

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name DUTCH CREEK	Waterbody ID Code 2154700	Sample ID (YYYYMMDD-CY-FD) 20181114-09-01
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Sampling Location	Database Key 169413411
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SWIMS Station ID 10008684	SWIMS Station Name DUTCH CREEK - 223RD ST AND 80TH AVE [1]
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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 LOWER YELLOW (CHIPPEWA CO.) RIVER	County CHIPPEWA
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Sample and Site Descriptors

Sample Collector (Last Name, First) ALLISON P WILLMAN, CHRISTOPHER J W	Project Name BIG DRYWOOD/LITTLE DRYWOOD TWA 2018
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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) 2	Estimated Area Sampled (m²) 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: TWA

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

Bedrock: _____	Boulders (basketball or larger): _____	Rubble (tennisball to basketball): 10	Gravel (ladybug to tennisball): 50
Sand: 20	Clay: _____	Silt/Muck: _____	Overhanging Vegetation: 10
Aquatic Macrophytes: 10	Leaf Snags: _____	Coarse Woody Debris: _____	Other ():: _____

Embeddedness of Substrate at Sample Site (%) 30	Canopy Cover at Sample Site (%) 0
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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:		
Physical			Pasturing of Livestock		
Bank Erosion			Runoff: - Barnyard		
Channelization: - Upstream			- Construction		
- Downstream			- Cropland		
Hydraulic Scour / Channel Incision			- Urban		
Impoundment: - Upstream			Septic Systems		
- Downstream			Tile Drainage - Organic Soils		
Low Flow			- Mineral Soils		
Sedimentation			Springs		
Sludge			Tributary(s)		
Thermal			Wetland		
Turbidity			Other - Specify:		
Other - Specify:					

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter <i>Macayla Greider</i>	Taxonomist <i>Dimrock, Jeffrey</i>	Estimated Percent of Sample Sorted <i>20%</i>
Date Processed <i>5/14/19</i>	Specimens Saved <i>225 subsample archived in ABC Lab 1 Jul 2022</i>	

Sort %:

Vials:

Total specs:

Grids: A(94) C1(25) B2(106)

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Allocaenia</i>	L	0-III	29	Hils 1995		
<i>Baetis brunneicollis</i>	L	I	1	Klob 2016		
<i>Acanthina</i>	L	III	3	"	dam	N
<i>A. macdunnoughi</i>	L	-	5	"		
<i>Maccabertium</i>	L	II	2	"	imm	N
<i>M. vicarium</i>	L	-	5	"		
<i>Leptophlebiidae</i>	L	I	1	"	dam	N
<i>Leptophlebia</i>	L	II	2	"	dam/imm	
<i>Paraleptophlebia</i>	L	♂-III	39	"		
<i>Cheumatopsyche</i>	L	I	1	Hils 1995		
<i>Hydropsyche</i>	L	I	1	"	imm	N
<i>H. betteni</i>	L	I	1	Schm/Hils 1986		
<i>Ceratopsyche glossonae</i>	L	-II	7	"		
<i>Limnephilidae</i>	L	II	2	Hils 1995	imm	
<i>Neophylax</i>	L	I	1	"	imm	
<i>Dubiraphia</i>	L	II	2	Hils Schm 1992		
<i>Notoserolis</i>	L	XIII	13	"	imm	N
<i>O. fastidiosus</i> L, 14 A, 16	L, A	♂	30	"		
<i>Stenelmis crenata</i>	A	III	3	"		
<i>Atherix variegata</i>	L	I	1	Hils 1995		
<i>Simulium vittatum</i> species complex 08110217	L	I	1	Adl et al 2004		
<i>Prosimulium</i>	L	0	20	"	imm	
<i>Chrysops</i>	L	I	1	Hils 1995		
<i>Dicranota</i>	L	III	4	"		
<i>Tipula</i>	L	III	3	"		
<i>Caeididae racovitzai racovitzai</i>	A	III	4	Will 1972		
<i>Lebertia</i>	A	I	1	Puck 1984		
<i>Enchytraeidae</i>	A	I	1	Thorp Rog 2016		
<i>Naididae</i>	A	III	7	Brinck 1991		
<i>Tubificinae (without hairs)</i>	A	I	1	Klemm 1985		Y
<i>Tubificinae (with hairs)</i>	A	I	1	"		Y
<i>Lumbriculidae</i>	A	I	1	Thorp Rog 2016		
<i>Ferrissia rivularis</i>	A	I	1	"		
<i>Physa</i>	A	I	1	"		
<i>Spit A2 Chironomidae</i>	L	only JSD				
<i>Brillia flavifrons</i>	L	I	1	Epler 2001		

3 taxa, TVAL ≤ 2.0

15 < (0.1 x 192)

Taxonomist: Dimick, Jeffrey

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[illegible]