

New Hampshire Volunteer River Assessment Program
2024 Pemigewasset River Watershed Data

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES



	Measurements not meeting New Hampshire surface water quality standards
INVALID	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)

23-PMI: Pemigewasset River, Woodstock (Route 175 Bridge) - NHDES Trend Station

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)	<i>E. coli</i> (cts/100ml)	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background	<406	230 ^B
4/15/2024	09:45	14.46	111.5	6.22	37.9	4.4	0.64		4.5
6/10/2024	09:45	10.12	97.9	6.60	50.4	13.9	0.61	<10	10.4
7/8/2024	09:40	9.70	106.2	6.33	57.4	19.6	0.09	20	13.5
7/25/2024	14:00	9.43	101.9	7.33	50.6	19.1			
8/15/2024	09:45	9.87	99.3	6.63	55.7	15.7	0.03	10	10.2

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO2) + Nitrate(NO3) (mg/L)	Total Nitrogen (mg/L) ^C
Standard		Narrative	Narrative	Narrative	Narrative
4/15/2024	09:45	0.00654		0.12	0.245
6/10/2024	09:45	0.0125		0.12	0.245
7/8/2024	09:40	0.0225	0.25	0.17	0.42
8/15/2024	09:45	0.0113		0.14	0.265

23-PMI: Pemigewasset River, Woodstock (Route 175 Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)	<i>E. coli</i> (cts/100ml)	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background	<406	230 ^B
6/16/2024	07:45	9.28	88.1	5.95	62.5	13.0	0.55		
7/3/2024	06:55	9.19	90.3	5.48	66.0	14.6	0.25		10.9
7/13/2024	07:05	8.32	93.6	6.07	75.1	20.5	0.35		
8/12/2024	08:30	9.53	94.7	6.31	47.1	15.4		<10	11
8/26/2024	06:45	8.58	88.3	5.98	46.7	15.9	0.15		
9/1/2024	07:40	9.45	98.4	5.79	62.8	16.1	0.42		

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO2) + Nitrate(NO3) (mg/L)	Total Nitrogen (mg/L) ^C
Standard		Narrative	Narrative	Narrative	Narrative
7/3/2024	06:55	0.0169		0.14	0.265
8/12/2024	08:30	0.0219		0.17	0.295

24-PMI: Pemigewasset River, Woodstock (Route 112 Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background
6/16/2024	08:30	10.26	95.4	5.99	106.7	12.1	0.33
7/3/2024	07:41	10.17	99.2	5.69	83.4	14.3	0.95
7/13/2024	07:35	8.20	91.2	6.16	101.8	19.1	0.09
8/26/2024	07:23	9.36	93.4	6.12	54.5	14.5	0.33
9/1/2024	07:55	9.97	101.9	6.34	87.7	15.2	0.17

25-PMI: Pemigewasset River, Lincoln (Route 3A Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background
6/16/2024	09:15	11.11	100.9	5.97	96.2	11.1	0.01
7/3/2024	08:05	9.96	95.8	5.65	76.1	13.8	0.15
7/13/2024	08:05	9.37	100.8	6.24	80.8	18.0	0.55
8/26/2024	07:50	9.36	93.2	6.01	51.2	13.9	0.81
9/1/2024	08:25	9.94	101.5	6.27	79.2	14.5	0.79

28-PMI: Pemigewasset River, Lincoln (Lafayette Campground Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)	<i>E. coli</i> (cts/100ml)	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background	<406	230 ^B
6/16/2024	10:10	11.17	98.6	6.12	80.6	9.9	0.18		
7/3/2024	08:55	10.18	93.6	5.78	79.8	11.3	0.12		19.2
7/13/2024	08:45	9.85	100.8	6.13	80.1	14.2	0.53		
8/12/2024	08:30							31	27.5
8/26/2024	08:25	9.44	91.3	6.27	62.8	11.8	1.03		
9/1/2024	09:25	8.13	86.0	6.35	87.0	13.3	0.21		

