

## 2017 BAKER RIVER WATERSHED VRAP DATA

	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

<sup>C</sup> 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 0.05 mg/L detection limit for nitrate (NO<sub>3</sub>) + nitrite (NO<sub>2</sub>) (0.025 mg/L)

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

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	8:10						6	10	
07/10/2017	8:10						3		
07/11/2017	8:18							<10	
07/17/2017	11:00	6.99	72.7	6.25	45.5	17.2			
08/03/2017	14:50	6.65	80.0	5.35	31.4	21.4			
08/07/2017	8:12						4	10	
08/10/2017	11:40			6.32					
09/05/2017	8:03						7	<10	6
09/06/2017	10:05			6.48					

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

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	8:00						7	<10	
07/10/2017	8:24						5		
07/11/2017	8:28							10	
07/17/2017	11:35	7.71	85.1	6.09	40.2	17.5			
08/03/2017	15:50	7.31	87.1	6.10	126.6	21.6			
08/07/2017	8:24						5	10	
08/10/2017	11:55			6.31					
09/05/2017	8:13						7	20	13
09/06/2017	10:18			6.52					

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

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	7:25						15	<10	
07/10/2017	8:35						8		
07/11/2017	8:40							10	
07/17/2017	12:00	7.75	85.0	5.92	52.9	19.9			
08/03/2017	16:45	7.20	80.3	5.87	60.0	22.7			
08/07/2017	8:35						9	20	
08/10/2017	12:25			6.32					
09/05/2017	8:23						11	30	18
09/06/2017	10:32			6.60					

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	9:28							11	20	
07/10/2017	7:45				0.56			17	<10	
07/17/2017	12:30	7.84	87.3	5.78		63.7	20.2			
08/03/2017	17:50	7.55	87.5	6.25		76.4	23.1			
08/07/2017	7:45							11	20	
08/10/2017	11:05			6.33						
09/05/2017	7:15							17	20	13
09/06/2017	11:08			6.39						

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

Date	Time of Sample	pH	Turbidity (NTUs)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	6.5-8.0	<10 NTU above background	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	9:29			9	10	
07/10/2017	7:56		0.58	17	20	
08/07/2017	7:52			11	20	
08/10/2017	10:45	6.06				
09/05/2017	7:10			19	10	16
09/06/2017	10:45	6.30				

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	9:06							10	60	
07/10/2017	8:07				0.77			14	30	
07/17/2017	13:10	7.90	88.5	5.97		62.9	20.7			
08/03/2017	18:15	7.16	82.8	6.05		81.6	22.7			
08/07/2017	8:05							11	20	
08/10/2017	12:45			6.28						
09/05/2017	7:24								<10	14
09/06/2017	11:15			6.33						

**06-BKR, Baker River, Wentworth**

Date	Time of Sample	pH
Standard	NA	6.5-8.0
09/06/2017	11:32	6.32

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
02/15/2017	10:15	15.01	103	6.10	0.35	57.3	0.1	9		
06/20/2017	10:15	8.95	98.1	7.08	0.80	49.2	19.8	8	150	
07/18/2017	9:40	8.83	98.1	6.80	0.95	58.0	20.5	8	40	
08/10/2017	12:55			6.34						
08/16/2017	9:50	9.38	104.0	6.68	0.69	66.3	18.7	8	<10	31
09/06/2017	11:58			6.55						

Date	Time of Sample	Total Phosphorus	Total Kjeldahl Nitrogen (TKN) (mg/L)	Nitrite (NO <sub>2</sub> ) + Nitrate (NO <sub>3</sub> ) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	NA	NA	NA	NA
02/15/2017	10:15	<0.005	<0.25	0.11	0.24 <sup>C</sup>
06/20/2017	10:15	0.017	<0.25	<0.05	NA
07/18/2017	9:40	0.009	<0.25	0.07	0.20 <sup>C</sup>
08/16/2017	9:50	0.005	<0.25	0.10	0.23 <sup>C</sup>

