



North Carolina Division of Forest Resources

# FORESTRY Leaflets

JULY 2010

WQ-12

## A Guide to Implementing the Randleman Lake Watershed Riparian Buffer Rule for Forest Management Activities

N.C. Administrative Code (15A NCAC 02B .0250) requires protecting and maintaining riparian areas along waterbodies located in the watershed of Randleman Lake. This Lake is located northwest of Randleman, NC but its watershed is in portions of Forsyth, Guilford and Randolph counties (refer to map on Page 4). Contact the N.C. Division of Water Quality Winston-Salem Regional Office or NCDFR Lexington District Office for more details.

**\*\*NOTE\*\* This rule was revised and the updated rule became effective June 1, 2010. This updated *Forestry Leaflet* replaces all former WQ-12 (and FM-37) leaflets from NCDFR.**

### Where to Apply This Buffer Rule

This buffer rule applies to all intermittent streams; perennial streams; lakes; reservoirs; and ponds in the watershed of Randleman Lake if the water body *"is approximately shown on any of the following references, or if there is other site specific evidence that indicates"* the presence of a water body that is not shown on any of these maps:

- The most recent version of the USGS 1:24000 scale topographic (topo) map; or
- The most recent version of the hardcopy soil survey maps developed by the USDA-NRCS; or
- A map approved by the N.C. Geographic Information Coordinating Council and the Environmental Management Commission.

#### **This buffer rule also applies to:**

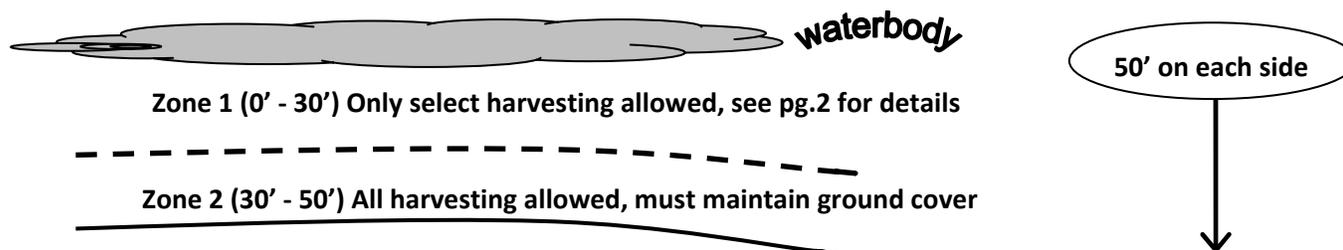
- Modified natural streams
- A ditch or man-made conveyance that delivers untreated stormwater runoff from an adjacent source directly to an intermittent stream or perennial stream.

**NOTE..... A SMZ is still required in certain situations as described within the FPG's, even if the water body does not require implementing the Randleman Lake Riparian Buffer Rule zone.**

### Required Buffer Zone Width

The buffer zone is comprised of 2 zones that together equal 50 feet:

- **Zone 1** = The closest 30 feet from the edge of the waterbody extending towards land, **AND**;
- **Zone 2** = the next 20 feet towards land, extending from the end of Zone 1



## How to Measure the Buffer Zone Width

The buffer zone is comprised of 2 zones that together equal 50 feet:

**Zone 1 is the closest 30-feet from the water body:**

- To measure Zone 1 for streams: “Zone 1 shall begin at the most landward limit of the top of the bank or the rooted herbaceous vegetation and extend landward a distance of 30 feet on all sides of the surface water, measured horizontally on a line perpendicular to a vertical line marking the edge of the top of the bank.”
- To measure Zone 1 for ponds, reservoirs, and lakes: “Zone 1 shall begin at the most landward limit of the normal high water level or the rooted herbaceous vegetation and extend landward a distance of 30 feet, measured horizontally on a line perpendicular to a vertical line marking the edge of the surface water or rooted herbaceous vegetation.”

**Zone 2 shall begin at the outer edge of Zone 1** and extend landward 20 feet as measured horizontally on a line perpendicular to the surface water.

## Timber Harvesting in the Riparian Buffer

**Selective timber harvesting is only allowed to occur in the 50 foot buffer if:**

- The property is enrolled in that county’s Present-Use Valuation Tax Program for forestry use; **or**
- The property has a forest management plan that has been prepared or approved by a Registered Forester.

