



Sonoma Water

State Water Resources Control Board Temporary Urgency Change Order (5/19/2023) Russian River Water Quality Report September 22 – September 28, 2023

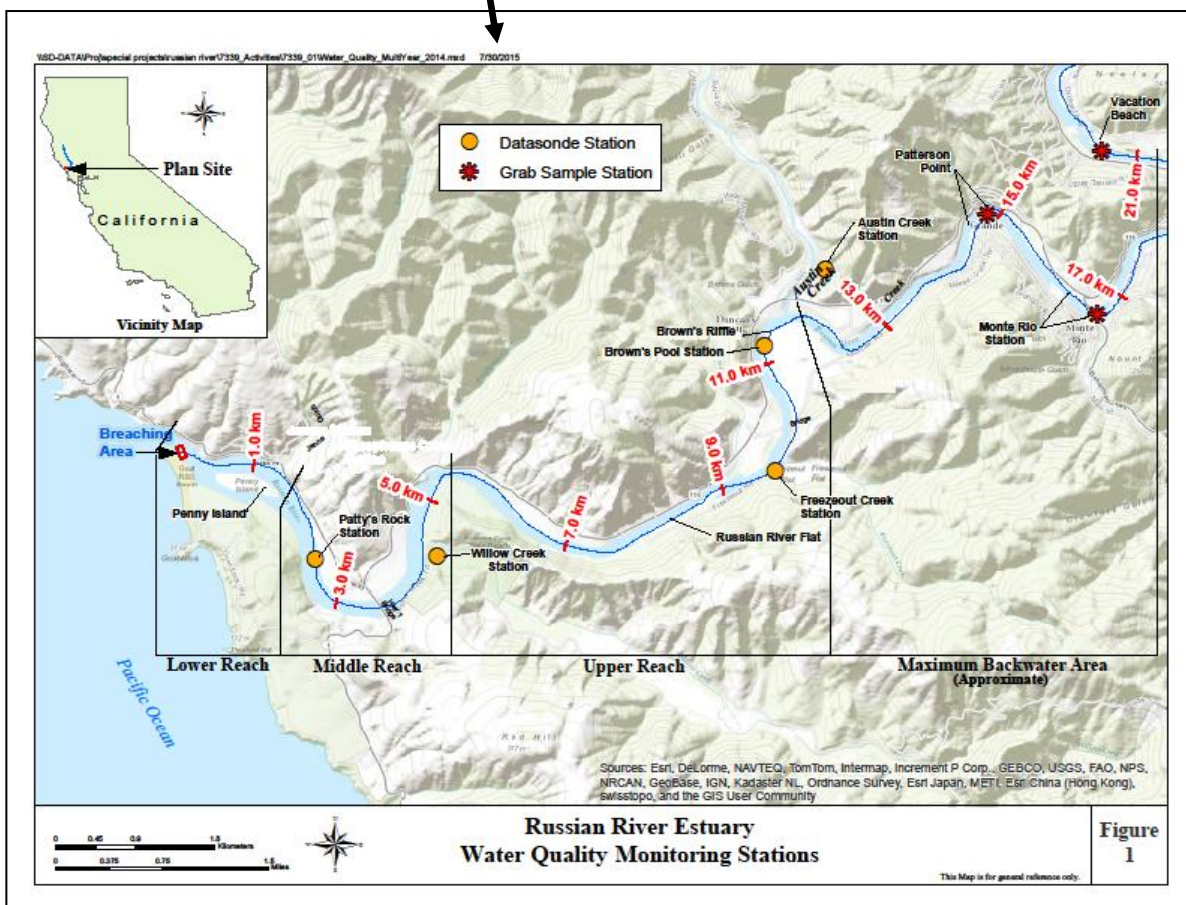
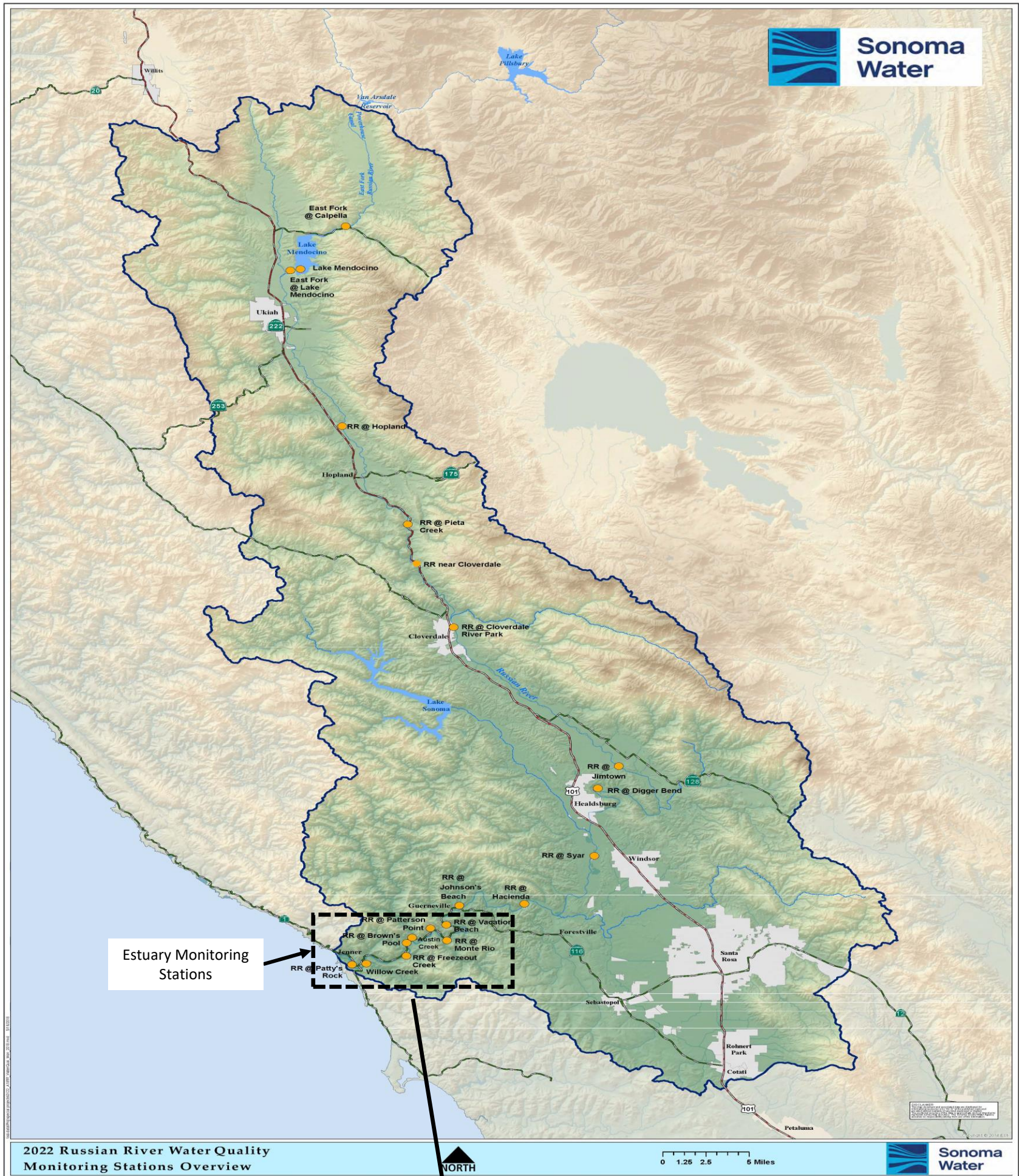
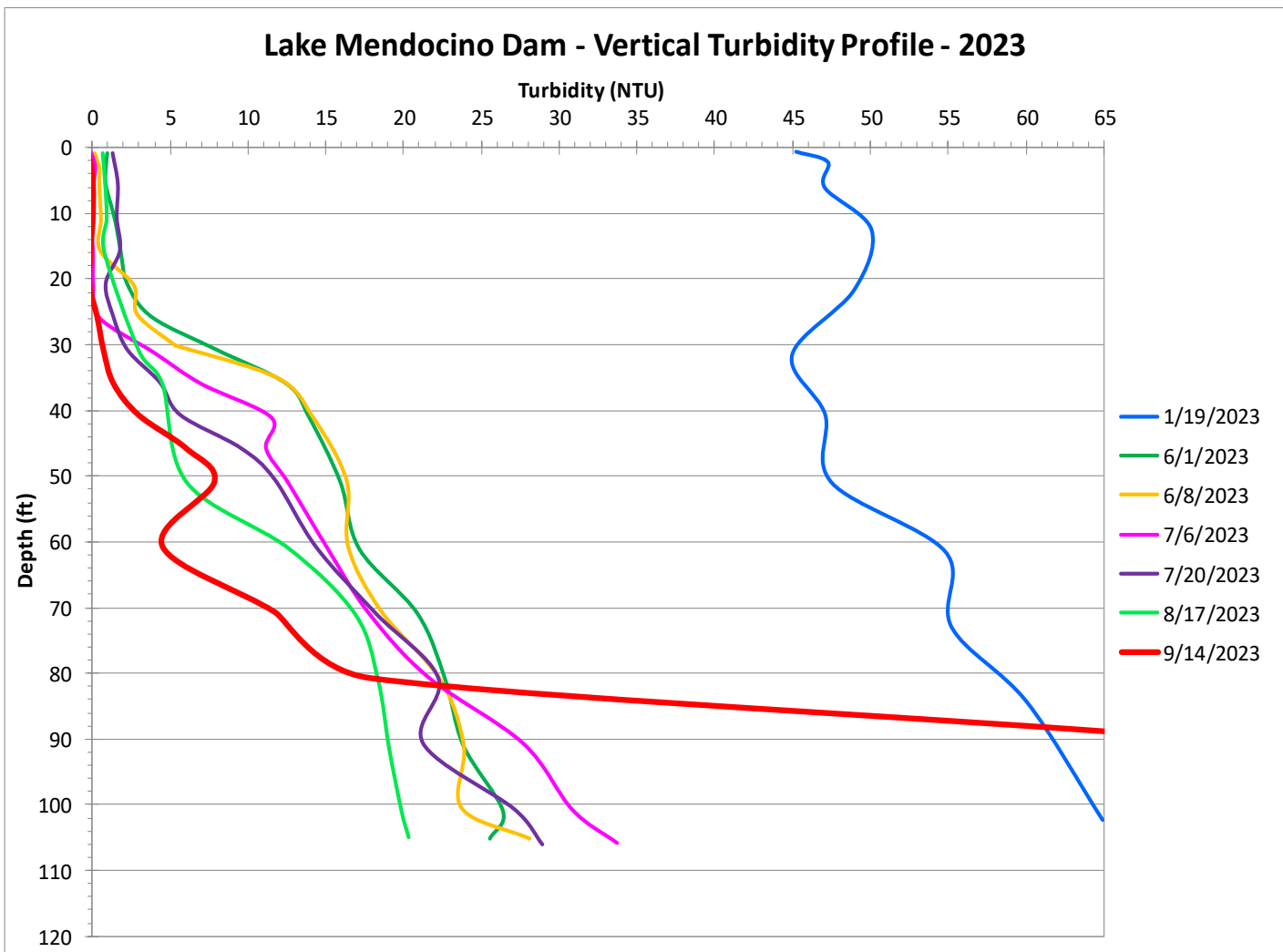
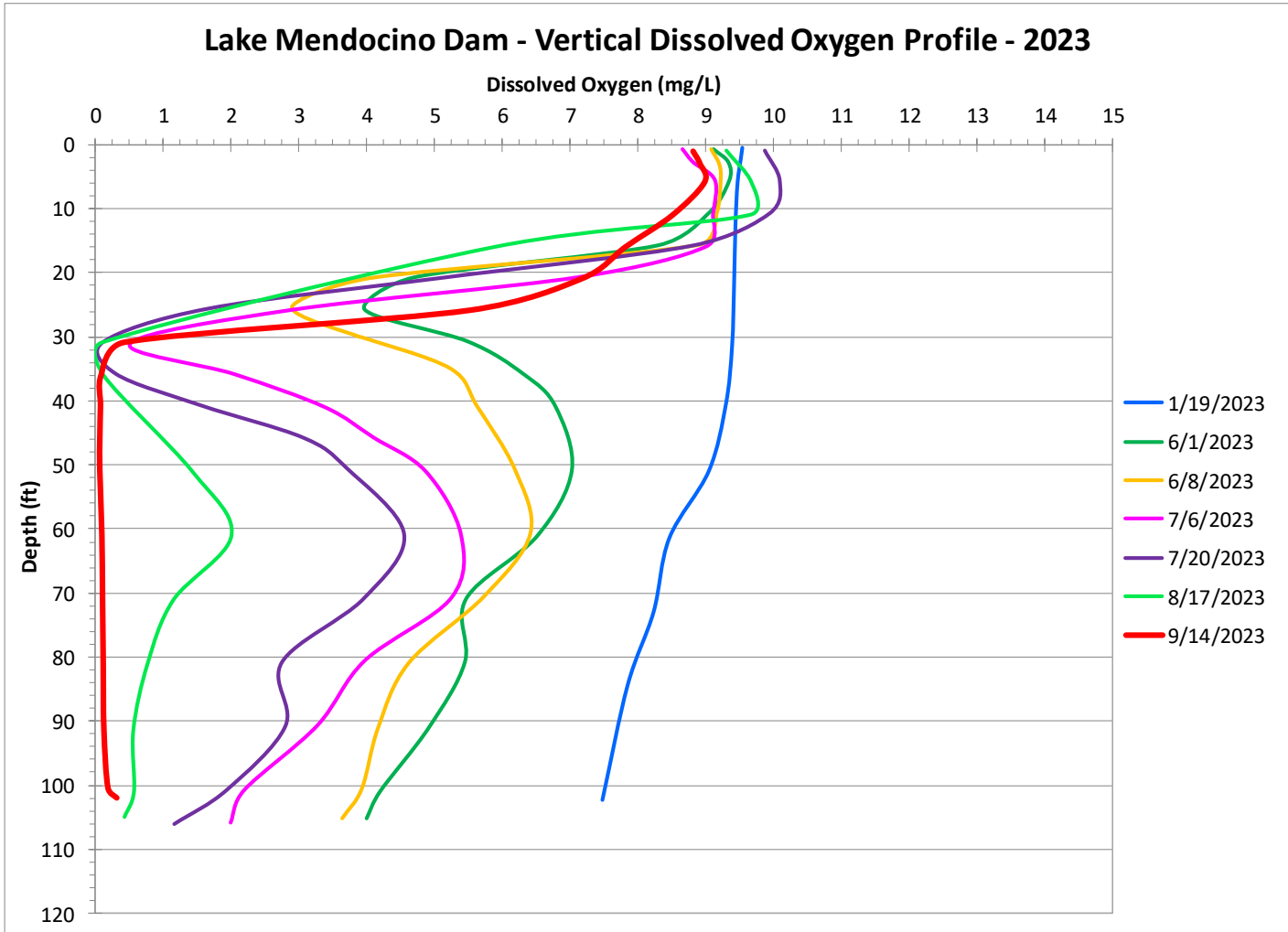
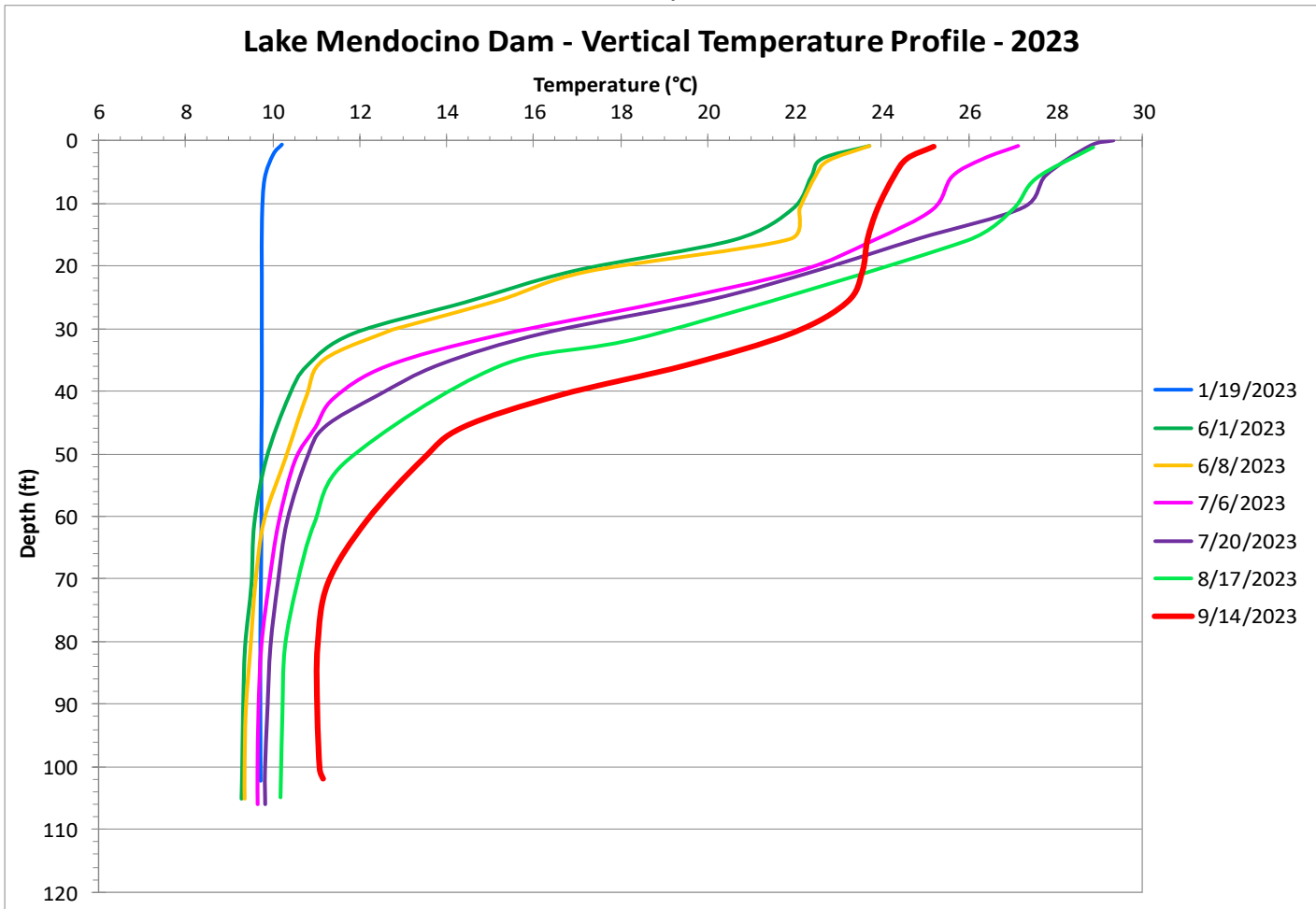


