SUBCHAPTER 02B - SURFACE WATER AND WETLAND STANDARDS

SECTION .0100 - PROCEDURES FOR ASSIGNMENT OF WATER QUALITY STANDARDS

15A NCAC 02B .0101 GENERAL PROCEDURES

(a) The rules contained in Sections .0100, .0200 and .0300 of this Subchapter, which pertain to the series of classifications and water quality standards, shall be known as the "Classifications and Water Quality Standards Applicable to the Surface Waters and Wetlands of North Carolina."

(b) The Environmental Management Commission (hereinafter referred to as the Commission), prior to classifying and assigning standards of water quality to any waters of the State, shall proceed as follows:

(1) The Commission, or its designee, shall determine waters to be studied for the purpose of classification and assignment of water quality standards on the basis of user requests, petitions, or the identification of existing or attainable water uses, as defined by Rule .0202 of this Subchapter, not presently included in the water classification.

(2) In determining the best usage of waters and assigning classifications of such waters, the Commission shall consider the criteria specified in G.S. 143-214.1(d). In determining whether to revise a designated best usage for waters through a revision to the classifications, the Commission shall follow the requirements of 40 CFR 131.10 which is incorporated by reference including subsequent amendments and editions. A copy of the most current version of the requirements is available free of charge at https://www.govinfo.gov.

(3) When revising the classification of waters, the Division shall collect water quality data within the watershed for those substances that require more stringent control than required by the existing classification. However, such sampling may be limited to only those parameters that are of concern. If the revision to classifications involves the removal of a designated use, the Division shall conduct a use attainability analysis as required by the provisions of 40 CFR 131.10.

(4) After studies of the identified waters to obtain the data and information required for determining the revised classification of the waters or segments of water are completed, the Commission, or its designee, shall make a decision on whether to initiate proceedings to modify the classifications and water quality standards of identified waters.

(5) In the case of a petition for classification and assignment of water quality standards according to the requirements of G.S. 150B-20 and 15A NCAC 02I .0500, the Director shall make a preliminary recommendation on the appropriate classifications and water quality standards of the identified waters on the basis of the study findings or information included in the petition supporting the classification and standards changes.

(6) The Commission shall make a decision on whether to grant or deny a petition in accordance with the provisions of G.S. 150B-20 and 15A NCAC 02I .0500 based on the information included in the petition and the recommendation of the Director.

(7) The chairman of the Commission shall give due notice of public hearings regarding water quality classifications or standards in accordance with the requirements of 40 CFR 131.20, 40 CFR 25.5, G.S. 143-214.1 and G.S. 150B-21.2 and shall appoint a hearing officer(s) in consultation with the Director.

(8) After completion of a public hearing regarding water quality classifications or standards, the hearing officer(s) shall submit a report of the proceedings of the hearing to the Commission. The hearing officer(s) shall include in the report a transcript or summary of testimony presented at such public hearing, exhibits, a summary of information from the stream studies conducted by the technical staff of the Commission, and final recommendations as to classification of the designated waters and the standards of water quality and best management practices to be applied to the classifications recommended.

(9) The Commission shall consider the provisions of G.S. 143-214.1, the hearing record(s), and final recommendation(s) of the hearing officer(s) before taking final action with respect to the assignment of classifications and any applicable standards or best management practices applicable as rule(s) to the waters under consideration.

(10) The final action of the Commission with respect to the assignment of classification with its accompanying standards and best management practices shall contain the Commission's conclusions relative to the various factors in G.S. 143-214.1(d) and shall include the class or classes

to which such designated waters in the watershed or watersheds shall be assigned on the basis of best usage in the interest of the public.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. August 1, 1995; February 1, 1993; August 3, 1992; August 1, 1990;
RRC Objection Eff. July 18, 1996 due to lack of statutory authority and ambiguity;
Amended Eff. October 1, 1996;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0102 USE OF CLASSIFICATIONS AND WATER QUALITY STANDARDS

History Note: *Authority G.S. 143-214.1;*
Eff. February 1, 1976;
Repealed Eff. January 1, 1985.

15A NCAC 02B .0103 ANALYTICAL PROCEDURES

(a) Chemical/Physical Procedures. Tests or analytical procedures to determine conformity with standards shall, insofar as practicable and applicable, conform to the guidelines by the U.S. Environmental Protection Agency (EPA) codified as 40 CFR, Part 136, which are hereby incorporated by reference including subsequent amendments and editions. A copy of the most current version of 40 CFR Part 136 is available free of charge at https://www.govinfo.gov. Methods not codified by 40 CFR, Part 136 shall, insofar as practicable and applicable, conform to the American Public Health Association (APHA), American Water Works Association (AWWA), and Water Environment Federation (WEF) publication "Standard Methods for the Examination of Water and Wastewater" (20th edition), which is incorporated by reference, including subsequent amendments and editions. The 20th edition is available for inspection at the Department of Environmental Quality, Division of Water Resources, 512 North Salisbury Street, Raleigh, North Carolina 27604-1170. A print copy of the most current edition of "Standard Methods for the Examination of Water and Wastewater" is available for purchase at a cost of three hundred and ninety-five dollars ($395.00) from the following places: APHA, 800 I Street NW, Washington, DC 20001; AWWA, 6666 W. Quincy Avenue, Denver, CO 80235; or WEF, 601 Wythe Street, Alexandria, VA 22314.

(b) Biological Procedures. Biological tests to determine conformity with standards shall be based on methods published by the EPA as codified as 40 CFR, Part 136, which are incorporated by reference including subsequent amendments and editions. A copy of the most current version of 40 CFR Part 136 is available free of charge at https://www.govinfo.gov.

(c) Wetland Evaluation Procedures. Evaluations of wetlands for the presence of existing uses shall be based on procedures approved by the Director. The Director shall approve wetland evaluation procedures that have been demonstrated to produce verifiable and repeatable results and that have widespread acceptance in the scientific community. Copies of approved methods or guidance may be obtained at no cost by submitting a written request to NCDWR, Wetlands Branch, 1617 Mail Service Center, Raleigh, NC 27699-1617.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. February 1, 1993; October 1, 1989; January 1, 1985; September 9, 1979;
RRC Objection Eff. July 18, 1996 due to lack of statutory authority and ambiguity;
Amended Eff. October 1, 1996;
Readopted Eff. November 1, 2019;
Amended Eff. June 1, 2020.

15A NCAC 02B .0104 CONSIDERATIONS/ASSIGNING/IMPLEMENTING WATER SUPPLY CLASSIFICATIONS

(a) In determining the suitability of waters for use as a source of water supply for drinking, culinary, or food processing purposes after approved treatment, the Commission shall consider the physical, chemical, and bacteriological maximum contaminant levels specified by U.S. Environmental Protection Agency regulations adopted pursuant to the Public Health Service Act, 42 U.S.C. 201 et seq., as amended by the Safe Drinking Water Act, 42 U.S.C. 300(f) et seq. In addition, the Commission shall be guided by the requirements for unfiltered and filtered water supplies and the

maximum contaminant levels specified in 15A NCAC 18C .1100, .1200 and .1500, which are incorporated by reference including subsequent amendments and editions.

(b) All waters used for water supply purposes or intended for future water supply use shall be classified to the most appropriate water supply classification as determined by the Commission in accordance with Sections .0100 and .0200 of this Subchapter. A more protective water supply classification may be applied to existing water supply watersheds after receipt of a resolution from all local governments having land use jurisdiction within the designated water supply watershed requesting a more protective water supply classification. Requests for reclassification of non-water supply segments and watersheds to a water supply classification shall include submittal to the Commission of resolutions from all local governments having land use jurisdiction within the proposed water supply watershed for which a water supply classification is being requested, provided that the Commission may reclassify waters without the consent of local governments if the Commission deems such reclassifications appropriate and necessary in accordance with Rule .0101 of this Section. Local governments requesting water supply reclassifications shall provide a topographic map (such as a 1:24,000 scale USGS map) indicating the normal pool elevation for backwaters of water supply reservoirs, longitude and latitude coordinates of intended water supply intakes, and critical areas and other watershed boundaries as appropriate.

(c) In considering the reclassification of waters for water supply purposes, the Commission shall take into consideration the risks posed by pollutants and the relative proximity, quantity, composition, natural dilution, and diminution of potential sources of pollution.

(d) The water supply watershed protection requirements of Rules .0620 through .0624 of this Subchapter and G.S. 143-214.5 that are applicable to State agencies and units of local government with land use authority in water supply watersheds that were classified as such on or before August 3, 1992, shall be effective no later than:

(1) August 3, 1992 - Activities administered by the State of North Carolina, such as the issuance of permits for landfills, NPDES wastewater discharges, and land application of sludge/residuals, and road construction activities;
(2) July 1, 1993 - Municipalities with a population greater than 5,000;
(3) October 1, 1993 - Municipalities with a population less than 5,000; and
(4) January 1, 1994 - County governments and other units of local government, as applicable.

(e) The water supply watershed protection requirements of Rules .0620 through .0624 of this Subchapter and G.S. 143-214.5 that are applicable to State agencies and units of local government with land use authority in water supply watersheds that were classified as such after August 3, 1992, shall be effective no later than:

(1) for activities administered by the State of North Carolina, such as the issuance of permits for landfills, NPDES wastewater dischargers, and land application of sludge or residuals, and road construction activities, the date the reclassification became effective; and
(2) for local governments, the date the local watershed ordinance was adopted or revised to reflect the reclassification, but no later than 270 days after receiving notice of a reclassification from the Commission.

(f) Discharge from groundwater remediation projects addressing water quality problems shall be allowed if an engineering alternatives analysis submitted for approval in accordance with 15A NCAC 02H .0105(c) demonstrates that no practicable alternative exists to such a discharge. Such discharges shall meet applicable requirements of Rules .0212 through .0218 of this Subchapter.

(g) For previously unknown existing unpermitted wastewater discharges to surface water, an engineering alternatives analysis shall be submitted for approval in accordance with 15A NCAC 02H .0105(c). If the analysis finds that no practicable alternative exists to surface water discharges, such discharges shall meet the "Minimum treatment requirements" as defined in Rule .0403 of this Subchapter.

(h) A more protective classification may be allowed by the Commission although minor occurrences of nonconforming activities are present prior to reclassification. When the Commission allows a more protective classification, expansions of existing wastewater discharges that otherwise would have been prohibited may be allowed if there is no increase in permitted pollutant loading. Other discharges of treated wastewater existing at the time of reclassification may be required to meet more stringent effluent limitations in accordance with Section .0400 of this Subchapter. Consideration of all practicable alternatives to surface water discharge shall be documented.

(i) Animal operations deemed permitted, as defined in 15A NCAC 02T .0103, and permitted under 15A NCAC 02T .1300 are allowed in all classified water supply watersheds.

(j) Local government water supply watershed ordinances for water supply classified watersheds shall be implemented in accordance with Rules .0620 through .0624 of this Subchapter.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*

Eff. February 1, 1976;
Amended Eff. August 1, 1995; August 3, 1992; March 1, 1991; October 1, 1989;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0105 DETERMINATION OF SAFETY OR SUITABILITY: CLASS A-II WATERS

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. January 1, 1985; September 9, 1979;
Repealed Eff. February 1, 1986.

15A NCAC 02B .0106 CONSIDERATIONS/ASSIGNING CLASSIFICATIONS FOR PRIMARY RECREATION

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. October 1, 1989; January 1, 1985; September 9, 1979;
Repealed Eff. November 1, 2019.

15A NCAC 02B .0107 DEFINITION OF REGULATIONS: CLASSIFICATIONS: AND STANDARDS

History Note: *Authority G.S. 143-214.1;*
Eff. February 1, 1976;
Repealed Eff. January 1, 1985.

15A NCAC 02B .0108 CONSIDERATIONS IN ASSIGNING THE SHELLFISHING AREA CLASSIFICATION

History Note: *Authority G.S. 143-214.1;*
Eff. January 1, 1985;
Amended Eff. October 1, 1989;
Repealed Eff. November 1, 2019.

15A NCAC 02B .0109 WATERS AFFECTED BY DREDGE AND FILL ACTIVITIES

History Note: *Authority G.S. 143-214.1;*
Eff. October 1, 1989;
Repealed Eff. October 1, 1996.

15A NCAC 02B .0110 CONSIDERATIONS FOR FEDERALLY-LISTED THREATENED OR ENDANGERED AQUATIC SPECIES

Certain waters provide habitat for federally-listed aquatic animal species that are listed as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service under the provisions of the Endangered Species Act, 16 U.S.C. 1531-1544 and subsequent modifications. Maintenance and recovery of the water quality conditions required to sustain and recover federally-listed threatened and endangered aquatic animal species contributes to the support and maintenance of a balanced and indigenous community of aquatic organisms and thereby protects the biological integrity of the waters. Rules .0225 and .0227 of this Subchapter shall apply to the development of site-specific strategies to maintain or recover the water quality conditions required to sustain and recover federally-listed threatened or endangered aquatic animal species. Nothing in this Rule shall prevent the Division or Commission from taking other actions within its authority to maintain and restore the quality of these waters.

History Note: *Authority G. S. 143-214.1; 143-215.3(a)(1); 143-215.8A;*
Eff. August 1, 2000;
Readopted Eff. November 1, 2019.

SECTION .0200 - CLASSIFICATIONS AND WATER QUALITY STANDARDS APPLICABLE TO SURFACE WATERS AND WETLANDS OF NORTH CAROLINA

15A NCAC 02B .0201 ANTIDEGRADATION POLICY

(a) The requirements for the antidegradation policy and implementation methods in 40 CFR 131.12 are incorporated by reference including subsequent amendments and editions. This material is available for inspection at the Department of Environmental Quality, Division of Water Resources, 512 North Salisbury Street, Raleigh, North Carolina, 27604-1170. A copy of the most current version of 40 CFR 131.12 is available free of charge at https://www.govinfo.gov. These requirements shall be implemented in North Carolina as set forth in this Rule.

(b) The Commission shall protect existing uses, as defined by Rule .0202 of this Section, and the water quality to protect such uses by classifying surface waters and having standards sufficient to protect these uses. In cases where the Commission or its designee determines that an existing use is not included in the classification of waters in accordance with Rule .0101(b)(1) of this Subchapter, a project that affects these waters shall not be permitted unless the existing uses are protected.

(c) The Commission shall consider the present and anticipated usage of waters with quality higher than the standards, including any uses not specified by the assigned classification (such as outstanding national resource waters or waters of exceptional water quality), and shall not allow degradation of the quality of waters with quality higher than the standards below the water quality necessary to maintain existing and anticipated uses of those waters. Waters with quality higher than the standards are defined by Rule .0202 of this Section. The following procedures shall be implemented in order to meet the requirements of this Rule:

(1) Each applicant for an National Pollutant Discharge Elimination System (NPDES) permit or NPDES permit expansion to discharge treated waste shall document non-discharge alternatives considered pursuant to 15A NCAC 02H .0105(c)(2).

(2) Public Notices for NPDES permits shall list parameters that would be water quality limited and state whether the discharge will use the entire available load capacity of the receiving waters and may, as a result, cause more stringent water quality based effluent limitations to be established for dischargers downstream.

(3) The Division may require supplemental documentation from an affected local government to show that a proposed project or parts of the project are necessary for important economic and social development under 40 CFR 131.12.

(4) Local governments shall have the option to work with the Commission and Division to identify and develop management strategies or classifications for waters with unused pollutant loading capacity to accommodate future economic growth.

Waters with quality higher than the standards shall be identified by the Division on a case-by-case basis through the NPDES permitting and waste load allocation processes, pursuant to the provisions of 15A NCAC 02H .0100. Dischargers affected by the requirements of this Paragraph and the public at large shall be notified according to the provisions described herein and all other appropriate provisions pursuant to 15A NCAC 02H .0109. If an applicant objects to the requirements to protect waters with quality higher than the standards and believes degradation is necessary to accommodate important social and economic development, the applicant may contest these requirements according to the provisions of G.S. 143-215.1(e) and 150B-23.

(d) The Commission shall consider the present and anticipated uses of High Quality Waters (HQW), including any uses not specified by the assigned classification (such as outstanding national resource waters or waters of exceptional water quality) and shall not allow degradation of the quality of High Quality Waters below the water quality necessary to maintain existing and anticipated uses of those waters pursuant to Rule .0224 of this Section.

(e) The water quality of waters classified as Outstanding Resource Waters (ORW), as described in Rule .0225 of this Section, shall be maintained such that existing uses, including the outstanding resource values of said Outstanding Resource Waters, are maintained and protected.

(f) Activities regulated under Section 404 of the federal Clean Water Act 33 U.S.C. 1344 that require a water quality certification as described in Section 401 of the federal Clean Water Act 33 U.S.C. 1341 shall be evaluated according to the procedures outlined in 15A NCAC 02H .0500. Activities that receive a water quality certification pursuant to the procedures in 15A NCAC 02H .0500 shall not be considered to remove existing uses. The evaluation of permits issued pursuant to G.S. 143-215.1 that involve the assimilation of wastewater or stormwater by wetlands shall incorporate the criteria found in 15A NCAC 02H .0506(c)(1) through (5) in determining the potential impact of the proposed activity on the existing uses of the wetland as described in Rule .0231(a) of this Section.

History Note: Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);

Eff. February 1, 1976;
Amended Eff. October 1, 1995; August 1, 1995; February 1, 1993; April 1, 1991; August 1, 1990;
RRC Objection Eff. July 18, 1996 due to lack of statutory authority and ambiguity;
Amended Eff. October 1, 1996;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0202 DEFINITIONS

The definition of any word or phrase used in this Section shall be the same as given in G.S. 143, Article 21. The following words and phrases, which are not defined in this article, shall be interpreted as follows:

(1) "Acute toxicity to aquatic life" means lethality or other harmful effects sustained by either resident aquatic populations or indicator species used as test organisms in a controlled toxicity test due to a short-term exposure (relative to the life cycle of the organism) of 96 hours or less to a specific chemical or mixture of chemicals (as in an effluent). Acute toxicity shall be determined using the following procedures:
   (a) for specific chemical constituents or compounds, acceptable levels shall be equivalent to a concentration of one-half or less of the Final Acute Value (FAV) as determined according to "Guidelines for Deriving Numerical Water Quality Criteria for the Protection of Aquatic Life and its Uses" published by the Environmental Protection Agency and referenced in the Federal Register (50 FR 30784, July 29, 1985) which is incorporated by reference including subsequent amendments and editions.
   (b) for specific chemical constituents or compounds for which values described under Sub-Item (a) of this Item cannot be determined, acceptable levels shall be equivalent to a concentration of one-third or less of the lowest available LC50 value.
   (c) for effluents, acceptable levels shall be defined as no statistically measurable lethality (99 percent confidence level using Student's t-test) during a specified exposure period. Concentrations of exposure shall be based on permit requirements and procedures in accordance with 15A NCAC 02H .1110.
   (d) in instances where detailed dose response data indicate that levels of acute toxicity are different from those defined in this Rule, the Director may determine on a case-by-case basis an alternate acceptable level through statistical analyses of the dose response in accordance with 15A NCAC 02H .1110.

(2) "Acute to Chronic Ratio" or "ACR" means the ratio of acute toxicity expressed as an LC50 for a specific toxicant or an effluent to the chronic value for the same toxicant or effluent.

(3) "Agricultural uses" means the use of waters for stock watering, irrigation, and other farm purposes.

(4) "Applicator" means any person, firm, corporation, wholesaler, retailer, or distributor; any local, State, or federal governmental agency; or any other person who applies fertilizer to the land of a consumer or client or to land that they own, lease, or otherwise hold rights.

(5) "Approved treatment," as applied to water supplies, means treatment approved by the Division in accordance with 15A NCAC 18C .0301 through .0309, as authorized by G.S. 130A-315 and G.S. 130A-317.

(6) "Attainable water uses" means uses that can be achieved by the imposition of effluent limits and cost effective and reasonable best management practices (BMP) for nonpoint source control.

(7) "Average" means the arithmetical average of the analytical results of all representative samples taken under prevailing environmental conditions during a specified period (for example: daily, weekly, or monthly).

(8) "Best Management Practice" or "BMP" means a structural or nonstructural management-based practice used singularly or in combination to reduce point source or nonpoint source inputs to receiving waters in order to achieve water quality protection goals.

(9) "Best usage" or "Best use" of waters, as specified for each class, means those uses as determined by the Environmental Management Commission in accordance with the provisions of G.S. 143-214.1.

(10) "Bioaccumulation factor" or "BAF" means a unitless value that describes the degree to which substances are taken up or accumulated into tissues of aquatic organisms from water directly and from food or other ingested materials containing the accumulated substances, and is measured as a ratio of a substance's concentration in tissue versus its concentration in water in situations where exposure to the substance occurs from both water and the food chain.

(11) "Bioconcentration factor" or "BCF" means a unitless value that describes the degree to which substances are absorbed or concentrated into tissues of aquatic organisms from water directly and is measured as a ratio of substance's concentration in tissue versus its concentration in water in situations where exposure to the substance occurs from water only.

(12) "Biological integrity" means the ability of an aquatic ecosystem to support and maintain a balanced and indigenous community of organisms having species composition, diversity, population densities, and functional organization similar to that of reference conditions.

(13) "Buffer" means a natural or vegetated area through which stormwater runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants.

(14) "Chronic toxicity to aquatic life" means any harmful effect sustained by either resident aquatic populations or indicator species used as test organisms in a controlled toxicity test due to long-term exposure (relative to the life cycle of the organism) or exposure during a substantial portion of the duration of a sensitive period of the life cycle to a specific chemical substance or mixture of chemicals (as in an effluent). In absence of extended periods of exposure, early life stage or reproductive toxicity tests may be used to define chronic impacts.

(15) "Chronic value for aquatic life" means the geometric mean of two concentrations identified in a controlled toxicity test as the No Observable Effect Concentration (NOEC) and the Lowest Observable Effect Concentration (LOEC).

(16) "Commercial applicator" means any person, firm, corporation, wholesaler, retailer, distributor, or any other person who for hire or compensation applies fertilizer to the land of a consumer or client.

(17) "Concentration" means the mass of a substance per volume of water and, for the purposes of this Section, shall be expressed as milligrams per liter (mg/l), micrograms per liter (ug/l), or nanograms per liter (ng/l).

(18) "Contiguous" means those wetlands landward of the mean high water line or normal water level and within 575 feet of classified surface waters that appear as solid blue lines on the most recently published versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps, which are available at no cost at http://www.usgs.gov/pubprod/.

(19) "Critical area" means the area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than risk associated with pollution from the remaining portions of the watershed. The boundary of a critical area is defined as:

(a) extending either 1/2 mile in a straight line fashion upstream from and draining to the normal pool elevation of the reservoir in which the intake is located or to the ridge line of the watershed, whichever is nearest the normal pool elevation of the reservoir;

(b) extending either 1/2 mile in a straight line fashion upstream from and draining to the intake (or other appropriate downstream location associated with the water supply) located directly in the stream or river (run-of-the-river) or to the ridge line of the watershed, whichever is nearest the intake; or

(c) extending a different distance from the reservoir or intake as adopted by the Commission during the reclassification process pursuant to Rule .0104 of this Subchapter.

Since WS-I watersheds are essentially undeveloped, establishment of a critical area is not required.

(20) "Cropland" means agricultural land that is not covered by a certified animal waste management plan and is used for growing corn, grains, oilseed crops, cotton, forages, tobacco, beans, or other vegetables or fruits.

(21) "Designated Nonpoint Source Agency" means an agency specified by the Governor in the North Carolina Nonpoint Source Management Program, as approved by the Environmental Protection Agency pursuant to the 1987 amendments to the federal Clean Water Act 33 U.S.C. 1329 that established Section 319 Nonpoint source management programs.

(22) "Director" means the Director of the Division.

(23) "Discharge" means the addition of any man-induced waste effluent either directly or indirectly to State surface waters.

(24) "Division" means the Division of Water Resources or its successors.

(25) "Domestic wastewater discharge" means the discharge of sewage, non-process industrial wastewater, other domestic wastewater, or any combination of these items. Domestic wastewater includes, but is not limited to, liquid waste generated by domestic water using fixtures and appliances from any residence, place of business, or place of public assembly, even if it contains no

sewage. Examples of domestic wastewater include once-through non-contact cooling water, seafood packing facility discharges, and wastewater from restaurants.

(26) "Effluent channel" means a discernable confined and discrete conveyance that is used for transporting treated wastewater to a receiving stream or other body of water, as provided in Rule .0228 of this Section.

(27) "Existing uses" mean uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

(28) "Fertilizer" means any substance containing nitrogen or phosphorus that is used primarily as plant food.

(29) "Fishing" means the taking of fish by recreational or commercial methods, the consumption of fish or shellfish, the propagation of fish, or the propagation of other aquatic life as is necessary to protect the biological integrity of the environment for fish.

(30) "Forest vegetation" means the plants of an area that grow in disturbed or undisturbed conditions in wooded plant communities in any combination of trees, saplings, shrubs, vines, and herbaceous plants, including mature and successional forests and cutover stands.

(31) "Freshwater" means all waters that under natural conditions have a chloride ion content of 500 mg/l or less.

(32) "Industrial discharge" means the discharge of industrial process treated wastewater or wastewater other than sewage. Stormwater shall not be considered to be an industrial wastewater unless it is contaminated with industrial wastewater. Industrial discharge includes:

(a) wastewater resulting from any process of industry or manufacture or from the development of any natural resource;

(b) wastewater resulting from processes of trade or business, including wastewater from laundromats and car washes, but not wastewater from restaurants; and

(c) wastewater discharged from a municipal wastewater treatment plant requiring a pretreatment program.

(33) "Land-disturbing activity" means any use of the land that results in a change in the natural cover or topography that may cause or contribute to sedimentation.

(34) "LC50" means that concentration of a toxic substance that is lethal or immobilizing to 50 percent of the sensitive aquatic toxicity testing species tested during a specified exposure period, as required by NPDES permit, under aquatic conditions characteristic of the receiving waters. Sensitive species for aquatic toxicity testing is defined by Subparagraph (50) of this Rule.

(35) "Local government" means a city or county in singular or plural as defined in G.S. 160A-1(2) and G.S. 158A-10.

(36) "Lower piedmont and coastal plain waters" means those waters of the Catawba River Basin below Lookout Shoals Dam; the Yadkin River Basin below the junction of the Forsyth, Yadkin, and Davie County lines; and all of the waters of Cape Fear, Lumber, Roanoke, Neuse, Tar-Pamlico, Chowan, Pasquotank, and White Oak River Basins; except tidal salt waters which are assigned S classifications.

(37) "MF" means the membrane filter procedure for bacteriological analysis.

(38) "Mixing zone" means a region of the receiving water in the vicinity of a discharge within which dispersion and dilution of constituents in the discharge occurs. Zones shall be subject to conditions established in accordance with Rule .0204(b) of this Section.

(39) "Mountain and upper piedmont waters" means all of the waters of the Hiwassee; Little Tennessee, including the Savannah River drainage area; French Broad; Broad; New; and Watauga River Basins; and those portions of the Catawba River Basin above Lookout Shoals Dam and the Yadkin River Basin above the junction of the Forsyth, Yadkin, and Davie County lines.

(40) "Nonpoint source pollution" means pollution that enters waters mainly as a result of precipitation and subsequent runoff from lands that have been disturbed by man's activities and includes all sources of water pollution that are not required to have a permit in accordance with G.S. 143-215.1(c).

(41) "Non-process discharge" means industrial effluent not directly resulting from the manufacturing process. An example is non-contact cooling water from a compressor.

(42) "Offensive condition" means any condition or conditions resulting from the presence of sewage, industrial wastes, or other wastes within the waters of the State or along the shorelines thereof that shall either directly or indirectly cause foul or noxious odors, unsightly conditions, or breeding of

abnormally large quantities of mosquitoes or other insect pests; damage private or public water supplies or other structures; result in the development of gases which destroy or damage surrounding property, herbage or grasses; cause the impairment of taste such as from fish flesh tainting; or affect the health of any person residing or working in the area.

(43) "Primary contact recreation" means swimming, diving, skiing, and similar uses involving human body contact with water where such activities take place in an organized or on a frequent basis.

(44) "Primary nursery area" or "PNA" means tidal saltwaters that provide essential habitat for the early development of commercially important fish and shellfish and are so designated by the Marine Fisheries Commission.

(45) "Protected area" means the area adjoining and upstream of the critical area in a WS-IV water supply in which protection measures are required. The boundary of a protected area is defined as:

(a) extending either five miles in an as-the-river-runs manner upstream from and draining to the normal pool elevation of the reservoir in which the intake is located or to the ridge line of the watershed, whichever is nearest the normal pool elevation of the reservoir;

(b) extending either 10 miles in an as-the-river-runs manner upstream from and draining to the intake located directly in the stream or river run-of-the-river or to the ridge line of the watershed, whichever is nearest the intake. In some cases the protected area shall encompass the entire watershed; or

(c) extending a different distance from the reservoir or intake as adopted by the Commission during the reclassification process pursuant to Rule .0104 of this Subchapter.

(46) "Residential development" means buildings for residence such as attached and detached single family dwellings, apartment complexes, condominiums, townhouses, cottages, and their associated outbuildings such as garages, storage buildings, and gazebos.

(47) "Residuals" has the same meaning as in 15A NCAC 02T .0103.

(48) "Riparian area" means an area that is adjacent to a body of water.

(49) "Secondary contact recreation" means wading, boating, other uses not involving human body contact with water, and activities involving human body contact with water where such activities take place on an infrequent, unorganized, or incidental basis.

(50) "Sensitive species for aquatic toxicity testing" means any species utilized in procedures accepted by the Commission or its designee in accordance with Rule .0103 of this Subchapter, and the following genera:

(a) Daphnia;
(b) Ceriodaphnia;
(c) Salmo;
(d) Pimephales;
(e) Mysidopsis;
(f) Champia;
(g) Cyprinodon;
(h) Arbacia;
(i) Penaeus;
(j) Menidia;
(k) Notropis;
(l) Salvelinus;
(m) Oncorhynchus;
(n) Selenastrum;
(o) Chironomus;
(p) Hyalella;
(q) Lumbriculus.

(51) "Shellfish culture" means the use of waters for the propagation, storage, and gathering of oysters, clams, and other shellfish for market purposes.

(52) "Swamp waters" means those waters that are classified as such by the Environmental Management Commission, pursuant to Rule .0101 of this Subchapter, and that have natural characteristics due to topography, such as low velocity, dissolved oxygen, or pH, that are different from streams draining steeper topography.

(53) "Tidal salt waters" means all waters that have a natural chloride ion content in excess of 500 parts per million.

(54) "Toxic substance" or "Toxicant" means any substance or combination of substances (including disease-causing agents) that, after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, has the potential to cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions or suppression in reproduction or growth), or physical deformities in such organisms or their offspring.

(55) "Trout waters" means those waters that are classified as such by the Environmental Management Commission, pursuant to Rule .0101 of this Subchapter, and have conditions that sustain and allow for natural trout propagation and survival and for year-round maintenance of stocked trout.

(56) "Water dependent structures" means those structures that require access or proximity to or siting within surface waters to fulfill its purpose, such as boat ramps, boat houses, docks, and bulkheads. Ancillary facilities such as restaurants, outlets for boat supplies, parking lots, and commercial boat storage areas are not water dependent structures.

(57) "Water quality based effluent limits (or limitations) and management practices" mean limits and practices developed by the Division to protect water quality standards and best uses of surface waters, consistent with the requirements of G.S. 143-214.1 and the federal Water Pollution Control Act, as amended.

(58) "Waters with quality higher than the standards" means waters that the Director determines (pursuant to Rule .0206 of this Section) have the capacity to receive additional pollutant loading and continue to meet applicable water quality standards.

(59) "Watershed" means a natural area of drainage, including all tributaries contributing to the supply of at least one major waterway within the State, the specific limits of each separate watershed to be designated by the Commission as defined by G.S. 143-213(21).

(60) "WER" or "Water effect ratio" expresses the difference between the measures of the toxicity of a substance in laboratory waters and the toxicity in site water.

(61) "Wetlands" are "waters" as defined by G.S. 143-212(6) that are inundated or saturated by an accumulation of surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands do not include prior converted cropland as defined in the National Food Security Act Manual, Fifth Edition, which is hereby incorporated by reference, not including subsequent amendments and editions, and is available free of charge at https://directives.sc.egov.usda.gov/RollupViewer.aspx?hid=29340.

History Note: *Authority G.S. 143-213; 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. August 1, 1995; February 1, 1993; August 3, 1992; August 1, 1990;
RRC Objection Eff. July 18, 1996 due to lack of authority and ambiguity;
Amended Eff. August 1, 1998; October 1, 1996;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0203 PROTECTION OF WATERS DOWNSTREAM OF RECEIVING WATERS

Water quality based effluent limitations and management practices for direct or indirect discharges of waste or for other sources of water pollution shall be developed by the Division such that the water quality standards and best usage of receiving waters and all downstream waters will not be impaired.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. October 1, 1989; January 1, 1985; September 9, 1979;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0204 LOCATION OF SAMPLING SITES AND MIXING ZONES

(a) In conducting tests or making analytical determinations of classified waters to determine whether they conform with the water quality standards established in accordance with this Subchapter, samples shall be collected outside of mixing zones. However, if required by NPDES permit, samples shall be collected within the mixing zone in order to ensure compliance with in-zone water quality requirements as outlined in Paragraph (b) of this Rule.

(b) A mixing zone may be established in the area of a discharge in order to provide opportunity for the mixture of the wastewater with the receiving waters. Water quality standards shall not apply within regions designated as mixing zones, except that such zones shall be subject to the conditions established in accordance with this Rule. The need for and limits of such mixing zones shall be determined by the Division on a case-by-case basis after consideration of the magnitude and character of the waste discharge and the size and character of the receiving waters. Mixing zones shall be designated such that discharges will not:

(1) result in acute toxicity to aquatic life, defined in Rule .0202(1) of this Section, or prevent free passage of aquatic organisms around the mixing zone;
(2) result in offensive conditions;
(3) produce undesirable aquatic life or result in a dominance of nuisance species outside of the assigned mixing zone; or
(4) endanger the public health or welfare.

In addition, a mixing zone shall not be designated for point source discharges of fecal coliform organisms in waters classified "WS-II," "WS-III," "B," or "SA," as defined in Rule .0301 of this Subchapter. Mixing zones shall not be designated for point source discharges of enterococci in waters classified "SB" or "SA," as defined in Rule .0301 of this Subchapter. For the discharge of heated wastewater, compliance with federal rules and regulations pursuant to Section 316(a) of the Clean Water Act, as amended, shall constitute compliance with Paragraph (b) of this Rule.

History Note: *Authority G.S. 143-214.1;*
Eff. February 1, 1976;
Amended Eff. May 1, 2007; October 1, 1989; February 1, 1986; September 9, 1979;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0205 NATURAL CHARACTERISTICS OUTSIDE STANDARDS LIMITS

Natural waters may on occasion, or temporarily, have characteristics outside of the normal range established by the water quality standards in this Subchapter. The adopted water quality standards relate to the condition of waters as affected by the discharge of sewage, industrial wastes, or other wastes including those from nonpoint sources and other sources of water pollution. Water quality standards shall not be considered violated if values outside the normal range are caused by natural conditions. If wastes are discharged to such waters, the discharger shall not be deemed a contributor to substandard conditions if maximum treatment in compliance with permit requirements is maintained and, therefore, meeting the established limits is beyond the discharger's control.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. October 1, 1989; January 1, 1985;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0206 FLOW DESIGN CRITERIA FOR EFFLUENT LIMITATIONS

(a) Water quality based effluent limitations shall be developed to allow appropriate frequency and duration of deviations from water quality standards so that the designated uses of receiving waters are protected. There are water quality standards for a number of categories of pollutants and to protect a range of water uses. For this reason, the appropriate frequency and duration of deviations from water quality standards shall not be the same for all pollutants. A flow design criterion shall be used in the development of water quality based effluent limitations as a simplified means of estimating the acceptable frequency and duration of deviations. Effluent limitations shall be developed using the following flow design criteria:

(1) All standards except toxic substances and aesthetics shall be protected using the minimum average flow for a period of seven consecutive days that has an average recurrence of once in ten years (7Q10 flow). Other governing flow strategies, such as varying discharges with the receiving waters ability to assimilate wastes, may be designated by the Commission or its designee on a case-by-case basis if the discharger or permit applicant provides evidence that establishes that the alternative flow strategies will give equal or better protection for the water quality standards. "Better protection for the water quality standards" means that deviations from the standard would be expected less frequently than provided by using the 7Q10 flow.
(2) Toxic substance standards to protect aquatic life from chronic toxicity shall be protected using the 7Q10 flow.

(3) Toxic substance standards to protect aquatic life from acute toxicity shall be protected using the 1Q10 flow.

(4) Toxic substance standards to protect human health shall be the following:

(A) The 7Q10 flow for standards to protect human health through the consumption of water, fish, and shellfish from noncarcinogens; and

(B) The mean annual flow to protect human health from carcinogens through the consumption of water, fish, and shellfish unless site specific fish contamination concerns necessitate the use of an alternative design flow;

(5) Aesthetic quality shall be protected using the minimum average flow for a period of 30 consecutive days that has an average recurrence of once in two years (30Q2 flow).

More complex modeling techniques may also be used to set effluent limitations directly based on frequency and duration criteria published by the U.S. Environmental Protection Agency, available free of charge at http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm and incorporated by reference, including subsequent amendments and editions, and the Commission or its designee has determined, on a case-by-case basis, that the techniques will protect the designated uses of receiving waters.

(b) If the stream flow is regulated, a minimum daily low flow may be used as a substitute for the 7Q10 flow, except in cases where there are acute toxicity concerns for aquatic life. In the cases where there are acute toxicity concerns, an alternative low flow, such as the instantaneous minimum release, shall be approved if the Director determines, on a case-by-case basis, that the designated uses of receiving waters are protected.

(c) Flow design criteria shall be used to develop water quality based effluent limitations and in the design of wastewater treatment facilities. Deviations from a specific water quality standard resulting from discharges that are demonstrated to be in compliance with water quality based effluent limitations for that standard shall not be a violation pursuant to G.S. 143-215.6 when the actual stream flow is less than the design flow.

(d) If the 7Q10 flow of the receiving stream is estimated to be zero, water quality based effluent limitations shall be assigned as follows:

(1) If the 30Q2 flow is estimated to be greater than zero, effluent limitations for new or expanded (additional) discharges of oxygen consuming waste shall be set at BOD_5= 5 mg/l, NH_3-N = 2 mg/l and DO = 6 mg/l, unless it is determined by the Director through modeling or other analysis that these limitations will not protect water quality standards. Requirements for existing discharges shall be determined on a case-by-case basis by the Director. More stringent limits shall be applied if violations of water quality standards are predicted to occur for a new or expanded discharge with the limits set pursuant to this Rule or if existing limits are determined to be inadequate to protect water quality standards.

(2) If the 30Q2 and 7Q10 flows are both estimated to be zero, no new or expanded discharge of oxygen consuming waste shall be allowed. Requirements for existing discharges to streams where the 30Q2 and 7Q10 flows are both estimated to be zero shall be determined on a case-by-case basis.

(3) Other water quality standards shall be protected by requiring the discharge to meet the standards set forth in this Subchapter, unless the Director determines that alternative limitations protect the classified water uses.

(e) Receiving water flow statistics shall be estimated through consultation with the U.S. Geological Survey. Estimates for any given location may be based on actual flow data, modeling analyses, or other methods determined to be appropriate by the Commission or its designee.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. January 1, 2015; February 1, 1993; October 1, 1989; August 1, 1985; January 1, 1985;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0207 MINIMUM ACCEPTABLE DEGREE OF TREATMENT

History Note: *Authority G.S. 143-214.1;*
Eff. February 1, 1976;
Repealed Eff. September 9, 1979.

15A NCAC 02B .0208 STANDARDS FOR TOXIC SUBSTANCES AND TEMPERATURE

(a) Toxic Substances: the concentration of toxic substances, either alone or in combination with other wastes, in surface waters shall not render waters injurious to aquatic life or wildlife, recreational activities, or public health, nor shall it impair the waters for any designated uses. Specific standards for toxic substances to protect freshwater and tidal saltwater uses are listed in Rules .0211 and .0220 of this Section, respectively. The narrative standard for toxic substances and numerical standards applicable to all waters shall be interpreted as follows:

(1) The concentration of toxic substances shall not result in chronic toxicity to aquatic life. Any levels in excess of the chronic value for aquatic life shall be considered to result in chronic toxicity. In the absence of direct measurements of chronic toxicity, the concentration of toxic substances shall not exceed the concentration specified by the fraction of the lowest LC50 value that predicts a no effect chronic level as determined by the use of an acceptable Acute to Chronic Ratio (ACR) in accordance with U.S. Environmental Protection Agency (EPA) "Guidelines for Deriving Numerical Water Quality Criteria for the Protection of Aquatic Life and its Uses." In the absence of an ACR, that toxic substance shall not exceed one-one hundredth (0.01) of the lowest LC50 or, if it is demonstrated that a toxic substance has a half-life of less than 96 hours, the maximum concentration shall not exceed one-twentieth (0.05) of the lowest LC50.

(2) The concentration of toxic substances shall not exceed the level necessary to protect human health through exposure routes of fish tissue consumption, water consumption, recreation, or other route identified for the water body. Fish tissue consumption shall include the consumption of shellfish. These concentrations of toxic substances shall be determined as follows:

(A) For non-carcinogens, these concentrations shall be determined using a Reference Dose (RfD) as published by the EPA pursuant to Section 304(a) of the Federal Water Pollution Control Act as amended, a RfD issued by the EPA as listed in the Integrated Risk Information System (IRIS) file, or a RfD approved by the Director after consultation with the State Health director. Water quality standards or criteria used to calculate water quality based effluent limitations to protect human health through the different exposure routes shall be determined as follows:

(i) Fish tissue consumption:

WQS = (RfD x RSC) x Body Weight / (FCR x BCF)

where:

WQS = water quality standard or criteria;
RfD = reference dose;
RSC = Relative Source Contribution;
FCR = fish consumption rate (based upon 17.5 gm/person-day);
BCF = bioconcentration factor or bioaccumulation factor (BAF), as appropriate.

Pursuant to Section 304(a) of the Federal Water Pollution Control Act as amended, BCF or BAF values, literature values, or site specific bioconcentration data shall be based on EPA publications; FCR values shall be average consumption rates for a 70 Kg adult for the lifetime of the population; alternative FCR values may be used when it is considered necessary to protect localized populations that may be consuming fish at a higher rate; RSC values, when made available through EPA publications pursuant to Section 304(a) of the Federal Clean Water Pollution Control Act to account for non-water sources of exposure may be either a percentage (multiplied) or amount subtracted, depending on whether multiple criteria are relevant to the chemical;

(ii) Water consumption (including a correction for fish consumption):

WQS = (RfD x RSC) x Body Weight / [WCR+(FCRxBCF)]

where:

WQS = water quality standard or criteria;
RfD = reference dose;
RSC = Relative Source Contribution;
FCR = fish consumption rate (based upon 17.5 gm/person-day);
BCF = bioconcentration factor or bioaccumulation factor (BAF), as appropriate;
WCR = water consumption rate (assumed to be two liters per day for adults).

To protect sensitive groups, exposure shall be based on a 10 Kg child drinking one liter of water per day. Standards may also be based on drinking water standards based on the requirements of the Federal Safe Drinking Water Act, 42 U.S.C. 300(f)(g)-1. For non-carcinogens, specific numerical water quality standards have not been included in this Rule because water quality standards to protect aquatic life for all toxic substances for which standards have been considered are more stringent than numerical standards to protect human health from non-carcinogens through consumption of fish. Standards to protect human health from non-carcinogens through water consumption are listed under the water supply classification standards in Rule .0211 of this Section. The equations listed in this Subparagraph shall be used to develop water quality based effluent limitations on a case-by-case basis for toxic substances that are not presently included in the water quality standards. Alternative FCR values may be used when it is necessary to protect localized populations that may be consuming fish at a higher rate;

(B) For carcinogens, the concentrations of toxic substances shall not result in unacceptable health risks and shall be based on a Carcinogenic Potency Factor (CPF). An unacceptable health risk for cancer shall be more than one case of cancer per one million people exposed (10^{-6} risk level). The CPF is a measure of the cancer-causing potency of a substance estimated by the upper 95 percent confidence limit of the slope of a straight line calculated by the Linearized Multistage Model or other appropriate model according to U.S. Environmental Protection Agency Guidelines, FR 51 (185): 33992-34003; and FR 45 (231 Part V): 79318-79379. Water quality standards or criteria for water quality based effluent limitations shall be calculated using the procedures given in this Part and in Part (A) of this Subparagraph. Standards to protect human health from carcinogens through water consumption are listed under the water supply classification standards in Rules .0212, .0214, .0215, .0216, and .0218 of this Section. Standards to protect human health from carcinogens through the consumption of fish (and shellfish) only shall be applicable to all waters as follows:

(i) Aldrin: 0.05 ng/l;
(ii) Arsenic: 10 ug/l;
(iii) Benzene: 51 ug/l;
(iv) Carbon tetrachloride: 1.6 ug/l;
(v) Chlordane: 0.8 ng/l;
(vi) DDT: 0.2 ng/l;
(vii) Dieldrin: 0.05 ng/l;
(viii) Dioxin: 0.000005 ng/l;
(ix) Heptachlor: 0.08 ng/l;
(x) Hexachlorobutadiene: 18 ug/l;
(xi) Polychlorinated biphenyls (total of all identified PCBs and congeners): 0.064 ng/l;
(xii) Polynuclear aromatic hydrocarbons (total of all PAHs): 31.1 ng/l;
(xiii) Tetrachloroethane (1,1,2,2): 4 ug/l;
(xiv) Tetrachloroethylene: 3.3 ug/L;
(xvi) Trichloroethylene: 30 ug/l;
(xvii) Vinyl chloride: 2.4 ug/l.

The values listed in Subparts (i) through (xvii) of this Part may be adjusted by the Commission or its designee on a case-by-case basis to account for site-specific or chemical-specific information pertaining to the assumed BCF, FCR, or CPF values or other data.

(b) Temperature: the Commission may establish a water quality standard for temperature for specific water bodies other than the standards specified in Rules .0211 and .0220 of this Section upon a case-by-case determination that thermal discharges to these waters that serve or may serve as a source or receptor of industrial cooling water provide for the maintenance of the designated best use throughout a portion of the water body. Such revisions of the temperature standard shall be consistent with the provisions of Section 316(a) of the Federal Water Pollution Control Act, as amended. A list of such revisions shall be maintained and made available to the public by the Division.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;

Amended Eff. May 1, 2007; April 1, 2003; February 1, 1993; October 1, 1989; January 1, 1985; September 9, 1979;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0209 VARIANCES FROM APPLICABLE STANDARDS
15A NCAC 02B .0210 BEST USE CRITERIA

History Note: *Authority G.S. 143-214.1;*
Eff. February 1, 1976;
Amended Eff. September 9, 1979;
Repealed Eff. January 1, 1985.

15A NCAC 02B .0211 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS C WATERS

In addition to the standards set forth in Rule .0208 of this Section, the following water quality standards shall apply to all Class C waters. Additional standards applicable to other freshwater classifications are specified in Rules .0212, .0214, .0215, .0216, .0218, .0219, .0223, .0224, .0225, and .0231 of this Section.

(1) The best usage of waters shall be aquatic life propagation, survival, and maintenance of biological integrity (including fishing and fish); wildlife; secondary contact recreation as defined in Rule .0202 of this Section; agriculture; and any other usage except for primary contact recreation or as a source of water supply for drinking, culinary, and food processing purposes. All freshwaters shall be classified to protect these uses at a minimum.

(2) The conditions of waters shall be such that waters are suitable for all best uses specified in this Rule. Sources of water pollution that preclude any of these uses on either a short-term or long-term basis shall be deemed to violate a water quality standard;

(3) Chlorine, total residual: 17 ug/l;

(4) Chlorophyll a (corrected): not greater than 40 ug/l for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation not designated as trout waters, and not greater than 15 ug/l for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation designated as trout waters (not applicable to lakes or reservoirs less than 10 acres in surface area). The Commission or its designee may prohibit or limit any discharge of waste into surface waters if the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired;

(5) Cyanide, total: 5.0 ug/l;

(6) Dissolved oxygen: not less than 6.0 mg/l for trout waters; for non-trout waters, not less than a daily average of 5.0 mg/l with an instantaneous value of not less than 4.0 mg/l; swamp waters, lake coves, or backwaters, and lake bottom waters may have lower values if caused by natural conditions;

(7) Fecal coliform: shall not exceed a geometric mean of 200/100ml (MF count) based upon at least five samples taken over a 30-day period, nor exceed 400/100ml in more than 20 percent of the samples examined during such period. Violations of this Item are expected during rainfall events and may be caused by uncontrollable nonpoint source pollution. All coliform concentrations shall be analyzed using the membrane filter technique. If high turbidity or other conditions would cause the membrane filter technique to produce inaccurate data, the most probable number (MPN) 5-tube multiple dilution method shall be used.

(8) Floating solids, settleable solids, or sludge deposits: only such amounts attributable to sewage, industrial wastes, or other wastes as shall not make the water unsafe or unsuitable for aquatic life and wildlife or impair the waters for any designated uses;

(9) Fluoride: 1.8 mg/l;

(10) Gases, total dissolved: not greater than 110 percent of saturation;

(11) Metals:

(a) With the exception of mercury and selenium, acute and chronic freshwater aquatic life standards for metals shall be based upon measurement of the dissolved fraction of the metal. Mercury and selenium water quality standards shall be based upon measurement of the total recoverable metal;

(b) With the exception of mercury and selenium, aquatic life standards for metals listed in this Sub-Item shall apply as a function of the pollutant's water effect ratio (WER). The WER

shall be assigned a value equal to one unless any person demonstrates to the Division's satisfaction in a permit proceeding that another value is developed in accordance with the "Water Quality Standards Handbook: Second Edition" published by the US Environmental Protection Agency (EPA-823-B-12-002), which is hereby incorporated by reference, including subsequent amendments and editions, and can be obtained free of charge at http://water.epa.gov/scitech/swguidance/standards/handbook/. Alternative site-specific standards may also be developed when any person submits values that demonstrate to the Commission that they were derived in accordance with the "Water Quality Standards Handbook: Second Edition, Recalculation Procedure or the Resident Species Procedure", which is hereby incorporated by reference including subsequent amendments and can be obtained free of charge at http://water.epa.gov/scitech/swguidance/standards/handbook/.

(c) Freshwater metals standards that are not hardness-dependent shall be as follows:

(i) Arsenic, dissolved, acute: WER· 340 ug/l;
(ii) Arsenic, dissolved, chronic: WER· 150 ug/l;
(iii) Beryllium, dissolved, acute: WER· 65 ug/l;
(iv) Beryllium, dissolved, chronic: WER· 6.5 ug/l;
(v) Chromium VI, dissolved, acute: WER· 16 ug/l;
(vi) Chromium VI, dissolved, chronic: WER· 11 ug/l;
(vii) Mercury, total recoverable, chronic: 0.012 ug/l;
(viii) Selenium, total recoverable, chronic: 5 ug/l;
(ix) Silver, dissolved, chronic: WER· 0.06 ug/l;

(d) Hardness-dependent freshwater metals standards shall be derived using the equations specified in Table A: Dissolved Freshwater Standards for Hardness-Dependent Metals. If the actual instream hardness (expressed as $CaCO_3$ or Ca+Mg) is less than 400 mg/l, standards shall be calculated based upon the actual instream hardness. If the instream hardness is greater than 400 mg/l, the maximum applicable hardness shall be 400 mg/l.

Table A: Dissolved Freshwater Standards for Hardness-Dependent Metals

Numeric standards calculated at 25 mg/l hardness are listed below for illustrative purposes. The Water Effects Ratio (WER) is equal to one unless determined otherwise under Sub-Item (11)(b) of this Rule.

Metal	Equations for Hardness-Dependent Freshwater Metals (ug/l)	Standard at 25 mg/l hardness (ug/l)
Cadmium, Acute	WER· [{1.136672-[ln hardness](0.041838)} · e^{0.9151 [ln hardness]-3.1485}]	0.82
Cadmium, Acute, Trout waters	WER· [{1.136672-[ln hardness](0.041838)} · e^{0.9151[ln hardness]-3.6236}]	0.51
Cadmium, Chronic	WER· [{1.101672-[ln hardness](0.041838)} · e^{0.7998[ln hardness]-4.4451}]	0.15
Chromium III, Acute	WER· [0.316 · e^{0.8190[ln hardness]+3.7256}]	180
Chromium III, Chronic	WER· [0.860 · e^{0.8190[ln hardness]+0.6848}]	24
Copper, Acute	WER· [0.960 · e^{0.9422[ln hardness]-1.700}] Or, Aquatic Life Ambient Freshwater Quality Criteria-Copper 2007 Revision (EPA-822-R-07-001)	3.6 NA
Copper, Chronic	WER· [0.960 · e^{0.8545[ln hardness]-1.702}] Or,	2.7

	Aquatic Life Ambient Freshwater Quality Criteria-Copper 2007 Revision (EPA-822-R-07-001)	NA
Lead, Acute	WER· [{1.46203-[ln hardness](0.145712)} · e^{1.273[ln hardness]-1.460}]	14
Lead, Chronic	WER· [{1.46203-[ln hardness](0.145712)} · e^{1.273[ln hardness]-4.705}]	0.54
Nickel, Acute	WER· [0.998 · e^{0.8460[ln hardness]+2.255}]	140
Nickel, Chronic	WER· [0.997 · e^{0.8460[ln hardness]+0.0584}]	16
Silver, Acute	WER· [0.85 · e^{1.72[ln hardness]-6.59}]	0.30
Zinc, Acute	WER· [0.978 · e^{0.8473[ln hardness]+0.884}]	36
Zinc, Chronic	WER· [0.986 · e^{0.8473[ln hardness]+0.884}]	36

(e) Compliance with acute instream metals standards shall only be evaluated using an average of two or more samples collected within one hour. Compliance with chronic instream metals standards shall only be evaluated using an average of a minimum of four samples taken on consecutive days or as a 96-hour average;

(12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. For the purpose of implementing this Rule, oils, deleterious substances, or colored or other wastes shall include substances that cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines, as described in 40 CFR 110.3(a)-(b), incorporated by reference including subsequent amendments and editions. This material is available, free of charge, at: http://www.ecfr.gov/;

(13) Pesticides:
- (a) Aldrin: 0.002 ug/l;
- (b) Chlordane: 0.004 ug/l;
- (c) DDT: 0.001 ug/l;
- (d) Demeton: 0.1 ug/l;
- (e) Dieldrin: 0.002 ug/l;
- (f) Endosulfan: 0.05 ug/l;
- (g) Endrin: 0.002 ug/l;
- (h) Guthion: 0.01 ug/l;
- (i) Heptachlor: 0.004 ug/l;
- (j) Lindane: 0.01 ug/l;
- (k) Methoxychlor: 0.03 ug/l;
- (l) Mirex: 0.001 ug/l;
- (m) Parathion: 0.013 ug/l; and
- (n) Toxaphene: 0.0002 ug/l;

(14) pH: shall be between 6.0 and 9.0 except that swamp waters may have a pH as low as 4.3 if it is the result of natural conditions;

(15) Phenolic compounds: only such levels as shall not result in fish-flesh tainting or impairment of other best usage;

(16) Polychlorinated biphenyls (total of all PCBs and congeners identified): 0.001 ug/l;

(17) Radioactive substances, based on at least one sample collected per quarter:
- (a) Combined radium-226 and radium-228: the average annual activity level for combined radium-226 and radium-228 shall not exceed five picoCuries per liter;
- (b) Alpha Emitters: the average annual gross alpha particle activity (including radium-226, but excluding radon and uranium) shall not exceed 15 picoCuries per liter;

(c) Beta Emitters: the average annual activity level for strontium-90 shall not exceed eight picoCuries per liter, nor shall the average annual gross beta particle activity (excluding potassium-40 and other naturally occurring radionuclides) exceed 50 picoCuries per liter, nor shall the average annual activity level for tritium exceed 20,000 picoCuries per liter;

(18) Temperature: not to exceed 2.8 degrees C (5.04 degrees F) above the natural water temperature, and in no case to exceed 29 degrees C (84.2 degrees F) for mountain and upper piedmont waters and 32 degrees C (89.6 degrees F) for lower piedmont and coastal plain Waters; the temperature for trout waters shall not be increased by more than 0.5 degrees C (0.9 degrees F) due to the discharge of heated liquids, but in no case to exceed 20 degrees C (68 degrees F);

(19) Toluene: 0.36 ug/l in trout classified waters or 11 ug/l in all other waters;

(20) Trialkyltin compounds: 0.07 ug/l expressed as tributyltin;

(21) Turbidity: the turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. Compliance with this turbidity standard shall be deemed met when land management activities employ Best Management Practices (BMPs), as defined by Rule .0202 of this Section, recommended by the Designated Nonpoint Source Agency, as defined by Rule .0202 of this Section.

