

Instructions: Bold fields must be completed.

**Station Summary**

<b>Waterbody Name</b> BAD RIVER		<b>Waterbody ID Code</b> 2891900	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20181030-02-01
<b>Sampling Location</b> Bad River @ Thomas St. - Upstream ~ 80 m			<b>Database Key</b> 168311224
<b>SWIMS Station ID</b> 10033485	<b>SWIMS Station Name</b> BAD RIVER AT GILMAN PARK		
<b>Latitude</b> 46.32287	<b>Longitude</b> -90.66437	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV <b>GPS</b>	<b>Datum Used if using GPS</b> WGS84 or NAD83
<b>Basin (WMU)</b> LAKE SUPERIOR		<b>Watershed Name</b> UPPER BAD RIVER	<b>County</b> ASHLAND

**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> JON KLEIST	<b>Project Name</b> NORTH DISTRICT NC STREAM STRATIFIED SITES 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

<b>Total Sampling Time (min)</b> 1 minute	<b>Estimated Area Sampled (m<sup>2</sup>)</b> 1 m <sup>2</sup>	<b>Number of Samples in Composite</b> 3-20 second Kicks	<b>Replicate No.</b> 1 of 1
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**Reason For Sampling**

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

<b>Water Temp. (C)</b> 5.3	<b>D.O. (mg/l)</b> 11.8	<b>D.O. (% sat.)</b> 93.1	<b>pH (su)</b> 7.2	<b>Conductivity (umhos/cm)</b> 51	<b>Transparency (cm)</b> >120
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<b>Water Color</b> <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" type="checkbox"/> Stained	<b>Estimated Stream Velocity (m/s)</b> <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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<b>Measured Velocity</b> circle units m/s or f/s	<b>Average Stream Depth of reach (m)</b> 0.6 m	<b>Average Stream Width of reach (m)</b> 12 m
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): 10 Rubble (tennisball to basketball): 50 Gravel (ladybug to tennisball): 20  
 Sand: 20 Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: \_\_\_\_\_ Leaf Snags: \_\_\_\_\_ Coarse Woody Debris: \_\_\_\_\_ Other ( \_\_\_\_\_ ): \_\_\_\_\_  
 Embeddedness of Substrate at Sample Site (%) 20% Canopy Cover at Sample Site (%) 20%

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

Comments

Special Instructions for Laboratory

**For Lab Use Only**

Sample Sorter <i>Kayla Wilcox</i>	Taxonomist <i>Dimick, Jeffrey</i>	Estimated Percent of Sample Sorted <i>13%</i>
Date Processed <i>8/28/19</i>	Specimens Saved <i>Subsample archived in ABL until Nov 2022</i>	

D3= 91  
 C1= 82

Wisconsin Department of Natural Resources

ABL SampleNum: 20181030-02-01

Taxonomist: Dimick, Jeffrey

Waterbody: Bad River

SWIMS Database Key: 168311224

Taxa	Life Stage	Benthic Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Paracornia angulata</i>	L	x-iii	19	Hitch 1974		
<i>Acroneuria</i>	L	ii	2	Hils 1995	imm	
<i>A. lyacras</i>	L	iii	3	Hitch 1974		
<i>Isoperla signata</i>	L	ii	2	Hils 1992		
Taeniopterygidae	L	x-i	16	Hils 1995	imm	N
<i>Dementrius glacialis</i>	L	i	6	Hils 1995		
<del>Acentrella</del> <i>Acentrella turbida</i>	L	ii	3	Klob 2016		
Ephemereidae	L	i	1	"	dam	N
<i>Ephemerella</i>	L	x-ii	8	"	imm	N
<i>E. invaria</i>	L	iii	4	"		
<i>Eurylophella</i>	L	i	2	"	imm	
<i>Epeorus vitreus</i>	L	i	1	"		
<i>Leucocrota</i>	L	ii	2	"		
<i>Maccaffertium</i>	L	ii	2	"	imm	N
<i>M. modestum</i>	L	ii	2	"		
<i>Phithrogena jejuna</i>	L	x-iii	19	"		
<i>Paraleptonhebra</i>	L	i	1	"	imm	N
<i>P. mollis</i>	L	i	1	"		
<i>Glossosoma nigricorn</i>	L	ii	3	Wynn Mar 2000		
<i>Cheumatopsyche</i>	L	i	1	Hils 1995		
<i>Ceratopsyche</i>	L	ii	2	"	imm	
<i>Setodes</i>	L	i	1	"	imm	
<i>Chimarra</i>	L	i	1	Hils 1995	imm	
<i>Psychomyia flavida</i>	L	i	1	"		
<i>Onicoservis</i>	L	0-iii	24	Hils Schm 1992	imm	N
<i>O. fastidius</i>	L	i	1	"		
<i>O. frivittatus</i>	L	x-iii	19	"		
<i>Stenelmis</i>	L	iii	4	"		
<i>Bezzia / Palpomyia</i>	L	ii	2	Hils 1995		
<del>Meotista</del> <i>Nemerodromia</i>	L	i	1	Cont Merr 2008		
<i>Simulium jenningsi</i> species group	L	i	1	Adl et al 2004		
<i>Prosimulium</i>	L	i	1	"	imm	
<i>Antocha</i>	L	iii	3	Hils 1995		
<i>Dicranota</i>	L	i	1	"		
<i>Hexatoma</i>	L	-	5	"		
<i>Pseudolimnophila</i>	L	iii	3	"		
<i>Lumbriculus</i>	A	-iii	9	Thorp, Ras 2016		
<i>Laerapex fuscus</i>	A	ii	2	"		

