

Instructions: Bold fields must be completed.

| Station Summary                |                         |  |  |
|--------------------------------|-------------------------|--|--|
| Waterbody Name<br>BRANCH RIVER |                         | Waterbody ID Code<br>71300                               | Sample ID (YYYYMMDD-CY-FD)<br>20170919-36-02 |
| Sampling Location              |                         |  | Database Key<br>149675591                    |
| SWIMS Station ID<br>363299     |                         | SWIMS Station Name<br>BRANCH RIVER AT N UNION RD (2)     |  |
| Latitude<br>44.135389          | Longitude<br>-87.765653 | Lat/Long Determination Method (circle)<br>SWIMS SWDV GPS | Datum Used if using GPS<br>WGS84 or NAD83    |
| Basin (WMU)<br>MANITOWOC       |                         | Watershed Name<br>BRANCH RIVER                           | County<br>MANITOWOC                          |

| Sample and Site Descriptors  |  |
|--|--|
| Sample Collector (Last Name, First)<br>MAY GANSBERG, Benes, Joshua | Project Name<br>NER LONG-TERM TREND WADEABLE REFERENCE STREAMS |

Sampling Device

D-Frame Kick Net       Surber Sampler       Eckman  
 Ponar       Artificial Substrate       Hess Sampler       Other: \_\_\_\_\_

Habitat Sampled

Riffle       Run       Pool  
 Other       Shoreline Composite       Proportionally-Sampled Habitat  
 Littoral Zone       Profundal Zone       Wetland

|                                |  |                                |                      |
|--------------------------------|--|--------------------------------|----------------------|
| Total Sampling Time (min)<br>3 | Estimated Area Sampled (m <sup>2</sup> )<br>15 | Number of Samples in Composite | Replicate No. 1 of 1 |
|--------------------------------|--|--------------------------------|----------------------|

Reason For Sampling

Least Impacted Reference       Baseline       Impact / Treatment Site  
 Control Site       Trend       Other: \_\_\_\_\_

|                         |                     |                        |                |                                |                   |
|-------------------------|---------------------|------------------------|----------------|--------------------------------|-------------------|
| Water Temp. (C)<br>17.8 | D.O. (mg/l)<br>11.2 | D.O. (% sat.)<br>118.2 | pH (su)<br>8.4 | Conductivity (umhos/cm)<br>682 | Transparency (cm) |
|-------------------------|---------------------|------------------------|----------------|--------------------------------|-------------------|

Water Color      Estimated Stream Velocity (m/s)

Clear       Turbid       Stained       Slow (< 0.15 m/s)       Moderate (0.15 m/s - 0.5 m/s)       Fast (> 0.5 m/s)

|   |   |   |
|---|---|---|
| Measured Velocity<br>circle units<br>m/s or f/s | Average Stream Depth of reach (m)<br>0.20 | Average Stream Width of reach (m)<br>15.0 |
|---|---|---|

Composition of Substrate Sampled (Percent):

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): 20 Gravel (ladybug to tennisball): 70  
 Sand: 10 Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: \_\_\_\_\_ Leaf Snags: \_\_\_\_\_ Coarse Woody Debris: \_\_\_\_\_ Other (\_\_\_\_): \_\_\_\_\_

Embeddedness of Substrate at Sample Site (%) 30      Canopy Cover at Sample Site (%) 50

**Stream and Watershed Descriptors**

N = Not a problem  
 U = Uncertain  
 PL = Present, Low Impact  
 PH = Present, High Impact

| Factors that may be influencing Water Resource Integrity |  | Local | Water-shed | Factors that may be influencing Water Resource Integrity |  | Local | Water-shed |
|--|--|-------|------------|--|--|-------|------------|
| <b>Biological</b>  |  |       |            | <b>Chemical</b>  |  |       |            |
| Algae: - Diatoms / Periphyton                            |  |       |            | Chlorine   |  |       |            |
| - Filamentous Algae                                      |  |       |            | Dissolved Oxygen   |  |       |            |
| - Planktonic Algae                                       |  |       |            | Nutrients (P, N...)                                      |  |       |            |
| Iron Bacteria  |  |       |            | Toxics: - Inorganic (Metals)                             |  |       |            |
| Macrophytes  |  |       |            | - Organic (PCBs, pesticides...)                          |  |       |            |
| Slimes   |  |       |            | Other - Specify:   |  |       |            |
| Other - Specify:   |  |       |            | <b>Sources of Stream Impacts</b>                         |  |       |            |
|  |  |       |            | Bank Erosion   |  |       |            |
|  |  |       |            | Point Source - Specify:                                  |  |       |            |
|  |  |       |            | Pasturing of Livestock                                   |  |       |            |
| <b>Physical</b>  |  |       |            | Runoff: - Barnyard                                       |  |       |            |
| Bank Erosion   |  |       |            | - Construction   |  |       |            |
| Channelization: - Upstream                               |  |       |            | - Cropland   |  |       |            |
| - Downstream   |  |       |            | - Urban  |  |       |            |
| Hydraulic Scour / Channel Incision                       |  |       |            | Septic Systems   |  |       |            |
| Impoundment: - Upstream                                  |  |       |            | Tile Drainage - Organic Soils                            |  |       |            |
| - Downstream   |  |       |            | - Mineral Soils  |  |       |            |
| Low Flow   |  |       |            | Springs  |  |       |            |
| Sedimentation  |  |       |            | Tributary(s)   |  |       |            |
| Sludge   |  |       |            | Wetland  |  |       |            |
| Thermal  |  |       |            | Other - Specify:   |  |       |            |
| Turbidity  |  |       |            |  |  |       |            |
| Other - Specify:   |  |       |            |  |  |       |            |

