

Instructions: Bold fields must be completed.

20190246001

Station Summary

Waterbody Name
WAUPACA RIVER

Waterbody ID Code
257400

Sample ID (YYYYMMDD-CY-FD)
Macroinvertebrate
20190246001

Sampling Location

5 M N of Clementson

Database Key
210950279

SWIMS Station ID
10008325

SWIMS Station Name
TOMORROW RIVER AT CLEMENTSON RD

Latitude
44.52428

Longitude
-89.338104

Lat/Long Determination Method (circle)
SWIMS SWDV GPS

Datum Used if using GPS
WGS84 or NAD83

Basin (WMU)
WOLF RIVER

Watershed Name
WAUPACA RIVER

County
PORTAGE

Sample and Site Descriptors

Sample Collector (Last Name, First)
MICHAEL MILLER

Project Name
CENTRAL SANDS INFLUENCE OF PESTICIDES ON MACROIN

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)

5

Estimated Area Sampled (m²)

1

Number of Samples in Composite

1

Replicate No. _____ of _____

Reason For Sampling

☐ Least Impacted Reference

☐ Baseline

☒ Impact / Treatment Site

☐ Control Site

☐ Trend

☐ Other: _____

Water Temp. (C)

6.8

D.O. (mg/l)

11.79

D.O. (% sat.)

96.7

pH (su)

7.87

Conductivity (umhos/cm)

204.1

Transparency (cm)

43

Water Color

☐ Clear

☒ Turbid

☐ Stained

Estimated Stream Velocity (m/s)

☐ Slow
(< 0.15 m/s)

☐ Moderate
(0.15 m/s - 0.5 m/s)

☒ Fast
(> 0.5 m/s)

Measured Velocity

circle units

m/s or f/s

Average Stream Depth of reach (m)

0.15

Average Stream Width of reach (m)

3

Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders
(basketball or larger): _____

Rubble
(tennisball to basketball): _____

Gravel
(ladybug to tennisball): 50

Sand: _____ Clay: _____

Silt/Muck: _____

Overhanging Vegetation: 90%

Aquatic Macrophytes: 10% Leaf Snags: _____ Coarse Woody Debris: _____ Other (): _____

Embeddedness of Substrate at Sample Site (%)

Canopy Cover at Sample Site (%)

41	20	C1	25	A4	D2	A1	C4	B3
21 → 2		22 → 2						
22 → 3		24 → 13		23		42	28	
23 → 6		21 → 5						
24 → 9		23 → 5						

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

Comments: hard to sample, fast flowing and deep water.
cobble and sand dominant substrate

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter Undlin, Dylan	Taxonomist Dimick, Jeffrey	Estimated Percent of Sample Sorted 37.5
Date Processed 3/4/23	Specimens Saved 138 subsample archived in ABL until Apr 2026	

On other side →

Wisconsin Department of Natural Resources

ABL SampleNum: 20191024-50-04

Taxonomist: Dimick, Jeffrey

 Waterbody: Waupaca River
 SWIMS Database Key: 287759429

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Taxa	Life Stage	Benthic Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Beetis brunneicolar</i>	L		8	Klub 2016		
<i>B. tricaudatus</i>	L		2	"		
<i>Ephemerella</i>	L		7	MCB 2019	imm	N
<i>E. invariata</i>	L		2	Klub 2016		
<i>Maccaffertium vicarium</i>	L	I	1	"		
<i>Leptophlebia</i>	L	I	1	MCB 2019	imm	
<i>Paracappa angulata</i>	L	I	1	Hitch 1974		
<i>Isoperla slossonae</i>	L	I	5	Hils 1982		
<i>Taeniopteryx</i>	L		4	MCB 2019	imm	
<i>Belostomatidae fumorum</i>	A	I	1	Hils 1984a		
<i>Brachycentrus americanus</i>	L		2	Hils 1985		
<i>B. occidentalis</i>	L		25	"		
<i>Lepidostoma</i>	L	I	1	MCB 2019		
<i>Limnephilidae</i>	L		3	"	imm	N
<i>Limnephilus</i>	L	I	1	"		
<i>Pycnopsycha</i>	L	I	1	"		
<i>Malania blanda</i>	L		3	Sherb Wall 1971		
<i>Diptera 08000200</i> <i>Brachyptera</i>	P		9	MCB 2019		
<i>Proleptia</i>	L		2	Hils 1985		
<i>Thrematocera 08304701</i>	P	I	1	MCB 2019		
<i>Gammarus pseudolimnaeus</i>	A	8-	47	Holsinger 1972		
<i>Physa</i>	A		2	Thorp 2016		
<i>Hemeroscoloplos</i>	L	I	1	MCB 2019		
<i>Pisidium</i>	A	xx	15	Thorp 2016		
<i>Tubificidae (with hairs)</i>	A		4	Kath Brin 1989		
<i>Tubificidae (without hairs)</i>	A		9	"		
<i>Split to Anisodonta</i>	L	 	5			
<i>Brillia</i>	L	I	1	Ander et al 2013	imm	N
<i>B. flavifrons</i>	L		2	Eder 2001		
<i>Parameletocnemus</i>	L	I	1	Ander et al 2013		
<i>Zaurelmyia</i>	L	I	1	"		
<i>Limnophyes</i>	L	I	1	"		
<i>Microtendipes cydalensis group</i>	L	I	1	"		
<i>Paratanytarsus longistylus</i>	L		2	"		
<i>Polypedilum (Polypedilum) illinoense group</i>	L	I	1	Boltan 2012		
<i>P. (Tropidura) scalareum group</i>	L	xi	11	"		

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