

North Carolina Division of Water Quality

# Riparian Buffer Rules for the Catawba River and Mainstem Lakes





### 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 stream bank, preventing soil from eroding into the water.

Riparian buffers also act as a filter to remove pollutants.

Preserving riparian buffers is critical to protecting our water resources.

### Why should we protect buffers?

Lakes along the mainstem of the Catawba River are in serious trouble. Three lakes—Rhodhiss, Hickory and Wylie—have documented water quality problems from excess nutrients (nitrogen and phosphorous), and others may follow. Riparian buffers are one way to protect the Catawba River and its lakes from stormwater runoff pollution, particularly from development activities.

# The benefits of riparian buffers are maximized when there is diffuse flow of stormwater runoff.

#### What is diffuse flow?

Diffuse flow refers to overland water flow that is spread out over the landscape, not concentrated into a defined channel.

### When is diffuse flow required?

Diffuse flow is required on all buffered streams, regardless of property size or type of land use. It must be achieved before storm water runoff enters the riparian buffer from new any ditch or manmade conveyance.

### How is diffuse flow achieved?

Diffuse flow may be achieved by installing a level spreader or other diffuse flow device. Level spreaders and other devices must be designed according to the N.C. Stormwater Best Management Practices Manual (http://portal.ncdenr.org/web/wq/ ws/su/bmp-manual).

### Benefits of buffers include:

- Filtering stormwater runoff.
- Providing flood control.
- Stabilizing stream banks.
- Protecting property.
- Adding scenic value to communities.
- Absorbing excess nutrients.
- Preventing erosion.
- Providing fish and wildlife Habitat.
- Moderating water temperature.

# Where do the Catawba Buffer Rules apply?

Within 50 feet of all shorelines along the Catawba River mainstem below Lake James to the NC/SC border and all shorelines of the Catawba mainstem lakes including, Lake James, Lake Rhodhiss, Lake Hickory, Lookout Shoals Lake, Lake Norman, Mountain Island Lake and the North Carolina portion of Lake Wylie.



# How are the riparian buffers measured?

For the Catawba River, the riparian buffer is measured from the top of the bank on each side of the river. For the mainstem lakes, the riparian buffer is measured from the full pond level.

#### The buffer has two zones:

The Catawba Riparian Buffer rules call for a two-zone buffer as shown in the diagram. Zone 1 (closest to the shoreline) is an undisturbed 30-foot forested buffer. Zone 2 consists of a 20foot zone of managed vegetation.

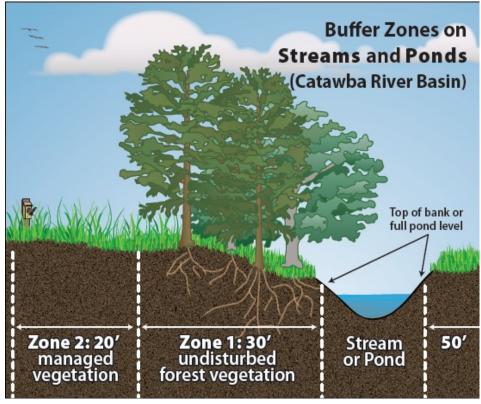
# What is allowed in the riparian buffers?

The riparian buffer must remain undisturbed, regardless of the property size or type of land use, unless the use is listed in the rules as exempt, potentially allowable or potentially allowable with mitigation.

#### Refer to the "Table of Uses" in the rules for specific activities.

**Exempt** uses are allowed in the buffer without approval from DWQ or local delegated government.

**Allowable** uses may occur in the buffer after written authorization from the DWQ or delegated local government.



Exempt uses are listed in the Catawba Buffer Rules "Table of Uses." Before beginning any other activities, contact DWQ or local delegated government.

Potentially allowable with mitigation uses may occur in the riparian buffer only after written authorization from DWQ or delegated local government that includes a mitigation strategy.

#### What is mitigation?

Mitigation is a way of offsetting a project's environmental impacts to a buffer. A separate buffer mitigation rule establishes requirements for activities that are determined to be "allowable with mitigation." Mitigation, which is required at a 1.5 or 2 to 1 ratio, can take three forms:

- Restoration or enhancement of a non-riparian buffer.
- Payment of a compensatory mitigation fee to a wetlands and buffer restoration fund.
- Donations of real property.

For all uses not listed in the "Table of Uses," please contact the Division of Water Quality or local delegated government before beginning any activities in the riparian buffer.

Please contact the N.C. Division of Water Quality regional office nearest your property to learn more about the Catawba Buffer Rules, request an on-site determination or report a violation.

Asheville Regional Office 2090 U.S. 70 Highway Swannanoa, NC 28778 828-296-4500



Mooresville Regional Office 610 East Center Avenue Mooresville, NC 28115 704-663-1699

The Catawba Riparian Buffer Rules, forms and applications are available online at: <u>http://portal.ncdenr.org/web/wg/swp/ws/401/riparianbuffers</u>