

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name PINE RIVER		Waterbody ID Code 247800	Sample ID (YYYYMMDD-CY-FD) 20181019-70-03
Sampling Location			Database Key 169215325
SWIMS Station ID 10049174		SWIMS Station Name PINE RIVER - AINAWA HABITAT SITE	
Latitude N 44.20557	Longitude W 89.19907	Lat/Long Determination Method (circle) SWIMS SWDV <u>GPS</u>	Datum Used if using GPS <u>WGS84</u> 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
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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) 3	Estimated Area Sampled (m²) 1.5	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: Targeted Watershed Assessment

Water Temp. (C) 9.2	D.O. (mg/l) 10.7	D.O. (% sat.) 95.0	pH (su) 7.6	Conductivity (umhos/cm) 376.8	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 1.59	circle units m/s or <u>f/s</u>	Average Stream Depth of reach (m) 0.8	Average Stream Width of reach (m) 5
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Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 30 Gravel (ladybug to tennisball): 40
 Sand: 30 Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____
 Aquatic Macrophytes: _____ Leaf Snags: _____ Coarse Woody Debris: _____ Other (_____): _____

Embeddedness of Substrate at Sample Site (%) 40
Canopy Cover at Sample Site (%) 0 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	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
Physical			Pasturing of Livestock	N	N
Bank Erosion	N	N	Runoff: - Barnyard	N	N
Channelization: - Upstream	N	N	- Construction	N	N
- Downstream	N	N	- Cropland	N	PL
Hydraulic Scour / Channel Incision	N	N	- Urban	N	N
Impoundment: - Upstream	PL	PH	Septic Systems	N	N
- Downstream	N	PL	Tile Drainage - Organic Soils	N	PL
Low Flow	N	N	- Mineral Soils	N	PL
Sedimentation	PL	PH	Springs	N	PL
Sludge	N	N	Tributary(s)	N	PL
Thermal	N	N	Wetland	N	PL
Turbidity	N	N	Other - Specify:		
Other - Specify:					

Comments

Fish habitat improvements made in 2018 throughout sample location

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter Sam Camarcho	Taxonomist Dimock, Jeffrey	Estimated Percent of Sample Sorted 13.9%
Date Processed 3/8/2019	Specimens Saved subsample archived in ABL until May 2022	

C1 A2
 101 102 203 total

Taxa	Life Stage	Benthic Tally	Count	Taxonomic Reference	Condition	Unique Taxon
Baetis	L	1	1	Klub 2016	dam	N
B. brunneicolar	L		4	"		
1/1 B. tricaudatus	L		1	"		
2/3 B. flavistriga species complex	L		8	"		
Ephemerella subvaria	L		2	"		
3/17 3/19 4/9 5/10 stenacron	L		2	"	imm	
Baeobrachycentrus americanus	L		4	Hils 1985		
B. occidentalis	L		2	"		
Protaptila	L		1	Hils 1985		
Cheumatopsyche	L	8-	37	"		
Hydropsyche hettneri	L		1	Schm Hils 1986		
Ceratopsyche glossonae	L	x	11	"		
6/11 C. spuma	L		1	"		
Oatiaservus	L		1	Hils Schm 1992	imm	N
O. fastidius L.S A.Z	LA	-	7	"		
7/3 Athierix variegata	L		2	Hils 1985		
Hemerodromia	L		4	Count Mar 2008		
Simulium vittatum species complex 08110217	L	-	7	Hiler et al 2004		
Simulium	P		1	"		N
Antocha	L	x	13	Hils 1985		
Hexatoma	L		2	"		
Gammarus pseudolimnensis	A	x	15	Hils 1972		
Caecidotea	A		2	Will 1972		
Lebertia	A		2	Pluchino 1984		
Limnesia	A	-	5	"		
Dugesidae	A		2	Thorp Reg 2016		
Tubificinae (with hairs)	A		1	Klemm 1985		
Pisidium	A		2	Burch 1972		
split A3 Chironomidae	L	 	4			
Tetania bavarica group	L		1	Bede 1983		
Microtendipes pedellus group	L	8x	52	EpI et al 2013		
Cladotanytarsus	L		3	"		
Paratanytarsus longistylus	L		3	"		
Rheotanytarsus	L	-	7	"		

>3 taxa, TVAL ≤ 2.0

13 < (0.1 x 102)