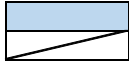


New Hampshire Volunteer River Assessment Program  
2019 Suncook River Watershed Data

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES



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

<sup>A</sup> Specific conductance > 835  $\mu\text{S}/\text{cm}$  indicate exceedance of chronic chloride standard of 230 mg/L

<sup>B</sup> Chronic water quality standard

<sup>C</sup> Calculated using 1/2 of the 0.050 mg/L detection limit of Nitrate+Nitrite (0.025 mg/L)

**11X-SNK, Suncook River, Route 126 Bridge, Barnstead**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Water Temp. ( $^{\circ}\text{C}$ )	Chloride (mg/L)
<b>Standard</b>	<b>NA</b>	<b>&gt;5.0</b>	<b>&gt;75% Daily Average</b>	<b>6.5-8.0</b>	<b>&lt;10 NTU above background</b>	<b>&lt;835 <math>\mu\text{S}/\text{cm}^{\text{A}}</math></b>	<b>NA</b>	<b>230<sup>B</sup></b>
09/18/2019	10:35	8.20	81.8	6.70		78.2	14.8	
10/14/2019	11:50	9.60	94.2	6.65	0.51	60.3	14.5	9

**11W-SNK, Suncook River, Barnstead, NHDES 2019 Synoptic Site**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Water Temp. ( $^{\circ}\text{C}$ )	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean	Chloride (mg/L)
<b>Standard</b>	<b>NA</b>	<b>&gt;5.0</b>	<b>&gt;75% Daily Average</b>	<b>6.5-8.0</b>	<b>&lt;10 NTU above background</b>	<b>&lt;835 <math>\mu\text{S}/\text{cm}^{\text{A}}</math></b>	<b>NA</b>	<b>&lt;406</b>	<b>&lt;126</b>	<b>230<sup>B</sup></b>
06/25/2019	09:00	8.22	91.4	6.58	0.44	65.4	20.5	63		11
07/25/2019	10:50	8.78	103.5	6.68	0.50	64.9	23.6	20		11
08/22/2019	09:00	7.57	88.7	6.51	0.56	67.0	23.2	110	52	12

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO <sub>2</sub> ) + Nitrate(NO <sub>3</sub> ) (mg/L)	Total Nitrogen (mg/L)
<b>Standard</b>	<b>NA</b>	<b>Narrative</b>	<b>Narrative</b>	<b>Narrative</b>	<b>Narrative</b>
06/25/2019	09:00	0.012	0.28	ND	0.31 <sup>C</sup>
07/25/2019	10:50	0.010	ND	ND	
08/22/2019	09:00	0.017	0.26	ND	0.29 <sup>C</sup>

**08-BIG, Big River, Tom Berry Road, Barnstead, NHDES 2019 Synoptic Site**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Water Temp. ( $^{\circ}\text{C}$ )	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean	Chloride (mg/L)
<b>Standard</b>	<b>NA</b>	<b>&gt;5.0</b>	<b>&gt;75% Daily Average</b>	<b>6.5-8.0</b>	<b>&lt;10 NTU above background</b>	<b>&lt;835 <math>\mu\text{S}/\text{cm}^{\text{A}}</math></b>	<b>NA</b>	<b>&lt;406</b>	<b>&lt;126</b>	<b>230<sup>B</sup></b>
06/25/2019	09:30	7.86	81.8	5.84	0.50	35.7	17.3	98		6
07/25/2019	11:30	7.54	81.9	5.56	0.72	32.0	19.4	97		4
08/22/2019	09:45	7.59	81.3	5.57	0.99	35.4	18.7	108	103	5

