

Instructions: Bold fields must be completed.

| Station Summary   |   |  |  |
|---|---|--|--|
| Waterbody Name<br>UNNAMED   |   | Waterbody ID Code<br>441900  | Sample ID (YYYYMMDD-CY-FD)<br>20181001-43-03 |
| Sampling Location<br>5 m U4 Riffle  |   | Database Key<br>168363657  |  |
| SWIMS Station ID<br>10047845  |   | SWIMS Station Name<br>UNNAMED TRIB TO LITTLE RIVER AT FREDRICKSON ROAD   |  |
| Latitude  | Longitude                                     | Lat/Long Determination Method (circle)<br>SWIMS SWDV GPS   | Datum Used if using GPS<br>WGS84 or NAD83    |
| Basin (WMU)<br>GREEN BAY  |   | Watershed Name<br>LITTLE RIVER   | County<br>OCONTO                             |
| Sample and Site Descriptors   |   |  |  |
| Sample Collector (Last Name, First)<br>ANDREW HUDAK   |   | Project Name<br>LITTLE RIVER TWA ASSESSMENT 2018   |  |
| Sampling Device   |   |  |  |
| <input checked="" type="checkbox"/> D-Frame Kick Net <input type="checkbox"/> Surber Sampler <input type="checkbox"/> Eckman<br><input type="checkbox"/> Ponar <input type="checkbox"/> Artificial Substrate <input type="checkbox"/> Hess Sampler <input type="checkbox"/> Other: _____  |   |  |  |
| Habitat Sampled   |   |  |  |
| <input checked="" type="checkbox"/> Riffle <input type="checkbox"/> Run <input type="checkbox"/> Pool<br><input type="checkbox"/> Other <input type="checkbox"/> Shoreline Composite <input type="checkbox"/> Proportionally-Sampled Habitat<br><input type="checkbox"/> Littoral Zone <input type="checkbox"/> Profundal Zone <input type="checkbox"/> Wetland |   |  |  |
| Total Sampling Time (min)<br>3  | Estimated Area Sampled (m <sup>2</sup> )<br>3 | Number of Samples in Composite<br>1  | Replicate No. 1 of 1                         |
| Reason For Sampling   |   |  |  |
| <input type="checkbox"/> Least Impacted Reference <input type="checkbox"/> Baseline <input type="checkbox"/> Impact / Treatment Site<br><input type="checkbox"/> Control Site <input type="checkbox"/> Trend <input checked="" type="checkbox"/> Other: TWA   |   |  |  |
| Water Temp. (C)<br>9.67   | D.O. (mg/l)<br>9.31                           | D.O. (% sat.)<br>83.1  | pH (su)<br>7.74                              |
| Conductivity (umhos/cm)<br>692  |   | Transparency (cm)<br>>122  |  |
| Water Color   |   | Estimated Stream Velocity (m/s)  |  |
| <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained  |   | <input checked="" type="checkbox"/> Slow (< 0.15 m/s) <input type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input type="checkbox"/> Fast (> 0.5 m/s) |  |
| Measured Velocity<br>circle units<br>m/s or f/s   | Average Stream Depth of reach (m)<br>2        | Average Stream Width of reach (m)<br>0.15  |  |
| Composition of Substrate Sampled (Percent):   |   |  |  |
| Bedrock: _____  | Boulders (basketball or larger): _____        | Rubble (tennisball to basketball): 40  | Gravel (ladybug to tennisball): 30           |
| Sand: 20  | Clay: _____                                   | Silt/Muck: _____   | Overhanging Vegetation: _____                |
| Aquatic Macrophytes: _____  | Leaf Snags: 10                                | Coarse Woody Debris: _____   | Other ( _____ ): _____                       |
| Embeddedness of Substrate at Sample Site (%) 30   |   | Canopy Cover at Sample Site (%) 40   |  |

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

Comments

Special Instructions for Laboratory

**For Lab Use Only**

|                                      |  |   |
|--------------------------------------|--|---|
| Sample Sorter<br><i>Sam Lamarche</i> | Taxonomist<br><i>Dimick Jeffery</i>                                | Estimated Percent of Sample Sorted<br><i>130%</i> |
| Date Processed<br><i>2/16/19</i>     | Specimens Saved<br><i>Subsample archived in ABI until May 2022</i> |   |

*E3 B2*  
*58 87*  
*145 Specs total*

| Taxa                             | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|----------------------------------|------------|-------------|-------|---------------------|-----------|--------------|
| Allocepnia                       | L          | 11          | 2     | Hils 1995           |           |              |
| Clioneella clia                  | L          | 1           | 1     | "                   |           |              |
| Baetis brunneicolor              | L          | 11          | 2     | Kleb 2016           |           |              |
| B. flavistriga species complex   | L          | 1111        | 4     | "                   |           |              |
| Maccabertium                     | L          | 11          | 2     | "                   | imm       | N            |
| M. vicarium                      | L          | x-1         | 16    | "                   |           |              |
| Leptophlebia                     | L          | 1           | 1     | "                   | imm       |              |
| Anmatopsyche                     | L          | 8-111       | 38    | Hils 1995           |           |              |
| Hydropsyche betteni              | L          | -           | 5     | Schm Hils 1996      |           |              |
| Ceratopsyche branta              | L          | 1           | 1     | "                   |           |              |
| <del>Limnephilidae</del>         | L          | 1           | 1     | Hils 1995           | imm       |              |
| Optoserius                       | L          | x-1111      | 21    | Hils Schm 1992      | imm       | N            |
| O. fastiditus L, 4 A, 4          | L/A        | -11         | 8     | "                   |           |              |
| Atherix variegata                | L          | 11          | 2     | Hils 1995           |           |              |
| Ceratopogon ulicoidithorax       | L          | 1           | 1     | "                   |           |              |
| Hemerodromia                     | L          | 1           | 1     | Court Meir 2008     |           |              |
| Chrysops                         | L          | 1           | 1     | Hils 1995           |           |              |
| Dicranota                        | L          | 1           | 1     | "                   |           |              |
| Tipula                           | L          | 11          | 2     | "                   |           |              |
| Orthocladius (Orthocladius)      | P          | 1           | 1     | Coff et al 1986     |           |              |
| Gammarus pseudolimnæus           | A          | x-11        | 12    | Hils 1972           |           |              |
| Caecidotea intermedia            | A          | -11         | 7     | Will 1972           |           |              |
| Urbicinae (without hairs)        | A          | 1           | 1     | Kleum 1985          |           |              |
| <del>Split A3 Chironomidae</del> | L          | 1111        |       |                     |           |              |
| Cochaypelepis 08270700           | L          | 1           | 1     | Cran Epl 2013       |           |              |
| Thienemannimyia group            | L          | 1111        | 4     | "                   | mt in det | N            |
| Orthoclaudiinae 08300000         | L          | 11          | 2     | Cranston 2013       | mt in det | N            |
| Corynoneura                      | L          | 1           | 1     | And f3 2013         |           |              |
| Orthocladius (Orthocladius)      | L          | 1           | 1     | "                   |           | N            |
| Cladotanytarsus                  | L          | 1           | 1     | Epl et al 2013      |           |              |
| Microtanytarsus pedellus group   | L          | 1           | 1     | "                   |           |              |
| Paratanytarsus sp. A             | L          | 1           | 1     | Hils unpubl         |           |              |
|                                  |            |             |       |                     |           |              |
|                                  |            |             |       |                     |           |              |
|                                  |            |             |       |                     |           |              |
|                                  |            |             |       |                     |           |              |