2013 OYSTER RIVER WATERSHED VRAP DATA

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

[A] Specific conductance > 835 µS/cm indicate exceedance of chronic chloride standard of 230 mg/L
[B] Chronic water quality standard
[C] Calculated using 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 (uS/cm)	Water Temp. (°C)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cmA**	**NA**	**<153**	**<47**
04/19/2013	10:32	9.39	93.0	5.57	0.79	103.7	13.9		
05/17/2013	10:27	7.41	73.5	5.72	0.69	126.7	15		
06/21/2013	10:08	6.65	68.8	5.63	0.72	100.1	17.9		
07/19/2013	10:25	6.41	75.7	6.05	1.03	106.4	23.9		
07/25/2013	9:53							70	
08/20/2013	10:42							320	
08/23/2013	10:41	5.70	61.6	5.99	1.52	132.5	19.3		
09/19/2013	10:21							60	110
10/18/2013	10:05	6.67	64.3	5.82	0.88	112.7	13.8		
11/15/2013	9:58	8.37	63.0	5.96	0.99	121.8	3.2		
11/21/2013	9:43							9	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/19/2013	10:22	10.20	93.2	4.78	0.22	88.0	11.4		
05/17/2013	10:10	8.87	85.1	4.98	0.19	97.7	13.6		
06/21/2013	10:25	8.38	86.0	4.70	0.36	94.1	16.6		
07/19/2013	10:48	8.19	97.2	5.12	0.66	106.2	24.1		
07/25/2013	10:00							40	
08/20/2013	10:35							30	
08/23/2013	10:30	6.92	75.4	5.37	0.31	88.9	19.5		
09/19/2013	10:16							20	29
10/18/2013	10:20	8.98	85.2	5.08	0.20	73.2	13.0		
11/15/2013	10:12	11.38	80.3	5.59	0.44	75.9	2.0		
11/21/2013	9:35							<10	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/19/2013	10:02	8.14	76.7	5.64	0.58	106.5	12.7		
05/17/2013	9:52	4.15	41.9	5.58	0.81	135.9	15.9		
06/21/2013	9:55	4.39	46.8	5.29	1.07	107.5	18.6		
07/19/2013	10:12	3.30	40.3	5.62	1.61	124.0	25.9		
07/25/2013	9:35							50	
08/20/2013	10:25							110	
08/23/2013	10:00	3.16	36.0	5.84	1.51	147.2	22.2		
09/19/2013	9:56							80	76
10/18/2013	9:50	4.45	44.3	5.71	1.81	120.8	13.6		
11/15/2013	9:45	8.10	58.8	6.01	2.34	141.2	2.2		
11/21/2013	9:12							<10	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/20/2013	10:40	9.40	88.6	6.56	0.62	117.6	12.6		
05/18/2013	11:10	6.83	69.5	6.56	1.43	153.8	16.1		
06/22/2013	12:05	6.59	80.5	6.55	0.39	120.0	24.0		
07/20/2013	10:40	4.29	55.7	6.57	0.56	122.3	29.0		
07/25/2013	9:25							50	
08/20/2013	7:32							40	
08/24/2013	12:07	5.86	62.4	6.81	0.90	130.8	18.4		
09/19/2013	9:51							70	52
09/21/2013	10:15	4.44	46.8	6.30	1.06	115.3	18.1		
10/19/2013	11:24	4.09	38.6	6.39	0.79	119.2	12.8		
11/16/2013	11:10	10.97	87.4	6.79	0.9	120.2	5.5		
11/21/2013	9:06							<10	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/19/2013	9:50	8.32	78.5	6.20	0.66	111.4	12.8		
05/17/2013	9:38	5.11	51.0	5.86	1.32	145.9	15.5		
06/21/2013	9:40	4.93	52.9	5.82	0.87	114.3	18.6		
07/19/2013	9:55	3.49	42.5	6.05	1.71	126.0	25.3		
07/25/2013	9:43							190	
08/20/2013	10:14							210	
