



Sonoma Water

# State Water Resources Control Board Temporary Urgency Change Order (6/17/2022) Russian River Water Quality Report December 9 – December 15, 2022

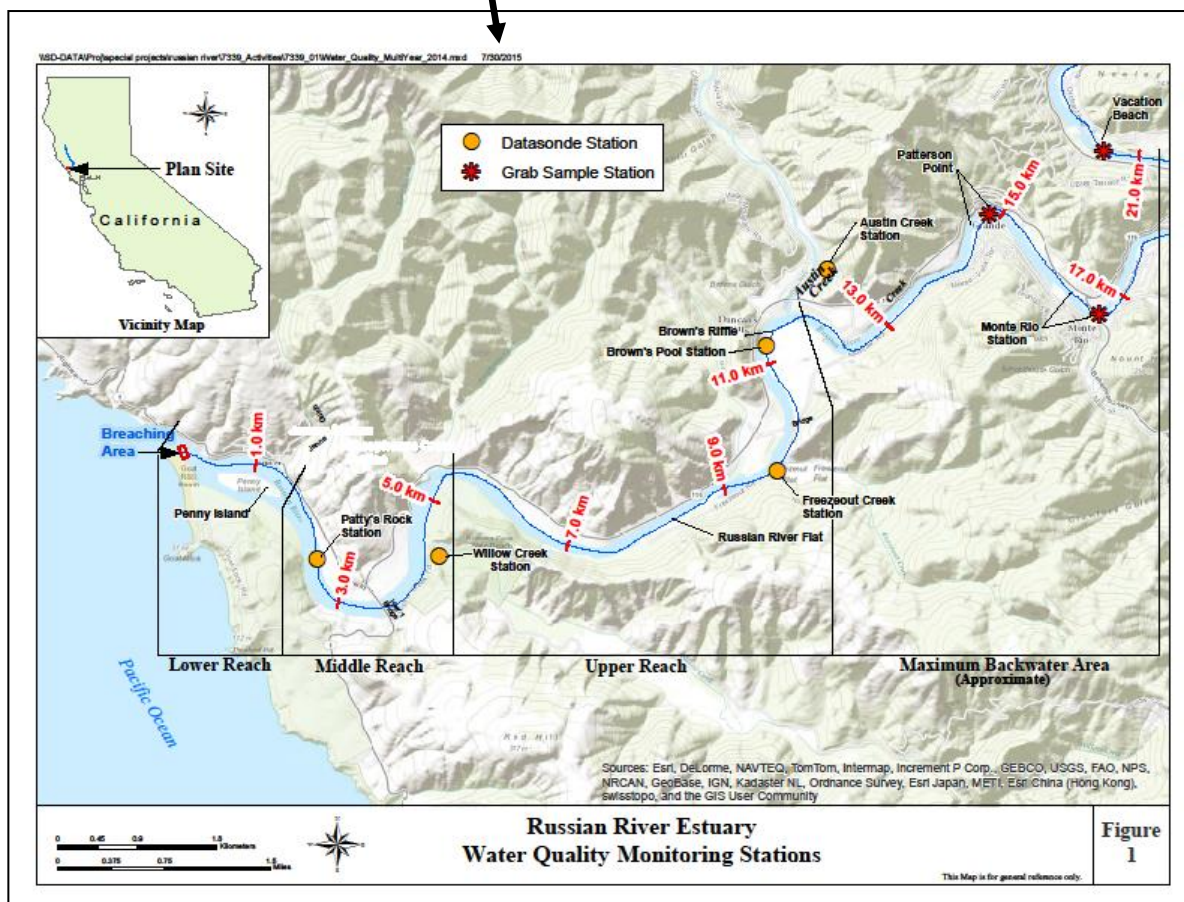
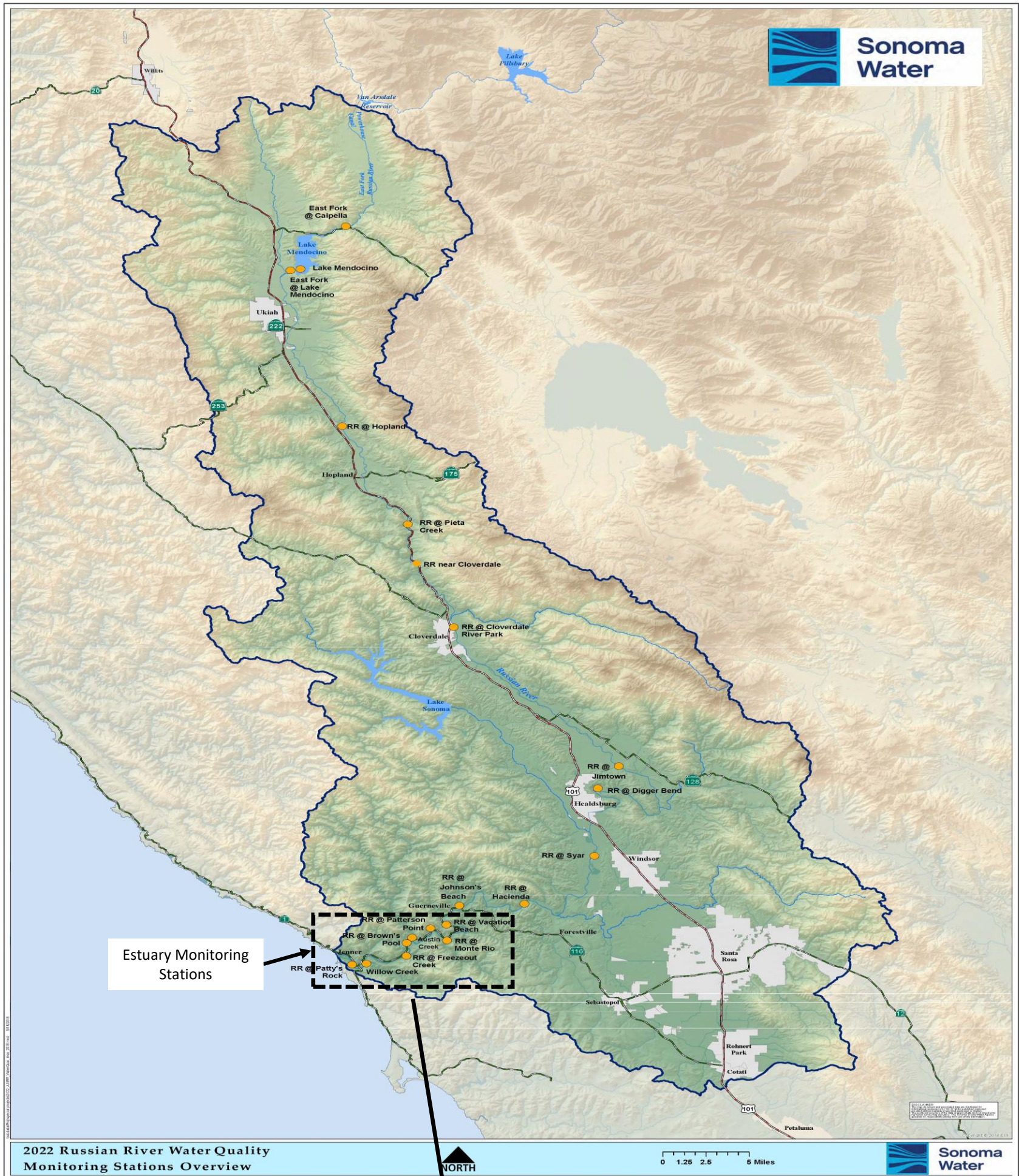
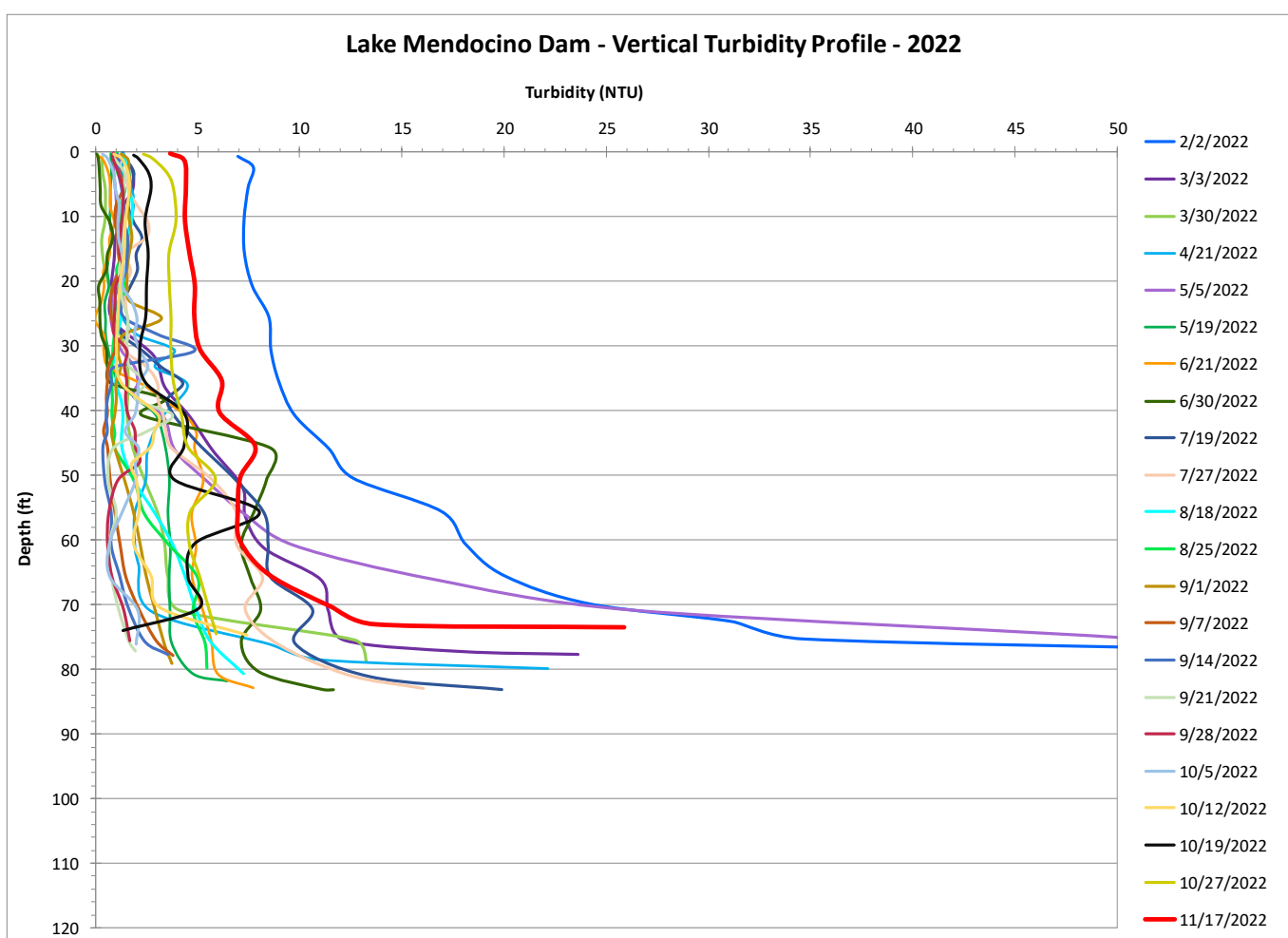
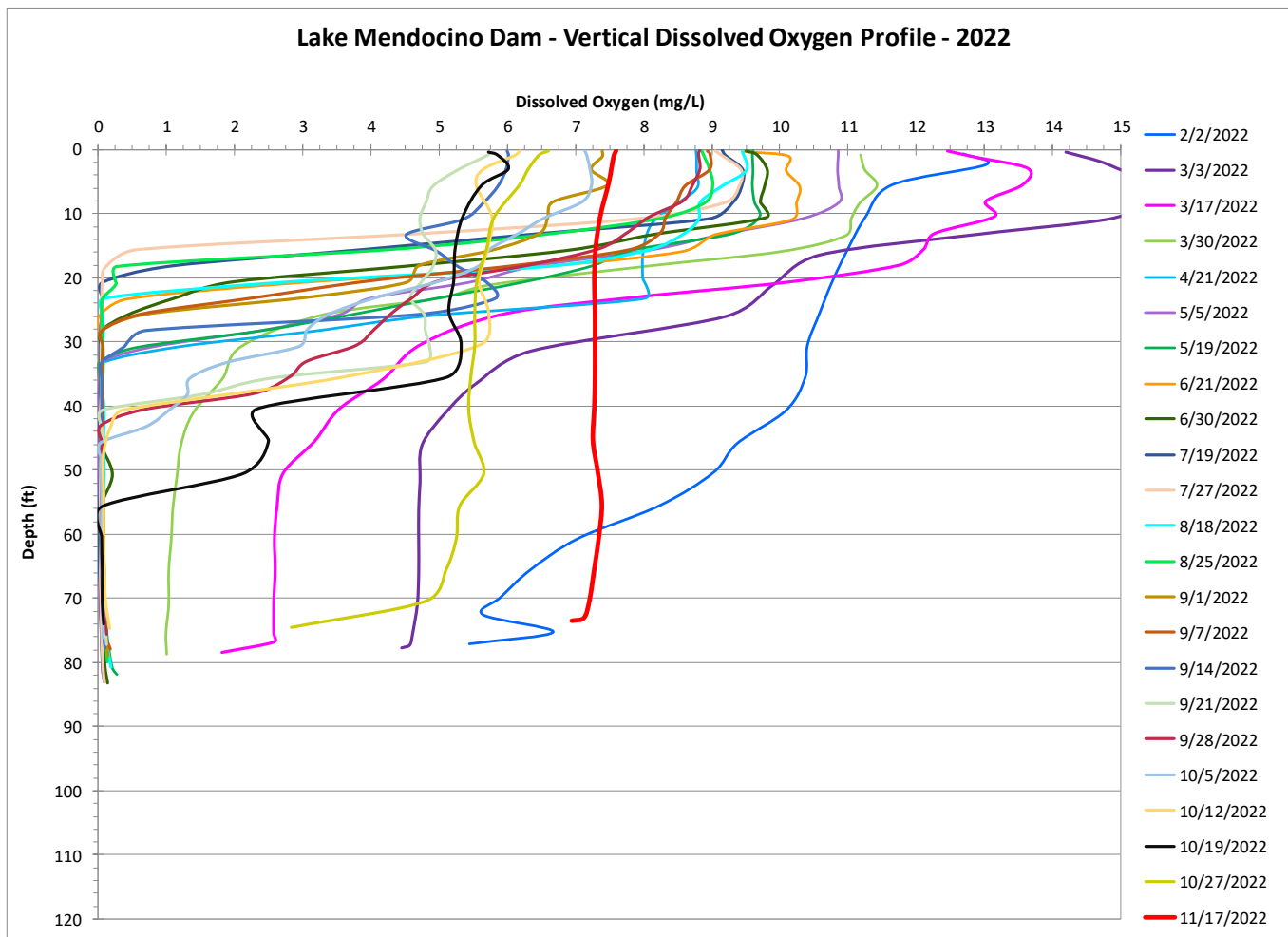
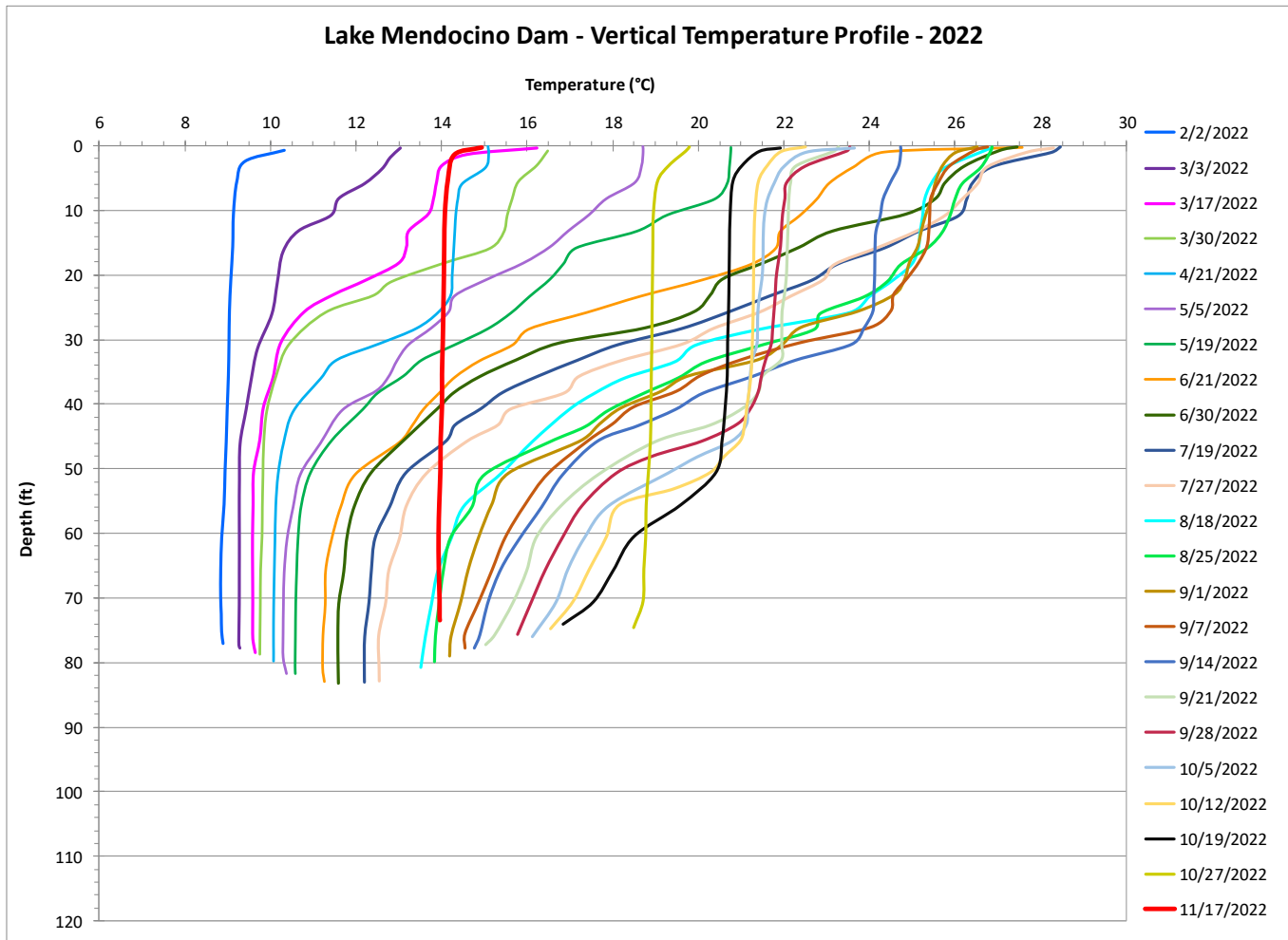


