

## Map Guide

### **Purpose of the map**

The purpose of the map is two-fold. First we want to help students become familiar with their watershed. Most students are familiar with their communities or neighborhoods; the location of their school, church, or ball field; where their friends live, etc. We want them to step back from their human-made communities, and see where they fit in on the landscape, then step forward again, and see how their natural community connects to their human-made community.

Secondly, and complimentary to the first purpose, we want to provide you with a tool that will help teach the standard course of study in a way that is meaningful for students. The science standards this map can help address are:

- Science 5.P.2.1 Explain how the sun's energy impacts the processes of the water cycle (including evaporation, transpiration, condensation, precipitation and runoff).
- Science 5.L.2.1 Compare the characteristics of several common ecosystems, including estuaries and salt marshes, oceans, wetlands and bogs, lakes and ponds, forests, and grasslands.
- Science 5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.
- Science 8.E.1.1 Explain the structure of the hydrosphere including: water distribution on earth and local river basins and water availability.
- Science 8.E.1.1 Predict the safety and potability of water supplies in North Carolina based on physical and biological factors, including: temperature, dissolved oxygen, pH, nitrates and phosphates, turbidity, bio-indicators.
- Science 8.E.1.4 Conclude that the good health of humans requires: monitoring of the hydrosphere, water quality standards, methods of water treatment, maintaining safe water quality, stewardship.

### **Using the map**

We encourage you to use this map as a starting point for conversations with your students. You may want to consider laminating it so it can be used again and again with dry erase markers. To help students engage with the map, we've provided some prompts below, beginning with simply getting students familiar with the map, and continuing to using the map as a jumping off point for conversations about their community.

#### **Becoming familiar with the map**

- Can you find the map title?
- Can you find the map legend?
- Can you find the map compass?
- Can you find the scale bar?

#### **Find your way around the map**

- Can you trace the edge of the Toe-Cane watershed?
- Can you find where the Toe and Cane rivers start?
- Can you trace the rivers to where they converge and leave the watershed?

- Can you find a tributary stream to the Toe River, that is, a stream that flows into the Toe River?
- Can you find a tributary stream to the Cane River, that is, a stream that flows into the Cane River?
- Can you find the Blue Ridge Parkway?

**Finding your community on the map**

- Can you find Avery County?
- Can you find Mitchell County?
- Can you find Spruce Pine?
- Can you find Newland?
- Can you find the location of your school?
- Can you find the location of your house?

This map is a product of the USFWS and Blue Ridge RC&D