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO <sub>2</sub> ) + Nitrate(NO <sub>3</sub> ) (mg/L)	Total Nitrogen (mg/L)
<b>Standard</b>	<b>NA</b>	<b>Narrative</b>	<b>Narrative</b>	<b>Narrative</b>	<b>Narrative</b>
06/25/2019	09:30	0.020	0.28	ND	0.31 <sup>C</sup>
07/25/2019	11:30	0.024	0.41	ND	0.44 <sup>C</sup>
08/22/2019	09:45	0.021	0.32	ND	0.35 <sup>C</sup>

**03-LITT, Little River, Barnstead, NHDES 2019 Synoptic Site**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/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 <sup>A</sup>	NA	<406	<126	230 <sup>B</sup>
06/25/2019	10:00	9.05	93.5	6.22	1.09	69.5	17.0	31		15
07/25/2019	11:50	8.70	93.9	6.28	1.62	90.8	19.0	120		19
08/22/2019	10:00							146	82	27

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO <sub>2</sub> ) + Nitrate(NO <sub>3</sub> ) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	Narrative	Narrative	Narrative	Narrative
06/25/2019	10:00	0.020	0.37	ND	0.40 <sup>C</sup>
07/25/2019	11:50	0.021	0.30	ND	0.33 <sup>C</sup>
08/22/2019	10:00	0.018	0.28	ND	0.31 <sup>C</sup>

**10-SNK, Suncook River, Province Road Bridge, Barnstead**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<835 µS/cm <sup>A</sup>	NA	230 <sup>B</sup>
06/18/2019	14:35	8.20	94.7	6.30	66.0	21.6	
07/10/2019	13:15	7.60	93.9	6.35	71.5	26.0	
08/12/2019	11:55	6.50	77.1	6.22	85.0	23.0	13
09/18/2019	09:40	6.40	66.2	6.30	75.0	17.2	17

**05-SNK, Suncook River, Short Falls Road Bridge, Epsom**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	<835 µS/cm <sup>A</sup>	NA	230 <sup>B</sup>
06/18/2019	13:30	8.35	91.0	6.50		90.0	19.7	17
07/10/2019	12:10	8.20	95.3	6.68		112.6	22.8	
08/09/2019	12:30							26
08/12/2019	13:00	8.20	94.0	6.55		133.1	21.1	
09/17/2019	12:00	9.65	98.0	6.30		144.5	16.0	39
10/14/2019	12:45	<del>9.90</del>	<del>95.3</del>	6.35	1.14	101.7	13.1	18

**03-SNK- Suncook River, Old Bear Brook Road, Pembroke**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	<835 µS/cm <sup>A</sup>	NA	230 <sup>B</sup>
06/17/2019	16:00	6.95	79.2	6.41		89.3	21.3	
07/09/2019	14:18	7.70	89.2	6.36		108.5	22.9	
08/12/2019	13:40	7.70	88.6	6.42		125.7	22.1	
09/17/2019	12:50	9.60	96.0	6.45		132.5	16.7	30
10/14/2019	16:00	9.68	94.0	6.10	0.83	105.6	13.4	20

**02-SNK, Suncook River, Webster Mill, Route 3/28 Bridge, Allenstown**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (µS/cm)	Water Temp. (°C)	<i>E. coli</i> (CTS/100mL)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<835 µS/cm <sup>A</sup>	NA	<406	230 <sup>B</sup>
06/17/2019	15:10	7.60	84.5	6.20	88.7	19.5		
07/09/2019	13:30	6.70	84.0	6.36	106.2	26.9		
08/13/2019	11:40	6.32	77.0	6.67	143.4	24.5	41	26

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO <sub>2</sub> ) + Nitrate(NO <sub>3</sub> ) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	Narrative	Narrative	Narrative	Narrative
08/13/2019	11:15	0.018	0.28	0.14	0.42

**00B-SNK, Suncook River, Memorial Field, Barnstead**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	<835 µS/cm <sup>A</sup>	NA	230 <sup>B</sup>
09/17/2019	13:25	9.20	98.0	6.56		141.1	18.1	
10/14/2019	15:20	8.70	90.6	6.66	1.72	129.7	16.3	21