Figure 1

Lake Mendocino Water Quality Vertical Profiles (January 19 – September 14, 2023)

Provisional Data Subject to Revision

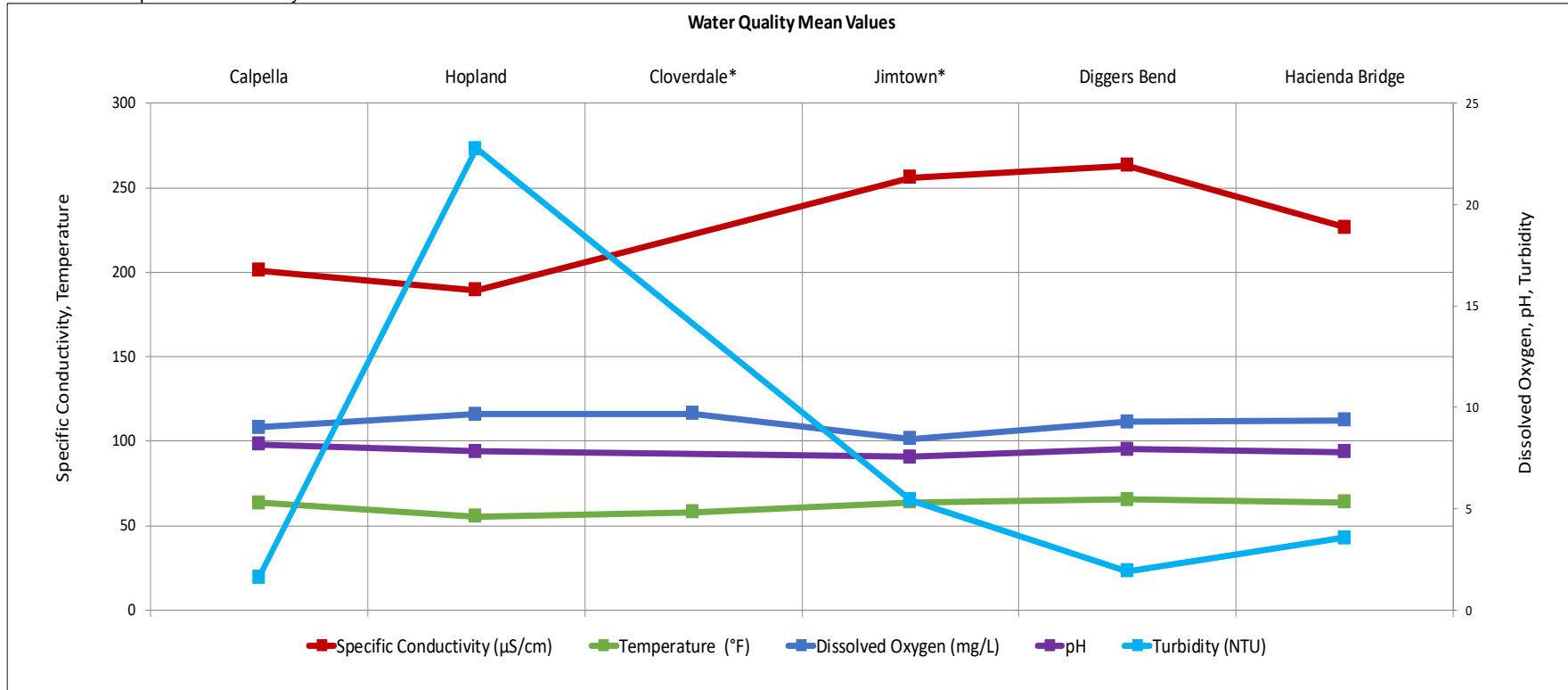


Russian River Water Quality Sondes (September 22 – September 28, 2023)

