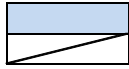


New Hampshire Volunteer River Assessment Program

2019 Warner 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 µS/cm indicate exceedance of chronic chloride standard of 230 mg/L

^B Chronic water quality standard

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

15-ADW, Andrew Brook, Mountain Road, Newbury

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	835µS/cm^A	NA
07/25/2019	11:05	8.80	91.8	5.70	1.05	27.4	18.0
08/18/2019	12:00	7.04	78.5	6.71	2.61	36.7	20.5
09/29/2019	12:30	7.62	75.2	6.41	0.60	45.1	15.0
10/20/2019	12:05	9.52	79.9	5.41	0.40	19.4	7.6

04-ADW, Andrew Brook, Sutton Road, Newbury

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	835µS/cm^A	NA
07/25/2019	11:21	8.26	86.6	6.10	0.67	75.4	18.0
08/18/2019	12:20	5.44	62.9	6.35	1.74	94.6	22.6
09/29/2019	12:50	5.64	57.8	6.19	1.59	105.4	16.5
10/20/2019	12:25	9.72	81.9	6.06	0.39	62.1	7.9

TODNBYO, Andrew Brook, Todd Lake Outlet, Bradford, NHDES VLAP Station

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm^A	NA	<230 mg/L^B	Narrative
06/23/2019	00:00			6.93	1.19	51.5		11	0.012
07/25/2019	10:35	7.40	91.2	6.53	0.47	57.8	25.2		
07/28/2019	10:00			6.97	0.53			54	0.010
08/18/2019	11:25	6.65	80.1	6.89	0.57	60.2	24.9		
08/25/2019	00:00			6.93	0.97	62.0		10	0.011
09/29/2019	11:55	7.22	76.4	6.58	0.40	30.1	18.4		
10/20/2019	11:30	9.11	82.3	6.49	0.75	65.8	10.7		

01-WBW, West Branch Warner River, Water Street, Bradford

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	835µS/cm ^A	NA
7/25/2019	10:46	9.43	98.5	6.64	1.10	56.9	17.5
8/18/2019	11:40	7.47	83.7	7.05	0.85	78.4	20.2
9/29/2019	12:10	8.90	87.1	6.78	0.38	76.4	14.4
10/20/2019	11:45	10.80	90.1	6.40	0.71	51.7	7.4

01-HOY, Hoyt Brook, Jones Street Bridge, Bradford

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	835µS/cm ^A	NA
7/25/2019	10:14	9.63	103.8	6.67	1.25	44.9	19.0
8/18/2019	11:10	7.88	86.1	7.03	0.77	90.8	19.6
9/29/2019	11:35	8.48	82.8	6.79	0.31	81.7	14.7
10/20/2019	11:05	10.23	85.1	5.90	1.16	52.9	7.4

11F-WNR, Warner River, Breezy Hill Road, Warner

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	835µS/cm ^A	NA
7/25/2019	09:57	7.50	83.3	6.12	0.95	65.1	20.9
8/18/2019	10:55	5.14	59.5	6.05	1.01	82.4	22.3
9/29/2019	11:20	4.94	50.9	6.00	0.84	98.9	16.7
10/20/2019	10:50	8.55	73.4	5.94	0.59	64.5	8.4

10-WNR, Warner River, Melvin Mills Road, Bradford, 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	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B
06/20/2019	13:15	7.43	81.7	6.62	0.69	62.6	20.0	86		10
07/18/2019	11:45	8.09	92.8	6.49	0.95	90.2	22.1	75		18
08/15/2019	11:30	8.17	91.0	6.55	0.75	99.6	20.7	20	51	18
10/22/2019	11:40	9.76	88.8	6.06	0.54	71.3	10.8			12

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	NA	NA	NA	NA
06/20/2019	13:15	0.019	ND	ND	
07/18/2019	11:45	0.015	ND	0.08	0.21 ^C
08/15/2019	11:30	0.022	0.26	ND	0.29 ^C
10/22/2019	11:40	0.013	0.26	ND	0.29 ^C

02-TSL, Thistle Brook, Main Street, Sutton

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	835µS/cm ^A	NA
07/25/2019	11:47			6.20	0.82	257.0	16.0
08/18/2019	12:45	6.32	68.2	6.59	0.73	190.3	19.2
09/29/2019	13:15	5.38	53.4	6.11	0.99	436.4	15.0
10/20/2019	12:45	9.56	80.7	6.29	1.50	246.2	8.1

02-LNE, Lane River, Roby Road, Warner

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	835µS/cm ^A	NA
7/25/2019	09:42	9.15	99.1	6.85	1.25	136.1	19.5
8/18/2019	10:35	7.12	79.0	6.79	0.80	162.8	20.4
9/29/2019	10:55	8.94	88.3	6.99	0.06	87.2	14.9
10/20/2019	10:25	10.36	86.0	6.30	0.72	169.3	7.2

01-XS4, Unnamed Stream, Kearsarge Regional High School, Sutton

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	835µS/cm ^A	NA
07/25/2019	12:04	9.74	99.7	6.56	0.38	41.6	16.6
08/18/2019	13:10	7.15	78.3	6.83	1.49	46.6	19.2
09/29/2019	13:35	7.95	78.6	6.61	0.36	49.2	14.8
10/20/2019	13:05	9.93	84.6	6.49	0.16	41.5	8.2

10-STV, Stevens Brook, North Road, Warner

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	835µS/cm ^A	NA
07/25/2019	12:26	9.29	101.4	6.70	4.49	199.2	19.8
08/18/2019	01:30	7.43	83.7	6.87	2.27	152.8	21.0
09/29/2019	14:00	9.20	90.8	6.68	0.60	133.3	15.0
10/20/2019	13:25	10.61	90.2	6.31	0.87	170.7	8.1

02-STV, Stevens Brook, Route 103, Warner

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	835µS/cm ^A	NA
07/25/2019	12:42	9.20	100.1	6.65	2.15	180.9	19.7
08/18/2019	01:45	7.68	90.4	6.67	0.45	18.9	23.3
09/29/2019	14:15	8.37	88.1	6.61	0.14	190.4	17.3
10/20/2019	13:40	10.35	89.3	6.31	0.65	186.9	8.6

05-WNR, Warner River, Joppa Road Bridge, Warner

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	835µS/cm ^A	NA
07/25/2019	09:23	8.74	95.2	6.63	1.01	109.8	19.7
08/18/2019	10:10	6.74	75.5	6.53	0.96	133.7	21.1
09/29/2019	10:25	7.01	71.7	6.53	0.45	167.8	16.5
10/20/2019	10:53	9.46	79.2	6.21	0.58	92.8	7.6

03-WNR, Warner River, Dustin Road/Route 127 Bridge, Davisville

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	835µS/cm ^A	NA
7/25/2019	08:15	7.20	80.3	6.42	0.85	111.0	20.5
8/18/2019	09:45	6.07	66.6	6.31	1.72	202.2	20.8
9/29/2019	09:55	5.93	59.6	6.29	1.02	200.6	15.6
10/20/2019	09:45	8.86	74.7	6.12	0.70	91.8	7.9

01-WNR, Warner River, Deer Path Road, Hopkinton

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	835µS/cm ^A	NA
7/25/2019	08:57	8.08	89.9	6.65	0.83	106.2	20.5
8/18/2019	09:30	5.04	56.6	6.73	0.94	184.2	20.9
9/29/2019	09:35	6.41	64.5	6.22	0.71	196.3	15.6
10/20/2019	09:35	10.08	85.4	6.24	0.68	92.4	8.0