**All of Zone 1 (0 to 30 feet): Includes Inner and Outer areas defined below.**

<b>Allowed</b>	Trees shall be removed with the minimum disturbance to soil and vegetation.
<b>Allowed with Restrictions</b>	Tracked or wheeled vehicles are allowed for selective timber harvesting, where there is no other practical alternative for removal of individual trees. This activity must comply with the FPG’s. If equipment is used, <i>no equipment shall operate within the first 10-feet of the buffer.</i>
<b>Prohibited</b>	No soil disturbing site prep is allowed.

**Inner Zone 1 (0 to 10 feet from water)**

<b>Allowed</b>	Removal of individual “high value” trees.
<b>Allowed with Restrictions</b>	<ul style="list-style-type: none"> <li>• “High Value” pine trees are defined as any tree with a 14-inch or larger DBH; <b>or</b> a 18-inch or larger stump diameter.</li> <li>• “High Value” hardwood and wetland trees are defined as any tree with a 16-inch or larger DBH; <b>or</b> a 24-inch or larger stump diameter.</li> </ul>
<b>Prohibited</b>	<ul style="list-style-type: none"> <li>• No equipment shall operate within the first 10-feet of the buffer zone.</li> <li>• No tree shall be removed if that tree has exposed primary roots in the streambank.</li> </ul>

**Outer Zone 1 (10 to 30 feet from water)**

<b>Allowed</b>	<ul style="list-style-type: none"> <li>• Diameter-Limit Cut harvest of timber.</li> <li>• All remaining trees shall be as evenly spaced as possible.</li> </ul>
<b>Allowed with Restrictions</b>	<ul style="list-style-type: none"> <li>• Harvest of no more than 50% of trees that have a DBH larger than 5-inches.</li> <li>• Re-entry into Outer Zone 1 for natural forest is allowed every 15 years.</li> <li>• Re-entry into Outer Zone 1 for plantation forest is allowed every 5 years.</li> </ul>
<b>Prohibited</b>	No removal of any tree with a DBH of 5-inches or smaller is allowed.

**All of Zone 2 (30 to 50 feet from water)**

<b>Allowed</b>	Harvesting and regeneration of the forest stand is allowed as long as all activities comply with the FPG’s.
----------------	---

## Other Forestry Activities in the Buffer

### Forestry Activities Allowed in the Entire 50-foot Riparian Buffer

- Removal of individual trees that are in danger of causing damage to structures or human life.
- Individual trees may be treated to maintain or improve their health, form, or vigor.
- Harvesting of dead or infected trees or other cutting techniques necessary to prevent or control extensive tree pest and disease infestation. These practices must be approved by the N.C. Division of Forest Resources (NCDFR) and must comply with the FPG's. The NCDFR must notify the local government of all approvals.

### Forestry Activities Allowed with Restrictions in the Entire 50-foot Riparian Buffer

- Access road and skid trails are prohibited except for stream crossings when established in accordance to the FPG's.
- Temporary stream crossings shall be permanently stabilized after any site disturbing activity is completed.
- Timber felling shall be directed away from the stream or body of water.
- Skidding shall be directed away from the stream or body of water. Skidding shall be done in a manner that minimizes soil disturbance and prevents the creation of channels or ruts.
- Natural regeneration of forest vegetation and planting of trees, shrubs, or ground cover plants to enhance the riparian buffer shall be allowed, provided that soil disturbance is minimized. Plantings shall consist primarily of native species.
- Fertilizer application is only allowed for one-time use that is necessary for permanent stabilization.
- Broadcast application of fertilizer or herbicides to the adjacent forest stand shall be conducted so that the chemicals are not applied directly to or allowed to drift into the riparian buffer.

### Forestry Activities Not Allowed in the Entire 50-foot Riparian Buffer

- Logging decks and sawmill sites shall not be placed in the buffer.
- High intensity prescribed burns are not allowed.

## Diffuse Flow of Runoff

Diffuse flow of runoff shall be maintained in the entire 50-foot riparian buffer by dispersing concentrated flow and reestablishing vegetation.

