

New Hampshire Volunteer River Assessment Program

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

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

**11-BKR, Baker River, Mooselauke Bridge, Warren**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA
05/31/2019	12:51	11.20	106.0	6.14	0.32	30.2	11.7
06/14/2019	14:03	11.10	107.0	6.17	0.93	30.8	12.1
06/28/2019	17:20	10.10	109.0	6.21	0.43	46.2	19.2
07/12/2019	15:35	10.00	107.0	5.82	1.89	37.6	20.0
07/27/2019	17:53	9.30	111.0	5.94	0.83	47.2	21.2

**10-BKR, Baker River, Batchelder Bridge, Warren**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/31/2019	13:20	11.10	107.0	6.13	0.24	35.0	12.2			
06/03/2019										8
06/03/2019	07:40							10		
06/14/2019	13:29	10.80	105.0	6.29	0.56	36.5	12.8			
06/28/2019	16:53	10.00	111.0	6.34	0.73	41.8	19.3			
07/08/2019	07:33							<10		7
07/12/2019	14:56	9.80	107.0	5.88	2.40	33.3	20.2			
07/27/2019	18:27	9.20	109.0	5.95	0.75	63.4	21.4			
08/05/2019	07:40							30		8
09/03/2019	07:40							30	17	8

**09-BKR, Baker River, Studio Road Bridge, Warren**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
06/03/2019										17
06/03/2019	08:03							10		
07/08/2019	07:57							20		13
08/05/2019	08:02							90		18
09/03/2019	08:01							90	55	10

**08-BKR, Baker River, Bixby Bridge, Warren**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/31/2019	13:53	10.90	107.0	6.12	0.55	47.9	13.9			
06/03/2019										11
06/03/2019	07:52							<10		
07/08/2019	07:45							<10		11
07/27/2019	19:02	<del>8.70</del>	<del>104.0</del>	6.36	0.96	91.5	22.3			
08/05/2019	07:53							10		11
09/03/2019	07:50							70	15	10

**07A-BKR, Baker River, Town Park, Wentworth**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
06/03/2019										11
06/03/2019	08:15							40		
07/08/2019	08:11							<10		15
07/27/2019	20:07	<del>9.10</del>	<del>108.0</del>	6.35	0.99	87.4	21.8			
08/05/2019	08:16							10		14
09/03/2019	08:18							170	20	10

**07-BKR, Baker River, Wentworth Town Beach, Wentworth**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/31/2019	17:00	10.60	107.0	6.16	0.33	47.5	14.7			
06/03/2019										12
06/03/2019	08:25							<10		
06/14/2019	11:13	10.20	101.0	6.21	0.36	48.2	13.6			
06/28/2019	15:37	9.70	107.0	6.37	0.73	64.7	21.4			
07/08/2019	08:19							<10		15
07/12/2019	13:18	9.50	98.0	5.61	7.93	21.5	20.2			
08/05/2019	08:26							10		18
09/03/2019	08:29							80	16	10

**06A-BKR, Baker River, Silver Bridge, Saunders Hill Road, Wentworth**

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)
<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>835µS/cm<sup>A</sup></b>	<b>NA</b>	<b>&lt;406</b>	<b>&lt;126</b>	<b>&lt;230 mg/L<sup>B</sup></b>
05/31/2019	17:27	<del>10.10</del>	<del>103.0</del>	6.19	0.62	46.3	15.1			
06/03/2019										11
06/03/2019	08:35							20		
06/12/2019	12:45	9.90	103.0	6.11	1.53	42.5	16.3			
06/28/2019	15:10	9.60	106.0	6.29	1.02	65.2	21.3			
07/08/2019	08:29							20		15
07/12/2019	12:39	9.00	93.0	5.40	103.00	19.3	20.1			
07/29/2019	10:36	<del>10.30</del>	<del>116.0</del>	6.53	6.38	90.6	24.6			
08/05/2019	08:36							10		17
09/03/2019	08:38							150	31	10

**06-SBR, South Branch Baker River, North Dorchester Road Bridge, Wentworth - 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)
<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>835µS/cm<sup>A</sup></b>	<b>NA</b>	<b>&lt;406</b>	<b>&lt;126</b>	<b>&lt;230 mg/L<sup>B</sup></b>
06/24/2019	09:45	10.07	103.2	6.44	1.37	45.7	16.5	75		7
07/22/2019	09:30	8.47	96.3	6.70	76.70	62.1	21.7	74		10
07/23/2019	12:55			7.05	78.90	59.5				10
08/19/2019	09:35	7.98	90.5	7.27	7.93	63.1	21.5	84	78	9
10/21/2019	10:40	11.73	98.6	6.42	4.79	48.6	7.9			9

Date	Time of Sample	Total Phosphous	Total Kjehldahl Nitrogen (TKN) (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>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
06/24/2019	09:45	0.012	ND	ND	
07/22/2019	09:30	0.076	0.27	0.10	0.37
08/19/2019	09:35	0.025	ND	ND	
10/21/2019	10:40	0.014	ND	ND	

