

Instructions: Bold fields must be completed.

Station Summary

| | | |
|-------------------------------------|------------------------------------|---|
| Waterbody Name PINE RIVER | Waterbody ID Code 247800 | Sample ID (YYYYMMDD-CY-FD) 20181026-70-05 |
| Sampling Location | | Database Key 168915319 |

| | |
|-----------------------------------|---|
| SWIMS Station ID 703063 | SWIMS Station Name PINE RIVER AT 28TH COURT |
|-----------------------------------|---|

| | | | |
|-----------------------------|-------------------------------|---|--|
| Latitude 44.14120 | Longitude -89.05877 | Lat/Long Determination Method (circle) SWIMS (SWDV) GPS | Datum Used if using GPS WGS84 or NAD83 |
|-----------------------------|-------------------------------|---|--|

| | | |
|----------------------------------|---|---------------------------|
| Basin (WMU) WOLF RIVER | Watershed Name PINE AND WILLOW RIVERS | County WAUSHARA |
|----------------------------------|---|---------------------------|

Sample and Site Descriptors

| | |
|---|---|
| Sample Collector (Last Name, First) DAVID BOLHA | Project Name PINE RIVER 319 PROJECT-FUNDED TWA 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) 3 | Estimated Area Sampled (m²) 2.0 | Number of Samples in Composite 1 | Replicate No. 1 of 1 |
|---------------------------------------|--|--|------------------------------------|

Reason For Sampling

Least Impacted Reference
 Baseline
 Impact / Treatment Site
 Control Site
 Trend
 Other: Targeted Watershed Assessment

| | | | | | |
|-------------------------------|----------------------------|------------------------------|-----------------------|---|---------------------------------|
| Water Temp. (C) 8.3 | D.O. (mg/l) 11.0 | D.O. (% sat.) 95.8 | pH (su) 7.9 | Conductivity (umhos/cm) 340.8 | 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 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) 0.6 | Average Stream Width of reach (m) 12 |
|--|---|--|

Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 80 Gravel (ladybug to tennisball): _____
 Sand: 20 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 (%)** 0

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 | 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 | N | N | - 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 | PL |
| Hydraulic Scour / Channel Incision | N | N | - Urban | N | N |
| Impoundment: - Upstream | PL | PH | Septic Systems | N | N |
| - Downstream | N | PH | Tile Drainage - Organic Soils | N | PL |
| Low Flow | N | N | - Mineral Soils | N | PL |
| Sedimentation | PH | PH | Springs | N | PL |
| Sludge | N | N | Tributary(s) | PL | PL |
| Thermal | N | N | Wetland | N | PL |
| Turbidity | N | N | Other - Specify: | | |
| Other - Specify: | | | | | |

Comments

Special Instructions for Laboratory

For Lab Use Only

| | | |
|--------------------------------------|--|--|
| Sample Sorter <i>Sam Lamarque</i> | Taxonomist <i>Dimick Jeffrey</i> | Estimated Percent of Sample Sorted <i>60%</i> |
| Date Processed <i>3/12/19</i> | Specimens Saved <i>subsample archived in ABL int'l May 2022</i> | |

B2 E3 C3 A2 A1 E2 C2 B1 D2
 17 12 18 13 11 28 9 13 14

135 total species

| Taxa | Life Stage | Benthic Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|---|------------|---------------|-------|---------------------|-----------|--------------|
| <i>Paragnetina media</i> | L | I | 1 | Hils 1995 | | |
| <i>Isoperla</i> | L | I | 1 | " | imm | |
| <i>Taeniopteryx</i> | L | IIII | 4 | " | imm | |
| <i>Baetis flavistriga</i> species complex | L | I | 1 | Klob 2016 | | |
| <i>Baetisca laurentina</i> | L | II | 2 | " | | |
| <i>Baetisca</i> | L | I | 1 | " | imm | N |
| <i>Stenocran inter punctatum</i> | L | III | 3 | " | | |
| <i>Maccaffertium</i> | L | III-III | 38 | " | imm | Y |
| <i>M. mediopunctatum</i> | L | - | 5 | " | | |
| <i>M. vicarium</i> | L | -IIII | 9 | " | | |
| Heptageniidae | L | II | 2 | " | dam | N |
| <i>Leptophlebia</i> | L | II | 2 | " | | |
| <i>Brachycentrus numerosus</i> | L | III | 3 | Hils 1995 | | |
| <i>Cheumatopsyche</i> | L | XIII | 13 | Hils 1995 | | |
| <i>Ceratopsyche bronca</i> | L | III | 3 | Schm Hils Kibb | | |
| <i>C. slossonae</i> | L | I | 1 | " | | |
| <i>C. spuma</i> | L | II | 2 | " | | |
| <i>Leucotrichia pictipes</i> | L | I | 1 | Hils 1995 | | |
| Limnephilidae | L | I | 1 | " | imm | N |
| <i>Pycnopsyche</i> | L | I | 1 | " | | |
| <i>Psychomyia flavida</i> | L | I | 1 | " | | |
| <i>Abiraphia</i> | L | I | 1 | Hils Schm 1992 | | |
| <i>Optioservus fastiditus</i> | L | I | 1 | " | | |
| <i>Liodessus affinis</i> | A | I | 1 | Hils 1994 | | |
| <i>Proleptia</i> | L | I | 1 | Hils 1995 | | |
| <i>Hemerodromia</i> | L | - | 5 | Court Merr 2008 | | |
| <i>Simulium</i> | L | II | 2 | Adler et al 2004 | imm | N |
| <i>S. venustum</i> species complex | L | I | 1 | " | | |
| <i>Simulium</i> | P | I | 1 | " | | N |
| <i>Chrysops</i> | L | I | 1 | Hils 1995 | | |
| <i>Antocha</i> | L | I | 1 | " | | |
| | | | | | | |
| <i>Gammarus pseudolimnaeus</i> | A | IIII | 4 | Hils 1972 | | |
| <i>Hyalella azteca</i> | A | I | 1 | Savcek et al 2015 | | |
| Mermithidae | A | L | 1 | Thorp Res 2016 | imm | |
| Tubificinae (without hairs) | A | I | 1 | Klemm 1985 | | |
| Cybeleidae | A | I | 1 | Thorp Res 2016 | | |
| <i>Pisidium</i> | A | I | 1 | Burch 1972 | | |

