



New Hampshire Volunteer River Assessment Program 2018 Oyster River Watershed Data



NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

 Measurements not meeting New Hampshire surface water quality standards
 Measurements not meeting NHDES quality assurance/quality control standards

^A Specific conductance > 835 $\mu\text{S}/\text{cm}$ indicate exceedance of chronic chloride standard of 230 mg/L

^B Chronic water quality standard

^C Calculated using 1/2 of the 0.25 mg/L detection limit of Total Kjeldahl Nitrogen (0.125 mg/L) and/or 1/2 of the 0.050 mg/L detection limit of Nitrate+Nitrite (0.025 mg/L)

01-CWL, Caldwell Brook, Route 4, Barrington - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA	<153
04/27/2018	10:26	8.88	81.3	5.45	0.37	123.9	11.3	
05/25/2018	09:55	6.63	68.9	5.73	0.63	184.9	17.1	
06/22/2018	10:35	6.27	62.3	5.90	2.21	268.4	15.2	
06/27/2018	08:25							79
07/27/2018	10:05	5.91	68.5	5.92	1.92	181.3	22.3	
08/22/2018	09:20							81
08/24/2018	10:25	6.05	65.0	5.82	0.79	136.6	18.4	
09/21/2018	10:08	6.41	66.0	5.83	1.04	139.2	16.6	
10/25/2018	10:35							24
10/26/2018	10:15	9.74	75.0	5.82	0.59	140.0	4.3	

15C-OYS, Oyster River, Emerald Drive, Barrington - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA	<153
04/27/2018	10:45	9.27	83.2	4.47	0.43	104.9	10.4	
05/25/2018	10:10	8.30	83.4	4.84	0.25	126.7	15.6	
06/22/2018	11:00	7.89	79.7	5.10	0.82	161.2	15.4	
06/27/2018	08:22							108
07/27/2018	10:24	7.70	86.6	5.20	0.64	105.7	21.1	
08/22/2018	09:15							61
08/24/2018	10:50	8.21	85.8	4.91	0.63	108.6	17.4	
09/21/2018	10:27	8.13	82.2	4.96	0.58	103.3	15.9	
10/25/2018	10:25							17
10/26/2018	10:38	11.86	90.6	4.95	0.32	118.6	4.0	

13A-OYS, Oyster River, Route 125 Crossing South of Lee Traffic Circle, Lee - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/27/2018	10:06	9.41	87.1	5.51	1.13	122.5	11.7	
05/25/2018	09:40	5.29	55.1	5.65	2.27	189.1	17.3	
06/22/2018	10:15	2.68	28.5	5.72	2.34	242.4	18.6	
06/27/2018	09:10							173
07/27/2018	09:49	2.59	30.1	5.64	2.68	236.6	22.8	
08/22/2018	09:05							345
08/24/2018	10:15	4.10	43.8	5.58	1.18	143.8	18.4	
09/21/2018	09:54	4.05	42.0	5.6	1.11	143.7	16.8	
10/25/2018	10:15							36
10/26/2018	10:03	8.45	65.6	5.71	0.73	152.7	4.5	

01-XBB - Wheelright Pond Outlet, Stepping Stone Road Bridge, Lee - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	10:25	9.23	87.2	6.49	0.58	142.0	12.9	
05/26/2018	10:59	7.12	82.2	6.62	0.98	155.7	22.5	
06/23/2018	10:50	6.12	62.3	6.72	1.78	184.0	16.2	
06/27/2018	09:04							210
07/28/2018	11:20	5.18	60.3	6.53	1.02	168.1	23.2	
08/22/2018	09:00							77
08/25/2018	11:25	4.83	57.3	6.59	1.63	157.4	23.2	
09/22/2018	10:20	5.51	60.7	6.67	0.62	139.9	19.9	
10/25/2018	10:05							3
10/27/2018	10:30	8.48	70.9	6.88	1.57	156.9	7.4	

13-OYS, Oyster River, Route 4 Bridge, East of Lee Traffic Circle, Lee, NH - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/27/2018	09:38	8.24	75.0	5.97	0.52	134.4	11.2	
05/25/2018	09:20	5.45	56.5	6.22	0.82	168.6	17.2	
06/22/2018	09:48	1.79	19.6	5.94	3.18	231.4	19.3	
06/27/2018	08:50							214
07/27/2018	09:23	1.88	21.6	5.78	3.00	262.2	22.4	
08/22/2018	08:45							111
08/24/2018	09:35	3.89	41.1	5.93	1.64	150.9	17.8	
09/21/2018	09:22	3.84	39.5	6.18	1.53	152.2	16.7	
10/25/2018	09:40							34
10/26/2018	09:30	7.88	60.1	6.12	0.96	157.1	3.9	

