15A NCAC 02B .0201 is proposed for amendment as follows:

15A NCAC 02B .0201 ANTIDEGRADATION POLICY

(a) It is the policy of the Environmental Management Commission to maintain, protect, and enhance water quality within the State of North Carolina. Pursuant to this policy, the requirements of 40 CFR 131.12 are hereby incorporated by reference including any subsequent amendments and editions. This material is available for inspection at the Department of ~~Environment, Health,~~ Environmental Quality, ~~and Natural Resources,~~ Division of Water ~~Quality,~~ Resources, ~~Water Quality Section,~~ 512 North Salisbury Street, Raleigh, North ~~Carolina.~~Carolina, 27604-1170. ~~Copies may be obtained from the U.S. Government Printing Office, Superintendent of Documents, Washington, DC 20402-9325 at a cost of thirteen dollars ($13.00).~~ A copy of the most current version of 40 CFR 131.12 is available free of charge on the internet at http://www.gpo.gov/fdsys/. These requirements shall be implemented in North Carolina as set forth in Paragraphs (b), (c), (d), (e) and (f) of this Rule.

(b) Existing uses, as defined by Rule .0202 of this Section, and the water quality to protect such uses shall be protected by properly 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, a project which shall affect 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 these requirements:

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

(2) Public Notices for NPDES permits shall list parameters that would be water quality limited and state whether or not the discharge shall use the entire available load capacity of the receiving waters and may cause more stringent water quality based effluent limitations to be established for dischargers downstream.

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

(4) The Commission and Division shall work with local governments on a voluntary basis to identify and develop appropriate 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 2H .0100). Dischargers affected by the requirements of Paragraphs (c)(1) through (c)(4) of this Rule and the public at large shall be notified according to the provisions described herein, and all other appropriate provisions pursuant to 15A NCAC 2H .0109. If an applicant objects to

Commented [A1]: Updates, no substantive changes.

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 ~~General Statute~~ G.S. 143-215.1(e) and 150B-23.

(d) The Commission shall consider the present and anticipated usage 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. ~~High Quality Waters are a subset of waters with quality higher than the standards and are as described by 15A NCAC 2B .0101(e)(5). The procedures described in~~ Rule .0224 of this Section shall be implemented in order to meet the requirements of this ~~part.~~ Rule.

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

(f) Activities regulated under Section 404 of the Federal Clean Water Act ~~(33 U.S.C. 1344),~~ 33 U.S.C. §1344 which require a water quality certification as described in Section 401 of the Federal Clean Water Act ~~(33 U.S.C. 1341),~~ 33 U.S.C. §1344 shall be evaluated according to the procedures outlined in 15A NCAC 2H .0500. Activities which receive a water quality certification pursuant to these procedures 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 2H .0506(c) ~~(1) (5)~~(1 through 5) in determining the potential impact of the proposed activity on the existing uses of the wetland per ~~15A NCAC 2H .0231.~~ Rule .0231 of this Section.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. October 1, 1995; August 1, 1995; February 1, 1993; April 1,1991; August 1, 1990;
RRC Objection Eff. July 18, 1996 due to lack of statutory authority and ambiguity;
Amended Eff. October 1, 1996.

Commented [A2]: This information is located in .0224.

Commented [A3]: Corrections to citations.

Commented [A4]: Corrected the reference.

15A NCAC 02B .0202 is proposed for amendment as follows:

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) to a specific chemical or mixture of chemicals (as in an effluent). Short-term exposure for acute tests is generally 96 hours or less. 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 hereby incorporated by reference including any subsequent ~~amendments.~~ amendments and editions.

(b) for specific chemical constituents or compounds for which values described under ~~Subparagraph~~ Sub-Item (1)(a) of this Rule 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 are defined as no statistically measurable lethality (99 percent confidence level using Students t ~~test)~~ test), a LC50>100%, or a No Observed Adverse Effect Concentration, during a specified exposure period. Concentrations of exposure and critical values for the No Observed Adverse Effect Concentration shall be determined on a case-by-case basis.

(d) in instances where detailed dose response data indicate that levels of acute toxicity are significantly 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 curve.

(2) Acute to Chronic Ratio (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 include the use of waters for stock watering, irrigation, and other farm purposes.

(4) Applicator means any person, firm, corporation, wholesaler, retailer, 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 they own or to land which they lease or otherwise hold rights.

(5) Approved treatment, as applied to water supplies, means treatment accepted as satisfactory by the ~~Division of Environmental Health or~~ Division of Water ~~Quality.~~Resources.

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

Commented [A1]: Added to show actual practice, no substantive change

Commented [A2]: Added from input from stakeholders for clarity, no substantive change.

~~(6)~~(7) Average (except bacterial) means arithmetical average and ~~includes~~ consists of the analytical results of all samples taken during the specified period (for example: daily, weekly, or monthly); all sampling shall be done as to obtain ~~the most~~ a representative sample under prevailing ~~conditions:~~ conditions.

~~(a) Daily Average for dissolved oxygen, shall be of at least four samples;~~

~~(b) Weekly Average means the average of all daily composite samples obtained during the calendar week. If only one grab sample is taken each day, the weekly average is the average of all daily grab samples. A minimum of three daily grab samples is needed to calculate a weekly average.~~

~~(c) Monthly Average means the average of all daily composites (or grab samples if only one per day) obtained during the calendar month.~~

~~The definitions in this Paragraph do not affect the monitoring requirements for NPDESpermits but rather shall be used by the Division along with other methodologies in determining violations of water quality standards. Arithmetical averages as defined by this Section, and not confidence limits nor other statistical descriptions, shall be used in all calculations of limitations which require the use of averages pursuant to this Section and 40 CFR 122.41(l)(4)(iii).~~

~~(7)~~(8) Best Management Practice (BMP) means a structural or nonstructural management-based practice used singularly or in combination to reduce nonpoint source inputs to receiving waters in order to achieve water quality protection goals.

~~(8)~~(9) Best usage 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.

~~(9)~~(10) Bioaccumulation factor (BAF) is 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 usually measured as a ratio of a substance's concentration in tissue versus its concentration in water in situations where exposure to the substance is occurring from both water and the food chain.

~~(10)~~(11) Bioconcentration factor (BCF) is a unitless value that describes the degree to which substances are absorbed or concentrated into tissues of aquatic organisms from water directly and is usually measured as a ratio of substance's concentration in tissue versus its concentration in water in situations where exposure to the substance is occurring from water only.

~~(11)~~(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.

~~(12)~~(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. ~~The buffer shall be measured landward from the normal pool elevation of impounded structures and from the bank of each side of streams or rivers.~~

~~(13) Built upon area means that portion of a development project that is covered by impervious or partially impervious cover including buildings, pavement, gravel areas (e.g. roads, parking lots, paths), recreation~~

Commented [A3]: Stakeholder input received from discharge representative indicated that this definition was ambiguous. Revised language provides flexibility for sampling under various conditions. No substantive change.

Commented [A4]: No one in DWR is using these definitions. No effect

Commented [A5]: See above comment for (7)(a).

Commented [A6]: Measurement of buffer is specified in the rules where it appears.

Commented [A7]: Moved to 2B .0621 and updated to refer to definition of BUA in G.S. 143-214.7 (stormwater). Also proposed to be defined in 2B .0701 (nutrient strategies).

~~facilities (e.g. tennis courts), etc. (Note: Wooden slatted decks and the water area of a swimming pool are considered pervious.)~~

(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) Cluster development means the grouping of buildings in order to conserve land resources and provide for innovation in the design of the project including minimizing stormwater runoff impacts. This term includes nonresidential development as well as single-family residential and multi-family developments. For the purpose of Sections .0100, .0200 and .0300 of this Subchapter, planned unit developments and mixed use development shall be considered as cluster development.~~

Commented [A8]: Moved to 2B .0621. No substantive changes.

~~(17)~~(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.

~~(18)~~(17) Concentrations are 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).

~~(19)~~(18) Contiguous refers to those wetlands landward of the mean high water line or normal water level and within 575 feet of classified surface waters which 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.

~~(20)~~(19) Critical area means the area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed. The critical area is defined as 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 comes first); or 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 comes first). Since WS-I watersheds are essentially undeveloped, establishment of a critical area is not required. ~~Local governments may extend the critical area as needed. Major landmarks such as highways or property lines may be used to delineate the outer boundary of the critical area if these landmarks are immediately adjacent to the appropriate outer boundary of 1/2 mile.~~ The Commission may adopt a different critical area size during the reclassification process.

Commented [A9]: No substantive changes, clarity only.

Commented [A10]: Moved to 2B .0623(4). No substantive changes.

~~(21)~~(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.

~~(22)~~(21) Designated Nonpoint Source Agency means those agencies specified by the Governor in the North Carolina Nonpoint Source Management Program, as approved by the Environmental Protection Agency.

~~(23) Development means any land disturbing activity which adds to or changes the amount of impervious or partially impervious cover on a land area or which otherwise decreases the infiltration of precipitation into the soil.~~

~~(24)~~(22) Director means the Director of the Division of Water ~~Quality.~~Resources.

~~(25)~~(23) Discharge is the addition of any man-induced waste effluent either directly or indirectly to state surface waters.

~~(26)~~(24)Division means the Division of Water ~~Quality~~ Resources or its successors.

~~(27)~~(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.

~~(28)~~(26) Effluent channel means a discernable confined and discrete conveyance which is used for transporting treated wastewater to a receiving stream or other body of water as provided in Rule ~~.0215~~ .0228 of this Section.

~~(29) Existing development, for projects that do not require a state permit, shall be defined as those projects that are built or those projects that at a minimum have established a vested right under North Carolina zoning law as of the effective date of the local government water supply ordinance, or such earlier time that an affected local government's ordinances shall specify, based on at least one of the following criteria:~~

~~(a) substantial expenditures of resources (time, labor, money) based on a good faith reliance upon having received a valid local government approval to proceed with the project, or~~

~~(b) having an outstanding valid building permit in compliance with G.S. 153A-344.1 or G.S. 160A-385.1, or~~

~~(c) having an approved site specific or phased development plan in compliance with G.S. 153A-344.1 or G.S. 160A-385.1.~~

~~For projects that require a state permit, such as landfills, NPDES wastewater discharges, land application of residuals and road construction activities, existing development shall be defined as those projects that are built or those projects for which a state permit was issued prior to August 3, 1992.~~

~~(30)~~(27) Existing uses mean uses actually attained in the water body, in a significant and not incidental manner, on or after November 28, 1975, whether or not they are included in the water quality ~~standards, which either have been actually available to the public or are uses deemed attainable by the Environmental Management Commission. At a minimum, uses shall be deemed attainable if they can be achieved by the imposition of effluent limits and cost-effective and reasonable best management practices (BMPs) for nonpoint source control.~~standards.

