

Instructions: Bold fields must be completed.

Station Summary

| | | | |
|---|------------------------------|--|---|
| Waterbody Name PRE-EMPTION CREEK | | Waterbody ID Code 2895200 | Sample ID (YYYYMMDD-CY-FD) 20190906-04-01 |
| Sampling Location VS Camp Eight Rd. | | | Database Key 204991581 |
| SWIMS Station ID 10013195 | | SWIMS Station Name PRE-EMPTION CREEK-40 METERS UPSTREAM OF CAMP 8 ROAD- STATION #1 | |
| Latitude 46.32787 | Longitude 91.08713 | 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) CRAIG ROESLER | Project Name NOR LONG-TERM TREND WADEABLE REFERENCE STREAM |
|---|--|

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) 2 | Estimated Area Sampled (m²) 1.5 | Number of Samples in Composite 3 | Replicate No. 1 of 1 |
|---------------------------------------|--|--|------------------------------------|

Reason For Sampling

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

| | | | | | |
|--------------------------------|---------------------------|------------------------------|-----------------------|---------------------------------------|----------------------------------|
| Water Temp. (C) 14.0 | D.O. (mg/l) 9.9 | D.O. (% sat.) 99.8 | pH (su) 7.8 | Conductivity (umhos/cm) 130 | Transparency (cm) >120 |
|--------------------------------|---------------------------|------------------------------|-----------------------|---------------------------------------|----------------------------------|

| | |
|--|--|
| Water Color <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input 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) |
|--|--|

| | | | |
|---------------------------------|-----------------------------------|---|---|
| Measured Velocity 0.6 | circle units <u>m/s</u> or f/s | Average Stream Depth of reach (m) 0.2 | Average Stream Width of reach (m) 2.5 |
|---------------------------------|-----------------------------------|---|---|

Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 50 Gravel (ladybug to tennisball): 40
 Sand: 10 Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____
 Aquatic Macrophytes: _____ Leaf Snags: _____ Coarse Woody Debris: _____ Other (____): _____

Embeddedness of Substrate at Sample Site (%) 20 **Canopy Cover at Sample Site (%)** 100

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

Comments

Special Instructions for Laboratory

For Lab Use Only

| | | |
|-------------------------------|---|---|
| Sample Sorter Logan Cutler | Taxonomist Dimick, Jeffrey | Estimated Percent of Sample Sorted 10% |
| Date Processed 10/13/2020 | Specimens Saved 130 subsample archived in ABL until Nov 2023 | |

45 31 54
 B2Q3,4 D1Q2,4 B2Q1,2

| Taxa | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|----------------------------------|------------|-------------|-------|---------------------|-----------|--------------|
| Ephemerella | L | xiiii | 14 | MerrGummB 2019 | imm | N |
| E. subvarra | L | x1 | 11 | Klub 2016 | | |
| Heptageniidae | L | 1 | 1 | MerrGummB 2019 | dam | N |
| Leuctra | L | 1 | 5 | " | | |
| Maccaffertium vicarium | L | iii | 3 | Klub 2016 | | |
| Paraleptophlebia | L | x-ii | 17 | " | | |
| Cordulegaster | L | 1 | 1 | MerrGummB 2019 | imm | |
| Paracania | L | ii | 2 | " | imm | |
| Isogenoides | L | ii | 2 | " | imm | |
| Isoperla | L | 1 | 1 | " | imm | |
| Glossosoma | L | -ii | 7 | " | imm | |
| G. intermedium | L | iii | 1 | Wym Mar 2000 | | |
| Proteptila | L | 1 | 1 | MerrGummB 2019 | | |
| Hydropsychidae | L | HTT | 5 | " | imm | |
| Ceratopsyche slossonae | L | 1 | 1 | Schmitts 1986 | | |
| C. slossonae | L | -1 | 6 | " | | |
| Hydropsyche | L | 1 | 1 | Hils 1995 | imm | |
| Cheumatopsyche | L | 1 | 1 | MerrGummB 2019 | | |
| Lepidostoma | L | xr | 15 | " | | |
| Oecetis | L | ii | 2 | " | imm | |
| Chimarra | L | iii | 3 | " | imm | N |
| C. aterrima | L | iii | 3 | Hils 1982 | | |
| Lynx diversa | L | 1 | 1 | Hils 1995 | | |
| Nesozia serricornis | L | iii | 3 | Nevzig 1966 | | |
| Optioservus | L | 1 | 1 | MerrGummB 2019 | imm | N |
| O. fastiditus | L | 1 | 1 | Hils Schm 1992 | | |
| Stenelmis | L | 1 | 1 | MerrGummB 2019 | | N |
| S. crenata | A | 1 | 1 | Hils Schm 1992 | | |
| Tipula | L | 1 | 1 | MerrGummB 2019 | | |
| Sphaeriidae = Pisidiidae | A | 1 | 1 | Thorp Bog 2016 | imm | |
| Spiliza chironomidae | L | x+iii | | | | |
| Parametropneumus | L | ii | 2 | And et al 2013 | | |
| Tretania bavaria group | L | HT | 5 | Bode 1983 | | |
| Neostempellina reissi | L | 1 | 1 | And et al 2013 | | |
| Conchapelopia 08270700 | L | 1 | 1 | " | | |
| Paratanytarsus longistilus | L | 1 | 1 | " | | |
| Polypedium (Uresipedium) aviceps | L | 1 | 1 | Bolton 2012 | | |