Figure 1



# Lake Mendocino Water Quality Vertical Profiles (February 2 – November 17, 2022)

Provisional Data Subject to Revision

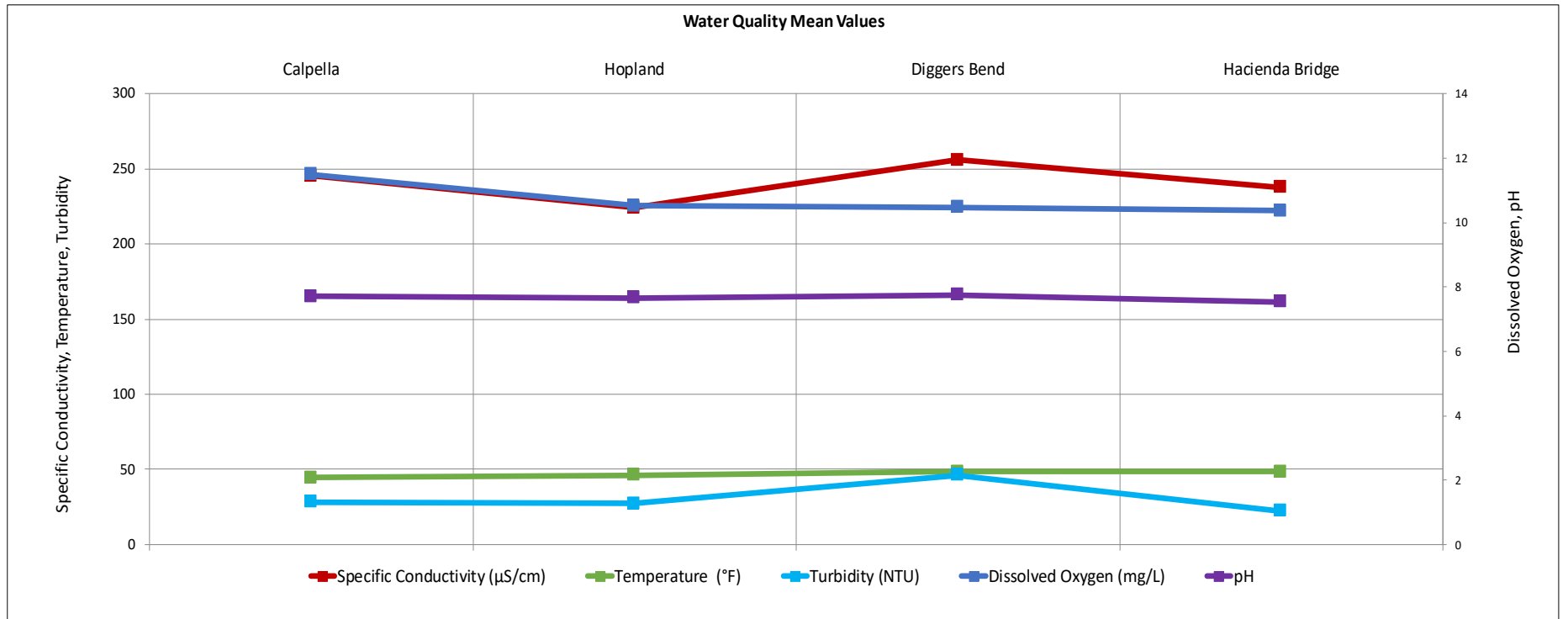


## Russian River Water Quality Sondes (December 9, 2022 – December 15, 2022)

Provisional Data Subject to Revision

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	41.2	44.4		45.3	45.5		45.9	
	Max	47.8	49.3		52.9	53.4		51.4	
	Mean	44.3	46.2		48.7	48.5		48.5	
Specific Conductivity (µS/cm)	Min	157.0	130.0			183.0		189.0	
	Max	293.0	307.0			350.0		280.0	
	Mean	245.1	224.0			255.8		237.7	
Dissolved Oxygen (mg/L)	Min	10.7	9.6			9.6		9.6	
	Max	12.5	11.0			11.3		10.8	
	Mean	11.5	10.5			10.5		10.4	
Dissolved Oxygen (% Saturation)	Min	89.4	81.7			85.7		85.6	
	Max	100.4	92.1			102.4		93.9	
	Mean	94.2	88.5			91.0		90.0	
pH	Min	7.4	7.5			7.7		7.4	
	Max	7.9	7.8			8.0		7.7	
	Mean	7.7	7.7			7.7		7.5	
Turbidity (NTU)	Min	2.9	1.6			0.4		2.6	
	Max	235.0	218.0			230.0		76.5	
	Mean	28.2	27.1			46.3		22.4	