Commented [A11]: Moved to 2B .0621; no substantive changes.

Commented [A12]: Reference correction, no effect.

Commented [A13]: Moved to 2B .0621; no substantive changes.

Commented [A14]: Moved to .0104 (d). No effect.

Commented [A15]: Per stakeholder input from both environmental and discharge representatives, language was removed to make definition consistent with federal regulations. We added a separate definition for "attainable uses" using the last sentence. No substantive change.

~~(31) Family subdivision means a division of a tract of land:~~

~~(a) to convey the resulting parcels, with the exception of parcels retained by the grantor, to a relative or relatives as a gift or for nominal consideration, but only if no more than one parcel is conveyed by the grantor from the tract to any one relative; or~~

~~(b) to divide land from a common ancestor among tenants in common, all of whom inherited by intestacy or by will.~~

~~(32)~~(28) Fertilizer means any substance containing nitrogen or phosphorus which is used primarily for its plant food content.

~~(33)~~(29) Fishing means the taking of fish by ~~sport~~ recreational or commercial methods as well as the consumption of fish or shellfish or the propagation of fish and such other aquatic life as is necessary to provide a suitable environment for fish.

~~(34)~~(30) Forest vegetation means the plants of an area which grow together in disturbed or undisturbed conditions in various wooded plant communities in any combination of trees, saplings, shrubs, vines and herbaceous plants. This includes mature and successional forests as well as cutover stands.

~~(35)~~(31) Freshwater means all waters that under natural conditions would have a chloride ion content of 500 mg/l or less.

~~(36)~~(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; or

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

~~(37)~~(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.

~~(38)~~(34) LC50 means that concentration of a toxic substance which is lethal (or immobilizing, if appropriate) to 50 percent of the organisms tested during a specified exposure period. The LC50 concentration for toxic materials shall be determined for sensitive species as defined by Subparagraph ~~(43)~~ (50) of this Rule under aquatic conditions characteristic of the receiving waters.

~~(39)~~(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.

~~(40)~~(36) Lower piedmont and coastal plain waters mean 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.

Commented [A16]: Moved to 2B .0621; no substantive changes.

Commented [A17]: Clarity, no substantive change.

~~(41)~~(37) MF is an abbreviation for the membrane filter procedure for bacteriological analysis.

~~(42) Major variance means a variance from the minimum statewide watershed protection rules that results in the relaxation, by a factor greater than five percent of any buffer, density or built-upon area requirement under the high density option; any variation in the design, maintenance or operation requirements of a wet detention pond or other approved stormwater management system; or relaxation by a factor greater than 10 percent, of any management requirement under the low density option.~~

Commented [A18]: Moved to 2B .0621 and changed to define a Major variance as "a variance that is not a minor variance." Has the effect of excluding from the definition "any variation in the design, maintenance or operation requirements of a wet detention pond or other approved stormwater management system." Variations to O&M reqts not needed, and variations to design of SCMs are already allowed as "alternatives" to the minimum design criteria.

~~(43) Minor variance means a variance from the minimum statewide watershed protection rules that results in a relaxation, by a factor of up to five percent of any buffer, density or built-upon area requirement under the high density option; or that results in a relaxation by a factor up to 10 percent, of any management requirement under the low density option.~~

Commented [A19]: Moved to 2B .0621 and clarify how to calculate percent variation to a setback. No substantive changes.

~~(44)~~(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 and such zones shall be subject to conditions established in accordance with 15A NCAC 2B ~~.0204(b).~~.0204(b) of this Section.

~~(45)~~(39)Mountain and upper piedmont waters mean 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.

~~(46) Nonconforming lot of record means a lot described by a plat or a deed that was recorded prior to the effective date of local watershed regulations (or their amendments) that does not meet the minimum lot size or other development requirements of Rule .0211 of this Subchapter.~~

Commented [A20]: Moved to 2B .0621; no substantive changes.

~~(47)~~(40) Nonpoint source pollution means pollution which enters waters mainly as a result of precipitation and subsequent runoff from lands which have been disturbed by man's activities and includes all sources of water pollution which are not required to have a permit in accordance with G.S. 143-215.1(c).

~~(48)~~(41) Non-process discharge means industrial effluent not directly resulting from the manufacturing process. An example would be non-contact cooling water from a compressor.

~~(49) Nutrient sensitive waters mean those waters which are so designated in the classification schedule in order to limit the discharge of nutrients (usually nitrogen and phosphorus). They are designated by "NSW" following the water classification.~~

Commented [A21]: Defined in .0223 of this section

~~(50)~~(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 which shall either directly or indirectly cause foul or noxious odors, unsightly conditions, or breeding of abnormally large quantities of mosquitoes or other insect pests, or shall damage private or public water supplies or other structures, result in the development of gases which destroy or damage surrounding property, herbage or grasses, or which may cause the impairment of taste, such as from fish flesh tainting, or affect the health of any person residing or working in the area.

~~(51)(43)Primary Nursery Areas (PNAs) are tidal saltwaters which provide essential habitat for the early development of commercially important fish and shellfish and are so designated by the Marine Fisheries~~

~~Commission.~~ Primary contact recreation includes swimming, diving, skiing, and similar uses involving full human body contact with water where such activities take place in an organized or on a frequent basis.

~~(52)~~(44) ~~Primary recreation includes swimming, skin diving, skiing, and similar uses involving human body contact with water where such activities take place in an organized or on a frequent basis.~~ Primary Nursery Areas (PNAs) are tidal saltwaters which provide essential habitat for the early development of commercially important fish and shellfish and are so designated by the Marine Fisheries Commission.

~~(53)~~(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 ~~boundaries of the~~ protected ~~areas are~~ area is defined as ~~within~~ extending five miles in an as-the-river-runs manner upstream from and draining to ~~of~~ the normal pool elevation of the reservoir in which the intake is located ~~and draining to water supply reservoirs (measured from the normal pool elevation)~~ or to the ridge line of the watershed (whichever comes first); or 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 comes first). ~~Local governments may extend the protected area. Major landmarks such as highways or property lines may be used to delineate the outer boundary of the protected area if these landmarks are immediately adjacent to the appropriate outer boundary of five or 10 miles.~~ In some cases the protected area shall encompass the entire watershed. The Commission may adopt a different protected area size during the reclassification process.

~~(54)~~(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.

~~(55)~~(47) ~~Residuals means any solid or demisolid waste generated from a wastewater treatment plant, water treatment plant or air pollution control facility permitted under the authority of the Environmental Management Commission.~~Residuals are defined in 15A NCAC 02T .0103.

~~(56)~~(48) Riparian area means an area that is adjacent to a body of water.

~~(57)~~(49) Secondary contact recreation includes 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.

~~(58)~~(50) Sensitive species for aquatic toxicity testing is any species utilized in procedures accepted by the Commission or its designee in accordance with Rule .0103 of this Subchapter, or the following genera:

(a) Daphnia;
(b) Ceriodaphnia;
(c) Salmo;
(d) Pimephales;
(e) Mysidopsis;
(f) Champia;
(g) Cyprinodon;
(h) Arbacia;

Commented [A22]: Moved from below. Clarified this definition to differentiate primary from secondary contact recreation. No effect.

Commented [A23]: Moved to be in alphabetic order.

Commented [A24]: No substantive changes, clarity only.

Commented [A25]: Moved to 2B .0623(4); no substantive changes

Commented [A26]: Reference to correct definition

Commented [A27]: Clarity, no effect.

(i) Penaeus;
(j) Menidia;
(k) Notropis;
(l) Salvelinus;
(m) Oncorhynchus;
(n) Selenastrum;
(o) Chironomus;
(p) Hyalella;
(q) Lumbriculus.

~~(59)~~(51) Shellfish culture includes the use of waters for the propagation, storage and gathering of oysters, clams, and other shellfish for market purposes.

~~(60) Stormwater collection system means any conduit, pipe, channel, curb or gutter for the primary purpose of transporting (not treating) runoff. A stormwater collection system does not include vegetated swales, swales stabilized with armoring or alternative methods where natural topography prevents the use of vegetated swales (subject to case-by-case review), curb outlet systems or pipes used to carry drainage underneath built-upon surfaces that are associated with development controlled by the provisions of 15A NCAC 2H .1003(c)(1).~~

Commented [A28]: Moved to 2B .0701 and updated to refer to 2H .1002 for consistency.

~~(61) Source of water supply for drinking, culinary or food-processing purposes means any source, either public or private, the waters from which are used for human consumption, or used in connection with the processing of milk, beverages, food, or other purpose which requires water suitable for human consumption.~~

Commented [A29]: Deleted because this is included in the WS classification rules in this Section.

~~(62)~~(52) ~~Swamp waters mean those waters which are classified by the Environmental Management Commission and which are topographically located so as to generally have very low velocities and other characteristics which are different from adjacent streams draining steeper topography. They are designated by "Sw" following the water classification.~~ Swamp waters are those waters which are classified by the Environmental Management Commission as such and which are topographically located so as to generally have natural characteristics such as low velocity, dissolved oxygen, or pH, which are different from streams draining steeper topography.

Commented [A30]: Provided clarity on swamp characteristics. Consolidated swamp water definitions from other rule areas.

~~(63)~~(53) Tidal salt waters mean all ~~tidal~~ waters ~~which are classified by the Environmental Management Commission~~ which ~~generally~~ have a natural chloride ion content in excess of 500 parts per ~~million and include all waters assigned S classifications.~~ million.

Commented [A31]: Provides for science based definition to be used as tool to determine fresh versus salt water.

~~(64)~~(54) Toxic substance or toxicant means any substance or combination of substances (including disease-causing agents), which 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.

~~(65)~~(55) ~~Trout~~ ~~waters are those waters which have conditions which shall sustain and allow for trout propagation and survival of stocked trout on a year-round basis. These waters shall be classified by the Commission after considering the requirements of Rule .0101(b) and (c) of this Subchapter and include all waters designated by "Tr" in the water classification.~~ Trout waters are those waters which are classified by the Environmental Management Commission as such and have conditions which shall sustain and allow for natural trout propagation and survival and maintenance of stocked trout on a year round basis.

~~(66)~~(56) Waste disposal includes the use of waters for disposal of sewage, industrial waste or other waste after approved treatment.

~~(67)~~(57) Water dependent structures are those structures for which the use requires access or proximity to or siting within surface waters to fulfill its basic 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.

