



TOWN *of*  
WAKE FOREST

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May 16, 2014

NCDEMLR

Sediment Control Commission

1612 Mail Service Center

Raleigh, NC 27699-1612

Re: Town of Wake Forest Revised Ordinance Letter- Watercours Buffer  
Zones

Dear Commissioners,

The Town of Wake Forest recently came before you with a revised erosion ordinance as outlined in the Town's adopted Unified Development Ordinance. There was a question regarding the definition of watercourse buffer zone as defined: the strip of land adjacent to a lake, river, creek, stream, **wash, channel**, or other body of water or natural watercourse.

In the body of the UDO there are additional clarification and details regarding watercourse buffers and who is responsible for their identification:

**12.3.5 OPERATION IN LAKES OR NATURAL WATERCOURSES**

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall comply with the watercourse buffer requirements in Section 12.7, the requirements of the NC Division of Water Resources and the US Army Corps of Engineers.

### 12.3.6 CONSTRUCTION BUFFER ZONES

A. Standard Buffer: All land-disturbing activity shall adhere to the watercourse buffer requirements in Section 12.7. In addition, no land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the 25% of the buffer zone nearest the land-disturbing activity.

### 12.7 WATERCOURSE (RIPARIAN) BUFFER AREAS

It is the intent of this section to seek to maximize retention of the natural beauty of vegetation along creeks, streams, rivers, and lakes, and other bodies of water while simultaneously providing for the retention of surface water run-off from areas adjacent to these natural and/or built features, resulting in a net reduction of pollutants that enter these water features.

#### 12.7.1 ESTABLISHMENT OF BUFFERS

A. Applicability: All protected drainageways and surface waters shall have riparian buffers directly adjacent to such surface waters of the width specified in 12.7.2 below. When multiple watercourse buffer standards apply, the more stringent standard shall dictate.

#### B. Location of Buffers

1. For the purposes of this section, intermittent streams, perennial streams, upper watershed drainageways that drain more than 5 acres, water supply impoundments, lakes, ponds and wetlands shall be deemed to be present if the feature is indicated on the most recent versions of the following:

- a. United States Geological Survey 1:24,000 scale (7.5 minute quadrangle) topographic maps;
- b. A soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture;
- c. The North Carolina Division of Water Resources (NCDWR) identification methodology for determination of perennial and intermittent streams; or
- d. Other site-specific evidence.

2. Wetlands may also be identified, as either a bordering or isolated wetland, using the 1987 Corp of Engineers technique and/or supplemental Corps-approved methodology.

3. In order to determine the amount of land drained by an upper watershed drainageway, USGS or Wake County topographic maps may be used.

4. Where obvious conflicts between actual field conditions and USGS and county soil survey maps exist, appeals may be made to the Administrator or, for appeals related to Neuse River Basin buffer requirements, the North Carolina Division of Water Resources.

5. All surface waters shall be determined by a qualified professional using the most recent version of Identification Method for the Origins of Intermittent and Perennial Streams and verified by qualified Town Staff and/or the NC Division of Water Resources.

C. Buffer Measurement: The width of each required riparian buffer shall be measured perpendicular to the banks of the protected drainageway, beginning at the most landward limit of the top of bank.

impervious surface averaging agreement, and documentation indicating the intent to convey the undeveloped parcel(s) or portion(s) thereof to the town.

3. If an impervious surface averaging allowance is granted as part of a Development Permit, no change in the development proposal authorized for either parcel shall be made unless the impervious surface averaging allowance is amended and reapproved by the Administrator.
  4. Before a Building Permit is issued, the undeveloped parcel(s) or portion(s) thereof shall be deeded (fee simple and at no cost) to the Town of Wake Forest and the town shall place a permanent conservation easement on the same, as provided under NCGS 121-35, granted to the town, a land conservation organization, or other entity capable of providing for the ongoing maintenance of the undeveloped property. No such agreement shall be accepted without approval of the Town Attorney as to the legal sufficiency of the documents involved.
  5. Once ownership of such land is conveyed, a plat showing the properties and conservation easements involved in the development, and outlining the impervious surface averaging requirements associated with the parcel pair must be reviewed, approved, and recorded prior to the issuance of the building permit.
- I. Agreements Shall Continue Indefinitely:** Applicants shall agree to bind themselves and their successors in title, individually and collectively, to maintain the pattern of development proposed for so long as the requirements of this section are applicable. Parties to enforcement of such agreement shall include the town.

