

Instructions: Bold fields must be completed.

Station Summary

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

Sample and Site Descriptors

Sample Collector (Last Name, First) JOSEPH CUNNINGHAM	Project Name MONTREAL RIVER WATERSHED TWA 2017
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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) 1 min	Estimated Area Sampled (m²) 2 m ²	Number of Samples in Composite 4 Sweeps	Replicate No. _____ of _____
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Reason For Sampling

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

Water Temp. (C) 9.8	D.O. (mg/l) 4.04	D.O. (%sat.) 35.6	pH (su) 6.4	Conductivity (umhos/cm) 59.1	Transparency (cm) >120
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Water Color <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" type="checkbox"/> Stained	Estimated Stream Velocity (m/s) <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)
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Measured Velocity circle units m/s or f/s	Average Stream Depth of reach (m) 0.25	Average Stream Width of reach (m) 2 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: 20 Overhanging Vegetation: _____
 Aquatic Macrophytes: _____ Leaf Snags: 40 Coarse Woody Debris: 40 Other (): _____

Embeddedness of Substrate at Sample Site (%) _____ **Canopy Cover at Sample Site (%)** 0%

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
Biological			Chemical		
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:			Sources of Stream Impacts		
			Bank Erosion		
			Point Source - Specify:		
Physical			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 ABC until Oct 2021</i>	

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