~~(68)~~(58) Water quality based effluent limits and best management practices are limitations or best management practices developed by the Division for the purpose of protecting water quality standards and best usage of surface waters consistent with the requirements of G.S. 143-214.1 and the Federal Water Pollution Control Act as amended.

~~(69)~~(59) Waters with quality higher than the standards means all waters for which the determination of waste load allocations (pursuant to Rule .0206 of this Section) indicates that water quality is sufficiently greater than that defined by the standards such that significant pollutant loading capacity still exists in those waters.

~~(70)~~ (60) 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). ~~the entire land area contributing surface drainage to a specific point. For the purpose of the water supply protection rules in 15A NCAC 2B .0104 and .0211 local governments may use major landmarks such as highways or property lines to delineate the outer boundary of the drainage area if these landmarks are immediately adjacent to the ridgeline.~~

~~(71)~~(61) Wetlands are "waters" as defined by G.S. 143-212(6) and are areas 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 ~~generally include swamps, marshes, bogs and similar areas.~~ do not include prior converted cropland as defined in the National Food Security Act Manual, Fifth Edition, available free of charge on the internet at https://directives.sc.egov.usda.gov/RollupViewer.aspx?hid=29340. ~~Wetlands classified as waters of the state are restricted to waters of the United States as defined by 33 CFR 328.3 and 40 CFR 230.3.~~

(62) For purposes of applicability to Rules 15A NCAC 02B .0265, .0266, .0277 and .0278 and until those rules are removed from Section .0200 and recodified into Section .0700, refer to rule 15A NCAC 02B .0621 for the definitions of "built-upon area" and "development".

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

Commented [A32]: Reworded for clarity. Consolidated trout water definitions from other rule areas.

Commented [A33]: WQC, in Jan 2018, requested to keep a definition for "watershed". This definition is identical to the statutory definition. The phrase "designated by the Commission" is important to maintain for identifying Water Supply watersheds.

Commented [A34]: Clarified that prior converted croplands, which are not considered waters of the U.S. are also not considered wetlands by the state.

Commented [A35]: Removed because if readopted with a new effective date, the federal references would exclude the state's isolated wetlands program.

Commented [A36]: These definitions need to remain in rule to continue to apply to the Falls and Jordan Rules which are remaining in the .0200 section for now per legislation.

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.

15A NCAC 02B .0203 is proposed for adoption as follows:

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

Water quality based effluent limitations or management practices for direct or indirect discharges of waste or for other sources of water pollution will 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.

15A NCAC 02B .0204 is proposed for amendment as follows:

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

(a) Location of Sampling Sites: in conducting tests or making analytical determinations of classified waters to determine conformity or nonconformity with the established standards, samples shall be collected outside the limits of prescribed mixing zones. However, where appropriate, 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) Mixing Zones: a mixing zone may be established in the area of a discharge in order to provide reasonable opportunity for the mixture of the wastewater with the receiving waters. Water quality standards shall not apply within regions defined as mixing zones, except that such zones shall be subject to the conditions established in accordance with this Rule. The limits of such mixing zones shall be defined by the ~~division~~ 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 determined such that discharges shall not:

(1) result in acute toxicity to aquatic life, ~~[as~~ defined ~~by~~ in Rule .0202(1) of this ~~Section]~~ 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 assigned for point source discharges of fecal coliform organisms in waters classified "WS-II," "WS-III," "B," or ~~"SA".~~ "SA" as defined in Rule .0301 of this Subchapter. Mixing zones shall not be assigned for point source discharges of enterococci in waters classified "SB" or ~~"SA".~~ "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 Federal Water Pollution Control Act as amended, shall constitute compliance with ~~Subparagraph~~ 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.

Commented [A1]: Reference provided. No effect.

15A NCAC 02B .0205 is proposed for adoption as follows:

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 standards. 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 will not be considered violated when values outside the normal range are caused by natural conditions. Where wastes are discharged to such waters, the discharger will not be considered a contributor to substandard conditions provided 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.

15A NCAC 02B .0206 is proposed for adoption as follows:

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 categories of standards. 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. 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 are hereby incorporated by reference including any subsequent ~~amendments.~~ amendments and editions. Use of more complex modeling techniques to set water quality based effluent limitations shall be approved by the Commission or its designee on a case-by-case basis. Flow design criteria to calculate water quality based effluent limitations for categories of water quality standards shall be the following:

(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 to the satisfaction of the Director 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).

(b) In cases where 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 by the Director on a case-by-case basis so that the designated uses of receiving waters are protected.

(c) Flow design criteria shall be used to develop water quality based effluent limitations and for the design of wastewater treatment facilities. Deviations from a specific water quality standard resulting from discharges that are affirmatively 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 flow is significantly less than the design flow.

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

(1) Where the 30Q2 flow is estimated to be greater than zero, effluent limitations for new or expanded (additional) discharges of oxygen consuming waste shall be set at BOD_5= 5 mg/l, NH_3-N = 2 mg/l and DO = 6 mg/l, unless it is determined by the Director 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 in cases where violations of water quality standards are predicted to occur for a new or expanded discharge with the limits set pursuant to this Rule, or where 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 (additional) 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 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.

15A NCAC 02B .0208 is proposed for adoption as follows:

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, public health, or 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. Procedures for interpreting the narrative standard for toxic substances and numerical standards applicable to all waters are as follows:

(1) Aquatic life standards: the concentration of toxic substances shall not result in chronic toxicity. Any levels in excess of the chronic value 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 acceptable acute/chronic ratios). If an acceptable acute/chronic ratio is not available, then that toxic substance shall not exceed one-one hundredth (0.01) of the lowest LC50 or if it is affirmatively 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) Human health standards: the concentration of toxic substances shall not exceed the level necessary to protect human health through exposure routes of fish tissue consumption, water consumption, or other route identified as appropriate for the water body. Fish tissue consumption includes the consumption of shellfish;

(A) For non-carcinogens, these concentrations shall be determined using a Reference Dose (RfD) as published by the U.S. Environmental Protection Agency pursuant to Section 304(a) of the Federal Water Pollution Control Act as amended or a RfD issued by the U.S. Environmental Protection Agency 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 are determined as follows:

(i) Fish tissue consumption:

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

where:

WQS = water quality standard or criteria;

RfD = reference dose;

RSC = Relative Source Contribution;

FCR = fish consumption rate (based upon 17.5 gm/person-day);

BCF = bioconcentration factor, or bioaccumulation factor (BAF), as appropriate.

Pursuant to Section 304(a) of the Federal Water Pollution Control Act as amended BCF or BAF values, literature values, or site specific bioconcentration data approved by the

Commission or its designee are based on U.S. Environmental Protection Agency publications; FCR values are 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 U.S. Environmental Protection Agency publications pursuant to Section 304(a) of the Federal Clean Water Pollution Control Act to account for non-water sources of exposure may be either a percentage (multiplied) or amount subtracted, depending on whether multiple criteria are relevant to the chemical;

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

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

where:

WQS = water quality standard or criteria;

RfD = reference dose;

RSC = Relative Source Contribution;

FCR = fish consumption rate (based upon 17.5 gm/person-day);

BCF = bioconcentration factor, or bioaccumulation factor (BAF), as appropriate;

WCR = water consumption rate (assumed to be two liters per day for adults).

To protect sensitive groups, exposure is 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 considered 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 considered to 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 are calculated using the procedures given in Subparagraphs (A) and (B) of this Rule. 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 are 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) 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 reasonable portion of the water body. Such revisions of the temperature standard must be consistent with the provisions of Section 316(a) of the Federal Water Pollution Control Act as amended. A listing of existing thermal 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.

15A NCAC 02B .0211 is proposed for amendment as follows:

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

General. The water quality standards for all fresh surface waters shall be the basic standards applicable to Class C waters. Water quality standards for temperature and numerical water quality standards for the protection of human health applicable to all ~~fresh~~ surface waters are in Rule .0208 of this Section. Additional and more stringent standards applicable to other specific freshwater classifications are specified in Rules .0212, .0214, .0215, .0216, .0218, .0219, .0223, .0224 and .0225 of this Section. ~~Action Levels for purposes of National Pollutant Discharge Elimination System (NPDES) permitting are specified in Item (22) of this Rule.~~

(1) Best Usage of Waters: aquatic life propagation ~~and maintenance of biological integrity (including fishing and fish), wildlife, secondary recreation, agriculture and any other usage except for primary recreation or as a source of water supply for drinking, culinary or food processing purposes;~~, 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) Conditions Related to Best Usage: the waters shall be suitable for ~~aquatic life propagation and maintenance of biological integrity, wildlife, secondary recreation, and agriculture.~~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 considered to be violating a water quality standard;

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

(4) Chlorophyll a (corrected): not greater than 40 ug/l (based upon monthly averaging where such data are available during the growing season which is generally April 1 – October 31) 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;~~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 a minimum 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 consecutive samples examined during any 30 day period, nor exceed 400/100ml in more than

Commented [BC1]: Actions Levels disapproved by US EPA decision document on 2007-2015 Triennial Review (rec'd by DWR April 19, 2016)

Commented [KG2]: Merging usage information from .0101 and .0301 into individual classification rule. No effect.

Commented [KG3]: Moved to (1) above. No effect.

Commented [KG4]: Unnecessary. No effect.

Commented [MJ5]: Add clarity that a single sample of Chlorophyll a is not adequate for assessment purposes. Effect: Provides for management recommendations regarding assessment and impairment to be guided by analysis.

Commented [BC6]: Modified for uniformity in identifying units of measure

20 percent of the samples examined during such period. Violations of the fecal coliform standard are expected during rainfall events and, in some cases, this violation is expected to be caused by uncontrollable nonpoint source pollution. All coliform concentrations shall be analyzed using the membrane filter technique, unless high turbidity or other adverse conditions necessitate the tube dilution method. In case of controversy over results, the MPN 5-tube dilution technique shall be used as the reference method;

(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, 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) 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;

With the exception of mercury and selenium, acute and chronic freshwater aquatic life standards for metals listed in this Subparagraph apply to the dissolved form of the metal and apply as a function of the pollutant's water effect ratio (WER). A WER expresses the difference between the measures of the toxicity of a substance in laboratory waters and the toxicity in site water. 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), free of charge, at http://water.epa.gov/scitech/swguidance/standards/handbook/, hereby incorporated by reference including any subsequent ~~amendments.~~ amendments and editions. Alternative site-specific standards may also be developed when any person

submits values that demonstrate to the Commissions' satisfaction that they were derived in accordance with the "Water Quality Standards Handbook: Second Edition, Recalculation Procedure or the Resident Species Procedure", hereby incorporated by reference including subsequent amendments at http://water.epa.gov/scitech/swguidance/standards/handbook/. This material is available free of charge.

