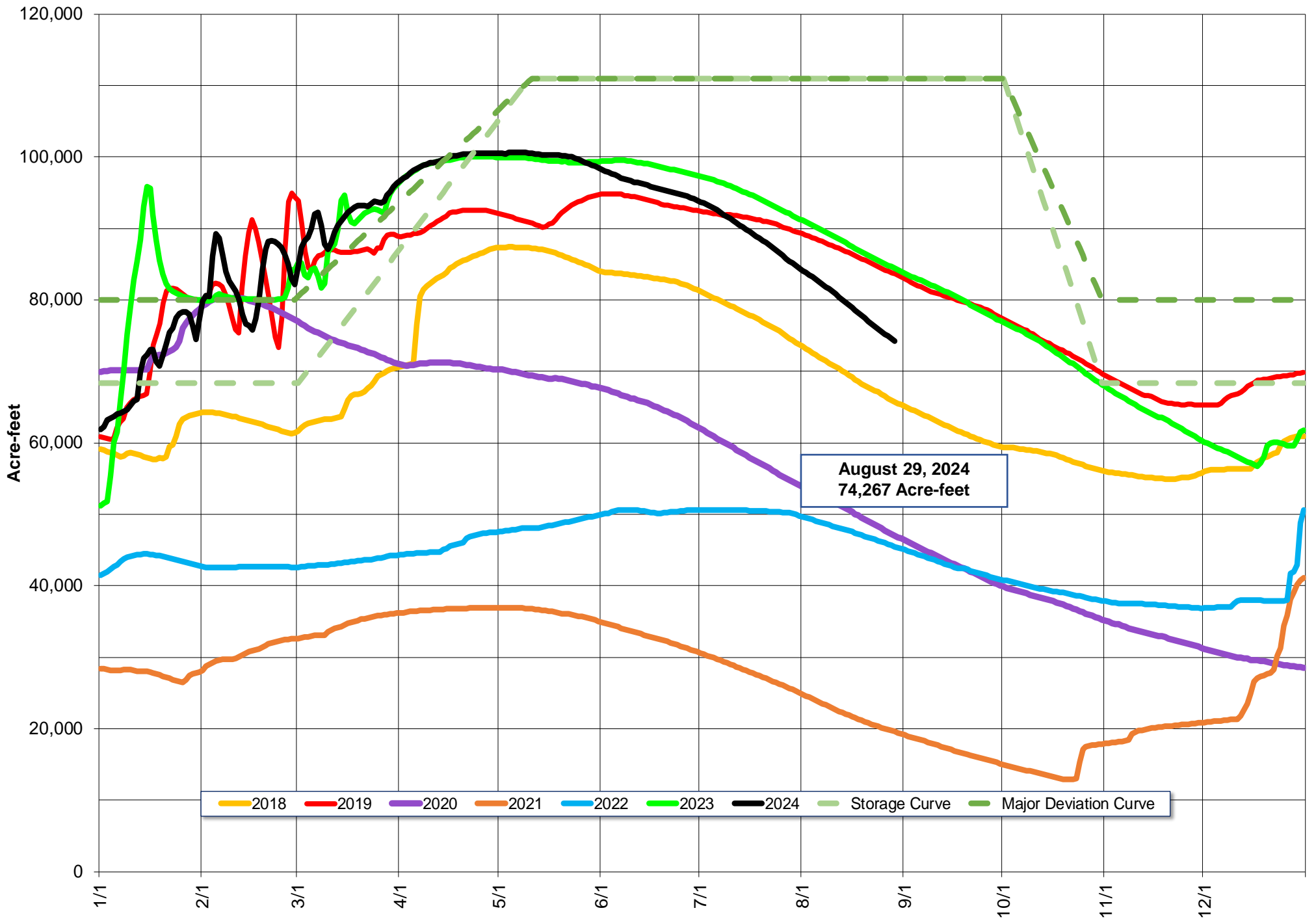
Instream Flow Requirements as of August 29, 2024

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



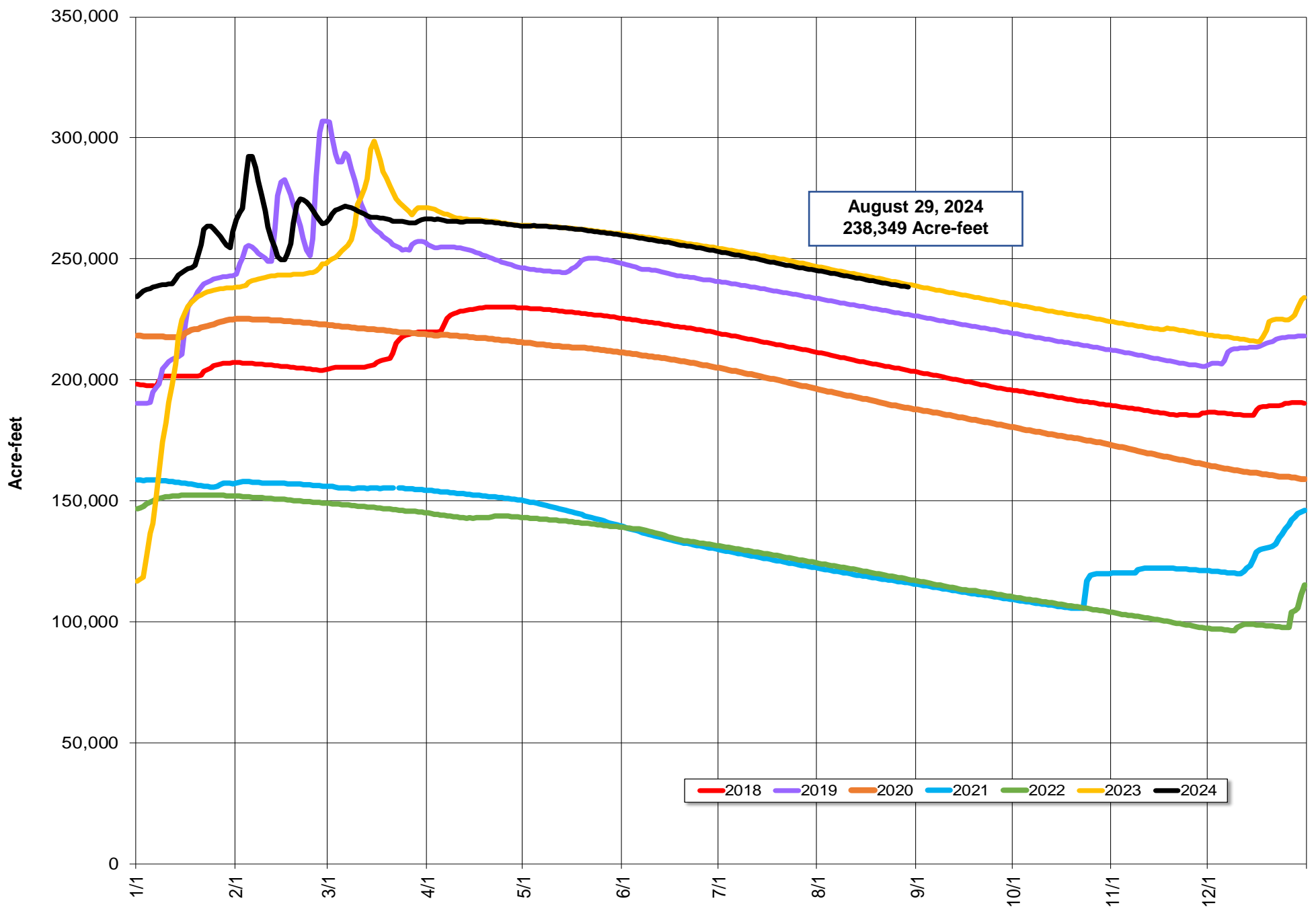
Storage (acre-feet)	August 29, 2024	74,267	
Change in Storage (acre-feet)	Last 30 days	-10,499	-350
	Last 7 days	-2,010	-287
Daily Inflow (cfs)	Last 7 days	Min	28
		Max	59
		Mean	49
Release (cfs)	Last 7 days	Min	197
		Max	219
		Mean	205

Lake Sonoma



Todd Schram, February 10, 2024

Lake Sonoma Storage 2018-2024



Storage (acre-feet)	August 29, 2024	238,349	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-7,141	-238
	Last 7 days	-1,584	-226
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	32
		Mean	10
Release (cfs)	Last 7 days	Min	97
		Max	98
		Mean	97

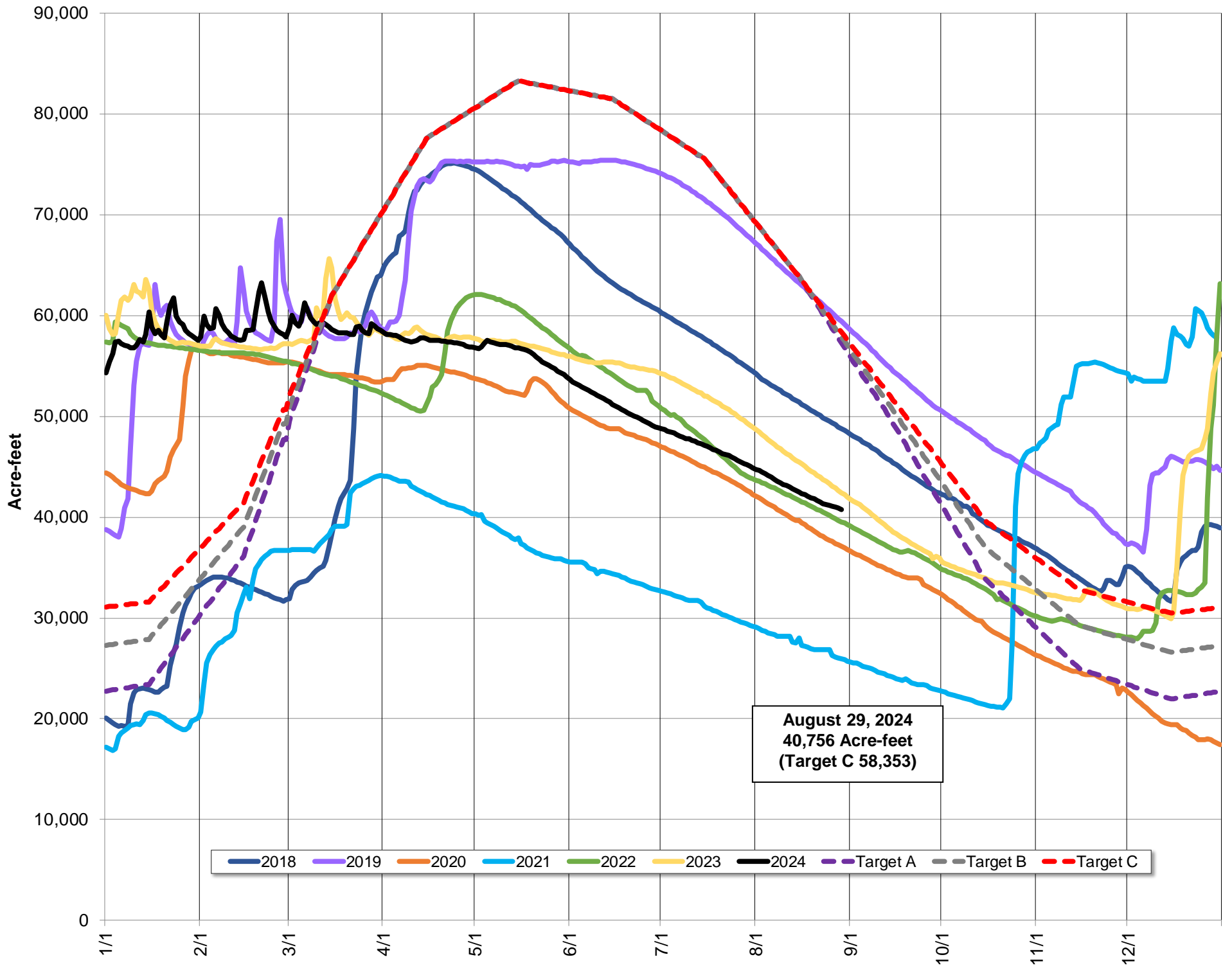
Potter Valley Project

PVP Diversion (cfs)	August 29, 2024	47
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Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2023 - August 30, 2024	487,132	1,458
	Last 7 days	257	37

*Inflow calculation based on criteria established in D1610

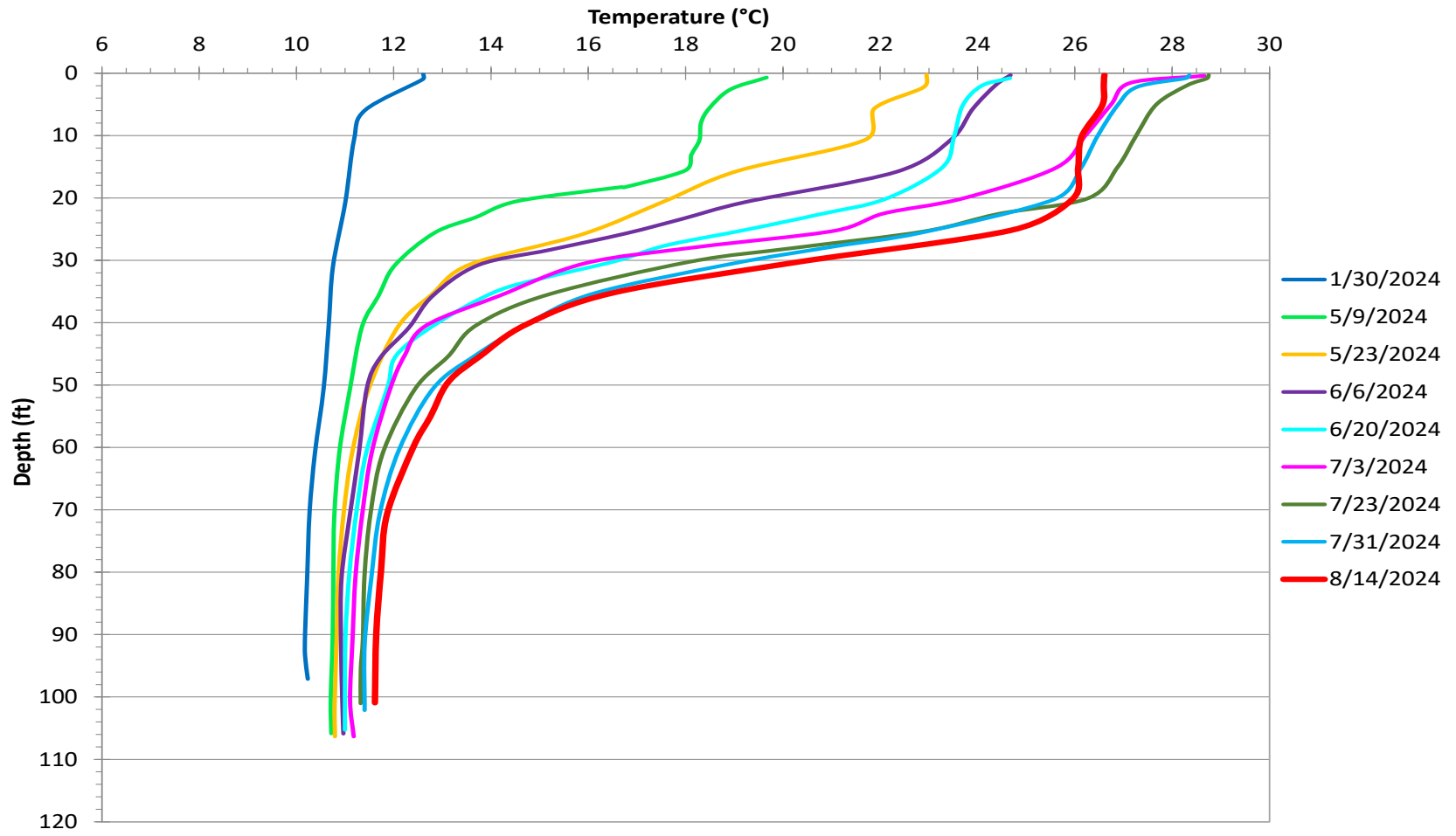
Lake Pillsbury Storage 2018 - 2024 and Target Storage Scenarios



