

Riparian (Stream) Buffers

Town of Hillsborough Information Sheet

Stormwater runoff pollution

North Carolina's No. 1 water pollution problem is stormwater runoff pollution. As stormwater runoff flows across exposed soil or impervious surfaces — such as pavement or rooftops — it picks up various pollutants. These include oil, grease, excess fertilizer, pet waste, various chemicals, trash and sediment. Polluted stormwater flows down our storm drains and through our ditches, where it is discharged untreated into our streams, rivers and lakes. Stormwater runoff pollution can adversely affect aquatic ecosystems and our drinking water supplies.



Benefits of riparian buffers

One of our best tools to protect water quality are riparian buffers. These undisturbed, naturally forested areas along streams, rivers and other surface water bodies provide several benefits:

- Control erosion and keep stream banks from collapsing.
- Help reduce flooding.
- Regulate the amount and quality of sunlight on the stream.
- Moderate stream temperature.
- Provide wildlife food and habitat.

For these reasons, activities impacting riparian buffers are regulated. Two sets of regulations protect riparian buffers within the Town of Hillsborough's planning jurisdiction. These include North Carolina's Neuse River Basin buffer rules and the Hillsborough Unified Development Ordinance (Section 6.20.17).



Hillsborough is committed to restoring riparian buffers.



What is a Good Riparian Buffer?

A buffer of native trees and shrubs immediately next to the stream and a grass strip are ideal. The trees next to the stream keep stream banks intact and provide better habitats for stream insects and fish. Grass strips along buffers help by intercepting runoff, spreading it out, slowing it down, and causing sediment and pollutants to settle out.

Required width for riparian buffers

Through its delegated authority from the state, the Town of Hillsborough enforces a 50-foot riparian buffer along all intermittent and perennial streams within its planning jurisdiction. The 50-foot buffer is measured from the top of the bank on both sides of the stream.

Within its planning jurisdiction, only the town determines what is classified as a stream for the purposes of riparian buffer protection. Town stormwater staff are certified by the state to conduct surface water identifications.

If you have a drainage feature on your property and need to know whether it is a stream, contact the



Stormwater and Environmental Services Division for a free determination.

Allowable activities within the riparian buffers

Generally riparian buffers should remain undisturbed, although that is not always practical. Roadways, driveways, and utilities are normally allowed to impact riparian buffers. Agricultural and forestry activities are also allowed to be conducted within riparian buffers, provided that state guidelines are followed.

Specifically, the town's riparian buffer rules contain a list of uses categorized as allowable or allowable with mitigation.



Eno River along Hillsborough's Riverwalk

Allowable activities are typically minor in impact but require a "no practical alternative analysis" to be submitted and approved prior to beginning the activity.

Allowable with mitigation is similar to the above but requires compensation for the impact, such as restoring or enhancing riparian buffers.

Activities not listed in the table of uses are prohibited without a variance from the state.

Under the Hillsborough Unified Development Ordinance, permitted uses include streets, roads, bridges, greenways and railroads. The ordinance also allows public water and sewer lines and other utility lines and associated appurtenances, such as poles, guy wires and transformers. For a full listing of allowable uses, see the ordinance on the town's website.

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