

Sample in 2 Jars

Instructions: Bold fields must be completed.

Station Summary

| | | |
|--|-----------------------------------|---|
| Waterbody Name NORTH BRANCH MILWAUKEE RIVER <u>Nichols Creek</u> | Waterbody ID Code 27100 | Sample ID (YYYYMMDD-CY-FD) 20161021-60-03 |
|--|-----------------------------------|---|

| | |
|--|----------------------------------|
| Sampling Location <u>9m DS of Sharp bend</u> | Database Key 134807303 |
|--|----------------------------------|

| | |
|-------------------------------------|--|
| SWIMS Station ID 10030491 | SWIMS Station Name NICHOLS CREEK - DS OF CTH N |
|-------------------------------------|--|

| | | | |
|------------------------------------|--------------------------------------|--|---|
| Latitude <u>43.68654</u> | Longitude <u>-88.03345</u> | Lat/Long Determination Method (circle) SWIMS SWDV <u>GPS</u> | Datum Used if using GPS WGS84 or <u>NAD83</u> |
|------------------------------------|--------------------------------------|--|---|

| | | |
|---------------------------------------|---|----------------------------|
| Basin (WMU) MILWAUKEE RIVER | Watershed Name NORTH BRANCH MILWAUKEE RIVER | County SHEBOYGAN |
|---------------------------------------|---|----------------------------|

Sample and Site Descriptors

| | |
|---|---|
| Sample Collector (Last Name, First) DYLAN OLSON | Project Name SER LONG-TERM TREND WADEABLE REFERENCE STREAMS |
|---|---|

Sampling Device

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) <u>4 min</u> | Estimated Area Sampled (m²) <u>1</u> | Number of Samples in Composite <u>2</u> | Replicate No. <u>1</u> <u>2</u> of <u>2</u> |
|--|---|---|--|

Reason For Sampling

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

| | | | | | |
|--------------------------------------|-----------------------------------|--------------------------------------|------------------------------|--|---|
| Water Temp. (C) <u>9.6</u> | D.O. (mg/l) <u>11.4</u> | D.O. (% sat.) <u>103.0</u> | pH (su) <u>8.1</u> | Conductivity (umhos/cm) <u>819.0</u> | Transparency (cm) <u>+120</u> |
|--------------------------------------|-----------------------------------|--------------------------------------|------------------------------|--|---|

| | |
|--|--|
| Water Color <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained | Estimated Stream Velocity (m/s) <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 — circle units m/s or f/s | Average Stream Depth of reach (m) <u>0.5m</u> | Average Stream Width of reach (m) <u>1.5m</u> |
|--|---|---|

Composition of Substrate Sampled (Percent):

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

Embeddedness of Substrate at Sample Site (%) 0
Canopy Cover at Sample Site (%) 20

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 |
|--|--|-------|------------|--|--|-------|------------|
| Biological | | | | Chemical | | | |
| 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: | | | | Sources of Stream Impacts | | | |
| | | | | Bank Erosion | | | |
| | | | | Point Source - Specify: | | | |
| | | | | Pasturing of Livestock | | | |
| | | | | Runoff: - Barnyard | | | |
| | | | | - Construction | | | |
| | | | | - Cropland | | | |
| | | | | - Urban | | | |
| | | | | Septic Systems | | | |
| | | | | Tile Drainage - Organic Soils | | | |
| | | | | - Mineral Soils | | | |
| | | | | Springs | | | |
| | | | | Tributary(s) | | | |
| | | | | Wetland | | | |
| | | | | Other - Specify: | | | |
| | | | | | | | |
| Physical | | | | | | | |
| Bank Erosion | | | | | | | |
| Channelization: - Upstream | | | | | | | |
| - Downstream | | | | | | | |
| Hydraulic Scour / Channel Incision | | | | | | | |
| Impoundment: - Upstream | | | | | | | |
| - Downstream | | | | | | | |
| Low Flow | | | | | | | |
| Sedimentation | | | | | | | |
| Sludge | | | | | | | |
| Thermal | | | | | | | |
| Turbidity | | | | | | | |
| Other - Specify: | | | | | | | |

