

New Hampshire Volunteer River Assessment Program

2020 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

^C Calculated using 1/2 of the 0.25 mg/L detection limit of Total Kjeldahl Nitrogen (0.125 mg/L)

11-BKR: Baker River, Warren (Moosilauke Bridge)

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
08/12/2020	10:26	6.47	71.9	5.87	0.38	41.5	20.8

10-BKR: Baker River, Warren (Batchelder Bridge)

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)	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	<230 mg/L ^B
06/22/2020	09:55							10	14
07/11/2020	15:27	8.72	99.2	6.37	3.03	52.7	21.7		
07/20/2020	10:00							10	11
07/28/2020	13:38	6.20	78.9	6.01	0.63	53.3	22.8		
08/12/2020	10:42	6.24	69.2	5.97	0.54	52.2	20.8		
08/26/2020	14:39	6.42	71.6	6.18	0.28	53.8	19.2		
09/10/2020	11:58	7.58	82.0	6.15	0.91	49.4	19.7		

08-BKR: Baker River, Warren (Bixby Bridge)

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)	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	<230 mg/L ^B
06/22/2020	10:05							<10	11
07/11/2020	16:10	7.02	81.2	6.31	1.81	59.0	23.5		
07/20/2020	09:35							<10	16
07/28/2020	14:20	5.66	69.8	6.46	1.03	66.8	26.4		
08/12/2020	11:46	5.35	64.7	5.96	0.68	69.7	24.9		
08/26/2020	15:02	5.99	62.9	5.77	0.17	61.6	22.0		
09/10/2020	12:19	5.89	69.5	6.28	0.19	55.2	23.9		
09/24/2020	13:50	6.80	74.7	6.25	0.48	58.7	20.1		

07A-BKR: Baker River, Wentworth (Town Park)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	09:25							41	16
06/27/2020	13:30	8.84	94.8	6.24	0.31	85.0	18.8		
07/20/2020	06:45							10	17
08/12/2020	12:36	5.88	69.5	6.12	0.38	89.5	24.5		

07-BKR: Baker River, Wentworth (Wentworth Town Beach)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	09:15							10	15
07/11/2020	17:10	5.87	68.6	6.22	0.73	83.0	23.7		
07/20/2020	07:05							63	17
07/28/2020	15:15	6.55	78.1	6.34	0.49	86.7	24.0		
08/12/2020	12:50	5.73	67.8	6.12	1.17	91.5	23.7		
08/26/2020	15:43	6.70	74.1	6.19	0.72	93.1	20.2		
09/10/2020	12:57	6.48	72.0	6.37	0.32	96.4	21.1		
09/24/2020	14:27	7.19	74.5	6.27	0.50	103.0	17.1		

06A-BKR: Baker River, Wentworth (Silver Bridge/Saunders Hill Road)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	09:35							350	18
07/11/2020	17:36	5.73	68.1	6.23	0.63	43.3	23.7		
07/20/2020	07:15							30	17
07/28/2020	15:35	5.76	67.6	6.27	0.57	83.8	24.1		
08/12/2020	13:12	5.34	62.1	6.17	0.16	93.0	23.2		
08/26/2020	16:09	6.27	67.3	5.78	0.22	96.3	19.0		
09/10/2020	13:10	6.03	66.8	6.30	0.58	101.6	20.6		
09/24/2020	14:45	6.87	69.3	5.97	0.35	110.6	15.9		

06-SBR: South Branch Baker River, Wentworth (North Dorchester Road Bridge) - 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)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm^A	NA	<230 mg/L^B
02/19/2020	09:35	15.48	105.8	6.83	1.04	62.0	0.1	9
06/23/2020	09:45	8.85	102.3	6.71	1.16	65.7	22.5	11
07/21/2020	09:30	9.36	104.8	6.83	1.34	67.6	20.9	13
08/18/2020	09:40	9.06	97.1	6.89	0.55	79.5	18.7	13
10/16/2020	11:53	12.02	108.9	7.01	4.24	58.2	11.0	8
11/18/2020	10:35	14.14	99.5	6.80	1.07	52.2	1.0	8
12/15/2020	10:45	14.68	100.5	6.69	1.09	41.2	0.0	10

