



Environmental Services

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August 13, 2010

Mr. John Huisman
NC Dept of Environment and Natural Resources
Division of Water Quality Planning
1617 Mail Service Center
Raleigh, NC 27669-1617

Subject: Wake County's Comments on Falls Lake Rules

Dear Mr. Huisman:

The purpose of this letter is to present Wake County's comments on the proposed Falls Lake Rules. The Wake County Board of Commissioners adopted the attached Consensus Principals to Guide Falls Lake Nutrient Management Strategy on March 1, 2010. The governing boards of the following jurisdictions have also adopted the Consensus Principals: Granville County, Person County, Orange County, Durham County, the City of Durham, and the City of Raleigh. Our primary comments regarding the Falls Lake Rules are presented in the following sections.

Staged Approach Based on Geographic Variation of Nutrient Loadings

The Consensus Principals acknowledge that it is appropriate to establish a two-stage nutrient reduction strategy with:

- Stage 1 addressing chlorophyll α in the lower lake below Highway 50 and to improve water quality in the upper lake above Highway 50, and
- Stage 2 designed to achieve water quality standards in the upper lake and to maintain water quality in the lower lake.

We highlight this point as it is essential that the strategy be developed in a manner that addresses the geographic variability of nutrient loadings and chlorophyll α exceedances in Falls Lake. NCDENR's data clearly supports this rational and technically-sound approach as the upper lake has recorded exceedances of the chlorophyll α standard that are 200 to 500 percent greater than in the lower Falls Lake.

Early Implementation Credits for Existing Development

Regarding early implementation credits, our concern is equitable and quantifiable credit for Wake County's long established land use and development policies and practices that have served to protect the water quality of Falls Lake. It is our interpretation of Senate Bill 1020 that the Environmental Management Commission (EMC), through NCDENR, will award nutrient and

Mr. John Huisman, NCDENR
Wake County's Comments for Proposed Falls Lake Rules

August 13, 2010

Page 2 of 4

turbidity credits to local governments that administer and enforce more stringent turbidity and nutrient reduction strategies than required by the final Rule.

Wake County adopted stringent water supply watershed protection rules for Falls Lake in 1984, eight years prior to the State's adoption of statewide water supply watershed protection rules. Currently, development in Wake County's jurisdiction of Falls Lake has been limited to low density (*1 unit per acre*) or very low density (*1 unit per two acres*) residential. Attached is a previous letter from Wake County dated September 17, 2009 which outlines some of the more important protective measures implemented by Wake County. In addition, we have attached a letter from the State's recent audit of Wake County's Water Supply Watershed Protection Program commending our comprehensive watershed protection efforts.

It is our expectation that NCDENR will provide Wake County with a specific and quantifiable nutrient load credit that can be either traded to another party or used by Wake County toward the County's nutrient reduction target. It is our further expectation that NCDENR will provide Wake County with the detailed calculations and technical basis for determining the quantity of nutrient credits to be award to Wake County for each individual strategy identified as being more stringent than the final Rule including, but not limited to, allowing only low-density development, 100-foot buffers versus 50-foot buffers, NRCS Curve Number approach for stormwater management, greater land area protected for critical area than required by State, and no development allowed in the 100-year flood plain.

Feasibility of Load Reduction Plan – Existing Development

The Rule does not recognize the unique limitations on Wake County Government and possibly other county governments in addressing load reductions for existing development. Currently, all public roads within Wake County are maintained by NCDOT. Therefore, Wake County does not have a public stormwater conveyance system nor, any related easements or rights of access. Municipalities, which do maintain roads, have publicly-owned stormwater conveyance systems and legal rights of entry to maintain and retrofit system components and make other improvements by which they can earn nutrient reduction credits. Unlike a municipality, Wake County has neither ownership nor rights of entry to stormwater conveyance systems associated with roads on privately developed properties. Accordingly, the Rule requirements of county governments should align with statutory authority and obligations, and recognize the County's legal limitations in addressing existing development loads on private property.

