



State Water Resources Control Board
 Temporary Urgency Change Orders (6/6/2024)
 Russian River Hydrologic & Water Quality Report
 August 16, 2024 - August 22, 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).

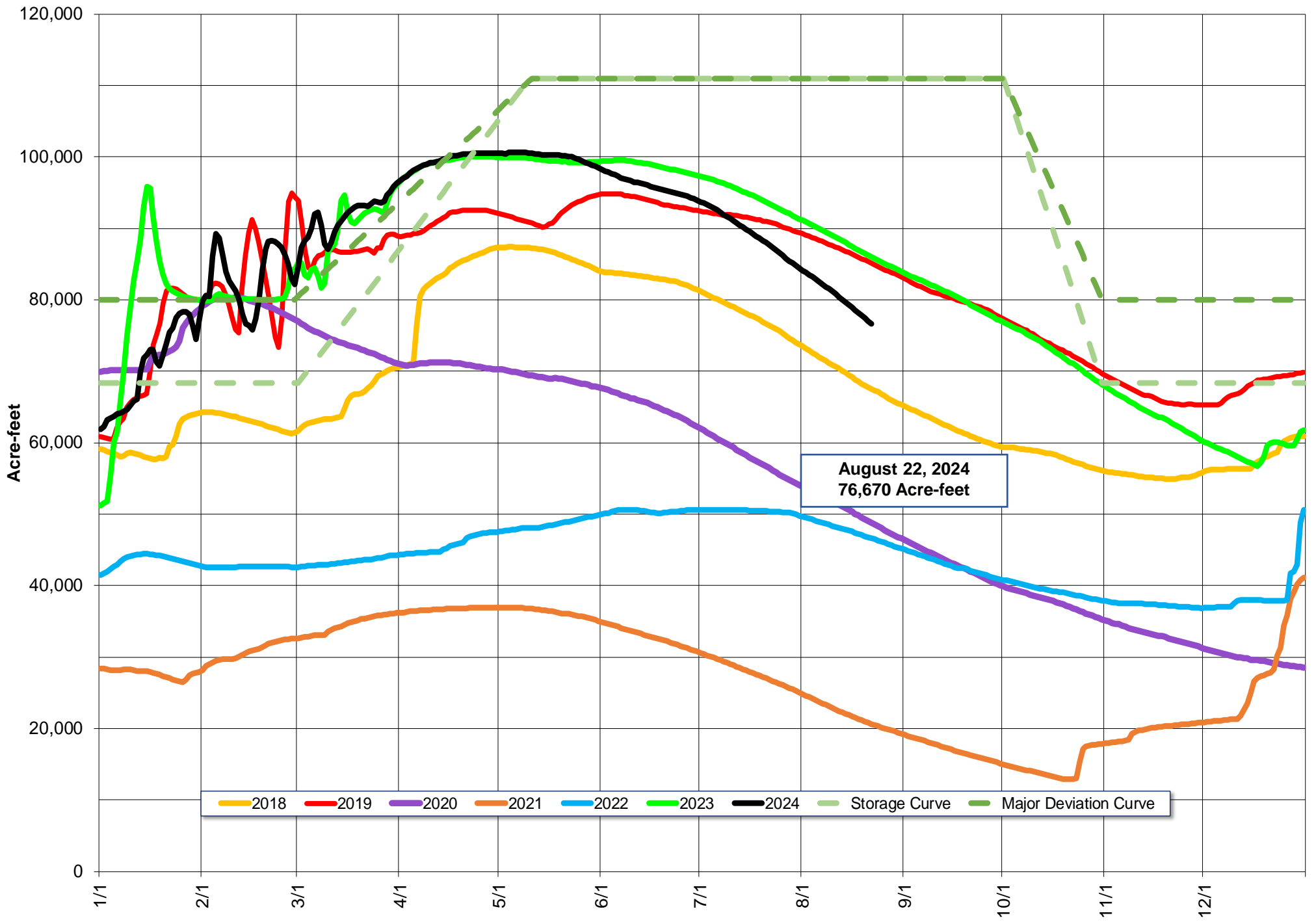
Instream Flow Requirements as of August 22, 2024

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



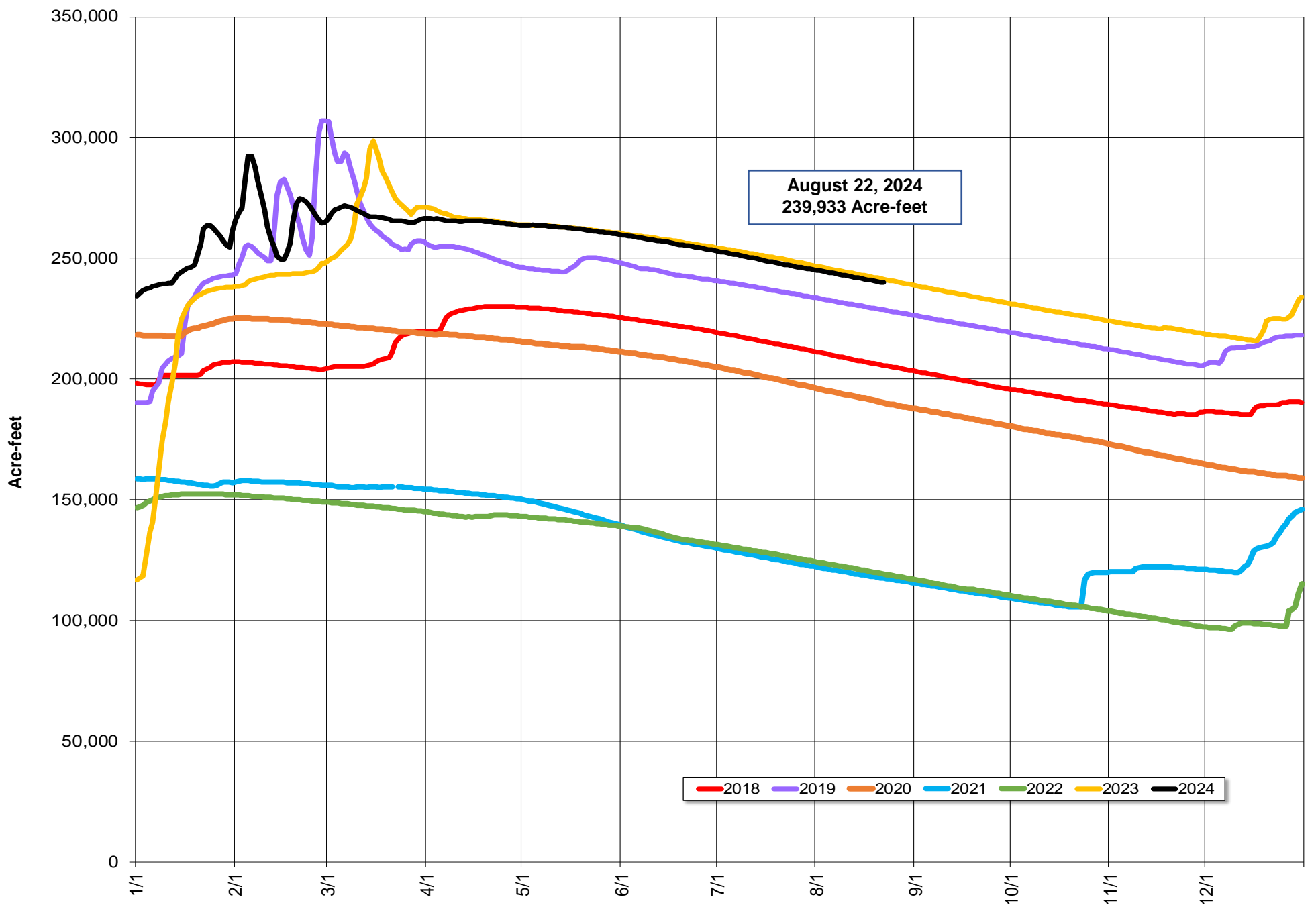
Storage (acre-feet)	August 22, 2024	76,670	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
	Last 7 days	-10,627	-354
Daily Inflow (cfs)	Last 7 days	Min	27
		Max	62
		Mean	45
Release (cfs)	Last 7 days	Min	219
		Max	219
		Mean	219

Lake Sonoma



Todd Schram, February 10, 2024

Lake Sonoma Storage 2018-2024



Storage (acre-feet)	August 22, 2024	239,933	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
	Last 7 days	-7,279	-243
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	13
		Mean	2
Release (cfs)	Last 7 days	Min	97
		Max	99
		Mean	98

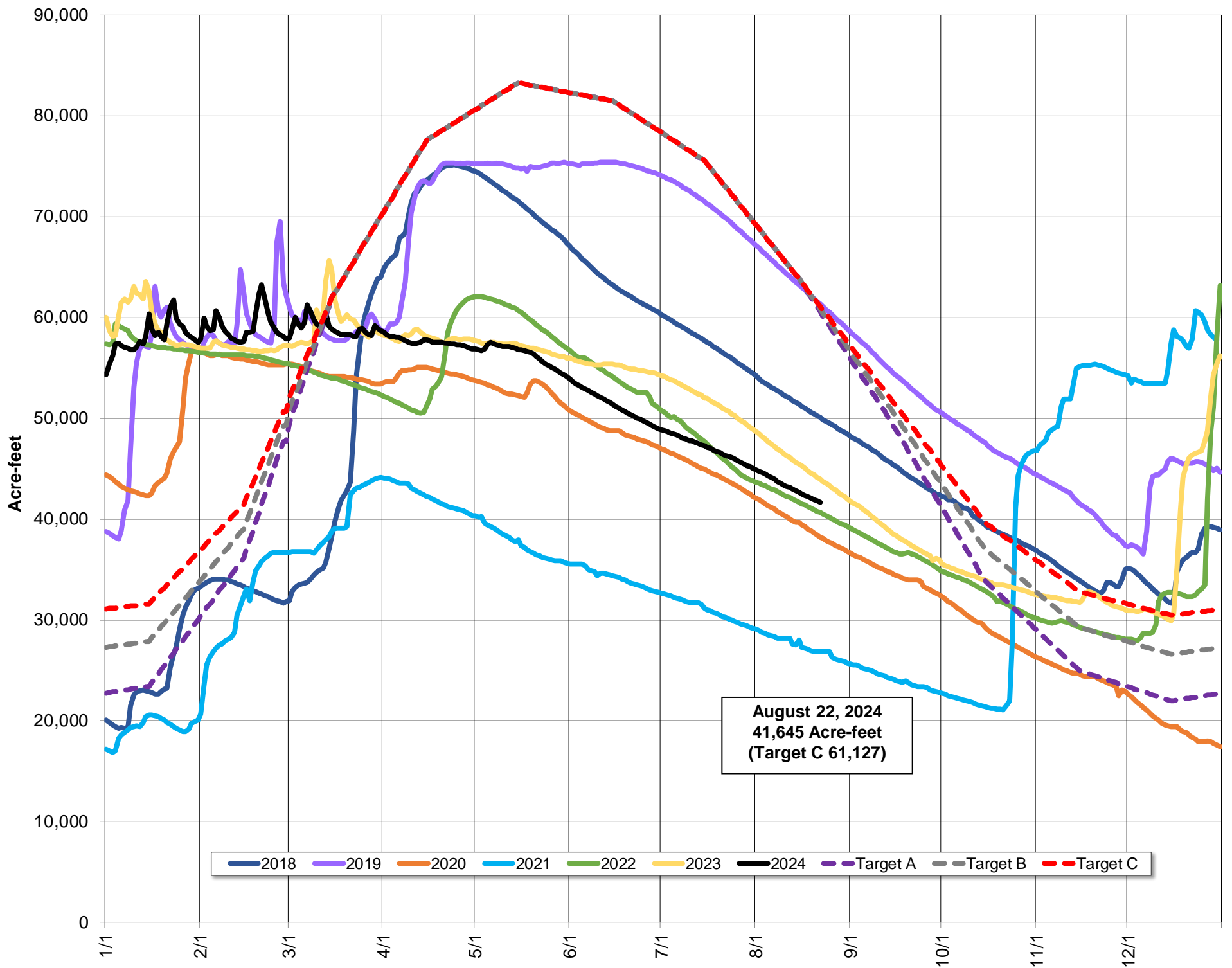
Potter Valley Project

PVP Diversion (cfs)	August 22, 2024	53
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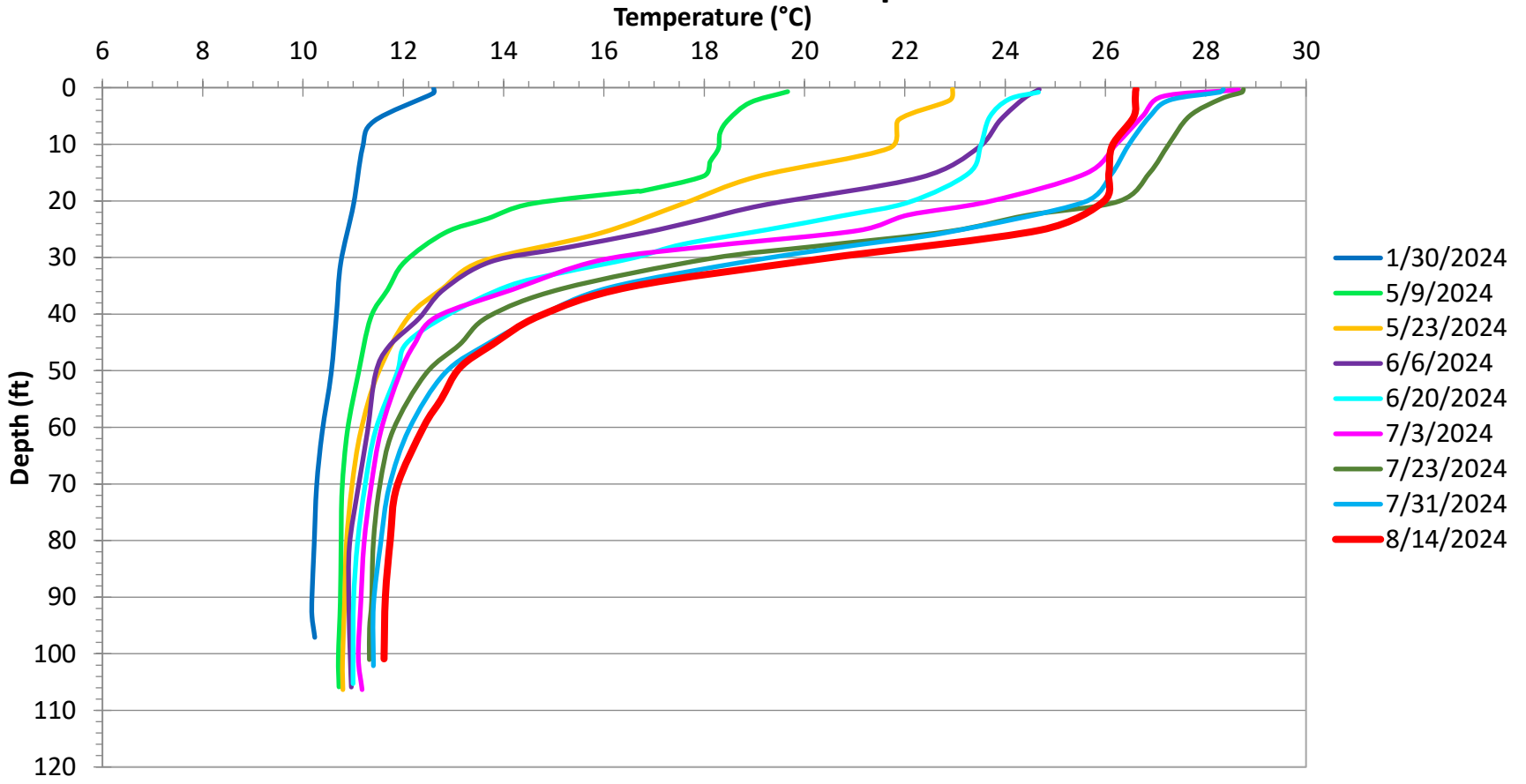
Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2023 - August 22, 2024	486,839	1,489
	Last 7 days	128	18

