

Instructions: Bold fields must be completed.

Station Summary					
Waterbody Name PRE-EMPTION CREEK		Waterbody ID Code 2895200		Sample ID (YYYYMMDD-CY-FD) 20211007-04-03	
Sampling Location @ Camp 8 Road US				Database Key 293646391	
SWIMS Station ID 10013195		SWIMS Station Name PRE-EMPTION CREEK-40 METERS UPSTREAM OF CAMP 8 ROAD- STATION #1			
Latitude 46.32799	Longitude -91.08739	Lat/Long Determination Method (circle) SWIMS SWDV <u>GPS</u>		Datum Used if using GPS <u>WGS84</u> or NAD83	
Basin (WMU) LAKE SUPERIOR		Watershed Name WHITE RIVER		County BAYFIELD	
Sample and Site Descriptors					
Sample Collector (Last Name, First) JOSEPH CUNNINGHAM			Project Name NOR LONG-TERM TREND WADEABLE REFERENCE STREAM		
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 min	Estimated Area Sampled (m²) 1 m ²	Number of Samples in Composite 3-20 second Kicks		Replicate No. 1 of 1	
Reason For Sampling					
<input checked="" 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: _____	
Water Temp. (C) 16.1	D.O. (mg/l) 9.2	D.O. (% sat.) 96.6	pH (su)	Conductivity (umhos/cm) 145	Transparency (cm) >120
Water Color			Estimated Stream Velocity (m/s)		
<input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" type="checkbox"/> Stained			<input type="checkbox"/> Slow (< 0.15 m/s) <input checked="" type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input type="checkbox"/> Fast (> 0.5 m/s)		
Measured Velocity circle units m/s or f/s		Average Stream Depth of reach (m) 0.2 m		Average Stream Width of reach (m) 3 m	
Composition of Substrate Sampled (Percent):					
Bedrock: _____		Boulders (basketball or larger): _____		Rubble (tennisball to basketball): 20	
Sand: 10		Clay: _____		Gravel (ladybug to tennisball): 60	
Aquatic Macrophytes: _____		Leaf Snags: 10		Coarse Woody Debris: _____	
Overhanging Vegetation: _____		Other (____): _____			
Embeddedness of Substrate at Sample Site (%) 10			Canopy Cover at Sample Site (%) 70		

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
Biological				Chemical			
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:				Sources of Stream Impacts			
				Bank Erosion			
				Point Source - Specify:			
				Pasturing of Livestock			
Physical				Runoff: - Barnyard			
Bank Erosion				- 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 Dimick, Jeffrey	Estimated Percent of Sample Sorted (R1) 6.25% / (R2) 4.69%
Date Processed 10-17-22 (R1)	Specimens Saved (R1) 144 / (R2) 159 subsamples	archived in 43L until Jan 2026

R1
 M1 q3: 32
 q1: 27
 q4: 47
 q2: 38
 q3: 47
 q4: 47

R2
 B1 q3: 29
 q1: 65
 q2: 65
 q4: 65
 q1: 65
 q2: 65

Taxa	Life Stage	Organism Count			Taxonomic Reference	Condition	Unique Taxon
		Rep 1	Rep 2	Rep 3			
<i>Aesopina macdunnoughi</i>	L	0	1		Klub 2016		
<i>Ephemerella subvaria</i>	L	14	4		"		
<i>Leucocuta</i>	L	1	1		MCB 2019		
<i>Maccaffertium vicarium</i>	L	2	3		Klub 2016		
<i>Neoleptophlebia</i>	L	16	22		MCB 2019	dam/imm	N
<i>N. mollis</i>	L	6	0		Klub 2016		
<i>Boyeria vindex</i>	L	2	0		McC Tennessen 2019		
<i>Cordulegaster</i>	L	1	0		MCB 2019	imm	
<i>Paracapnia angulata</i>	L	2	2		Hitch 1974		
<i>Acronura</i>	L	0	1		MCB 2019	imm	
<i>Isoperla</i>	L	1	0		"	imm	N
<i>I. transmarina</i>	L	1	2		Hils 1982		
<i>Taeniopteryx</i>	L	1	1		MCB 2019	imm	
<i>Glossosoma</i>	L	2	2		"	imm	
<i>Protophila</i>	L	2	0		"		
<i>Heliconia borealis</i>	L	1	0		Hils 1995		
<i>Ceratopsyche</i>	L	1	0		MCB 2008	imm	N
<i>C. glossanae</i>	L	3	5		Schm Hils 1986		
<i>C. sparna</i>	L	7	8		"		
<i>Cheumatopsyche</i>	L	10	10		MCB 2019		
<i>Hydropsyche betteni</i>	L	0	1		Schm Hils 1986		
<i>Lepidostoma</i>	L	4	3		MCB 2019		
<i>Limnephilidae</i>	L	0	1		"	imm	N
<i>Pycnopsyche</i>	L	0	1		"		
<i>chimarra</i>	L	0	2		"	imm	N
<i>C. atermima</i>	L	2	7		Hils 1982		
<i>Dolophilodes distinctus</i>	L	0	2		Hils 1995		
<i>Zhyalophila vibax</i>	L	1	0		Pratt Morse 2001		
<i>Neophylax</i>	L	0	2		MCB 2019	imm	
<i>Nigronia semicomis</i>	L	3	4		Neunzig 1966		
<i>Stalis</i>	L	1	0		MCB 2019		
<i>optioservus</i>	L	1	2		"	imm	
<i>stenelmis</i>	L	0	1		"		N
<i>S. crenata</i>	A	1	2		Hils Schm 1992		
<i>Hemerodromia</i>	L	1	0		MCB 2019		
<i>chrysops</i>	L	0	1		"		
<i>Antocha</i>	L	1	0		"		
<i>Pseudolimnophila</i>	L	3	1		"		
<i>Tipula</i>	L	1	0		"		
<i>Lumbriculus</i>	A	0	1		Thorp Iog 2016		