(22) Toxic Substance Level Applicable to NPDES Permits: Chloride: 230 mg/l. If chloride is determined by the waste load allocation to be exceeded in a receiving water by a discharge under the specified 7Q10 criterion for toxic substances, the discharger shall monitor the chemical or biological effects of the discharge. Efforts shall be made by all dischargers to reduce or eliminate chloride from their effluents. Chloride shall be limited as appropriate in the NPDES permit if sufficient information exists to indicate that it may be a causative factor resulting in toxicity of the effluent.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. January 1, 2015; May 1, 2007; April 1, 2003; August 1, 2000; October 1, 1995; August 1, 1995; April 1, 1994; February 1, 1993;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0212 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-I WATERS

The following water quality standards shall apply to surface waters within water supply watersheds classified as WS-I. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section shall also apply to Class WS-I waters.

(1) The best usage of waters classified as WS-I shall be as a source of water supply for drinking, culinary, or food processing purposes for those users desiring maximum protection of their water supplies in the form of the most stringent WS classification, and any best usage specified for Class C waters. Class WS-I waters are waters located on land in public ownership and waters located in undeveloped watersheds.

(2) The best usage of waters classified as WS-I shall be maintained as follows:

(a) Water quality standards in a WS-I watershed shall meet the requirements as specified in Item (3) of this Rule.

(b) Wastewater and stormwater point source discharges in a WS-I watershed shall meet the requirements as specified in Item (4) of this Rule.

(c) Nonpoint source pollution in a WS-I watershed shall meet the requirements as specified in Item (5) of this Rule.

(d) Following approved treatment, as defined in Rule .0202 of this Section, the waters shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, and food-processing purposes that are specified in 40 CFR Part 141 National Primary Drinking Water Regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500, incorporated by reference including subsequent amendments and editions.

(e) Sources of water pollution that preclude any of the best uses on either a short-term or long-term basis shall be deemed to violate a water quality standard.

(f) The Class WS-I classification may be used to protect portions of Class WS-II, WS-III, and WS-IV water supplies. For reclassifications occurring after the July 1, 1992 statewide reclassification, a WS-I classification that is requested by local governments shall be considered by the Commission if all local governments having jurisdiction in the affected areas have adopted a resolution and the appropriate ordinances as required by G.S. 143-214.5(d) to protect the watershed or if the Commission acts to protect a watershed when one or more local governments has failed to adopt protective measures as required by this Sub-Item.

(3) Water quality standards applicable to Class WS-I Waters shall be as follows:

(a) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;

(b) Total coliforms shall not exceed 50/100 ml (MF count) as a monthly geometric mean value in watersheds serving as unfiltered water supplies;

(c) Chlorinated phenolic compounds: not greater than 1.0 ug/l to protect water supplies from taste and odor problems from chlorinated phenols;

(d) Solids, total dissolved: not greater than exceed 500 mg/l;

(e) Total hardness: not greater than 100 mg/l as calcium carbonate ($CaCO_3$ or Ca + Mg);

(f) Toxic and other deleterious substances that are non-carcinogens:

(i) Barium: 1.0 mg/l;

(ii) Chloride: 250 mg/l;

(iii) Nickel: 25 ug/l;

(iv) Nitrate nitrogen: 10.0 mg/l;

(v) 2,4-D: 70 ug/l;

(vi) 2,4,5-TP (Silvex): 10 ug/l; and

(vii) Sulfates: 250 mg/l;

(g) Toxic and other deleterious substances that are carcinogens:

(i) Aldrin: 0.05 ng/1;

(ii) Arsenic: 10 ug/l;

(iii) Benzene: 1.19 ug/1;

(iv) Carbon tetrachloride: 0.254 ug/l;

(v) Chlordane: 0.8 ng/1;

(vi) Chlorinated benzenes: 488 ug/l;

(vii) DDT: 0.2 ng/1;

(viii) Dieldrin: 0.05 ng/1;

(ix) Dioxin: 0.000005 ng/l;

(x) Heptachlor: 0.08 ng/1;

(xi) Hexachlorobutadiene: 0.44 ug/l;

(xii) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;

(xiii) Tetrachloroethane (1,1,2,2): 0.17 ug/l;

(xiv) Tetrachloroethylene: 0.7 ug/l;

(xv) Trichloroethylene: 2.5 ug/l; and

(xvi) Vinyl Chloride: 0.025 ug/l.

(4) Wastewater and stormwater point source discharges in a WS-I watershed shall be permitted pursuant to 15A NCAC 02B .0104.

(5) Nonpoint source pollution in a WS-I watershed shall not have an adverse impact, as defined in 15A NCAC 02H .1002, on use as a water supply or any other designated use.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. January 1, 2015; May 1, 2007; April 1, 2003; October 1, 1995; February 1, 1993; March 1, 1991; October 1, 1989;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0213 REVISIONS TO DISSOLVED OXYGEN STANDARDS

History Note: *Authority G.S. 143-214.1;*
Eff. December 14, 1978;
Amended Eff. July 1, 1988;
Repealed Eff. October 1, 1989.

15A NCAC 02B .0214 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-II WATERS

The following water quality standards shall apply to surface waters within water supply watersheds classified as WS-II. Water quality standards applicable to Class C waters as described in Rule .0211of this Section shall also apply to Class WS-II waters.

(1) The best usage of waters classified as WS-II shall be as a source of water supply for drinking, culinary, or food-processing purposes for those users desiring maximum protection for their water supplies where a WS-I classification is not feasible as determined by the Commission in accordance with Rule .0212 of this Section and any best usage specified for Class C waters.

(2) The best usage of waters classified as WS-II shall be maintained as follows:
- (a) Water quality standards in a WS-II watershed shall meet the requirements as specified in Item (3) of this Rule.
- (b) Wastewater and stormwater point source discharges in a WS-II watershed shall meet the requirements as specified in Item (4) of this Rule.
- (c) Nonpoint source pollution in a WS-II watershed shall meet the requirements as specified in Item (5) of this Rule.
- (d) Following approved treatment, as defined in Rule .0202 of this Section, the waters shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, and food-processing purposes that are specified in 40 CFR Part 141 National Primary Drinking Water Regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500.
- (e) Sources of water pollution that preclude any of the best uses on either a short-term or long-term basis shall be deemed to violate a water quality standard.
- (f) The Class WS-II classification may be used to protect portions of Class WS-III and WS-IV water supplies. For reclassifications of these portions of Class WS-III and WS-IV water supplies occurring after the July 1, 1992 statewide reclassification, a WS-II classification that is requested by local governments shall be considered by the Commission if all local governments having jurisdiction in the affected areas have adopted a resolution and the appropriate ordinances as required by G.S. 143-214.5(d) to protect the watershed or if the Commission acts to protect a watershed when one or more local governments has failed to adopt protective measures as required by this Sub-Item.

(3) Water quality standards applicable to Class WS-II Waters shall be as follows:
- (a) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
- (b) Odor producing substances contained in sewage or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as shall not cause organoleptic effects in water supplies that cannot be corrected by treatment, impair the palatability of fish, or have an adverse impact, as defined in 15A NCAC 02H .1002, on any best usage established for waters of this class;
- (c) Chlorinated phenolic compounds: not greater than 1.0 ug/l to protect water supplies from taste and odor problems from chlorinated phenols;
- (d) Total hardness: not greater than 100 mg/l as calcium carbonate ($CaCO_3$ or Ca + Mg);
- (e) Solids, total dissolved: not greater than 500 mg/l;
- (f) Toxic and other deleterious substances that are non-carcinogens:
  - (i) Barium: 1.0 mg/l;
  - (ii) Chloride: 250 mg/l;
  - (iii) Nickel: 25 ug/l;
  - (iv) Nitrate nitrogen: 10.0 mg/l;
  - (v) 2,4-D: 70 ug/l;
  - (vi) 2,4,5-TP (Silvex): 10 ug/l; and

(vii) Sulfates: 250 mg/l;

(g) Toxic and other deleterious substances that are carcinogens:

(i) Aldrin: 0.05 ng/1;
(ii) Arsenic: 10 ug/l;
(iii) Benzene: 1.19 ug/1;
(iv) Carbon tetrachloride: 0.254 ug/l;
(v) Chlordane: 0.8 ng/1;
(vi) Chlorinated benzenes: 488 ug/l;
(vii) DDT: 0.2 ng/1;
(viii) Dieldrin: 0.05 ng/1;
(ix) Dioxin: 0.000005 ng/l;
(x) Heptachlor: 0.08 ng/1;
(xi) Hexachlorobutadiene: 0.44 ug/l;
(xii) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(xiii) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(xiv) Tetrachloroethylene: 0.7 ug/l;
(xv) Trichloroethylene: 2.5 ug/l; and
(xvi) Vinyl Chloride: 0.025 ug/l.

(4) Wastewater and stormwater point source discharges in a WS-II watershed shall meet the following requirements:

(a) Discharges that qualify for a General NPDES Permit pursuant to 15A NCAC 02H .0127 shall be allowed in the entire watershed.

(b) Discharges from trout farms that are subject to Individual NPDES Permits shall be allowed in the entire watershed.

(c) Stormwater discharges that qualify for an Individual NPDES Permit pursuant to 15A NCAC 02H .0126 shall be allowed in the entire watershed.

(d) No discharge of sewage, industrial, or other wastes shall be allowed in the entire watershed except for those allowed by Sub-Items (a) through (c) of this Item or Rule .0104 of this Subchapter, and none shall be allowed that have an adverse effect on human health or that are not treated in accordance with the permit or other requirements established by the Division pursuant to G.S. 143-215.1. Upon request by the Commission, a discharger shall disclose all chemical constituents present or potentially present in their wastes and chemicals that could be spilled or be present in runoff from their facility that may have an adverse impact on downstream water quality. These facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances.

(e) New domestic and industrial discharges of treated wastewater that are subject to Individual NPDES Permits shall not be allowed in the entire watershed.

(f) No new landfills shall be allowed in the Critical Area, and no NPDES permits shall be issued for landfills that discharge treated leachate in the remainder of the watershed.

(g) No new permitted sites for land application of residuals or petroleum contaminated soils shall be allowed in the Critical Area.

(5) Nonpoint source pollution in a WS-II watershed shall meet the following requirements:

(a) Nonpoint source pollution shall not have an adverse impact on waters for use as a water supply or any other designated use.

(b) Class WS-II waters shall be protected as water supplies that are located in watersheds that meet average watershed development density levels specified for Class WS-II waters in Rule .0624 of this Subchapter.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. May 10, 1979;
Amended Eff. January 1, 2015; May 1, 2007; April 1, 2003; January 1, 1996; October 1, 1995;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0215 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-III WATERS

The following water quality standards shall apply to surface waters within water supply watersheds classified as WS-III. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section shall also apply to Class WS-III waters.

(1) The best usage of waters classified as WS-III shall be as a source of water supply for drinking, culinary, or food-processing purposes for those users where a more protective WS-I or WS-II classification is not feasible as determined by the Commission in accordance with Rules .0212 and .0214 of this Section and any other best usage specified for Class C waters.

(2) The best usage of waters classified as WS-III shall be maintained as follows:
- (a) Water quality standards in a WS-III watershed shall meet the requirements as specified in Item (3) of this Rule.
- (b) Wastewater and stormwater point source discharges in a WS-III watershed shall meet the requirements as specified in Item (4) of this Rule.
- (c) Nonpoint source pollution in a WS-III watershed shall meet the requirements as specified in Item (5) of this Rule.
- (d) Following approved treatment, as defined in Rule .0202 of this Section, the waters shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in 40 CFR Part 141 National Primary Drinking Water Regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500.
- (e) Sources of water pollution that preclude any of the best uses on either a short-term or long-term basis shall be deemed to violate a water quality standard.
- (f) The Class WS-III classification may be used to protect portions of Class WS-IV water supplies. For reclassifications of these portions of WS-IV water supplies occurring after the July 1, 1992 statewide reclassification, a WS-II classification that is requested by local governments shall be considered by the Commission if all local governments having jurisdiction in the affected areas have adopted a resolution and the appropriate ordinances as required by G.S. 143-214.5(d) to protect the watershed or if the Commission acts to protect a watershed when one or more local governments has failed to adopt protective measures as required by this Sub-Item.

(3) Water quality standards applicable to Class WS-III Waters shall be as follows:
- (a) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
- (b) Odor producing substances contained in sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as shall not cause organoleptic effects in water supplies that cannot be corrected by treatment, impair the palatability of fish, or have an adverse impact, as defined in 15A NCAC 02H .1002, on any best usage established for waters of this class;
- (c) Chlorinated phenolic compounds: not greater than 1.0 ug/l to protect water supplies from taste and odor problems from chlorinated phenols;
- (d) Total hardness: not greater than 100 mg/l as calcium carbonate ($CaCO_3$ or Ca + Mg);
- (e) Solids, total dissolved: not greater than 500 mg/l;
- (f) Toxic and other deleterious substances that are non-carcinogens:
  - (i) Barium: 1.0 mg/l;
  - (ii) Chloride: 250 mg/l;
  - (iii) Nickel: 25 ug/l;
  - (iv) Nitrate nitrogen: 10.0 mg/l;
  - (v) 2,4-D: 70 ug/l;
  - (vi) 2,4,5-TP (Silvex): 10 ug/l; and
  - (vii) Sulfates: 250 mg/l;
- (g) Toxic and other deleterious substances that are carcinogens:
  - (i) Aldrin: 0.05 ng/1;
  - (ii) Arsenic: 10 ug/l;
  - (iii) Benzene: 1.19 ug/1;
  - (iv) Carbon tetrachloride: 0.254 ug/l;
  - (v) Chlordane: 0.8 ng/1;
  - (vi) Chlorinated benzenes: 488 ug/l;

(vii) DDT: 0.2 ng/1;
(viii) Dieldrin: 0.05 ng/1;
(ix) Dioxin: 0.000005 ng/l;
(x) Heptachlor: 0.08 ng/1;
(xi) Hexachlorobutadiene: 0.44 ug/l;
(xii) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(xiii) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(xiv) Tetrachloroethylene: 0.7 ug/l;
(xv) Trichloroethylene: 2.5 ug/l; and
(xvi) Vinyl Chloride: 0.025 ug/l.

(4) Wastewater and stormwater point source discharges in a WS-III watershed shall meet the following requirements:
(a) Discharges that qualify for a General NPDES Permit pursuant to 15A NCAC 02H .0127 shall be allowed in the entire watershed.
(b) Discharges from trout farms that are subject to Individual NPDES Permits shall be allowed in the entire watershed.
(c) Stormwater discharges that qualify for an Individual NPDES Permit pursuant to 15A NCAC 02H .0126 shall be allowed in the entire watershed.
(d) New domestic wastewater discharges that are subject to Individual NPDES Permits shall not be allowed in the Critical Area and are allowed in the remainder of the watershed.
(e) New industrial wastewater discharges that are subject to Individual NPDES Permits except non-process industrial discharges shall not be allowed in the entire watershed.
(f) No discharge of sewage, industrial, or other wastes shall be allowed in the entire watershed except for those allowed by Sub-Items (a) through (e) of this Item or Rule .0104 of this Subchapter, and none shall be allowed that have an adverse effect on human health or that are not treated in accordance with the permit or other requirements established by the Division pursuant to G.S. 143-215.1. Upon request by the Commission, a discharger shall disclose all chemical constituents present or potentially present in their wastes and chemicals that could be spilled or be present in runoff from their facility that may have an adverse impact on downstream water quality. These facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances.
(g) No new landfills shall be allowed in the Critical Area, and no NPDES permits shall be issued for landfills to discharge treated leachate in the remainder of the watershed.
(h) No new permitted sites for land application of residuals or petroleum contaminated soils shall be allowed in the Critical Area.

(5) Nonpoint source pollution in a WS-III watershed shall meet the following requirements:
(a) Nonpoint source pollution shall not have an adverse impact on waters for use as a water supply or any other designated use.
(b) Class WS-III waters shall be protected as water supplies that are located in watersheds that meet average watershed development density levels specified Class WS-III waters in Rule .0624 of this Subchapter.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. September 9, 1979;
Amended Eff. January 1, 2015; May 1, 2007; April 1, 2003; January 1, 1996; October 1, 1995; October 1, 1989;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0216 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-IV WATERS

The following water quality standards shall apply to surface waters within water supply watersheds classified as WS-IV. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section shall also apply to Class WS-IV waters.

(1) The best usage of waters classified as WS-IV shall be as a source of water supply for drinking, culinary, or food-processing purposes for those users where a more protective WS-I, WS-II or WS-

III classification is not feasible as determined by the Commission in accordance with Rules .0212 through .0215 of this Section and any other best usage specified for Class C waters.

(2) The best usage of waters classified as WS-IV shall be maintained as follows:

(a) Water quality standards in a WS-IV watershed shall meet the requirements as specified in Item (3) of this Rule.

(b) Wastewater and stormwater point source discharges in a WS-IV watershed shall meet the requirements as specified in Item (4) of this Rule.

(c) Nonpoint source pollution in a WS-IV watershed shall meet the requirements as specified in Item (5) of this Rule.

(d) Following approved treatment, as defined in Rule .0202 of this Section, the waters shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in 40 CFR Part 141 National Primary Drinking Water Regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500.

(e) Sources of water pollution that preclude any of the best uses on either a short-term or long-term basis shall be deemed to violate a water quality standard.

(f) The Class WS-II or WS-III classifications may be used to protect portions of Class WS-IV water supplies. For reclassifications of these portions of WS-IV water supplies occurring after the July 1, 1992 statewide reclassification, a WS-IV classification that is requested by local governments shall be considered by the Commission if all local governments having jurisdiction in the affected areas have adopted a resolution and the appropriate ordinances as required by G.S. 143-214.5(d) to protect the watershed or if the Commission acts to protect a watershed when one or more local governments has failed to adopt protective measures as required by this Sub-Item.

(3) Water quality standards applicable to Class WS-IV Waters shall be as follows:

(a) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;

(b) Odor producing substances contained in sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or waste, as will not cause organoleptic effects in water supplies that cannot be corrected by treatment, impair the palatability of fish, or have an adverse impact, as defined in 15A NCAC 02H .1002, on any best usage established for waters of this class;

(c) Chlorinated phenolic compounds: not greater than 1.0 ug/l to protect water supplies from taste and odor problems due to chlorinated phenols shall be allowed. Specific phenolic compounds may be given a different limit if it is demonstrated not to cause taste and odor problems and not to be detrimental to other best usage;

(d) Total hardness: not greater than 100 mg/l as calcium carbonate ($CaCO_3$ or Ca + Mg);

(e) Solids, total dissolved: not greater than 500 mg/l;

(f) Toxic and other deleterious substances that are non-carcinogens:

(i) Barium: 1.0 mg/l;

(ii) Chloride: 250 mg/l;

(iii) Nickel: 25 ug/l;

(iv) Nitrate nitrogen: 10.0 mg/l;

(v) 2,4-D: 70 ug/l;

(vi) 2,4,5-TP (Silvex): 10 ug/l; and

(vii) Sulfates: 250 mg/l;

(g) Toxic and other deleterious substances that are carcinogens:

(i) Aldrin: 0.05 ng/1;

(ii) Arsenic: 10 ug/l;

(iii) Benzene: 1.19 ug/1;

(iv) Carbon tetrachloride: 0.254 ug/l;

(v) Chlordane: 0.8 ng/1;

(vi) Chlorinated benzenes: 488 ug/l;

(vii) DDT: 0.2 ng/1;

(viii) Dieldrin: 0.05 ng/1;

(ix) Dioxin: 0.000005 ng/l;

(x) Heptachlor: 0.08 ng/1;
(xi) Hexachlorobutadiene: 0.44 ug/l;
(xii) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(xiii) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(xiv) Tetrachloroethylene: 0.7 ug/l;
(xv) Trichloroethylene: 2.5 ug/l; and
(xvi) Vinyl Chloride: 0.025 ug/l.

(4) Wastewater and stormwater point source discharges in a WS-IV watershed shall meet the following requirements:
(a) Discharges that qualify for a General NPDES Permit pursuant to 15A NCAC 02H .0127 shall be allowed in the entire watershed.
(b) Discharges from domestic facilities, industrial facilities and trout farms that are subject to Individual NPDES Permits shall be allowed in the entire watershed.
(c) Stormwater discharges that qualify for an Individual NPDES Permit pursuant to 15A NCAC 02H .0126 shall be allowed in the entire watershed.
(d) No discharge of sewage, industrial wastes, or other wastes shall be allowed in the entire watershed except for those allowed by Sub-Items (a) through (c) of this Item or Rule .0104 of this Subchapter, and none shall be allowed that have an adverse effect on human health or that are not treated in accordance with the permit or other requirements established by the Division pursuant to G.S. 143-215.1. Upon request by the Commission, dischargers or industrial users subject to pretreatment standards shall disclose all chemical constituents present or potentially present in their wastes and chemicals that could be spilled or be present in runoff from their facility which may have an adverse impact on downstream water supplies. These facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances.
(e) New industrial discharges of treated wastewater in the critical area shall meet the provisions of Rule .0224(c)(2)(D), (E), and (G) of this Section and Rule .0203 of this Section.
(f) New industrial connections and expansions to existing municipal discharges with a pretreatment program pursuant to 15A NCAC 02H .0904 shall be allowed in the entire watershed.
(g) No new landfills shall be allowed in the Critical Area.
(h) No new permitted sites for land application residuals or petroleum contaminated soils shall be allowed in the Critical Area.

(5) Nonpoint source pollution in a WS-IV watershed shall meet the following requirements:
(a) Nonpoint source pollution shall not have an adverse impact on waters for use as a water supply or any other designated use.
(b) Class WS-IV waters shall be protected as water supplies that are located in watersheds that meet average watershed development density levels specified for Class WS-IV waters in Rule .0624 of this Subchapter.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. February 1, 1986;
Amended Eff. January 1, 2015; May 1, 2007; April 1, 2003; June 1, 1996; October 1, 1995; August 1, 1995; June 1, 1994;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0217 STORMWATER CONTROL CRITERIA TO PROTECT WATER QUALITY STDS

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. November 1, 1986;
Repealed Eff. January 1, 1988.

15A NCAC 02B .0218 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-V WATERS

The following water quality standards shall apply to surface waters within water supply watersheds classified as WS-V. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section shall also apply to Class WS-V waters.

(1) The best usage of waters classified as WS-V shall be as waters that are protected as water supplies which are generally upstream and draining to Class WS-IV waters; waters previously used for drinking water supply purposes; or waters used by industry to supply their employees, but not municipalities or counties, with a raw drinking water supply source, although this type of use is not restricted to WS-V classification; and all Class C uses.

(2) The best usage of waters classified as WS-V shall be maintained as follows:

(a) Water quality standards in a WS-V water shall meet the requirements as specified in Item (3) of this Rule.

(b) Wastewater and stormwater point source discharges in a WS-V water shall meet the requirements as specified in Item (4) of this Rule.

(c) Nonpoint source pollution in a WS-V water shall meet the requirements as specified in Item (5) of this Rule.

(d) Following approved treatment, as defined in Rule .0202 of this Section, the waters shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in 40 CFR Part 141 National Primary Drinking Water Regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500.

(e) The Commission or its designee may apply management requirements for the protection of waters downstream of receiving waters provided in Rule .0203 of this Section.

(f) The Commission shall consider a more protective classification for the water supply if a resolution requesting a more protective classification is submitted from all local governments having land use jurisdiction within the affected watershed.

(g) Sources of water pollution that preclude any of the best uses on either a short-term or long-term basis shall be deemed to violate a water quality standard;

(3) Water quality standards applicable to Class WS-V Waters shall be as follows:

(a) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;

(b) Odor producing substances contained in sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or waste, as will not cause organoleptic effects in water supplies that can not be corrected by treatment, impair the palatability of fish, or have an adverse impact, as defined in 15A NCAC 02H .1002, on any best usage established for waters of this class;

(c) Chlorinated phenolic compounds: not greater than 1.0 ug/l to protect water supplies from taste and odor problems due to chlorinated phenols. Specific phenolic compounds may be given a different limit if it is demonstrated not to cause taste and odor problems and not to be detrimental to other best usage;

(d) Total hardness: not greater than 100 mg/l as calcium carbonate ($CaCO_3$ or Ca + Mg);

(e) Solids, total dissolved: not greater than 500 mg/l;

(f) Toxic and other deleterious substances that are non-carcinogens:

(i) Barium: 1.0 mg/l;

(ii) Chloride: 250 mg/l;

(iii) Nickel: 25 ug/l;

(iv) Nitrate nitrogen: 10.0 mg/l;

(v) 2,4-D: 70 ug/l;

(vi) 2,4,5-TP (Silvex): 10 ug/l; and

(vii) Sulfates: 250 mg/l;

(g) Toxic and other deleterious substances that are carcinogens:

(i) Aldrin: 0.05 ng/1;

(ii) Arsenic: 10 ug/l;

(iii) Benzene: 1.19 ug/1;

(iv) Carbon tetrachloride: 0.254 ug/l;

(v) Chlordane: 0.8 ng/1;

(vi) Chlorinated benzenes: 488 ug/l;

(vii) DDT: 0.2 ng/1;
(viii) Dieldrin: 0.05 ng/1;
(ix) Dioxin: 0.000005 ng/l;
(x) Heptachlor: 0.08 ng/1;
(xi) Hexachlorobutadiene: 0.44 ug/l;
(xii) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(xiii) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(xiv) Tetrachloroethylene: 0.7 ug/l;
(xv) Trichloroethylene: 2.5 ug/l; and
(xvi) Vinyl Chloride: 0.025 ug/l.

(4) No discharge of sewage, industrial wastes, or other wastes shall be allowed that have an adverse effect on human health or that are not treated in accordance with the permit or other requirements established by the Division pursuant to G.S. 143-215.1. Upon request by the Commission, dischargers or industrial users subject to pretreatment standards shall disclose all chemical constituents present or potentially present in their wastes and chemicals that could be spilled or be present in runoff from their facility which may have an adverse impact on downstream water quality. These facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances.

(5) Nonpoint Source pollution in a WS-V water shall not have an adverse impact on waters for use as water supply or any other designated use.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. October 1, 1989;
Amended Eff. January 1, 2015; May 1, 2007; April 1, 2003; October 1, 1995;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0219 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS B WATERS

The following water quality standards shall apply to surface waters that are for primary contact recreation as defined in Rule .0202 of this Section, and are classified as Class B waters. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section also apply to Class B waters.

(1) The best usage of Class B waters shall be primary contact recreation and any other best usage specified for Class C waters.

(2) Class B waters shall meet the standards of water quality for outdoor bathing places as specified in Item (3) of this Rule and shall be of sufficient size and depth for primary contact recreation. In assigning the B classification to waters intended for primary contact recreation, the Commission shall consider the relative proximity of sources of water pollution and the potential hazards involved in locating swimming areas close to sources of water pollution and shall not assign this classification to waters in which such water pollution could result in a hazard to public health. Sources of water pollution that preclude any of these uses on either a short-term or long-term basis shall be deemed to violate a water quality standard.

(3) Quality standards applicable to Class B waters:
(a) Sewage, industrial wastes, or other wastes: none shall be allowed that are not treated to the satisfaction of the Commission. In determining the degree of treatment required for such waste when discharged into waters to be used for bathing, the Commission shall consider the quality and quantity of the sewage and wastes involved and the proximity of such discharges to waters in this class. Discharges in the immediate vicinity of bathing areas shall not be allowed if the Director determines that the waste cannot be treated to ensure the protection of primary contact recreation;
(b) Fecal coliforms shall not exceed a geometric mean of 200/100 ml (MF count) based on at least five samples taken over a 30-day period, nor exceed 400/100 ml in more than 20 percent of the samples examined during such period.

(4) Wastewater discharges to waters classified as B shall meet the reliability requirements specified in 15A NCAC 02H .0124. Discharges to waters where a primary contact recreational use is determined by the Director to be attainable shall be required to meet water quality standards and reliability requirements to protect this use concurrently with reclassification efforts.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. January 1, 1990;
Amended Eff. October 1, 1995;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0220 TIDAL SALT WATER QUALITY STANDARDS FOR CLASS SC WATERS

In addition to the standards set forth in Rule .0208 of this Section, the following water quality standards shall apply to all Class SC waters. Additional standards applicable to other tidal salt water classifications are specified in Rules .0221 and .0222 of this Section.

(1) The best usage of waters classified as SC shall be aquatic life propagation, survival, and maintenance of biological integrity (including fishing, fish, and Primary Nursery Areas (PNAs)); wildlife; secondary contact recreation as defined in Rule .0202 in this Section; and any usage except primary contact recreation or shellfishing for market purposes. All saltwaters shall be classified to protect these uses at a minimum.

(2) The best usage of waters classified as SC shall be maintained as specified in this Rule. Any source of water pollution that precludes any of these uses on either a short-term or a long-term basis shall be deemed to violate a water quality standard;

(3) Chlorophyll a (corrected): not greater than 40 ug/l in sounds, estuaries, and other waters subject to growths of macroscopic or microscopic vegetation. The Commission or its designee may prohibit or limit any discharge of waste into surface waters if the Director determines that the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired;

(4) Cyanide: 1 ug/l;

(5) Dissolved oxygen: not less than 5.0 mg/l, except that swamp waters, poorly flushed tidally influenced streams or embayments, or estuarine bottom waters may have lower values if caused by natural conditions;

(6) Enterococcus, including Enterococcus faecalis, Enterococcus faecium, Enterococcus avium and Enterococcus gallinarium: not exceed a geometric mean of 35 enterococci per 100 ml based upon a minimum of five samples taken over a 30-day period. For the purposes of beach monitoring and notification, "Coastal Recreational Waters Monitoring, Evaluation and Notification" regulations (15A NCAC 18A .3400), available free of charge at: http://www.ncoah.com/, are incorporated by reference including subsequent amendments and editions;

(7) Floating solids, settleable solids, or sludge deposits: only such amounts attributable to sewage, industrial wastes, or other wastes as shall not make the waters unsafe or unsuitable for aquatic life and wildlife, or impair the waters for any designated uses;

(8) Gases, total dissolved: not greater than 110 percent of saturation;

(9) Metals:

(a) With the exception of mercury and selenium, acute and chronic tidal salt water quality standards for metals shall be based upon measurement of the dissolved fraction of the metals. Mercury and selenium shall be based upon measurement of the total recoverable metal;

(b) With the exception of mercury and selenium, acute and chronic tidal saltwater quality aquatic life standards for metals listed in this Sub-Item shall apply as a function of the pollutant's water effect ratio (WER). The WER shall be assigned a value equal to one unless any person demonstrates to the Division in a permit proceeding that another value is developed in accordance with the "Water Quality Standards Handbook: Second Edition" published by the US Environmental Protection Agency (EPA-823-B-12-002). Alternative site-specific standards may also be developed when any person submits values that demonstrate to the Commission that they were derived in accordance with the "Water Quality Standards Handbook: Second Edition, Recalculation Procedure or the Resident Species Procedure."

(c) Acute and chronic tidal salt water quality metals standards shall be as follows:

(i) Arsenic, acute: WER· 69 ug/l;

(ii) Arsenic, chronic: WER· 36 ug/l;

(iii) Cadmium, acute: WER· 40 ug/l;

(iv) Cadmium, chronic: WER· 8.8 ug/l;
(v) Chromium VI, acute: WER· 1100 ug/l;
(vi) Chromium VI, chronic: WER· 50 ug/l;
(vii) Copper, acute: WER· 4.8 ug/l;
(viii) Copper, chronic: WER· 3.1 ug/l;
(ix) Lead, acute: WER· 210 ug/l;
(x) Lead, chronic: WER· 8.1 ug/l;
(xi) Mercury, total recoverable, chronic: 0.025 ug/l;
(xii) Nickel, acute: WER· 74 ug/l;
(xiii) Nickel, chronic: WER· 8.2 ug/l;
(xiv) Selenium, total recoverable, chronic: 71 ug/l;
(xv) Silver, acute: WER· 1.9 ug/l;
(xvi) Silver, chronic: WER· 0.1 ug/l;
(xvii) Zinc, acute: WER· 90 ug/l; and
(xviii) Zinc, chronic: WER· 81 ug/l;

(d) Compliance with acute instream metals standards shall only be evaluated using an average of two or more samples collected within one hour. Compliance with chronic instream metals standards shall only be evaluated using averages of a minimum of four samples taken on consecutive days, or as a 96-hour average;

(10) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, aquatic life, and wildlife or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. For the purpose of implementing this Rule, oils, deleterious substances, or colored or other wastes shall include substances that cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines, as described in 40 CFR 110.3, incorporated by reference including any subsequent amendments and editions. This material is available free of charge at https://www.govinfo.gov.

(11) Pesticides:
(a) Aldrin: 0.003 ug/l;
(b) Chlordane: 0.004 ug/l;
(c) DDT: 0.001 ug/l;
(d) Demeton: 0.1 ug/l;
(e) Dieldrin: 0.002 ug/l;
(f) Endosulfan: 0.009 ug/l;
(g) Endrin: 0.002 ug/l;
(h) Guthion: 0.01 ug/l;
(i) Heptachlor: 0.004 ug/l;
(j) Lindane: 0.004 ug/l;
(k) Methoxychlor: 0.03 ug/l;
(l) Mirex: 0.001 ug/l;
(m) Parathion: 0.178 ug/l; and
(n) Toxaphene: 0.0002 ug/l;

(12) pH: shall be between 6.8 and 8.5, except that swamp waters may have a pH as low as 4.3 if it is the result of natural conditions;

(13) Phenolic compounds: only such levels as shall not result in fish-flesh tainting or impairment of other best usage;

(14) Polychlorinated biphenyls: (total of all PCBs and congeners identified) 0.001 ug/l;

(15) Radioactive substances, based on at least one sample collected per quarter:
(a) Combined radium-226 and radium-228: the average annual activity level for combined radium-226, and radium-228 shall not exceed five picoCuries per liter;
(b) Alpha Emitters: the average annual gross alpha particle activity (including radium-226, but excluding radon and uranium) shall not exceed 15 picoCuries per liter;
(c) Beta Emitters: the average annual activity level for strontium-90 shall not exceed eight picoCuries per liter, nor shall the average annual gross beta particle activity (excluding potassium-40 and other naturally occurring radionuclides exceed 50 picoCuries per liter, nor shall the average annual activity level for tritium exceed 20,000 picoCuries per liter;

(16) Salinity: changes in salinity due to hydrological modifications shall not result in removal of the functions of a PNA. Projects that are determined by the Director to result in modifications of salinity such that functions of a PNA are impaired shall employ water management practices to mitigate salinity impacts;

(17) Temperature: shall not be increased above the natural water temperature by more than 0.8 degrees C (1.44 degrees F) during the months of June, July, and August, shall not be increased by more than 2.2 degrees C (3.96 degrees F) during other months, and shall in no case exceed 32 degrees C (89.6 degrees F) due to the discharge of heated liquids;

(18) Trialkyltin compounds: 0.007 ug/l expressed as tributyltin;

(19) Turbidity: the turbidity in the receiving water shall not exceed 25 Nephelometric Turbidity Units (NTU); if turbidity exceeds this level due to natural background conditions, the existing turbidity level shall not be increased. Compliance with this turbidity standard shall be deemed met when land management activities employ Best Management Practices (BMPs), defined by Rule .0202 of this Section, recommended by the Designated Nonpoint Source Agency, as defined by Rule .0202 of this Section.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. October 1, 1995;
Amended Eff. January 1, 2015; May 1, 2007; August 1, 2000;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0221 TIDAL SALT WATER QUALITY STANDARDS FOR CLASS SA WATERS

In addition to the standards set forth in Rules .0220 and .0222 of this Section, the following water quality standards shall apply to tidal surface waters that are used for shellfishing for market purposes and that are classified SA.

(1) The best usage of waters classified as SA shall be shellfishing for market purposes and any other usage specified by the "SB" or "SC" classification;

(2) The best usage of waters classified as SA shall be maintained as specified in this Rule. In determining the safety or suitability of Class SA waters to be used for shellfishing for market purposes, the Commission shall consider the existing water quality of the area in relation to the standards to protect shellfishing uses, the potential contamination of the area from both point and nonpoint sources of pollution, and the presence of harvestable quantities of shellfish or the potential for the area to have harvestable quantities through management efforts of the Division of Marine Fisheries. Waters shall meet the current sanitary and bacteriological standards in 15A NCAC 18A .0400, which is hereby incorporated by reference, as adopted by the Commission for Public Health and shall be suitable for shellfish culture. Any source of water pollution that precludes any of these uses, on either a short-term or a long-term basis shall be deemed to violate a water quality standard. Waters shall not be classified SA without the written concurrence of the Division of Marine Fisheries.

(3) The following water quality standards shall apply to Class SA Waters:

(a) Floating solids, settleable solids, or sludge deposits: none attributable to sewage, industrial wastes, or other wastes;

(b) Sewage: none;

(c) Industrial wastes or other wastes shall not be allowed unless they are treated in accordance with the permit or other requirements established by the Division pursuant to G.S. 143-215.1; and

(d) Organisms of the fecal coliform group shall meet the bacteriological standards in 15A NCAC 18A .0431(4).

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. October 1, 1995;
Amended Eff. May 1, 2007;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0222 TIDAL SALT WATER QUALITY STANDARDS FOR CLASS SB WATERS

In addition to the standards set forth in Rule .0220 of this Section, the following water quality standards shall apply to tidal surface waters that are used for primary contact recreation as defined in Rule .0202 of this Section and that are classified SB.

(1) The best usage of waters classified as SB shall be primary contact recreation and any other usage specified by the "SC" classification;

(2) The best usage of waters classified as SB shall be maintained as specified in this Rule. In assigning the SB classification to waters intended for primary contact recreation, the Commission shall consider the relative proximity of sources of water pollution and the potential hazards involved in locating swimming areas close to sources of water pollution, and shall not assign this classification to waters in which such water pollution could result in a hazard to public health. The waters shall meet accepted sanitary standards of water quality for outdoor bathing places as specified in Item (3) of this Rule and shall be of sufficient size and depth for primary contact recreation purposes. Any source of water pollution that precludes any of these uses, on either a short-term or a long-term basis, shall be deemed to violate a water quality standard.

(3) The following water quality standards shall apply to Class SB waters:

(a) Floating solids, settleable solids, or sludge deposits: none attributable to sewage, industrial wastes, or other wastes;

(b) Sewage, industrial wastes, or other wastes: none shall be allowed that are not treated to the satisfaction of the Commission. In determining the degree of treatment required for such waters discharged into waters that are to be used for bathing, the Commission shall consider the quantity and quality of the sewage and other wastes involved and the proximity of such discharges to the waters in this class. Discharges in the immediate vicinity of bathing areas shall not be allowed if the Director determines that the waste cannot be treated to ensure the protection of primary contact recreation;

(c) Enterococcus, including Enterococcus faecalis, Enterococcus faecium, Enterococcus avium and Enterococcus gallinarium: not exceed a geometric mean of 35 enterococci per 100 ml based upon a minimum of five samples taken over a 30-day period. In accordance with Clean Water Act, 33 U.S.C. 1313 for the purposes of beach monitoring and notification, "Coastal Recreation Waters Monitoring, Evaluation and Notification" regulations (15A NCAC 18A .3400) are incorporated by reference including subsequent amendments and editions.

(4) Wastewater discharges to waters classified as SB shall meet the reliability requirements specified in 15A NCAC 02H .0124. Discharges to waters where a primary contact recreational use is determined by the Director to be attainable shall be required to meet water quality standards and reliability requirements to protect this use concurrently with reclassification efforts.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
Eff. October 1, 1995;
Amended Eff. May 1, 2007;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0223 WATER QUALITY STANDARDS FOR NUTRIENT SENSITIVE WATERS

(a) In addition to existing classifications, the Commission may classify any surface waters of the State as Nutrient Sensitive Waters (NSW) upon a finding that such waters are experiencing or are subject to excessive growths of microscopic or macroscopic vegetation. Excessive growths are growths that the Commission determines impair the best usage of the water as determined by the classification applied to such waters. In classifying waters as NSW, the Commission shall consider the criteria specified in G.S. 143-214.1.

(b) NSW may include any or all waters within a particular river basin as the Commission deems necessary to control excessive growths of microscopic or macroscopic vegetation.

(c) For the purpose of this Rule, the term "nutrients" shall mean phosphorous or nitrogen or any other chemical parameter or combination of parameters that the Commission determines to be contributing to excessive growths of microscopic or macroscopic vegetation. In determining whether such parameters are contributing to excessive growths of microscopic or macroscopic vegetation, the Commission shall consider information such as chemical, physical, and biological data and reports.

(d) Those waters of the State that are classified as NSW shall be identified in the appropriate river basin classification schedule. The schedules are available online at http://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification.
(e) Nutrient strategies applicable to NSW shall be developed by the Commission to limit nutrients so as to control the magnitude, duration, or frequencies of excessive growths of microscopic or macroscopic vegetation so that the existing and designated uses of the waterbody are protected or restored. Nutrient strategies applicable to NSW are set forth in this Subchapter.

History Note: *Authority G.S. 143-214.1; 143-215.8B;*
Eff. October 1, 1995;
Amended Eff. August 1, 2000;
Readopted Eff. November 1, 2019;
Amended Eff. June 1, 2020.

15A NCAC 02B .0224 WATER QUALITY STANDARDS FOR HIGH QUALITY WATERS

(a) High Quality Waters (HQW) are a subset of "waters with quality higher than the standards" as defined in Rule .0202(58) of this Section. This Rule shall be implemented in order to meet the requirements of Rule .0201(d) of this Section.
(b) High Quality Waters (HQW) shall include:
(1) water supply watersheds that are classified as Class WS-I or WS-II;
(2) waters classified as Class SA; and
(3) surface waters of the State that the Commission classifies as HQW upon finding that such waters are:
(A) rated excellent based on biological and physical/chemical characteristics through monitoring or special studies; or
(B) primary nursery areas (PNA) and other functional nursery areas designated by the Marine Fisheries Commission or the Wildlife Resources Commission.
(c) New or expanded wastewater discharges in High Quality Waters shall comply with the following:
(1) Discharges from new single family residences shall be prohibited. Existing subsurface systems for single family residences that fail and must discharge shall install a septic tank, dual or recirculating sand filters, disinfection, and step aeration.
(2) All new National Pollutant Discharge Elimination System (NPDES) wastewater discharges, except those for single family residences, shall comply with the following:
(A) Oxygen Consuming Wastes: Effluent limitations for oxygen consuming wastes shall be BOD_5= 5 mg/l, NH_3-N = 2 mg/l, and DO = 6 mg/l. More stringent limitations shall be set, if necessary, to ensure that the cumulative pollutant discharge of oxygen-consuming wastes does not cause the DO of the receiving water to drop more than 0.5 mg/l below background levels, and in no case below the standard. Where background information is not available, evaluations shall assume a percent saturation determined by staff to be applicable to that hydroenvironment.
(B) Total Suspended Solids: Discharges of total suspended solids (TSS) shall be limited to effluent concentrations of 10 mg/l for trout waters and HQW-classified PNAs and 20 mg/l for all other High Quality Waters.
(C) Disinfection: Alternative methods to chlorination shall be required for discharges to trout streams, except that single family residences may use chlorination if other options are not economically feasible, as determined on a case-by-case basis. Domestic discharges to SA waters shall be prohibited.
(D) Emergency Requirements: Reliable treatment designs shall be employed, such as stand-by power capability for entire treatment works, dual train design for all treatment components, or other reliable treatment designs in accordance with 15A NCAC 02H .0124.
(E) Volume: The total volume of treated wastewater for all discharges combined shall not exceed 50 percent of the total instream flow under 7Q10 conditions.
(F) Nutrients: Where nutrient overenrichment is projected to be a concern, effluent limitations shall be set for phosphorus or nitrogen, or both.
(G) Toxic substances: In cases where complex wastes (those containing or potentially containing toxicants) may be present in a discharge, a safety factor shall be applied to any

chemical or whole effluent toxicity allocation. The limit for a specific chemical constituent shall be allocated at one-half of the normal standard at design conditions. Whole effluent toxicity shall be allocated to protect for chronic toxicity at an effluent concentration equal to twice that which is acceptable under design conditions. In all instances there may be no acute toxicity in an effluent concentration of 90 percent. Ammonia toxicity shall be evaluated according to EPA guidelines promulgated in "Ambient Water Quality Criteria for Ammonia - 1984"; EPA document number 440/5-85-001; NITS number PB85-227114; July 29, 1985 (50 FR 30784) or "Ambient Water Quality Criteria for Ammonia (Saltwater) - 1989"; EPA document number 440/5-88-004; NTIS number PB89-169825. This material related to ammonia toxicity is available at no cost at https://www.epa.gov/wqc/aquatic-life-criteria-ammonia and https://www.epa.gov/sites/production/files/2019-02/documents/ambient-wqc-ammonia-saltwater-1989.pdf, and is hereby incorporated by reference including subsequent amendments and editions.

(3) All expanded NPDES wastewater discharges in High Quality Waters shall comply with Subparagraph (2) of this Paragraph, except for those existing discharges that expand with no increase in permitted pollutant loading.

(d) Development activities that require an Erosion and Sedimentation Control Plan in accordance with rules established by the NC Sedimentation Control Commission and which drain to and are within one mile of High Quality Waters (HQW) shall comply with the stormwater management rules as specified in 15A NCAC 02H .1019 (coastal county waters) or .1021 (non-coastal county waters).

(e) Waters Classified HQW with Specific Actions: Thorpe Reservoir [Little Tennessee River Basin, Index No. 2-79-23-(1)], including its tributaries, shall be managed with respect to wastewater discharges as required by Paragraph (c) of this Rule. Paragraph (d) of this Rule shall not apply to Thorpe Reservoir and its tributaries.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. October 1, 1995;
Amended Eff. August 1, 1998; April 1, 1996;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0225 WATER QUALITY STANDARDS FOR OUTSTANDING RESOURCE WATERS

(a) The Commission shall classify surface waters of the State as outstanding resource waters (ORW) upon finding, on a case-by-case basis, that such waters are of exceptional State or national recreational or ecological significance that require additional protection to maintain existing uses, as described in this Rule, and that the waters meet the following conditions:

(1) the water quality is rated as excellent based on physical, chemical or biological information; and

(2) the characteristics that make these waters of exceptional State or national recreational or ecological significance may not be protected by the assigned narrative and numerical water quality standards.

(b) For purposes of this Rule, a water body shall be deemed to be of exceptional State or national recreational or ecological significance if it exhibits one or more of the following ORW uses:

(1) there are outstanding fish or commercially-important aquatic species habitat and fisheries;

(2) there is a high level of water-based recreation or the potential for such recreation;

(3) the waters have received a designation such as a North Carolina or National Wild and Scenic River or a National Wildlife Refuge, which do not provide any water quality protection;

(4) the waters represent an important component of a State or national park or forest; or

(5) the waters are of ecological or scientific significance, such as habitat for rare or endangered species or as areas for research and education.

(c) Quality Standards for ORW.

(1) Freshwater: Water quality conditions shall be maintained to protect the outstanding resource values of waters classified ORW. Management strategies to protect resource values shall be developed on a site-specific basis during the proceedings to classify waters as ORW in accordance with Rule .0101 of the Subchapter. No new discharges or expansions of existing discharges shall be permitted, and stormwater controls for all new development activities requiring an Erosion and Sedimentation Control Plan in accordance with rules established by the NC Sedimentation Control Commission shall comply with the stormwater provisions set forth in 15A NCAC 02H .1000, including the

specific stormwater management requirements for freshwater ORW areas set forth in 15A NCAC 02H .1019 and .1021.

(2) Saltwater: Water quality conditions shall be maintained to protect the outstanding resource values of waters classified ORW. Management strategies to protect resource values shall be developed on a site-specific basis during the proceedings to classify waters as ORW in accordance with Rule .0101 of this Subchapter. New development shall comply with the stormwater provisions set forth in 15A NCAC 02H .1000, including the specific stormwater management requirements for saltwater ORW areas set forth in 15A NCAC 02H .1019 and .1021. No dredge or fill activities shall be allowed if those activities would result in a reduction of the beds of "submerged aquatic vegetation habitat" or "shellfish producing habitat," defined in 15A NCAC 03I .0101, and incorporated by reference including subsequent amendments and editions, except for maintenance dredging, such as that required to maintain access to existing channels and facilities located within the designated areas, or maintenance dredging for activities such as agriculture. The Commission shall hold a public hearing before granting a permit to discharge to waters classified as ORW.

Additional, site-specific actions to protect resource values shall be considered during the proceedings to classify waters as ORW and shall be specified in Paragraph (d) of this Rule. These actions may include anything within the powers of the Commission, as set forth in G.S. 143-21 and G.S. 143B-282. The Commission shall also consider local actions that have been taken to protect a water body in determining the additional, site-specific actions.

(d) Listing of Waters Classified ORW with Specific Actions.

(1) Roosevelt Natural Area [White Oak River Basin, Index Nos. 20-36-9.5-(1) and 20-36-9.5-(2)], including all fresh and saline waters within the property boundaries of the natural area: New development on a site within 575 feet of and naturally draining to the Roosevelt Natural Area shall comply with the low density option in the stormwater rules set forth in 15A NCAC 02H .1019.

(2) Chattooga River ORW Area (Little Tennessee River Basin and Savannah River Drainage Area): the following undesignated waterbodies that are tributary to ORW designated segments shall comply with Subparagraph (c)(1) of this Rule in order to protect the designated waters as per Rule .0203 of this Section. However, expansions of existing discharges to the following segments shall be allowed if there is no increase in pollutant loading:

(A) North and South Fowler Creeks and associated tributaries;
(B) Green and Norton Mill Creeks and associated tributaries;
(C) Cane Creek and associated tributaries;
(D) Ammons Branch and associated tributaries; and
(E) Glade Creek and associated tributaries.

(3) Henry Fork ORW Area (Catawba River Basin): the following undesignated waterbodies that are tributary to ORW designated segments shall comply with Subparagraph (c)(1) of this Rule in order to protect the designated waters as per Rule .0203 of this Section:

(A) Ivy Creek and associated tributaries; and
(B) Rock Creek and associated tributaries.

(4) South Fork New and New Rivers ORW Area [New River Basin (Index Nos. 10-1-33.5 and 10)]: the following management strategies, in addition to the discharge requirements set forth in Subparagraph (c)(1) of this Rule, shall apply to the designated ORW areas:

(A) Stormwater controls described in Subparagraph (c)(1) of this Rule shall apply to land within one mile of and that drains to the designated ORW areas;
(B) New or expanded National Pollutant Discharge Elimination System (NPDES) permitted wastewater discharges located upstream of the designated ORW (for the North Fork New River ORW area, see Subparagraph (14) of this Paragraph) shall be permitted such that the following water quality standards are maintained in the ORW segment:
(i) the total volume of treated wastewater for all upstream discharges combined shall not exceed 50 percent of the total instream flow in the designated ORW under 7Q10 conditions, which are defined in Rule .0206(a)(1) of this Section;
(ii) a safety factor shall be applied to any chemical allocation such that the effluent limitation for a specific chemical constituent shall be the more stringent of either the limitation allocated under design conditions pursuant to Rule .0206 of this Section for the normal standard at the point of discharge, or the limitation allocated under design conditions for one-half the normal standard at the upstream border of the ORW segment;

(iii) a safety factor shall be applied to any discharge of complex wastewater (those containing or potentially containing toxicants) to protect for chronic toxicity in the ORW segment by setting the whole effluent toxicity limitation at the higher effluent concentration determined under design conditions pursuant to Rule .0206 of this Section for either the instream effluent concentration at the point of discharge or twice the effluent concentration calculated as if the discharge were at the upstream border of the ORW segment;

(C) New or expanded NPDES permitted wastewater discharges located upstream of the designated ORW (for the North Fork New River ORW area, see Subparagraph (14) of this Paragraph) shall comply with the following:

(i) Oxygen Consuming Wastes: Effluent limitations for oxygen consuming wastes shall be BOD = 5 mg/1, and NH3-N = 2 mg/1;

(ii) Total Suspended Solids: Discharges of total suspended solids (TSS) shall be limited to effluent concentrations of 10 mg/1 for trout waters and to 20 mg/1 for all other waters;

(iii) Emergency Requirements: Reliable treatment designs shall be employed, such as stand-by power capability for entire treatment works, dual train design for all treatment components, or other reliable treatment designs in accordance with 15A NCAC 02H .0124;

(iv) Nutrients: If nutrient overenrichment is projected to be a concern, effluent limitations shall be set for phosphorus, nitrogen, or both;

(5) Old Field Creek (New River Basin): the undesignated portion of Old Field Creek from its source to Call Creek shall comply with Subparagraph (c)(1) of this Rule in order to protect the designated waters as per Rule .0203 of this Section;

(6) In the following designated waterbodies, no additional restrictions shall be placed on new or expanded marinas. The only new or expanded NPDES permitted discharges that shall be allowed shall be non-domestic, non-process industrial discharges. The Alligator River Area (Pasquotank River Basin), extending from the source of the Alligator River to the U.S. Highway 64 bridge, including New Lake Fork, North West Fork Alligator River, Juniper Creek, Southwest Fork Alligator River, Scouts Bay, Gum Neck Creek, Georgia Bay, Winn Bay, Stumpy Creek Bay, Stumpy Creek, Swann Creek (Swann Creek Lake), Whipping Creek (Whipping Creek Lake), Grapevine Bay, Rattlesnake Bay, The Straits, The Frying Pan, Coopers Creek, Babbitt Bay, Goose Creek, Milltail Creek, Boat Bay, Sandy Ridge Gut (Sawyer Lake) and Second Creek, but excluding the Intracoastal Waterway (Pungo River-Alligator River Canal) and all other tributary streams and canals;

(7) In the following designated waterbodies, the only type of new or expanded marina that shall be allowed shall be those marinas located in upland basin areas, or those with fewer than 10 slips having no boats over 24 feet in length and no boats with heads. The only new or expanded NPDES permitted discharges that shall be allowed shall be non-domestic, non-process industrial discharges:

(A) the Northeast Swanquarter Bay Area including all waters northeast of a line from a point at Lat. 35E 23N 51O and Long. 76E 21N 02O thence southeast along the Swanquarter National Wildlife Refuge hunting closure boundary (as defined by the 1935 Presidential Proclamation and depicted on the U.S. Fish and Wildlife Service Swanquarter National Wildlife Refuge map at https://www.fws.gov/southeast/pdf/map/swanquarter-national-wildlife-refuge.pdf, incorporated by reference) to Drum Point;

(B) the Neuse-Southeast Pamlico Sound Area (Southeast Pamlico Sound Section of the Southeast Pamlico, Core and Back Sound Area); (Neuse River Basin) including all waters within an area defined by a line extending from the southern shore of Ocracoke Inlet northwest to the Tar-Pamlico River and Neuse River basin boundary, then southwest to Ship Point;

(C) the Core Sound Section of the Southeast Pamlico, Core and Back Sound Area (White Oak River Basin), including all waters of Core Sound and its tributaries, but excluding Nelson Bay, Little Port Branch and Atlantic Harbor at its mouth, and those tributaries of Jarrett Bay that are closed to shellfishing;

(D) the Western Bogue Sound Section of the Western Bogue Sound and Bear Island Area (White Oak River Basin), including all waters within an area defined by a line from Bogue

Inlet to the mainland at SR 1117 to a line across Bogue Sound from the southwest side of Gales Creek to Rock Point and including Taylor Bay and the Intracoastal Waterway;

(E) the Stump Sound Area (Cape Fear River Basin), including all waters of Stump Sound and Alligator Bay from marker Number 17 to the western end of Permuda Island, but excluding Rogers Bay, the Kings Creek Restricted Area, and Mill Creek; and

(F) the Topsail Sound and Middle Sound Area (Cape Fear River Basin), including all estuarine waters from New Topsail Inlet to Mason Inlet and including the Intracoastal Waterway and Howe Creek, but excluding Pages Creek and Futch Creek.