\*Station operated seasonally

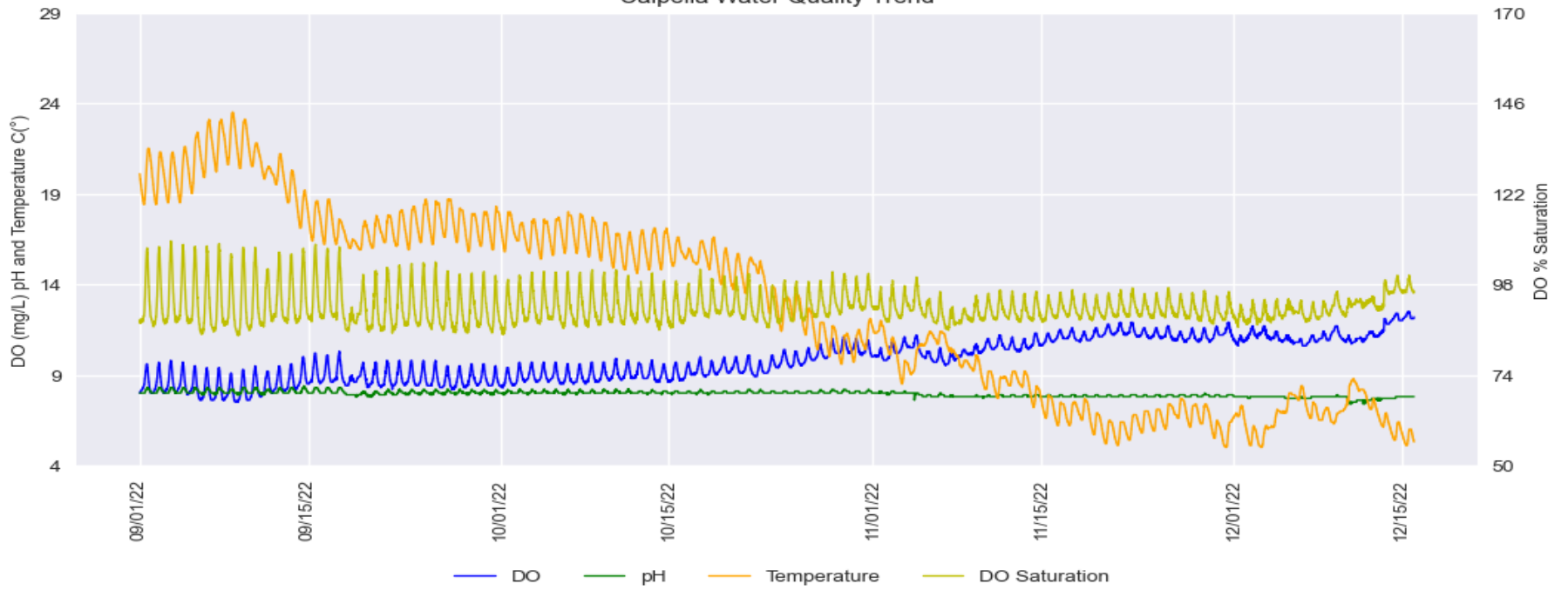


## Russian River Water Quality September 1 – December 15, 2022

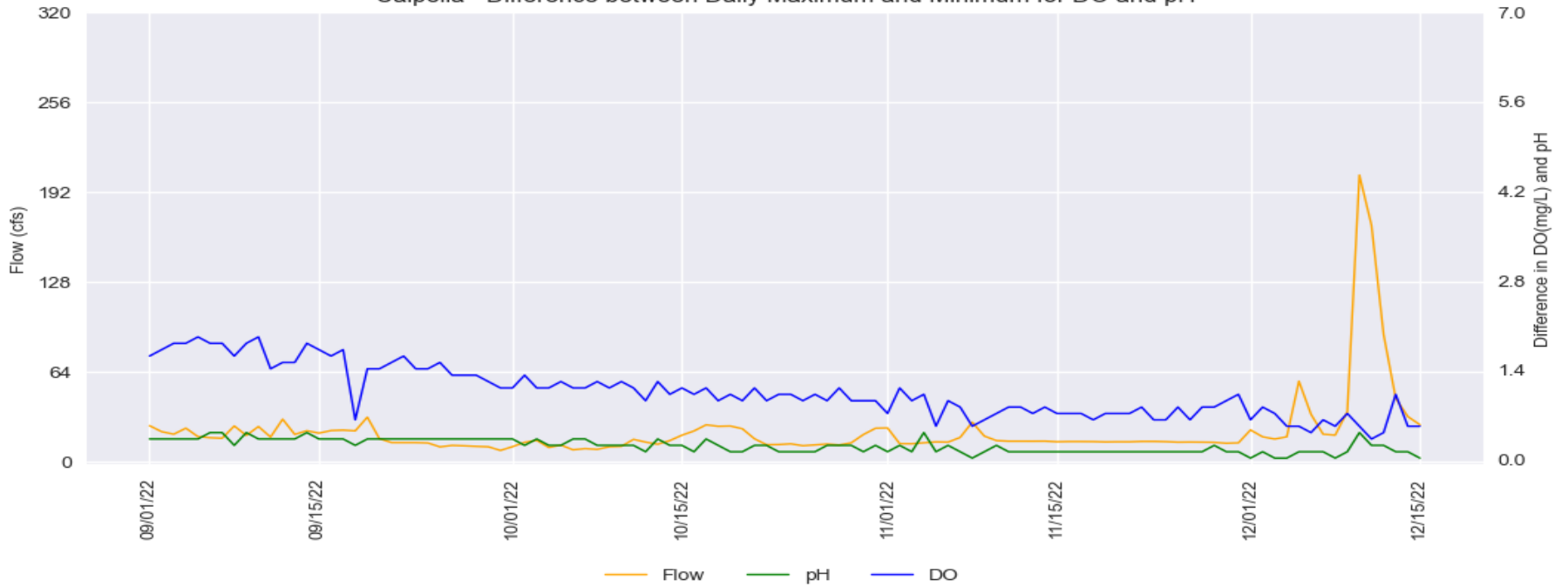
Provisional Data Subject to Revision

### Calpella (East Fork Russian River)

#### Calpella Water Quality Trend



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

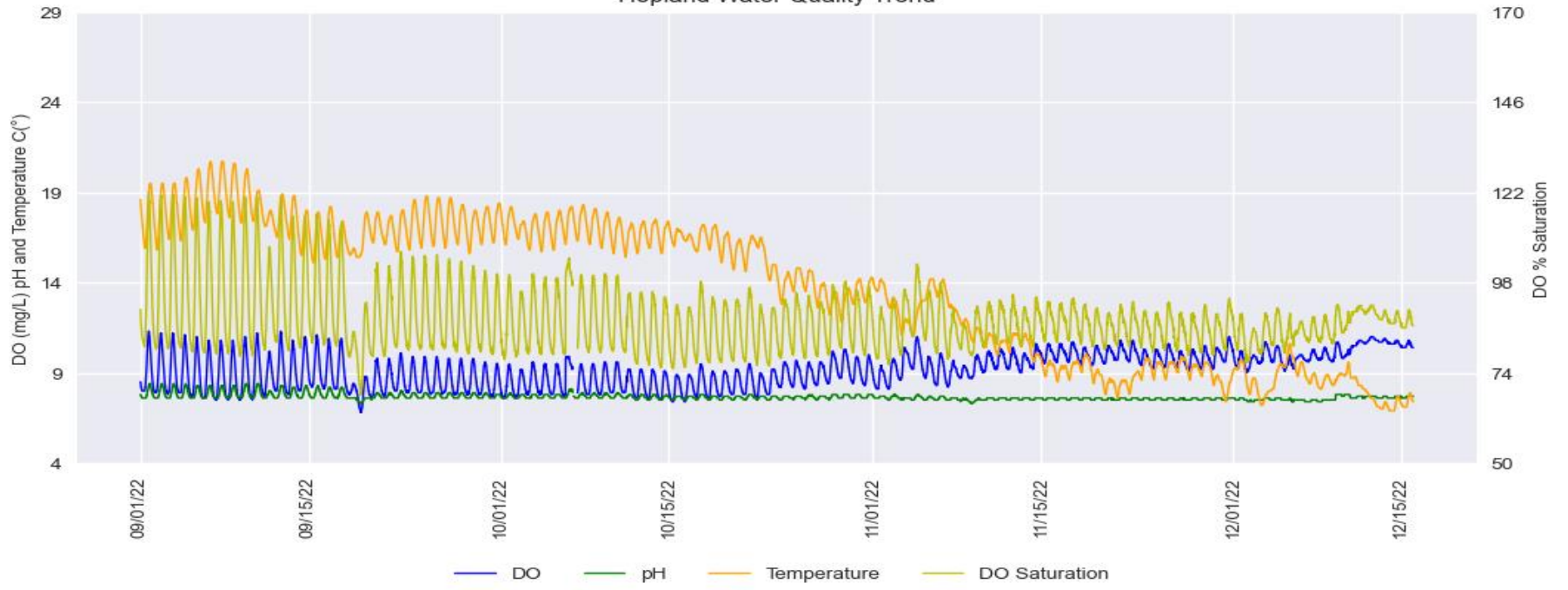


Russian River Water Quality September 1 – December 15, 2022

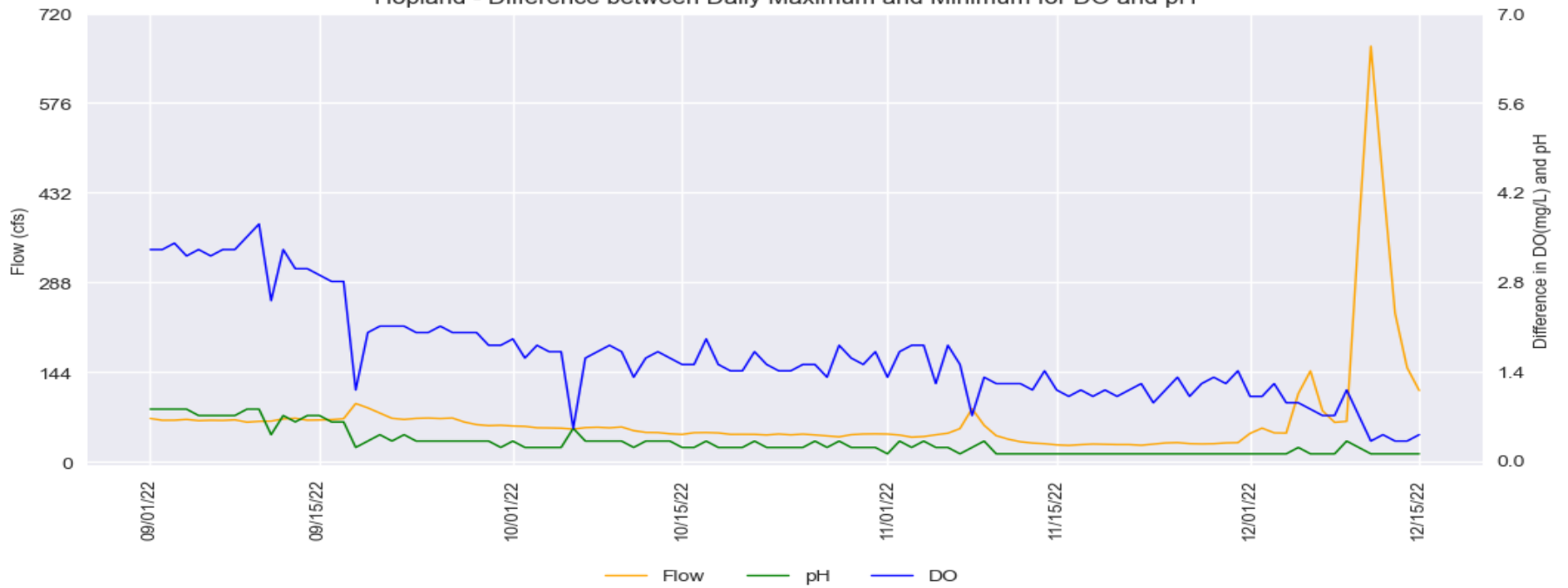
Provisional Data Subject to Revision

**Hopland**

Hopland Water Quality Trend

