15A NCAC 02B .0262 is proposed for amendment as follows:

15A NCAC 02B .0262 JORDAN WATER SUPPLY NUTRIENT STRATEGY: PURPOSE AND SCOPE

PURPOSE. The purpose of this Rule, 15A NCAC 02B .0263 through .0273 and .0311(p) shall be to restore and maintain nutrient-related water quality standards in B. Everett Jordan Reservoir; protect its classified uses as set out in 15A NCAC 02B .0216, including use as a source of water supply for drinking water, culinary and food processing purposes; and maintain or enhance protections currently implemented by local governments in existing water supply watersheds. These Rules, as further enumerated in Item (3) of this Rule, together shall constitute the Jordan water supply nutrient strategy, or Jordan nutrient strategy. Additional provisions of this Rule include establishing the geographic and regulatory scope of the Jordan nutrient strategy, defining its relationship to existing water quality regulations, setting specific nutrient mass load goals for Jordan Reservoir, providing for the use of adaptive management to restore Jordan Reservoir, and citing general enforcement authorities. The following provisions further establish the framework of the Jordan water supply nutrient strategy:

(1) SCOPE. B. Everett Jordan Reservoir is hereafter referred to as Jordan Reservoir. All lands and waters draining to Jordan Reservoir are hereafter referred to as the Jordan watershed. Jordan Reservoir and all waters draining to it have been supplementally classified as Nutrient Sensitive Waters (NSW) pursuant to 15A NCAC 02B .0101(e)(3) and 15A NCAC 02B .0223. Water supply waters designated WS-II, WS-III, and WS-IV within the Jordan watershed shall retain their classifications. The remaining waters in the Jordan watershed are classified WS-V as of the initial effective date of this Rule, August 11, 2009. The requirements of all of these water supply classifications shall be retained and applied except as specifically noted in Item (6) of this Rule and elsewhere within the Jordan nutrient strategy. Pursuant to G.S. 143-214.5(b), the entire Jordan watershed shall be designated a critical water supply watershed and through the Jordan nutrient strategy given additional, more stringent requirements than the state minimum water supply watershed management requirements. These requirements supplement the water quality standards applicable to Class C waters, as described in Rule .0211 of this Section, which apply throughout the Jordan watershed.

(2) DEFINITIONS.For purposes of this Rule, the following definitions apply:

(a) Jordan nutrient strategy, or Jordan water supply nutrient strategy means the set of 15A NCAC 02B .0262 through .0273 and .0311(p).

(b) Jordan Reservoir means the surface water impoundment operated by the US Army Corps of Engineers and named B. Everett Jordan Reservoir, as further delineated for purposes of the Jordan nutrient strategy in Item (5) of this Rule.

(c) Jordan watershed means all lands and waters draining to B. Everett Jordan Reservoir.

~~(2)~~(3) STRATEGY GOAL. Pursuant to G.S. 143-215.1(c5), 143-215.8B, and 143B-282(c) and (d) of the Clean Water Responsibility Act of 1997, the Environmental Management Commission establishes the goal of reducing the average annual nitrogen and phosphorus delivered to Jordan Reservoir from all point

and nonpoint sources of these nutrients located within its watershed, as specified in Item (6) of this Rule, and provides for adaptive management of the strategy and goal, as specified in Item (9) of this Rule.

~~(3)~~(4) RULES ENUMERATED. The second rule in the following list provides definitions for terms that are used in more than one rule of the Jordan nutrient strategy. An individual rule may contain additional definitions that are specific to that Rule. The rules of the Jordan nutrient strategy are titled as follows:

(a) Rule. 0262 - Purpose and Scope;

(b) Rule. 0263 - Definitions;

(c) Rule. 0264 - Agriculture;

(d) Rule. 0265 - Stormwater Management for New Development;

(e) Rule. 0266 - Stormwater Management for Existing Development;

(f) Rule. 0267 - Protection of Existing Riparian Buffers;

(g) Rule. 0268 - Mitigation for Riparian Buffers;

(h) Rule. 0269 - Riparian Buffer Mitigation Fees to the NC Ecosystem Enhancement Program;

(i) Rule. 0270 - Wastewater Discharge Requirements;

(j) Rule. 0271 - Stormwater Requirements for State and Federal Entities;

(k) Rule. 0272 - Fertilizer Management;

(l) Rule. 0273 - Options for Offsetting Nutrient Loads; and

(m) Rule. 0311 - Cape Fear River Basin.

~~(4)~~(5) RESERVOIR ARMS AND SUBWATERSHEDS. For the purpose of the Jordan nutrient strategy, Jordan Reservoir is divided into three arms and the Jordan watershed is divided into three tributary subwatersheds as follows:

(a) The Upper New Hope arm of the reservoir, identified by index numbers 16-41-1-(14), 16-41-2-(9.5), and 16-41-(0.5) in the Schedule of Classifications for the Cape Fear River Basin, 15A NCAC 02B .0311, encompasses the upper end of the reservoir upstream of SR 1008, and its subwatershed encompasses all lands and waters draining into it.

(b) The Lower New Hope arm of the reservoir, identified by index number 16-41-(3.5) in the Schedule of Classifications for the Cape Fear River Basin, 15A NCAC 02B .0311, lies downstream of SR 1008 and upstream of the Jordan Lake Dam, excluding the Haw River arm of the reservoir, and its subwatershed encompasses all lands and waters draining into the Lower New Hope arm of the reservoir excluding those that drain to the Upper New Hope arm of the reservoir and the Haw River arm of the reservoir.

(c) The Haw River arm of the reservoir, identified by index number 16-(37.5) in the Schedule of Classifications for the Cape Fear River Basin, 15A NCAC 02B .0311, lies immediately upstream of Jordan Lake Dam, and its subwatershed includes all lands and waters draining into the Haw River arm of the reservoir excluding those draining into the Upper and Lower New Hope arms.

~~(5)~~(6) NUTRIENT REDUCTION GOALS. Each arm of the lake has reduction goals ~~goals, total allowable loads, point source wasteload allocations, and nonpoint source load allocations~~ for both nitrogen and phosphorus based on a field-calibrated nutrient response model developed pursuant to provisions of G.S. 143-215.1(c5). The reduction goals ~~and allocations~~ shall be met collectively by the sources regulated under the Jordan nutrient strategy. The reduction goals are expressed in terms of a percentage reduction in delivered loads from the baseline years, 1997-2001. ~~1997-2001, while allocations are expressed in pounds per year of allowable delivered load.~~ Each arm and subwatershed shall conform to its respective reduction goals ~~allocations for~~ nitrogen and phosphorus as follows:

(a) The ~~at-lake~~ nitrogen reduction goals for the arms of Jordan Reservoir are as follows:

(i) The Upper New Hope arm has a ~~1997-2001 baseline nitrogen load of 986,186 pounds per year and a nitrogen Total Maximum Daily Load (TMDL)~~ nitrogen reduction goal of 35 percent. ~~The resulting TMDL includes a total allowable load of 641,021 pounds of nitrogen per year: a point source mass wasteload allocation of 336,079 pounds of nitrogen per year, and a nonpoint source mass load allocation of 304,942 pounds of nitrogen per year.~~

(ii) The Lower New Hope arm ~~has a~~ shall maintain its 1997-2001 baseline nitrogen load. ~~load of 221,929 pounds per year and a nitrogen TMDL capped at the baseline nitrogen load. The resulting TMDL includes a total allowable load of 221,929 pounds of nitrogen per year: a point source mass wasteload allocation of 6,836 pounds of nitrogen per year, and a nonpoint source mass load allocation of 215,093 pounds of nitrogen per year.~~

(iii) The Haw River arm has a ~~1997-2001 baseline nitrogen load of 2,790,217 pounds per year and a nitrogen TMDL~~ reduction goal of eight percent. ~~The resulting TMDL includes a total allowable load of 2,567,000 pounds of nitrogen per year: a point source mass wasteload allocation of 895,127 pounds of nitrogen per year, and a nonpoint source mass load allocation of 1,671,873 pounds of nitrogen per year.~~

(b) The at-lake phosphorus reduction goals for the arms of Jordan Reservoir are as follows:

(i) The Upper New Hope arm has a ~~1997-2001 baseline phosphorus load of 87,245 pounds per year and a phosphorus TMDL~~ reduction goal of five percent. ~~The resulting TMDL includes a total allowable load of 82,883 pounds of phosphorus per year: a point source mass wasteload allocation of 23,108 pounds of phosphorus per year, and a nonpoint source mass load allocation of 59,775 pounds of phosphorus per year.~~

(ii) The Lower New Hope arm ~~has a~~ shall maintain its 1997-2001 baseline phosphorus load. ~~load of 26,574 pounds per year and a phosphorus TMDL capped at the baseline phosphorus load. The resulting TMDL includes a total allowable load of 26,574 pounds of phosphorus per year: a point source mass wasteload allocation of 498~~

~~pounds of phosphorus per year, and a nonpoint source mass load allocation of 26,078 pounds of phosphorus per year.~~

(iii) The Haw River arm has a ~~1997-2001 baseline phosphorus load of 378,569 pounds per year and a phosphorus TMDL~~ reduction goal of five percent~~. The resulting TMDL includes a total allowable load of 359,641 pounds of phosphorus per year: a point source mass wasteload allocation of 106,001 pounds of phosphorus per year, and a nonpoint source mass load allocation of 253,640 pounds of phosphorus per year.~~

~~(c) The allocations established in this Item may change as a result of allocation transfer between point and nonpoint sources to the extent provided for in rules of the Jordan nutrient strategy and pursuant to requirements on the sale and purchase of load reduction credit set out in 15A NCAC 02B .0273.~~

~~(6)~~(7) RELATION TO WATER SUPPLY REQUIREMENTS. The following water supply requirements shall apply:

(a) For all waters designated as WS-II, WS-III, or WS-IV within the Jordan watershed, the requirements of water supply 15A NCAC 02B .0214 through .0216 shall remain in effect with the exception of Sub-Item (3)(b) of those Rules addressing nonpoint sources. The nonpoint source requirements of Sub-Item (3)(b) of those Rules are superseded by the requirements of this Rule and 15A NCAC 02B .0263 through .0269, and .0271 through .0273, except as specifically stated in any of these Rules. For WS-II, WS-III, and WS-IV waters, the retained requirements of 15A NCAC 02B .0214 through .0216 are the following:

(i) Item (1) of 15A NCAC 02B .0214 through .0216 addressing best usages;

(ii) Item (2) of 15A NCAC 02B .0214 through .0216 addressing predominant watershed development conditions, discharges expressly allowed watershed-wide, general prohibitions on and allowances for domestic and industrial discharges, Maximum Contaminant Levels following treatment, and the local option to seek more protective classifications for portions of existing water supply watersheds;

(iii) Sub-Item (3)(a) of 15A NCAC 02B .0214 through .0216 addressing waste discharge limitations; and

(iv) Sub-Items (3)(c) through (3)(h) of 15A NCAC 02B .0214 through .0216 addressing aesthetic and human health standards.

(b) For waters designated WS-V in the Jordan Watershed, the requirements of Rules .0263 through .0273 and .0311 of this Subchapter shall apply. The requirements of 15A NCAC 02B .0218 shall also apply except for Sub-Items (3)(e) through (3)(h) of that Rule, which shall only apply where:

(i) The designation of WS-V is associated with a water supply intake used by an industry to supply drinking water for their employees; or

(ii) Standards set out in 15A NCAC 02B .0218(3)(e) through (3)(h) are violated at the upstream boundary of waters within those watersheds that are classified as WS-II, WS-III, or WS-IV. This Sub-Item shall not be construed to alter the nutrient reduction requirements set out in 15A NCAC 02B .0262(5) or 15A NCAC 02B .0275(3).

~~(7)~~(8) APPLICABILITY. Types of parties responsible for implementing rules within the Jordan nutrient strategy and, as applicable, their geographic scope of responsibility, are identified in each rule. The specific local governments responsible for implementing Rules .0265, .0266, .0267, .0268, and .0273 of this Subchapter shall be as follows:

(a) Rules .0265, .0266, .0267, .0268, and .0273 of this Subchapter shall be implemented by all incorporated municipalities, as identified by the Office of the Secretary of State, with planning jurisdiction within or partially within the Jordan watershed. As of August 11, 2009, those municipalities are:

(i) Alamance;

(ii) Apex;

(iii) Burlington;

(iv) Carrboro;

(v) Cary;

(vi) Chapel Hill;

(vii) Durham;

(viii) Elon;

(ix) Gibsonville;

(x) Graham;

(xi) Green Level;

(xii) Greensboro;

(xiii) Haw River;

(xiv) Kernersville;

(xv) Mebane;

(xvi) Morrisville;

(xvii) Oak Ridge;

(xviii) Ossipee;

(xix) Pittsboro;

(xx) Pleasant Garden;

(xxi) Reidsville;

(xxii) Sedalia;

(xxiii) Stokesdale;

(xxiv) Summerfield; and

(xxv) Whitsett.

(b) Rules .0265, .0266, .0267, .0268, and .0273 of this Subchapter shall be implemented by the following counties for the portions of the counties where the municipalities listed in Sub-Item (7)(a) do not have an implementation requirement:

(i) Alamance;

(ii) Caswell;

(iii) Chatham;

(iv) Durham;

(v) Guilford;

(vi) Orange;

(vii) Rockingham; and

(viii) Wake.

(c) A unit of government may arrange through interlocal agreement or other instrument of mutual agreement for another unit of government to implement portions or the entirety of a program required or allowed under any of the rules listed in Item (3) of this Rule to the extent that such an arrangement is otherwise allowed by statute. The governments involved shall submit documentation of any such agreement to the Division. No such agreement shall relieve a unit of government from its responsibilities under these Rules.