(8) In the following designated waterbodies, no new or expanded NPDES permitted discharges and only new or expanded marinas with fewer than 10 slips having no boats over 24 feet in length and no boats with heads shall be allowed:

(A) the Swanquarter Bay and Juniper Bay Area (Tar-Pamlico River Basin), including all waters within a line beginning at Juniper Bay Point and running south and then west below Great Island, then northwest to Shell Point and including Shell, Swanquarter, and Juniper Bays and their tributaries, but excluding all waters northeast of a line from a point at Lat. 35E 23N 51O and Long. 76E 21N 02O thence southeast along the Swanquarter National Wildlife Refuge hunting closure boundary (as defined by the 1935 Presidential Proclamation and depicted on the U.S. Fish and Wildlife Service Swanquarter National Wildlife Refuge map at https://www.fws.gov/southeast/pdf/map/swanquarter-national-wildlife-refuge.pdf, incorporated by reference) to Drum Point and also excluding the Blowout, Hydeland, Juniper, and Quarter Canals;

(B) the Back Sound Section of the Southeast Pamlico, Core and Back Sound Area (White Oak River Basin), including that area of Back Sound extending from Core Sound west along Shackleford Banks, then north to the westernmost point of Middle Marshes and along the northwest shore of Middle Marshes (to include all of Middle Marshes), then west to Rush Point on Harker's Island, and along the southern shore of Harker's Island back to Core Sound;

(C) the Bear Island Section of the Western Bogue Sound and Bear Island Area (White Oak River Basin), including all waters within an area defined by a line from the western most point on Bear Island to the northeast mouth of Goose Creek on the mainland, east to the southwest mouth of Queen Creek, then south to green marker No. 49, then northeast to the northern most point on Huggins Island, then southeast along the shoreline of Huggins Island to the southeastern most point of Huggins Island, then south to the northeastern most point on Dudley Island, then southwest along the shoreline of Dudley Island to the eastern tip of Bear Island; and

(D) the Masonboro Sound Area (Cape Fear River Basin), including all waters between the Barrier Islands and the mainland from Carolina Beach Inlet to Masonboro Inlet.

(9) Black and South Rivers ORW Area (Cape Fear River Basin) [Index Nos. 18-68-(0.5), 18-68-(3.5), 18-68-(11.5), 18-68-12-(0.5), 18-68-12-(11.5), and 18-68-2]: the following management strategies shall be required in addition to the discharge requirements specified in Subparagraph (c)(1) of this Rule:

(A) Stormwater controls described in Subparagraph (c)(1) of this Rule shall apply to land within one mile of and that drains to the designated ORW areas;

(B) New or expanded NPDES permitted wastewater discharges located one mile upstream of the stream segments designated ORW (upstream on the designated mainstem and upstream into direct tributaries to the designated mainstem) shall comply with the following discharge restrictions:

(i) Oxygen Consuming Wastes: Effluent limitations shall be as follows: BOD shall not exceed 5 mg/l and NH3-N shall not exceed 2 mg/l;

(ii) Total Suspended Solids: Discharges of total suspended solids (TSS) shall be limited to effluent concentrations of 20 mg/l;

(iii) Emergency Requirements: Reliable treatment designs shall be employed, such as stand-by power capability for entire treatment works, dual train design for all treatment components, or other reliable treatment designs in accordance with 15A NCAC 02H .0124;

(iv) Nutrients: If nutrient overenrichment is projected to be a concern, effluent limitations shall be set for phosphorus, nitrogen, or both.

(v) Toxic substances: If complex discharges (those containing or potentially containing toxicants) may be currently present in the discharge, a safety factor shall be applied to any chemical or whole effluent toxicity allocation. The limit for a specific chemical constituent shall be allocated at one-half of the normal standard at design conditions. Whole effluent toxicity shall be allocated to protect for chronic toxicity at an effluent concentration equal to twice that which is acceptable under flow design criteria pursuant to Rule .0206 of the Section.

(10) Lake Waccamaw ORW Area (Lumber River Basin) [Index No. 15-2]: all undesignated waterbodies that are tributary to Lake Waccamaw shall comply with Paragraph (c) of this Rule in order to protect the designated waters as per Rule .0203 of this Section;

(11) Swift Creek and Sandy Creek ORW Area (Tar-Pamlico River Basin) [portion of Index No. 28-78-(0.5) and Index No. 28-78-1-(19)]: all undesignated waterbodies that drain to the designated waters shall comply with Paragraph (c) of this Rule in order to protect the designated waters as per Rule .0203 of this Section and to protect outstanding resource values found in the designated waters as well as in the undesignated waters that drain to the designated waters;

(12) Fontana Lake North Shore ORW Area (Little Tennessee River Basin and Savannah River Drainage Area) [Index Nos. 2-96 through 2-164] (excluding all waterbodies that drain to the south shore of Fontana Lake) consists of the entire watersheds of all creeks that drain to the north shore of Fontana Lake between Eagle and Forney Creeks, including Eagle and Forney Creeks. In addition to the requirements set forth in Subparagraph (c)(1) of this Rule, any person conducting development activity disturbing greater than or equal to 5,000 square feet of land area in the designated ORW area shall undertake the following actions to protect the outstanding resource values of the designated ORW and downstream waters:

(A) investigate for the presence of and identify the composition of acid-producing rocks by exploratory drilling or other means and characterize the net neutralization potential of the acid-producing rocks prior to commencing the land-disturbing activity;

(B) to the maximum extent practicable, taking into account site-specific factors including technical and cost considerations as well as protection of water quality, avoid areas where acid-producing rocks are found with net neutralization potential of –5 or less;

(C) establish background levels of acidity and mineralization prior to commencing land-disturbing activity and monitor and maintain baseline water quality conditions for the duration of the land-disturbing activity and thereafter for a period of at least two years as determined by the Division as part of a certification issued in accordance with 15A NCAC 02H .0500 or stormwater permit issued pursuant to this Rule;

(D) obtain a NPDES permit for construction pursuant to Rule 15A NCAC 02H .0126 prior to initiating land-disturbing activity;

(E) design stormwater control systems to control and treat stormwater runoff from all surfaces generated by one inch of rainfall, in accordance with 15A NCAC 02H .1003(3), .1003(5), and .1050; and

(F) post development, replicate pre-development runoff characteristics and mimic the natural hydrology of the site.

(13) Horsepasture River ORW Area (Savannah Drainage Area) [Index No. 4-13-(0.5) and Index No. 4-13-(12.5)]: all undesignated waterbodies that are located within the Horsepasture River watershed shall comply with Subparagraph (c)(1) of this Rule in order to protect the designated waters as per Rule .0203 of this Section and to protect outstanding resource values throughout the watershed. However, new domestic wastewater discharges and expansions of existing wastewater discharges shall be allowed provided that:

(A) Oxygen Consuming Wastes: Effluent limitations shall be as follows: BOD shall not exceed 5 mg/l and NH3-N shall not exceed 2 mg/l;

(B) Total Suspended Solids: Discharges of total suspended solids (TSS) shall be limited to effluent concentrations of 10 mg/1 for trout waters and to 20 mg/l for all other waters except for mining operations, which shall be held to their respective NPDES TSS permit limits;

(C) Nutrients: If nutrient overenrichment is projected to be a concern, effluent limitations shall be set for phosphorus, nitrogen, or both; and

(D) Volume: The total volume of treated wastewater for all discharges combined shall not exceed 25 percent of the total instream flow in the designated ORW under 7Q10 conditions, as defined in Rule .0206(a)(1) of this Section;

(14) North Fork New River ORW Area (New River Basin) [Index Nos. 10-2-(1), 10-2-(11) and 10-2-(12)]: all non-ORW waterbodies, including Little Buffalo Creek and Claybank Creek [Index Nos. 10-2-20-1 and 10-2-20-1-1], that are located within the North Fork New River watershed shall comply with Rule .0224 of this Section in order to protect the ORW designated waters.

History Note: *Authority G.S. 143-214.1; S.L. 2005-97;*
Eff. October 1, 1995;
Amended Eff. August 1, 2003 (see S.L. 2003-433, s.2); August 1, 2000; April 1, 1996; January 1, 1996;
Temporary Amendment Eff. October 7, 2003;
Amended Eff. December 1, 2010; July 1, 2009; January 1, 2007; June 1, 2004;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0226 EXEMPTIONS FROM SURFACE WATER QUALITY STANDARDS

Variances from applicable standards, revisions to water quality standards or site-specific water quality standards may be granted by the Commission on a case-by-case basis pursuant to G.S. 143-215.3(e), 143-214.3 or 143-214.1. A listing of existing variances shall be maintained and made available to the public by the Division. Exemptions established pursuant to this Rule shall be reviewed as part of the Triennial Review of Water Quality Standards conducted pursuant to 40 CFR 131.10(g).

History Note: *Authority G.S. 143-214.1; 143-214.3; 143-215.3(e);*
Eff. October 1, 1995;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0227 WATER QUALITY MANAGEMENT PLANS

(a) In implementing the water quality standards to protect the "existing uses" [as defined by Rule .0202 of this Section] of the waters of the State or the water quality that supports those uses, the Commission shall develop water quality management plans on a priority basis to attain, maintain or enhance water quality throughout the State. Additional specific actions deemed necessary by the Commission to protect the water quality or the existing uses of the waters of the State shall be specified in Paragraph (b) of this Rule. These actions may include anything within the powers of the Commission, as set forth in G.S. 143-21 and G.S. 143B-282. The Commission may also consider local actions that have been taken to protect a waterbody in determining the appropriate protection options to be incorporated into the water quality management plan.

(b) All waters determined by the Commission to be protected by a water quality management plan are listed with specific actions either in Rules .0601 - .0608 of this Subchapter that address the Goose Creek watershed (Yadkin Pee-Dee River Basin) or as follows:

(1) The Lockwoods Folly River Area (Lumber River Basin), which includes all waters of the lower Lockwoods Folly River in an area extending north from the Intracoastal Waterway to a line extending from Genoes Point to Mullet Creek, shall be protected by the specific actions described in Parts (A) through (D) of this Subparagraph.

(A) New development activities within 575' of the mean high water line that require a Sedimentation Erosion Control Plan or a CAMA major development permit shall comply with the low density option of the coastal stormwater requirements as specified in 15A NCAC 02H .1005(3)(a).

(B) New or expanded NPDES permits shall be issued only for non-domestic, non-industrial process type discharges, such as non-industrial process cooling or seafood processing discharges. Pursuant to 15A NCAC 02H .0111, a public hearing shall be mandatory for any proposed (new or expanded) NPDES permit to this protected area.

(C) New or expanded marinas shall be located in upland basin areas.

(D) No dredge or fill activities shall be allowed if those activities would result in a reduction of the beds of "submerged aquatic vegetation habitat" or "shellfish producing habitat" that are defined in 15A NCAC 03I .0101, except for maintenance dredging, such as that

required to maintain access to existing channels and facilities located within the protected area or maintenance dredging for activities such as agriculture.

(2) A part of the Cape Fear River (Cape Fear River Basin) comprised of a section of Index No.18-(71) from upstream mouth of Toomers Creek to a line across the river between Lilliput Creek and Snows Cut shall be protected by the Class SC Sw standards as well as the following site-specific action: All new individual NPDES wastewater discharges and expansions of existing individual NPDES wastewater discharges shall be required to provide treatment for oxygen consuming wastes as described in Parts (A) through (C) of this Subparagraph.

(A) Effluent limitations shall be as follows: BOD_5 = 5 mg/l, NH_3-N = 1 mg/l and DO = 6 mg/l, or utilize site-specific best available technology on a case-by-case basis for industrial discharges in accordance with Rule .0406 (e) of this Subchapter.

(B) Seasonal effluent limits for oxygen consuming wastes shall be considered in accordance with Rule .0404 of this Subchapter.

(C) Any new or expanded permitted pollutant discharge of oxygen consuming waste shall not cause the dissolved oxygen of the receiving water to drop more than 0.1 mg/l below the modeled in-stream dissolved oxygen at total permitted capacity for all discharges.

History Note: *Authority G.S. 143-214.1; 143-215.8A;*
Eff. October 1, 1995;
Amended Eff. June 30, 2017; January 1, 1996;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0228 EFFLUENT CHANNELS

The standards of water quality contained in this Section shall not apply to waters within effluent channels, as defined in Rule .0202 of this Section, except that said waters shall be maintained at a quality that shall prevent the occurrence of offensive conditions, protect public health, and allow maintenance of the standards applicable to all downstream waters. Effluent channels shall be designated by the Director on a case-by-case basis prior to permit issuance. To be designated as such, effluent channels shall:

(1) be contained entirely on property owned (or otherwise controlled) by the discharger, as demonstrated by land records, deeds, contracts, written agreements, or other legal instruments;

(2) not contain natural waters except when such waters occur in direct response to rainfall events by overland runoff; and

(3) be so constructed or modified as to minimize the migration of fish into said channel.

History Note: *Authority G.S. 143-214.1;*
Eff. October 1, 1995;
Amended Eff. January 1, 1996;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0229 TAR-PAMLICO RIVER BASIN - NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: NUTRIENT OFFSET PAYMENTS FOR NON-TAR-PAMLICO BASIN ASSOCIATION MEMBERS (RECODIFIED TO 15A NCAC 02B .0733 EFF. APRIL 1, 2020)

15A NCAC 02B .0230 ACTIVITIES DEEMED TO COMPLY WITH WETLANDS STANDARDS

(a) The following activities for which Section 404 permits are not required pursuant to Section 404(f)(1) of the Clean Water Act and which are not recaptured into the permitting process pursuant to Section 404(f)(2) are deemed to be in compliance with wetland standards in 15A NCAC 02B .0231 provided that they comply with the most current versions of the federal regulations to implement Section 404 (f)(US Environmental Protection Agency and US Army Corps of Engineers including 40 C.F.R. 232.3) and the Sedimentation Pollution Control Act, G.S. 113A, Article 4:

(1) normal, on-going silviculture**,** farming, and ranching activities, such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, provided that relevant silvicultural activities comply with U.S. Environmental Protection Agency and U.S. Army Corps of Engineers Memorandum to the Field entitled "Application of Best Management Practices to Mechanical Silvicultural Site Preparation Activities for the Establishment of Pine Plantations in the Southeast", November 28, 1995 which is available at no cost at https://www.epa.gov/cwa-404/memorandum-application-best-

management-practices-mechanical-silvicultural-site-preparation and is hereby incorporated by reference including any subsequent amendments and editions;

(2) maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures**,** and other maintenance, repairs or modification to existing structures as required by the NC Dam Safety Program. Information about the NC Dam Safety Program can be found at https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/dam-safety;

(3) construction and maintenance of farm or stock ponds or irrigation ditches. In addition, new pond construction in designated river basins with riparian buffer protection programs as set forth in this Subchapter shall comply with the applicable requirements of the riparian buffer protection rules as set forth in this Subchapter.

(4) maintenance of drainage ditches, provided that spoil is removed to high ground, placed on top of previous spoil, or placed parallel to one side or the other of the ditch within a distance of 20 feet and spoils are placed in a manner that minimizes damages to existing wetlands; and ditch maintenance is no greater than the original depth, length and width of the ditch;

(5) construction of temporary sediment control measures or best management practices as required by the NC Erosion and Sediment Control Program on a construction site, provided that the temporary sediment control measures or best management practices are restored to natural grade and stabilized within two months of completion of the project and native woody vegetation is reestablished during the next appropriate planting season and maintained. Information about the NC Erosion and Sediment Control Program can be found at https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/dam-safety; and

(6) construction or maintenance of farm roads, forest roads, and temporary roads for moving mining equipment where such roads are constructed and maintained in accordance with best management practices, as defined in 40 C.F.R. 232.3 (c)(6)(i-xv), to assure that flow and circulation patterns and chemical and biological characteristics of the navigable waters are not impaired, that the reach of navigable waters is not reduced, and that any adverse effects on the aquatic environment will be otherwise minimized.

(b) Where the Director determines, in consultation with the US Army Corps of Engineers or the US Environmental Protection Agency, and considering existing or projected environmental impact, that an activity is not exempt from permitting under Section 404(f), or where the appropriate Best Management Practices are not implemented and maintained in accordance with Paragraph (a) of this Rule, the Director may require restoration of the wetlands as well as 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; 143-214.7; 143-215; 143-215.3; 143-215.6A; 143-215.6B; 143-215.6C;*
Temporary Adoption Eff. November 24, 1999;
Eff. April 1, 2001;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0231 WETLAND STANDARDS

(a) Wetlands shall be assigned to one of the following classifications:

(1) Class WL: waters that meet the definition of wetlands as defined in Rule .0202 of this Section except those designated as SWL; or

(2) Class SWL: waters that meet the definition of coastal wetlands as defined by 15A NCAC 07H .0205, which are landward of the mean high water line, and wetlands contiguous to estuarine waters as defined by 15A NCAC 07H .0206.

In addition, the EMC may classify wetlands as unique wetlands (Class UWL) that are of exceptional State or national ecological significance which require special protection to maintain existing uses. Class UWL wetlands may include wetlands that have been documented as habitat essential for the conservation of State or federally listed threatened or endangered species.

(b) The water quality standards for all wetlands are designed to protect, preserve, restore, and enhance the quality and uses of wetlands and other waters of the State influenced by wetlands. The following are wetland uses:

(1) Storm and flood water storage and retention;

(2) Moderation of water level fluctuations;

(3) Hydrologic functions, including groundwater discharge that contributes to maintain dry weather streamflow and, at other locations or times, groundwater recharge that replenishes the groundwater system;

(4) Filtration or storage of sediments, nutrients, toxic substances, or other pollutants that would otherwise have an adverse impact, as defined in 15A NCAC 02H .1002, on the quality of other waters of the State;

(5) Shoreline protection against erosion through the dissipation of wave energy and water velocity and stabilization of sediments;

(6) Habitat for the propagation of resident wetland-dependent aquatic organisms, including fish, crustaceans, mollusks, insects, annelids, planktonic organisms, and the plants and animals upon which these aquatic organisms feed and depend upon for their needs in all life stages; and

(7) Habitat for the propagation of resident wetland-dependent wildlife species, including mammals, birds, reptiles, and amphibians for breeding, nesting, cover, travel corridors, and food.

(c) The following standards shall be used to assure the maintenance or enhancement of the existing uses of wetlands identified in Paragraph (b) of this Rule:

(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses;

(2) Floating or submerged debris, oil, deleterious substances, or other material shall not be present in amounts that may cause adverse impacts on existing wetland uses;

(3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses;

(4) Materials that adversely affect the palatability of fish or aesthetic quality of the wetland shall not be present in amounts that may cause adverse impacts on existing wetland uses;

(5) Concentrations or combinations of substances that are toxic or harmful to human, animal, or plant life shall not be present in amounts which individually or cumulatively may cause adverse impacts on existing wetland uses;

(6) Hydrological conditions necessary to support the biological and physical characteristics naturally present in wetlands shall be protected to prevent detrimental impacts on:

(A) Water currents, erosion or sedimentation patterns;

(B) Natural water temperature variations;

(C) The chemical, nutrient, and dissolved oxygen regime of the wetland;

(D) The movement of aquatic fauna;

(E) The pH of the wetland; and

(F) Water levels or elevations.

(7) The populations of wetland flora and fauna shall be maintained to protect biological integrity as defined in Rule .0202 of this Section.

History Note: *Authority G.S. 143-214.1; 143-215.3(a)(1);*
RRC Objection Eff. July 18, 1996 due to lack of statutory authority and ambiguity;
Eff. October 1, 1996;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0232 NEUSE RIVER BASIN - NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: BASIN NUTRIENT REDUCTION GOAL (RECODIFIED TO 15A NCAC 02B .0710 EFF. APRIL 1, 2020)

15A NCAC 02B .0233 NEUSE RIVER BASIN: NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority G.S. 143-214.1; 143-214.7; 143-215.3(a)(1); S.L. 1995, c. 572;*
Temporary Adoption Eff. July 22, 1997;
Temporary Adoption Eff. June 22, 1999; April 22, 1998; January 22, 1998;
Eff. August 1, 2000;
Transferred to 15A NCAC 02B .0610, .0611, .0612, and .0714 Eff. June 15, 2020.

15A NCAC 02B .0234 NEUSE RIVER BASIN - NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS (RECODIFIED TO 15A NCAC 02B .0713 EFF. APRIL 1, 2020)

15A NCAC 02B .0235 NEUSE RIVER BASIN-NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: BASINWIDE STORMWATER REQUIREMENTS (RECODIFIED TO 15A NCAC 02B .0711 EFF. APRIL 1, 2020)

15A NCAC 02B .0236 NEUSE RIVER BASIN-NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: AGRICULTURAL NITROGEN LOADING REDUCTION

History Note: *Authority G.S. 143.214.1; 143.214.7; 143.215.3(a)(1);*
Eff. August 1, 1998;
Repealed Eff. April 1, 2020.

15A NCAC 02B .0237 BEST MANAGEMENT PRACTICE COST-EFFECTIVENESS RATE

History Note: *Authority G.S. 143-214.1;*
Eff. April 1, 1997;
Repealed Eff. April 1, 2020.

15A NCAC 02B .0238 NEUSE RIVER BASIN-NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: AGRICULTURAL NITROGEN REDUCTION STRATEGY (RECODIFIED TO 15A NCAC 02B .0712 EFF. APRIL 1, 2020)

15A NCAC 02B .0239 NEUSE RIVER BASIN: NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: NUTRIENT MANAGEMENT

History Note: *Authority G.S. 143-214.1; 143-214.7; 143-215.3(a)(1);*
Eff. August 1, 1998;
Repealed Eff. April 1, 2020.

15A NCAC 02B .0240 NUTRIENT OFFSET PAYMENTS (RECODIFIED TO 15A NCAC 02B .0703 EFF. APRIL 1, 2020)

15A NCAC 02B .0241 NEUSE RIVER BASIN: NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: DELEGATION OF AUTHORITY FOR THE PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority 143-214.1; 143-214.7; 143-215.3(a)(1); S.L. 1998 c. 221;*
Eff. August 1, 2000;
Transferred to 15A NCAC 02B .0715 Eff. June 15, 2020.

15A NCAC 02B .0242 NEUSE RIVER BASIN: NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: MITIGATION PROGRAM FOR PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority 143-214.1; 143-214.7; 143-215.3(a)(1); S.L. 1998, c. 221;*
Temporary Adoption Eff. June 22, 1999;
Eff. August 1, 2000;
Repealed Eff. October 24, 2014.

15A NCAC 02B .0243 CATAWBA RIVER BASIN: PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority G.S. 143-214.1; 143-214.7; 143-215.3(a)(1); S.L. 1999-329, s. 7.1; S.B 824-2003;*
Temporary Adoption Eff. June 30, 2001; (exempt from 270 day requirement - S.L. 2001-418 & S.L. 2003-340);
Eff. August 1, 2004;
Transferred to 15A NCAC 02B .0610, .0611, .0612, and.0614 Eff. June 15, 2020.

15A NCAC 02B .0244 CATAWBA RIVER BASIN: MITIGATION PROGRAM FOR PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS IN THE CATAWBA RIVER BASIN

History Note: *Authority G.S. 143-214.1; 143-214.7; 143-215.3(a)(1); S.L. 1999, c. 329, s. 7.1; S.B. 824-2003; Temporary Adoption Eff. June 30, 2001 (exempt from 270 day requirement - S.L. 2001-418 & S.L. 2003-340); Eff. August 1, 2004; Repealed Eff. October 24, 2014.*

15A NCAC 02B .0245 RESERVED FOR FUTURE CODIFICATION
15A NCAC 02B .0246 RESERVED FOR FUTURE CODIFICATION
15A NCAC 02B .0247 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0248 RANDLEMAN LAKE WATER SUPPLY WATERSHED: NUTRIENT MANAGEMENT STRATEGY

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; Eff. April 1, 1999; Amended Eff. May 1, 2010; Transferred to 15A NCAC 02B .0720 Eff. June 15, 2020.*

15A NCAC 02B .0249 RANDLEMAN LAKE WATER SUPPLY WATERSHED: WASTEWATER DISCHARGE REQUIREMENTS

History Note: *Authority G. S. 143-214.1; 143-214.5; 143-215.3(a)(1); Eff. April 1, 1999; Transferred to 15A NCAC 02B .0722 Eff. June 15, 2020.*

15A NCAC 02B .0250 RANDLEMAN LAKE WATER SUPPLY WATERSHED: PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-215.3(a)(1); Eff. April 1, 1999; Amended Eff. June 1, 2010; Transferred to 15A NCAC 02B .0610, .0611, .0612, and .0724 Eff. June 15, 2020.*

15A NCAC 02B .0251 RANDLEMAN LAKE WATER SUPPLY WATERSHED: STORMWATER REQUIREMENTS

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-215.1; 143-215.3(a)(1); Eff. April 1, 1999; Transferred to 15A NCAC 02B .0721 Eff. June 15, 2020.*

15A NCAC 02B .0252 RANDLEMAN LAKE WATER SUPPLY WATERSHED: MITIGATION PROGRAM FOR PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority 143-214.1; 143-214.7; 143-215.3(a)(1); S.L. 1998, c. 221; Eff. June 1, 2010; Repealed Eff. October 24, 2014.*

15A NCAC 02B .0253 - .0254 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0255 TAR-PAMLICO RIVER BASIN - NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: AGRICULTURAL NUTRIENT LOADING GOALS

History Note: *Authority G.S. 143-214.1; 143-214.7; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; Eff. April 1, 2001; Repealed Eff. April 1, 2020.*

15A NCAC 02B .0256 TAR-PAMLICO RIVER BASIN-NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: AGRICULTURAL NUTRIENT CONTROL STRATEGY (RECODIFIED TO 15A NCAC 02B .0732 EFF. APRIL 1, 2020)

15A NCAC 02B .0257 TAR-PAMLICO RIVER BASIN - NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: NUTRIENT MANAGEMENT

History Note: *Authority G.S. 143-214.1; 143-214.7; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143B-282(d); Eff. April 1, 2001; Repealed Eff. April 1, 2020.*

15A NCAC 02B .0258 TAR-PAMLICO RIVER BASIN-NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: BASINWIDE STORMWATER REQUIREMENTS (RECODIFIED TO 15A NCAC 02B .0731 EFF. APRIL 1, 2020)

15A NCAC 02B .0259 TAR-PAMLICO RIVER BASIN: NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority 143-214.1; 143-214.7; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143B-282(d); S.L. 1999-329, s. 7.1; Temporary Adoption Eff. January 1, 2000; Eff. August 1, 2000; Transferred to 15A NCAC 02B .0610, .0611, .0612, and .0734 Eff. June 15, 2020.*

15A NCAC 02B .0260 TAR-PAMLICO RIVER BASIN - NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: MITIGATION PROGRAM FOR PROTECTION AND MAINTENANCE OF RIPARIAN BUFFERS

History Note: *Authority 143-214.1; 143-214.7; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143B-282(d); S.L. 1999, c. 329, s. 7.1; Temporary Adoption Eff. January 1, 2000; Eff. August 1, 2000; Repealed Eff. October 24, 2014.*

15A NCAC 02B .0261 TAR-PAMLICO RIVER BASIN - NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: DELEGATION OF AUTHORITY FOR THE PROTECTION AND MAINTENANCE OF EXISTING RIPARIAN BUFFERS

History Note: *Authority G S. 143-214.1; 143-214.7; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143B-282(d); S.L. 1999-329, s. 7.1; Temporary Adoption Eff. January 1, 2000; Eff. August 1, 2000; Transferred to 15A NCAC 02B .0735 Eff. June 15, 2020.*

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) 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 loads of nitrogen and phosphorus delivered to Jordan Reservoir from all point and nonpoint sources of these nutrients located within its watershed, as specified in Item (5) of this Rule, and provides for adaptive management of the strategy and goal, as specified in Item (8) of this Rule.

(3) 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) 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) NUTRIENT REDUCTION GOALS. Each arm of the lake has reduction 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, while allocations are expressed in pounds per year of allowable delivered load. Each arm and subwatershed shall conform to its respective allocations for nitrogen and phosphorus as follows:

(a) The at-lake nitrogen 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) 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 1997-2001 baseline nitrogen 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 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 1997-2001 baseline phosphorus 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) 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 2B .0275(3).

(7) 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) 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.

15A NCAC 02B .0263 JORDAN WATER SUPPLY NUTRIENT 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:

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

(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) "Development" means the same as defined in 15A NCAC 02B .0202(23).

(7) "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 in the Jordan watershed. A discharge value is equivalent to a delivered value divided by the transport factor for that discharge location.

(8) "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) "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) "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) "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.

(17) "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) "Nitrogen" or "total nitrogen" means the sum of the organic, nitrate, nitrite, and ammonia forms of nitrogen in a water or wastewater.

(20) "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) "Nutrients" means total nitrogen and total phosphorus.

(22) "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) "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) "Phosphorus" or "total phosphorus" means the sum of the orthophosphate, polyphosphate, and organic forms of phosphorus in a water or wastewater.

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

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

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

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

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

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

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

(33) "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) "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.*

15A NCAC 02B .0264 JORDAN WATER SUPPLY NUTRIENT STRATEGY: AGRICULTURE
(See S.L. 2013-395)

This Rule sets forth a process by which agricultural operations in the Jordan watershed will collectively limit their nitrogen and phosphorus loading to the Jordan Reservoir, as prefaced in Rule 15A NCAC 02B .0262. This process is as follows:

(1) PURPOSE. The purposes of this Rule are to achieve and maintain the percentage reduction goals defined in Rule 15A NCAC 02B .0262 for the collective agricultural loading of nitrogen and phosphorus from their respective 1997-2001 baseline levels, to the extent that best available accounting practices will allow. This Rule aims to achieve the goals set out in 15A NCAC 02B .0262 within six to nine years, as set out in Sub-Item (5)(b) of this Rule. Additionally this Rule will protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed.

(2) PROCESS. This Rule requires accounting for agricultural land management practices at the county and subwatershed levels in the Jordan watershed, and implementation of practices by farmers in these areas to collectively achieve the nutrient reduction goals on a county and subwatershed basis. Producers may be eligible to obtain cost share and technical assistance from the NC Agriculture Cost Share Program and similar federal programs to contribute to their counties' nutrient reductions. A Watershed Oversight Committee, and if needed Local Advisory Committees, will develop strategies, coordinate activities, and account for progress.

(3) LIMITATION. This Rule may not fully address significant nutrient sources relative to agriculture in that it does not directly address atmospheric sources of nitrogen to the Jordan watershed from agricultural operations located both within and outside of the Jordan watershed. As better information becomes available from ongoing research on atmospheric nitrogen loading to the Jordan 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 Reservoir Nutrient Sensitive Waters Strategy.

(4) APPLICABILITY. This Rule shall apply to all persons engaging in agricultural operations in the Jordan watershed, including those related to crops, horticulture, livestock, and poultry. This Rule applies to livestock and poultry operations above the size thresholds in this Item in addition to requirements for animal operations set forth in general permits issued pursuant to G.S. 143-215.10C. Nothing in this Rule shall be deemed to allow the violation of any assigned surface water, groundwater, or air quality standard by any agricultural operation, including any livestock or poultry operation below the size thresholds in this Item. This Rule does not require specific actions by any individual person or operation if the county or counties in which they conduct operations can collectively achieve their nutrient reduction targets, in the manner described in Item (5) of this Rule, within six years of the effective date of this Rule. For the purposes of this Rule, agricultural operations are activities that relate to any of the following pursuits:

  (a) The commercial production of crops or horticultural products other than trees. As used in this Rule, commercial shall mean activities conducted primarily for financial profit.

  (b) Research activities in support of such commercial production.

  (c) The production or management of any of the following number of livestock or poultry at any time, excluding nursing young:

    (i) 5 or more horses;

    (ii) 20 or more cattle;

    (iii) 20 or more swine not kept in a feedlot, or 150 or more swine kept in a feedlot;

    (iv) 120 or more sheep;

    (v) 130 or more goats;

    (vi) 650 or more turkeys;

    (vii) 3,500 or more chickens; or

    (viii) Any single species of any other livestock or poultry, or any combination of species of livestock or poultry, that exceeds 20,000 pounds of live weight at any time.

(5) METHOD FOR RULE IMPLEMENTATION. This Rule shall be implemented initially by a Watershed Oversight Committee and, if needed, through a cooperative effort between the Watershed Oversight Committee and Local Advisory Committees in each county. The membership, roles and responsibilities of these committees are set forth in Items (7) and (8) of this Rule. Committees' activities shall be guided by the following constraints:

  (a) Within three years after the effective date of this Rule, the Watershed Oversight Committee shall provide the Commission with an initial assessment of the extent to which agricultural

operations in each subwatershed have achieved the nitrogen goals identified in Item (1) of this Rule through activities conducted since the baseline period. The Watershed Oversight Committee shall use the accounting process described in Items (7) and (8) of this Rule to make its assessment. Should the Commission determine at that time that a subwatershed nitrogen goal has not been achieved, then Local Advisory Committees shall be formed in that subwatershed according to Item (8) of this Rule to further progress toward the goal by developing local strategies to guide implementation.

(b) For any subwatershed identified in Sub-Item (5)(a) of this Rule as not having achieved its nitrogen goal within three years, the Commission shall within six years after the effective date of this Rule again determine, with input from the Watershed Oversight Committee, whether the subwatershed has achieved its nitrogen goal. Should the Commission determine at that time that a subwatershed has not achieved its goal, then it shall require additional best management practice (BMP) implementation as needed to ensure that the goal is met within nine years after the effective date of this Rule. The Commission may also consider alternative recommendations from the Watershed Oversight Committee based on its assessment of the practicability of agricultural operations meeting the subwatershed goal. Should the Commission require some form of individual compliance, then it shall also subsequently approve a framework proposed by the Watershed Oversight Committee for allowing producers to obtain credit through offsite measures. Such offsite measures shall meet the requirements of 15A NCAC 02B .0273(2) – (4). The Commission shall review compliance with the phosphorus goals within six years of the effective date and shall require additional BMP implementation within any subwatershed as needed to meet its goal within an additional three years from that date.

(c) Should a committee called for under Sub-Item (5)(a) of this Rule not form nor follow through on its responsibilities such that a local strategy is not implemented in keeping with Item (8) of this Rule, the Commission shall require all persons subject to this Rule in the affected area to implement BMPs as needed to meet the goals of this Rule.

(6) RULE REQUIREMENTS FOR INDIVIDUAL OPERATIONS. Persons subject to this Rule shall adhere to the following requirements:

(a) If the initial accounting required under Sub-Item (5)(a) of this Rule determines that agricultural operations have not already collectively met the nitrogen reduction goals, persons subject to this Rule shall register their operations with their Local Advisory Committee according to the requirements of Item (8) of this Rule within four years after the effective date of this Rule. Within six years after the effective date of this Rule, such persons are not required to implement any specific BMPs but may elect to contribute to the collective local nutrient strategy by implementing any BMPs they choose that are recognized by the Watershed Oversight Committee as nitrogen-reducing or phosphorus-reducing BMPs.

(b) Should a local strategy not achieve its goal after six years, operations within that local area may face specific implementation requirements, as described under Sub-Item (5)(b) of this Rule.

(c) Producers may generate nitrogen loading reduction credit for sale to parties subject to or operating under other nutrient strategy rules in the Jordan watershed under either of the following circumstances and only pursuant to the conditions of Sub-Item (7)(b)(vii) of this Rule and 15A NCAC 02B .0273:

(ii) If the subwatershed in which they implement nitrogen-reducing practices has achieved its nitrogen goal.

(ii) At any point during the implementation of this Rule, a pasture-based livestock operation that implements an excluded buffer BMP on part or all of its operation may sell that portion of the nitrogen reduction credit attributed to the buffer restoration aspect of the practice, while the credit attributed to the exclusion aspect shall accrue to the achievement or maintenance of the goals of this Rule.

(7) WATERSHED OVERSIGHT COMMITTEE. The Watershed Oversight Committee shall have the following membership, role and responsibilities:

(a) MEMBERSHIP. The Director shall be responsible for forming a Watershed Oversight Committee within two months of the effective date of this Rule. Until such time as the

Commission determines that long-term maintenance of the nutrient loads is assured, the Director shall either reappoint members or replace members at least every six years. The Director shall solicit nominations for membership on this Committee to represent each of the following interests, and shall appoint one nominee to represent each interest except where a greater number is noted. The Director may appoint a replacement at any time for an interest in Sub-Items (7)(a)(vi) through (7)(a)(x) of this Rule upon request of representatives of that interest:

(i) Division of Soil and Water Conservation;
(ii) United States Department of Agriculture-Natural Resources Conservation Service (shall serve in an "ex-officio" non-voting capacity and shall function as a technical program advisor to the Committee);
(iii) North Carolina Department of Agriculture and Consumer Services;
(iv) North Carolina Cooperative Extension Service;
(v) Division of Water Quality;
(vi) Three environmental interests, at least two of which are residents of the Jordan watershed;
(vii) General farming interests;
(viii) Pasture-based livestock interests;
(ix) Equine livestock interests;
(x) Cropland farming interests; and
(xi) The scientific community with experience related to water quality problems in the Jordan watershed.

(b) ROLE. The Watershed Oversight Committee shall:

(i) Develop tracking and accounting methods for nitrogen and phosphorus loss. Submit methods to the Water Quality Committee of the Commission for approval based on the standards set out in Sub-Item (7)(c) of this Rule within two years after the effective date of this Rule;
(ii) Identify and implement future refinements to the accounting methods as needed to reflect advances in scientific understanding, including establishment or refinement of nutrient reduction efficiencies for BMPs;
(iii) Within three years after the effective date of this Rule, collect data needed to conduct initial nutrient loss accounting for the baseline period and the most current year feasible, perform this accounting, and determine the extent to which agricultural operations have achieved the nitrogen loss goal and phosphorus loss trend indicators for each subwatershed. Present findings to the Water Quality Committee of the Commission;
(iv) Review, approve, and summarize local nutrient strategies if required pursuant to Sub-Item (5)(a) of this Rule and according to the timeframe identified in Sub-Item (8)(c)(ii) of this Rule. Provide these strategies to the Division;
(v) Establish requirements for, review, approve and summarize local nitrogen and phosphorus loss annual reports as described under Sub-Item (8)(e) of this Rule, and present these reports to the Division annually, until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule. Present the annual report six years after the effective date to the Commission. Should that annual report find that a subwatershed has not met its nitrogen goal, include an assessment in that report of the practicability of producers achieving the goal within nine years after the effective date, and recommendations to the Commission as deemed appropriate;
(vi) Obtain nutrient reduction efficiencies for BMPs from the scientific community associated with design criteria identified in rules adopted by the Soil and Water Conservation Commission, including 15A NCAC 06E .0104 and 15A NCAC 06F .0104; and
(vii) Investigate and, if feasible, develop an accounting method to equate implementation of specific nitrogen-reducing practices on cropland or pastureland to reductions in nitrogen loading delivered to streams. Quantify the nitrogen credit generated by such practices for purposes of selling or buying credits.

Establish criteria and a process as needed for the exchange of nitrogen credits between parties meeting the criteria of either Sub-Item (5)(b) or Sub-Item (6)(c) of this Rule with parties subject to or operating under other nutrient strategy rules in the Jordan watershed pursuant to the requirements of 15A NCAC 02B .0273. Approve eligible trades, and ensure that such practices are accounted for and tracked separately from those contributing to the goals of this Rule.

(c) ACCOUNTING METHODS. Success in meeting this Rule's purpose will be gauged by estimating percentage changes in nitrogen loss from agricultural lands in the Jordan watershed and by evaluating broader trends in indicators of phosphorus loss from agricultural lands in the Jordan watershed. The Watershed Oversight Committee shall develop accounting methods that meet the following requirements:

(i) The nitrogen method shall quantify baseline and annual total nitrogen losses from agricultural operations in each county, each subwatershed, and for the entire Jordan watershed;

(ii) The nitrogen and phosphorus methods shall include a means of tracking implementation of BMPs, including number, type, and area affected;

(iii) The nitrogen method shall include a means of estimating incremental nitrogen loss reductions from actual BMP implementation and of evaluating progress toward and maintenance of the nutrient goals from changes in BMP implementation, fertilization, individual crop acres, and agricultural land use acres;

(iv) The nitrogen and phosphorus methods shall be refined as research and technical advances allow;

(v) The phosphorus method shall quantify baseline values for and annual changes in factors affecting agricultural phosphorus loss as identified by the phosphorus technical advisory committee established under 15A NCAC 02B .0256(f)(2)(C). The method shall provide for periodic qualitative assessment of likely trends in agricultural phosphorus loss from the Jordan watershed relative to baseline conditions;

(vi) Phosphorus accounting may also include a scientifically valid, survey-based sampling of farms in the Jordan watershed for the purpose of conducting field-scale phosphorus loss assessments and extrapolating phosphorus losses for the Jordan watershed for the baseline period and at periodic intervals; and

(vii) Aspects of pasture-based livestock operations that potentially affect nutrient loss and are not captured by the accounting methods described above shall be accounted for in annual reporting by quantifying changes in the extent of livestock-related nutrient controlling BMPs. Progress may be judged based on percent change in the extent of implementation relative to subwatershed percentage goals identified in Rule .0262 of this Section.

(8) LOCAL ADVISORY COMMITTEES. Local Advisory Committees required by Sub-Item (5)(a) of this Rule shall be formed for each county within the applicable subwatershed within three years and three months after the effective date of this Rule, and shall have the following membership, roles, and responsibilities:

(a) MEMBERSHIP. A Local Advisory Committee shall be appointed as provided for in this Item. It shall terminate upon a finding by the Commission that it is no longer needed to fulfill the purposes of this Rule. Each Local Advisory Committee shall consist of:

(i) One representative of the county Soil and Water Conservation District;

(ii) One representative of the county office of the United States Department of Agriculture Natural Resources Conservation Service;

(iii) One representative of the North Carolina Department of Agriculture and Consumer Services whose regional assignment includes the county;

(iv) One representative of the county office of the North Carolina Cooperative Extension Service;

(v) One representative of the North Carolina Division of Soil and Water Conservation whose regional assignment includes the county; and

(vi) At least two farmers who reside in the county.

(b) APPOINTMENT OF MEMBERS. The Director of the Division of Water Quality and the Director of the Division of Soil and Water Conservation of the Department of Environment and Natural Resources shall appoint members described in Sub-Items (8)(a)(i), (8)(a)(ii), (8)(a)(iv), and (8)(a)(v) of this Rule. The Director of the Division of Water Quality, with recommendations from the Director of the Division of Soil and Water Conservation and the Commissioner of Agriculture, shall appoint the members described in Sub-Items (8)(a)(iii) and (8)(a)(vi) of this Rule from persons nominated by nongovernmental organizations whose members produce or manage agricultural commodities in each county. Members of the Local Advisory Committees shall serve at the pleasure of their appointing authority.

(c) ROLE. The Local Advisory Committees shall:

(i) Conduct a registration process for persons subject to this Rule. This registration process shall be completed within 48 months after the effective date of this Rule. The registration process shall request the type and acreage of agricultural operations. It shall provide persons with information on requirements and options under this Rule, and on available technical assistance and cost share options;

(ii) Develop local nutrient control strategies for agricultural operations, pursuant to Sub-Item (8)(d) of this Rule, to meet the nitrogen and phosphorus goals of this Rule. Strategies shall be submitted to the Watershed Oversight Committee no later than 46 months after the effective date of this Rule;

(iii) Ensure that any changes to the design of the local strategy will continue to meet the nutrient goals of this Rule; and

(iv) Submit reports to the Watershed Oversight Committee, pursuant to Sub-Item (8)(e) of this Rule, annually until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule.

(d) LOCAL NUTRIENT CONTROL STRATEGIES. Local Advisory Committees shall develop county nutrient control strategies that meet the following requirements. If a Local Advisory Committee fails to submit a nutrient control strategy required in Sub-Item (8)(c)(ii) of this Rule, the Commission may develop one based on the accounting methods that it approves pursuant to Sub-Item (7)(b)(i) of this Rule. Local strategies shall meet the following requirements:

(i) Local nutrient control strategies shall be designed to achieve the required nitrogen loss reduction goals and qualitative trends in indicators of agricultural phosphorus loss within six years after the effective date of this Rule, and to maintain those reductions in perpetuity or until such time as this Rule is revised to modify this requirement.

(ii) Local nutrient control strategies shall specify the numbers, acres, and types of all agricultural operations within their areas, numbers of BMPs that will be implemented by enrolled operations and acres to be affected by those BMPs, estimated nitrogen and phosphorus loss reductions, schedule for BMP implementation, and operation and maintenance requirements.

(e) ANNUAL REPORTS. The Local Advisory Committees shall be responsible for submitting annual reports for their counties to the Watershed Oversight Committee until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule. The Watershed Oversight Committee shall determine reporting requirements to meet these objectives. Those requirements may include information on BMPs implemented by individual farms, proper BMP operation and maintenance, BMPs discontinued, changes in agricultural land use or activity, and resultant net nitrogen loss and phosphorus trend indicator changes.

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;
See S.L. 2013-395.

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, 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 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 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 road 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 from all surfaces 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 version of the *Stormwater Best Management Practices Manual* published by the Division, 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;

(vi) 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 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, 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);

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

(viii) 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. 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 the requirements of 15A NCAC 02B .0273 (2) through (4) and 15A NCAC 02B .0240.

(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

(d) The following requirements in water supply 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

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

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

(a) By August 10, 2014, 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

(b) 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;*
Eff. August 11, 2009;
See S.L. 2013-395;
Amended Eff. July 7, 2014.

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 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) 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) 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, 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) STAGE 2 ADAPTIVE MANAGEMENT. The Division shall review monitoring described in Item (4) 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 monitoring report or any subsequent monitoring report for the Upper New Hope Creek Arm of Jordan Reservoir required under Item (4) 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 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) 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) 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) NOTIFICATION OF STAGE 2 REQUIREMENTS. Based on findings under Item (5) 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) 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) A local government receiving notice of the requirement to develop and implement a Stage 2 program under Item (6) 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) of this Rule.

(9) STAGE 2 PROGRAM DEVELOPMENT. Local governments shall utilize the model program to control nutrient loading from existing development, that was approved by the Commission as of December 2013, to develop their Stage 2 program to control nutrient loading from existing development as described under Item (10) 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) 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) of this Rule, each local government that has not received Division approval for having achieved the required reductions as specified in Item (8) 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) 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) 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) 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 unless the area is being redeveloped.

(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.

(11) ADDITIONAL MEASURES TO REDUCE NITROGEN LOADING IN THE UPPER NEW HOPE CREEK SUBWATERSHED. If the March 1, 2023, 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) of this Rule.

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

(13) 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) 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;*
See S.L. 2013-395;
Eff. July 7, 2014.

15A NCAC 02B .0267 JORDAN WATER SUPPLY NUTRIENT STRATEGEY: PROTECTION OF EXISTING RIPARIAN BUFFERS

(See S.L. 2013-395)

Protection of the nutrient removal and other water quality benefits provided by riparian buffers throughout the watershed is an important element of the overall Jordan water supply nutrient strategy. The following is the strategy for riparian buffer protection and maintenance in the Jordan watershed, as prefaced in 15A NCAC 02B .0262:

(1) PURPOSE. The purposes of this Rule shall be to protect and preserve existing riparian buffers throughout the Jordan watershed as generally described in 15A NCAC 02B .0262, in order to maintain their nutrient removal and stream protection functions. Additionally this Rule will help protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed. Local governments shall establish programs to meet or exceed the minimum requirements of this Rule. The requirements of this Rule shall supersede all locally implemented buffer requirements stated in 15A NCAC 02B .0214 through .0216 as applied to WS-II, WS-III, and WS-IV waters in the Jordan watershed. Local governments subject to this Rule may choose to implement more stringent requirements, including requiring additional buffer width.

(2) DEFINITIONS. For the purpose of this Rule, these terms shall be defined as follows:

(a) 'Access Trails' means pedestrian trails constructed of pervious or impervious surfaces and related structures to access a surface water, including boardwalks, steps, rails, and signage.

(b) 'Airport Facilities' means all properties, facilities, buildings, structures, and activities that satisfy or otherwise fall within the scope of one or more of the definitions or uses of the words or phrases 'air navigation facility', 'airport', or 'airport protection privileges' under G.S. 63-1; the definition of 'aeronautical facilities' in G.S. 63-79(1); the phrase 'airport facilities' as used in G.S. 159-48(b)(1); the phrase 'aeronautical facilities' as defined in G.S. 159-81 and G.S. 159-97; and the phrase 'airport facilities and improvements' as used in Article V, Section 13, of the North Carolina Constitution, which shall include, without limitation, any and all of the following: airports, airport maintenance facilities, clear zones, drainage ditches, fields, hangars, landing lighting, airport and airport-related offices, parking facilities, related navigational and signal systems, runways, stormwater outfalls, terminals, terminal shops, and all appurtenant areas used or suitable for airport buildings or other airport facilities, and all appurtenant rights-of-way; restricted landing areas; any structures, mechanisms, lights, beacons, marks, communicating systems, or other instrumentalities or devices used or useful as an aid, or constituting an advantage or convenience to the safe taking off, navigation, and landing of aircraft, or the safe and efficient operation or maintenance of an airport or restricted landing area; easements through, or interests in, air space over land or water, interests in airport hazards outside the boundaries of airports or restricted landing areas, and other protection privileges, the acquisition or control of which is necessary to ensure safe approaches to the landing areas of airports and restricted landing areas, and the safe and efficient operation thereof and any combination of any or all of such facilities. Notwithstanding the foregoing, the following shall not be included in the definition of 'airport facilities':

(i) Satellite parking facilities;

(ii) Retail and commercial development outside of the terminal area, such as rental car facilities; and

(iii) Other secondary development, such as hotels, industrial facilities, free-standing offices and other similar buildings, so long as these facilities are not directly associated with the operation of the airport, and are not operated by a unit of government or special governmental entity such as an airport authority, in which case they are included in the definition of 'airport facilities'.

(c) 'Forest management plan' means as defined in Chapter 160A-458.5(4).

(d) 'Forest plantation' means an area of planted trees that may be conifers (pines) or hardwoods. On a plantation, the intended crop trees are planted rather than naturally regenerated from seed on the site, coppice (sprouting), or seed that is blown or carried into the site.

(e) 'Greenway / Hiking Trails' means pedestrian trails constructed of pervious or impervious surfaces and related structures including but not limited to boardwalks, steps, rails, and signage, and that generally run parallel to the shoreline.

(f) 'High Value Tree' means a tree that meets or exceeds the following standards: for pine species, 14-inch DBH or greater or 18-inch or greater stump diameter; or for hardwoods and wetland species, 16-inch DBH or greater or 24-inch or greater stump diameter.

(g) 'Shoreline stabilization' is the in-place stabilization of an eroding shoreline. Stabilization techniques which include "soft" methods or natural materials (such as root wads, or rock vanes) may be considered as part of a restoration design. However, stabilization techniques that consist primarily of "hard" engineering, such as concrete lined channels, riprap, or gabions, while providing bank stabilization, shall not be considered stream restoration.

(h) 'Stream restoration' is defined as the process of converting an unstable, altered or degraded stream corridor, including adjacent riparian zone and flood-prone areas to its natural or referenced, stable conditions considering recent and future watershed conditions. This process also includes restoring the geomorphic dimension, pattern, and profile as well as biological and chemical integrity, including transport of water and sediment produced by the stream's watershed in order to achieve dynamic equilibrium. 'Referenced' or 'referenced reach' means a stable stream that is in dynamic equilibrium with its valley and contributing watershed. A reference reach can be used to develop natural channel design criteria for stream restoration projects.

(i) 'Stump diameter' means the diameter of a tree measured at six inches above the ground surface level.

(j) 'Temporary road' means a road constructed temporarily for equipment access to build or replace hydraulic conveyance structures such as bridges, culverts, pipes or water dependent structures, or to maintain public traffic during construction.

(3) APPLICABILITY. This Rule applies to all landowners and other persons conducting activities in the Jordan watershed, including state and federal entities, and to all local governments in the Jordan watershed, as described in 15A NCAC 02B .0262. Local governments shall develop riparian buffer protection programs for approval by the Commission, incorporating the minimum standards set out throughout this Rule and shall apply the requirements of this Rule throughout their jurisdictions within the Jordan watershed except where The Division shall exercise jurisdiction. For the following types of buffer activities in the Jordan watershed, wherever local governments are referenced in this Rule, the Division shall implement applicable requirements to the exclusion of local governments:

(a) Activities conducted under the authority of the State.
(b) Activities conducted under the authority of the United States.
(c) Activities conducted under the authority of multiple jurisdictions.
(d) Activities conducted under the authority of local units of government.
(e) Forest harvesting activities described in Item (14) of this Rule.
(f) Agricultural activities.
(g) Activities conducted in a location where there is no local government program implementing NPDES stormwater requirements, Water Supply Watershed requirements, or a voluntary local stormwater or buffer initiative at the time of the activity.

(4) BUFFERS PROTECTED. The following minimum criteria shall be used for identifying regulated buffers:

(a) This Rule shall apply to activities conducted within, or outside of with impacts upon, 50-foot wide riparian buffers directly adjacent to surface waters in the Jordan watershed (intermittent streams, perennial streams, lakes, reservoirs and ponds), excluding wetlands.
(b) Wetlands adjacent to surface waters or within 50 feet of surface waters shall be considered as part of the riparian buffer but are regulated pursuant to 15A NCAC 02H .0506.
(c) A surface water shall be subject to this Rule if the feature is approximately shown on any of the following references, and shall not be subject if it does not appear on any of these references:
    (i) The most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture.
    (ii) The most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS).
    (iii) Maps approved by the Geographic Information Coordinating Council and by the Commission. Prior to approving such maps, the Commission shall provide a 30-day public notice and opportunity for comment. Maps approved under this sub-item shall not apply to projects that are existing and ongoing within the meaning of this Rule as set out in Item (6).
(d) Where the specific origination point of a stream regulated under this Item is in question, upon request of the Division or another party, the local government shall make an on-site determination. A local government representative who has successfully completed the Division's *Surface Water Identification Training Certification* course, its successor, or other equivalent training curriculum approved by the Division, shall establish that point using the latest version of the Division publication, *Identification Methods for the Origins of Intermittent and Perennial Streams*, available at http://portal.ncdenr.org/web/wq/swp/ws/401/waterresources/streamdeterminations or from the Division of Water Quality, 401/Wetlands Unit, 1650 Mail Service Center, Raleigh, NC, 27699-1650. A local government may accept the results of a site assessment made by another party who meets these criteria. Any disputes over on-site determinations made according to this Sub-Item shall be referred to the Director in writing. The Director's determination is subject to review as provided in Articles 3 and 4 of G.S. 150B.
(e) Riparian buffers protected by this Rule shall be measured pursuant to Item (7) of this Rule.

