

**Instructions:** Bold fields must be completed.

**Station Summary**

<b>Waterbody Name</b> Unnamed Trib to Gile Flowage		<b>Waterbody ID Code</b>	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20171020-26-11
<b>Sampling Location</b> <del>Upstream Island Lake Rd. 2-10 m Downstream ≈ 30 m</del>			<b>Database Key</b> 149286733
<b>SWIMS Station ID</b> 10049233	<b>SWIMS Station Name</b> UNNAMED (2942900) TRIB TO GILE FLOWAGE 115M DS ISLAND LAKE RD		
<b>Latitude</b> 46.38455	<b>Longitude</b> -96.19774	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV <b>GPS</b>	<b>Datum Used if using GPS</b> WGS84 or NAD83
<b>Basin (WMU)</b> LAKE SUPERIOR		<b>Watershed Name</b> MONTREAL RIVER	<b>County</b> IRON

**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> JOSEPH CUNNINGHAM	<b>Project Name</b> MONTREAL RIVER WATERSHED TWA 2017
<b>Sampling Device</b>	
<input checked="" type="checkbox"/> D-Frame Kick Net	<input type="checkbox"/> Surber Sampler
<input type="checkbox"/> Ponar	<input type="checkbox"/> Artificial Substrate
<input type="checkbox"/> Eckman	<input type="checkbox"/> Hess Sampler
<input type="checkbox"/> Other: _____	

**Habitat Sampled**

<input type="checkbox"/> Riffle	<input type="checkbox"/> Run	<input type="checkbox"/> Pool
<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Shoreline Composite	<input type="checkbox"/> Proportionally-Sampled Habitat
<input type="checkbox"/> Littoral Zone	<input type="checkbox"/> Profundal Zone	<input type="checkbox"/> Wetland

<b>Total Sampling Time (min)</b> 1 min	<b>Estimated Area Sampled (m<sup>2</sup>)</b> 2 m <sup>2</sup>	<b>Number of Samples in Composite</b> 4 Sweeps	<b>Replicate No.</b> _____ <b>of</b> _____
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**Reason For Sampling**

<input type="checkbox"/> Least Impacted Reference	<input type="checkbox"/> Baseline	<input type="checkbox"/> Impact / Treatment Site
<input type="checkbox"/> Control Site	<input type="checkbox"/> Trend	<input type="checkbox"/> Other: TWA Project

<b>Water Temp. (C)</b> 9.8	<b>D.O. (mg/l)</b> 4.04	<b>D.O. (%sat.)</b> 35.6	<b>pH (su)</b> 6.4	<b>Conductivity (umhos/cm)</b> 59.1	<b>Transparency (cm)</b> >120
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<b>Water Color</b>	<b>Estimated Stream Velocity (m/s)</b>
<input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" 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)

<b>Measured Velocity</b> circle units m/s or f/s	<b>Average Stream Depth of reach (m)</b> 0.25	<b>Average Stream Width of reach (m)</b> 2 m
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**Composition of Substrate Sampled (Percent):**

<b>Bedrock:</b> _____	<b>Boulders (basketball or larger):</b> _____	<b>Rubble (tennisball to basketball):</b> _____	<b>Gravel (ladybug to tennisball):</b> _____
<b>Sand:</b> _____	<b>Clay:</b> _____	<b>Silt/Muck:</b> 20	<b>Overhanging Vegetation:</b> _____
<b>Aquatic Macrophytes:</b> _____	<b>Leaf Snags:</b> 40	<b>Coarse Woody Debris:</b> 40	<b>Other (_____):</b> _____

<b>Embeddedness of Substrate at Sample Site (%)</b> _____	<b>Canopy Cover at Sample Site (%)</b> 0%
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**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	PL	U	Toxics: - Inorganic (Metals)		
Macrophytes			- Organic (PCBs, pesticides...)		
Slimes			Other - Specify:		
Other - Specify:			<b>Sources of Stream Impacts</b>		
			Bank Erosion		
			Point Source - Specify:		
<b>Physical</b>			Pasturing of Livestock		
Bank Erosion			Runoff: - Barnyard		
Channelization: - Upstream			- Construction		
- Downstream			- Cropland		
Hydraulic Scour / Channel Incision			- Urban		
Impoundment: - Upstream			Septic Systems		
- Downstream			Tile Drainage - Organic Soils		
Low Flow			- Mineral Soils		
Sedimentation	PH	PH	Springs	PL	PL
Sludge			Tributary(s)		
Thermal			Wetland	PH	U
Turbidity			Other - Specify:		
Other - Specify:					

Comments

Major beaver impacts upstream and downstream of station. ~~Moved station 10 m~~

Special Instructions for Laboratory

~~above Island Lake Rd. downstream had limited to no substrate or vegetation due to beaver impacts, silt, and wetland.~~

**For Lab Use Only**

Sample Sorter <i>Kyle Cole</i>	Taxonomist <i>Dimick Jeffrey</i>	Estimated Percent of Sample Sorted <i>27%</i>
Date Processed <i>6/13/18</i>	Specimens Saved <i>Subsample archived in ABL until Oct 2021</i>	

C3=42 E1=19  
 B1=35 D3=26