



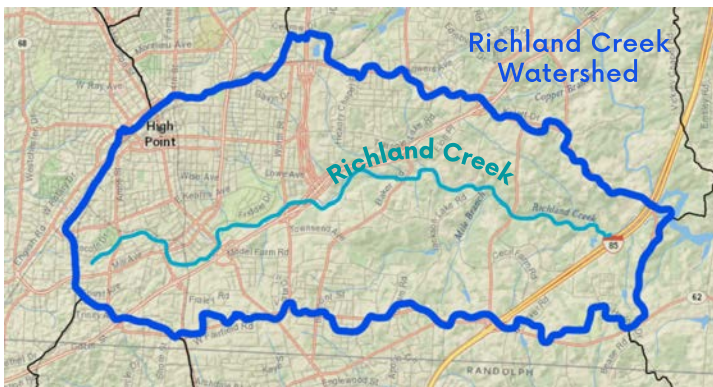
## STREAM BUFFER BASICS

# RICHLAND CREEK AND HEADWATERS DEEP RIVER WATERSHEDS

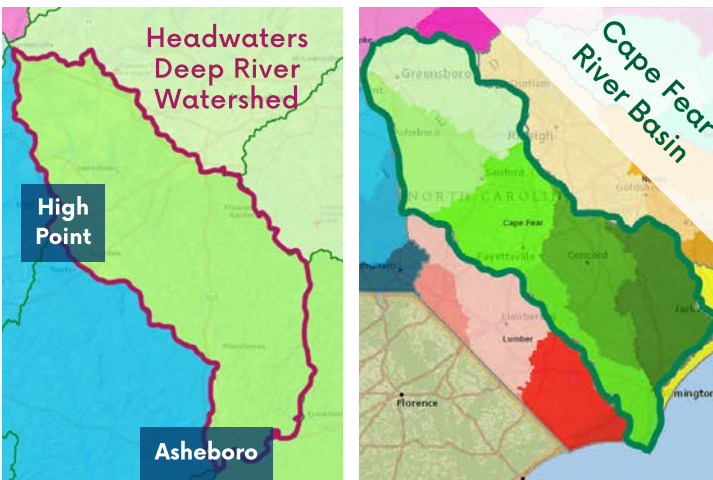
STORMWATER SMART  
PIEDMONT TRIAD REGIONAL COUNCIL



North Carolina Watershed Brochure Series · January 1, 2021 · Piedmont Triad Regional Council · [www.ptrc.org/stormwatersmart](http://www.ptrc.org/stormwatersmart)



**RICHLAND CREEK IS A CRITICAL HEADWATER STREAM OF THE DEEP RIVER, CONTRIBUTING TO THE DRINKING WATER SUPPLY STORED IN THE RANDLEMAN RESERVOIR.**



The creek runs through densely populated areas of the City of High Point, as well as rural areas of Guilford County. The boundaries of the Richland Creek watershed show the elevated edges of the surrounding land area. When it rains, the stormwater drains into the center of the watershed to Richland Creek. Downstream and eastward, the waterway connects to the Deep River, continuing through the Cape Fear River Basin and eventually emptying into the Atlantic Ocean near Wilmington.

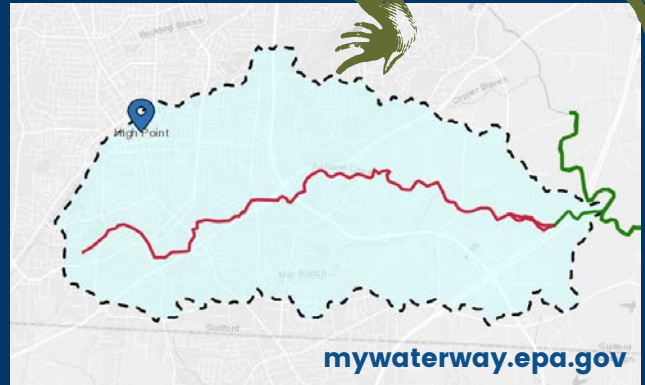
*Through a Section 205(j) Grant awarded by the U.S. EPA, the Piedmont Triad Regional Council and its local community partners are able to provide new opportunities for water quality planning and stream restoration in the Richland Creek watershed. See the back page for more information on how residents, businesses, and other community partners can be involved!*



