

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

Station Summary

Waterbody Name BULL BROOK		Waterbody ID Code 2622000	Sample ID (YYYYMMDD-CY-FD) 20161011-48-02
Sampling Location 40m US CTH J		Database Key 134667077	
SWIMS Station ID 10013474	SWIMS Station Name BULL BROOK AT CTY J		
Latitude 45.31044	Longitude -92.30050	Lat/Long Determination Method (circle) SWIMS SWDV <u>GPS</u>	Datum Used if using GPS <u>WGS84</u> or NAD83
Basin (WMU) ST. CROIX	Watershed Name LOWER APPLE RIVER	County POLK	

Sample and Site Descriptors

Sample Collector (Last Name, First) CRAIG ROESLER	Project Name NORTH DISTRICT NC STREAM STRATIFIED SITES 2016
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Sampling Device

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) 15	Estimated Area Sampled (m²) 15	Number of Samples in Composite 3	Replicate No. <u>1</u> of <u>1</u>
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Reason For Sampling

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

Water Temp. (C) 12.6	D.O. (mg/l) 7.4	D.O. (%sat.)	pH (su)	Conductivity (umhos/cm) 213	Transparency (cm) 100
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Water Color <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Stained	Estimated Stream Velocity (m/s) <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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Measured Velocity 0.9 circle units m/s or (f/s)	Average Stream Depth of reach (m) 0.2	Average Stream Width of reach (m) 25
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Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): _____ Gravel (ladybug to tennisball): 70
 Sand: 30 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 (%)** 30

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	Watershed	Factors that may be influencing Water Resource Integrity	Local	Watershed
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		
			Point Source - Specify:		
Physical			Pasturing of Livestock		
Bank Erosion			Runoff: - Barnyard		
Channelization: - Upstream			- Construction		
- Downstream			- Cropland		
Hydraulic Scour / Channel Incision			- Urban		
Impoundment: - Upstream			Septic Systems		
- Downstream			Tile Drainage - Organic Soils		
Low Flow			- Mineral Soils		
Sedimentation			Springs		
Sludge			Tributary(s)		
Thermal			Wetland		
Turbidity			Other - Specify:		
Other - Specify:					

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter Andrew Peltmann	Taxonomist Derrick J. Gray	Estimated Percent of Sample Sorted 13%
Date Processed 11/29/16	Specimens Saved Subsample archived in MBL until Sept 2020	

A1-76
 E3-138

Taxa	Life Stage	Benthic Tally	Count	Taxonomic Reference	Condition	Unique Taxon
Tamiaspiter x	L	II	2	Hilsenhoff 1985	imm	
Maccaffertium vicarium	L	II	2	Klitzsch 2016		
Chaetomorphidae	L	0-	25	Hilsenhoff 1985		
Hydropsyche betteni	L	III	5	Schm. Hils. 1986		
Dubica phia	L	II	2	Hils. Schm. 1997		
Antisericus	L	- IIII	9	"	imm	N
O-Festinius L.S A. I	L/A	- I	6	"		
Stenelmis	L	IV	3	"		
Nemerochroma	L	- IIII	10	Genl. Mem. 2008		
Nematoma	L	I	1	Hilsenhoff 1985		
Diammaus pseudolimnensis	A	x	10	Hiltinger 1972		
Nyalika	A	I	1	Pennak 1978		
Pocidobea racovitzai racovitzai	A	II	2	Williams 1972		
Meconitrida	I	III	3	Bernat 1991	imm	
Lumbricidae	A	II	2	Bern, Geld. 1991		
Platylabus annata	A	I	1	Kloos 1985		
Enchytraeidae	A	I	1	Bern, Geld. 1991		
Helisoma anceps	A	I	1	Burch 1982		
Sphaerium	A	I	1	Burch 1972		
Spit. Az. Chironomidae	L	III-IV				
Thielferia w/o capilliform chaetae	A	I	1	Kloos 1985		
Thienemannimyia group	L	I	1	Crane, Epler 2013		
Orthocladinae	L	II	2	Crane 2013		
Limnophyes	L	I	1	Andr. + 3 2013		
Parametrisanemus	L	II	2	"		
Parakriatella	L	I	1	"		
Nasopodius	L	II	2	"	imm	
Orthocladus (Orthocladus)	L	I	1	"		
Cricotopus/Orthocladus	L	I	1	Ferr. et al 2008	imm	N
Cricotopus (Cricotopus) bicinctus group	L	II	2	Andr. + 3 2013		
Chironominae	L	III	3	Crane 2013	imm/inf/imm	N
Cladopharyngus	L	I	1	Epler et al 2013		
Cryptochironomus	L	I	5	"		
Microsectra	L	II	2	"		
Amblydorsus sp.	L	- I	6	Hilsenhoff 1985	imm	
Polypedium	L	I	1	Epler et al 2013	imm	Y

