

Instructions: Bold fields must be completed.

2021006-70-01

Station Summary			
Waterbody Name CEDAR SPRING CREEK		Waterbody ID Code 245000	Sample ID (YYYYMMDD-CY-FD) 2021006-68-01 2021006-70-01
Sampling Location			Database Key 286597351
SWIMS Station ID 10030585		SWIMS Station Name CEDAR SPRINGS CREEK - COUNTY HIGHWAY Q	
Latitude 44.086742	Longitude -89.07207	Lat/Long Determination Method (circle) SWIMS SWDV GPS	Datum Used if using GPS WGS84 or NAD83
Basin (WMU) WOLF RIVER		Watershed Name PINE AND WILLOW RIVERS	County WAUSHARA

Sample and Site Descriptors	
Sample Collector (Last Name, First) DAVID BOLHA	Project Name NER LONG-TERM TREND WADEABLE REFERENCE STREAM

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 (m ²) 1.5	Number of Samples in Composite 1	Replicate No. _____ of _____
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Reason For Sampling

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

Water Temp. (C) 14.5	D.O. (mg/l) 9.84	D.O. (% sat.) 96.5	pH (su) 7.98	Conductivity (umhos/cm) 382.1	Transparency (cm) 120
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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) .15	Average Stream Width of reach (m) 3
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Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 40 Gravel (ladybug to tennisball): 60
 Sand: _____ Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____
 Aquatic Macrophytes: _____ Leaf Snags: _____ Coarse Woody Debris: _____ Other (_____): _____

Embeddedness of Substrate at Sample Site (%) 10
 Canopy Cover at Sample Site (%) 30

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

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter Raymer, Blake	Taxonomist Dimick, Jeffrey	Estimated Percent of Sample Sorted R1=6.25% R2=9.38%
Date Processed 10/11/22	Specimens Saved R1=137, R2=136	subsamples archived in ABL until Jan 2026

A3: 94:32 C4 91:40
 92:33
 C4: 93:32 93:
 91:
 92:
 94:
 R1=137

D1 93:19 C4 91:4
 92: 36
 94:18 94:16
 91:26
 R2=136

Taxa	Life Stage	Organism Count			Taxonomic Reference	Condition	Unique Taxon
		Rep 1	Rep 2	Rep 3			
<i>Baetis brunneicolor</i>	L	7	8		Klub 2016		
<i>B. fricardatus</i>	L	8	5		"		
<i>Ephemerella invaria</i>	L	0	1		"		
<i>E. subvaria</i>	L	1	7		"		
<i>Brachycentrus occidentalis</i>	L	1	1		Hils 1985		
<i>Microsema gelidum</i>	L	1	1		"		
<i>Glossosoma intermedium</i>	L	1	0		Wym Mar 2000		
Hydroptychidae	L	2	4		MCB 2019	imm	N
<i>Ceratopsyche</i>	L	1	0		Hils 1985	imm	N
<i>C. slossonae</i>	L	24	16		Schm Hils 1986		
<i>Cheumatopsyche</i>	L	18	17		MCB 2019		
<i>Hydropsyche betterii</i>	L	10	5		Schm Hils 1986		
<i>Chimarra aterrima</i>	L	0	1		Hils 1982		
<i>Optioservus</i>	L	19	25		MCB 2019	imm	N
<i>O. fastiditus</i>	L	13	13		Hils Schm 1992		
<i>Diamesa</i>	P	1	0		MCB 2019		
<i>Paratanytarsus</i>	P	1	0		"		
<i>Neoplasta</i>	L	2	1		"		
<i>Simulium tuberosum</i> species complex	L	0	1		Adl et al 2004		
<i>S. vittatum</i> species complex 08110218	L	6	11		"		
<i>Hybanitra</i>	L	0	1		MCB 2019		
<i>Antocha</i>	L	1	1		"		
<i>Dicranota</i>	L	1	1		"		
<i>Gammarus pseudohumans</i>	A	7	8		Hils 1972		
Meunieridae	A	0	2		Thorp Poy 2016		
Dugesidae	A	3	0		"		
Physa	A	1	2		"		
Pisidium	A	0	1		"		
Mesocrici	A	2	0		"		
Naididae	A	9	2		Kath Brn 1998		
Lebertia	A	2	3		Peck et al 1990		
Sperchoniidae	A	6	11		"		
split A2 Chironomidae	L	11	9	ND			
<i>Thienemannimyia</i> group	L	1	0		Ander et al 2013		
Orthocladiinae	L	3	1		"	imm	N
<i>Eukiefferella</i>	L	1	0		"	can	
<i>Orthocladius</i> (<i>Orthocladius</i>)	L	0	1		"		
<i>Parametretremus</i>	L	2	3		"		
<i>Tretania bavarica</i> group	L	7	5		Beck 1983		
<i>Orthochironominae</i>	L	1	0		Ander et al 2013	imm	N

30
 >3 taxa, TVAL ≤ 2.0