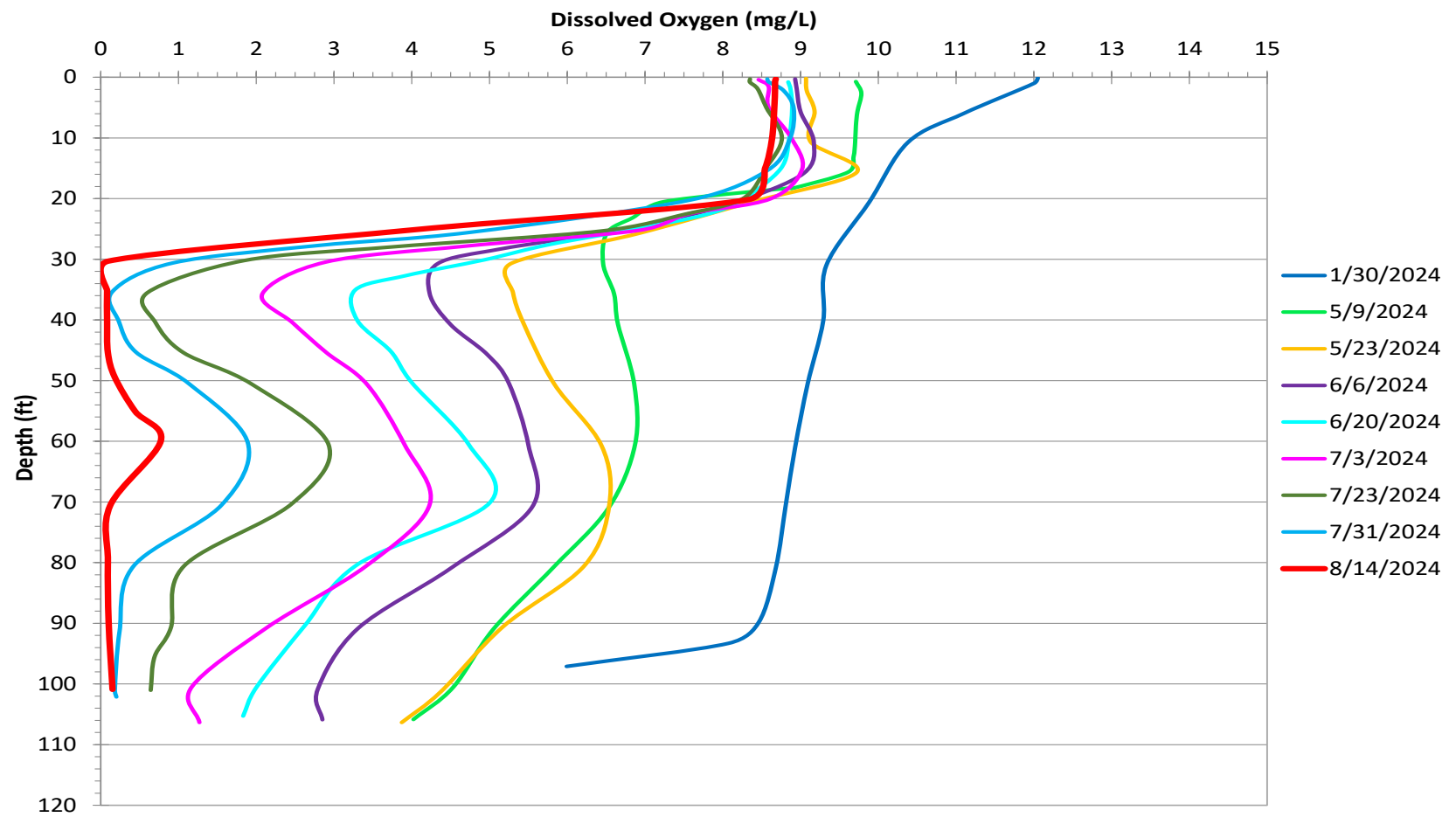
Lake Mendocino Water Quality Vertical Profiles (January 30 – August 14, 2024)

Provisional Data Subject to Revision

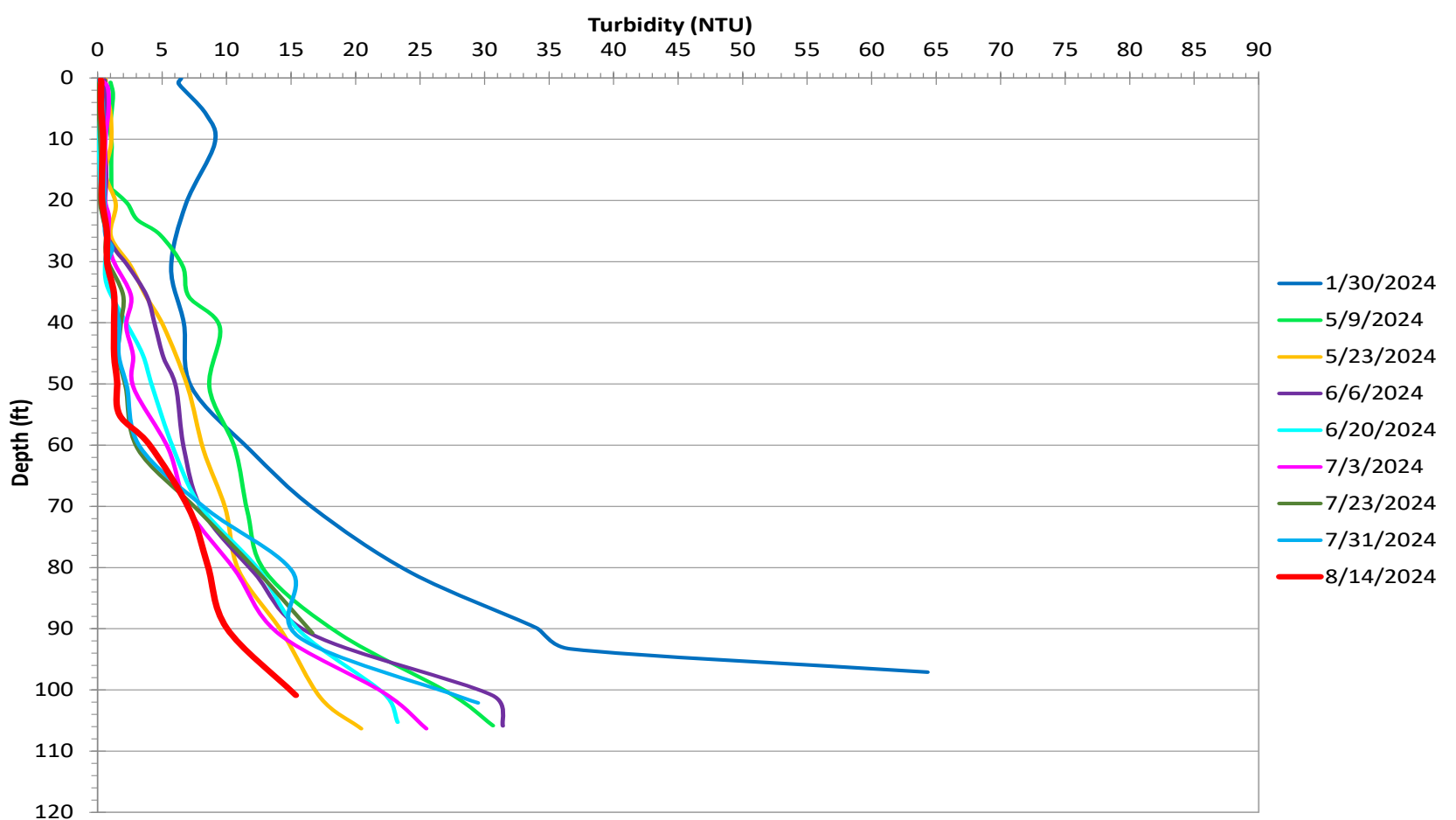
Lake Mendocino Dam - Vertical Temperature Profile - 2024



Lake Mendocino Dam - Vertical Dissolved Oxygen Profile - 2024



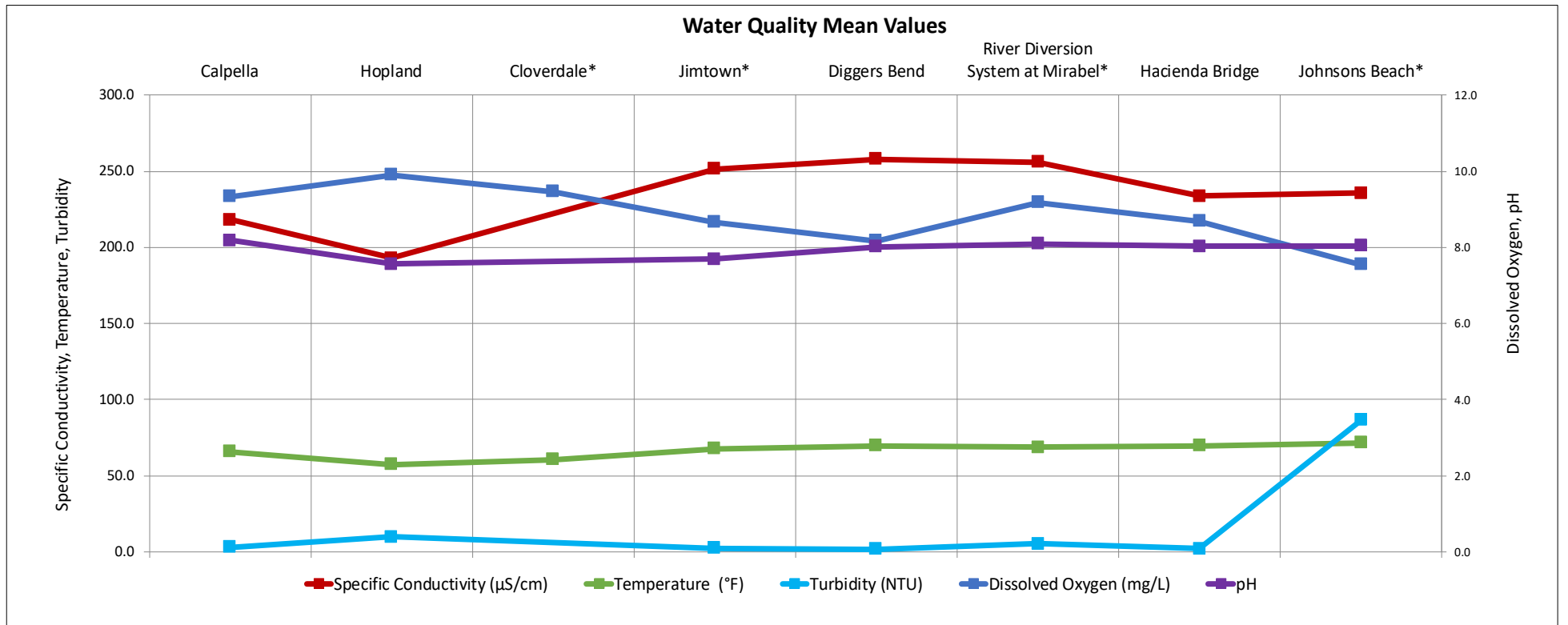
Lake Mendocino Dam - Vertical Turbidity Profile - 2024



Russian River Flows (August 23, 2024 - August 29, 2024)

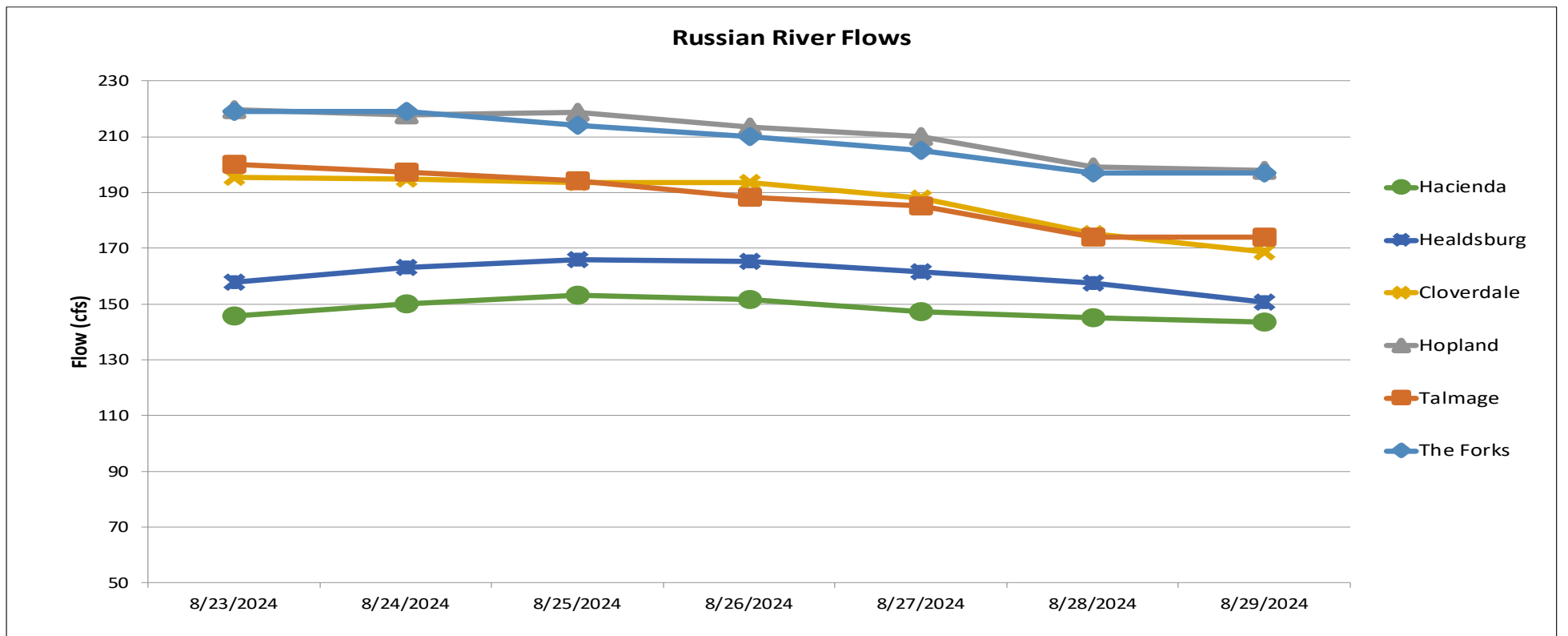
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463000	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	62.1	54.9	57.6	64.2	66.2	66.7	65.8	70.1
	Max	70.7	60.3	65.1	72.0	74.1	71.2	74.1	74.3
	Mean	65.6	57.4	60.6	67.6	69.7	68.5	69.6	71.4
Specific Conductivity (µS/cm)	Min	214.0	191.0		249.0	256.0	238.6	231.0	135.4
	Max	223.0	195.0		257.0	261.0	276.8	237.0	249.6
	Mean	218.4	193.0		251.4	258.1	256.2	233.7	235.7
Dissolved Oxygen (mg/L)	Min	8.3	8.9	8.7	7.0	7.2	8.3	6.8	4.7
	Max	11.0	11.2	10.4	11.0	9.2	10.1	9.5	8.2
	Mean	9.3	9.9	9.5	8.7	8.2	9.2	8.7	7.5
Dissolved Oxygen (% Saturation)	Min	91.7	87.3	89.2	75.7	79.5	91.8	73.9	54.2
	Max	117.0	111.5	109.2	121.9	106.5	113.1	109.2	93.6
	Mean	100.0	96.4	95.7	95.0	91.6	101.6	97.6	86.2
pH	Min	8.0	7.4		7.4	7.8	7.9	7.4	7.8
	Max	8.5	7.9		8.1	8.2	8.2	8.5	8.1
	Mean	8.2	7.6		7.7	8.0	8.1	8.0	8.0
Turbidity (NTU)	Min	1.7	7.5		1.3	1.0	3.1	1.1	7.1
	Max	5.2	12.1		4.0	2.4	52.1	3.4	1484.1
	Mean	2.8	9.7		2.2	1.6	5.1	2.0	86.3

*Station operated seasonally



Gage	24-hr Average Flow (cfs)						
	Aug 23, 2024	Aug 24, 2024	Aug 25, 2024	Aug 26, 2024	Aug 27, 2024	Aug 28, 2024	Aug 29, 2024
The Forks*	219	219	214	210	205	197	197
Talmage USGS 11462080	200	197	194	188	185	174	174
Hopland USGS 11462500	220	218	219	214	210	199	198
Cloverdale USGS 11463000	195	195	194	194	188	175	169
Healdsburg USGS 11464000	158	163	166	165	162	157	151
Hacienda USGS 11467000	146	150	153	152	147	145	143

