

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

| Station Summary | | | |
|----------------------------------|------------------------|---|--|
| Waterbody Name SPIDER CREEK | | Waterbody ID Code 2918700 | Sample ID (YYYYMMDD-CY-FD) 20180926-02-03 |
| Sampling Location @ CTH GG US | | Database Key 168311258 | |
| SWIMS Station ID 10051355 | | SWIMS Station Name SPIDER CREEK 10M US CTH GG | |
| Latitude 46.23519 | Longitude -90.83359 | Lat/Long Determination Method (circle) SWIMS SWDV GPS | Datum Used if using GPS WGS84 or NAD83 |
| Basin (WMU) LAKE SUPERIOR | | Watershed Name MARENGO RIVER | County ASHLAND |

| Sample and Site Descriptors | |
|--|--|
| Sample Collector (Last Name, First) CRAIG ROSENBERG JON J KLEIST / JOSEPH | Project Name NORTH DISTRICT NC STREAM STRATIFIED SITES 2018 |

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 (m ²) 1.5 | Number of Samples in Composite 3 | Replicate No. <u>1</u> of <u>1</u> |
|--------------------------------|---|-------------------------------------|------------------------------------|

Reason For Sampling

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

| | | | | | |
|-------------------------|--------------------|-----------------------|----------------|-------------------------------|-------------------------|
| Water Temp. (C) 12.1 | D.O. (mg/l) 5.6 | D.O. (% sat.) 53.0 | pH (su) 5.3 | Conductivity (umhos/cm) 28 | Transparency (cm) 80 |
|-------------------------|--------------------|-----------------------|----------------|-------------------------------|-------------------------|

Water Color

Clear
 Turbid
 Stained

Estimated Stream Velocity (m/s)

Slow (< 0.15 m/s)
 Moderate (0.15 m/s - 0.5 m/s)
 Fast (> 0.5 m/s)

| | | |
|---|--|--|
| Measured Velocity circle units m/s or f/s | Average Stream Depth of reach (m) 0.5 | Average Stream Width of reach (m) 5 |
|---|--|--|

Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): _____ Gravel (ladybug to tennisball): 30
 Sand: _____ Clay: _____ Silt/Muck: _____ Overhanging Vegetation: 30
 Aquatic Macrophytes: 40 Leaf Snags: _____ Coarse Woody Debris: _____ Other (_____): _____
 Embeddedness of Substrate at Sample Site (%) 60 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 | Watershed | Factors that may be influencing Water Resource Integrity | Local | Watershed |
|--|-------|-----------|--|-------|-----------|
| Biological | | | Chemical | | |
| Algae: - Diatoms / Periphyton | N | N | Chlorine | N | N |
| - Filamentous Algae | N | N | Dissolved Oxygen | N | N |
| - Planktonic Algae | N | N | Nutrients (P, N...) | N | N |
| Iron Bacteria | N | N | Toxics: - Inorganic (Metals) | N | N |
| Macrophytes | PL | PL | - Organic (PCBs, pesticides...) | N | N |
| Slimes | N | N | Other - Specify: | | |
| Other - Specify: | | | Sources of Stream Impacts | | |
| | | | Bank Erosion | N | N |
| | | | Point Source - Specify: | N | N |
| Physical | | | Pasturing of Livestock | N | N |
| Bank Erosion | N | N | Runoff: - Barnyard | N | N |
| Channelization: - Upstream | N | N | - Construction | N | N |
| - Downstream | N | N | - Cropland | N | N |
| Hydraulic Scour / Channel Incision | N | N | - Urban | N | N |
| Impoundment: - Upstream | PH | PH | Septic Systems | N | N |
| - Downstream | PH | PH | Tile Drainage - Organic Soils | N | N |
| Low Flow | N | N | - Mineral Soils | N | N |
| Sedimentation | PL | PL | Springs | N | U |
| Sludge | N | N | Tributary(s) | N | N |
| Thermal | N | N | Wetland | PL | PL |
| Turbidity | N | N | Other - Specify: <i>Beaver</i> | PH | PH |
| Other - Specify: | | | | | |

