

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name ISABELLE CREEK	Waterbody ID Code 2445000	Sample ID (YYYYMMDD-CY-FD) 20171106-48-01
Sampling Location DS bridge ~ 5m		Database Key 153706350

SWIMS Station ID 483010	SWIMS Station Name ISABELLE CREEK - CTH C R MILES 14.3
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Latitude	Longitude	Lat/Long Determination Method (circle) SWIMS SWDV GPS	Datum Used if using GPS WGS84 or NAD83
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Basin (WMU) LOWER CHIPPEWA	Watershed Name TRIMBELLE RIVER AND ISABELLE CREEK	County PIERCE
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Sample and Site Descriptors

Sample Collector (Last Name, First) MYCAL RALEIGH	Project Name WEST DISTRICT FOLLOW UP MONITORING FOR IMPAIRME
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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) 1.5 min	Estimated Area Sampled (m²) 2m ²	Number of Samples in Composite 1	Replicate No. 1 of 1
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Reason For Sampling

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

Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Conductivity (umhos/cm)	Transparency (cm)
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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)
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Measured Velocity circle units m/s or f/s	Average Stream Depth of reach (m) 0.2	Average Stream Width of reach (m) 1.5m
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Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): 10 Rubble (tennisball to basketball): 20 Gravel (ladybug to tennisball): 60
 Sand: 10 Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____
 Aquatic Macrophytes: _____ Leaf Snags: _____ Coarse Woody Debris: _____ Other (): _____

Embeddedness of Substrate at Sample Site (%) 25
Canopy Cover at Sample Site (%) 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
Biological			Chemical		
Algae: - Diatoms / Periphyton	U	U	Chlorine	U	U
- Filamentous Algae	PL	U	Dissolved Oxygen	U	U
- Planktonic Algae	N	U	Nutrients (P, N...)	U	U
Iron Bacteria	N	U	Toxics: - Inorganic (Metals)	U	U
Macrophytes	N	U	- Organic (PCBs, pesticides...)	U	U
Slimes	U	U	Other - Specify:		
Other - Specify:			Sources of Stream Impacts		
			Bank Erosion	PH	U
Physical			Point Source - Specify:		
Bank Erosion	PH	U	Pasturing of Livestock	PH	U
Channelization: - Upstream	N	U	Runoff: - Barnyard	PL	U
- Downstream	N	U	- Construction	N	U
Hydraulic Scour / Channel Incision	N	U	- Cropland	PH	U
Impoundment: - Upstream	N	U	- Urban	N	U
- Downstream	N	U	Septic Systems	U	U
Low Flow	N	U	Tile Drainage - Organic Soils	U	U
Sedimentation	PH	U	- Mineral Soils	U	U
Sludge	N	U	Springs	U	U
Thermal	U	U	Tributary(s)	U	U
Turbidity	N	U	Wetland	U	U
Other - Specify:			Other - Specify:		

Comments Heavy Cattle grazing on DS side. Crops surrounding US and DS. Most of substrate is sand. Follow-up site

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter <i>Kayla Wilson</i>	Taxonomist <i>Derrick Jeffrey</i>	Estimated Percent of Sample Sorted <i>13</i>
Date Processed <i>01/31/18</i>	Specimens Saved <i>Subsample archived in ABC until Apr 2021</i>	

DI = 46
 CA = 79
 125

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Baetis flavistriga</i> species complex	L	1	1	Kluber et al 2016		
<i>Cnemidopyche</i>	L	11	7	Hilsenhoff 1995		
<i>Nymphopyche betteni</i>	L	11	2	Schm., D. B. 1986		
<i>Helichus striatus</i>	A	1	1	Hils., Schm. 1992		
<i>Neopkista</i>	L	11	2	Const. Merr. 2008		
Muscidae	L	1	1	"		
<i>Simulium vittatum</i> species complex 08110217	L	1	1	Aker et al. 2004		
<i>Gammarus pseudolimnoides</i>	A	x	10	Neisinger 1972		
Enchytraeidae	A	/	5	Braun, C. H. 1991		
Naididae Naididae	A	1111	4	"		
Chironomid Naididae w/ capilliform chaetae	A	11	2	Ersev et al 2008		
Physa	A	11	2	Rogers 2016		
split to Chironomidae	L	1111				
<i>Ceratopeltia</i>	L	1	1	Const., Epler 2013		
<i>Corynoneura</i>	L	1	1	Ander. + 3 2013		
<i>Chaetocladius</i>	L	1	1	"		
<i>Thienemannella</i>	L	1111	4	"	dam/imm	N
<i>Th. xera</i>	L	x11	12	Bolton 2012		
<i>Tvetenia bavarica</i> group	L	111	3	Bode 1983		
<i>Orthocladius</i> (<i>Orthocladius</i>)	L	1	1	Ander. + 3 2013		
<i>Cricotopus</i> / <i>Orthocladius</i>	L	1111	4	Fern. et al 2008	imm	N
<i>Cricotopus</i> (<i>Cricotopus</i>) <i>tremulus</i> group	L	11	2	Ander. + 3 2013		
Chironominae 08330000	L	11	2	Constan 2013	not idet	N
<i>Cryptochironomus</i>	L	1	1	Epler et al 2013		
<i>Microspectra</i>	L	111	3	"		
<i>Polypedium</i> (<i>Triopdura</i>) <i>scalenum</i> group	L	11	2	Bolton 2012		
<i>P.</i> (<i>Bresipedium</i>) <i>flavum</i>	L	8x-1	56	"		
<i>Saetheria</i>	L	111	3	Epler et al 2013		

23 taxa, TVAL = 2.0