

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

**Station Summary**

<b>Waterbody Name</b> APPLE RIVER		<b>Waterbody ID Code</b> 2614000	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20161011-48-03
<b>Sampling Location</b> 100m US 153rd. Ave.			<b>Database Key</b> 134666940
<b>SWIMS Station ID</b> 10015582		<b>SWIMS Station Name</b> APPLE RIVER AT 153RD. AVE.	
<b>Latitude</b> 45.42861	<b>Longitude</b> -92.37809	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV <u>GPS</u>	<b>Datum Used if using GPS</b> <u>WGS84</u> or NAD83
<b>Basin (WMU)</b> ST. CROIX		<b>Watershed Name</b> UPPER APPLE RIVER	<b>County</b> POLK

**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> CRAIG ROESLER	<b>Project Name</b> 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

<b>Total Sampling Time (min)</b> 15	<b>Estimated Area Sampled (m<sup>2</sup>)</b> 15	<b>Number of Samples in Composite</b> 3	<b>Replicate No.</b> <u>1</u> <b>of</b> <u>1</u>
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**Reason For Sampling**

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

<b>Water Temp. (C)</b> 13.6	<b>D.O. (mg/l)</b> 8.5	<b>D.O. (%sat)</b>	<b>pH (su)</b> 7.8	<b>Conductivity (umhos/cm)</b> 227	<b>Transparency (cm)</b> 96
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<b>Water Color</b> <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained	<b>Estimated Stream Velocity (m/s)</b> <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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<b>Measured Velocity</b> 1.5 circle units m/s or f/s	<b>Average Stream Depth of reach (m)</b> 0.3	<b>Average Stream Width of reach (m)</b> 2.5
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): 20 Gravel (ladybug to tennisball): 70  
 Sand: 10 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 (%)** 10

**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
<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			
				Point Source - Specify:			
<b>Physical</b>				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 <i>Andrew Kohlmann</i>	Taxonomist <i>Dimick, Jeffrey</i>	Estimated Percent of Sample Sorted <i>7%</i>
Date Processed <i>11/29/16</i>	Specimens Saved <i>subsample archived in ABC until Sept 2020</i>	

B3 = 147

	Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
1/2	<i>Paracornia arcuata</i>	L	11	2	Nitchlock 1974		
4/3	<i>Acetina capitata</i>	L	1	1	Dimick unpubl.		
3/3	<i>Taxiwopteryx</i>	L	11	2	Hilsenhoff 1995		
	<i>Baetis</i>	L	1	1	Ridderhaus 2016	dam	N
	<i>B. flavistriga</i> Species Complex	L	1	1	"		
	<i>Acerpenna psychra</i>	L	1	1	"		
	<i>Dipterobrycon</i>	L	1	1	"		
	<i>Stenonema</i>	L	11	3	"	imm	
4/11	<i>Leucocentrus</i>	L	11	6	"		ND
	<i>Mesochorus</i>	L	1	5	"	imm	N
	<i>M. medispunctatum</i>	L	11	12	"		
	<i>M. terminatum</i>	L	11	2	"		
3/26	<i>M. vicarium</i>	L	11	15	"		
4/27	<i>Isaenychia</i>	L	1	1	"	imm	
7/31	<i>Micranema rustrum</i>	L	11	4	Hilsenhoff 1995		
	<i>Cheumatopsyche</i>	L	1	6	Hilsenhoff 1995		
8/31	<i>Hydropsyche scalaris</i>	L	11	3	Schm. Hils. 1986		
	<i>Ceratopsyche</i>	L	1	1	Hilsenhoff 1995	imm	N
	<i>C. brevis</i>	L	1	1	Schm. Hils. 1986		
	<i>C. macosa bifida</i> group	L	1	1	"		
	<i>Triaenodes</i>	L	1	1	Hilsenhoff 1995	imm	N
	<i>T. injustus</i>	L	1	1	Cleaver 1996		
9/35	<i>Nigronia semicornis</i>	L	1	1	Neunzig 1986		
	<i>Dubimiphis</i>	L	1	1	Hils. Schm. 1992		
	<i>Stenelmis</i>	L	1	6	"		
10/36	<i>Atherix variegata</i>	L	1	1	Hilsenhoff 1995		
	<i>Smicromma villosum</i> Species Complex	L	1	1	Ackerstaff 2004		
	<i>Antocha</i>	L	1	1	Hilsenhoff 1995		
	<i>Hyaloleia</i>	A	111	24	Pennak 1978		
	<i>Caeridotea</i>	L	11	2	Williams 1972	imm	
	<i>Trichoptera</i>	A	1	1	Kolasa 1991		
	<i>Tubificidae</i> w/o capilliform structure	A	111	3	Klemm 1985		
	<i>Lumbricellidae</i>	A	1	1	Smith, Cold. 1993		
	<i>Pisidium</i>	A	1	1	Burch 1972		
	<i>Sphaerium</i>	A	11	11	"		
	<i>Chironomidae</i>	L	111				

> 3 taxa, TVAL ≤ 2.0

36 > (0.1 x 114)