(f) Parties subject to this rule shall abide by all State rules and laws regarding waters of the state including but not limited to 15A NCAC 02H .0500, 15A NCAC 02H .1300, and Sections 401 and 404 of the Federal Water Pollution Control Act.

(g) A riparian buffer may be exempt from this Rule as described in Item (5) or (6) of this Rule.

(h) No new clearing, grading, or development shall take place nor shall any new building permits be issued in violation of this Rule.

(5) EXEMPTION BASED ON ON-SITE DETERMINATION. When a landowner or other affected party including the Division believes that the maps have inaccurately depicted surface waters, he or she shall consult the appropriate local government. Upon request, a local government representative who has successfully completed the Division's *Surface Water Identification Training Certification* course, its successor, or other equivalent training curriculum approved by the Division, shall make an on-site determination. Local governments may also accept the results of site assessments made by other parties who have successfully completed such training. Any disputes over on-site determinations shall be referred to the Director in writing. A determination of the Director as to the accuracy or application of the maps is subject to review as provided in Articles 3 and 4 of G.S. 150B. Surface waters that appear on the maps shall not be subject to this Rule if a site evaluation reveals any of the following cases:

(a) Man-made ponds and lakes that are not part of a natural drainage way that is classified in accordance with 15A NCAC 02B .0100, including ponds and lakes created for animal watering, irrigation, or other agricultural uses. A pond or lake is part of a natural drainage way when it is fed by an intermittent or perennial stream or when it has a direct discharge point to an intermittent or perennial stream.

(b) Ephemeral streams.

(c) The absence on the ground of a corresponding intermittent or perennial stream, lake, reservoir, or pond.

(d) Ditches or other man-made water conveyances, other than modified natural streams.

(6) EXEMPTION WHEN EXISTING USES ARE PRESENT AND ONGOING. This Rule shall not apply to uses that are existing and ongoing; however, this Rule shall apply at the time an existing, ongoing use is changed to another use. Change of use shall involve the initiation of any activity that does not meet either of the following criteria for existing, ongoing activity:

(a) It was present within the riparian buffer as of the effective date of a local program enforcing this Rule and has continued to exist since that time. For any Division-administered activities listed in Item (3) of this Rule, a use shall be considered existing and ongoing if it was present within the riparian buffer as of the Rule's effective date of August 11, 2009 and has continued to exist since that time. Existing uses shall include agriculture, buildings, industrial facilities, commercial areas, transportation facilities, maintained lawns, utility lines and on-site sanitary sewage systems, any of which involve either specific, periodic management of vegetation or displacement of vegetation by structures or regular activity. Only the portion of the riparian buffer occupied by the footprint of the existing use is exempt from this Rule. Change of ownership through purchase or inheritance is not a change of use. Activities necessary to maintain uses are allowed provided that the site remains similarly vegetated, no impervious surface is added within 50 feet of the surface water where it did not previously exist as of the effective date of a local program enforcing this Rule, or for Division-administered activities listed in Item (3) of this Rule as of the Rule's effective date of August 11, 2009, and existing diffuse flow is maintained. Grading and revegetating Zone Two is allowed provided that the health of the vegetation in Zone One is not compromised, the ground is stabilized and existing diffuse flow is maintained.

(b) Projects or proposed development that are determined by the local government to meet at least one of the following criteria:

(i) Project requires a 401 Certification/404 Permit and these were issued prior to the effective date of the local program enforcing this Rule, and prior to the August 11, 2009 effective date of this Rule for Division-administered activities listed in Item (3) of this Rule;

(ii) Projects that require a state permit, such as landfills, NPDES wastewater discharges, land application of residuals and road construction activities, have begun construction or are under contract to begin construction and had received

all required state permits and certifications prior to the effective date of the local program implementing this Rule, and prior to the August 11, 2009 effective date of this Rule for Division-administered activities listed in Item (3) of this Rule;

(iii) Projects that are being reviewed through the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process (published by the US Army Corps of Engineers and Federal Highway Administration, 2003) or its immediate successor and that have reached agreement with DENR on avoidance and minimization by the effective date of the local program enforcing this Rule, and prior to the August 11, 2009 effective date of this Rule for state and federal entities; or

(iv) Projects that are not required to be reviewed by the Clean Water Act Section 404/National Environmental Policy Act Merger 01 Process (published by the US Army Corps of Engineers and Federal Highway Administration, 2003) or its immediate successor if a Finding of No Significant Impact has been issued for the project and the project has the written approval of the local government prior to the effective date of the local program enforcing this Rule, or the written approval of the Division prior to the August 11, 2009 effective date of this Rule for state and federal entities.

(7) ZONES OF THE RIPARIAN BUFFER. The protected riparian buffer shall have two zones as follows:

(a) Zone One shall consist of a vegetated area that is undisturbed except for uses provided for in Item (9) of this Rule. The location of Zone One shall be as follows:

(i) For intermittent and perennial streams, Zone One shall begin at the top of the bank and extend landward a distance of 30 feet on all sides of the surface water, measured horizontally on a line perpendicular to a vertical line marking the top of the bank.

(ii) For ponds, lakes and reservoirs located within a natural drainage way, Zone One shall begin at the normal water level and extend landward a distance of 30 feet, measured horizontally on a line perpendicular to a vertical line marking the normal water level.

(b) Zone Two shall consist of a stable, vegetated area that is undisturbed except for uses provided for in Item (9) of this Rule. Grading and revegetating in Zone Two is allowed provided that the health of the vegetation in Zone One is not compromised. Zone Two shall begin at the outer edge of Zone One and extend landward 20 feet as measured horizontally on a line perpendicular to the surface water. The combined width of Zones One and Two shall be 50 feet on all sides of the surface water.

(8) DIFFUSE FLOW REQUIREMENT. Diffuse flow of runoff shall be maintained in the riparian buffer by dispersing concentrated flow prior to its entry into the buffer and reestablishing vegetation as follows:

(a) Concentrated runoff from new ditches or manmade conveyances shall be converted to diffuse flow at non-erosive velocities before the runoff enters Zone Two of the riparian buffer;

(b) Periodic corrective action to restore diffuse flow shall be taken as necessary and shall be designed to impede the formation of erosion gullies;

(c) As set out in Items (7) and (9) of this Rule, no new stormwater conveyances are allowed through the buffers except for those specified in Item (9) of this Rule addressing stormwater management ponds, drainage ditches, roadside ditches, and stormwater conveyances; and

(d) Activities conducted outside of buffers identified in Item (4) that alter the hydrology in violation of the diffuse flow requirements set out in this Item shall be prohibited.

(9) TABLE OF USES. The following chart sets out potential new uses within the buffer, or outside the buffer with impacts on the buffer, and categorizes them as exempt, allowable, or allowable with mitigation. All uses not categorized as exempt, allowable, or allowable with mitigation are considered prohibited and may not proceed within the riparian buffer, or outside the buffer if the use would impact diffuse flow through the buffer, unless a variance is granted pursuant to Item (12) of this Rule. The requirements for each category are given in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Access trails: Pedestrian access trails leading to the surface water, docks, fishing piers, boat ramps and other water dependent activities: • Pedestrian access trails that are restricted to the minimum width practicable and do not exceed 4 feet in width of buffer disturbance, and provided that installation and use does not result in removal of trees as defined in this Rule and no impervious surface is added to the riparian buffer • Pedestrian access trails that exceed 4 feet in width of buffer disturbance, the installation or use results in removal of trees as defined in this Rule or impervious surface is added to the riparian buffer	X	X	
Airport facilities: • Airport facilities that impact equal to or less than 150 linear feet or one-third of an acre of riparian buffer • Airport facilities that impact greater than 150 linear feet or one-third of an acre of riparian buffer • Activities necessary to comply with FAA requirements (e.g. radar uses or landing strips)1		X X	X
Archaeological activities	X		
Bridges		X	
Canoe Access provided that installation and use does not result in removal of trees as defined in this Rule and no impervious surface is added to the buffer.	X		

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Dam maintenance activities: • Dam maintenance activities that do not cause additional buffer disturbance beyond the footprint of the existing dam or those covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3 • Dam maintenance activities that do cause additional buffer disturbance beyond the footprint of the existing dam or those not covered under the U.S. Army Corps of Engineers Nationwide Permit No.3	X	X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Drainage ditches, roadside ditches and stormwater conveyances through riparian buffers: • New stormwater flows to existing drainage ditches, roadside ditches, and stormwater conveyances provided flows do not alter or result in the need to alter the conveyance and are managed to minimize the sediment, nutrients and other pollution that convey to waterbodies. • Realignment of existing roadside drainage ditches retaining the design dimensions, provided that no additional travel lanes are added and the minimum required roadway typical section is used based on traffic and safety considerations. • New or altered drainage ditches, roadside ditches and stormwater outfalls provided that a stormwater management facility is installed to control nutrients and attenuate flow before the conveyance discharges through the riparian buffer • New drainage ditches, roadside ditches and stormwater conveyances applicable to linear projects that do not provide a stormwater management facility due to topography constraints provided that other practicable BMPs are employed.	X	X X	X

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Drainage of a pond in a natural drainage way provided that a new riparian buffer that meets the requirements of Items (7) and (8) of this Rule is established adjacent to the new channel	X		
Driveway crossings of streams and other surface waters subject to this Rule: • Driveway crossings on single family residential lots that disturb equal to or less than 25 linear feet or 2,500 square feet of riparian buffer • Driveway crossings on single family residential lots that disturb greater than 25 linear feet or 2,500 square feet of riparian buffer • In a subdivision that cumulatively disturb equal to or less than 150 linear feet or one-third of an acre of riparian buffer • In a subdivision that cumulatively disturb greater than 150 linear feet or one-third of an acre of riparian buffer	X	X X	X
Driveway impacts other than crossing of a stream or other surface waters subject to this Rule			X
Fences: • Fences provided that disturbance is minimized and installation does not result in removal of trees as defined in this Rule • Fences provided that disturbance is minimized and installation results in removal of trees as defined in this Rule	X	X	
Forest harvesting - see Item (14) of this Rule			
Fertilizer application: one-time application to establish vegetation	X		

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Grading and revegetation in Zone Two provided that diffuse flow and the health of existing vegetation in Zone One is not compromised and disturbed areas are stabilized until they are revegetated.	X		
Greenway/hiking trails designed, constructed and maintained to maximize nutrient removal and erosion protection, minimize adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practical.		X	
Historic preservation	X		
Maintenance access on modified natural streams: a grassed travel way on one side of the water body when less impacting alternatives are not practical. The width and specifications of the travel way shall be only that needed for equipment access and operation. The travel way shall be located to maximize stream shading.		X	
Mining activities: • Mining activities that are covered by the Mining Act provided that new riparian buffers that meet the requirements of Items (7) and (8) of this Rule are established adjacent to the relocated channels • Mining activities that are not covered by the Mining Act OR where new riparian buffers that meet the requirements or Items (7) and (8) of this Rule are not established adjacent to the relocated channels • Wastewater or mining dewatering wells with approved NPDES permit	X	X	X

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Playground equipment: • Playground equipment on single family lots provided that installation and use does not result in removal of vegetation • Playground equipment installed on lands other than single-family lots or that requires removal of vegetation	X	X	
Ponds created by impounding streams and not used as stormwater BMPs: • New ponds provided that a riparian buffer that meets the requirements of Items (7) and (8) of this Rule is established adjacent to the pond • New ponds where a riparian buffer that meets the requirements of Items (7) and (8) of this Rule is NOT established adjacent to the pond		X	X
Protection of existing structures, facilities and stream banks when this requires additional disturbance of the riparian buffer or the stream channel		X	
Railroad impacts other than crossings of streams and other surface waters subject to this Rule.			X

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Railroad crossings of streams and other surface waters subject to this Rule: • Railroad crossings that impact equal to or less than 40 linear feet of riparian buffer • Railroad crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer • Railroad crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer	X	X	X
Recreational and accessory structures in Zone Two: • Sheds and gazebos in Zone Two, provided they are not prohibited under local water supply ordinance: o Total footprint less than or equal to 150 square feet per lot. o Total footprint greater than 150 square feet per lot. • Wooden slatted decks and associated steps, provided the use meets the requirements of Items (7) and (8) of this Rule: o Deck at least eight feet in height and no vegetation removed from Zone One. o Deck less than eight feet in height or vegetation removed from Zone One.		X X	 X X
Removal of previous fill or debris provided that diffuse flow is maintained and vegetation is restored	X		
Road impacts other than crossings of streams and other surface waters subject to this Rule			X

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Road crossings of streams and other surface waters subject to this Rule: • Road crossings that impact equal to or less than 40 linear feet of riparian buffer • Road crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer • Road crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer	X	X	X
Road relocation: Relocation of existing private access roads associated with public road projects where necessary for public safety: • Less than or equal to 2,500 square feet of buffer impact • Greater than 2,500 square feet of buffer impact		X	X
Stormwater BMPs: • Wet detention, bioretention, and constructed wetlands in Zone Two if diffuse flow of discharge is provided into Zone One • Wet detention, bioretention, and constructed wetlands in Zone One		X	X
Scientific studies and stream gauging	X		
Streambank or shoreline stabilization		X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Temporary roads, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season. A one-time application of fertilizer may be used to establish vegetation: At the end of five years the restored buffer shall comply with the restoration criteria in Item (8) of 15A NCAC 02B .0268:			
• Less than or equal to 2,500 square feet of buffer disturbance	X		
• Greater than 2,500 square feet of buffer disturbance		X	
• Associated with culvert installation or bridge construction or replacement.		X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Temporary sediment and erosion control devices, provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions immediately after construction is complete and replanted immediately with comparable vegetation, except that tree planting may occur during the dormant season. A one-time application of fertilizer may be used to establish vegetation. At the end of five years the restored buffer shall comply with the restoration criteria in Item (8) of Rule 15A NCAC 02B .0268:			
• In Zone Two provided ground cover is established within timeframes required by the Sedimentation and Erosion Control Act, vegetation in Zone One is not compromised, and runoff is released as diffuse flow in accordance with Item (8) of this Rule.	X		
• In Zones one and two to control impacts associated with uses approved by the local government or that have received a variance, provided that sediment and erosion control for upland areas is addressed, to the maximum extent practical, outside the buffer.		X	
• In-stream temporary erosion and sediment control measures for work within a stream channel that is authorized under Sections 401 and 404 of the Federal Water Pollution Control Act.	X		
• In-stream temporary erosion and sediment control measures for work within a stream channel.		X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Utility, electric, aerial, perpendicular crossings of streams and other surface waters subject to this Rule[2,3,5]: • Disturb equal to or less than 150 linear feet of riparian buffer • Disturb greater than 150 linear feet of riparian buffer	X	X	
Utility, electric, aerial, other than perpendicular crossings[5]: • Impacts in Zone Two • Impacts in Zone One[2,3]		X	X
Utility, electric, underground, perpendicular crossings[3,4,5]: • Disturb less than or equal to 40 linear feet of riparian buffer • Disturb greater than 40 linear feet of riparian buffer	X	X	
Utility, electric, underground, other than perpendicular crossings[4]: • Impacts in Zone Two • Impacts in Zone One[1]	X X		

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Utility, non-electric, perpendicular crossings of streams and other surface waters subject to this Rule[3,5]:			
• Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width	X		
• Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width		X	
• Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width		X	
• Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width			X
• Disturb greater than 150 linear feet of riparian buffer			X
Utility, non-electric, other than perpendicular crossings[4,5]:			
• Impacts in Zone Two		X	
• Impacts in Zone One[1]			X

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing or harvesting of plant products in Zone Two • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees that are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering stability of the streambank. • Removal of individual trees which are dead, diseased or damaged. • Removal of poison ivy • Removal of invasive exotic vegetation as defined in: *Smith, Cherri L. 1998. Exotic Plant Guidelines. Dept. of Environment and Natural Resources. Division of Parks and Recreation. Raleigh, NC. Guideline #30*	X X X X X X X X		
Vehicular access roads leading to water-dependent structures as defined in 15A NCAC 02B .0202, provided they do not cross the surface water and have minimum practicable width not exceeding ten feet.		X	
Water dependent structures as defined in 15A NCAC 02B .0202 where installation and use result in disturbance to riparian buffers.		X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

Use	Exempt*	Allowable*	Allowable with Mitigation*
Water supply reservoirs: • New reservoirs where a riparian buffer that meets the requirements of Items (7) and (8) of this Rule is established adjacent to the reservoir • New reservoirs where a riparian buffer that meets the requirements of Items (7) and (8) of this Rule is not established adjacent to the reservoir		X	X
Water wells • Single family residential water wells • All other water wells	X	X	
Wetland, stream and buffer restoration that results in impacts to the riparian buffers: • Wetland, stream and buffer restoration that requires Division approval for the use of a 401 Water Quality Certification • Wetland, stream and buffer restoration that does not require Division approval for the use of a 401 Water Quality Certification	X	X	
Wildlife passage structures		X	

* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Item (10) of this Rule.

[1] Provided that:

- No heavy equipment is used in Zone One.
- Vegetation in undisturbed portions of the buffer is not compromised.
- Felled trees are removed by chain.
- No permanent felling of trees occurs in protected buffers or streams.
- Stumps are removed only by grinding.
- At the completion of the project the disturbed area is stabilized with native vegetation.
- Zones one and two meet the requirements of Sub-Items (7) and (8) of this Rule.

[2] Provided that, in Zone One, all of the following BMPs for overhead utility lines are used. If all of these BMPs are not used, then the overhead utility lines shall require a no practical alternative evaluation by the local government, as defined in Item (11) of this Rule.

- A minimum zone of 10 feet wide immediately adjacent to the water body shall be managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed.
- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain where trees are cut.
- Riprap shall not be used unless it is necessary to stabilize a tower.
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

[3] Provided that poles or aerial infrastructure shall not be installed within 10 feet of a water body unless the local government completes a no practical alternative evaluation as defined in Item (11) of this Rule.

[4] Provided that, in Zone One, all of the following BMPs for underground utility lines are used. If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the local government, as defined in Item (11) of this Rule.

- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain, except in the trench where trees are cut.
- Underground cables shall be installed by vibratory plow or trenching.
- The trench shall be backfilled with the excavated soil material immediately following cable installation.
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Measures shall be taken upon completion of construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

[5] Perpendicular crossings are those that intersect the surface water at an angle between 75 degrees and 105 degrees.

(10) REQUIREMENTS FOR CATEGORIES OF USES. Uses designated in Item (9) of this Rule as exempt, allowable, and allowable with mitigation within a riparian buffer shall have the following requirements:

(a) EXEMPT. Uses designated as exempt are permissible without local government authorization provided that they adhere to the limitations of the activity as defined in Item (9). In addition, exempt uses shall be designed, constructed and maintained to minimize soil disturbance and to provide the maximum water quality protection practicable, including construction, monitoring, and maintenance activities.

(b) ALLOWABLE. Uses designated as allowable may proceed provided that there are no practical alternatives to the requested use pursuant to Item (11) of this Rule. This includes construction, monitoring, and maintenance activities. These uses require written authorization from the local government.

(c) ALLOWABLE WITH MITIGATION. Uses designated as allowable with mitigation may proceed provided that there are no practical alternatives to the requested use pursuant to Item (11) of this Rule and an appropriate mitigation strategy has been approved pursuant to Item (13) of this Rule. These uses require written authorization from the local government.

(11) DETERMINATION OF "NO PRACTICAL ALTERNATIVES."

(a) Persons who wish to undertake uses designated as allowable or allowable with mitigation shall submit a request for a "no practical alternatives" determination to the local government. The applicant shall certify that the project meets all the following criteria for finding "no practical alternatives":

(i) The basic project purpose cannot be practically accomplished in a manner that would better minimize disturbance, preserve aquatic life and habitat, and protect water quality;

(ii) The use cannot practically be reduced in size or density, reconfigured or redesigned to better minimize disturbance, preserve aquatic life and habitat, and protect water quality; and

(iii) Best management practices shall be used if necessary to minimize disturbance, preserve aquatic life and habitat, and protect water quality;

(b) The applicant shall also submit at least the following information in support of their assertion of "no practical alternatives":

(i) The name, address and phone number of the applicant;

(ii) The nature of the activity to be conducted by the applicant;

(iii) The location of the activity, including the jurisdiction;

(iv) A map of sufficient detail to accurately delineate the boundaries of the land to be utilized in carrying out the activity, the location and dimensions of any

disturbance in riparian buffers associated with the activity, and the extent of riparian buffers on the land;

(v) An explanation of why this plan for the activity cannot be practically accomplished, reduced or reconfigured to better minimize disturbance to the riparian buffer, preserve aquatic life and habitat and protect water quality; and

(vi) Plans for any best management practices proposed to be used to control the impacts associated with the activity.

(c) Within 60 days of a submission that addresses Sub-Item (11)(b) of this Rule, the local government shall review the entire project and make a finding of fact as to whether the criteria in Sub-Item (11)(a) have been met. A finding of "no practical alternatives" shall result in issuance of an Authorization Certificate. Failure to act within 60 days shall be construed as a finding of "no practical alternatives" and an Authorization Certificate shall be issued to the applicant unless one of the following occurs:

(i) The applicant agrees, in writing, to a longer period;

(ii) The local government determines that the applicant has failed to furnish requested information necessary to the local government's decision;

(iii) The final decision is to be made pursuant to a public hearing; or

(iv) The applicant refuses access to its records or premises for the purpose of gathering information necessary to the local government's decision.

(d) The local government may attach conditions to the Authorization Certificate that support the purpose, spirit and intent of the riparian buffer protection program.

(e) Any appeals of determinations regarding Authorization Certificates shall be referred to the Director. The Director's decision is subject to review as provided in G.S. 150B Articles 3 and 4.

(12) VARIANCES. Persons who wish to undertake prohibited uses may pursue a variance. The local government may grant minor variances. For major variances, local governments shall prepare preliminary findings and submit them to the Commission for approval. The variance request procedure shall be as follows:

(a) For any variance request, the local government shall make a finding of fact as to whether there are practical difficulties or unnecessary hardships that prevent compliance with the riparian buffer protection requirements. A finding of practical difficulties or unnecessary hardships shall require that the following conditions are met:

(i) If the applicant complies with the provisions of this Rule, he/she can secure no reasonable return from, nor make reasonable use of, his/her property. Merely proving that the variance would permit a greater profit from the property shall not be considered adequate justification for a variance. Moreover, the local government shall consider whether the variance is the minimum possible deviation from the terms of this Rule that shall make reasonable use of the property possible;

(ii) The hardship results from application of this Rule to the property rather than from other factors such as deed restrictions or other hardship;

(iii) The hardship is due to the physical nature of the applicant's property, such as its size, shape, or topography, such that compliance with provisions of this rule would not allow reasonable use of the property;

(iv) The applicant did not cause the hardship by knowingly or unknowingly violating this Rule;

(v) The applicant did not purchase the property after August 11, 2009, the effective date of this Rule, and then request a variance; and

(vi) The hardship is rare or unique to the applicant's property.

(b) For any variance request, the local government shall make a finding of fact as to whether the variance is in harmony with the general purpose and intent of the State's riparian buffer protection requirements and preserves its spirit; and

(c) For any variance request, the local government shall make a finding of fact as to whether, in granting the variance, the public safety and welfare have been assured, water quality has been protected, and substantial justice has been done.

(d) MINOR VARIANCES. A minor variance request pertains to activities that will impact only Zone Two of the riparian buffer. Minor variance requests shall be reviewed and approved based on the criteria in Sub-Items (12)(a) through (12)(c) of this Rule by the local government pursuant to G.S. 153A-Article 18, or G.S. 160A-Article 19. The local government may attach conditions to the variance approval that support the purpose, spirit and intent of the riparian buffer protection program. Request for appeals to decisions made by the local governments shall be made in writing to the Director. The Director's decision is subject to review as provided in G.S. 150B Articles 3 and 4.

(e) MAJOR VARIANCES. A major variance request pertains to activities that will impact any portion of Zone One or any portion of both Zones One and Two of the riparian buffer. If the local government has determined that a major variance request meets the requirements in Sub-Items (12)(a) through (12)(c) of this Rule, then it shall prepare a preliminary finding and submit it to the Commission for approval. Within 90 days after receipt by the local government, the Commission shall review preliminary findings on major variance requests and take one of the following actions: approve, approve with conditions and stipulations, or deny the request. Appeals from a Commission decision on a major variance request are made on judicial review to Superior Court.

(13) MITIGATION. Persons who wish to undertake uses designated as allowable with mitigation shall meet the following requirements in order to proceed with their proposed use:

(a) Obtain a determination of "no practical alternatives" to the proposed use pursuant to Item (11) of this Rule; and

(b) Obtain approval for a mitigation proposal pursuant to 15A NCAC 02B .0268.

(14) REQUIREMENTS SPECIFIC TO FOREST HARVESTING. The following requirements shall apply for forest harvesting operations and practices:

(a) All the following measures shall apply in the entire riparian buffer as applicable:

(i) Logging decks and sawmill sites shall not be placed in the riparian buffer;

(ii) Access roads and skid trails shall be prohibited except for temporary and permanent stream crossings established in accordance with 15A NCAC 01I .0203. Temporary stream crossings shall be permanently stabilized after any site disturbing activity is completed;

(iii) Timber felling shall be directed away from the stream or waterbody;

(iv) Skidding shall be directed away from the stream or water body and shall be done in a manner that minimizes soil disturbance and prevents the creation of channels or ruts;

(v) Individual trees may be treated to maintain or improve their health, form or vigor;

(vi) Harvesting of dead or infected trees as necessary to prevent or control the spread of tree pest and disease infestation shall be allowed. These practices must be approved by the Division of Forest Resources for a specific site pursuant to the rule. The Division of Forest Resources must notify the Division of all approvals;

(vii) Removal of individual trees that are in danger of causing damage to structures or human life shall be allowed;

(viii) Natural regeneration of forest vegetation and planting of trees, shrubs, or ground cover plants to enhance the riparian buffer shall be allowed provided that soil disturbance is minimized;

(ix) High-intensity prescribed burns shall not be allowed; and

(x) Application of fertilizer shall not be allowed except as necessary for permanent stabilization. Broadcast application of fertilizer to the adjacent forest stand shall be conducted so that the chemicals are not applied directly to or allowed to drift into the riparian buffer.

(b) In Zone One, forest vegetation shall be protected and maintained. Selective harvest as provided for below is allowed on forest lands that have a deferment for use value under forestry in accordance with G.S. 105-277.2 through 277.6 or on forest lands that have a forest management plan. A plan drafted under either option shall meet the standards set out in this Item. Copies of either the approval of the deferment for use value under forestry or the forest management plan shall be produced upon request. For such forest lands, selective harvest is allowed in accordance with the following:

(i) Tracked or wheeled vehicles are permitted for the purpose of selective timber harvesting where there is no other practical alternative for removal of individual trees provided activities comply with forest practice guidelines for water quality as defined in 15A NCAC 01I .0101 through .0209, and provided no equipment shall operate within the first 10 feet immediately adjacent to the stream except at stream crossings designed, constructed and maintained in accordance with Rule 15A NCAC 01I .0203;

(ii) Soil disturbing site preparation activities are not allowed; and

(iii) Trees shall be removed with the minimum disturbance to the soil and residual vegetation.

(c) In addition to the requirements of (b) in this Item, the following provisions for selective harvesting shall be met:

(i) The first 10 feet of Zone One directly adjacent to the stream or waterbody shall be undisturbed except for the removal of individual high value trees as defined provided that no trees with exposed primary roots visible in the streambank be cut unless listed as an exempt activity under Vegetation Management in the Table of Uses, Sub-Item (9) of this Rule;

(ii) In the outer 20 feet of Zone One, a maximum of 50 percent of the trees greater than five inches DBH may be cut and removed. The reentry time for harvest shall be no more frequent than every 15 years, except on forest plantations where the reentry time shall be no more frequent than every five years. In either case, the trees remaining after harvest shall be as evenly spaced as possible; and

(iii) In Zone Two, harvesting and regeneration of the forest stand shall be allowed in accordance with 15A NCAC 01I .0100 through .0200 as enforced by the Division of Forest Resources.

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

(a) For Division-administered activities listed in Item (3) of this Rule, the Division shall continue to implement the requirements of this Rule, which it has done since its effective date of August 11, 2009:

(b) Local governments shall continue to implement buffer programs approved by the Commission in September 2010 and January 2011, or subsequent revisions to those programs approved by the Commission or its delegated authority, to ensure that existing land use activities and proposed development complies with local programs. These programs are required to meet the standards set out in this Rule, 15A NCAC 02B .0268, and are guided by the model buffer program approved by the Commission in September 2009. A local government shall issue an approval for new development only if the development application proposes to avoid impacts to riparian buffers defined in Item (4) of this Rule, or where the application proposes to impact such buffers, it demonstrates that the applicant has done the following, as applicable:

(i) Determined that the activity is exempt from requirements of this Rule;

(ii) Received an Authorization Certificate from the Division pursuant to Item (11) of this Rule for uses designated as Allowable or Allowable with Mitigation;

(iii) For uses designated as Allowable with Mitigation, received approval of a mitigation plan pursuant to 15A NCAC 02B .0268; and

(iv) Received a variance pursuant to Item (12) of this Rule;

(c) Local governments shall continue to submit annual reports to the Division summarizing their activities in implementing the requirements of this Rule;

(d) If a local government fails to adopt or adequately implement its program as called for in this Rule, the Division may take appropriate enforcement action as authorized by statute, and may choose to assume responsibility for implementing that program until such time as it determines that the local government is prepared to comply with its responsibilities; and

(e) LOCAL OVERSIGHT. The Division shall periodically inspect local programs to ensure that they are being implemented and enforced in keeping with the requirements of this Rule. Local governments shall maintain on-site records for a minimum of five years, and shall furnish a copy of these records to the Division within 30 days of receipt of a written request for them. Local programs' records shall include the following:

(i) A copy of all variance requests;
(ii) Findings of fact on all variance requests;
(iii) Results of all variance proceedings;
(iv) A record of complaints and action taken as a result of complaints;
(v) Records for stream origin calls and stream ratings; and
(vi) Copies of all requests for authorization, records approving authorization and Authorization Certificates.

(16) OTHER LAWS, REGULATIONS AND PERMITS. In all cases, compliance with this Rule does not preclude the requirement to comply with all other federal, state and local laws, regulations, and permits regarding streams, steep slopes, erodible soils, wetlands, floodplains, forest harvesting, surface mining, land disturbance activities, or any other landscape feature or water quality-related activity.

History Note: *Authority 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. 1999-329, s. 7.1.; S.L. 2005-190; S.L. 2006-259; S.L. 2009-216; S.L. 2009-484;*
Eff. August 11, 2009;
Amended Eff. September 1, 2011;
See S.L. 2013-395;
Amended Eff. July 7, 2014.

15A NCAC 02B .0268 JORDAN WATER SUPPLY NUTRIENT STRATEGY: MITIGATION FOR RIPARIAN BUFFERS

History Note: *Authority 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. 1999-329, s. 7.1.; S.L. 2005-190; S.L. 2006-259;*
Eff. August 11, 2009;
Amended Eff. September 1, 2011;
Repealed Eff. October 24, 2014.

15A NCAC 02B .0269 RIPARIAN BUFFER MITIGATION FEES TO THE NC ECOSYSTEM ENHANCEMENT PROGRAM

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.5(i); 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;*
Eff. August 11, 2009;
Transferred to 15A NCAC 02R .0601 Eff. May 1, 2015.

15A NCAC 02B .0270 JORDAN WATER SUPPLY NUTRIENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS
(See S.L. 2013-395)

The following is the NPDES wastewater discharge management strategy for the B. Everett Jordan Reservoir watershed, or Jordan watershed:

(1) PURPOSE. The purpose of this Rule is to establish minimum nutrient control requirements for point source wastewater discharges in the Jordan watershed in order to restore and maintain water quality in the reservoir and its tributaries and protect their designated uses, including water supply.

(2) APPLICABILITY. This Rule applies to all wastewater treatment facilities discharging in the Jordan watershed that receive nutrient-bearing wastewater and are subject to requirements for individual NPDES permits.

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

(a) In regard to point source dischargers, treatment facilities, and wastewater flows and discharges,

(i) "Existing" means that which was subject to a NPDES permit as of December 31, 2001;

(ii) "Expanding" means that which has increased or will increase beyond its permitted flow as defined in this Rule; and

(iii) "New" means that which was not subject to a NPDES permit as of December 31, 2001.

(b) "Active" allocation means that portion of an allocation that has been applied toward and is expressed as a nutrient limit in an individual NPDES permit. Allocation that is held but not applied in this way is "reserve" allocation.

(c) "Limit" means the mass quantity of nitrogen or phosphorus that a discharger or group of dischargers is authorized through a NPDES permit to release into surface waters of the Jordan watershed. Limits are enforceable and may be expressed as "delivered limit" or as the equivalent "discharge limit."

(d) "MGD" means million gallons per day.

(e) "Permitted flow" means the maximum monthly average flow authorized in a facility's NPDES permit as of December 31, 2001, with the following exceptions:

Facility Owner	Facility Name	NPDES Permit	Permitted Flow (MGD)
B. E. Jordan & Son, LLC	B. E. Jordan & Son WWTP	NC0042528	0.036
Durham County	Triangle WWTP	NC0026051	12.0
Fearrington Utilities, Inc.	Fearrington Village WWTP	NC0043559	0.5
Greensboro, City of	T.Z. Osborne WWTP	NC0047384	40.0
Mervyn R. King	Countryside Manor WWTP	NC0073571	0.03
OWASA	Mason Farm WWTP	NC0025241	14.5
Pittsboro, Town of	Pittsboro WWTP	NC0020354	2.25
Quarterstone Farm Assoc.	Quarterstone Farm WWTP	NC0066966	0.2
Aqua North Carolina, Inc.	Chatham WRF	NC0056413	0.35

(f) "Reserve" allocation means allocation that is held by a permittee or other person but which has not been applied toward and is not expressed as a nutrient limit in an individual NPDES permit. Allocation that has been applied and expressed in this way is "active" allocation.

(4) This Item provides for the initial division of nutrient wasteload allocations among point source dischargers under this strategy.

(a) The delivered wasteload allocations of nitrogen and phosphorus assigned to point source dischargers collectively in each of the Jordan subwatersheds, as set out in 15A NCAC 02B .0262(4), shall be divided as follows:

Subwatershed and Discharger Subcategories	Delivered Allocations (lb/yr) Total Nitrogen	Total Phosphorus
Upper New Hope Arm		
Permitted flows ≥ 0.1 MGD	332,466	22,498
Permitted flows < 0.1 MGD	3,613	608
Lower New Hope Arm		
Permitted flows ≥ 0.1 MGD	6,836	498
Permitted flows < 0.1 MGD	0	0
Haw River Arm		
Permitted flows ≥ 0.1 MGD	881,757	104,004
Permitted flows < 0.1 MGD	13,370	1,996

(b) The nutrient allocations in Sub-Item (a) of this Item shall be apportioned among the existing dischargers in each subcategory in proportion to the dischargers' permitted flows and the resulting delivered nutrient allocations assigned to each individual discharger.

(5) This Item describes allowable changes in nutrient allocations.

(a) The aggregate and individual nutrient allocations available to point source dischargers in the Jordan watershed are subject to change:

(i) Whenever the Commission, through rulemaking, revises the wasteload allocations in 15A NCAC 02B .0262 in order to ensure the protection of water quality in the reservoir and its tributaries or to conform with applicable state or federal requirements;

(ii) Whenever one or more point source dischargers acquires any portion of the nonpoint load allocations under the provisions in this Rule, and 15A NCAC 02B .0273, Options for Offsetting Nutrient Loads;

(iii) As the result of allocation transfers between point sources or between point and nonpoint sources, except that nutrient allocation can be transferred and applied only within its assigned subwatershed; or

(iv) Any allocation is valid only in the subwatershed for which it is first established.

(b) In the event that the Commission changes any nutrient wasteload allocation specified in 15A NCAC 02B .0262 or Item (4) of this Rule, the Commission shall also re-evaluate the apportionment among the dischargers and shall revise the individual allocations as necessary.

(6) This Item identifies nutrient control requirements specific to existing discharges.

(a) Any existing discharger with a permitted flow of 0.1 MGD or greater shall continue to limit its total phosphorus discharge to its active individual discharge allocation initially applied as of calendar year 2010 as defined or modified pursuant to this Rule.

(b) Each existing discharger with a permitted flow greater than or equal to 0.1 MGD, having evaluated its treatment facilities and operations, identified further opportunities to improve and optimize nitrogen reduction in the existing facilities, and submitted a report to the Division in 2010 proposing optimization measures, shall, upon Division acceptance of the report, implement the measures as provided in the acceptance, and shall continue to implement such measures until treatment system improvements undertaken to comply with this Rule's nitrogen limits are completed and operational. Beginning in 2015 and continuing until one year after the improvements are operational, each such discharger shall submit a progress report to the Division by March 1 of each year documenting the status of the proposed measures and the nitrogen reductions achieved at the facility in the previous calendar year.

(c) No later than the calendar year 2016, each existing discharger with a permitted flow greater than or equal to 0.1 MGD shall limit its total nitrogen discharge to its active individual discharge allocation as defined or modified pursuant to this Rule, except that if by December 31, 2016, the discharger has received an authorization pursuant to G.S. 143-215.1 for construction, installation, or alteration of its treatment works for purposes of complying with its total nitrogen limit, at which point the limit shall become effective no later than calendar year 2018.

(7) This Item identifies nutrient control requirements specific to new discharges.

(a) Any person proposing a new wastewater discharge to surface waters shall meet the following requirements prior to applying for an NPDES permit:

(i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 02H .0105(c)(2);

(ii) If the results of the evaluation support a new discharge, acquire sufficient nitrogen and phosphorus allocations for the discharge. The proponent may obtain allocation for the proposed discharge from existing dischargers pursuant to the applicable requirements of Item (9) of this Rule or employ measures to offset the increased nutrient loads resulting from the proposed discharge. The proponent may fund offset measures by making payment to the NC Ecosystem Enhancement Program or private sellers of reduction credit, or may implement other offset measures contingent upon approval by the Division as meeting the requirements of rule 15A NCAC 02B .0273 and 15A NCAC 02B .0703. The offsets shall be of an amount equivalent to the allocations required for a period of 30 years. Payment for each 30-year portion of the nonpoint source load allocation shall be made prior to the ensuing permit issuance;

(iii) Determine whether the proposed discharge of nutrients will cause local water quality impacts; and

(iv) Provide documentation with its NPDES permit application demonstrating that the requirements of Sub-Items (i) through (iii) of this Sub-Item have been met.

(b) The nutrient discharge allocations and offsets for a new facility shall not exceed the mass loads equivalent to a concentration of 3.0 mg/L nitrogen or 0.18 mg/L phosphorus at the permitted flow in the discharger's NPDES permit.

(c) Upon the effective date of its NPDES permit, a new discharger shall be subject to nitrogen and phosphorus limits not to exceed its active individual discharge allocations.

(8) This Item identifies nutrient control requirements specific to expanding discharges.

(a) Any person proposing to expand an existing wastewater discharge to surface waters beyond its permitted flow as defined in this Rule shall meet the following requirements prior to applying for an NPDES permit:

(i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 02H .0105(c)(2);

(ii) If the results of the evaluation support an expanded discharge, acquire sufficient nitrogen and phosphorus allocations for the discharge. The proponent may obtain allocation for the proposed discharge from existing dischargers pursuant to the applicable requirements of Item (9) of this Rule or employ measures to offset the increased nutrient loads resulting from the proposed discharge. The proponent may fund offset measures by making payment to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that Program or implement other offset measures contingent upon approval by the Division, either of which shall meet the requirements of rule 15A NCAC 02B .0273. The offsets shall be of an amount equivalent to the allocations required for a period of 30 years. Payment for each 30-year portion of the nonpoint source load allocation shall be made prior to the ensuing permit issuance;

(iii) Determine whether the proposed discharge of nutrients will cause local water quality impact; and

(iv) Provide documentation with its NPDES permit application demonstrating that the requirements of Sub-Items (i) through (iii) of this Sub-Item have been met.

(b) The nutrient discharge limits for an expanding facility shall not exceed the greater of its nutrient allocations or the mass value equivalent to a concentration of 3.0 mg/L nitrogen or 0.18 mg/L phosphorus at the permitted flow in the discharger's NPDES permit; except that this provision shall not result in an allocation or limit that is less than originally assigned to the discharger under this Rule.

(c) Upon expansion or upon notification by the Director that it is necessary to protect water quality, any discharger with a permitted flow of less than 0.1 MGD, as defined under this Rule, shall become subject to total nitrogen and total phosphorus permit limits not to exceed its active individual discharge allocations.

(9) This Item describes additional requirements regarding nutrient discharge limits for wastewater facilities:

(a) Annual mass nutrient limits shall be established as calendar-year limits.

(b) Any point source discharger holding nutrient allocations under this Rule may by mutual agreement transfer all or part of its allocations to any new, existing, or expanding dischargers in the same Jordan subwatershed or to other person(s), subject to the provisions of the Jordan nutrient strategy.

(c) For NPDES compliance purposes, the enforceable nutrient limits for an individual facility or for a compliance association described in Item (10) shall be the effective limits in the governing permit, regardless of the allocation held by the discharger or association.

(d) The Director may establish more stringent nitrogen or phosphorus discharge limits for any discharger upon finding that such limits are necessary to prevent the discharge from causing adverse water quality impacts on surface waters other than an arm of Jordan Reservoir as defined in Rule .0262(4) of this strategy. The Director shall establish such limits through modification of the discharger's NPDES permit in accordance with applicable rules and regulations. When the Director does so, the discharger retains its nutrient allocations, and the non-active portion of the discharger's allocation becomes reserve allocation. The allocation remains in reserve until the director determines that less

stringent limits are allowable or until the allocation is applied to another discharge not subject to such water quality-based limits.

(e) In order for any transfer of allocation to become effective as a discharge limit in an individual NPDES permit, the discharger must request and obtain modification of the permit. Such request shall:
  (i) Describe the purpose and nature of the modification;
  (ii) Describe the nature of the transfer agreement, the amount of allocation transferred, and the dischargers or persons involved;
  (iii) Provide copies of the transaction agreements with original signatures consistent with NPDES signatory requirements; and
  (iv) Demonstrate to the Director's satisfaction that the increased nutrient discharge will not violate water quality standards in localized areas.

(f) Changes in a discharger's nutrient limits shall become effective upon modification of its individual permit but no sooner than January 1 of the year following modification. If the modified permit is issued after January 1, the Director may make the limit effective on that January 1 provided that the discharger made acceptable application in a timely manner.

(g) Regional Facilities. In the event that an existing discharger or group of dischargers accepts wastewater from another NPDES-permitted treatment facility in the same Jordan subwatershed and that acceptance results in the elimination of the discharge from the other treatment facility, the eliminated facility's delivered nutrient allocations shall be transferred and added to the accepting discharger's delivered allocations.

(10) This Item describes the option for dischargers to join a group compliance association to collectively meet nutrient control requirements.

(a) Any or all facilities within the same Jordan subwatershed may form a group compliance association to meet delivered nutrient allocations collectively. More than one group compliance association may be established in any subwatershed. No facility may belong to more than one association at a time.

(b) Any such association must apply for and shall be subject to an NPDES permit that establishes the effective nutrient limits for the association and for its members.

(c) No later than 180 days prior to the proposed date of a new association's operation or expiration of an existing association's NPDES permit, the association and its members shall submit an application for a NPDES permit for the discharge of nutrients to surface waters of the Jordan watershed. The association's NPDES permit shall be issued to the association and its members. It shall specify the delivered nutrient limits for the association and for each of its co-permittee members. Association members shall be deemed in compliance with the permit limits for nitrogen and phosphorus contained in their individually issued NPDES permits so long as they remain members in an association.

(d) An association's delivered nitrogen and phosphorus limits shall be the sum of its members' individual active delivered allocations for each nutrient plus any other active allocation obtained by the association or its members.

(e) The individual delivered allocations for each member in the association permit shall initially be equivalent to the discharge limits in effect in the member's NPDES permit. Thereafter, changes in individual allocations or limits must be incorporated into the members' individual permits before they are included in the association permit.

(f) An association and its members may reapportion the individual delivered allocations of its members on an annual basis. Changes in individual allocations or limits must be incorporated into the members' individual permits before they are included in the association permit.

(g) Changes in nutrient limits shall become effective no sooner than January 1 of the year following permit modification. If the modified permit is issued after January 1, the Director may make the limit effective on that January 1 provided that the discharger made acceptable application in a timely manner.

(h) Beginning with the first full calendar year that the nitrogen or phosphorus limits are effective, an association that does not meet its permit limit for nitrogen or phosphorus for a calendar year shall, no later than May 1 of the year following the exceedance, make an offset payment to the NC Ecosystem Enhancement Program or to private sellers of nutrient

offset credit, or by implementing other load offsetting measures contingent upon approval by the Division as meeting the requirements of rule 15A NCAC 02B .0273 and 15A NCAC 02B .0703.

(i) Association members shall be deemed in compliance with their individual delivered limits in the association NPDES permit for any calendar year in which the association is in compliance with its delivered limit. If the association fails to meet its delivered limit, the association and the members that have failed to meet their individual delivered nutrient limits in the association NPDES permit will be out of compliance with the association NPDES permit.

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-215; 143-215.1; 143-215.3(a)(1); 143-215B; 143B-282(c); 143B-282(d); S.L. 1995, c. 572; S.L. 2005-190; S.L. 2006-259; S.L. 2009-216; S.L. 2011-394; S.L. 2012-187;*
Eff. August 11, 2009;
See S.L. 2013-395;
Amended Eff. April 1, 2020; July 7, 2014.

15A NCAC 02B .0271 JORDAN WATER SUPPLY NUTRIENT STRATEGY: STORMWATER REQUIREMENTS FOR STATE AND FEDERAL ENTITIES
(See S.L. 2013-395)

The following is the stormwater strategy for the activities of state and federal entities within the Jordan watershed, as prefaced in Rule 02B .0262.

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

(a) To accomplish the following on lands under state and federal control:

(i) Achieve and maintain, on new non-road development lands, the nonpoint source nitrogen and phosphorus percentage reduction goals established for Jordan Reservoir in 15A NCAC 02B .0262 relative to the baseline period defined in that Rule;

(ii) Provide the highest practicable level of treatment on new road development; and

(iii) On existing state-maintained roadways and facilities, and existing developed lands controlled by other state and federal entities in the Jordan watershed, achieve and maintain the nonpoint source nitrogen and phosphorus percentage reduction goals established for Jordan Reservoir in 15A NCAC 02B .0262 relative to the baseline period defined in that Rule.

(b) To ensure that the integrity and nutrient processing functions of receiving waters and associated riparian buffers are not compromised by erosive flows from state-maintained roadways and facilities and from lands controlled by other state and federal entities in the Jordan watershed; and

(c) To protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed.

(2) APPLICABILITY. This Rule shall apply to all existing and new development, both as defined in 15A NCAC 02B .0263, that lies within or partially within the Jordan watershed under the control of the NC Department of Transportation (NCDOT), including roadways and facilities, and to all lands controlled by other state and federal entities in the Jordan watershed.

(3) EXISTING DEVELOPMENT ADAPTIVE IMPLEMENTATION. The Division of Water Quality shall review monitoring required in Item (4) of 15A NCAC 02B .0266 to decide whether to implement a 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 state and federal entities that need to develop and implement a program to control nutrient loadings:

(a) If the March 2014 monitoring report or any subsequent monitoring report for the Upper New Hope Creek Arm of Jordan Reservoir required under Item (4) of 15A NCAC 02B .0266 shows that nutrient-related water quality standards are not being achieved, state and federal entities in the subwatershed of that arm of Jordan Reservoir shall develop and implement a program to control nutrient loading from existing development within the subwatershed, as provided in this Rule;

(b) If the March 2017 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) of 15A NCAC 02B .0266 shows that nutrient-related water quality standards are not being achieved, state and federal entities in the subwatershed of that arm of Jordan Reservoir shall develop and implement a program to control nutrient loading from existing development within the subwatershed, as provided in this Rule;

(c) The Division shall defer development and implementation of a program to control nutrient loading from existing development required in a subwatershed by this Sub-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) of 15A NCAC 02B .0266 shows that nutrient-related water quality standards have not been achieved, the Division shall notify each state and federal entity in the subwatershed of that arm of Jordan Reservoir, and each entity shall develop and implement a program to control nutrient loading from existing development as provided in this Rule; and

(d) ADDITIONAL MEASURES TO REDUCE NITROGEN LOADING IN THE UPPER NEW HOPE CREEK SUBWATERSHED. If the March 1, 2023, 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, state and federal entities located in whole or in part in the Upper New Hope Creek Subwatershed shall modify their programs to control nutrient loading from existing roadway and nonroadway development to achieve additional reductions in nitrogen loadings. The modified 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 in that arm of Jordan Reservoir. Subject state and federal entities shall develop and implement a program to control nutrient loading from existing development within the subwatershed, as provided in this Rule.

(4) EXISTING DEVELOPMENT NOTIFICATION REQUIREMENTS. Based on findings under Item (3) of this Rule, the Division shall notify the state and federal entities in each subwatershed that either:

(a) Implementation of a program to control nutrient loading from existing development, or additional measures under an existing program, will be necessary to achieve water quality standards in an arm of the reservoir and direct the state and federal entities in the subwatershed to develop or modify a load reduction program in compliance with this Rule; or

(b) Implementation of a program to control nutrient loading from existing development is not necessary at that time but will be reevaluated in three years based on the most recent water quality monitoring information.

(5) NON-NCDOT REQUIREMENTS. With the exception of the NCDOT, all state and federal entities that control lands within the Jordan watershed shall meet the following requirements:

(a) For any new development proposed within their jurisdictions that would disturb one-half acre or more, non-NCDOT state and federal entities shall continue to develop stormwater management plans for submission to and approval by the Division. These stormwater plans shall not be approved by the Division unless the following criteria are met:

(i) The 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 loading calculation method called for in Item (10) of this Rule or other equivalent method acceptable to the Division;

(ii) 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;

(iii) Stormwater systems shall be designed to control and treat the runoff generated from all surfaces by one inch of rainfall. The treatment volume shall be drawn down pursuant to guidance specific to each practice as provided in the most recent version of the Stormwater Best Management Practices Manual published by the Division, or other technically at least equivalent guidance 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 development shall not contribute to degradation of waters of the State. At a minimum, the 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;

(iv) Proposed new development that would replace or expand structures or improvements that existed as of December 2001, the end of the baseline period, and which 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 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 load reduction goals stated in 15A NCAC 02B .0262 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 Sub-Item (5)(a)(i) of this Rule;

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

(vi) The entity shall have the option of offsetting part of the nitrogen and phosphorus loads by implementing or funding offsite management measures as follows: Before using offsite offset options, a development shall meet any requirements for engineered stormwater controls described in Sub-Item (5)(a)(iii) of this Rule, and shall attain a maximum nitrogen loading rate on-site of four pounds per acre per year for single-family, detached and duplex residential development and eight 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 (5)(a)(iii) of this Rule. An entity may make offset payments to the NC Ecosystem Enhancement Program or to private sellers of reduction credit as meeting the applicable requirements of 15A NCAC 02B .0703. An entity may propose other offset measures to the Division, including providing its own offsite offset or utilizing a private seller. All offset measures identified in this Sub-Item shall meet the requirements of 15A NCAC 02B .0273(2)-(4); and

(vii) The non-NCDOT state or federal entity shall include measures to ensure maintenance of best management practices (BMPs) implemented as a result of the provisions in Sub-Item (5)(a) of this Rule for the life of the development.

(b) For existing development, non-NCDOT state and federal entities receiving notice from the Division of the requirement to develop and implement or modify a program to control nutrient loading from existing development, as specified under Item (4) of this Rule, shall do so based on the standards set out in this Sub-Item. Such entities shall submit these programs for approval by the Division in accordance with the process identified in Item (7)

of this Rule. A load reduction program shall include the following elements and meet the associated criteria:

(i) The long-term objective of this program shall be for the entity to achieve the percentage nutrient load reduction goals in Item (5) of 15A NCAC 02B .0262 relative to annual mass loads, in pounds per year, representative of the baseline period defined in that Rule and reaching Jordan Reservoir from existing developed lands within each subwatershed under its control. Loads shall be calculated by applying the method called for in Item (10) of this Rule or an equivalent or more accurate method acceptable to the Division, to acreages of different types of existing developed lands as defined in this Sub-Item and in Item (2) of this Rule. To provide entities spatial latitude to obtain reductions in different locations, loads thus calculated shall be converted to delivered loads to Jordan Reservoir using transport factors established in the Division document, Nitrogen and Phosphorus Delivery from Small Watersheds to Jordan Lake, dated June 30, 2002. Subject entities shall include estimates of, and plans for offsetting, nutrient load increases from lands developed subsequent to the baseline period but prior to implementation of new development programs. For these post-baseline developed lands, the new loading rate shall be compared to the applicable loading rate target in Sub-Item (5)(a)(i) of this Rule for the subwatershed and acres involved, and the difference shall constitute the load reduction need. Should percentage reduction goals be adjusted pursuant to Item (8) of 15A NCAC 02B .0262, then the annual load goals established in this Sub-Item shall be adjusted accordingly. Entities may seek to fund implementation of load-reducing activities through grant sources such as the North Carolina Clean Water Act Section 319 Grant Program, or other funding programs for nonpoint sources;

(ii) The load reduction program shall include a plan and supporting technical analysis for achieving half of each load reduction goal within 10 years of the applicable notification date established under Item (4) of this Rule, and a plan and timeframes for achieving the remaining half subject to modification based on technical analysis at 10 years after the notification date established under Item (4) of this Rule. A load reduction program may propose an alternative compliance timeframe provided it includes a technical analysis that demonstrates the need for that timeframe. A program technical analysis shall examine the feasibility of achieving stated goals and shall consider factors such as magnitude of reduction need relative to area within a subwatershed, the potential for utilizing the range of load-reducing activities listed in Sub-Item (5)(b)(iv) of this Rule, and relative costs and efficiencies of each activity to the extent information is available. The load reduction program shall propose implementation rates and timeframes for each activity, and shall provide for proportionate annual progress toward meeting the reduction goals as practicable, that is capable of being put into practice, done, or accomplished;

(iii) The load reduction program shall identify specific load-reducing practices implemented to date subsequent to the baseline period and for which it is seeking credit. It shall estimate load reductions for these practices using methods provided for in Item (10) of this Rule, and their anticipated duration;

(iv) The load reduction program shall identify the types of activities the entity intends to implement and types of existing development affected, relative proportions or a prioritization of practices, and the relative magnitude of reductions it expects to achieve from each. An entity may credit any nitrogen or phosphorus load reductions in excess of those required by other rules in this Chapter. The program shall identify the duration of anticipated load reductions, and may seek activities that provide sustained, long-term reductions. The load reduction program shall meet the requirements of 15A NCAC 02B .0273. Potential load-reducing activities may include stormwater activities such as street sweeping, improvement of existing ponds and stormwater structures, removal of existing built-upon area, retrofitting of existing development with engineered best management practices

(BMPs), treatment of runoff in redevelopment projects, over-treatment of runoff in new development projects, source control activities such as pet waste reduction and fertilization reduction, alternative stormwater practices such as rain barrels, cisterns, downspout disconnections, and stormwater capture and reuse, restoration of ecological communities such as streams and riparian buffers, and wastewater activities such as creation of surplus allocation through advanced treatment at wastewater facilities, expansion of surplus allocation through regionalization, collection system improvements, and removal of illegal discharges;

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

(vi) An entity shall have the option of working with municipalities or counties within its subwatershed to jointly meet the load targets from all existing development within their combined jurisdictions. An entity may utilize private or third party sellers. All reductions shall meet the requirements of 15A NCAC 02B .0273;

(vii) The entity shall include measures to provide for operation and maintenance of retrofitted stormwater controls to ensure that they meet the load targets required in Sub-Item (5)(b) of this Rule for the life of the development; and

(viii) An entity may choose to conduct monitoring of stream flows and runoff from catchments to quantify disproportionately high loading rates relative to those used in the accounting methods stipulated under Item (10) of this Rule, and to subsequently target load-reducing activities to demonstrated high-loading source areas within such catchments for proportionately greater load reduction credit. An entity may propose such actions in its initial load reduction program submittal or at any time subsequent, and shall obtain Division approval of the monitoring design. It shall also obtain Division approval of any resulting load reduction benefits based on the standards set out in this Rule. An entity that chooses such monitoring shall execute the monitoring, and provide the results to the Division as part of its load reduction program submittal.

