

**GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2009**

**SENATE BILL 1020  
RATIFIED BILL**

AN ACT TO PROTECT AND RESTORE WATER QUALITY AND QUANTITY IN THE UPPER NEUSE RIVER BASIN, FALLS LAKE, AND OTHER DRINKING WATER SUPPLY RESERVOIRS BY DIRECTING THE ENVIRONMENTAL MANAGEMENT COMMISSION TO PROVIDE CREDIT TO LOCAL GOVERNMENTS, LANDOWNERS, AND OTHERS WHO REDUCE WATER POLLUTION IN THE UPPER NEUSE RIVER BASIN BEFORE PERMANENT RULES ARE ADOPTED AND TO MODIFY THE NUTRIENT MANAGEMENT STRATEGY AND ADOPT A SEDIMENTATION STRATEGY FOR CERTAIN DRINKING WATER SUPPLY RESERVOIRS.

Whereas, that portion of the Neuse River Basin that is upstream of the Falls Dam and that includes Falls Lake is often referred to as the Upper Neuse River Basin; and

Whereas, the nine drinking water supply reservoirs in the Upper Neuse River Basin provide water for drinking, sanitation, food processing, cooling, industrial processing, and other essential uses for the citizens of Orange, Person, Durham, Granville, and Wake Counties; and

Whereas, the General Assembly enacted S.L. 1997-458, the Clean Water Responsibility and Environmentally Sound Policy Act, to protect and restore the waters of the State in 1997; and

Whereas, the General Assembly enacted S.L. 2005-190, the Clean Lakes Act, to protect and restore the drinking water supply reservoirs of the State in 2005; and

Whereas, the North Carolina Division of Water Quality in the Department of Environment and Natural Resources listed Falls Lake in the Upper Neuse River Basin as impaired waters in 2008, and the U.S. Environmental Protection Agency also classifies Falls Lake as impaired waters due to nutrients and turbidity; and

Whereas, the quality and quantity of the water in the nine drinking water supply reservoirs in the Upper Neuse River Basin are essential to public health, environmental quality, and the economic vitality of the region; and

Whereas, the North Carolina Environmental Management Commission may not develop a nutrient management strategy and rules to implement the nutrient management strategy for the Upper Neuse River Basin by July 1, 2009, as required by law; and

Whereas, delayed development of a nutrient management strategy and rules to implement the nutrient management strategy threatens the quality and quantity of drinking water supply reservoirs in the Upper Neuse River Basin; Now, therefore,

The General Assembly of North Carolina enacts:

**SECTION 1.(a)** Definition. – For purposes of this section, the term "Upper Neuse River Basin" is that portion of the Neuse River Basin upstream of the Falls Dam, including Falls Lake.

**SECTION 1.(b)** Credit for Early Adoption. – The Environmental Management Commission shall encourage local governments, landowners, and others to develop, adopt, and implement policies and practices to reduce the runoff and discharge of nitrogen, phosphorus, sediment, and other pollutants into the surface waters and drinking water supply reservoirs in the Upper Neuse River Basin before it adopts permanent rules to implement the nutrient management strategy and the turbidity strategy for Upper Falls Lake. The Environmental Management Commission shall, in its permanent rules, provide credit for the early implementation of the nutrient management strategy for the Upper Neuse River Basin and the turbidity strategy for Falls Lake to local governments, landowners, and others who implement



policies and practices after January 1, 2007, to reduce runoff and discharge of nitrogen, phosphorus, and sediment in the Upper Neuse River Basin.

**SECTION 1.(c) Reports.** – The Environmental Management Commission shall report its progress in implementing this section to the Environmental Review Commission as part of each quarterly report it makes pursuant to G.S. 143B-282(b).

**SECTION 2.(a)** Section 3 of S.L. 2005-190, as amended by Section 31 of S.L. 2006-259, reads as rewritten:

**"SECTION 3.(a) Applicability of section to certain reservoirs.** – This section applies only to drinking water supply reservoirs that meet all of the following criteria as of 1 July 2005:

- (1) The reservoir serves a population greater than 300,000 persons.
- (2) The Environmental Management Commission has classified all or any part of the water in the reservoir as a nutrient sensitive water (NSW).
- (3) Water quality monitoring data indicates that water quality in the reservoir violates the chlorophyll A standard.
- (4) The Division of Water Quality of the Department of Environment and Natural Resources has not prepared or updated a calibrated nutrient response model for the reservoir since 1 July 2002.