*Inflow calculation based on criteria established in D1610

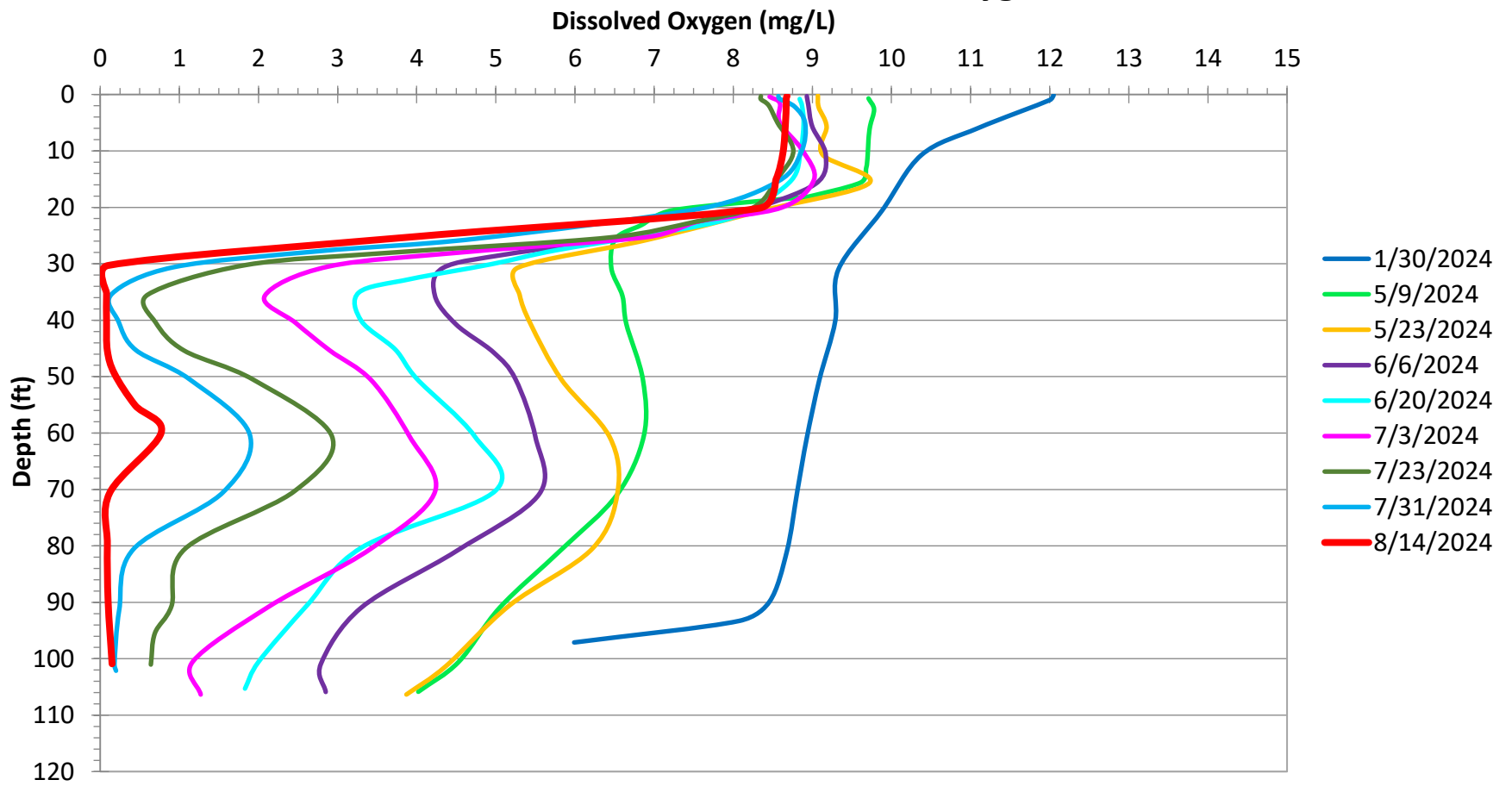
Lake Pillsbury Storage 2018 - 2024 and Target Storage Scenarios



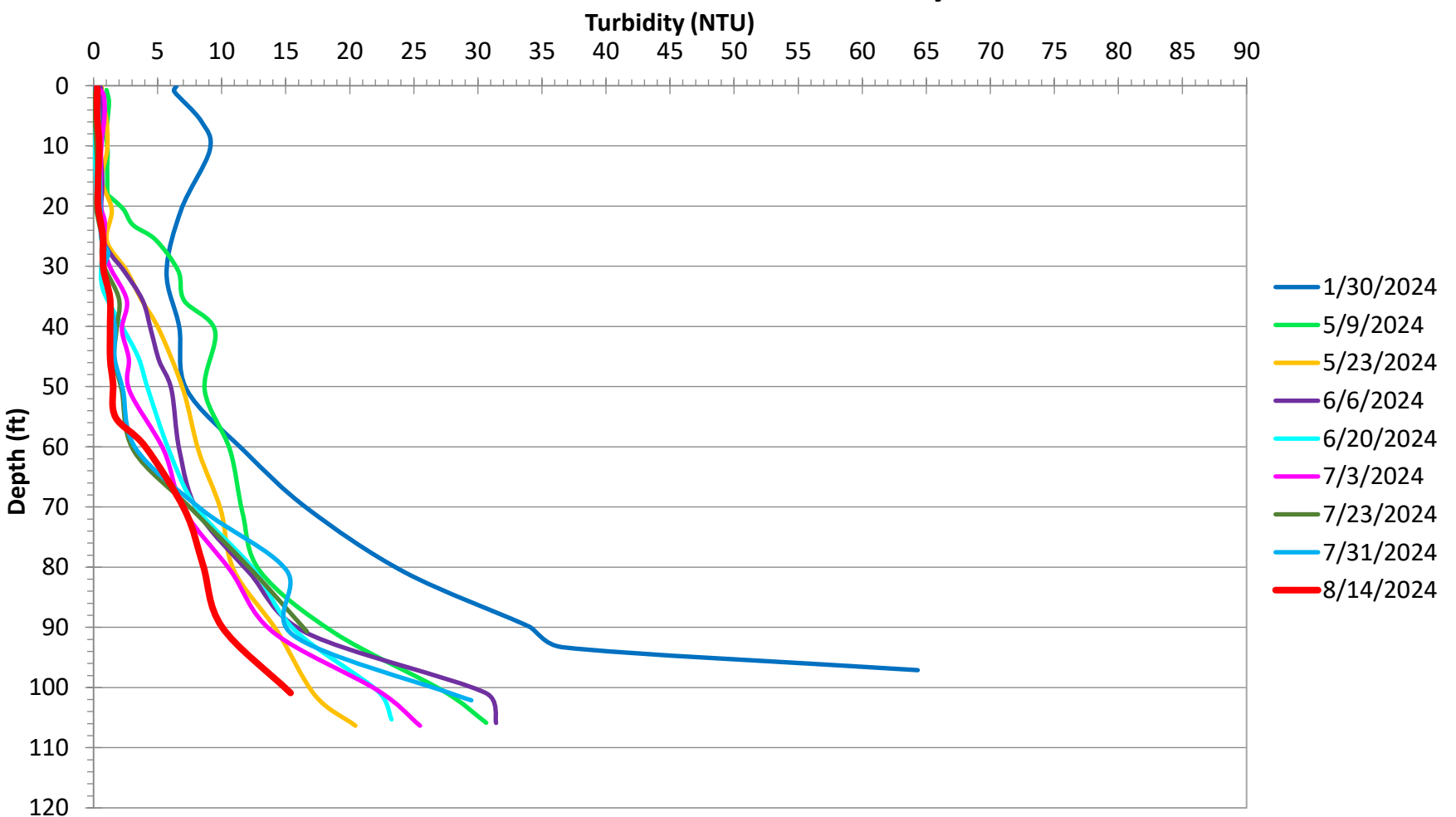
Lake Mendocino Dam - Vertical Temperature Profile - 2024



Lake Mendocino Dam - Vertical Dissolved Oxygen Profile - 2024



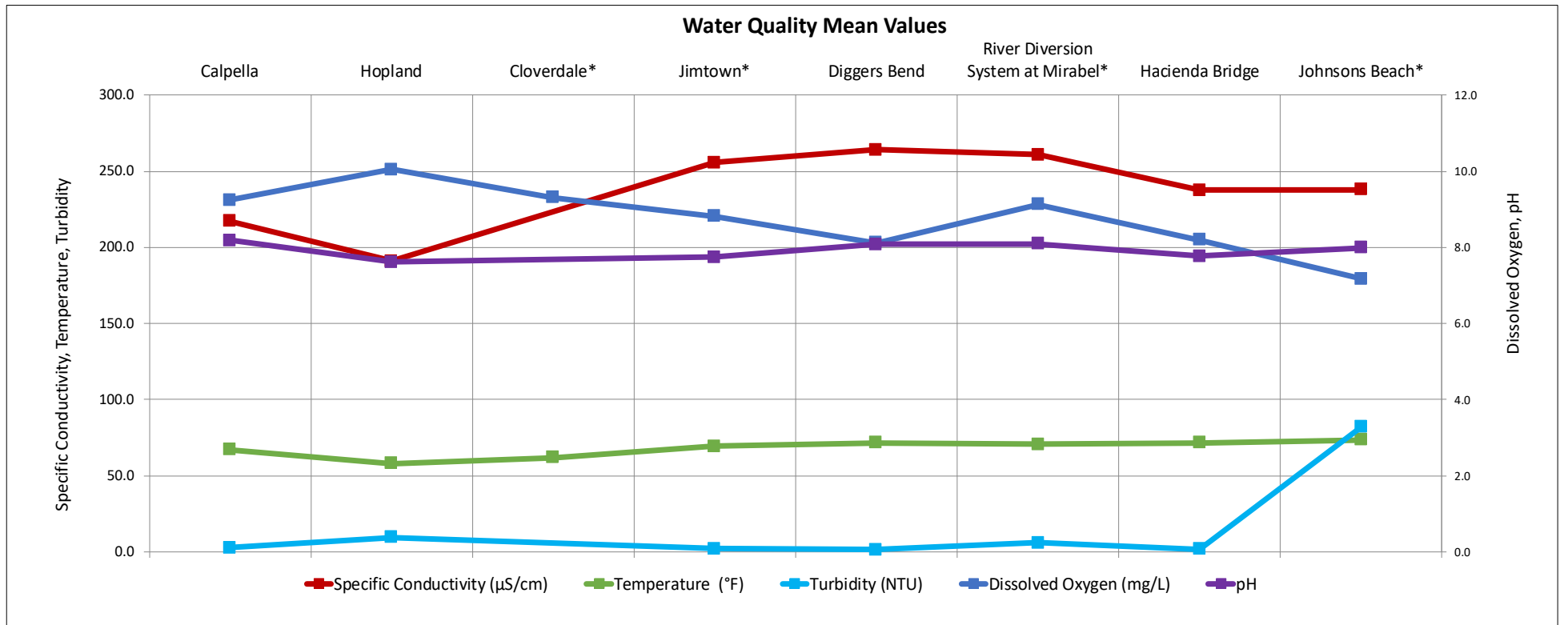
Lake Mendocino Dam - Vertical Turbidity Profile - 2024



Russian River Flows (August 16, 2024 - August 22, 2024)

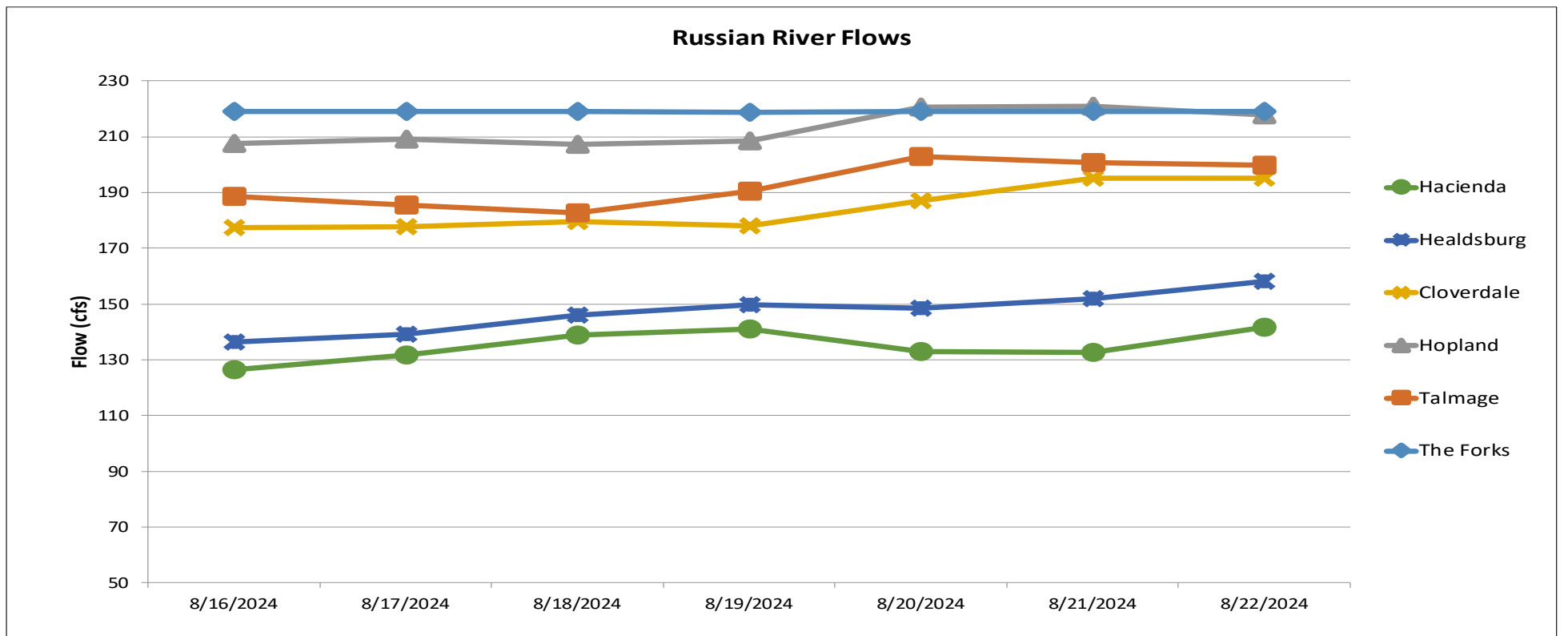
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463000	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	63.7	55.2	59.0	66.2	68.0	69.4	68.0	71.6
	Max	70.7	59.7	65.5	73.8	76.1	72.3	75.2	76.3
	Mean	66.9	57.8	62.0	69.4	71.5	70.4	71.4	73.6
Specific Conductivity (µS/cm)	Min	212.0	190.0		250.0	260.0	240	235.0	135.6
	Max	227.0	193.0		260.0	268.0	278	241.0	253.4
	Mean	217.4	191.1		255.8	264.3	261	237.5	238.1
Dissolved Oxygen (mg/L)	Min	8.3	9.0	8.6	6.7	7.1	8.3	5.6	4.7
	Max	10.9	11.6	10.3	11.8	9.4	10.1	9.2	7.8
	Mean	9.2	10.0	9.3	8.8	8.1	9.1	8.2	7.2
Dissolved Oxygen (% Saturation)	Min	90.9	87.9	88.1	73.7	79.5	73.7	62.3	73.7
	Max	120.1	115.8	109.0	135.4	112.5	135.4	108.1	135.4
	Mean	100.5	98.2	95.7	98.7	92.9	98.7	93.7	98.7
pH	Min	8.0	7.4		7.4	7.9	8.0	7.3	7.8
	Max	8.6	8.0		8.2	8.3	8.2	8.0	8.1
	Mean	8.2	7.6		7.8	8.1	8.1	7.8	8.0
Turbidity (NTU)	Min	1.6	8.0		1.2	0.6	2.7	1.0	7
	Max	4.6	11.6		3.5	2.1	36.1	3.0	2573
	Mean	2.7	9.4		1.8	1.3	5.8	1.8	82

*Station operated seasonally



Gage	24-hr Average Flow (cfs)						
	Aug 16, 2024	Aug 17, 2024	Aug 18, 2024	Aug 19, 2024	Aug 20, 2024	Aug 21, 2024	Aug 22, 2024
The Forks*	219	219	219	219	219	219	219
Talmage USGS 11462080	189	186	183	190	203	201	200
Hopland USGS 11462500	208	209	207	208	221	221	218
Cloverdale USGS 11463000	177	178	180	178	187	195	195
Healdsburg USGS 11464000	136	139	146	150	149	152	158
Hacienda USGS 11467000	126	132	139	141	133	133	142