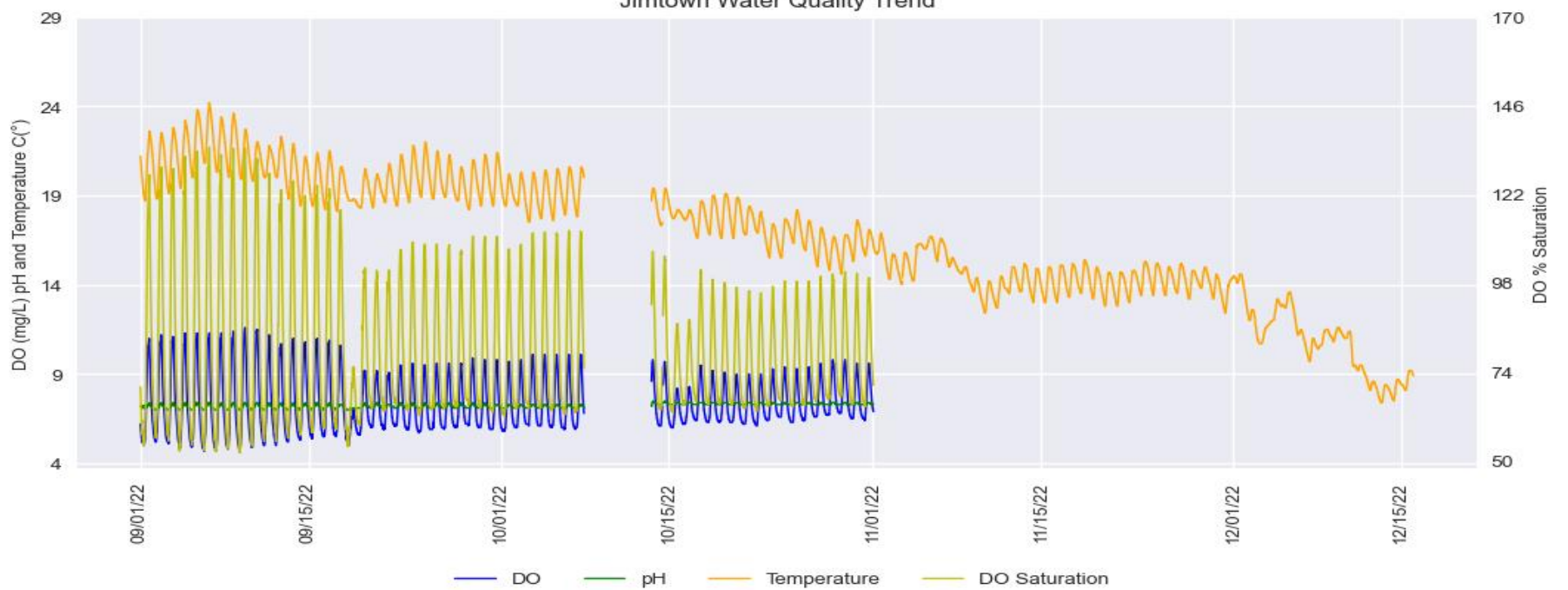


Hopland - Difference between Daily Maximum and Minimum for DO and pH

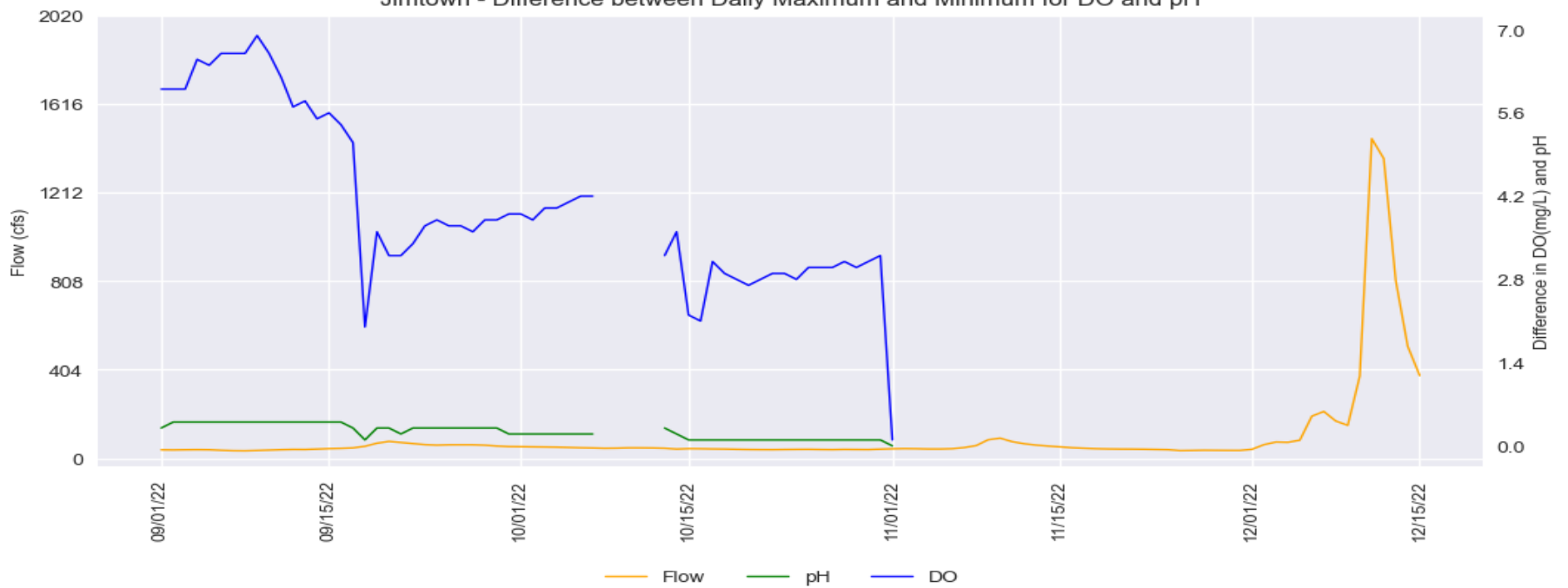


**Jimtown**

Jimtown Water Quality Trend



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



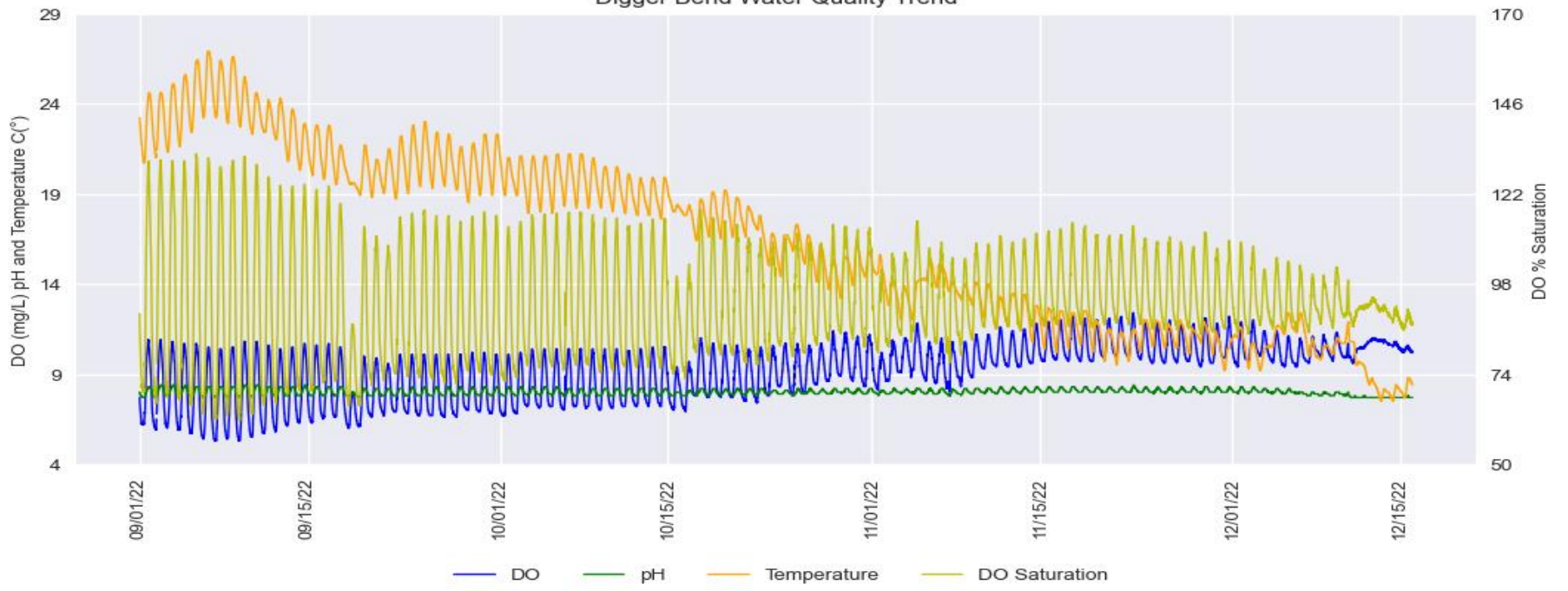


Russian River Water Quality September 1 – December 15, 2022

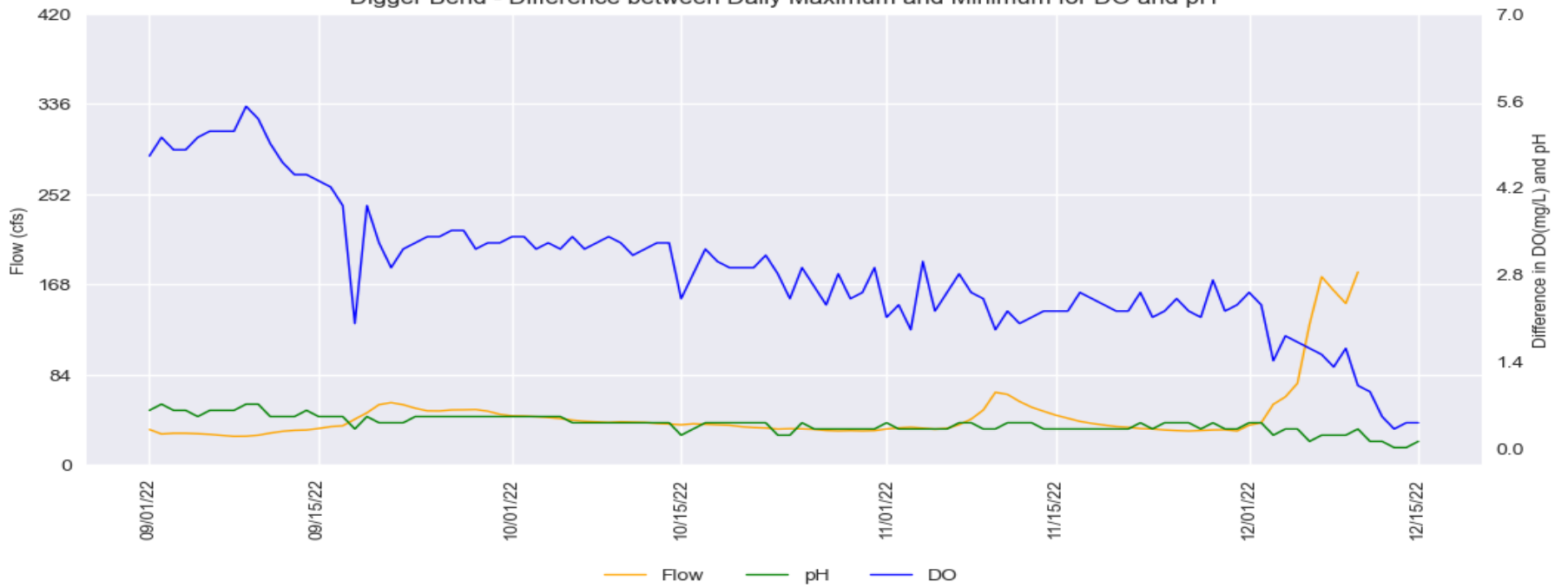
Provisional Data Subject to Revision

**Diggers Bend**

Digger Bend Water Quality Trend

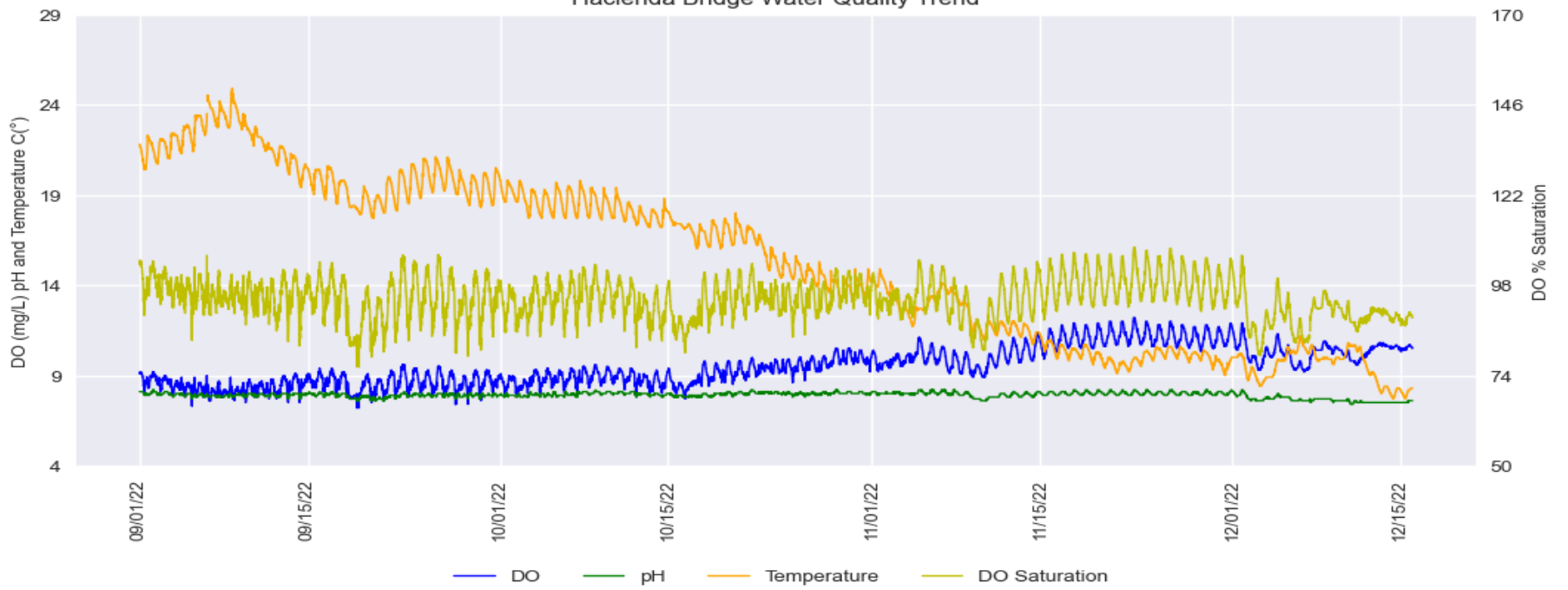