08/23/2013	9:45	2.98	33.0	6.08	2.71	159.2	20.4		
09/19/2013	10:01							70	141
10/18/2013	9:40	4.41	42.4	5.86	1.77	128.0	13.7		
11/15/2013	9:33	7.27	56.2	6.22	1.58	160.7	3.4		
11/21/2013	9:15							20	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/20/2013	10:25	10.42	95.4	6.46	2.28	461	11.3		
05/18/2013	10:55	9.27	88.8	6.68	3.23	636	13.5		
06/22/2013	11:40	8.37	88.1	6.77	4.1	581	17.6		
07/20/2013	7:25	7.53	85.9	6.64	13.1	895	21.7		
07/25/2013	9:48							4100	
08/20/2013	10:17							640	
08/24/2013	11:41	7.47	77.6	6.87	7.55	1478	17.0		
09/19/2013	10:05							6100	2520
09/21/2013	10:00	8.36	82.4	6.76	8.49	319	14.5		
10/19/2013	11:05	7.86	71.9	6.60	4.59	843	11.5		
11/16/2013	10:55	11.46	88.7	6.63	2.61	960	4.4		
11/21/2013	9:22							340	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/20/2013	10:10	9.42	87.8	6.62	4.11	93.8	12.2		
05/18/2013	10:30	9.93	95.1	6.95	4.23	119.7	13.4		
06/22/2013	11:00	8.52	91.4	6.88	9.92	108.0	18.8		
07/20/2013	10:10	5.85	70.2	6.92	11.1	143.8	23.9		
07/25/2013	9:05							290	
08/20/2013	9:55							280	
08/24/2013	11:06	6.29	62.6	6.88	21	147.2	15.2		
09/19/2013	9:31							160	235
09/21/2013	9:45	8.45	83.2	6.44	4.55	107.0	14.6		
10/19/2013	10:39	9.74	85.4	7.01	4.39	126.3	9.5		
11/16/2013	10:25	12.42	92.3	6.94	4.34	131.1	2.6		
11/21/2013	8:52							<10	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/19/2013	9:38	9.47	89.0	6.59	1.43	121.7	12.6		
05/17/2013	9:22	8.24	83.1	6.47	3.37	157.7	15.7		
06/21/2013	9:20	8.05	84.3	6.53	2.76	125.7	17.7		
07/19/2013	9:35	6.72	81.4	6.63	4.27	143.0	25.1		
07/25/2013	9:15							240	
08/20/2013	10:04							140	
08/23/2013	9:28	6.51	73.5	6.57	3.70	178.1	21.5		
09/19/2013	9:41							220	195
10/18/2013	9:25	8.20	78.7	6.49	2.14	162.1	13.2		
11/15/2013	9:20	11.36	81.6	6.70	1.20	160.7	1.8		
11/21/2013	8:42							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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean	Chloride (mg/L)
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**	**230[B]**
02/28/2013	12:35	13.7	95.1	6.18	8.1	220.5	0.5			30
04/19/2013	9:20	9.71	91.0	6.63	1.88	100.4	12.4			
05/17/2013	9:05	7.62	75.0	6.51	6.48	183.7	14.6			
06/17/2013	9:00	8.58	88.7	6.71	4.15	122.1	17.0	70		19
06/21/2013	9:03	7.73	80.9	6.50	4.15	136.0	17.7			
07/12/2013	8:50	7.91	88.8	6.27	5.31	127.1	21.2	400		21
07/19/2013	9:15	6.92	83.1	6.60	5.41	148.6	24.5			
07/25/2013	8:50							340		
08/09/2013	8:50	6.46	73.1	6.91	6.71	175.8	21.4	70	161	34
08/20/2013	9:41							180	203	
08/23/2013	9:08	5.91	66.3	6.59	4.49	192.3	21.2			
09/19/2013	9:21							220	121	
10/11/2013	9:15	9.35	85.0	6.59	3.05	182.1	11.1	50	126	38
10/18/2013	9:10	8.15	78.3	6.44	2.83	170.1	13.4			
11/15/2013	9:50	11.99	86.0	6.62	2.76	162.0	1.8			
11/21/2013	8:36							20		

