

# ***NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY***



## **Division of Water Resources**

Administrative Code Section:

15A NCAC 02B .0100: Procedures for Assignment of Water Quality Standards

15A NCAC 02B .0200: Classifications and Water Quality Standards Applicable to Surface Waters and Wetlands of North Carolina

15A NCAC 02B .0300: Assignment of Stream Classifications

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**ENVIRONMENTAL MANAGEMENT COMMISSION  
RALEIGH, NORTH CAROLINA**

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## 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 .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" (20<sup>th</sup> 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, 8001 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 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.*

**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 .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 .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;*  
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## 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<sub>5</sub> = 5 mg/l, NH<sub>3</sub>-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 .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:

$$WQS = (RfD \times RSC) \times \text{Body Weight} / (FCR \times BCF)$$

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):

$$WQS = (RfD \times RSC) \times \text{Body Weight} / [WCR + (FCR \times BCF)]$$

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;

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 .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<sub>3</sub> 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	$WER \cdot [1.136672 - \ln(\text{hardness})](0.041838) \cdot e^{\{0.9151 [\ln(\text{hardness}) - 3.1485]\}}$	0.82
Cadmium, Acute, Trout waters	$WER \cdot [1.136672 - \ln(\text{hardness})](0.041838) \cdot e^{\{0.9151 [\ln(\text{hardness}) - 3.6236]\}}$	0.51
Cadmium, Chronic	$WER \cdot [1.101672 - \ln(\text{hardness})](0.041838) \cdot e^{\{0.7998 [\ln(\text{hardness}) - 4.4451]\}}$	0.15
Chromium III, Acute	$WER \cdot [0.316 \cdot e^{\{0.8190 [\ln(\text{hardness}) + 3.7256]\}}$	180
Chromium III, Chronic	$WER \cdot [0.860 \cdot e^{\{0.8190 [\ln(\text{hardness}) + 0.6848]\}}$	24
Copper, Acute	$WER \cdot [0.960 \cdot e^{\{0.9422 [\ln(\text{hardness}) - 1.700]\}}$ Or, Aquatic Life Ambient Freshwater Quality Criteria-Copper 2007 Revision (EPA-822-R-07-001)	3.6  NA
Copper, Chronic	$WER \cdot [0.960 \cdot e^{\{0.8545 [\ln(\text{hardness}) - 1.702]\}}$ Or, Aquatic Life Ambient Freshwater Quality Criteria-Copper 2007 Revision (EPA-822-R-07-001)	2.7  NA
Lead, Acute	$WER \cdot [1.46203 - \ln(\text{hardness})](0.145712) \cdot e^{\{1.273 [\ln(\text{hardness}) - 1.460]\}}$	14
Lead, Chronic	$WER \cdot [1.46203 - \ln(\text{hardness})](0.145712) \cdot e^{\{1.273 [\ln(\text{hardness}) - 4.705]\}}$	0.54
Nickel, Acute	$WER \cdot [0.998 \cdot e^{\{0.8460 [\ln(\text{hardness}) + 2.255]\}}$	140

Nickel, Chronic	WER: $[0.997 \cdot e^{\{0.8460[\ln \text{hardness}] + 0.0584\}}]$	16
Silver, Acute	WER: $[0.85 \cdot e^{\{1.72[\ln \text{hardness}] - 6.59\}}]$	0.30
Zinc, Acute	WER: $[0.978 \cdot e^{\{0.8473[\ln \text{hardness}] + 0.884\}}]$	36
Zinc, Chronic	WER: $[0.986 \cdot e^{\{0.8473[\ln \text{hardness}] + 0.884\}}]$	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<sub>3</sub> 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/l;
    - (ii) Arsenic: 10 ug/l;
    - (iii) Benzene: 1.19 ug/l;
    - (iv) Carbon tetrachloride: 0.254 ug/l;
    - (v) Chlordane: 0.8 ng/l;

- (vi) Chlorinated benzenes: 488 ug/l;
  - (vii) DDT: 0.2 ng/l;
  - (viii) Dieldrin: 0.05 ng/l;
  - (ix) Dioxin: 0.000005 ng/l;
  - (x) Heptachlor: 0.08 ng/l;
  - (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 .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 .0211 of 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<sub>3</sub> 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/l;
    - (ii) Arsenic: 10 ug/l;
    - (iii) Benzene: 1.19 ug/l;
    - (iv) Carbon tetrachloride: 0.254 ug/l;

- (v) Chlordane: 0.8 ng/l;
  - (vi) Chlorinated benzenes: 488 ug/l;
  - (vii) DDT: 0.2 ng/l;
  - (viii) Dieldrin: 0.05 ng/l;
  - (ix) Dioxin: 0.000005 ng/l;
  - (x) Heptachlor: 0.08 ng/l;
  - (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<sub>3</sub> 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/l;
    - (ii) Arsenic: 10 ug/l;
    - (iii) Benzene: 1.19 ug/l;
    - (iv) Carbon tetrachloride: 0.254 ug/l;

- (v) Chlordane: 0.8 ng/l;
  - (vi) Chlorinated benzenes: 488 ug/l;
  - (vii) DDT: 0.2 ng/l;
  - (viii) Dieldrin: 0.05 ng/l;
  - (ix) Dioxin: 0.000005 ng/l;
  - (x) Heptachlor: 0.08 ng/l;
  - (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<sub>3</sub> 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/l;
    - (ii) Arsenic: 10 ug/l;

- (iii) Benzene: 1.19 ug/l;
  - (iv) Carbon tetrachloride: 0.254 ug/l;
  - (v) Chlordane: 0.8 ng/l;
  - (vi) Chlorinated benzenes: 488 ug/l;
  - (vii) DDT: 0.2 ng/l;
  - (viii) Dieldrin: 0.05 ng/l;
  - (ix) Dioxin: 0.000005 ng/l;
  - (x) Heptachlor: 0.08 ng/l;
  - (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 .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<sub>3</sub> 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/l;
    - (ii) Arsenic: 10 ug/l;
    - (iii) Benzene: 1.19 ug/l;
    - (iv) Carbon tetrachloride: 0.254 ug/l;

- (v) Chlordane: 0.8 ng/l;
  - (vi) Chlorinated benzenes: 488 ug/l;
  - (vii) DDT: 0.2 ng/l;
  - (viii) Dieldrin: 0.05 ng/l;
  - (ix) Dioxin: 0.000005 ng/l;
  - (x) Heptachlor: 0.08 ng/l;
  - (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 gallinarum*: 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 gallinarum*: 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://portal.ncdenr.org/web/wq/ps/csu/classifications>.

(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.*

## **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 NH<sub>3</sub>-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 Shackelford 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 NH<sub>3</sub>-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 NH<sub>3</sub>-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/l 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**

Variations 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 variations 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<sub>5</sub> = 5 mg/l, NH<sub>3</sub>-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 .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.*

## 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 Tuckasegee 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 Classification Schedule was 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  
System 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 reclassified 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 .0214 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.*

**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, 2007 see 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) Classifications 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.*