



New Hampshire Volunteer River Assessment Program
2019 Ashuelot 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 detectin limit of Total Kjeldahl Nitrogen (0.125 mg/L)

28-ASH, Ashuelot River, Route 31, Washington

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E. coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	09:10	8.80	91.5	5.70	0.39	22.8	17.3			4	
05/28/2019	09:10										
06/25/2019	09:23	7.81	87.9	5.65	0.47	27.4	21.2	5		5	
07/23/2019	09:10	7.08	83.0	5.69	0.51	31.4	23.2			5	0.010
07/26/2019	09:06							23			
08/20/2019	09:34	5.23	57.6	5.71	0.51	50.5	20.1	19	13	10	0.010
09/17/2019	09:25	8.18	80.0	5.71	0.29	42.0	14.4	7	15	8	

27-ASH, Ashuelot River, Mountain Road, Lempster

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E. coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	09:31	9.10	90.9	5.65	0.53	26.8	15.4			6	
06/25/2019	09:00	7.73	82.3	5.56	0.54	21.4	18.9	9		7	
07/23/2019	08:45	7.65	84.8	5.73	0.76	33.2	20.4			6	0.014
07/26/2019	08:50							10			
08/20/2019	09:06	7.09	76.0	5.65	0.13	33.4	18.7	18	12	6	0.008
09/17/2019	08:55	9.34	85.6	5.81	1.73	57.6	11.5	12	13	12	

24A-ASH, Ashuelot River, Route 10, Marlow

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E. coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	08:35	8.42	88.8	5.77	0.55	33.1	17.9			7	
06/25/2019	08:25	7.89	87.3	5.57	0.73	37.9	20.6	16		6	
07/23/2019	08:20	7.06	83.2	5.84	0.81	48.1	23.7			8	0.012
07/26/2019	08:30							16			
08/20/2019	08:32	7.03	82.2	5.90	0.42	47.0	23.2	43	22	9	0.008
09/17/2019	08:25	6.79	68.4	6.05	0.30	55.4	15.8	38	30	12	

23-ASH, Ashuelot River, Route 10, Gilsum

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E. coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	08:00	9.25	93.0	6.01	0.47	38.9	15.7			9	
06/25/2019	08:00	8.81	93.6	5.94	0.67	46.6	18.4	15		9	
07/23/2019	07:55	8.50	92.2	6.26	1.88	53.6	18.9			10	0.021
07/26/2019	08:20							32			
08/20/2019	08:05	8.55	93.1	5.93	0.51	70.5	19.5	68	32	14	0.011
09/17/2019	07:45	9.54	88.2	6.35	0.25	89.7	11.6	9	27	19	

20A-ASH, Ashuelot River, Stone Arch Bridge, Keene

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	07:40	8.22	86.6	5.83	0.99	59.4	17.9			11	
06/25/2019	08:10	7.60	84.1	5.86	1.46	60.2	20.3	34		11	
07/23/2019	08:35	6.95	79.2	6.12	1.50	77.2	21.9			11	0.016
07/26/2019	09:16							21			
08/20/2019	07:44	6.56	76.0	5.98	0.84	90.8	22.7	119	44	19	0.014
09/17/2019	08:20	7.98	79.6	5.95	0.47	90.7	15.2	44	48	17	

18-ASH, Ashuelot River, Route 101, Keene

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	08:16	8.17	86.8	6.05	0.97	104.9	18.4			23	
06/25/2019	08:30	7.76	87.3	5.94	1.83	104.9	21.1	124		23	
07/23/2019	09:04	7.26	83.1	6.10	2.93	140.2	22.0			29	0.025
07/26/2019	09:28							25			
08/20/2019	08:12	6.50	75.2	6.15	1.68	246.0	22.6	276	95	61	0.018
09/17/2019	09:06	7.71	77.9	6.10	1.33	246.1	15.8	326	131	66	

16D-ASH, Ashuelot River, 40 Feet Upstream of Keene WWTF, Swanzey

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	08:39	8.39	86.5	5.95	1.21	119.9	16.9			28	
06/25/2019	09:03	7.87	86.0	6.47	2.24	129.2	19.7	59		28	
07/23/2019	10:34	7.84	86.0	6.66	5.84	133.2	19.8			27	0.045
07/26/2019	08:44							62			
08/20/2019	09:10	7.28	82.4	6.56	1.88	168.7	21.4	178	87	39	0.023
09/17/2019	09:05	8.22	81.2	6.71	1.68	246.5	14.8	55	85	58	

16A-ASH, Mouth of South Branch Ashuelot River, Swanzey

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	09:04	8.10	83.5	6.01	1.37	90.7	16.8			17	
06/25/2019	08:26	7.82	84.4	6.55	1.71	99.6	19.1	122		19	
07/23/2019	10:16	7.42	82.4	6.72	5.74	103.0	20.5			18	0.039
07/26/2019	08:37							125			
08/20/2019	08:39	7.20	81.6	6.60	1.83	106.5	21.5	197	144	20	0.018
09/17/2019	08:30	8.44	82.4	6.75	1.43	136.0	14.3	75	123	23	