**"SECTION 3.(b) Temporary limitation on increased nutrient loading.** – If the Environmental Management Commission determines either that water quality in all or in any part of a drinking water supply reservoir to which this section applies does not meet current water quality standards or that it is likely that water quality will not meet water quality standards at any time prior to 1 July 2010, the Commission shall not make any new or increased nutrient loading allocation to any person who is required to obtain a permit under G.S. 143-215 for an individual wastewater discharge directly or indirectly into that reservoir. This limitation on new or increased nutrient loading allocation shall not be construed to prohibit a person who holds a permit for a wastewater discharge into a drinking water supply reservoir from purchasing a nutrient loading allocation from another person who holds a permit for a wastewater discharge into the same drinking water supply reservoir. This subsection expires with respect to a drinking water supply reservoir when permanent rules adopted by the Commission to implement the nutrient management strategy for that reservoir become effective.

**"SECTION 3.(c) Nutrient management strategy.** – The Environmental Management Commission shall develop a nutrient management strategy for drinking water supply reservoirs to which this section applies by ~~1 July 2009~~ 15 January 2011. The nutrient management strategy shall be based on a calibrated nutrient response model that meets the requirement of G.S. 143-215.1(c5). The nutrient management strategy shall include specific mandatory measures to achieve the reduction goals. ~~The Commission shall consider the cost of the proposed measures in relation to the effectiveness of the measures.~~ In developing the nutrient management strategy, the Commission shall consider the effectiveness of measures previously implemented in the watershed and the cost of the proposed measures in relation to their effectiveness. These measures could include, but are not limited to, buffers, erosion and sedimentation control requirements, post-construction stormwater management, agricultural nutrient reduction measures, the addition of nutrient removal treatment processes to point source permitted wastewater treatment plants, the removal of point source discharging wastewater treatments through regionalization and conversion to nondischarge treatment technologies, measures to address nutrient inputs from on-site wastewater treatment systems, control of atmospheric deposition, allowing the sale and purchase of nutrient offsets, allowing trading of nutrient loading allocations and credits for nutrient reductions, and any other measures that the Commission determines to be necessary to meet the nutrient reduction goals. To the extent that one or more other State programs already mandate any of these measures, the nutrient management strategy shall incorporate the mandated measures and any extension of those measures and any additional measures that may be necessary to achieve the nutrient reduction goals. In making a nutrient loading allocation to a permit holder, the Commission shall, to the extent allowed by federal and State law, give consideration to all voluntary efforts taken by the permit holder to protect water quality prior to the development of the nutrient management strategy.

**"SECTION 3.(d) Eligibility under the Clean Water Revolving Loan and Grant Act.** – The definitions set out in G.S. 159G-3 apply to this subsection. The operator of a wastewater treatment works that is owned by an agency of the State may apply for a loan or grant under

Chapter 159G of the General Statutes on the same basis as any other applicant if the operator is a local government unit and if the local government unit operates the wastewater treatment works pursuant to a contract with the State agency that contemplates that the local government unit will eventually acquire ownership of the wastewater treatment works.

**"SECTION 3.(e) Implementation; rulemaking.** – The Environmental Management Commission shall adopt permanent rules to implement the nutrient management strategies required by this section by ~~1 July 2009~~ 15 January 2011. The rules shall require that reductions in nutrient loading from all sources begin no later than five years after the rules become effective. The rules shall require that stormwater management programs to reduce nutrient loading from new development be implemented no later than 30 months after the rules become effective.

**"SECTION 3.(f) Reports.** – The Environmental Management Commission shall report its progress in implementing this section to the Environmental Review Commission as a part of each quarterly report it makes pursuant to G.S. 143B-282(b)."

**SECTION 2.(b)** S.L. 2005-190, as amended by Section 31 of S.L. 2006-259, is amended by adding four new subsections to read:

**"SECTION 3.(g) Compensatory mitigation for riparian buffer loss; nutrient offset purchases.** – Compensatory mitigation for riparian buffer loss in the watershed of a drinking water supply to which this section applies must be performed in the watershed of the drinking water supply. The Environmental Management Commission may further limit the area in which compensatory mitigation for riparian buffer loss must be performed in the watershed of a drinking water supply to which this section applies. Any nutrient offset purchased to offset loading in the watershed of a drinking water supply to which this section applies may only be obtained from an offset project located in the watershed of the drinking water supply. The Environmental Management Commission may further limit the area from which nutrient offsets may be obtained in the watershed of a drinking water supply to which this section applies.