Comments

Special Instructions for Laboratory

| For Lab Use Only                     |  |   |
|--------------------------------------|--|---|
| Sample Sorter<br><i>Sam Lamarche</i> | Taxonomist<br><i>Dimick, Jeffrey</i>                               | Estimated Percent of Sample Sorted<br><i>7%</i> |
| Date Processed<br><i>10/24/18</i>    | Specimens Saved<br><i>Subsample archived in ABL until Jan 2022</i> |   |

*3E*  
*362*

|     | Taxa  | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|-----|---|------------|-------------|-------|---------------------|-----------|--------------|
| 41  | <i>Paragnetina media</i>                          | L          | 1           | 1     | Hils 1995           |           |              |
|     | Baetis  | L          | x1          | 11    | Klub 2016           | dam       | N            |
|     | <i>B. intercalaris</i>                            | L          | -III        | 8     | "                   |           |              |
|     | <i>B. flavistriga</i> species complex             | L          | 8x11        | 52    | "                   |           |              |
|     | <i>Acerpenna</i>                                  | L          | 1           | 1     | "                   | dam       |              |
|     | <i>caenis</i>                                     | L          | 1           | 1     | "                   | imm       | N            |
|     | <i>C. anceps</i>                                  | L          | 0           | 20    | "                   |           |              |
|     | <i>C. latipennis</i>                              | L          | 1           | 1     | "                   |           |              |
| 312 | <i>Telegonopsis deficiens</i>                     | L          | 1           | 1     | "                   |           |              |
|     | Heptageniidae                                     | L          | -1          | 6     | "                   | dam       | N            |
| 362 | Leuctra   | L          | 80          | 80    | "                   |           |              |
|     | <i>Maccaffertium</i>                              | L          | 011         | 22    | "                   | imm       | Y            |
|     | <i>M. medispunctatum</i>                          | L          | 8x11        | 52    | "                   |           |              |
|     | <i>Tricorythodes</i>                              | L          | "           | 2     | "                   |           |              |
| 465 | <i>Isonychia</i>                                  | L          | III         | 3     | "                   | imm       |              |
|     | Hydropsychidae                                    | L          | 1           | 1     | Hils 1995           | imm       | N            |
|     | <i>Cheumatopsyche</i>                             | L          | -411        | 10    | "                   |           |              |
|     | <i>Hydropsyche betteni</i>                        | L          | 1           | 1     | Schm Hils Kobb      |           |              |
|     | <i>Chimarra obscura</i>                           | L          | 1           | 1     | Hils 1982           |           |              |
|     | <i>Agria</i>                                      | L          | 11          | 2     | West May 1996       | imm       |              |
|     | <i>D. proserpens</i>                              | L          | x11         | 12    | Hils Schm 1992      | imm       | N            |
|     | <i>D. fastiditus</i>                              | L          | 011         | 23    | "                   |           |              |
|     | <i>Stenelmis</i>                                  | L          | 111         | 4     | "                   |           | N            |
|     | <i>S. crenata</i>                                 | A          | 1           | 1     | "                   |           |              |
|     | <i>Psephenus henricki</i>                         | L          | x           | 10    | "                   |           |              |
|     | <i>Simulium vittatum</i> species complex 08110218 | L          | 11          | 2     | Adl et al 2004      |           |              |
|     | <i>S. jenningsi</i> species group                 | L          | x-          | 15    | "                   |           |              |
|     | <i>Amblypsilota</i>                               | L          | 11          | 2     | Hils 1995           |           |              |
|     | Dicraneta   | L          | 1           | 1     | "                   |           |              |
|     | <i>Eukiefferiella</i>                             | P          | 1           | 1     | Ferr et al 2008     |           | N            |
|     | <i>Parametriocnemus</i>                           | P          | -1          | 6     | "                   |           |              |
|     |   |            |             |       |                     |           |              |
|     | Tubificinae (without hairs)                       | A          | 1           | 1     | Kemm 1985           |           |              |
|     | <i>Pisidium</i>                                   | A          | 1           | 1     | Burch 1972          |           |              |
|     |   |            |             |       |                     |           |              |
|     | <i>Cardiocladius obscurus</i>                     | L          | 111         | 4     | Epler 2001          |           |              |
|     | <i>Eukiefferiella devonica</i> group              | L          | 11          | 2     | Ander + 3 2013      |           |              |
|     | <i>Thienemannella xena</i>                        | L          | 1           | 1     | Bolton 2012         |           |              |

>3 taxa, TVAL <= 2.0

857 (0.1 x 322)