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH

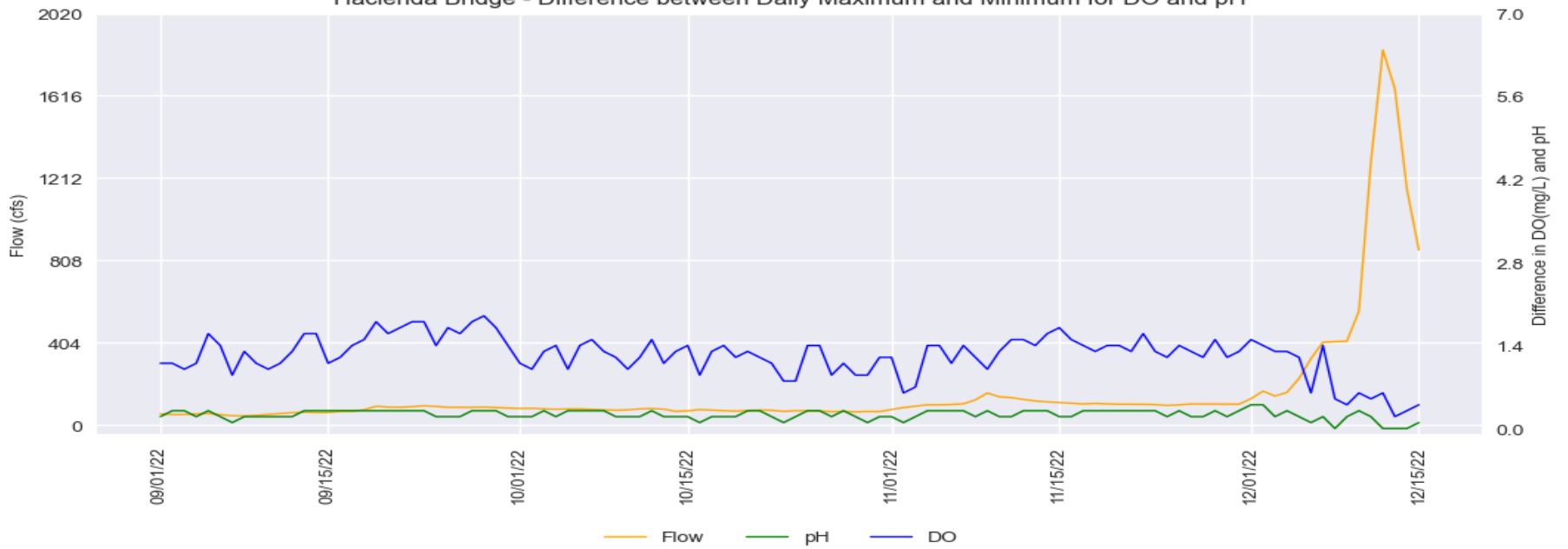


**Hacienda Bridge**

Hacienda Bridge Water Quality Trend



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

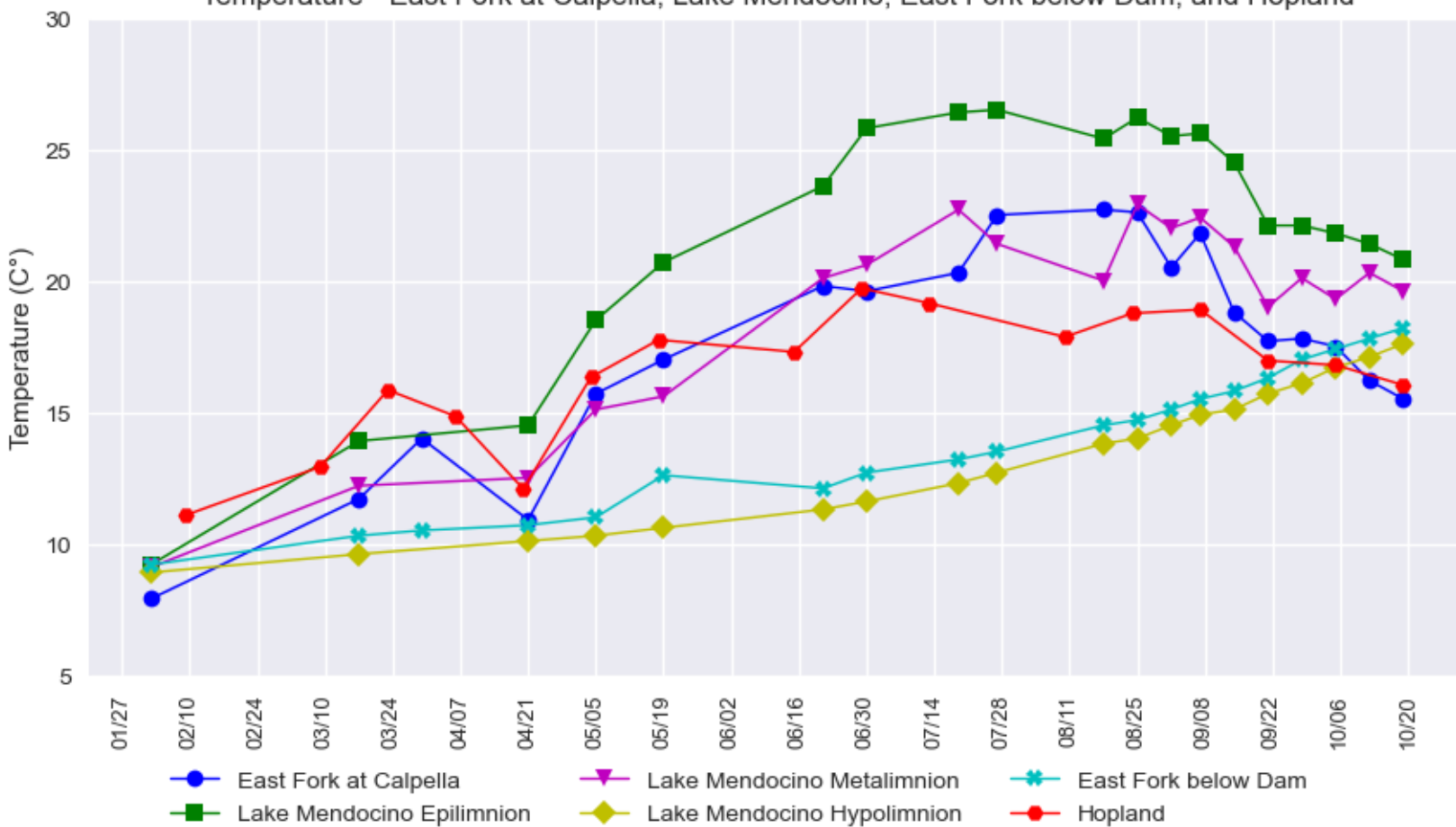


Russian River Water Quality Grab Samples (February 02 - October 19, 2022)

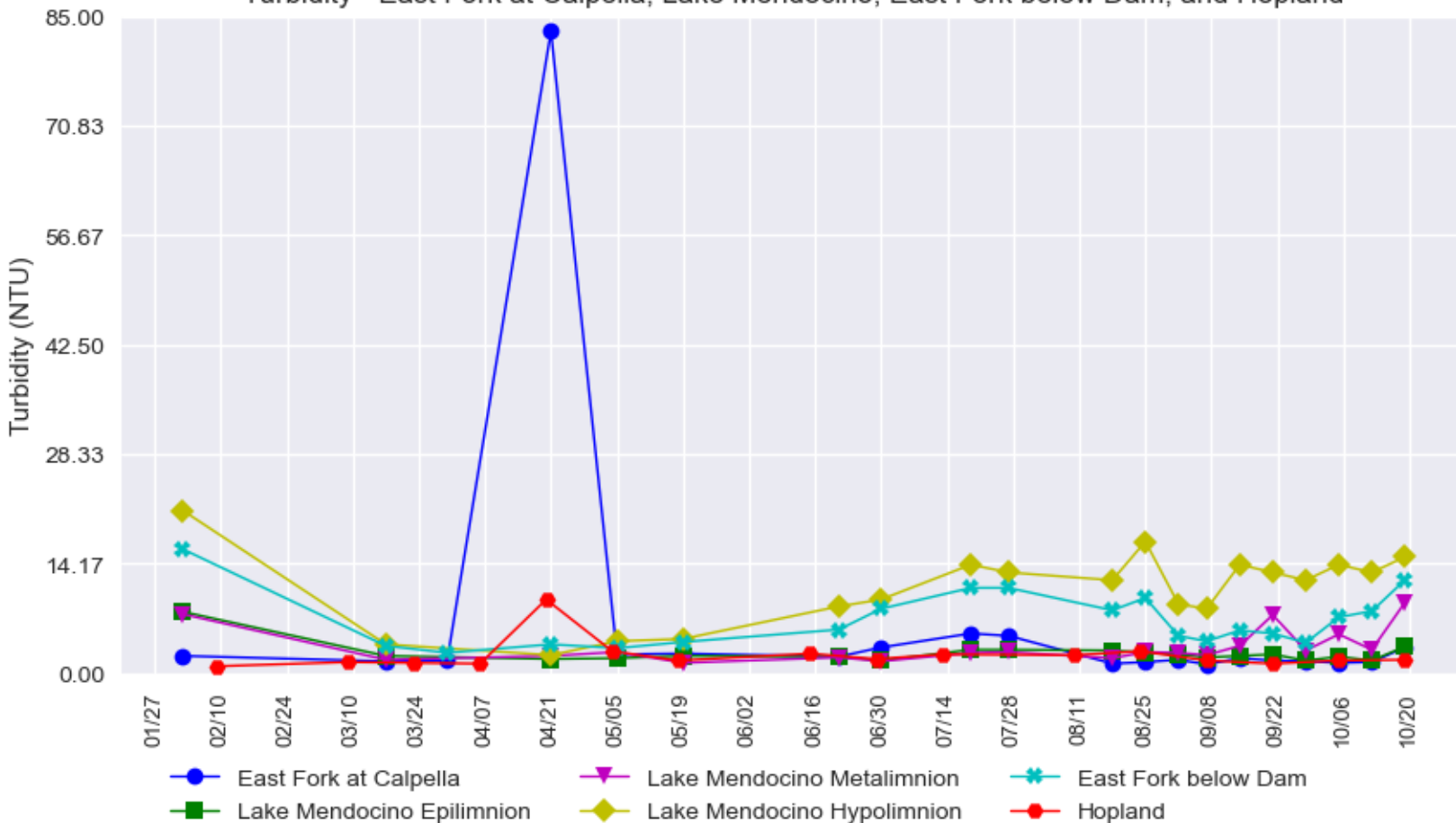
Provisional Data Subject to Revision

Lake Mendocino to Hopland Water Quality

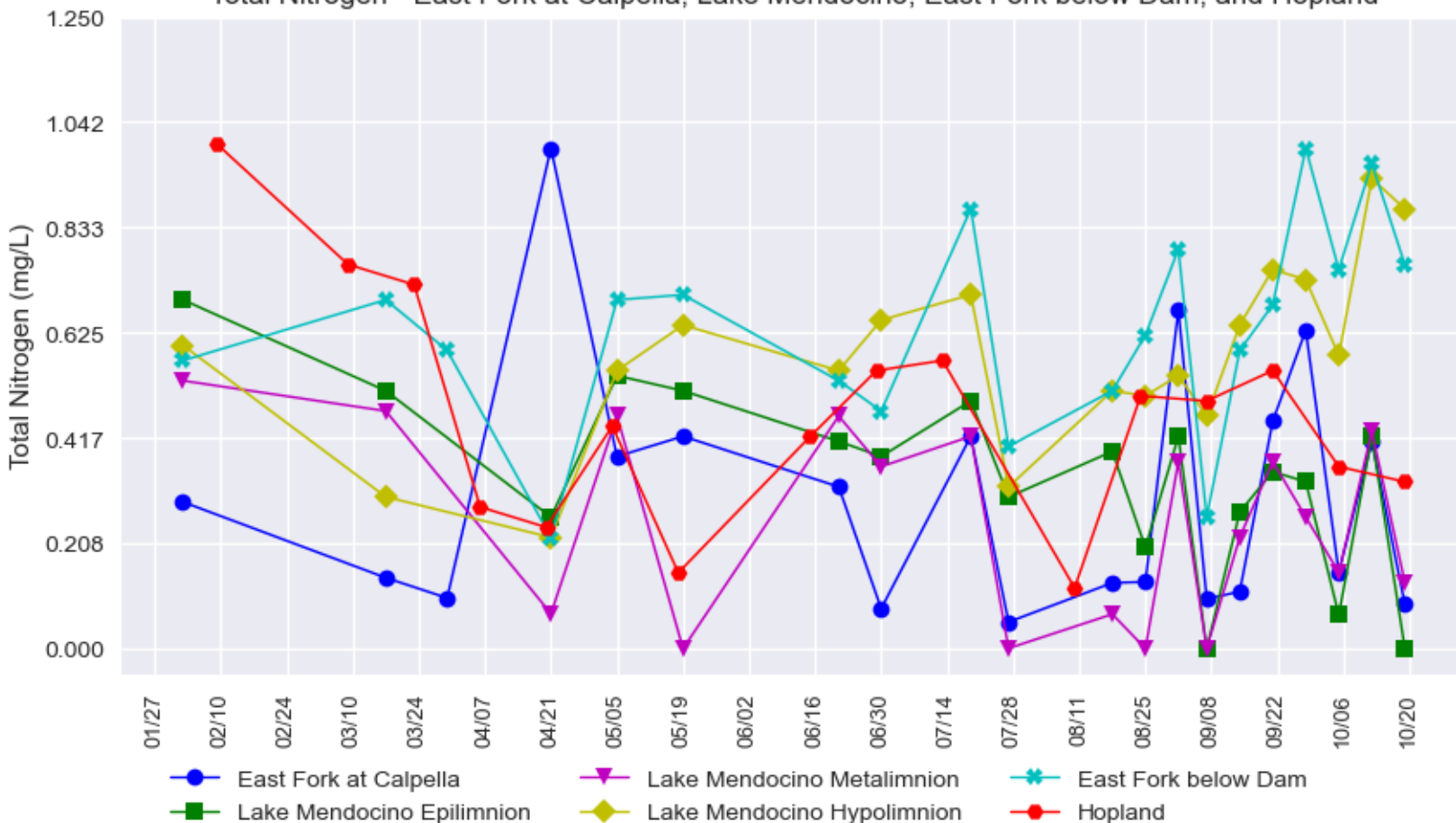
Temperature - East Fork at Calpella, Lake Mendocino, East Fork below Dam, and Hopland



