

# River Observation

Observation is an important part of any scientific study. Great Smoky Mountains National Park is a center for study by scientists in many areas around the world! Unfortunately, our love of our park has also brought some negative impacts from human interactions especially near our rivers in the form of littering, pollution, ecosystem disruption, and introduction of invasive species. Before completing the activity below, take a moment to learn more about [water quality monitoring](#) by the scientists here in the Smokies.

## Directions:

With the assistance of an adult, find an outdoor area near you with a river, creek, stream, lake or pond and make observations to help determine the health of the body of water near you.

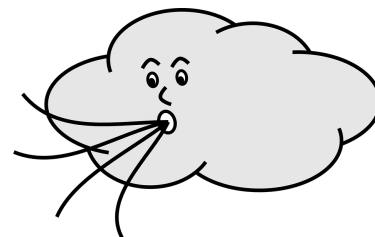
Observer Names: \_\_\_\_\_ Date: \_\_\_\_\_

Location: \_\_\_\_\_

## Weather:

Raining? \_\_\_\_\_ Cloud Coverage? \_\_\_\_\_ Windy? \_\_\_\_\_

Air Temperature? \_\_\_\_\_ Water Temperature? \_\_\_\_\_



## Human Impact:

What % of the parking lot is full? \_\_\_\_\_

Are there many people in the area now? \_\_\_\_\_

Is there any litter? Describe. \_\_\_\_\_

What is the pH of the water? \_\_\_\_\_ Is this a pure substance as defined in class? \_\_\_\_\_

Why or why not? \_\_\_\_\_

## Observe your area (about as far as your arms extend in a circle):

What can you hear?

What can you smell?



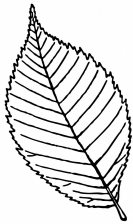
What can you feel? (ensure you are not touching animals or poison ivy!)

Can you taste anything as you breathe in?

List BIOTIC characteristics of this biome:



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What conclusions can you make about the health of this ecosystem based on your observations?