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

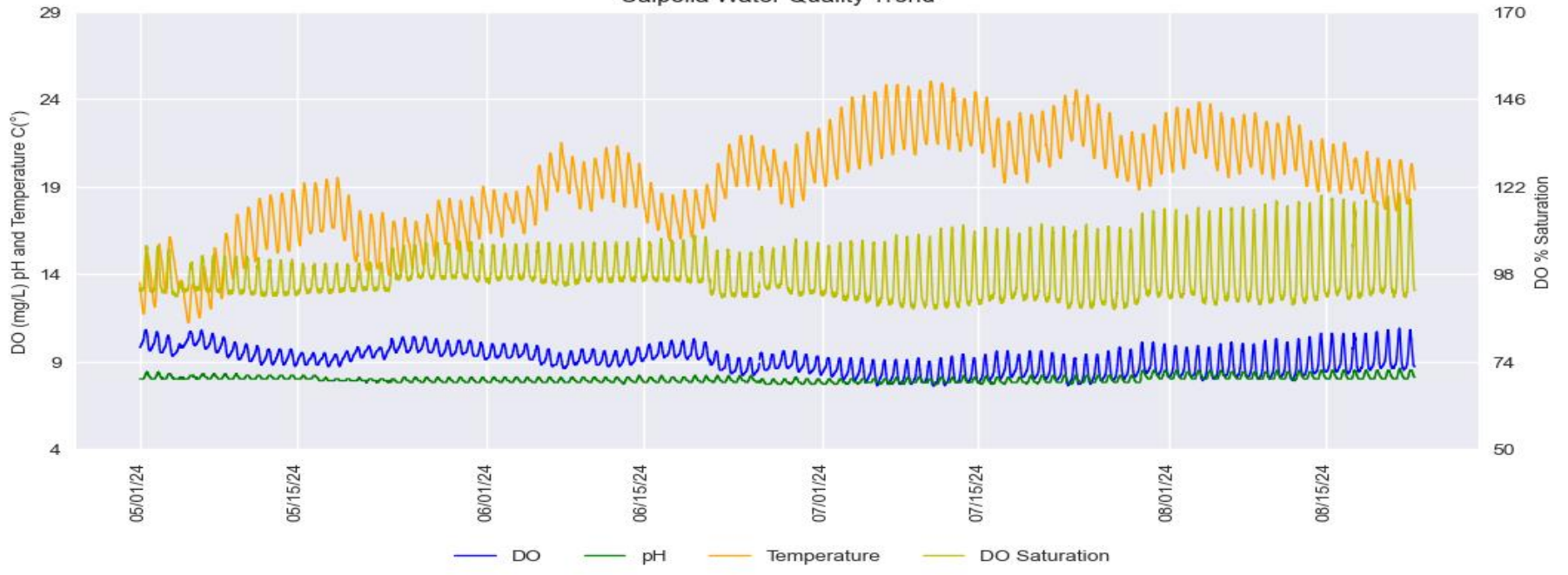


Russian River Water Quality May 1, 2024 – August 22, 2024

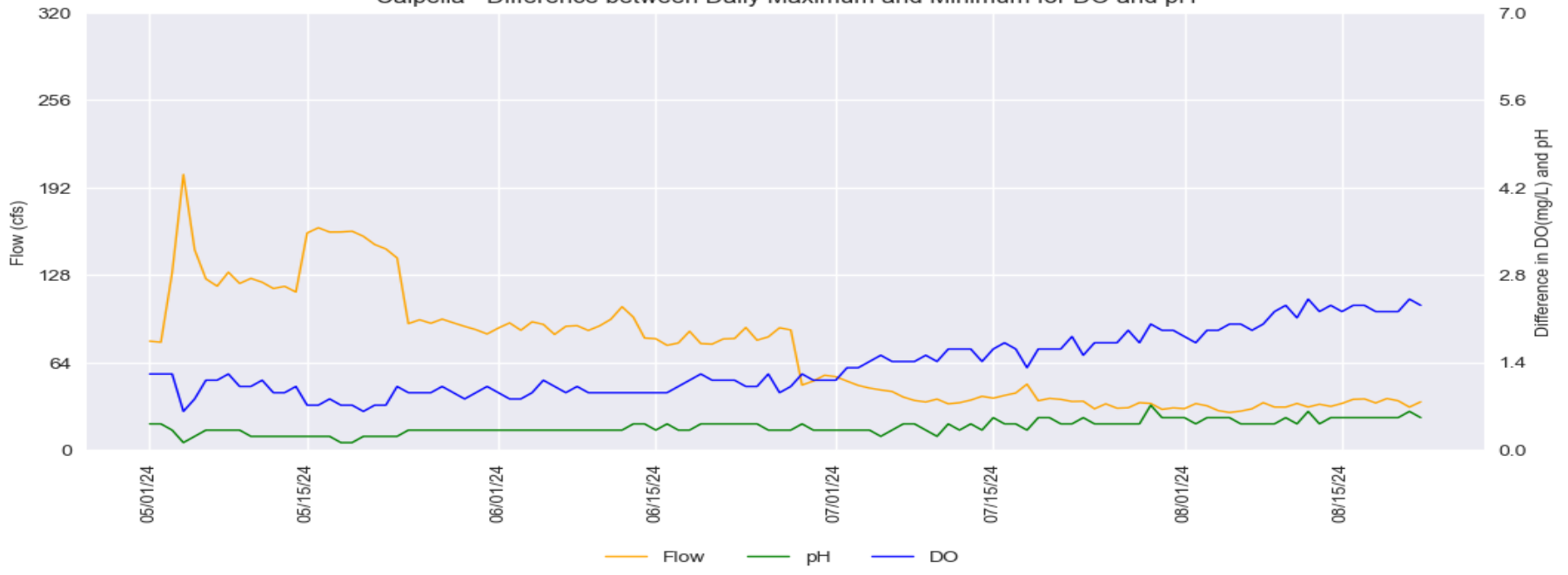
Provisional Data Subject to Revision

Calpella

Calpella Water Quality Trend

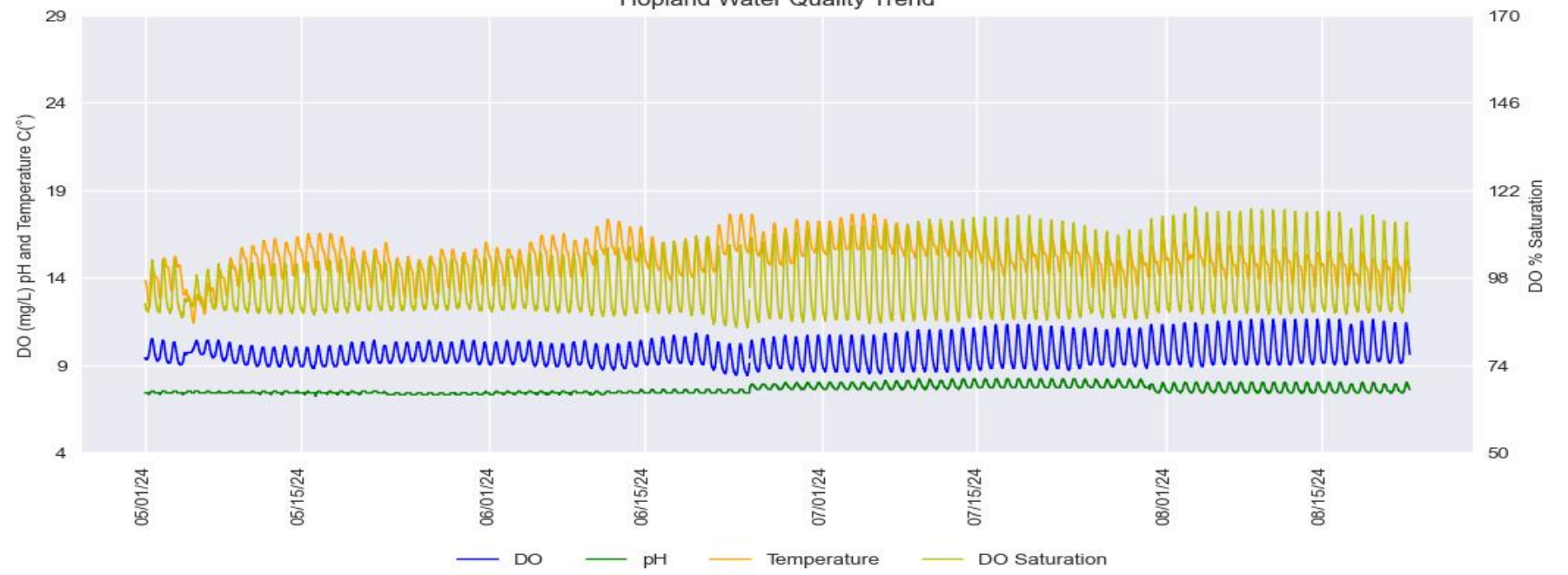


Calpella - Difference between Daily Maximum and Minimum for DO and pH

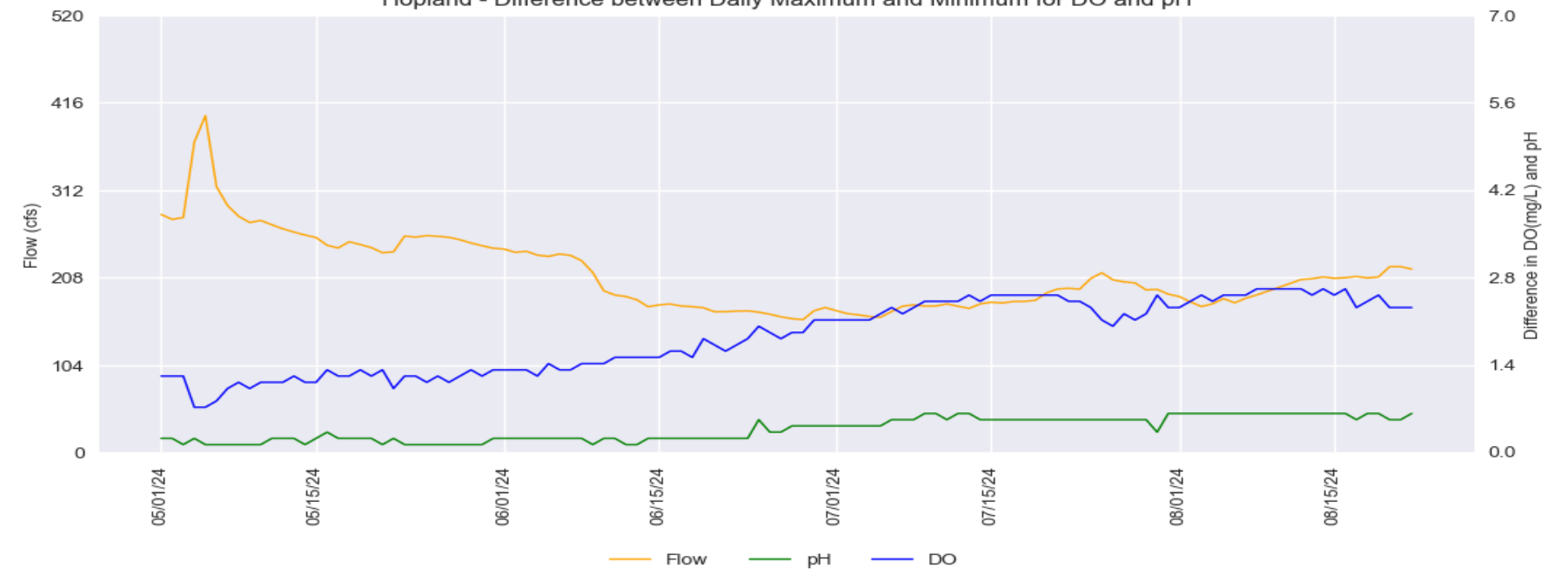


Hopland

Hopland Water Quality Trend



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

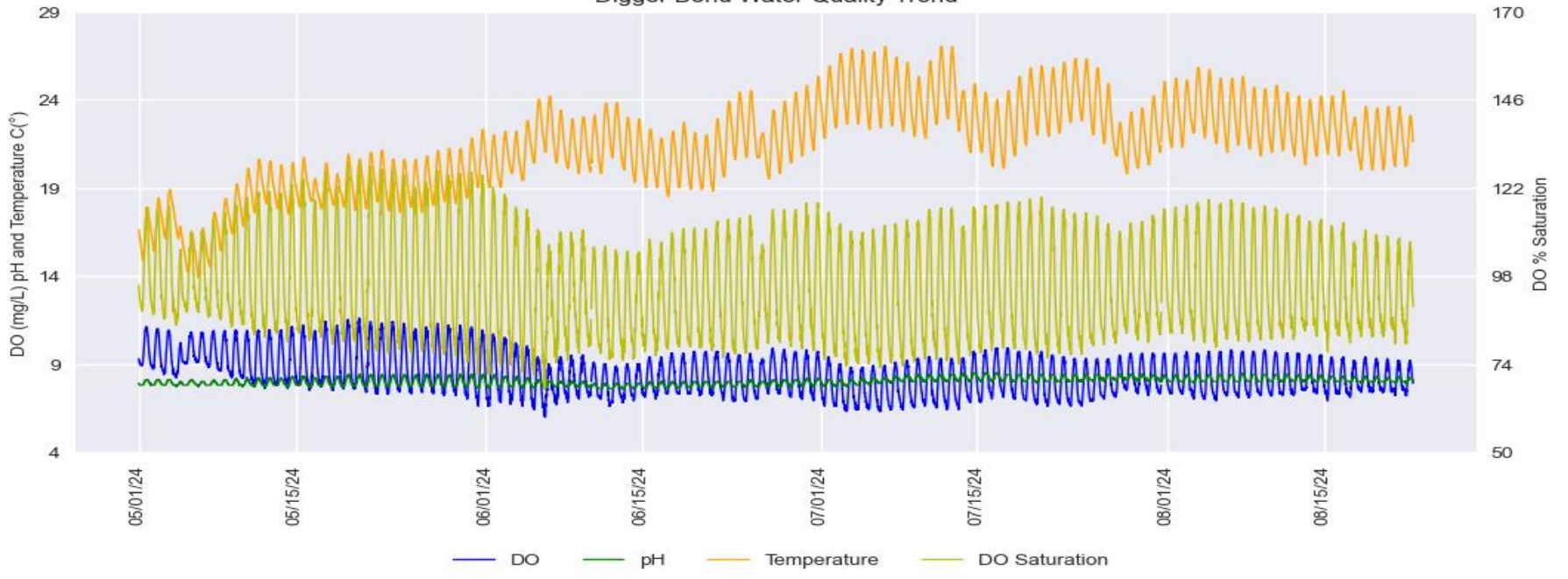


Russian River Water Quality May 1, 2024 – August 22, 2024

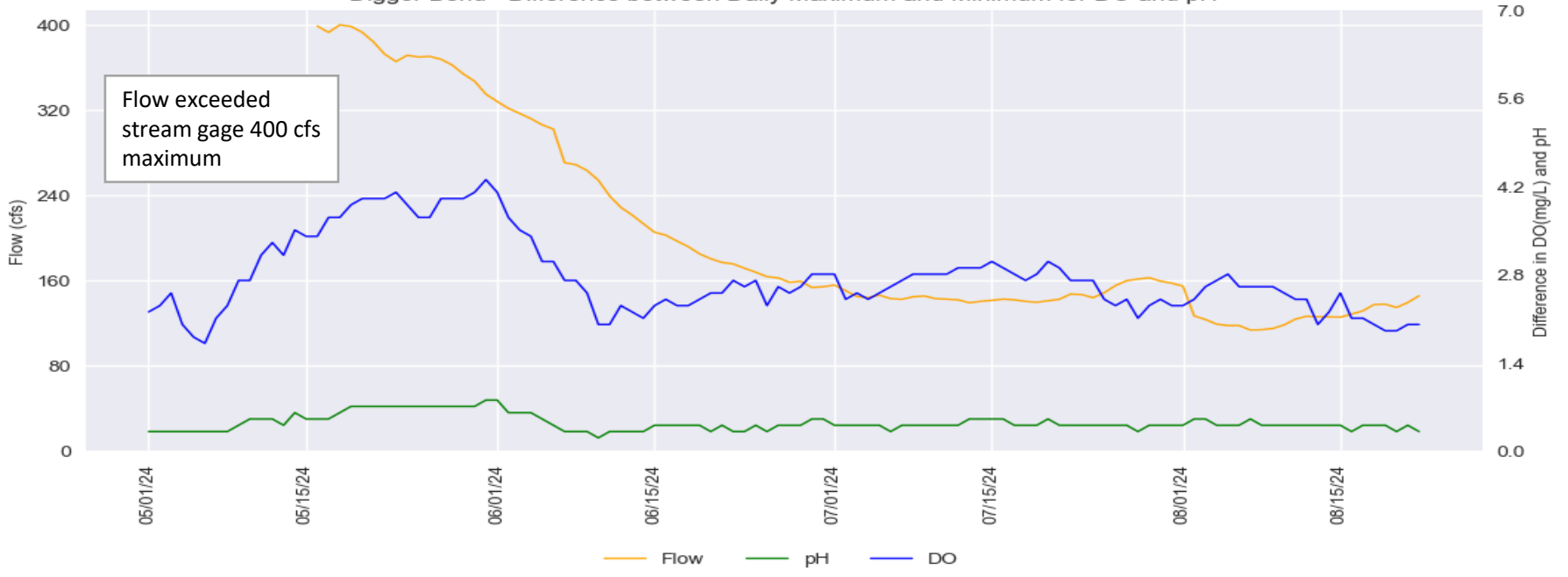
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Digger Bend

