



# THE TRAVELING WATER SHOW

**TIME:** 2 one-hour sessions

**OBJECTIVE:** To introduce the concept of water resources.

**MATERIALS:** County maps and information about farms, housing, business, and industries in the area.

## **BACKGROUND:**

Water covers approximately 71% of the earth's surface; about 97% of this water is in oceans while the remainder is in groundwater, lakes, rivers, and streams. Even with such an abundance, clean drinking water is not always easily available. People and governments must invest time and money treating and transporting water.

North Carolinians get water from wells and water treatment plants. Well water comes from aquifers, AND geological formations containing water that lie beneath the earth's surface. Because industry and population developments draw on local aquifers, this source of water is becoming increasingly more difficult to find. Most cities in the state get their water from rivers, streams, and lakes. This water, that was in the past safe to drink directly from the source, must now be chemically purified at a treatment plant.

## **BEFORE THE ACTIVITY:**

Obtain county maps, copy and enlarge sections of the maps to make the rivers, streams, and lakes easier to locate.

## **LEAD-IN:**

Do you know where your water comes from? (Help students name local water sources.)

What do you think happens in a watershed area?

A watershed is much like a bathtub after a small child has taken a bath. All the child's toys and sand, dirt, twigs, and pebbles head for the drain as the water is emptied. In the natural environment, water draining into rivers and lakes picks up many things from the land.

What are some things water could pick up? (pesticides, fertilizer, oil, loose soil)

What happens after a hard rain? What do you see next to roads and streets after a hard rain?

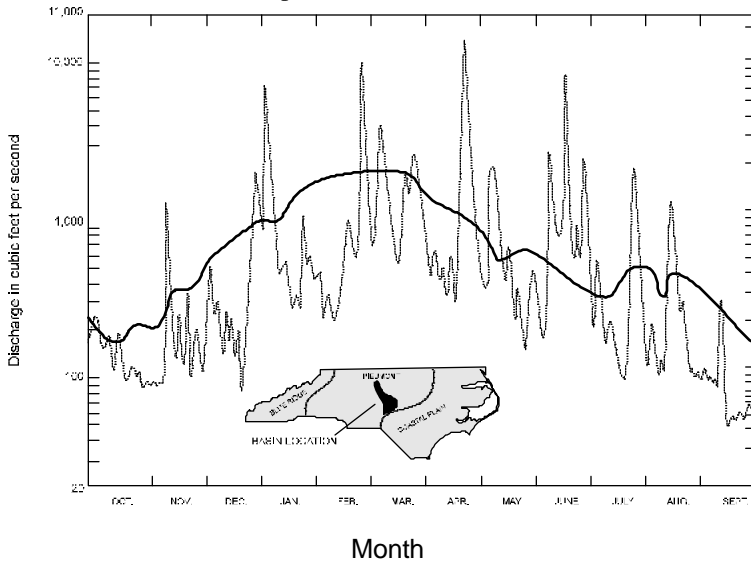
## **ACTIVITY:**

1. Divide class into small groups; give each group an enlarged map section.
2. Each group should use markers to color code rivers, streams, and lakes.
3. Instruct groups to research activities such as housing developments, industries, malls, or farming that happen near their rivers, streams, and lakes.

**BRANCHING OUT The NC Forest Stewardship Activity Guide**

They may use symbols or stickers on the map to indicate the activities.

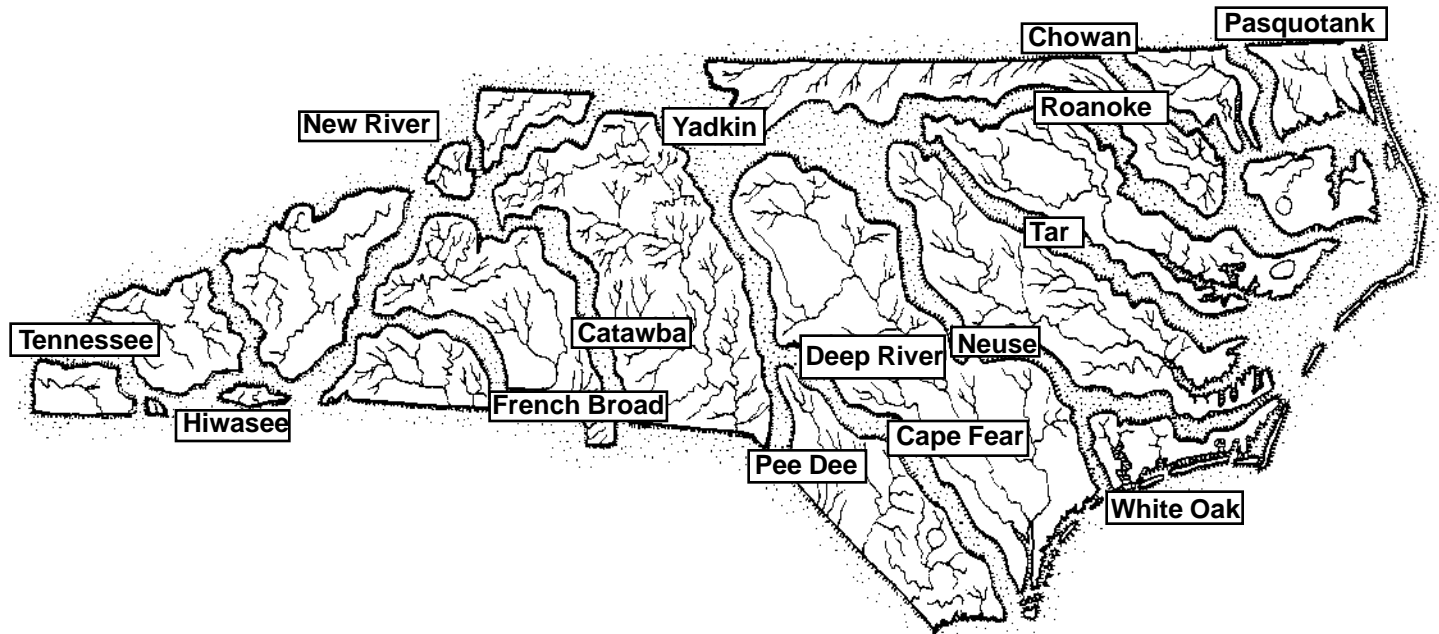
4. Groups should present their findings to the class.
5. Discuss the impact of the activities on water sources.



**BRANCHING OUT:**

1. Groups may track water from a treatment plant back to its source.
2. Activities from a broad area and their effects on a water source may be researched.
3. Research what a hydroelectric dam does to water flow in a river.
4. Identify any natural lakes in the area. How were they formed? How were the other lakes formed? (As a rule, there are no natural lakes in the Piedmont.)

Daily and median discharge for the Deep River Watershed near Sanford for the 1992 water year  
 Note - Peak flow (discharge) following a rain event can be 10 times greater than the average flow.



North Carolina's Watersheds - There are more than a dozen watersheds in North Carolina. Can you identify the watershed in which you live? Which watersheds are not impacted by urban development, agriculture or forestry?

Discuss the concerns of downstream users.