01-WDY, Wendy's Brook, Footbridge 500' Upstream of Confluence with Oyster River, Lee - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/27/2018	09:55	10.64	94.3	6.24	2.06	376.0	10.1	
05/25/2018	09:35	8.77	87.0	6.42	2.11	1191.0	14.8	
06/22/2018	10:00	8.43	85.5	6.62	4.16	2029.0	15.5	
06/27/2018	08:57							> 2150
07/27/2018	09:38	7.49	82.7	6.58	6.82	872.0	20.6	
08/22/2018	08:50							> 2150
08/24/2018	10:00	8.32	84.6	6.84	6.29	723.0	16.4	
09/21/2018	09:37	8.13	82.3	6.84	6.10	666.0	15.9	
10/25/2018	10:20							1414
10/26/2018	09:46	9.79	78.1	6.68	3.96	626.0	4.3	

01-DBE, Dube Brook, Cherry Lane Bridge, Madbury - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	10:02	10.11	90.0	6.31	5.06	95.3	10.2	
05/26/2018	10:34	9.02	96.4	6.81	8.94	143.2	18.9	
06/23/2018	10:10	5.54	55.4	6.81	16.90	168.9	15.4	
06/27/2018	08:27							548
07/28/2018	10:50	7.59	84.7	6.80	6.72	129.0	20.9	
08/22/2018	08:15							365
08/25/2018	10:50	8.74	91.5	7.02	4.77	127.2	17.4	
09/22/2018	09:55	8.06	81.6	7.14	4.55	132.6	16.4	
10/25/2018	09:00							155
10/27/2018	10:05	11.83	90.3	7.07	3.29	117.9	4.0	

10-OYS, Oyster River, Route 155 Bridge, Lee - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/27/2018	09:15	9.80	88.0	6.22	2.74	144.3	10.5	
05/25/2018	09:05	8.56	88.0	6.68	2.40	193.4	16.6	
06/22/2018	09:25	6.46	68.1	6.75	4.72	227.4	18.1	
06/27/2018	08:36							205
07/27/2018	09:09	6.73	77.4	6.76	5.41	278.7	22.3	
08/22/2018	08:25							214
08/24/2018	09:25	8.12	86.7	6.75	3.73	173.8	18.2	
09/21/2018	09:08	7.85	80.6	6.72	3.70	169.6	16.6	
10/25/2018	09:15							179
10/26/2018	09:15	10.76	83.5	6.75	2.00	176.5	4.6	

09-OYS, Oyster River, Route 155A Bridge (USGS Gaging Station), Lee - Class A (NHDES Trend Station)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E.coli</i> Geometric Mean
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	230 ^B	<153	<47
04/09/2018	11:50	12.9	100.0	6.88	2.20	174.3	4.7	37		
04/27/2018	09:00	10.57	95.6	6.21	3.29	147.6	10.7			
05/25/2018	08:50	7.32	75.0	6.65	4.45	215.6	16.5			
06/21/2018	11:30	6.17	68.4	6.85	8.37	276.1	20.4	55	60	
06/22/2018	09:05	4.88	51.2	6.58	5.87	265.8	18.2			
06/27/2018	08:42								214	
07/19/2018	11:45	6.89	76.4	6.78	5.16	370.7	20.4	100	750	213
07/27/2018	08:52	6.09	71.4	6.67	8.93	323.8	21.9			
08/16/2018	11:35	7.86	91.0	6.76	4.15	181.1	22.7	40	350	383
08/22/2018	08:30								185	365
08/24/2018	08:55	7.02	75.7	6.73	5.20	188.7	17.9			
09/21/2018	08:51	7.49	76.9	6.69	4.19	177.9	16.6			
10/25/2018	09:25								326	
10/26/2018	08:55	10.16	78.6	6.77	2.36	188.5	4.6			

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO ₂) + Nitrate(NO ₃) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	Narrative	Narrative	Narrative	Narrative
04/09/2018	11:50	0.014	ND	0.06	0.18 ^C
06/21/2018	11:30	0.047	0.45	0.15	0.60
07/19/2018	11:45	0.046	0.49	0.08	0.57
08/16/2018	11:35	0.049	0.76	ND	0.79 ^C

01-CSB, Chelsey Brook, Packer's Falls Road Bridge, Lee - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	10:38	8.97	80.2	6.27	1.56	168.6	10.4	
05/26/2018	11:25	8.29	83.3	6.50	2.05	215.7	15.7	
06/23/2018	11:10	9.16	85.3	6.77	0.98	264.1	12.6	
06/27/2018	07:02							184
07/28/2018	11:50	7.49	78.0	6.63	1.14	257.7	17.2	
08/22/2018	08:35							62
08/25/2018	11:40	6.99	71.1	6.67	1.62	224.2	15.8	
09/22/2018	10:45	7.32	72.4	6.72	1.32	218.4	14.8	
10/25/2018	09:30							38
10/27/2018	11:00	9.75	78.7	6.90	1.97	237.5	6.1	

