

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

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

^B 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 ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835$\mu\text{S}/\text{cm}^{\text{A}}$	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 ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835$\mu\text{S}/\text{cm}^{\text{A}}$	NA	<406	<126	<230 mg/L^B
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 ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835$\mu\text{S}/\text{cm}^{\text{A}}$	NA	<406	<126	<230 mg/L^B
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 ^A	NA	<406	<126	<230 mg/L ^B
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	8.70	104.0	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 ^A	NA	<406	<126	<230 mg/L ^B
06/03/2019										11
06/03/2019	08:15							40		
07/08/2019	08:11							<10		15
07/27/2019	20:07	9.10	108.0	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 ^A	NA	<406	<126	<230 mg/L ^B
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)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<126	<230 mg/L ^B
05/31/2019	17:27	10.10	103.0	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	10.30	116.0	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)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<126	<230 mg/L ^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 Phosphorus	Total Kjeldahl Nitrogen (TKN) (mg/L)	Nitrite (NO ₂) + Nitrate (NO ₃) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	NA	NA	NA	NA
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)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA
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 ^A	NA	<406	<126	<230 mg/L ^B
05/31/2019	17:55	10.20	102.0	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	10.10	118.0	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 ^A	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	9.70	114.0	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 ^A	NA	<406	<126	<230 mg/L ^B
05/31/2019	18:28	10.00	101.1	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	9.80	119.0	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)	<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 ^A	NA	<406	<126	<230 mg/L ^B
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)	<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 ^A	NA	<406	<126	<230 mg/L ^B
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	9.60	121.0	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)	<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 ^A	NA	<406	<126	<230 mg/L ^B
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	9.50	116.0	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 ^A	NA	<406	<126	<230 mg/L ^B
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	9.10	113.0	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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