Digger Bend Water Quality Trend

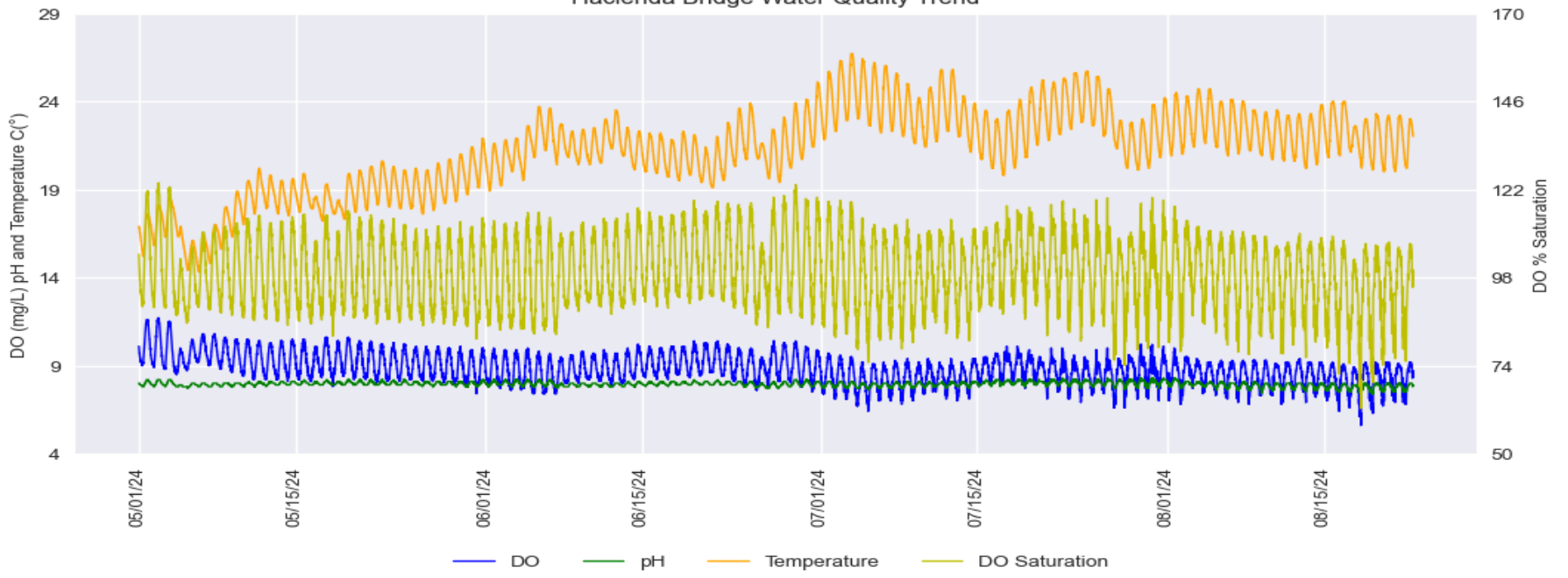


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH

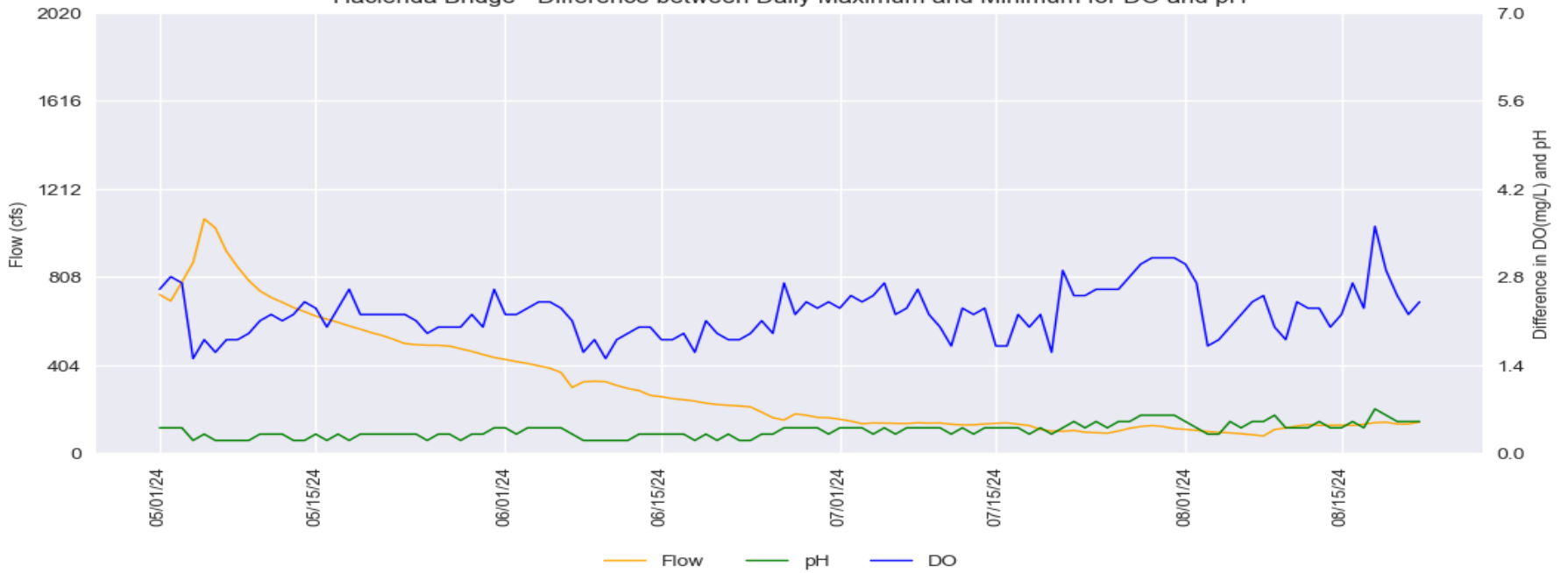


Hacienda Bridge

Hacienda Bridge Water Quality Trend



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

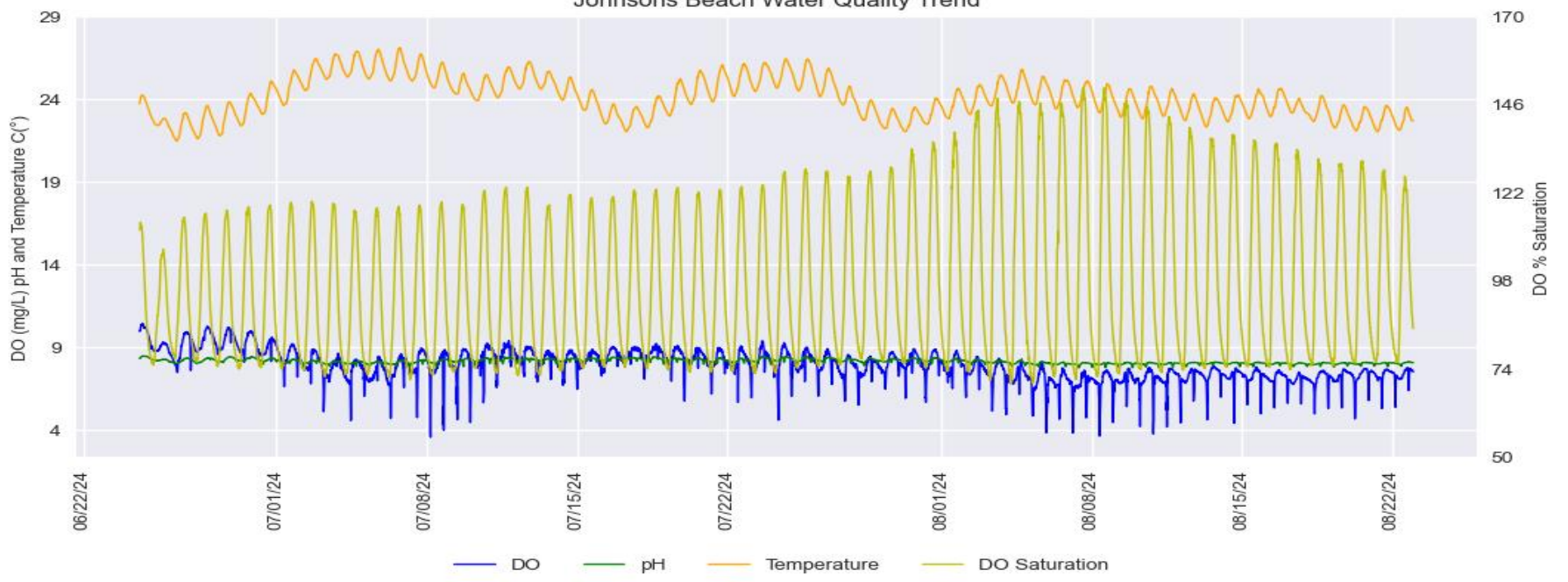


Russian River Water Quality June 24, 2024 – August 22, 2024

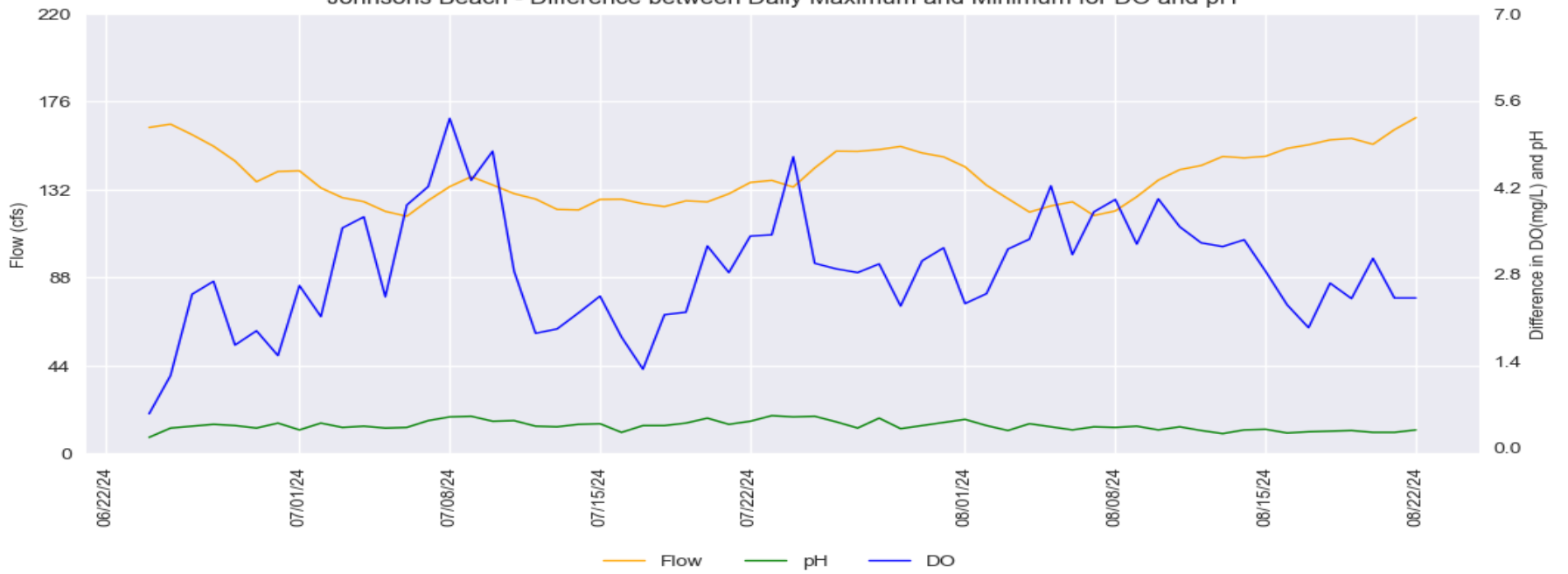
Provisional Data Subject to Revision

Johnsons Beach

Johnsons Beach Water Quality Trend

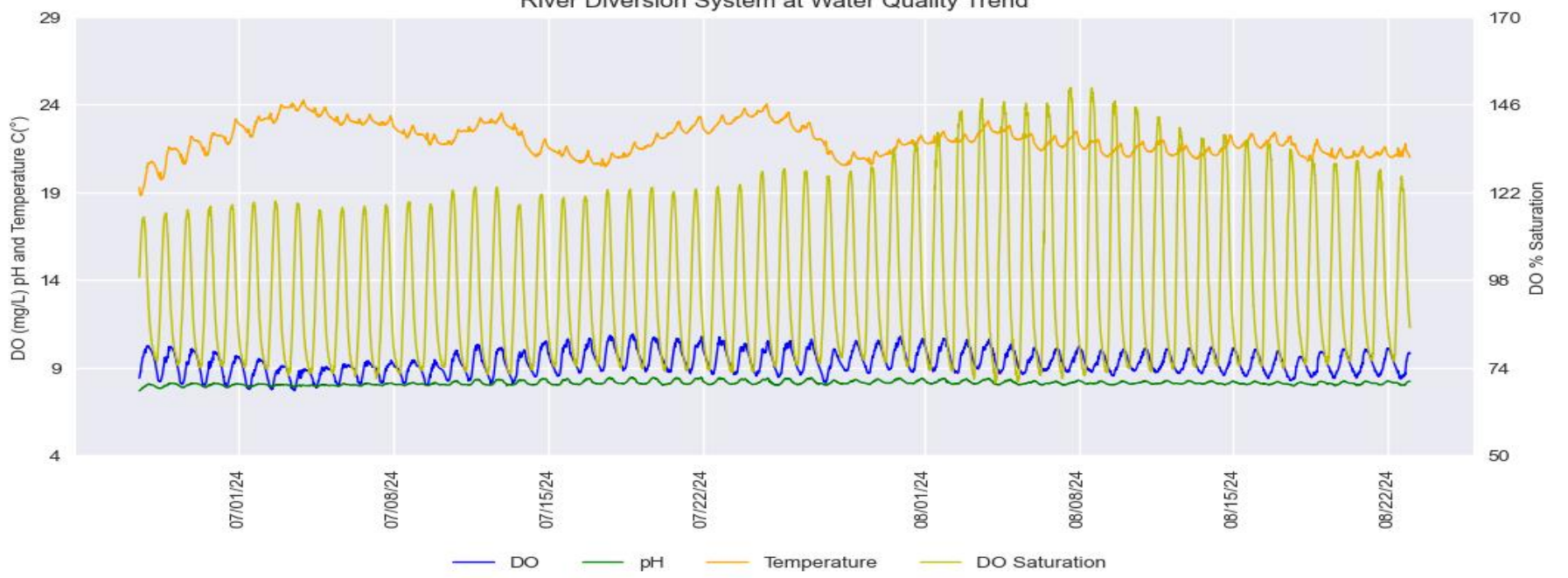


Johnsons Beach - Difference between Daily Maximum and Minimum for DO and pH