Hardness-dependent freshwater metals standards are located in Sub-Item (c) and (d) of this Rule and in Table A: Dissolved Freshwater Standards for Hardness-Dependent Metals;

(c) Hardness-dependent freshwater metals standards shall be ~~as follows:~~

~~(i) Hardness-dependent metals standards shall be~~ derived using the equations specified in Table A: Dissolved Freshwater Standards for Hardness-Dependent Metals. If the actual instream hardness (expressed as $CaCO_3$ or Ca+Mg) is ~~less than 25 milligrams/liter (mg/l), standards shall be calculated based upon 25 mg/l hardness. If the actual instream hardness is greater than 25 mg/l and~~ 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;

Commented [BC7]: A "low-end hardness cap" was disapproved for Clean Water Act purposes by US EPA decision document on 2007-2015 Triennial Review (rec'd by DWR April 19, 2016)

~~(ii) Hardness dependent metals in NPDES permitting: for NPDES permitting purposes, application of the equations in Table A: Dissolved Freshwater Standards for Hardness-Dependent Metals shall have hardness values (expressed as $CaCO_3$ or Ca+Mg) established using the median of instream hardness data collected within the local US Geological Survey (USGS) and Natural Resources Conservation Service (NRCS) 8-digit Hydrologic Unit (HU). The minimum applicable instream hardness shall be 25 mg/l and the maximum applicable instream hardness shall be 400 mg/l, even when the actual median instream hardness is less than 25 mg/l and greater than 400 mg/l;~~

Commented [BC8]: NPDES implementing procedures were disapproved for Clean Water Act permitting purposes by the US EPA decision document on the 2007-2015 Triennial review (rec'd by DWR on 04-19-2016)

(d) Alternatives:

Acute and chronic freshwater aquatic life standards for metals listed in Table A apply to the dissolved form of the metal and apply as a function of the pollutant's water effect ratio (WER), which is set forth in Sub-Item (b) of this Rule. Alternative site-specific standards may also be developed as set forth in Sub-Item (b) of this Rule;

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 (d) of this Rule.

Metal	Equations for Hardness-Dependent Freshwater Metals (ug/l)	Standard at 25 mg/l

		hardness (ug/l)
Cadmium, Acute	WER· [{1.136672-[*ln* hardness](0.041838)} · *e*^{0.9151 [*ln* hardness]-3.1485}]	0.82
Cadmium, Acute, Trout waters	WER· [{1.136672-[*ln* hardness](0.041838)} · *e*^{0.9151[*ln* hardness]-3.6236}]	0.51
Cadmium, Chronic	WER· [{1.101672-[*ln* hardness](0.041838)} · *e*^{0.7998[*ln* hardness]-4.4451}]	0.15
Chromium III, Acute	WER· [0.316 · *e*^{0.8190[*ln* hardness]+3.7256}]	180
Chromium III, Chronic	WER· [0.860 · *e*^{0.8190[*ln* hardness]+0.6848}]	24
Copper, Acute	WER· [0.960 · *e*^{0.9422[*ln* hardness]-1.700}] Or, Aquatic Life Ambient Freshwater Quality Criteria—Copper 2007 Revision (EPA-822-R-07-001)	3.6 NA
Copper, Chronic	WER· [0.960 · *e*^{0.8545[*ln* hardness]-1.702}] Or, Aquatic Life Ambient Freshwater Quality Criteria—Copper 2007 Revision (EPA-822-R-07-001)	2.7 NA
Lead, Acute	WER· [{1.46203-[*ln* hardness](0.145712)} · *e*^{1.273[*ln* hardness]-1.460}]	14
Lead, Chronic	WER· [{1.46203-[*ln* hardness](0.145712)} · *e*^{1.273[*ln* hardness]-4.705}]	0.54
Nickel, Acute	WER· [0.998 · *e*^{0.8460[*ln* hardness]+2.255}]	140
Nickel, Chronic	WER· [0.997 · *e*^{0.8460[*ln* hardness]+0.0584}]	16
Silver, Acute	WER· [0.85 · *e*^{1.72[*ln* hardness]-6.59}]	0.30
Zinc, Acute	WER· [0.978 · *e*^{0.8473[*ln* hardness]+0.884}]	36

Zinc, Chronic	WER· [0.986 · *e*^{0.8473[*ln* hardness]+0.884}]	36

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

~~(f) Metals criteria shall be used for proactive environmental management. An instream exceedence of the numeric criterion for metals shall not be considered to have caused an adverse impact to the instream aquatic community without biological confirmation and a comparison of all available monitoring data and applicable water quality standards. This weight of evidence evaluation shall take into account data quality and the overall confidence in how representative the sampling is of conditions in the waterbody segment before an assessment of aquatic life use attainment, or non-attainment, shall be made by the Division. Recognizing the synergistic and antagonistic complexities of other water quality variables on the actual toxicity of metals, with the exception of mercury and selenium, biological monitoring will be used to validate, by direct measurement, whether or not the aquatic life use is supported;~~

(12) Oils, deleterious substances, 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, 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 pursuant to 40 CFR 110.3(a)-(b) which are hereby incorporated by reference including any subsequent amendments and ~~additions.~~ 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;

Commented [MJ9]: "Biological confirmation" disapproved by US EPA decision document on 2007-2015 Triennial Review (rec'd by DWR April 19, 2016)

Effect: Satisfies EPA's disapproval. Limits the state's ability to effectively manage 303(d) listings.

(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 normal for the waters in the area, which range 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:

(a) Combined radium-226 and radium-228: the average annual activity level (based on at least one sample collected per quarter) 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 (based on at least one sample collected per quarter) 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: 11 ug/l or 0.36 ug/l in trout classified 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 can be 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]. BMPs shall be in full compliance with all specifications governing the proper design, installation, operation, and maintenance of such ~~BMPs;~~BMPs.

(22) ~~Action Levels for Toxic Substances~~ Toxic Substance Levels Applicable to NPDES Permits:

Commented [BC10]: Actions Levels disapproved by US EPA decision document on 2007-2015 Triennial Review (rec'd by DWR April 19, 2016
Effect: Fiscal note documents costs and benefits associated

Commented [MJ11R10]: Removing Action Levels for Copper, Silver & Zinc. Retaining ability for Chloride levels to be controlled by NPDES permits.

~~(a) Copper, dissolved, chronic: 2.7 ug/l;~~
~~(b) Silver, dissolved, chronic: 0.06 ug/l;~~
~~(c) Zinc, dissolved, chronic: 36 ug/l; and~~
~~(d)~~ Chloride: 230 mg/l;

~~The hardness-dependent freshwater action levels for copper and zinc, provided here for illustrative purposes, corresponds to a hardness of 25 mg/l. Copper and zinc action level values for other instream hardness values shall be calculated per the chronic equations specified in Item (11) of this Rule and in Table A: Dissolved Freshwater Standards for Hardness-Dependent Metals.~~ If the ~~action~~ levels for any of the substances listed in this Item (which are generally not bioaccumulative and have variable toxicity to aquatic life because of chemical form, solubility, stream characteristics or associated waste characteristics) are 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 these substances from their effluents. Those substances for which ~~action~~ levels are listed in this Item shall be limited as appropriate in the NPDES permit if sufficient information ~~(to be determined for metals by measurements of that portion of the dissolved instream concentration of the action levels parameter attributable to a specific NPDES permitted discharge)~~ exists to indicate that any of those substances 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.

15A NCAC 02B .0212 is proposed for amendment as follows:

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

The following water quality standards 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 WS-I waters are as follows: a source of water supply for drinking, culinary, or food processing purposes for those users desiring maximum protection of their water supplies; waters located on land in public ownership; and any best usage specified for Class C waters;~~ Best Usage of Waters: a source of water supply for drinking, culinary, or food processing purposes for those users desiring maximum protection of their water supplies and any best usage specified for Class C waters; waters located on land in public ownership and in undeveloped watersheds.

(2) ~~The conditions related to the best usage shall be as follows: waters of this class are protected water supplies within essentially natural and undeveloped watersheds in public ownership with no permitted point source dischargers except those specified in Rule .0104 of this Subchapter; waters within this class shall be relatively unimpacted by nonpoint sources of pollution; land use management programs are required to protect waters from nonpoint source pollution;~~ Conditions Related to Best Usage:

(a) Chemical and physical water quality parameters in a WS-I watershed shall meet requirements as specified in Item (3) of this Rule.

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

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

(d) ~~the~~ The waters, following treatment required by the Division, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, and food-processing purposes that are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C ~~.1500.~~ .1500, which are hereby incorporated by reference including subsequent amendments and editions.

(e) Sources of water pollution that preclude any of ~~these~~ the best uses ~~on either a short-term or long-term basis~~ shall be considered to be violating 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, the more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate

Commented [A1]: Merging usage information from .0101 and .0301 into individual classification rule. No effect.

Commented [A2]: Moved some language to other parts of this rule or 2B .0624. Reworded language moved to other parts of this rule for clarity. "Essentially natural" was deemed unnecessary as "natural" is a subcategory of "undeveloped" and "essentially" is an ambiguous phrase. "Land use management programs are required to protect waters from nonpoint source pollution" is a requirement already stated in 02B .0104.

Commented [A3]: Provides location of moved language from Item (2) to other parts of the rule.

Commented [A4]: Removed unnecessary language. No effect.

ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local governments has failed to adopt necessary protection measures;

(3) ~~Quality standards applicable to Class WS-I Waters shall be as follows:~~ Chemical and physical water quality parameters in a WS-I watershed shall meet the following requirements:

(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) Nonpoint Source Pollution: none shall be allowed that would adversely impact the waters for use as a water supply or any other designated use;~~

~~(c)~~(b) Organisms of coliform group: total coliforms not to exceed 50/100 ml (MF count) as a monthly geometric mean value in watersheds serving as unfiltered water supplies;

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

~~(e) Sewage, industrial wastes: none shall be allowed except those specified in Item (2) of this Rule or Rule .0104 of this Subchapter;~~

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

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

~~(h)~~(f) Toxic and other deleterious substances:

(i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~non-carcinogens in Class WS-I waters:~~ non-carcinogens:

(A) Barium: 1.0 mg/l;

(B) Chloride: 250 mg/l;

(C) Nickel: 25 ug/l;

(D) Nitrate nitrogen: 10.0 mg/l;

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

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

(G) Sulfates: 250 mg/l;

(ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~carcinogens in Class WS-I waters:~~ carcinogens:

(A) Aldrin: 0.05 ng/1;

(B) Arsenic: 10 ug/l;

(C) Benzene: 1.19 ug/1;

(D) Carbon tetrachloride: 0.254 ug/l;

(E) Chlordane: 0.8 ng/1;

(F) Chlorinated benzenes: 488 ug/l;

(G) DDT: 0.2 ng/1;

Commented [A5]: Moved to Item 5.