Comments *Beaver impoundment @ site - New impoundment after fish survey. site is flooded - @ Vegetation Sweeps to sample*

Special Instructions for Laboratory

↓ 1 Kick in gravel mid channel

| For Lab Use Only | | |
|-----------------------------------|---|---|
| Sample Sorter <i>Kayla Wilcox</i> | Taxonomist <i>Dimick Jeffrey</i> | Estimated Percent of Sample Sorted <i>27%</i> |
| Date Processed <i>8/27/19</i> | Specimens Saved <i>Subsample archived in ABL until Nov 2022</i> | |

*C1=29 C2=28
 B1=35
 C3=35*

| Taxa | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|---|------------|-------------|-------|---------------------|------------|--------------|
| <i>Leptophlebia</i> | L | -1 | 6 | Klich 2016 | dam/imm | |
| <i>Oxyethira</i> | L | ii | 2 | Hils 1995 | | |
| <i>Platycentropus</i> | L | i | 1 | " | | |
| <i>Ptilostomis</i> | L | -1 | 6 | " | | |
| <i>Dubioaphia quadrinata</i> | A | i | 1 | Hils Schum 1992 | | |
| <i>Optiosecurus</i> | L | -iii | 8 | " | imm | N |
| <i>O. fastiditrus</i> | L | i | 1 | " | | |
| <i>Stenelmis</i> | L | ii | 2 | " | | |
| <i>Nemerodromia</i> | L | ii | 2 | Court Merz 2008 | | |
| <i>Oecidodea racovitzae racovitzae</i> | L | 8-ii | 37 | Will 1972 | | |
| Cyclopiidae | A | i | 1 | Thorp Reg 2016 | | |
| Naididae | A | ii | 2 | Braunfeld 1991 | | |
| Tubificonidae (without hairs) | A | i | 1 | Klemm 1985 | | |
| <i>Lumbriculus</i> | A | x-1 | 16 | Thorp Reg 2016 | | |
| <i>Glossiphonia complanata</i> | A | i | 1 | Klemm 1985 | | |
| <i>Melobdella stagnalis</i> species complex | A | i | 1 | Saglam et al 2010 | | |
| Eprobactellidae | A | i | 1 | Klemm 1985 | dam | |
| <i>Pisidium</i> | A | iii | 3 | Mackie 2007 | | |
| Spit Az chironomidae | L | TJJ D | | | | |
| <i>Ablabesmyia</i> (<i>Ablabesmyia</i>) | L | i | 1 | Cran Epl 2013 | | |
| <i>Conchapelopia</i> 08270700 | L | ii | 3 | " | | |
| <i>Metretelonia</i> | L | i | 1 | " | | |
| <i>Procladius</i> (<i>Holotanytus</i>) | L | iii | 3 | " | | |
| <i>Thienemannimyia</i> group | L | iiii | 4 | " | | |
| <i>Orthocladius</i> 08300800 | L | i | 1 | Cranston 2013 | mt med | N |
| <i>Cricotopus</i> (<i>Cricotopus</i>) <i>bicinctus</i> group | L | i | 1 | Andt 3 2013 | | |
| Limnephys | L | i | 1 | " | | |
| <i>Thienemannella</i> | L | i | 1 | " | dam | |
| <i>Chironomus</i> 08330000 | L | i | 5 | Cranston 2013 | mt med/imm | N |
| <i>Chironomus</i> | L | ii | 2 | Epl et al 2013 | | |
| <i>Diapentia</i> | L | i | 1 | " | | |
| <i>Mecropsectra</i> | L | -iiii | 9 | " | | |
| <i>Mecropsectra pediculus</i> group | L | iii | 3 | " | | |
| <i>Phenosectra flavipes</i> | L | ii | 2 | Balton 2012 | | |
| <i>Polypetillum</i> (<i>Polypetillum</i>) <i>fallax</i> group | L | ii | 2 | " | | |
| <i>P.(P.) illinoense</i> group | L | iii | 4 | " | | |
| <i>Rhytanytarsus</i> | L | i | 5 | Epl et al 2013 | | |

