

# **FROM RIVERS TO SOUNDS IN THE BERTIE WATER CRESCENT**

## **AN EARTH & ENVIRONMENTAL SCIENCE PROGRAM THAT FOLLOWS THE WATER**

**NORTH CAROLINA LAND OF WATER (NC LOW) & A TIME FOR SCIENCE (ATFS)**

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### **WORKSHOP FIELDTRIP 2: CASHIE RIVER SYSTEM**

#### **FIELD TRIP CONCEPTS AND QUESTIONS FOR THE CASHIE RIVER SYSTEM**

Characteristics, dynamics, & main concepts of a world-class, black-water tributary river system.

1. Cashie River Basin: trunk river and tributary streams
2. Cashie River Gradient: upstream incised channel to downstream drowned river estuary
3. Role of floodplains vs human encroachment
4. Water quality and ecosystems of black-water streams

#### **STOP 1. SCHOOL ROAD.**

- a. What is the approximate elevation of the Cashie River surface? \_\_\_\_\_
- b. Estimate the width of primary river channel (relative to a 100 yd football field)?  
\_\_\_\_\_
- c. Using a small stick measure the flow rate (estimated feet/10 seconds) in the main channel.  
\_\_\_\_\_
- d. Describe the width and topography of the floodplain (relative to a 100 yd football field).  
\_\_\_\_\_
- e. Types of trees in the floodplain (upland pine-oak/swamp cypress-gum). \_\_\_\_\_
- f. Color of water \_\_\_\_\_
- g. List direct sources of runoff pollution. \_\_\_\_\_
- h. Describe the human encroachment \_\_\_\_\_

#### **STOP 2. HOGGARDS MILL ROAD.**

- a. What is the approximate elevation of the Cashie River surface? \_\_\_\_\_
- b. Estimate the width of primary river channel (relative to a 100 yd football field)?  
\_\_\_\_\_
- c. Using a small stick measure the flow rate (estimated feet/10 seconds) in the main channel.  
\_\_\_\_\_
- d. Describe the width and topography of the floodplain (relative to a 100 yd football field).  
\_\_\_\_\_
- e. Types of trees in the floodplain (upland pine-oak/swamp cypress-gum). \_\_\_\_\_
- f. Color of water \_\_\_\_\_

g. List direct sources of runoff pollution. \_\_\_\_\_

h. Describe the human encroachment \_\_\_\_\_

**STOP 3. DOWNTOWN WINDSOR.**

a. What is the approximate elevation of the Cashie River surface? \_\_\_\_\_

b. Estimate the width of primary river channel (relative to a 100 yd football field)?  
\_\_\_\_\_

c. Using a small stick measure the flow rate (estimated feet/10 seconds) in the main channel.  
\_\_\_\_\_

d. Describe the width and topography of the floodplain (relative to a 100 yd football field).  
\_\_\_\_\_

e. Types of trees in the floodplain (upland pine-oak/swamp cypress-gum). \_\_\_\_\_

f. Color of water \_\_\_\_\_

g. List direct sources of runoff pollution. \_\_\_\_\_

h. Describe the human encroachment \_\_\_\_\_

**STOP 4. TREE HOUSE VILLAGE.**

a. What is the approximate elevation of the Cashie River surface? \_\_\_\_\_

b. Estimate the width of primary river channel (relative to a 100 yd football field)?  
\_\_\_\_\_

c. Using a small stick measure the flow rate (estimated feet/10 seconds) in the main channel.  
\_\_\_\_\_

d. Describe the width and topography of the floodplain (relative to a 100 yd football field).  
\_\_\_\_\_

e. Types of trees in the floodplain (upland pine-oak/swamp cypress-gum). \_\_\_\_\_

f. Color of water \_\_\_\_\_

g. List direct sources of runoff pollution. \_\_\_\_\_

h. Describe the human encroachment \_\_\_\_\_

**STOP 5. BOARDWALK AND ROANOKE-CASHIE RIVER CENTER.**

a. What is the approximate elevation of the Cashie River surface? \_\_\_\_\_

b. Estimate the width of primary river channel (relative to a 100 yd football field)?  
\_\_\_\_\_

c. Using a small stick measure the flow rate (estimated feet/10 seconds) in the main channel.  
\_\_\_\_\_

d. Describe the width and topography of the floodplain (relative to a 100 yd football field).  
\_\_\_\_\_

e. Types of trees in the floodplain (upland pine-oak/swamp cypress-gum). \_\_\_\_\_

f. Color of water \_\_\_\_\_

g. List direct sources of runoff pollution. \_\_\_\_\_

h. Describe the human encroachment \_\_\_\_\_