

# 2015 OYSTER RIVER WATERSHED VRAP DATA

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

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

<sup>B</sup> Chronic water quality standard

<sup>C</sup> Calculated using 1/2 of the 0.05 mg/L detection limit of  $\text{NO}_2$   $\text{NO}_3$  (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. ( $^{\circ}\text{C}$ )
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cmA}$	NA
05/15/2015	10:58	7.82	77.5	5.93	1.4	127.4	15.0
06/19/2015	11:00	6.55	69.5	5.98	1.6	172.7	17.9
06/20/2015	11:15	6.23	62.1	5.38	0.7	108.4	15.6
07/24/2015	10:55	7.10	74.2	5.97	2.0	201.2	17.5
08/14/2015	10:10	6.99	70.6	6.01	1.8	196.7	16.7
09/18/2015	11:00	5.33	55.9	6.03	2.3	225.3	17.2

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

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm <sup>A</sup>	NA
05/15/2015	10:44	10.24	96.9	5.30	0.4	107.8	12.9
06/19/2015	11:15	7.61	80.2	5.43	0.3	102.6	17.9
06/20/2015	10:55	5.73	57.1	6.08	1.7	175.0	16.6
07/24/2015	10:40	7.42	77.4	5.40	0.5	117.8	17.3
08/14/2015	10:25	6.88	70.5	5.53	0.7	110.1	16.7
09/18/2015	10:42	7.46	77.6	5.62	0.4	106.7	17.4

### 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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm <sup>A</sup>	NA
05/15/2015	09:58	7.51	76.0	5.88	4.0	180.0	15.5
06/19/2015	10:25	3.96	45.6	5.80	4.2	177.2	22.6
06/20/2015	10:20	3.62	38.4	5.89	4.1	176.6	19.7
07/24/2015	10:00	3.41	38.4	5.88	3.8	197.6	21.3
08/14/2015	09:45	3.71	40.0	5.98	2.8	246.8	19.3
09/18/2015	09:55	3.30	34.9	5.96	2.4	210.1	18.1

**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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm <sup>A</sup>	NA
05/16/2015	11:05	6.17	61.1	6.70	0.7	122.6	15.1
07/25/2015	11:15	5.28	60.8	6.69	0.6	140.5	23.3
08/15/2015	11:30	5.27	62.8	6.65	0.5	143.1	23.7
09/19/2015	10:35	5.62	60.3	6.52	0.7	145.0	18.7

**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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm <sup>A</sup>	NA
05/15/2015	09:43	8.00	79.9	6.38	2.3	151.0	15.4
06/20/2015	10:00	4.84	52.0	6.37	2.6	157.7	19.8
07/24/2015	09:42	4.74	53.8	6.36	1.7	149.8	21.8
08/14/2015	09:35	4.01	44.9	6.25	1.8	187.4	21.2
09/18/2015	09:42	2.79	30.5	6.10	1.6	184.9	20.4

**05-WDY, Wendy's Brook, Downstream of Rte. 125 Culvert, Market Basket Driveway, Lee - Class A**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/15/2015	10:21	7.65	72.6	6.24	2.3	591.0	12.6
06/19/2015	10:45	8.06	83.6	6.49	5.3	885.0	16.9
06/20/2015	10:55	5.51	62.2	6.19	13.0	945.0	16.1
07/24/2015	10:15	5.62	59.5	6.17	3.3	958.0	18.1
08/14/2015	09:55	5.22	60.1	6.12	1.1	834.0	18.2
09/18/2015	10:15	3.77	41.5	6.07	0.7	725.0	18.4

**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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/16/2015	10:45	7.39	73.5	6.62	3.2	1068	13.7
07/25/2015	10:55	7.84	82.0	6.88	4.3	1964	17.8
08/15/2015	11:10	6.72	74.5	6.85	7.7	1928	19.9
09/19/2015	10:25	7.51	83.4	6.71	9.1	2161	17.4

**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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm <sup>A</sup>	NA
05/16/2015	10:20	8.40	85.1	7.21	5.0	129.5	12.8
07/25/2015	10:25	0.94	10.0	6.55	13.7	153.6	18.5
08/15/2015	10:35	0.79	8.7	6.47	23.7	169.0	20.1
09/19/2015	09:45	0.42	4.6	6.51	41.7	189.0	17.5

**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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm <sup>A</sup>	NA
05/15/2015	09:30	9.78	96.1	6.89	3.3	173.2	14.6
06/19/2015	09:45	8.50	92.5	6.85	0.2	250.1	19.5
06/20/2015	09:40	5.88	63.1	6.67	4.5	203.3	18.2
08/14/2015	09:25	7.22	78.7	7.12	2.9	217.9	18.9
09/18/2015	09:30	7.11	76.2	6.81	3.3	206.0	18.9

