**Wadeable Macroinvertebrate Field Data Report**

**Form 3200-081 (R 8/14)**

**Page 1 of 2**

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### Instructions: Bold fields must be completed.

#### Station Summary

**Waterbody Name**

EMMONS CREEK

**Waterbody ID Code**


**Sample ID (YYYYMMDD-CY-FD)**

20180318-50-9

**Date**

05/08/2018

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**Database Key**

159426664

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**Sampling Location**

**R55-R-30m-49-031818**

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**Latitude**

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**Longitude**

---

**Lat/Long Determination Method (circle)**

- SWIMS
- SWDV
- GPS

**Datum Used if using GPS**

- WGS84
- NAD83

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**Basin (WMU)**

WOLF RIVER

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**Watershed Name**

WAUPACA RIVER

---

**County**

PORTAGE

---

**Sample and Site Descriptors**

**SWIMS Station ID**

10049350

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**SWIMS Station Name**

EMMONS CREEK - CONTROL REACH NEAR STRATTON LAKE RD

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**Latitude**

---

**Longitude**

---

**Sampling Site ID**

---

**Sample Collector (Last Name, First)**

DAVID A BOLHA, MICHAEL P SHUPRYT

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**Project Name**

EMMONS CREEK DISCHARGE REDUCTION MI FY18

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**Sampling Device**

- D-Frame Kick Net
- Surber Sampler
- Artificial Substrate
- Hess Sampler
- Other: Core

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**Habitat Sampled**

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

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**Total Sampling Time (min)**

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**Estimated Area Sampled (m²)**

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**Number of Samples in Composite**

Replicate No. of

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**Reason For Sampling**

- Least Impacted Reference
- Baseline
- Control Site
- Trend
- Impact / Treatment Site
- Other: Special Project

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**Water Temp. (°C)**

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**D.O. (mg/l)**

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**D.O. (% sat.)**

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**pH (su)**

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**Conductivity (umhos/cm)**

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**Transparency (cm)**

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**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)

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**Measured Velocity**

circle units m/s or f/s

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**Average Stream Depth of reach (m)**

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**Average Stream Width of reach (m)**

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

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

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**Embeddedness of Substrate at Sample Site (%)**

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**Canopy Cover at Sample Site (%)**

---
### Stream and Watershed Descriptors

<table>
<thead>
<tr>
<th>Biological</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors that may be influencing Water Resource Integrity</td>
<td>Factors that may be influencing Water Resource Integrity</td>
</tr>
<tr>
<td><strong>Local</strong></td>
<td><strong>Watershed</strong></td>
</tr>
<tr>
<td>N = Not a problem</td>
<td>PL = Present, Low Impact</td>
</tr>
<tr>
<td>Algae: - Diatoms / Periphyton</td>
<td>Chlorine</td>
</tr>
<tr>
<td>- Filamentous Algae</td>
<td>Dissolved Oxygen</td>
</tr>
<tr>
<td>- Planktonic Algae</td>
<td>Nutrients (P, N...)</td>
</tr>
<tr>
<td>Iron Bacteria</td>
<td>Toxics: - inorganic (Metals)</td>
</tr>
<tr>
<td>Macrophytes</td>
<td>- Organic (PCBs, pesticides...)</td>
</tr>
<tr>
<td>Slimes</td>
<td>Other - Specify:</td>
</tr>
<tr>
<td>Other - Specify:</td>
<td></td>
</tr>
</tbody>
</table>

### Sources of Stream Impacts

<table>
<thead>
<tr>
<th>Physical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Erosion</td>
<td>Pasturing of Livestock</td>
</tr>
<tr>
<td>Channelization: - Upstream</td>
<td>Runoff: - Barnyard</td>
</tr>
<tr>
<td>- Downstream</td>
<td>- Construction</td>
</tr>
<tr>
<td>Hydraulic Scour / Channel Incision</td>
<td>- Cropland</td>
</tr>
<tr>
<td>Impoundment: - Upstream</td>
<td>- Urban</td>
</tr>
<tr>
<td>- Downstream</td>
<td>Septic Systems</td>
</tr>
<tr>
<td>Low Flow</td>
<td>Tile Drainage - Organic Soils</td>
</tr>
<tr>
<td>Sedimentation</td>
<td>- Mineral Soils</td>
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<tr>
<td>Sludge</td>
<td>Springs</td>
</tr>
<tr>
<td>Thermal</td>
<td>Tributary(s)</td>
</tr>
<tr>
<td>Turbidity</td>
<td>Wetland</td>
</tr>
<tr>
<td>Other - Specify:</td>
<td>Other - Specify:</td>
</tr>
</tbody>
</table>

### Comments

Special Instructions for Laboratory

### For Lab Use Only

<table>
<thead>
<tr>
<th>Sample Sorter</th>
<th>Taxonomist</th>
<th>Estimated Percent of Sample Sorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam Lamarche</td>
<td>Danick Jeffrey</td>
<td>100%</td>
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</tbody>
</table>

Date Processed: 12/6/18

Specimens Saved: Subsample archived in F3 until Mar 2022
<table>
<thead>
<tr>
<th>Taxa</th>
<th>Life Stage</th>
<th>Bench Tally</th>
<th>Count</th>
<th>Taxonomic Reference</th>
<th>Condition</th>
<th>Unique Taxon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brachycentrus americanus</td>
<td>L 11</td>
<td></td>
<td>2</td>
<td>NB '75 1985</td>
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<tr>
<td>B. occidentalis</td>
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<td>Micreus macrulatus gelidum</td>
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<td>Glossosoma intermedia</td>
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<td>25</td>
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<td>Glossosoma</td>
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<td>Nephasta</td>
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<td>Takoča</td>
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<td>13</td>
<td>NB '75 1945</td>
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<td>Chironomidae sp250000</td>
<td>L 14</td>
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<td>82</td>
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<tr>
<td>Naidingi</td>
<td>A 1</td>
<td></td>
<td>5</td>
<td>Bünge '99 1991</td>
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</tr>
<tr>
<td>Megadrilli = Metagynophora</td>
<td>A 1</td>
<td></td>
<td>1</td>
<td>Theiß '00 2006</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>