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) ^C
Standard		Narrative	Narrative	Narrative	Narrative
7/3/2024	08:55	0.00665		0.19	0.315
8/12/2024	08:30	0.00602		0.2	0.325

03G-MAD: Mad River, Thornton (Route 49 Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background
5/15/2024	10:07	10.30	99.5	5.76	29.2	13.2	0.22
6/11/2024	10:00	9.27	94.6	5.98	56.5	15.1	1.09
6/18/2024	09:15	9.60	99.0	6.12	56.2	17.7	0.33
6/25/2024	09:30	8.70	90.4	5.92	36.4	15.7	0.36
7/9/2024	09:10	7.74	100.2	6.21	50.1	19.6	0.17
7/23/2024	11:50	9.09	95.4	5.52	37.5	18.0	2.57
8/13/2024	09:00	9.13	98.0	6.30	40.7	14.9	0.22

15-PMI: Pemigewasset River, Plymouth (Holderness Road Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background
5/15/2024	08:14	8.61	86.0	5.92	41.9	13.9	0.19
6/11/2024	08:02	8.16	82.5	5.98	64.1	16.0	0.55
6/18/2024	08:00	7.92	88.5	6.39	95.5	19.7	0.55
6/25/2024	08:15	8.38	90.2	5.88	41.9	17.0	1.59
7/9/2024	08:00	7.31	88.0	6.16	76.6	22.8	0.76
7/23/2024	10:40	7.71	90.0	5.91	90.6	22.0	0.58
8/13/2024	08:00	8.60	92.4	6.39	53.6	17.3	0.61

18-PMI: Pemigewasset River, Campton (Blair Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)	<i>E. coli</i> (cts/100ml)	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background	<406	230 ^B
5/15/2024	08:56	10.46	100.9	5.49	31.1	13.7	0.05		
6/11/2024	08:50	8.26	81.2	5.62	31.8	15.2	0.67		
6/18/2024	08:30	7.84	87.6	6.04	88.5	19.5	0.42		
6/25/2024	08:45	8.24	88.2	5.63	43.6	16.9	0.48	62	12.9
7/9/2024	08:30	7.49	88.5	5.88	72.6	22.4	0.94		
7/23/2024	11:20	7.97	92.0	5.78	77.2	21.1	4.60	613	26.2
8/13/2024	08:25	7.76	82.0	5.87	49.8	16.5	0.32	41	13.6

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) ^C
Standard		Narrative	Narrative	Narrative	Narrative
6/25/2024	08:45	0.0105		0.088	0.213
7/23/2024	11:20	0.0235	0.38	0.18	0.56
8/13/2024	09:30	0.00936		0.097	0.222

21-PMI: Pemigewasset River, Thornton (Memorial Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)	<i>E. coli</i> (cts/100ml)	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background	<406	230 ^B
5/15/2024	09:40	10.53	101.2	5.58	25.5	12.1	0.10		
6/11/2024	09:25	9.75	97.2	5.89	47.6	14.4	0.24		
6/18/2024	09:45	8.09	88.6	6.17	73.1	19.0	0.40		
6/25/2024	10:00	10.10	105.0	5.98	44.6	17.2	0.41	10	13.8
7/9/2024	09:30	7.74	91.3	5.97	63.3	21.7	0.48		
7/23/2024	12:15	8.49	96.4	5.59	52.2	20.5	2.83	379	16.3
8/13/2024	09:30	9.23	96.0	6.18	32.5	16.3	0.25	10	13.0

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) ^C
Standard		Narrative	Narrative	Narrative	Narrative
6/25/2024	08:45	0.0142		0.11	0.235
7/23/2024	12:15	0.0232	0.26	0.19	0.45
8/13/2024	09:30	0.00856		0.12	0.245