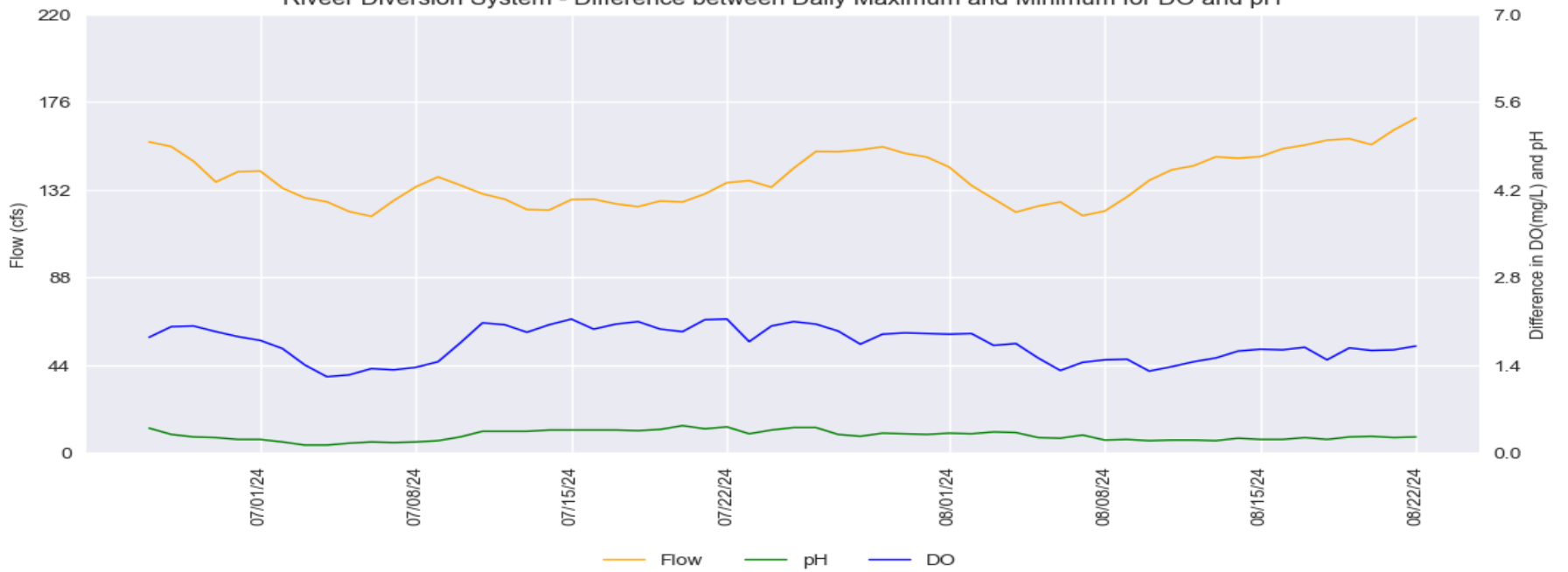


River Diversion System at Mirabel

River Diversion System at Water Quality Trend



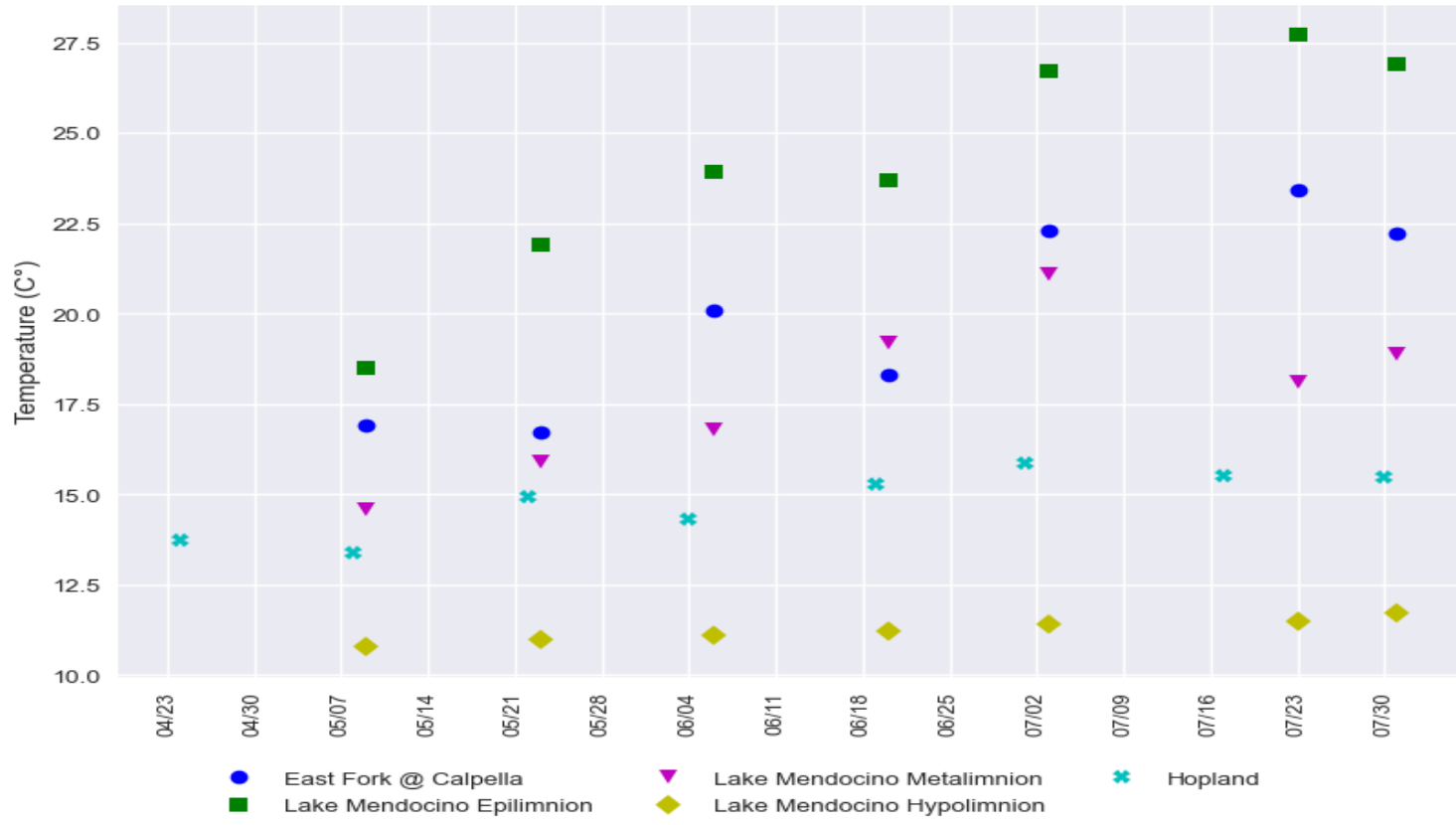
River Diversion System - Difference between Daily Maximum and Minimum for DO and pH



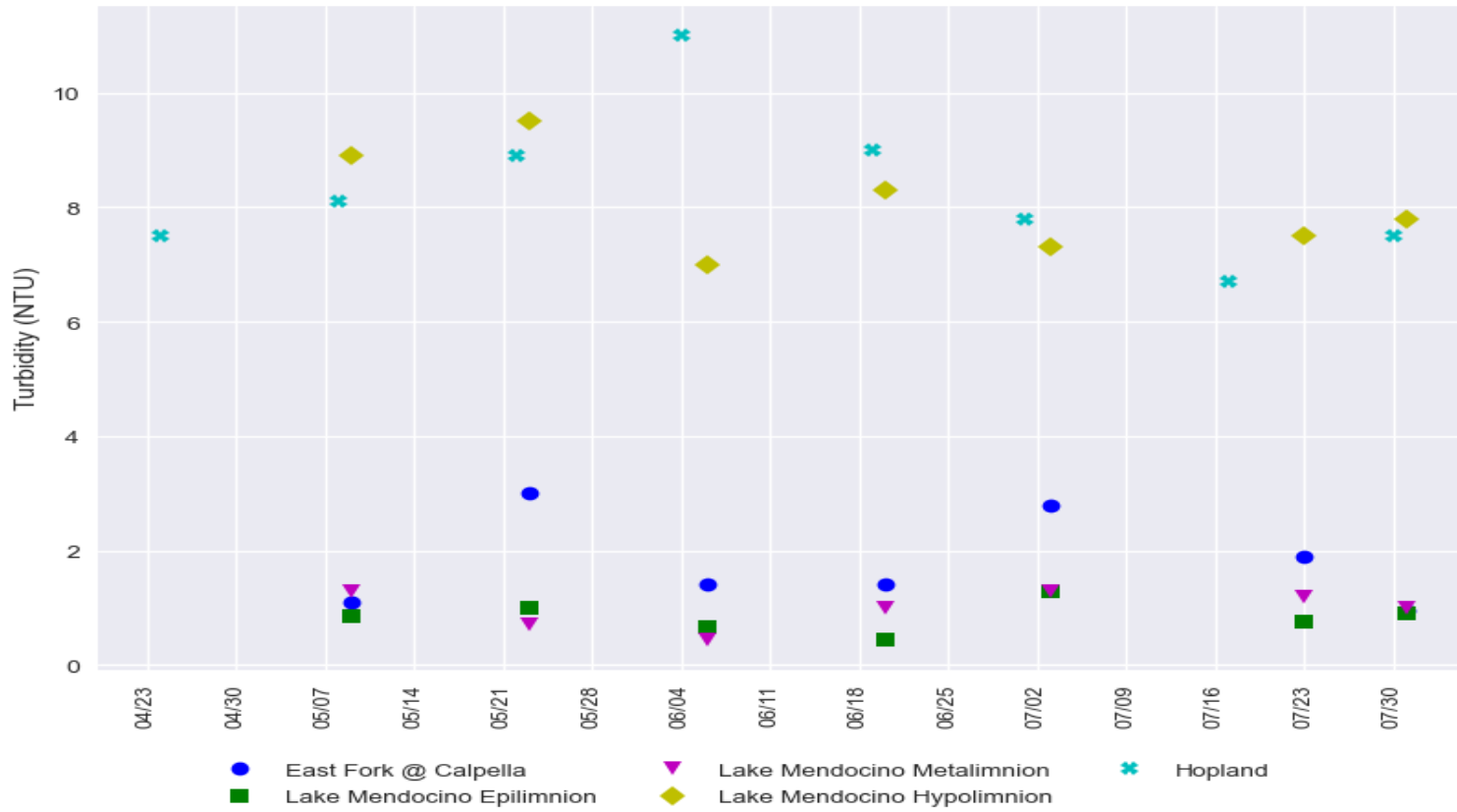
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision

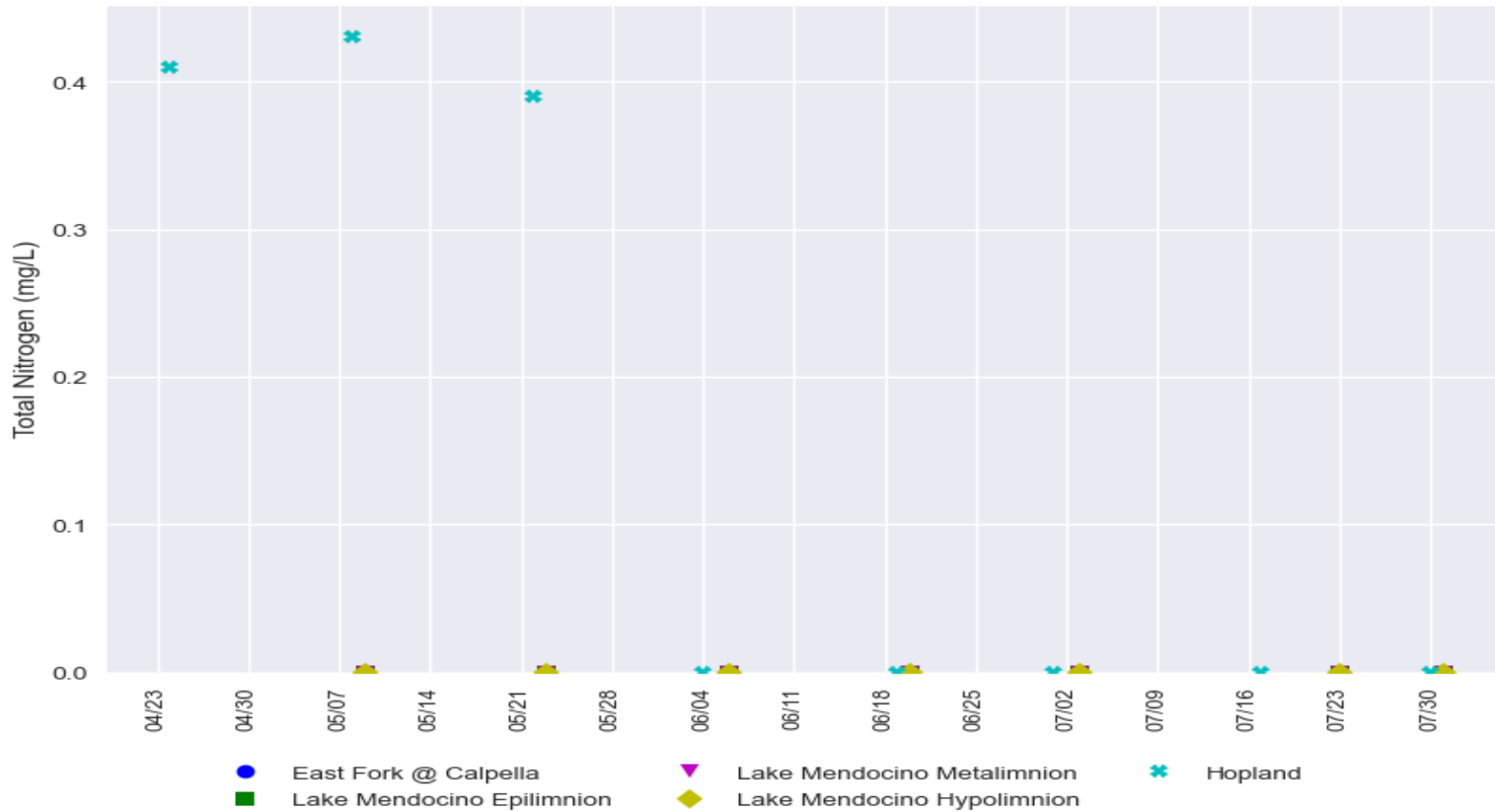
Temperature - East Fork at Calpella, Lake Mendocino, and Hopland



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

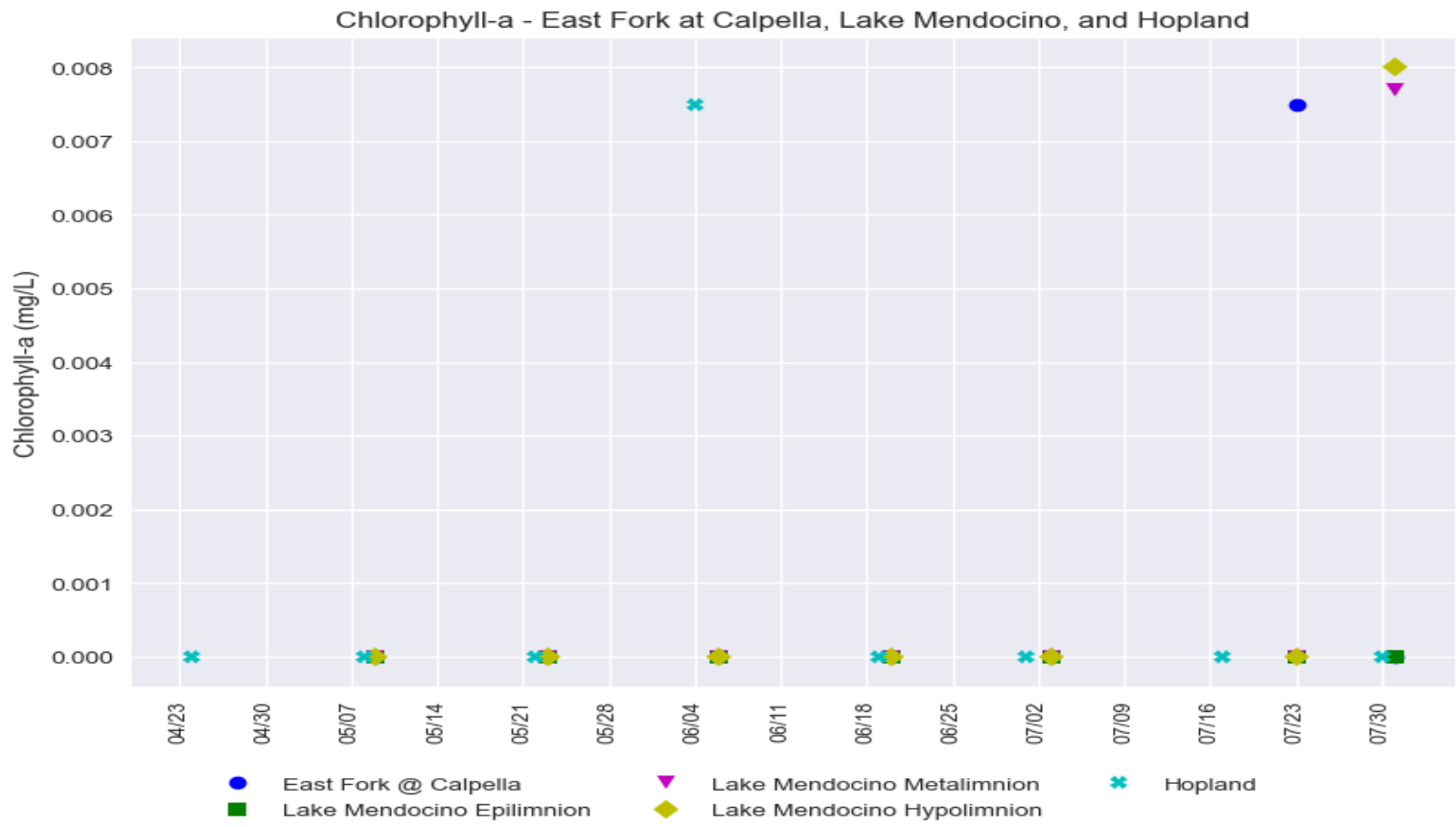
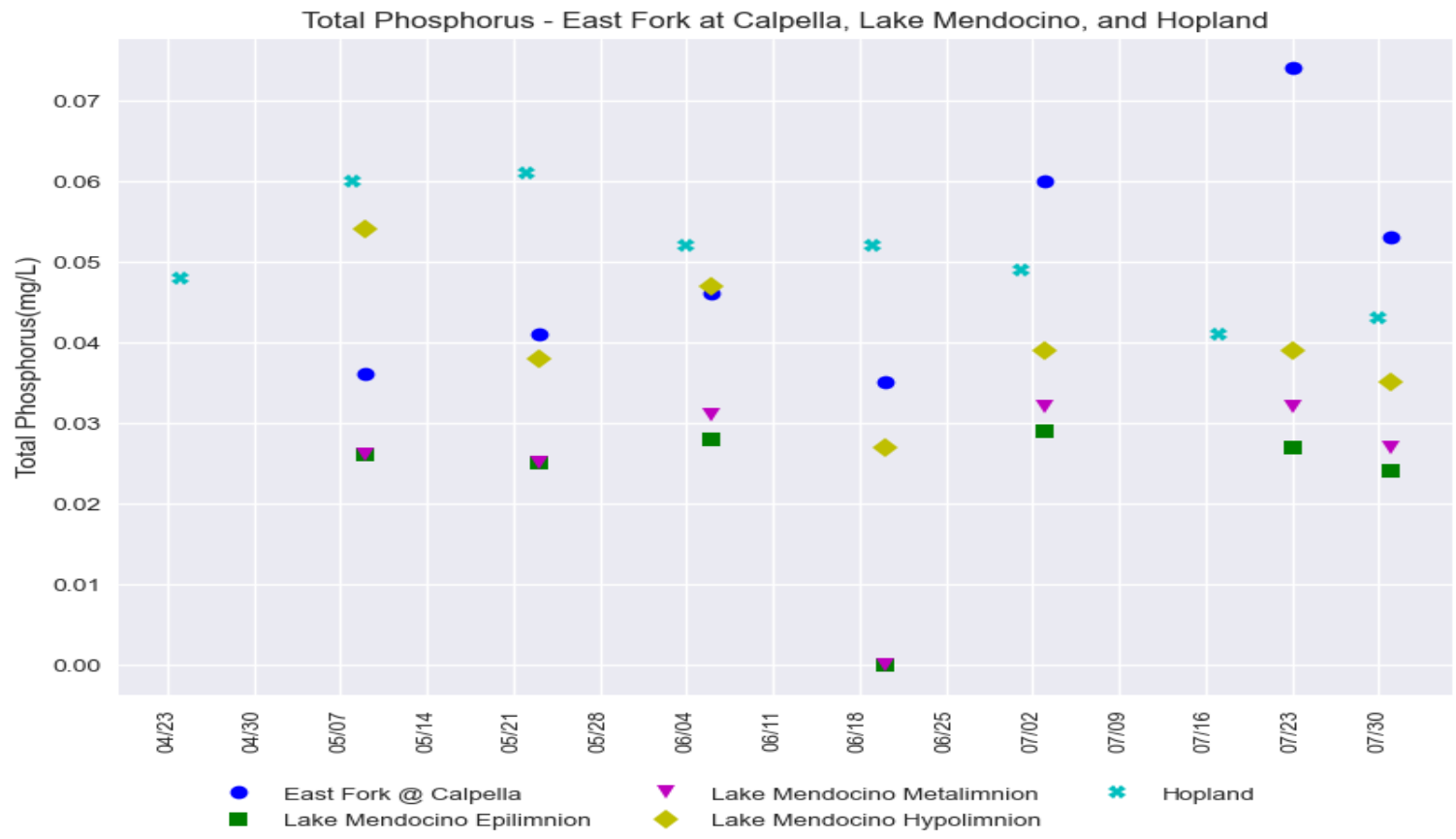