Equivalent Program Option

Wake County supports the Equivalent Program Option, which provides local governments the flexibility to create and modify their existing programs to meet the requirements set forth in the Rule. However, the requirement outlined in (5) (b) that local programs provide three years of continuous flow and nutrient monitoring data demonstrating that watershed wide nutrient loading rates (*i.e. based on in stream nutrient concentrations*) are at or below site-specific nutrient loading

Mr. John Huisman, NCDENR
Wake County's Comments for Proposed Falls Lake Rules

August 13, 2010

Page 3 of 3

rates (*i.e.* 2.2 lbs/ac/yr for TN and 0.33 lbs/ac/yr for TP) does not appear to account for background nutrient loadings present in Piedmont streams. We believe a more appropriate approach would be to define a technically-based background concentration or watershed loading rate for nutrients for the Falls Lake watershed, and require local governments that desire to pursue the Equivalent Program Option to achieve in-stream nutrient concentrations that meet or exceed the equivalent of the site-specific nutrient targets plus the allowance for background nutrient concentrations. For example, if it was determined that a technically-based background concentration for TN in the Falls Lake watershed was 0.3 lbs/acre/yr, then a local government's Equivalent Program Option would be deemed compliant with the final Rule if in-stream water quality samples demonstrated a watershed loading rate of 2.5 lbs/ac/year for TN.

In addition, the current draft of the Rule is based on the premise that nutrient load reductions will occur over a ten-year period, and at the end of that period (*Stage 1*) the lower lake will meet water quality standards. However, local governments that desire to pursue the Equivalent Program Option will be required to demonstrate (*with three years of monitoring data*) that the Equivalent Program Option meets the nutrient reduction targets in advance of the first 10-year period allowed for Stage 1. We believe it would be more appropriate to allow local governments to submit monitoring data during the course of the initial 10-year period demonstrating that a local government's Equivalent Program Option is incrementally achieving the reduction goals, with the expectation that the reduction goals will be achieved at the end of the first ten-year period. We believe this is more consistent with the intent of the Rule.

Closing Comments

In summary, Wake County is committed to improving and protecting water quality in Falls Lake, and we want to extend our sincere appreciation to NCDENR for allowing us to submit comments on the proposed Rule.

As shown on the attached map, approximately 64,400 acres of the Falls Lake watershed is in Wake County. Of that acreage, 96.5% is in Wake County's planning jurisdiction, 2.4% is in the City of Raleigh's jurisdiction and 1.2% is in the Town of Wake Forest's jurisdiction. Of the approximately 56,142 acres in the County's jurisdiction, 99.999% is zoned as either low density or very low density residential. We believe the low and very low density zoning, along with other development standards required by Wake County has contributed significantly to protecting water quality in Falls Lake – and these standards and the associated monitoring program will be key components of our submittal for the Equivalent Program Option.

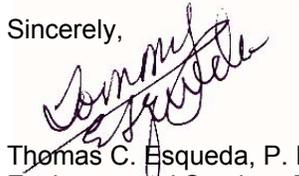
Once again, thank you for the opportunity to submit comments on the draft Rule. If you have any questions or require additional information, please do not hesitate to contact me by email at Tommy.Esqueda@wakegov.com or by telephone at 919-856-7444.

Mr. John Huisman, NCDENR
Wake County's Comments for Proposed Falls Lake Rules

August 13, 2010

Page 4 of 4

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas C. Esqueda', is written over a light-colored rectangular background.

Thomas C. Esqueda, P. E., Director
Environmental Services Department
Wake County Government

Cc: David Cooke, Wake County Manager
Scott Warren, County Attorney
Joe Durham, Deputy County Manager, Wake County
Britt Stoddard, Director, Division of Water Quality, Wake County
Melinda Clark, Watershed Manager, Wake County

Attachments:

- (1) Consensus Principles Document, March 10, 2010
- (2) Letter to NCDENR September 17, 2009
- (3) NCDENR letter presenting findings of audit for Wake County's Water Supply Watershed Protection Program
- (4) Falls Lake Watershed Map, Wake County jurisdiction