~~(8)~~(9) ADAPTIVE MANAGEMENT. The Division shall evaluate the effectiveness of the Jordan nutrient strategy no sooner than ten years following the effective date and periodically thereafter as part of the review of the *Cape Fear River Basinwide Water Quality Plan*. The Division shall base its evaluation on, at a minimum, trend analyses as described in the monitoring section of the *B. Everett Jordan Reservoir, North Carolina Nutrient Management Strategy and Total Maximum Daily Load*, and lake use support assessments. ~~Both of these documents can be found on the Division's website at www.ncwater.org.~~ The Division may also develop additional watershed modeling or other source characterization work. Any nutrient response modeling and monitoring on which any recommendation for adjustment to strategy goals may be based shall meet the criteria set forth in G.S. 143-215.1(c5) and meet or exceed criteria used by the Division for the monitoring and modeling used to establish the goals in Item (5) of this Rule. Any modification to these Rules as a result of such evaluations would require additional rulemaking.

~~(9) LIMITATION. The Jordan nutrient strategy may not fully address significant nutrient sources in the Jordan watershed in that these Rules do not directly address atmospheric sources of nitrogen to the watershed from sources located both within and outside of the watershed. As better information becomes available from ongoing research on atmospheric nitrogen loading to the watershed from these sources, and on measures to control this loading, the Commission may undertake separate rule making to require such measures it deems necessary from these sources to support the goals of the Jordan nutrient strategy.~~

(10) ENFORCEMENT. Failure to meet requirements of Rules .0262, .0264, .0265, .0266, .0267, .0268, .0269, .0270, .0271, .0272 and .0273 of this Subchapter may result in imposition of enforcement measures as authorized by G.S. 143-215.6A (civil penalties), G.S. 143-215.6B (criminal penalties), and G.S. 143-215.6C (injunctive relief).

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-215.1; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143-215.8B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259; S.L. 2012-187;*
Eff. August 11, 2009;
Amended Eff. January 1, 2014; September 1, 2011.
Amended Eff. August 1, 2017.

15A NCAC 02B .0263 is proposed for amendment as follows:

15A NCAC 02B .0[redacted] [redacted]TRIENT STRATEGY: DEFINITIONS

~~The following words and phrases, which are not defined in G.S. 143, Article 21, shall be interpreted as follows for the purposes of the Jordan nutrient strategy:~~ Unless the context indicates otherwise, the following words and phrases, which are not defined in G.S. 143, Article 21, shall be interpreted as follows for the purposes of the Jordan and Falls lake nutrient strategies, and any other strategy rules which explicitly reference these definitions in the goals rule:

~~(1) "Allocation" means the mass quantity of nitrogen or phosphorus that a discharger, group of dischargers, nonpoint source, or collection of nonpoint sources is assigned as part of a TMDL. For point sources, possession of allocation does not authorize the discharge of nutrients but is prerequisite to such authorization through a NPDES permit.~~

~~(2)~~(1) "Applicator" means the same as defined in 15A NCAC 02B .0202(4).

(2) [redacted]ospheric nitrogen means reactive forms of nitrogen, including total oxidized nitrogen (NO_y) which includes all nitrogen oxides (including NO_2, NO, nitrogen trioxide [N_2O_3], nitrogen tetroxide [N_2O_4], dinitrogen pentoxide [N_2O_5], nitric acid (HNO_3) peroxyacl nitrates (PAN)), ammonia-nitrogen (NH_x) and organic nitrogen.

(3) "Channel" means 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 the flow of water.

(4) "DBH" means diameter at breast height of a tree measured at 4.5 feet above ground surface level.

~~(5) "Delivered," as in delivered allocation, load, or limit, means the allocation, load, or limit that is measured or predicted at Jordan Reservoir. A delivered value is equivalent to a discharge value multiplied by the transport factor for that discharge location.~~

~~(6) "[redacted]velopment" means the same as defined in 15A NCAC 02B .0202(23).~~

~~(7)~~(5) "Discharge," as in discharge allocation, load, or limit means the allocation, load, or limit that is measured at the point of discharge into surface waters. ~~waters in the Jordan watershed~~. A discharge value is equivalent to a delivered value divided by the transport factor for that discharge location.

~~(8)~~(6) "Ditch or canal" means 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.

~~(9)~~(7) "Ephemeral stream" means a feature that carries only stormwater in direct response to precipitation with water flowing only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water.

~~(10) "Existing development" means development, other than that associated with agricultural or forest management activities, that meets one of the following criteria:~~

~~(a) It either is built or has established a vested right based on statutory or common law as interpreted by the courts, for projects that do not require a state permit, as of the effective date of either local new development stormwater programs implemented under 15A NCAC 02B .0265 or, for projects requiring a state permit, as of the applicable compliance date established in 15A NCAC 02B .0271(5) and (6); or~~

~~(b) It occurs after the compliance date set out in Sub-Item (4)(d) of Rule .0265 but does not result in a net increase in built-upon area.~~

~~(11)~~(8) "Intermittent stream" means 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. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the continuous conveyance of water.

~~(12) "Jordan nutrient strategy," or "Jordan water supply nutrient strategy" means the set of 15A NCAC 02B .0262 through .0273 and .0311(p).~~

~~(13) "Jordan Reservoir" means the surface water impoundment operated by the US Army Corps of Engineers and named B. Everett Jordan Reservoir, as further delineated for purposes of the Jordan nutrient strategy in 15A NCAC 02B .0262(4).~~

~~(14) "Jordan watershed" means all lands and waters draining to B. Everett Jordan Reservoir.~~

~~(15)~~(9) "Load" means the mass quantity of a nutrient or pollutant released into surface waters over a given time period. Loads may be expressed in terms of pounds per year and may be expressed as "delivered load" or an equivalent "discharge load."

~~(16) "Load allocation" means the same as set forth in federal regulations 40 CFR 130.2(g), which is incorporated herein by reference, including subsequent amendments and editions. These regulations may be obtained at no cost from http://www.epa.gov/lawsregs/search/40cfr.html or from the U.S. Government Printing Office, 732 North Capitol St. NW, Washington D.C., 20401.~~

(10) Load allocation means the same as set forth in federal regulations 40 CFR 130.2(g), which is incorporated herein by reference, including subsequent amendments and editions. A copy of the most current version of the regulations is available free of charge on the internet at http://www.gpo.gov/fdsys/.

~~(17)~~(11) "Modified natural stream" means an on-site channelization or relocation of a stream channel and subsequent relocation of the intermittent or perennial flow as evidenced by topographic alterations in the immediate watershed. A modified natural stream must have the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.

~~(18) "New development" means any development project that does not meet the definition of existing development set out in this Rule.~~

~~(19)~~(12) “Nitrogen” means total nitrogen unless specified otherwise.~~"Nitrogen" or "total nitrogen" means the sum of the organic, nitrate, nitrite, and ammonia forms of nitrogen in a water or wastewater.~~

~~(20)~~(13) "NPDES" means National Pollutant Discharge Elimination System, and connotes the permitting process required for the operation of point source discharges in accordance with the requirements of Section 402 of the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq.

~~(21)~~(14) “Nutrients” means the combination of total nitrogen and total phosphorus for the purpose of the nutrient rules of this section. ~~"Nutrients" means total nitrogen and total phosphorus.~~

~~(22)~~[redacted]. "Perennial stream" means 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 for a perennial stream, but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.

~~(23)~~(16) "Perennial waterbody" means a natural or man-made basin, including lakes, ponds, and reservoirs, that stores surface water permanently at depths sufficient to preclude growth of rooted plants. For the purpose of the State's riparian buffer protection program, the waterbody must be part of a natural drainage way (i.e., connected by surface flow to a stream).

~~(24)~~(17) “Phosphorus” means total phosphorus unless specified otherwise. ~~"Phosphorus" or "total phosphorus" means the sum of the orthophosphate, polyphosphate, and organic forms of phosphorus in a water or wastewater.~~

~~(25)~~(18) "Stream" means a body of concentrated flowing water in a natural low area or natural channel on the land surface.

~~(26)~~(19) "Surface waters" means all waters of the state as defined in G.S. 143-212 except underground waters.

~~(27)~~(20) "Technical specialist" means the same as defined in 15A NCAC 06H .0102(9).

~~(28)~~(21) "Total Maximum Daily Load," or "TMDL," means the same as set forth in federal regulations 40 CFR 130.2(i) and 130.7(c)(1), which are incorporated herein by reference, including subsequent amendments and editions. These regulations may be obtained at no cost from http://www.epa.gov/lawsregs/search/40cfr.html or from the U.S. Government Printing Office, 732 North Capitol St. NW, Washington D.C., 20401.

~~(29)~~(22) "Total nitrogen" or "nitrogen" means the sum of the organic, nitrate, nitrite, and ammonia forms of nitrogen in a water or wastewater.

~~(30)~~(23) "Total phosphorus" or "phosphorus" means the sum of the orthophosphate, polyphosphate, and organic forms of phosphorus in a water or wastewater.

~~(31)~~(24) "Transport factor" means the fraction of a discharged nitrogen or phosphorus load that is delivered from the discharge point to ~~Jordan Reservoir,~~ a waterbody as determined in an approved TMDL.

~~(32)~~(25) "Tree" means a woody plant with a DBH equal to or exceeding five inches or a stump diameter exceeding six inches.

~~(33)~~(26) "Wasteload" means the mass quantity of a nutrient or pollutant released into surface waters by a wastewater discharge over a given time period. Wasteloads may be expressed in terms of pounds per year and may be expressed as "delivered wasteload" or an equivalent "discharge wasteload."

~~(34)~~(27) "Wasteload allocation" means the same as set forth in federal regulations 40 CFR 130.2(h), which is incorporated herein by reference, including subsequent amendments and editions. These regulations may be obtained at no cost from http://www.epa.gov/lawsregs/search/40cfr.html or from the U.S. Government Printing Office, 732 North Capitol St. NW, Washington D.C., 20401.

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143 215.8B; 143B-282(c); 143B-282(d); S.L. 2001-355; S.L. 2005-190; S.L. 2006-259; Eff. August 11, 2009.*
Amended Eff. August 1, 2017.

15A NCAC 02B .0265 is proposed for amendment as follows:

15A NCAC 02B .0265 JORDAN WATER SUPPLY NUTRIENT STRATEGY: STORMWATER MANAGEMENT FOR NEW DEVELOPMENT

~~(See S.L. 2013-395)~~

The following is the stormwater strategy for new development ~~activities~~ within the Jordan watershed, as prefaced in 15A NCAC 02B .0262:

(1) PURPOSE. The purposes of this Rule are as follows:

(a) To achieve and maintain the nitrogen and phosphorus loading goals established for Jordan Reservoir in 15A NCAC 02B .0262 from lands in the Jordan watershed on which new development occurs;

(b) To provide control for stormwater runoff from new development in Jordan watershed to ensure that the integrity and nutrient processing functions of receiving waters and associated riparian buffers are not compromised by erosive flows; and

(c) To protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed from the potential impacts of new development.

(2) APPLICABILITY. This Rule shall apply to those areas of new development ~~development, as defined in 15A NCAC 02B .0263,~~ that lie within the Jordan watershed and the planning jurisdiction of a municipality or county that is identified in 15A NCAC 02B .0262.

(3) REQUIREMENTS. All local governments subject to this Rule shall implement stormwater management programs as approved by the Commission in May and September 2012 for areas described in Item (2) of this Rule, based on the standards in this Item:

(a) An approved stormwater management plan shall be required for all proposed new development disturbing one acre or more for single family and duplex residential property and recreational facilities, and one-half acre or more for commercial, industrial, institutional, multifamily residential, or local government property. These stormwater plans shall not be approved by the subject local governments unless the following criteria are met:

(i) Nitrogen and phosphorus loads contributed by the proposed new development ~~activity~~ in a given subwatershed shall not exceed the unit-area mass loading rates applicable to that subwatershed as follows for nitrogen and phosphorus, respectively, expressed in units of pounds per acre per year: 2.2 and 0.82 in the Upper New Hope; 4.4 and 0.78 in the Lower New Hope; and 3.8 and 1.43 in the Haw. The developer shall determine the need for engineered stormwater controls to meet these loading rate targets by using the Jordan and Falls Stormwater Nutrient Load Accounting Tool approved by the Commission in March 2011 or other equivalent method acceptable to the Division;

(ii) Proposed new development undertaken by a local government solely as a public linear transportation project shall be deemed compliant with the purposes of this Rule if it meets the riparian buffer protection requirements of 15A NCAC 02B .0267 and .0268;

(iii) New development that would exceed the nitrogen or phosphorus loading rate targets set out in this Item without the use of engineered stormwater controls shall have engineered stormwater controls that meet the design requirements set out in Sub-Item (3)(a)(v) of this Item and that achieve 85 percent removal of total suspended solids;

(iv) Proposed new development subject to NPDES, water supply, and other state-mandated stormwater regulations shall comply with those regulations in addition to the other requirements of this Sub-Item. Proposed new development in any water supply watershed in the Jordan watershed designated WS-II, WS-III, or WS-IV shall comply with the density-based restrictions, obligations, and requirements for engineered stormwater controls, clustering options, and 10/70 provisions described in Sub-Items (3)(b)(i) and (3)(b)(ii) of the applicable Rule among 15A NCAC 02B .0214 through .0216;

(v) Stormwater systems shall be designed to control and treat the runoff generated by one inch of rainfall from all surfaces of ~~new~~ development ~~by one inch of rainfall.~~draining to the BMP. The treatment volume shall be drawn down pursuant to standards specific to each practice as provided in the most recent ~~July 2007~~ version of the *Stormwater Best Management Practices Manual* published by the ~~Division,~~DEMLR, or other at least technically equivalent standards acceptable to the Division. To ensure that the integrity and nutrient processing functions of receiving waters and associated riparian buffers are not compromised by erosive flows, stormwater flows from the new development shall not contribute to degradation of waters of the State. At a minimum, ~~the new development shall not result in a net increase in peak flow leaving the site from pre-development conditions for the one year, 24 hour storm event;~~ BMPs shall be designed to manage peak flow for the 1-year, 24-hour storm so that there is no increase in comparison to the predevelopment conditions, and net increase in peak flow from other drainage leaving the site shall not exceed 10 percent;

(vi) New development may satisfy the requirements of this Rule by demonstrating pre- and post development runoff volume matching through the use of an accounting tool approved by the Division that estimates the effect of Low Impact Development techniques utilizing the most up to date approved LID

accounting tool, or the most recent research data available for runoff and effluent of LID techniques and hydraulic and hydrologic performance of best management practices;

~~(vi)~~(vii) Proposed new development that would replace or expand structures ~~or improvements~~ that existed as of December 2001, the end of the baseline period, and that would not result in a net increase in built-upon area that existed as of December 2001 shall not be required to meet the nutrient loading targets or high-density requirements except to the extent that it shall provide stormwater control at least equal to the previous development. ~~Proposed new development that would replace or expand existing structures or improvements and would result in a net increase in built-upon area shall have the option either to achieve at least the percentage loading reduction goals stated in 15A NCAC 02B .0262 as applied to nitrogen and phosphorus loading from the previous development for the entire project site,~~condition, ~~or to meet the loading rate targets described in Sub-Item (3)(a)(i). These requirements shall supersede those identified in 15A NCAC 02B .0104(q);~~

(viii) Proposed development that would replace or expand existing structures and would result in a net increase in built-upon area shall treat the net increase and shall have the option to achieve the loading rate targets described in this Item. These requirements shall supersede those identified in 15A NCAC 02B .0104(q).