(6) NCDOT REQUIREMENTS. The NCDOT shall meet the following requirements on lands within the Jordan Watershed:

(a) Implementation of its program for post-construction stormwater runoff control for new development approved by the Commission in November 2012, including new and widening NCDOT roads and facilities. The program established a process by which the Division reviews and approves stormwater designs for new NCDOT development projects. The program delineates the scope of vested projects that would be considered as existing development, and defines lower thresholds of significance for activities considered new development. In addition, the following criteria apply:

(i) For new and widening roads, compliance with the riparian buffer protection requirements of Rules 15A NCAC 02B .0267 and .0268 which are expected to achieve a 30 percent nitrogen reduction efficiency in runoff treatment through either diffuse flow into buffers or other practices, shall be deemed as compliant with the purposes of this Rule;

(ii) New non-road development shall achieve and maintain the nitrogen and phosphorus percentage load reduction goals established for each subwatershed in 15A NCAC 02B .0262 relative to either area-weighted average loading rates of all developable lands as of the baseline period defined in 15A NCAC 02B .0262, or to project-specific pre-development loading rates. Values for area-weighted average loading rate targets for nitrogen and phosphorus, respectively, in each subwatershed shall be the following, 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 NCDOT shall determine the need for engineered stormwater controls to meet these loading rate targets by using the loading calculation method called for in Item (10) of this Rule or other equivalent method acceptable to the Division. Where stormwater treatment systems are needed to meet these targets, they shall be designed to control and treat the runoff generated

from all surfaces by one inch of rainfall. Such systems shall be assumed to achieve the nutrient removal efficiencies identified in the most recent version of the Stormwater Best Management Practices Manual published by the Division provided that they meet associated drawdown and other design specifications included in the same document. The NCDOT may propose to the Division nutrient removal rates for practices currently included in the BMP Toolbox required under its NPDES stormwater permit, or may propose revisions to those practices or additional practices with associated nutrient removal rates. The NCDOT may use any such practices approved by the Division to meet loading rate targets identified in this Sub-Item. New non-road development shall also control runoff flows to meet the purpose of this Rule regarding protection of the nutrient functions and integrity of receiving waters;

(iii) For new non-road development, the NCDOT shall have the option of partially offsetting its nitrogen and phosphorus loads by implementing or funding offsite management measures. These offsite offsetting measures shall achieve at least equivalent reductions in nitrogen and phosphorus load to the remaining reduction needed onsite to comply with Sub-Item (6)(a)(ii) of this Rule. Before using offsite offset options, a development shall attain a maximum nitrogen loading rate of 8 pounds per acre per year. The NCDOT may make offset payments to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that Program. The NCDOT may propose other offset measures to the Division. All offset measures identified in this Sub-Item shall meet the requirements of 15A NCAC 02B .0273; and

(iv) New development shall continue compliance, required as of August 11, 2009, with the riparian buffer protection requirements of 15A NCAC 02B .0267 and .0268 through a Division approval process.

(b) NCDOT EXISTING DEVELOPMENT LOAD REDUCTION GOALS. For NCDOT existing roadway and non-roadway development, a 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 in the Upper New Hope and Haw subwatersheds. The load reduction goal for the Lower New Hope arm shall be designed to maintain no increases in nitrogen and phosphorus loads from existing roadway and nonroadway development relative to the baseline period 1997 through 2001. Load reduction goals for each subwatershed shall be calculated as follows:

(i) For existing NCDOT roadways and industrial facilities, baseline loads shall be established using stormwater runoff nutrient load characterization data collected through the National Pollutant Discharge Elimination System (NPDES) Research Program under NCS0000250 Permit Part II Section G;

(ii) For other NCDOT nonroadway development, baseline loads shall be established by applying the Tar-Pamlico Nutrient Export Calculation Worksheet, Piedmont Version, dated October 2004, to acreages of nonroadway development under the control of NCDOT during the baseline period. The baseline load for other nonroadway development may also be calculated using an equivalent or more accurate method acceptable to the Division and recommended by the Scientific Advisory Board established under Session Law 2009-216; and

(iii) The existing development load reduction goal shall be adjusted to account for nutrient loading increases from existing roadway and nonroadway development subsequent to the baseline period but prior to implementation of new development stormwater programs pursuant to Sub-Item (6)(a) of this Rule.

(c) If notified by the Division of the requirement to develop and implement, or modify a program to control nutrient loading from existing development as specified under Item (4) of this Rule, the NCDOT shall do so based on the standards set out in this sub-item. The NCDOT shall submit such programs to the Division for approval according to the processes identified in Item (8) of this Rule. Such program shall achieve the nutrient load reduction

goals in Sub-Item (6)(b) of this rule and address both roadway and nonroadway development. Such program shall include the following elements:

(i) Identification of the NCDOT stormwater outfalls from Interstate, US, and NC primary routes;

(ii) Identification and elimination of illegal discharges into the NCDOT's stormwater conveyance system; and

(iii) Initiation of a "Nutrient Management Education Program" for NCDOT staff and contractors engaged in the application of fertilizers on highway rights of way. The purpose of this program shall be to contribute to the load reduction goals established in 15A NCAC 02B .0262 through proper application of nutrients, both inorganic fertilizer and organic nutrients, to highway rights of way in the Jordan watershed in keeping with the most current state-recognized technical guidance on proper nutrient management.

(d) If notified by the Division of the requirement to develop and implement, or modify a program to control nutrient loading from existing development as specified under Item (4) of this Rule, the NCDOT shall achieve the nutrient load reduction goals under Sub-Item (6)(b) of this Rule by development of a load reduction program that addresses both roadway and nonroadway development in each subwatershed of the Jordan Reservoir. Such program may include, but not be limited to, the following load-reducing measures:

(i) street sweeping;

(ii) source control activities such as pet waste reduction and fertilizer management at NCDOT facilities;

(iii) improvement of existing stormwater structures;

(iv) alternative stormwater practices such as use of rain barrels and cisterns;

(v) stormwater capture and reuse; and

(vi) purchase of nutrient reduction credits.

(e) The NCDOT may meet minimum implementation rate and schedule requirements of its program by implementing a combination of three stormwater retrofits per year for existing roadway development in the Jordan Lake watershed and other load-reducing measures identified in its program developed pursuant to this Rule and approved by the Commission.

(7) NON-NCDOT RULE IMPLEMENTATION. For all state and federal entities that control lands within the Jordan watershed with the exception of the NCDOT, this Rule shall be implemented as follows:

(a) As of July 2012, the date of Commission approval for the nutrient accounting methods, entities shall comply with the requirements of Sub-Item (5)(a) of this Rule for any new development proposed within their jurisdictions;

(b) Within six months after receiving notice to develop and implement, or modify a program to control nutrient loading from existing development as specified in Sub Item (4)(a) of this Rule, subject entities shall submit load reduction programs to the Division for preliminary approval according to the standards set out in Sub-Item (5)(b) of this Rule;

(c) Within six months following submission of the subject entity's program to control nutrient loading from existing development, the Division shall request the Commission's approval of entities' load reduction programs. The Commission shall either approve the programs or require changes. Should the Commission require changes, the Division shall seek Commission approval at the earliest feasible date subsequent to the original request;

(d) Within two months following Commission approval of a load reduction program, entities shall begin to implement load reduction programs;

(e) Upon implementation of the requirements of Item (5) of this Rule, subject entities shall provide annual reports to the Division documenting their progress in implementing those requirements; and

(f) If the 2023 monitoring report or subsequent monitoring reports for the Upper New Hope Arm of Jordan Reservoir shows that nutrient-related water quality standards are not being achieved, the Division shall notify the subject entities of the need for additional measures to reduce nitrogen loading in the subwatershed. The subject entities shall then submit a modified program to achieve the nutrient reductions specified in Sub-Item (3)(d) of this Rule. Submission, review and approval, and implementation of a modified program shall

follow the process, timeline, and standards set out in Sub-Items (7)(b) through (7)(d) of this Rule.

(8) NCDOT RULE IMPLEMENTATION. For the NCDOT, this Rule shall be implemented as follows:

(a) NCDOT shall continue to implement the Stormwater Management Program for New Development approved by the Commission in November 2012, and implemented as of January 2013 or subsequent revisions to their program approved by the Commission or its delegated authority. This program shall continue to meet or exceed the requirements in Sub-Items (6)(a) of this Rule;

(b) Existing development requirements shall be implemented as follows:

(i) Within six months after receiving notice to develop and implement, or modify a program to control nutrient loading from existing development as specified in Item (4)(a) of this Rule, the NCDOT shall submit the Existing Development Program for the Jordan watershed to the Division for approval. This Program shall meet or exceed the requirements in Sub-Items (6)(c) through (6)(e) of this Rule;

(ii) Within six months following submission of the NCDOT's program to control nutrient loading from existing development, the Division shall request the Commission's approval of the NCDOT Existing Development Program. If the Commission disapproves the program, the NCDOT 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 NCDOT's modified program;

(iii) Within two months after the Commission's approval of a program to control nutrient loading from existing development, the NCDOT shall implement their approved program; and

(iv) If the 2023 monitoring report or subsequent monitoring reports for the Upper New Hope Arm of Jordan Reservoir shows that nutrient-related water quality standards are not being achieved, the Division shall notify the NCDOT of the need for additional measures to reduce nitrogen loading in the subwatershed. The NCDOT shall then submit a modified program to achieve the nutrient reductions specified in Sub-Item (3)(d) of this Rule. Submission, review and approval, and implementation of a modified program shall follow the process and timeline set out in Sub-Items (8)(b)(i) through (8)(b)(iii) of this Rule.

(c) Upon implementation, the NCDOT shall submit annual reports to the Division summarizing its activities in implementing each of the requirements in Sub-Items (6)(c) through (6)(e) of this Rule. This annual reporting may be incorporated into annual reporting required under NCDOT's NPDES stormwater permit.

(9) RELATIONSHIP TO OTHER REQUIREMENTS. A party may in its program submittal under Item (7) or (8) of this Rule request that the Division accept its implementation of another stormwater program or programs, such as NPDES stormwater requirements, as satisfying one or more of the requirements set forth in Item (5) or (6) of this Rule. The Division shall provide determination on acceptability of any such alternatives prior to requesting Commission approval of programs as required in Items (7) and (8) of this Rule. The party shall include in its program submittal technical information demonstrating the adequacy of the alternative requirements.

(10) ACCOUNTING METHODS. Non-NCDOT entities shall continue to utilize the Jordan/Falls Lake Stormwater Load Accounting Tool approved by the Commission in July 2012 for all applicable load reduction estimation activities or equivalent, more source-specific or more accurate methods acceptable to the Division. Except as for the establishment of baseline loads as specified under Item (6)(b) of this Rule, NCDOT shall utilize the NCDOT-Jordan/Falls Lake Stormwater Load Accounting Tool approved by the Commission in July 2012 for all applicable load estimation activities or equivalent, more source-specific, or more accurate methods acceptable to the Division. The Division shall periodically revisit these accounting methods to determine the need for revisions to both the methods and to existing development load reduction assignments made using the methods set out in this Rule. It shall do so no less frequently than every 10 years. 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 BMP nutrient removal efficiencies.

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.5(i); 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;*
Eff. August 11, 2009;
Amended Eff. September 1, 2011;
See S.L. 2013-395;
Amended Eff. April 1, 2020; July 7, 2014.

15A NCAC 02B .0272 JORDAN WATER SUPPLY NUTRIENT STRATEGY: FERTILIZER MANAGEMENT

The following is the management strategy for controlling land-applied nutrients in the Jordan watershed, as prefaced in Rule .0262 of this Section.

(1) PURPOSE. The purpose of this Rule is to protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed by managing the application of nutrients, both inorganic fertilizer and organic nutrients, to lands in the Jordan watershed. The requirements of this Rule are to be fully implemented within three years from the effective date as set out in Item (6) of this Rule.

(2) APPLICABILITY. This Rule shall apply to the application of nutrients on:
- (a) Cropland areas in the Jordan watershed for commercial purposes;
- (b) Commercial ornamental and floriculture areas and greenhouse production areas in the Jordan watershed;
- (c) Golf courses, public recreational lands, road or utility rights-of-way, or other commercial or institutional lands where any such land, or combination of such lands, under common management in the watershed totals at least five acres; and
- (d) Any lands in the Jordan watershed where a hired applicator, as defined in 15A NCAC 02B .0202(4), who does not own or lease the lands applies nutrients to a total of at least five acres per year.

(3) REQUIREMENTS. Application of nutrients to lands subject to this Rule shall be in accordance with the following requirements:
- (a) Application shall be made either:
  - (i) By an applicator who has completed nutrient management training pursuant to Item (4) of this Rule; or
  - (ii) Pursuant to a nutrient management plan that meets the requirements of Item (5) of this Rule.
- (b) With the exception of residential homeowners, a person who hires an applicator to apply nutrients to the land that they own or manage in the Jordan watershed shall either:
  - (i) Ensure that the applicator they hire has attended and completed nutrient management training pursuant to Item (4) of this Rule; or
  - (ii) Ensure that the applicator they hire follows a nutrient management plan that has been developed for the land that they own or manage pursuant to Item (5) of this Rule.

(4) NUTRIENT MANAGEMENT TRAINING. To demonstrate compliance with this Rule through the nutrient management training option, the applicator shall have a certificate indicating completion of training provided by either the Cooperative Extension Service or the Division. Training certificates shall be kept on-site or be produced within 24 hours of a request by the Division. Training shall be sufficient to provide participants with an understanding of the value and importance of proper management of nitrogen and phosphorus, and the water quality impacts of poor nutrient management, and the ability to understand and properly carry out a nutrient management plan.

(5) NUTRIENT MANAGEMENT PLANS. Nutrient management plans developed to comply with this rule shall meet the following requirements:
- (a) Nutrient management plans for cropland, excluding those for application of Class A bulk, and Class B wastewater residuals, regulated under 15A NCAC 02T .1100 and septage application regulated under 15A NCAC 13B .0815 through .0829, shall meet the standards and specifications adopted by the NC Soil and Water Conservation Commission, including those found in 15A NCAC 06E .0104 and 15A NCAC 06H .0104, which are incorporated

herein by reference, including any subsequent amendments and editions to such rules that are in place at the time that plans are approved by a technical specialist as required under Sub-Item (5)(e) of this Rule.

(b) Nutrient management plans for application of Class A bulk, and Class B, wastewater residuals regulated under 15A NCAC 02T .1100 and septage application regulated under 15A NCAC 13B .0815 through .0829 shall meet the standards and specifications adopted by the NC Soil and Water Conservation Commission in 15A NCAC 06E .0104, including any subsequent amendments and editions to such rule that are in place at the time that plans are approved by the permitting agency. This compliance includes addressing the phosphorus requirements of US Department of Agriculture Natural Resources Conservation Service Practice Standard 590 regarding Nutrient Management.

(c) Nutrient management plans for lands identified in Sub-Item (2)(c) of this Rule shall follow the applicable guidance contained in the most recent version of North Carolina Cooperative Extension Service publications "Water Quality and Professional Lawn Care" (NCCES publication number WQWM-155), "Water Quality and Home Lawn Care" (NCCES publication number WQWM-151), or "Water Quality for Golf Course Superintendents and Professional Turf Managers" (NCCES publication number WQWM-156 Revised) as appropriate for the activity. The above-referenced guidelines are hereby incorporated by reference including any subsequent amendments and editions. Copies may be obtained from the Division of Water Quality, 512 North Salisbury Street, Raleigh, North Carolina 27604 at no cost. Nutrient management plans may also follow other guidance distributed by land-grant universities for turfgrass management as long as it is equivalent to or more stringent than the above-listed guidelines.

(d) Nutrient management plans for ornamental and floriculture production shall follow the Nutrient Management section of the most recent version of the Southern Nursery Association guidelines promulgated in "Best Management Practices – A BMP Guide For Producing Container and Field Grown Plants". Copies may be obtained from the Southern Nursery Association, 1827 Powers Ferry Road SE, Suite 4-100, Atlanta, GA 30339-8422 or from www.sna.org. The materials related to nutrient management plans for ornamental and floriculture production are hereby incorporated by reference including any subsequent amendments and editions. Copies are available for inspection at the Department of Environment and Natural Resources Library, 512 North Salisbury Street, Raleigh, North Carolina 27604. Nutrient management plans for ornamental and floriculture production may also follow other guidance distributed by land-grant universities for such production as long as it is equivalent or more stringent than the above-listed guidelines.

(e) The nutrient management plan shall be approved in writing by an appropriate technical specialist, as defined in 15A NCAC 06H .0102(9), as follows:

(i) Nutrient management plans for cropland using either inorganic or organic nutrients, except those using biosolids or septage, shall be approved by a technical specialist designated pursuant to the process and criteria specified in rules adopted by the Soil and Water Conservation Commission for nutrient management planning, including 15A NCAC 06H .0104, excepting Sub-Item (a)(2) of that Rule.

(ii) Nutrient management plans for lands identified in Sub-Item (2)(c) of this Rule, ornamental and floriculture production shall be approved by a technical specialist designated by the Soil and Water Conservation Commission pursuant to the process and criteria specified in 15A NCAC 06H .0104 excepting Sub-Item (a)(2) of that Rule. If the Soil and Water Conservation Commission does not designate such technical specialists, then the Environmental Management Commission shall do so using the same process and criteria.

(f) Persons with approved waste utilization plans that are required under state or federal animal waste regulations are deemed in compliance with this Rule as long as they are compliant with their approved waste utilization plans.

(g) Nutrient management plans and supporting documents must be kept on-site or be produced within 24 hours of a request by the Division.

(6) COMPLIANCE. The following constitute the compliance requirements of this Rule:

(a) For proposed new application of Class A bulk, and Class B, wastewater residuals pursuant to permits obtained under 15A NCAC 02T .1100 or its predecessor, and septage application pursuant to permits obtained under 15A NCAC 13B .0815 through .0829, all applications for new permits shall be made according to, and subsequent nutrient applications shall comply with, the applicable requirements of this Rule as of its effective date.

(b) For existing, ongoing application of residuals and septage as defined in this Item, beginning one year after the effective date of this Rule, all applications for renewal of existing permits shall be made according to, and subsequent nutrient applications shall comply with, the applicable requirements of this Rule.

(c) For all other application with the exception of the application of residuals and septage as defined in this Item, the requirements of this Rule shall become effective three years after its effective date and shall apply to all application of nutrients on lands subject to this Rule after that date.

(d) Persons who fail to comply with this Rule are subject to enforcement measures authorized in 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; 143-215.3(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; Eff. August 11, 2009.*

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

PURPOSE. This Rule provides parties subject to other rules within the Jordan nutrient strategy with options for meeting rule requirements by obtaining or buying credit for 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 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 rules of the Jordan 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:

(1) PREREQUISITES. The following buyers shall meet applicable criteria identified here and in rules imposing reduction requirements on them before utilizing the option outlined in this 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) The party seeking approval to sell excess loading reduction credits pursuant to this Rule shall demonstrate to the Division that such reductions meet the following criteria:

(a) 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;

(b) Load reductions eligible for credit shall not include reductions achieved under other regulations to mitigate or offset actions that increase nutrient loading;

(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 reductions and define the magnitude and duration of those reductions to the Division, including addressing the following items:

(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.

(3) 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.

(4) 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.

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; 143-214.12; 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.

15A NCAC 02B .0274 NUTRIENT OFFSET PAYMENT RATES FOR THE NC ECOSYSTEM ENHANCEMENT PROGRAM

History Note: *Authority G.S. 143-214.1; 143-214.20; 143-214.21; S.L. 1995, c. 572; S.L. 2006, c. 215; S.L. 2007, c. 438; S.L. 2009, c. 337; S.L. 2009, c. 484; S.L. 2009, c. 486;*
Eff. September 1, 2010;
Transferred to 15A NCAC 02R .0602 Eff. May 1, 2015.

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

PURPOSE. The purpose of this Rule and Rules 15A NCAC 02B .0276 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 significant 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) 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) 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 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 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) 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;

(b) STAGE II. Stage II requires implementation of additional controls in the Upper Falls Watershed beginning no later than January 15, 2021 to achieve nutrient-related water quality standards throughout Falls Reservoir by 2041 to the maximum extent technically and economically feasible, 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) 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 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) Attainment of nutrient-related water quality standards in the Lick Creek arm of Falls Reservoir and points downstream no later than January 15, 2026;

(iv) Attainment of nutrient-related water quality standards in the Ledge and Little Lick Creek arms of Falls Reservoir and points downstream no later than January 15, 2031;

(v) Attainment of nutrient-related water quality standards at points downstream of the Interstate 85 crossing of Falls Reservoir no later than January 15, 2036;

(vi) Attainment of nutrient-related water quality standards throughout Falls Reservoir no later than 2041;

(vii) Where the Division finds that acceptable progress has not been made towards achieving nutrient-related water quality standards throughout 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 may request Commission approval to initiate additional rulemaking;

(viii) 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 report to the Commission and provide information to the public in January 2016 and every five years thereafter as necessary. 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 consider information 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 model-based load reduction targets, to ensure that allowable loads to Falls Reservoir remain appropriate as implementation proceeds, a person may at any time during implementation of the Falls nutrient strategy develop and submit for Commission approval supplemental nutrient response modeling of Falls Reservoir based on additional data collected after a period of implementation. The Commission may consider revisions to the requirements of Stage II based on the results of such modeling as follows:
(i) A person shall obtain Division review and approval of any monitoring study plan and description of the modeling framework 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 180 days of receipt, the division shall either approve the plan and modeling framework or notify the person seeking to perform the supplemental modeling of changes to the plan and modeling framework 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 may accept modeling products and results that estimate a range of combinations of nitrogen and phosphorus percentage load reductions needed to meet the goal of the Falls nutrient 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 that otherwise comply with the requirements of this Item. 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 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 modeling data, products and results acceptable to the Commission for this purpose. Where supplemental modeling is accepted by the Commission, and results indicate allowable loads of nitrogen and phosphorus to Falls Reservoir from the watersheds of Ellerbe Creek, Eno River, Little River, Flat River, and Knap of Reeds Creek that are substantially different than those identified in Item (3), then the Commission may initiate rulemaking to establish those allowable loads as the revised objective of Stage II relative to their associated baseline values;

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

(a) Rule .0275 Purpose and Scope;

(b) Rule .0276 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) 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) 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).

15A NCAC 02B .0276 FALLS WATER SUPPLY NUTRIENT STRATEGY: DEFINITIONS

(a) 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 Falls nutrient strategy:

(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. For point sources, possession of allocation does not authorize the discharge of nutrients but is prerequisite to such authorization through a NPDES permit, and allocation may be further distinguished as follows:
(A) "Active" allocation means that portion of an allocation that has been applied toward and is expressed as a nutrient limit in an individual NPDES permit;
(B) "Reserve" allocation means allocation that is held by a permittee or other person but which has not been applied toward and is not expressed as a nutrient limit in an individual NPDES permit;

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

(3) "Atmospheric nitrogen" means total oxidized nitrogen (NO_y) which includes all nitrogen oxides (including NO_2, NO, N_2, nitrogen trioxide [N_2O_3], nitrogen tetroxide [N_2O_4], dinitrogen pentoxide [N_2O_5], nitric acide (HNO3) peroxyacl nitrates (PAN)), the sum of which is referred to as reduced nitrogen (NH_x));

(4) "Delivered," as in delivered allocation, load, or limit, means the allocation, load, or limit that is measured or predicted at Falls Reservoir;

(5) "Development" means the same as defined in 15A NCAC 02B .0202(23);

(6) "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 in the Falls watershed;

(7) "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, as of the effective date of either local new development stormwater programs implemented under 15A NCAC 02B .0277 for projects that do not require a state permit or, as of the applicable compliance date established in 15A NCAC 02B .0281(5) and (6); or
(B) It occurs after the compliance date set out in Sub-Item (5)(d) of Rule .0277 but does not result in a net increase in built-upon area;

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

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

(10) "Upper Falls Reservoir" means that portion of the reservoir upstream of State Route 50;

(11) "Upper Falls Watershed" means that area of Falls watershed draining to Upper Falls Reservoir;

(12) "Lower Falls Reservoir" means that portion of the reservoir downstream of State Route 50;
(13) "Lower Falls Watershed" means that are of Falls watershed draining to lower falls Reservoir without first passing through Upper Falls Reservoir;
(14) "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;"
(15) "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;
(16) "New development" means any development project that does not meet the definition of existing development set out in this Rule;
(17) "Nitrogen" means the sum of the organic, nitrate, nitrite, and ammonia forms of nitrogen in a water or wastewater;
(18) "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;
(19) "Nutrients" means total nitrogen and total phosphorus;
(20) "Phosphorus" or "total phosphorus" means the sum of the orthophosphate, polyphosphate, and organic forms of phosphorus in a water or wastewater;
(21) "Stream" means a body of concentrated flowing water in a natural low area or natural channel on the land surface;
(22) "Surface waters" means all waters of the state as defined in G.S. 143-212 except underground waters;
(23) "Technical specialist" means the same as defined in 15A NCAC 06H .0102(9);
(24) "Total nitrogen" means the same as 'nitrogen' defined in Item (17);
(25) "Total phosphorus" means the same as 'phosphorus' defined in Item (20);
(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;" and
(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.

(b) The definitions in Rule .0279 shall also apply throughout these Falls Water Supply Nutrient Strategy rules.

History Note: *Authority G.S. 143-214.1; 1432-214.3;143-214.5; 143-214.7; 143-215.1; 143215.3; 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).

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 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. 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-half acre or more for single family and duplex residential property and recreational facilities, and 12,000 square feet 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

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

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

(a) Nitrogen and phosphorus loads contributed by the proposed new development activity 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) The developer shall have the option of offsetting part of 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:

(i) Proposed new development activity 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), shall achieve 30 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) of this Rule;

(ii) Proposed new development activity disturbing at least 12,000 but less than one acre of land for commercial, industrial, institutional, multifamily residential, or local government property, except as stated in Sub-Item (4)(b)(iv), shall achieve 30 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) of this Rule;

(iii) Except as stated in Sub-Item (4)(b)(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) 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) of this Rule;

(c) Offsite offsetting measures shall achieve at least equivalent reductions in nitrogen and phosphorus loading to the remaining reduction needed 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 with the requirements of Rules .0703 and .0282 of this Subchapter;

(d) 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) Stormwater systems shall be designed to control and treat at a minimum the runoff generated from all surfaces in the project area 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 version of the Stormwater Best Management Practices Manual published by the Division, or other at least technically equivalent standards acceptable to the Division;

(f) 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;

(g) New development may satisfy the requirements of this Rule 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;

(h) 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. 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) 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;*
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Amended Eff. April 1, 2020.

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. It provides local governments three years to develop programs that propose Stage I load reduction actions to the Division and requires local governments to begin and track measures to reduce nutrient loads from existing developed lands within their jurisdiction by January 15, 2014, as specified in Item (7). Local governments shall submit for approval and implement Stage II load reduction programs by 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; 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) 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 2020, 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 2020. This Stage I program shall meet the criteria defined in Item (4) of this Rule;
  (b) By January 15, 2021 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, 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 reductions achieved in the last seven years of Stage I or (B) provide for an annual expenditure that equals or exceeds the average annual amount the local government has spent to achieve nutrient reductions from existing development during the last seven years of Stage I. A local government's expenditures shall include all local government funds, including any state and federal grant 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 reductions achieved in the highest three years of implementation of Stage I or (B) provide for an annual expenditure that equals or exceeds the average annual amount the local government has spent to achieve nutrient reductions from existing development during the highest three years of implementation of Stage I. Annual expenditures shall be calculated in accordance with Sub-Item (3)(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) of this Rule;

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

(a) Jurisdictions in the Eno River and Little River subwatersheds shall, as a part of their Stage I load reduction programs, begin and continuously implement a program to reduce loading from discharging sand filters and malfunctioning septic systems discharging into waters of the State within those jurisdictions and subwatersheds;

(b) Jurisdictions within any Falls subwatershed in which chlorophyll a levels have exceeded 40 micrograms/liter in more than seventy-five percent of the monitoring events in any calendar year shall, as part of their Stage I load reduction programs, begin and continuously implement a program to reduce nutrient loading into the waters of the State within those jurisdictions and that subwatersheds;

(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 systems;

(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) 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) 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) 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) 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 also calculate target nitrogen and phosphorus loads and corresponding load reduction needs;

(h) 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);

(i) 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 types of existing development affected, 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) The load reduction program shall identify anticipated funding mechanisms or sources and discuss steps take or planned to secure such funding;

(k) 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 private third party sellers;

(l) The program shall address the extent of load reduction proposed from the following 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 in (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) The program shall include evaluation of load reduction potential relative to the following factors:
    (i) Extent of physical opportunities for installation;
    (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) The Commission shall approve a Stage I load reduction program if it is consistent with Items (3) and (4) of this Rule. The Commission shall Approve a Stage II load reduction program if it is consistent with Items (3) and (4) of this Rule unless the Commission finds that the local governments can, through the implementation of reasonable and cost-effective measures not included in the proposed program, meet the Stage II nutrient load reductions required by 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 modified program. In determining whether additional or alternative load reduction measures are reasonable and cost effective, the Commission shall consider factors identified in Sub-Item (4)(o) of this 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) RULE IMPLEMENTATION. This Rule shall be implemented as follows:
    (a) By July 2013, the Division shall submit a Stage I model local program to the Commission for approval that embodies the criteria described in Items (3)(a) and (4) 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
        (iv) Methods to account for load reduction credits from various activities;
    (b) 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 or exceed the requirements of Items (3) and (4) 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 lands within their jurisdictions;
    (c) Within 20 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) 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 three 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 existing development Stage I load reduction program;

(e) Upon implementation of the programs required under Item (4) of this Rule, local governments shall provide annual reports to the Division documenting their progress in implementing those requirements within three months following each anniversary of program implementation date 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. Local governments shall indefinitely maintain and ensure performance of implemented load-reducing measures;

(f) By January 15, 2021 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) 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 shall provide 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) 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) Once either load reductions are achieved per annual reporting or water quality standards are met in the lake per Rule 15A NCAC 02B .0275, local governments shall submit programs to ensure no load increases and shall report annually per Sub-Item (e) on compliance with no increases and take additional actions as necessary;

(i) At least every five years after the effective date, the Division shall review the accounting methods stipulated under Sub-Item (7)(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).

15A NCAC 02B .0279 FALLS WATER SUPPLY NUTRIENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS

The following is the NPDES wastewater discharge management strategy for the Falls of the Neuse Reservoir watershed (the Falls watershed):

(1) PURPOSE. The purpose of this Rule is to establish minimum nutrient control requirements for point source wastewater discharges in the Falls watershed in order to restore and maintain water quality in the reservoir and protect its designated uses.

(2) APPLICABILITY. This Rule applies to all wastewater treatment facilities discharging in the Falls watershed that receive nutrient-bearing wastewater and are subject to requirements for individual NPDES permits.

(3) DEFINITIONS. For the purposes of this Rule, the definitions in 15A NCAC 02B .0276 and the following definitions apply:

(a) In regard to point source dischargers, treatment facilities, and wastewater flows and discharges,

(i) "Existing" means that which was subject to an NPDES permit as of December 31, 2006;

(ii) "Expanding" means that which has increased or will increase beyond its permitted flow as defined in this Rule; and

(iii) "New" means that which was not subject to an NPDES permit as of December 31, 2006.

(b) "Limit" or "limitation," except when specified as a concentration limit, means the mass quantity of nitrogen or phosphorus that a discharger or group of dischargers is authorized through an NPDES permit to release into surface waters of the Falls watershed.

(c) "MGD" means million gallons per day.

(d) "Permitted flow" means the maximum monthly average flow authorized in a facility's NPDES permit as of December 31, 2006.

(4) INITIAL NUTRIENT ALLOCATIONS FOR EXISTING UPPER FALLS DISCHARGERS. This Item establishes initial Stage I and Stage II nutrient allocations for existing dischargers in the Upper Falls watershed:

(a) Stage I nitrogen and phosphorus allocations for dischargers with permitted flows of 0.1 MGD or greater are as follows:

		Mass Allocations (pounds/year)	
Facility Name	NPDES No.	Total Nitrogen	Total Phosphorus
North Durham	NC0023841	97,665	10,631
SGWASA	NC0026824	22,420	2,486
Hillsborough	NC0026433	10,422	1,352

(b) Stage I allocations for dischargers with permitted flows less than 0.1 MGD are equal to the Stage II allocations specified in Sub-Items (c) and (d) of this Item.

(c) Stage II nitrogen and phosphorus allocations are as follows:

	Mass Allocations (pounds/year)	
Discharger Subcategories	Total Nitrogen	Total Phosphorus
Permitted flows ≥ 0.1 MGD	97,617	5,438
Permitted flows < 0.1 MGD	1,052	175

(d) The Stage II allocations in Sub-Item (c) of this Item shall be divided among the existing dischargers in each subcategory in proportion to the dischargers' permitted flows as defined in this Rule, and the resulting nutrient allocations shall be assigned to each individual discharger.

(5) CHANGES IN NUTRIENT ALLOCATIONS.

(a) The aggregate and individual nutrient allocations available to point source dischargers in the Falls watershed are subject to change:

(i) Whenever the Commission, through rulemaking, revises the nutrient reduction targets in or pursuant to 15A NCAC 02B .0275 in order to ensure the protection of water quality in the reservoir and its tributaries or to conform with applicable state or federal requirements;

(ii) Whenever one or more point source dischargers acquires any portion of the nonpoint load allocations under the provisions in this Rule and 15A NCAC 02B .0282, Options for Offsetting Nutrient Loads; or

(iii) As the result of allocation transfers conducted between point sources or between point and nonpoint sources and in accordance with this Rule, provided that

nutrient allocation can be transferred and applied only within the portion of the Falls watershed to which it was originally assigned (Upper or Lower).

(b) In the event that the Commission changes any nutrient reduction target specified in 15A NCAC 02B .0275 or in Item (4) of this Rule, the Commission shall also re-evaluate the apportionment among the dischargers and shall revise the individual allocations as necessary.

(6) NUTRIENT DISCHARGE LIMITATIONS FOR EXISTING UPPER FALLS DISCHARGERS.

(a) Beginning with calendar year 2016, any existing discharger with a permitted flow of 0.1 MGD or greater shall limit its total nitrogen and phosphorus discharges to its active, individual Stage I allocations as defined or modified pursuant to this Rule.

(b) Beginning with calendar year 2036, except as provided in Sub-item (d) of this Item, each existing discharger with a permitted flow greater than or equal to 0.1 MGD shall limit its total nitrogen and phosphorus discharges to its active, individual Stage II allocations as defined or modified pursuant to this Rule.

(c) Not later than March 15, 2011, the Director shall notify existing permittees of the individual Stage I and Stage II nutrient allocations initially assigned to them pursuant to this Rule.

(d) Not later than January 15, 2027, each existing discharger with a permitted flow greater than or equal to 0.1 MGD shall submit to the Division a plan for meeting its Stage II mass limitations. The plan shall describe the discharger's strategy for complying with the limitations and shall include a schedule for the design and construction of facility improvements and for the development and implementation of related programs necessary to the strategy. If a discharger determines that it cannot meet its limitations by calendar year 2036, the discharger may include its findings in the plan and request an extension of its compliance dates for the nitrogen and phosphorus limitations. This alternate plan shall document the compliance strategies considered and the reasons each was judged infeasible; identify the minimum loadings that are technically and economically feasible by 2036; and propose intermediate limits for the period beginning with 2036 and extending until the Stage II limitations can be met. Within 180 days of receipt, the Division shall approve the plan as submitted, which could include intermediate limits, or inform the discharger of any changes or additional information needed for approval. The Division shall incorporate the approved nitrogen and phosphorus mass limitations and compliance dates into the discharger's NPDES permit upon the next renewal or other major permit action following plan approval. If the Division extends the dates by which a discharger must meet Stage II limitations, the discharger shall update and submit its plan for Division approval every five years after the original submittal, and the Division shall take necessary and appropriate action as with the original plan, until the Stage II limitations are satisfied.

(e) It is the intent of this Item that all dischargers shall make continued progress toward complying with Stage II mass limitations. The Division shall not approve intermediate limitations that exceed either the applicable Stage I limitations or intermediate limitations previously approved pursuant to this Item.

(7) NUTRIENT DISCHARGE LIMITATIONS FOR EXISTING LOWER FALLS DISCHARGERS.

(a) Beginning with calendar year 2016, any existing discharger with a permitted flow of 0.1 MGD or greater shall limit its total nitrogen and phosphorus discharges as specified in this Item.

(b) CONCENTRATION LIMITS. The nitrogen and phosphorus discharge limits for existing dischargers shall be as follows:

	Discharge Limits (milligrams/liter)	
Limit Type	Total Nitrogen	Total Phosphorus
Monthly Average	8.0	1.0
Annual Average	5.5	0.5

Existing facilities must meet both monthly average and annual average limits in any given calendar year.

(c) MASS LIMITS.

(i) In addition to the concentration limits specified in this Item, the collective annual mass discharge of total phosphorus shall not exceed 911 pounds in any calendar year.

(ii) Any discharger may request a mass discharge limit in lieu of the concentration limit for nitrogen or phosphorus or both, in which case the Director shall set a limit equivalent to the annual average concentration limit at the facility's permitted flow. The resulting mass limit shall become effective with the ensuing calendar year or with calendar year 2016, whichever is later.

(8) NUTRIENT CONTROL REQUIREMENTS FOR NEW DISCHARGERS.

(a) Any person proposing a new wastewater discharge in the Upper Falls watershed shall meet the following requirements prior to applying for an NPDES permit:

(i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 02H .0105(c)(2);

(ii) If the results of the evaluation support a new discharge, acquire sufficient nitrogen and phosphorus allocations for the discharge. The proponent may obtain allocation for the proposed discharge from existing dischargers pursuant to the applicable requirements of Item (10) of this Rule or obtain allocation from other sources to offset the increased nutrient loads resulting from the proposed discharge. The proponent may fund offset measures by making payment to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that program or to another seller of offset credits approved by the Division or may implement other offset measures contingent upon approval by the Division, either of which shall meet the requirements of Rule 15A NCAC 02B .0282. The amount of allocation or offsets obtained shall be sufficient for the duration of the discharge or for a period of 30 years, whichever is shorter. Payment for each allocation or offset shall be made prior to the ensuing permit issuance;

(iii) Determine whether the proposed discharge of nutrients will cause local water quality impacts; and

(iv) Provide documentation with its NPDES permit application demonstrating that the requirements of Sub-Items (a)(i) through (a)(iii) of this Item have been met.

(b) The nutrient discharge limits for a new facility in the Upper Falls watershed shall not exceed the mass loads equivalent to a concentration of 3.0 milligrams per liter nitrogen or 0.1 milligrams per liter phosphorus at the permitted flow in the discharger's NPDES permit.

(c) Upon the effective date of its NPDES permit, a new discharger in the Upper Falls watershed shall be subject to nitrogen and phosphorus limits not to exceed its active individual discharge allocations in any given calendar year.

(d) The Director shall not issue an NPDES permit for any new wastewater facility that would discharge in the Lower Falls watershed and to which this Rule would apply.

(9) NUTRIENT CONTROL REQUIREMENTS FOR EXPANDING DISCHARGERS.

(a) Any person proposing to expand an existing wastewater discharge in the Upper Falls watershed beyond its permitted flow shall meet the following requirements prior to applying for an NPDES permit:

(i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 02H .0105(c)(2);

(ii) If the results of the evaluation support an expanded discharge, acquire sufficient nitrogen and phosphorus allocations for the discharge. The proponent may obtain allocation for the proposed discharge from existing dischargers pursuant to the applicable requirements of Item (10) of this Rule or obtain allocation from other sources to offset the increased nutrient loads resulting from the proposed discharge. The proponent may fund offset measures by making payment to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that program or to another seller of offset credits approved by the Division or may implement other offset measures contingent upon approval by the Division, either of which shall meet the requirements of Rule 15A NCAC 02B .0282. The amount of allocation or offsets obtained shall be sufficient for the duration of the

discharge or for a period of 30 years, whichever is shorter. Payment for each allocation or offset shall be made prior to the ensuing permit issuance;

(iii) Determine whether the proposed discharge of nutrients will cause local water quality impact; and

(iv) Provide documentation with its NPDES permit application demonstrating that the requirements of Sub-Items (a)(i) through (a)(iii) of this Item have been met;

(b) The nutrient discharge limits for an expanding facility in the Upper Falls watershed shall not exceed the mass value equivalent to a concentration of 3.0 milligrams per liter nitrogen or 0.1 milligrams per liter phosphorus at the expanded flow limit in the discharger's NPDES permit; except that this provision shall not result in an active allocation or limit that is less than originally assigned to the discharger under this Rule.

(c) Upon expansion or upon notification by the Director that it is necessary to protect water quality, any discharger with a permitted flow of less than 0.1 MGD in the Upper Falls watershed, shall become subject to total nitrogen and total phosphorus permit limits not to exceed its active individual discharge allocations.

(d) The Director shall not issue an NPDES permit for the expansion of any wastewater discharge in the Lower Falls watershed to which this Rule applies.

(10) ADDITIONAL PROVISIONS REGARDING NUTRIENT ALLOCATIONS AND LIMITATIONS.

(a) Annual mass nutrient limits shall be established as calendar-year limits.

(b) Any discharger holding nutrient allocations pursuant to this Rule may by mutual agreement transfer all or part of its allocations to any new, existing, or expanding dischargers or to other person(s) in the Falls watershed, subject to the provisions of this Rule and the Falls nutrient strategy, except that allocation shall not be transferred between the Upper and Lower Falls watersheds.

(c) For NPDES compliance purposes, the enforceable nutrient limits for an individual facility or for a compliance association described in Item (11) of this Rule shall be the effective limits in the governing permit, regardless of the allocation held by the discharger or association.

(d) The Director may establish more stringent nitrogen or phosphorus discharge limits for any discharger upon finding that such limits are necessary to prevent the discharge from causing adverse water quality impacts on surface waters tributary to Falls Reservoir. The Director shall establish such limits through modification of the discharger's NPDES permit in accordance with applicable rules and regulations. When the Director does so, the discharger retains its nutrient allocations, and the non-active portion of the discharger's allocation becomes reserve allocation. The allocation remains in reserve until the Director determines that less stringent limits are allowable or until the allocation is applied to another discharge not subject to such water quality-based limits.

(e) In order for any transfer of allocation to become effective as a discharge limit in an individual NPDES permit, the discharger must request and obtain modification of the permit. Such request shall:

(i) Describe the purpose and nature of the modification;

(ii) Describe the nature of the transfer agreement, the amount of allocation transferred, and the dischargers or persons involved;

(iii) Provide copies of the transaction agreements with original signatures consistent with NPDES signatory requirements; and

(iv) Demonstrate to the Director's satisfaction that the increased nutrient discharge will not violate water quality standards in localized areas.

(f) Changes in a discharger's nutrient limits shall become effective upon modification of its individual permit but no sooner than January 1 of the year following modification. If the modified permit is issued after January 1, the Director may make the limit effective on that January 1 provided that the discharger made acceptable application in a timely manner.

(g) REGIONAL FACILITIES. In the event that an existing discharger or group of dischargers accepts wastewater from another NPDES-permitted treatment facility and that acceptance results in the elimination of the discharge from the other treatment facility, the eliminated facility's nutrient allocations shall be transferred and added to the accepting discharger's

allocations, except that allocation shall not be transferred between the Upper and Lower Falls watersheds.

(11) GROUP COMPLIANCE OPTION.

(a) Any facilities within the Upper or the Lower Falls watersheds may form a group compliance association to meet nutrient limits collectively within their respective portion of the Falls watershed. More than one group compliance association may be established in either portion of the watershed. No facility may be a co-permittee member of more than one association for any given calendar year.

(b) Any such association must apply for and shall be subject to an NPDES permit that establishes the effective nutrient limits for the association and for its members.

(c) No later than 180 days prior to the proposed date of a new association's operation or expiration of an existing association's NPDES permit, the association and its members shall submit an application for an NPDES permit for the discharge of nutrients to surface waters of the Falls watershed. The association's NPDES permit shall be issued to the association and its members. It shall specify the nutrient limits for the association and for each of its co-permittee members. Association members shall be deemed in compliance with the permit limits for nitrogen and phosphorus contained in their individually issued NPDES permits so long as they remain members in an association.

(d) An association's nitrogen and phosphorus limits shall be the sum of its members' individual active allocations for each nutrient plus any other active allocation obtained by the association or its members.

(e) The individual limits for each member in the association permit shall initially be equivalent to the discharge limits in effect in the member's NPDES permit. Thereafter, changes in individual allocations or limits shall be incorporated into the members' individual permits before they are included in the association permit.

(f) An association and its members may reapportion the individual allocations of its members on an annual basis. Changes in individual allocations or limits must be incorporated into the members' individual permits before they are included in the association permit.

(g) Changes in an association's nutrient limits shall become effective no sooner than January 1 of the year following permit modification. If the modified permit is issued after January 1, the Director may make the limit effective on that January 1 provided that the association made acceptable application in a timely manner.

(h) Beginning with the first full calendar year that the nitrogen or phosphorus limits are effective, an association that does not meet its permit limit for nitrogen or phosphorus for a calendar year shall, no later than May 1 of the year following the exceedance, make an offset payment to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that program or by implementing other load offsetting measures contingent upon approval by the Division, either of which shall meet the requirements of Rule 15A NCAC 02B .0282.

(i) Association members shall be deemed in compliance with their individual limits in the association NPDES permit for any calendar year in which the association is in compliance with its group limit for that nutrient. If the association fails to meet its limit, the association and the members that have failed to meet their individual nutrient limits in the association NPDES permit shall be deemed out of compliance with the association NPDES permit.

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-215; 143-215.1; 143-215.3(a)(1); 143-215B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259;*
Eff. January 15, 2011 (this permanent rule replaces the temporary rule approved by the RRC on December 16, 2010).

15A NCAC 02B .0280 FALLS RESERVOIR WATER SUPPLY NUTRIENT STRATEGY: AGRICULTURE

This Rule sets forth a staged process, as prefaced in 15A NCAC 02B .0275, by which agricultural operations in the Falls watershed will collectively limit their nitrogen and phosphorus loading to the Falls Reservoir. This process is as follows:

(1) PURPOSE. The purposes of this Rule are to achieve and maintain the percentage reduction objectives defined in 15A NCAC 02B .0275 for the collective agricultural loading of nitrogen and phosphorus from their respective 2006 baseline levels, to the extent that best available accounting practices will allow, in two stages. Stage I shall be 10 years and Stage II shall be 15 years, as set out in Item (5) of this Rule. Additionally this Rule will protect the water supply uses of the Falls Reservoir.

(2) PROCESS. This Rule requires accounting for agricultural land management practices at the county level in the Falls watershed, and implementation of practices by farmers to collectively achieve the nutrient reduction objectives on a watershed basis. Producers may be eligible to obtain cost share and technical assistance from the NC Agriculture Cost Share Program and similar federal programs to contribute to their counties' nutrient reductions. A Watershed Oversight Committee and Local Advisory Committees will develop strategies, coordinate activities, and account for progress.

(3) LIMITATION. This Rule does not fully address significant agricultural nutrient sources in that it does not directly address atmospheric sources of nitrogen to the Falls watershed from agricultural operations located both within and outside of the Falls watershed. As better information becomes available from ongoing research on atmospheric nitrogen loading to the Falls 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 objectives of the Falls Nutrient Strategy.

(4) APPLICABILITY. This Rule shall apply to all persons engaging in agricultural operations in the Falls watershed, including those related to crops, horticulture, livestock, and poultry. This Rule applies to livestock and poultry operations above the size thresholds in this Item in addition to requirements for animal operations set forth in general permits issued pursuant to G.S. 143-215.10C. Nothing in this Rule shall be deemed to allow the violation of any assigned surface water, groundwater, or air quality standard by any agricultural operation, including any livestock or poultry operation below the size thresholds in this Item. This Rule shall not apply to dedicated land application sites permitted under 15A NCAC 02T .1100. This Rule does not require specific actions by any individual person or operation if agriculture in the Falls watershed can collectively achieve its Stage I nutrient reduction objectives, in the manner described in Item (5) of this Rule, by calendar year 2020. If the Stage I nutrient reduction objectives are not met by calendar year 2020, Stage II of implementation shall require specific actions by individuals and operations. For the purposes of this Rule, agricultural operations are activities that relate to any of the following pursuits:

(a) The commercial production of crops or horticultural products other than trees. As used in this Rule, commercial shall mean activities conducted primarily for financial profit.

(b) Research activities in support of such commercial production.

(c) The production or management of any of the following number of livestock or poultry at any time, excluding nursing young:

(i) Five or more horses;

(ii) 20 or more cattle;

(iii) 20 or more swine not kept in a feedlot, or 150 or more swine kept in a feedlot;

(iv) 120 or more sheep;

(v) 130 or more goats;

(vi) 650 or more turkeys;

(vii) 3,500 or more chickens; or

(viii) Any single species of any other livestock or poultry, or any combination of species of livestock or poultry that exceeds 20,000 pounds of live weight at any time.

(5) METHOD FOR RULE IMPLEMENTATION. This Rule shall be implemented in two stages and through a cooperative effort between the Watershed Oversight Committee and Local Advisory Committees in each county. The membership, roles and responsibilities of these committees are set forth in Items (7) and (8) of this Rule. Committee's activities shall be guided by the following:

(a) In Stage I, agriculture shall achieve a collective 20 percent reduction in nitrogen loading and a 40 percent reduction in phosphorus loading relative to the 2006 baseline by calendar year 2020.

(b) In Stage II, beginning in calendar year 2021 agriculture shall achieve a collective 40 percent reduction in nitrogen loading and a 77 percent reduction in phosphorus loading relative to the 2006 baseline by calendar year 2035.

(c) By January 15, 2013, the Watershed Oversight Committee shall provide the Commission with an initial assessment of the extent to which agricultural operations in the Falls watershed have achieved the Stage I nitrogen and phosphorus reduction objectives identified in Item (1) of this rule through activities conducted since the baseline period. The Watershed Oversight Committee shall use the accounting process described in Items (7) and (8) of this rule to make its assessment.

(d) If annual reporting following the 10th year of implementation indicates that agriculture has not collectively achieved its Stage I nitrogen and phosphorus reduction objectives identified in this Item, Stage II shall include specific implementation requirements for individual operators. Specifically, within five years of the start of Stage II, cropland operators shall establish vegetated riparian buffers adjacent to streams on all cropland where such buffers do not already exist. Additionally, pastured livestock operators shall establish excluded vegetated riparian buffers adjacent to streams where such excluded buffers do not already exist. Streams to which these requirements apply shall be those that meet the classification of intermittent or perennial streams using the September 2010 version of the *Identification Methods for the Origins of Intermittent and Perennial Streams Manual* published by the Division. Existing and newly established riparian buffers shall be a minimum of 20 feet in width with criteria further defined by the Watershed Oversight Committee.

The Commission may also consider alternative recommendations from the Watershed Oversight Committee based on the Committee's assessment of the practicability of agricultural operations meeting the Stage I objectives. Should the Commission accept some alternative form of individual compliance, then it shall also subsequently approve a framework proposed by the Watershed Oversight Committee for allowing producers to obtain credit through offsite measures. Such offsite measures shall meet the requirements of 15A NCAC 02B .0282.

(e) Should a committee called for under Item (5) of this Rule not form nor follow through on its responsibilities such that a local strategy is not implemented in keeping with Item (8) of this Rule, the Commission shall require all persons subject to this Rule in the affected area to implement BMPs as needed to meet the objectives of this Rule.

(6) RULE REQUIREMENTS FOR INDIVIDUAL OPERATIONS. Persons subject to this Rule shall adhere to the following requirements:

(a) Persons subject to this Rule shall register their operations with their Local Advisory Committee according to the requirements of Item (8) of this Rule;

(b) Persons are not required to implement any specific BMPs in Stage I, with the exception of Sub-Item (d) of this Item, but may elect to contribute to the collective local nutrient strategy by implementing any BMPs they choose that are recognized by the Watershed Oversight Committee as nitrogen-reducing or phosphorus-reducing BMPs;

(c) The Division shall require that residuals application, animal waste application, and surface irrigation pursuant to permits issued under 15A NCAC 02T .1100, 15A NCAC 02T .1300, and 15A NCAC 02T .0500 respectively, to lands within the Falls watershed be done in a manner that minimizes the potential for nitrogen and phosphorus loading to surface waters by implementing the following measures:

(i) Animal waste application operators subject to t the permitting requirements in this Sub-item shall meet Realistic Yield Expectation based nitrogen application rates and shall apply phosphorus in compliance with guidance established in the most recent version of North Carolina Agricultural Research Service's Technical Bulletin 323, "North Carolina Phosphorus Loss Assessment: I Model Description and II. Scientific Basis and Supporting Literature" developed by the Department of Soil Science and Biological and Agricultural Engineering at North Carolina State University. The Division shall modify all existing permits for affected lands to include these requirements upon their next renewal after effective date, and shall include these requirements in all new permits issued after effective date. Permittees shall be required to comply with this condition upon permit issuance or renewal as applicable; and

(ii) Residual application and surface irrigation operators subject to the permitting requirements in this Sub-item shall meet Realistic Yield Expectation based nitrogen application rates and shall conduct and provide to the Division annual assessments of their soil test phosphorus index results and phosphorus loading rates. At such time as data quantifying the fate and transport of chemically bound phosphorus are made available, the Division may make recommendations to the Commission to consider whether revisions to the requirements of this Rule are needed and may initiate rulemaking or any other action allowed by law.

(d) Should a local strategy not achieve its Stage I objectives by calendar year 2020; operations within that local area shall face specific implementation requirements, as described under Sub-Item (5)(d) of this Rule.