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

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO2) + Nitrate(NO3) (mg/L)	Total Nitrogen (mg/L)
Standard	**NA**	**Narrative**	**Narrative**	**Narrative**	**Narrative**
02/28/2013	12:35	0.0310	0.35	0.17	0.52
06/17/2013	9:00	0.0259	0.25	ND	0.28[C]
07/12/2013	8:50	0.0514	0.62	0.08	0.70
08/09/2013	8:50	0.0559	0.68	0.11	0.79
10/11/2013	9:15	0.0278	0.43	ND	0.46[C]

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/19/2013	8:55	9.83	90.5	6.65	2.59	109.8	12.0		
05/17/2013	8:50	7.60	74.3	6.76	4.48	209.5	14.4		
06/21/2013	8:45	8.02	83.3	6.64	3.95	153.2	17.1		
07/19/2013	8:55	7.28	86.0	6.86	5.43	174.5	23.9		
07/25/2013	8:43							270	
08/20/2013	7:25							240	
08/23/2013	8:53	7.07	76.4	6.71	3.62	238.8	19.0		
09/19/2013	9:12							230	246
10/18/2013	8:53	7.05	67.0	6.56	2.14	198.4	13.1		
11/15/2013	8:40	11.85	86.1	6.75	2.39	184.2	2.1		
11/21/2013	8:27							30	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/20/2013	10:50	8.50	80.8	6.60	1.43	201	13.0		
05/18/2013	11:30	9.42	95.2	6.74	0.92	241	14.0		
06/22/2013	12:30:00	7.15	73.6	6.65	1.97	235	16.7		
07/20/2013	6:50	7.87	81.2	6.56	1.95	257	17.0		
07/25/2013	8:40							50	
08/20/2013	7:20							50	
08/24/2013	12:17	8.36	80.4	6.80	12.7	249	13.6		
09/19/2013	9:07							40	46
09/21/2013	10:30	8.18	77.3	6.58	6.42	230	12.9		
10/19/2013	11:58	8.74	79.7	6.85	0.99	254	10.9		
11/16/2013	11:30			6.76	1.16				
11/21/2013	8:24							30	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>6.0**	**>75% Daily Average**	**6.5 - 8.0**	**As naturally occuring**	**<835 µS/cm[A]**	**NA**	**<153**	**<47**
04/19/2013	8:25	9.70	89.3	6.62	3.31	111.6	11.7		
05/17/2013	8:20	7.85	77.1	6.85	5.14	210.4	14.5		
06/21/2013	8:15	8.22	85.7	6.75	4.31	158.2	17.1		
07/19/2013	8:30	7.04	83.3	6.83	4.74	174.8	23.8		
07/25/2013	8:20							110	
08/20/2013	8:57							70	
08/23/2013	8:30	6.28	68.4	6.75	3.33	230.9	19.5		
09/19/2013	8:53							160	107
10/18/2013	8:25	7.92	75.6	6.64	2.49	157.2	13.2		
11/15/2013	8:20	11.20	81.0	6.74	2.09	187.3	2.0		
11/21/2013	8:10							30	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>5.0**	**>75% Daily Average**	**6.5 - 8.0**	**<10 NTU above background**	**<835 µS/cm[A]**	**NA**	**<406**	**<126**
04/20/2013	8:45	7.50	70.8	6.67	3.49	242	12.7		
05/18/2013	8:57	6.93	66.6	6.75	2.55	298	13.0		
06/22/2013	9:25	7.30	74.3	6.87	4.06	298	16.9		
07/20/2013	8:35	1.35	16.2	6.26	4.13	170	24.3		
07/25/2013	8:08							200	
08/20/2013	7:50							340	
08/24/2013	8:50	4.31	43.4	6.86	2.89	354	15.9		
09/19/2013	8:36							260	261
09/21/2013	8:30	5.91	57.3	6.68	2.67	289	19.0		
10/19/2013	8:45	4.71	41.8	6.98	5.12	292	9.8		
11/16/2013	8:45	7.12	51.3	6.81	4.81	277	2.3		
11/21/2013	7:54							<10	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>5.0**	**>75% Daily Average**	**6.5 - 8.0**	**<10 NTU above background**	**<835 µS/cm[A]**	**NA**	**<406**	**<126**
04/20/2013	8:10	8.83	81.5	6.98	7.04	648	11.7		
05/18/2013	8:20	8.42	79.0	7.32	2.80	1431	12.3		
06/22/2013	8:12	8.35	86.8	7.30	2.40	1014	17.1		
07/20/2013	8:15	5.52	65.0	7.27	2.74	1206	22.7		
07/25/2013	7:10							260	
08/20/2013	9:11							1240	
08/24/2013	8:30	7.92	80.1	7.45	2.66	1478	16.3		
09/19/2013	7:55							440	522
09/21/2013	8:15	8.14	81.5	7.40	0.08	1042	15.1		
10/19/2013	8:25	6.04	55.0	7.27	1.40	1049	11.2		
11/16/2013	8:20	6.23	54.2	7.22	0.94	814	9.1		
11/21/2013	7:15							150	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>5.0**	**>75% Daily Average**	**6.5 - 8.0**	**<10 NTU above background**	**<835 µS/cm[A]**	**NA**	**<406**	**<126**
04/20/2013	9:05	9.69	88.8	6.91	6.65	484	11.3		
05/18/2013	9:15	8.93	84.0	7.27	1.68	1017	12.3		
06/22/2013	9:00	8.29	86.8	7.28	5.42	695	18.0		
07/20/2013	9:00	6.42	73.4	7.43	2.7	1136	22.8		
07/25/2013	7:30							220	
08/20/2013	9:20							580	
08/24/2013	9:30	8.20	84.2	7.71	1.59	732	16.8		
09/19/2013	8:01							60	197
09/21/2013	8:45	8.77	88.5	7.28	2.97	714	15.5		
10/19/2013	9:05	8.17	73.4	7.34	0.91	1020	10.5		
11/16/2013	9:05	9.67	74.0	7.36	1.02	945	3.7		
11/21/2013	7:22							310	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>5.0**	**>75% Daily Average**	**6.5 - 8.0**	**<10 NTU above background**	**<835 µS/cm[A]**	**NA**	**<406**	**<126**
04/20/2013	9:15	9.76	91.8	7.19	5.05	326	12.1		
05/18/2013	9:40	8.85	86.4	7.21	2.34	373	13.3		
06/22/2013	9:50	7.46	83.7	7.19	4.30	165	18.7		
07/20/2013	9:21	6.87	81.0	7.42	2.94	361	23.6		
07/25/2013	7:40							100	
08/24/2013	10:05	8.44	86.8	7.44	1.56	366	16.7		
09/19/2013	8:08							130	
09/21/2013	8:55	9.02	89.9	7.07	1.92	308	14.6		
10/19/2013	9:33	8.72	77.4	7.33	1.67	361	10.1		
11/16/2013	9:30	11.56	86.3	7.32	1.6	381	3.1		
11/21/2013	7:30							100	