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

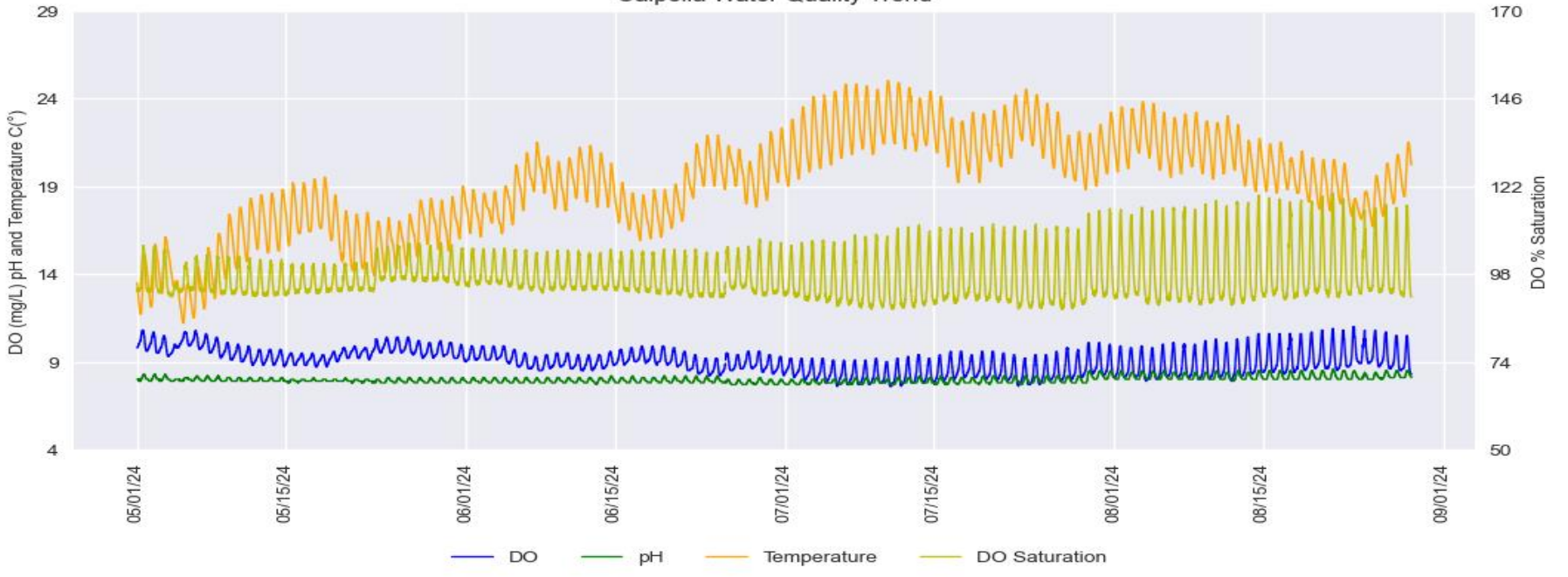


Russian River Water Quality May 1, 2024 – August 29, 2024

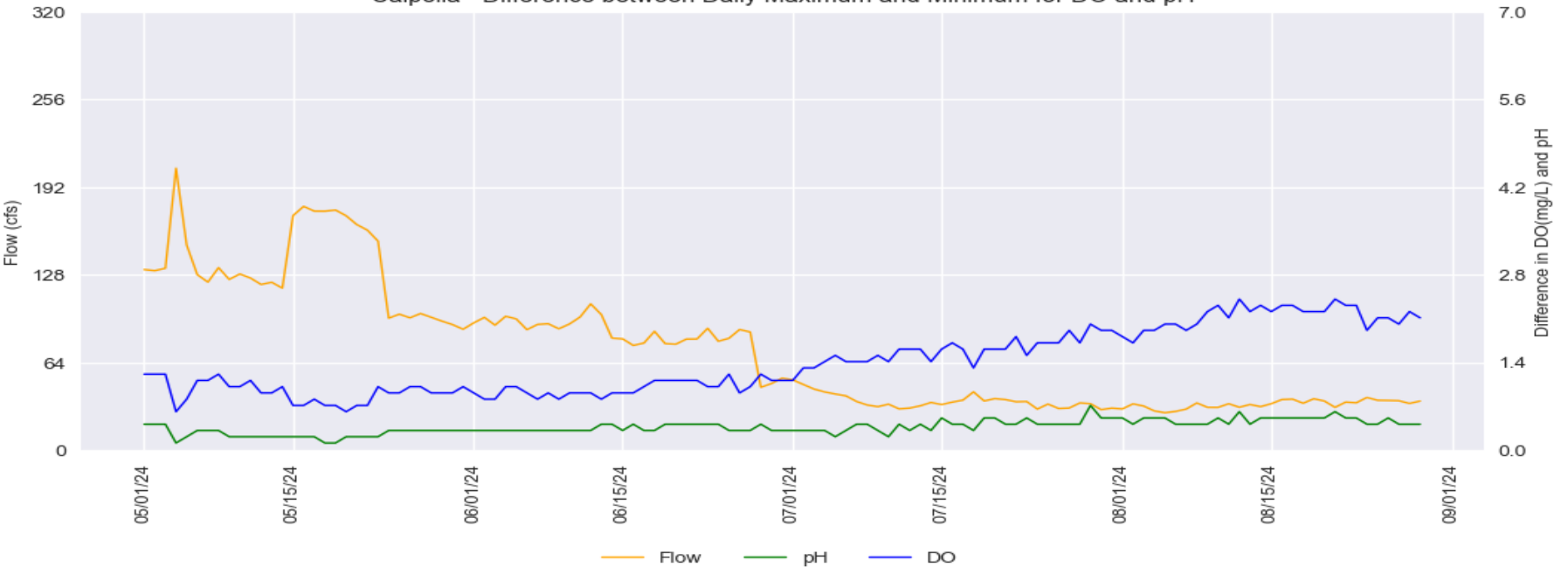
Provisional Data Subject to Revision

Calpella

Calpella Water Quality Trend

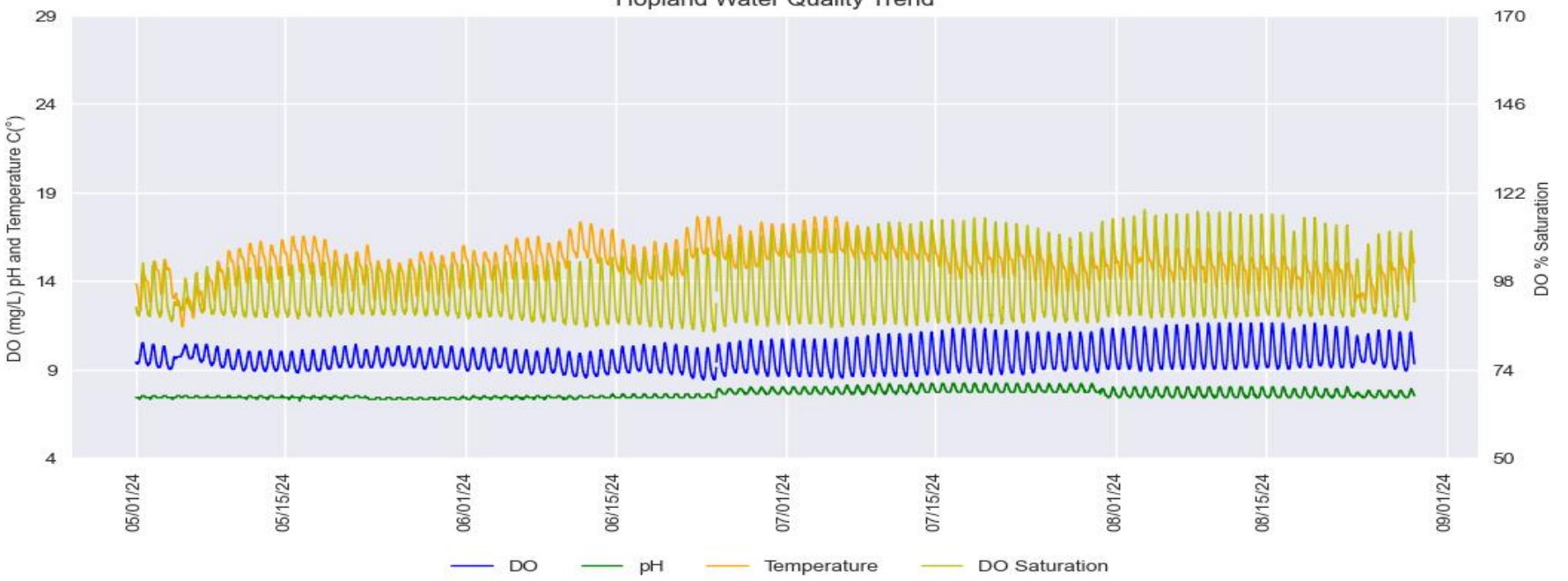


Calpella - Difference between Daily Maximum and Minimum for DO and pH

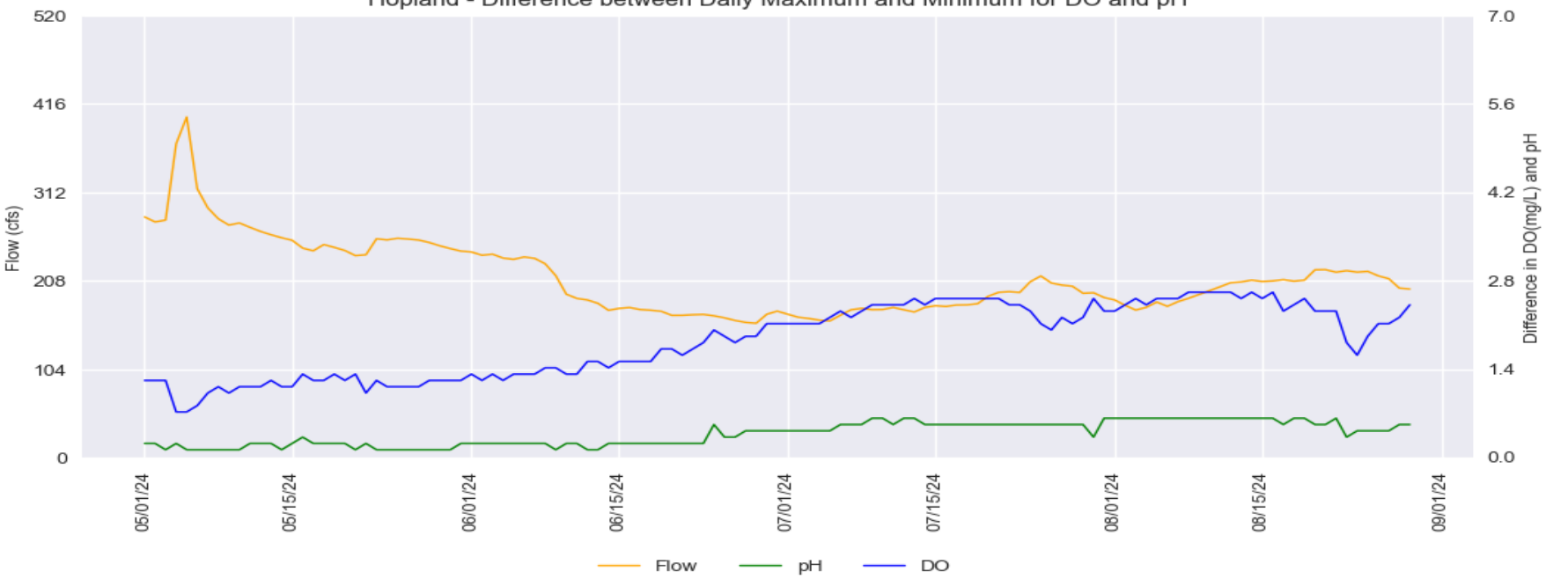


Hopland

Hopland Water Quality Trend



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

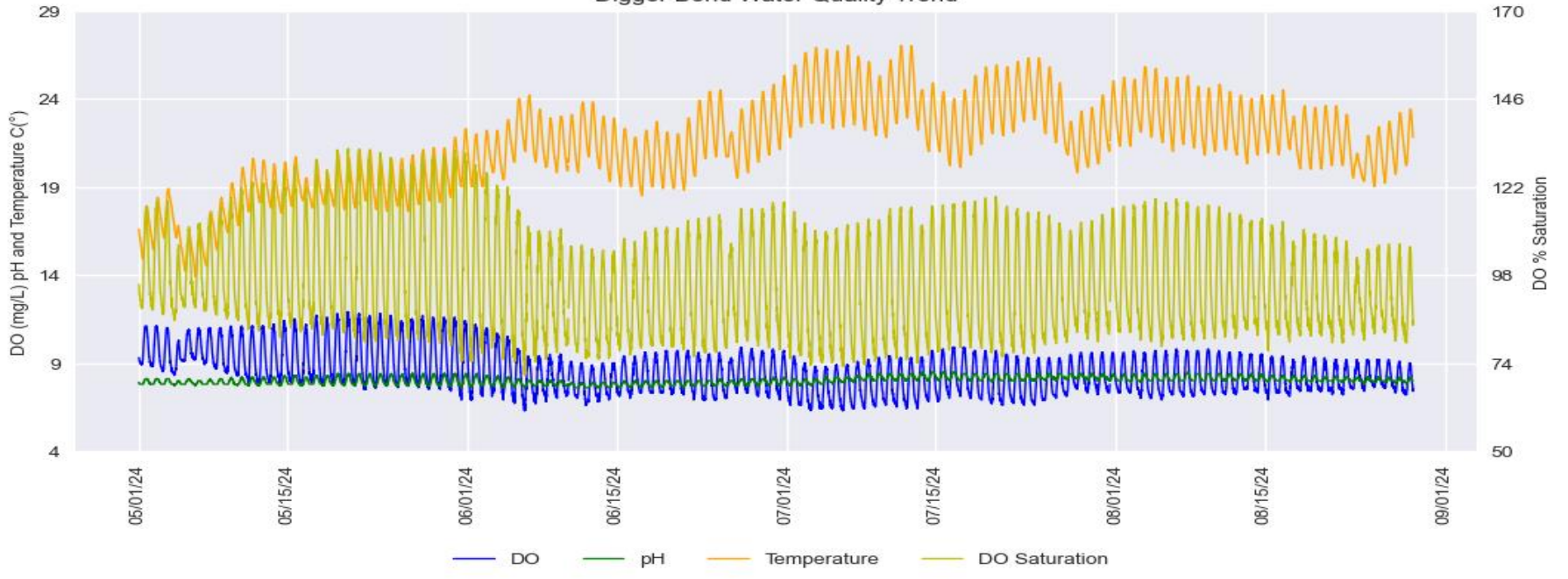


Russian River Water Quality May 1, 2024 – August 29, 2024

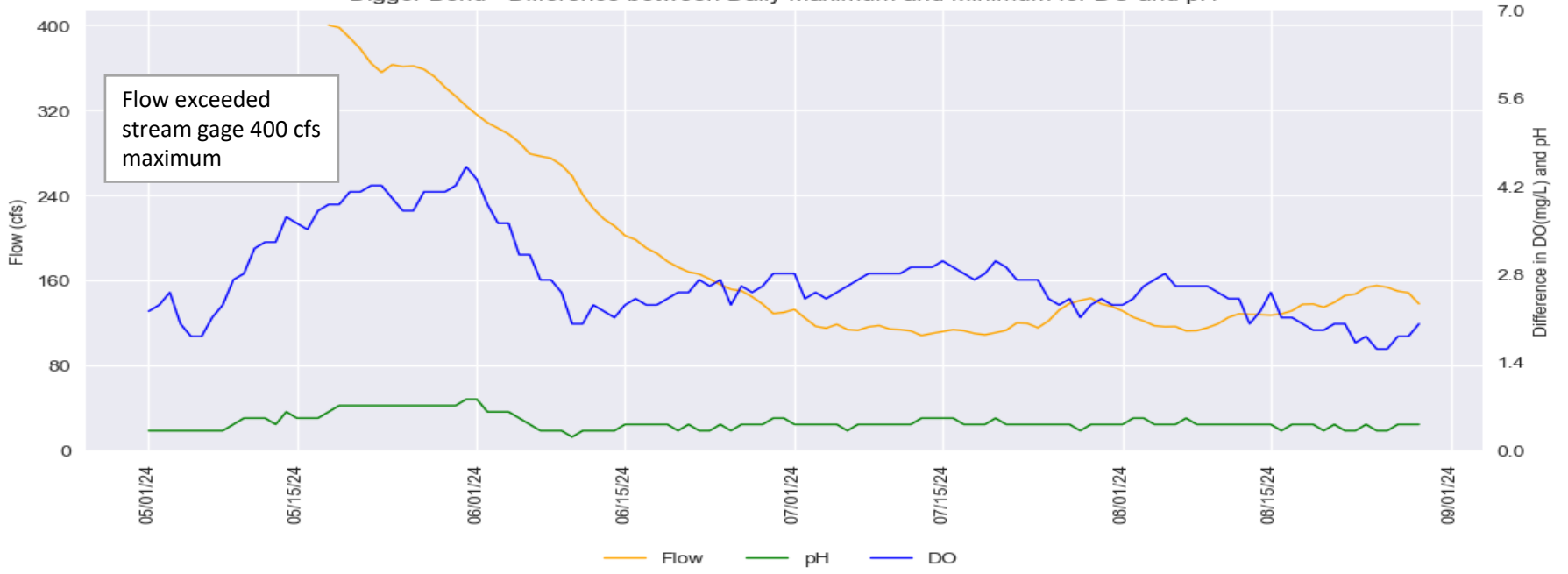