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	61.3	53.8	56.3	61.9	62.8		61.7	
	Max	65.7	57.6	60.8	67.3	68.5		66.6	
	Mean	63.4	55.4	58.0	63.9	65.3		63.8	
Specific Conductivity (µS/cm)	Min	199.0	188.0		253.0	259.0		225.0	
	Max	204.0	192.0		259.0	266.0		229.0	
	Mean	201.0	189.5		256.1	263.1		226.8	
Dissolved Oxygen (mg/L)	Min	8.6	9.3	9.2	7.4	7.2		7.9	
	Max	9.8	10.2	10.6	10.5	12.2		10.5	
	Mean	9.0	9.7	9.7	8.5	9.3		9.4	
Dissolved Oxygen (% Saturation)	Min	90.5	87.6	89.6	76.4	75.7		81.9	
	Max	103.1	98.1	105.7	114.6	134.7		113.4	
	Mean	94.1	91.6	94.8	88.9	99.1		98.4	
pH	Min	8.1	7.8		7.4	7.5		7.5	
	Max	8.4	7.9		7.9	8.6		8.0	
	Mean	8.2	7.8		7.5	7.9		7.8	
Turbidity (NTU)	Min	0.8	16.8		3.4	1.5		2.9	
	Max	3.5	31.6		6.6	2.5		5.1	
	Mean	1.6	22.8		5.4	1.9		3.6	

*Station operated seasonally

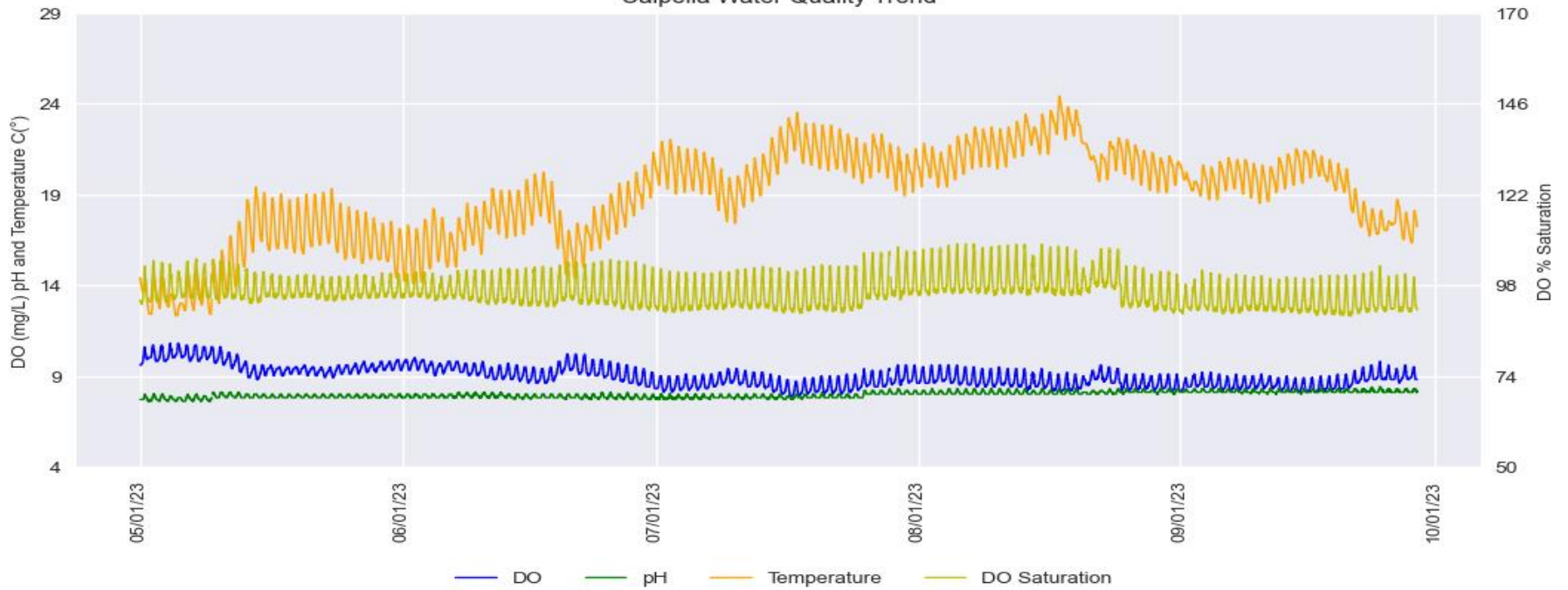


Russian River Water Quality April 1 – September 28, 2023

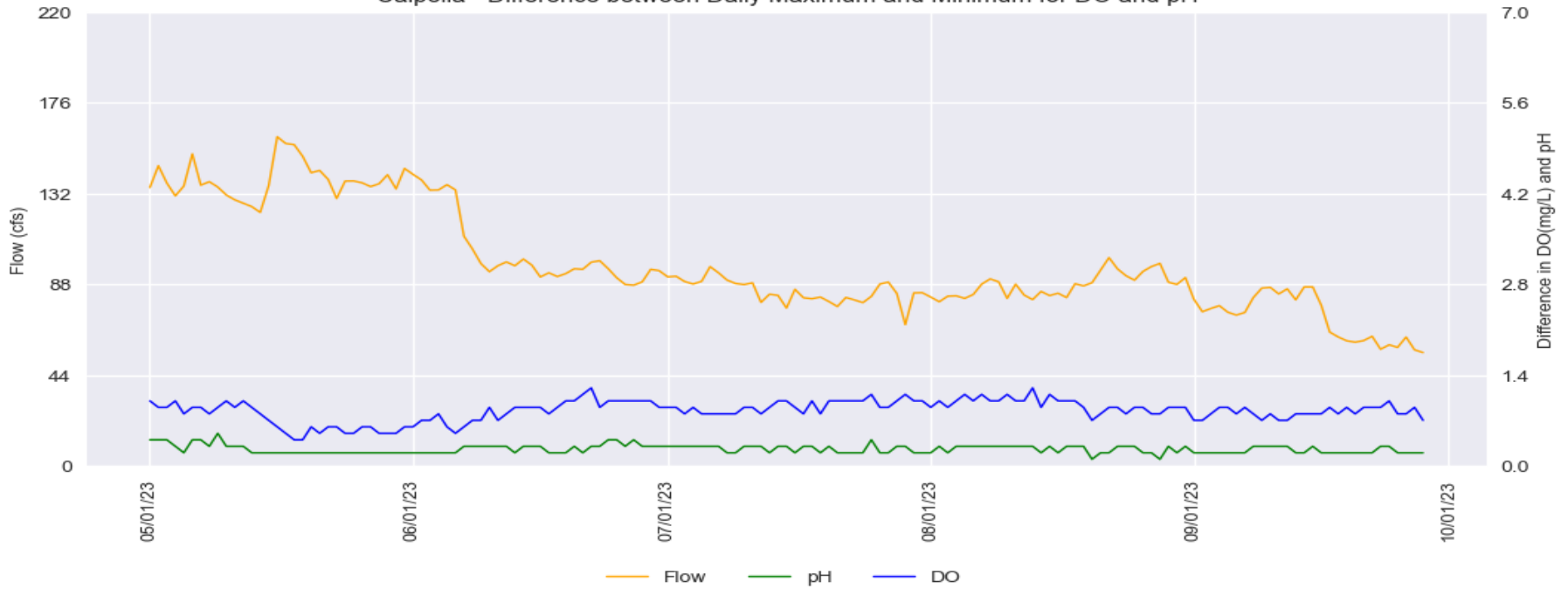
Provisional Data Subject to Revision

Calpella (East Fork Russian River)

