

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

Station Summary

| | | |
|--------------------------------------|-----------------------------------|---|
| Waterbody Name ONION RIVER | Waterbody ID Code 51200 | Sample ID (YYYYMMDD-CY-FD) 20181116-60-04 |
|--------------------------------------|-----------------------------------|---|

| | |
|---|----------------------------------|
| Sampling Location @ Kw, up and ds of bridge | Database Key 168915227 |
|---|----------------------------------|

| | |
|-----------------------------------|---|
| SWIMS Station ID 603349 | SWIMS Station Name ONION RIVER - UPSTREAM OF CTH KW |
|-----------------------------------|---|

| | | | |
|-----------------------------|-------------------------------|--|---|
| Latitude 43.58275 | Longitude -87.85038 | Lat/Long Determination Method (circle) SWIMS <u>SWDV</u> GPS | Datum Used if using GPS <u>WGS84</u> or NAD83 |
|-----------------------------|-------------------------------|--|---|

| | | |
|---------------------------------|--------------------------------------|----------------------------|
| Basin (WMU) SHEBOYGAN | Watershed Name ONION RIVER | County SHEBOYGAN |
|---------------------------------|--------------------------------------|----------------------------|

Sample and Site Descriptors

| | |
|--|--|
| Sample Collector (Last Name, First) CRAIG HELKER | Project Name ONION RIVER EASTERN DISTRICT TWA 2018 |
|--|--|

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) 3 | Estimated Area Sampled (m²) 3 | Number of Samples in Composite | Replicate No. _____ of _____ |
|---------------------------------------|--|---------------------------------------|-------------------------------------|

Reason For Sampling

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

| | | | | | |
|--------------------------------|-----------------------------|-------------------------------|----------------|---|----------------------------------|
| Water Temp. (C) 2.52 | D.O. (mg/l) 13.44 | D.O. (% sat.) 101.5 | pH (su) | Conductivity (umhos/cm) 723.7 | Transparency (cm) 4120 |
|--------------------------------|-----------------------------|-------------------------------|----------------|---|----------------------------------|

| | |
|--|--|
| Water Color <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained | Estimated Stream Velocity (m/s) <input checked="" 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 -72 circle units m/s or f/s | Average Stream Depth of reach (m) .7 | Average Stream Width of reach (m) 9.97 |
|---|--|--|

Composition of Substrate Sampled (Percent):

Bedrock: _____
 Boulders (basketball or larger): _____
 Rubble (tennisball to basketball): 60
 Gravel (ladybug to tennisball): 20
 Sand: 20
 Clay: _____
 Silt/Muck: _____
 Overhanging Vegetation: _____
 Aquatic Macrophytes: _____
 Leaf Snags: _____
 Coarse Woody Debris: _____
 Other (_____): _____

Embeddedness of Substrate at Sample Site (%) 30
Canopy Cover at Sample Site (%) 50

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 | | | |
| Physical | | | | 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

LC = 126

~~2B =~~

Total = 126

For Lab Use Only

| | | |
|-------------------------------------|---|--|
| Sample Sorter Murphy Steinhilber | Taxonomist Dimock, Jeffrey | Estimated Percent of Sample Sorted 7% |
| Date Processed 4/3/2019 | Specimens Saved Subsample archived in ABL until Jan 2022 | |

| Taxa | Life Stage | Bench Tally | Count | Taxonomic Reference | Condition | Unique Taxon |
|---|------------|-------------|-------|---------------------|-----------|--------------|
| <i>Baetis intercalaris</i> | L | I | 1 | Klub 2016 | | |
| <i>Stenocran</i> | L | IIII | 4 | " | imm | N |
| <i>S. interpunctatum</i> | L | -III | 8 | " | | |
| <i>Maccaffertium terminatum</i> | L | III | 3 | " | | |
| <i>Cheumatopsyche</i> | L | XIII | 13 | Hils 1995 | | |
| <i>Hydropsyche betteni</i> | L | I | 1 | Schm Hils 1986 | | |
| <i>Ceratopsyche branta</i> | L | XII | 12 | " | | |
| <i>Dubiraphia</i> | L | I | 1 | Hils Schm 1992 | | |
| <i>Optioservus fastiditus</i> | L | II | 2 | " | | |
| <i>Stenelmis crenata</i> | A | II | 2 | " | | |
| <i>Nemerodromia</i> | L | I | 1 | Govt Merr 2008 | | |
| <i>Coeloclelea</i> | A | I | 1 | Will 1972 | fem | |
| <i>Tubificonae (without hairs)</i> | A | I | 1 | Klemm 1985 | | Y |
| <i>Tubificonae (with hairs)</i> | A | I | 1 | " | | Y |
| Salt A3 Chironomidae | L | 2100 | | | | |
| <i>Thienemannimyia</i> | L | I | 1 | cran Epl 2013 | | |
| <i>Eukiefferella claryensis</i> group | L | I | 1 | And + S 2013 | | |
| <i>Thienemannella</i> | L | I | 1 | " | dam | N |
| <i>Th-xena</i> | L | I | 1 | Bolton 2012 | | |
| <i>Orthocladius</i> | L | I | 1 | And + S 2013 | mt indet | N |
| <i>O. (Orthocladius) oliveri</i> | L | II | 2 | Epler 2001 | | |
| <i>Cladotanytarsus</i> | L | -IIII | 9 | Epl et al 2013 | | |
| <i>Cryptochironomus</i> | L | I | 1 | " | | |
| <i>Microtendipes</i> | L | II | 2 | " | | |
| <i>Microtendipes pedellus</i> group | L | II | 2 | " | | |
| <i>Nilothauma</i> | L | I | 1 | " | | |
| <i>Paratanytarsus species B</i> | L | I | 1 | Hils unpubl | | |
| <i>Polypedilum (Polypedilum) illinoense</i> group | L | II | 2 | Bolton 2012 | | |
| <i>P. (Tripodura) scalaeum</i> group | L | II | 2 | " | | |
| <i>P. (Vesipedilum) flavum</i> | L | X-III | 19 | " | | |
| <i>Zneotanytarsus</i> | L | 31 | 31 | Epl et al 2013 | | |
| <i>Stretchironomus</i> | L | III | 3 | " | | |
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