

New Hampshire Volunteer River Assessment Program
2021 Connecticut 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 indicates 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)

58-CNT: Connecticut River, Lancaster (Route 2 Bridge) - NHDES Trend Station

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	Chloride (mg/L)	E. coli (MPN/100mL)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	230 ^B	<406
04/12/2021	10:45	10.76	96.0	6.14	1.24	40	10.3	<3	
06/16/2021	10:25	8.41	93.1	6.79	0.70	107	20.3	7	10
07/13/2021	10:40	8.43	95.9	6.94	1.03	84	21.7	4	<10
08/16/2021	10:30	7.47	84.5	7.05	1.37	51	21.4	5	63

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO2) + Nitrate (NO3) (mg/L)	Total Nitrogen (mg/L)
Standard		Narrative	Narrative	Narrative	Narrative
04/12/2021	10:45	0.016	ND	0.120	0.4
06/16/2021	10:25	0.012	ND	0.220	0.470
07/13/2021	10:40	0.011	0.320	0.170	0.490
08/16/2021	10:30	0.017	0.300	0.100	0.400

53-CNT: Connecticut River, Dalton (Bridge downstream of Gilman Dam)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
06/27/2021	13:05	7.99	95.0	6.65	0.93	85	24.6

50-CNT: Connecticut River, Littleton (Route 18 Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
06/27/2021	11:05	8.27	94.6	6.85	1.01	59	24.9
07/29/2021	10:35	9.00	106.7	5.90		67	21.8
08/25/2021	10:45	7.15	79.0	6.30	0.59	67	25.1

43-CNT: Connecticut River

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
07/08/2021	14:00	8.48	90.2	6.87	0.83	95	17.9
08/26/2021	10:10	7.90	94.6	6.50	0.91	1	23.1

40-CNT: Connecticut River

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
07/01/2021	15:40	6.40	70.5	6.32	0.01	102	22.4
08/26/2021	11:20	7.22	91.5	6.22	1.37	1	24.9

27-CNT: Connecticut River, Lebanon (Route 89 Bridge)

Date	Time of Sample	Chloride (mg/L)	Total Phosphorus (mg/L)	Nitrite (NO ₂) + Nitrate (NO ₃) (mg/L)
Standard		230 ^B	Narrative	Narrative
06/27/2021	14:38	22	0.045	0.200
08/01/2021	16:30	16	0.010	0.050
08/29/2021	13:30	18	0.048	0.180
09/29/2021	10:30	15	0.023	0.150
10/24/2021	16:15	18	0.017	0.060

14-CNT: Connecticut River, Charlestown (Black River Confluence)

Date	Time of Sample	Chloride (mg/L)	Total Phosphorus (ug/L)	Total Nitrogen (mg/L)
Standard		230 ^B	Narrative	Narrative
06/21/2021	17:15	18	12.3	0.340
07/30/2021	14:30	13	25.1	0.350
08/31/2021	13:00	16	12.9	0.360
09/28/2021	17:00	15	11.8	0.310

13D-CNT: Connecticut River, Walpole (Arch Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
06/28/2021	9:45	4.32	53.5	7.43	0.82	1791	26.2
07/17/2021	8:45	6.00	69.8	7.15	0.85	154	23.0
08/15/2021	9:16	5.21	62.4	7.24	0.77	162	24.7
09/19/2021	08:45	5.55	61.7	7.13	0.81	169	20.4
10/11/2021	10:15	6.28	65.7	7.16	1.02	154	17.2

13-CNT: Connecticut River, Walpole (Vilas Bridge/Bridge Street)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
06/28/2021	11:05	6.19	76	7.55	0.78	1828	26.5
07/17/2021	9:45	4.93	57.2	7.42	0.77	153	22.5
08/15/2021	10:15	5.34	63.4	7.46	0.73	168	24.3
09/19/2021	9:45	6.84	75.8	7.42	0.78	172	20.6
10/11/2021	10:57	6.90	72.0	7.50	0.85	160	17.1

10-CNT: Connecticut River, Walpole (Route 123 Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	Total Phosphorus (ug/L)	Total Nitrogen (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	230 ^B	Narrative	Narrative
06/28/2021	12:30	5.07	65.1	7.21	0.49	180	26.9	18	14.3	0.440
07/17/2021	11:06	6.27	75.5	7.43	1.57	146	24.3	15	25.0	0.430
08/15/2021	11:00	6.39	77.1	7.24	0.61	161	25.2	17	12.8	0.390
09/19/2021	10:45	6.78	75.2	7.37	0.84	163	20.5	17	14.5	0.440
10/11/2021	11:54	6.69	69.7	7.15	0.84	153	17.3	17	13.7	0.380

07-CNT: Connecticut River, Brattleboro (Route 9 Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
07/11/2021	11:45	5.40	63.1	7.13	0.66	132	22.5
08/07/2021	11:24	5.43	62.9	7.09	1.14	133	22.4
09/04/2021	11:07	6.04	67.7	7.18	1.31	151	20.6
10/02/2021	13:50	6.66	179	7.37	0.67	179	18.2

04-CNT: Connecticut River, Hinsdale (Route 119 Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	Total Phosphorus (ug/L)	Total Nitrogen (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	230 ^B	Narrative	Narrative
07/11/2021	13:10	5.29	61.2	7.15	0.83	128	22.2	14	14.6	0.410
08/07/2021	12:50	5.59	64.7	7.09	2.10	125	21.4	13	15.7	0.300
09/04/2021	12:30	5.61	64.1	7.28	1.75	148	21.4	15	13.3	0.360
10/02/2021	15:28	6.03	64.3	7.25	0.89	170	18.3	18	13.7	0.340

01-CNT: Connecticut River, Northfield, MA (Route 10 Bridge) - 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)	E. coli (MPN/100mL)	E. coli Geometric Mean
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	230 ^B	<406	<126
04/07/2021	11:00	13.32	109.7	6.98	1.20	88	7.0	13		
06/14/2021	11:15	7.30	83.1	6.78	0.74	200	21.7		20	
07/20/2021	11:00	9.28	104.3	7.21	7.50	101	21.1	12	246	
08/10/2021	11:00	8.13	93.1	7.08	1.13	101	22.1	14	41	59

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO2) + Nitrate (NO3) (mg/L)	Total Nitrogen (mg/L)
Standard		Narrative	Narrative	Narrative	Narrative
04/07/2021	11:00	0.011	ND	0.180	0.430
06/14/2021	11:15	0.010	ND	0.150	0.400
07/20/2021	11:00	0.040	0.320	0.450	0.770
08/10/2021	11:00	0.013	0.260	0.140	0.400

