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	20180910-63-01

Sampling Location	**Database Key**
	168762132

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**
JEAN UNMUTH	SCR LONG-TERM TREND WADEABLE REFERENCE STREAM

Sampling Device

- [X] 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)	**Estimated Area Sampled (m^2)**	**Number of Samples in Composite**	**Replicate No.** / **of**
4.0	1.0	1	1 / 1

Reason For Sampling

- [X] 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)**
17.5	11.9	130	8.4	529	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)**
0.41	0.20	6.0

Composition of Substrate Sampled (Percent):

Bedrock:	Boulders (basketball or larger):	Rubble (tennisball to basketball):	Gravel (ladybug to tennisball):
		50	50

Sand:	Clay:	Silt/Muck:	Overhanging Vegetation:

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

Embeddedness of Substrate at Sample Site (%) 10 **Canopy Cover at Sample Site (%)** 40

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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		
- Filamentous Algae	PL	
- Planktonic Algae		
Iron Bacteria	N	
Macrophytes	N	
Slimes	N	
Other - Specify:		
Physical		
Bank Erosion	PH	PH
Channelization: - Upstream	N	
- Downstream		
Hydraulic Scour / Channel Incision	PH	PH
Impoundment: - Upstream		
- Downstream		
Low Flow	N	
Sedimentation	PL	
Sludge	N	
Thermal	N	
Turbidity	N	
Other - Specify:		

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

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Logan Cutler	Dimick, Jeffrey	27%
Date Processed	**Specimens Saved**	
10/23/19	34 + 32 + 68 = 134	
	D1 D3 B1/C3 Total	

2hr Subsample archived in ABL until Jan 2023 2hr

Wisconsin Department of Natural Resources
ABL SampleNum: **20180910-63-01**
Taxonomist: Dimick, Jeffrey

Waterbody: **Billings Creek**
SWIMS Database Key: **168762132**

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
Baetis brunneicolor	L	III	3	Klub 2016		
B. flavistriga species complex	L	III	3	"		
Heptageniidae	L	II	2	"	dam	N
Maccaffertium	L	I	1	"	dam	N
M. mediopunctatum	L	XII	12	"		
M. vicarium	L	III	3	"		
Brachycentrus occidentalis	L	I	1	Hils 1985		
Helicopsyche borealis	L	IIII	4	Hils 1995		
Ceratopsyche bronta	L	-IIII	9	Schm Hils 1986		
C. slossonae	L	-IIII	9	"		
Ceratopsyche	L	I	1	Hils 1995	imm	N
Cheumatopsyche	L	/	5	"		
Hydropsyche betteni	L	II	2	Schm Hils 1986		
~~Helichus~~ striatus Helichus	A	I	1	Hils Schm 1992		
Optioservus	L	XII	12	"	imm	N
O. fastidiosus L, 12 A, 5	L,A	X-II	17	"		
Stenelmis	L	I	1	"		N
S. crenata	A	IIII	4	"		
Atherix variegata	L	-I	6	Hils 1995		
Tipula	L	I	1	"		
Gammarus pseudolimnaeus	A	X-III	18	Hols 1972		
Mermithidae	A	I	1	Thorp Rog 2016	imm	
Dugesiidae	A	(	1	"		
Naididae	A	I	1	Brin Cold 1991		
Tubificinae (without hairs)	A	(	1	Klemm 1985		
Conchapelopia 08220700	L	I	1	Crane Epl 2013		
Diamesa	L	III	3	Soothland 2013		
Orthocladiinae 08300000	L	I	1	Cranston 2013	imm	N
Cricotopus	L	I	1	Lind+3 2013		N
C. (Cricotopus) tremulus group	L	II	2	"		
C. (C.) trifascia group	L	I	1	"		
Parametriocnemus	L	I	1	"		
Tvetenia discoloripes group	L	I	1	Bode 1983		
Microtendipes pedellus group	L	I	1	Epl et al 2013		
Polypedilum (Uresipedilum) aviceps	L	II	2	Bolton 2012		
Rheotanytarsus	L	II	2	Epl et al 2013		