00M-SMT: Smith River, Bristol (Bridge Downstream of Profile Falls)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background
5/22/2024	08:15			6.54	70.3	17.5	0.88
6/12/2024	08:45	9.71	98.8		60.3	16.2	0.95
6/26/2024	08:14	9.25	100.5	6.89	54.3	19.4	1.27
7/10/2024	08:15	7.91	93.6	6.75	80.8	23.8	1.13
7/24/2024	08:25	8.36	91.7	6.28	86.1	19.9	1.98
8/14/2024	08:23	8.75	91.6	6.76	70.1	17.6	1.50
8/28/2024	08:30	9.44	102.2	7.34	90.1	19.2	0.60

01-NFD: Newfound River, Bristol (Route 104 at Pleasant Street Bridge)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background
5/22/2024	10:10			6.54	46.9	17.5	0.50
6/12/2024	09:45	8.42	91.3	5.60	46.1	19.3	0.56
6/26/2024	08:39	8.28	92.9	6.41	46.5	21.0	0.34
7/10/2024	08:43	7.26	88.2	6.27	45.4	25.2	0.37
7/24/2024	08:55	7.32	94.5	5.61	53.5	22.0	0.63
8/14/2024	08:55	7.66	85.1	6.06	53.5	20.6	0.90
8/28/2024	08:30	8.15	92.4	5.85	46.1	21.5	1.19

07-PMI: Pemigewasset River, Bristol (Old Bristol Road Bridge off Central Street)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background
5/22/2024	10:50			6.24	61.1	17.1	0.93
6/12/2024	10:01	8.41	92.3		86.6	19.8	1.34
6/26/2024	09:02	8.61	93.3	5.78	47.9	19.2	1.88
7/10/2024	09:00	7.39	88.5	6.23	74.4	24.5	0.82
7/24/2024	09:25	7.21	87.0	5.97	89.6	24.8	1.03
8/14/2024	09:43	7.84	87.4	5.73	39.7	20.7	1.74
8/28/2024	10:25	8.11	89.8	5.96	63.9	20.4	1.52

09A-PMI: Pemigewasset River, Bristol (Mooney-Clark)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)	<i>E. coli</i> (cts/100ml)	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background	<406	230 ^B
5/22/2024	11:20			6.26	65.4	21.4	0.95		
6/12/2024	11:20	8.64	94.6		80.8	19.8	0.91		
6/26/2024	10:39	8.49	99.3	6.29	45.8	23.2	1.55	122	15.7
7/10/2024	10:25	8.33	106.3	6.51	83.3	27.9	1.93		
7/24/2024	10:50	8.16	94.9	6.20	91.2	22.8	1.04		
8/14/2024	11:06	7.84	87.3	5.91	51.7	20.7	1.19		
8/28/2024	10:58	8.10	93.1	5.88	75.1	22.2	1.36		

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) ^C
Standard		Narrative	Narrative	Narrative	Narrative
6/26/2024	10:37	0.0188		0.078	0.203

11A-PMI: Pemigewasset River, Bridgewater (Sahegenet Falls)

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Turbidity (NTUs)	<i>E. coli</i> (cts/100ml)	Chloride (mg/L)
Standard		>5.0	>75% Daily Average	6.5-8.0	835 µS/cm ^A		<10 NTU above background	<406	230 ^B
5/22/2024	11:55			6.13	62.5	19.1	0.51		
6/12/2024	11:56	8.85	93.3		76.7	17.9	0.95		
6/26/2024	11:16	8.30	93.2	5.90	49.0	21.0	1.05	86	16.6
7/10/2024	11:02	7.06	85.0	6.29	36.1	24.7	0.63		
7/24/2024	11:25	8.45	93.1	6.11	51.1	20.1	1.67		
8/14/2024	10:38	8.59	92.7	6.03	54.9	19.1	1.29	74	
8/28/2024	11:55	8.44	94.5	6.14	70.6	20.8	1.15		