Provisional Data Subject to Revision

Digger Bend

Digger Bend Water Quality Trend

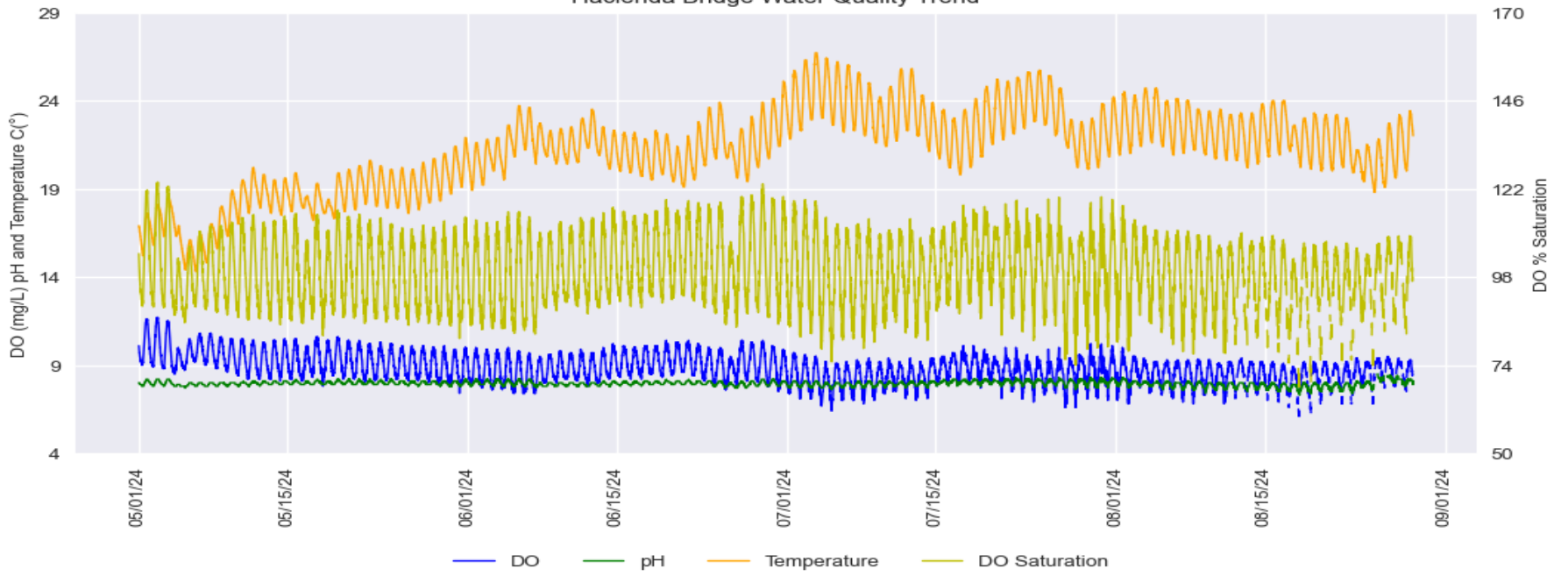


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH

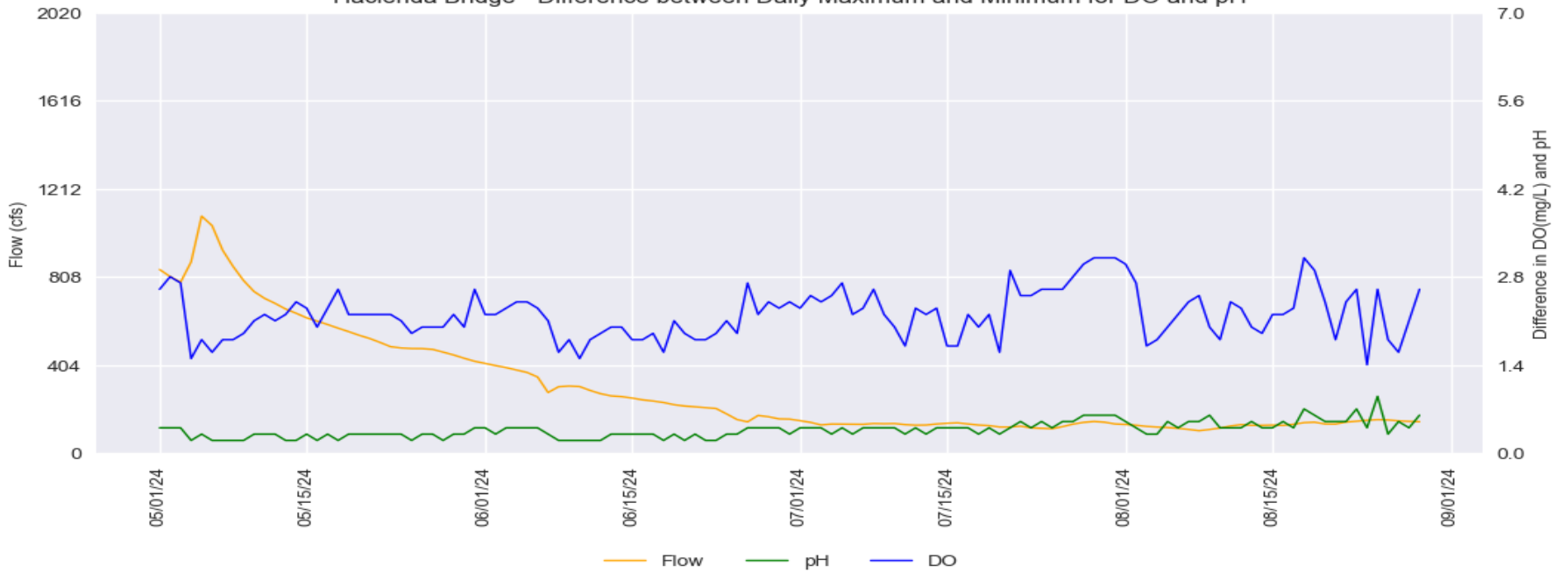


Hacienda Bridge

Hacienda Bridge Water Quality Trend



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

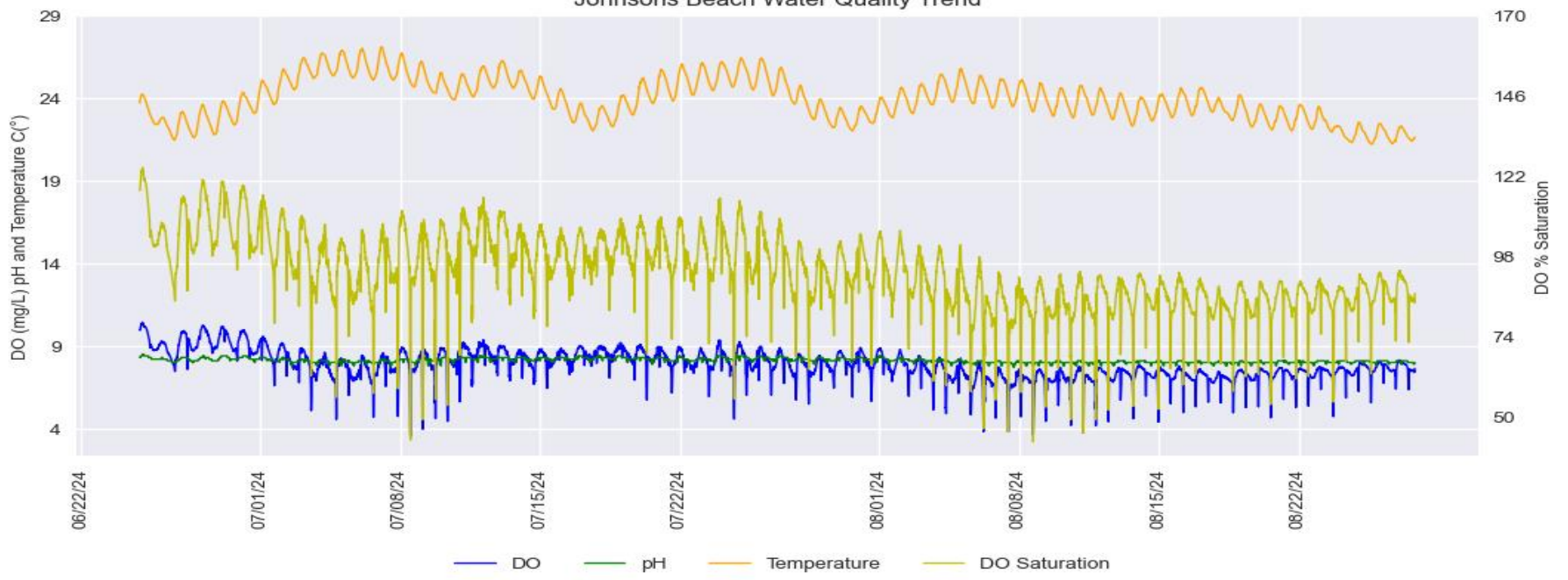


Russian River Water Quality June 24, 2024 – August 29, 2024

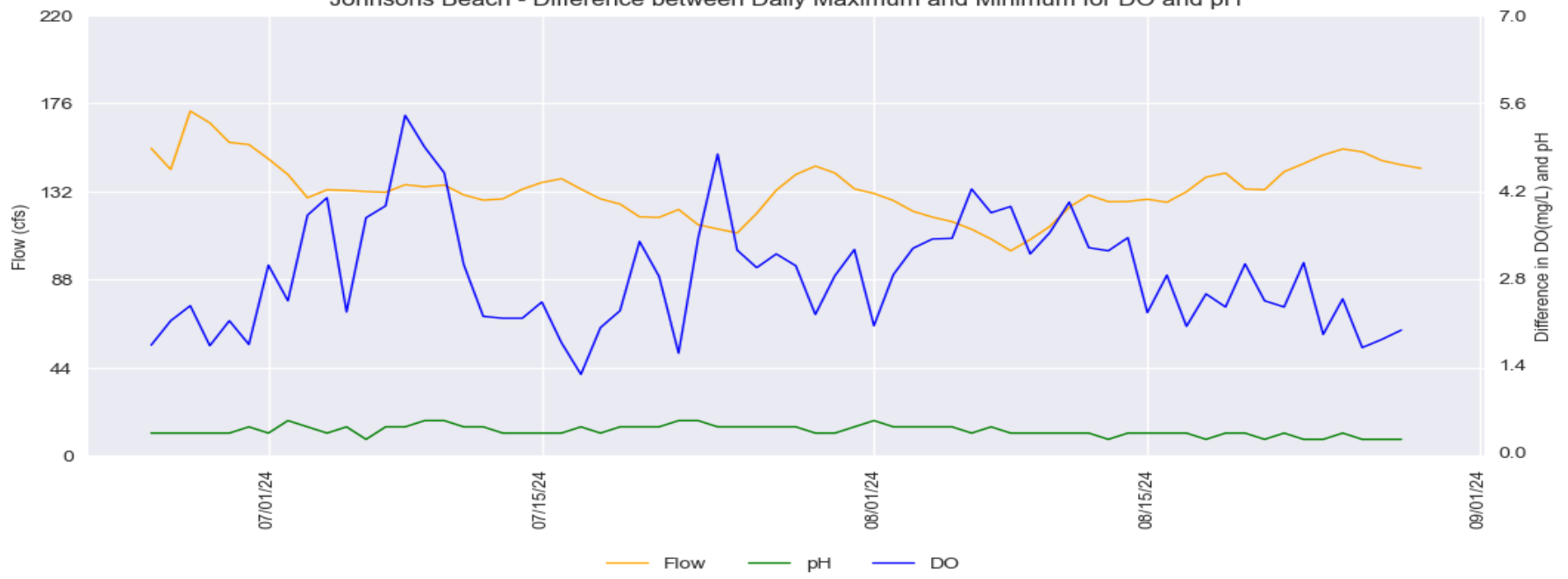
Provisional Data Subject to Revision

Johnsons Beach

Johnsons Beach Water Quality Trend

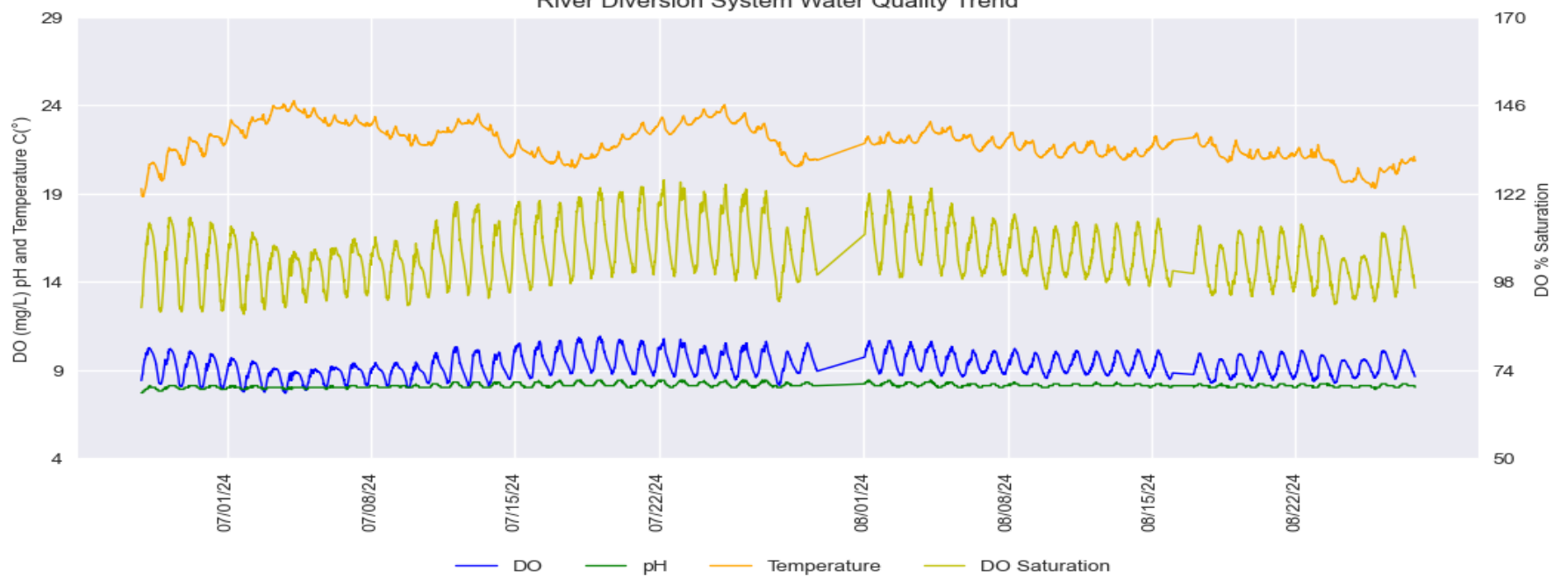


Johnsons Beach - Difference between Daily Maximum and Minimum for DO and pH

