

NC Stream Watch

NC Stream Watch is a fun way to stay connected to your neighborhood waterways *and* practice scientific methods with friends and family! You can also share your data on the NC Stream Watch statewide map; just search "NC Stream Watch" in your browser and link to NC DEQ's page. Need help? Contact Stormwater SMART at stormwatersmart@ptrc.org.



Stream Watcher's Name or Group Name: _____



Start your survey by taking a picture of your waterway, including the banks on both sides of the creek or stream.

Location: _____

Date/Time of Observation: _____

Name of stream (or tributary of what larger stream?): *

Days since last rain: Today 1-2 days 3+ days

* Many streams in North Carolina do not have names, or have more than one! If you don't see a name on your maps application, make up a name that reflects what is unique about this waterway.

OVERVIEW

TRASH



Take a look around from where you stand. How much trash or litter can you see? (Base your answer on your own experience of city and county parks.)

☐ Clean ☐ Moderate
☐ Sparse ☐ Heavy

HABITAT ASSESSMENT

"Habitat" is a fancy word for shelter. How much cover do you see on bottom of the channel for critters to hide in? Look for submerged roots, woody and vegetative debris, rocks, and leaf packs (decomposing leaves clumped together).

☐ Lots of cover on channel bottom
☐ Some cover on channel bottom
☐ Little to no cover on channel bottom

Cobble stones are easy for larvae and nymphs to hide under. Are there an abundance of cobbles?

☐ Lots of cobbles
☐ Some cobbles
☐ Little to no cobbles
☐ More sand/sediment AND no cobbles



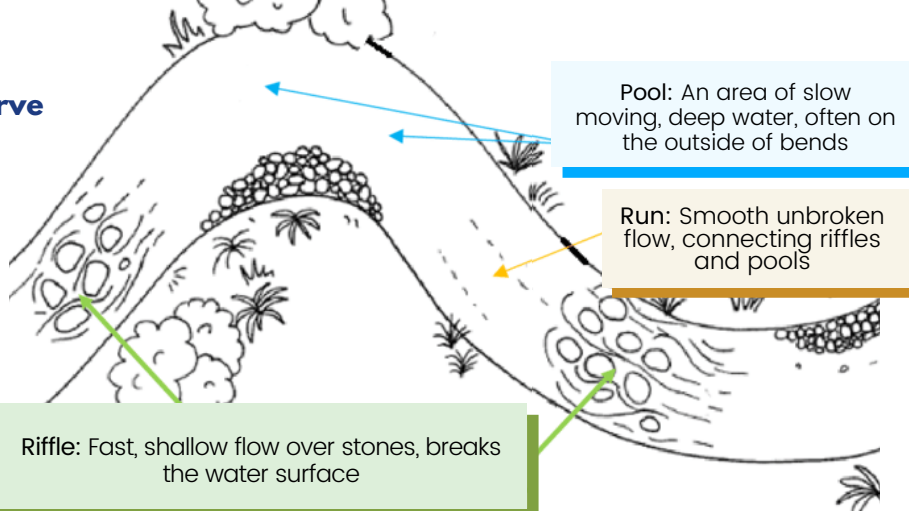
What plants and critters do you see? What other signs of life? (Tracks, nests, burrows, etc.)



HABITAT: FLOWS

Walk along the creek and observe the surface of the water. How diverse are the stream flows?

- ☐ Good diversity of riffles/runs/pools
- ☐ Some diversity of riffles/runs/pools
- ☐ No visible diversity of riffles/runs/pools in this section of the stream.



STABILITY OF BANKS

Deep plant roots help stabilize the bank. If there is a lot of exposed soil or sediment, that is a sign of erosion and instability. On the slope, do you see lots of vegetation, lots of erosion, or something in between?

- ☐ Lots of vegetation, little to no exposed soil or sediment
- ☐ Some vegetation in spots, some exposed soil or sediment
- ☐ Sparse or no vegetation on stream banks, lots of exposed soil or sediment

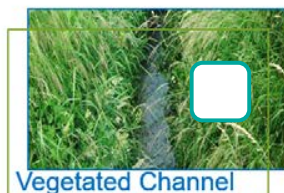
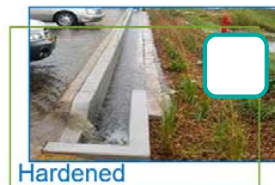
A good buffer area includes diverse vegetation at least three stream widths on each side of the stream. Take a look at both sides; what do you see?

- ☐ Lots of buffer vegetation on both sides of stream
- ☐ Some buffer vegetation on parts of the stream
- ☐ Little to no buffer vegetation on either side of the stream



STORMWATER CONVEYANCES

Conveyances are sources of stormwater into a stream. These are usually human-made structures that consolidate water flow. These are important to find because they give clues for how a stream can be impacted by humans. What kind of conveyances do you see?



Water Quantity: How much water is in the conveyance?

- ☐ Flowing
- ☐ Wet
- ☐ Dry

Surrounding Land Use: How are humans using the land around this section of the stream? Select all that apply.

- ☐ Roads/Transportation
- ☐ Agriculture
- ☐ Forest Harvesting
- ☐ Industrial
- ☐ Wildlife Protection
- ☐ Residential/Neighborhood
- ☐ School Campus
- ☐ Parking Lots
- ☐ Other

Need help? Our educators can come to your neighborhood! It's free anywhere in the counties of Alamance, Davidson, Randolph, most of Guilford, and parts of Forsyth. Contact us at stormwatersmart@ptrc.org!