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	8:30							9	20	
07/10/2017	8:40				0.71			9	40	
07/17/2017	13:30	7.83	89.8	6.13		60.3	21.8			
08/03/2017	18:40	6.85	80.4	6.17		80.4	24.3			
08/07/2017	8:25							10	80	
08/10/2017	10:30			6.23						
09/05/2017	8:40							11	150	78
09/06/2017	12:12			6.36						

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

Date	Time of Sample	pH	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)
Standard	NA	6.5-8.0	<230 mg/L <sup>B</sup>	<406
06/05/2017	8:45		10	30
08/10/2017	9:20	6.05		
09/06/2017	12:35	6.32		

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	8:10							11	10	
07/10/2017	8:00				0.79			10	60	
07/18/2017	16:55	5.92	73.4	6.12		55.0	22.5			
08/03/2017	7:05	5.84	69.1	5.91		87.2	23.2			
08/07/2017	8:11							12	100	
08/10/2017	13:20			6.32						
09/05/2017	8:05							11	180	103
09/06/2017	12:49			6.39						

**05-STI, Stinson Brook, Mill Road, Rumney, NHDES 2017 Synoptic Station**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/29/2017	12:55	9.55	94.1	6.75	0.11	58.2	15.5	20	<10	
07/27/2017	12:40	9.18	96.6	6.45	0.27	66.6	17.8	11.7	10	
08/23/2017	13:20	8.46	93.1	6.34	0.47	46.9	20	8.45	30	11

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)
Standard	NA	NA	NA	NA	NA
06/29/2017	12:55	0.005	<0.25	0.06	0.19 <sup>C</sup>
07/27/2017	12:40	<0.005	<0.25	0.05	0.18 <sup>C</sup>
08/23/2017	13:20	0.006	<0.25	<0.05	NA

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	9:10							10	10	
07/10/2017	8:20				0.94			9	70	
07/18/2017	18:08	6.75	83.3	6.00		52.4	22.3			
08/03/2017	19:30	7.02	83.2	6.24		87.8	23.2			
08/07/2017	8:43							10	90	
08/10/2017	9:05			5.98						
09/05/2017	8:25							11	230	113
09/06/2017	13:25			6.30						

**02-BKR, Baker River, Covered Bridge/Smith Bridge Road, Plymouth, NHDES 2017 Synoptic Station**

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (uS/cm)	Water Temp. (°C)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	7:35							11	10	
06/29/2017	13:25	8.78	90.3	6.62	0.79	90.4	17.0	21	50	
07/10/2017	8:45				1.15			25	60	31
07/18/2017	19:00	6.96	88.9	5.71		58.7	22.1			
07/27/2017	13:05	8.59	92.8	6.46	0.69	90.6	19.1	13	10	31
08/03/2017	20:00	5.70	67.2	6.05		97.2	23.7			
08/07/2017	8:45							10	220	51
08/10/2017	13:45			6.13						
08/23/2017	13:50	8.19	93.6	6.23	1.54	87.6	22.0	15	190	
09/05/2017	8:40							11	320	237
09/06/2017	13:40			6.48						

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)
Standard	NA	NA	NA	NA	NA
06/29/2017	13:25	0.007	<0.25	0.26	0.39 <sup>C</sup>
07/27/2017	13:05	0.006	<0.25	0.26	0.39 <sup>C</sup>
08/23/2017	13:50	0.011	<0.25	0.16	0.29 <sup>C</sup>

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	7:30							11	20	
07/10/2017	8:30				1.28			12	120	
07/18/2017	19:41	7.00	83.3	6.15		61.5	22.1			
08/04/2017	11:30	7.91	89.1	6.23		117.2	21.3			
08/07/2017	8:20							11	270	
08/10/2017	8:40			6.09						
09/05/2017	8:30							12	330	220
09/06/2017	14:06			6.49						

**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)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm <sup>A</sup>	NA	<230 mg/L <sup>B</sup>	<406	<126
06/05/2017	7:30							13	20	
07/10/2017	8:15				1.20			20	100	
07/18/2017	20:00	7.26	84.6	6.19		65.6	22.0			
08/04/2017	12:30	7.19	92.5	6.30		122.3	22.5			
08/07/2017	8:15							13	480	
08/10/2017	13:55			6.31						
09/05/2017	8:20							13	370	261
09/06/2017	14:14			6.39						