(7) WATERSHED OVERSIGHT COMMITTEE. The Watershed Oversight Committee shall have the following membership, role and responsibilities:

(a) MEMBERSHIP. The Director shall be responsible for forming a Watershed Oversight Committee by March 15, 2011. Until such time as the Commission determines that long-term maintenance of the nutrient loads is assured, the Director shall either reappoint members or replace members at least every six years. The Director shall solicit nominations for membership on this Committee to represent each of the following interests, and shall appoint one nominee to represent each interest except where a greater number is noted. The Director of the Division of Water Quality may appoint a replacement at any time for an interest in Sub-Items (7)(a)(vi) through (7)(a)(x) of this Rule upon request of representatives of that interest or by the request of the Commissioner of Agriculture:

(i) Division of Soil and Water Conservation;

(ii) United States Department of Agriculture-Natural Resources Conservation Service (shall serve in an "ex-officio" non-voting capacity and shall function as a technical program advisor to the Committee);

(iii) North Carolina Department of Agriculture and Consumer Services;

(iv) North Carolina Cooperative Extension Service;

(v) Division of Water Quality;

(vi) Three environmental interests, at least two of which are residents of the Falls watershed;

(vii) General farming interests;

(viii) Pasture-based livestock interests;

(ix) Equine livestock interests;

(x) Cropland farming interests; and

(xi) The scientific community with experience related to water quality problems in the Falls watershed.

(b) ROLE. The Watershed Oversight Committee shall:

(i) Develop tracking and accounting methods for nitrogen and phosphorus loading and submit methods to the Water Quality Committee of the Commission for approval based on the standards set out in Sub-Item (7)(c) of this Rule by March 15, 2012;

(ii) Identify and implement future refinements to the accounting methods as needed to reflect advances in scientific understanding, including establishment or refinement of nutrient reduction efficiencies for BMPs;

(iii) By January 15, 2013, collect data needed to conduct initial nutrient loading accounting for the baseline period and the most current year feasible, perform this accounting, and determine the extent to which agricultural operations have achieved the Stage I nitrogen loading objective and phosphorus loading trend indicators for the watershed and present findings to the Water Quality Committee of the Commission;

(iv) Review, approve, and summarize local nutrient strategies if required pursuant to Sub-Item (5)(d) of this Rule and according to the timeframe identified in Sub-Item (8)(c)(ii) of this Rule. Provide these strategies to the Division;

(v) Establish requirements for, review, approve and summarize local nitrogen and phosphorus loading annual reports as described under Sub-Item (8)(e) of this

Rule, and present the report to the Division annually, until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of Rule. Present a report in January 2014 to the Commission. Should that report find that agriculture in the watershed has not met its collective nitrogen or phosphorus objective, include an assessment in that report of the practicability of producers achieving the Stage I objective by calendar year 2020, and recommendations to the Commission as deemed appropriate;

(vi) Obtain nutrient reduction efficiencies for BMPs from the scientific community associated with design criteria identified in rules adopted by the Soil and Water Conservation Commission, including 15A NCAC 06E .0104 and 15A NCAC 06F .0104; and

(vii) Investigate and, if feasible, develop an accounting method to equate implementation of specific nutrient-reducing practices on cropland or pastureland to reductions in nutrient loading delivered to streams;

(viii) Quantify the nitrogen and phosphorus credits generated by such practices for the purpose of selling or buying credits; establish criteria and a process as needed for the exchange of nutrient credits between parties subject to this rule with each other or with parties subject to other nutrient strategy rules in the Falls lake watershed pursuant to the requirements of 15A NCAC 02B .0282; obtain approval from the Division for this trading program pursuant to the requirements of Rule .0282; approve eligible trades; and ensure that such credits traded for purposes of meeting this Rule are accounted for and tracked separately from those contributing to the objectives of other rules of the Falls nutrient strategy.

(c) ACCOUNTING METHODS. Success in meeting this Rule's purpose will be gauged by estimating percentage changes in nitrogen loading from agricultural lands in the Falls watershed and by evaluating broader trends in indicators of phosphorus loading from agricultural lands in the Falls watershed. The Watershed Oversight Committee shall develop accounting methods that meet the following requirements:

(i) The nitrogen method shall estimate baseline and annual total nitrogen loading from agricultural operations in each county and for the entire Falls watershed;

(ii) The nitrogen and phosphorus methods shall include a means of tracking implementation of BMPs, including number, type, and area affected;

(iii) The nitrogen method shall include a means of estimating incremental nitrogen loading reductions from actual BMP implementation and of evaluating progress toward and maintenance of the nutrient objectives from changes in BMP implementation, fertilization, individual crop acres, and agricultural land use acres;

(iv) The nitrogen and phosphorus methods shall be refined as research and technical advances allow;

(v) The phosphorus method shall quantify baseline values for and annual changes in factors affecting agricultural phosphorus loading as identified by the phosphorus technical advisory committee established under 15A NCAC 02B .0256(f)(2)(C). The method shall provide for periodic qualitative assessment of likely trends in agricultural phosphorus loading from the Falls watershed relative to baseline conditions;

(vi) Phosphorus accounting may also include a scientifically valid, survey-based sampling of farms in the Falls watershed for the purpose of conducting field-scale phosphorus loading assessments and extrapolating phosphorus loading for the Falls watershed for the baseline period and at periodic intervals; and

(vii) Aspects of pasture-based livestock operations that potentially affect nutrient loading and are not captured by the accounting methods described above shall be accounted for in annual reporting to the extent that advances in scientific understanding reasonably allow. Such accounting shall, at a minimum, quantify changes in the extent of livestock-related nutrient controlling BMPs. Progress may be judged based on percent change in the extent of implementation relative to percentage objectives identified in Item (5) of this Rule.

(8) LOCAL ADVISORY COMMITTEES. Local Advisory Committees shall be formed for each county within the watershed by January 15, 2012, and shall have the following membership, roles, and responsibilities:

(a) MEMBERSHIP. A Local Advisory Committee shall be appointed as provided for in this Item. It shall terminate upon a finding by the Commission that it is no longer needed to fulfill the purposes of this Rule. Each Local Advisory Committee shall consist of:

(i) One representative of the county Soil and Water Conservation District;

(ii) One representative of the county office of the United States Department of Agriculture Natural Resources Conservation Service;

(iii) One representative of the North Carolina Department of Agriculture and Consumer Services;

(iv) One representative of the county office of the North Carolina Cooperative Extension Service;

(v) One representative of the North Carolina Division of Soil and Water Conservation whose regional assignment includes the county;

(vi) At least two farmers who reside in the county; and

(vii) One representative of equine livestock interests.

(b) APPOINTMENT OF MEMBERS. The Director of the Division of Water Quality and the Director of the Division of Soil and Water Conservation of the Department of Environment and Natural Resources shall appoint members described in Sub-Items (8)(a)(i), (8)(a)(ii), (8)(a)(iv), and (8)(a)(v) of this Rule. The Director of the Division of Water Quality, with recommendations from the Director of the Division of Soil and Water Conservation and the Commissioner of Agriculture, shall appoint the members described in Sub-Items (8)(a)(iii) and (8)(a)(vi) of this Rule from persons nominated by nongovernmental organizations whose members produce or manage agricultural commodities in each county. Members of the Local Advisory Committees shall serve at the pleasure of their appointing authorities.

(c) ROLE. The Local Advisory Committees shall:

(i) Conduct a registration process for persons subject to this Rule. This registration process shall be completed by January 15, 2012. The registration process shall request at a minimum the type and acreage of agricultural operations. It shall provide persons with information on requirements and options under this Rule, and on available technical assistance and cost share options;

(ii) Develop local nutrient control strategies for agricultural operations, pursuant to Sub-Item (8)(d) of this Rule, to meet the nitrogen and phosphorus objectives of this Rule. Strategies shall be submitted to the Watershed Oversight Committee by July 2012;

(iii) Ensure that any changes to the design of the local strategy will continue to meet the nutrient objectives of this Rule; and

(iv) Submit reports to the Watershed Oversight Committee, pursuant to Sub-Item (8)(e) of this Rule, annually beginning in calendar year 2012 until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule.

(d) LOCAL NUTRIENT CONTROL STRATEGIES. Local Advisory Committees shall develop nutrient control strategies. If a Local Advisory Committee fails to submit a nutrient control strategy required in Sub-Item (8)(c)(ii) of this Rule, the Commission may develop one based on the accounting methods that it approves pursuant to Sub-Item (7)(b)(i) of this Rule. Local strategies shall meet the following requirements:

(i) Local nutrient control strategies shall be designed to achieve the required nitrogen loading reduction objectives and qualitative trends in indicators of agricultural phosphorus loading by calendar year 2020, and to maintain those reductions in perpetuity or until such time as this rule is revised to modify this requirement; and

(ii) Local nutrient control strategies shall specify the numbers, acres, and types of all agricultural operations within their areas, numbers of BMPs that will be implemented by enrolled operations and acres to be affected by those BMPs,

estimated nitrogen and phosphorus loading reductions, schedule for BMP implementation, and operation and maintenance requirements.

(e) ANNUAL REPORTS. The Local Advisory Committees shall be responsible for submitting annual reports for their counties to the Watershed Oversight Committee until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule. The Watershed Oversight Committee shall determine reporting requirements to meet these objectives. Those requirements may include information on BMPs implemented by individual farms, proper BMP operation and maintenance, BMPs discontinued, changes in agricultural land use or activity, and resultant net nitrogen loading and phosphorus trend indicator changes. The annual reports in 2016 and 2026 shall address agriculture's success in complying with the load reduction requirements described in Items (5)(a) and (5)(b) of this Rule and shall include adjustments to address deficiencies to achieve compliance.

(f) PROGRESS. In 2016 the Division of Water Quality, in consultation with the Watershed Oversight Committee, shall submit a report to the Commission gauging the extent to which reasonable progress has been achieved towards the Stage I objectives described in this Rule.

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).

15A NCAC 02B .0281 FALLS WATER SUPPLY NUTRIENT STRATEGY: STORMWATER REQUIREMENTS FOR STATE AND FEDERAL ENTITIES

The following is the stormwater strategy, as prefaced in Rule 02B .0275, for the activities of state and federal entities within the Falls watershed.

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

(a) To achieve and maintain, on new non-road development lands, the nonpoint source nitrogen and phosphorus percentage reduction objectives established for Falls Reservoir in 15A NCAC 02B .0275 relative to the baseline period defined in Rule, to provide the highest practicable level of treatment on new road development, and to achieve and maintain the percentage objectives on existing developed lands by reducing loading from state-maintained roadways and facilities, and from lands controlled by other state and federal entities in the Falls watershed;

(b) To ensure that the integrity and nutrient processing functions of receiving waters and associated riparian buffers are not compromised by erosive flows from state-maintained roadways and facilities and from lands controlled by other state and federal entities in the Falls watershed; and

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

(2) APPLICABILITY. This Rule shall apply to all existing and new development, both as defined in 15A NCAC 02B .0276, that lies within or partially within the Falls watershed under the control of the NC Department of Transportation (NCDOT), including roadways and facilities, and to all lands controlled by other state and federal entities in the Falls watershed.

(3) NON-NCDOT REQUIREMENTS. With the exception of the NCDOT, all state and federal entities that control lands within the Falls watershed shall meet the following requirements:

(a) For any new development proposed within their jurisdictions that would disturb one quarter acre or more, non-NCDOT state and federal entities shall develop stormwater management plans for submission to and approval by the Division;

(b) The non-NCDOT state or federal entity shall include measures to ensure maintenance of best management practices (BMPs) implemented as a result of the provisions in Sub-Item (a) of this Item for the life of the development; and

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

(4) PLAN APPROVAL REQUIREMENTS. A developer's stormwater plan shall not be approved unless the following criteria are met:

(a) Nitrogen and phosphorus loads contributed by the proposed new development activity 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 need for engineered stormwater controls to meet these loading rate targets by using the loading calculation method called for in Sub-Item (4)(a) of 15A NCAC 02B .0277 or other equivalent method acceptable to the Division;

(b) The developer shall have the option of offsetting part of their nitrogen and phosphorus loads 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:

(i) Proposed new development activity disturbing at least one quarter acre but less than one acre of land, except as stated in this Item, shall achieve 30 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 this item;

(ii) Except as stated in this Item, 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 this Item; or

(iii) Proposed development that would replace or expand structures or improvements that existed as of December 2006, the end of the baseline period, and that increases impervious surface within a 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 this Item;

(c) Offsite offsetting measures shall achieve at least equivalent reductions in nitrogen and phosphorus loading to the remaining reduction needed onsite to comply with the loading rate targets set out in this Item. A developer may use any measure that complies with the requirements of Rules .0703 and .0282 of this Subchapter;

(d) Proposed new development subject to NPDES, water supply, and other state-mandated stormwater regulations shall comply with those regulations and with applicable permit limits 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) Stormwater systems shall be designed to control and treat at a minimum the runoff generated from all surfaces in the project area 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 version of the Stormwater Best Management Practices Manual published by the Division, or other at least technically equivalent standards acceptable to the Division;

(f) 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;

(g) New development may satisfy the requirements of this Rule 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; and

(h) Proposed new development shall demonstrate compliance with the riparian buffer protection requirements of 15A NCAC 02B .0233 and .0242.

(5) NON-NCDOT STAGED AND ADAPTIVE IMPLEMENTATION REQUIREMENTS. For existing development, non-NCDOT state and federal entities shall develop and implement staged load reduction programs for achieving and maintaining nutrient load reductions from existing development based on the standards set out in this Item. Such entities shall submit these load-reducing programs for approval by the Commission that include the following staged elements and meet the minimum standards for each stage of implementation:

(a) In Stage I, entities subject to this rule shall implement a load reduction program that provides estimates of, and plans for offsetting by calendar year 2020, nutrient loading increases from lands developed subsequent to the baseline (2006) and not subject to the requirements of the Falls Lake new development stormwater program. For these 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 state or federal entity may assume uniform pre-development loading rates of 2.89 pounds per acre per year N and 0.63 pounds per acre per year P for these lands. The entity shall achieve this stage one load reduction by calendar year 2020. This Stage I program shall meet the criteria defined in Item (4) of 15A NCAC 02B.0278; and

(b) By January 15, 2021, and every five years thereafter, a state or federal entity located in the Upper Falls Watershed as defined in Item (11) of 15A NCAC 02B .0276 shall submit and begin implementing a Stage II load reduction program or revision designed to achieve the percent load reduction objectives from existing developed lands under its control, that includes timeframes for achieving these objectives and that meets the criteria defined in Items (5) and (6) of this Rule.

(6) ELEMENTS OF NON-NCDOT LOAD REDUCTION PROGRAMS. A non-NCDOT state or federal entity load reduction program shall address the following elements:

(a) State and federal entities in the Eno River and Little River subwatersheds shall, as part of their Stage I load reduction programs, begin and continuously implement a program to reduce loading from discharging sand filters and malfunctioning septic systems owned or used by state or federal agencies discharging into waters of the State within those subwatersheds;

(b) State and federal entities in any Falls subwatershed in which chlorophyll a levels have exceeded 40 ug/L in more than seventy-five percent of the monitoring events in any calendar year shall, as part of their Stage I load reduction programs, begin and continuously implement a program to reduce nutrient loading into the waters of the State within that subwatersheds;

(c) The total amount of nutrient loading reductions in Stage I is not increased for state and federal entities 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 (a) and (b) of this Item;

(d) In preparation for implementation of their Stage I and Stage II load reduction programs, state and federal entities shall develop inventories and characterize load reduction potential to the extent that accounting methods allow for the following:

(i) Wastewater collection systems;

(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 state and federally 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) A state or federal entities load reduction need shall be based on the developed lands owned or used by the state or federal entity within the Falls watershed;

(f) Nitrogen and phosphorous loading from existing developed lands, including loading from onsite wastewater treatment systems to the extent accounting methods allow, shall be calculated by applying the accounting tool described in Item (13) and shall quantify baseline loads of nitrogen and phosphorus to surface waters from the lands under the entity's control as well as loading changes post-baseline. It shall also calculate target nitrogen and phosphorus loads and corresponding reduction needs;

(g) Nitrogen and phosphorus loading from existing developed lands, including loading from onsite wastewater treatment systems to the extent accounting methods allow, shall be calculated by applying the accounting too described in Item (13) of this Rule and shall quantify baseline loads of nitrogen and phosphorus to surface waters from state and federal entities as well as loading changes post-baseline. It shall calculate target nitrogen and phosphorus loads and corresponding load reduction needs;

(h) The Commission shall recognize reduction credit for implementation of policies and practices implemented after January 1, 2007 and before January 15, 2011, 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 subsequent to the baseline period and for which the entity is seeking credit. It shall estimate load reductions for these practices and their anticipated duration using methods provided for in Item (13);

(i) The program shall include a proposed implementation schedule that includes annual implementation expectations. The load reduction program shall identify the types of activities the state or federal entity intends to implement and types of existing development affected, relative proportions or prioritization of practices, relative magnitude of reductions it expects to achieve from each, and the relative 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) The load reduction program shall identify anticipated funding mechanisms or sources and discuss steps taken or planned to secure such funding;

(k) 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 state or federal entity; and
(ii) Lands other than those on which the entity's load reduction need is based as described in this Item, including lands both within and outside its jurisdiction and third party sellers.

(l) The program shall address the extent of load reduction proposed from, at a minimum, the following 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 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 state or federal entity may propose in its load reduction program the use of the following measures in addition to items listed in (l) and (m), or may propose other measures for which it can provide equivalent 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 waste and fertilizer controls.

(o) The program shall include evaluation of load reduction potential relative to the following factors:
(i) Extent of physical opportunities for installation;
(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 non-NCDOT state or federal entity'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.

(7) The Commission shall approve a non-NCDOT Stage I load reduction program if it meets the requirements of Items (5) and (6) of this Rule. The Commission shall approve a Stage II load reduction program if it meets the requirements of Items (5) and (6) of this Rule unless the Commission finds that the local non-NCDOT state or federal entity can, through the implementation of reasonable and cost-effective measures not included in the proposed program, meet the Stage II nutrient load reductions required by this Rule by a date earlier than that proposed by the non-NCDOT state or federal entity. If the Commission finds that there are additional or alternative reasonable and cost-effective measures, the Commission may require the non-NCDOT state or federal entity 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 non-NCDOT state or federal entity 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 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 those identified in Sub-Item (6)(o) of this Rule. The Commission shall not require additional or alternative measures that would require a non-NCDOT state or federal entity to:
(a) Install a new stormwater collection system in an area of existing development unless the area is being redeveloped; or
(b) Reduce impervious surfaces within an area of existing development unless the area is being redeveloped.

(8) A non-NCDOT state or federal entity shall have the option of working with the county or counties in which it falls, or with a municipality or municipalities within the same subwatershed, to jointly meet the loading targets from all lands within their combined jurisdictions within a subwatershed. The entity may utilize private or third party sellers. All reductions involving trading with other parties shall meet the requirements of 15A NCAC 02B .0282.

(9) NCDOT REQUIREMENTS. The NCDOT shall develop a single Stormwater Management Program that will be applicable to the entire Falls watershed and submit this program for approval by the Division according to the standards set forth below. In addition, the program shall, at a minimum, comply with NCDOT's then-current stormwater permit. This program shall:

(a) Identify NCDOT stormwater outfalls from Interstate, US, and NC primary routes;

(b) Identify and eliminate illegal discharges into the NCDOT's stormwater conveyance system;

(c) Establish a program for post-construction stormwater runoff control for new development, including new and widening NCDOT roads and facilities. The program shall establish a process by which the Division shall review and approve stormwater designs for new NCDOT development projects. The program shall delineate the scope of vested projects that would be considered as existing development, and shall define lower thresholds of significance for activities considered new development. In addition, the following criteria shall apply:

(i) For new and widening roads, weigh stations, and replacement of existing bridges, compliance with the riparian buffer protection requirements of Rules 15A NCAC 02B .0233 and .0242 shall be deemed as compliance with the purposes of this Rule;

(ii) New non-road development shall achieve and maintain the nitrogen and phosphorus percentage load reduction objectives established in 15A NCAC 02B .0275 relative to either area-weighted average loading rates of all developable lands as of the baseline period defined in 15A NCAC 02B .0275, or to project-specific pre-development loading rates. Values for area-weighted average loading rate targets for nitrogen and phosphorus, respectively, are expressed in units of pounds per acre per year: 2.2 and 0.33. The NCDOT shall determine the need for engineered stormwater controls to meet these loading rate targets by using the loading calculation method called for in Item (13) of this Rule or other equivalent method acceptable to the Division. Where stormwater treatment systems are needed to meet these targets, they shall be designed to control and treat the runoff generated from all surfaces by one inch of rainfall. Such systems shall be assumed to achieve the nutrient removal efficiencies identified in the July 2007 version of the Stormwater Best Management Practices Manual published by the Division provided that they meet associated drawdown and other design specifications included in the same document. The NCDOT may propose to the Division nutrient removal rates for practices currently included in the BMP Toolbox required under its NPDES stormwater permit, or may propose revisions to those practices or additional practices with associated nutrient removal rates. The NCDOT may use any such practices approved by the Division to meet loading rate targets identified in this Sub-item. New non-road development shall also control runoff flows to meet the purpose of this Rule regarding protection of the nutrient functions and integrity of receiving waters; and

(iii) For new non-road development, the NCDOT shall have the option of offsetting part of their nitrogen and phosphorus loads by implementing or funding offsite management measures. Before using an offsite offset option, a development shall implement structural stormwater controls that 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 this Item. Offsite offsetting measures shall achieve at least equivalent reductions in nitrogen and phosphorus loading to the remaining reduction needed onsite to comply with the loading rate targets set out in this Item. The NCDOT may use any measure that complies with the requirements of Rules .0703 and .0282 of this Subchapter.

(d) Establish a program to identify and implement load-reducing opportunities on existing development within the watershed. The long-term objective of this effort shall be for the NCDOT to achieve the nutrient load objectives in 15A NCAC 02B .0275 as applied to existing development under its control, including roads and facilities:

(i) The NCDOT may achieve the nutrient load reduction objective in 15A NCAC 02B .0275 for existing roadway and non-roadway development under its control

by the development of a load reduction program that addresses both roadway and non-roadway development in the Falls watershed. As part of the accounting process described in Item (13) of this Rule, baseline nutrient loads shall be established for roadways and industrial facilities using stormwater runoff nutrient load characterization data collected through the National Pollutant Discharge Elimination System (NPDES) Research Program under NCS0000250 Permit Part II Section G;

(ii) The program shall include estimates of, and plans for offsetting, nutrient load increases from lands developed subsequent to the baseline period but prior to implementation of its new development program. It shall include a technical analysis that includes a proposed implementation rate and schedule. This schedule shall provide for proportionate annual progress toward reduction objectives as practicable throughout the proposed compliance period. The program shall identify the types of activities NCDOT intends to implement and types of existing roadway and non-roadway development affected, relative proportions or a prioritization of practices, and the relative magnitude of reductions it expects to achieve from each;

(iii) The program to address roadway and non-roadway development may include stormwater retrofits and other load reducing activities in the watershed including: illicit discharge removal; street sweeping; source control activities such as fertilizer management at NCDOT facilities; improvement of existing stormwater structures; use of rain barrels and cisterns; stormwater capture and reuse; and purchase of nutrient reduction credits;

(iv) NCDOT may meet minimum implementation rate and schedule requirements by implementing a combination of at least six stormwater retrofits per year for existing development in the Falls watershed or some other minimum amount based on more accurate reduction estimates developed during the accounting tool development process;

(v) To the maximum extent practicable, retrofits shall be designed to treat the runoff generated from all surfaces by one inch of rainfall, and shall conform to the standards and criteria established in the most recent version of the Division-approved NCDOT BMP Toolbox required under NCDOT's NPDES stormwater permit. To establish removal rates for nutrients for individual practices described in the Toolbox, NCDOT shall submit technical documentation on the nutrient removal performance of BMPs in the Toolbox for Division approval. Upon approval, NCDOT shall incorporate nutrient removal performance data into the BMP Toolbox. If a retrofit is proposed that is not described in the NCDOT BMP Toolbox, then to the maximum extent practicable, such retrofit shall conform to the standards and criteria set forth in the July 2007 version of the Stormwater Best Management Practices Manual published by the Division, or other technically equivalent guidance acceptable to the Division;

(e) Initiate a "Nutrient Management Education Program" for NCDOT staff and contractors engaged in the application of fertilizers on highway rights of way. The purpose of this program shall be to contribute to the load reduction objectives established in 15A NCAC 02B .0275 through proper application of nutrients, both inorganic fertilizer and organic nutrients, to highway rights of way in the Falls watershed in keeping with the most current state-recognized technical guidance on proper nutrient management; and

(f) Address compliance with the riparian buffer protection requirements of 15A NCAC 02B .0233 and .0242 through a Division approval process.

(10) NON-NCDOT RULE IMPLEMENTATION. For all state and federal entities that control lands within the Falls watershed with the exception of the NCDOT, this Rule shall be implemented as follows:

(a) Upon Commission approval of the accounting methods required in Item (13) of this Rule, subject entities shall comply with the requirements of Items (3) and (4) of this Rule;

(b) By July 15, 2013, the Division shall submit a Stage I model local program to the Commission for approval that embodies the criteria described in Items (5) and (6) of this

Rule. The Division shall work in cooperation with subject state and federal entities and other watershed interests in developing this model program, which shall include the following:

(i) Methods to quantify load reduction requirements and resulting load reduction assignments for individual entities;

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

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

(c) Within six months after the Commission's approval of the Stage I model local program, subject entities shall submit load reduction programs that meet or exceed the requirements of Items (5) and (6) 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 lands owned or controlled by the responsible state or federal entity;

(d) Within 20 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) of this Rule. Should the Commission require changes, the applicable state or federal entity shall have two months to submit revisions, and the Division shall provide follow-up recommendations to the Commission within two months after receiving revisions;

(e) Within three months after the Commission's approval of a Stage I existing development load reduction program, the affected entity shall complete adoption of and begin implementation of its existing development Stage I load reduction program;

(f) Upon implementation of the programs required under Item (4) of this Rule, state and federal entities subject to this Rule shall provide annual reports to the Division documenting their progress in implementing those requirements within three months following each anniversary of program implementation date until such time the Commission determines they are no longer needed to ensure maintenance of reductions or that standards are protected. State and federal entities shall indefinitely maintain and ensure performance of implemented load-reducing measures;

(g) By January 15, 2021 and every five years thereafter until either accounting determines load reductions have been achieved, standards are met, or the Commission takes other actions per 15A NCAC 02B .0275, state and federal entities located in the upper Falls watershed as defined in Item (3) of 15A NCAC 02B .0275 shall submit and begin implementation of 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. Should the Commission require changes, the applicable state or federal entity shall submit revisions within two months, and the Division shall provide follow-up recommendations to the Commission within three months after receiving revisions. Upon approval, the state or federal entity shall adjust implementation based on its approved program;

(h) A state or federal entity 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;

(i) Once either load reductions are achieved per annual reporting or water quality standards are met in the lake per 15A NCAC 02B .0275, state and federal entities shall submit programs to ensure no load increases and shall report annually per Sub-Item (10)(f) on compliance with no increases and take additional actions as necessary; and

(j) Beginning January 2016 and every five years thereafter, the Division shall review the accounting methods stipulated under Sub-Item (10)(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.

(11) NCDOT RULE IMPLEMENTATION. For the NCDOT, this Rule, shall be implemented as follows:
  (a) By July 2013, the NCDOT shall submit the Stormwater Management Program for the Falls watershed to the Division for approval. This Program shall meet or exceed the requirements in Item (9) of this Rule;
  (b) By January 15, 2014, the Division shall request the Commission's approval of the NCDOT Stormwater Management Program;
  (c) By January 15, 2014, the NCDOT shall implement the Commission-approved Stormwater Management Program; and
  (d) Upon implementation, the NCDOT shall submit annual reports to the Division summarizing its activities in implementing each of the requirements in Item (9) of this Rule. This annual reporting may be incorporated into annual reporting required under NCDOT's NPDES stormwater permit.

(12) RELATIONSHIP TO OTHER REQUIREMENTS. A party may in its program submittal request that the Division accept its implementation of another stormwater program or programs, such as NPDES stormwater requirements, as satisfying one or more of the requirements set forth in Items (4) or (5) of this Rule. The Division shall provide determination on acceptability of any such alternatives prior to requesting Commission approval of programs under this Rule. The party shall include in its program submittal technical information demonstrating the adequacy of the alternative requirements.

(13) ACCOUNTING METHODS. By July 15, 2012, the Division shall submit a nutrient accounting framework to the Commission for approval. This framework shall include tools for quantifying load reduction assignments on existing development for parties subject to this Rule, load reduction credits from various activities on existing developed lands, and a tool that will allow subject parties to account for loading from new and existing development and loading changes due to BMP implementation. The Division shall work in cooperation with subject parties and other watershed interests in developing this framework. The Division shall periodically revisit these accounting methods to determine the need for revisions to both the methods and to existing development load reduction assignments made using the methods set out in this Rule. It shall do so no less frequently than every 10 years. 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 BMP nutrient removal efficiencies.

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. April 1, 2020.

15A NCAC 02B .0282 FALLS WATER SUPPLY NUTRIENT STRATEGY: OPTIONS FOR OFFSETTING NUTRIENT LOADS

PURPOSE. This Rule provides parties subject to other rules within the Falls nutrient strategy with options for meeting rule requirements by obtaining or buying credit for nutrient load-reducing activities conducted by others (sellers). It provides the potential for parties who achieve excess load reductions under the Falls nutrient strategy to recover certain costs by selling such credits, and it provides opportunity for third parties to produce reductions and sell credits. Overall it provides the potential for more cost-effective achievement of strategy reduction objectives. 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 rules of the Falls nutrient strategy to ensure that crediting is properly accounted for. This Rule furthers the adaptive management intent of the strategy to protect the water supply, aquatic life, and recreational uses of Falls Reservoir. The minimum requirements for the exchange of load reduction credits are:

(1) PREREQUISITES. The following buyers shall meet applicable criteria identified here and in rules imposing reduction requirements on them before utilizing the option outlined in this Rule:
  (a) Agriculture Rule .0280: Owners of agricultural land shall receive approval from the Watershed Oversight Committee to obtain offsite credit pursuant to the conditions of Sub-Item (7)(b)(vii) of Rule .0280;

(b) New Development Rule .0277: Developers shall meet onsite reduction requirements enumerated in Sub-Item (4)(b) of Rule .0277 before obtaining offsite credit;

(c) Wastewater Rule .0279: 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 of Rule .0279; and

(d) State and Federal Entities Stormwater Rule .0281:

(i) Non-DOT entities shall meet onsite new development reduction requirements enumerated in Sub-Item (4)(b) of Rule .0281; and

(ii) NC DOT shall meet onsite non-road new development reduction requirements enumerated in Sub-Item (9)(c) of Rule .0281 before obtaining offsite credit.

(2) The party seeking approval to sell load reduction credits pursuant to this Rule shall demonstrate to the Division that such reductions meet the following criteria:

(a) Load reductions eligible for credit shall not include reductions that result from actions required to mitigate nutrient load-increasing actions under any regulation, except where a rule in this Section expressly allows such credit; and

(b) The party seeking to sell credits shall define the nature of the activities that would produce reductions and define the magnitude and duration of those reductions to the Division, including addressing the following items:

(i) Quantify and account for the relative uncertainties in reduction need estimates and load reduction estimates;

(ii) Ensure that load reductions shall take place at the time and for the duration in which the reduction need occurs; and

(iii) Demonstrate means adequate for assuring the achievement and claimed duration of load reduction, including the cooperative involvement of any other involved parties;

(c) Geographic Restrictions. Eligibility to use load reductions as credit is based on the following geographic criteria:

(i) Impacts in the upper Falls watershed as defined in Item (19) of 15A NCAC 02B .0276 may be offset only by load reductions achieved in the upper Falls watershed; and

(ii) Impacts in the lower Falls watershed as defined in Item (20) of 15A NCAC 02B .0276 shall be offset by load reductions achieved anywhere within the Falls watershed.

(3) The party seeking approval to sell load reduction credits shall provide for accounting and tracking methods that ensure genuine, accurate, and verifiable achievement of the purposes of this Rule, and shall otherwise meet the requirements of Rule .0703 of this Subchapter, which establishes procedural requirements for nutrient offset payments. 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.

(4) Local governments have the option of combining their reduction needs from NPDES dischargers assigned allocations in 15A NCAC 02B .0279 and existing development as described in 15A NCAC 02B .0278, including loads from properly functioning and malfunctioning septic systems and discharging sand filters, into one reduction and allocation requirement and meet them jointly.

(5) 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 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 load offset elsewhere that results in localized adverse water quality impacts that contribute to impairment of classified uses of the affected waters.

(6) A party seeking to purchase nutrient offset credit from the NC Ecosystem Enhancement Program or from a public or private seller of reduction credit shall meet the applicable requirements of Rule .0703 of this Subchapter, which establishes procedural requirements for nutrient offset payments, in addition to applicable requirements of this Rule. Requirements of Rule .0703 include, but are not limited to, the requirement for non-governmental entities to purchase credit from a provider other than the NC Ecosystem Enhancement Program if such credit is available.

(7) The Watershed Oversight Committee under Rule 15A NCAC 02B .0280 may satisfy the seller requirements of Items (2) and (3) of this Rule and the trading provisions of Rule .0280 for individual agricultural land owners by submitting to the Division for approval a trading program, or revisions to such a program, that demonstrates how individual trades shall meet the requirements of this Rule and Rule .0280, and by subsequently including in annual reports required under Rule .0280 separate tracking and accounting for such trades.

History Note: *Authority G.S. 143-214.1; 1432-214.3; 143-214.5; 143-214.7; 143-215.1; 1432-15.3; 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. April 1, 2020.

15A NCAC 02B .0283 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0284 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0285 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0286 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0287 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0288 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0289 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0290 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0291 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0292 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0293 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0294 RESERVED FOR FUTURE CODIFICATION

15A NCAC 02B .0295 MITIGATION PROGRAM REQUIREMENTS FOR PROTECTION AND MAINTENANCE OF RIPARIAN BUFFERS

(a) PURPOSE. The purpose of this Rule is to set forth the mitigation requirements that apply to applicants listed in Paragraph (c) of this Rule and to set forth requirements for buffer mitigation providers.

(b) DEFINITIONS. For the purpose of this Rule, these terms shall be defined as follows:

(1) "Authority" means either the Division or a local government that has been delegated or designated pursuant to Rules .0233, .0243, .0250, .0259, .0267, or .0607 of this Subchapter to implement the riparian buffer program.

(2) "Compensatory Buffer Mitigation Bank" means a buffer mitigation site created by a mitigation provider and approved for mitigation credit by the Division through execution of a mitigation banking instrument.

(3) "Division" means the Division of Water Resources of the North Carolina Department of Environment and Natural Resources.

(4) "Enhancement Site" means a riparian zone site characterized by conditions between that of a restoration site and a preservation site such that the establishment of woody stems (i.e., tree or shrub species) will maximize nutrient removal and other buffer functions.

(5) "Hydrologic Area" means the Watershed Boundary Dataset (WBD), located at no cost at http://data.nconemap.com/geoportal/catalog/search/resource/details.page?uuid={16A42F31-

6DC7-4EC3-88A9-03E6B7D55653} using the eight-digit Hydrologic Unit Code (HUC) prepared by the United States Geological Survey.

(6) "Locational Ratio" means the mitigation ratio applied to the mitigation requirements based on the location of the mitigation site relative to the impact site as set forth in Paragraph (f) of this Rule.

(7) "Mitigation banking instrument" means the legal document for the establishment, operation, and use of a mitigation bank.

(8) "Monitoring period" means the length of time specified in the approved mitigation plan during which monitoring of vegetation success and other anticipated benefits to the adjacent water as listed in the mitigation approval is done.

(9) "Non-wasting endowment" means a fund that generates enough interest to cover the cost of the long term monitoring and maintenance.

(10) "Outer Coastal Plain" means the portion of the state shown as the Middle Atlantic Coastal Plain (63) on Griffith, et al. (2002) "Ecoregions of North and South Carolina." Reston, VA, United States Geological Survey available at no cost at http://www.epa.gov/wed/pages/ecoregions/ncsc_eco.htm.

(11) "Preservation Site" means riparian zone sites that, as determined by a site visit conducted by the Authority, are characterized by a forest consisting of the forest strata and diversity of species appropriate for the location.

(12) "Restoration Site" means riparian zone sites that are characterized by an absence of trees and by a lack of dense growth of smaller woody stems (i.e., shrubs or saplings) or sites that are characterized by scattered individual trees such that the tree canopy is less than 25 percent of the cover and by a lack of dense growth of smaller woody stems (i.e., shrubs or saplings).

(13) "Riparian buffer mitigation unit" means a unit representing a credit of riparian buffer mitigation as set forth in Paragraph (m) of this Rule.

(14) "Riparian wetland" means a wetland that is found in one or more of the following landscape positions:

(A) in a geomorphic floodplain;

(B) in a natural topographic crenulation;

(C) contiguous with an open water equal to or greater than 20 acres in size; or

(D) subject to tidal flow regimes excluding salt/brackish marsh wetlands.

(15) "Stem" means a woody seedling, sapling, shrub, or tree, no less than 10 centimeters in height.

(16) "Urban" means an area that is either designated as an urbanized area under the most recent federal decennial census available at no cost at http://www.census.gov/ or is located within the corporate limits of a municipality.

(17) "Zonal Ratio" means the mitigation ratio applied to impact amounts in the respective zones of the riparian buffer as set forth in Paragraph (e) of this Rule.

(c) MITIGATION REQUIREMENTS. Buffer mitigation is required when one of the following applies:

(1) The applicant has received an authorization certificate for impacts pursuant to Rule .0233, .0243, .0250, .0259, .0267, or .0607 of this Subchapter and is required to perform mitigation as a condition of the authorization certificate; or

(2) The applicant has received a variance pursuant to Rule .0233, .0243, .0250, .0259, .0267, or .0607 of this Subchapter and is required to perform mitigation as a condition of a variance approval.

Any applicant covered under this Paragraph shall submit to the Authority a written mitigation proposal that calculates the required area of mitigation and describes the area and location of each type of proposed mitigation. The applicant shall not impact buffers until the Authority approves the mitigation plan and issues written approval.

(d) AREA OF IMPACT. The Authority shall determine the area of impact in square feet to each Zone as defined by the applicable Rule .0233, .0243, .0250, .0259, .0267, or .0607 of this Subchapter of the proposed riparian buffer by adding the following:

(1) The area of the footprint of the use impacting the riparian buffer;

(2) The area of the boundary of any clearing and grading activities within the riparian buffer necessary to accommodate the use; and

(3) The area of any ongoing maintenance corridors within the riparian buffer associated with the use.

The Authority shall deduct from this total the area of any wetlands that are subject to and compliant with riparian wetland mitigation requirements under 15A NCAC 02H .0506 and are located within the proposed riparian buffer impact area.

(e) AREA OF MITIGATION REQUIRED ON ZONAL MITIGATION RATIOS. The Authority shall determine the required area of mitigation for each Zone by applying each of the following ratios to the area of impact calculated under Paragraph (d) of this Rule:

Basin/Watershed	Zone 1 Ratio	Zone 2 Ratio
Neuse River Basin (15A NCAC 02B .0233)	3:1	1.5:1
Catawba River Basin (15A NCAC 02B .0243)	2:1	1.5:1
Randleman Lake Watershed (15A NCAC 02B .0250)	3:1	1.5:1
Tar-Pamlico River Basin (15A NCAC 02B .0259)	3:1	1.5:1
Jordan Lake Watershed (15A NCAC 02B .0267)	3:1	1.5:1
Goose Creek Watershed (15A NCAC 02B .0607)	3:1[A]	

[A] The Goose Creek Watershed does not have a Zone 1 and Zone 2. The mitigation ratio in the Goose Creek Watershed is 3:1 for the entire buffer.

(f) AREA OF MITIGATION REQUIRED ON LOCATIONAL MITIGATION RATIOS. The applicant or mitigation provider shall use the following locational ratios as applicable based on location of the proposed mitigation site relative to that of the proposed impact site. Locational ratios shall be as follows:

Location	Ratio
Within the 12-digit HUC[A]	0.75:1
Within the eight-digit HUC[B]	1:1
Outside of the eight-digit HUC[B]	2:1

[A] Except within the Randleman Lake Watershed. Within the Randleman Lake Watershed the ratio is 1:1.

[B] Except as provided in Paragraph (g) of this Rule.

(g) GEOGRAPHIC RESTRICTIONS ON LOCATION OF MITIGATION. Mitigation shall be performed in the same river basin where the impact is located with the following additional specifications:

(1) In the following cases, mitigation shall be performed in the same watershed where the impact is located:
  (A) Falls Lake Watershed, as defined in Rule .0275 of this Section;
  (B) Goose Creek Watershed, as defined in Rule .0601 of this Subchapter;
  (C) Randleman Lake Water Supply Watershed, as defined in Rule .0248 of this Section;
  (D) Each subwatershed of the Jordan Lake watershed, as defined in Rule .0262 of this Section; and
  (E) Other watersheds as specified in riparian buffer protection rules adopted by the Commission.

(2) Buffer mitigation for impacts within watersheds with riparian buffer rules that also have federally listed threatened or endangered aquatic species may be done within other watersheds with the same federally listed threatened or endangered aquatic species as long as the impacts are in the same river basin as the mitigation site.

(h) MITIGATION OPTIONS FOR APPLICANTS. The applicant may propose any of the following types of mitigation:

(1) Riparian buffer restoration or enhancement pursuant to Paragraph (n) of this Rule;
(2) Payment of a compensatory mitigation fee to a compensatory buffer mitigation bank pursuant to Paragraph (i) of this Rule or payment of a compensatory mitigation fee to the Riparian Buffer Restoration Fund pursuant to Paragraph (j) of this Rule. Payment shall conform to the requirements of G.S. 143-214.20;
(3) Donation of real property or of an interest in real property pursuant to Paragraph (k) of this Rule;
(4) Alternative buffer mitigation pursuant to Paragraph (o) of this Rule; or
(5) Other buffer mitigation as approved by the Environmental Management Commission as a condition of a variance approval.

(i) PURCHASE OF BUFFER MITIGATION CREDITS FROM A PRIVATE OR PUBLIC COMPENSATORY BUFFER MITIGATION BANK. Applicants who choose to satisfy some or all of their mitigation by purchasing mitigation credits from a private or public compensatory buffer mitigation bank shall meet the following requirements:

(1) The compensatory buffer mitigation bank from which credits are purchased shall have available riparian buffer credits approved by the Division;

(2) The compensatory buffer mitigation bank from which credits are purchased shall be located as described in Paragraphs (e), (f), and (g) of this Rule; and

(3) After receiving a mitigation acceptance letter from the compensatory buffer mitigation bank, proof of payment for the credits shall be provided to the Authority prior to any activity that results in the removal or degradation of the protected riparian buffer.

(j) PAYMENT TO THE RIPARIAN BUFFER RESTORATION FUND. Applicants who choose to satisfy some or all of their mitigation requirement by paying a compensatory mitigation fee to the Riparian Buffer Restoration Fund shall meet the requirements of Rule .0269 of this Section. Payment made to the NC Division of Mitigation Services (DMS) shall be contingent upon acceptance of the payment by the DMS. The DMS shall consider their financial, temporal, and technical ability to satisfy the mitigation request to determine whether they shall accept or deny the request.

(k) DONATION OF PROPERTY. Applicants who choose to satisfy their mitigation requirement by donating real property or an interest in real property to fully or partially offset an approved payment into the Riparian Buffer Restoration Fund pursuant to Paragraph (j) of this Rule shall do so in accordance with 15A NCAC 02R .0403.

(l) MITIGATION SITE REQUIREMENTS FOR APPLICANTS AND MITIGATION PROVIDERS. For each mitigation site proposed by an applicant or mitigation provider under Paragraphs (n) or (o) of this Rule, the Authority shall identify functional criteria to measure the anticipated benefits of the mitigation to the adjacent water. The Authority shall issue a mitigation determination that specifies the area, type, and location of mitigation and the water quality benefits to be provided by the mitigation site. All mitigation proposals shall meet the following criteria:

(1) The location of the buffer mitigation site shall comply with the requirements of Paragraphs (f) and (g) of this Rule. In the Catawba watershed, buffer mitigation may be done along the lake shoreline as well as along intermittent and perennial stream channels throughout the watershed.

(2) The mitigation proposal shall include a commitment to provide:

(A) a perpetual conservation easement or similar preservation mechanism to ensure perpetual stewardship that protects the mitigation site's nutrient removal and other water quality functions;

(B) a non-wasting endowment or other dedicated financial surety to provide for the perpetual land management and hydrological maintenance of lands and maintenance of structures as applicable; and

(C) financial assurance in the form of a completion bond, credit insurance, letter of credit, escrow, or other vehicle acceptable to the Authority payable to, or for the benefit of, the Authority in an amount sufficient to ensure that the property is secured in fee title or by easement, and that planting or construction, monitoring and maintenance are completed as necessary to meet success criteria as specified in the approved mitigation plan. This financial assurance obligation shall not apply to the NC DMS.

(3) Diffuse flow of runoff shall be maintained in the riparian buffer. Any existing impervious cover or stormwater conveyances such as ditches, pipes, or drain tiles shall be eliminated and the flow converted to diffuse flow. If the applicant or mitigation provider determines that elimination of existing stormwater conveyances is not feasible, then they shall include a justification and shall provide a delineation of the watershed draining to the stormwater outfall and the percentage of the total drainage by area treated by the riparian buffer with the mitigation plan specified in Paragraph (n) or (o) of this Rule for Authority approval. During mitigation plan review and approval, the Authority may reduce credit proportionally.

(4) Sewer easement within the buffer. If the proposed mitigation site contains a sewer easement in Zone 1, that portion of the sewer easement within Zone 1 shall not be suitable for buffer mitigation credit. If the proposed mitigation site contains a sewer easement in Zone 2, the portion of the sewer easement in Zone 2 may be suitable for buffer mitigation credit if:

(A) the applicant or mitigation provider restores or enhances the forested buffer in Zone 1 adjacent to the sewer easement;

(B) the sewer easement is required to be maintained in a condition that meets the vegetative requirements of the collection system permit; and

(C) diffuse flow is provided across the entire buffer width.

(5) The applicant or mitigation provider shall provide a site specific credit/debit ledger to the Authority at regular intervals as specified in the mitigation plan approval or mitigation banking instrument once credits are established and until they are exhausted.

(6) Buffer mitigation credit, nutrient offset credit, wetland mitigation credit, and stream mitigation credit shall be accounted for in accordance with the following:

(A) Buffer mitigation used for buffer mitigation credit shall not be used for nutrient offset credits;

(B) Buffer mitigation credit shall not be generated within wetlands that provide wetland mitigation credit required by 15A NCAC 02H .0506; and

(C) Buffer mitigation credit may be generated on stream mitigation sites as long as the width of the restored or enhanced riparian buffer meets the requirements of Subparagraph (n)(1) of this Rule.

(m) RIPARIAN BUFFER MITIGATION UNITS. Mitigation activities shall generate riparian buffer mitigation units as follows:

Mitigation Activity	Square Feet of Mitigation Buffer	Riparian Buffer Mitigation Units Generated
Restoration Site	1	1
Enhancement Site	2	1
Preservation Site on Non-Subject Urban Streams	3	1
Preservation Site on Subject Urban Streams	3	1
Preservation Site on Non-Subject Rural Streams	5	1
Preservation Site on Subject Rural Streams	10	1

(n) RIPARIAN BUFFER RESTORATION SITE OR ENHANCEMENT SITE. Authority staff shall make an on-site determination as to whether a potential mitigation site qualifies as a restoration site or enhancement site as defined in Paragraph (b) of this Rule. Riparian buffer restoration sites or enhancement sites shall meet the following requirements:

(1) Buffer restoration sites or enhancement sites may be proposed as follows:

Buffer width (ft)	Proposed Percentage of Full Credit
Less than 20	0 %
20-29	75 %
30-100	100 %
101-200	33%

(2) The applicant or mitigation provider shall submit a restoration or enhancement mitigation plan to the Authority for written approval. The plan shall demonstrate compliance with the requirements of this Paragraph and Paragraphs (l) and (m) of this Rule and shall also contain the following:

(A) A map of the proposed restoration or enhancement site;

(B) A vegetation plan that shall detail the activities proposed to ensure a final performance standard of 260 stems per acre at the completion of monitoring. The final performance standard shall include a minimum of four native hardwood tree species or four native hardwood tree and native shrub species, where no one species is greater than 50 percent of stems. Native hardwood and native shrub volunteer species may be included to meet the final performance standard of 260 stems per acre. The Authority may approve alternative vegetation plans upon consideration of factors, including site wetness and plant availability, to meet the requirements of this Part;

(C) A grading plan (if applicable). The site shall be graded in a manner to ensure diffuse flow through the entire riparian buffer;

(D) A schedule for implementation, including a fertilization and herbicide plan if applicable; and

(E) A monitoring plan to document whether the site is expected to meet the final performance standards as defined in Part (n)(2)(B) of this Rule and other anticipated benefits to the adjacent water. The plan shall include a proposed schedule and method for monitoring the vegetative status of the restoration or enhancement site for five years, including the health

and average stem densities of native hardwood tree or tree and shrub species that are to be counted toward the final performance standard.

(3) Within one year after Authority approval of the mitigation plan, the applicant or mitigation provider shall present documentation to the Authority that the riparian buffer has been restored or enhanced unless the applicant or mitigation provider requests, and the Authority agrees in writing prior to that date, to a longer time period.

(4) The applicant or mitigation provider shall submit written annual reports, unless an alternative schedule has been approved by the Authority during the mitigation plan approval, for a period of five years after completion of the activities identified in Part (n)(2)(B) of this Rule at the restoration site or enhancement site showing:

(A) compliance with the monitoring plan approved pursuant to Part (n)(2)(E) of this Rule; and

(B) that diffuse flow through the riparian buffer has been maintained.

If the Authority determines that the native hardwood tree or tree and shrub species at the site are not expected to meet the final performance standards listed in Part (n)(2)(B) of this Rule, then the Authority may require that the applicant or mitigation provider replace trees or trees and shrubs as needed during that five-year period. If the Authority determines that diffuse flow through the buffer is not being maintained, then the Authority may require that the applicant or mitigation provider restore diffuse flow. If the Authority determines that the final performance standards listed in Part (n)(2)(B) of this Rule have not been achieved at the end of the five-year monitoring period, the Authority may require additional years of monitoring. The Authority shall make determinations referenced in this Subparagraph on a site specific basis based on the annual reports, any supplemental information submitted by the applicant or mitigation provider, or a site evaluation by the Authority.

(o) ALTERNATIVE BUFFER MITIGATION OPTIONS. Alternative buffer mitigation options are detailed in this Paragraph. Any proposal for alternative buffer mitigation shall be provided in writing to the Division, shall meet the content and procedural requirements for approval by the Division, shall meet the requirements set out in Paragraphs (l) and (m) of this Rule and the requirements set out in the named Subparagraph of this Paragraph addressing that applicable alternative buffer mitigation option:

(1) Retroactive Credit. Alternative buffer mitigation sites constructed and within the required monitoring period on the effective date of this Rule shall be eligible for use as alternative buffer mitigation sites. Alternative buffer mitigation sites that have completed monitoring and were released by the Division on or within the past 10 years of the effective date of this Rule shall be eligible for use as alternative buffer mitigation sites. All alternative buffer mitigation site proposals submitted under this Subparagraph shall meet the following:

(A) A map or maps of the proposed alternative buffer mitigation site;

(B) Documentation of pre-existing conditions showing that the proposed alternative buffer mitigation site met the criteria to qualify for the applicable alternative buffer mitigation type identified in the applicable Subparagraph of this Paragraph;

(C) Documentation of the activities that were conducted at the proposed alternative buffer mitigation site to meet success criteria identified in the applicable Subparagraph of this Paragraph; and

(D) Documentation that the proposed alternative buffer mitigation site met the success criteria identified in the applicable Subparagraph of this Paragraph.

These alternative buffer mitigation sites shall receive credit in accordance with the criteria set forth in Paragraph (m) and Subparagraph (n)(1) of this Rule.

(2) Coastal Headwater Stream Mitigation. Wooded buffers planted along Outer Coastal Plain headwater stream mitigation sites may also be approved as riparian buffer mitigation credit if the site meets all applicable requirements of Paragraph (n) of this Rule. In addition, all success criteria specified in the approval of the stream mitigation site by the Division shall be met. The area of the buffer shall be measured perpendicular to the length of the valley being restored. The area within the proposed buffer mitigation site shall not also be used as wetland mitigation.

(3) Buffer Restoration and Enhancement on Non-Subject Streams. Restoration or enhancement of buffers may be conducted on intermittent or perennial streams that are not subject to the applicable Rule .0233, .0243, .0250, .0259, .0267, or .0607 of this Subchapter. These streams shall be confirmed as intermittent or perennial streams by Division staff certified per G.S. 143-214.25A using the Division publication, "Methodology for Identification of Intermittent and Perennial Streams and Their Origins (v.4.11, 2010)" available at no cost at

http://portal.ncdenr.org/web/wq/swp/ws/401/waterresources/streamdeterminations. The proposal shall meet all applicable requirements of Paragraph (n) of this Rule.

(4) Preservation of Buffer on Non-Subject Streams. Preservation of buffers on intermittent or perennial streams that are not subject to the applicable Rule .0233, .0243, .0250, .0259, .0267, or .0607 of this Subchapter may be proposed in order to permanently protect the buffer from cutting, clearing, filling, grading, and similar activities that would affect the functioning of the buffer. These streams shall be confirmed as intermittent or perennial streams by Division staff certified per G.S. 143-214.25A using the Division publication, "Methodology for Identification of Intermittent and Perennial Streams and Their Origins (v4.11, 2010)." The preservation site shall meet the requirements of Subparagraph (n)(1) of this Rule and the requirements set forth in 15A NCAC 02R .0403(c)(7), (8), and (11). The area of preservation credit within a buffer mitigation site shall comprise of no more than 25 percent of the total area of buffer mitigation.

(5) Preservation of Buffers on Subject Streams. Buffer preservation may be proposed on streams that are subject to the applicable Rule .0233, .0243, .0250, .0259, .0267, or .0607 of this Subchapter in order to permanently protect the buffer from cutting, clearing, filling, grading, and similar activities that would affect the functioning of the buffer beyond the protection afforded by the existing buffer rules on sites that meet the definition of a preservation site. The preservation site shall meet the requirements of Subparagraph (n)(1) and the requirements set forth in 15A NCAC 02R .0403(c)(7), (8), and (11). The area of preservation credit within a buffer mitigation site shall comprise of no more than 25 percent of the total area of buffer mitigation.

(6) Enhancement of grazing areas adjacent to streams. Buffer credit at a 2:1 ratio shall be available for an applicant or mitigation provider who proposes permanent exclusion of grazing livestock that otherwise degrade the stream and riparian zone through trampling, grazing, or waste deposition by fencing the livestock out of the stream and its adjacent buffer. The applicant or mitigation provider shall provide an enhancement plan as set forth in Paragraph (n) of this Rule. The applicant or mitigation provider shall demonstrate that grazing was the predominant land use since the effective date of the applicable buffer rule.

(7) Mitigation on ephemeral channels. For purposes of riparian buffer mitigation as described in this Part, an "ephemeral channel" is defined as a natural channel exhibiting discernible banks within a topographic crenulation (V-shaped contour lines) indicative of natural drainage on the 1:24,000 scale (7.5 minute) quadrangle topographic map prepared by the U.S. Geologic Survey, or as seen on digital elevation models with contours developed from the most recent available LiDAR data, available at no cost at http://www.ncfloodmaps.com/lidar.com. Ephemeral channels only flow for a short period of time after precipitation in the drainage area and do not have periods of base flow sustained by groundwater discharge. The applicant or mitigation provider shall provide a delineation of the watershed draining to the ephemeral channel. The entire area proposed for mitigation shall be within the contributing drainage area to the ephemeral channel. The ephemeral channel shall be directly connected to an intermittent or perennial stream and contiguous with the rest of the mitigation site protected under a perpetual conservation easement. The area of the mitigation site on ephemeral channels shall comprise no more than 25 percent of the total area of buffer mitigation. The proposal shall meet all applicable requirements of Paragraph (n) of this Rule for restoration or enhancement. The proposal shall meet all applicable requirements of Subparagraph (o)(4) or (o)(5) of this Rule for preservation.