Calpella Water Quality Trend



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

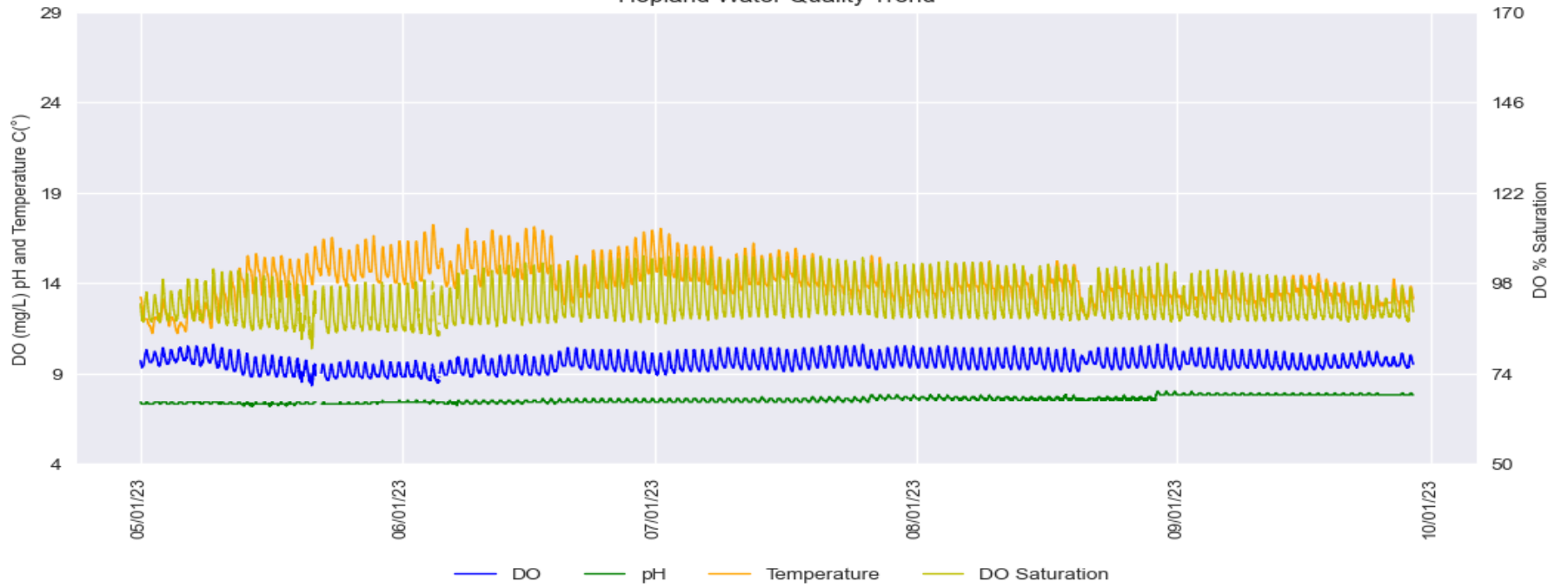


Russian River Water Quality April 1 – September 28, 2023

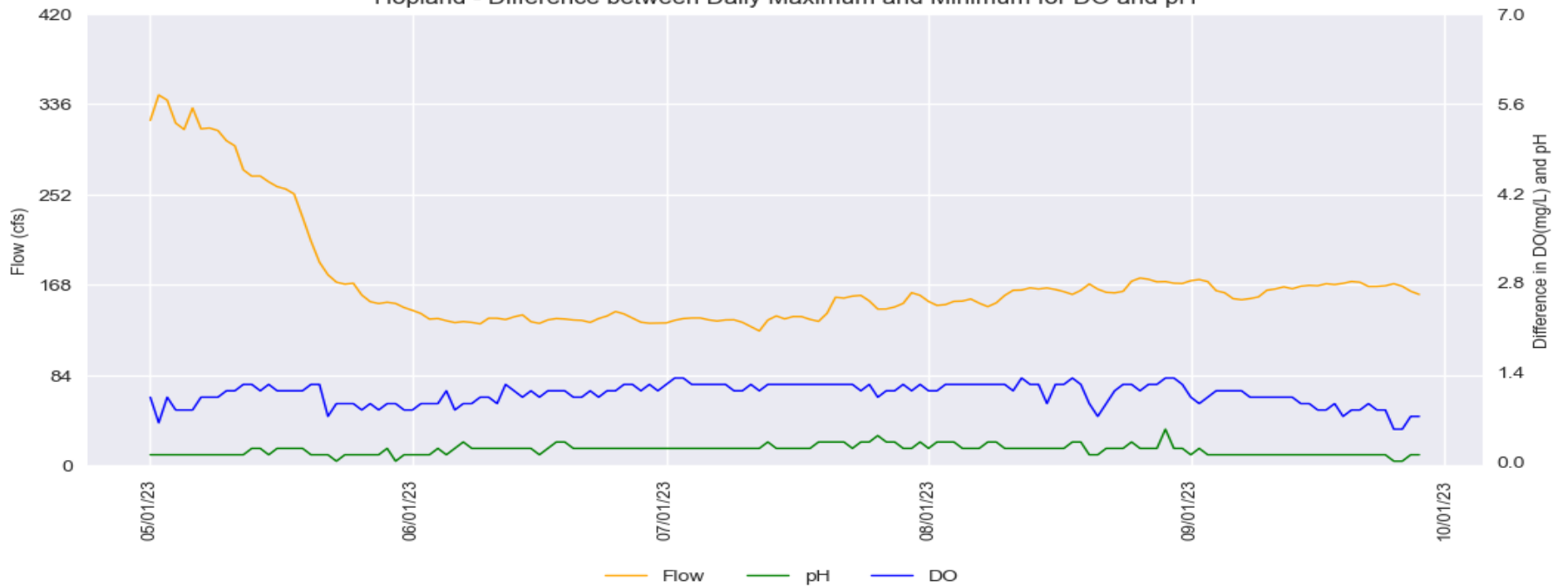
Provisional Data Subject to Revision

Hopland

Hopland Water Quality Trend

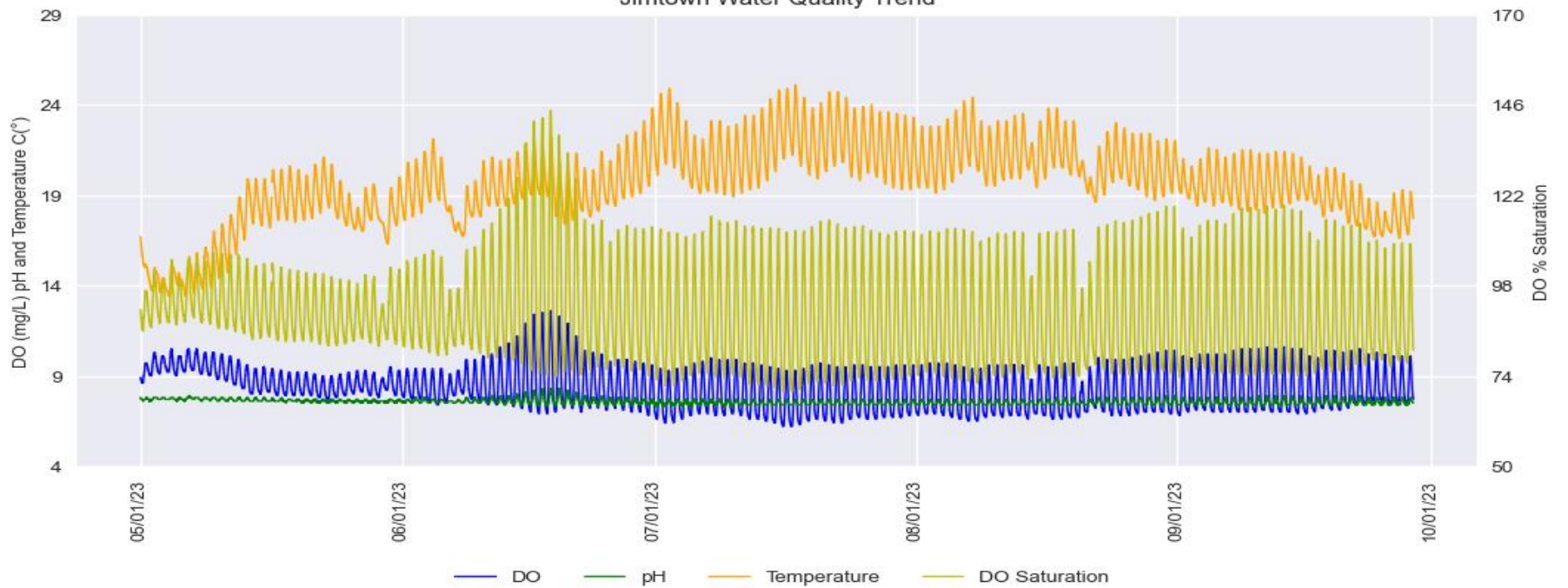


Hopland - Difference between Daily Maximum and Minimum for DO and pH

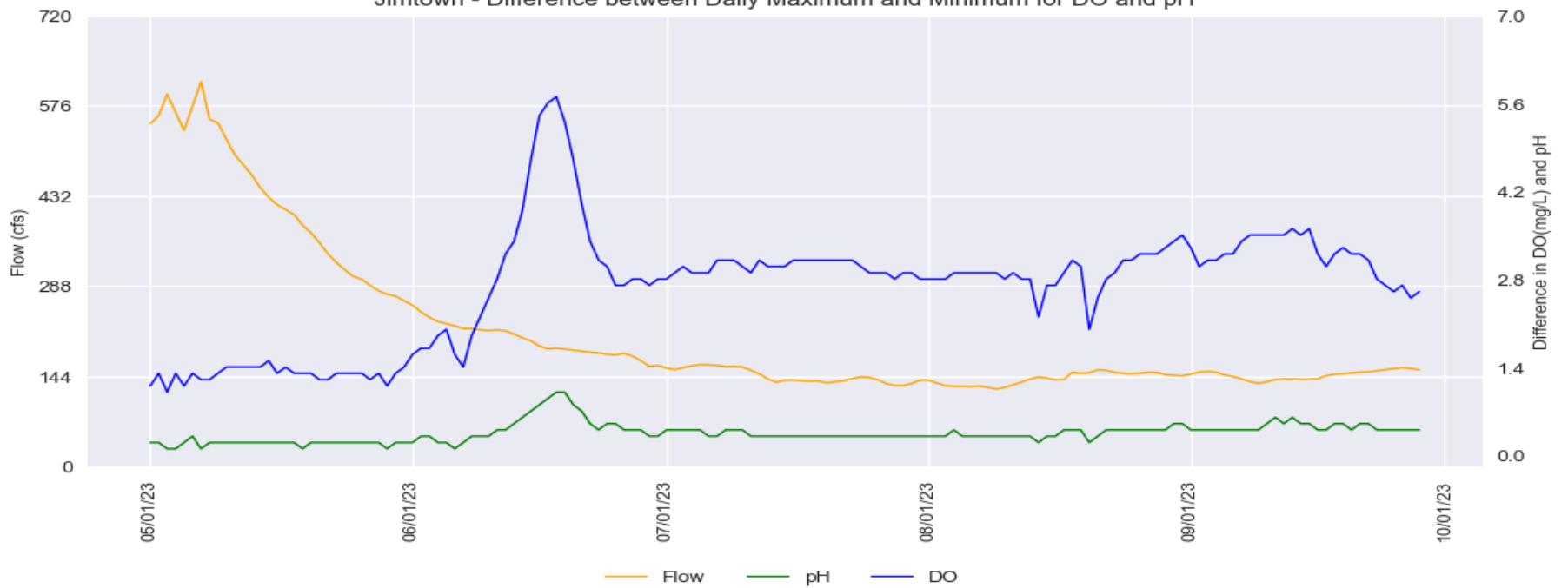


Jimtown

Jimtown Water Quality Trend



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

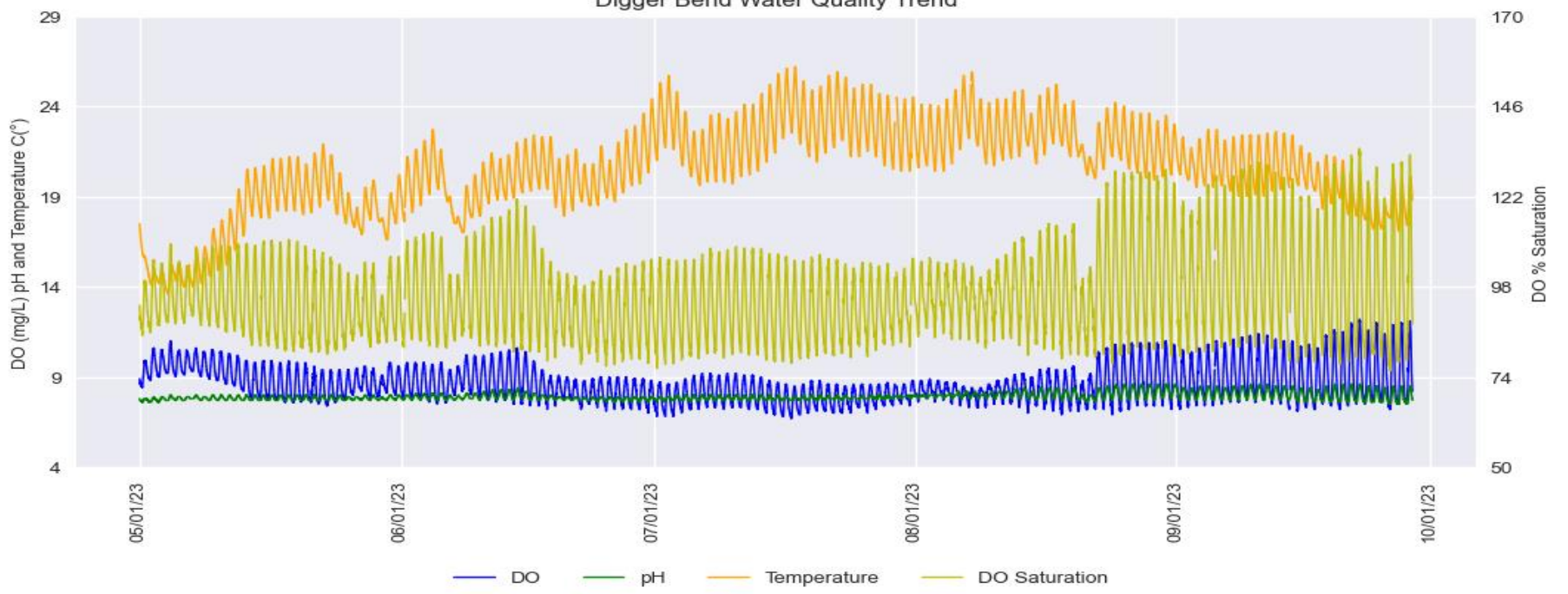


Russian River Water Quality April 1 – September 28, 2023

