

## DOES YOUR PROPERTY HAVE A STREAM?

What some people consider a ditch may be an important drainage channel or waterway, even if it is dry sometimes during the year. Before disturbing the soil, adding structures, or removing vegetation near streams on your property, call Chapel Hill Stormwater Management to request a stream determination. If it is an intermittent or perennial stream, there are restrictions for construction, use and maintenance activities within the riparian (streamside) buffer. Permits may be needed.



### DEFINITIONS

**Channel:** a natural water-carrying trough cut vertically into low areas of the land surface by erosive action of concentrated flowing water or a ditch or canal excavated for water flow.

**Ditch or canal:** a man-made channel other than a modified natural stream constructed for drainage purposes that is typically dug through inter-stream divide areas. A ditch or canal may have flows that are perennial, intermittent, or ephemeral and may exhibit hydrological and biological characteristics similar to perennial or intermittent streams.

**Ephemeral stream:** an aquatic bed above the water table that carries stormwater in direct response to precipitation. Water flows only during and shortly after large precipitation events.

**Intermittent stream:** a well-defined channel that contains water for only part of the year, typically during winter and spring when the aquatic bed is below the water table. The flow may be heavily supplemented by stormwater runoff.

**Perennial stream:** a well-defined channel that contains water year-round during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water; but it also carries stormwater.

**Riparian Buffer:** a vegetated area adjoining a stream or river. Buffers, especially if forested, help to shade waterways, stabilize stream banks, and filter pollutants from stormwater runoff before it reaches waterways. Buffers protect water quality and prevent loss of land from erosion.

### Streamside buffers:

- ◆ Protect your property from erosion.
- ◆ Slow and filter stormwater runoff.
- ◆ Stabilize banks with vegetation.
- ◆ Minimize flood damage.
- ◆ Shade water to keep it cool and Increase dissolved oxygen for aquatic life.
- ◆ Provide wildlife habitat and corridors.



### Town of Chapel Hill Stormwater Management

#### Mailing Address:

405 Martin Luther King Jr. Boulevard  
Chapel Hill, NC 27514

#### Physical Address:

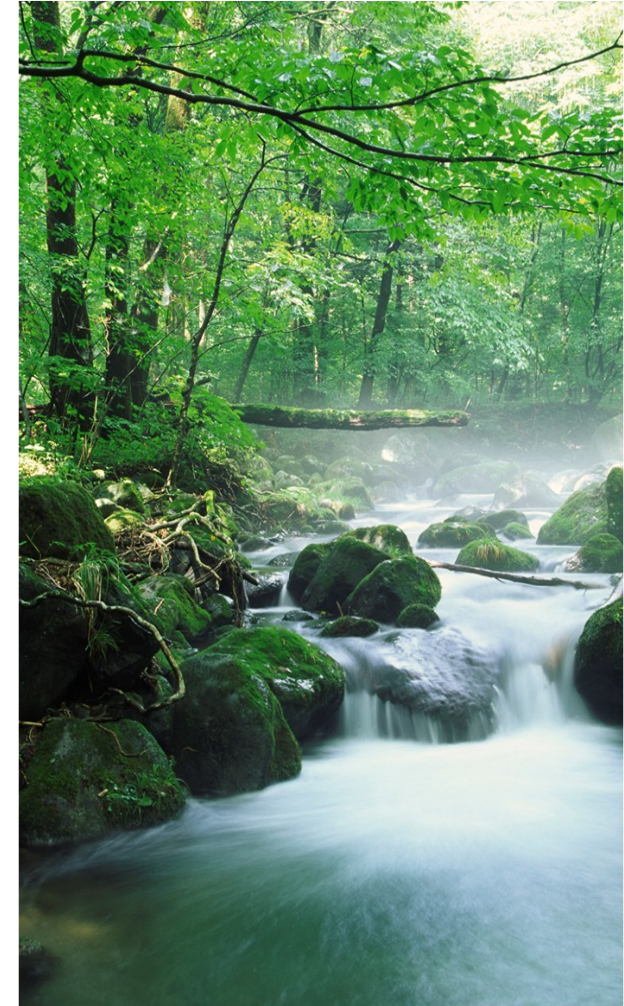
208 N. Columbia Street 2nd Floor  
Chapel Hill, NC 27514

[stormwater@townofchapelhill.org](mailto:stormwater@townofchapelhill.org)  
[www.townofchapelhill.org/stormwater](http://www.townofchapelhill.org/stormwater)

#### Report Stormwater Issues

911 for emergencies  
919-969-RAIN (7246)