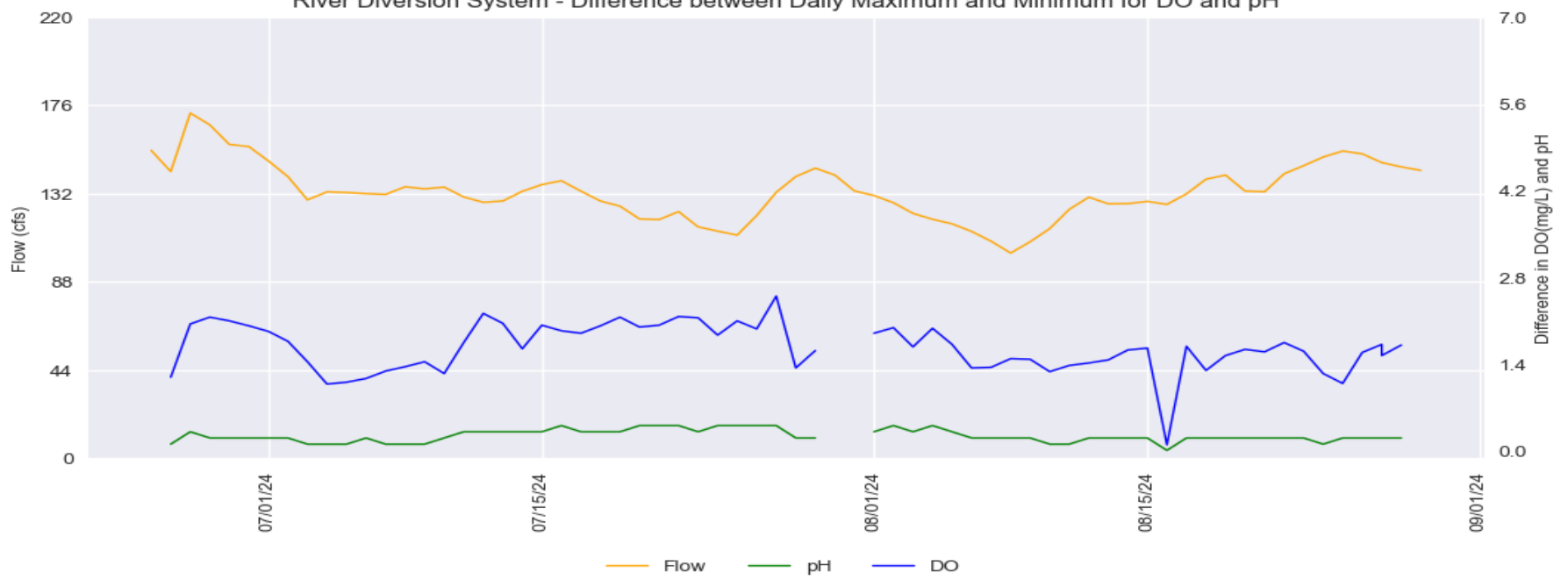


River Diversion System at Mirabel

River Diversion System Water Quality Trend



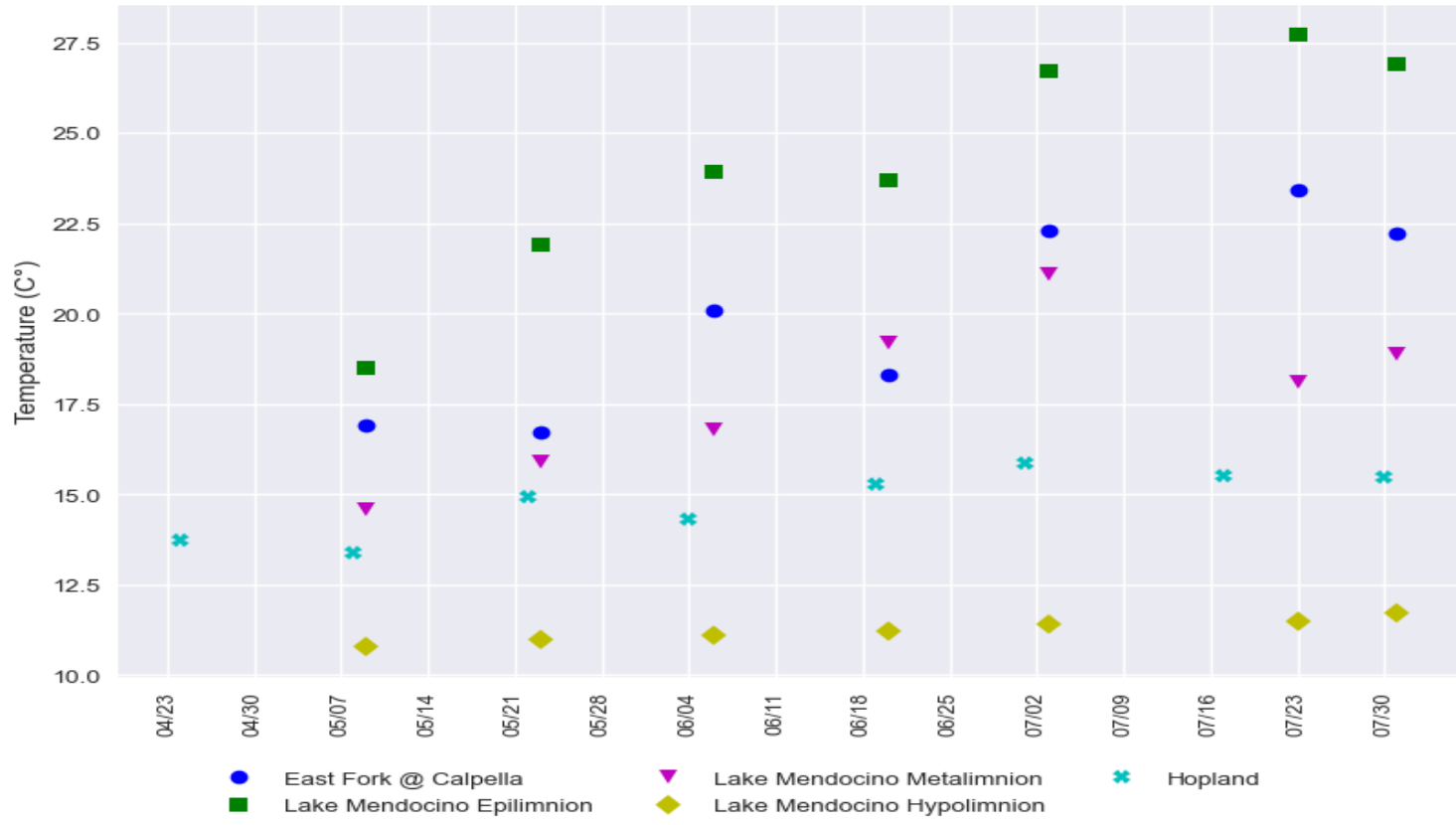
River Diversion System - Difference between Daily Maximum and Minimum for DO and pH



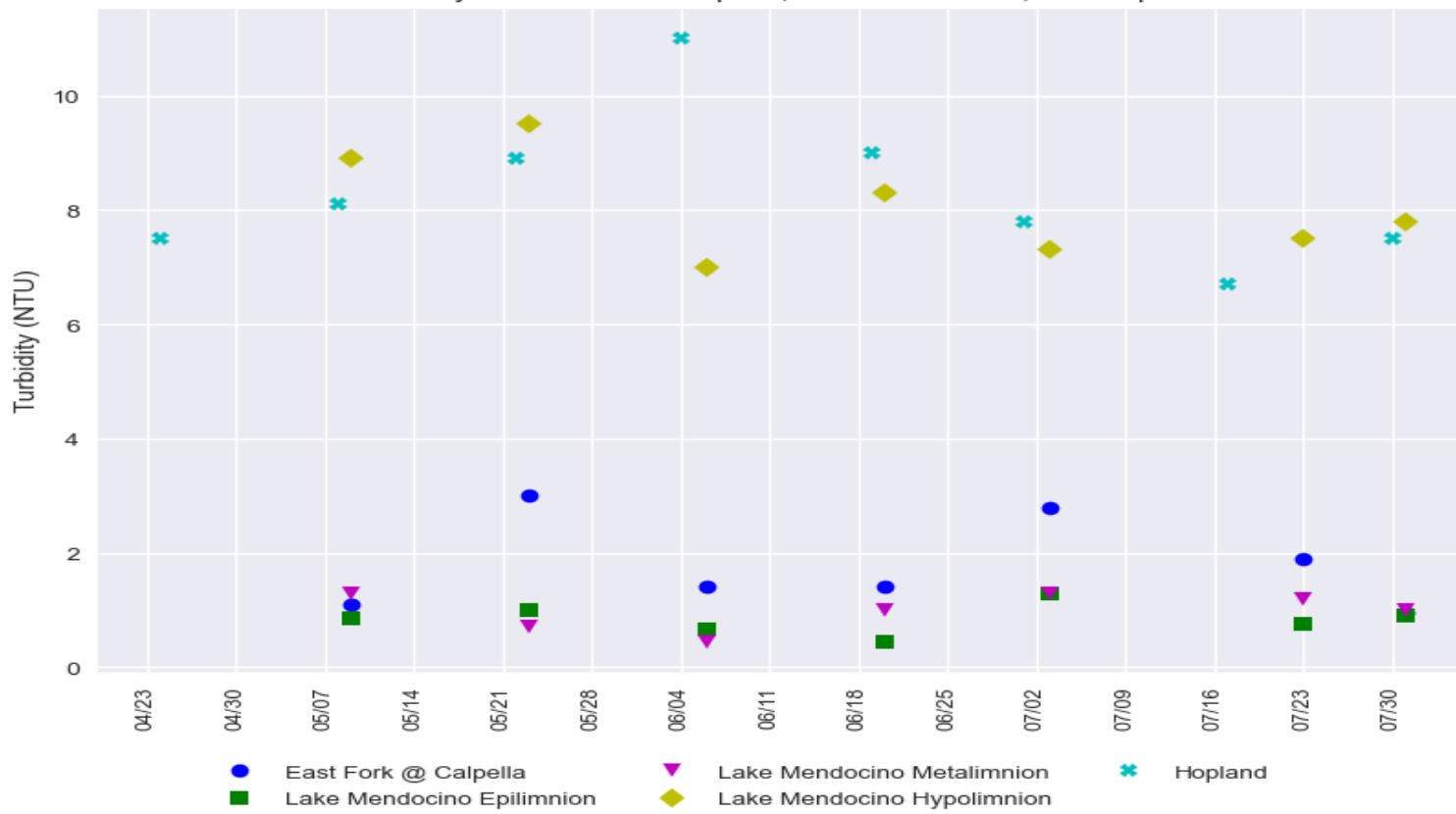
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision

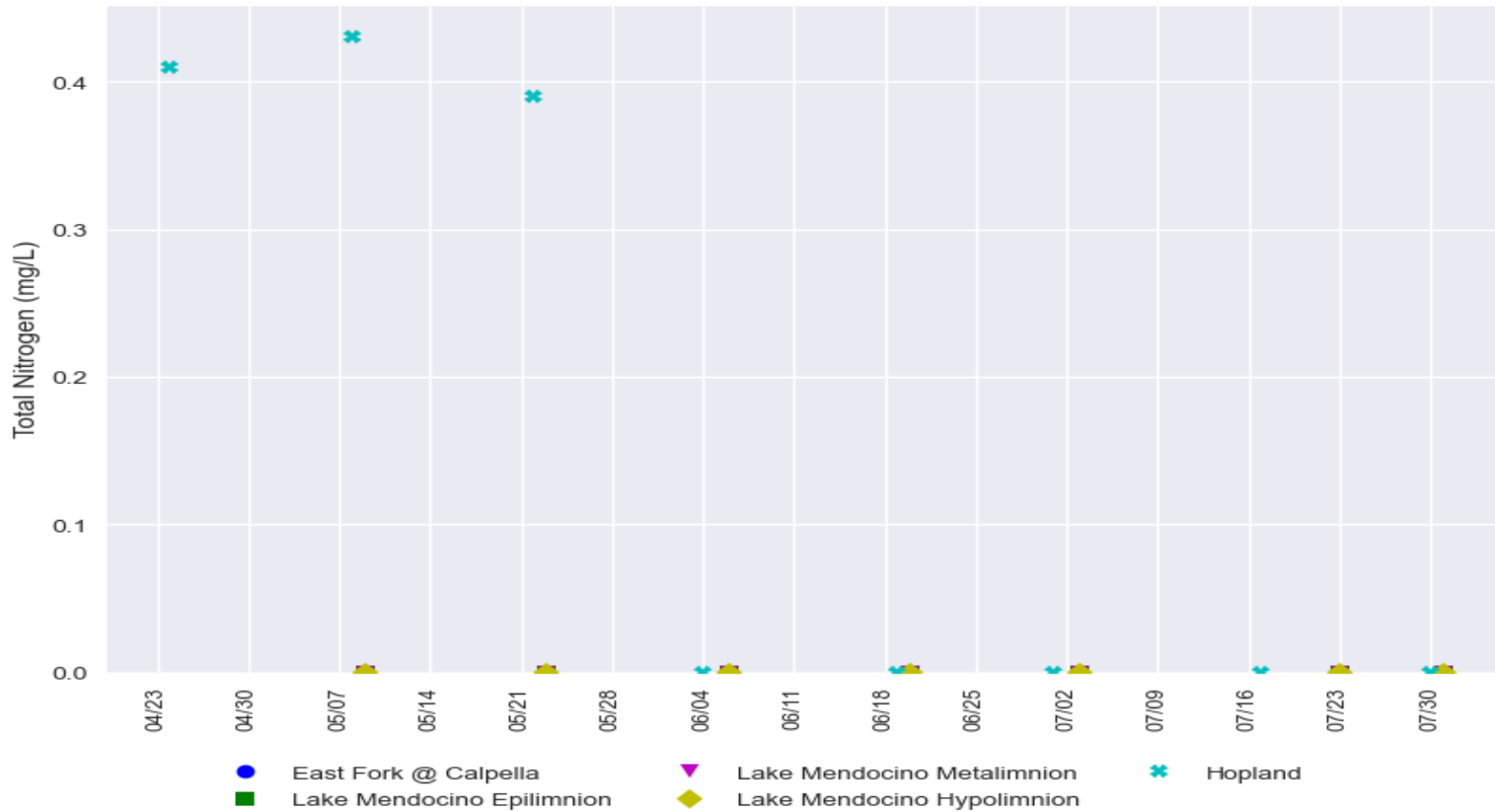
Temperature - East Fork at Calpella, Lake Mendocino, and Hopland



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



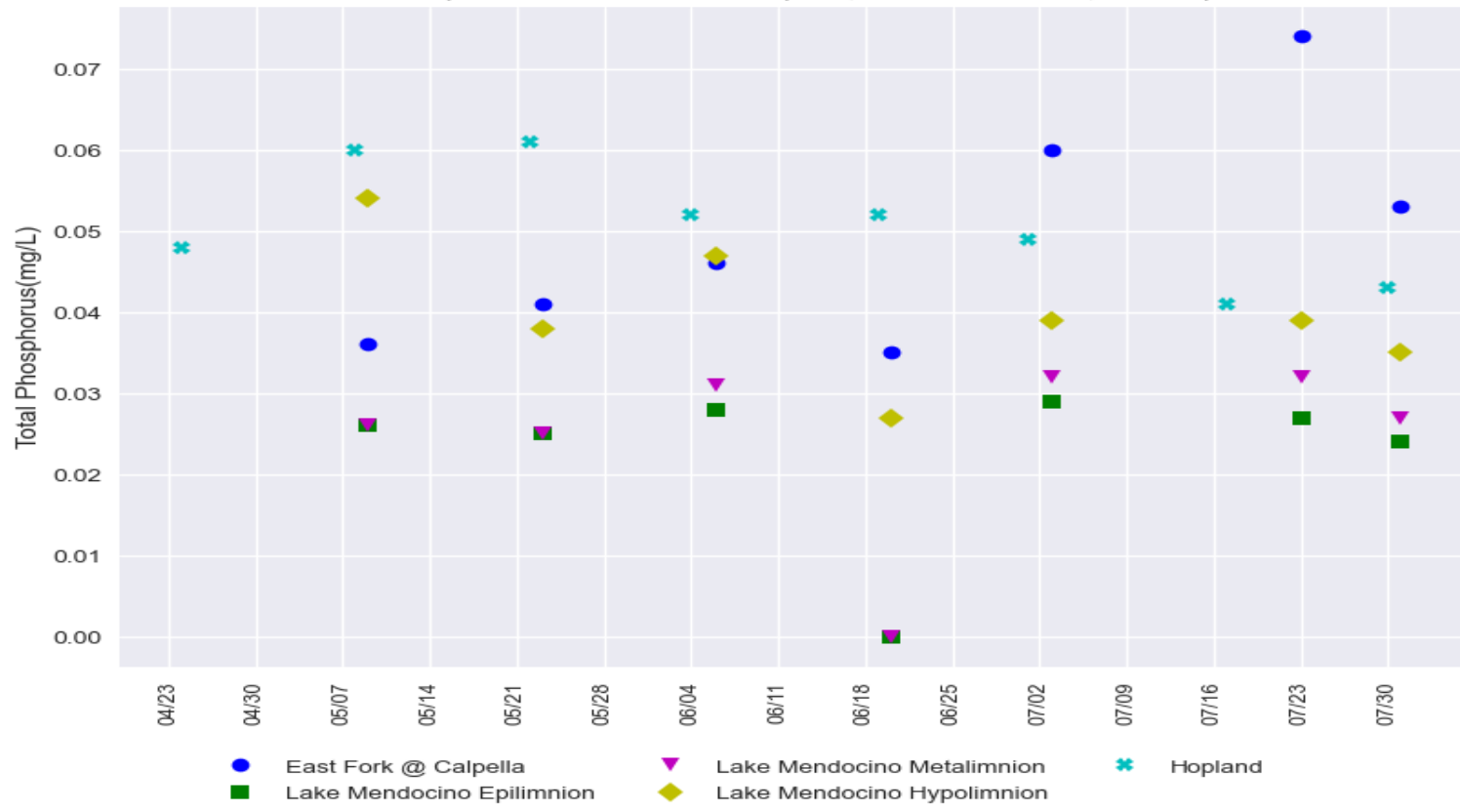
Total Nitrogen (mg/L) - East Fork at Calpella, Lake Mendocino, and Hopland