07-OYS, Oyster River, Footbridge, College Woods, Durham, NH - Class A

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/27/2018	08:32	10.33	93.9	6.45	5.29	163.5	11.0	
05/25/2018	08:20	8.65	87.3	6.86	2.47	235.3	15.9	
06/22/2018	08:30	6.03	61.6	6.75	5.28	298.2	17.2	
06/27/2018	07:21							113
07/27/2018	08:15	6.06	68.5	6.87	6.11	326.5	20.9	
08/22/2018	07:05							157
08/24/2018	08:30	7.11	73.6	6.93	4.35	202.5	17.4	
09/21/2018	08:22	7.84	78.8	6.84	4.00	195.0	16.3	
10/25/2018	07:45							225
10/26/2018	08:30	9.82	77.0	6.54	2.55	214.1	4.7	

01-HML, Hamel Brook, Route 108 Bridge, Durham - Class B

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	08:40	7.99	73.0	6.32	4.19	197.5	11.4	
05/26/2018	08:55	7.33	78.9	5.74	2.38	320.9	19.0	
06/23/2018	08:37	4.98	50.8	6.99	3.37	391.3	16.2	
06/27/2018	07:46							210
07/28/2018	08:46	4.50	51.4	6.74	5.76	300.6	22.0	
08/22/2018	07:35							261
08/25/2018	09:12	4.56	48.9	6.67	1.88	277.6	18.3	
09/22/2018	08:40	4.83	50.5	6.67	3.01	213.5	17.5	
10/25/2018	08:15							86
10/27/2018	08:35	7.27	57.5	6.84	2.56	258.8	5.3	

05-OYS, Oyster River, Route 108 Bridge, Mill Pond, Durham, NH - Class B

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	08:55	9.56	87.3	6.54	4.59	194.7	11.2	
05/26/2018	09:09	7.75	85.5	6.78	2.28	267.9	19.8	
06/23/2018	08:56	6.36	70.0	7.02	2.02	365.7	20.1	
06/27/2018	07:40							41
07/28/2018	09:05	5.66	67.8	6.97	6.19	319.8		
08/22/2018	07:30							96
08/25/2018	09:35	6.44	71.8	6.85	3.37	203.5	20.4	
09/22/2018	08:55	5.98	62.5	6.76	3.22	214.0	17.5	
10/25/2018	08:10							172
10/27/2018	08:55	10.22	80.9	7.06	3.14	226.8	5.3	

00E-CGB - College Brook, Mill Pond Road Bridge, Durham - Class B

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	08:15	10.81	95.5	7.12	5.57	754.0	9.8	
05/26/2018	08:20	8.20	85.2	7.23	1.68	1557.0	17.0	
06/23/2018	08:10	6.69	68.4	7.45	2.10	1795.0	15.5	
06/27/2018	07:35							> 2150
07/28/2018	08:15	6.39	72.4	7.24	4.31	863.0	21.2	
08/22/2018	07:20							166
08/25/2018	08:40	7.98	84.8	7.58	2.39	1154.0	18.1	
09/22/2018	08:20	6.99	74.0	7.56	3.21	1113.0	17.8	
10/25/2018	08:00							1733
10/27/2018	08:20	9.50	77.5	7.52	3.19	1069.0	6.4	

00J-PRB, Pettee Brook, Sauer Terrace, Durham - Class B

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	09:10	10.22	95.1	6.74	3.82	485.9	11.6	
05/26/2018	09:43	8.88	91.1	7.02	1.15	718.0	16.9	
06/23/2018	09:19	7.45	75.9	7.52	2.31	1821.0	16.0	
06/27/2018	07:57							365
07/28/2018	09:35	7.43	86.3	7.34	5.15	788.0	21.9	
08/22/2018	07:45							147
08/25/2018	09:58	7.89	86.1	7.48	3.19	688.0	19.6	
09/22/2018	09:05	7.48	80.2	7.46	1.79	600.0	18.2	
10/25/2018	08:35							219
10/27/2018	09:15	10.60	86.4	7.51	2.43	659.0	6.5	

03-JNC, Johnson Creek, Freshet Road Bridge, Durham - Class B

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm ^A	NA	<153
04/28/2018	09:40	11.26	99.8	6.60	4.95	277.3	9.9	
05/26/2018	10:19	9.77	103.4	7.06	4.29	451.0	18.3	
06/23/2018	09:42	8.39	84.4	7.13	4.40	455.0	15.6	
06/27/2018	08:10							194
07/28/2018	10:11	7.66	85.3	6.89	6.11	302.2	21.3	
08/22/2018	08:00							210
08/25/2018	10:25	8.42	88.8	7.36	5.34	388.5	17.9	
09/22/2018	09:35	8.15	84.4	7.30	5.94	350.9	17.0	
10/25/2018	08:50							93
10/27/2018	09:35	11.52	88.7	7.23	3.42	336.4	4.3	