Commented [A6]: Moved to Item 4.

Commented [A7]: Removed duplicative language.

Commented [A8]: Removed duplicative language.

(H) Dieldrin: 0.05 ng/1;
(I) Dioxin: 0.000005 ng/l;
(J) Heptachlor: 0.08 ng/1;
(K) Hexachlorobutadiene: 0.44 ug/l;
(L) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(M) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(N) Tetrachloroethylene: 0.7 ug/l;
(O) Trichloroethylene: 2.5 ug/l; and
(P) Vinyl Chloride: 0.025 ug/l.

(4) Wastewater and stormwater point source discharges in a WS-I watershed shall meet the following requirements: Point source discharges shall be permitted pursuant to 15A NCAC 02B .0104 of this Subchapter.

(5) Nonpoint source pollution in a WS-I watershed shall meet the following requirements: Nonpoint sources of pollution shall not have an adverse impact, as defined in 15A NCAC 02H .1002, on waters within this class.

Commented [A9]: Language moved and reworded (for clarity) from Item (3)(b); rule reference added.

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.

15A NCAC 02B .0214 is proposed for amendment as follows:

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

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

(1) ~~The best usage of WS-II waters are as follows: 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 and any best usage specified for Class C waters;~~ Best Usage of Waters: 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 and any best usage specified for Class C waters.

(2) ~~The conditions related to the best usage shall be as follows: waters of this class are protected as water supplies which are in predominantly undeveloped watersheds and meet average watershed development density levels as specified in Sub-Items (3)(b)(i)(A), (3)(b)(i)(B), (3)(b)(ii)(A) and (3)(b)(ii)(B) of this Rule; discharges that qualify for a General Permit pursuant to 15A NCAC 02H .0127, trout farm discharges, recycle (closed loop) systems that only discharge in response to 10-year storm events and other stormwater discharges shall be allowed in the entire watershed; new domestic and industrial discharges of treated wastewater shall not be allowed in the entire watershed;~~ Conditions Related to Best Usage:

(a) Chemical and physical water quality parameters in a WS-II watershed shall meet requirements as specified in Item (3) of this Rule.

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

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

(d) ~~the~~The waters, following treatment required by the Division, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, and food-processing purposes that are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C ~~.1500.~~ .1500, which are hereby incorporated by reference including subsequent amendments and editions.

(e) Sources of water pollution that preclude any of ~~these~~ the best uses ~~on either a short-term or long-term basis~~ shall be considered to be violating 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, the

Commented [A1]: Merging usage information from .0101 and .0301 into individual classification rule. No effect.

Commented [A2]: Moved some language to other parts of this rule or 2B .0624. Remaining language was deemed unnecessary: "predominately undeveloped watershed" is an ambiguous phrase and "recycle (closed loop) systems" should not discharge and are addressed in 02T rules.

Commented [A3]: Provides location of moved language from Item (2) above to other parts of the rule.

Commented [A4]: Unnecessary. No effect.

more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local governments has failed to adopt necessary protection measures;

(3) ~~Quality standards applicable to Class WS-II Waters shall be as follows:~~ Chemical and physical water quality parameters in a WS-II watershed shall meet the following requirements:

~~(a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none shall be allowed except for those specified in either Item (2) of this Rule and Rule .0104 of this Subchapter; none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any discharger shall be required upon request by the Commission to 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;~~

Commented [A5]: Moved language in this paragraph to Item (4)(d) of this rule.

~~(b) Nonpoint Source and Stormwater Pollution: none that would adversely impact the waters for use as a water supply or any other designated use;~~

Commented [A6]: Moved and reworded this language to Item (5)(a).

~~(i) Nonpoint Source and Stormwater Pollution Control Criteria for Entire Watershed:~~

~~(A) Low Density Option: development density shall be limited to either no more than one dwelling unit per acre of single family detached residential development (or 40,000 square foot lot excluding roadway right-of-way), or 12 percent built-upon area for all other residential and non-residential development in the watershed outside of the critical area; stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;~~

~~(B) High Density Option: if new development exceeds the low density option requirements as stated in Sub-Item (3)(b)(i)(A) of this Rule, then engineered stormwater controls shall be used to control runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 30 percent built-upon area;~~

~~(C) Land within the watershed shall be deemed compliant with the density requirements if the following condition is met: the density of all existing development at the time of reclassification does not exceed the~~

Commented [A7]: (A) Through (H) moved to Water Supply Watershed Protection Rules.

density requirement when densities are averaged throughout the entire watershed area at the time of classification;

(D) Cluster development shall be allowed on a project-by-project basis as follows:

(I) overall density of the project meets associated density or stormwater control requirements of this Rule;

(II) buffers meet the minimum statewide water supply watershed protection requirements;

(III) built-upon areas shall be designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas;

(IV) areas of concentrated development shall be located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways;

(V) remainder of tract to remain in vegetated or natural state;

(VI) area in the vegetated or natural state may be conveyed to a property owners association, a local government for preservation as a park or greenway, a conservation organization, or placed in a permanent conservation or farmland preservation easement;

(VII) a maintenance agreement for the vegetated or natural area shall be filed with the Register of Deeds; and

(VIII) cluster development that meets the applicable low density option requirements shall transport stormwater runoff from the development by vegetated conveyances to the maximum extent practicable;

(E) A maximum of 10 percent of each jurisdiction's portion of the watershed outside of the critical area as delineated on July 1, 1993 may be developed with new development projects and expansions of existing development of up to 70 percent built-upon surface area (the "10/70 option") in addition to the new development approved in compliance with the appropriate requirements of Sub-Item (3)(b)(i)(A) or Sub-Item (3)(b)(i)(B) of this Rule. For expansions to existing development, the existing built-upon surface area shall not be counted toward the allowed 70 percent built-upon surface area. A local

government having jurisdiction within the watershed may transfer, in whole or in part, its right to the 10/70 option land area to another local government within the watershed upon submittal of a joint resolution and review by the Commission. When the water supply watershed is composed of public lands, such as National Forest land, local governments may count the public land acreage within the watershed outside of the critical area in calculating the acreage allowed under this provision. For local governments that do not choose to use the high density option in that WS-II watershed, each project shall, to the maximum extent practicable, minimize built-upon surface area, direct stormwater runoff away from surface waters, and incorporate best management practices, as defined in Rule .0202 of this Section, to minimize water quality impacts. If the local government selects the high density development option within that WS-II watershed, then engineered stormwater controls shall be employed for the new development;

(F) If local governments choose the high density development option that requires stormwater controls, then they shall assume ultimate responsibility for operation and maintenance of the required controls as outlined in Rule .0104 of this Subchapter;

(G) A minimum 100 foot vegetative buffer shall be required for all new development activities that exceed the low density option requirements as specified in Sub-Items (3)(b)(i)(A) and Sub-Item (3)(b)(ii)(A) of this Rule, otherwise a minimum 30 foot vegetative buffer for development activities shall be required along all perennial waters indicated on the most recent versions of U.S.G.S. U.S. Geological Survey 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. Nothing in this Rule shall stand as a bar to artificial streambank or shoreline stabilization;

(H) No new development shall be allowed in the buffer; water dependent structures, or other structures such as flag poles, signs, and security lights, which result in only de minimus increases in impervious area and public projects such as road crossings and greenways may be allowed where no practicable alternative exists. These activities shall minimize built-upon surface area and avoid channelizing stormwater;

(I) No National Pollutant Discharge Elimination System (NPDES) permits shall be issued for landfills that discharge treated leachate;

Commented [A8]: Moved to Item (4) (f) of this rule.

~~(ii) Critical Area Nonpoint Source and Stormwater Pollution Control Criteria:~~

~~(A) Low Density Option: new development shall be limited to either no more than one dwelling unit of single family detached residential development per two acres (or 80,000 square foot lot excluding roadway right-of-way), or six percent built-upon area for all other residential and non-residential development; stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;~~

~~(B) High Density Option: if new development density exceeds the low density requirements specified in Sub-Item (3)(b)(ii)(A) of this Rule, then engineered stormwater controls shall be used to control runoff from the first inch of rainfall; new residential and non-residential development density shall not exceed 24 percent built-upon area;~~

~~(C) No new permitted sites for land application of residuals or petroleum contaminated soils shall be allowed;~~

~~(D) No new landfills shall be allowed;~~

~~(c)~~(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;

~~(d)~~(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 taste and odor difficulties in water supplies that cannot be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;

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

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

~~(g)~~(e) Total dissolved solids: not greater than 500 mg/l;

~~(h)~~(f) Toxic and other deleterious substances:

(i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~non~~ carcinogens ~~in Class WS-II waters:~~ non-carcinogens:

(A) Barium: 1.0 mg/l;

(B) Chloride: 250 mg/l;

(C) Nickel: 25 ug/l;

(D) Nitrate nitrogen: 10 mg/l;

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

Commented [A9]: (A) and (B) moved to Water Supply Watershed Protection Rules.

Commented [A10]: Moved to Item (4) (g) of this rule.

Commented [A11]: Moved to Item (4) (f) of this rule.

Commented [A12]: Removed duplicative language.

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

(G) Sulfates: 250 mg/l;

(ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~carcinogens in Class WS-II waters:~~ carcinogens:

(A) Aldrin: 0.05 ng/l;

(B) Arsenic: 10 ug/l;

(C) Benzene: 1.19 ug/l;

(D) Carbon tetrachloride: 0.254 ug/l;

(E) Chlordane: 0.8 ng/l;

(F) Chlorinated benzenes: 488 ug/l;

(G) DDT: 0.2 ng/l;

(H) Dieldrin: 0.05 ng/l;

(I) Dioxin: 0.000005 ng/l;

(J) Heptachlor: 0.08 ng/l;

(K) Hexachlorobutadiene: 0.44 ug/l;

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

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

(N) Tetrachloroethylene: 0.7 ug/l;

(O) Trichloroethylene: 2.5 ug/l; and

(P) 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 2H .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 2H .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 (4)(a) through (4)(c) of this Rule or Rule .0104 of this Subchapter; none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any discharger shall be required upon request by the Commission to 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

Commented [A13]: Removed duplicative language.

Commented [A14]: Language moved from Items (2) and (3).

Commented [A15]: Additional language regarding individual permit was added for clarity.