# RICHLAND CREEK & HEADWATERS DEEP RIVER WATER QUALITY



The water quality of Richland Creek is considered impaired by Environmental Protection Agency (EPA) and the North Carolina Department of Environmental Quality (NC DEQ). Assessments of stream habitats show degraded aquatic life and excessive amounts of bacteria and other microbes. These impairments come from pollution in stormwater: soil and sediment, animal and pet waste, fertilizers, pesticides, household cleaners, discarded electronics, litter, lawn clippings, motor oil, and more. Pollution is important for communities to address because it has direct, negative effects on the quality of human recreation, the cost of clean drinking water, and survival rates of wildlife on land and in the water.



Storm systems carry the runoff from rain events to the nearest creek, untreated and unfiltered. Pollution that enters a storm drain ends up harming aquatic life and degrading water quality. If you see or smell noxious discharge at an outfall, or if you witness someone dumping anything into a storm drain, you can help stop the damage by calling 3-1-1 or your local stormwater department (see last page).



## RIPARIAN BUFFER BENEFITS

A riparian stream buffer is an area running parallel alongside both sides of a protected stream, river, pond, or lake. Stream buffers not only filter pollutants, prevent erosion, and reduce flooding; they also provide habitats for a variety of animal species, many of whom use stream buffers like highways to travel within their range in search of food, water and shelter. Healthy vegetation provides a safe, shaded place to rest and reproduce.



