

Instructions: Bold fields must be completed.

**Station Summary**

<b>Waterbody Name</b> BULL GUS CREEK	<b>Waterbody ID Code</b> 2926700	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20171019-26-08
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<b>Sampling Location</b> Downstream of FR 703 x 60 m	<b>Database Key</b> 149418843
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<b>SWIMS Station ID</b> 10037096	<b>SWIMS Station Name</b> BULL GUS CREEK 100M DS OF FR 703
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<b>Latitude</b> 46.30317	<b>Longitude</b> -90.50584	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV GPS	<b>Datum Used if using GPS</b> WGS84 or NAD83
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<b>Basin (WMU)</b> LAKE SUPERIOR	<b>Watershed Name</b> TYLER FORKS	<b>County</b> IRON
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**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> JON KLEIST Cunningham, Joseph	<b>Project Name</b> NOR LONG-TERM TREND WADEABLE REFERENCE STREAMS
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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 min	<b>Estimated Area Sampled (m<sup>2</sup>)</b> 1 m <sup>2</sup>	<b>Number of Samples in Composite</b> 3-20 second Kicks	<b>Replicate No.</b> _____ of _____
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**Reason For Sampling**

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

<b>Water Temp. (C)</b> 8.4	<b>D.O. (mg/l)</b> 7.9	<b>D.O. (% sat.)</b> 67.1	<b>pH (su)</b> 6.4	<b>Conductivity (umhos/cm)</b> 51	<b>Transparency (cm)</b> 2120
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<b>Water Color</b> <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" 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 type="checkbox"/> Fast (> 0.5 m/s)
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<b>Measured Velocity</b> 0.3	circle units m/s or f/s	<b>Average Stream Depth of reach (m)</b> 0.3 m	<b>Average Stream Width of reach (m)</b> 2.5 m
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): 30% Gravel (ladybug to tennisball): 40%  
 Sand: 20% Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: \_\_\_\_\_ Leaf Snags: 10% Coarse Woody Debris: \_\_\_\_\_ Other (\_\_\_\_): \_\_\_\_\_  
 Embeddedness of Substrate at Sample Site (%) 20% Canopy Cover at Sample Site (%) 80%

**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			
				Point Source - Specify:			
				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>Logan Cutler</i>	Taxonomist <i>Dimick, Jeffrey</i>	Estimated Percent of Sample Sorted <i>C3 7%</i>
Date Processed <i>11/12/18</i>	Specimens Saved <i>subsample archived in ABC until Feb 2022</i>	

C3-261