~~(vii)~~(ix) Proposed new development shall comply with the riparian buffer protection requirements of 15A NCAC 02B .0267 and .0268; and

~~(viii)~~(x) Developers shall have the option of offsetting part of their nitrogen and phosphorus loads by implementing or funding offsite management measures as follows: Before using offsite offset options, a development shall attain a nitrogen loading rate on-site of that does not exceed six pounds per acre per year for single-family, detached and duplex residential development and ten pounds per acre per year for other development, including multi-family residential, commercial and industrial and shall meet any requirements for engineered stormwater controls described in Sub-Item (3)(a)(iii) and (iv) of this Rule. Developers shall have the option of meeting the onsite nitrogen loading rate and the requirements for engineered stormwater controls through a regional stormwater treatment BMP that is dedicated to serving a contiguous area of new or existing development. Offsite offsetting measures shall achieve reductions in nitrogen and phosphorus loading that are at least equivalent to the remaining reduction needed to comply with the loading rate targets set out in Sub-Item

(3)(a)(i) of this Rule. ~~A developer may make offset payments to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that Program. A developer may use an offset option provided by the local government in which the development activity occurs. A developer may propose other offset measures to the local government, including providing his or her own offsite offset or utilizing a private seller. All offset measures identified in this Sub-Item shall meet~~ Offsetting reductions shall have a plan to ensure they are perpetual in nature. The developer may use any practice that complies with the requirements of ~~15A NCAC 02B~~ Rule .0273 ~~(2) through (4) and 15A NCAC 02B .0240.~~or .0240 of this Section.

(b) A plan to ensure maintenance of best management practices (BMPs) implemented as a result of the provisions in Sub-Item (3)(a) of this Rule for the life of the development;

(c) A plan to ensure enforcement and compliance with the provisions in Sub-Item (3)(a) of this Rule for the life of the new ~~development; and~~ development;

(d) The following requirements in water supply watersheds Rule 15A NCAC 02B .0104 shall apply to new development throughout the Jordan watershed:

(i) Requirements in Paragraph (f) for local governments to assume ultimate responsibility for operation and maintenance of high-density stormwater controls, to enforce compliance, to collect fees, and other measures;

(ii) Variance procedures in Paragraph (r);

(iii) Assumption of local programs by the Commission in Paragraph ~~(x); and~~(x);

(iv) Delegation of Commission authorities to the Director in Paragraph ~~(aa).~~ (aa); and

(e) Nothing in this Rule preempts local governments from implementing requirements that are more restrictive than those set forth in this Rule.

(4) RULE IMPLEMENTATION. This Rule shall be implemented as follows:

(a) By ~~August 10, 2014,~~August 10, 2017 the affected local governments shall complete adoption of and implement their local stormwater management program as approved by the Commission in May or September 2012 or subsequent revision to the program approved by the Commission or its delegated authority. Programs met the requirements of Item (3) of this Rule and were guided by the model local ordinance approved by the Commission in March ~~2011; and~~ 2011;

(b) Any significant modifications to a local government's program shall be submitted to the Director for approval; and

~~(b)~~(c) Upon implementation, subject local governments shall submit annual reports to the Division summarizing their activities in implementing each of the requirements in Item

(3) of this Rule, including changes to nutrient loading due to implementation of Sub-Item (3)(a) of this Rule.

~~(5) RELATIONSHIP TO OTHER REQUIREMENTS. Local governments shall have the following options with regard to satisfying the requirements of other rules in conjunction with this Rule:~~

~~(a) A local government may in its program submittal under Sub Item (4)(b) of this Rule request that the Division accept the local government's implementation of another stormwater program or programs, such as NPDES municipal stormwater requirements, as satisfying one or more of the requirements set forth in Item (3) of this Rule. The Division will provide determination on acceptability of any such alternatives prior to requesting Commission approval of local programs as required in Sub-Item (4)(c) of this Rule. The local government shall include in its program submittal technical information demonstrating the adequacy of the alternative requirements.~~

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-214.12; 143-214.21; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143-215.8B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259; S.L. 2009-216; S.L. 2009-484; S.L. 2012-200; S.L. 2012-201; <u>S.L. 2013-395;</u>*

Eff. August 11, 2009;

~~See S.L. 2013-395;~~

Amended Eff. July 7, 2014.

<u>Amended Eff. August 1, 2017.</u>

15A NCAC 02B .0266 is proposed for amendment as follows:

15A NCAC 02B .0266 JORDAN WATER SUPPLY NUTRIENT STRATEGY: STORMWATER MANAGEMENT FOR EXISTING DEVELOPMENT ~~*See S.L. 2013-395*~~

This Rule is the stormwater strategy to control nutrient loading from existing development. The Division shall determine whether nutrient load reduction measures for existing development are necessary in each subwatershed of Jordan Reservoir. The Division shall require implementation of reasonable and cost-effective nutrient load reduction measures for existing development in each subwatershed of the Jordan Reservoir, as provided in this Rule and in accordance with a staged, adaptive management program.

(1) PURPOSE. The purposes of this Rule are as follows:

(a) To improve the management of stormwater runoff from existing development in the Jordan Watershed to contribute toward nitrogen and phosphorus loading goals identified in 15A NCAC 02B .0262; and

(b) To contribute to the restoration of water quality in the Jordan Reservoir as specified in Rule 15A NCAC 02B .0262.

(2) APPLICABILITY. This Rule shall apply to municipalities and counties located in whole or in part in the Jordan Watershed as identified in Rule 15A NCAC 02B .0262(7).

(3) DEFINITIONS. For the purposes of this Rule, the definitions in 15A NCAC 02B .0262 and the following definitions apply:

(a) "Existing Development" means structures and other land modifications resulting from development activities, other than those associated with agriculture or forest management activities, that meet the following criteria:

(i) For projects that do not require a state permit, they are in place or have established a vested right based on statutory or common law as interpreted by the courts, as of the effective date of local new development stormwater programs implemented under Rule .0265 of this Section;

(ii) For projects that require a state permit, they are in place as of the applicable compliance date established in Rule .0265 of this Section; and

(iii) They are not replaced by structures or other land modifications resulting from development activities that occur after the applicable date referenced elsewhere in this sub-paragraph.

(b) "New Development" means any development that does not meet the definition of existing development in the Rule.

~~(3)~~(4) STAGE 1 PROGRAM REQUIREMENTS. Municipalities and counties located in whole or in part in the Jordan watershed shall continue to implement a Stage 1 adaptive management program to control nutrient loading from existing development in the Jordan watershed as approved by the Commission in May 2010 or subsequent revision their program approved by the Commission or

its delegated authority. The Stage 1 adaptive management program met the requirements set out in 40 CFR 122.34 as applied by the Division in the NPDES General Permit for municipal separate storm sewer systems in effect on July 1, 2009. Local governments shall report annually to the Division on implementation progress on the following Stage 1 program elements:

(a) Public education to inform the public of the impacts of nutrient loading and measures that can be implemented to reduce nutrient loading from stormwater runoff from existing development.

(b) Mapping that includes major components of the municipal separate storm sewer system, including the location of major outfalls, as defined in 40 CFR 122.26(b)(5) (July 1, 2008) and the names and location of all waters of the United States that receive discharges from those outfalls, land use types, and location of sanitary sewers.

(c) Identification and remove illegal discharges.

(d) Identification of opportunities for retrofits and other projects to reduce nutrient loading from existing developed lands.

(e) Maintenance of best management practices implemented by the local government.

~~(4)~~(5) NUTRIENT MONITORING. The Division shall maintain an ongoing program to monitor water quality in each arm of Jordan Reservoir. The Division shall also accept water quality sampling data from a monitoring program implemented by a local government or nonprofit organization if the data meets quality assurance standards established by the Division. On March 1, ~~2014,~~2017, the Division shall report the results of monitoring in each arm of Jordan Reservoir to the Environmental Review Commission. The Division shall submit an updated monitoring report under this Item every three years thereafter until such time as the lake is no longer impaired by nutrient pollution.

~~(5)~~(6) STAGE 2 ADAPTIVE MANAGEMENT. The Division shall review monitoring described in Item ~~(4)~~(5) of this Rule to decide whether to implement a Stage 2 adaptive management program to control nutrient loading from existing development to achieve nutrient-related water quality standards in Jordan Lake. The Division shall use the following conditions to identify local governments that need to develop and implement a Stage 2 program:

(a) If the March 1, ~~2014~~2017 monitoring report or any subsequent monitoring report for the Upper New Hope Creek Arm of Jordan Reservoir required under Item ~~(4)~~(5) of this Rule shows that nutrient-related water quality standards are not being achieved, a municipality or county located in whole or in part in the subwatershed of that arm of Jordan Reservoir shall develop and implement a Stage 2 program within the subwatershed, as provided in this Rule.

(b) If the March 1, ~~2017~~2020 monitoring report or any subsequent monitoring report for the Haw River Arm or the Lower New Hope Creek Arm of Jordan Reservoir required under Item ~~(4)~~(5) of this Rule shows that nutrient-related water quality standards are not being

achieved, a municipality or county located in whole or in part in the subwatershed of that arm of Jordan Reservoir shall develop and implement a Stage 2 program within the subwatershed, as provided in this Rule.

(c) The Division shall defer development and implementation of Stage 2 programs required in a subwatershed by this Item if it determines that additional reductions in nutrient loading from existing development in that subwatershed will not be necessary to achieve nutrient-related water quality standards. In making this determination, the Division shall consider the anticipated effect of measures implemented or scheduled to be implemented to reduce nutrient loading from sources in the subwatershed other than existing development. If any subsequent monitoring report for an arm of Jordan Reservoir required under Item ~~(4)~~(5) of this Rule shows that nutrient-related water quality standards have not been achieved, the Division shall notify the municipalities and counties located in whole or in part in the subwatershed of that arm of Jordan Reservoir and the municipalities and counties shall develop and implement a Stage 2 adaptive management program as provided in this Rule.

~~(6)~~(5) NOTIFICATION OF STAGE 2 REQUIREMENTS. Based on findings under Item ~~(5)~~(6) of this Rule, the Division shall notify the local governments in each subwatershed that either:

(a) Implementation of a Stage 2 program will be necessary to achieve water quality standards in an arm of the reservoir and direct the municipalities and counties in the subwatershed to develop a load reduction program in compliance with this Rule; or

(b) Implementation of a Stage 2 program is not necessary at that time but will be reevaluated in three years based on the most recent water quality monitoring information.

~~(7)~~(8) STAGE 2 LOAD GOALS. The Division shall establish a load reduction goal for existing development for each municipality and county required to implement a Stage 2 program. The load reduction goal shall be designed to achieve, relative to the baseline period 1997 through 2001, an eight percent reduction in nitrogen loading and a five percent reduction in phosphorus loading reaching Jordan Reservoir from existing developed lands within the police power jurisdiction of the local government. The baseline load shall be estimated using the results of a watershed model recommended in a July 2012 report to the Secretary from the Nutrient Scientific Advisory Board established pursuant to Section 4(a) of S.L. 2009-216, or by using an equivalent or more accurate method acceptable to the Division and recommended by that Board. The baseline load for a municipality or county shall not include nutrient loading from lands under State or federal control or lands in agriculture or forestry. The load reduction goal shall be adjusted to account for nutrient loading increases from lands developed subsequent to the baseline period but prior to implementation of new development stormwater programs.

~~(8)~~(9) A local government receiving notice of the requirement to develop and implement a Stage 2 program under Item ~~(6)~~(7) of this Rule shall not be required to submit a program if the local

government demonstrates that it has already achieved the reductions in nutrient loadings required under Item ~~(7)~~(8) of this Rule.

~~(9)~~(10) STAGE 2 PROGRAM DEVELOPMENT. Local governments shall utilize the model program that is scheduled to be approved by the Commission as of December ~~,~~2016to develop their Stage 2 ~~program~~programs to control nutrient loading from existing development as described under Item ~~(10)~~(11) of this Rule. In developing this model program, the Division considered comments from municipalities and counties listed in 15A NCAC 02B .0262(7) and recommendations from the Nutrient Scientific Advisory Board. The model program identifies specific load reduction practices and programs and reduction credits associated with each practice or program and shall provide that a local government may obtain additional or alternative load-reduction credits based on site-specific monitoring data.

