

Instructions: Bold fields must be completed.

| Station Summary                         |                                    |   |
|---|------------------------------------|---|
| Waterbody Name<br><b>MECAN RIVER</b>    | Waterbody ID Code<br><b>155000</b> | Sample ID (YYYYMMDD-CY-FD)<br><b>20171018-39-04</b> |
| Sampling Location<br><b>US County E</b> |                                    | Database Key<br><b>149844339</b>                    |

|  |  |   |
|--|--|---|
| SWIMS Station ID<br><b>10049295</b>              | SWIMS Station Name<br><b>MECAN RIVER AT COUNTY E</b> |   |
| Latitude<br><b>N43.92006</b>                     | Longitude<br><b>W89.31870</b>                        | Lat/Long Determination Method (circle)<br><b>SWIMS SWDV GPS</b> |
| Datum Used if using GPS<br><b>WGS84 or NAD83</b> |  |   |
| Basin (WMU)<br><b>UPPER FOX</b>                  | Watershed Name<br><b>MECAN RIVER</b>                 | County<br><b>MARQUETTE</b>                                      |

| Sample and Site Descriptors                               |   |
|---|---|
| Sample Collector (Last Name, First)<br><b>DAVID BOLHA</b> | Project Name<br><b>MACROINVERTEBRATE SPATIAL ANALYSIS</b> |

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)<br><b>2</b> | Estimated Area Sampled (m <sup>2</sup> )<br><b>1.5</b> | Number of Samples in Composite<br><b>1</b> | Replicate No. _____ of _____ |
|---------------------------------------|--|--|------------------------------|

Reason For Sampling

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

|  |                            |                              |                        |                                       |                   |
|--|----------------------------|------------------------------|------------------------|---------------------------------------|-------------------|
| Water Temp. (°C)<br><b>10.4</b><br><del>50.8</del> F | D.O. (mg/l)<br><b>8.83</b> | D.O. (% sat.)<br><b>78.8</b> | pH (su)<br><b>7.53</b> | Conductivity (umhos/cm)<br><b>330</b> | Transparency (cm) |
|--|----------------------------|------------------------------|------------------------|---------------------------------------|-------------------|

|   |  |
|---|--|
| 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>circle units<br>m/s or f/s | Average Stream Depth of reach (m)<br><b>0.5</b> | Average Stream Width of reach (m)<br><b>18</b> |
|---|---|--|

Composition of Substrate Sampled (Percent):

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): \_\_\_\_\_ Gravel (ladybug to tennisball): \_\_\_\_\_  
 Sand: **40** Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: **30** Leaf Snags: **10** Coarse Woody Debris: **20** Other ( ): \_\_\_\_\_

Embeddedness of Substrate at Sample Site (%) \_\_\_\_\_ Canopy Cover at Sample Site (%) **30**

**Stream and Watershed Descriptors**

N = Not a problem      PL = Present, Low Impact  
 U = Uncertain            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 |
|--|--|-------|------------|--|--|-------|------------|
| <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>  |  |       |            | Runoff: - Barnyard                                       |  |       |            |
| Bank Erosion   |  |       |            | - Construction   |  |       |            |
| Channelization: - Upstream                               |  |       |            | - Cropland   |  |       |            |
| - Downstream   |  |       |            | - Urban  |  |       |            |
| Hydraulic Scour / Channel Incision                       |  |       |            | Septic Systems   |  |       |            |
| Impoundment: - Upstream                                  |  |       |            | Tile Drainage - Organic Soils                            |  |       |            |
| - Downstream   |  |       |            | - Mineral Soils  |  |       |            |
| Low Flow   |  |       |            | Springs  |  |       |            |
| Sedimentation  |  |       |            | Tributary(s)   |  |       |            |
| Sludge   |  |       |            | Wetland  |  |       |            |
| Thermal  |  |       |            | Other - Specify:   |  |       |            |
| Turbidity  |  |       |            |  |  |       |            |
| Other - Specify:   |  |       |            |  |  |       |            |

Comments

Special Instructions for Laboratory

**For Lab Use Only**

|                                      |  |  |
|--------------------------------------|--|--|
| Sample Sorter<br><i>Jesse Olberg</i> | Taxonomist<br><i>Dimick Jeffrey</i>                                | Estimated Percent of Sample Sorted<br><i>13%</i> |
| Date Processed<br><i>11/28/18</i>    | Specimens Saved<br><i>Subsample archived in ASL until Feb 2022</i> |  |

