State of Wisconsin
Department of Natural Resources
PO Box 7291, Madison WI 53707-7291
dnr.wi.gov

Wadeable Macroinvertebrate Field Data Report

Form 3200-081 (R 8/14)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	**Waterbody ID Code**	**Sample ID (YYYYMMDD-CY-FD)**
BILLINGS CREEK	1196900	20161019-63-01

Sampling Location	**Database Key**
10m US of Hwy F bridge	134803461

SWIMS Station ID	**SWIMS Station Name**
10009007	BILLINGS CREEK STATION #3 BRG. ON CTH F

Latitude	**Longitude**	**Lat/Long Determination Method (circle)**	**Datum Used if using GPS**
43.706295	-90.54354	SWIMS SWDV GPS	WGS84 or NAD83

Basin (WMU)	**Watershed Name**	**County**
LOWER WISCONSIN	MIDDLE KICKAPOO RIVER	VERNON

Sample and Site Descriptors

Sample Collector (Last Name, First)	**Project Name**
CAMILLE BRUHN	WCR LONG-TERM TREND WADEABLE REFERENCE STREAMS

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Other
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	**Estimated Area Sampled (m^2)**	**Number of Samples in Composite**	**Replicate No.**
1	1	1	1 of 1

Reason For Sampling

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

Water Temp. (C)	**D.O. (mg/l)**	**D.O. (% sat.)**	**pH (su)**	**Conductivity (umhos/cm)**	**Transparency (cm)**
10.36	11.80	105.6	8.21	493	120+

Water Color

- [X] Clear
- [ ] Turbid
- [ ] Stained

Estimated Stream Velocity (m/s)

- [ ] Slow (< 0.15 m/s)
- [X] 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)**	**Average Stream Width of reach (m)**
	0.2	4.5

Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 90% Gravel (ladybug to tennisball): 5%

Sand: 5% Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____

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

Embeddedness of Substrate at Sample Site (%) 5% **Canopy Cover at Sample Site (%)** 0%

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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
Biological		
Algae: - Diatoms / Periphyton	N	
- Filamentous Algae	N	
- Planktonic Algae	N	
Iron Bacteria	U	
Macrophytes	N	
Slimes	N	
Other - Specify:		
Physical		
Bank Erosion	PL	
Channelization: - Upstream	N	
- Dow nstream	N	
Hydraulic Scour / Channel Incision	N	
Impoundment: - Upstream	N	
- Dow nstream	N	
Low Flow	N	
Sedimentation	N	
Sludge	N	
Thermal	N	
Turbidity	N	
Other - Specify:		

Factors that may be influencing Water Resource Integrity	Local	Water-shed
Chemical		
Chlorine	U	
Dissolved Oxygen	N	
Nutrients (P, N...)	U	
Toxics: - Inorganic (Metals)	U	
- Organic (PCBs, pesticides...)	U	
Other - Specify:		
Sources of Stream Impacts		
Bank Erosion	N	
Point Source - Specify:	N	
Pasturing of Livestock (DS of site pasturing)	PL	
Runoff: - Barnyard	N	
- Construction	N	
- Cropland	PL	
- Urban	N	
Septic Systems	N	
Tile Drainage - Organic Soils	U	
- Mineral Soils	U	
Springs	U	
Tributary(s)	N	
Wetland	N	
Other - Specify:		

Comments Sampled 10m US from Hwy F bridge on Billings Creek. Nice riffle area with rubble and gravel. Area DS did not have livestock present, but there was a visible area where livestock have access to drink in stream. Crop fields present locally. Tributary comes into creek just US (~2m) of bridge.

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Taylor Hasz	Dimick, Jeffrey	13%
Date Processed	**Specimens Saved**	
8-28-17	Subsample archived in ABL until Nov 2020	

C3 101

A1 86

Wisconsin Department of Natural Resources
ABL SampleNum: **20161019-63-01**
Taxonomist: Dimick, Jeffrey

Waterbody: **Billings Creek**
SWIMS Database Key: **134803461**

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
Isoperla transmarina	L	1	1	Hilsenhoff 1982		
Baetis bovinecolor	L	II	2	Klebertanz 2016		
B. tricaudatus	L	1	1	"		
Plauditus dubius	L	1	1	"		
Iswaeon anoka	L	1	1	"		
Ephemerella excrucians	L	III	3	"		
Maccaffertium mediopunctatum	L	1	1	"		
M. vicarium	L	II	2	"		
Glossosoma intermedium	L	1	1	Wiggins, Morse 2000		
Cheumatopsyche	L	II	2	Hilsenhoff 1995		
Hydropsyche betteni	L	XI	11	Ross, Schm., Hils. 1986		
Ceratopsyche	L	II	2	Hilsenhoff 1995	dam	N
C. bronta	L	/	5	Schm., Hils. 1986		
C. slossonae	L	X-II	17	"		
C. sparna	L	-II	7	"		
Neophylax	L	1	1	Hilsenhoff 1995	imm	
Hydropsyche	L	1	1	"	imm	N
Diboraphia	L	1	1	Hils., Schm. 1992		
Optioservus	L	011	22	"	imm	N
O. fastiditus L, 10 A, 4	L, A	X1111	14	"		
Stenelmis	L	II	2	"		N
S. crenata	A	1	1	"		
Atherix variegata	L	III	4	Hilsenhoff 1995		
Nemerodromia	L	1	1	Coffman, Mess. 2008		
Antocha	L	X-	15	Hilsenhoff 1995		
Gammarus pseudolimnaeus	A	4	2	Holsinger 1972		
Hygrobates	A	-1	6	Pluehino 1984		
Sphaerodexsis	A	1	1	"		
Tricladida	A	1	1	Kolasa 1991		
Naidinae	A	-01	8	Brin, Cole. 1991		
Tvetenia	P	1	1	Fer. et al. 2008		N
Orthocladius (Orthocladius)	P	1	1	"		
Eukiefferiella	L	1	1	Ander. et 3 2013	dam	N
Eu. brehmi group	L	1	1	"		
Eu. devonica group	L	II	2	"		
Parametriocnemus	L	III	4	"		

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Tvetenia bavarica group	L	-	5	Bode 1983		
Orthocladius (Eurthocladius) rivulorum	L	II	2	Epler 2001		
O. (Orthocladius)	L	0-IIII	29	Anderson 2013		Y
Cricotopus	L	I	1	"		
Paratanytarsus sp. A	L	I	1	Hirsenhoff ~~1990~~ unpubl.		
P. longistilus	L	II	2	Epler et al. 2013		
Polypedilum (Uresipedilum) aviceps	L	IIII	4	Bolton 2012		
Rheotanytarsus	L	X-II	17	Epler et al 2013		