Provisional Data Subject to Revision

Diggers Bend

Diggers Bend Water Quality Trend

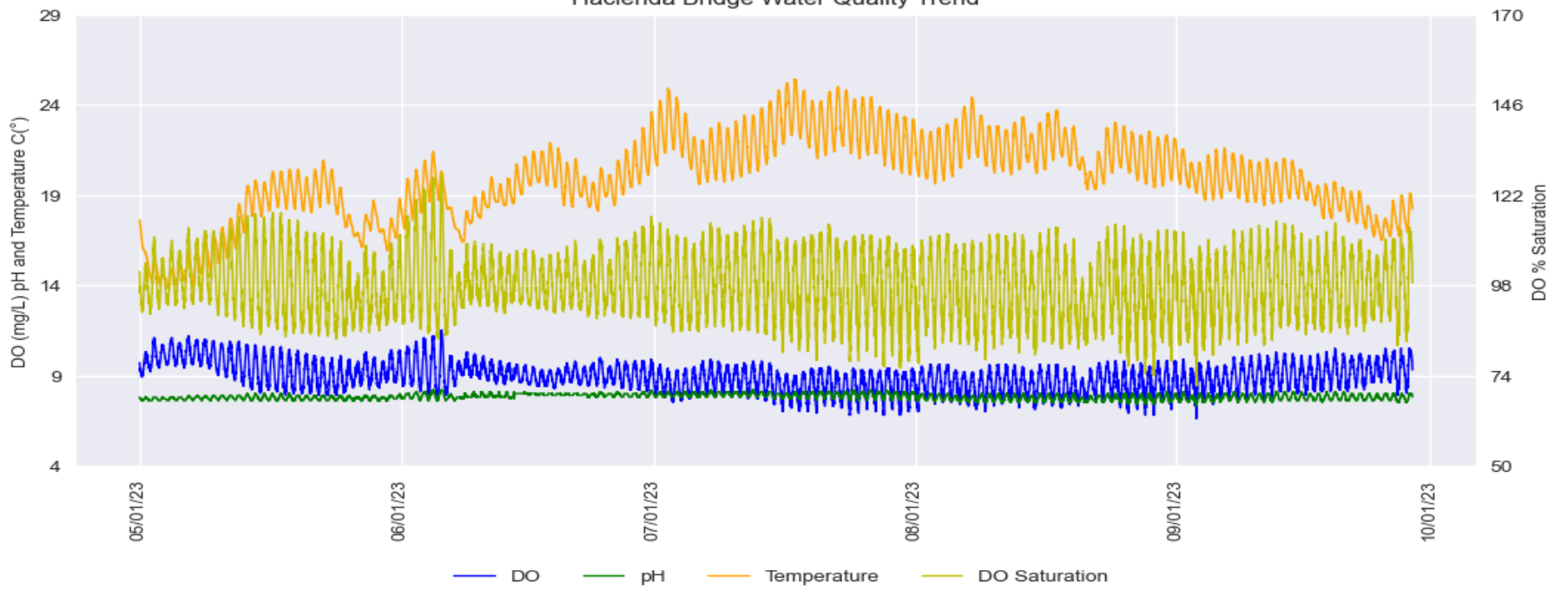


Diggers Bend - Difference between Daily Maximum and Minimum for DO and pH

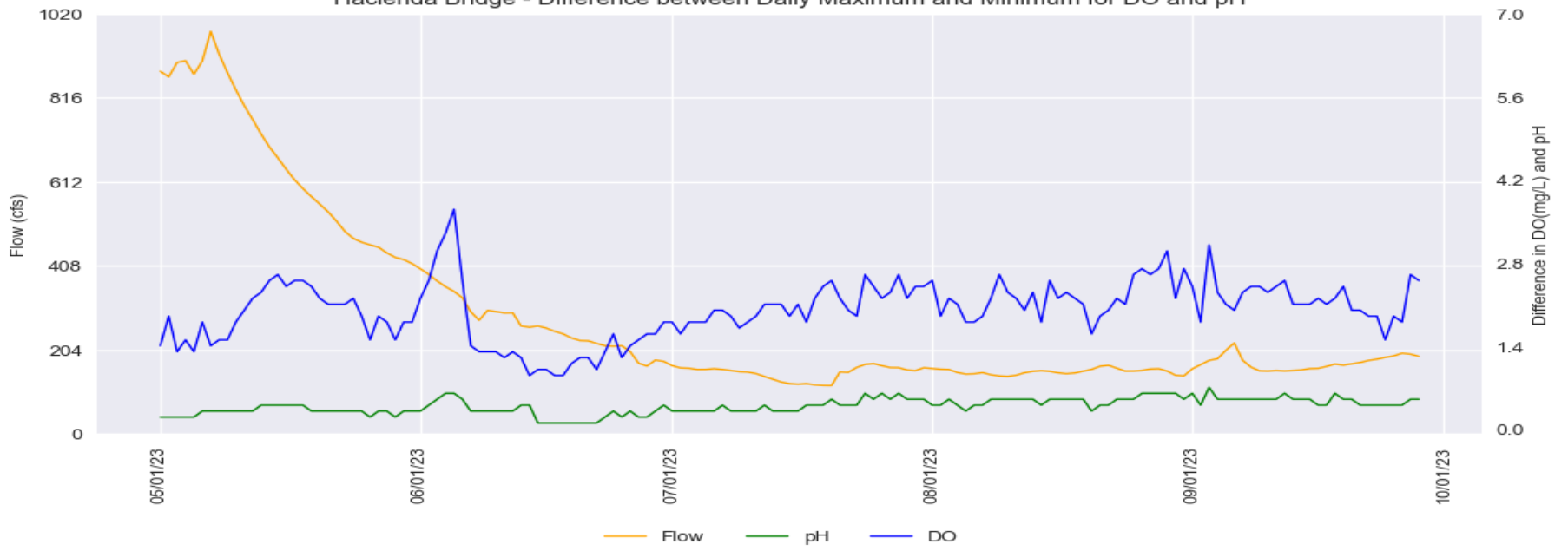


Hacienda Bridge

Hacienda Bridge Water Quality Trend



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



Russian River Water Quality Grab Samples (August 1 - September 19, 2023)
Provisional Data Subject to Revision

Parameter***	CDPH Guidance*	Date	Patterson Point	Monte Rio	Vacation Beach
Total Coliforms MPN/100 mL	10,000	8/1/2023	12997**	3448**	3654**
		8/8/2023	1918**	4884**	3448**
		8/15/2023	1935**	1918**	1421**
		8/22/2023	2419.6	2419.6	1732.9
		8/29/2023	2359**	1842**	1789**
		9/5/2023	1986.3	1986.3	1732.9
		9/12/2023	1732.9	1413.6	1046.2
		9/19/2023	1354**	1785**	1374**
E. Coli MPN/100 mL	235	8/1/2023	32.7	5.2	8.5
		8/8/2023	16.1	9.8	7.4
		8/15/2023	17.5	6.3	6.2
		8/22/2023	14.6	17.5	8.5
		8/29/2023	52.9	20.1	20.3
		9/5/2023	51.2	47.3	13.5
		9/12/2023	47.1	29.9	14.5
		9/19/2023	21.3	86	26.5
Enterococcus MPN/100 mL ****	61	8/1/2023	36.8	14.6	7.5
		8/8/2023	12.1	8.6	8.6
		8/15/2023	24.6	8.6	40.5
		8/22/2023	16.9	22.8	21.6
		8/29/2023	64.5	18.7	9.8
		9/5/2023	29.8	23.3	8.4
		9/12/2023	25.9	18.5	20.3
		9/19/2023	24.9	58.3	14.6