Commented [A16]: Added correct reference and language for clarity

Commented [A17]: "Non-process industrial wastes" was removed because it is a sub-category of industrial waste, and "in the entire watershed" was added for clarity. Changed "and" to "or" for clarity.

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) None that would have an adverse impact, as that term is defined in 15A NCAC 02H .1002, on waters for use as a water supply or any other designated use.

(b) Waters of this class shall be protected as water supplies that are located in watersheds that meet average watershed development density levels specified 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.

Commented [A18]: Added reference to NPDES permits for clarity.

Commented [A19]: Added 'remainder of the watershed" for clarity.

Commented [A20]: Language moved from Items (2) and (3).

Commented [A21]: Provided rule reference language for further clarity.

Commented [A22]: Added "that are located in watersheds" for clarity and corrected rule reference.

15A NCAC 02B .0215 is proposed for amendment as follows:

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

The following water quality standards 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 WS-III waters are as follows: 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 and any other best usage specified for Class C waters;~~ Best Usage of Waters: 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 and any other best usage specified for Class C waters.

(2) ~~The conditions related to the best usage shall be as follows: waters of this class are protected as water supplies that are in low to moderately developed watersheds and meet average watershed development density levels as specified in Sub-Items (3)(b)(i)(A), (3)(b)(i)(B), (3)(b)(ii)(A) and (3)(b)(ii)(B) of this Rule; discharges that qualify for a General Permit pursuant to 15A NCAC 2H .0127, trout farm discharges, recycle (closed loop) systems that only discharge in response to 10-year storm events, and other stormwater discharges shall be allowed in the entire watershed; treated domestic wastewater discharges shall be allowed in the entire watershed but no new domestic wastewater discharges shall be allowed in the critical area; no new industrial wastewater discharges except non-process industrial discharges shall be allowed in the entire watershed,~~ Conditions Related to Best Usage:

(a) Chemical and physical water quality parameters in a WS-III watershed shall meet requirements as specified in Item (3) of this Rule.

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

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

(d) ~~the~~ The waters, following treatment required by the Division, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C ~~.1500.~~ .1500 which are hereby incorporated by reference including any subsequent amendments and editions.

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

Commented [A1]: Merging usage information from .0101 and .0301 into individual classification rule. No effect.

Commented [A2]: Moved some language to other parts of this rule or 2B .0624. Remaining language was deemed unnecessary: "low to moderately developed watershed" is an ambiguous phrase and "recycle (closed loop) systems" should not discharge and are addressed in 02T rules.

Commented [A3]: Provides location of moved language from Item (2) above to other parts of the rule.

Commented [A4]: Unnecessary. No effect.

(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, the more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local governments has failed to adopt necessary protection measures;

(3) ~~Quality standards applicable to Class WS-III Waters shall be as follows:~~ Chemical and physical water quality parameters in a WS-III watershed shall meet the following requirements:

~~(a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none shall be allowed except for those specified in Item (2) of this Rule and Rule .0104 of this Subchapter; none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any discharger may be required by the Commission to 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;~~

~~(b) Nonpoint Source and Stormwater Pollution: none that would adversely impact the waters for use as water supply or any other designated use;~~

~~(i) Nonpoint Source and Stormwater Pollution Control Criteria For Entire Watershed:~~

~~(A) Low Density Option: development density shall be limited to either no more than two dwelling units of single family detached residential development per acre (or 20,000 square foot lot excluding roadway right-of-way), or 24 percent built-upon area for all other residential and non-residential development in watershed outside of the critical area; stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;~~

~~(B) High Density Option: if new development density exceeds the low density option requirements specified in Sub-Item (3)(b)(i)(A) of this Rule then development shall control runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 50 percent built-upon area;~~

~~(C) Land within the watershed shall be deemed compliant with the density requirements if the following condition is met: the density of all existing development at the time of reclassification does not exceed the~~

Commented [A5]: Moved language in this paragraph to Item (4)(f) of this rule.

Commented [A6]: Moved and reworded this language to Item (5)(a).

Commented [A7]: (A) Through (H) moved to Water Supply Watershed Protection Rules.

density requirement when densities are averaged throughout the entire watershed area;

(D) Cluster development shall be allowed on a project-by-project basis as follows:

(I) overall density of the project meets associated density or stormwater control requirements of this Rule;

(II) buffers meet the minimum statewide water supply watershed protection requirements;

(III) built-upon areas shall be designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas;

(IV) areas of concentrated development shall be located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways;

(V) remainder of tract to remain in vegetated or natural state;

(VI) area in the vegetated or natural state may be conveyed to a property owners association, a local government for preservation as a park or greenway, a conservation organization, or placed in a permanent conservation or farmland preservation easement;

(VII) a maintenance agreement for the vegetated or natural area shall be filed with the Register of Deeds; and

(VIII) cluster development that meets the applicable low density option requirements shall transport stormwater runoff from the development by vegetated conveyances to the maximum extent practicable;

(E) A maximum of 10 percent of each jurisdiction's portion of the watershed outside of the critical area as delineated on July 1, 1993 may be developed with new development projects and expansions of existing development of up to 70 percent built-upon surface area (the "10/70 option") in addition to the new development approved in compliance with the appropriate requirements of Sub-Item (3)(b)(i)(A) or Sub-Item (3)(b)(i)(B) of this Rule. For expansions to existing development, the existing built-upon surface area shall not be counted toward the allowed 70 percent built-upon surface area. A local

government having jurisdiction within the watershed may transfer, in whole or in part, its right to the 10/70 option land area to another local government within the watershed upon submittal of a joint resolution and review by the Commission. When the water supply watershed is composed of public lands, such as National Forest land, local governments may count the public land acreage within the watershed outside of the critical area in figuring the acreage allowed under this provision. For local governments that do not choose to use the high density option in that WS-III watershed, each project shall, to the maximum extent practicable, minimize built-upon surface area, direct stormwater runoff away from surface waters, and incorporate best management practices, as defined in Rule .0202 of this Section, to minimize water quality impacts. If the local government selects the high density development option within that WS-III watershed, then engineered stormwater controls shall be employed for the new development;

(F) If local governments choose the high density development option that requires engineered stormwater controls, then they shall assume ultimate responsibility for operation and maintenance of the required controls as outlined in Rule .0104 of this Subchapter;

(G) A minimum 100 foot vegetative buffer shall be required for all new development activities that exceed the low density requirements as specified in Sub-Item (3)(b)(i)(A) and Sub-Item (3)(b)(ii)(A) of this Rule, otherwise a minimum 30 foot vegetative buffer for development shall be required along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. Nothing in this Rule shall stand as a bar to artificial streambank or shoreline stabilization;

(H) No new development shall be allowed in the buffer; water dependent structures, or other structures such as flag poles, signs, and security lights, which result in only de minimus increases in impervious area and public projects such as road crossings and greenways may be allowed where no practicable alternative exists. These activities shall minimize built-upon surface area and avoid channelizing stormwater;

(I) No National Pollutant Discharge Elimination System (NPDES) permits shall be issued for landfills that discharge treated leachate;

(ii) Critical Area Nonpoint Source and Stormwater Pollution Control Criteria:

Commented [A8]: Moved language to Item (4) (g) of this rule.

Commented [A9]: (A) and (B) moved to Water Supply Watershed Protection Rules.

~~(A) Low Density Option: new development shall be limited to either no more than one dwelling unit of single family detached residential development per acre (or 40,000 square foot lot excluding roadway right-of-way), or 12 percent built-upon area for all other residential and non-residential development; stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;~~

~~(B) High Density Option: if new development exceeds the low density requirements specified in Sub-Item (3)(b)(ii)(A) of this Rule, then engineered stormwater controls shall be used to control runoff from the first inch of rainfall; development shall not exceed 30 percent built-upon area;~~

~~(C) No new permitted sites for land application of residuals or petroleum contaminated soils shall be allowed;~~

~~(D) No new landfills shall be allowed;~~

~~(c)~~(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;

~~(d)~~(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 taste and odor difficulties in water supplies that cannot be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;

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

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

~~(g)~~(e) Total dissolved solids: not greater than 500 mg/l;

~~(h)~~(f) Toxic and other deleterious substances:

(i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~non-carcinogens in Class WS-III waters:~~ non-carcinogens:

(A) Barium: 1.0 mg/l;

(B) Chloride: 250 mg/l;

(C) Nickel: 25 ug/l;

(D) Nitrate nitrogen: 10 mg/l;

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

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

(G) Sulfates: 250 mg/l;

Commented [A10]: Moved to Item (4) (h) of this rule.

Commented [A11]: Moved to Item (4)(g) of this rule.

Commented [A12]: Removed duplicative language.

(ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~carcinogens in Class WS-III waters:~~ carcinogens:

(A) Aldrin: 0.05 ng/l;
(B) Arsenic: 10 ug/l;
(C) Benzene: 1.19 ug/l;
(D) Carbon tetrachloride: 0.254 ug/l;
(E) Chlordane: 0.8 ng/l;
(F) Chlorinated benzenes: 488 ug/l;
(G) DDT: 0.2 ng/l;
(H) Dieldrin: 0.05 ng/l;
(I) Dioxin: 0.000005 ng/l;
(J) Heptachlor: 0.08 ng/l;
(K) Hexachlorobutadiene: 0.44 ug/l;
(L) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(M) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(N) Tetrachloroethylene: 0.7 ug/l;
(O) Trichloroethylene: 2.5 ug/l; and
(P) 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 2H .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 2H .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 (4)(a) through (4)(e) of this Rule or Rule .0104 of this Subchapter; none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any discharger may be required by the Commission to disclose all chemical constituents present or potentially present in their

Commented [A13]: Removed duplicative language.

Commented [A14]: Language moved from Items (2) and (3).

Commented [A15]: Additional language regarding individual permit was added for clarity.

Commented [A16]: Added correct reference and language for clarity.

Commented [A17]: Added reference to NPDES permits for clarity.

Commented [A18]: Added reference to NPDES permits for clarity.

Commented [A19]: "Non-process industrial wastes" was removed because it is a sub-category of industrial waste and "in the entire watershed" was added for clarity. Changed "and" to "or" for clarity.

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) None that would have an adverse impact, as that term is defined in 15A NCAC 02H .1002, on waters for use as a water supply or any other designated use.

(b) Waters of this class shall be protected as water supplies that are located in watersheds that meet average watershed development density levels specified 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.

Commented [A20]: Added “remainder of the watershed” for clarity.

Commented [A21]: Language moved from Items (2) and (3).

Commented [A22]: Provided rule reference language for further clarity.

Commented [A23]: Added “that are located in watersheds” for clarity and corrected rule reference.