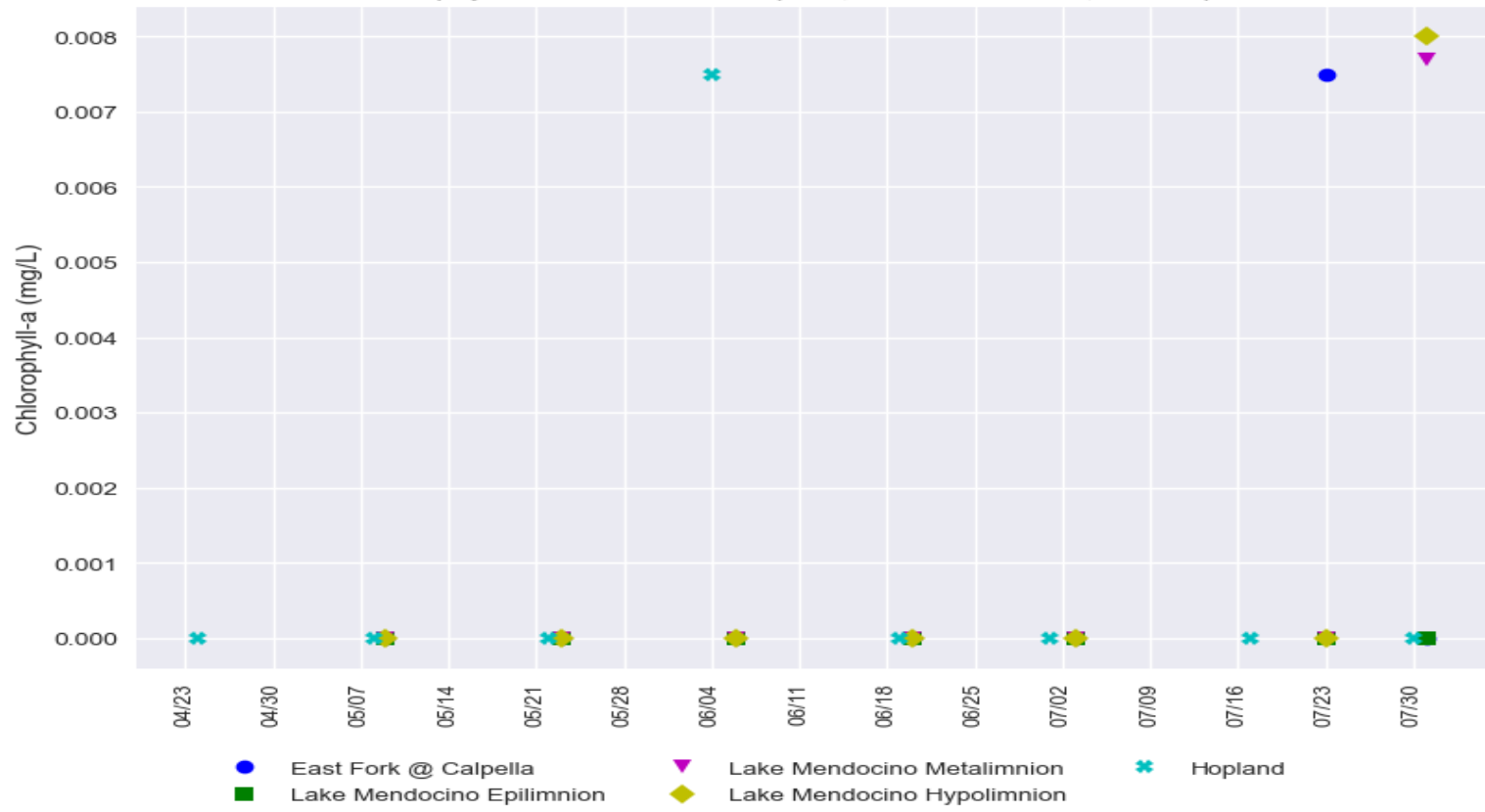
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision

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

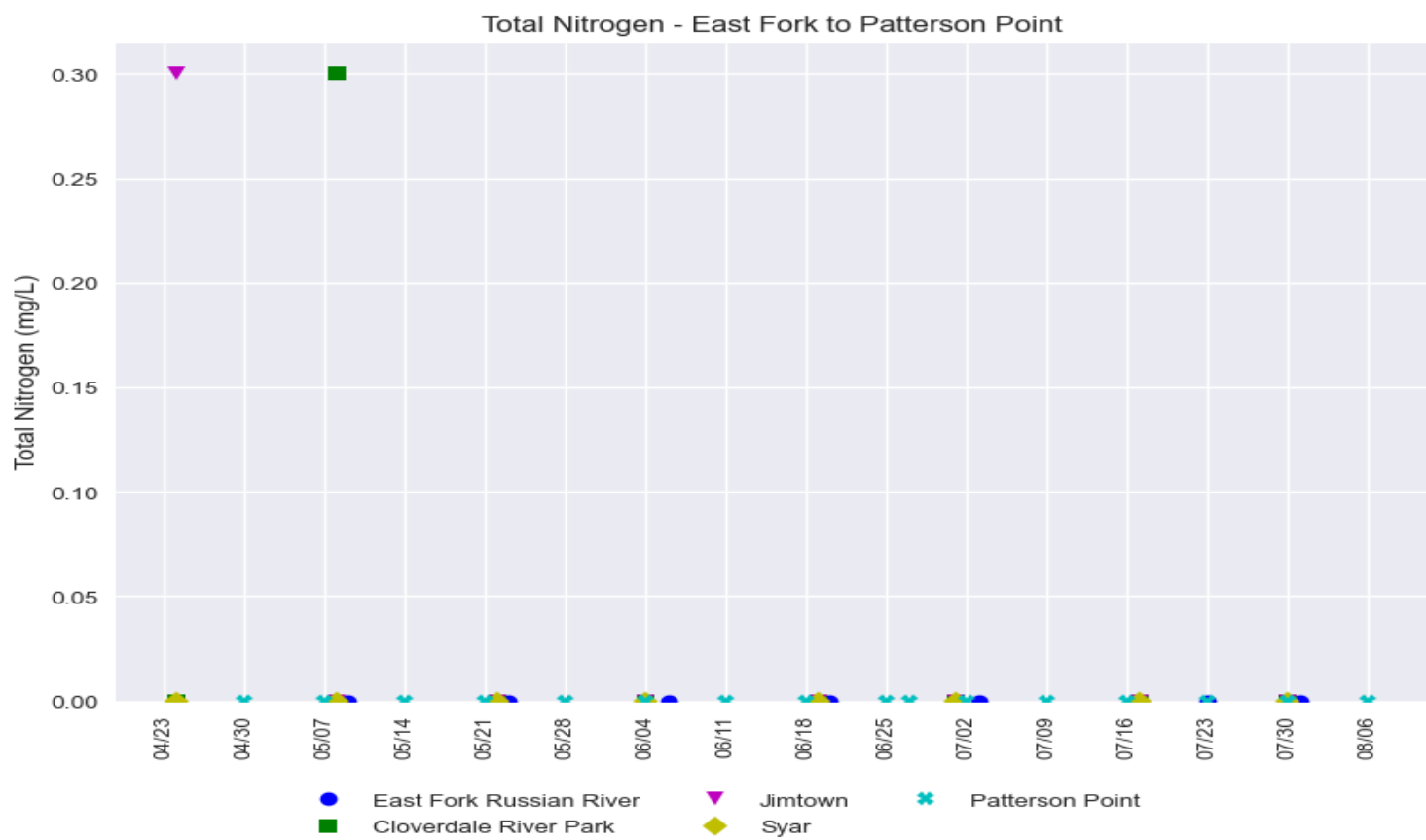
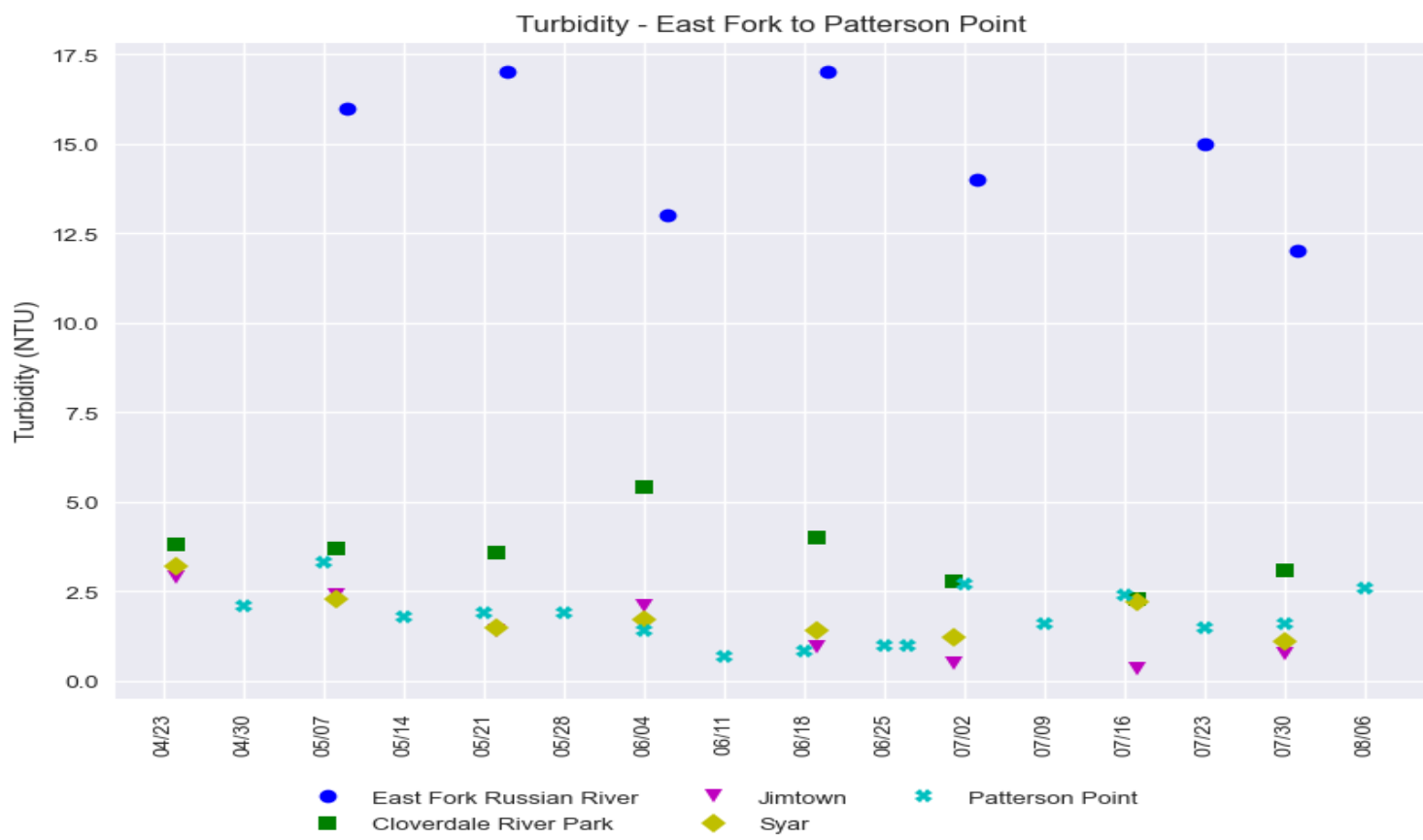
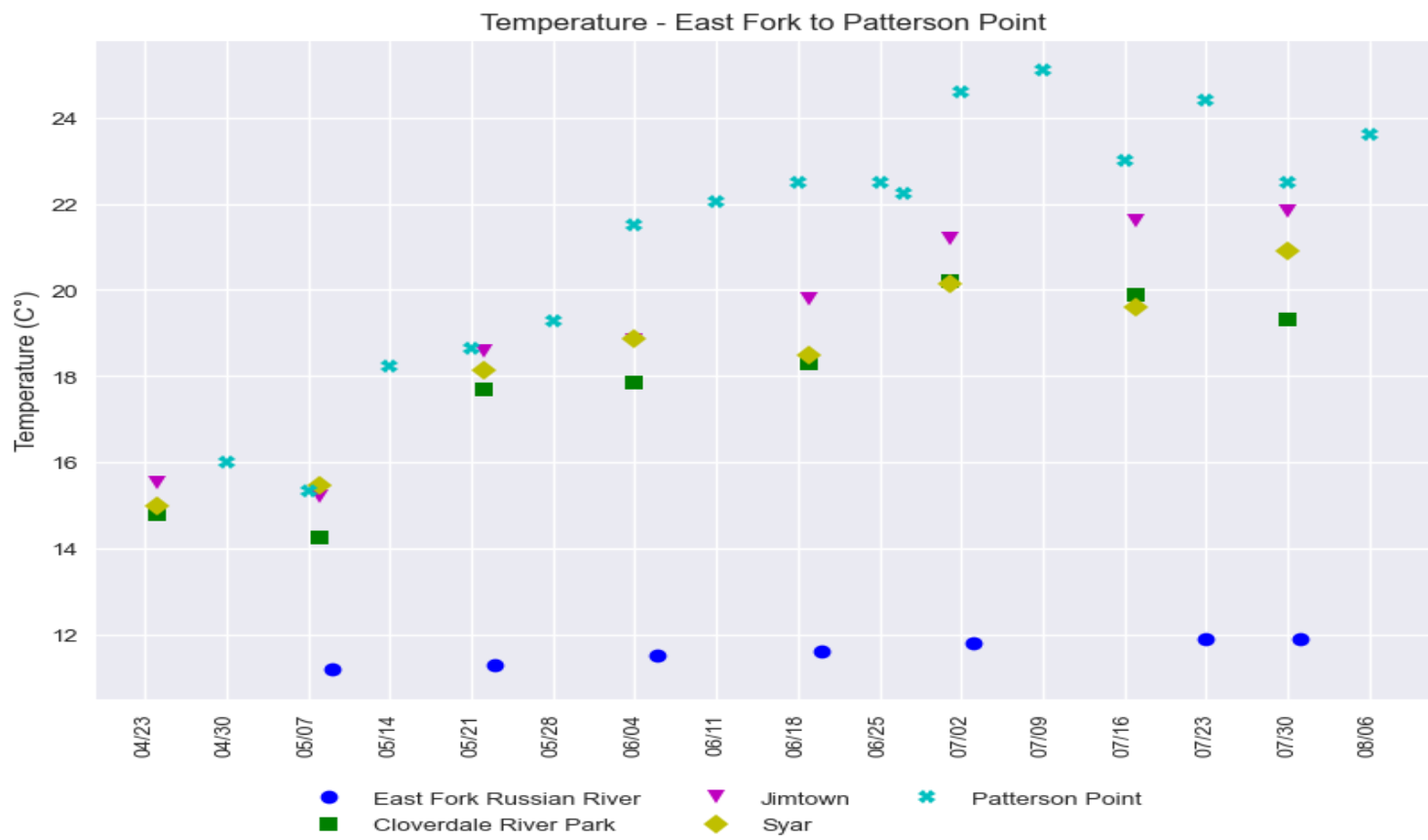


