

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

**Station Summary**

<b>Waterbody Name</b> EIGHTEENMILE CREEK	<b>Waterbody ID Code</b> 2895900	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20211007-04-04
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<b>Sampling Location</b>	<b>Database Key</b> 293547171
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<b>SWIMS Station ID</b> 043097	<b>SWIMS Station Name</b> EIGHTEEN MILE CREEK - 20 M UPSTREAM OLD HWY 63 - STATION #3
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<b>Latitude</b> 46.36021	<b>Longitude</b> -91.12518	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV <u>GPS</u>	<b>Datum Used if using GPS</b> <u>WGS84</u> or NAD83
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<b>Basin (WMU)</b> LAKE SUPERIOR	<b>Watershed Name</b> WHITE RIVER	<b>County</b> BAYFIELD
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**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> JOSEPH CUNNINGHAM	<b>Project Name</b> NOR LONG-TERM TREND WADEABLE REFERENCE STREAM
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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> 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> 13.8	<b>D.O. (mg/l)</b> 9.9	<b>D.O. (% sat.)</b> 98.8	<b>pH (su)</b>	<b>Conductivity (umhos/cm)</b> 120	<b>Transparency (cm)</b> >120
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<b>Water Color</b> <input checked="" type="checkbox"/> Clear <input 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> 0.4	<b>Average Stream Width of reach (m)</b> 8 m
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): 10 Rubble (tennisball to basketball): 60 Gravel (ladybug to tennisball): 20  
 Sand: 10 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 (%)** 40

**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		PH	U
				Point Source - Specify:			
				Pasturing of Livestock			
<b>Physical</b>				Runoff: - Barnyard			
Bank Erosion		PH	U	- Construction			
Channelization: - Upstream				- Cropland			
- Downstream				- Urban			
Hydraulic Scour / Channel Incision				Septic Systems			
Impoundment: - Upstream				Tile Drainage - Organic Soils			
- Downstream				- Mineral Soils			
Low Flow				Springs			
Sedimentation				Tributary(s)			
Sludge				Wetland			
Thermal				Other - Specify:			
Turbidity							
Other - Specify:							

Comments

Special Instructions for Laboratory

**For Lab Use Only**

Sample Sorter Reed, Kayla	Taxonomist Dimitri, Jeffrey	Estimated Percent of Sample Sorted (R) 15.6%   12.5%
Date Processed 10-19-22	Specimens Saved (R) 133	131 subsamples archived in ABL under Jan 2024

(R) C2q2:11 P4q4:12 A3q2:24 (R) A2q3:10 C3q3:22 DB  
 q4:16 q3:6 q1:18 q4:16 q2:21  
 q1:10 q2:0 q3 q2-29 q4  
 q3:19 q1:11 q4: q1:22 q1:11

Taxa	Life Stage	Organism Count			Taxonomic Reference	Condition	Unique Taxon
		Rep 1	Rep 2	Rep 3			
<i>Baetis tricaudatus</i>	L	1	0		Klob 2016		
<i>Ephemerella</i>	L	0	2		MCB 2019	imm	Y
<i>E. subvaria</i>	L	9	10		Klob 2016		
<i>Epeorus vitreus</i>	L	4	3		"		
<i>Heptagenia pulla</i>	L	4	2		"		
<i>Rhythrogena</i>	L	22	21		MCB 2019	dam/imm	N
<i>R. impersonata</i>	L	1	2		Klob 2016		
Leptophlebiidae	L	0	1		MCB 2019	dam	N
Neoleptophlebia	L	8	6		"	dam	
<i>Paracania angulata</i>	L	1	0		Hitch 1974		
<i>Acronetia lycarvas</i>	L	2	0		"		
<i>Isogenoides frondalis</i>	L	3	4		Hils Bill 1973		
<i>Isoperla transmarina</i>	L	5	3		Hils 1982		
<i>Pteronareys</i>	L	1	1		MCB 2019	imm	N
<i>P. pretetii</i>	L	1	1		Myers Kond 2017		
<i>Taeniopteryx</i>	L	5	4		MCB 2019	imm	
<i>Brachycentrus americanus</i>	L	1	0		Hils 1985		
<i>Glossopsoma</i>	L	15	24		MCB 2019	imm	N
<i>G. intermedium</i>	L	3	3		Wym Mar 2000		
<i>Ceratopsyche glossonae</i>	L	1	0		Schmitt Hils 1986		
<i>C. sparna</i>	L	0	1		"		
<i>Lepidostoma</i>	L	2	2		MCB 2019		
<i>Goera stylata</i>	L	2	1		Hils 1985		
<i>Rhyacophila</i>	L	1	2		MCB 2019	imm	N
<i>R. fuscata</i>	L	0	3		Rath Mar 2001		
<i>Neophylax</i>	L	2	1		MCB 2019		
Trichoptera	L	1	0		"	imm	N
<i>Optroselva</i>	L	4	5		"	imm	N
<i>O. fastidius</i>	A	0	1		Hils Schmitt 1992		
<i>O. trivittatus</i> R1 L1 A, Z R2 L2 A, I	L/A	3	3		"		
<i>Atherix variegata</i>	L	16	13		Hils 1985		
<i>Simulium tuberosum</i> species complex	L	0	2		Ader et al 2004		
<i>Antocha</i>	L	2	1		MCB 2019		
<i>Pisidium</i>	A	1	0		Thorp Bog 2016		
<i>Autodrilus plurisetus</i>	A	0	1		Kahn Brin 1998		
<del><i>Spiliza chloromida</i></del>	L	12	9	ND			
Orthocladinae	L	3	0		Ader et al 2013	imm	N
<i>Eukiefferella</i>	L	0	1		"	imm	Y
<i>E. claripennis</i> group	L	1	0		"		