~~(10)~~(11) STAGE 2 IMPLEMENTATION. The following process shall be applied for local governments subject to the requirement to develop and implement a Stage 2 adaptive management program.

(a) Within six months after receiving notice to develop and implement a Stage 2 program as described in Item ~~(6)~~(7) of this Rule, or within twelve months of approval of the Model Existing Development Program in Item (10), whichever is later, each local government that has not received Division approval for having achieved the required reductions as specified in Item ~~(8)~~(7) of this Rule shall submit to the Commission a program that is designed to achieve the reductions in nutrient loadings established by the Division pursuant to Item ~~(7)~~(8) of this Rule. A local government program may include nutrient management strategies that are not included in the model program developed pursuant to Item ~~(9)~~(10) of this Rule in addition to or in place of any component of the model program. In addition, a local government may satisfy the requirements of this Item through reductions in nutrient loadings from other sources in the same subwatershed to the extent those reductions go beyond measures otherwise required by statute or rule. ~~A local government may also work with other local governments within the same subwatershed to collectively meet the required reductions in nutrient loadings from existing development within their combined jurisdictions. Any credit for reductions achieved or obtained outside of the police power jurisdiction of a local government shall be adjusted based on transport factors established by the Division document Nitrogen and Phosphorus Delivery from Small Watersheds to Jordan Lake, dated June 30, 2002 or an equivalent or more accurate method acceptable to the Division and recommended by the Nutrient Scientific Advisory Board established pursuant to Section 4(a) of S.L. 2009-216.~~

(b) Within six months following submission of a local government's Stage 2 adaptive management program to control nutrient loading from existing development, the Division shall recommend that the Commission approve or disapprove the program. The Commission shall approve the program if it meets the requirements of this Item, unless

the Commission finds that the local government can, through the implementation of reasonable and cost-effective measures not included in the proposed program, meet the reductions in nutrient loading established by the Division pursuant to Item ~~(7)~~(8) of this Rule by a date earlier than that proposed by the local government. If the Commission finds that there are additional or alternative reasonable and cost-effective measures, the Commission may require the local government to modify its proposed program to include such measures to achieve the required reductions by the earlier date. If the Commission requires such modifications, the local government shall submit a modified program within two months. The Division shall recommend that the Commission approve or disapprove the modified program within three months after receiving the local government's modified program. In determining whether additional or alternative load reduction measures are reasonable and cost effective, the Commission shall consider factors including, but not limited to, the increase in the per capita cost of a local government's stormwater management program that would be required to implement such measures and the cost per pound of nitrogen and phosphorus removed by such measures. The Commission shall not require additional or alternative measures that would require a local government to:

(i) Install or require installation of a new stormwater collection system in an area of existing development unless the area is being redeveloped.

(ii) Acquire developed private property.

(iii) Reduce or require the reduction of impervious surfaces within an area of existing development.

(c) Within three months after the Commission's approval of a Stage 2 adaptive management program to control nutrient loading from existing development, the local government shall complete adoption and begin implementation of its program.

(12) A local government may obtain reductions through other means within its subwatersehd in addition to its implementation of practices on lands within its jurisdiction. Any credit for reductions achieved or obtained outside of the police power jurisdiction of a local government shall be adjusted based on transport factors established by the Division document Nitrogen and Phosphorus Delivery from Small Watersheds to Jordan Lake, dated June 30, 2002 or an equivalent or more accurate method acceptable to the Division and recommended by the Nutrient Scientific Advisory Board established pursuant to Section 4(a) of S.L. 2009-216. Other means include:

(a) A municipality or county may work with other municipalities or counties within the same subwatershed to jointly meet the loading targets from all lands within their combined jurisdiction within a subwatershed;

(b) A local government may combine nutrient load allocations established for its NPDES discharges in Rule .0270 of this Section with those assigned to it for existing developed lands in this Rule into one set of allocations and meet them jointly;

(c) Purchase of nutrient offset credits pursuant to G.S. 143-214.26 and Rules .0240 of this Section; and

(d) Other forms of trading pursuant to Rule .0273 of this Section.

~~(11)~~(13) ADDITIONAL MEASURES TO REDUCE NITROGEN LOADING IN THE UPPER NEW HOPE CREEK SUBWATERSHED. If the March 1, ~~2023,~~2026, monitoring report or any subsequent monitoring report for the Upper New Hope Creek Arm of Jordan Reservoir shows that nutrient-related water quality standards are not being achieved, a municipality or county located in whole or in part in the Upper New Hope Creek Subwatershed shall modify its Stage 2 adaptive management program to control nutrient loading from existing development to achieve additional reductions in nitrogen loading from existing development. The modified Stage 2 program shall be designed to achieve a total reduction in nitrogen loading from existing development of 35 percent relative to the baseline period 1997 through 2001. The Division shall notify local governments of the requirement to submit a modified Stage 2 adaptive management program. Submission, review and approval, and implementation of a modified Stage 2 adaptive management program shall follow the process, timeline, and standards set out Item ~~(10)~~(11) of this Rule.

~~(12)~~(14) Each local government implementing a Stage 2 program shall submit an annual report to the Division summarizing its activities in implementing its program.

~~(13)~~(15) If at any time the Division finds, based on water quality monitoring, that an arm of the Jordan Reservoir has achieved compliance with water quality standards, the Division shall notify the local governments in the subwatershed. Subject to the approval of the Commission, a local government may modify its Stage 2 adaptive management program to control nutrient loading from existing development to maintain only those measures necessary to prevent increases in nutrient loading from existing development.

~~(14)~~(16) The Division shall report annually to the Commission regarding the implementation of adaptive management programs to control nutrient loading from existing development in the Jordan watershed.

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-214.12; 143-214.21; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143 215.8B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259; S.L. 2009-216;S.L. 2013-395;*

~~See S.L. 2013-395;~~

Eff. July 7, 2014.

Amended Eff. August 1, 2017.

15A NCAC 02B .0273 is proposed for amendment as follows:

15A NCAC 02B .0273 ~~JORDAN WATER SUPPLY NUTRIENT STRATEGY: OPTIONS FOR OFFSETTING NUTRIENT LOADS~~ NUTRIENT TRADING

PURPOSE. This Rule provides ~~parties~~ persons, including local governments subject to ~~other~~ nutrient rules ~~within the Jordan nutrient strategy~~ of this Section with ~~options~~ options, to the extent allowed by those rules, for meeting rule nutrient load reduction requirements by obtaining or buying nutrient credit ~~for~~ made available from qualifying load-reducing activities conducted by ~~others (sellers) that produce excess load reductions relative to rule requirements. It provides the potential for parties who achieve excess load reductions to recover certain costs by selling such credits, and it provides opportunity for private parties to produce reductions and sell credits for profit. Overall it~~ others. Nutrient trading provides the potential for more cost-effective achievement of strategy reduction goals. ~~Accounting is required to ensure and track the availability and use of trading credits. This accounting will be compared against compliance accounting required under other individual rules of the Jordan a nutrient strategy. This Rule furthers the adaptive management intent of the strategy to protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed.~~ The minimum requirements for ~~these offset options are:~~ trading activities are as follows:

(1) DEFINITIONS. Unless context indicates otherwise, the following words and phrases, which are not defined in G.S. 143 Article 21, shall be interpreted as follows for purposes of this Rule:

(a) The terms "load reduction credit", "credit", "non-wasting endowment", "nutrient offset" and "nutrient offset bank" shall have the meanings ascribed in Rule .0240 of this Section;

(b) "Trading" means the exchange of qualifying nutrient load reduction credit by a party that achieves such reduction to a recipientTrading that involves payment of nutrient offset fees to the Ecosystem Enhancement Program or to a nutrient offset bank shall conform to Rule .0240 of this Section. Trading involving the exchangeof credits generated by a load-reducing practice to a person who is subject to nutrient control requirements or to the Program shall comply with this Rule.

~~(1)~~ (2) PROVIDERS QUALIFICATIONS AND PREREQUISITES. ~~The following buyers shall meet applicable criteria identified here and in rules imposing reduction requirements on them~~ Persons subject to nutrient control requirements under Rules of this Section and the Program may use the option to obtain load reduction credit pursuant to the limitations and requirements of this Rule. These providers may in turn exchange load reduction credit obtained pursuant to this Rule that subsequently becomes unnecessary for rule compliance to other persons meeting these specifications. Providers shall meet any prerequisite conditions established in the nutrient rules to which they are subject before utilizing the option outlined in this ~~Rule:~~ Rule.

~~(a) Agriculture Rule .0264: Agricultural producers shall receive approval from the Watershed Oversight Committee to obtain offsite credit pursuant to the conditions of Sub-Item (5)(b);~~

~~(b) New Development Rule .0265: Developers shall meet onsite reduction requirements enumerated in Sub-Item (3)(a)(vii) before obtaining offsite credit;~~

~~(c) Wastewater Rule .0270: New and expanding dischargers shall first make all reasonable efforts to obtain allocation from existing dischargers as stated in Sub-Items (7)(a)(ii) and (8)(a)(ii), respectively; and~~

~~(d) State and Federal Entities Stormwater Rule .0271:~~

~~(i) Non-DOT entities shall meet onsite new development reduction requirements enumerated in Sub-Item (3)(a)(vi); and~~

~~(ii) NC DOT shall meet onsite non-road new development reduction requirements enumerated in Sub-Item (4)(c)(iii) before obtaining offsite credit.~~

~~(2)~~ (3) GEOGRAPHIC RESTRICTIONS. Buyers and sellers of credit shall adhere to the following watershed-specific geographic constraints on credit use:

(a) For activities subject to the Falls Water Supply Nutrient Strategy described in Rule .0275 of this Section:

(i) Load reduction needs in the upper Falls watershed as defined in Rule .0275 of this Section may be satisfied only by load reductions achieved in the upper Falls watershed; and

(ii) Load reduction needs in the lower Falls watershed as defined in Rule .0275 of this Section may be satisfied by load reductions achieved anywhere within the Falls watershed.

(b) For activities subject to the Neuse nutrient strategy described in Rule .0232 of this Section, load reduction needs in the Neuse 01 8-digit cataloguing unit, as designated by the US Geological Survey, below the Falls watershed may be satisfied only by load reductions achieved in that same subwatershed or in a lower watershed above the Neuse estuary; and

(c) For activities subject to the Jordan nutrient strategy, load reduction needs may be satisfied only by load reductions achieved in the same subwatershed of the Jordan watershed, as defined in Rule .0262 of this Section.

~~(2)~~ (4) CREDIT APPROVAL STANDARDS. The party seeking approval to sell ~~excess~~ loading reduction credits pursuant to this Rule shall demonstrate to the Division that ~~such reductions~~ load reduction practices meet the following criteria:

(a) ELIGIBLE REDUCTIONS. Loading reductions eligible for credit ~~are only those in excess of load reduction goals or percentage reductions required under rules in this Section or in excess of the percentage load reduction goals established in Rule .0262 of this strategy as applied to sources not addressed by rules in this section;~~ shall be as follows:

(i) Reductions shall be achieved relative to the loading condition of the source being controlled as of the baseline period of the relevant nutrient strategy as defined in rules

of this Section. Alternatively reductions may be relative to a loading condition for which departure from baseline conditions is accounted under the strategy; For other technologies, including in-lake or lake-side pump-and-treat methods that remove nutrients, reductions shall be credited based on pounds per year removed.

(iii) Reductions shall be site-specific estimates of annual mass load reduction of nitrogen and phosphorus. For finite-duration credits, annual mass load reductions shall be expressed in units of pounds. Site reductions shall be converted to reductions delivered to the impaired water body under the relevant nutrient strategy by incorporating any delivery factors as required under rules of this Section for that strategy. Site-specific reduction estimates for Division-approved practices shall conform to design standards and load reduction estimation methods provided at http://portal.ncdenr.org/web/wq/nutrient-offset-practices. Other practices shall satisfactorily address approval standards provided in the guidance, *DWR Approval Framework for Alternative Nutrient Load-Reducing Measures* dated May 29, 2015 or latest revision; and

(iv) Reductions shall not include those used to satisfy other requirements under the same nutrient strategy or those resulting from state or federal compensatory mitigation requirements.

(b) ~~Load reductions eligible for credit shall not include reductions achieved under other regulations to mitigate or offset actions that increase nutrient loading;~~DURATION OF REDUCTIONS. The duration of the practice and associated load reductions shall be defined. Mechanisms shall be established to ensure that load reductions are sustained for the stated practice duration. For perpetual load reduction practices, mechanisms shall include the following as appropriate to the type of practice:

(i) parties shall agree to provide adequate financial assurance to protect and maintain load reductions for the stated duration including for maintenance, repair and renovation of the proposed measure;

A perpetual conservation easement or similar preservation mechanism to ensure perpetual stewardship with the purpose of protecting the measure's nutrient removal functions; or

(ii) A non-wasting endowment or other dedicated financial surety to provide for the perpetual management, maintenance, repair and renovation of appurtenant lands and structures; or

(iii) Placement of structures in recorded drainage easements with recorded access easements to the nearest appropriate public right-of-way for purposes of operation and maintenance. These easements shall be granted in favor of the party responsible for

operating and maintaining the structures, with a note as to the responsible party. Structure operation and maintenance shall be the responsibility of the landowner or easement holder unless the Division gives written approval for another party;or

(iv) A legally binding commitment to provide an alternative practice or practices achieving equivalent load reduction and otherwise meeting the requirements of this Rule in the event that the approved practice at some point cannot be continued.