Comments

Special Instructions for Laboratory

sample in 2 jars

For Lab Use Only

| | | |
|----------------------------------|---|---|
| Sample Sorter Andrew Kohlmann | Taxonomist Dimick, Jeffrey | Estimated Percent of Sample Sorted 70% |
| Date Processed 5/9/17 | Specimens Saved Subsample archived in ADL until Nov 2020 | |

B3-251

| | Taxa | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|------|---|------------|-------------|-------|---------------------|---------------|--------------|
| 1/1 | <i>Isoperla glassorum</i> | L | I | 1 | Hilsenhoff 1982 | | |
| 2/5 | <i>Ephemerella subvaria</i> | L | III | 4 | Klukarantz 2016 | | |
| 3/10 | <i>Brachycentrus americanus</i> | L | III | 5 | Hilsenhoff 1985 | | |
| 4/17 | <i>Micrasema solidum</i> | L | -II | 7 | " | | |
| | <i>Charmatopsyche</i> | L | II | 3 | Hilsenhoff 1985 | | |
| | <i>Hydropsyche</i> | L | I | 1 | " | imm | N |
| | <i>H. betteri</i> | L | I | 1 | Schm., Hils. 1986 | | |
| | <i>Ceratopsyche</i> | L | I | 1 | Hilsenhoff 1985 | imm | N |
| | <i>C. glassorum</i> | L | XI | 11 | Schm., Hils. 1986 | | |
| 5/21 | <i>Lepidostoma</i> | L | III | 4 | Hilsenhoff 1985 | | |
| | <i>Limnephilidae</i> | L | " | 2 | " | imm | N |
| | <i>Pycnopsyche</i> | L | I | 1 | " | | |
| | <i>Chimarra alternata</i> | L | III | 22 | Hilsenhoff 1985 | | |
| | <i>Optoservus</i> | L | XIII | 13 | Hils., Schm. 1992 | | |
| | <i>O. fastidius</i> | L | XI | 15 | " | | |
| | <i>Neoplasta</i> | L | I | 1 | Cont. Mess. 2008 | | |
| | <i>Simulium tuberosum</i> species group | L | III | 3 | Adereta 2004 | | |
| | <i>S. vittatum</i> species complex | L | III | 3 | " | | |
| | <i>Amblyops</i> | L | -II | 7 | Hilsenhoff 1985 | | |
| | <i>Dicranota</i> | L | IIII | 4 | " | | |
| | <i>Gammarus pseudolimnoides</i> | A | 0+ | 25 | Holsinger 1972 | | |
| | <i>Naidinae</i> | A | I | 1 | Born. Geol. 1981 | | |
| | <i>Tvetenia</i> | A | I | 1 | Ferr. et al 2008 | | N |
| | <i>Tanyptarinae</i> | L | I | 1 | Cranston 2013 | imm | N |
| | <i>Conchapelonia</i> | L | III | 4 | Cran., Epkr 2013 | | |
| | <i>Meropelopia</i> | L | II | 2 | " | | |
| | <i>Thienemannimyia</i> group | L | III | 4 | " | imm | N |
| 6/11 | <i>Pagastia</i> | L | 0 | 20 | Saath, And. 2013 | | |
| | <i>Orthocladinae</i> | L | X-I | 16 | Cranston 2013 | not ident/imm | N |
| | <i>Brillia</i> | L | -II | 7 | Anden. +3 2013 | | |
| | <i>Eukiefferiella brehmi</i> group | L | X-I | 16 | " | | |
| | <i>Eu. claripennis</i> group | L | X | 10 | " | | |
| | <i>Parakiefferiella</i> | L | III | 3 | " | | |
| | <i>Parametriocnemus</i> | L | -II | 7 | " | | |
| | <i>Thienemannella</i> | L | III | 4 | " | imm | |
| | <i>Tvetenia bavarica</i> group | L | X-II | 12 | Bode 1983 | | |

>3 taxa, TVAL ≤ 2.0

41 > (0.1 x 311)

