

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

Station Summary			
Waterbody Name MECAN RIVER		Waterbody ID Code 155000	Sample ID (YYYYMMDD-CY-FD) 20171018-39-01
Sampling Location		Database Key 149844335	
SWIMS Station ID 10041822		SWIMS Station Name MECAN RIVER AT 14TH AVE	
Latitude N 43.96460	Longitude W 89.34707	Lat/Long Determination Method (circle) SWIMS SWDV <u>GPS</u>	Datum Used if using GPS <u>WGS84</u> or NAD83
Basin (WMU) UPPER FOX		Watershed Name MECAN RIVER	County MARQUETTE

Sample and Site Descriptors	
Sample Collector (Last Name, First) DAVID BOLHA	Project Name MACROINVERTEBRATE SPATIAL ANALYSIS

**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) 3.0	Estimated Area Sampled (m <sup>2</sup> ) 2.0	Number of Samples in Composite 1	Replicate No. _____ of _____
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**Reason For Sampling**

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

Water Temp. (°C) <sup>9.8°C</sup> <del>49.6</del> F	D.O. (mg/l) 8.56	D.O. (% sat.) 75.1	pH (su) 7.81	Conductivity (umhos/cm) 347.3	Transparency (cm)
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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 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 1.20	circle units m/s or <u>f/s</u>	Average Stream Depth of reach (m) 0.8	Average Stream Width of reach (m) 8.0
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): \_\_\_\_\_ Gravel (ladybug to tennisball): \_\_\_\_\_  
 Sand: ~~100~~ 25 Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: 50 Leaf Snags: 25 Coarse Woody Debris: \_\_\_\_\_ Other ( ): \_\_\_\_\_  
 Embeddedness of Substrate at Sample Site (%) \_\_\_\_\_ Canopy Cover at Sample Site (%) 10

No riffles of hard substrate, all shifting sand substrate

**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				Toxics: - Inorganic (Metals)			
Macrophytes				- Organic (PCBs, pesticides...)			
Slimes				Other - Specify:			
Other - Specify:				<b>Sources of Stream Impacts</b>			
				Bank Erosion			
<b>Physical</b>				Point Source - Specify:			
Bank Erosion				Pasturing of Livestock			
Channelization: - Upstream				Runoff: - Barnyard			
- Downstream				- Construction			
Hydraulic Scour / Channel Incision				- Cropland			
Impoundment: - Upstream				- Urban			
- 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

2 caddis case, none  
 6 midges  
 1 damselfly  
 2 snails Phy. lim

For Lab Use Only		
Sample Sorter <i>Logan Cutler</i>	Taxonomist <i>Dimick, Jeffrey</i>	Estimated Percent of Sample Sorted <i>7%</i>
Date Processed <i>11/26/18</i>	Specimens Saved <i>subsample 257 archived in ABC until Feb 2022</i>	

Grid C-1 257  
 7%

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
4/4 <i>Taeniopteryx</i>	L		4	Hils 1995	imm	
<i>Baetis brunneicolor</i>	L	-	7	Klob 2016		
<i>B. flavistriga</i> species complex	L		1	"		
<i>Isaogen anka</i>	L	x	10	"		
<i>Caenis</i>	L		2	"	imm	N
<i>C. latipennis</i>	L		1	"		
<i>C. punctata</i>	L		4	"		
<i>Maccaffertium</i>	L		2	"	imm	
<i>Leptophlebia</i>	L		1	"	imm	N
<i>L. cupida</i>	L		4	"		
<i>Colopteryx</i>	L		2	West May 1990	imm	N
<i>C. maculata</i>	L		1	"		
2/9 3/10 <i>Brachycentrus numerosus</i>	L	-	5	Hils 1985		
<i>B. occidentalis</i>	L		1	"		
<i>Cheumatopsyche</i>	L		1	Hils 1995		
<i>Hydropsyche betteni</i>	L	?	1	Schm Hils 1986		
<i>Ceratopsyche</i> (alt/walk)	L		1	Hils 1995	imm	Y
<i>C. bronata</i>	L		1	Schm Hils 1986		
<i>C. strosserae</i>	L		1	"		
4/9 <i>C. sparna</i>	L	-	9	"		
<i>Hydroptila</i>	L	?	1	Hils 1995		
<i>Limnephilidae</i>	L		2	"	imm	
<i>Dubiraphia</i>	L		2	Hils Schm 1992		
5/10 <i>Probetzia</i>	L		1	Hils 1995		
<i>Ephydriidae</i>	L	-	8	Coat Mar 2008		
<i>Hemerodromia</i>	L		3	"		
<i>Neoplasta</i>	L		1	"		
<i>Simulium</i>	L		1	Adl et al 2004	imm	Y
<i>S. venustum</i> species complex	L		1			
<i>S. vittatum</i> species complex 08110217	L		2			
<i>Gammarus pseudolimnoides</i>	A	-	7	Hils 1972		
<i>Hyalella wellborni</i>	A		3			
<i>Hyambates</i>	A		1	Pluch 1984		
<i>Tubificinae</i> (without hairs)	A		1	Klemm 1985		Y
<i>Tubificinae</i> (with hairs)	A		1	"		Y
<i>Idolobdella</i>	A		1	Thorp 2016		
<i>Orconectes virilis</i>	A		1	Hobbs Jass 1988		

>3 taxa, TVAL ≤ 2.0

21 < (D.L x 231)