(c) ~~These excess loading reductions shall be available as credit only within the same subwatershed of the Jordan watershed, as defined in Rule .0262 of this Section, as the reduction need that they propose to offset;~~

(d) ~~The party seeking to sell credits shall define the nature of the activities that would produce excess load reductions and define the magnitude and duration of those reductions to the Division, including addressing the following items:~~PRACTICE PLAN. In addition to providing practice information to support compliance with the preceding criteria, the party seeking to provide credits shall provide a plan with the following practice specifics:

~~(i) Account for differences in instream nutrient losses between the location of the reduction need and excess loading reduction in reaching the affected arm of Jordan Reservoir;~~

~~(ii) Quantify and account for the relative uncertainties in reduction need estimates and excess loading reduction estimates;~~

~~(iii) Ensure that excess loading reductions shall take place at the time and for the duration in which the reduction need occurs; and~~

~~(iv) Demonstrate means adequate for assuring the achievement and claimed duration of excess loading reduction, including the cooperative involvement of any other involved parties.~~

(i) Location and site boundaries of the practice in relation to the location of the recipient's loading activity in conformance with Item (3) of this Rule, documentation or other satisfactory evidence of pre-project conditions suitable for achievement of estimated load reductions, plans on the nature of the practice with sufficient detail to demonstrate conformance with design standards and support estimates of associated load reductions, and load reduction calculations conforming to the requirements of this Item;

(ii) Identification of property owner and as appropriate the party responsible for ensuring performance of the practice, for reporting on it, for holding and enforcing the conservation easement, and for ensuring protection and maintenance of functions for the stated duration of the practice;

(iii) To the extent needed, identification of parties responsible for obtaining or holding any permits or other authorizations needed to establish the practice, those responsible for constructing it, a plan for its installation, including a timeline, a commitment to provide an as-built plan and report upon its completion, elements of that plan and report, and criteria for successful completion;

(iv) Should the practice not yet be installed, agreement to provide the Division opportunity for site review prior to installation to verify site conditions suitable to achieve the proposed load reductions, and following establishment to verify completion of the practice;

(v) Plans for post-completion operation and maintenance of the practice by the responsible party, including commitment to repair and renovate it as needed to maintain its performance, to keep records of all such maintenance, repair and renovation, and to notify the Division of any significant performance remediation needs and plans; and

(vi) Agreement that the party responsible for the practice shall allow the Division access to it throughout its lifetime for compliance inspection purposes.

~~(3)~~ (5) ~~The party seeking approval to sell excess loading reductions shall provide for accounting and tracking methods that ensure genuine, accurate, and verifiable achievement of the purposes of this Rule. The Division shall work cooperatively with interested parties at their request to develop such accounting and tracking methods to support the requirements of Item (2) of this Rule.~~ RECEPIENT RESPONSIBILITIES. A person meeting the qualifications and prerequisites described in this Rule may obtain credit if they meet all requirements of the nutrient rules to which they are subject to the satisfaction of the Division or its designated regulatory authority, including adjusting credit needs for any required delivery factors, obtaining and maintaining proof of purchase of appropriate credit amounts and durations to satisfy rule requirements and compliance with geographic restrictions on credit availability.

~~(4)~~ (6) APPROVALS. ~~Proposals for use of offsetting actions as described in this Rule shall become effective after determination by the Director that the proposal contains adequate scientific or engineering standards or procedures necessary to achieve and account for load reductions as required under Sub-Items (2) and (3) of this Rule, and that specific accounting tools required for these purposes in individual rules have been adequately established. In making this determination, the Director shall also evaluate the potential for excess loading to produce localized adverse water quality impacts that contribute to impairment of classified uses of the affected waters.~~ The Division shall review proposals for load reduction credit according to the provisions of this Rule. A party receiving Division approval may then provide the approved credits as estimated in the practice plan. Responsibility for achieving and maintaining the practice's nutrient load reductions pursuant to this Rule shall be remain with the provider after credit approval by the Division.

(7) AGRICULTURAL OPERATIONS. A Watershed Oversight Committee or Basin Oversight Committee under a strategy agriculture rule may enable and facilitate trading by persons subject to that rule by implementing trading provisions established in that rule.

History Note: *Authority G S. 143-214.1; 143-214.3; 143-214.7; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143-214.12; 143-214.21; 143-215.8B; 143B-282(c); 143B-282(d); S.L. 1999; c. 329, s. 7.1; S.L. 2005-190; S.L. 2006-259;*
Eff. August 11, 2009.
Amended Eff. August 1, 2017.

15A NCAC 02B .0275 is proposed for amendment as follows:

15A NCAC 02B .0275 FALLS WATER SUPPLY NUTRIENT STRATEGY: PURPOSE AND SCOPE

PURPOSE. The purpose of this Rule and Rules 15A NCAC 02B ~~.0276~~ .0277 through .0282 and .0315(q) shall be to attain the classified uses of Falls of the Neuse Reservoir set out in 15A NCAC 02B .0211 from current impaired conditions related to excess nutrient inputs; protect its classified uses as set out in 15A NCAC 02B .0216, including use as a source of water supply for drinking water; and maintain and enhance protections currently implemented by local governments in existing water supply watersheds encompassed by the watershed of Falls of the Neuse Reservoir. The reservoir, and all waters draining to it, have been supplementally classified as Nutrient Sensitive waters (NSW) pursuant to 15A NCAC 02B .0101(e)(3) and 15A NCAC 02B .0223. These Rules, as enumerated in Item (6) of this Rule, together shall constitute the Falls water supply nutrient strategy, or Falls nutrient strategy, and shall be implemented in accordance with 15A NCAC 02B .0223. The following items establish the framework of the Falls nutrient strategy:

(1) SCOPE AND LIMITATION. Falls of the Neuse Reservoir is hereafter referred to as Falls Reservoir. All lands and waters draining to Falls Reservoir are hereafter referred to as the Falls watershed. The Falls nutrient strategy rules require controls that reduce nitrogen and phosphorus loads from sources of these nutrients throughout the Falls watershed. These Rules do not address atmospheric emission sources of nitrogen that is deposited into the watershed but do include provisions to account for reductions in such deposition as the water quality benefits of air quality regulations are quantified. Neither do these Rules address sources on which there is insufficient scientific knowledge to base regulation, other sources deemed adequately addressed by existing regulations, sources currently considered minor, or nutrient contributions from lake sediments, which are considered outside the scope of these Rules. The Commission may undertake additional rulemaking in the future or make recommendations to other rulemaking bodies as deemed appropriate to more fully address nutrient sources to Falls Reservoir. While the scope of these Rules is limited to the reduction of nutrient loads to surface waters, practitioners are encouraged to maximize opportunities for concurrently benefiting other ecosystem services where feasible in the course of achieving the nutrient objectives.

(2) DEFINITIONS. For the purposes of this Rule the definitions the following definition apply:

(a) Falls nutrient strategy, or Falls water supply nutrient strategy means the set of 15A NCAC 02B .0275 through .0282 and .0315(p).

(b) Falls Reservoir means the surface water impoundment operated by the US Army Corps of Engineers and named Falls of Neuse Reservoir

(b2) The permanently impounded areas of Falls Reservoir means the areas of the lake containing water that extend beyond the historic channel of the Neuse River and its tributaries under reservoir operating rules, and normal variations in reservoir level.

(c) Upper Falls Reservoir means that portion of the reservoir upstream of State Route 50.

(d) Upper Falls Watershed means that area of Falls watershed draining to Upper Falls Reservoir.

(e) Lower Falls Reservoir means that portion of the reservoir downstream of State Route 50.

(f) Lower Falls Watershed means that area of Falls watershed draining to lower falls Reservoir without first passing through Upper Falls Reservoir.

~~(2)~~(3) CRITICAL WATER SUPPLY WATERSHED DESIGNATION. Water supply waters designated WS-II, WS-III, and WS-IV within the Falls watershed shall retain their classifications. The remaining waters in the Falls watershed shall be classified WS-V. The requirements of all of these water supply classifications shall be retained and applied except as specifically noted elsewhere within the Falls nutrient strategy. In addition, pursuant to G.S. 143-214.5(b), the entire Falls watershed shall be designated a critical water supply watershed and through the Falls nutrient strategy given additional, more stringent requirements than the state minimum water supply watershed management requirements. Water supply requirements of 15A NCAC 02B .0104 apply except to the extent that requirements of the Falls nutrient strategy are more stringent than provisions addressing agriculture, forestry, and existing development. These requirements supplement the water quality standards applicable to Class C waters, as described in Rule .0211 of this Section, which apply throughout the Falls watershed. Water supply watershed requirements shall be as follows:

(a) For WS-II, WS-III, and WS-IV waters, the retained requirements of Rules 15A NCAC 02B .0214 through .0216 are characterized as follows:

(i) Item (1) addressing best usages;

(ii) Item (2) addressing predominant watershed development conditions, discharges expressly allowed watershed-wide, general prohibitions on and allowances for domestic and industrial discharges, Maximum Contaminant Levels following treatment, and the local option to seek more protective classifications for portions of existing water supply watersheds;

(iii) Sub-Item (3)(a) addressing wastewater discharge limitations;

(iv) Sub-Item (3)(b) addressing nonpoint source and stormwater controls; and

(v) Sub-Items (3)(c) through (3)(h) addressing aesthetic and human health standards.

(b) For waters classified WS-V, the requirements of water supply Rule 15A NCAC 02B .0218 shall be applied.

~~(3)~~(4) GOAL AND OBJECTIVES. To achieve the purpose of the Falls nutrient strategy, the Commission establishes the goal of attaining and maintaining nutrient-related water quality standards identified in 15A NCAC 02B .0211 (throughout Upper Falls Reservoir) pursuant to G.S. 143-215.8B and 143B-282(c) and (d) of the Clean Water Responsibility Act of 1997. The Commission establishes a staged and adaptive implementation plan, outlined hereafter, to achieve the following objectives. The objective of Stage I is to, at minimum, achieve and maintain nutrient-related water quality standards in the Lower Falls Reservoir as soon as possible but no later than January 15, 2021 and to improve water quality in the Upper Falls Reservoir.

The objective of Stage II is to achieve and maintain nutrient-related water quality standards throughout Upper Falls Reservoir. (This is estimated to require a reduction of 40 and 77 percent in average annual mass loads of nitrogen and phosphorus respectively, delivered from the sources named in Item (6) in the Upper Falls Watershed from a baseline of 2006). ~~The resulting Stage II allowable loads to Falls Reservoir from the watersheds of Ellerbe Creek, Eno River, Little River, Flat River, and Knap of Reeds Creek shall be 658,000 pounds of nitrogen per year and 35,000 pounds of phosphorus per year.~~

~~(4)~~(5) STAGED IMPLEMENTATION. The Commission shall employ the staged implementation plan set forth below to achieve the goal of the Falls nutrient strategy:

(a) STAGE I. Stage I requires intermediate or currently achievable controls throughout the Falls watershed with the objective of reducing nitrogen and phosphorus loading, and attaining nutrient-related water quality standards in the Lower Falls Reservoir as soon as possible but no later than January 15, 2021, while also improving water quality in the Upper Falls Reservoir as described in this Item. Implementation timeframes are described in individual rules, with full implementation occurring no later than January 15, 2021 unless otherwise specified in an individual rule;

(b) STAGE II. Stage II requires implementation of additional controls in the Upper Falls Watershed beginning ~~no later than January 15, 2021 or~~ after completion of Stage I to achieve nutrient-related water quality standards throughout the permanently impounded areas of Falls Reservoir (to the maximum extent technically and economically feasible, and in balance with other water quality goals in the watershed), with progress toward this overall objective as described in Sub-Item (5)(a); and

(c) MAINTENANCE OF ALLOCATIONS. Sources shall maintain the load reductions required under these Rules beyond the implementation stages.

~~(5)~~(6) ADAPTIVE IMPLEMENTATION. The Commission shall employ the following adaptive implementation plan in concert with the staged implementation approach described in this Rule:

(a) (The Division shall perform water quality monitoring throughout Falls Reservoir) and shall accept reservoir water quality monitoring data provided by other parties that meet Division standards and quality assurance protocols. The Division shall utilize this data to estimate load reduction achieved, changes that should be made in the nutrient strategy, and to perform periodic use support assessments pursuant to 40 CFR 130.7(b). It shall evaluate use support determinations to judge progress on and compliance with the goal of the Falls nutrient strategy, including the following assessments:

~~(i) Attainment of nutrient-related water quality standards downstream of Highway NC 98 crossing of Falls Reservoir no later than January 15, 2016;~~

~~(ii)~~ Attainment of nutrient-related water quality standards in the Lower Falls Reservoir no later than January 15, 2021;

~~(iii)~~(

~~(v)~~(iv) ~~(vi)~~(v) Attainment of nutrient-related water quality standards throughout the permanently impounded areas of Falls Reservoir to the maximum extent technically and economically feasible;;

~~(vii)~~(vi) Where the Division finds that acceptable progress has not been made towards achieving nutrient-related water quality standards throughout the permanently impounded areas of Falls Reservoir defined in Sub-Items (i) through (vi) of this Item or that conditions have deteriorated in a segment of Falls Reservoir as described in this Item, at any time, it shall evaluate compliance with the Falls nutrient strategy rules and the effectiveness of the Falls nutrient strategy itself, and may request Commission approval to initiate additional rulemaking;

~~(viii)~~(vii) Where the Division finds, based on reservoir monitoring, that nutrient-related water quality standards are attained in a previously impaired segment of Falls Reservoir, as described in this Item, and are met for sufficient time to demonstrate sustained maintenance of standards, as specified in individual rules of this strategy, it shall notify affected parties in that segment's watershed that further load reductions are not required and of requirements for maintenance of measures to prevent loading increases. Sufficient time is defined as (at least two consecutive use support assessments) demonstrating compliance with nutrient-related water quality standards in a given segment of Falls Reservoir.