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



Total Nitrogen - East Fork at Calpella, Lake Mendocino, East Fork below Dam, and Hopland

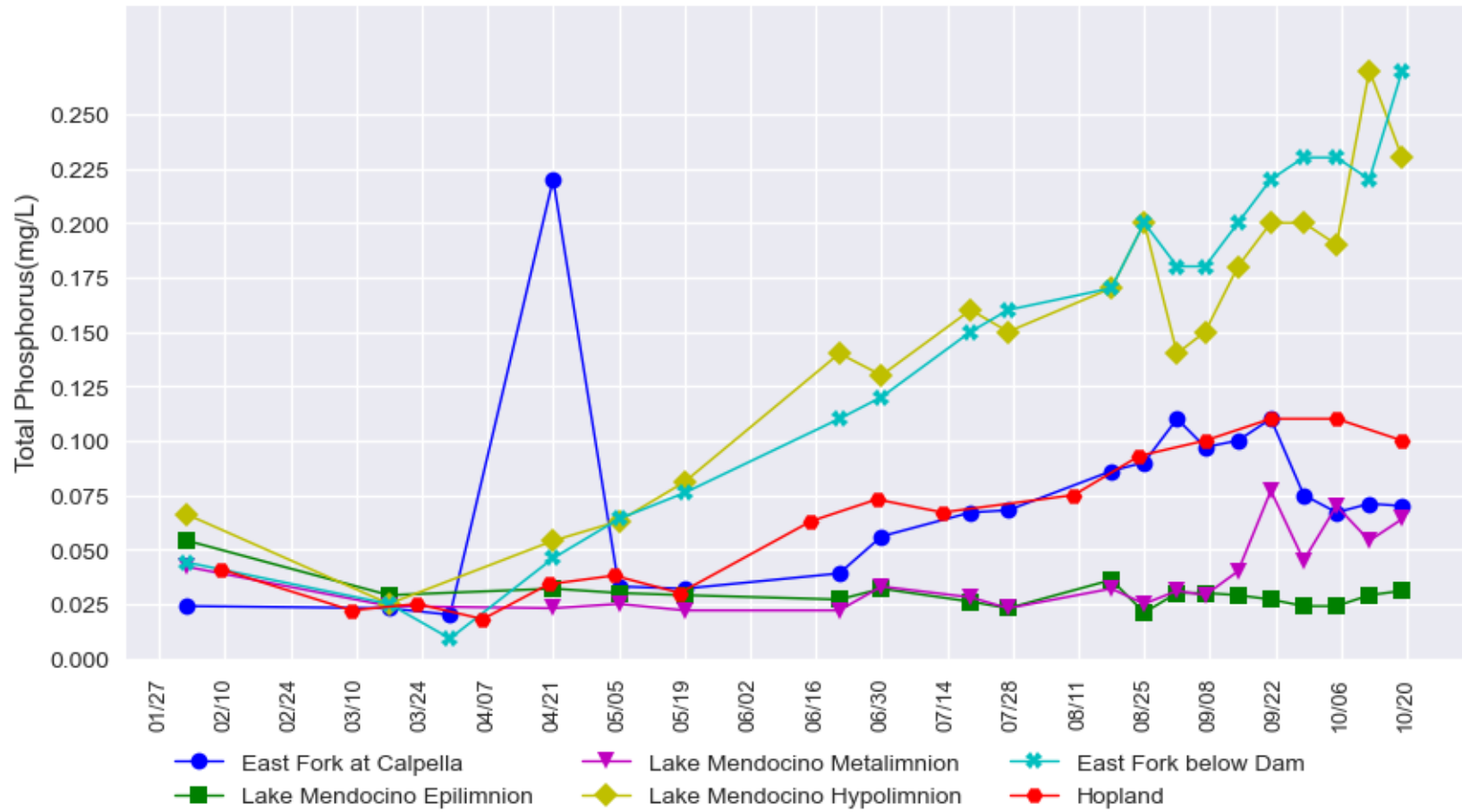


\*Each marker in the plot represents a grab sample. The lines are used to help visualize the data, but do not represent a continuous data measurement.

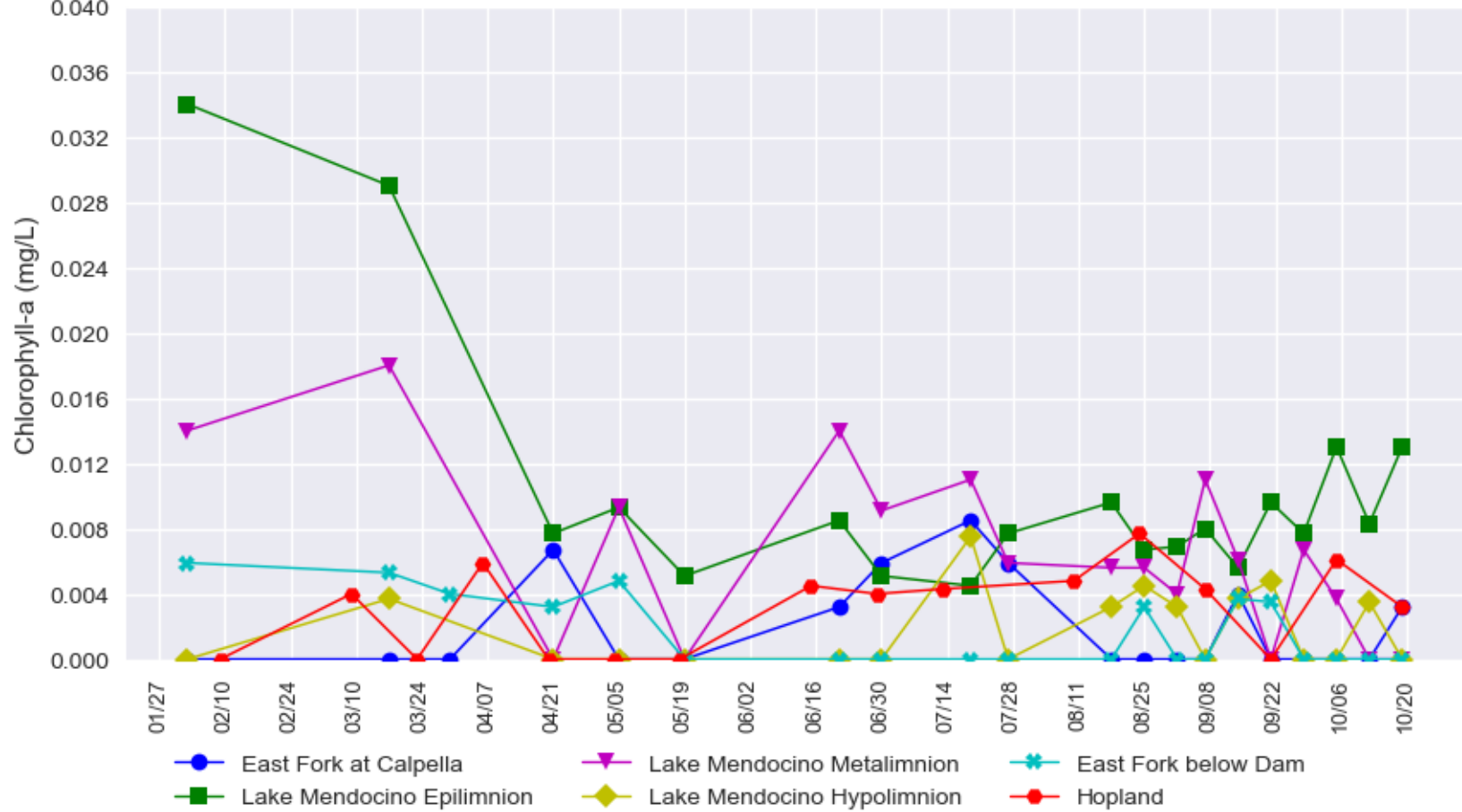
Russian River Water Quality Grab Samples (February 02 - October 19, 2022)

Provisional Data Subject to Revision  
 Lake Mendocino to Hopland Water Quality

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



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



\*Each marker in the plot represents a grab sample. The lines are used to help visualize the data, but do not represent a continuous data measurement.

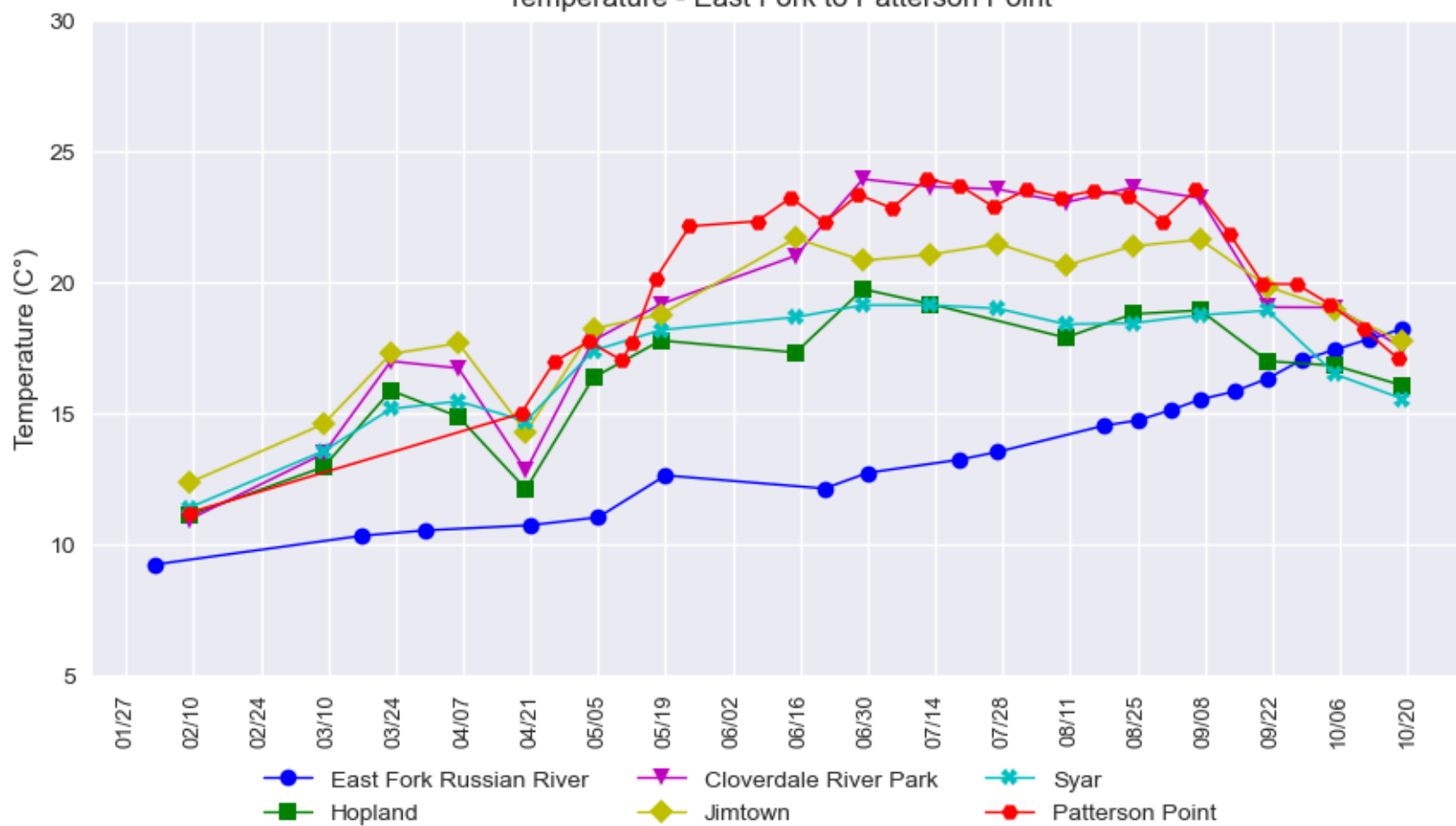


Russian River Water Quality Grab Samples (February 02 - October 19, 2022)

