

**Wadeable Macroinvertebrate  
Field Data Report**

Form 3200-081 (R 8/14)

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**Instructions:** Bold fields must be completed.

**Station Summary**

|                                              |                               |                                                                        |                                                         |
|----------------------------------------------|-------------------------------|------------------------------------------------------------------------|---------------------------------------------------------|
| <b>Waterbody Name</b><br>APPLE RIVER         |                               | <b>Waterbody ID Code</b><br>2614000                                    | <b>Sample ID (YYYYMMDD-CY-FD)</b><br>20171009-49-02     |
| <b>Sampling Location</b><br>2m DS GRIFFIN ST |                               |                                                                        | <b>Database Key</b><br>149840685                        |
| <b>SWIMS Station ID</b><br>10013471          |                               | <b>SWIMS Station Name</b><br>APPLE RIVER AT GRIFFIN ST. (AMERY)        |                                                         |
| <b>Latitude</b><br>45.29587                  | <b>Longitude</b><br>-92.35812 | <b>Lat/Long Determination Method (circle)</b><br>SWIMS SWDV <u>GPS</u> | <b>Datum Used if using GPS</b><br><u>WGS84</u> or NAD83 |
| <b>Basin (WMU)</b><br>ST. CROIX              |                               | <b>Watershed Name</b><br>LOWER APPLE RIVER                             | <b>County</b><br>POLK                                   |

**Sample and Site Descriptors**

|                                                                           |                                                                       |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>Sample Collector (Last Name, First)</b><br>CRAIG P ROESLER, CHANG VANG | <b>Project Name</b><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                        |

|                                       |                                                      |                                            |                                    |
|---------------------------------------|------------------------------------------------------|--------------------------------------------|------------------------------------|
| <b>Total Sampling Time (min)</b><br>1 | <b>Estimated Area Sampled (m<sup>2</sup>)</b><br>1.5 | <b>Number of Samples in Composite</b><br>3 | <b>Replicate No.</b> 1 <b>of</b> 1 |
|---------------------------------------|------------------------------------------------------|--------------------------------------------|------------------------------------|

**Reason For Sampling**

|                                                   |                                              |                                                  |
|---------------------------------------------------|----------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> Least Impacted Reference | <input checked="" type="checkbox"/> Baseline | <input type="checkbox"/> Impact / Treatment Site |
| <input type="checkbox"/> Control Site             | <input type="checkbox"/> Trend               | <input type="checkbox"/> Other: _____            |

|                                |                           |                           |                       |                                       |                                  |
|--------------------------------|---------------------------|---------------------------|-----------------------|---------------------------------------|----------------------------------|
| <b>Water Temp. (C)</b><br>14.4 | <b>D.O. (mg/l)</b><br>9.3 | <b>D.O. (%sat.)</b><br>94 | <b>pH (su)</b><br>7.9 | <b>Conductivity (umhos/cm)</b><br>231 | <b>Transparency (cm)</b><br>>120 |
|--------------------------------|---------------------------|---------------------------|-----------------------|---------------------------------------|----------------------------------|

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

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

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

|                            |                                        |                                       |                                    |
|----------------------------|----------------------------------------|---------------------------------------|------------------------------------|
| Bedrock: _____             | Boulders (basketball or larger): _____ | Rubble (tennisball to basketball): 30 | Gravel (ladybug to tennisball): 60 |
| Sand: 10                   | Clay: _____                            | Silt/Muck: _____                      | Overhanging Vegetation: _____      |
| Aquatic Macrophytes: _____ | Leaf Snags: _____                      | Coarse Woody Debris: _____            | Other ( ): _____                   |

|                                                        |                                          |
|--------------------------------------------------------|------------------------------------------|
| <b>Embeddedness of Substrate at Sample Site (%)</b> 20 | <b>Canopy Cover at Sample Site (%)</b> 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 |
|----------------------------------------------------------|--|-------|------------|----------------------------------------------------------|--|-------|------------|
| <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    | Taxonomist                               | Estimated Percent of Sample Sorted |
| Kayla Wilcox     | Dimick, Jeffery                          | 20%                                |
| Date Processed   | Specimens Saved                          |                                    |
| 6/19/18          | Subsample archived in ASL until Oct 2021 |                                    |

