

Instructions: Bold fields must be completed.

**Station Summary**

|                                |                              |                                              |
|--------------------------------|------------------------------|----------------------------------------------|
| Waterbody Name<br>KRAUSE CREEK | Waterbody ID Code<br>2929000 | Sample ID (YYYYMMDD-CY-FD)<br>20171003-02-04 |
| Sampling Location<br>@ STH 13  |                              | Database Key<br>149272318                    |

|                              |                                                     |                                                                 |                                                  |
|------------------------------|-----------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------|
| SWIMS Station ID<br>10048869 | SWIMS Station Name<br>KRAUSE CREEK 15M US OF STH 13 |                                                                 |                                                  |
| Latitude<br>46.36439         | Longitude<br>-90.68080                              | Lat/Long Determination Method (circle)<br>SWIMS SWDV <u>GPS</u> | Datum Used if using GPS<br><u>WGS84</u> or NAD83 |
| Basin (WMU)<br>LAKE SUPERIOR |                                                     | Watershed Name<br>UPPER BAD RIVER                               | County<br>ASHLAND                                |

**Sample and Site Descriptors**

|                                                          |                                                                |
|----------------------------------------------------------|----------------------------------------------------------------|
| Sample Collector (Last Name, First)<br>JOSEPH CUNNINGHAM | Project Name<br>NORTH DISTRICT NC STREAM STRATIFIED SITES 2017 |
|----------------------------------------------------------|----------------------------------------------------------------|

**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)<br>1 min | Estimated Area Sampled (m <sup>2</sup> )<br>1 m <sup>2</sup> | Number of Samples in Composite<br>3-20 second Kicks | Replicate No. _____ of _____ |
|------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|------------------------------|

**Reason For Sampling**

|                                                   |                                   |                                                             |
|---------------------------------------------------|-----------------------------------|-------------------------------------------------------------|
| <input 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 type="checkbox"/> Other: <u>Nat. Comm stratified</u> |

|                         |                    |                      |                |                               |                           |
|-------------------------|--------------------|----------------------|----------------|-------------------------------|---------------------------|
| Water Temp. (C)<br>14.8 | D.O. (mg/l)<br>9.5 | D.O. (%sat.)<br>94.1 | pH (su)<br>7.4 | Conductivity (umhos/cm)<br>40 | Transparency (cm)<br>>120 |
|-------------------------|--------------------|----------------------|----------------|-------------------------------|---------------------------|

|                                                                                                                           |                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water Color<br><input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained | Estimated Stream Velocity (m/s)<br><input type="checkbox"/> Slow (< 0.15 m/s) <input type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input type="checkbox"/> Fast (> 0.5 m/s) |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                       |                                            |                                            |
|-------------------------------------------------------|--------------------------------------------|--------------------------------------------|
| Measured Velocity<br>0.5 circle units<br>m/s or (f/s) | Average Stream Depth of reach (m)<br>0.4 m | Average Stream Width of reach (m)<br>2.5 m |
|-------------------------------------------------------|--------------------------------------------|--------------------------------------------|

**Composition of Substrate Sampled (Percent):**

|                            |                                        |                                              |                                           |
|----------------------------|----------------------------------------|----------------------------------------------|-------------------------------------------|
| Bedrock: _____             | Boulders (basketball or larger): _____ | Rubble (tennisball to basketball): <u>30</u> | Gravel (ladybug to tennisball): <u>50</u> |
| Sand: <u>20</u>            | Clay: _____                            | Silt/Muck: _____                             | Overhanging Vegetation: _____             |
| Aquatic Macrophytes: _____ | Leaf Snags: _____                      | Coarse Woody Debris: _____                   | Other (____): _____                       |

|                                                       |                                            |
|-------------------------------------------------------|--------------------------------------------|
| Embeddedness of Substrate at Sample Site (%) <u>0</u> | Canopy Cover at Sample Site (%) <u>70%</u> |
|-------------------------------------------------------|--------------------------------------------|

**Stream and Watershed Descriptors**

N = Not a problem  
U = Uncertain

PL = Present, Low Impact  
PH = Present, High Impact

| Factors that may be influencing<br>Water Resource Integrity |  | Local | Water-<br>shed | Factors that may be influencing<br>Water Resource Integrity |  | Local | Water-<br>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                                                |  |       |                |
|                                                             |  |       |                | Point Source - Specify:                                     |  |       |                |
|                                                             |  |       |                | Pasturing of Livestock                                      |  |       |                |
| Bank Erosion                                                |  | PL    | PL             | 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                                                     |  | U     | U              |
| Sludge                                                      |  |       |                | Tributary(s)                                                |  |       |                |
| Thermal                                                     |  |       |                | Wetland                                                     |  | U     | U              |
| Turbidity                                                   |  |       |                | Other - Specify:                                            |  |       |                |
| Other - Specify:                                            |  |       |                |                                                             |  |       |                |