02-BRD, Beards Creek, Coe Drive, Durham - Class B

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>5.0**	**>75% Daily Average**	**6.5 - 8.0**	**<10 NTU above background**	**<835 µS/cm[A]**	**NA**	**<406**	**<126**
08/20/2013	9:30							150	

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)	*E. coli* (CTS/100mL)	*E.coli* Geometric Mean
Standard	**NA**	**>5.0**	**>75% Daily Average**	**6.5 - 8.0**	**<10 NTU above background**	**<835 µS/cm[A]**	**NA**	**<406**	**<126**
04/20/2013	9:45	9.51	88.5	6.92	7.04	339	12.2		
05/18/2013	10:05	8.74	84.1	6.96	2.16	381	13.5		
06/22/2013	10:25	11.34	118.4	6.99	5.35	329	18.0		
07/20/2013	9:45	7.12	83.5	6.99	9.09	387	24.1		
07/25/2013	7:55							460	
08/20/2013	8:00							20	
08/24/2013	10:41	5.94	61.3	6.96	2.38	332	16.9		
09/19/2013	8:25							110	100
09/21/2013	9:20	8.94	87.2	6.94	7.93	320	18.1		
10/19/2013	10:10	7.70	73.4	7.06	3.61	385	11.2		
11/16/2013	9:55	12.9	93.4	7.09	2.98	393	2.1		
11/21/2013	7:42							90	