(b) The Division, to address resulting uncertainties including those related to technological advancement, scientific understanding, actions chosen by affected parties, loading effects, and loading effects of other regulations, shall continue to report to the Commission and provide information to the public ~~in January 2016 and~~ every five years ~~thereafter~~ as ~~necessary.~~ necessary, making its next report in January 2021. The reports shall address all of the following subjects:

(i) Changes in nutrient loading to Falls Reservoir and progress in attaining nutrient-related water quality standards as described in Sub-Items (5)(a)(i) through (vi) of this Rule;

(ii) The state of wastewater and stormwater nitrogen and phosphorus control technology, including technological and economic feasibility;

(iii) Use and projected use of wastewater reuse and land application opportunities;

(iv) The utilization and nature of nutrient offsets and projected changes. This shall include an assessment of any load reduction value derived from preservation of existing forested land cover;

(v) Results of any studies evaluating instream loading changes resulting from implementation of rules;

(vi) Results of any studies evaluating nutrient loading from conventional septic systems and discharging sand filter systems;

(vii) Assessment of the instream benefits of local programmatic management measures such as fertilizer or pet waste ordinances, improved street sweeping and the extent to which local governments have implemented these controls;

(viii) Results of applicable studies, monitoring, and modeling from which a baseline will be established to address changes in atmospheric deposition of nitrogen;

(ix) Recent or anticipated changes in regulations affecting atmospheric nitrogen emissions and their projected effect on nitrogen deposition;

(x) Results of any studies evaluating nutrient loading from groundwater;

(xi) Updates to nutrient loading accounting tools; and

(c) The Division shall submit a report to the Commission in July 2025 that shall address the following subjects in addition to the content required elsewhere under this Item:

(i) The physical, chemical, and biological conditions of the Upper Falls Reservoir including nutrient loading impacts;

(ii) Whether alternative regulatory action pursuant to Sub-Item (5)(g) would be sufficient to protect existing uses as required under the Clean Water Act;

(iii) The impact of management of the Falls Reservoir on water quality in the Upper Falls Reservoir;

(iv) The methodology used to establish compliance with nutrient-related water quality standards in Falls Reservoir and the potential for using alternative methods;

(v) The feasibility of achieving the Stage II objective; and

(vi) The estimated costs and benefits of achieving the Stage II objective;

(d) The Division shall make recommendations, if any, on rule revisions based on the information reported pursuant to Sub-Items (b) and (c) of this Rule;

(e) In developing the reports required under Sub-Items (b) and (c) of this Rule, the Division shall consult with and utilize information that meets Division standards and quality assurance protocols submitted by local governments and other persons with an interest in Falls Reservoir. Following receipt of a report, the Commission shall consider whether revisions to the requirements of Stage II are needed and may initiate rulemaking or any other action allowed by law;

(f) Recognizing the uncertainty associated with the model and the data used to develop the reduction targets for the Falls nutrient strategy, any person, local government, or association may at any time during implementation of the Falls nutrient strategy develop and submit for

Commission approval supplemental or new nutrient response model(s) for Falls Reservoir based upon additional analysis and data collected. The Commission shall consider revisions to the requirements of Stage II based on the results of such data and modeling as follows:

(i) A person shall obtain Division review and approval of any monitoring study plan to be used prior to commencement of such a study. The study plan and modeling framework shall meet any Division requirements for data quality and model support or design in place at that time. Within 60 days of receipt, the division shall either approve the plan or notify the person seeking to perform the supplemental modeling of changes to the plan required by the Division;

(ii) Supplemental modeling shall include a minimum of three years of lake water quality data unless the person performing the modeling can provide information to the Division demonstrating that a shorter time span is sufficient;

(iii) The Commission shall accept modeling products, results, and interpretations to meet the goal of [redacted] Falls nutrient related water quality standards ~~strategy, along with associated allowable loads to Falls Reservoir, from the watersheds of Ellerbe Creek, Eno River, Little River, Flat River, and Knap of Reeds Creek and~~. Such modeling may incorporate the results of studies that provide new data on various nutrient sources such as atmospheric deposition, internal loading, and loading from tributaries other than those identified in this Sub-item. The Division shall assure that the supplemental or new modeling is conducted in accordance with the quality assurance requirements of the Division;

(iv) The Commission shall review Stage II requirements if a party submits supplemental monitoring data, or modeling data, products and results acceptable to the Commission for this purpose. The Commission shall initiate rulemaking if supplemental monitoring data and modeling results acceptable to the Commission indicate that changes to the Stage II reductions goals are required.~~;~~

(g) Nothing in this strategy shall be construed to limit, expand, or modify the authority of the Commission to undertake alternative regulatory actions otherwise authorized by state or federal law, including the reclassification of waters of the State pursuant to G.S. 143-214.1, the revision of water quality standards pursuant to G.S. 143-214.3, and the granting of variances pursuant to G.S. 143-215.3.

~~(6)~~(7) RULES ENUMERATED. The Falls nutrient strategy rules consists of the following rules titled as follows:

(a) Rule .0275 Purpose and Scope;

(b) Rule ~~.0276~~ .0263 Definitions. An individual rule may contain additional definitions for terms that are used in that rule only;

(c) Rule .0277 Stormwater Management for New Development;

(d) Rule .0278 Stormwater Management for Existing Development;

(e) Rule .0279 Wastewater Discharge Requirements;

(f) Rule .0280 Agriculture;

(g) Rule .0281 Stormwater Requirements for State and Federal Entities;

(h) Rule .0282 Options for Offsetting Nutrient Loads; and

(i) Rule .0315 Neuse River Basin.

~~(7)~~(8) APPLICABILITY. Categories of parties required to implement the Falls nutrient strategy rules and, as applicable, their geographic scope of responsibility, are identified in each rule. The specific local governments responsible for implementing Rules .0277, .0278, and .0282 shall be as follows:

(a) All incorporated municipalities, as identified by the Office of the Secretary of State, with planning jurisdiction within or partially within the Falls watershed. Those municipalities are currently:

(i) Butner;

(ii) Creedmoor;

(iii) Durham;

(iv) Hillsborough;

(v) Raleigh;

(vi) Roxboro;

(vii) Stem; and

(viii) Wake Forest;

(b) All counties with jurisdiction in Falls watershed and for land where municipalities listed in Sub-Item (7)(a) do not have an implementation requirement:

(i) Durham;

(ii) Franklin;

(iii) Granville;

(iv) Orange;

(v) Person; and

(vi) Wake;

(c) A unit of government may arrange through interlocal agreement or other instrument of mutual agreement for another unit of government to implement portions or the entirety of a program required or allowed under any rule of this strategy to the extent that such an arrangement is otherwise allowed by statute. The governments involved shall submit documentation of any such agreement to the Division. No such agreement shall relieve a unit of government from its responsibilities under these Rules.

~~(8)~~(9) ENFORCEMENT. Failure to meet requirements of Rules .0275, .0277, .0278, .0279, .0280, .0281, or .0282 of this Section may result in imposition of enforcement measures as authorized by G.S. 143-215.6A (civil penalties), G.S. 143-215.6B (criminal penalties), and G.S. 143-215.6C (injunctive relief).

History Note: *Authority G.S. 143-214.1; 143-214.3; 143-214.5; 143-214.7; 143-215.1; 143-215.3; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143-215.8B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259; S.L. 2009-337; S.L. 2009-486;*
Eff. January 15, 2011 (this permanent rule replaces the temporary rule approved by the RRC on December 16, 2010).
Amended Eff. August 1, 2017.

15A NCAC 02B .0277 is proposed for amendment as follows:

15A NCAC 02B .0277 FALLS RESERVOIR WATER SUPPLY NUTRIENT STRATEGY: STORMWATER MANAGEMENT FOR NEW DEVELOPMENT

The following is the stormwater strategy, as prefaced in 15A NCAC 02B .0275, for new development ~~activities~~ products within the Falls watershed:

(1) PURPOSE. The purposes of this Rule are as follows:

(a) To achieve and maintain the nitrogen and phosphorus loading objectives established for Falls Reservoir in 15A NCAC 02B .0275 from lands in the Falls watershed on which new development occurs;

(b) To provide control for stormwater runoff from new development in Falls watershed to ensure that the integrity and nutrient processing functions of receiving waters and associated riparian buffers are not compromised by erosive flows; and

(c) To protect the water supply, aquatic life and recreational uses of Falls Reservoir from the potential impacts of new development.

(2) APPLICABILITY. This Rule shall apply to those areas of new development that lie within the Falls watershed and the planning jurisdiction of a municipality or county that is identified in 15A NCAC 02B .0275. ~~This Rule shall not apply to development activities on state and federal lands that are set out in Rule .0281 of this Section.~~

(3) REQUIREMENTS. ~~All local governments subject to this Rule shall develop stormwater management programs for submission to and approval by the Commission, to be implemented in areas described in Item (2) of this Rule.~~ Local governments shall implement stormwater management programs according to their plans approved by the Commission in January 2012 that include the following elements and standards contained in Item (4) of this Rule:~~Nothing in this Rule preempts local governments from establishing requirements that are more restrictive than those set forth in this Rule. Local government stormwater management programs shall include the following elements and the standards contained in Item (4):~~

(a) The requirement that a stormwater management plan shall be submitted for local government approval based on the standards in Item (4) for all proposed new development disturbing one acre or more for single family and duplex residential property and recreational facilities, and one-half acre or more for commercial, industrial, institutional, multifamily residential, or local government property;

(b) A plan to ensure maintenance of best management practices (BMPs) implemented to comply with this rule for the life of the ~~development; and~~ development;

(c) A plan to ensure enforcement and compliance with the provisions in Item (4) of this Rule for the life of the new ~~development.~~development; and

(d) Nothing in this Rule preempts local governments from implementing requirements that are more restrictive than those set forth in this Rule.

(4) PLAN APPROVAL REQUIREMENTS. A developer's stormwater plan shall not be approved by a subject local government unless the requirements of Item (3) and the following criteria are met:

(a) Nitrogen and phosphorus loads contributed by the proposed new development ~~activity~~product shall not exceed the following unit-area mass loading rates for nitrogen and phosphorus, respectively, expressed in units of pounds/acre/year: 2.2 and 0.33. Proposed development that would replace or expand structures ~~or improvements~~ that existed as of December 2006, the end of the baseline period, and that would not result in a net increase in built-upon area shall not be required to meet the nutrient loading targets or high-density requirements except to the extent that the developer shall provide stormwater control at least equal to the previous development. ~~Proposed development that would replace or expand existing structures or improvements and would result in a net increase in built-upon area shall have the option either to achieve at least the percentage loading reduction objectives stated in 15A NCAC 02B .0275 as applied to nitrogen and phosphorus loading from the previous development for the entire project site, or to meet the loading rate targets described in this Item. These requirements shall supersede those identified in 15A NCAC 02B .0104(q). The developer shall determine the load reductions needed to meet these loading rate targets by using the loading calculation method called for in Sub-Item (5)(a) or other equivalent method acceptable to the Division;~~

(b) Proposed development that would replace or expand existing structures and would result in a net increase in built-upon area shall treat the net increase and shall meet the loading rate targets described in this Item. These requirements shall supersede those identified in 15A NCAC 02B .0104(q). The developer shall determine the load reductions needed to meet these loading rate targets by using the loading calculation method called for in Sub-Item (5)(a) or other equivalent method acceptable to the Division;

~~(b)~~(c) The developer shall have the option of offsetting the nitrogen and phosphorus load by implementing or funding offsite offset measures. Before using an offsite offset option, a development (shall implement onsite structural stormwater controls that achieve one of the following levels of reductions:) sites draining to a regional structural stormwater control facility shall be considered onsite structural controls.

(i) Proposed new development ~~activities~~ disturbing at least one-half acre but less than one acre of land for single family and duplex residential property and recreational facilities, except as stated in Sub-Item ~~(4)(b)(iv),~~(4)(c)(iv) shall achieve 30 percent or more of the required load reduction in both nitrogen and

phosphorus loading onsite and shall meet any requirements for engineered stormwater controls described in Sub-Item ~~(4)(e)~~(4)(f) of this Rule;

(iii) Except as stated in Sub-Item ~~(4)(b)(iv),~~(4)(c)(iv) proposed new development ~~activity~~ that disturbs one acre of land or more shall achieve 50 percent or more of the needed load reduction in both nitrogen and phosphorus loading onsite and shall meet any requirements for engineered stormwater controls described in Sub-Item ~~(4)(e)~~(4)(f) of this Rule; or

(iv) Proposed development that would replace or expand structures or improvements that existed as of December 2006 and that increases impervious surface within a local government's designated downtown area, regardless of area disturbed, shall achieve 30 percent of the needed load reduction in both nitrogen and phosphorus onsite, and shall meet any requirements for engineered stormwater controls described in Sub-Item ~~(4)(e)~~(4)(f) of this Rule;

Developers shall have the option of meeting the percent load reduction through a regional stormwater treatment BMP that is dedicated to serving a contiguous area of new or existing development.