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**12.7.2 WATERCOURSE BUFFER TABLES**

A. General Buffers		The following watercourse buffer standards shall apply for all development projects.		
Surface Water Features	Zone 1 Buffer	Zone 2 Buffer	Additional Standards	
1. Intermittent and Perennial Streams (not subject to Neuse River Buffer Rules)	30 ft	20 ft	See Section 12.7.3	
2. Wetlands	10 ft	Not required		

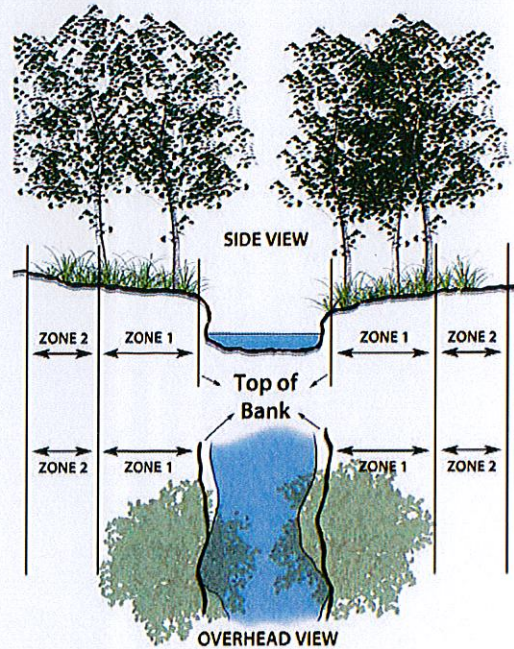
B. Watershed Protection District Buffers		When located in the Falls Lake, Richland Creek or Smith Creek Water Supply Watersheds (both the Critical Area & Watershed Management Area), the following watercourse buffer standards shall apply.		
Surface Water Features	Zone 1 Buffer	Zone 2 Buffer	Additional Standards	
1. Intermittent Stream	50 ft	Not required	All buildings and structures shall be set back a minimum 10 ft from the edge of any required buffer.	
2. Perennial Stream (w/ Low Impervious Surface Option)	50 ft			
3. Perennial Stream (w/ High Impervious Surface Option)	100 ft			
4. Upper Watershed Drainageway (drains more than 5 acres)	25 ft			
5. Water Supply Impoundment	100 ft			
6. WS-II Streams (Smith Creek), WS-III & WS-IV Streams (Falls Lake & Richland Creek)*	100 ft			

\* Excludes tributaries

C. Neuse River Basin Buffers		When located in the Neuse River Basin, the state regulations for water management as outlined in 15 A NCAC 2B.0233 shall apply.		
Surface Water Features	Zone 1 Buffer	Zone 2 Buffer	Additional Standards	
All intermittent streams, perennial streams, water supply impoundments, lakes and ponds	30 feet min.	20 feet min.	All buildings and structures shall be set back a minimum 10 ft from the edge of any required buffer.  See Section 12.7.3	

**D. Delineation of Buffer Zones**

1. **Zone 1:** Zone 1 begins at the top of bank for intermittent streams and perennial streams and extends landward on all sides of the water body. For all other water bodies, Zone 1 begins at the top of bank or mean high water line. Zone 1 is an undisturbed area of vegetation.
2. **Zone 2:** Zone 2 begins at the outer edge of Zone 1 and extends landward. Zone 2 consists of a stable vegetated area that may be graded and revegetated provided that the health of vegetation in Zone 1 is not compromised.

**12.7.3 WATERCOURSE BUFFER STANDARDS**

- A. Permitted Uses in Watercourse Buffers:** All required buffers shall remain natural and undisturbed except as allowed by NRRB Rules, as amended, or as may be necessary to accommodate any of the uses permitted in 15 A NCAC 2B.0233. These activities shall minimize built-upon surface area, direct run-off away from the surface waters and maximize the utilization of best management practices (BMP's).
- B. Additional Neuse River Buffer Standards:** The Neuse River regulations of this section and 15 A NCAC 2B.0233 shall not apply to riparian buffer areas with existing and ongoing uses established as of July 27, 1997. Existing forest vegetation of any width present after this date must be protected and maintained in accordance with the Neuse River regulations of this section and 15 A NCAC 2B.0233.
- C. Buffers to be Shown on Plans:** All required watercourse buffers shall be shown on all approved site plans and subdivision plans. Where designated by the Administrator, the placement of signs may be required to relay the buffer protection requirements to the public.
- D. Exclusion of Watercourse Buffer Areas from Lots:** Single-family lots created through a site and/or subdivision plan shall not be platted into a watercourse buffer area except through the approval of the Administrator when all of the following conditions are met:
  1. The subdivision is limited in size and has no homeowners association;
  2. There is no other reason for the formation of a homeowners association (e.g., covenant, other common areas, engineered stormwater control structures);
  3. The buffer is placed in a permanent conservation or other legal instrument dedicated to the town or other approved conservation or governmental entity (required documents must be provided prior to recordation of the plat for the impacted area).

I hope that this answers any questions you may have in further detail regarding the addition of washes and channels to the definition, as specifically mentioned in section 12.7 the additional areas are to provide the waterbodies with natural beauty, the retention of surface water runoff, and protect from additional pollution.

If you have any additional questions, please feel free to contact myself or Holly Miller at 919-435-9400.

Sincerely,

A handwritten signature in black ink, appearing to read "Vivian A. Jones". The signature is fluid and cursive, with a large initial "V" and "A".

Mayor Vivian A. Jones

Town of Wake Forest

Cc: Holly Miller, PE, Assistant Town Engineer  
Mark Williams, Town Manager  
Roe O'Donnell, PE, Deputy Town Manager  
Eric Keravuori, PE, Director of Engineering  
Chip Russell, AICP, Planning Director  
Chad Sary, AICP, Assistant Planning Director