

Instructions: Bold fields must be completed.

Station Summary			
Waterbody Name RUSH RIVER		Waterbody ID Code 2440300	Sample ID (YYYYMMDD-CY-FD) 20171115-56-01
Sampling Location DS of bridge 1110m, past Deaver dams			Database Key 151068289
SWIMS Station ID 10008921		SWIMS Station Name 19 - RUSH RIVER - 18TH AVE. [19]	
Latitude	Longitude	Lat/Long Determination Method (circle) SWIMS SWDV GPS	Datum Used if using GPS WGS84 or NAD83
Basin (WMU) LOWER CHIPPEWA		Watershed Name RUSH RIVER	County SAINT CROIX

Sample and Site Descriptors	
Sample Collector (Last Name, First) MYCAL RALEIGH	Project Name WEST DISTRICT NC STREAM STRATIFIED SITES 2017

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) 0.5 min (30s)	Estimated Area Sampled (m ²) 1m ²	Number of Samples in Composite 1	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: NCSR

Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Conductivity (umhos/cm)	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 checked="" 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 circle units m/s or f/s	Average Stream Depth of reach (m) 1.5	Average Stream Width of reach (m) 4m
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Composition of Substrate Sampled (Percent):

Bedrock: _____ Boulders (basketball or larger): _____ Rubble (tennisball to basketball): 20 Gravel (ladybug to tennisball): 80
 Sand: _____ Clay: _____ Silt/Muck: _____ Overhanging Vegetation: _____
 Aquatic Macrophytes: _____ Leaf Snags: _____ Coarse Woody Debris: _____ Other (____): _____

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

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

Comments Upstream of beaver dams, stream has very slow velocity and has areas of heavy sedimentation. Water has slightly turbid appearance above dams, but DS of dams, water clarity is clear, more velocity and exposed gravel/rubble. Good woodland buffer on both sides (WB-10+m) then cropland and pastures.

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter <i>Kayla Wilcox</i>	Taxonomist <i>Dimick Ledford</i>	Estimated Percent of Sample Sorted <i>70%</i>
Date Processed <i>8/16/18</i>	Specimens Saved <i>Subsample archived in ABI until Dec 2021</i>	

BI-128