Chlorophyll-a - East Fork at Calpella, Lake Mendocino, and Hopland



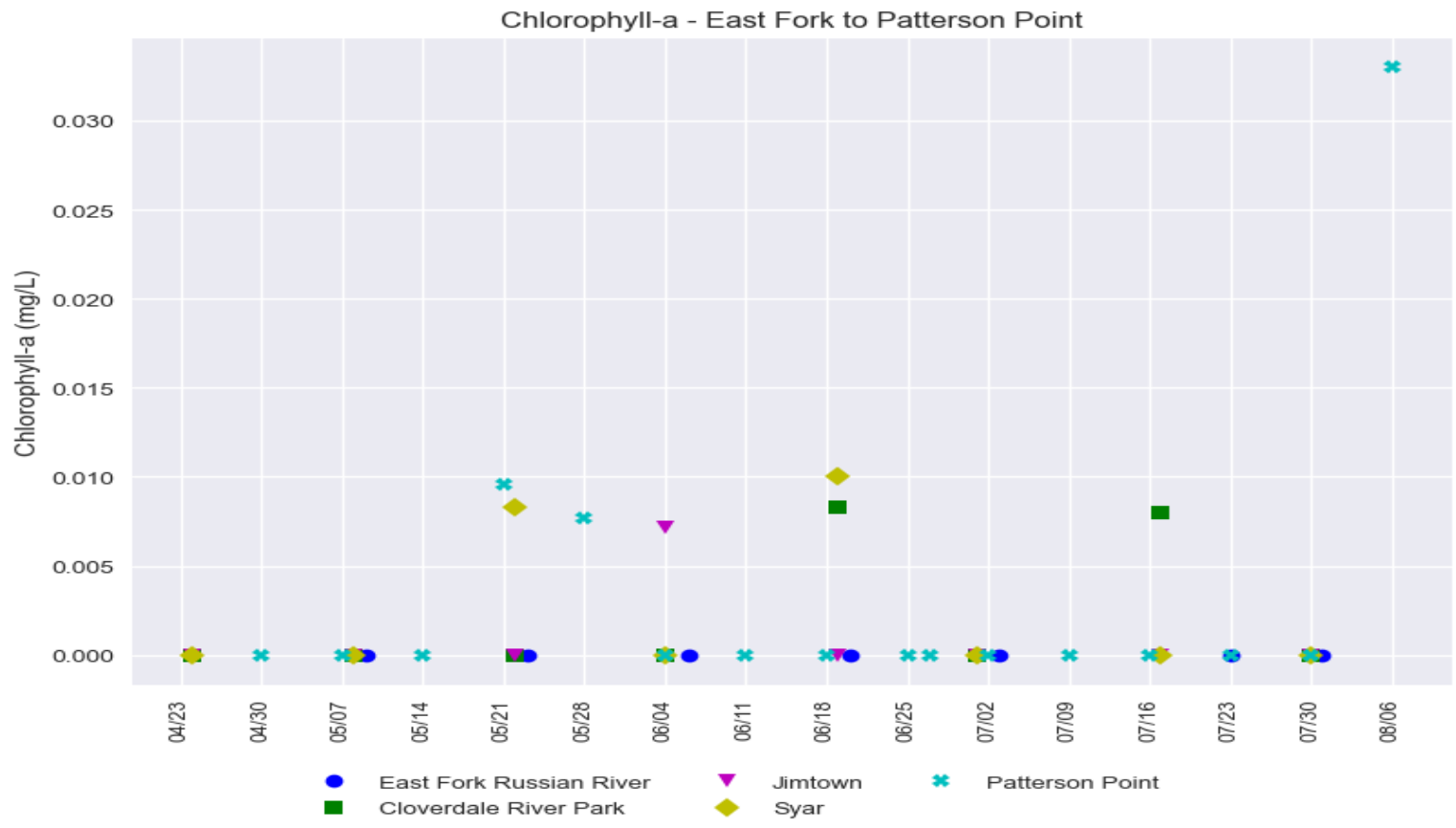
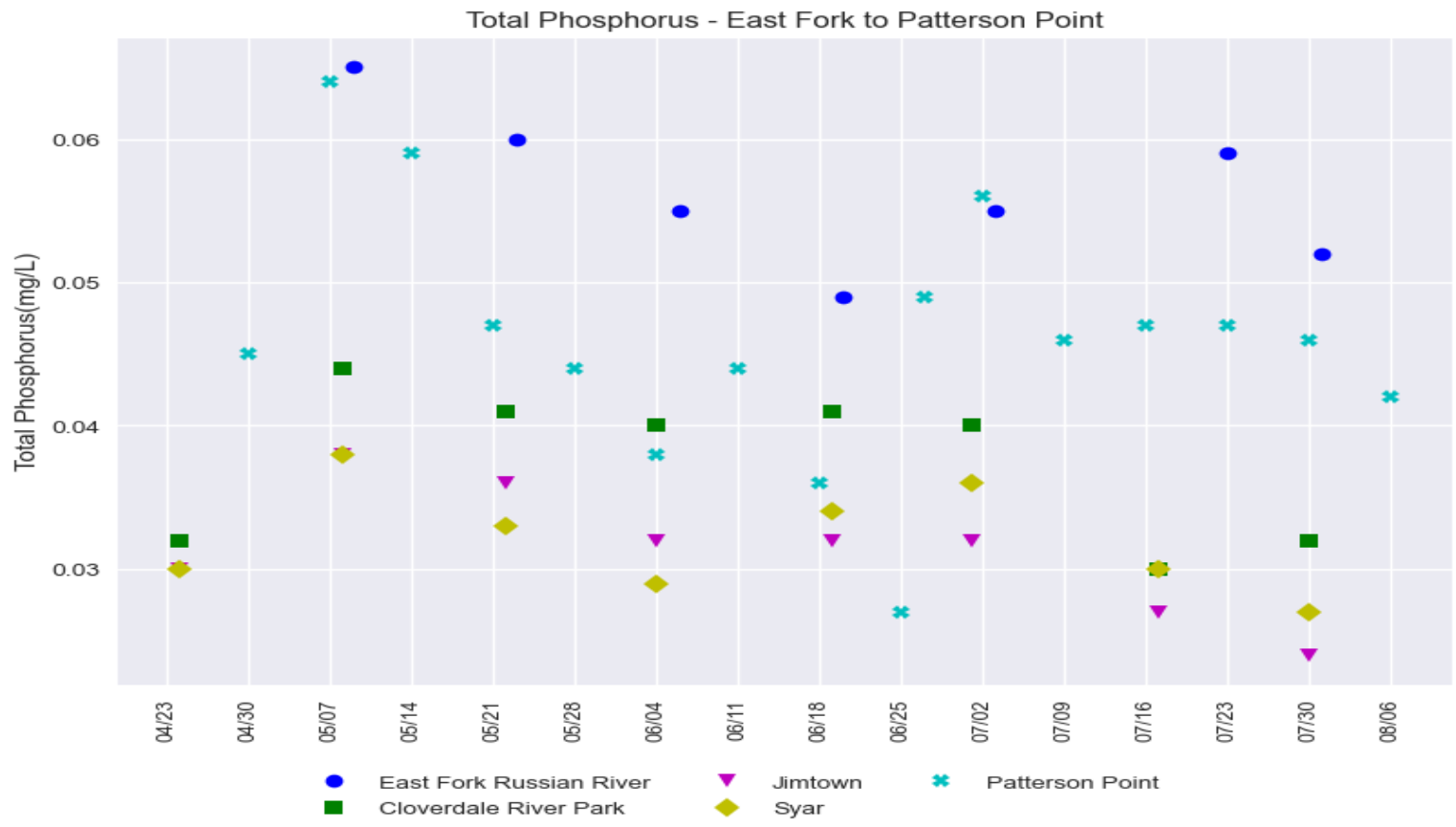
Russian River Water Quality Grab Samples

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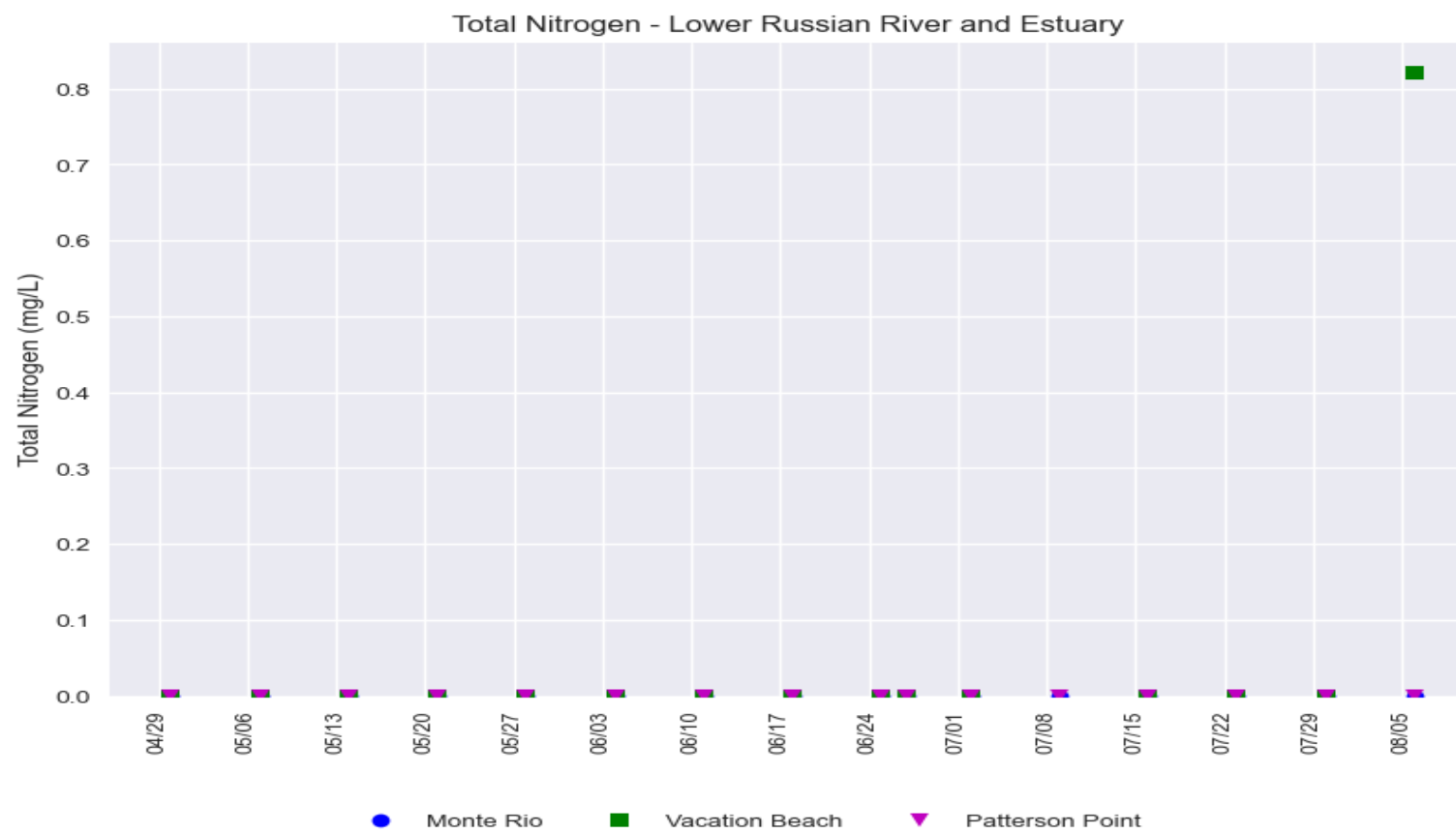
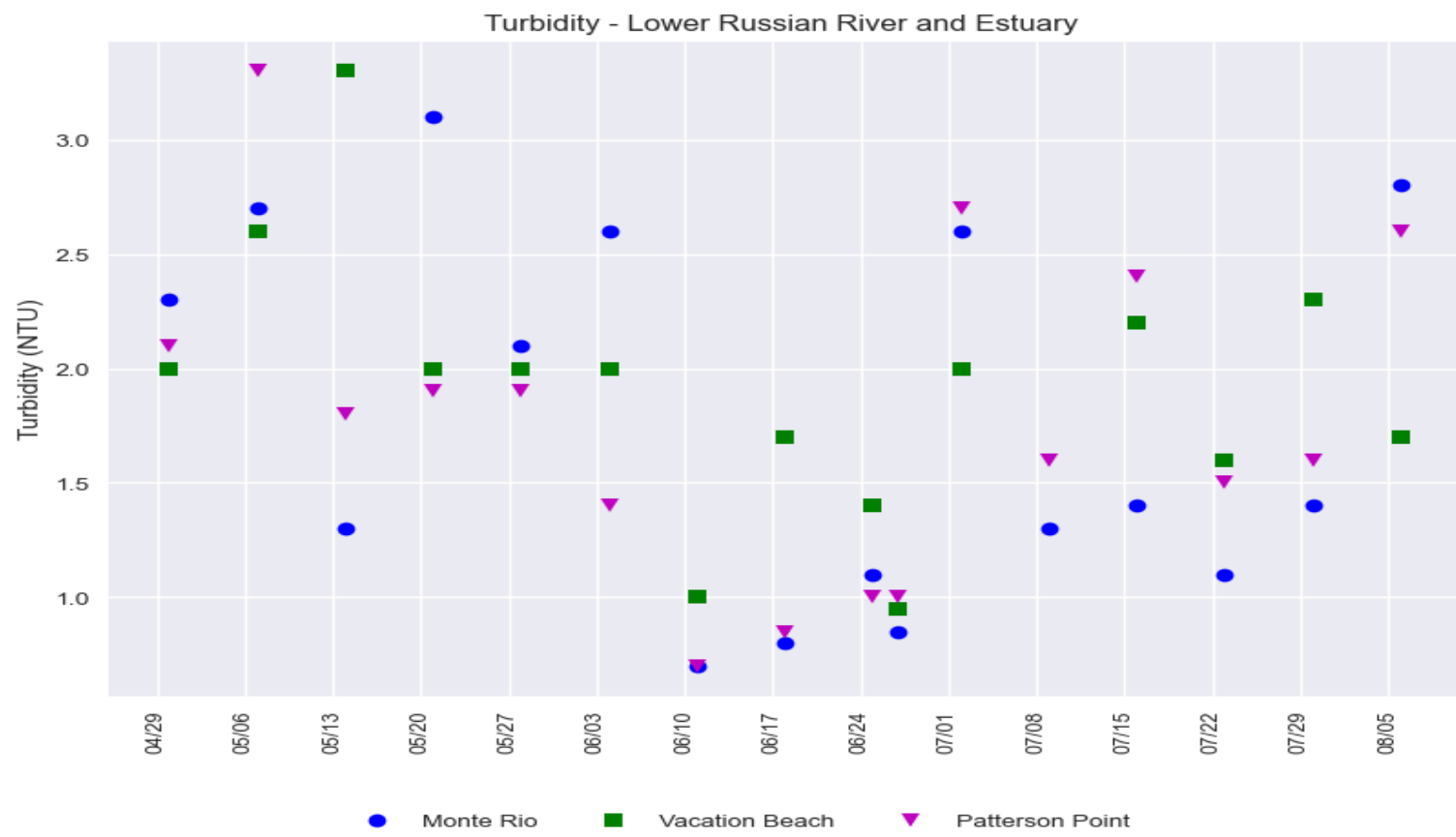
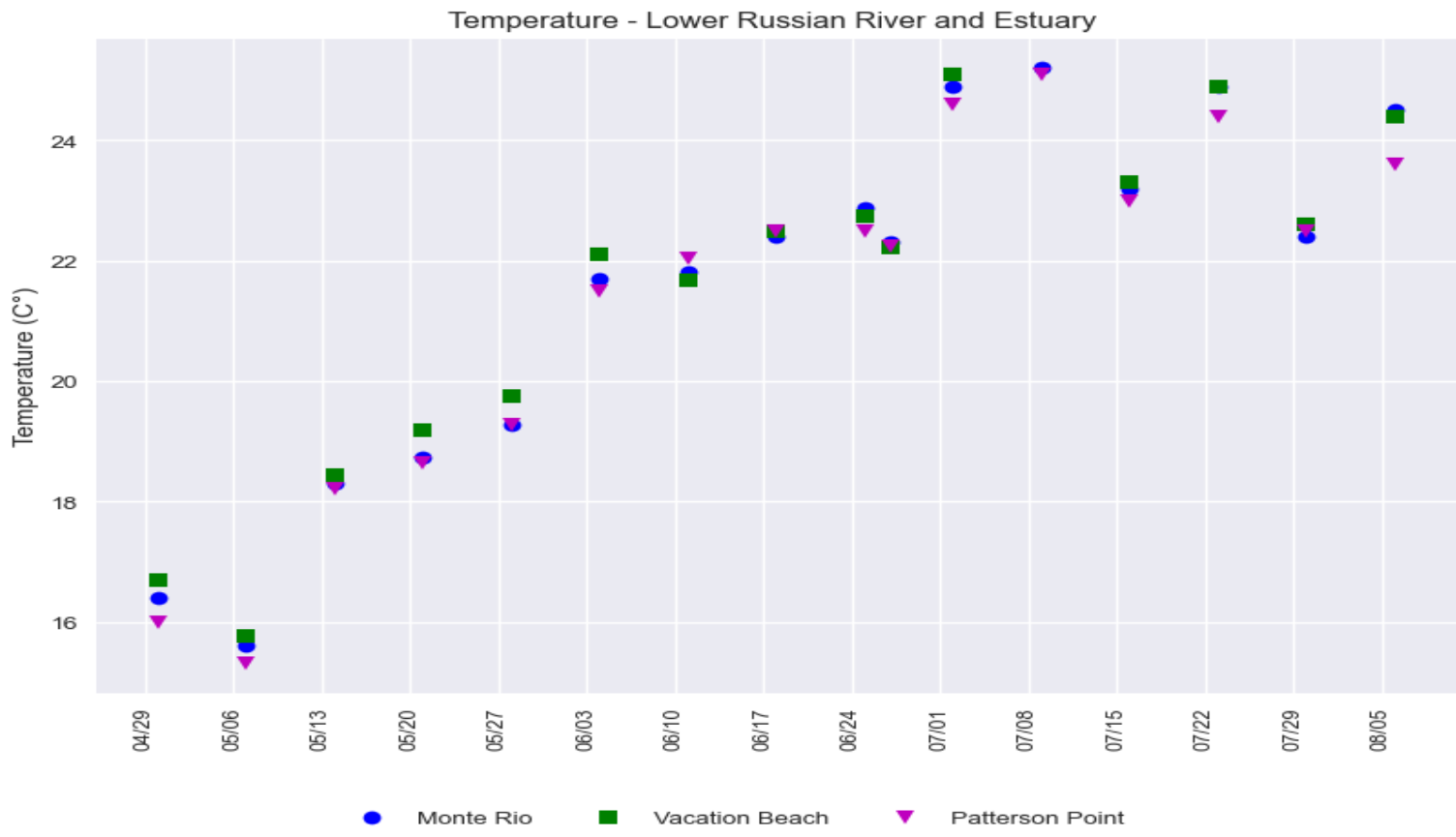
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



