

# Greenway and Hiking Trails in North Carolina's Riparian Buffer Protection Areas



Neuse River Basin • Tar-Pamlico River Basin • Catawba River Basin • Randleman Lake Watershed • Goose Creek Watershed

## Planning a new greenway or hiking trail

**This guide will help you understand the permitting process for greenways and hiking trails in North Carolina's riparian buffers.**

### What is a riparian buffer?

A riparian buffer is a strip of forested or vegetated land bordering a body of water. The vegetation and root systems in a riparian buffer stabilize the streambank, preventing soil from eroding into the water. They also act like a filter and sponge to remove, transform, or store nutrients and other pollutants, making the preservation of riparian buffers a critical part of protecting our water resources.



### Where does the riparian buffer apply?

The riparian buffer applies to the following types of water bodies that are depicted on the most recent printed version of the soil survey maps prepared by the Natural Resources Conservation Service or the 1:24,000 scale quadrangle topographic maps prepared by the U.S. Geologic Survey:

- Perennial streams
- Intermittent streams
- Modified natural streams
- Lakes and ponds (including beaver ponds)
- Estuaries

### How wide are the riparian buffers?

In the Neuse, Tar-Pamlico and Catawba river basins and the Randleman Lake watershed, there is a 50-foot riparian buffer divided into two zones. The inner 30 feet (Zone 1) of the buffer must remain undisturbed and the outer 20 feet (Zone 2) of the buffer must be managed vegetation.

In the Goose Creek Watershed, within the 100-year floodplain, there is a 200-foot undisturbed riparian buffer. Outside the 100-year floodplain, there is a 100-foot undisturbed riparian buffer.

### How are the riparian buffers measured?

For streams, the riparian buffer is measured landward from the top of the stream bank on each side of the stream.

For ponds, lakes and reservoirs, the riparian buffer is measured from the normal water level or full pond level (in Catawba).

In the 20 coastal counties within the Neuse or Tar-Pamlico river basins, the riparian buffer is measured from the landward edge of the N.C. Division of Coastal Management's wetland boundary.

## What type of permit do I need for a greenway or hiking trail in the riparian buffer?

Greenway and hiking trails are allowable activities within the riparian buffer rules. Allowable activities require a buffer authorization from the N.C. Division of Water Quality (or delegated local government) before proceeding.

## Why is it important to keep greenway and hiking trails out of Zone I of the riparian buffer?

Riparian buffers provide many important functions that protect water quality, including:

- Filtering runoff
- Providing flood control
- Absorbing excess nutrients
- Moderating water temperature
- Controlling erosion
- Stabilizing stream banks

Removing trees and root systems in Zone I negatively impacts these important functions, especially stream bank stability. Damage due to erosion from unstable banks requires costly and frequent maintenance. Greenways constructed a safe distance from the stream protect the integrity of the stream and greenway.



## How do I apply for a permit for a greenway or hiking trail in the riparian buffer?

Use the pre-construction notification (PCN) form (<http://www.saw.usace.army.mil/WETLANDS/pcn/>) to apply for a buffer authorization.

Send your completed application to DWQ or the appropriate delegated local government.



## What are the key points to be aware of when designing a greenway or hiking trail in the riparian buffer?

- As part of the permitting process, the applicant must demonstrate that they avoided and minimized all buffer impacts to the greatest extent practicable.
- Impacts to the inner 30 feet (Zone I) from the trail or maintenance corridor must be avoided. If this is not possible, written justification must be included with the application.
- The maximum width for a greenway trail is 10 feet with a two-foot grassed maintenance corridor on either side of the trail.
- All impacts associated with greenway and hiking trails in the riparian buffer are permanent impacts, regardless of what type of material the trail is constructed with.

**For more information, please contact one of the following N.C. Division of Water Quality locations:**

Mooresville Regional Office • 610 East Center Ave., Mooresville, NC 28115 • (704) 663-1699

Raleigh Regional Office • 3800 Barrett Dr, Suite 101, Raleigh, NC 27609 • (919) 791-4200

Washington Regional Office • 943 Washington Square Mall, Washington, NC 27889 • (252) 946-6481

Wilmington Regional Office • 127 Cardinal Drive Ext., Wilmington, NC 28405-2845 • (910) 796-7215

Central Office 2321 • 2321 Crabtree Blvd; Suite 250, Raleigh, NC 27604 • (919) 733-1786

Riparian buffer rules are available online: <http://h2o.enr.state.nc.us/admin/rules/documents/Redbook2007.pdf>

Riparian buffer applications and information are available online: <http://h2o.enr.state.nc.us/ncwetlands/RiparianBufferRules.htm>