B2=28 C3=54  
A3=51  
137

Wisconsin Department of Natural Resources

ABL SampleNum: 20171009-49-02

Taxonomist: Dimick, Jeffrey

Waterbody: Apple River

SWIMS Database Key: 149840685

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| Taxa                                     | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|------------------------------------------|------------|-------------|-------|---------------------|-----------|--------------|
| <i>Acerpenna pygmaea</i>                 | L          | III         | 4     | Klvh 2016           |           |              |
| <i>Isuraea aneta</i>                     | L          | III         | 4     | "                   |           |              |
| <i>Caenis</i>                            | L          | I           | 1     | "                   | imm       |              |
| <i>C. latipennis</i>                     | L          | I           | 1     | "                   |           |              |
| <i>Isonychia</i>                         | L          | I           | 1     | "                   | imm       | N            |
| <i>Stenonema stenonema</i>               | L          | I           | 1     | "                   | imm       |              |
| <i>Maccaffertium leucocrota</i>          | L          | II          | 2     | "                   | imm       | N            |
| <i>Maccaffertium</i>                     | L          | -I          | 6     | "                   | imm       | n=3,4        |
| <i>M. medipunctatum</i>                  | L          | XIII        | 13    | "                   |           |              |
| <i>Tricorythodes</i>                     | L          | XXII        | 22    | "                   |           |              |
| <i>Argia</i>                             | L          | I           | 1     | West May 1996       | imm       |              |
| <i>Hydropsychidae</i>                    | L          | I           | 1     | Hils 1995           | imm       | N            |
| <i>Cheumatopsyche</i>                    | L          | 0-1         | 26    | "                   |           |              |
| <i>Hydropsyche</i>                       | L          | I           | 1     | "                   | imm       |              |
| <i>Ceratopsyche morosa bifida form</i>   | L          | II          | 2     | Schm Hils 1996      |           |              |
| <i>Optoserius</i>                        | L          | II          | 2     | Hils Schm 1992      | imm       | N            |
| <i>O. fastidius</i>                      | L          | I           | 1     | "                   |           |              |
| <i>O. trivittatus</i>                    | L          | I           | 1     | "                   |           |              |
| <i>Stenelmis</i>                         | L          | I           | 1     | "                   |           | N            |
| <i>S. crenata</i>                        | A          | I           | 1     | "                   |           |              |
| <i>Hyalella wellborni</i>                | A          | III         | 3     | Seavek et al 2015   |           |              |
| <i>Psephenidae</i>                       | A          | I           | 1     | Thorp Reg 2016      |           |              |
| <i>Pisidium</i>                          | A          | -II         | 7     | Burch 1972          |           |              |
| <i>Sphaerium</i>                         | A          | X-I         | 16    | "                   |           |              |
| <i>Spit A3 Chironomidae</i>              | L          | 7-10        |       |                     |           |              |
| <i>Dibriaphis</i>                        | L          | II          | 2     | Hils Schm 1992      |           |              |
| <i>Conchapelopia</i> 08270700            | L          | II          | 2     | Cran Epl 2013       |           |              |
| <i>Pentaneura inconspicua</i>            | L          | I           | 1     | "                   |           |              |
| <i>Thienemannimyia group</i>             | L          | I           | 1     | "                   | imm       | N            |
| <i>Chironominae</i> 08330000             | L          | I           | 1     | Cranston 2013       | imm       | N            |
| <i>Cladotanytarsus</i>                   | L          | II          | 2     | Epl et al 2013      |           |              |
| <i>Microdendipes rydalsensis group</i>   | L          | I           | 1     | "                   |           |              |
| <i>Nilotypha</i>                         | L          | II          | 2     | "                   |           |              |
| <i>Polypedilum</i>                       | L          | I           | 1     | "                   | mt indet  | N            |
| <i>P. (Polypedilum) illinoense group</i> | L          | -I          | 6     | Balden 2012         |           |              |
| <i>P. (Pseudopodisma) flavum</i>         | L          | XIII        | 14    | "                   |           |              |

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[illegible]