~~(c)~~(d) Offsite offsetting measures shall achieve at least equivalent reductions in nitrogen and phosphorus loading to that required onsite to comply with the loading rate targets set out in Sub-Item (4)(a) of this Item. ~~A developer may use any measure that complies~~ Offsetting reductions shall have a plan to ensure that theybe perpetual in nature. The developer may use any practice that complies with the requirements of ~~Rules~~ Rule .0240 ~~and~~ or .0282. of this Section;

~~(d)~~(e) Proposed new development subject to NPDES, water supply, and other state-mandated stormwater regulations shall comply with those regulations in addition to the other requirements of this Sub-item. Proposed new development in any water supply watershed in the Falls watershed designated WS-II, WS-III, or WS-IV shall comply with the density-based restrictions, obligations, and requirements for engineered stormwater controls, clustering options, operation and maintenance responsibilities, vegetated setbacks, land application, and landfill provisions described in Sub-Items (3)(b)(i) and (3)(b)(ii) of the applicable rule among 15A NCAC 02B .0214 through .0216. Provided, the allowance in water supply watershed rules for 10 percent of a jurisdiction to be developed at up to 70 percent built-upon area without stormwater treatment shall not be available in the Falls watershed;

~~(e)~~(f) Stormwater systems shall be designed to control and treat at a minimum the runoff generated by one inch of rainfall from all surfaces ~~in the project area~~ draining to the BMP. ~~by one inch of rainfall.~~ The treatment volume shall be drawn down pursuant to standards specific to each practice as provided in the ~~July 2007~~ most recent version of the

Stormwater Best Management Practices Manual published by the ~~Division,~~DEMLR, or other at least technically equivalent standards acceptable to the Division;

~~(f)~~(g) To ensure that the integrity and nutrient processing functions of receiving waters and associated riparian buffers are not compromised by erosive flows, at a minimum, ~~the new development shall not result in a net increase in peak flow leaving the site from pre-development conditions for the one-year, 24-hour storm event;~~ net increase in peak flow leaving the site from the predevelopment condition for the 1-year, 24-hour storm shall not exceed 10 percent;

~~(g)~~(h) New development may satisfy the requirements of this Rule by demonstrating pre and post development runoff volume matching through the use of an accounting tool approved by the Division that estimates the effect of Low Impact Development for runoff and effluent of LID techniques and hydraulic and hydrologic performance of best management practices; ~~by meeting the post-development hydrologic criteria set out in Chapter 2 of the North Carolina Low Impact Development Guidebook dated June 2009, or the hydrologic criteria in the most recent version of that guidebook;~~

Proposed new development undertaken by a local government solely as a linear transportation project shall be deemed compliant with the purposes of this Rule if it meets the riparian buffer protection requirements of 15A NCAC 02B .0267 and .0268;

~~(h)~~(i) Proposed new development shall demonstrate compliance with the riparian buffer protection requirements of 15A NCAC 02B .0233 and .0242 or subsequent amendments or replacements to those requirements.

(5) RULE IMPLEMENTATION. ~~This Rule shall be implemented as follows:~~

(a) ~~No later than March 15, 2011, the Division shall submit a model local stormwater program, including a model local ordinance that embodies the criteria described in Items (3) and (4) of this Rule to the Commission for approval.~~ Local governments shall continue to implement their stormwater management programs as approved by the Commission in March 2011 or any subsequent modifications to those programs approved by the Director based on standards set out in Items (3) and (4) of this Rule. ~~The model program shall include a tool that will allow developers to account for nutrient loading from development lands and loading changes due to BMP implementation to meet the requirements of Items (3) and (4) of this Rule. The accounting tool shall utilize nutrient efficiencies and associated design criteria established for individual BMPs in the July 2007 version of the Stormwater Best Management Practices Manual published by the Division, or other more precise standards acceptable to the Division. At such time as data quantifying nutrient loads from onsite wastewater systems is made available, the new development nutrient export accounting tool shall be revised to require accounting for nutrient loading from onsite wastewater from newly developed lands that use such~~

~~systems. Should research quantify significant loading from onsite wastewater systems, the Division may also make recommendations to the Commission for Public Health to initiate rulemaking to reduce nutrient loading to surface waters from these systems. The Division shall work in cooperation with subject local governments and other watershed interests in developing this model program;~~

(b) Any significant modifications to a local government's program shall be submitted to the Director for approval.

(c) At such time as data quantifying nutrient loads from onsite wastewater systems is made available, the new development nutrient export accounting tool shall be revised to require accounting for nutrient loading from onsite wastewater from newly developed lands that use such systems. Should research quantify significant loading from onsite wastewater systems, the Division may also make recommendations to the Commission for Public Health to initiate rulemaking to reduce nutrient loading to surface waters from these systems.

(d) Upon implementation, subject local governments shall submit annual reports to the Division summarizing their activities in implementing each of the requirements in Items (3) and (4) of this Rule, including changes to nutrient loading.

~~(b) Within five months after the Commission's approval of the model local stormwater program and model ordinance, subject local governments shall submit stormwater management programs, in conjunction with similar requirements in 15A NCAC 02B .0278, to the Division for preliminary approval. These local programs shall meet or exceed the requirements in Items (3) and (4) of this Rule;~~

~~(c) Within 10 months after the Commission's approval of the model local stormwater program, the Division shall provide recommendations to the Commission on local stormwater programs. The Commission shall either approve the programs or require changes based on the standards set out in Items (3) and (4) of this Rule. Should the Commission require changes, the applicable local government shall have two months to submit revisions, and the Division shall provide follow up recommendations to the Commission within two months after receiving revisions;~~

~~(d) Within six months after the Commission's approval of a local program, or upon the Division's first renewal of a local government's NPDES stormwater permit, whichever occurs later, the affected local government shall complete adoption of and implement its local stormwater management program; and~~

~~(e) Upon implementation, subject local governments shall submit annual reports to the Division summarizing their activities in implementing each of the requirements in Items (3) and (4) of this Rule, including changes to nutrient loading.~~

~~(6) EQUIVALENT PROGRAM OPTION. A local government may in its program submittal under Sub-Item (5)(b) of this Rule request that the Division accept the local government's implementation of another stormwater program or programs as satisfying one or more of the requirements set forth in Items (3) and (4) of this Rule. The Division shall provide determination on the acceptability of any such alternative prior to requesting Commission approval of local programs as required in Sub-Item (5)(c) of this Rule. Should a local government propose alternative requirements to achieve and maintain the rate targets described in Sub-Item (4)(a) of this Rule, it shall include in its program submittal technical information demonstrating the adequacy of those requirements. Should an alternative program propose monitoring of watersheds to compare measured loading to expected loading, it shall at a minimum include the following:~~

~~(a) Engineering calculations that quantify expected loading from new development projects based on stormwater controls currently enforced;~~

~~(b) At least three years of continuous flow and nutrient monitoring data demonstrating that watershed loading rates are at or below rates that would result from meeting the requirements of this Rule and Rule .0278 of this Section based on the land cover composition of the watershed;~~

~~(c) An ongoing water quality monitoring program based on continuous flow and concentration sampling to be performed indefinitely into the future with results reported annually to the Division for review and approval;~~

~~(d) A corrective action plan to be implemented should data collected under the ongoing monitoring program demonstrate watershed loading is within 10 percent of the rate estimated in compliance with this Item; and~~

~~(e) Should a local government submit an alternate program for consideration that includes areas within its jurisdiction outside of the monitored watershed it shall submit technical information demonstrating the areas outside of the monitored watershed can reasonably be expected to load at equal or lesser rates than those estimated in compliance with this Item based on comparative analysis of land uses and other factors affecting nutrient loading.~~

History Note: *Authority G.S. 143-214.1; 143-214.3; 143-214.5; 143-214.7; 143-215.1; 143-215.3; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143-215.8B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259; S.L. 2009-337; S.L. 2009-486;*
Eff. January 15, 2011 (this permanent rule replaces the temporary rule approved by the RRC on December 16, 2010).
Amended Eff. August 1, 2017.

15A NCAC 02B .0278 is proposed for amendment as follows:

15A NCAC 02B .0278 FALLS WATER SUPPLY NUTRIENT STRATEGY: STORMWATER MANAGEMENT FOR EXISTING DEVELOPMENT

This Rule establishes a staged, adaptive approach by which municipalities and counties shall contribute to achieving the nonpoint source loading objectives of the Falls Reservoir nutrient strategy by reducing or otherwise offsetting nutrient contributions from existing development. Local governments ~~three years~~ shall develop local programs that propose Stage I load reduction actions to the Division. It requires local governments to begin and track measures to reduce nutrient loads from existing developed lands within their jurisdiction within 12 months of Commission approval of the Stage I local model program ~~January 15, 2014~~ as specified in Item (8) (a). Local governments shall submit for approval and implement Stage II load reduction programs by January 2031 ~~January 15, 2021~~ and submit revised load reductions programs every five years thereafter. The following is the watershed stormwater strategy, as prefaced in Rule 15A NCAC 02B .0275, for existing development in the Falls watershed:

(1) PURPOSE. The purposes of this Rule are as follows:

(a) To achieve and maintain the nonpoint source nitrogen and phosphorus percentage reduction objectives established for Falls Reservoir in Rule 15A NCAC 02B .0275 on nutrient loading from existing development in the Falls watershed relative to the baseline period defined in that ~~rule. Existing development is defined in Rule 15A NCAC 02B .0276;~~ rule; and

(b) To protect the water supply, aquatic life, and recreational uses of Falls Reservoir.

(2) APPLICABILITY. This Rule shall apply to municipalities and counties in the Falls watershed as identified in Rule 15A NCAC 02B .0275.

(3) DEFINITIONS. For the purposes of this Rule, the definitions in 15A NCAC 02B .0275 and the following definition apply:

(a) "Existing Development" means structures and other land modifications resulting from development activities, other than those associated with agriculture or forest management activities, that meet the following criteria:

(i) For projects that do not require a state permit, they are in place or have established a vested right based on statutory or common law as interpreted by the courts, as of the effective date of local new development stormwater programs implemented under Rule .0277 of this Section; and

(ii) For projects that require a state permit, they are in place as of the applicable compliance date established in Rule .0281 of this Section; and

(ii) They are not replaced by structures or other land modifications resulting from development activities that occur after the applicable date referenced elsewhere in this sub-paragraph.

(b) "New Development" means any development that does not meet the definition of existing development in the Rule.

~~(3)~~(4) STAGED AND ADAPTIVE IMPLEMENTATION REQUIREMENTS. Local governments shall employ the following staged and adaptive implementation program. All local governments subject to this Rule shall develop load-reducing programs for submission to and approval by the Commission that include the following staged elements and meet the associated minimum standards for each stage of implementation:

(a) In Stage I, a local government subject to this Rule shall implement a load reduction program that provides estimates of, and plans for offsetting by calendar year 2025 nutrient loading increases from lands developed subsequent to the baseline period and not subject to the requirements of the local government's Falls Lake new development stormwater program. For these post-baseline existing developed lands, the current loading rate shall be compared to the loading rate for these lands prior to development for the acres involved, and the difference shall constitute the load reduction need in annual mass load, in pounds per year. Alternatively, a local government may assume uniform pre-development loading rates of 2.89 pounds/acre/year N and 0.63 pounds/acre/year P for these lands. The local government shall achieve this Stage I load reduction by calendar year 2025 This Stage I program shall meet the criteria defined in Item (4) of this Rule;

(b) By ~~January 15, 2021~~ January 2031 and every five years thereafter, a local government located in the Upper Falls Watershed shall submit and begin implementing a Stage II load reduction program that meets the following requirements:

(i) If a local government achieves the Stage I reduction objectives described in this Item, a local government's initial Stage II load reduction program shall be, either (A) achieve additional annual reductions in nitrogen and phosphorus loads from existing development greater than or equal to the average annual additional reductions achieved ~~in the last seven years~~ since the baseline or (B) provide for an annual expenditure that equals to the average annual expenditure since the baseline.. A local government's expenditures shall include all local government funds, used to achieve nutrient reductions from existing developed lands. The cost of achieving reductions from municipal wastewater treatment plants shall not be included in calculating a local government's expenditures. Notwithstanding this requirement, the EMC may approve an initial Stage II load reduction program based on a lower annual level of reduction or a lower annual level of expenditure if the local government demonstrates that continuing the prior annual level of reduction or annual level of expenditure is not reasonable or cost-effective given the reductions that will be achieved, (or the expenditure would cause serious financial hardship to the local government);

(ii) If Stage I reduction objectives are not achieved, a local government's initial Stage II load reduction program shall, at the local government's election, either (A) achieve additional annual reductions in nitrogen and phosphorus loads from existing development greater than or equal to the ~~average annual additional~~ the average annual additional reductions achieved in the last ~~three years~~ seven years of implementation of Stage I or (B) provide for an annual expenditure that equals or exceeds the average annual ~~average annual~~ amount the local government has spent to achieve nutrient reductions from existing development ~~three years~~ in the last seven years. Annual expenditures shall be calculated in accordance with Sub-Item ~~(3)(b)(i)~~ (4)(b)(i) of this Item;

(iii) Subsequent five year programs shall be designed to achieve (the Stage II percent load reduction goals from existing developed lands in a local government's jurisdiction), shall include timeframes for achieving these goals and shall meet the requirements of Item ~~(4)~~(5) of this Rule;

~~(4)~~(5) ELEMENTS OF LOAD REDUCTION PROGRAMS. A local government's Stage I and Stage II load reduction program shall address the following elements:

(a) The State and health departments in counties in the Eno River and Little River subwatersheds shall, as a part of Stage I, begin and continuously implement a program to reduce loading from discharging sand filters and malfunctioning septic systems discharging into waters of the State;

(b)

~~(c) The total amount of nutrient loading reductions in Stage I is not increased for local jurisdictions by the requirements to add specific program components to address loading from malfunctioning septic systems and discharging sand filters or high nutrient loading levels pursuant to Sub-Items (4)(a) and (b) of this Item;~~

~~(d) In preparation for implementation of their Stage I and Stage II load reduction programs, local governments shall develop inventories and characterize load reduction potential to the extent that accounting methods allow of the following by January 2013:~~

~~(i) Wastewater collection system~~

~~(ii) Discharging sand filter systems, including availability of or potential for central sewer connection;~~

~~(iii) Properly functioning and malfunctioning septic systems;~~

~~(iv) Restoration opportunities in utility corridors;~~

~~(v) Fertilizer management plans for local government-owned lands;~~

~~(vi) Structural stormwater practices, including intended purpose, condition, potential for greater nutrient control; and~~

~~(vii) Wetlands and riparian buffers including potential for restoration opportunities;~~

~~(e)~~(c) A local government's load reduction need shall be based on the developed lands that fall within its general police powers and within the Falls watershed;

~~(f)~~(d) The load reduction need shall not include lands under state or federal control, and a county shall not include lands within its jurisdictional boundaries that are under municipal police powers;

~~(g)~~(e) Nitrogen and phosphorus loading from existing development, including loading from onsite wastewater treatment systems to the extent that accounting methods allow, shall be calculated by applying the accounting tool described in Sub-Item ~~(7)(a)~~(8)(a) and shall quantify baseline loads of nitrogen and phosphorus to surface waters in the local government's jurisdiction as well as loading changes post-baseline. It shall include the nitrogen and phosphorus reductions needed for Stages I and II.

