

Instructions: Bold fields must be completed.

Station Summary					
Waterbody Name PINE RIVER		Waterbody ID Code 247800		Sample ID (YYYYMMDD-CY-FD) 20181026-70-01	
Sampling Location				Database Key 168915315	
SWIMS Station ID 10022005		SWIMS Station Name PINE RIVER CTH A OLD BRIDGE UPSTREAM ANNUAL SITE			
Latitude 44.18663	Longitude 89.15418	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 PINE RIVER 319 PROJECT-FUNDED TWA 2018		
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 type="checkbox"/> Riffle <input checked="" 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) 2.0	Estimated Area Sampled (m ²) 1.5	Number of Samples in Composite 1		Replicate No. <u>1</u> of <u>1</u>	
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: <u>Targeted Watershed Assessment</u>					
Water Temp. (C) 7.6	D.O. (mg/l) 10.7	D.O. (% sat.) 91.6	pH (su) 7.8	Conductivity (umhos/cm) 369.3	Transparency (cm) 120
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 type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input checked="" type="checkbox"/> Fast (> 0.5 m/s)		
Measured Velocity 1.63	circle units m/s or f/s	Average Stream Depth of reach (m) 0.4		Average Stream Width of reach (m) 6.0	
Composition of Substrate Sampled (Percent):					
Bedrock: _____		Boulders (basketball or larger): _____	Rubble (tennisball to basketball): <u>40</u>	Gravel (ladybug to tennisball): <u>50</u>	
Sand: <u>10</u>		Clay: _____	Silt/Muck: _____	Overhanging Vegetation: _____	
Aquatic Macrophytes: _____		Leaf Snags: _____	Coarse Woody Debris: _____	Other (____): _____	
Embeddedness of Substrate at Sample Site (%) <u>30</u>			Canopy Cover at Sample Site (%) <u>0</u>		

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

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter Kierstan Czarnecki	Taxonomist Dimick, Jeffrey	Estimated Percent of Sample Sorted 27%
Date Processed 3/11/2019	Specimens Saved 231 subsample archived in ABE units 1 May 2022	

E1: 39 C3: 37
 D2: 45 A2: 110

	Taxa	Life Stage	Benthic Tally	Count	Taxonomic Reference	Condition	Unique Taxon
2/5	Taeniopteryx	L	III	5	Hils 1995	imm	
	Baetis brunneicollis	L	III	3	Klob 2016		
	B. flavistriga species complex	L	-	5	"		
	Baetisca	L	I	1	"	imm	N
	B. laurentina	L	II	2	"		
	Baetidae	L	I	1	"	dam	N
2/6	Ephemera invaria	L	I	1	"		
3/8	E. subvaria	L	II	2	"		
	Heptageniidae	L	II	2	"	imm	N
	Stenocran	L	II	2	"	imm	
	Maccaffertium	L	X-I	16	"	imm	Y
	M. mediopunctatum	L	I	1	"		
4/4	M. vicarium	L	-I	6	"		
5/16	Brachycentrus occidentalis	L	II	2	Hils 1985		
	Hydropsychidae	L	II	2	Hils 1985	imm	N
	Cheumatopsyche	L	XIII	14	"		
	Hydropsyche belleni	L	I	1	Schm Hils 1986		
	Ceratopsyche slossonae	L	II	2	"		
	Oecetis	L	II	2	Hils 1985	imm	
6/24	Ceratopsyche sparna	L	-II	8	Schm Hils 1986		
7/5	Brachycentrus americanus	L	I	1	Hils 1985		
8/27	Nigronia serricornis	L	II	2	Neunzig 1966		
	Otioceratus	L	X-II	17	Hils Schm 1992	imm	N
	O. fastidius	L & A	-III	9	"		
9/32	Atherix variegata	L	I	5	Hils 1985		
	Stenelmis	L	I	1	Hils Schm 1992		
	Probezzia	L	I	1	Hils 1985		
	Idmerodromia	L	X-II	17	Court Meis 2008		
	Simulium	L	I	1	Ader et al 2004	imm	N
	S. venustum species complex	L	II	2	"		
	S. vittatum species complex 08110218	L	-II	7	"		
10/1	S. jenningsi species group	L	I	1	"		
	Simulium	P	III	4	"		N
	Antocha	L	-III	9	Hils 1985		
	Gammarus pseudolimnoides	A	0/	25	Hils 1972		
	Trombidiformes	A	I	1	Thorp & Roy 2016	imm	N
	Hydrobates	A	I	1	Pluchino 1984		

> 3 taxa, TVAL ≤ 2.0
 33 > (0.1 × 188)