**"SECTION 3.(h) Additional standards for land-disturbing activities in the water supply watershed.** – For purposes of this section, "land-disturbing activity" does not include the land-disturbing activities set out in G.S. 113A-52.01. In addition to any other requirements of State, federal, and local law, land-disturbing activity in the watershed of the water supply reservoir to which this section applies shall meet all of the following design standards for sedimentation and erosion control:

- (1) Erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the runoff of the 25-year storm that produces the maximum peak rate of runoff as calculated according to procedures set out in the United States Department of Agriculture Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States or any generally recognized organization or association.
- (2) Sediment basins shall be planned, designed, and constructed so that the basin will have a settling efficiency of at least seventy percent (70%) for the 40-micron size soil particle transported into the basin by the runoff of the two-year storm that produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States or any generally recognized organization or association.
- (3) Newly constructed open channels shall be planned, designed, and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit steeper slopes or where the slopes are stabilized by using mechanical devices, structural devices, or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.
- (4) For an area of land-disturbing activity where grading activities have been completed, temporary or permanent ground cover sufficient to restrain erosion shall be provided as soon as practicable, but in no case later than seven days after completion of grading. For an area of land-disturbing

activity where grading activities have not been completed, temporary ground cover shall be provided as follows:

- a. For an area with no slope, temporary ground cover shall be provided for the area if it has not been disturbed for a period of 14 days.
- b. For an area of moderate slope, temporary ground cover shall be provided for the area if it has not been disturbed for a period of 10 days. For purposes of this subdivision, "moderate slope" means an inclined area, the inclination of which is less than or equal to three units of horizontal distance to one unit of vertical distance.
- c. For an area of steep slope, temporary ground cover shall be provided for the area if it has not been disturbed for a period of seven days. For purposes of this subdivision, "steep slope" means an inclined area, the inclination of which is greater than three units of horizontal distance to one unit of vertical distance.

**"SECTION 3.(i)** For purposes of this section, "land-disturbing activity" does not include the land-disturbing activities set out in G.S. 113A-52.01. No later than December 31, 2011, the Sedimentation Control Commission shall adopt rules for the control of erosion and sedimentation resulting from land-disturbing activities in the watershed of the water supply reservoir to which this section applies. In developing the rules, the Commission shall consider the standards established pursuant to Section 3(h), as enacted by Section 2(b) of this act.

**"SECTION 3.(j)** The Department of Environment and Natural Resources, in consultation with the Environmental Management Commission, shall identify improvements needed in the design, operation, and siting of septic tank systems in order to reduce excess nutrient loading from septic tank systems in the watershed of a drinking water supply to which this section applies. The Department shall report its findings and recommendations for specific changes to standards adopted by the Commission for Public Health pursuant to G.S. 130A-355 to the Commission for Public Health and to the Environmental Review Commission no later than March 1, 2010."

**SECTION 3.** Concurrent with the permanent rule making required by Section 3 of S.L. 2005-190, as amended by Section 31 of S.L. 2006-259 and Section 2(a) of this act, and pursuant to G.S. 143-215.8B, the Environmental Management Commission shall adopt temporary rules. The Commission shall adopt the temporary rules required by this section by January 15, 2011.

**SECTION 4.** Section 3(h) of S.L. 2005-190, as enacted by Section 2(b) of this act, becomes effective January 1, 2010, applies to land-disturbing activities begun on or after January 1, 2010, and expires on the date that rules adopted pursuant to Section 3(i) of S.L. 2005-190, as enacted by Section 2(b) of this act, become effective. The remaining sections of this act are effective when they become law.

In the General Assembly read three times and ratified this the 11<sup>th</sup> day of August, 2009.

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Walter H. Dalton  
President of the Senate

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Joe Hackney  
Speaker of the House of Representatives

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Beverly E. Perdue  
Governor

Approved \_\_\_\_\_m. this \_\_\_\_\_ day of \_\_\_\_\_, 2009