

Instructions: Bold fields must be completed.

**Station Summary**

<b>Waterbody Name</b> UNNAMED TRIBUTARY TO POKEGAMA R.		<b>Waterbody ID Code</b> 28 44 400	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20171013-16-03
<b>Sampling Location</b> 20 m DS IRONDALE RD			<b>Database Key</b> 149840370
<b>SWIMS Station ID</b> 10049173		<b>SWIMS Station Name</b> UNNAMED TRIBUTARY TO POKEGAMA R. 3M US IRONDALE RD	
<b>Latitude</b> 46.60516	<b>Longitude</b> 92.18636	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV <u>GPS</u>	<b>Datum Used if using GPS</b> <u>WGS84</u> or NAD83
<b>Basin (WMU)</b> LAKE SUPERIOR		<b>Watershed Name</b> ST. LOUIS AND LOWER NEMADJI RIVER	<b>County</b> DOUGLAS

**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> CRAIG P ROESLER, CHANG VANG	<b>Project Name</b> NORTHERN DISTRICT 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

<b>Total Sampling Time (min)</b> 1.5	<b>Estimated Area Sampled (m<sup>2</sup>)</b> 1.5	<b>Number of Samples in Composite</b> 3	<b>Replicate No.</b> 1 <b>of</b> 1
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**Reason For Sampling**

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

<b>Water Temp. (C)</b> 10.0	<b>D.O. (mg/l)</b> 9.5	<b>D.O. (% sat.)</b> 86	<b>pH (su)</b> 7.4	<b>Conductivity (umhos/cm)</b> 114	<b>Transparency (cm)</b> 24
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<b>Water Color</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Stained	<b>Estimated Stream Velocity (m/s)</b> <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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<b>Measured Velocity</b> circle units m/s or f/s	<b>Average Stream Depth of reach (m)</b>	<b>Average Stream Width of reach (m)</b>
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): 10 Gravel (ladybug to tennisball): 90  
 Sand: \_\_\_\_\_ Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: \_\_\_\_\_ Leaf Snags: \_\_\_\_\_ Coarse Woody Debris: \_\_\_\_\_ Other (\_\_\_\_): \_\_\_\_\_

**Embeddedness of Substrate at Sample Site (%)** 10 **Canopy Cover at Sample Site (%)** 30

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

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter <i>David Haglauer</i>	Taxonomist <i>Jim Dimick, Jeffrey</i>	Estimated Percent of Sample Sorted 20%
Date Processed 12-15-17	Specimens Saved <i>Subsample archived in ABC until Apr 2021</i>	

C2 37  
 C1 82  
 E3 72  
 191

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Allorhynia</i>	L	88x	101	Hilsenhoff 1995		
<i>Paracappnia angulata</i>	L	1	1	Hilsenhoff 1974		
<i>Perlesidea</i>	L	1	1	Hilsenhoff 1995		
<i>Baetis brunneicollis</i>	L	1	1	Kluehstanz 2016		
<i>Acerpenna</i>	L	11	2	"	dam	N
<i>A. macdunnoughi</i>	L	x1	11	"		
<i>caenis</i>	L	1	1	"		
<i>Leptanthebia</i>	L	11	2	"	imm	N
<i>L. cupida</i>	L	88x	95	"		
<i>Glossosoma</i>	P	1	1	Wyg, Curr. 2008		
Hydropsychidae	L	1	1	Hilsenhoff 1995	imm	N
<i>Cheumatopsyche</i>	L	6-44	40	"		
<i>Hydropsyche betteni</i>	L	x1	11	Schm, Hils. 1986		
Limnophilidae	L	1	5	Hilsenhoff 1995	imm	
<i>Helichus striatus</i>	A	1	1	Hils. Schm. 1992		
<i>Optiosecurus fastiditus</i>	A	11	2	"		
<i>Wemerodromia</i>	L	111	4	Court, Merr. 2008		
<i>Simulium</i>	L	1	1	Adler et al 2004		
<i>Dicranota</i>	L	1	1	Hilsenhoff 1995		
<i>Coryanura</i>	P	1	1	Ferr. et al. 2008		
Tubificid Naididae w/o capilliform chaetae	A	11	2	<del>Braun et al 2011</del> Ersev et al 2008		
Enopbiellidae	A	1	1	<del>Klemm 1985</del> Davis et al	imm	
<i>Laemipea fuscus</i>	A	1	1	Burch 1982		
<i>Fossaria</i>	A	1	1	"		
Naidinae	A	1	1	Ersev, Gust. 2002		
<i>Concha pelopia</i>	L	1	1	Craw, Epler 2013		
<i>Diplocladius</i>	L	1	1	Anderson 2013		
<i>Limnephys</i>	L	1	1	"		
<i>Proameletrocnemus</i>	L	111	8	"		
<i>Tuctenia havana group</i>	L	1	1	Bode 1983		
<i>Orthocladus (Euaethocladus) rivicola</i>	L	1	1	Epler 2001		
<i>Paratanytarsus</i> sp A	L	11	2	Hilsenhoff unpubl		
<i>Phaenosectra flavipes</i>	L	1	1	Bolden 2012		
<i>Polypedilum (Uresipedilum) aviceps</i>	L	11	2	"		
<i>Zheptanytarsus</i>	L	1	1	Epler et al 2013		
<i>Tanytarsus</i>	L	111	8	"		