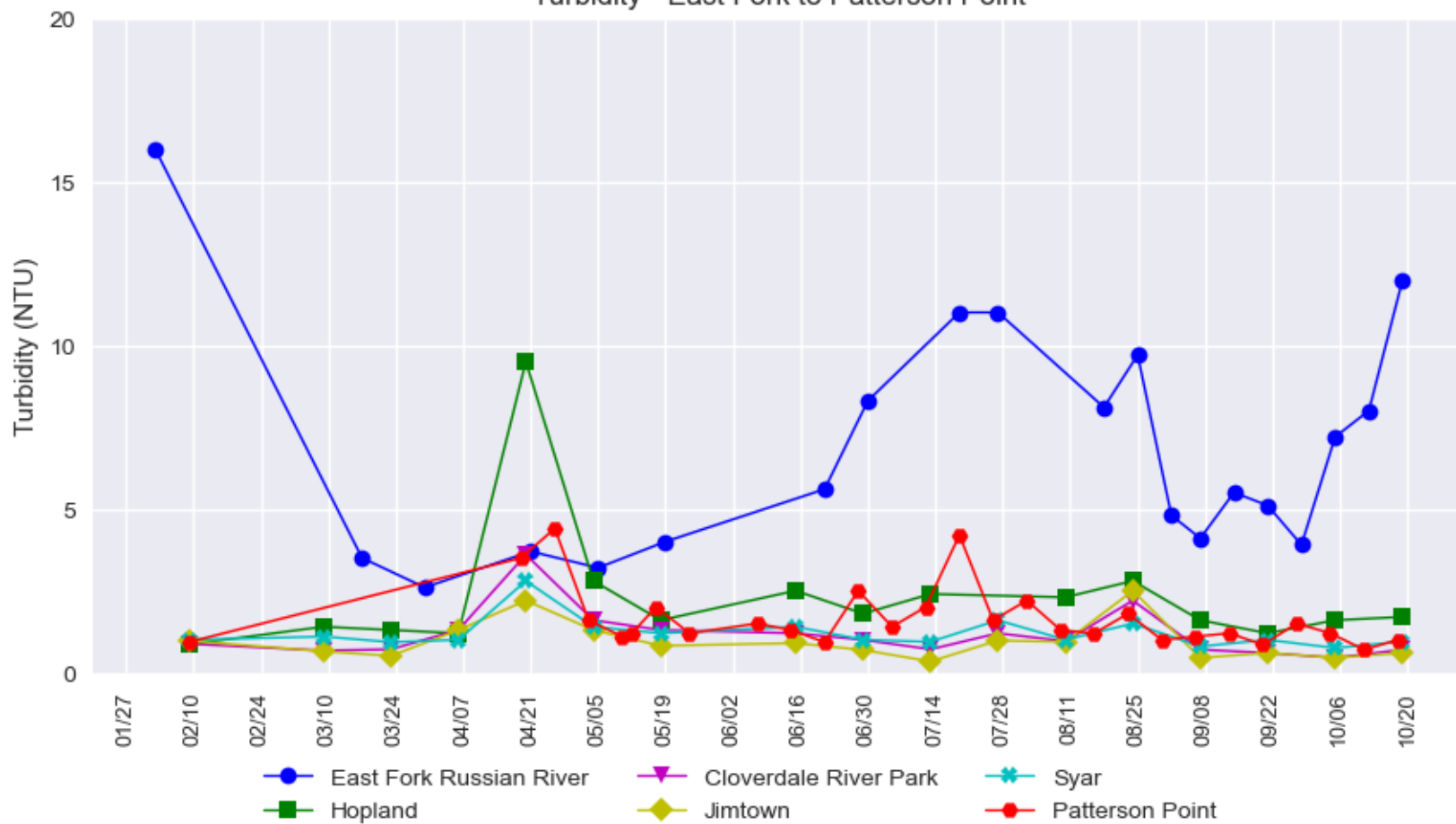
Provisional Data Subject to Revision

East Fork (below Lake Mendocino) to Patterson Point Water Quality

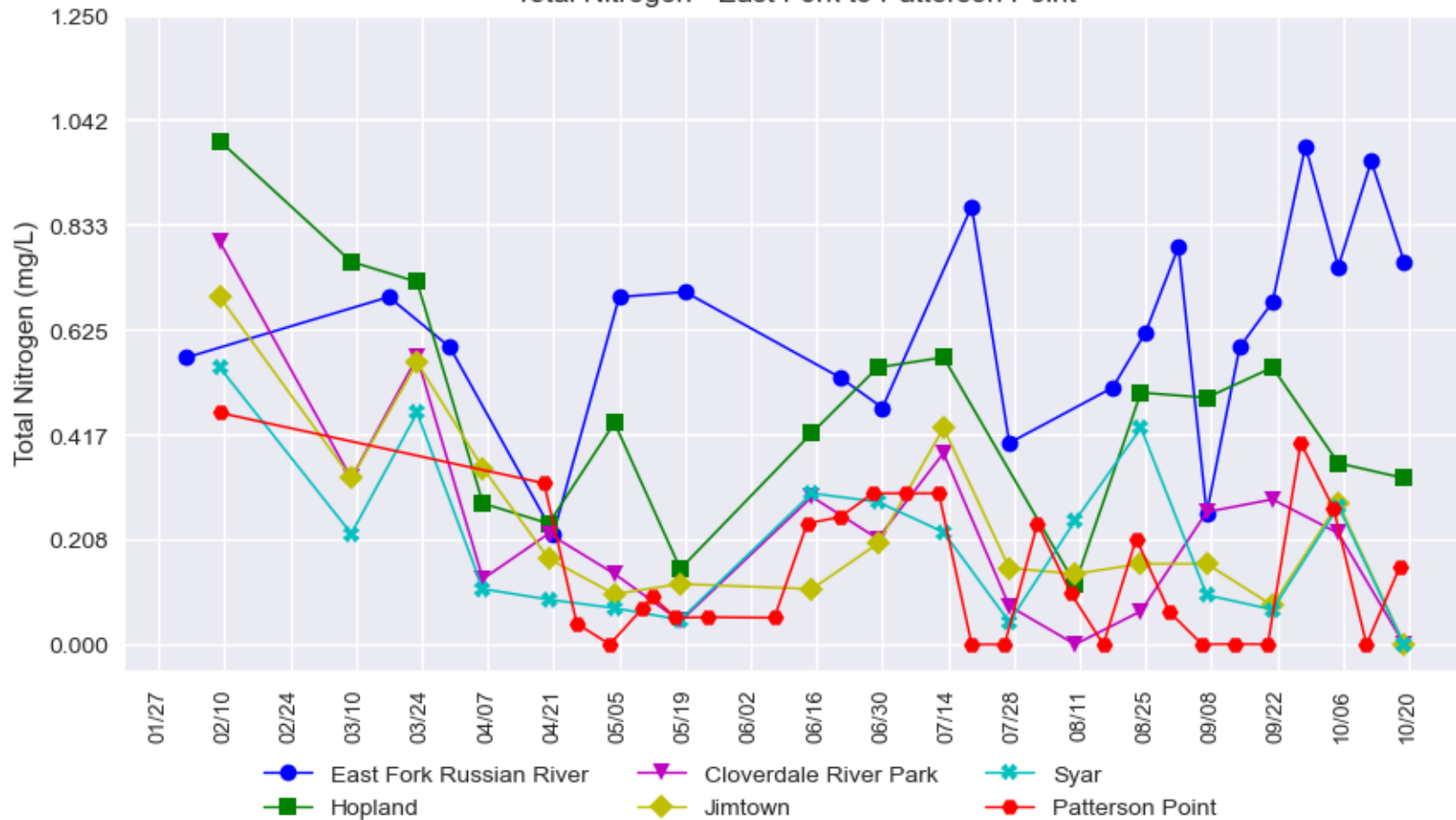
Temperature - East Fork to Patterson Point



Turbidity - East Fork to Patterson Point



Total Nitrogen - East Fork to Patterson Point



\*Each marker in the plot represents a grab sample. The lines are used to help visualize the data, but do not represent a continuous data measurement.

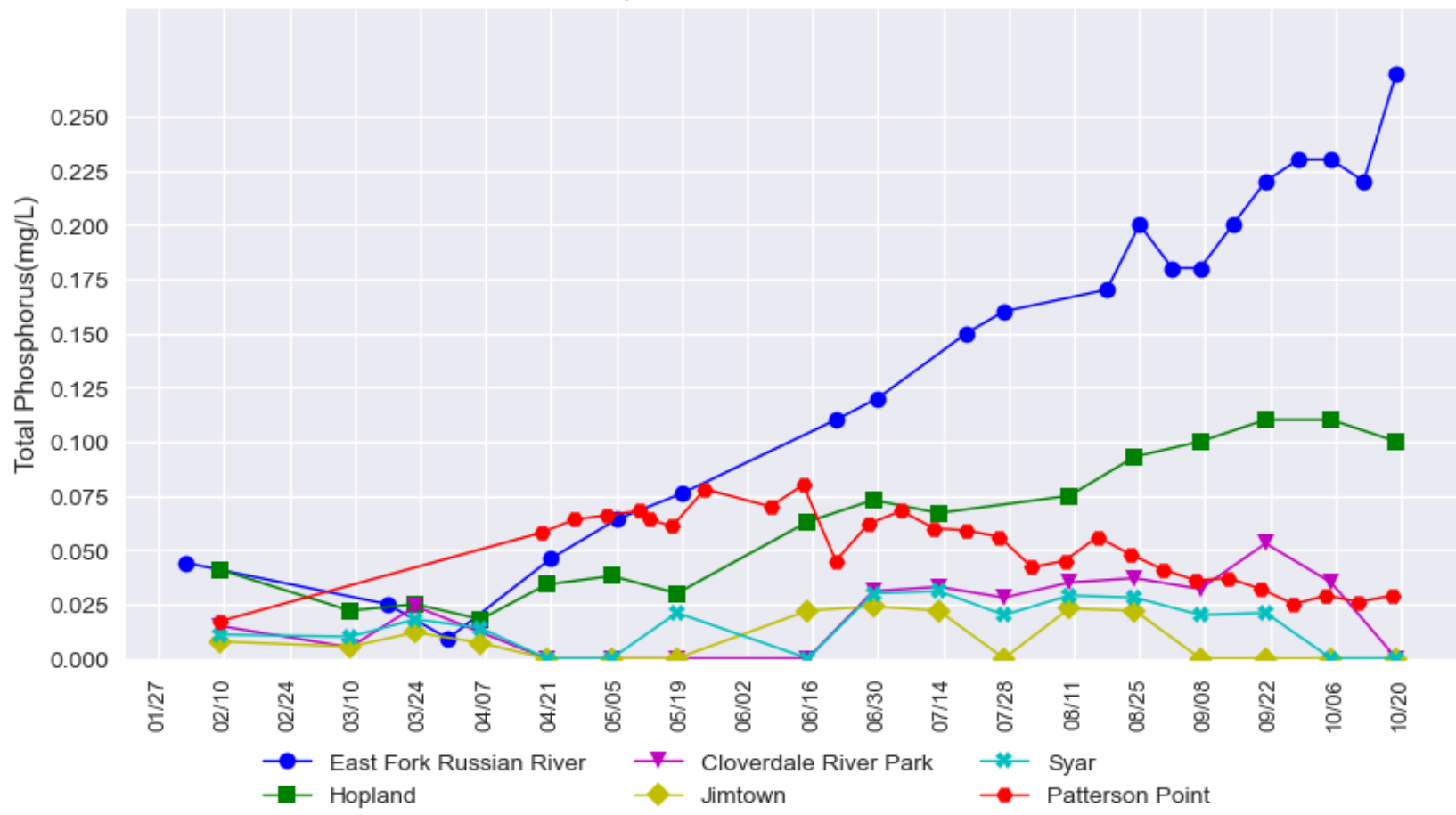


Russian River Water Quality Grab Samples (February 02 - October 19, 2022)