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
02/19/2020	09:35	0.006	ND	0.09	0.22 ^C
06/23/2020	09:45	0.019	ND	0.06	0.19 ^C
07/21/2020	09:30	0.009	ND	0.06	0.18 ^C
08/18/2020	09:40	0.040	ND	0.13	0.26 ^C

05-BKR: Baker River, Rumney (Sandhill Bridge)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm^A	NA	<406	<230 mg/L^B
06/22/2020	10:45							132	12
07/11/2020	18:02	5.80	72.2	6.45	0.68	0.1	26.3		
07/20/2020	09:35							74	15
07/28/2020	16:03	5.44	66.5	6.34	0.76	66.8	25.6		
08/12/2020	13:39	5.53	68.9	6.25	1.11	97.4	26.1		
08/26/2020	16:24	6.49	73.9	6.26	0.90	87.9	20.2		
09/10/2020	13:42	6.38	76.7	6.23	1.38	100.8	23.3		
09/24/2020	15:01	7.10	74.7	6.32	0.45	110.6	19.5		

04-BKR: Baker River, Rumney (New Town Bridge/Stinson Lake Road)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	11:05							110	14
06/27/2020	12:55	8.69	95.1	6.28	0.57	98.2	20.0		
07/11/2020	18:27	5.44	66.2	6.32	0.75	88.7	25.7		
07/20/2020	09:25							20	15
07/28/2020	16:59	5.17	64.2	6.42	0.65	86.7	27.1		
08/12/2020	13:59	5.71	70.8	6.19	0.51	97.4	26.2		
08/26/2020	16:48	5.97	66.3	6.42	0.42	103.7	20.8		
09/10/2020	14:07	7.89	91.7	6.39	0.49	104.2	23.1		
09/24/2020	15:21	8.38	83.8	6.11	0.86	115.2	16.1		

03-BKR: Baker River, Rumney (Route 25/Downstream of School Street)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	08:20							86	15
07/20/2020	09:10							62	14

02-BKR: Baker River, Plymouth (Covered Bridge/Smith Bridge Road)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	08:05							110	19
06/27/2020	12:05	8.49	94.5	6.34	1.04	111.9	20.6		
07/20/2020	08:55							85	16
07/28/2020	17:55	5.07	61.7	6.31	1.16	89.7	26.0		
08/12/2020	14:50	5.32	67.8	6.19	1.79	108.3	27.8		
08/26/2020	17:15	5.38	60.8	6.42	1.48	118.9	21.5		
09/10/2020	14:33	5.72	67.3	6.29	2.84	118.9	23.4		
09/24/2020	15:44	8.29	85.2	6.17	1.67	128.1	16.3		

01A-BKR: Baker River, Plymouth (Tenney Mountain Highway Bridge)

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	07:20							134	20
07/11/2020	19:00	5.13	63.8	6.30	1.88	46.2	26.5		
07/20/2020	08:40							556	18
07/28/2020	18:31	4.84	58.6	6.26	2.22	97.3	25.7		
08/12/2020	15:54	4.65	58.6	6.48	2.10	116.8	27.3		
08/26/2020	17:39	5.88	65.5	6.41	2.08	123.6	20.8		
09/10/2020	14:55	5.88	69.0	6.42	2.56	131.7	23.3		
09/24/2020	16:20	7.87	80.8	6.19	1.98	139.7	17.0		

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

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)	Chloride (mg/L)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835µS/cm ^A	NA	<406	<230 mg/L ^B
06/22/2020	07:20							146	22
07/20/2020	08:35							122	19



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