*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 (July 5 - September 5, 2023)
Provisional Data Subject to Revision

Parameter		MDL*	Units	Date	Patterson Point	Monte Rio	Vacation Beach
Temperature	-	°C	7/5/2023	22.4	22.2	22.3	
			7/11/2023	22	21.8	22.1	
			7/18/2023	23.7	24.0	24.1	
			7/25/2023	23.7	23.9	23.9	
			8/1/2023	22.9	23.1	23.1	
			8/8/2023	23.4	23.6	23.7	
			8/15/2023	21.5	22.4	22.5	
			8/22/2023	21.6	21.7	21.3	
			8/29/2023	21.8	21.6	21.7	
			9/5/2023	21.3	21.1	21.0	
Nutrients	Ammonia as N	0.1	mg/L	7/5/2023	0.1	ND	ND
				7/11/2023	0.33	0.4	ND
				7/18/2023	ND	ND	ND
				7/25/2023	ND	ND	ND
				8/1/2023	ND	ND	ND
				8/8/2023	ND	ND	ND
				8/15/2023	ND	ND	ND
				8/22/2023	ND	ND	ND
				8/29/2023	ND	ND	ND
				9/5/2023	ND	ND	ND
	Nitrate as N	0.04	mg/L	7/5/2023	ND	ND	ND
				7/11/2023	ND	ND	0.1
				7/18/2023	ND	ND	ND
				7/25/2023	ND	ND	ND
				8/1/2023	ND	ND	ND
				8/8/2023	ND	ND	ND
				8/15/2023	ND	ND	ND
				8/22/2023	ND	ND	ND
				8/29/2023	ND	ND	ND
				9/5/2023	ND	ND	ND
Nutrients	Nitrite as N	0.05	mg/L	7/5/2023	ND	ND	ND
				7/11/2023	ND	ND	ND
				7/18/2023	ND	ND	ND
				7/25/2023	ND	ND	ND
				8/1/2023	ND	ND	ND
				8/8/2023	ND	ND	ND
				8/15/2023	ND	ND	ND
				8/22/2023	ND	ND	ND
				8/29/2023	ND	ND	ND
				9/5/2023	ND	ND	ND
	Total Organic Nitrogen as N	0.1	mg/L	7/5/2023	ND	ND	ND
				7/11/2023	ND	ND	ND
				7/18/2023	ND	0.4	ND
				7/25/2023	ND	ND	ND
				8/1/2023	3.9	ND	ND
				8/8/2023	ND	ND	ND
				8/15/2023	ND	ND	ND
				8/22/2023	ND	ND	ND
				8/29/2023	ND	ND	ND
				9/5/2023	ND	ND	ND
	Total Kjeldahl Nitrogen	0.2	mg/L	7/5/2023	ND	ND	ND
				7/11/2023	0.45	ND	ND
				7/18/2023	ND	0.4	ND
				7/25/2023	ND	ND	ND
				8/1/2023	3.9	ND	ND
				8/8/2023	ND	ND	ND
				8/15/2023	ND	ND	ND
				8/22/2023	ND	ND	ND
				8/29/2023	ND	ND	ND
				9/5/2023	ND	ND	ND
	Total Phosphorus	0.02	mg/L	7/5/2023	0.056	0.044	0.040
				7/11/2023	0.04	0.039	0.042
				7/18/2023	ND	0.046	ND
				7/25/2023	0.035	0.032	0.028
				8/1/2023	0.045	0.041	0.039
				8/8/2023	0.036	0.034	0.029
				8/15/2023	0.037	0.038	0.034
				8/22/2023	0.036	0.036	0.031
				8/29/2023	0.043	0.043	0.036
				9/5/2023	0.032	0.031	0.030
Total Orthophosphate	0.03	mg/L	7/5/2023	ND	ND	ND	
			7/11/2023	ND	ND	ND	
			7/18/2023	ND	ND	ND	
			7/25/2023	ND	ND	ND	
			8/1/2023	ND	ND	ND	
			8/8/2023	ND	ND	ND	
			8/15/2023	0.092	ND	ND	
			8/22/2023	ND	ND	ND	
			8/29/2023	ND	ND	ND	
			9/5/2023	ND	ND	ND	

Russian River Water Quality Grab Samples (July 5 - September 5, 2023)
Provisional Data Subject to Revision

Parameter		MDL*	Units	Date	Patterson Point	Monte Rio	Vacation Beach
Chlorophyll	Chlorophyll A	0.003	mg/L	7/5/2023	0.004	0.0061	0.0069
				7/11/2023	ND	ND	0.0067
				7/18/2023	0.0037	0.0071	0.0096
				7/25/2023	0.0077	ND	0.0059
				8/1/2023	0.0048	ND	0.0100
				8/8/2023	0.0051	0.0093	ND
				8/15/2023	ND	ND	0.0110
				8/22/2023	ND	ND	0.0059
				8/29/2023	0.0056	0.0075	ND
				9/5/2023	0.0088	ND	ND
Carbon	Total Organic Carbon	0.3	mg/L	7/5/2023	2	2.02	1.91
				7/11/2023	1.83	1.86	1.78
				7/18/2023	2.35	2.02	1.90
				7/25/2023	1.91	1.94	1.87
				8/1/2023	2.03	1.94	1.88
				8/8/2023	2.02	2.08	1.91
				8/15/2023	2.04	1.90	1.84
				8/22/2023	1.92	1.88	1.97
				8/29/2023	1.69	1.69	1.71
	9/5/2023	1.82	1.85	1.81			
	Dissolved Organic Carbon	0.2	mg/L	7/5/2023	1.71	1.91	1.61
				7/11/2023	1.88	2.02	1.84
				7/18/2023	1.97	1.99	1.89
				7/25/2023	1.83	1.80	1.78
				8/1/2023	1.89	1.90	1.84
				8/8/2023	2	1.93	1.87
				8/15/2023	1.86	1.86	1.87
				8/22/2023	1.98	1.88	2.09
8/29/2023				1.79	1.81	1.85	
9/5/2023	1.78	1.79	1.75				
Solids	Turbidity	0.1	NTU	7/5/2023	1.9	1.3	1.4
				7/11/2023	2.1	1.9	3.1
				7/18/2023	2.4	2.3	3.1
				7/25/2023	2.5	2.1	2.7
				8/1/2023	1.7	2.3	2.6
				8/8/2023	1.8	2.1	2.1
				8/15/2023	1.9	1.9	1.9
				8/22/2023	2.5	2.2	1.6
				8/29/2023	2.7	2.9	2.3
	9/5/2023	1.9	1.3	1.4			
	TDS	10	mg/L	7/5/2023	140	140	130
				7/11/2023	160	160	150
				7/18/2023	140	150	160
				7/25/2023	110	100	140
				8/1/2023	100	110	98
				8/8/2023	140	140	130
				8/15/2023	140	130	130
				8/22/2023	130	120	130
8/29/2023				120	140	120	
9/5/2023	98	100	100				