

New Hampshire Volunteer River Assessment Program  
2021 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

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

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

**05-MQB: McQuesten Brook, Manchester (South Main Street Culvert)**

| Date       | Time of Sample | DO (mg/L) | DO (% sat.)        | pH      | Turbidity (NTUs)         | Specific Conductance ( $\mu\text{S}/\text{cm}$ ) | Water Temp. ( $^{\circ}\text{C}$ ) | E. Coli (mpn/100mL) |
|------------|----------------|-----------|--------------------|---------|--------------------------|--|------------------------------------|---------------------|
| 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                |
| 06/17/2021 | 10:19          | 10.87     | 100.9              | 7.05    | 0.09                     | 725  | 12.1                               | 884                 |
| 07/15/2021 | 11:23          | 9.83      | 100.8              | 6.70    | 0.99                     | 495  | 16.6                               |                     |
| 08/12/2021 | 10:00          | 9.79      | 96.6               | 6.44    | 0.59                     | 908  | 14.9                               |                     |

**04A-MQB: McQuesten Brook, Manchester (Former Deep Spot of McQuesten Pond)**

| 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                                 |
| 06/17/2021 | 10:42          | 8.65      | 87.0               | 6.41    | 1.64                     | 775  | 15.7                               |
| 07/15/2021 | 11:40          | 7.98      | 89.1               | 6.85    | 3.43                     | 784  | 20.9                               |
| 08/12/2021 | 10:20          | 7.36      | 81.8               | 6.34    | 3.65                     | 606  | 20.7                               |

**03D-MQB: McQuesten Brook, Manchester (Hale Road Culvert)**

| 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                                 |
| 06/17/2021 | 9:54           | 8.89      | 87.9               | 7.04    | 4.21                     | 917  | 14.8                               |
| 07/15/2021 | 11:08          | 7.16      | 77.6               | 6.87    | 2.28                     | 2292   | 18.9                               |
| 08/12/2021 | 9:42           | 6.86      | 75.0               | 6.90    | 3.48                     | 1596   | 19.6                               |

**03-MQB: McQuesten Brook, Manchester (Former McQuesten Pond Outlet)**

| 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                                 |
| 06/17/2021 | 9:30           | 9.85      | 93.0               | 6.48    | 1.09                     | <del>598.0</del>                                 | 12.6                               |
| 07/15/2021 | 10:53          | 8.91      | 93.9               | 6.65    | 1.66                     | 594.0  | 18.0                               |
| 08/12/2021 | 9:30           | 9.27      | 95.2               | 6.51    | 1.91                     | 984.0  | 16.5                               |

**02-MQB: McQuesten Brook, Bedford (Wathen Road Culvert)**

| Date       | Time of Sample | DO (mg/L) | DO (% sat.)        | pH      | Turbidity (NTUs)         | Specific Conductance ( $\mu\text{S}/\text{cm}$ ) | Water Temp. ( $^{\circ}\text{C}$ ) | Chloride (mg/L)  | E. Coli (mpn/100mL) | E.coli Geometric Mean |
|------------|----------------|-----------|--------------------|---------|--------------------------|--|------------------------------------|------------------|---------------------|-----------------------|
| Standard   | NA             | >5.0      | >75% Daily Average | 6.5-8.0 | <10 NTU above background | <835 $\mu\text{S}/\text{cm}^{\text{A}}$          | NA                                 | 230 <sup>B</sup> | <406                | <126                  |
| 06/17/2021 | 9:02           | 9.63      | 91.7               | 6.63    | 1.07                     | 902  | 12.9                               |                  | 135                 |                       |
| 07/15/2021 | 10:26          | 9.19      | 96.7               | 6.65    | 0.37                     | 664  | 17.9                               | 144              | 631                 |                       |
| 08/12/2021 | 9:02           | 9.26      | 95.8               | 6.53    | 1.62                     | 1015   | 16.9                               | 190              | 602                 | 372                   |

| Date       | Time of Sample | Total Phosphorus (mg/L) | Total Kjeldahl Nitrogen (mg/L) | Nitrite (NO <sub>2</sub> ) + Nitrate(NO <sub>3</sub> ) (mg/L) | Total Nitrogen (mg/L) |
|------------|----------------|-------------------------|--------------------------------|---|-----------------------|
| Standard   |                | Narrative               | Narrative                      | Narrative   | Narrative             |
| 06/17/2021 | 9:02           | 0.021                   | 0.26                           | 2.90  | 3.16                  |
| 07/15/2021 | 10:26          | 0.043                   | 0.48                           | 1.90  | 2.38                  |
| 08/12/2021 | 9:02           | 0.021                   | 0.34                           | 0.34  | 0.68                  |

**01-MQB: McQuesten Brook, Bedford (Riverway Place Culvert)**

| 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                                 |
| 06/17/2021 | 8:39           | 9.24      | 94.0               | 7.05    | 1.70                     | 2826   | 16.0                               |
| 07/15/2021 | 10:15          | 8.74      | 96.6               | 6.80    | 0.67                     | 2270   | 20.2                               |
| 08/12/2021 | 8:46           | 8.28      | 92.7               | 6.89    | 0.42                     | 1948   | 20.6                               |