(8) Restoration and Enhancement on Ditches. For purposes of riparian buffer mitigation as described in this Part, a "ditch" is defined as a man-made channel other than a modified natural stream that was constructed for drainage purposes. To be used for mitigation, a ditch shall meet all of the following criteria:

(A) be directly connected with and draining towards an intermittent or perennial stream;
(B) be contiguous with the rest of the mitigation site protected under a perpetual conservation easement;
(C) stormwater runoff from overland flow shall drain towards the ditch;
(D) be between one and three feet in depth; and
(E) the entire length of the ditch shall have been in place prior to the effective date of the applicable buffer rule.

The width of the restored or enhanced area shall not be less than 30 feet and shall not exceed 50 feet for crediting purposes. The applicant or mitigation provider shall provide a delineation of the

watershed draining to the ditch. The watershed draining to the ditch shall be at least four times larger than the restored or enhanced area along the ditch. The perpetual conservation easement shall include the ditch and the confluence of the ditch with the intermittent or perennial stream, and provide language that prohibits future maintenance of the ditch. The proposal shall meet all applicable requirements of Paragraph (n) of this Rule for restoration or enhancement.

(9) Stormwater Treatment Options. All stormwater treatment options shall meet the following requirements:

(A) Structural options already required by other local, state, or federal rule or permit cannot be used as alternative buffer mitigation credit, except to the extent such measure(s) exceed the requirements of such rule or permit. Stormwater Best Management Practices (BMPs), including bioretention facilities, constructed wetlands, infiltration devices and sand filters are all potentially approvable BMPs by the Division for alternative buffer mitigation credit. Other BMPs may be approved only if they meet the nutrient removal levels outlined in Part (o)(9)(B) of this Rule. Existing or planned BMPs for a local, state, or federal rule or permit may be retrofitted or expanded to improve their nutrient removal if this level of treatment is not required by other local, state, or federal rules. In this case, the predicted increase in nutrient removal may be counted toward alternative buffer mitigation credit;

(B) Minimum treatment levels: Any structural BMP shall provide at least 30 percent total nitrogen and 35 percent total phosphorus removal as demonstrated by a scientific and engineering literature review as approved by the Division. The mitigation proposal shall demonstrate that the proposed alternative removes an equal or greater annual mass load of nutrients to surface waters as the buffer impact authorized in the authorization certificate or variance, following the calculation of impact and mitigation areas pursuant to Paragraphs (d), (e), and (f) of this Rule. To estimate the rate of nutrient removal of the impacted buffer, the applicant or mitigation provider may use the "NC Division of Water Quality – Methodology and Calculation for determining nutrient reductions associated with Riparian Buffer Establishment" available at no cost at http://portal.ncdenr.org/c/document_library/get_file?uuid=55c3758f-5e27-46cf-8237-47f890d9329a&groupId=38364. The applicant or mitigation provider may propose an alternative method of estimating the rate of nutrient removal for consideration and review by the Division;

(C) All proposed structural BMPs shall follow the Division's "2009 Stormwater Best Management Practice Design Manual" available at no cost at http://portal.ncdenr.org/web/lr/bmp-manual. If a specific proposed structural BMP is not addressed in this Manual, the applicant or mitigation provider shall follow Chapter 20 in this Manual for approval;

(D) All structural options are required to have Division approved operation and maintenance plans;

(E) All structural options are required to have continuous and perpetual maintenance and shall follow the Division's "2009 Stormwater Best Management Practice Design Manual";

(F) Upon completion of construction, the designer for the type of BMP installed shall certify that the system was inspected during construction and that the BMP was constructed in conformity with plans and specifications approved by the Division;

(G) Removal and replacement of structural options: If a structural option is proposed to be removed and cannot be replaced on-site, then a structural or non-structural measure of equal or better nutrient removal capacity, as determined by calculations submitted to and approved by the Division, in a location as specified by Paragraphs (f) and (g) of this Rule shall be constructed as a replacement;

(H) Renovation or repair of structural options: If the applicant, mitigation provider, or the Division determines that a structural option must be renovated or repaired, it shall be renovated to provide equal or better nutrient removal capacity than as originally designed; and

(I) Structural options, as well as their operation and maintenance, are the responsibility of the landowner or easement holder unless the Division gives written approval for another responsible party to operate and maintain them. Structural options shall be located in recorded drainage easements for the purposes of operation and maintenance and shall have

recorded access easements to the nearest public right-of-way. These easements shall be granted in favor of the party responsible for operating and maintaining the structure, with a note that operation and maintenance is the responsibility of the landowner, easement holder, or other responsible party.

(10) Approval for other alternative buffer mitigation options. Other alternative riparian buffer mitigation options not specified within this Rule may be submitted to the Division for review and recommendation to the Environmental Management Commission on a case-by-case basis. Any proposal submitted under this Paragraph shall provide documentation or calculations to demonstrate that the proposed alternative mitigation option removes an equal or greater annual mass load of nutrients to surface waters as a riparian buffer. Upon completion of the Division's review, and prior to recommendation to the Environmental Management Commission, the Division shall issue a 30-calendar day public notice through the Division's website and the DWRwetlands Listserve. Division staff shall present their recommendations, including comments received during the public notice period, to the Environmental Management Commission for a final decision. If approved by the Environmental Management Commission, the alternative buffer mitigation option may be proposed by other applicants and mitigation providers.

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-214.20; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143-215.8A; 143-215.8B; 143-282(c); 143B-282(d); S.L. 1998-221; S.L. 1999-329, s. 7.1; S.L. 2001-418, s. 4.(a); S.L. 2003-340, s. 5; S.L. 2005-190; S.L. 2006-259; S.L. 2009-337; S.L. 2009-486; S.L. 2014-95;*
Temporary Adoption Eff. October 24, 2014;
Eff. November 1, 2015.

SECTION .0300 - ASSIGNMENT OF STREAM CLASSIFICATIONS

15A NCAC 02B .0301 CLASSIFICATIONS: GENERAL

(a) The classifications assigned to the waters of the State of North Carolina are set forth in river basin classification schedules provided at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification and in Rules .0302 to .0317 of this Section. These classifications are based upon procedures described in Rule .0101 of this Subchapter.

(b) Classifications. The classifications assigned to the waters of North Carolina are denoted by the letters C, B, WS-I, WS-II, WS-III, WS-IV, WS-V, WL, SC, SB, SA, SWL, Tr, Sw, NSW, ORW, HQW, and UWL. The "best usage", as defined in Rule .0202 of this Subchapter, for each classification is defined in the rules as follows:

(1) Fresh Waters Classifications:
- (A) Class C: Rule .0211 of this Subchapter;
- (B) Class B: Rule .0219 of this Subchapter;
- (C) Class WS-I (Water Supply): Rule .0212 of this Subchapter;
- (D) Class WS-II (Water Supply): Rule .0214 of this Subchapter;
- (E) Class WS-III (Water Supply): Rule .0215 of this Subchapter;
- (F) Class WS-IV (Water Supply): Rule .0216 of this Subchapter;
- (G) Class WS-V (Water Supply): Rule .0218 of this Subchapter; and
- (H) Class WL (Wetlands): Rule .0231 of this Subchapter.

(2) Tidal Salt Waters Classifications:
- (A) Class SC: Rule .0220 of this Subchapter;
- (B) Class SB: Rule .0222 of this Subchapter;
- (C) Class SA: Rule .0221 of this Subchapter; and
- (D) Class SWL: Rule .0231 of this Subchapter.

(3) Supplemental Classifications:
- (A) Class Tr (Trout Waters): Rule .0202 of this Subchapter;
- (B) Class Sw (Swamp): Rule .0202 of this Subchapter;
- (C) Class NSW (Nutrient Sensitive Waters): Rule .0223 of this Subchapter;
- (D) Class ORW (Outstanding Resource Waters): Rule .0225 of this Subchapter;
- (E) Class HQW (High Quality Waters): Rule .0224 of this Subchapter; and
- (F) Class UWL (Unique Wetlands): Rule .0231 of this Subchapter.

(c) Water Quality Standards. The water quality standards applicable to each classification assigned are those established in the rules of Section .0200 of this Subchapter.
(d) Index Number. The index number is an identification number assigned to each stream or segment of a stream, indicating the specific tributary progression between the main stem stream and tributary stream. The index number can be referenced to the Division's river basin classification schedules (hydrologic and alphabetic) for each river basin.
(e) Classification Date. The classification date indicates the date on which enforcement of the provisions of General Statutes 143-215.1 became effective with reference to the classification assigned to the various streams in North Carolina.
(f) Unnamed Streams.

(1) Any stream that is not listed in a river basin classification schedule carries the same classification as that assigned to the stream segment to which it is tributary except:
    (A) unnamed freshwaters tributary to tidal saltwaters will be classified "C"; or
    (B) after November 1, 1986, any areas of tidal saltwater created by dredging projects approved in accordance with 15A NCAC 07H .0208 and connected to Class SA waters shall be classified "SC" unless case-by-case reclassification proceedings are conducted per Rule .0101 of this Subchapter.
(2) In addition to Subparagraph (f)(1) of this Rule, for unnamed streams entering other states or for specific areas of a river basin, the following Rules shall apply:
    (A) Hiwassee River Basin (Rule .0302 of this Section);
    (B) Little Tennessee River Basin and Savannah River Drainage Area (Rule .0303 of this Section);
    (C) French Broad River Basin (Rule .0304 of this Section);
    (D) Watauga River Basin (Rule .0305 of this Section);
    (E) Broad River Basin (Rule .0306 of this Section);
    (F) New River Basin (Rule .0307 of this Section);
    (G) Catawba River Basin (Rule .0308 of this Section);
    (H) Yadkin-Pee Dee River Basin (Rule .0309 of this Section);
    (I) Lumber River Basin (Rule .0310 of this Section);
    (J) Roanoke River Basin (Rule .0313 of this Section);
    (K) Tar-Pamlico River Basin (Rule .0316 of this Section); and
    (L) Pasquotank River Basin (Rule .0317 of this Section).

History Note: *Authority G.S. 143-214.1; 143-214.5; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. August 1, 1995; August 3, 1992; August 1, 1990; October 1, 1989;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0302 HIWASSEE RIVER BASIN

(a) Classifications assigned to the waters within the Hiwassee River Basin are set forth in the Hiwassee River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
    (A) Asheville Regional Office
    2090 US 70
    Swannanoa, North Carolina; and
    (B) Division of Water Resources
    Central Office
    512 North Salisbury Street
    Raleigh, North Carolina.

(b) Unnamed streams entering Georgia or Tennessee shall be classified "C Tr."
(c) The Hiwassee River Basin Classification Schedule was amended effective:

(1) August 9, 1981;
(2) February 1, 1986;
(3) March 1, 1989;
(4) August 1, 1990;

(5) August 3, 1992;
(6) July 1, 1995;
(7) August 1, 2002.

(d) The Hiwassee River Basin Classification Schedule was amended effective March 1, 1989 as follows:

(1) Fires Creek (Index No. 1-27) and all tributary waters were reclassified from Class C-trout and Class C to Class C-trout ORW and Class C ORW.
(2) Gipp Creek (Index No. 1-52-23) and all tributary waters were reclassified from Class C-trout and Class C to Class C-trout ORW and Class C ORW.

(e) The Hiwassee River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(f) The Hiwassee River Basin Classification Schedule was amended effective July 1, 1995 with the reclassification of the Hiwassee River [Index Nos. 1-(42.7) and 1-(48.5)] from McComb Branch to the Town of Murphy water supply intake including tributaries from Classes WS-IV and WS-IV CA to Classes WS-IV, WS-IV CA, WS-V and C.

(g) The Hiwassee River Basin Classification Schedule was amended effective August 1, 2002 with the reclassification of the Hiwassee River [portion of Index No. 1-(16.5)] from a point 1.2 mile upstream of mouth of McComb Branch to a point 0.6 mile upstream of McComb Branch (Town of Murphy proposed water supply intake) from Class WS-IV to Class WS-IV CA.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. August 1, 2002; July 1, 1995; August 3, 1992; August 1, 1990; March 1, 1989;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0303 LITTLE TENNESSEE RIVER BASIN AND SAVANNAH RIVER DRAINAGE AREA

(a) Classifications assigned to the waters within the Little Tennessee River Basin and Savannah River Drainage Area are set forth in the Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
(A) Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina; and
(B) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering Georgia or Tennessee shall be classified "C Tr." Such streams in the Savannah River drainage area entering South Carolina shall be classified "B Tr."

(c) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective:

(1) February 16, 1977;
(2) March 1, 1977;
(3) July 13, 1980;
(4) February 1, 1986;
(5) October 1, 1987;
(6) March 1, 1989;
(7) January 1, 1990;
(8) July 1, 1990;
(9) August 1, 1990;

(10) March 1, 1991;
(11) August 3, 1992;
(12) February 1, 1993;
(13) August 1, 1994;
(14) September 1, 1996;
(15) August 1, 1998;
(16) August 1, 2000;
(17) April 1, 2003;
(18) January 1, 2007;
(19) November 1, 2007;
(20) July 1, 2009.

(d) The Little Tennessee Basin and Savannah River Drainage Area Classification Schedule was amended effective March 1, 1989 as follows:

(1) Nantahala River (Index No. 2-57) from source to the backwaters of Nantahala Lake and all tributary waters were reclassified from Class B-trout, Class C-trout and Class C to Class B-trout ORW, Class C-trout ORW and Class C ORW.
(2) Chattooga River (Index No. 3) including Scotsman Creek, Overflow Creek, Big Creek, Talley Mill Creek and all tributary waters were reclassified from Class B-trout, Class C-trout and Class C to Class B-trout ORW, Class C-trout ORW and Class C ORW and Clear Creek and all tributary waters were reclassified from Class C-trout and Class C to Class B-trout and Class B.

(e) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective January 1, 1990 as follows:

(1) North Fork Coweeta Creek (Index No. 2-10-4) and Falls Branch (Index No. 2-10-4-1) were reclassified from Class C to Class B.
(2) Burningtown Creek (Index No. 2-38) was reclassified from C-trout to B-trout.

(f) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective July 1, 1990 by the reclassification of Alarka Creek (Index No. 2-69) from source to Upper Long Creek (Index No. 2-69-2) including all tributaries from Classes C and C Tr to Classes C HQW and C Tr HQW.

(g) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective March 1, 1991 as follows:

(1) Cartoogechaye Creek [Index Nos. 2-19-(1) and 2-19-(16)] from Gibson Cove Branch to bridge at U.S. Hwy. 23 and 441 and from the bridge at U.S. Hwy. 23 and 441 to the Little Tennessee River was reclassified from Classes WS-III Tr and C Tr to Classes WS-III and B Tr and B Tr respectively.
(2) Coweeta Creek (Index Nos. 2-10) from its source to the Little Tennessee River including all tributaries except Dryman Fork (Index No. 2-10-3) and North Fork Coweeta Creek (Index No. 2-10-4) was reclassified from Classes C and C Tr to Classes B and B Tr.

(h) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(i) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective February 1, 1993 as follows:

(1) Bearwallow Creek from its source to 2.3 miles upstream of the Toxaway River [Index No. 4-7-(1)] was revised to indicate the application of an additional management strategy (Rule .0201(d) of this Subchapter) to protect downstream waters; and
(2) the Tuckaseegee River from its source to Tennessee Creek [Index No. 2-79-(0.5)] including all tributaries was reclassified from Classes WS-III&B Tr HQW, WS-III HQW and WS-III to Classes WS-III Tr ORW and WS-III ORW.

(j) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective August 1, 1994 with the reclassification of Deep Creek [Index Nos. 2-79-63-(1) and 2-79-63-(16)] from its source to the Great Smokey Mountains National Park Boundary including tributaries from Classes C Tr, B Tr and C Tr HQW to Classes WS-II Tr and WS-II Tr CA.

(k) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective September 1, 1996 as follows:

(1) Deep Creek from the Great Smoky Mountains National Park Boundary to the Tuckasegee River [Index no. 2-79-63-(21)] was reclassified from Class C Tr to Class B Tr; and

(2) the Tuckasegee River from the West Fork Tuckasegee River to Savannah Creek and from Macks Town Branch to Cochran Branch [Index Nos. 2-79-(24), 2-79(29.5) and 2-79-(38)] was reclassified from Classes WS-III Tr, WS-III Tr CA and C to Classes WS-III&B Tr, WS-III&B Tr CA and B.

(l) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective August 1, 1998 with the reclassifications of Thorpe Reservoir (Lake Glenville), Hurricane Creek, and Laurel Branch [Index Nos. 2-79-23-(1), 2 -79-23-2, and 2-79-23-2-1 respectively] from classes WS-III&B, WS-III Tr and WS-III to classes WS-III&B HQW, WS-III Tr HQW, and WS-III HQW.

(m) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended August 1, 2000 with the reclassification of Wesser Creek [Index No. 2-79-52-5-1] from its source to Williams Branch from Class C to Class C Tr.

(n) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended April 1, 2003 with the reclassification of a portion of the Little Tennessee River [Index No. 2-(1)] from a point 0.4 mile upstream of N.C. Highway 28 to Nantahala River Arm of Fontana Lake from Class C to Class B.

(o) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended January 1, 2007 with the reclassification of the entire watersheds of all creeks that drain to the north shore of Fontana Lake between Eagle and Forney Creeks, including Eagle and Forney Creeks, [Index Nos. 2-96 through 2-164 (excluding all waterbodies that drain to the south shore of Fontana Lake)] from Class B, C Tr, WS-IV Tr CA, WS-IV Tr, and WS-IV & B CA to Class B ORW, C Tr ORW, WS-IV Tr ORW CA, WS-IV Tr ORW, and WS-IV & B ORW CA, respectively. Additional site-specific management strategies are outlined in Rule .0225(e)(12) of this Subchapter.

(p) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended effective November 1, 2007 with the reclassification of Richland Balsam Seep near Beechflat Creek [Index No. 2-79-28-3-2] to Class WL UWL. The Division of Water Resources maintains a Geographic Information Systems data layer of the UWL.

(q) The Little Tennessee River Basin and Savannah River Drainage Area Classification Schedule was amended July 1, 2009 with the reclassification of the watershed of the lower portion of the Horsepasture River [portion of Index Number 4-13-(12.5)] from a point approximately 0.60 miles downstream of N.C. 281 (Bohaynee Road) to the NC-SC state line from Class B Tr to Class B Tr ORW, and the watershed of the upper portion of the Horsepasture River [Index Number 4-13-(0.5) and a portion of Index Number 4-13-(12.5)] from source to a point approximately 0.60 miles downstream of N.C. 281 (Bohaynee Road) to include only the ORW management strategy as represented by "+". The "+" symbol means that all undesignated waterbodies that are located within the watershed of the upper portion of Horsepasture River shall comply with Rule .0225(c) of this Subchapter in order to protect the designated waters as per Rule .0203 of this Subchapter and to protect outstanding resource values found throughout the entire Horsepasture River watershed. Site-specific management strategies are outlined in Rule .0225(e)(13) of this Subchapter.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1); S.L. 2005-97;*
Eff. February 1, 1976;
Amended Eff. July 1, 2009; November 1, 2007; January 1, 2007; April 1, 2003; August 1, 2000; August 1, 1998; September 1, 1996; August 1, 1994; February 1, 1993; August 3, 1992; March 1, 1991;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0304 FRENCH BROAD RIVER BASIN

(a) Classifications assigned to the waters within the French Broad River Basin are set forth in the French Broad River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and

(2) the following offices of the North Carolina Department of Environmental Quality:

(A) Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina; and

(B) Division of Water Resources
Central Office

512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering Tennessee are classified "B."

(c) The French Broad River Basin Classification Schedule was amended effective:

(1) September 22, 1976;
(2) March 1, 1977;
(3) August 12, 1979;
(4) April 1, 1983;
(5) August 1, 1984;
(6) August 1, 1985;
(7) February 1, 1986;
(8) May 1, 1987;
(9) August 1, 1990.

(d) The French Broad River Basin Classification Schedule was amended effective March 1, 1989 as follows:

(1) Cataloochee Creek (Index No. 5-41) and all tributary waters were reclassified from Class C-trout and Class C to Class C-trout ORW and Class C ORW.
(2) South Fork Mills River (Index No. 6-54-3) down to Queen Creek and all tributaries were reclassified from Class WS-I and Class WS-III-trout to Class WS-I ORW and Class WS-III-trout ORW.

(e) The French Broad River Basin Classification Schedule was amended effective October 1, 1989 as follows: Cane River (Index No. 7-3) from source to Bowlens Creek and all tributaries were reclassified from Class C trout and Class C to Class WS-III trout and Class WS-III.

(f) The French Broad River Basin Classification Schedule was amended effective January 1, 1990 as follows: North Toe River (Index No. 7-2) from source to Cathis Creek (Christ Branch) and all tributaries were reclassified from Class C trout and Class C to Class WS-III trout and Class WS-III.

(g) The French Broad River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(h) The French Broad River Basin Classification Schedule was amended effective October 1, 1993 as follows: Reasonover Creek [Index No. 6-38-14-(1)] from source to Reasonover Lake Dam and all tributaries were reclassified from Class B Trout to Class WS-V and B Trout, and Reasonover Creek [Index No. 6-38-14-(4)] from Reasonover Lake Dam to Lake Julia Dam and all tributaries were reclassified from Class C Trout to Class WS-V Trout.

(i) The French Broad River Basin Classification Schedule was amended effective July 1, 1995 with the reclassification of Cane Creek [Index Nos. 6-57-(1) and 6-57-(9)] from its source to the French Broad River from Classes WS-IV and WS-IV Tr to Classes WS-V, WS-V Tr and WS-IV.

(j) The French Broad River Basin Classification Schedule was amended effective November 1, 1995 as follows: North Toe River [Index Numbers 7-2-(0.5) and 7-2-(37.5)] from source to a point 0.2 miles downstream of Banjo Branch, including tributaries, has been reclassified from Class WS-III, WS-III Trout and WS-III Trout CA (critical area) to Class WS-IV Trout, WS-IV, WS-IV Trout CA, and C Trout.

(k) The French Broad River Basin Classification Schedule was amended effective January 1, 1996 as follows: Stokely Hollow [Index Numbers 6-121.5-(1) and 6-121.5-(2)] from source to mouth of French Broad River has been reclassified from Class WS-II and Class WS-II CA to Class C.

(l) The French Broad River Basin Classification Schedule was amended April 1, 1996 with the reclassification of the French Broad River [Index No. 6-(1)] from a point 0.5 miles downstream of Little River to Mill Pond Creek to Class WS-IV; French Broad River [Index No. 6-(51.5)] from a point 0.6 miles upstream of Mills River to Mills River to Class WS-IV CA (Critical Area), from Mills River to a point 0.1 miles upstream of Boring Mill Branch to Class C; and the Mills River [Index No. 6-54-(5)] was reclassified from City of Hendersonville water supply intake to a point 0.7 miles upstream of mouth of Mills River to Class WS-III, and from a point 0.7 miles upstream of mouth of Mills River to French Broad River to Class WS-III CA (Critical Area).

(m) The French Broad River Basin Classification Schedule was amended August 1, 1998 with the revision to the primary classification for portions of the French Broad River [Index No. 6-(38.5)] and the North Toe River 7-2-(10.5) from Class IV to Class C.

(n) The French Broad River Basin Classification Schedule was amended August 1, 1998 with the reclassification of Clear Creek [Index No. 6-55-(1)] from its source to Lewis Creek from Class C Tr to Class B Tr.
(o) The French Broad River Basin Classification Schedule was amended August 1, 2000 with the reclassification of Rough Creek [Index No. 5-8-4-(1)], including all tributaries, from its source to the Canton Reservoir from Class WS-I to Class WS-I Tr ORW.
(p) The French Broad River Basin Classification Schedule was amended August 1, 2002 with the revision to the primary classification for the French Broad River [Index No. 6-(1), 6-(27), 6-(47.5), 6-(52.5), and 6-(54.5)] including its four headwater forks' mainstems, watershed of tributary Davidson River, and watershed of tributary Bent Creek below Powhatan Dam, and the Nolichucky River [Index No. 7] including a lower portion of the North Toe River from Class C and Class WS-IV to Class B.
(q) The French Broad River Basin Classification Schedule was amended August 1, 2002 with the reclassification of the North Toe River [Index No. 7-2-(0.5)], including all tributaries, from source to a point 0.2 mile upstream of Pyatt Creek, from Class C Tr to Class WS-V Tr.
(r) The French Broad River Basin Classification Schedule was amended September 1, 2004 with the reclassification of a portion of Richland Creek [Index No. 5-16(1)], from source to a point approximately 11.2 miles from source (Boyd Avenue), from Class B to Class B Tr, and all tributaries to the portion of the creek referenced in this Paragraph from C, C HQW, and WS-I HQW, and WS-I HQW to C Tr, C HQW Tr, and WS-I HQW Tr, respectively, except Hyatt Creek [Index No. 5-16-6], Farmer Branch [Index No. 5-16-11], and tributaries already classified as Tr.
(s) The French Broad River Basin Classification Schedule was amended effective November 1, 2007 with the reclassification of McClure's Bog near Gash Creek [Index No. 6-47] to Class WL UWL. The North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of the UWL.
(t) The French Broad River Basin Classification Schedule was amended effective September 1, 2009 with the reclassification of the entire watershed of Big Laurel Creek (Index No. 6-112) from source to the French Broad River from Class C Tr to Class C ORW Tr.
(u) The French Broad River Basin Classification Schedule was amended effective September 1, 2009 with the reclassification of the entire watershed of Spring Creek [Index No. 6-118-(1) and 6-118-(27)] from source to the French Broad River from Class C Tr and Class C to Class C ORW Tr and Class C ORW.
(v) The French Broad River Basin Classification Schedule was amended December 1, 2011 with the reclassification of a portion of the French Broad River [Index No. 6-(54.5)] from the confluence of the Mills River to a point 0.2 miles downstream of the confluence of the Mills River from Class B to Class WS-IV&B CA.
(w) The Schedule of Classifications and Water Quality Standards for the French Broad River Basin was amended January 1, 2019 with the reclassification of Enka Lake, which is a portion of the Bill Moore Creek (Index No. 6-76-7) from Class C to Class B.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. January 1, 2019; December 1, 2011; September 1, 2009; November 1, 2007; September 1, 2004; August 1, 2002; August 1, 2000; August 1, 1998; April 1, 1996; January 1, 1996; November 1, 1995; July 1, 1995;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0305 WATAUGA RIVER BASIN

(a) Classifications assigned to the waters within the Watauga River Basin are set forth in the Watauga River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification and
(2) the following offices of the North Carolina Department of Environmental Quality:
    (A) Asheville Regional Office
    2090 US Highway 70
    Swannanoa, Carolina;
    (B) Winston-Salem Regional Office
    450 West Hanes Mill Road
    Winston-Salem, North Carolina; and
    (C) Division of Water Resources
    Central Office
    512 North Salisbury Street

Raleigh, North Carolina.

(b) Unnamed streams entering the State of Tennessee are classified "C."

(c) The Watauga River Basin Classification Schedule was amended effective:

(1) August 12, 1979;
(2) February 1, 1986;
(3) October 1, 1987;
(4) August 1, 1989;
(5) August 1, 1990;
(6) December 1, 1990;
(7) April 1, 1992;
(8) August 3, 1992;
(9) February 1, 1993;
(10) April 1, 1994;
(11) August 1, 1998;
(12) November 1, 2007.

(d) The Watauga River Basin Classification Schedule was amended effective July 1, 1989 as follows:

(1) Dutch Creek (Index No. 8-11) was reclassified from Class C-trout to Class B-trout.
(2) Pond Creek (Index No. 8-20-2) from water supply intake (located just above Tamarack Road) to Beech Creek and all tributary waters were reclassified from Class WS-III to C.

(e) The Watauga River Basin Classification Schedule was amended effective December 1, 1990 with the reclassification of the Watauga River from the US Highway 321 bridge to the North Carolina/Tennessee state line from Class C to Class B.

(f) The Watauga River Basin Classification Schedule was amended effective April 1, 1992 with the reclassification of Pond Creek from Classes WS-III and C to Classes WS-III Trout and C Trout.

(g) The Watauga River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 2B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(h) The Watauga River Basin Classification Schedule was amended effective February 1, 1993 with the reclassification of Boone Fork (Index No. 8-7) and all tributary waters from Classes C Tr HQW and C HQW to Classes C Tr ORW and C ORW.

(i) The Watauga River Basin Classification Schedule was amended effective April 1, 1994 with the reclassification of the Elk River from Peavine Branch to the North Carolina/Tennessee state line [Index No. 8-22-(3)] from Class C Tr to Class B Tr.

(j) The Watauga River Basin Classification Schedule was amended effective August 1, 1998 with the reclassification of East Fork Pond Creek from its source to the backwater of Santis Lake, [Index No. 8-20-2-1.5] from Class WS-II Tr to Class WS-III Tr; the reclassification of West Fork Pond Creek (Santis Lake) [Index No. 8-20-2-1-(2)] from the backwaters of Santis Lake to Pond Creek from WS-II Tr CA to WS-III Tr CA; and the reclassification of the connecting stream of Lake Coffey [Index No. 8-20-2-2] from the dam at Lake Coffey to Pond Creek from WS-II Tr CA to C Tr.

(k) The Watauga River Basin Classification Schedule was amended effective November 1, 2007 with the reclassification of the Beech Creek Bog near Beech Creek [Index No. 8-20] to Class WL UWL. The North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of the UWL.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. November 1, 2007; August 1, 1998; April 1, 1994; February 1, 1993; August 3, 1992; April 1, 1992;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0306 BROAD RIVER BASIN

(a) Classifications assigned to the waters within the Broad River Basin are set forth in the Broad River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and

(2) the following offices of the North Carolina Department of Environmental Quality:

(A) Mooresville Regional Office
610 East Center Avenue
Suite 301
Mooresville, North Carolina;

(B) Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina; and

(C) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering South Carolina are classified "C."

(c) The Broad River Basin Classification Schedule was amended effective:

(1) March 1, 1977;
(2) February 12, 1979;
(3) August 12, 1979;
(4) April 1, 1983;
(5) February 1, 1986.

(d) The Broad River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and 0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(e) The Broad River Basin Classification Schedule was amended effective September 1, 1994 with the reclassification of the Second Broad River [Index No. 9-41-(0.5)] from its source to Roberson Creek including associated tributaries was reclassified from Class WS-V to Classes WS-V, WS-IV and WS-IV CA.

(f) The Broad River Basin Classification Schedule was amended effective August 1, 1998 with the revision to the primary classification for portions of the Broad River [Index No. 9-(23.5)] from Class WS-IV to Class C and Second Broad River [Index Nos. 9-41-(10.5) and 9-41-(14.5)] and First Broad River [Index No. 9-50-(11)] from Class WS-IV to Class WS-V.

(g) The Broad River Basin Classification Schedule was amended August 1, 2000 with the reclassification of the Green River [Index No. 9-29-(1)], including all tributaries, from its source to its mouth in Lake Summit at elevation 2011 from Class C Tr to Class B Tr.

(h) The Broad River Basin Classification Schedule was amended effective August 1, 2000 with the reclassification of Lake Montonia [Index No. 9-54-1-(1)], and all tributaries, from Class B to Class B HQW.

(i) The Broad River Basin Classification Schedule was amended effective April 1, 2001 with the reclassification of the Green River [Index No. 9-29-(1)], including all tributaries, from its source to the downstream side of the mouth of Rock Creek from Class B Tr to Class B Tr HQW.

(j) The Broad River Basin Classification Schedule was amended effective March 1, 2007 with the reclassification of the North Fork First Broad River (Index No. 9-50-4), including all tributaries, from its source to the First Broad River from Class C Tr to Class C Tr ORW.

(k) The Broad River Basin Classification Schedule was amended effective March 1, 2007 with the reclassification of a segment of the Broad River [Index No. 9-(25.5)] from a point 0.5 mile upstream of the City of Shelby proposed water supply intake to the City of Shelby proposed water supply intake from Class C to Class WS-IV CA, and from a point 0.5 mile upstream of the City of Shelby proposed water supply intake to a point approximately 0.3 mile downstream of its confluence with Cane Creek from Class C to Class WS-IV. The City of Shelby proposed water supply intake is to be placed on the Broad River at a point approximately one mile upstream of its confluence with the First Broad River.

(l) The Broad River Basin Classification Schedule was amended effective March 1, 2007 with the reclassification of a segment of the Broad River [Index No. 9-(25.5)] from a point 0.5 mile upstream of the Town of Forest City proposed water supply intake to the Town of Forest City proposed water supply intake from Class C to Class WS-IV CA, and from a point 0.5 mile upstream of the Town of Forest City proposed water supply intake to a point approximately 0.2 mile downstream of Rutherford County SR 1145 (Town of Rutherfordton water supply intake) from Class C to Class WS-IV. The Town of Forest City proposed water supply intake is to be placed on the Broad River at a point approximately 0.4 mile downstream of McKinney Creek.
(m) The Broad River Basin was Classification Schedule amended effective September 1, 2014, in order to allow a water supply intake to be placed in Lake Adger by Polk County, as follows:

(1) a portion of the Green River [Index No. 9-29-(33)], including tributaries, from the dam at Lake Adger to a point 0.35 mile downstream of Rash Creek from Class C to Class WS-IV CA. The CA extends 0.5 mile from and draining to the normal pool elevation of Lake Adger.
(2) a portion of the Green River from a point 0.35 mile [Index No. 9-29-(33)], including tributaries, downstream of Rash Creek to a point 300 feet downstream of Laurel Branch from Class C to Class WS-IV. The PA extends 5.0 miles from and draining to the normal pool elevation of Lake Adger.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. September 1, 2014; March 1, 2007; April 1, 2001; August 1, 2000; August 1, 1998; September 1, 1994; August 3, 1992; February 1, 1986; January 1, 1985;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0307 NEW RIVER BASIN

(a) Classifications assigned to the waters within the New River Basin are set forth in the New River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
(A) Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina;
(B) Winston-Salem Regional Office
450 West Hanes Mill Road
Winston-Salem, North Carolina; and
(C) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering the State of Tennessee are classified "C."
(c) The New River Basin Classification Schedule was amended effective:

(1) August 10, 1980 (see Paragraph (d) of this Rule);
(2) April 1, 1983 (see Paragraph (e) of this Rule);
(3) February 1, 1986 (see Paragraph (f) of this Rule);
(4) August 1, 1989 (see Paragraph (g) of this Rule);
(5) August 1, 1990 (see Paragraph (h) of this Rule);
(6) August 3, 1992 (see Paragraph (i) of this Rule);
(7) February 1, 1993 (see Paragraph (j) of this Rule);
(8) August 1, 1998 (see Paragraph (k) of this Rule);
(9) November 1, 2007 (see Paragraph (l) of this Rule);
(10) December 1, 2010 (see Paragraph (m) of this Rule); and
(11) July 3, 2012 (see Paragraph (n) of this Rule).

(d) The New River Basin Classification Schedule was amended effective August 10, 1980 as follows:

(1) South Fork New River [Index No. 10-1-(1)] from the confluence of the Middle Fork South Fork New River and the East Fork South Fork New River to Winkler Creek was reclassified from Class C to Class A-II;

(2) Middle Fork South Fork New River [Index Nos. 10-1-2-(6) and 10-1-2-(14)] from Brown Branch to the South Fork New River was reclassified from Class C and C Trout to Class A-II and A-II Trout;
(3) East Fork South Fork New River [Index Nos. 10-1-3-(1) and 10-1-3-(7)] was reclassified from Class C and C Trout to Class A-II and A-II Trout; and
(4) Winkler Creek [Index No. 10-1-4-(2) from Boone water supply intake dam to Watauga County SR 1549 and Flannery Fork [Index No. 10-1-4-3-(2)] from the dam at Camp Sky Ranch Bathing Lake to Winkler Creek were reclassified from Class C Trout to Class A-II Trout.

(e) The New River Basin Classification Schedule was amended effective April 1, 1983 as follows: Naked Creek [Index No. 10-1-32] was reclassified from Class C Trout to Class C.

(f) The New River Basin Classification Schedule was amended effective February 1, 1986 with the reclassification of all Class A-I and A-II streams to Class WS-I and WS-III in the New River Basin.

(g) The New River Basin Classification Schedule was amended effective August 1, 1989 as follows: South Fork New River [Index No. 10-1-(30)] from Dog Creek to New River and all tributary waters were reclassified from Class C-trout and Class C to Class B-trout and B.

(h) The New River Basin Classification Schedule was amended effective August 1, 1990 as follows:

(1) New River [Index No. 10] from the confluence of the North and South Forks New River to the last point at which the New River crosses the North Carolina/Virginia State line was reclassified from Class C to Class C HQW;
(2) South Fork New River [Index Nos. 10-1-(14.5), 10-1-(26), 10-1-(30), and 10-1-(33.5)] from Elk Creek to the confluence of the New River and North Fork New River was reclassified from Class C, B and WS-III to Class C HQW, B HQW and WS-III HQW;
(3) Howard Creek [Index Nos. 10-1-9-(1) and 10-1-9-(6)] from source to the South Fork New River was reclassified from Class WS-III Trout and C Trout to Class WS-III Trout HQW and C Trout HQW;
(4) Big Horse Creek [Index No. 10-2-21-(5.5)] from North Carolina/Virginia State line to lower Ashe County SR 1361 bridge was reclassified from Class C Trout to Class C Trout HQW; and
(5) Little River [Index No. 10-9-(11.5)] from N.C. Hwy. 18 bridge to the North Carolina/Virginia State line was reclassified from Class C to Class C HQW.

(i) The New River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(j) The New River Basin Classification Schedule was amended effective February 1, 1993 as follows:

(1) the South Fork New River (Index No. 10-1-33.5) from Dog Creek to the New River was reclassified from Class B HQW to Class B ORW;
(2) the New River (Index No. 10) from the confluence of the North and South Fork New Rivers to the last point at which it crosses the North Carolina/Virginia State line was reclassified from Class C HQW to Class C ORW; and
(3) Old Field Creek (Index No. 10-1-22) from Call Creek to the South Fork New River, and Call Creek (Index No. 10-1-22-1) from its source to Old Field Creek were reclassified from Class WS-IV Trout to Class WS-IV Trout ORW.

(k) The New River Basin Classification Schedule was amended effective August 1, 1998 with the revision to the primary classification for a portion of the South Fork New River [Index No. 10-1 (20.5)] from Class WS-IV to Class WS-V.

(l) The New River Basin Classification Schedule was amended effective November 1, 2007 with the reclassification of Bluff Mountain Fen near Buffalo Creek [Index No. 10-2-20] to Class WL UWL. The North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of the UWL.

(m) The New River Basin Classification Schedule was amended effective December 1, 2010 with the reclassification of the North Fork New River [Index Nos. 10-2-(1), 10-2-(12)] and its tributaries from C+, C+ Trout and C Trout HQW to C ORW and C Trout ORW with the exception of the following:

(1) Index Nos. 10-2-21-9, 10-2-21-(8), 10-2-(11) and 10-2-20 were reclassified from C+ and C Trout + to C HQW and C Trout HQW; and
(2) Little Buffalo Creek and Claybank Creek (Index Nos. 10-2-20-1 and 10-2-20-1-1) did not qualify for the ORW or HQW designation; however, these waters shall be managed in the same way as the downstream designated HQW areas.

(n) The New River Basin Classification Schedule was amended effective July 3, 2012 as follows:
(1) the portion of the South Fork New River [Index No. 10-1-(14.5)] from the Town of Boone's intake, located nearly 0.5 miles upstream of SR 1100, to 875 feet downstream of SR 1351 from C HQW to WS-IV CA HQW;
(2) the portion of the South Fork New River [Index No. 10-1-(14.5)] from 875 feet downstream of SR 1351 to Elk Creek from C HQW to WS-IV HQW; and
(3) the portion of the South Fork New River [Index No. 10-1-(3.5)] from Elk Creek to 1.75 miles upstream of SR 1351 from C+ to WS-IV +.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. July 3, 2012; December 1, 2010; November 1, 2007; August 1, 1998; February 1, 1993; August 3, 1992; August 1, 1990; August 1, 1989;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0308 CATAWBA RIVER BASIN

(a) Classifications assigned to the waters within the Catawba River Basin are set forth in the Catawba River Basin Classification Schedule, which may be inspected at the following places:
(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
(A) Mooresville Regional Office
610 East Center Avenue, Suite 301
Mooresville, North Carolina;
(B) Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina; and
(C) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering South Carolina are classified "C."

(c) The Catawba River Basin Classification Schedule was amended effective:
(1) March 1, 1977 (see Paragraph (d) of this Rule);
(2) August 12, 1979 (see Paragraph (e) of this Rule);
(3) April 1, 1982 (see Paragraph (f) of this Rule; Rule);
(4) January 1, 1985 (see Paragraph (g) of this Rule);
(5) August 1, 1985 (see Paragraph (h) of this Rule);
(6) February 1, 1986 (see Paragraph (i) of this Rule);
(7) March 1, 1989 (see Paragraph (j) of this Rule);
(8) May 1, 1989 (see Paragraph (k) of this Rule);
(9) March 1, 1990 (see Paragraph (l) of this Rule);
(10) August 1, 1990 (see Paragraph (m) of this Rule);
(11) August 3, 1992 (see Paragraph (n) of this Rule);
(12) April 1, 1994 (see Paragraph (o) of this Rule);
(13) July 1, 1995 (see Paragraph (p) of this Rule);
(14) September 1, 1996 (see Paragraph (q) of this Rule);
(15) August 1, 1998 (see Paragraph (r) of this Rule);
(16) April 1, 1999 (see Paragraph (s) of this Rule);
(17) August 1, 2000 (see Paragraph (t) of this Rule);
(18) August 1, 2004 (see Paragraph (u) of this Rule);

(19) May 1, 2007 (see Paragraph (v) of this Rule);
(20) September 1, 2010 (see Paragraph (w) of this Rule);
(21) March 1, 2013 (see Paragraph (x) of this Rule); and
(22) July 1, 2017 (see Paragraph (y) of this Rule).

(d) The Catawba River Basin Classification Schedule was amended effective March 1, 1977 as follows:
(1) Torrence Branch (Index No. 11-136) from source to North Carolina-South Carolina State Line was reclassified from Class D to Class B; and
(2) Edwards Branch (Index No. 11-137-8-2-1) from source to Brier Creek was reclassified from Class D to Class C.

(e) The Catawba River Basin Classification Schedule was amended effective August 12, 1979 as follows: Unnamed Tributary to Lower Little River (Robinette Creek)(Index No. 11-69-1.5) from source to Lower Little River was reclassified from Class C to Class B.

(f) The Catawba River Basin Classification Schedule was amended effective April 1, 1982 as follows:
(1) Spainhour Creek (Index No. 11-39-3) from source to Lower Creek was reclassified from Class C (1) to Class C; and
(2) Allen Creek (Index No. 11-129-5-7-2-4) from source to Maiden Creek was reclassified from Class C to Class A-II.

(g) The Catawba River Basin Classification Schedule was amended effective January 1, 1985 as follows: Catawba Creek from source to N.C. Highway 275 was reclassified from Class C(1) to Class C.

(h) The Catawba River Basin Classification Schedule was amended effective August 1, 1985 as follows:
(1) Brier Creek (Index No. 11-137-8-2) from source to Little Sugar Creek was reclassified from Class C (1) to Class C;
(2) Little Hope Creek (Index No. 11-137-8-3) from source to Little Sugar Creek was reclassified from Class C (1) to Class C; and
(3) McMullen Creek (Index No. 11-137-9-5) from source to N.C. Highway 16 was reclassified from Class C (1) to Class C.

(i) The Catawba River Basin Classification Schedule was amended effective February 1, 1986 with the reclassification of all A-I and A-II streams to WS-I and WS-III in the Catawba River Basin.

(j) The Catawba River Basin Classification Schedule was amended effective March 1, 1989 as follows:
Wilson Creek (Index No. 11-38-34) and all tributary waters were reclassified from Class B-trout and Class C-trout to Class B-trout ORW and Class C-trout ORW.

(k) The Catawba River Basin Classification Schedule was amended effective May 1, 1989 as follows:
(1) Henry Fork [Index Nos. 11-129-1-(1) and 11-129-1-(2)] from source to Laurel Creek, including all tributaries, were reclassified from Class WS-I, C and C trout to Class WS-I ORW, C ORW and C trout ORW, except Ivy Creek and Rock Creek which will remain Class C trout and Class C; and
(2) Jacob Fork [Index Nos. 11-129-2-(1) and 11-129-2-(4)] from source to Camp Creek, including all tributaries, were reclassified from Class WS-III trout and WS-III to WS-III trout ORW and WS-III ORW.

(l) The Catawba River Basin Classification Schedule was amended effective March 1, 1990 as follows:
(1) Upper Creek [Index No. 11-35-2-(1)] from source to Timbered Branch including all tributaries except Timbered Branch (Index No. 11-35-2-9) was reclassified from Class C Trout to Class C Trout ORW; and
(2) Steels Creek [Index No. 11-35-2-12(1)] from source to Little Fork and all tributaries was reclassified from Class C Trout to Class C Trout ORW.

(m) The Catawba River Basin Classification Schedule was amended effective August 1, 1990 as follows:
(1) The classification for the portion of Mackey Creek [Index No. 11-15-(2)] from Marion Water Supply Intake to Laurel Fork was reclassified from Class C to Class C HQW;
(2) Laurel Fork Creek [Index No. 11-15-3] from source to Mackey Creek was reclassified from Class C Tr to Class C Tr HQW;
(3) Armstrong Creek [Index No. 11-24-14-(1)] from source to Bee Rock Creek was reclassified from Class WS-III Tr to Class WS-III Tr HQW;
(4) Two segments of Linville River [Index Nos. 11-29-(16) and 11-29-(19)] were reclassified from Class B Tr and Class B to Class B Tr HQW and Class B HQW, respectively;
(5) Upper Creek [Index No. 11-35-2-(8.5)] and its named tributaries were reclassified from Class C Tr to Class C Tr HQW;

(6) Upper Creek (Clear Water Beach Lake) [Index No. 11-35-2-(10)] from Holly Spring Branch to Dam Clear Water Beach Lake was reclassified from Class B Tr to Class B Tr HQW;
(7) Holly Spring Branch [Index No. 11-35-2-11] from source to Upper Creek was reclassified from Class C Tr to Class Tr HQW;
(8) Steels Creek [Index No. 11-35-2-12-(5)] from Little Fork to a point 1.7 miles upstream from N.C. Highway 181 Bridge was reclassified from Class B Tr to Class B Tr HQW and Steels Creek [Index No. 11-35-2-12-(7)] from a point 1.7 miles upstream from N.C. Highway 181 bridge to Clear Water Beach Lake, Upper Creek was reclassified from Class B to Class B HQW;
(9) Upper Creek [Index No. 11-35-2-(13)] from Dam at Clear Water Beach Lake to Warrior Fork was reclassified from Class WS-III Tr to Class WS-III Tr HQW;
(10) The portion of Johns River [Index No. 11-38-(28)] from Wilson Creek to Rhodhiss Lake, Catawba River was reclassified from Class C to Class C HQW;
(11) Mulberry Creek [Index No. 11-38-32-(1)] from source to Boone Fork and its tributaries Left Fork Mulberry Creek [Index No. 11-38-32-2], Right Fork Mulberry Creek [Index No. 11-38-32-3], Roaring Creek [Index No. 11-38-32-8] and Clark Branch [Index No. 11-38-32-10] were reclassified from Class C Tr to Class C Tr HQW;
(12) Amos Creek [Index No. 11-38-32-4] and Mills Creek [Index No. 11-38-32-5] and their named tributaries were reclassified from Class C to Class C HQW;
(13) Cane Branch [Index No. 11-38-32-6], Rush Branch [11-38-32-7] and Frankum Creek [11-38-32-9] and its named tributaries were reclassified from Class C to Class C HQW;
(14) Mulberry Creek [Index No. 11-38-32-(11)] from Boone Branch to Dam at Mulberry Beach was reclassified from Class B to Class B HQW;
(15) Boone Branch (Fork) [Index No. 11-38-32-12] and its named tributaries from source to Mulberry Creek were reclassified from Class B to Class B HQW;
(16) Brown Branch [Index No. 11-38-32-13] and Moore Branch [Index No. 11-38-32-14] were reclassified from Class B to Class B HQW; and
(17) Anderson Creek [Index No. 11-38-32-16] was reclassified from Class C to Class C HQW.

(n) The Catawba River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(o) The Catawba River Basin Classification Schedule was amended effective April 1, 1994 as follows:
(1) Friday Lake (Index No. 11-125.5) from its source to Little Paw Creek was reclassified from Class C to Class B; and
(2) The Linville River [Index No. 12-29-(1)] from Grandmother Creek to Linville Falls was reclassified from Class C Tr to Class B Tr.

(p) The Catawba River Basin Classification Schedule was amended effective July 1, 1995 with the reclassification of Clark Creek from a point 0.6 mile downstream of Catawba County SR 2014 to 0.4 mile upstream of Larkard Creek [Index No. 11-129-5-(4.5)], and Howards Creek from its source to 0.7 mile upstream of Lincoln County State Road 1200 [Index No. 11-129-4], including associated tributaries from Class WS-IV to Classes C and WS-IV.

(q) The Catawba River Basin Classification Schedule was amended effective September 1, 1996 as follows:
(1) North Fork Catawba River [Index No. 11-24-(1)] from Laurel Branch to Armstrong Creek from Class C Tr to Class B Tr; and
(2) Catawba River (Lake Hickory) from Rhodhiss dam to highway 321 [Index No. 11-(51)] from Class WS-IV CA to Class WS-IV B CA.

(r) The Catawba River Basin Classification Schedule was amended effective August 1, 1998 as follows:
(1) The primary classification for portions of South Fork Catawba River [Index No. 11-129-(0.5)] and Hoyle Creek [Index No. 11-129-15-(1)] was reclassified from Class WS-IV to Class WS-V;
(2) Mill Creek [Index No. 11-7] from its source to Swannanoa Creek, including all tributaries, from Class C Tr to Class Tr HQW;
(3) Toms Creek [Index Nos. 11-21-(1) and 11-21-(2)] from its source to Harris Creek, including all tributaries were reclassified from Class C Tr to Class Tr HQW; and

(4) Harris Creek to McDowell County SR 1434, including all tributaries were reclassified from Class C to Class HQW.

(s) The Catawba River Basin Classification Schedule was amended effective April 1, 1999 as follows:

(1) Portion of the Catawba River [Index Nos. 11-(27.5) and 11-(31)] from Class WS-IV B and WS-IV to Class WS-V B and WS-V;

(2) Armstrong Creek [Index Nos. 11-24-14-(1), 11-24-14-(13.5) and 11-24-14-(14)], and all tributaries from Classes WS-II Tr, WS-II, WS-II CA and C Tr to Classes C Tr HQW and C HQW;

(3) Lookout Shoals Lake from Oxford Dam to Island Creek [Index No. 11-(67)] from Class WS-V to Class WS-IV CA, from Island Creek to Elk Shoal Creek [Index No. 11-(70.5)] from Class WS-IV to Class WS-IV CA and from Elk Shoal Creek to a point one half mile upstream of Lookout Shoals Dam [Index No. 11-(72)] from Class WS-IV B to Class WS-IV B CA;

(4) The classifications of tributary streams that are within five miles and draining to the normal pool elevation of Lookout Shoals Lake (Protected Area) have been revised to Class WS-IV; and

(5) The classifications of tributary streams that are within one half mile and draining to the normal pool elevation of Lookout Shoals Lake (Critical Area) have been revised to Class WS-IV CA.

(t) The Catawba River Basin Classification Schedule was amended August 1, 2000 with the reclassification of Little Grassy Creek (Index No. 11-29-2), including all tributaries, from its source to the Linville River from Class C Tr to Class C Tr ORW.

(u) The Catawba River Basin Classification Schedule was amended August 1, 2004 with the reclassification of a segment of three surface waters, more specifically Henry Fork [11-129-1-(1)], Jerry Branch [11-129-1-3-(1)], and He Creek [11-129-1-4-(1)], from source to a formerly used City of Morganton Water Intake from Class WS-I ORW to Class WS-V ORW.

(v) The Catawba River Basin Classification Schedule was amended May 1, 2007 with the reclassification of the Catawba River [Index No. 11-(31.5)] from a point 0.6 mile upstream of Muddy Creek to a point 1.2 miles upstream of Canoe Creek from WS-IV to WS-IV Tr and Catawba River [Index No. 11-(32.3)] from a point 1.2 miles upstream of Canoe Creek to a point 0.7 mile upstream of Canoe Creek (Morganton water supply intake) from WS-IV CA to WS-IV Tr CA. Named and unnamed tributaries to this portion of the Catawba River are not classified as Trout. Between the last day of May and the first day of November the water quality standard for dissolved oxygen shall not be less than a daily average of 5.0 mg/l with a minimum instantaneous value of not less than 4.0 mg/l.

(w) The Catawba River Basin Classification Schedule was amended September 1, 2010 with the reclassification of the portion of the Catawba River [Index No. 11-(1)], from its source to the Left Prong Catawba River confluence, and its named tributaries, Chestnut Branch (Fork) [Index No. 11-2], Clover Patch Branch [Index No. 11-3], Youngs Fork Creek [Index No. 11-4], Spring Branch [Index No. 11-5], and Left Prong Catawba River [Index No. 11-6] from Class C Tr to Class C Tr HQW.

(x) The Catawba River Basin Classification Schedule was amended March 1, 2013 as follows:

(1) the portion of Maiden Creek [Index No. 11-129-5-7-2-(1)] from source to a point 0.7 mile upstream from backwaters of Maiden Reservoir, and its named tributary, Bee Branch [Index No. 11-129-5-7-2-2], from Class WS-II HQW to WS-V;

(2) the portion of Maiden Creek [Index No. 11-129-5-7-2-(2.5)] from a point 0.7 mile upstream from backwaters of Maiden Reservoir to dam at Maiden Reservoir from Class WS-II HQW CA to WS-V;

(3) the portion of Allen Creek [Index No. 11-129-5-7-2-4-(1)] from source to a point 0.7 mile upstream of Maiden water supply intake from Class WS-II HQW to WS-V; and

(4) the portion of Allen Creek [Index No. 11-129-5-7-2-4-(2)] from a point 0.7 mile upstream of Maiden water supply intake to Maiden water supply intake from Class WS-II HQW CA to WS-V.

(y) The Catawba River Basin Classification Schedule was amended July 1, 2017 as follows:

(1) a portion of the Catawba River [Index No. 11-(23)], including tributaries, from Bridgewater Dam to North Fork Catawba River from Class WS-V & B to Class WS-IV CA & B, and a portion of the Catawba River [part of Index No. 11-(8)], including tributaries, from North Fork Catawba River to a point 0.7 mile downstream of SR 1501 from Class C to Class WS-IV CA. The CA extends 0.5 mile from and draining to the normal pool elevation of Lake James.