16-ASH, Ashuelot River, Cresson Bridge, Swanzey

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	09:28	8.28	85.3	6.00	1.03	120.0	16.8			27	
06/25/2019	09:31	7.76	84.4	6.61	1.62	136.1	19.5	102		29	
07/23/2019	09:23	7.43	81.8	6.66	6.64	129.2	20.1			24	0.044
07/26/2019	08:54							81			
08/20/2019	09:40	7.25	82.4	6.64	1.57	163.7	21.6	199	118	37	0.018
09/17/2019	09:34	8.06	79.7	6.71	1.47	232.4	14.8	77	107	48	

02B-SBA, South Branch Ashuelot River, Upstream of Monadnock Regional High School, Swanzey

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	09:15	8.69	87.9	6.04	1.31	83.2	15.9			15	
06/25/2019	09:53	7.84	84.6	6.05	1.72	89.5	18.7	99		15	
07/23/2019	09:55	7.94	85.8	6.15	6.85	98.3	19.1			17	0.052
07/26/2019	09:51							101			
08/20/2019	09:14	7.70	87.4	6.18	1.78	98.8	21.7	137	111	17	0.016
09/17/2019	09:58	9.17	89.9	6.24	1.26	113.6	14.5	45	85	25	

02-SBA, South Branch Ashuelot River, Route 32 Bridge, Swanzey

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	08:48	8.15	83.3	6.10	1.56	85.9	16.3			15	
06/25/2019	09:15	7.79	83.6	6.04	1.70	92.3	18.7	93		16	
07/23/2019	09:24	7.61	82.8	6.18	5.60	102.1	19.5			16	0.045
07/26/2019	09:40							98			
08/20/2019	08:45	7.72	86.8	6.21	1.87	100.1	21.2	219	126	17	0.017
09/17/2019	09:29	8.89	87.5	6.08	1.49	117.2	14.6	57	107	24	

15A-ASH, Ashuelot River, Thompson Covered Bridge, West Swanzey

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	09:44	8.39	86.7	6.14	1.09	122.0	16.9			26	
06/25/2019	09:29	7.56	83.4	6.27	1.68	120.0	20.1	123		26	
07/23/2019	09:44	7.50	86.0	6.16	4.33	166.9	20.7			34	0.031
07/26/2019	09:40							68			
08/20/2019	09:45	7.05	81.8	6.35	1.35	155.6	22.7	104	95	36	0.015
09/17/2019	09:15	8.23	83.4	6.34	1.28	235.5	16.1	58	74	57	

07-ASH, Ashuelot River, Route 119, Winchester

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)	Total Phosphorus (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B	Narrative
05/28/2019	09:09	8.13	84.1	6.12	0.92	113.0	16.9			24	
06/25/2019	08:50	7.82	86.2	6.33	1.59	111.4	20.1	61		24	
07/23/2019	08:55	6.80	78.0	6.14	2.27	133.3	21.1			23	0.026
07/26/2019	09:10							61			
08/20/2019	09:07	7.28	84.0	6.30	1.25	188.0	22.8	65	62	42	0.016
09/17/2019	08:40	8.09	81.4	6.32	1.14	196.2	15.8	43	55	42	

02-ASH, Ashuelot River, Route 63, Hinsdale, NHDES Trend Station

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	E. coli (MPN/100mL)	E.coli Geometric Mean	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<406	<126	230 ^B
06/17/2019	12:05	9.07	97.8	6.78	2.53	89.3	19.0	213		18
07/15/2019	11:15	8.32	98.8	7.28	1.28	173.1	23.9	<10		37
08/12/2019	10:35	8.79	98.9	7.14	1.05	110.1	21.2	31	32	34
10/15/2019	12:20	10.82	99.2	7.17	1.33	142.9	12.2			25

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		Narrative	Narrative	Narrative	Narrative
06/17/2019	12:05	0.021	0.25	0.16	0.41
07/15/2019	11:15	0.019	ND	0.27	0.40 ^C
07/18/2019	11:15	0.017	ND	0.32	0.45 ^C
08/12/2019	10:35	0.016	ND	0.28	0.41 ^C
10/15/2019	12:20	0.016	ND	0.11	0.24 ^C

01-ASH, Ashuelot River, 147 River Street, Hinsdale

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)	Total Phosphorus (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	Narrative
05/28/2019	08:23	9.03	94.2	6.48	0.92	113.5	17.2			23	
06/25/2019	08:16	8.60	95.1	6.31	1.71	109.2	20.2	27		23	
07/23/2019	08:00	7.79	87.4	6.71	2.21	136.3	21.7			27	0.031
07/26/2019	08:54							26			
08/20/2019	07:58	7.88	91.0	6.69	0.96	178.2	22.3	75	37	42	0.017
09/17/2019	08:05	9.24	92.7	6.58	0.87	198.0	15.5	11	28	43	