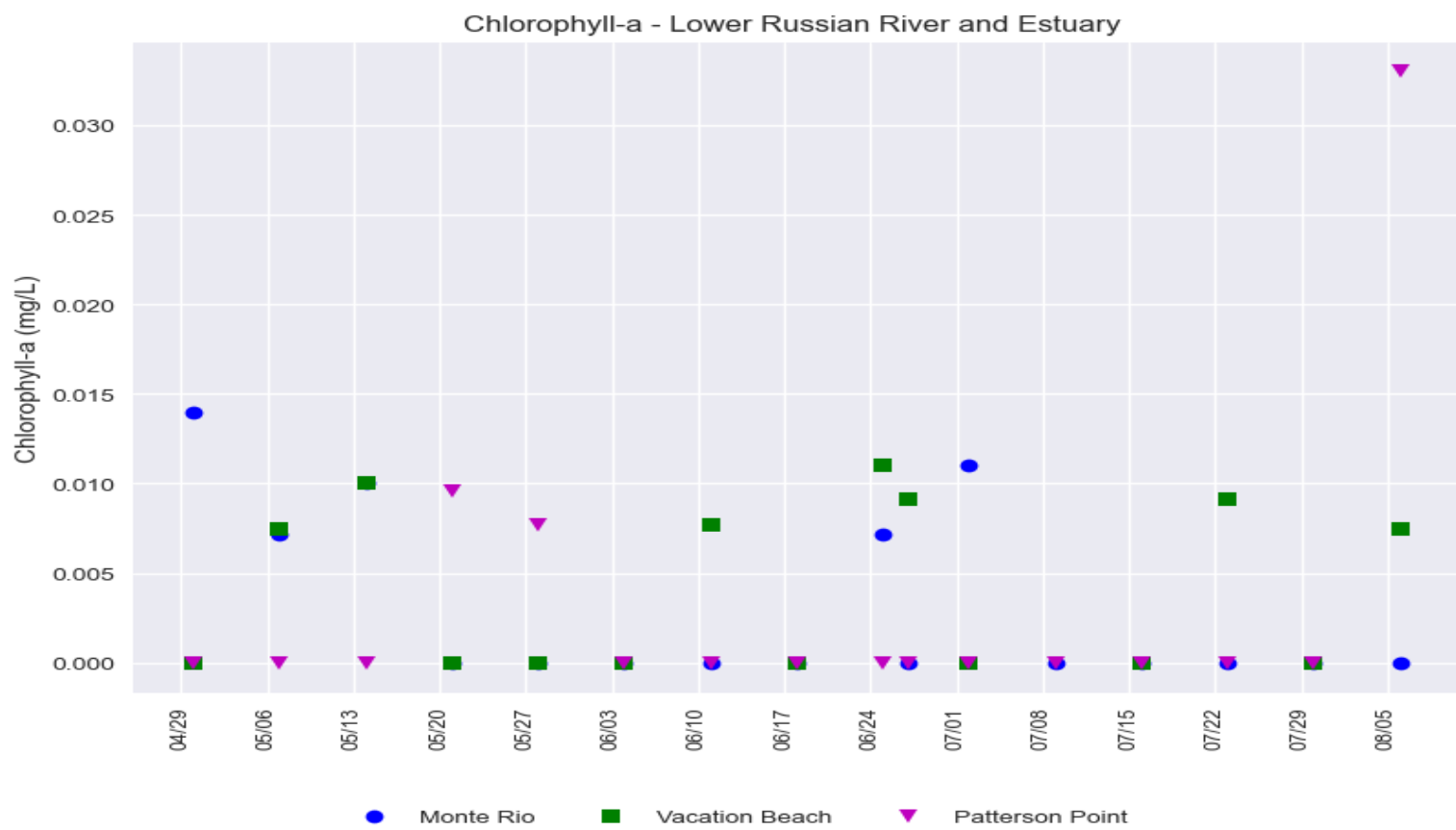
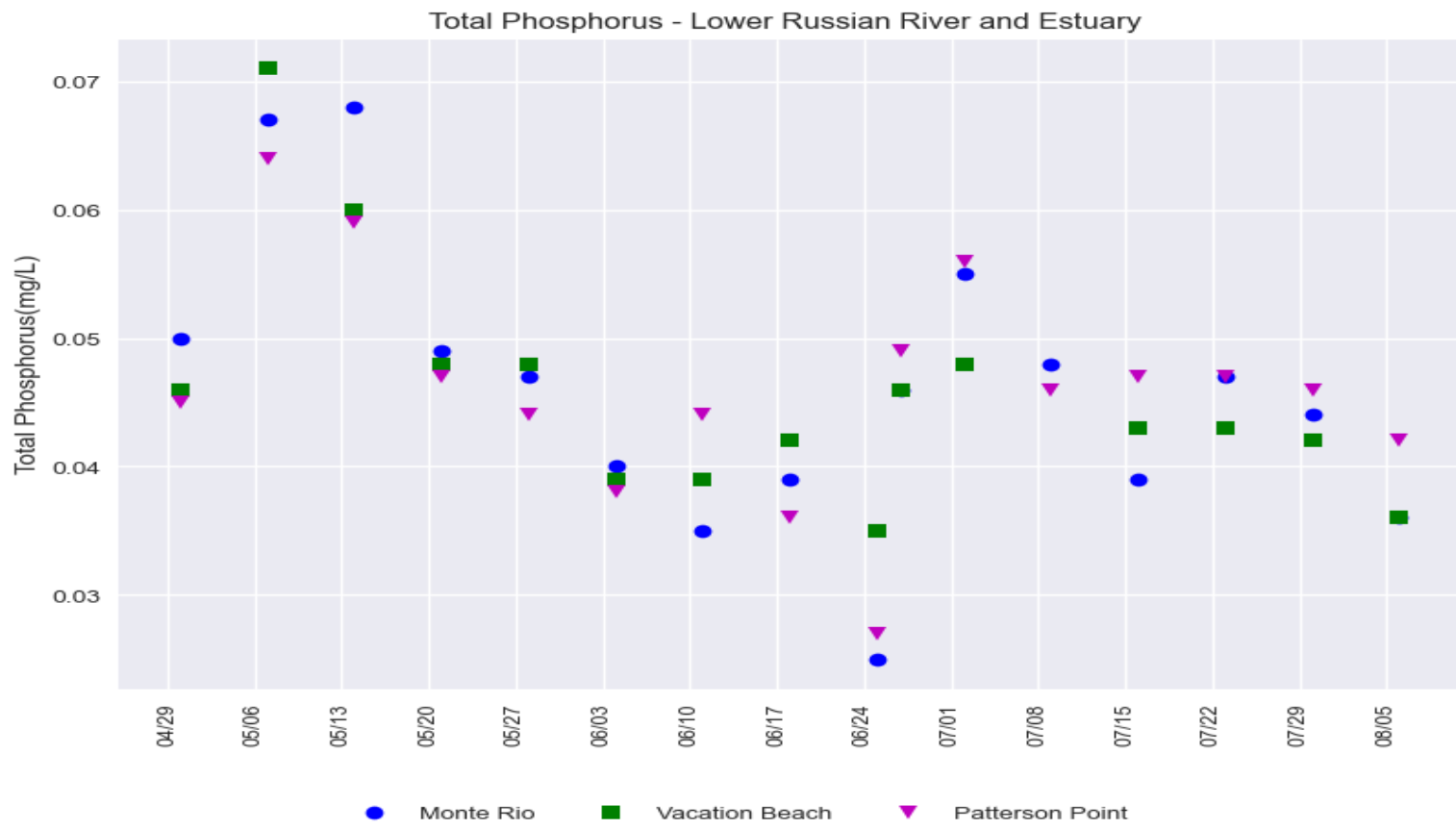
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



Russian River Water Quality Grab Samples (June 18 - August 6, 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	6/18/2024	816.4	920.8	1986.3
		6/25/2024	1782**	3076**	2282**
		6/27/2024	1607**	1722**	2382**
		7/2/2024	4352**	5794**	2613**
		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**
E. Coli MPN/100 mL	235	6/18/2024	25.6	27.5	25.6
		6/25/2024	39.3	62.4	14.8
		6/27/2024	44.1	56.3	34.5
		7/2/2024	101.2	105	11
		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
Enterococcus MPN/100 mL****	61	6/18/2024	12.1	23.8	14.5
		6/25/2024	34.1	96	27.9
		6/27/2024	16.9	16	19.3
		7/2/2024	34.1	238.2	24.6
		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

*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

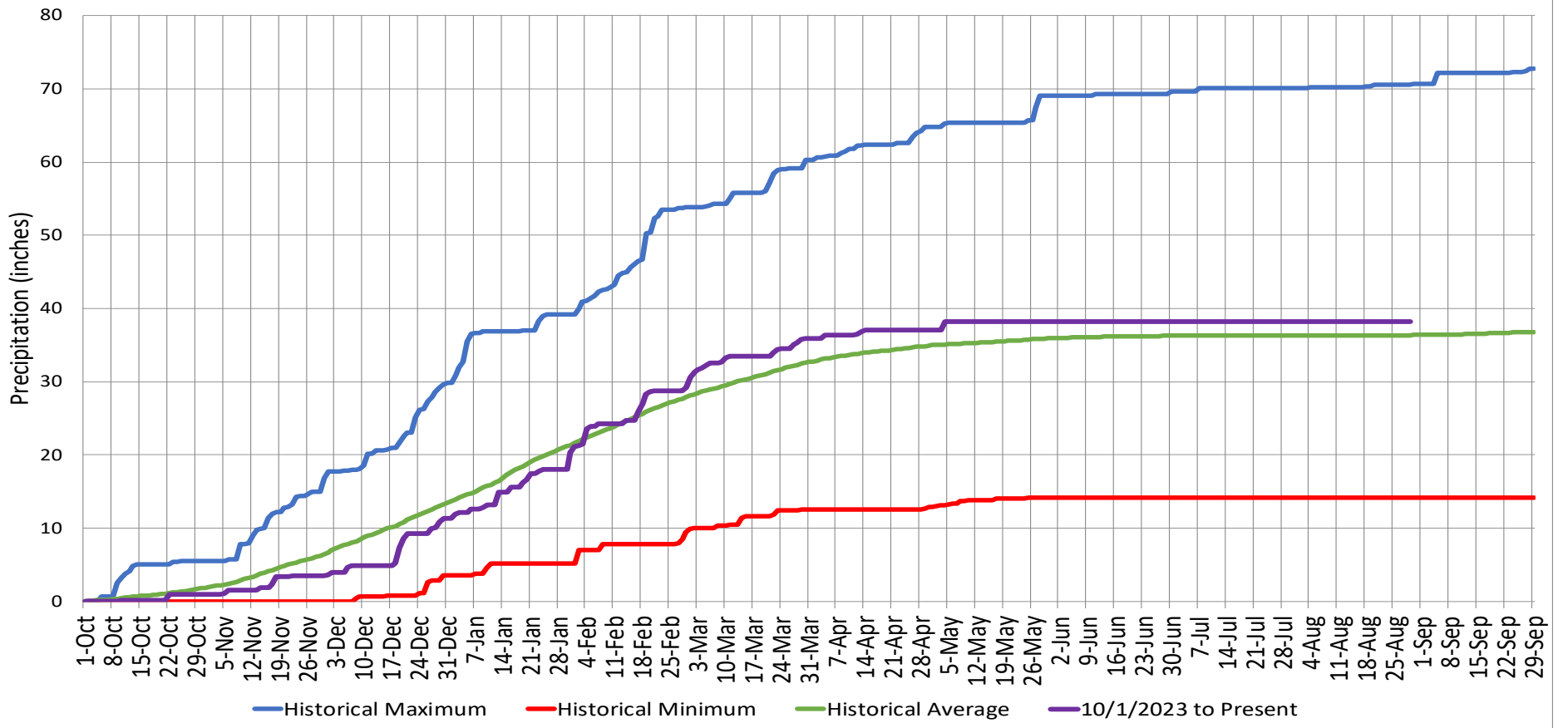
****We continue to collect enterococcus data, however it is not a reliable fecal indicator bacteria in freshwater

Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))

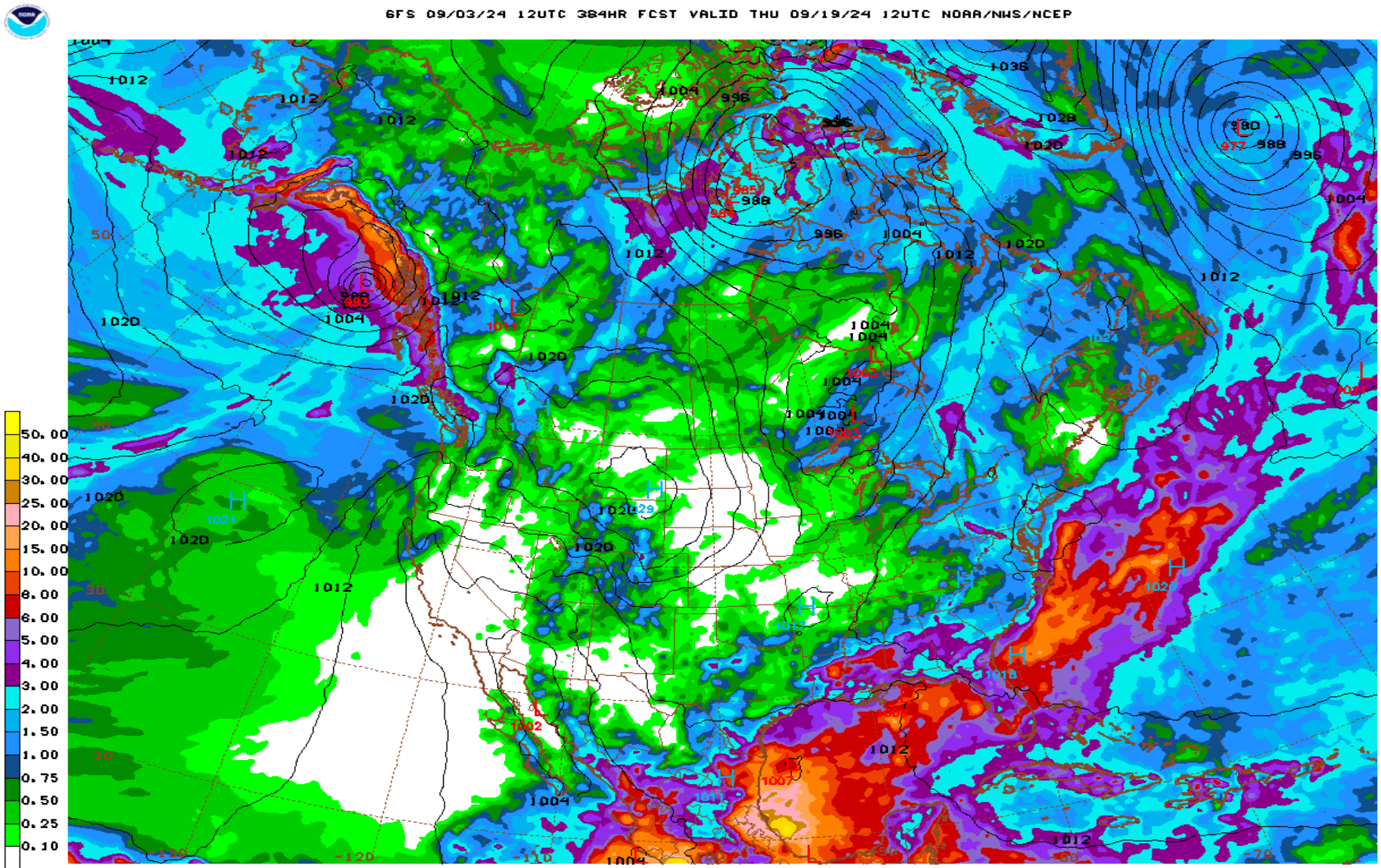
Date Range	Cumulative (inches)
Oct 1, 2023 - Aug 29, 2024	38.22
Last 7 Days*	0.00

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

6FS 09/03/24 12UTC 384HR FCST VALID THU 09/19/24 12UTC NOAA/NWS/NCEP



6FS THU 240919/1200V384 ENSL (4MB), 384HR ACCUMULATED PRECIP (IN)

Date Range
Sep 3 - Sep 19, 2024

Forecasted Cumulative (inches)
0.00