

Instructions: Bold fields must be completed.

20180924-34-D1

**Station Summary**

|                                                        |                             |                                         |
|--------------------------------------------------------|-----------------------------|-----------------------------------------|
| Waterbody Name<br>LILY RIVER                           | Waterbody ID Code<br>370900 | Sample ID (YYYYMMDD-CY-FD)<br>9/24/2018 |
| Sampling Location<br>upstream 10m above station stant. |                             | Database Key<br>168309912               |

|                              |                                                        |                                                          |                                           |
|------------------------------|--------------------------------------------------------|----------------------------------------------------------|-------------------------------------------|
| SWIMS Station ID<br>10029113 | SWIMS Station Name<br>LILY RIVER - 169M UPSTREAM CTH-A |                                                          |                                           |
| Latitude<br>45.35118         | Longitude<br>-88.83144                                 | Lat/Long Determination Method (circle)<br>SWIMS SWDV GPS | Datum Used if using GPS<br>WGS84 or NAD83 |
| Basin (WMU)<br>WOLF RIVER    |                                                        | Watershed Name<br>LILY RIVER                             | County<br>LANGLADE                        |

**Sample and Site Descriptors**

|                                                         |                                                               |
|---------------------------------------------------------|---------------------------------------------------------------|
| Sample Collector (Last Name, First)<br>JAMES KLOSIEWSKI | 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>20 min | Estimated Area Sampled (m <sup>2</sup> )<br>9 m <sup>2</sup> | Number of Samples in Composite<br>2 | 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 checked="" type="checkbox"/> Trend | <input type="checkbox"/> Other: _____            |

|                         |                    |                      |                 |                                  |                           |
|-------------------------|--------------------|----------------------|-----------------|----------------------------------|---------------------------|
| Water Temp. (C)<br>15.3 | D.O. (mg/l)<br>9.5 | D.O. (% sat.)<br>95% | pH (su)<br>8.05 | Conductivity (umhos/cm)<br>260.8 | Transparency (cm)<br>7120 |
|-------------------------|--------------------|----------------------|-----------------|----------------------------------|---------------------------|

|                                                                                                                           |                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 checked="" type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input type="checkbox"/> Fast (> 0.5 m/s) |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                        |                                          |                                           |
|--------------------------------------------------------|------------------------------------------|-------------------------------------------|
| Measured Velocity<br>circle units<br>m/s or f/s<br>0.5 | Average Stream Depth of reach (m)<br>1.5 | Average Stream Width of reach (m)<br>11 m |
|--------------------------------------------------------|------------------------------------------|-------------------------------------------|

**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 (%) 10 | Canopy Cover at Sample Site (%) 0 |
|-------------------------------------------------|-----------------------------------|

**Stream and Watershed Descriptors**

N = Not a problem

PL = Present, Low Impact

U = Uncertain

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                                      |       |                |
| <b>Physical</b>                                             |       |                |                                                             |       |                |
| 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<br><i>Abby Adams</i> | Taxonomist<br><i>Dr. Brock Jeffrey</i>                             | Estimated Percent of Sample Sorted<br><i>71</i> |
| Date Processed<br><i>10-12-19</i>  | Specimens Saved<br><i>Subsample archived in ABZ until Jan 2022</i> |                                                 |

AZ 197

Total Specs = 197

Wisconsin Department of Natural Resources

ABL SampleNum: 20180924-34-01

Taxonomist: Dimick, Jeffrey

Waterbody: Lily River

SWIMS Database Key: 168309912

Page 1 of 2

| Taxa                             | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|----------------------------------|------------|-------------|-------|---------------------|-----------|--------------|
| Baetidae                         | L          | 1           | 1     | Klich 2016          | dam       | N            |
| Baetis intercalarius             | L          | 1           | 1     | "                   |           |              |
| Ephemerella subvaria             | L          | 11          | 2     | "                   |           |              |
| Leucocrota                       | L          | 1           | 1     | "                   |           |              |
| Maccaffertium modestum           | L          | 1111        | 4     |                     |           |              |
| Gomphidae                        | L          | 1           | 1     | Tennissen 2019      | imm       |              |
| Glossosoma                       | L          | -1          | 6     | Hils 1995           | imm       |              |
| Protophila                       | L          | 801         | 61    | "                   |           |              |
| Heliconsyche borealis            | L          | 1           | 1     | "                   |           |              |
| Ceratopsyche bronca              | L          | 11          | 2     | Schm Hils 1986      |           |              |
| C. glossonae                     | L          | 1           | 1     | "                   |           |              |
| C. walkeri                       | L          | x1          | 11    | "                   |           |              |
| Chaumatopsyche                   | L          | 1           | 1     | Hils 1995           |           |              |
| Leucotrichia pectipennis         | L          | 111         | 3     | "                   |           |              |
| Lepidostoma                      | L          | 1           | 1     | "                   |           |              |
| Setodes                          | L          | 1           | 5     | "                   |           |              |
| Chimarra                         | L          | -111        | 8     | "                   | imm       | N            |
| C. socia                         | L          | 1111        | 4     | Hils 1982           |           |              |
| Psychomyia flavida               | L          | 11          | 2     | Hils 1995           |           |              |
| Optroservus                      | L          | 111         | 3     | Hils Schm 1992      | imm       | N            |
| D. trivittatus L, 29 A, 6        | LA         | 8-1         | 35    | "                   |           |              |
| Stenelmis                        | L          | 111         | 7     | "                   |           | N            |
| S. crenata                       | A          | 1           | 1     | "                   |           |              |
| S. sandersoni                    | A          | 1           | 1     | "                   |           |              |
| Psephenus hernicki               | L          | 111         | 5     | "                   |           |              |
| Nemotendromia                    | L          | 1           | 1     | Court Meir 2008     |           |              |
| Antocha                          | L          | 1           | 1     | Hils 1995           |           |              |
| Pseudolimnophila                 | L          | 11          | 2     | "                   |           |              |
| Lebertia                         | A          | 1           | 1     | Pluchino 1964       |           |              |
| Ferrissia rivularis              | A          | 1           | 5     | Thorp 1966 2016     |           |              |
| Pisidium                         | A          | 1111        | 4     | Mackie 2007         |           |              |
| <del>Split 43 Chironomidae</del> | L          | 111         | 100   |                     |           |              |
| Tanyptera 08270000               | L          | 1           | 1     | Cranston 2013       | imm       |              |
| Orthocladiinae 08300000          | L          | 1           | 1     | Cranston 2013       | imm       | Y            |
| Lopescladius                     | L          | 1           | 1     | And+3 2013          |           |              |
| chironomidae 08330000            | L          | 1           | 1     | Cranston 2013       | imm       | N            |
| Microtendipes pedellus group     | L          | 11          | 2     | Ed et al 2013       |           |              |

Taxonomist: Dimick, Jeffrey

SWIMS Database Key: 168309912