# Chapel Hill: GOT CREEK?



## Check the Rules for Use & Maintenance of Streamside Land

# If you have a stream, these regulations may apply:

## Floodplain Regulations

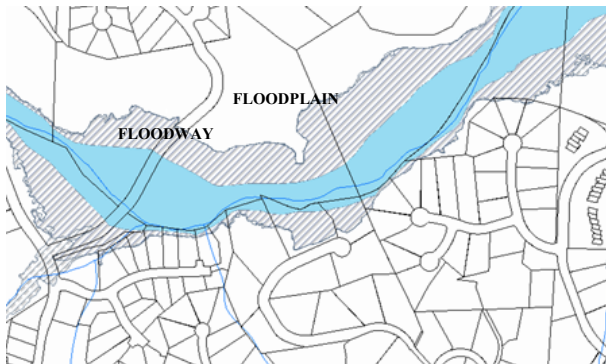
Flood Damage Prevention Ordinance  
Town Code of Ordinances: Chapter 5 Article IV

Before planning or placing anything within the floodplain, call Stormwater Management or read the Flood Damage Prevention Ordinance. For residents of the Town to qualify for federal flood insurance, the Town must enact and enforce floodplain regulations.

Flood-prone areas are subject to periodic inundation that results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare of our community.

These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities and by the occupancy in floodplain areas or uses vulnerable to floods or other hazards.

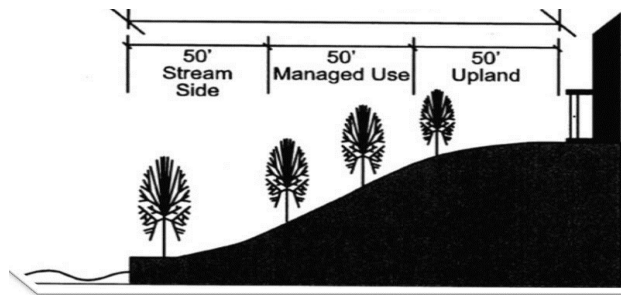
Minimizing construction within the floodplain areas of the town and the surrounding areas within its zoning jurisdiction has been identified as an effective means for furthering environmental goals as expressed in the comprehensive plan for Chapel Hill.



## Resource Conservation District (RCD)

Town Code of Ordinances: Appendix A  
Land Use Management Section 3.6.3

The Planning Department determines RCD width.  
Contact Planning at 919-968-5066.



RCD provisions limit or eliminate structures and development within riparian buffers, which may range from 50' to 150' from intermittent or perennial streams. The RCD protects or improves water quality of streams by preserving vegetated areas that slow, filter and infiltrate stormwater runoff. The RCD also protects wildlife habitat.

**WITHIN FLOODPLAIN, RCD or JORDAN LAKE BUFFERS, DO NOT:**  
(without proper permits or exemptions)



- Dig in the stream or reshape banks
- Place objects, fences, bridges, structures, gardens
- Use fertilizers, pesticides or herbicides
- Use heavy equipment or grade or clear
- Landscape other than planting of vegetation
- Remove trees and vegetation

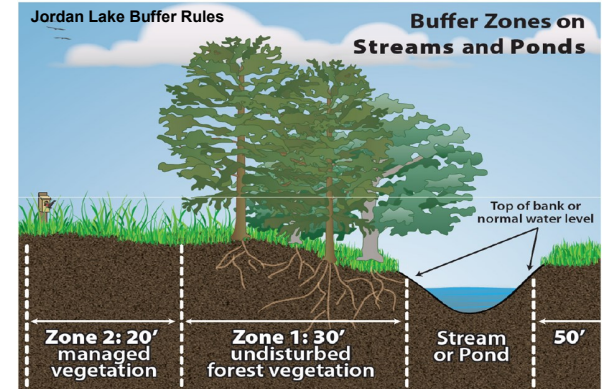
## Jordan Lake Buffer Rules

Town Code of Ordinances Appendix A  
Land Use Management Section 5.18

The Rules are required by the State to protect water quality in Jordan Lake, a major drinking water supply and recreation reservoir. All creeks in Chapel Hill and Carrboro flow into Jordan Lake.

### The Rules:

- Apply **only** to intermittent and perennial streams and perennial water bodies mapped on the most recent paper version of the soil survey map prepared by the U.S. NRCS OR the most recent version of USGS 1:24,000 scale quadrangle topographic maps OR a Town prepared map approved by the Geographic Information Coordinating Council and EMC.



- Do not apply unless there is a *change in use or activity within the buffer*. Some activities require a notification to Planning, rather than a permit.
- Require Authorizations and Variances for work done in the buffer.
- Require diffuse flow of runoff to be maintained in the buffer by dispersing concentrated flow and re-establishing vegetation.