D3 77 4 hr  
 B2 99 1.5 hr 176  
 C3

*71  
 1.25 hr*

| Taxa                                       | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|--|------------|-------------|-------|---------------------|-----------|--------------|
| <i>Isonychia</i>                           | L          | I           | 1     | Hils 1995           | imm       |              |
| <i>Taeniopteryx</i>                        | L          | x-ii        | 17    | "                   | imm       | N            |
| <i>T. nivalis</i>                          | L          | I           | 1     | Fall skew 1980      |           |              |
| Baetidae                                   | L          | I           | 1     | Klub 2016           | dam       | N            |
| <i>Baetis brunneicollis</i>                | L          | ii          | 3     | "                   |           |              |
| <i>Labobaetis propinquus</i>               | L          | x           | 10    | "                   |           |              |
| <i>Placiditus</i>                          | L          | I           | 1     | "                   | dam       |              |
| <i>Isonychia anoka</i>                     | L          | iiii        | 4     | "                   |           |              |
| <i>Ephemerella</i>                         | L          | ?           | 1     | "                   | imm       |              |
| <i>Maccaffertium</i>                       | L          | iii         | 3     | "                   | imm       | Y            |
| <i>M. mediopunctatum</i>                   | L          | ii          | 2     | "                   |           |              |
| <i>Leptophlebia</i>                        | L          | -iiii       | 9     | "                   | dam/imm   |              |
| <i>Coloburiscus maculata</i>               | L          | I           | 1     | west May 1996       |           |              |
| <i>Brachycentrus numerosus</i>             | L          | x'          | 15    | Hils 1985           |           |              |
| Hydropsychidae                             | L          | I           | 1     | Hils 1995           | imm       | N            |
| <i>Cheumatopsyche</i>                      | L          | 21          | 21    | "                   |           |              |
| <i>Hydropsyche</i>                         | L          | iii         | 3     | "                   | imm       | N            |
| <i>H. betteri</i>                          | L          | x-iiii      | 19    | Schum Hils 1986     |           |              |
| <i>H. scalaris</i>                         | L          | iiii        | 4     | "                   |           |              |
| <i>Ceratopsyche branta</i>                 | L          | -i          | 6     | "                   |           |              |
| <i>C. sparna</i>                           | L          | x-iiii      | 20    | "                   |           |              |
| <i>Hydroptila</i>                          | L          | I           | 1     | Hils 1995           |           |              |
| <i>Polycentropus</i>                       | L          | I           | 1     | "                   |           |              |
| <i>Dubiraphia</i>                          | L          | iii         | 3     | Hils Schum 1992     |           |              |
| <i>Hemerodromia</i>                        | L          | iiii        | 4     | Coat Mer 2008       |           |              |
| <i>Neoplasia</i>                           | L          | iii         | 4     | "                   |           |              |
| Ephydriidae                                | L          | I           | 1     | "                   |           |              |
| <i>Simulium venustum</i> species complex   | L          | ii          | 2     | Adl et al 2004      |           |              |
| <i>S. vittatum</i> species complex 0640218 | L          | ii          | 2     | "                   |           |              |
| <i>Simulium</i>                            | P          | iiii        | 4     | "                   |           |              |
| <i>Thienemanniella</i>                     | P          | ii          | 2     | Ferret al 2008      |           |              |
| <i>Cricotopus (Cricotopus)</i>             | P          | ii          | 2     | Coat et al 1986     |           |              |
| <i>Gammarus pseudolimnoides</i>            | A          | -ii         | 7     | Hils 1972           |           |              |
| <i>Nyalisella wellborni</i>                | A          | iii         | 3     |                     |           |              |
| Caecicotea                                 | A          | iiii        | 4     | Will 1972           | imm       |              |
| Physa                                      | A          | -ii         | 7     | Thorp Pos 2016      |           |              |
| Hydrobiidae NOT P-antipodarum              | A          | I           | 1     | Brown 1991          |           |              |

> 3 taxa, TVAL ≤ 2.0

587 (0.1x212)