15A NCAC 02B .0216 is proposed for amendment as follows:

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

The following water quality standards 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 WS-IV waters shall be as follows: 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 and any other best usage specified for Class C waters;~~ Best Usage of Waters: 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 and any other best usage specified for Class C waters.

(2) ~~The conditions related to the best usage shall be as follows: waters of this class are protected as water supplies that are in moderately to highly developed watersheds or protected areas and~~ which ~~meet average watershed development density levels as specified in Sub-Items (3)(b)(i)(A), (3)(b)(i)(B), (3)(b)(ii)(A) and (3)(b)(ii)(B) of this Rule; discharges that qualify for a General Permit pursuant to 15A NCAC 02H .0127, trout farm discharges, recycle (closed loop) systems that only discharge in response to 10-year storm events, other stormwater discharges, and domestic wastewater discharges shall be allowed in the protected and critical areas; treated industrial wastewater discharges shall be allowed in the protected and critical areas; however, new industrial wastewater discharges in the critical area shall be required to meet the provisions of 15A NCAC 02B .0224 (1)(b)(iv), (v) and (vii), and 15A NCAC 02B .0203; new industrial connections and expansions to existing municipal discharges with a pretreatment program pursuant to 15A NCAC 02H .0904 shall be allowed;~~ Conditions Related to Best Usage:

(a) Chemical and physical water quality parameters in a WS-IV watershed shall meet requirements as specified in Item (3) of this Rule.

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

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

(d) ~~the~~ The waters, following treatment required by the Division, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C ~~.1500.~~ .1500, which are hereby incorporated by reference including subsequent amendments and editions.

Commented [WA1]: Added to be consistent with titles for other WS classification regulations

Commented [KG2]: Merging usage information from .0101 and .0301 into individual classification rule. No effect.

Commented [KG3]: Moved some language to other parts of this rule or 2B .0624. Reworded language moved to other parts of this rule for clarity. Remaining language was deemed unnecessary: "Moderately to highly developed or protected areas" are ambiguous phrases and "recycle (closed loop) systems" should not discharge and are addressed in 02T rules.

Commented [WA4]: Provides location of moved language in Item (2) to other parts in this rule.

(e) Sources of water pollution that preclude any of ~~these~~ the best uses ~~on either a short-term or long-term basis~~ shall be considered to be violating 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, the more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local governments has failed to adopt necessary protection ~~measures;~~measures.

(3) ~~Quality standards applicable to Class WS-IV Waters shall be as follows:~~Chemical and physical water quality parameters in a WS-IV watershed shall meet the following requirements:

~~(a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none shall be allowed except for those specified in Item (2) of this Rule and Rule .0104 of this Subchapter and none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any dischargers or industrial users subject to pretreatment standards may be required by the Commission to 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;~~

~~(b) Nonpoint Source and Stormwater Pollution: none shall be allowed that would adversely impact the waters for use as water supply or any other designated use.~~

~~(i) Nonpoint Source and Stormwater Pollution Control Criteria For Entire Watershed or Protected Area:~~

~~(A) Low Density Option: development activities that require a Sedimentation/Erosion Control Plan in accordance with 15A NCAC 04 established by the North Carolina Sedimentation Control Commission or approved local government programs as delegated by the Sedimentation Control Commission shall be limited to no more than either: two dwelling units of single family detached development per acre (or 20,000 square foot lot excluding roadway right-of-way),or 24 percent built-upon on area for all other residential and non-residential development; or three dwelling units per acre, or 36 percent built-upon area for projects without curb and gutter street systems in the protected area outside of the critical area; stormwater runoff from the development shall be~~

Commented [KG5]: Unnecessary. No effect.

Commented [WA6]: Moved to Item (4) in this rule.

Commented [KG7]: Moved (A) through (H) of (i) to Water Supply Watershed Protection Rules. No effect

~~transported by vegetated conveyances to the maximum extent practicable;~~

~~(B) High Density Option: if new development activities that require a Sedimentation/Erosion Control Plan exceed the low density requirements of Sub-Item (3)(b)(i)(A) of this Rule, then development shall control the runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 70 percent built-upon area;~~

~~(C) Land within the critical and protected area shall be deemed compliant with the density requirements if the following condition is met: the density of all existing development at the time of reclassification does not exceed the density requirement when densities are averaged throughout the entire area;~~

~~(D) Cluster development shall be allowed on a project-by-project basis as follows:~~

~~(I) overall density of the project meets associated density or stormwater control requirements of this Rule;~~

~~(II) buffers meet the minimum statewide water supply watershed protection requirements;~~

~~(III) built-upon areas shall be designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas;~~

~~(IV) areas of concentrated development shall be located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways;~~

~~(V) remainder of tract to remain in vegetated or natural state;~~

~~(VI) area in the vegetated or natural state may be conveyed to a property owners association, a local government for preservation as a park or greenway, a conservation organization, or placed in a permanent conservation or farmland preservation easement;~~

~~(VII) a maintenance agreement for the vegetated or natural area shall be filed with the Register of Deeds; and~~

~~(VIII) cluster development that meets the applicable low density option requirements shall transport stormwater runoff from the~~

development by vegetated conveyances to the maximum extent practicable;

(E) If local governments choose the high density development option that requires engineered stormwater controls, then they shall assume responsibility for operation and maintenance of the required controls as outlined in Rule .0104 of this Subchapter;

(F) A minimum 100 foot vegetative buffer shall be required for all new development activities that exceed the low density option requirements as specified in Sub-Item (3)(b)(i)(A) or Sub-Item (3)(b)(ii)(A) of this Rule, otherwise a minimum 30 foot vegetative buffer for development shall be required along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies;

(G) No new development shall be allowed in the buffer; water dependent structures, or other structures, such as flag poles, signs, and security lights, which result in only de minimus increases in impervious area and public projects such as road crossings and greenways may be allowed where no practicable alternative exists. These activities shall minimize built-upon surface area and avoid channelizing stormwater;

(H) For local governments that do not use the high density option, a maximum of 10 percent of each jurisdiction's portion of the watershed outside of the critical area as delineated on July 1, 1995 may be developed with new development projects and expansions to existing development of up to 70 percent built-upon surface area (the "10/70 option") in addition to the new development approved in compliance with the appropriate requirements of Sub-Item (3)(b)(i)(A) of this Rule. For expansions to existing development, the existing built-upon surface area shall not be counted toward the allowed 70 percent built-upon surface area. A local government having jurisdiction within the watershed may transfer, in whole or in part, its right to the 10/70 option land area to another local government within the watershed upon submittal of a joint resolution for review by the Commission. When the designated water supply watershed area is composed of public land, such as National Forest land, local governments may count the public land acreage within the designated watershed area outside of the critical area in figuring the acreage allowed under this provision. Each project shall, to the maximum extent practicable, minimize built-upon surface area,

~~direct stormwater runoff away from surface waters and incorporate best management practices, as defined in Rule .0202 of this Section, to minimize water quality impacts;~~

~~(ii) Critical Area Nonpoint~~ Source and Stormwater Pollution Control Criteria: ~~(A) Low Density Option: new development activities that require a Sedimentation/Erosion Control Plan in accordance with 15A NCAC 4 established by the North Carolina Sedimentation Control Commission or approved local government programs as delegated by the Sedimentation Control Commission shall be limited to no more than two dwelling units of single family detached development per acre (or 20,000 square foot lot excluding roadway right-of-way), or 24 percent built-upon area for all other residential and non-residential development; stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;~~

~~(B) High Density Option: if new development density exceeds the low density requirements specified in Sub-Item (3)(b)(ii)(A) of this Rule, engineered stormwater controls shall be used to control runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 50 percent built-upon area;~~

~~(C) No new permitted sites for land application of residuals or petroleum contaminated soils shall be allowed;~~

~~(D) No new landfills shall be allowed;~~

Commented [KG8]: (A) And (B) of (ii) moved to Water Supply Watershed Protection Rule. No effect.

Commented [WA9]: Moved to Item (4)(h) in this rule.

Commented [WA10]: Moved to Item (4)(g) in this rule

~~(c)~~(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;

~~(d)~~(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 taste and odor difficulties in water supplies that cannot be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;

~~(e)~~(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;

~~(f)~~(d) Total hardness shall not exceed 100 mg/l as calcium carbonate ($CaCO_3$ or Ca + Mg);

~~(g)~~(e) Total dissolved solids shall not exceed 500 mg/l;

~~(h)~~(f) Toxic and other deleterious substances:

(i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~non-carcinogens in Class WS-IV waters:~~non-carcinogens:

(A) Barium: 1.0 mg/l;
(B) Chloride: 250 mg/l;
(C) Nickel: 25 ug/l;
(D) Nitrate nitrogen: 10.0 mg/l;
(E) 2,4-D: 70 ug/l;
(F) 2,4,5-TP (Silvex): 10 ug/l; and
(G) Sulfates: 250 mg/l;

(ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~carcinogens in Class WS-IV waters:~~carcinogens:

(A) Aldrin: 0.05 ng/l;
(B) Arsenic: 10 ug/l;
(C) Benzene: 1.19 ug/l;
(D) Carbon tetrachloride: 0.254 ug/l;
(E) Chlordane: 0.8 ng/l;
(F) Chlorinated benzenes: 488 ug/l;
(G) DDT: 0.2 ng/l;
(H) Dieldrin: 0.05 ng/l;
(I) Dioxin: 0.000005 ng/l;
(J) Heptachlor: 0.08 ng/l;
(K) Hexachlorobutadiene: 0.44 ug/l;
(L) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(M) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(N) Tetrachloroethylene: 0.7 ug/l;
(O) Trichloroethylene: 2.5 ug/l; and
(P) 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 2H .0126 shall be allowed in the entire watershed.

Commented [WA11]: Removed duplicative language

Commented [WA12]: Removed duplicative language

Commented [WA13]: Language moved from Items (2) and (3) in this rule.

Commented [WA14]: Additional language regarding individual permit was added for clarity.

Commented [WA15]: Added correct reference and language for clarity.

(d) No discharge of sewage, industrial wastes, or other wastes shall be allowed in the entire watershed except for those allowed by Sub-Items (4)(a) through (4)(c) of this Rule or Rule .0104 of this Subchapter; none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any dischargers or industrial users subject to pretreatment standards may be required by the Commission to 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.

Commented [WA16]: "Non-process industrial wastes" was removed because it is a sub-category of industrial waste and "in the entire watershed" was added for clarity. Changed "and" to "or" for clarity.

(e) New industrial discharges of treated wastewater in the critical area shall be required to meet the provisions of Sub-Items (c)(2)(iv), (v), and (vii) of Rule .0224 of this Section and Rule .0203 of this Section.

