New Hampshire Volunteer River Assessment Program

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

[B] Chronic water quality standard

05-MQB, McQuesten Brook, South Main Street Culvert, Manchester

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	<835 µS/cm[A]	NA
06/20/2019	10:30	9.30	93.8	6.35	6.37	322.0	15.8
07/18/2019	11:01	8.41	79.8	6.46	0.89	547.0	12.8
08/14/2019	10:52	8.98	85.5	6.43	0.87	556.0	13.1

04A-MQB, McQuesten Brook, Former Deep Spot of McQuesten Pond, Manchester

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	<835 µS/cm[A]	NA
06/20/2019	10:50	6.67	67.0	6.19	6.32	602.0	15.4
07/18/2019	11:14	7.16	75.6	6.34	5.81	664.0	17.8
08/14/2019	11:06	7.26	75.4	6.38	3.55	672.0	17.1

03D-MQB, McQuesten Brook, Hale Road Culvert, Manchester

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	<835 µS/cm[A]	NA
06/20/2019	10:20	7.36	81.2	6.26	9.20	208.0	20.3
07/18/2019	10:52	7.60	81.4	6.86	2.49	1846.0	18.6
08/14/2019	10:39	7.39	80.7	7.06	3.16	1852.0	19.3

03-MQB, McQuesten Brook, Former McQuesten Pond Outlet, Downstream of 04A-MQB and 05-MQB Confluence, Manchester

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	<835 µS/cm[A]	NA
06/20/2019	10:06	8.37	84.3	6.31	9.30	367.0	15.7
07/18/2019	10:35	~~7.75~~	~~76.8~~	6.41	1.37	618.0	14.9
08/14/2019	10:28	8.33	82.4	6.49	1.83	624.0	15.0

02-MQB, McQuesten Brook, Wathen Road Culvert, Bedford

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	*E. coli* (cts/100mL)	*E. coli GEOMEAN* (cts/100mL)	Chloride (mg/L)
Standard	**NA**	**>5.0**	**>75% Daily Average**	**6.5-8.0**	**<10 NTU above background**	**<835 µS/cm[A]**	**NA**	**<406**	**<126**	**230[B]**
06/20/2019	09:30							>2000		202
06/20/2019	09:50	9.07	88.0	6.51	4.10	638.0	13.9			
07/18/2019	10:00							200		204
07/18/2019	10:20	8.54	85.2	6.69	2.00	667.0	15.2			
08/14/2019	09:50	9.54	94.8	6.65	1.69	670.0	15.0	292	489	170

Date	Time of Sample	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite (NO_2) + Nitrate(NO_3) (mg/L)	Total Nitrogen (mg/L)
Standard	**NA**	**Narrative**	**Narrative**	**Narrative**	**Narrative**
06/20/2019	09:30	0.055	0.45	2.70	3.15
07/18/2019	10:00	0.015		2.90	
08/14/2019	09:50	0.014		3.00	

01-MQB, McQuesten Brook, Riverway Place Culvert, Bedford

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**	**<835 µS/cm[A]**	**NA**
06/20/2019	09:30	8.80	90.5	6.75	3.50	1941.0	16.5
07/18/2019	10:03	7.53	82.5	6.77	3.22	2027.0	19.5
08/14/2019	09:40	8.98	98.8	6.95	1.48	2157.0	19.6