Total Nitrogen (mg/L) - East Fork at Calpella, Lake Mendocino, and Hopland



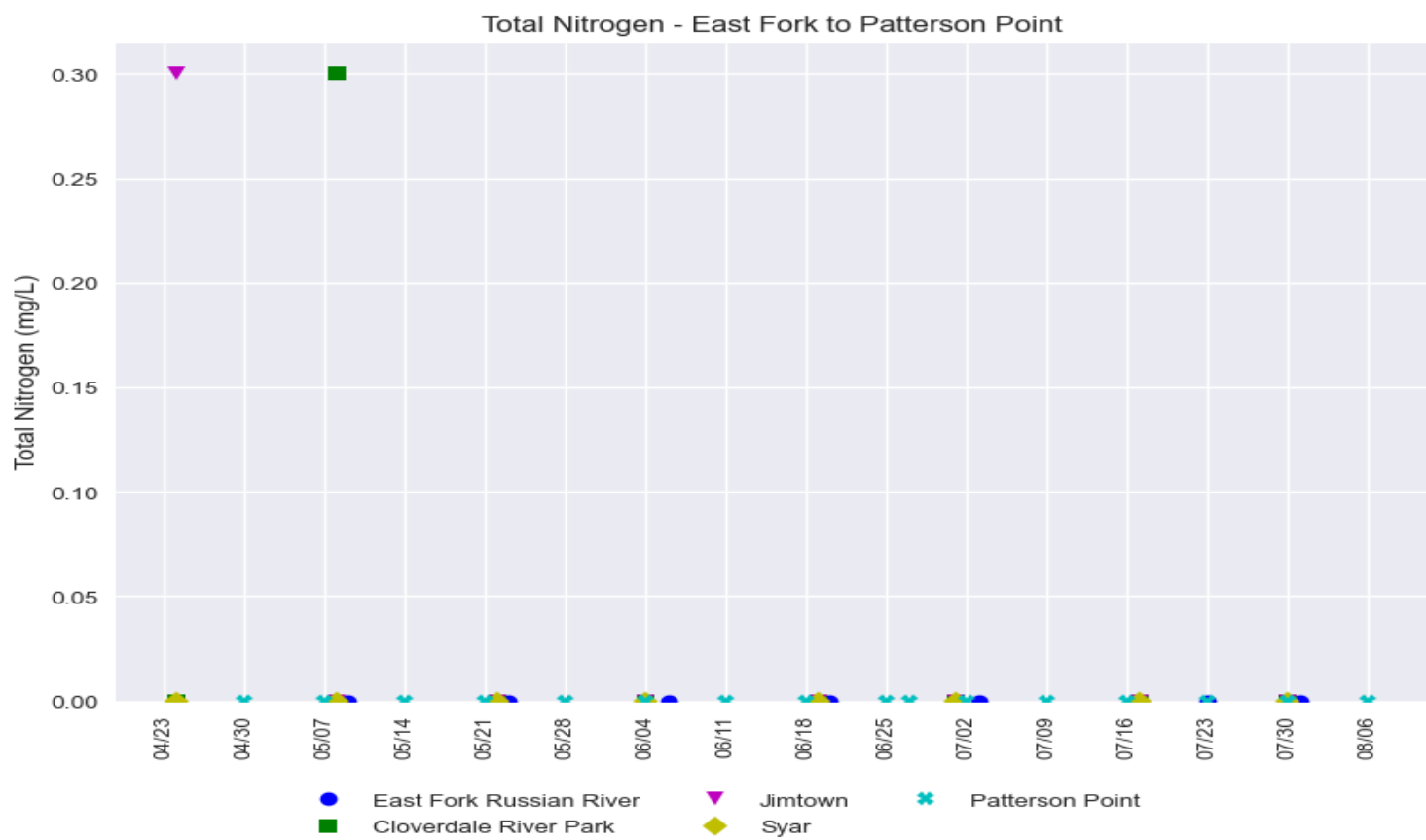
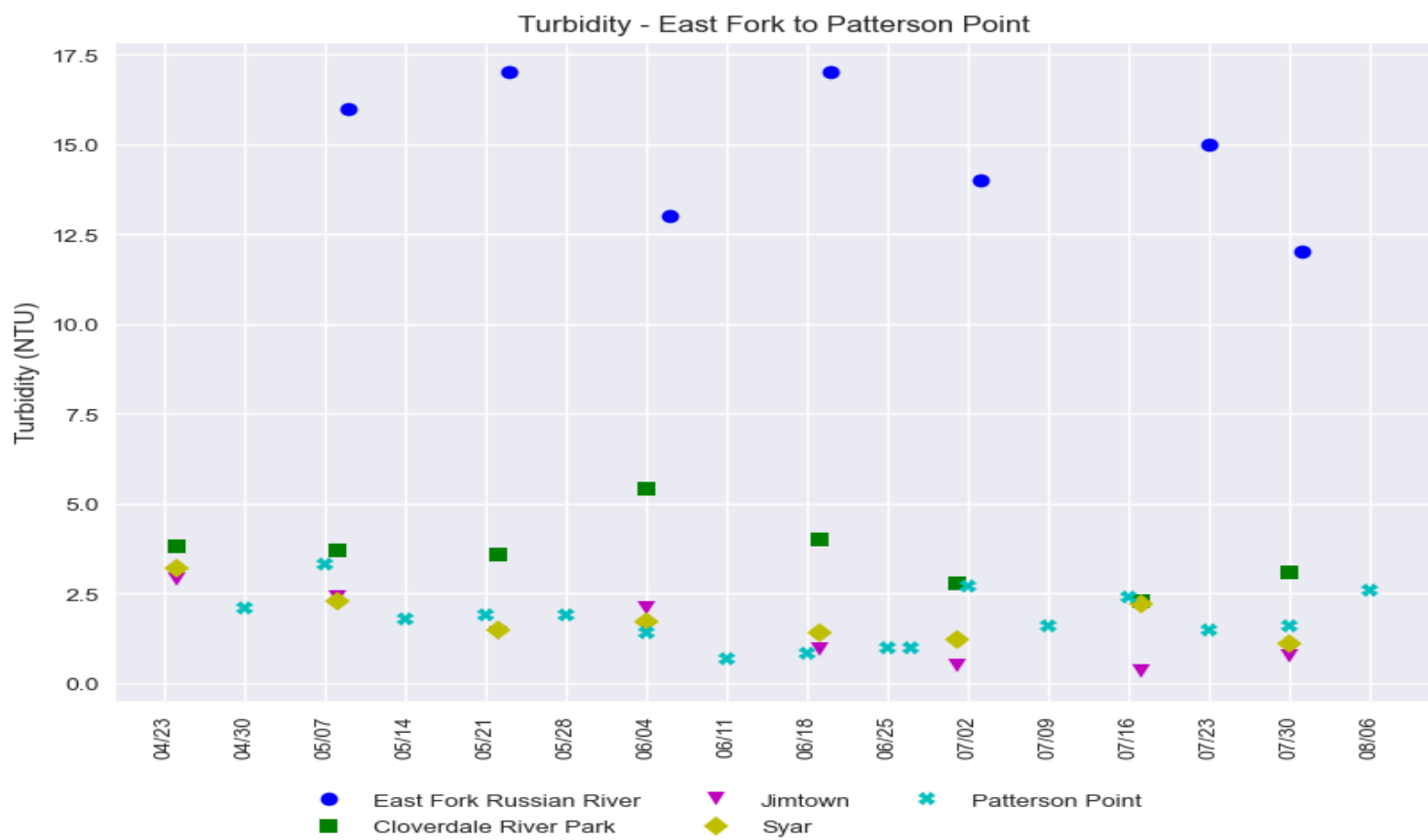
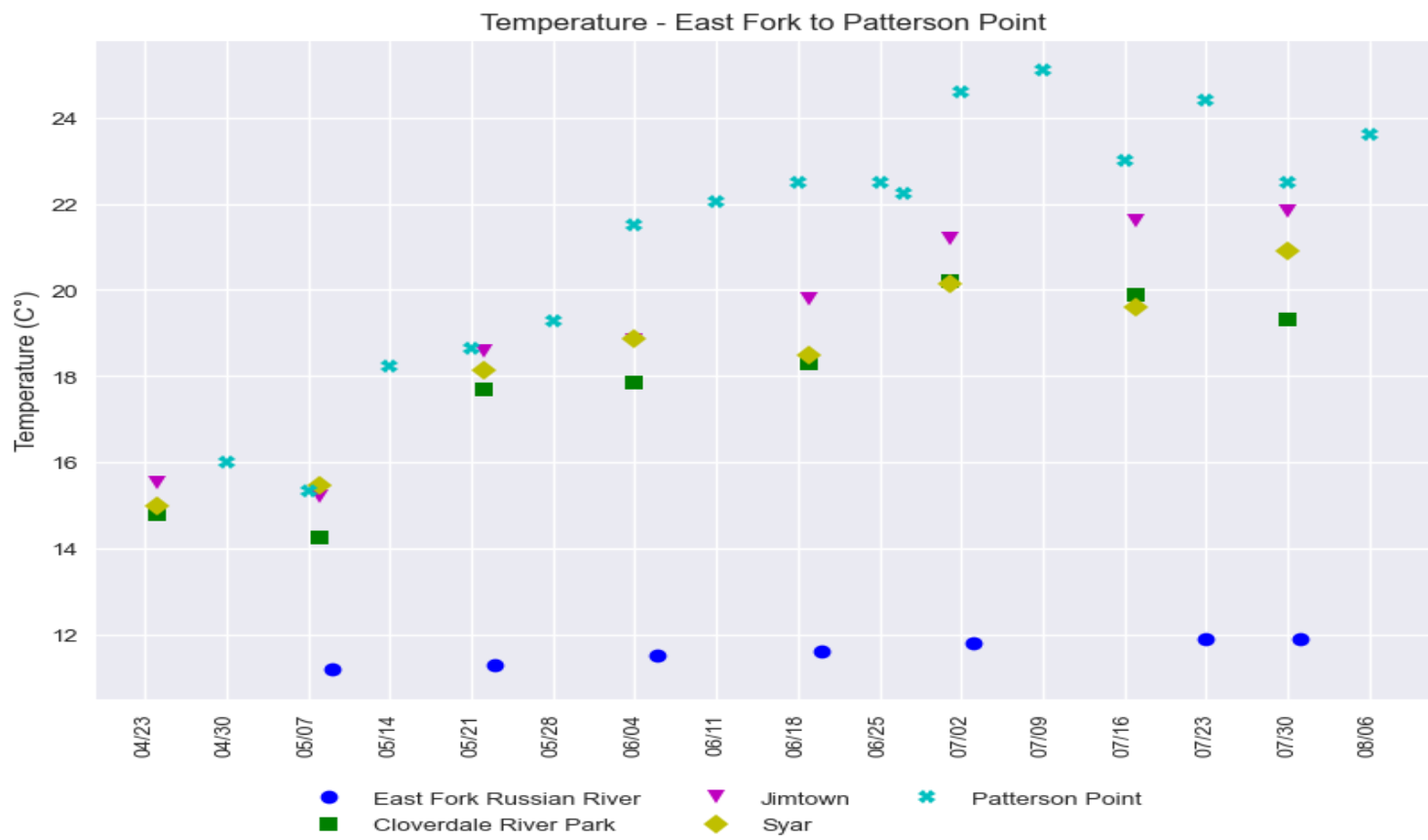
Russian River Water Quality Grab Samples