**Healthy buffer:**  
natural, mature  
vegetation on  
creek banks.



**Unhealthy buffer:** stream  
banks eroded &  
roots exposed

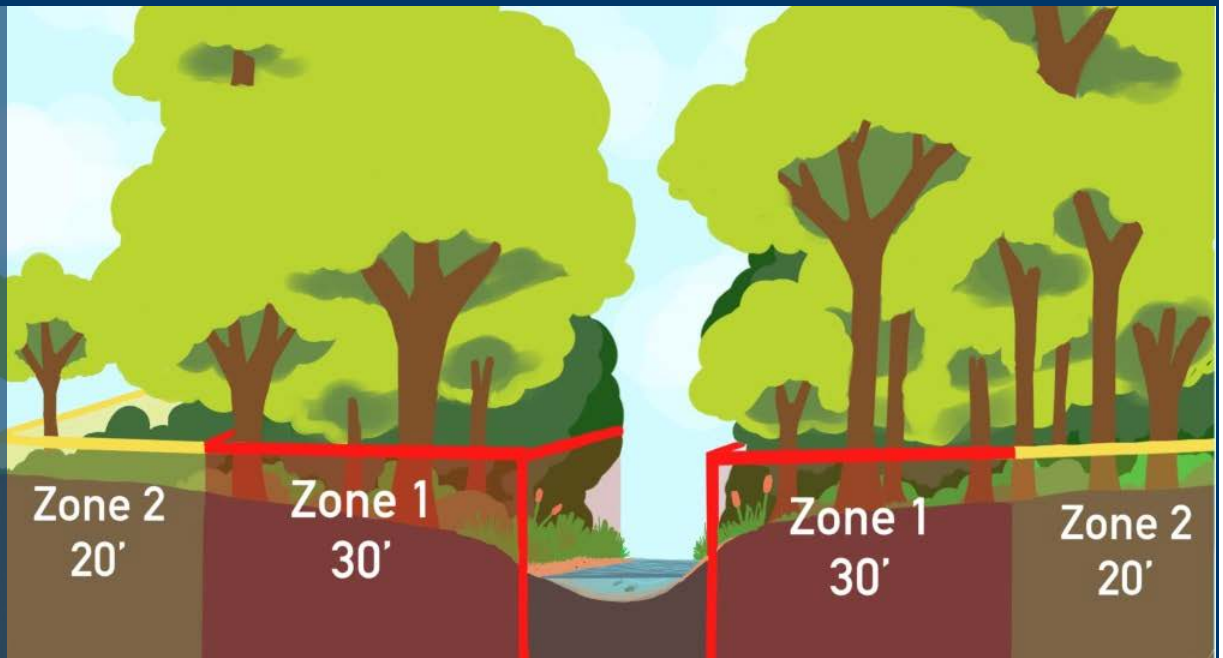


# NCDEQ STREAM BUFFER ZONES

Regulations are set by the North Carolina Department of Environmental Quality (NCDEQ). Permitting rules vary slightly depending on the watershed, but the general rule has the riparian buffer divided into Zone 1 and Zone 2; together totaling 50' of protective vegetation.



PROTECTING THE 50' BUFFER ZONE PRESERVES WATER QUALITY AND ALLOWS OUR NATURAL LANDSCAPE AND ITS WILDLIFE TO THRIVE!



## ●●●●● ZONE 1 ●●●●●

Zone 1 extends from the top of the bank landward for 30 feet on all sides of the stream. Zone 1 has the stronger protections of the two zones, and should have a variety of native grasses, shrubs, and trees.

**NO** clearing, grading or development should take place here. No mowing, tree removal, or pesticide and fertilizer use.

**NO** direct deposit of concentrated water runoff flow, such as downspouts from rooftops and paved areas.

## ●●●●● ZONE 2 ●●●●●

Zone 2 continues landward another 20 feet, creating a 50-foot buffer in total. Grading & revegetation are allowed IF:

- IF no impervious surfaces are added (i.e. paved walkways or slabs)
- IF no trees are removed.

Some stormwater runoff is allowed to enter Zone 2, but the flow must be diffused and traveling at slower speeds. A rock pile or rain garden can help!



## HOW DO I KNOW IF A WATERWAY IS REGULATED?



What may look like a dry ditch during part of the year may be a protected stream that requires a permit for any kind of development. Before doing anything within the 50' buffer that affects stream health (clearing trees and shrubs, adding walkways and structures, applying fertilizer and pesticides, redirecting water flow, etc.) check with your local government for assistance in determining if you are dealing with a protected stream, even if water rarely flows. See the next page for local contact information.

# HELPFUL VEGETATION

There are a variety of important plants that thrive in riparian buffer habitats, with deep root systems to help filter pollutants and stabilize stream banks, preventing the loss of sediment. Here are just a few to look for and prioritize in a riparian buffer near you:

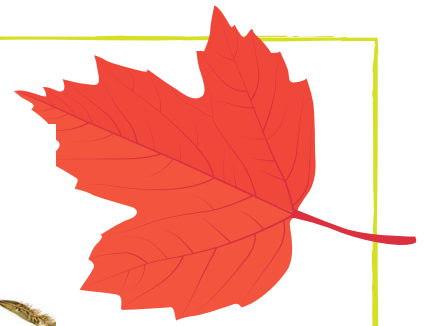
Green Ash



Swamp Milkweed (a favorite of Monarch butterflies)



Black Willow



Red Maple

Southern Wax Myrtle



River Birch



Virginia Sweetspire

## LOCAL GOVERNMENT PARTNERS

City of High Point  
(336) 883-3111 · 211 S. Hamilton ·  
P.O. Box 230 · High Point, NC 27261

Guilford County Watershed  
Protection & Stormwater  
Management  
(336) 641-5565 · 301 West Market St  
· Greensboro, NC 27401

Guilford County Soil & Water  
Conservation District  
(336) 641-2440 · 3309 Burlington  
Rd, Room 108 ·  
Greensboro, NC 27405-7405



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## GETTING INVOLVED

Local residents, businesses, and other groups can help protect water quality in the Richland Creek Watershed by participating in creek cleanups, wildflower plantings, changing behaviors at home and at work, and joining discussions with community leaders.

LEARN MORE  
AND SIGN UP TO  
BE NOTIFIED OF  
COMMUNITY  
EVENTS!