**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)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean	Chloride (mg/L)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 µS/cm <sup>A</sup>	NA	<153	<47	230 <sup>B</sup>
04/09/2015	11:30	13.67	96.0	5.95	2.1	130.7	1.3	10		28
05/15/2015	09:15	7.85	75.5	6.87	4.3	202.5	13.6			
06/19/2015	09:30	6.78	73.5	6.70	5.7	250.5	19.2			
06/20/2015	09:30	5.77	62.8	6.70	7.6	255.0	18.4			
06/23/2015	13:00	7.89	86.5	6.64	5.7	182.2	19.8	1510		41
07/24/2015	09:11	6.25	69.0	6.66	5.5	203.2	20.1			
07/27/2015	11:30	7.73	85.4	6.90	6.4	209.1	20.2	50		39
08/14/2015	09:10	5.10	57.7	6.80	4.3	239.8	19.3			
08/25/2015	11:15	7.09	81.3	6.71	4.8	251.4	22.1	180		60
09/18/2015	09:13	5.28	55.9	6.78	5.1	237.7	18.2			

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO <sub>2</sub> ) + Nitrate(NO <sub>3</sub> ) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	Narrative	Narrative	Narrative	Narrative
04/09/2015	11:30	0.015	0.26	0.097	0.36
06/23/2015	13:00	0.049	0.67	< 0.05	0.70 <sup>C</sup>
07/27/2015	11:30	0.038	0.85	0.12	0.97
08/25/2015	11:15	0.045	0.54	0.06	0.60

**08-OYS, Oyster River, Mast Road Bridge, Durham - Class A**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/15/2015	09:00	8.99	86.4	7.03	3.8	220.0	13.7
06/19/2015	09:10	7.28	76.9	6.92	6.0	249.7	17.7
06/20/2015	09:05	6.78	71.7	6.99	5.9	274.9	18.3
07/24/2015	08:50	6.96	74.8	6.98	7.1	234.6	18.9
08/14/2015	08:55	6.81	73.5	6.88	5.4	273.7	18.0
09/18/2015	08:50	5.95	61.2	7.03	5.1	279.5	16.8

**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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/16/2015	11:20	8.60	77.5	6.94	1.3	193.6	11.6
07/25/2015	11:35	8.88	87.3	6.81	1.5	259.2	13.9
08/15/2015	11:45	8.79	86.7	6.74	1.1	257.7	14.7
09/19/2015	10:55	8.85	85.7	6.69	0.7	256.0	12.6

**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)
Standard	NA	>6.0	>75% Daily Average	6.5 - 8.0	As naturally occurring	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/15/2015	08:20	9.34	89.6	7.12	3.8	240.1	13.5
06/19/2015	08:30	6.58	68.6	6.84	5.2	226.7	17.8
06/20/2015	08:40	6.79	70.4	6.74	6.4	244.7	17.1
07/24/2015	08:20	6.34	68.6	6.85	5.9	240.5	19.4
08/14/2015	08:30	6.01	64.7	6.81	3.6	304.3	18.5
09/18/2015	08:15	5.87	59.8	7.10	3.5	271.3	16.9

**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)
Standard	NA	>5.0	>75% Daily Average	6.5 - 8.0	<10 NTU above background	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/16/2015	08:45	7.36	68.5	7.03	2.6	375.2	12.4
07/25/2015	08:45	4.69	48.3	6.63	5.0	511.0	16.7
08/15/2015	08:48	4.08	44.4	7.14	2.8	515.0	18.8
09/19/2015	08:25	2.13	22.2	6.98	4.2	521.0	17.3



**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)
Standard	NA	>5.0	>75% Daily Average	6.5 - 8.0	<10 NTU above background	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/16/2015	08:20	8.81	83.1	7.50	2.7	1528	12.5
07/25/2015	08:15	7.40	80.8	7.51	2.8	1788	17.7
08/15/2015	08:15	7.64	84.8	7.65	2.2	1706	20.2
09/19/2015	08:05	6.90	74.4	7.43	2.1	1837	17.4

**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)
Standard	NA	>5.0	>75% Daily Average	6.5 - 8.0	<10 NTU above background	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/16/2015	09:10	8.04	76.8	7.53	2.0	1371	12.5
07/25/2015	09:15	<del>9.54</del>	77.9	7.64	0.0	<del>1330</del>	18.0
08/15/2015	09:15	6.82	75.5	7.62	1.9	1555	20.2
09/19/2015	11:19	6.99	75.6	7.54	1.2	1722	18.7

**02G-BRD, Beards Creek, Stoleworthy Wildlife Sanctuary, Durham - Class B**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard	NA	>5.0	>75% Daily Average	6.5 - 8.0	<10 NTU above background	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/16/2015	09:30	9.82	93.7	7.42	1.5	462.4	13.1
07/25/2015	09:40	7.47	77.9	7.54	0.1	486.8	17.5
08/15/2015	09:45	7.31	80.3	7.37	0.7	424.2	20.0

**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)
Standard	NA	>5.0	>75% Daily Average	6.5 - 8.0	<10 NTU above background	<835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/16/2015	09:50	9.16	85.6	7.32	3.8	399.3	12.5
07/25/2015	10:00	7.12	75.8	7.06	0.3	396.6	18.0
08/15/2015	10:05	7.44	81.6	7.16	7.1	441.6	19.9
09/19/2015	09:23	7.61	79.2	7.05	1.9	269.7	17.3