~~(h)~~(f) The Commission shall recognize reduction credit for early implementation of policies and practices implemented after January 1, 2007 and before timeframes required by this Rule, to reduce runoff and discharge of nitrogen and phosphorus per Session Law 2009-486. The load reduction program shall identify specific load-reducing practices implemented to date subsequent to the baseline period and for which the local government is seeking credit. It shall estimate load reductions for these practices and their anticipated duration using methods provided for in Sub-Item ~~(5)(a);~~(8)(a);

~~(i)~~(g) The program shall include a proposed implementation schedule that includes annual implementation expectations. The load reduction program shall identify the types of activities the local government intends to implement and a prioritization of practices, magnitude of reductions it expects to achieve from each, and the costs and efficiencies of each activity to the extent information is available. The program shall identify the duration of anticipated loading reductions, and may seek activities that provide long-term reductions;

~~(j)~~(h) The load reduction program shall identify anticipated funding mechanisms or sources and discuss steps taken or planned to secure such funding;

~~(k)~~(i) The program shall address the extent of load reduction opportunities intended from the following types of lands:

(i) Lands owned or otherwise controlled by the local government;

(ii) Each land use type of privately owned existing development including projected redevelopment, on which the local government's load reduction need is based as described in this Item; and

(iii) Lands other than those on which the local government's load reduction need is based as described in this Item, including lands both within and outside its jurisdiction and including the use of interlocal agreements and public or private third party sellers;

(j) The program shall address the extent of load reduction opportunities from the following types of practices either included in the model program or subsequently approved by the Director according to Sub-Item (8)(b):

(i) Stormwater and ecosystem practices;

(ii) Onsite and municipal wastewater practices; and

(iii) Other practices, measures, and activities for which accounting methods acceptable to the Division can be provided.

~~(l) The program shall address the extent of load reduction proposed from the following~~ from ~~stormwater and ecosystem restoration activities:~~

~~(i) Bioretention;~~

~~(ii) Constructed wetland;~~

~~(iii) Sand filter;~~

~~(iv) Filter strip;~~

~~(v) Grassed swale;~~

~~(vi) Infiltration device;~~

~~(vii) Extended dry detention;~~

~~(viii) Rainwater harvesting system;~~

~~(ix) Treatment of redevelopment;~~

~~(x) Overtreatment of new development;~~

~~(xi) Removal of impervious surface;~~

~~(xii) Retrofitting treatment into existing stormwater ponds;~~

~~(xiii) Off-line regional treatment systems;~~

~~(xiv) Wetland or riparian buffer restoration; and~~

~~(xv) Reforestation with conservation easement or other protective covenant;~~

~~(m) The program shall evaluate the load reduction potential from the following wastewater activities:~~

~~(i) Creation of surplus relative to an allocation established in Rule 15A NCAC 02B .0279;~~

~~(ii) Expansion of surplus allocation through regionalization;~~

~~(iii) Connection of discharging sand filters and malfunctioning septic systems to central sewer or replacement with permitted non-discharge alternatives;~~

~~(iv) Removal of illegal discharges; and~~

~~(v) Improvement of wastewater collection systems;~~

~~(n) A local government may propose in its load reduction program the use of the following measures in addition to items listed (l) and (m), or may propose other measures for which it can provide accounting methods acceptable to the Division:~~

~~(i) Redirecting runoff away from impervious surfaces;~~

~~(ii) Soil amendments;~~

~~(iii) Stream restoration;~~

~~(iv) Improved street sweeping; and~~

~~(v) Source control, such as pet waste and fertilizer ordinances;~~

~~(o)~~(k) The program shall include evaluation of load reduction potential relative to the following factors:

(i)

(ii) Landowner acceptance;

(iii) Incentive and education options for improving landowner acceptance;

(iv) Existing and potential funding sources and magnitudes;

(v) Practice cost-effectiveness (e.g., cost per pound of nutrient removed);

(vi) Increase in per capita cost of a local government's stormwater management program to implement the program;

(vii) Implementation rate without the use of eminent domain; and

(viii) Need for and projected role of eminent domain;

~~(5)~~(6) The Commission shall approve a Stage I load reduction program if it is consistent with Items ~~(3)~~(4) and ~~(4)~~(5) of [redacted] Rule. The Commission shall not require additional or alternative measures that would require a local government to:

(a) Install or require installation of a new stormwater collection system in an area of existing development unless the area is being redeveloped;

(b) Acquire developed private property; or

(c) Reduce or require the reduction of impervious surfaces within an area of existing development unless the area is being redeveloped.

~~(6) A municipality shall have the option of working with the county or counties in which it falls, or with another municipality or municipalities within the same subwatershed, to jointly meet the loading targets from all lands within their combined jurisdictions within a subwatershed. A local government may utilize private or third party sellers. All reductions involving trading with other parties shall meet the requirements of Rule 15A NCAC 02B .0282.~~

(7) A local government may obtain reductions through other means within either the Upper Falls Reservoir or Lower Falls Reservoir watershed in addition to its implementation of practices on lands within its jurisdiction. Other means include:

(a) A municipality or county may work with other municipalities or counties within either the Upper Falls Reservoir or Lower Fal[redacted]eservoir watershed to jointly meet the loading targets from lands within their combined jurisdiction within a watershed;

(b) A local government may combine nutrient load allocations established for its NPDES discharges in Rule .0279 of this Section with those assigned to it for existing developed lands in this Rule into one set of allocations and meet them jointly;

(c) Purchase of nutrient offset credits pursuant to G.S. 143-214.26 and Rules .0240 of this Section; and

(d) Other forms of trading pursuant to Rule .0273 of this Section.

~~(7)~~(8) RULE IMPLEMENTATION. This Rule shall be implemented as follows:

(a) By ~~July 2013,~~March 2017 the Division shall submit a Stage I model local program to the Commission for approval that embodies the criteria described in Items ~~(3)(a)~~(4)(a) and ~~(4)~~(5) of this Rule. The Division shall work in cooperation with subject local governments and other watershed interests in developing this model program, which shall include the following:

(i) Model local ordinances as applicable;

(ii) Methods to quantify load reduction requirements and resulting load reduction assignments for individual local governments;

(iii) Methods to account for discharging sand filters, malfunctioning septic systems, and leaking collection ~~systems; and~~ systems.

~~(iv) Methods to account for load reduction credits from various activities;~~

(b) The Division shall include with the model program supporting information for local governments, which shall include:

(i) Identification of the set of nutrient-reducing practices currently approved by the division for use toward compliance with this rule, along with identification of relevant documents establishing design standards and credit methods; and

(ii) Explanation of the process to be used for adjusting load allocations and reduction needs to account for existing practices and changes in jurisdictional limits since baseline and into the future, as well as the process used by the Division for approving additional measures for use under this Rule.

~~(b)~~(c) Within six months after the Commission's approval of the Stage I model local program, subject local governments shall submit load reduction programs that meet the requirements of Items ~~(3)~~(4) and ~~(4)~~(5) of this Rule to the Division for review and preliminary approval and shall begin implementation and tracking of measures to reduce nutrient loads from existing developed [redacted] within their jurisdictions upon approval of local programs by the Commission;

~~(c)~~(d) Within ~~20~~ 12 months of the Commission's approval of the Stage I model local program, the Division shall provide recommendations to the Commission on existing development load reduction programs. The Commission shall either approve the programs or require changes based on the standards set out in Item ~~(4)~~(5) of this Rule. Should the Commission require changes, the applicable local government shall have two months to submit revisions, and the

Division shall provide follow-up recommendations to the Commission within two months after receiving revisions;

~~(d)~~(e) Within nine months after the Commission's approval of a Stage I local existing development load reduction program, the local government shall complete adoption of and begin implementation of its approved existing development Stage I load reduction program;

~~(e)~~(f) Upon implementation of the programs required under Item ~~(4)~~(5) of this Rule, local governments shall provide annual reports to the Division documenting their progress in implementing those requirements until such time the Commission determines they are no longer needed to ensure maintenance of reductions or that standards are protected. Annual reports shall include accounting of total annual expenditures, including local government funds and any state and federal grants used toward load reductions achieved from existing developed lands.

Note: The Division seeks public comment concerning alternative timelines for implementation of a local government Stage II load reduction programs per Sub-Item (8)(g) considering the proposed timeline revision for the St[redacted] Model Program in Sub-Item (8)(a) of this rule.

~~(f)~~(g) By ~~January 15, 2021~~January 2031 and every five years thereafter until accounting determines that assigned load reductions have been achieved, standards are met in the lake, or the Commission takes other actions per Rule 15A NCAC 02B .0275, local governments located in the Upper Falls Watershed as defined in Item ~~(3)~~(4) of Rule 15A NCAC 02B .0275 shall submit and begin implementation of a Stage II load reduction program or program revision to the Division. Within nine months after submittal, the Division shall make recommendations to the Commission on approval of these programs. The Commission shall either approve the programs or require changes based on the standards set out in this Rule. If the Commission require changes, the applicable local governments shall submit revisions within two months, and the Division sh[redacted]rovide follow-up recommendations to the Commission within three months after receiving revisions. Upon program approval, local governments shall revise implementation as necessary based on the approved program;

~~(g)~~(h) A local government may, at any time after commencing implementation of its load reduction program, submit program revisions to the Division for approval based on identification of more cost-effective strategies or other factors not originally recognized;

~~(h)~~(i) Once either load reductions are achieved per annual reporting or (nutrient related water quality standards are met in the lake) per Rule 15A NCAC 02B .0275, (local governments shall report every five years per Sub-Item ~~(e)~~ (f) on compliance

~~(i)~~(j) At least every five years after the effective date, the Division shall review the accounting methods stipulated under [redacted]-Item ~~(7)(a)~~(8)(a) to determine the need for revisions to those

methods and to loading reductions assigned using those methods. Its review shall include values subject to change over time independent of changes resulting from implementation of this Rule, such as untreated export rates that may change with changes in atmospheric deposition. It shall also review values subject to refinement, such as nutrient removal efficiencies.

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-214.12; 143-214.21; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143-215.8B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259; S.L. 2009-337;*
Eff. January 15, 2011 (this permanent rule replaces the temporary rule approved by the RRC on December 16, 2010).
Amended Eff. August 1, 2017.

HB74 NUTRIENT RULES RE-WRITE

CITY OF DURHAM'S OVERARCHING CONCERNS

July 15, 2015

These are general concerns that City of Durham staff have identified in the draft rules prepared by DWR. Within the context of these general concerns, the City of Durham also contemporaneously provides comments and edits to the actual draft rules.

- The rules need to explicitly acknowledge the limited data upon which they are based (atmospheric deposition, sediment contribution, limited sampling during unusual weather conditions)
- Agriculture rules
    - need to break down the silos created by the rules in which the various regulated entities cannot work together to achieve the most effective changes to improve water quality
    - concern regarding WOC control of agriculture
    - need to break down the structural barriers to trading between agriculture and other entities
    - rules must include a clear definition of "active agricultural operation"
    - why does agriculture have a separate credit development process from the process applied to other regulated entities?
- New Development rules:
    - the Jordan, Falls, and Neuse rules should all have the same disturbance thresholds
    - the definition of "onsite" should be drafted to explicitly allows regional bmps
- Trading: the rules should be revised to permit, and to encourage, trading amongst all regulated entities in order to provide the most cost effective implementation of bmps that will have real impacts on water quality
- Nutrient offset: the rules should explicitly state that local governments are authorized to establish and engage in nutrient banking
- Falls Lake should not have a single compliance point to measure and assess compliance with the water quality standards, but should evaluate compliance based on a management area with multiple monitoring stations. The use of management areas is consistent with previous state-developed and EPA-approved lake TMDLs/strategies (Lake Wylie, Jordan Lake) and with estuarine strategies (Neuse River Estuary, Tar-Pamlico Estuary).

- Change implementation dates of Falls rules in .0275(5), .0278 (ED rule) due to delays in ED and credit development
- Falls Stage II—change the implementation date for the Falls Stage II rules until after the completion of UNRBA's re-examination, and DENR and the EMC have completed new rulemaking for Stage II (new rulemaking should be required based upon the results of the re-examination)
- Falls .0275(6)(b)—
    - DENR's 2016 report should not be eliminated—Durham wants the EMC to be educated on the efforts that have been undertaken to date in the watershed
    - require that DENR actually perform some of the work required by this section or that state money be provided to allow UNRBA to perform the work
- DENR needs to take on increased enforcement responsibility with regard to failing on-site WWT systems. Cities and towns do not have authority over these systems.
- Explicit recognition in the Falls Lake rules that the lower lake is meeting water quality standards.
- Provide an exemption in the Falls Lake rules for linear transportation projects similar to the exemption provided in the Jordan rules. Note: pursuant to this exemption, linear transportation projects must still comply with buffer requirements.
- As required by North Carolina Statute, the nutrient management strategies should fairly and proportionally distribute the nutrient load reduction allocations to the respective sources. It is inappropriate that the forest loading allocation has been assigned to other regulated parties.