

Instructions: Bold fields must be completed.

**Station Summary**

<b>Waterbody Name</b> ISABELLE CREEK	<b>Waterbody ID Code</b> 2445000	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20171106-48-02
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<b>Sampling Location</b> DS bridge w Bm	<b>Database Key</b> 153706358
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<b>SWIMS Station ID</b> 483007	<b>SWIMS Station Name</b> ISABELLE CREEK - R MILES 11.5 (410 <sup>th</sup> Ave)
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<b>Latitude</b>	<b>Longitude</b>	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV GPS	<b>Datum Used if using GPS</b> WGS84 or NAD83
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<b>Basin (WMU)</b> LOWER CHIPPEWA	<b>Watershed Name</b> TRIMBELLE RIVER AND ISABELLE CREEK	<b>County</b> PIERCE
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**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> MYCAL RALEIGH	<b>Project Name</b> 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

<b>Total Sampling Time (min)</b> 1	<b>Estimated Area Sampled (m<sup>2</sup>)</b> 1.5	<b>Number of Samples in Composite</b> 1	<b>Replicate No.</b> 1 of 1
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**Reason For Sampling**

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

<b>Water Temp. (C)</b>	<b>D.O. (mg/l)</b>	<b>D.O. (% sat.)</b>	<b>pH (su)</b>	<b>Conductivity (umhos/cm)</b>	<b>Transparency (cm)</b>
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**Water Color**

Clear    
 Turbid    
 Stained

**Estimated Stream Velocity (m/s)**

Slow (< 0.15 m/s)    
 Moderate (0.15 m/s - 0.5 m/s)    
 Fast (> 0.5 m/s)

<b>Measured Velocity</b> circle units m/s or f/s	<b>Average Stream Depth of reach (m)</b> 2	<b>Average Stream Width of reach (m)</b> 4m
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): 20 Rubble (tennisball to basketball): 50 Gravel (ladybug to tennisball): 30  
 Sand: \_\_\_\_\_ Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: \_\_\_\_\_ Leaf Snags: \_\_\_\_\_ Coarse Woody Debris: \_\_\_\_\_ Other ( ): \_\_\_\_\_  
 Embeddedness of Substrate at Sample Site (%) 0 Canopy Cover at Sample Site (%) 15

**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	N	U	Chlorine	U	U
- Filamentous Algae	N	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	N	U	Other - Specify:		
Other - Specify:			<b>Sources of Stream Impacts</b>		
			Bank Erosion	N	U
<b>Physical</b>			Point Source - Specify:		
Bank Erosion	N	U	Pasturing of Livestock	N	PH
Channelization: - Upstream	N	U	Runoff: - Barnyard	N	U
- Downstream	N	U	- Construction	N	U
Hydraulic Scour / Channel Incision	N	U	- Cropland	PH	PH
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	N	U	- Mineral Soils	U	U
Sludge	N	U	Springs	U	U
Thermal	U	U	Tributary(s)	U	U
Turbidity	PL	U	Wetland	U	U
Other - Specify:			Other - Specify:		

Comments Stream very slow US of riffle - ice formed on surface. Water clarity poor from turbidity

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter <i>David G. ...</i>	Taxonomist <i>Dimick, K. ...</i>	Estimated Percent of Sample Sorted 13%
Date Processed 1/31/2018	Specimens Saved <i>Subsample archived in ABC until Apr 2021</i>	

SC 113  
 IC (150)

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
Baetis flavistriga species complex	L	-II	7	Klueberhanz 2016		
Cheumatopsyche	L	B-1	46	Hilsenhoff 1995		
Hydropsyche belloni	L	X	10	Schm. Hils. 1986		
Onchoservus	L	-I	6	Hils. Schm. 1992	imm	N
O. fastidius L. 4 A. 1	L, A	-	5	"		
Stenelmis	L	-II	7	"		N
S. crenata	A	III	3	"		
Dicranota	L	I	1	Hilsenhoff 1995		
Cyclopiidae	A	I	1	Williamson 1991		
Naididae	A	III	3	Braun, Geld. 1991		
Tubificoid naididae w/p capilliform chaetae	A	III	4	Ersev et al 2008		
Glossiphonia complanata	A	I	1	Klemm 1985		
Physa	A	II	3	Rogers 2016		
<del>Spit A3 Chironomidae</del>	<del>L</del>	<del>III</del>	<del>15</del>			
Conchapelopia	L	XIII	14	Crain, Epler 2013		
Thienemannimyia group	L	I	1	"		
Eukiefferiella claripennis group	L	I	1	Ander. + 3 2013		
Parametriocnemus	L	III	4	"		
Tvetenia havanaica group	L	X	10	Bode 1983		
Nanocladius	L	-III	8	Ander. + 3 2013		
Orthocladius (Orthocladius)	L	-	5	"		
Microsectra	L	III	3	Epler et al 2013		
Microtendipes pedellus group	L	III	3	"		
Paratanytarsus sp. B	L	-	5	Hilsenhoff unpubl.		
P. longistylus	L	II	2	Epler et al 2013		
Paratendipes	L	I	1	"		
Polypedilum (Polypedilum) illinoense group	L	II	2	Bolton 2012		
P. (Vesipedilum)	L	I	1	"	not idet	N
P. (V.) aviceps	L	I	1	"		
P. (V.) flavum	L	-III	9	"		
Zheutanytarsus	L	II	2	Epler et al 2013		
Tanytarsus	L	II	2	"		