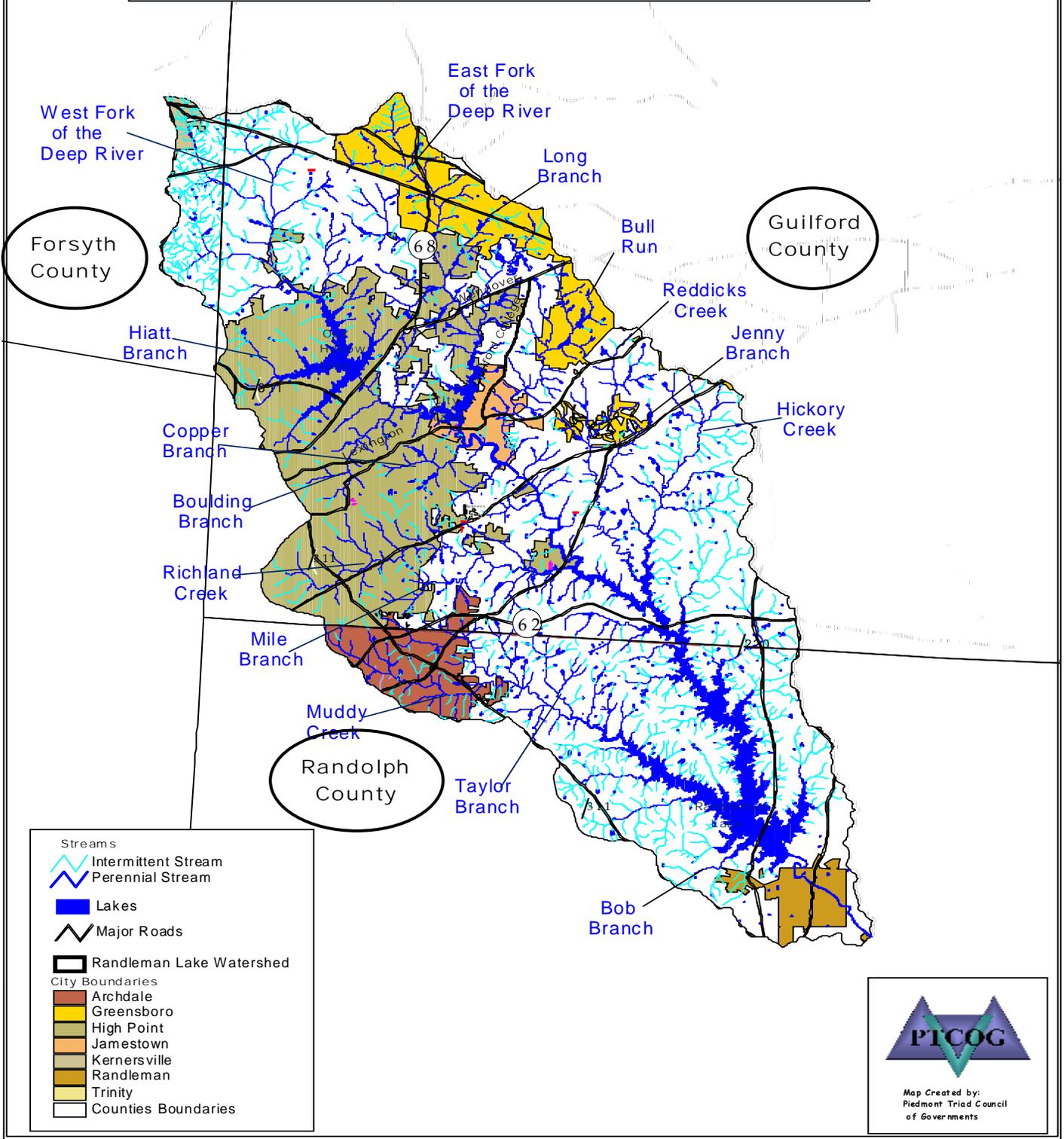
- Concentrated runoff from new ditches or manmade conveyances shall be converted to diffuse flow at non-erosive velocities before the runoff enters Zone 2 of the riparian buffer.
- Periodic corrective action to restore diffuse flow shall be taken if necessary to impede the formation of erosion gullies.
- No new stormwater conveyances are allowed through the buffers except for those specified in Item (9) of this Rule addressing stormwater management ponds drainage ditches, roadside ditches, and stormwater conveyances.

**This Forestry Leaflet is not intended to provide legal advice or final interpretation of the Randleman Lake riparian buffer rule. Seek assistance from the NC-DWQ, or a Registered Forester who is certified to make stream determinations for buffer rule applicability. There may be additional requirements of this buffer rule that are not disclosed in this Forestry Leaflet -- you are encouraged to read and understand the complete rules.**



The North Carolina Division of Forest Resources is an equal opportunity / affirmative action employer. Its programs, activities and employment practices are available to all people regardless of race, color, religion, sex, age, national origin, handicap or political affiliation.  
*This is a 'print-as-needed' document available at N.C. Division of Forest Resources offices and at [www.dfr.nc.gov](http://www.dfr.nc.gov).*

# Randleman Lake Watershed



Watershed map created by and provided courtesy of the Piedmont Triad Council of Governments [www.ptcog.org](http://www.ptcog.org)