Comments

Special Instructions for Laboratory

**For Lab Use Only**

|                                        |                                                                    |                                                  |
|----------------------------------------|--------------------------------------------------------------------|--------------------------------------------------|
| Sample Sorter<br><i>Murphy Steiner</i> | Taxonomist<br><i>Dimick, Jeffrey</i>                               | Estimated Percent of Sample Sorted<br><i>20%</i> |
| Date Processed<br><i>09/18/18</i>      | Specimens Saved<br><i>Subsample archived in dBL until Dec 2021</i> |                                                  |

C2 ~~40~~ 40 E3  
E2 ~~55~~ 55 B2  
B1 92 C1

Wisconsin Department of Natural Resources

ABL SampleNum: 20171003-02-04

Taxonomist: Dimick, Jeffrey

Waterbody: Krause Creek  
SWIMS Database Key: 149272318

Page 1 of 2

| Taxa                                     | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|------------------------------------------|------------|-------------|-------|---------------------|-----------|--------------|
| <i>Allocapnia</i>                        | L          | 11          | 2     | Hils 1995           |           |              |
| <i>Paracapnia angulata</i>               | L          | 8           | 35    | Hitch 1974          |           |              |
| <i>Isoperla</i>                          | L          | 1           | 1     | Hils 1995           | imm       |              |
| <i>Taeniopteryx</i>                      | L          | 1           | 1     | "                   | imm       |              |
| <i>Baetis dricoides</i>                  | L          | 11          | 2     | Kich 2016           |           |              |
| <i>Ephemerella subvaria</i>              | L          | 118         | 4     | "                   |           |              |
| <i>Eurylophella</i>                      | L          | 1           | 1     | "                   | imm       |              |
| <i>Epeorus vitreus</i>                   | L          | x-11        | 17    | "                   |           |              |
| <i>Leucopacta</i>                        | L          | x11         | 12    | "                   |           |              |
| <i>Maccaffertium</i>                     | L          | "           | 2     | "                   | imm       | N            |
| <i>M. vicarium</i>                       | L          | 1           | 1     | "                   |           |              |
| <i>Leptophlebia</i>                      | L          | 11          | 2     | "                   | dam       | Y            |
| <i>Paraleptophlebia</i>                  | L          | x1          | 15    | "                   | dam/imm   | N            |
| <i>P. mollis</i>                         | L          | 11          | 2     | "                   |           |              |
| <i>Conulegaster</i>                      | L          | 1           | 1     | Need et al 2000     | imm       |              |
| <i>Glossosoma</i>                        | L          | 8           | 30    | Hils 1995           | imm       | N            |
| <i>G. intermedium</i>                    | L          | -111        | 9     | Wym Mar 2000        |           |              |
| <i>Hydropsyche betteni</i>               | L          | 1           | 1     | Schm Hils 1986      |           |              |
| <i>Ceratopsyche alhedra</i>              | L          | 1           | 1     | "                   |           |              |
| <i>C. sparsa</i>                         | L          | 1           | 1     | "                   |           |              |
| <i>C. glossinae</i>                      | L          | x11         | 12    | "                   |           |              |
| <i>Lepidostoma</i>                       | L          | -1          | 6     | Hils 1995           |           |              |
| <i>Limnephilidae</i>                     | L          | 11          | 2     | "                   | imm       |              |
| <i>Dolophiletes distinctus</i>           | L          | x-1         | 16    | JSD 11              |           |              |
| <i>Boera stylata</i>                     | L          | 1           | 1     | "                   |           |              |
| <i>Atherix variegata</i>                 | L          | 1111        | 4     | "                   |           |              |
| <i>Dicranota</i>                         | L          | 1           | 1     | "                   |           |              |
| <i>Tipula</i>                            | L          | 1           | 1     | "                   |           |              |
| <i>Dugesiiidae</i>                       | A          | 1           | 1     | Thorp Reg 2016      |           |              |
| <i>Tubificinae (without hairs)</i>       | A          | 11          | 2     | Klemm 1985          |           | Y            |
| <i>Tubificinae (with hairs)</i>          | A          | 1           | 1     | "                   |           |              |
| <i>Metagynophora</i>                     | A          | 111         | 3     | JSD                 |           |              |
| <i>Nannocladius (Plecopteraclathrus)</i> | L          | 1           | 1     | Anders + 3 2013     | imm       | N            |
| <i>N. (P.) sp. #5 Jacobsen</i>           | L          | 11          | 2     | Epker 2001          |           |              |
| <i>Microtendipes nydalensis group</i>    | L          | 1           | 1     | Epker et al 2013    |           |              |
| <i>Paratanytarsus longistylus</i>        | L          | 1           | 1     | "                   |           |              |

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Page 2 of 2

[illegible]