

Instructions: Bold fields must be completed.

**Station Summary**

|                                               |                                                        |                                                                 |                                                  |
|-----------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------|
| Waterbody Name<br>BULL GUS CREEK              |                                                        | Waterbody ID Code<br>2926700                                    | Sample ID (YYYYMMDD-CY-FD)<br>20190929-26-01     |
| Sampling Location<br>5m DS FR 703 Road Bridge |                                                        |                                                                 | Database Key<br>207081665                        |
| SWIMS Station ID<br>10037096                  | SWIMS Station Name<br>BULL GUS CREEK 100M DS OF FR 703 |                                                                 |                                                  |
| Latitude<br>46.30315                          | Longitude<br>-90.50585                                 | 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>TYLER FORKS                                   | County<br><u>IRON</u>                            |

**Sample and Site Descriptors**

|                                                          |                                                               |
|----------------------------------------------------------|---------------------------------------------------------------|
| Sample Collector (Last Name, First)<br>JOSEPH CUNNINGHAM | Project Name<br>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)<br>1 | Estimated Area Sampled (m <sup>2</sup> )<br>1 | Number of Samples in Composite<br>3 | Replicate No. <u>1</u> of <u>1</u> |
|--------------------------------|-----------------------------------------------|-------------------------------------|------------------------------------|

**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 type="checkbox"/> Other: _____            |

|                         |                    |                       |                |                                |                           |
|-------------------------|--------------------|-----------------------|----------------|--------------------------------|---------------------------|
| Water Temp. (C)<br>14.3 | D.O. (mg/l)<br>5.2 | D.O. (% sat.)<br>50.8 | pH (su)<br>6.9 | Conductivity (umhos/cm)<br>113 | Transparency (cm)<br>7/20 |
|-------------------------|--------------------|-----------------------|----------------|--------------------------------|---------------------------|

|                                                                                                                           |                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water Color<br><input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" type="checkbox"/> Stained | Estimated Stream Velocity (m/s)<br><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<br>0.3 | circle units<br><u>m/s</u> or f/s | Average Stream Depth of reach (m)<br>0.2 | Average Stream Width of reach (m)<br>3 |
|--------------------------|-----------------------------------|------------------------------------------|----------------------------------------|

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

|                            |                                        |                                              |                                           |
|----------------------------|----------------------------------------|----------------------------------------------|-------------------------------------------|
| Bedrock: _____             | Boulders (basketball or larger): _____ | Rubble (tennisball to basketball): <u>40</u> | Gravel (ladybug to tennisball): <u>40</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>20 %</u> | Canopy Cover at Sample Site (%) <u>80 %</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                               | PL    | PL             | Chlorine                                                    | N     | N              |
| - Filamentous Algae                                         | N     | N              | Dissolved Oxygen                                            | N     | N              |
| - Planktonic Algae                                          | N     | N              | Nutrients (P, N...)                                         | N     | N              |
| Iron Bacteria                                               | N     | PL             | Toxics: - Inorganic (Metals)                                | N     | N              |
| Macrophytes                                                 | N     | N              | - Organic (PCBs, pesticides...)                             | N     | N              |
| Slimes                                                      | N     | N              | Other - Specify:                                            |       |                |
| Other - Specify:                                            |       |                | <b>Sources of Stream Impacts</b>                            |       |                |
|                                                             |       |                | Bank Erosion                                                | PL    | PL             |
|                                                             |       |                | Point Source - Specify:                                     | N     | N              |
|                                                             |       |                | Pasturing of Livestock                                      | N     | N              |
| <b>Physical</b>                                             |       |                |                                                             |       |                |
| Bank Erosion                                                | PL    | PL             | 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                                     | PL    | PL             | Septic Systems                                              | N     | N              |
| - Downstream                                                | N     | PL             | Tile Drainage - Organic Soils                               | N     | N              |
| Low Flow                                                    | N     | N              | - Mineral Soils                                             | N     | N              |
| Sedimentation                                               | N     | N              | Springs                                                     | N     | PL             |
| Sludge                                                      | N     | N              | Tributary(s)                                                | N     | N              |
| Thermal                                                     | N     | N              | Wetland                                                     | PL    | PL             |
| Turbidity                                                   | N     | N              | Other - Specify:                                            |       |                |
| Other - Specify:                                            |       |                |                                                             |       |                |

Comments *Failing Beaver Dam just upstream of station*

Special Instructions for Laboratory

### For Lab Use Only

|                                     |                                                                    |                                                   |
|-------------------------------------|--------------------------------------------------------------------|---------------------------------------------------|
| Sample Sorter<br><i>Noas, Eric</i>  | Taxonomist<br><i>Dimick, Jeffrey</i>                               | Estimated Percent of Sample Sorted<br><i>8.3%</i> |
| Date Processed<br><i>11/17/2020</i> | Specimens Saved<br><i>Subsample archived in ABL until Dec 2023</i> |                                                   |

A1Q3 E2Q2 A1Q4 E2Q4 A1Q1  
17 38 24 38 23 = 140

Taxonomist: Dimick, Jeffrey

Page 1 of 1

any tags vs