(2) a portion of the Catawba River [part of Index No. 11-(8)], including tributaries, from a point 0.7 mile downstream of SR 1501 to a point 0.2 mile upstream of SR 1221 from Class C to Class WS-IV. The PA extends 5.0 miles from and draining to the normal pool elevation of Lake James.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*

Eff. February 1, 1976;
Amended Eff. July 1, 2017; March 1, 2013; December 1, 2010; September 1, 2010; May 1, 2007; August 1, 2004; August 1, 2000; April 1, 1999; August 1, 1998; September 1, 1996; July 1, 1995; April 1, 1994; August 3, 1992; August 1, 1990;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0309 YADKIN-PEE DEE RIVER BASIN

(a) Classifications assigned to the waters within the Yadkin-Pee Dee River Basin are set forth in the Yadkin River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and

(2) the following offices of the North Carolina Department of Environmental Quality:

(A) Mooresville Regional Office
610 East Center Avenue, Suite 301
Mooresville, North Carolina;

(B) Winston-Salem Regional Office
450 West Hanes Mill Road
Winston-Salem, North Carolina;

(C) Fayetteville Regional Office
225 Green Street
Systel Building Suite 714
Fayetteville, North Carolina;

(D) Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina; and

(E) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering Virginia are classified "C," and such streams entering South Carolina are classified "C".

(c) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective:

(1) February 12, 1979;
(2) March 1, 1983;
(3) August 1, 1985;
(4) February 1, 1986;
(5) October 1, 1988;
(6) March 1, 1989;
(7) January 1, 1990;
(8) August 1, 1990;
(9) January 1, 1992;
(10) April 1, 1992;
(11) August 3, 1992;
(12) December 1, 1992;
(13) April 1, 1993;
(14) September 1, 1994;
(15) August 1, 1995;
(16) August 1, 1998;
(17) April 1, 1999;
(18) July 1, 2006;
(19) September 1, 2006;
(20) November 1, 2007.

(d) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective October 1, 1988 as follows:

(1) Mitchell River [Index No. 12-62-(1)] from source to mouth of Christian Creek (North Fork Mitchell River) including all tributaries has been reclassified from Class B Tr to Class B Tr ORW.

(2) Mitchell River [Index No. 12-62-(7)] from mouth of Christian Creek (North Fork Mitchell River) to Surry County SR 1315 including all tributaries has been classified from Class C Tr to C Tr ORW, except Christian Creek and Robertson Creek which will be reclassified from Class B Tr to Class B Tr ORW.

(3) Mitchell River [Index No. 12-62-(12)] from Surry County SR 1315 to mouth of South Fork Mitchell River including all tributaries from Class C to Class C ORW.

(e) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective March 1, 1989 as follows: Elk Creek [Index Nos. 12-24-(1) and 12-24-(10)] and all tributary waters were reclassified from Class B-trout, Class C-trout and Class B to Class B-trout ORW, Class C-trout ORW and Class B ORW.

(f) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective January 1, 1990 as follows: Barnes Creek (Index No. 13-2-18) was reclassified from Class C to Class C ORW.

(g) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective January 1, 1992 as follows:

(1) Little River [Index Nos. 13-25-(10) and 13-25-(19)] from Suggs Creek to Densons Creek has been reclassified from Classes WS-III and C to Classes WS-III HQW and C HQW.

(2) Densons Creek [Index No. 13-25-20-(1)] from its source to Troy's Water Supply Intake including all tributaries has been reclassified from Class WS-III to Class WS-III HQW.

(3) Bridgers Creek (Index No. 13-25-24) from its source to the Little River has been reclassified from Class C to Class C HQW.

(h) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective April 1, 1992 with the reclassification of the North Prong South Fork Mitchell River from Class C to Class C Trout.

(i) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(j) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective December 1, 1992 as follows:

(1) Pike Creek (Index No. 12-46-1-2) was reclassified from Class C Tr to Class C Tr HQW;

(2) Basin Creek (Index No. 12-46-2-2) was reclassified from Class C Tr to Class C Tr ORW;

(3) Bullhead Creek (Index No. 12-46-4-2) was reclassified from Class C Tr to Class C Tr ORW;

(4) Rich Mountain Creek (Index No. 12-46-4-2-2) was reclassified from Class Tr to Class C Tr ORW; and

(5) Widows Creek (Index No. 12-46-4-4) was reclassified from Class C Tr HQW to Class C Tr ORW.

(k) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective September 1, 1994 as follows:

(1) Lanes Creek [Index Nos. 13-17-40-(1) and 13-17-40-(10.5)] from its source to the Marshville water supply dam including tributaries was reclassified from Classes WS-II and WS-II CA to Class WS-V.

(2) The South Yadkin River [Index Nos. 12-108-(9.7) and 12-108-(15.5)] from Iredell County SR 1892 to a point 0.7 mile upstream of the mouth of Hunting Creek including associated tributaries was reclassified from Classes WS-V, C and WS-IV to Classes WS-V, WS-IV, C and WS-IV CA.

(3) The Yadkin River [Index Nos. 12-(53) and 12-(71)] from a point 0.3 mile upstream of the mouth of Elkin Creek (River) to the Town of King water supply intake including associated tributaries was reclassified from Classes C and WS-IV to Classes WS-IV and WS-IV CA.

(4) The Yadkin River [Index Nos. 12-(80.5), 12-(81.5) and 12-(84.5)] from the Town of King water supply intake to the Davie County water supply intake reclassified from Classes C, B, WS-IV and WS-V to Classes WS-IV, WS-IV B and WS-IV CA.

(l) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective August 1, 1995 as follows: Bear Creek [Index Nos. 12-108-18-(3), 12-108-18-(3.3)], Little Bear Creek (Index No. 12-108-18-2), and Blue Branch (Index No. 12-108-18-2-1) were reclassified from WS-II and WS-II CA (Critical Area) to C and WS-IV.

(m) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective August 1, 1998 with the revision to the primary classification for portions of the Yadkin River [Index No. 12-(45)] from Class WS-IV to WS-V, Yadkin River [Index No. 12-(67.5)] from Class WS-IV to Class C, Yadkin River [Index Nos. 12-(93.5) and 12-(98.5)] from Class WS-IV to Class WS-V, South Yadkin River [Index No. 12-108-(12.5)] from Class WS-IV to Class WS-V, and South Yadkin River [Index Nos. 12-108-(19.5) and 12-108-(22)] from Class WS-IV to Class C.

(n) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective April 1, 1999 with the reclassification of a portion of the Yadkin River [Index No. 12-(80.5)] from WS-IV CA to WS-IV. A portion of the Yadkin River 0.5 mile upstream of Bashavia Creek was reclassified from WS-IV to WS-IV CA. Bashavia Creek [Index Nos. 12-81-(0.5) and 12-81-(2)] was reclassified from WS-IV and WS-IV CA to Class C. Tributaries to Bashavia Creek were also reclassified to Class C. Portions of the Yadkin River [Index Nos. 12-(25.5) and 12-(27)] were reclassified from WS-IV to Class C and from WS-IV & B to Class B. Tributaries were reclassed from Class WS-IV to Class C. Supplemental classifications were not changed.
(o) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective July 1, 2006 with the reclassification of a portion of the Uwharrie River. More specifically, Index No. 13-2-(25), Index No. 13-2-(17.5), and a portion of Index No. 13-2-(1.5) was reclassified from Class WS-IV CA, WS-IV, and C, to Class WS-IV B CA, WS-IV B, and B, respectively.
(p) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective September 1, 2006 with the reclassification of a segment of the Yadkin River [portion of Index No. 12-(53)] from a point 0.3 mile upstream of the Town of Elkin proposed water supply intake to the Town of Elkin proposed water supply intake from C to WS-IV CA. The Town of Elkin proposed water supply intake is to be placed on the Yadkin River at a point directly above the mouth of Elkin Creek.
(q) The Yadkin-Pee Dee River Basin Classification Schedule was amended effective November 1, 2007 with the reclassifications as listed below, and the North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of these UWLs.

(1) Black Ankle Bog near Suggs Creek [Index No. 13-25-12] was reclassified to Class WL UWL.
(2) Pilot Mountain Floodplain Pool near Horne Creek [Index No. 12-75] was reclassified to Class WL UWL.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. November 1, 2007; September 1, 2006; July 1, 2006; April 1, 1999; August 1, 1998; August 1, 1995; September 1, 1994; April 1, 1993; December 1, 1992;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0310 LUMBER RIVER BASIN

(a) Classifications assigned to the waters within the Lumber River Basin are set forth in the Lumber River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
  (A) Fayetteville Regional Office
  225 Green Street
  Systel Building Suite 714
  Fayetteville, North Carolina;
  (B) Wilmington Regional Office
  127 Cardinal Drive Extension
  Wilmington, North Carolina; and
  (C) Division of Water Resources
  Central Office
  512 North Salisbury Street
  Raleigh, North Carolina.

(b) Unnamed streams entering South Carolina are classified "C Sw".
(c) The Lumber River Basin Classification Schedule was amended effective:

(1) March 1, 1977;
(2) December 13, 1979;
(3) September 14, 1980;
(4) April 12, 1981;
(5) April 1, 1982;
(6) February 1, 1986;
(7) July 1, 1990;
(8) August 1, 1990;

(9) August 3, 1992;
(10) September 1, 1996;
(11) August 1, 2000;
(12) November 1, 2007.

(d) The Lumber River Basin Classification Schedule was amended effective July 1, 1990 by the reclassification of Naked Creek (Index No. 14-2-6) from source to Drowning Creek including all tributaries from Class WS-III to Class WS-III ORW.

(e) The Lumber River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(f) The Lumber River Basin Classification Schedule was amended effective September 1, 1996 by the reclassification of the Lumber River from 2.0 miles upstream of highway 401 to a point 0.5 mile upstream of Powell Branch [Index Nos. 14-(3), 14-(4), 14-(4.5), 14-(7) and 14-(10.3)] from Classes WS-IV Sw HQW, WS-IV Sw HQW CA and C Sw HQW to Classes WS-IV B Sw HQW, WS-IV B Sw HQW CA and B Sw HQW.

(g) The Lumber River Basin Classification Schedule was amended effective August 1, 2000 with the reclassification of Lake Waccamaw [Index No. 15-2] from Class B Sw to Class B Sw ORW.

(h) The Lumber River Basin Classification Schedule was amended effective November 1, 2007 with the reclassifications listed below, and the North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of these UWLs:

(1) Waccamaw Natural Lake Shoreline near Lake Waccamaw [Index No. 15-2] was reclassified to Class WL UWL.
(2) Green Swamp Small Depression Pond near Royal Oak Swamp [Index No. 15-25-1-12] was reclassified to Class WL UWL.
(3) Old Dock Savanna near Gum Swamp Run [Index No. 15-6] was reclassified to Class WL UWL.
(4) Myrtle Head Savanna near Mill Branch [Index No. 15-7-7] was reclassified to Class WL UWL.
(5) Goosepond Bay near Big Marsh Swamp [Index No. 14-22-2] was reclassified to Class WL UWL.
(6) Antioch Bay near Raft Swamp [Index No. 14-10-(1)] was reclassified to Class WL UWL.
(7) Pretty Pond Bay near Big Marsh Swamp [Index No. 14-22-2] was reclassified to Class WL UWL.
(8) Dunahoe Bay near Big Marsh Swamp [Index No. 14-22-2] was reclassified to Class WL UWL.
(9) Hamby's Bay near Raft Swamp [Index No. 14-10-(1)] was reclassified to Class WL UWL.
(10) Oak Savanna Bay near Smith Branch [Index No. 14-10-3] was reclassified to Class WL UWL.
(11) Big Island Savanna near Driving Creek [Index No. 15-7-1] was reclassified to Class WL UWL.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. November 1, 2007; August 1, 2000; September 1, 1996; August 3, 1992; August 1, 1990; July 1, 1990; February 1, 1986;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0311 CAPE FEAR RIVER BASIN

(a) Classifications assigned to the waters within the Cape Fear River Basin are set forth in the Cape Fear River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
(A) Winston-Salem Regional Office
450 West Hanes Mill Road
Winston-Salem, North Carolina;
(B) Fayetteville Regional Office
225 Green Street
Systel Building Suite 714

Fayetteville, North Carolina;

(C) Raleigh Regional Office
3800 Barrett Drive
Raleigh, North Carolina;

(D) Washington Regional Office
943 Washington Square Mall
Washington, North Carolina;

(E) Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, North Carolina; and

(F) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) The Cape Fear River Basin Classification Schedule was amended effective:

(1) March 1, 1977;
(2) December 13, 1979;
(3) December 14, 1980;
(4) August 9, 1981;
(5) April 1, 1982;
(6) December 1, 1983;
(7) January 1, 1985;
(8) August 1, 1985;
(9) December 1, 1985;
(10) February 1, 1986;
(11) July 1, 1987;
(12) October 1, 1987;
(13) March 1, 1988;
(14) August 1, 1990.

(c) The Cape Fear River Basin Classification Schedule was amended effective June 1, 1988 as follows:

(1) Cane Creek [Index No. 16-21-(1)] from source to a point 0.5 mile north of N.C. Hwy. 54 (Cane Reservoir Dam) including the Cane Creek Reservoir and all tributaries has been reclassified from Class WS-III to WS-I.

(2) Morgan Creek [Index No. 16-41-1-(1)] to the University Lake dam including University Lake and all tributaries has been reclassified from Class WS-III to WS-I.

(d) The Cape Fear River Basin Classification Schedule was amended effective July 1, 1988 by the reclassification of Crane Creek (Crains Creek) [Index No. 18-23-16-(1)] from source to mouth of Beaver Creek including all tributaries from C to WS-III.

(e) The Cape Fear River Basin Classification Schedule was amended effective January 1, 1990 as follows:

(1) Intracoastal Waterway (Index No. 18-87) from southern edge of White Oak River Basin to western end of Permuda Island (a line from Morris Landing to Atlantic Ocean), from the eastern mouth of Old Topsail Creek to the southwestern shore of Howe Creek and from the southwest mouth of Shinn Creek to channel marker No. 153 including all tributaries except the King Creek Restricted Area, Hardison Creek, Old Topsail Creek, Mill Creek, Futch Creek and Pages Creek were reclassified from Class SA to Class SA ORW.

(2) Topsail Sound and Middle Sound ORW Area which includes all waters between the Barrier Islands and the Intracoastal Waterway located between a line running from the western most shore of Mason Inlet to the southwestern shore of Howe Creek and a line running from the western shore of New Topsail Inlet to the eastern mouth of Old Topsail Creek was reclassified from Class SA to Class SA ORW.

(3) Masonboro Sound ORW Area which includes all waters between the Barrier Islands and the mainland from a line running from the southwest mouth of Shinn Creek at the Intracoastal Waterway to the southern shore of Masonboro Inlet and a line running from the Intracoastal Waterway Channel marker No. 153 to the southside of the Carolina Beach Inlet was reclassified from Class SA to Class SA ORW.

(f) The Cape Fear River Basin Classification Schedule was amended effective January 1, 1990 as follows: Big Alamance Creek [Index No. 16-19-(1)] from source to Lake Mackintosh Dam including all tributaries has been reclassified from Class WS-III NSW to Class WS-II NSW.

(g) The Cape Fear River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(h) The Cape Fear River Basin Classification Schedule was amended effective June 1, 1994 as follows:

(1) The Black River from its source to the Cape Fear River [Index Nos. 18-68-(0.5), 18-68-(3.5) and 18-65-(11.5)] was reclassified from Classes C Sw and C Sw HQW to Class C Sw ORW.

(2) The South River from Big Swamp to the Black River [Index Nos. 18-68-12-(0.5) and 18-68-12(11.5)] was reclassified from Classes C Sw and C Sw HQW to Class C Sw ORW.

(3) Six Runs Creek from Quewhiffle Swamp to the Black River [Index No. 18-68-2] was reclassified from Class C Sw to Class C Sw ORW.

(i) The Cape Fear River Basin Classification Schedule was amended effective September 1, 1994 with the reclassification of the Deep River [Index No. 17-(36.5)] from the Town of Gulf-Goldston water supply intake to US highway 421 including associated tributaries from Class C to Classes C, WS-IV and WS-IV CA.

(j) The Cape Fear River Basin Classification Schedule was amended effective August 1, 1998 with the revision to the primary classification for portions of the Deep River [Index No. 17-(28.5)] from Class WS-IV to Class WS-V, Deep River [Index No. 17-(41.5)] from Class WS-IV to Class C, and the Cape Fear River [Index 18-(10.5)] from Class WS-IV to Class WS-V.

(k) The Cape Fear River Basin Classification Schedule was amended effective April 1, 1999 with the reclassification of Buckhorn Creek (Harris Lake)[Index No. 18-7-(3)] from the backwaters of Harris Lake to the Dam at Harris Lake from Class C to Class WS-V.

(l) The Cape Fear River Basin Classification Schedule was amended effective April 1, 1999 with the reclassification of the Deep River [Index No. 17-(4)] from the dam at Oakdale-Cotton Mills, Inc. to the dam at Randleman Reservoir (located 1.6 mile upstream of U.S. Hwy 220 Business), and including tributaries from Class C and Class B to Class WS-IV and Class WS-IV & B. Streams within the Randleman Reservoir Critical Area have been reclassified to WS-IV CA. The Critical Area for a WS-IV reservoir is defined as 0.5 mile and draining to the normal pool elevation of the reservoir. All waters within the Randleman Reservoir Water Supply Watershed are within a designated Critical Water Supply Watershed and are subject to a special management strategy specified in Rule .0248 of this Subchapter.

(m) The Cape Fear River Basin Classification Schedule was amended effective August 1, 2002 as follows:

(1) Mill Creek [Index Nos. 18-23-11-(1), 18-23-11-(2), 18-23-11-3, 18-23-11-(5)] from its source to the Little River, including all tributaries was reclassified from Class WS-III NSW and Class WS-III B NSW to Class WS-III NSW HQW@ and Class WS-III B NSW HQW@.

(2) McDeed's Creek [Index Nos. 18-23-11-4, 18-23-11-4-1] from its source to Mill Creek, including all tributaries was reclassified from Class WS III NSW and Class WS-III B NSW to Class WS-III NSW HQW@ and Class WS-III B NSW HQW@.

The "@" symbol as used in this Paragraph means that if the governing municipality has deemed that a development is covered under a "5/70 provision" as described in Rule .0215(3)(b)(i)(E) of this Subchapter, then that development is not subject to the stormwater requirements as described in 15A NCAC 02H .1006.

(n) The Cape Fear River Basin Classification Schedule was amended effective November 1, 2004 as follows:

(1) the portion of Rocky River [Index Number 17-43-(1)] from a point 0.3 mile upstream of Town of Siler City upper reservoir dam to a point 0.3 mile downstream of Lacy Creek from WS-III to WS-III CA.

(2) the portion of Rocky River [Index Number 17-43-(8)] from dam at lower water supply reservoir for Town of Siler City to a point 65 feet below dam (site of proposed dam) from C to WS-III CA.

(3) the portion of Mud Lick Creek (Index No. 17-43-6) from a point 0.4 mile upstream of Chatham County SR 1355 to Town of Siler City lower water supply reservoir from WS-III to WS-III CA.

(4) the portion of Lacy Creek (17-43-7) from a point 0.6 mile downstream of Chatham County SR 1362 to Town of Siler City lower water supply reservoir from WS-III to WS-III CA.

(o) The Cape Fear River Basin Classification Schedule was amended effective November 1, 2007 with the reclassifications listed below, and the North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of these UWLs.

(1) Military Ocean Terminal Sunny Point Pools, all on the eastern shore of the Cape Fear River [Index No. 18-(71)] were reclassified to Class WL UWL.
(2) Salters Lake Bay near Salters Lake [Index No. 18-44-4] was reclassified to Class WL UWL.
(3) Jones Lake Bay near Jones Lake [Index No. 18-46-7-1] was reclassified to Class WL UWL.
(4) Weymouth Woods Sandhill Seep near Mill Creek [18-23-11-(1)] was reclassified to Class UWL.
(5) Fly Trap Savanna near Cape Fear River [Index No. 18-(71)] was reclassified to Class WL UWL.
(6) Lily Pond near Cape Fear River [Index No. 18-(71)] was reclassified to Class WL UWL.
(7) Grassy Pond near Cape Fear River [Index No. 18-(71)] was reclassified to Class WL UWL.
(8) The Neck Savanna near Sandy Run Swamp [Index No. 18-74-33-2] was reclassified to Class WL UWL.
(9) Bower's Bog near Mill Creek [Index No. 18-23-11-(1)] was reclassified to Class WL UWL.
(10) Bushy Lake near Turnbull Creek [Index No. 18-46] was reclassified to Class WL UWL.

(p) The Cape Fear River Basin Classification Schedule was amended effective January 1, 2009 as follows:

(1) the portion of Cape Fear River [Index No. 18-(26)] (including tributaries) from Smithfield Packing Company's intake, located approximately 2 miles upstream of County Road 1316, to a point 0.5 miles upstream of Smithfield Packing Company's intake from Class C to Class WS-IV CA.
(2) the portion of Cape Fear River [Index No.18-(26)] (including tributaries) from a point 0.5 miles upstream of Smithfield Packing Company's intake to a point 1 mile upstream of Grays Creek from Class C to Class WS-IV.

(q) The Cape Fear River Basin Classification Schedule was amended effective August 11, 2009 with the reclassification of all Class C NSW waters and all Class B NSW waters upstream of the dam at B. Everett Jordan Reservoir from Class C NSW and Class B NSW to Class WS-V NSW and Class WS-V & B NSW, respectively. All waters within the B. Everett Jordan Reservoir Watershed are within a designated Critical Water Supply Watershed and are subject to a special management strategy specified in Rules .0262 through .0273 of this Subchapter.

(r) The Cape Fear River Basin Classification Schedule was amended effective September 1, 2009 with the reclassification of a portion of the Haw River [Index No. 16-(28.5)] from the Town of Pittsboro water supply intake, which is located approximately 0.15 mile west of U.S. 15/501, to a point 0.5 mile upstream of the Town of Pittsboro water supply intake from Class WS-IV to Class WS-IV CA.

(s) The Cape Fear River Basin Classification Schedule was amended effective March 1, 2012 with the reclassification of the portion of the Haw River [Index No. 16-(1)] from the City of Greensboro's intake, located approximately 650 feet upstream of Guilford County 2712, to a point 0.5 miles upstream of the intake from Class WS-V NSW to Class WS-IV CA NSW, and the portion of the Haw River [Index No. 16-(1)] from a point 0.5 miles upstream of the intake to a point 0.6 miles downstream of U.S. Route 29 from Class WS-V NSW to Class WS-IV NSW.

(t) The Cape Fear River Basin Classification Schedule was amended effective June 30, 2017 with the reclassification of a section of 18-(71) from upstream mouth of Toomers Creek to a line across the river between Lilliput Creek and Snows Cut from Class SC to Class SC Sw. A site-specific management strategy is outlined in 15A NCAC 02B .0227.

(u) The Cape Fear River Basin Classification Schedule was amended effective September 1, 2019 with the reclassification of a portion of Sandy Creek [Index No. 17-16-(1)] (including tributaries) from a point 0.4 mile upstream of SR-2481 to a point 0.6 mile upstream of N.C. Hwy 22 from WS-III to WS-III CA. The reclassification resulted in an updated representation of the water supply watershed for the Sandy Creek reservoir.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. June 30, 2017; March 1, 2012; September 1, 2009; August 11, 2009; January 1, 2009; November 1, 2007; November 1, 2004; August 1, 2002; April 1, 1999; August 1, 1998; September 1, 1994; June 1, 1994; August 3, 1992; August 1, 1990;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0312 WHITE OAK RIVER BASIN

(a) Classifications assigned to the waters within the White Oak River Basin are set forth in the White Oak River Basin Classification Schedule, which may be inspected in the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and

(2) the following offices of the North Carolina Department of Environmental Quality:

(A) Washington Regional Office
943 Washington Square Mall
Washington, North Carolina;

(B) Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, North Carolina; and

(C) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) The White Oak River Basin Classification Schedule was amended effective:

(1) December 13, 1979 see Paragraph (c);
(2) June 1, 1988 see Paragraph (d);
(3) January 1, 1990 see Paragraph (e);
(4) August 1, 1990 see Paragraph (f);
(5) August 1, 1991 see Paragraph (g);
(6) June 1, 1992 see Paragraph (h);
(7) December 1, 1992 see Paragraph (i);
(8) November 1, 2007 see Paragraph (j);
(9) July 1, 2011 see Paragraph (k).

(c) The White Oak River Basin Classification Schedule was amended effective December 13, 1979 with the reclassification of a portion of the White Oak River Restricted Area (Index No. 20-32) and a portion of the Newport River (Morehead City and Beaufort Harbors Restricted Area) [Index No. 21-(31)] from Class SC to Class SA.

(d) The White Oak River Basin Classification Schedule was amended effective June 1, 1988 with the reclassification of unnamed waters as follows:

(1) a portion of the Roosevelt Natural Area Swamp, which drains to Bogue Sound (20-36), from Class SA to Class C Sw ORW.
(2) another portion of the Roosevelt Natural Area Swamp, which drains to Bogue Sound (20-36), from Class SA to Class SA Sw ORW.

(e) The White Oak River Basin Classification Schedule was amended effective January 1, 1990 as follows:

(1) Intracoastal Waterway (Index No. 19-39) from northeastern boundary of Cape Fear River Basin to Daybeacon No. 17 including all unnamed bays, guts, and channels, except Rogers Bay and Mill Creek and Intracoastal Waterway (Index No. 19-41) from the northeast mouth of Goose Creek to the southwest mouth of Queen Creek were reclassified from Class SA to Class SA ORW.
(2) Bear Island ORW Area, which includes all waters within an area north of Bear Island defined by a line from the western most point on Bear Island to the northeast mouth of Goose Creek on the mainland, east to the southwest mouth of Queen Creek, then south to green marker No. 49, then northeast to the northern most point on Huggins Island, then southeast along the shoreline of Huggins Island to the southeastern most point of Huggins Island, then south to the northeastern most point on Dudley Island, then southwest along the shoreline of Dudley Island to the eastern tip of Bear Island to the western mouth of Foster Creek including Cow Channel were reclassified from Class SA to Class SA ORW.
(3) Bogue Sound (including Intracoastal Waterway from White Oak River Basin to Beaufort Inlet)(Index No. 20-36) from Bogue Inlet to a line across Bogue Sound from the southwest side of mouth of Gales Creek to Rock Point and all tributaries except Hunting Island Creek, Goose Creek, and Broad Creek were reclassified from Class SA to Class SA ORW.
(4) Core Sound (Index No. 21-35-7) from northern boundary of White Oak River Basin (a line from Hall Point to Drum Inlet) to Back Sound and all tributaries except Atlantic Harbor Restricted Area, Nelson Bay, Jarrett Bay, Williston Creek, Wade Creek and Middens Creek were reclassified from Class SA to Class SA ORW.
(5) Back Sound (Index No. 21-35) from a point on Shackleford Banks at lat. 34 degrees 40' 57" and long 76 degrees 37' 30" north to the western most point of Middle Marshes and along the northwest shoreline of Middle Marshes (to include all of Middle Marshes) to Rush Point on Harkers Island and along the southern shore of Harkers Island back to Core Sound and all tributaries were reclassified from Class SA to Class SA ORW.

(f) The White Oak River Basin Classification Schedule was amended effective August 1, 1990 with the reclassification of a portion of the White Oak River [Index No. 20-(1)] from Spring Branch to Hunters Creek from Class C to Class C HQW.
(g) The White Oak River Basin Classification Schedule was amended effective August 1, 1991 by adding the supplemental classification NSW (Nutrient Sensitive Waters) to all waters in the New River Drainage Area above a line running across the New River from Grey Point to a point of land approximately 2,200 yards downstream of the mouth of Duck Creek.
(h) The White Oak River Basin Classification Schedule was amended effective June 1, 1992 with the reclassification of Peletier Creek (Index No. 20-36-11) from its source to Bogue Sound from Class SA to Class SB with the requirement that no discharges be allowed.
(i) The White Oak River Basin Classification Schedule was amended effective December 1, 1992 with the reclassification of the Atlantic Harbor Restricted Area (Index No. 21-35-7-2) from Class SC to Class SA ORW.
(j) The White Oak River Basin Classification Schedule was amended effective November 1, 2007 with the reclassifications listed below, and the North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of these UWLs:

(1) Theodore Roosevelt Maritime Swamp Forest near Roosevelt Natural Area Swamp [Index No. 20-36-9.5-(1)] was reclassified to Class WL UWL.
(2) Bear Island Maritime Wet Grassland near the Atlantic Ocean [Index No. 99-(4)] was reclassified to Class WL UWL.

(k) The White Oak River Basin Classification Schedule was amended effective July 1, 2011 with the reclassification of a portion of Southwest Creek [Index No. 19-17-(0.5)] from a point approximately 0.5 mile upstream of Mill Run to Mill Run from Class C NSW to Class SC NSW, and another portion of Southwest Creek [Index No. 19-17-(6.5)] from Mill Run to New River from Class C HQW NSW to Class SC HQW NSW.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. July 1, 2011; November 1, 2007; December 1, 1992; June 1, 1992; August 1, 1991; August 1, 1990;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0313 ROANOKE RIVER BASIN
(a) Classifications assigned to the waters within the Roanoke River Basin are set forth in the Roanoke River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
(A) Raleigh Regional Office
3800 Barrett Drive
Raleigh, Carolina;
(B) Washington Regional Office
943 Washington Square Mall
Washington, Carolina;
(C) Winston-Salem Regional Office
450 West Hanes Mill Road
North Carolina; and
(D) Division of Water Resources
Regional Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering Virginia are classified "C", except that all backwaters of John H. Kerr Reservoir and the North Carolina portion of streams tributary thereto not otherwise named or described shall carry the classification "B," and all backwaters of Lake Gaston and the North Carolina portion of streams tributary thereto not otherwise named or described shall carry the classification "C and B".
(c) The Roanoke River Basin Classification Schedule was amended effective:

(1) May 18, 1977;
(2) July 9, 1978;

(3) July 18, 1979;
(4) July 13, 1980;
(5) March 1, 1983;
(6) August 1, 1985;
(7) February 1, 1986.

(d) The Roanoke River Basin Classification Schedule was amended effective July 1, 1991 with the reclassification of Hyco Lake (Index No. 22-58) from Class C to Class B.

(e) The Roanoke River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(f) The Roanoke River Basin Classification Schedule was amended effective August 1, 1998 with the reclassification of Cascade Creek (Camp Creek) [Index No. 22-12] and its tributaries from its source to the backwaters at the swimming lake from Class B to Class B ORW, and reclassification of Indian Creek [index No. 22-13] and its tributaries from its source to Window Falls from Class C to Class C ORW.

(g) The Roanoke River Basin Classification Schedule was amended effective August 1, 1998 with the reclassification of Dan River and Mayo River WS-IV Protected Areas. The Protected Areas were reduced in size.

(h) The Roanoke River Basin Classification Schedule was amended effective April 1, 1999 as follows:

(1) Hyco River, including Hyco Lake below elevation 410 [Index No. 22-58-(0.5)] was reclassified from Class B to Class WS-V B.
(2) Mayo Creek (Maho Creek)(Mayo Reservoir) [Index No. 22-58-15] was reclassified from its source to the dam of Mayo Reservoir from Class C to Class WS-V.

(i) The Roanoke River Basin Classification Schedule was amended effective April 1, 2001 as follows:

(1) Fullers Creek from source to a point 0.8 mile upstream of Yanceyville water supply dam [Index No. 22-56-4-(1)] was reclassified from Class WS-II to Class WS-III.
(2) Fullers Creek from a point 0.8 mile upstream of Yanceyville water supply dam to Yanceyville water supply dam [Index No. 22-56-4-(2)] was reclassified from Class WS-II CA to Class WS-III CA.

(j) The Roanoke River Basin Classification Schedule was amended effective November 1, 2007 with the reclassification of Hanging Rock Hillside Seepage Bog near Cascade Creek [Index No. 22-12-(2)] to Class WL UWL. The Division of Water Resources maintains a Geographic Information Systems data layer of the UWL.

(k) The Roanoke River Basin Classification Schedule was amended effective July 3, 2012 as follows:

(1) a portion of the Dan River [Index No. 22-(39)] (including tributaries) from the City of Roxboro's intake, located approximately 0.7 mile upstream of NC Highway 62, to a point approximately 0.5 mile upstream of the City of Roxboro's intake from Class C to Class WS-IV CA.
(2) a portion of the Dan River [Index No. 22-(39)] (including tributaries) from a point approximately 0.5 mile upstream of the City of Roxboro's intake to the North Carolina-Virginia state line from Class C to Class WS-IV.

(l) The Roanoke River Basin Classification Schedule was amended effective January 1, 2013 as follows:

(1) a portion of the Roanoke River [Index No. 23-(26)] (including tributaries) from the Martin County Regional Water And Sewer Authority's intake, located approximately 0.3 mile upstream of US 13/US 17, to a point approximately 0.5 mile upstream of the Martin County Regional Water And Sewer Authority's intake from Class C to Class WS-IV CA.
(2) a portion of the Roanoke River [Index No. 23-(26)] (including tributaries) from a point approximately 0.5 mile upstream of the Martin County Regional Water And Sewer Authority's intake to a point approximately 1 mile downstream of Coniott Creek (Town Swamp) from Class C to Class WS-IV.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. January 1, 2013; July 3, 2012; November 1, 2007; April 1, 2001; April 1, 1999; August 1, 1998; August 3, 1992; July 1, 1991; February 1, 1986; August 1, 1985;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0314 CHOWAN RIVER BASIN

(a) Classifications assigned to the waters within the Chowan River Basin are set forth in the Chowan River Basin Classification Schedule, which may be inspected in the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and

(2) the following offices of the North Carolina Department of Environmental Quality:

(A) Raleigh Regional Office
3800 Barrett Drive
Raleigh, North Carolina;

(B) Washington Regional Office
943 Washington Square Mall
Washington, North Carolina: and

(C) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) Unnamed streams entering Virginia are classified "C."

(c) All classifications assigned to the waters of the Chowan River Basin are additionally classified as Nutrient Sensitive Waters (NSW) in accordance with the provisions of Rule .0223 of this Subchapter.

(d) The Chowan River Basin Classification Schedule was amended effective August 1, 1985.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. November 1, 1978; March 1, 1977;
Emergency Amendment [(f)] Eff. March 10, 1979, for a period of 120 days to expire on September 7, 1979;
Emergency Amendment [(f)] Made Permanent Eff. September 6, 1979;
Amended Eff. August 1, 1985; January 1, 1985;
Readopted Eff. November 1, 2019;
Amended Eff. June 1, 2020.

15A NCAC 02B .0315 NEUSE RIVER BASIN

(a) Classifications assigned to the waters within the Neuse River Basin are set forth in the Neuse River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and

(2) the following offices of the North Carolina Department of Environmental Quality:

(A) Raleigh Regional Office
3800 Barrett Drive
Raleigh, North Carolina;

(B) Washington Regional Office
943 Washington Square Mall
Washington, North Carolina;

(C) Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, North Carolina; and

(D) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) The Neuse River Basin Classification Schedule was amended effective:

(1) March 1, 1977 see Paragraph (c) of this Rule;

(2) December 13, 1979 see Paragraph (d) of this Rule;

(3) September 14, 1980 see Paragraph (e) of this Rule;

(4) August 9, 1981 see Paragraph (f) of this Rule;

(5) January 1, 1982 see Paragraph (g) of this Rule;
(6) April 1, 1982 see Paragraph (h) of this Rule;
(7) December 1, 1983 see Paragraph (i) of this Rule;
(8) January 1, 1985 see Paragraph (j) of this Rule;
(9) August 1, 1985 see Paragraph (k) of this Rule;
(10) February 1, 1986 see Paragraph (l) of this Rule;
(11) May 1, 1988 see Paragraph (m) of this Rule;
(12) July 1, 1988 see Paragraph (n) of this Rule;
(13) October 1, 1988 see Paragraph (o) of this Rule;
(14) January 1, 1990 see Paragraph (p) of this Rule;
(15) August 1, 1990;
(16) December 1, 1990 see Paragraph (q) of this Rule;
(17) July 1, 1991 see Paragraph (r) of this Rule;
(18) August 3, 1992;
(19) April 1, 1994 see Paragraph (t) of this Rule;
(20) July 1, 1996 see Paragraph (u) of this Rule;
(21) September 1, 1996 see Paragraph (v) of this Rule;
(22) April 1, 1997 see Paragraph (w) of this Rule;
(23) August 1, 1998 see Paragraph (x) of this Rule;
(24) August 1, 2002 see Paragraph (y) of this Rule;
(25) July 1, 2004 see Paragraph (z) of this Rule;
(26) November 1, 2007see Paragraph (aa) of this Rule;
(27) January 15, 2011 see Paragraph (bb) of this Rule; and
(28) July 1, 2012 see Paragraph (cc) of this Rule.

(c) The Neuse River Basin Classification Schedule was amended effective March 1, 1977 with the a total of 179 streams in the Neuse River Basin reclassified from Class D to Class C.

(d) The Neuse River Basin Classification Schedule was amended effective December 13, 1979 as follows: Little River [Index No. 27-57-(21.5)] from source to the dam at Wake Forest Reservoir has been reclassified from Class A-II to Class A-II and B.

(e) The Neuse River Basin Classification Schedule was amended effective September 14, 1980 as follows: The Eno River from Durham County State Road 1003 to U.S Highway 501 [Index No. 27-2-(16)] was reclassified from Class C and B to Class A-II and B.

(f) The Neuse River Basin Classification Schedule was amended effective August 9, 1981 to remove the swamp water designation from all waters designated SA in the Neuse River Basin.

(g) The Neuse River Basin Classification Schedule was amended effective January 1, 1982 as follows: The Trent River from the mouth of Brice Creek to the Neuse River [Index No. 27-101-(39)] was reclassified from Class SC Sw to Class SB Sw.

(h) The Neuse River Basin Classification Schedule was amended effective April 1, 1982 as follows:

(1) Longview Branch from source to Crabtree Creek [Index No. 27-33-(21)] was reclassified from Class C1 to Class C.
(2) Watson Branch from source to Walnut Creek [Index No. 27-34-(8)] was reclassified from Class C1 to Class C.

(i) The Neuse River Basin Classification Schedule was amended effective December 1, 1983 to add the Nutrient Sensitive Waters classification to the entire river basin above Falls dam.

(j) The Neuse River Basin Classification Schedule was amended effective January 1, 1985 as follows: Nobel Canal from source to Swift Creek [Index No. 27-97-(2)] was reclassified from Class C1 to Class C.

(k) The Neuse River Basin Classification Schedule was amended effective August 1, 1985 as follows:

(1) Southeast Prong Beaverdam Creek from source to Beaverdam Creek [Index No. 27-33-15(2)] was reclassified from Class C1 to Class C.
(2) Pigeon House branch from source to Crabtree Creek [Index No. 27-33-(18)] was reclassified from Class C1 to Class C.
(3) Rocky Branch from source to Pullen Road [Index No. 27-34-6-(1)] was reclassified from Class C1 to Class C.
(4) Chavis Branch from source to Watson Branch [Index No. 27-37-8-1] was reclassified from Class C1 to Class C.

(l) The Neuse River Basin Classification Schedule was amended effective February 1, 1986 to reclassify all Class A-I and Class A-II streams in the Neuse River Basin to WS-I and WS-III.
(m) The Neuse River Basin Classification Schedule was amended effective May 1, 1988 to add the Nutrient Sensitive Waters classification to the waters of the Neuse River Basin below the Falls Lake dam.
(n) The Neuse River Basin Classification Schedule was amended effective July 1, 1988 as follows:
(1) Smith Creek [Index No. 27-23-(1)] from source to the dam at Wake Forest Reservoir has been reclassified from Class WS-III to WS-I.
(2) Little River [Index No. 27-57-(1)] from source to the N.C. Hwy. 97 Bridge near Zebulon including all tributaries has been reclassified from Class WS-III to WS-I.
(3) An unnamed tributary to Buffalo Creek just upstream of Robertson's Pond in Wake County from source to Buffalo Creek including Leo's Pond has been reclassified from Class C to B.
(o) The Neuse River Basin Classification Schedule was amended effective October 1, 1988 as follows:
(1) Walnut Creek (Lake Johnson, Lake Raleigh) [Index No. 27-34-(1)]. Lake Johnson and Lake Raleigh have been reclassified from Class WS-III to Class WS-III B.
(2) Haw Creek (Camp Charles Lake)(Index No. 27-86-3-7) from the backwaters of Camp Charles Lake to dam at Camp Charles Lake has been reclassified from Class C to Class B.
(p) The Neuse River Basin Classification Schedule was amended effective January 1, 1990 as follows:
(1) Neuse-Southeast Pamlico Sound ORW Area which includes all waters within a line beginning at the southwest tip of Ocracoke Island, and extending north west along the Tar-Pamlico River Basin and Neuse River Basin boundary line to Lat. 35 degrees 06' 30", thence in a southwest direction to Ship Point and all tributaries, were reclassified from Class SA NSW to Class SA NSW ORW.
(2) Core Sound (Index No. 27-149) from northeastern limit of White Oak River Basin (a line from Hall Point to Drum Inlet) to Pamlico Sound and all tributaries, except Thorofare, John Day Ditch were reclassified from Class SA NSW to Class SA NSW ORW.
(q) The Neuse River Basin Classification Schedule was amended effective December 1, 1990 with the reclassification of the following waters as described in (1) through (3) of this Paragraph.
(1) Northwest Creek from its source to the Neuse River (Index No. 27-105) from Class SC Sw NSW to Class SB Sw NSW;
(2) Upper Broad Creek [Index No. 27-106-(7)] from Pamlico County SR 1103 at Lees Landing to the Neuse River from Class SC Sw NSW to Class SB Sw NSW; and
(3) Goose Creek [Index No. 27-107-(11)] from Wood Landing to the Neuse River from Class SC Sw NSW to Class SB Sw NSW.
(r) The Neuse River Basin Classification Schedule was amended effective July 1, 1991 with the reclassification of the Bay River [Index No. 27-150-(1)] within a line running from Flea Point to the Hammock, east to a line running from Bell Point to Darby Point, including Harper Creek, Tempe Gut, Moore Creek and Newton Creek, and excluding that portion of the Bay River landward of a line running from Poorhouse Point to Darby Point from Classes SC Sw NSW and SC Sw NSW HQW to Class SA NSW.
(s) The Neuse River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.
(t) The Neuse River Basin Classification Schedule was amended effective April 1, 1994 as follows:
(1) Lake Crabtree [Index No. 27-33-(1)] was reclassified from Class C NSW to Class B NSW.
(2) The Eno River from Orange County State Road 1561 to Durham County State Road 1003 [Index No. 27-10-(16)] was reclassified from Class WS-IV NSW to Class WS-IV B NSW.
(3) Silver Lake (Index No. 27-43-5) was reclassified from Class WS-III NSW to Class WS-III B NSW.
(u) The Neuse River Basin Classification Schedule was amended effective July 1, 1996 with the reclassification of Austin Creek [Index Nos. 27-23-3-(1) and 27-23-3-(2)] from its source to Smith Creek from classes WS-III NSW and WS-III NSW CA to class C NSW.
(v) The Neuse River Basin Classification Schedule was amended effective September 1, 1996 with the reclassification of an unnamed tributary to Hannah Creek (Tuckers Lake) [Index No. 27-52-6-0.5] from Class C NSW to Class B NSW.

(w) The Neuse River Basin Classification Schedule was amended effective April 1, 1997 with the reclassification of the Neuse River (including tributaries) from mouth of Marks Creek to a point 1.3 miles downstream of Johnston County State Road 1908 to class WS-IV NSW and from a point 1.3 miles downstream of Johnston County State Road 1908 to the Johnston County Water Supply intake (located 1.8 miles downstream of Johnston County State Road 1908) to class WS-IV CA NSW [Index Nos. 27-(36) and 27-(38.5)].
(x) The Neuse River Basin Classification Schedule was amended effective August 1, 1998 with the revision of the Critical Area and Protected Area boundaries surrounding the Falls Lake water supply reservoir. The revisions to these boundaries are the result of the US Army Corps of Engineers raising the lake's normal pool elevation. The result of these revisions is the Critical and Protected Area boundaries (classifications) may extend further upstream than the current designations. The Critical Area for a WS-IV reservoir is defined as 0.5 miles and draining to the normal pool elevation. The Protected Area for a WS-IV reservoir is defined as 5 miles and draining to the normal pool elevation. The normal pool elevation of the Falls Lake reservoir has changed from 250.1 feet mean sea level (msl) to 251.5 feet msl.
(y) The Neuse River Basin Classification Schedule was amended effective August 1, 2002 with the reclassification of the Neuse River [portions of Index No. 27-(56)], including portions of its tributaries, from a point 0.7 mile downstream of the mouth of Coxes Creek to a point 0.6 mile upstream of Lenoir County proposed water supply intake from Class C NSW to Class WS-IV NSW and from a point 0.6 mile upstream of Lenoir County proposed water supply intake to Lenoir proposed water supply intake from Class C NSW to Class WS-IV CA NSW.
(z) The Neuse River Basin Classification Schedule was amended effective July 1, 2004 with the reclassification of the Neuse River (including tributaries in Wake County) [Index Nos. 27-(20.7), 27-21, 27-21-1] from the dam at Falls Lake to a point 0.5 mile upstream of the Town of Wake Forest Water Supply Intake (former water supply intake for Burlington Mills Wake Finishing Plant) from Class C NSW to Class WS-IV NSW and from a point 0.5 mile upstream of the Town of Wake Forest proposed water supply intake to Town of Wake Forest proposed water supply intake [Index No. 27-(20.1)] from Class C NSW to Class WS-IV NSW CA. Fantasy Lake [Index No. 27 -57-3-1-1], a former rock quarry within a WS-II NSW water supply watershed, was reclassified from Class WS-II NSW to Class WS-II NSW CA.
(aa) The Neuse River Basin Classification Schedule was amended effective November 1, 2007 with the reclassification of the entire watershed of Deep Creek (Index No. 27-3-4) from source to Flat River from Class WS-III NSW to Class WS-III ORW NSW.
(bb) The Neuse River Basin Classification Schedule was amended effective January 15, 2011 with the reclassification of all Class C NSW waters and all Class B NSW waters upstream of the dam at Falls Reservoir from Class C NSW and Class B NSW to Class WS-V NSW and Class WS-V & B NSW, respectively. All waters within the Falls Watershed are within a designated Critical Water Supply Watershed and are subject to a special management strategy specified in Rules .0275 through .0283 of this Subchapter.
(cc) The Neuse River Basin Classification Schedule was amended effective July 1, 2012 as follows:

(1) Johnston County owned quarry near Little River [Index No. 27-57-(20.2)] from Class C NSW to Class WS-IV NSW CA. The Division of Water Resources maintains a Geographic Information Systems data layer of this quarry;
(2) a portion of the Neuse River [Index Number 27-(41.7)] from a point approximately 1.4 miles downstream of Gar Gut to a point approximately 1.7 miles upstream of Bawdy Creek from Class WS-V NSW to Class WS-IV NSW; and
(3) a portion of the Neuse River [Index No. 27-(49.5)] from a point approximately 0.5 mile upstream of S.R. 1201 (Johnston County intake) to S.R. 1201 (Johnston County intake) from Class WS-IV NSW to Class WS-IV NSW CA.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. November 1, 2007; July 1, 2004 (see SL 2001-361); August 1, 2002; August 1, 1998; April 1, 1997; September 1, 1996; July 1, 1996; April 1, 1994; August 3, 1992; July 1, 1991;
Amended Eff. January 15, 2011 (this permanent rule replaces the temporary rule approved by the RRC on December 16, 2010);
Amended Eff. July 1, 2012;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0316 TAR-PAMLICO RIVER BASIN

(a) Classifications assigned to the waters within the Tar-Pamlico River Basin are set forth in the Tar-Pamlico River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and

(2) the following offices of the North Carolina Department of Environmental Quality:

(A) Raleigh Regional Office
3800 Barrett Drive
Raleigh, North Carolina;

(B) Washington Regional Office
943 Washington Square Mall
Washington, North Carolina; and

(C) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) All drainage canals not noted in the schedule are classified "C Sw," except the main drainage canals to Pamlico Sound and its bays which are classified "SC."

(c) The Tar-Pamlico River Basin Classification Schedule was amended effective:

(1) March 1, 1977;
(2) November 1, 1978;
(3) June 8, 1980;
(4) October 1, 1983;
(5) June 1, 1984;
(6) August 1, 1985;
(7) February 1, 1986;
(8) August 1, 1988;
(9) January 1, 1990;
(10) August 1, 1990;
(11) August 3, 1992;
(12) April 1, 1994;
(13) January 1, 1996;
(14) September 1, 1996;
(15) October 7, 2003;
(16) June 1, 2004;
(17) November 1, 2007.

(d) The Tar-Pamlico River Basin Classification Schedule was amended effective August 1, 1988 as follows: Tar River (Index No. 28-94) from a point 1.2 miles downstream of Broad Run to the upstream side of Tranters Creek from Class C to Class B.

(e) The Tar-Pamlico River Basin Classification Schedule was amended effective January 1, 1990 by the reclassification of Pamlico River and Pamlico Sound [Index No. 29-(27)] which includes all waters within a line beginning at Juniper Bay Point and running due south to Lat. 35° 18' 00", long. 76° 13' 20", thence due west to lat. 35° 18' 00", long 76° 20' 00", thence northwest to Shell Point and including Shell Bay, Swanquarter and Juniper Bays and their tributaries, but excluding the Blowout, Hydeland Canal, Juniper Canal and Quarter Canal were reclassified from Class SA and SC to SA ORW and SC ORW.

(f) The Tar-Pamlico River Basin Classification Schedule was amended effective January 1, 1990 by adding the supplemental classification NSW (Nutrient Sensitive Waters) to all waters in the basin from source to a line across Pamlico River from Roos Point to Persimmon Tree Point.

(g) The Tar-Pamlico River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(h) The Tar-Pamlico River Basin Classification Schedule was amended effective April 1, 1994 with the reclassification of Blounts Creek from Herring Run to Blounts Bay [Index No. 29-9-1-(3)] from Class SC NSW to Class SB NSW.
(i) The Tar-Pamlico River Basin Classification Schedule was amended effective January 1, 1996 with the reclassification of Tranters Creek [Index Numbers 28-103- (4.5), 28-103- (13.5), 28-103- (14.5) and 28-103- (16.5)] from a point 1.5 miles upstream of Turkey Swamp to the City of Washington's former auxiliary water supply intake, including tributaries, from Class WS-IV Sw NSW and Class WS-IV CA Sw NSW to Class C Sw NSW.
(j) The Tar-Pamlico River Basin Classification Schedule was amended effective September 1, 1996 with the addition of Huddles Cut (previously unnamed in the schedule) classified as SC NSW with an Index No. of 29-25.5.
(k) The Tar-Pamlico River Basin Classification Schedule was temporarily amended effective October 7, 2003 and permanently amended June 1, 2004 with the reclassification of a portion of Swift Creek [Index Number 28-78-(0.5)] and a portion of Sandy Creek [Index Number 28-78-1-(19)] from Nash County SR 1004 to Nash County SR 1003 from Class C NSW to Class C ORW NSW, and the waters that drain to these two creek portions to include only the ORW management strategy as represented by "+". The "+" symbol means that all undesignated waterbodies that drain to the portions of the two creeks referenced in this Paragraph shall comply with Rule .0225(c) of this Subchapter in order to protect the designated waters as per Rule .0203 of this Subchapter and to protect outstanding resource values found in the designated waters as well as in the undesignated waters that drain to the designated waters.
(l) The Tar-Pamlico River Basin Classification Schedule was amended effective November 1, 2007 with the reclassifications listed below, and the North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of these UWLs.

(1) Goose Creek Tidal Freshwater Marsh along the confluence of Goose Creek [Index No. 29-33] and the Pamlico River [Index No. 29-(27)], along Flatty Creek [Index No. 29-11-4] a length of the Pamlico River shoreline [Index No. 29-(27)] was reclassified to Class WL UWL.
(2) Mallard Creek Tidal Freshwater Marsh along Mallard Creek [Index No. 29-13-(1)] 0.2 miles above its confluence with the Pamlico River to Class WL UWL.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. August 1, 2003 (see S.L. 2003-433, s.1); September 1, 1996; January 1, 1996; April 1, 1994; August 3, 1992; August 1, 1990;
Temporary Amendment Eff. October 7, 2003;
Amended Eff. November 1, 2007; June 1, 2004;
Readopted Eff. November 1, 2019.

15A NCAC 02B .0317 PASQUOTANK RIVER BASIN

(a) lassifications assigned to the waters within the Pasquotank River Basin are set forth in the Pasquotank River Basin Classification Schedule, which may be inspected at the following places:

(1) the Internet at https://deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/river-basin-classification; and
(2) the following offices of the North Carolina Department of Environmental Quality:
(A) Washington Regional Office
943 Washington Square Mall
Washington, North Carolina; and
(B) Division of Water Resources
Central Office
512 North Salisbury Street
Raleigh, North Carolina.

(b) All drainage canals not noted in the schedule are classified "C."
(c) The Pasquotank River Basin Classification Schedule was amended effective:

(1) March 1, 1977;
(2) May 18, 1977;
(3) December 13, 1979;
(4) January 1, 1985;
(5) February 1, 1986;
(6) January 1, 1990;
(7) August 1, 1990;

(8) August 3, 1992;
(9) August 1, 1998;
(10) August 1, 2000;
(11) November 1, 2007.

(d) The Pasquotank River Basin Classification Schedule was amended effective January 1, 1990 by the reclassification of Alligator River [Index Nos. 30-16-(1) and 30-16-(7)] from source to U.S. Hwy. 64 and all tributaries except Swindells Canal, Florida Canal, New Lake, Fairfield Canal, Carters Canal, Dunbar Canal and Intracoastal Waterway (Pungo River - Alligator River Canal) were reclassified from C Sw and SC Sw to C Sw ORW and SC Sw ORW.

(e) The Pasquotank River Basin Classification Schedule was amended effective August 1, 1990 as follows:

(1) Croatan Sound [Index No. 30-20-(1)] from a point of land on the southern side of mouth of Peter Mashoes Creek on Dare County mainland following a line eastward to Northwest Point on Roanoke Island and then from Northwest Point following a line west to Reeds Point on Dare County mainland was reclassified from Class SC to Class SB.

(2) Croatan Sound [Index No. 30-20-(1.5)] from Northwest Point on Roanoke Island following a line west to Reeds Point on Dare County mainland to William B. Umstead Memorial Bridge was reclassified from Class SC to Class SA.

(f) The Pasquotank River Basin Classification Schedule was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules (15A NCAC 02B .0100, .0200 and .0300), which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(g) The Pasquotank River Basin Classification Schedule was amended effective August 1, 1998 with the revision to the primary classification for a portion of the Pasquotank River [Index No. 30-3-(1.7)] from Class WS-IV to Class WS-V.

(h) The Pasquotank River Basin Classification Schedule was amended effective August 1, 2000 with the reclassification of Lake Phelps [Index No. 30-14-4-6-1] from Class C Sw to Class B Sw ORW.

(i) The Pasquotank River Basin Classification Schedule was amended effective November 1, 2007 with the reclassifications listed below, and the North Carolina Division of Water Resources maintains a Geographic Information Systems data layer of these UWLs.

(1) Phelps Lake Natural Lake Shoreline near Phelps Lake [Index No. 30-14-4-6-1] was reclassified to Class WL UWL.

(2) Nags Head Woods near Buzzard Bay [Index No. 30-21-1] was reclassified to Class WL UWL.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. November 1, 2007; August 1, 2000; August 1, 1998; August 3, 1992; August 1, 1990; January 1, 1990; February 1, 1986;
Readopted Eff. November 1, 2019.