

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

Station Summary						
Waterbody Name MONTREAL RIVER			Waterbody ID Code 2940300		Sample ID (YYYYMMDD-CY-FD) 20181101-26-02	
Sampling Location 80 m DS of Riverside Dr					Database Key 168906049	
SWIMS Station ID 10039078		SWIMS Station Name E. FK. MONTREAL RIVER - UPSTREAM OF RIVERSIDE DR. (SEC. 28)				
Latitude 46.35248	Longitude -90.11693	Lat/Long Determination Method (circle) SWIMS SWDV GPS			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) JON KLEIST				Project Name MONTREAL RIVER TWA 2017-2018		
Sampling Device						
<input checked="" type="checkbox"/> D-Frame Kick Net <input type="checkbox"/> Surber Sampler <input type="checkbox"/> Eckman <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 <input type="checkbox"/> Other <input type="checkbox"/> Shoreline Composite <input type="checkbox"/> Proportionally-Sampled Habitat <input type="checkbox"/> Littoral Zone <input type="checkbox"/> Profundal Zone <input type="checkbox"/> Wetland						
Total Sampling Time (min) 1.5	Estimated Area Sampled (m ²) 2	Number of Samples in Composite 3			Replicate No. <u>1</u> of <u>1</u>	
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 checked="" type="checkbox"/> Other: <u>TWA</u>						
Water Temp. (C) 3.3	D.O. (mg/l) 12.8	D.O. (% sat.) 96.0	pH (su) 7.0	Conductivity (umhos/cm) 53	Transparency (cm) >120	
Water Color <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" type="checkbox"/> Stained				Estimated Stream Velocity (m/s) <input type="checkbox"/> Slow (< 0.15 m/s) <input type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input checked="" type="checkbox"/> Fast (> 0.5 m/s)		
Measured Velocity circle units m/s or f/s		Average Stream Depth of reach (m) 0.5		Average Stream Width of reach (m) 9		
Composition of Substrate Sampled (Percent):						
Bedrock: _____		Boulders (basketball or larger): _____		Rubble (tennisball to basketball): <u>60</u>		Gravel (ladybug to tennisball): <u>30</u>
Sand: <u>10</u>		Clay: _____		Silt/Muck: _____		Overhanging Vegetation: _____
Aquatic Macrophytes: _____		Leaf Snags: _____		Coarse Woody Debris: _____		Other (_____): _____
Embeddedness of Substrate at Sample Site (%) <u>0</u>				Canopy Cover at Sample Site (%) <u>0</u>		

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	Watershed	Factors that may be influencing Water Resource Integrity	Local	Watershed
Biological			Chemical		
Algae: - Diatoms / Periphyton	PL	PL	Chlorine	N	N
- Filamentous Algae	N	N	Dissolved Oxygen		
- Planktonic Algae	N	N	Nutrients (P, N...)		
Iron Bacteria	N	PL	Toxics: - Inorganic (Metals)		
Macrophytes	PL	PL	- Organic (PCBs, pesticides...)		
Slimes	N	N	Other - Specify:		
Other - Specify:			Sources of Stream Impacts		
			Bank Erosion	N	PL
			Point Source - Specify:	N	N
Physical			Pasturing of Livestock		
Bank Erosion	N	PL	Runoff: - Barnyard		
Channelization: - Upstream	N	N	- Construction		
- Downstream	N	N	- Cropland		
Hydraulic Scour / Channel Incision	N	N	- Urban		
Impoundment: - Upstream	PL	PL	Septic Systems		
- Downstream	N	PL	Tile Drainage - Organic Soils		
Low Flow	N	N	- Mineral Soils		
Sedimentation			Springs	N	PL
Sludge			Tributary(s)	N	PL
Thermal			Wetland	N	PL
Turbidity			Other - Specify:		
Other - Specify:					

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter Logan Cutler	Taxonomist Dimrock, Jeffrey	Estimated Percent of Sample Sorted 13%
Date Processed 3/30/19	Specimens Saved 82 + 138 = 220 subsample archived in ABC Lab 1 Jun 2022	

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Paracappnia angulata</i>	L	04	22	Hitch 1974		
<i>Acroneuria</i>	L	"	2	Hils 1995	imm	N
<i>A. lycorias</i>	L	III	4	Hitch 1974		
<i>Paragnetina media</i>	L	1	1	Hils 1995		
<i>Isoperla</i>	L	"	2	"	imm	N
<i>I. signata</i>	L	XIII	13	Hils 1982		
<i>I. transmarina</i>	L	1	1	"		
<i>Oemopteryx glacialis</i>	L	-1	6	Hils 1995		
<i>Taeniopteryx burksi</i>	L	1	1	Foll Stew 1980		
<i>Acentrella</i>	L	1	1	Ribb 2016	dam	
<i>Ephemerella</i>	L	-1	6	"	imm	N
<i>E. invaria</i>	L	"	2	"		
<i>Eurylophella</i>	L	1	1	"		
<i>Epeorus vitreus</i>	L	III	4	"		
<i>Leucocrota</i>	L	-III	8	"		
<i>Macaferdium</i>	L	III	4	"	imm	N
<i>M. modestum</i>	L	IV	3	"		
<i>M. vicarium</i>	L	III	3	"		
<i>Paraleptophlebia</i>	L	VI	3	"	dam/imm	
<i>Cordulegaster</i>	L	"	2	Need et al 2002	imm	
<i>Gomphidae</i>	L	III	3	"	imm	N
<i>Stylogomphus albistylus</i>	L	1	1	"		
<i>Glossosoma</i>	L	1	1	Hils 1995	imm	N
<i>G. intermedium</i>	L	1	1	Wyn Mar 2000		
<i>Cnematopteryx</i>	L	01	25	Hils 1995		
<i>Ceratopteryx</i>	L	1	1	"	imm	N
<i>C. glossonae</i>	L	1	5	Schm Hils 1986		
<i>C. sparna</i>	L	1	5	"		
<i>C. walkeri</i>	L	1	1	"		
<i>Leucotrachia pectipes</i>	L	1	1	Hils 1995		
<i>Chimarra</i>	L	X-1	16	"	imm	N
<i>Ch. aterrima</i>	L	III	4	Hils 1982		
<i>Psychomyia flavida</i>	L	-1	6	Hils 1995		
<i>Neophylax</i>	L	1	1	"	imm	
<i>Optiosevus</i>	L	XII	12	Hils Schm 1992	imm	N
<i>O. fastidius</i>	L	III	4	"		
<i>O. trivittatus</i>	L, A	XI	11	"		
<i>Stenelmis</i>	L	1	5	"		N