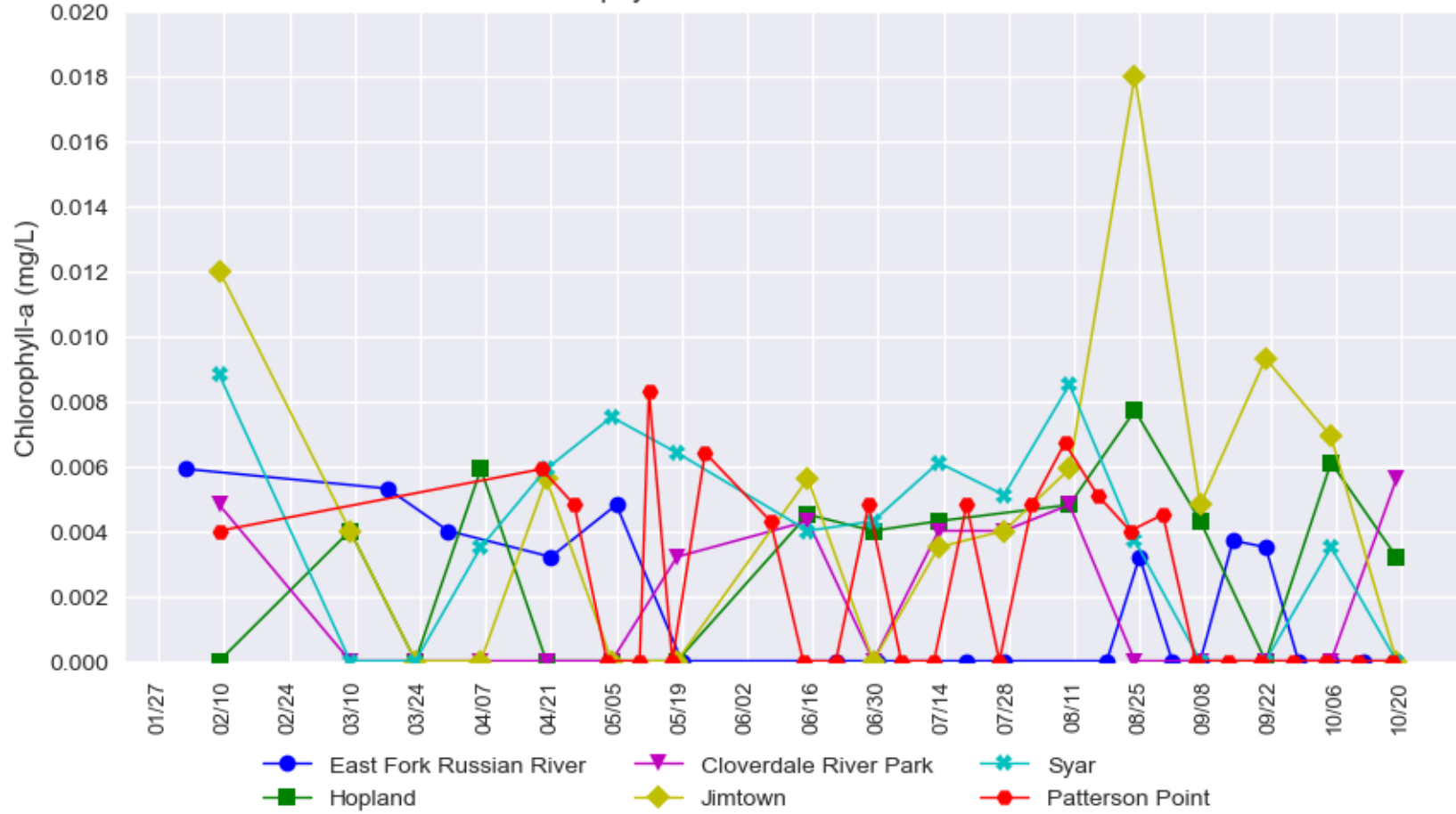
Provisional Data Subject to Revision

East Fork (below Lake Mendocino) to Syar Water Quality

Total Phosphorus - East Fork to Patterson Point



Chlorophyll-a - East Fork to Patterson Point



\*Each marker in the plot represents a grab sample. The lines are used to help visualize the data, but do not represent a continuous data measurement.

**Russian River Water Quality Grab Samples (August 23 - October 11, 2022)**  
**Provisional Data Subject to Revision**

Parameter***	CDPH Guidance*	Date	Patterson Point	Monte Rio	Vacation Beach
Total Coliforms MPN/100 mL	10,000	8/23/2022	1236**	1500**	1439**
		8/30/2022	1720**	1720**	1956**
		9/6/2022	2014**	2143**	3654**
		9/13/2022	1515**	12997**	3076**
		9/20/2022	3282**	1467**	2098**
		9/27/2022	1850**	2359**	1918**
		10/4/2022	1413.6	980.4	1119.9
		10/11/2022	1732.9	1553.1	1046.2
E. Coli MPN/100 mL	235	8/23/2022	7.5	19.9	13.5
		8/30/2022	12.1	12.2	17.3
		9/6/2022	65.7	30.9	23.1
		9/13/2022	9.7	17.5	63.7
		9/20/2022	58.3	70.6	59.1
		9/27/2022	34.5	51.2	25.6
		10/4/2022	14.4	23.1	12.2
		10/11/2022	41.4	73.3	19.9
Enterococcus MPN/100 mL****	61	8/23/2022	8.6	8.4	4.1
		8/30/2022	3.1	9.7	22.1
		9/6/2022	65.1	7.5	7.5
		9/13/2022	2	7.5	15.5
		9/20/2022	151.5	21.3	25.9
		9/27/2022	60.9	53.7	32.3
		10/4/2022	14.5	12.1	5.2
		10/11/2022	23.8	27.5	22.8

\*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.



**Russian River Water Quality Grab Samples (August 23 - November 1, 2022)**  
**Provisional Data Subject to Revision**

Parameter		MDL*	Units	Date	Patterson Point	Monte Rio	Vacation Beach
Temperature	Temperature	-	°C	8/23/2022	23.28	23.5	23.7
				8/30/2022	22.3	22.2	22.6
				9/6/2022	23.5	23.7	24.1
				9/13/2022	21.84	21.9	22.3
				9/20/2022	19.91	19.8	19.6
				9/27/2022	19.9	19.8	19.6
				10/4/2022	19.12	18.9	19.0
				10/11/2022	18.17	17.9	18.3
				10/18/2022	17.07	16.7	17.0
				11/1/2022	0	-	-
Nutrients	Ammonia as N	0.1	mg/L	8/23/2022	ND	ND	ND
				8/30/2022	ND	ND	ND
				9/6/2022	ND	ND	ND
				9/13/2022	ND	ND	ND
				9/20/2022	ND	ND	ND
				9/27/2022	ND	ND	ND
				10/4/2022	0.2	0.2	0.2
				10/11/2022	ND	ND	ND
				10/18/2022	0.15	ND	ND
				11/1/2022	ND	-	-
	Nitrate as N	0.04	mg/L	8/23/2022	ND	ND	ND
				8/30/2022	0.065	0.1	0.1
				9/6/2022	ND	ND	ND
				9/13/2022	ND	ND	ND
				9/20/2022	ND	ND	ND
				9/27/2022	ND	ND	ND
				10/4/2022	0.066	0.1	0.1
				10/11/2022	ND	ND	ND
				10/18/2022	ND	ND	ND
				11/1/2022	0.14	-	-
Nutrients	Nitrite as N	0.05	mg/L	8/23/2022	ND	ND	ND
				8/30/2022	ND	ND	ND
				9/6/2022	ND	ND	ND
				9/13/2022	ND	ND	ND
				9/20/2022	ND	ND	ND
				9/27/2022	ND	ND	ND
				10/4/2022	ND	ND	ND
				10/11/2022	ND	ND	ND
				10/18/2022	ND	ND	ND
				11/1/2022	ND	-	-
	Total Organic Nitrogen as N	0.1	mg/L	8/23/2022	0.21	ND	ND
				8/30/2022	ND	ND	ND
				9/6/2022	ND	ND	ND
				9/13/2022	ND	ND	ND
				9/20/2022	ND	ND	ND
				9/27/2022	0.4	ND	ND
				10/4/2022	ND	ND	ND
				10/11/2022	ND	ND	ND
				10/18/2022	ND	ND	0.4
				11/1/2022	0.5	-	-
	Total Kjeldahl Nitrogen	0.2	mg/L	8/23/2022	0.21	ND	ND
				8/30/2022	ND	ND	ND
				9/6/2022	ND	ND	ND
				9/13/2022	ND	ND	ND
				9/20/2022	ND	ND	ND
				9/27/2022	0.4	ND	ND
				10/4/2022	ND	ND	ND
				10/11/2022	ND	ND	ND
				10/18/2022	ND	ND	0.4
				11/1/2022	0.5	-	-
	Total Phosphorus	0.02	mg/L	8/23/2022	0.048	0.0	0.0
				8/30/2022	0.041	0.0	0.0
				9/6/2022	0.036	0.0	0.0
				9/13/2022	0.037	0.0	0.0
				9/20/2022	0.032	0.0	0.0
				9/27/2022	0.025	0.0	0.0
				10/4/2022	0.029	0.0	0.0
				10/11/2022	0.026	0.0	0.0
				10/18/2022	0.029	0.0	0.1
				11/1/2022	0.053	-	-
Total Orthophosphate	0.03	mg/L	8/23/2022	0.077	0.1	0.0	
			8/30/2022	0.071	0.1	0.0	
			9/6/2022	0.053	0.0	ND	
			9/13/2022	0.064	0.1	0.0	
			9/20/2022	0.038	0.0	0.0	
			9/27/2022	0.034	0.0	0.0	
			10/4/2022	0.04	0.0	0.0	
			10/11/2022	0.03	0.0	ND	
			10/18/2022	0.045	0.0	0.0	
			11/1/2022	0.14	-	-	

**Russian River Water Quality Grab Samples (August 23 - November 1, 2022)**  
**Provisional Data Subject to Revision**

Parameter		MDL*	Units	Date	Patterson Point	Monte Rio	Vacation Beach
Chlorophyll	Chlorophyll A	0.003	mg/L	8/23/2022	0.004	ND	0.0
				8/30/2022	0.0045	ND	ND
				9/6/2022	ND	ND	0.0
				9/13/2022	ND	0.0	ND
				9/20/2022	ND	ND	ND
				9/27/2022	ND	ND	ND
				10/4/2022	ND	ND	ND
				10/11/2022	ND	0.0	ND
				10/18/2022	ND	ND	ND
				11/1/2022	0.0093	-	-
Carbon	Total Organic Carbon	0.3	mg/L	8/23/2022	2.24	2.2	2.2
				8/30/2022	2.07	2.1	2.1
				9/6/2022	2.09	2.0	2.0
				9/13/2022	2.01	2.2	2.1
				9/20/2022	2.17	2.1	2.0
				9/27/2022	2.06	1.9	1.9
				10/4/2022	1.8	1.8	1.8
				10/11/2022	1.85	1.8	1.8
				10/18/2022	1.86	1.7	1.7
	11/1/2022	2.99	-	-			
	Dissolved Organic Carbon	0.2	mg/L	8/23/2022	1.9	1.9	1.9
				8/30/2022	1.68	1.7	1.7
				9/6/2022	1.75	1.7	1.6
				9/13/2022	1.64	1.8	1.7
				9/20/2022	1.71	1.7	1.6
				9/27/2022	1.63	1.6	1.6
				10/4/2022	1.54	1.7	1.5
				10/11/2022	1.52	1.5	1.5
10/18/2022				1.43	1.5	1.4	
11/1/2022	2.57	-	-				
Solids	Turbidity	0.1	NTU	8/23/2022	1.8	1.0	0.9
				8/30/2022	1	1.1	1.2
				9/6/2022	1.1	1.0	1.6
				9/13/2022	1.2	1.0	1.1
				9/20/2022	0.85	1.0	1.0
				9/27/2022	1.5	2.3	3.4
				10/4/2022	1.2	1.6	2.2
				10/11/2022	0.7	0.9	0.7
				10/18/2022	1	2.0	1.9
	11/1/2022	1.4	-	-			
	TDS	10	mg/L	8/23/2022	140	160.0	150.0
				8/30/2022	140	130.0	130.0
				9/6/2022	150	140.0	140.0
				9/13/2022	150	150.0	130.0
				9/20/2022	140	120.0	94.0
				9/27/2022	170	170.0	170.0
				10/4/2022	160	160.0	170.0
				10/11/2022	120	130.0	140.0
10/18/2022				160	66.0	160.0	
11/1/2022	170	-	-				