## Recommendation for Purpose and Intent Section 304, Chatham County Watershed Protection Ordinance

## By the Chatham County Environmental Review Board (ERB) 21 June 2007 Revised (11/02/07)

## PURPOSE AND INTENT

Chatham County is historically a rural, primarily agricultural county that is experiencing unprecedented growth and development. The quality, variability and value of its natural resources (soils, streams and water bodies, groundwater, aquatic ecosystems, geology, natural habitat and flora and fauna) make it necessary that riparian buffers be preserved and managed. Several factors drive the need for stricter oversight of streams and water bodies in Chatham County. Jordan Lake, a source of drinking water for Chatham and Wake Counties, is almost wholly encompassed within Chatham County, and the lake is listed under § 303(d) of the Clean Water Act<sup>1</sup> as "impaired waters" due to high concentrations of Chlorophyll a. Some soils of Chatham are designated as "highly erodible", as the County lies within both the Triassic Basin and the Carolina Slate Belt. Due to the rural nature of this agriculturally based County, there is no county-wide sanitary sewer system, with the result that septic tanks serve as the primary sewage disposal method, and spray irrigation fields are employed in many instances. Many citizens depend on groundwater wells for water supply, which can be impacted by surface waters. Additionally, at this time the county lacks a storm water management program and ordinance to manage the increasing runoff from impervious surfaces as a result of new development. Unmanaged, this runoff causes increased pollutant loads, soil and stream channel erosion and increased volumes and discharges.

The amendments to § 304 requiring a stricter management of riparian buffers in the Chatham County Watershed Protection Ordinance are in response to the factors listed above. The purpose and intent of § 304 are to: (a) protect the public health, safety and welfare of Chatham County citizens, (b) ensure environmentally sound use of the County's water and land resources, (c) protect the drinking water, recreational and economic values inherent in well managed water resources, (d) preserve the biological integrity of riparian and aquatic ecosystems, and (e) help maintain forested riparian buffers throughout the County.

Forested riparian buffers are especially important because they fulfill critical ecosystem functions. Forested riparian buffers:

<sup>&</sup>lt;sup>1</sup> The official citation of the "Clean Waters Act" is the *FEDERAL WATER POLLUTION CONTROL ACT OF 1972*, and amended, 1977, 1981, 1987 & 2002. see 33 U.S.C. 1251 et seq.

- Reduce pollutants and filter runoff,
- Improve air quality and lower ozone levels,
- Maintain stable water flows,
- Help sustain natural channel morphology,
- Help maintain water and air temperature by providing shade,
- Stabilize stream banks,
- Provide most of the organic carbon and nutrients necessary to support aquatic food webs,
- Provide sources of sufficient large woody debris for stream channels,
- Help reduce flood severity,
- Facilitate the exchange of groundwater and surface water,
- Provide important wildlife habitat, and
- Protect riparian plant communities.