

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name ELK CREEK	Waterbody ID Code 2120800	Sample ID (YYYYMMDD-CY-FD) 20181031-09-03
Sampling Location DS of bridge 165m		Database Key 169645827

SWIMS Station ID 10030130	SWIMS Station Name ELK CREEK AT 35TH STREET
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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 MUDDY AND ELK CREEKS	County CHIPPEWA
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Sample and Site Descriptors

Sample Collector (Last Name, First) MYCAL RALEIGH / Kristen Ralubin	Project Name WCR LONG-TERM TREND WADEABLE REFERENCE STREAM
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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	Estimated Area Sampled (m²) 1	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: _____

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) 3	Average Stream Width of reach (m) 4.5
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Composition of Substrate Sampled (Percent):

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

Embeddedness of Substrate at Sample Site (%) 40
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	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	PL	U	- Organic (PCBs, pesticides...)	U	U
Slimes	N	U	Other - Specify:		
Other - Specify:			Sources of Stream Impacts		
			Bank Erosion	PH	U
			Point Source - Specify:		
Physical			Pasturing of Livestock	PH	U
Bank Erosion	PH	U	Runoff: - Barnyard	PL	U
Channelization: - Upstream	N	U	- Construction	N	U
- Downstream	N	U	- Cropland	PH	PH
Hydraulic Scour / Channel Incision	N	U	- Urban	N	N
Impoundment: - Upstream	N	U	Septic Systems	U	U
- Downstream	N	PL	Tile Drainage - Organic Soils	U	U
Low Flow	N	U	- Mineral Soils	U	U
Sedimentation	PL	U	Springs	U	U
Sludge	N	U	Tributary(s)	U	U
Thermal	N	U	Wetland	U	U
Turbidity	N	U	Other - Specify:		
Other - Specify:					

Comments: CLP in stream. Heavy horse pasturing us of bridge. Cropland surrounding on both sides of stream

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter Logan Cutler	Taxonomist Drmick, Jeffrey	Estimated Percent of Sample Sorted 13%
Date Processed 11/1/19	Specimens Saved 77 + 52 = 129	

2hr
 subsample archived in ABC until Jan 2023

	Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
1/2	<i>Baetis tricaudatus</i>	L	ii	2	Klub 2016		
	<i>B. flavistruga</i> species complex	L	i	1	"		
	<i>Ephemerella</i>	L	xiii	13	"	imm	N
2/6	<i>E. excrucians</i>	L	iiii	4	"		
3/10	<i>Paraleptophlebia</i>	L	iii	4	"	imm	
	<i>Prostria</i>	L	i	1	Hils 1995	imm	
	<i>Allocapnia</i>	L	i	1	"		
4/17	<i>Isoperla signata</i>	L	-ii	7	Hils 1982		
5/23	<i>Taeniopteryx</i>	L	-i	6	Hils 1995	imm	
6/21	<i>Brachycentrus americanus</i>	L	iii	4	Hils 1985		
	<i>Ceratopsyche glossocæ</i>	L	xiiii	14	Schm Hils 1986		
	<i>Hydatophylax argus</i>	L	i	1	Hils 1985		
	<i>Optioservus</i>	L	xiiii	14	Wass Schm 1992		
	<i>O. fastidiosus</i> L3 A2	L/A	-	5	"		
	<i>Stenelmis orenata</i>	A	i	1	"		
7/28	<i>Atherix variegata</i>	L	AD	1	Hils 1995		
	<i>Bezzia/palpus</i>	L	i	1	"		
	<i>Neoplasta</i>	L	i	1	cont Merr 2008		
	<i>Simulium vittatum</i> species complex 08110218	L	i	1	Adl et al 2004		
	<i>Simulium</i>	L	i	1	"	imm	Y
	<i>Antocha</i>	L	i	1	Hils 1995		
	<i>Dicranota</i>	L	x	10	"		
8/29	<i>Hesperocongra dolichophallus</i>	L	i	1	"		
	<i>Limnophila</i>	L	i	1	"		
	<i>Gammarus pseudolimnoides</i>	A	iiii	8	Hils 1972		
	<i>Caecidotea racovitzai racovitzai</i>	A	x-ii	17	Will 1972		
	<i>Hygrobates</i>	A	ii	2	Pluch 1984		
	<i>Limnesia</i>	A	-ii	7	"		
	<i>Lebertia</i>	A	-i	6	"		
	<i>Tubificonae (with hairs)</i>	A	i	1	Klemm 1985		
	<i>Diamesa</i>	L	i	1	Smith And 2013		
	<i>Thienemanniomyia</i> group	L	i	1	Cran Epl 2013		
9/30	<i>Parachaeoocladius</i>	L	i	1	And + 3 2013		
	<i>Chironominae</i> 08330000	L	i	1	Cranston 2013	not in det	Y
	<i>Cladotanytarsus</i>	L	ii	2	Epl et al 2013		
	<i>Microtendipes pedellus</i> group	L	ii	2	"		
	<i>Rhyotanytarsus</i>	L	i	1	"		

> 3 taxa, TVAL ≤ 2.0

30 > (0.1 x 113)