

Instructions: Bold fields must be completed.

| Station Summary   |                               |  |  |
|---|-------------------------------|--|--|
| Waterbody Name<br><b>UNNAMED TRIBUTARY TO POKEGAMA BAY</b>  |                               | Waterbody ID Code<br><b>2844200</b>  | Sample ID (YYYYMMDD-CY-FD)<br>20171013-16-05     |
| Sampling Location<br><b>35 m DS STH 105 CULVERT OUTFALL</b> |                               | Database Key<br>149840248  |  |
| SWIMS Station ID<br>10049172                                |                               | SWIMS Station Name<br><b>BAY</b><br>UNNAMED TRIBUTARY TO POKEGAMA 182M DS OF STH 105 |  |
| Latitude<br><b>46.66652</b>                                 | Longitude<br><b>-92.13254</b> | Lat/Long Determination Method (circle)<br>SWIMS SWDV <b>GPS</b>                      | Datum Used if using GPS<br><b>WGS84</b> or NAD83 |
| Basin (WMU)<br>LAKE SUPERIOR                                |                               | Watershed Name<br>ST. LOUIS AND LOWER NEMADJI RIVER                                  | County<br>DOUGLAS                                |

| Sample and Site Descriptors   |   |
|---|---|
| Sample Collector (Last Name, First)<br><b>CRAIG P ROESLER, CHANG VANG</b> | Project Name<br><b>NORTHERN DISTRICT TWA 2017</b> |

**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><b>2</b> | Estimated Area Sampled (m <sup>2</sup> )<br><b>2</b> | Number of Samples in Composite<br><b>3</b> | Replicate No. <b>1</b> of <b>1</b> |
|---------------------------------------|--|--|------------------------------------|

**Reason for Sampling**

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

|                                |                            |                            |                       |                                       |                                |
|--------------------------------|----------------------------|----------------------------|-----------------------|---------------------------------------|--------------------------------|
| Water Temp. (C)<br><b>10.2</b> | D.O. (mg/l)<br><b>10.8</b> | D.O. (% sat.)<br><b>98</b> | pH (su)<br><b>7.7</b> | Conductivity (umhos/cm)<br><b>142</b> | Transparency (cm)<br><b>27</b> |
|--------------------------------|----------------------------|----------------------------|-----------------------|---------------------------------------|--------------------------------|

**Water Color**

Clear       Turbid       Stained

**Estimated Stream Velocity (m/s)**

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><b>0.25</b> | Average Stream Width of reach (m)<br><b>2</b> |
|---|--|---|

**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): **90** Gravel (ladybug to tennisball): **10**

Sand: \_\_\_\_\_ Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_

Aquatic Macrophytes: \_\_\_\_\_ Leaf Snags: \_\_\_\_\_ Coarse Woody Debris: \_\_\_\_\_ Other (\_\_\_\_): \_\_\_\_\_

Embeddedness of Substrate at Sample Site (%) **20**      Canopy Cover at Sample Site (%) **20**

**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

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Special Instructions for Laboratory

| For Lab Use Only                      |  |  |
|---------------------------------------|--|--|
| Sample Sorter<br><i>Macella Clair</i> | Taxonomist<br><i>Dimock, Jeffrey</i>                               | Estimated Percent of Sample Sorted<br><i>27%</i> |
| Date Processed<br><i>1/12/13</i>      | Specimens Saved<br><i>Subsample archived in ABC until Apr 2021</i> |  |

B1 19  
 A2 38  
 C1 41  
 D1 32

| Taxa  | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|---|------------|-------------|-------|---------------------|-----------|--------------|
| <i>Allocapnia</i>                           | L          | -III        | 8     | Hilsenhoff 1995     |           |              |
| <i>Baetis bairdii</i>                       | L          | -III        | 8     | Klubertanz 2016     |           |              |
| <i>B. flavistriga</i> species complex       | L          | I           | 1     | "                   |           |              |
| <i>Acerpenna</i>                            | L          | IIII        | 4     | "                   | dam       | N            |
| <i>A. macdunnoughi</i>                      | L          | III         | 3     | "                   |           |              |
| <i>Coenis</i>                               | L          | II          | 2     | "                   | imm       | N            |
| <i>C. latipennis</i>                        | L          | -           | 5     | "                   |           |              |
| <i>Stenonema</i>                            | L          | I           | 1     | "                   | imm       | N            |
| <i>S. inter punctatum</i>                   | L          | IIII        | 4     | "                   |           |              |
| <i>Stenonema femoratum</i>                  | L          | I           | 1     | "                   |           |              |
| Leptophlebiidae                             | L          | JSD III     | 2     | "                   | dam       | N            |
| <i>Leptophlebia cupida</i>                  | L          | IIII        | 7     | "                   |           |              |
| <i>Allossosoma intermedium</i>              | L          | -I          | 6     | Wynne, Morse 2000   |           |              |
| <i>Cheumatopsyche</i>                       | L          | ×II         | 12    | Hilsenhoff 1995     |           |              |
| <i>Hydropsyche betteri</i>                  | L          | ×IIII       | 9     | Schm, Hils. 1986    |           |              |
| <i>Ceratopsyche glossanthe</i>              | L          | II          | 2     | "                   |           |              |
| <i>C. sparna</i>                            | L          | I           | 1     | "                   |           |              |
| Limnephilidae                               | L          | I           | 1     | Hilsenhoff 1995     |           |              |
| <i>Dubiraphia quadrinotata</i>              | A          | II          | 2     | Hils, Schm. 1992    |           |              |
| <i>D. vittata</i>                           | A          | I           | 1     | "                   |           |              |
| <i>Opatoserius</i>                          | L          | ×II         | 12    | "                   | imm       | N            |
| <i>O. fastidiosus</i> L, 25 A, 5            | L          | 44          | 30    | "                   |           |              |
| <i>Pericoma</i>                             | L          | I           | 1     | Hilsenhoff 1995     |           |              |
| <i>Simulium tuberosum</i> species Group     | L          | III         | 3     | Adler et al 2004    |           |              |
| <i>S. vittatum</i> species complex 08110217 | L          | III         | 3     | "                   |           |              |
| Chrysops                                    | L          | I           | 1     | Hilsenhoff 1995     |           |              |
| Hydrobates                                  | A          | I           | 1     | Pluchino 1984       |           |              |
| Cyclopidae                                  | A          | I           | 1     | Williamson 1991     |           |              |
| <i>Nabarsia baltimorea</i>                  | L          | I           | 1     | Epler 2001          |           |              |
| <i>Meropelopia</i>                          | L          | I           | 1     | Crab, Epler 2013    |           |              |
| <i>Cardiocladius obscurus</i>               | L          | I           | 1     | Epler 2001          |           |              |
| <i>Eukretferrella claripennis</i> group     | L          | I           | 1     | Anderson 2013       |           |              |
| <i>Parametriocnemus</i>                     | L          | I           | 1     | "                   |           |              |
| <i>Polypedilum (Urosipedilum) aviceps</i>   | L          | I           | 1     | Bolton 2012         |           |              |
| <i>Tanytarsus</i>                           | L          | I           | 1     | Epler et al 2013    |           |              |

< 3 taxa, TVAL ≤ 2.0