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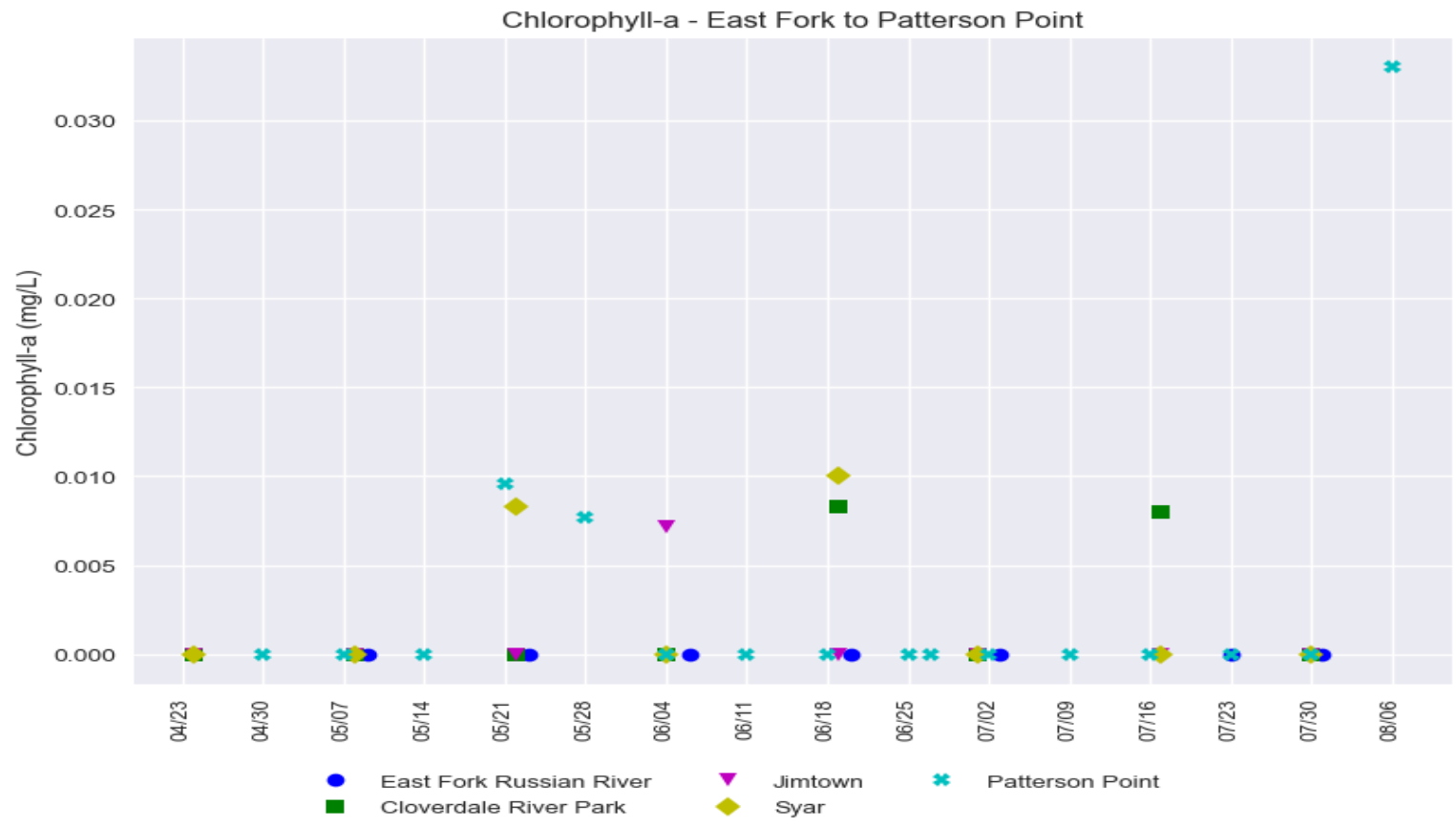
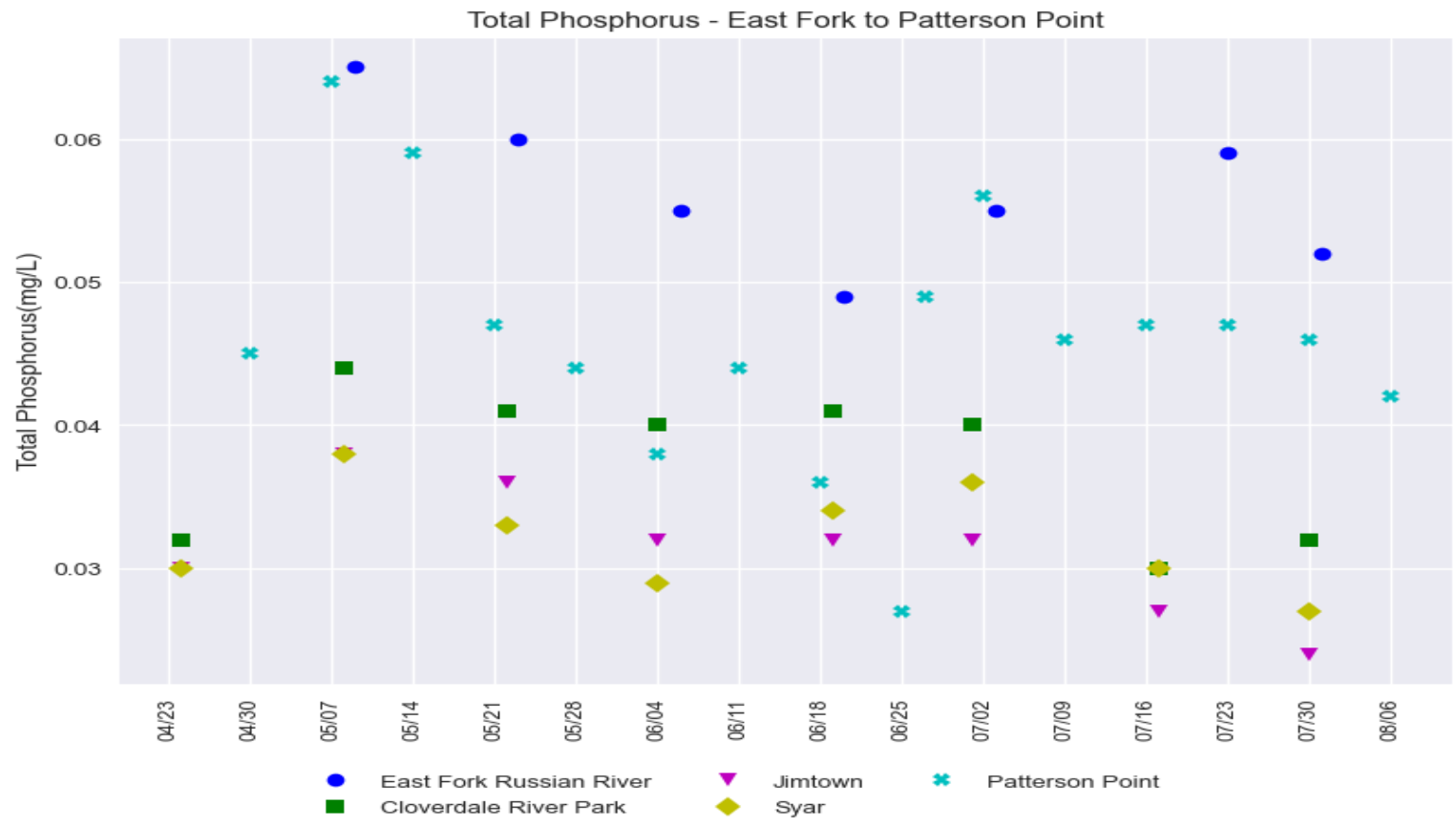
Russian River Water Quality Grab Samples

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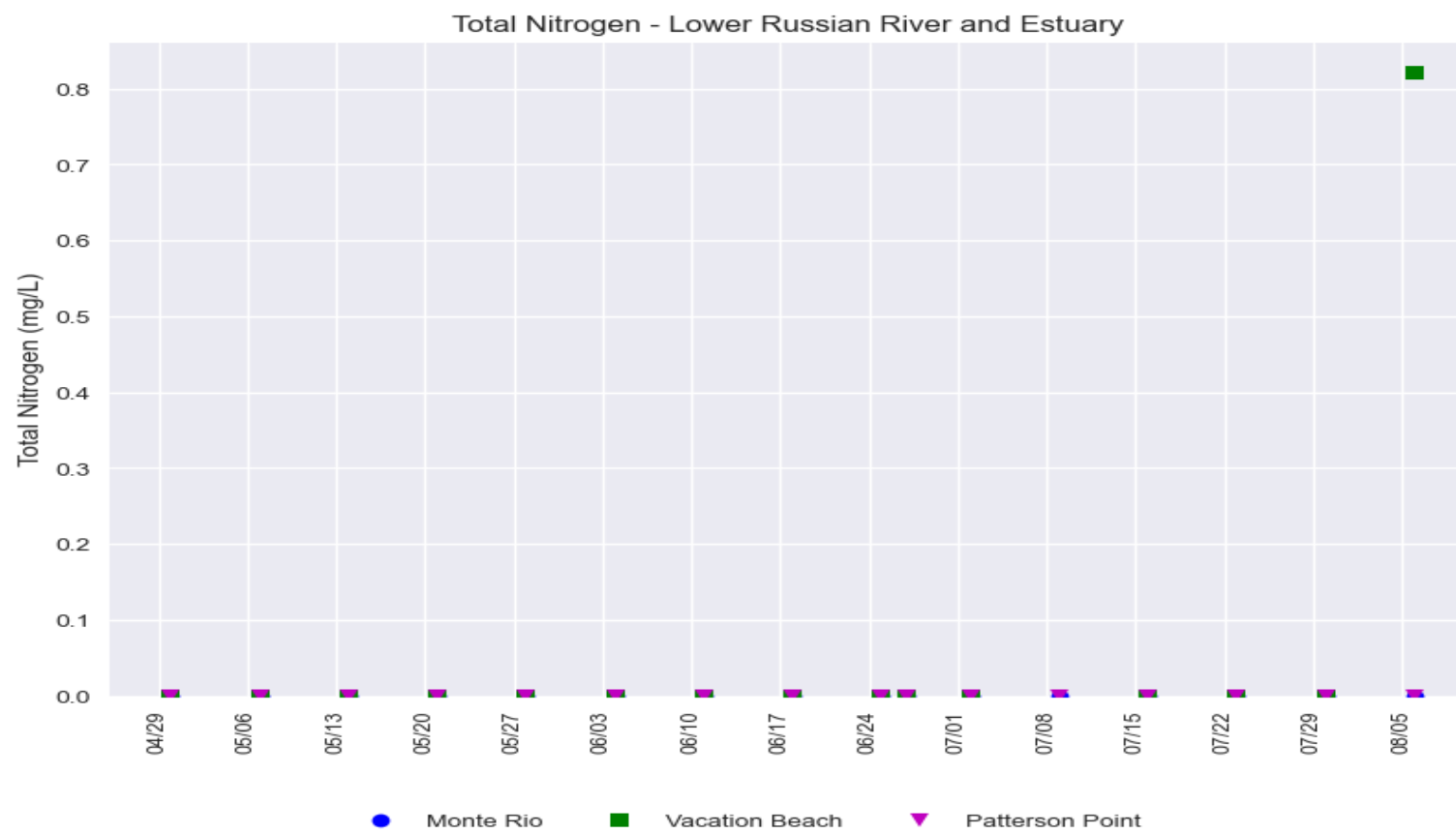
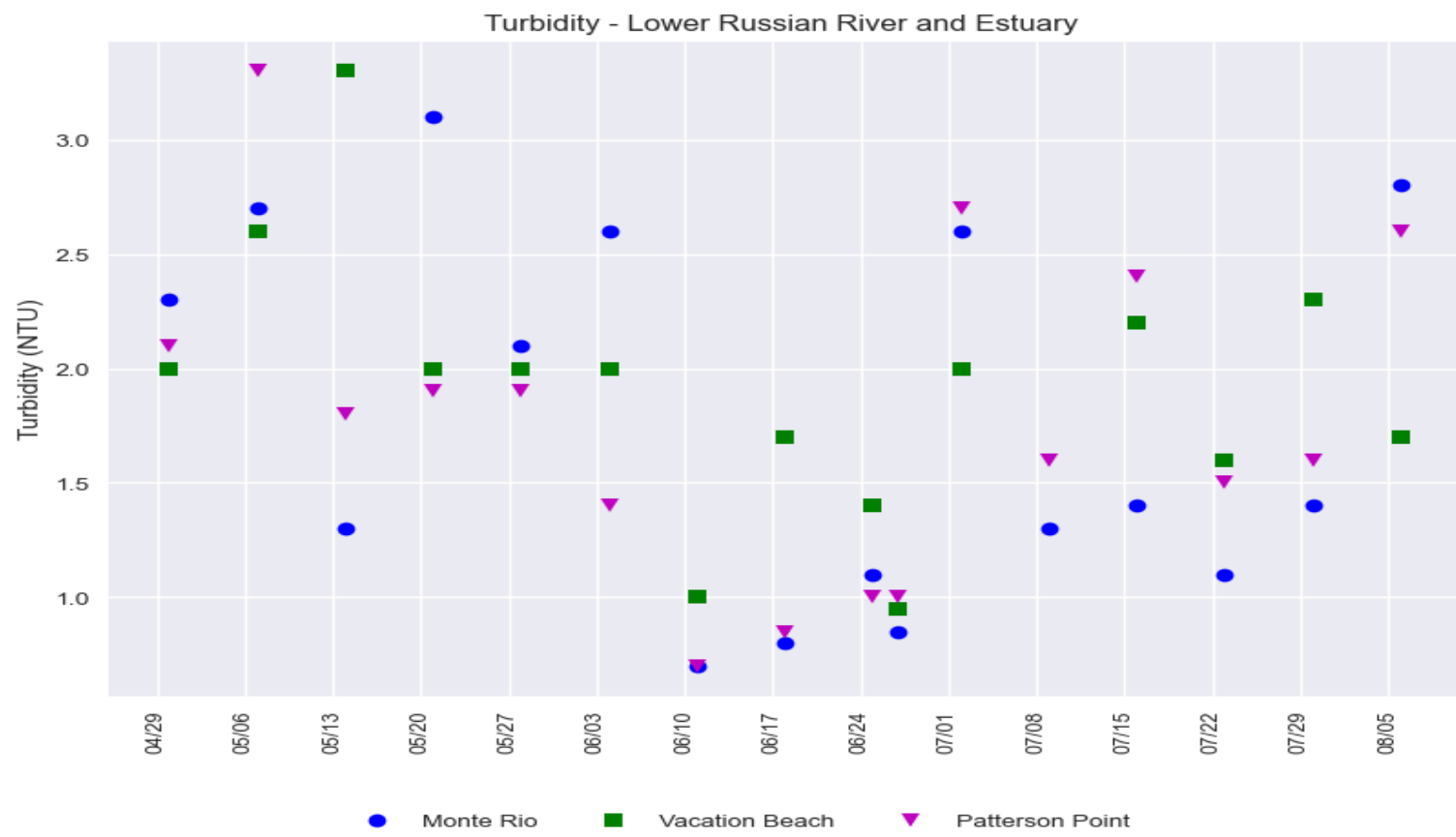
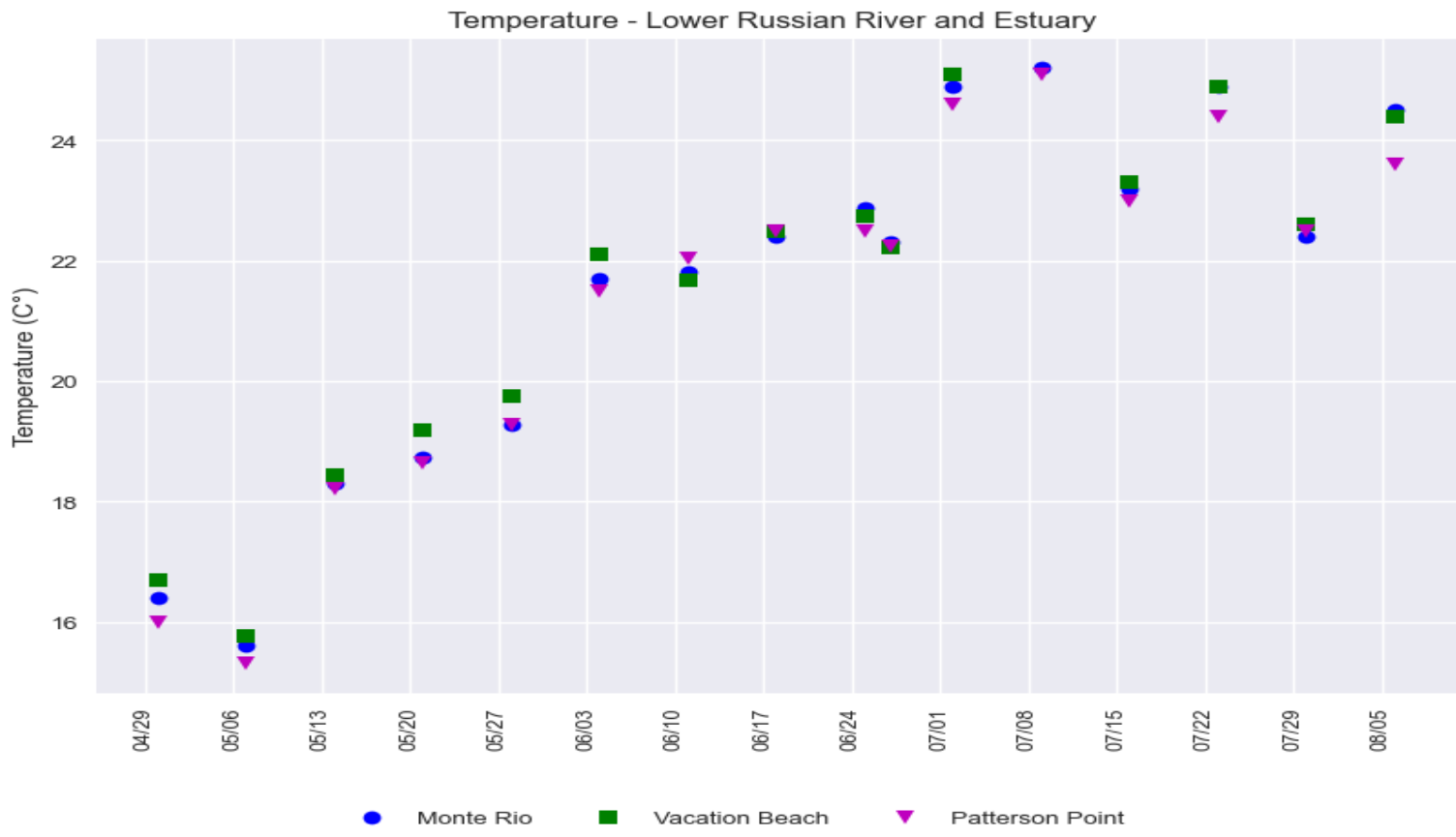
Russian River Water Quality Grab Samples

