

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

Station Summary

Waterbody Name MONTREAL RIVER	Waterbody ID Code 2940300	Sample ID (YYYYMMDD-CY-FD) 2018101-26-01
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Sampling Location 300 m US TN RD 28	Database Key 168311242
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SWIMS Station ID 10032009	SWIMS Station Name MONTREAL RIVER - BELOW TOWN RD. 28
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Latitude 46.41649	Longitude -90.21968	Lat/Long Determination Method (circle) SWIMS SWDV <u>GPS</u>	Datum Used if using GPS <u>WGS84</u> or NAD83
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Basin (WMU) LAKE SUPERIOR	Watershed Name MONTREAL RIVER	County IRON
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Sample and Site Descriptors

Sample Collector (Last Name, First) JON KLEIST	Project Name NORTH DISTRICT NC STREAM STRATIFIED SITES 2018
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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) 1.5	Estimated Area Sampled (m²) 2	Number of Samples in Composite 4	Replicate No. 1 of 1
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Reason For Sampling

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

Water Temp. (C) 4.17	D.O. (mg/l) 13.1	D.O. (% sat.) 100.1	pH (su) 7.0	Conductivity (umhos/cm) 102	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 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)
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Measured Velocity 0.7 <small>circle units</small> m/s or f/s	Average Stream Depth of reach (m) 0.4	Average Stream Width of reach (m) 12
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Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 70 Gravel (ladybug to tennisball): 30
 Sand: _____ Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____
 Aquatic Macrophytes: _____ Leaf Snags: _____ Coarse Woody Debris: _____ Other (): _____

Embeddedness of Substrate at Sample Site (%) 0 **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	Watershed	Factors that may be influencing Water Resource Integrity	Local	Watershed
Biological			Chemical		
Algae: - Diatoms / Periphyton	PH	PH	Chlorine	N	N
- Filamentous Algae	N	N	Dissolved Oxygen	N	N
- Planktonic Algae	N	N	Nutrients (P, N...)	N	N
Iron Bacteria	N	PL	Toxics: - Inorganic (Metals)	N	N
Macrophytes	N	N	- Organic (PCBs, pesticides...)	N	N
Slimes	N	N	Other - Specify:		
Other - Specify:			Sources of Stream Impacts		
			Bank Erosion	N	PL
			Point Source - Specify:	N	N
Physical			Pasturing of Livestock	N	N
Bank Erosion	N	PL	Runoff: - Barnyard	N	N
Channelization: - Upstream	N	N	- Construction	N	N
- Downstream	N	N	- Cropland	N	N
Hydraulic Scour / Channel Incision	N	N	- Urban	N	PL
Impoundment: - Upstream	N	N	Septic Systems	N	N
- Downstream	PL	PL	Tile Drainage - Organic Soils	N	N
Low Flow	N	N	- Mineral Soils	N	N
Sedimentation	N	N	Springs	N	PL
Sludge	N	N	Tributary(s)	N	PL
Thermal	N	N	Wetland	N	PL
Turbidity	N	N	Other - Specify:		
Other - Specify:					

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter Jokanna Erickson	Taxonomist Dimitri, Jeffrey	Estimated Percent of Sample Sorted 13%
Date Processed 8/29/2019	Specimens Saved Subsample archived in HBL until Nov 2022	

D1 | C3 | Total: 146
 55 | 91

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Allocaenia</i>	L	1	1	Hils 1995		
<i>Paracania angulata</i>	L	8	30	Hils 1974		
<i>Acronema lycorias</i>	L	III	3	"		
<i>Isoperla signata</i>	L	-II	7	Hils 1982		
<i>Baetis tricaudatus</i>	L	1	1	Kub 2016		
<i>Acandrella turbida</i>	L	III	4	"		
<i>Acempenna pygmaea</i>	L	1	1	"		
<i>Ephemerella subvarra</i>	L	II	3	"		
<i>Epeorus vitreus</i>	L		1	"		
<i>Laccocrota</i>	L	-II	7	"		
Heptageniidae	L	-	5	"	imm	N
<i>Maccaffertium</i>	L	II	2	"	imm	Y
<i>M. vicarium</i>	L	"	2	"		
<i>Paraleptophlebia</i>	L	0-III	30	"	dam/imm	N
<i>P. mollis</i>	L	II	3	"		
<i>Ceratopsyche morosa</i>	L	III	3	Schm Hils 1986	imm	N
<i>C. m. bifida form</i>	L	II	1	"		
<i>C. m. morosa form</i>	L	1	1	"		
<i>C. sparna</i>	L	1	1	"		
<i>Neophylax</i>	L	1	1	Hils 1995	imm	
<i>Oligoneurus</i>	L	XIII	14	Hils Schum 1992	imm	
<i>O. fastidius</i>	L	III	3	"		
<i>Stenelmis</i>	L	1	1	"		
<i>Atherix variegata</i>	L	L	1	Hils 1995		
<i>Limnocalanus</i>	A	Bull	44	Thompson 2016		
<i>Laonereis fuscus</i>	A	1	1	"		
<i>Gynurus deflexus</i>	A	1	1	Burch 1989		
SPH Ag Chironomidae	L	1330				
<i>Conchapelopia ob270700</i>	L	1	1	Cran Epl 2013		
<i>Eukiefferella brehmi group</i>	L	1	1	Andr+3 2013		
<i>Thienemanniella xera</i>	L	1	1	Bolton 2012		
<i>Cladotanytarsus</i>	L	L	1	Epl et al 2013		
<i>Microtendipes pedellus group</i>	L	L	1	"		
<i>Polypedilum (Uresipedilum) aviceps</i>	L	X-III	18	Bolton 2012		
<i>P. (U.) flavum</i>	L	"	2	"		