

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

Station Summary					
Waterbody Name OTTER CREEK		Waterbody ID Code 2156800		Sample ID (YYYYMMDD-CY-FD) 20191118-09-03	
Sampling Location US bridge ~ 7m				Database Key 215849269	
SWIMS Station ID 10008713		SWIMS Station Name OTTER CREEK - CTHS G AND S			
Latitude		Longitude		Lat/Long Determination Method (circle) SWIMS SWDV GPS	
Basin (WMU) LOWER CHIPPEWA				Watershed Name LOWER YELLOW (CHIPPEWA CO.) RIVER	
County CHIPPEWA				Datum Used if using GPS WGS84 or NAD83	
Sample and Site Descriptors					
Sample Collector (Last Name, First) MYCAL RALEIGH Kristen Patterson			Project Name WEST DISTRICT NC STREAM STRATIFIED SITES 2019		
Sampling Device					
<input checked="" type="checkbox"/> D-Frame Kick Net		<input type="checkbox"/> Surber Sampler		<input type="checkbox"/> Eckman	
<input type="checkbox"/> Ponar		<input type="checkbox"/> Artificial Substrate		<input type="checkbox"/> Hess Sampler <input type="checkbox"/> Other: _____	
Habitat Sampled					
<input checked="" type="checkbox"/> Riffle		<input type="checkbox"/> Run		<input type="checkbox"/> Pool	
<input type="checkbox"/> Other		<input type="checkbox"/> Shoreline Composite		<input type="checkbox"/> Proportionally-Sampled Habitat	
<input type="checkbox"/> Littoral Zone		<input type="checkbox"/> Profundal Zone		<input type="checkbox"/> Wetland	
Total Sampling Time (min) 1.5		Estimated Area Sampled (m²) 25		Number of Samples in Composite 1	
Reason For Sampling					
<input type="checkbox"/> Least Impacted Reference		<input type="checkbox"/> Baseline		<input type="checkbox"/> Impact / Treatment Site	
<input type="checkbox"/> Control Site		<input type="checkbox"/> Trend		<input checked="" type="checkbox"/> Other: NCSR	
Water Temp. (C) 2.2		D.O. (mg/l)		D.O. (% sat.)	
pH (su)		Conductivity (umhos/cm)		Transparency (cm)	
Water Color			Estimated Stream Velocity (m/s)		
<input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained			<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)		
Measured Velocity circle units m/s or f/s		Average Stream Depth of reach (m) .15		Average Stream Width of reach (m) 6m	
Composition of Substrate Sampled (Percent):					
Bedrock: _____		Boulders (basketball or larger): _____		Rubble (tennisball to basketball): 80	
Sand: 10		Clay: _____		Gravel (ladybug to tennisball): 10	
Aquatic Macrophytes: _____		Leaf Snags: _____		Coarse Woody Debris: _____	
Other (____): _____		Overhanging Vegetation: _____		Other (____): _____	
Embeddedness of Substrate at Sample Site (%) 10			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	Watershed	Factors that may be influencing Water Resource Integrity	Local	Watershed
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	N	U	- Organic (PCBs, pesticides...)	U	U
Slimes	N	U	Other - Specify:		
Other - Specify:			Sources of Stream Impacts		
			Bank Erosion	PL	U
			Point Source - Specify:		
Physical			Pasturing of Livestock	PH	PH
Bank Erosion	N	U	Runoff: - Barnyard	PL	U
Channelization: - Upstream	N	U	- Construction	N	N
- Downstream	N	U	- Cropland	PH	PH
Hydraulic Scour / Channel Incision	N	U	- Urban	N	N
Impoundment: - Upstream	N	PH	Septic Systems	U	U
- Downstream	N	U	Tile Drainage - Organic Soils	U	U
Low Flow	N	U	- Mineral Soils	U	U
Sedimentation	N	U	Springs	U	U
Sludge	U	U	Tributary(s)	U	U
Thermal	U	U	Wetland	U	U
Turbidity	U	U	Other - Specify:		
Other - Specify:					

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter Logan Cutler	Taxonomist Dimitri Jeffrey	Estimated Percent of Sample Sorted 15
Date Processed 9/29/2020	Specimens Saved 150 subsample archived in ABC lab 1 May 2023	

15 38 25 42 30
 C1Q1 B3Q1,4 C1Q3,4 B3Q23 C1Q2

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Acerperina pygmaea</i>	L	i	1	Klich 2016		
Heptageniidae	L	ii	2	Merrillum B 2019		
<i>Maccaffertium medopunctatum</i>	L	x	10	Klich 2016		
<i>Stenacron</i>	L	i	1	Merrillum B 2019		
<i>Allocapnia</i>	L	-i	4	"		
<i>Paracapnia angulata</i>	L	i	1	Hutch 1974		
<i>Taeniopteryx</i>	L	ii	2	Merrillum B 2019	imm	
<i>Helocopsyche borealis</i>	L	i	1	Hils 1985		
<i>Ceratopsyche</i>	L	i	1	"	imm	N
<i>C. borealis</i>	L	i	1	Schm Hils 1986		
<i>Cheumatopsyche</i>	L	xx	15	Merrillum B 2019		
<i>Microptilia</i>	L	ii	2	"		
<i>Chimarra obscura</i>	L	ii	2	Hils 1982		
<i>Optreterrus</i>	L	iii	3	Merrillum B 2019	imm	N
<i>O. fastidius</i>	L	ii	2	Hils Schm 1992		
<i>Stenelmis</i>	L	xi	11	Merrillum B 2019		N
<i>S. crenata</i>	A	iii	3	Hils Schm 1992		
<i>Bezza/Palomyia</i>	L	i	1	Hils 1985		
<i>Nemurochroma</i>	L	iii	4	Merrillum B 2019		
<i>Simulium tuberosum</i> species complex	L	i	1	Adkretal 2004		
<i>S. vittatum</i> species complex 08110217	L	0	20	"		
<i>Dicranota</i>	L	ii	3	Merrillum B 2019		
<i>Hygrobales</i>	A	i	1	Peck et al 2000		
<i>Spelochorridae</i>	A	ii	2	"		
<i>Ferrissia ovalaris</i>	A	i	1	Thorp Reg 2016		
<i>Sphaerium striatum</i>	A	i	1	Mackie 2007		
<i>Naididae</i>	A	0-ii	27	Bennet et al 1991	Kath Brim	1998
<i>Tubificinae</i> (without hairs)	A	-ii	7	Kath Brim 1998		
<i>Dugesiiidae</i>	A	xx-ii	17	Thorp Reg 2016		
Split A2a Chironomidae	L	Bxiii				
Split A2b Chironomidae	L	-iiii				
<i>Cardinalius obscurus</i>	L	ii	2	Epler 2001		
<i>Conchapelona</i> 08270700	L	i	1	And et al 2013		
<i>Thienemannimyia</i>	L	i	1	"		
<i>Thienemannimyia</i> group	L	iii	4	"	imm	N
<i>Orthocladinae</i> 08300000	L	i	1	"	imm	N
<i>Cricotopus</i> (<i>Isocladius</i>) <i>sylvestris</i> group	L	i	1	"		

<3 taxa, TVAL ≤ 20