**10-SBR, South Branch Baker River, Outlet Dam, Groton**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)
<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>835µS/cm<sup>A</sup></b>	<b>NA</b>
06/14/2019	12:18	10.30	103.0	6.32	0.54	51.1	13.9
06/28/2019	16:26	9.70	108.0	6.51	0.60	63.5	21.7
07/12/2019	13:54	9.60	101.0	5.65	5.07	23.8	20.3

**05-BKR, Baker River, Sandhill Bridge, Rumney**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/31/2019	17:55	<del>10.20</del>	<del>102.0</del>	6.18	0.64	41.6	15.2			
06/03/2019										9
06/03/2019	08:34							40		
06/12/2019	14:15	10.10	106.0	6.11	0.69	40.6	17.0			
06/28/2019	14:27	9.30	106.0	6.32	0.89	55.2	21.8			
07/08/2019	08:40							40		13
07/12/2019	12:16	8.40	90.0	5.49	150.00	17.4	20.1			
07/29/2019	11:07	<del>10.10</del>	<del>118.0</del>	6.61	7.19	95.3	24.8			
08/05/2019	08:40							<10		15
09/03/2019	08:40							520	47	8

**04G-BKR, Baker River, USGS Gage Station, Rumney**

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 <sup>A</sup>	NA
05/29/2019	16:31	11.00	105.0	6.02	1.05	33.5	12.4
06/14/2019	10:10	9.90	97.0	6.14	0.92	42.7	13.6
06/27/2019	13:50	9.60	105.0	6.14	0.93	41.9	19.2
07/11/2019	12:57	9.90	108.0	6.17	0.91	61.6	21.4
07/29/2019	11:41	<del>9.70</del>	<del>114.0</del>	6.60	7.67	99.1	24.9

**04-BKR, Baker River, Stinson Lake Road Bridge/New Town Bridge, Rumney**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/31/2019	18:28	<del>10.00</del>	<del>101.1</del>	6.12	0.61	44.1	14.8			
06/03/2019										11
06/03/2019	08:00							20		
06/14/2019	14:45	9.90	99.0	6.19	1.04	48.8	14.4			
06/28/2019	14:07	9.20	105.0	6.24	1.25	58.2	21.2			
07/08/2019	08:10							40		14
07/11/2019	13:40	10.10	105.0	6.33	1.05	58.7	21.3			
07/29/2019	12:36	<del>9.80</del>	<del>119.0</del>	6.54	7.01	96.5	24.8			
08/05/2019	08:10							10		18
09/03/2019	08:06							1960	92	8

**03-BKR, Baker River, Route 25 D/S of School Street & Gravel Pit, Rumney**

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)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
06/03/2019										10
06/03/2019	08:18							<10		
07/08/2019	08:20							70		14
08/05/2019	08:25							20		18
09/03/2019	08:25							700	99	6

**02-BKR, Baker River, Covered Bridge/Smith Bridge Road, Plymouth**

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)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/29/2019	14:25	10.80	102.0	6.11	1.89	30.2	11.3			
06/03/2019										10
06/03/2019	08:05							<10		
06/12/2019	13:30	10.10	103.0	6.13	1.15	40.0	15.8			
06/27/2019	13:12	9.80	108.0	6.15	1.91	44.5	19.3			
07/08/2019	08:30							80		16
07/11/2019	12:16	9.50	103.0	6.25	1.75	63.1	21.2			
07/29/2019	13:23	<del>9.60</del>	<del>121.0</del>	6.50	7.65	98.3	25.1			
08/05/2019	08:50							20		21
09/03/2019	09:30							500	93	7

**01A-BKR, Baker River, Tenney Mountain Highway Bridge, Plymouth**

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)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/29/2019	15:05	10.50	101.0	6.14	1.39	39.9	11.8			
06/03/2019										10
06/03/2019										12
06/03/2019	07:50							<10		
06/12/2019	12:20	9.80	100.0	6.12	1.31	39.6	16.3			
06/27/2019	12:40	9.70	106.0	6.16	1.97	47.5	19.2			
07/08/2019	08:15							70		21
07/11/2019	11:05	9.80	106.0	6.31	2.93	99.2	21.0			
07/29/2019	13:58	<del>9.50</del>	<del>116.0</del>	6.42	7.81	106.3	24.7			
08/05/2019	08:35							30		19
09/03/2019	09:40							620	109	8

**01-BKR, Baker River, Green Bridge (Route 3/25 Bridge), Plymouth**

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	835µS/cm <sup>A</sup>	NA	<406	<126	<230 mg/L <sup>B</sup>
05/29/2019	15:46	10.70	102.0	6.11	1.76	39.8	12.1			
06/03/2019	07:35							30		
06/14/2019	10:40	10.40	104.0	6.28	0.59	49.0	13.9			
06/27/2019	12:05	8.80	103.0	6.15	1.82	46.7	19.2			
07/08/2019	08:00							70		20
07/11/2019	11:42	9.70	105.0	6.27	2.86	86.4	21.2			
07/29/2019	14:29	<del>9.10</del>	<del>113.0</del>	6.50	8.36	105.4	24.9			
08/05/2019	08:20							50		25
09/03/2019	09:55							620	129	9



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