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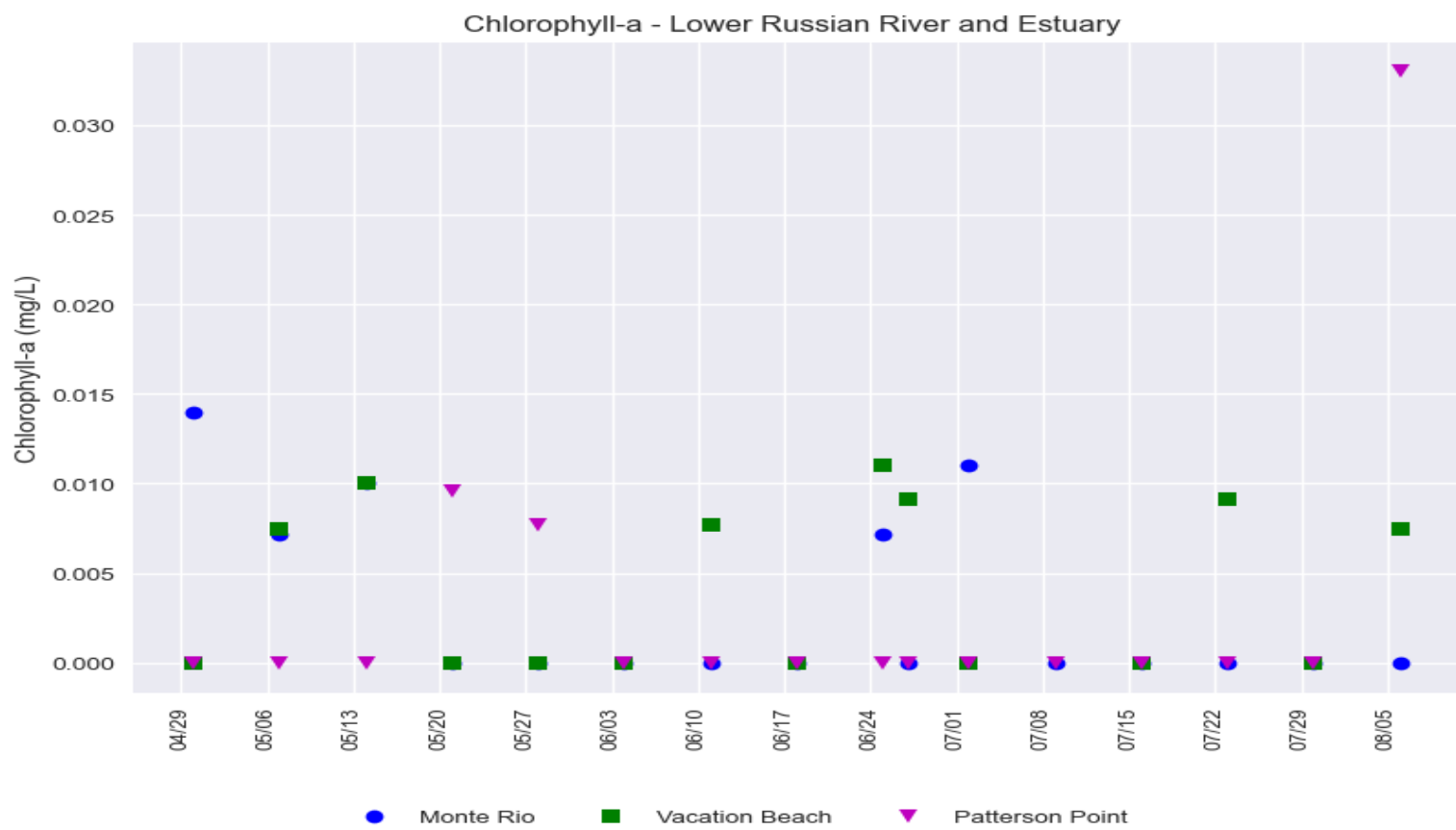
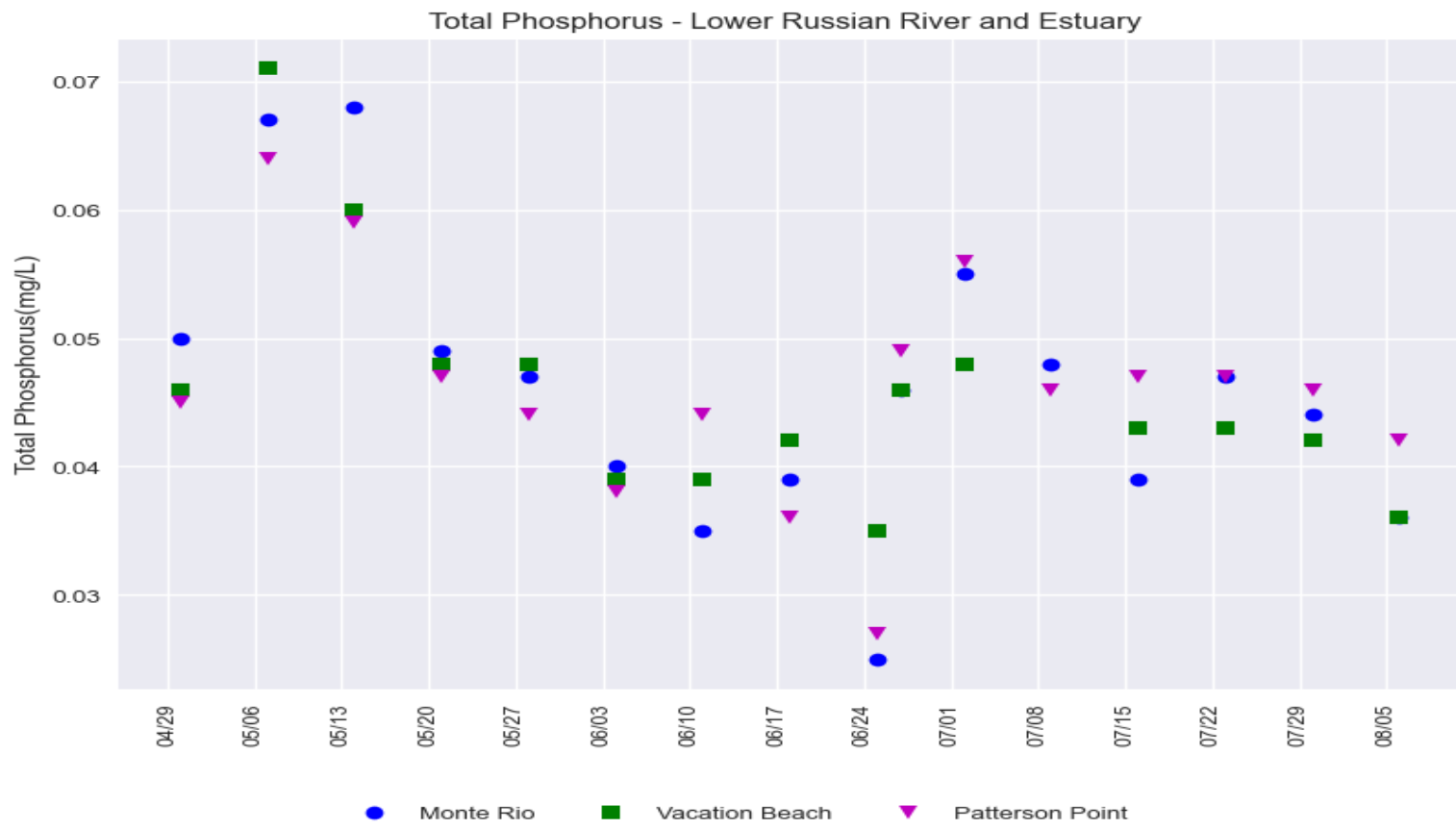
Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



Russian River Water Quality Grab Samples

Provisional Data Subject to Revision



**Russian River Water Quality Grab Samples (June 25 - August 13, 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	6/25/2024	1299.7	>2419.6	>2419.6
		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	2187**	2282**	2014**
		8/6/2024	>2419.6	2419.6	1553.1
		8/13/2024	2187**	2613**	1071**
E. Coli MPN/100 mL	235	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
		8/13/2024	18.5	6.3	6.3
Enterococcus MPN/100 mL****	61	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
		8/13/2024	17.6	1	5.2

*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

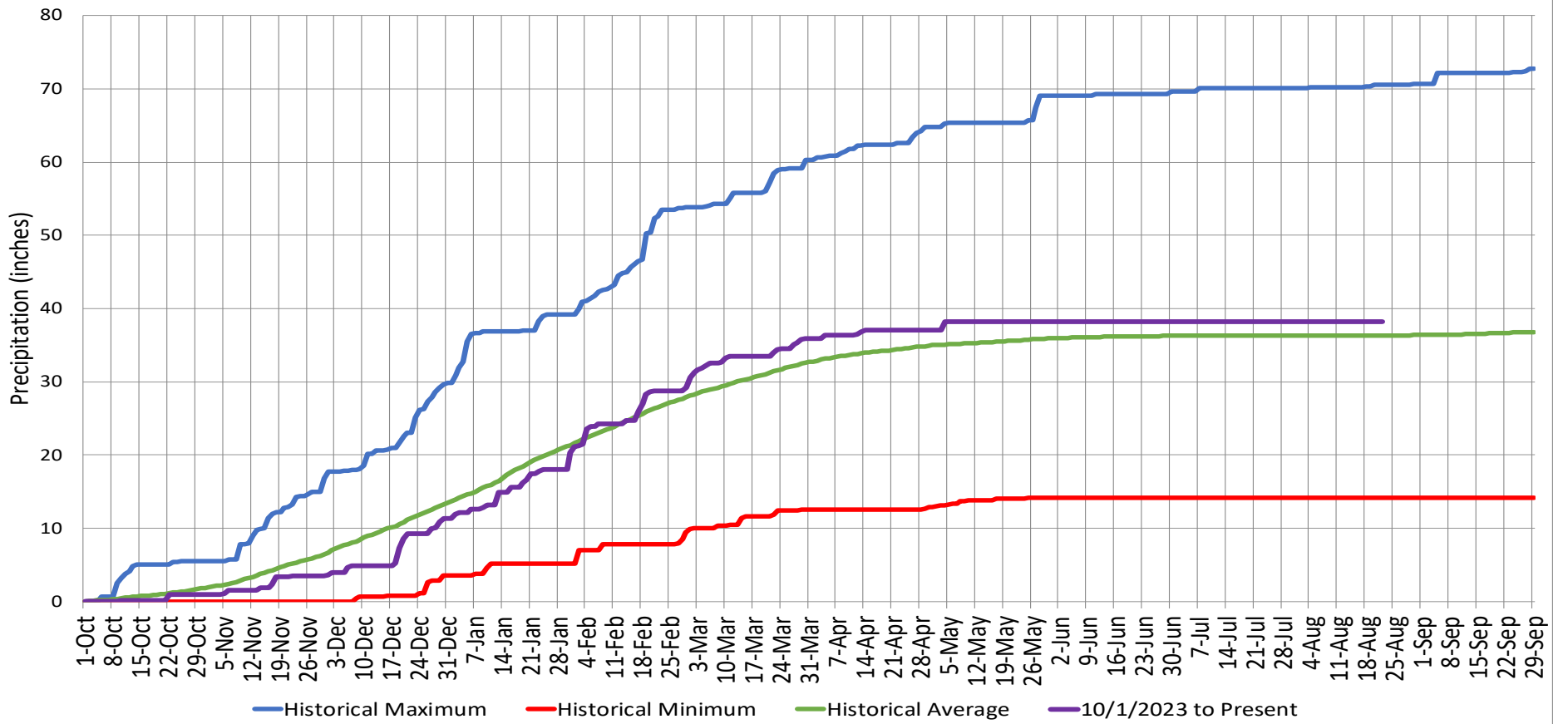
****We continue to collect enterococcus data, however it is not a reliable fecal indicator bacteria in freshwater environments and is not being relied upon for posting at freshwater beaches, per SoCo DHS and NCRWQCB.

Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))

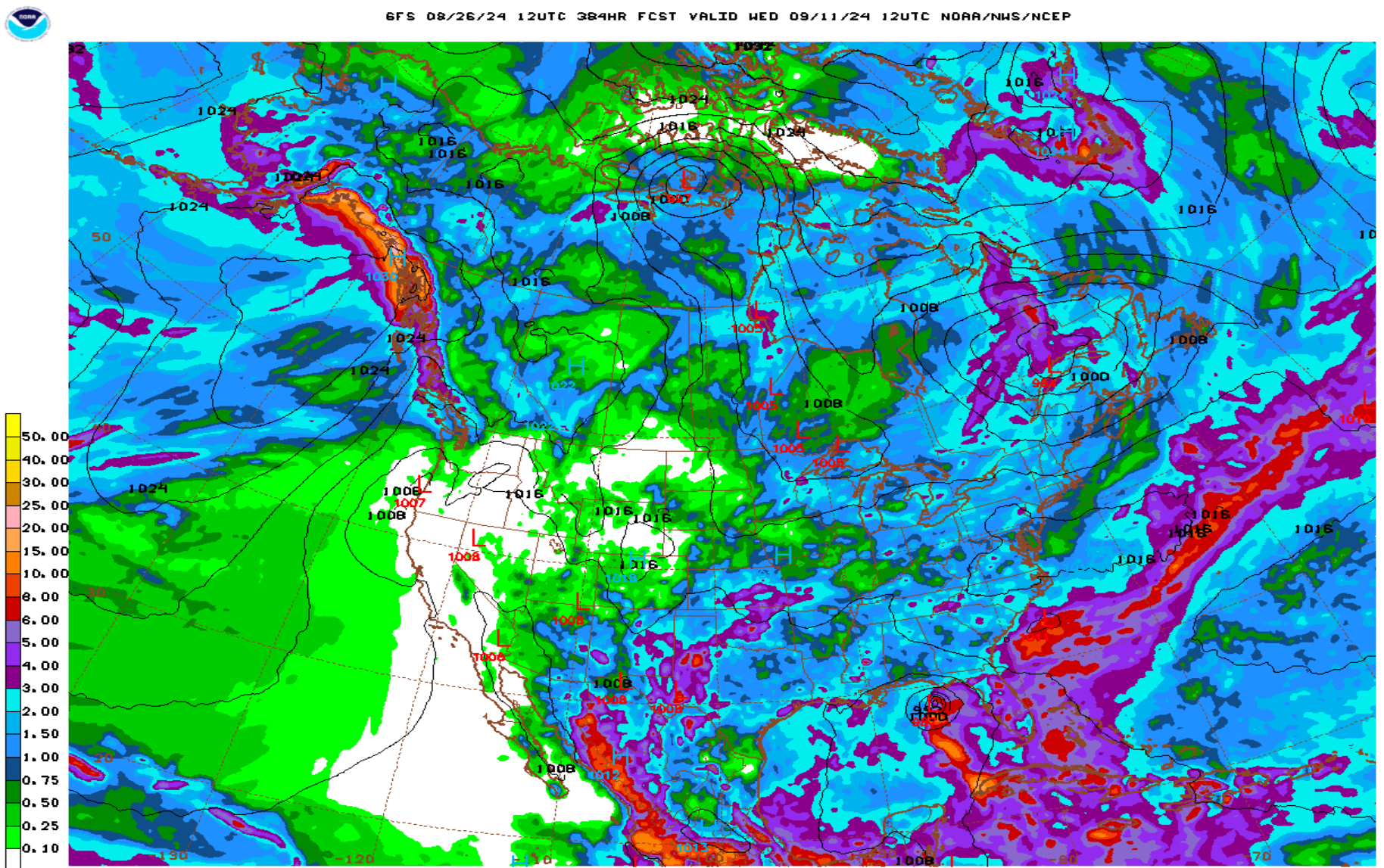
Date Range	Cumulative (inches)
Oct 1, 2023 - Aug 22, 2024	38.22
Last 7 Days*	0.00

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

6FS 08/26/24 12UTC 384HR FCST VALID WED 09/11/24 12UTC NOAA/NWS/NCEP



6FS WED 240911/1200V384 EMSL (4MB). 384HR ACCUMULATED PRECIP (IN)

Date Range
Aug 26 - Sep 11, 2024

Forecasted Cumulative (inches)
0.00