Commented [WA17]: Moved from Item (2) and added correct rule reference

(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.

Commented [WA18]: Moved from Item (2) in this rule.

(g) No new landfills shall be allowed in the Critical Area.

Commented [WA19]: Moved from Item (3)(ii)(D) in this rule.

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

Commented [WA20]: Moved from Item (3)(ii)(C) in this rule.

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

Commented [WA21]: Language moved from Items (2) and (3) in this rule.

(a) None that would have an adverse impact, as that term is defined in 15A NCAC 02H .1002, on waters for use as a water supply or any other designated use.

Commented [WA22]: Language moved and reworded (for clarity) from Item (3)(b), rule reference added

(b) Waters of this class shall be protected as water supplies that are located in watersheds that meet average watershed development density levels specified in Rule .0624 of this Subchapter.

Commented [WA23]: Language moved and reworded (for clarity) from Item (2), rule reference added

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.

15A NCAC 02B .0218 is proposed for amendment as follows:

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

The following water quality standards 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 WS-V waters shall be as follows: waters that are protected as water supplies that are upstream and draining to Class WS-IV waters; or 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 shall not be restricted to WS-V classification; and all Class C uses. The Commission may 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;~~ Best Usage of Waters: waters that are protected as water supplies which are generally upstream and draining to Class WS-IV waters; or 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 conditions related to the best usage shall be as follows: waters of this class are protected water supplies;~~ Conditions Related to Best Usage:

(a) Chemical and physical water quality parameters in a WS-V water shall meet requirements as specified in Item (3) of this Rule.

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

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

(d) ~~the~~ The waters, following treatment required by the Division, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C ~~.1500;~~ .1500, which are hereby incorporated by reference including subsequent amendments and editions;

(e) ~~no categorical restrictions on watershed development or wastewater discharges shall be required, however, the~~ The Commission or its designee may apply management requirements for the protection of waters downstream of receiving waters ~~(15A NCAC 02B .0203).~~provided in Rule .0203 of this Section.

Commented [KG1]: Merging usage information from .0101 and .0301 into individual classification rule. No effect.

Commented [WA2]: Moved to Item (2)(f) in this rule

Commented [WA3]: Provides location of language in this rule.

Commented [WA4]: Removed unnecessary language. No effect

(f) The Commission may 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 ~~these~~ the best uses ~~on either a short-term or long-term basis~~ shall be considered to be violating a water quality standard;

(3) ~~Quality standards applicable to Class WS-V Waters shall be as follows:~~ Chemical and physical water quality parameters in a WS-V water shall meet the following requirements:

~~(a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any discharges or industrial users subject to pretreatment standards shall be required by the Commission to 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;~~

~~(b)~~(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;

~~(c) Nonpoint Source and Stormwater Pollution: none that would adversely impact the waters for use as water supply or any other designated use;~~

~~(d)~~(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 taste and odor difficulties in water supplies that ~~cannot~~can not be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;

~~(e)~~(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;

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

~~(g)~~(e) Total dissolved solids: not greater than 500 mg/l;

~~(h)~~(f) Toxic and other deleterious substances:

(i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~non-carcinogens in Class WS-V waters:~~non-carcinogens:

(A) Barium: 1.0 mg/l;

(B) Chloride: 250 mg/l;

Commented [KG5]: Provides consistency with Rule .0104, no fiscal impact.

Commented [WA6]: Unnecessary. No effect

Commented [WA7]: Moved language to Item (4) in this rule

Commented [WA8]: Moved to Item (5) in this rule

Commented [WA9]: Removed duplicative language

(C) Nickel: 25 ug/l;
(D) Nitrate nitrogen: 10.0 mg/l;
(E) 2,4-D: 70 ug/l;
(F) 2,4,5-TP (Silvex): 10 ug/l; and
(G) Sulfates: 250 mg/l.

(ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for ~~carcinogens in Class WS-V waters:~~carcinogens:

(A) Aldrin: 0.05 ng/l;
(B) Arsenic: 10 ug/l;
(C) Benzene: 1.19 ug/l;
(D) Carbon tetrachloride: 0.254 ug/l;
(E) Chlordane: 0.8 ng/l;
(F) Chlorinated benzenes: 488 ug/l;
(G) DDT: 0.2 ng/l;
(H) Dieldrin: 0.05 ng/l;
(I) Dioxin: 0.000005 ng/l;
(J) Heptachlor: 0.08 ng/l;
(K) Hexachlorobutadiene: 0.44 ug/l;
(L) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
(M) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
(N) Tetrachloroethylene: 0.7 ug/l;
(O) Trichloroethylene: 2.5 ug/l; and
(P) Vinyl Chloride: 0.025 ug/l.

(4) Wastewater and stormwater point source discharges in a WS-V water shall meet the following requirements: 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 to the satisfaction of the Commission and in accordance with the requirements of the Division. Any dischargers or industrial users subject to pretreatment standards may be required by the Commission to 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 meet the following requirements: None that would adversely impact, as that term is defined in 15A NCAC 02H .1002, on waters for use as water supply or any other designated use;

Commented [WA10]: Removed duplicative language

Commented [WA11]: Language moved from Item (3) in this rule.

Commented [WA12]: "Non-process industrial wastes" was removed because it is a sub-category of industrial waste

Commented [WA13]: Language moved from Item (3)(c) in this Rule.

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.

15A NCAC 02B .0219 is proposed for amendment as follows:

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

The following water quality standards apply to surface waters that are for primary contact recreation ~~including frequent or organized swimming~~ 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) ~~Best Usage of Waters. Primary recreation and any other best usage specified by the "C" classification; Best Usage of Waters.~~ Best Usage of Waters: Primary contact recreation as defined in Rule .0202 of this Section and any other best usage specified by the "C" classification.

(2) Conditions Related to Best Usage. In assigning the B classification to waters intended for primary contact recreation, the Commission will take into consideration the relative proximity of sources of water pollution and the potential hazards involved in locating swimming areas close to sources of water pollution and will not assign this classification to waters in which such water pollution could result in a hazard to public health. The waters shall meet accepted 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. Sources of water pollution which preclude any of these uses ~~on either a short term or long term basis~~ shall be considered to be violating a water quality ~~standard;~~standard.

(3) Quality standards applicable to Class B waters:

(a) Sewage, industrial wastes, or other wastes: none which are not effectively 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 may not be allowed if the Director determines that the waste ~~can not~~ cannot be reliably treated to ensure the protection of primary contact recreation;

(b) Organisms of coliform group: fecal coliforms not to exceed geometric mean of 200/100 ml (MF count) based on at least five consecutive samples examined during any 30-day period and not to exceed 400/100 ml in more than 20 percent of the samples examined during such period.

(4) Wastewater discharges to waters classified as B will meet the reliability requirements specified in 15A NCAC 2H .0124. Discharges to waters where a primary contact recreational use is determined by the Director to be attainable will 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.

Commented [A1]: Added clarity, no effect.

Commented [A2]: Providing rule reference, no effect.

Commented [A3]: Moved from .0106, no effect. Merged from .0101 and .0301, no effect.

Commented [A4]: Deleted unnecessary language, no effect

Commented [A5]: Moved from .0106, no effect.

15A NCAC 02B .0220 is proposed for amendment as follows:

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

~~General.~~ The water quality standards for all tidal salt waters shall be the basic standards applicable to Class SC waters. Water quality ~~standards~~ for temperature and numerical water quality standards for the protection of human health applicable to all surface waters are in Rule .0208 of this Section. Additional and more stringent standards applicable to other specific tidal salt water classifications are specified in Rules .0221 and .0222 of this Section. ~~Action Levels, for purposes of National Pollutant Discharge Elimination System (NPDES) permitting, are specified in Item (20) of this Rule.~~

(1) ~~Best Usage of Waters: any usage except primary recreation or shellfishing for market purposes; usages include aquatic life propagation and maintenance of biological integrity (including fishing, fish and functioning PNAs), wildlife, and secondary recreation;~~ Best Usage of Waters: 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) Conditions Related to Best Usage: the waters shall be suitable ~~for aquatic life propagation and maintenance of biological integrity, wildlife, and secondary recreation.~~all best uses specified in this Rule. Any source of water pollution that precludes any of these ~~uses, including their functioning as PNAs, on either a short-term or a long-term basis~~ uses shall be considered to be violating a water quality standard;

(3) Chlorophyll a (corrected): not greater than 40 ug/l (based upon monthly averaging where such data are available during the growing season which is generally April 1 – October 31) 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, in the opinion of the Director, the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired;

(4) Cyanide: 1 ug/l;

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

(6) Enterococcus, ~~including Enterococcus faecalis, Enterococcus faecium, Enterococcus avium and Enterococcus gallinarium:~~ including *Enterococcus faecalis*, *Enterococcus faecium*, *Enterococcus avium* and *Enterococcus gallinarium*: not to exceed a geometric mean of 35 enterococci per 100 ml based upon a minimum of five samples within any consecutive 30 days. For purposes of beach monitoring and notification, "Coastal Recreational Waters Monitoring, Evaluation and Notification" regulations (15A NCAC 18A .3400), available free of charge at:

Commented [A1]: Incorporated rule reference, no effect.

Commented [A2]: Merging information from .0101 and .0301, no effect.

Commented [A3]: Language moved into (1) above, no effect.

Commented [A4]: Delete unnecessary language, no effect

Commented [A5]: Add clarity that a single sample of Chlorophyll a is not adequate for assessment purposes.
Effect: Provides for management recommendations regarding assessment and impairment to be guided by analysis.

Commented [A6]: Italicized genus and species names, no effect.

http://www.ncoah.com/, are hereby incorporated by reference including any subsequent ~~amendments;~~ 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, 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) 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;

~~(c) Metals criteria shall be used for proactive environmental management. An instream exceedence of the numeric criterion for metals shall not be considered to have caused an adverse impact to the aquatic community without biological confirmation and a comparison of all available monitoring data and applicable water quality standards. This weight of evidence evaluation shall take into account data quality and the overall confidence in how representative the sampling is of conditions in the waterbody segment before an assessment of aquatic life use attainment, or non-attainment, is made by the Division. Recognizing the synergistic and antagonistic complexities of other water quality variables on the actual toxicity of metals, with the exception of mercury and selenium, biological monitoring shall be used to validate, by direct measurement, whether or not the aquatic life use is supported.~~

~~(d)~~(c) Acute and chronic tidal salt water quality metals standards are 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;

Commented [A7]: "Biological confirmation" disapproved by US EPA decision document on 2007-2015 Triennial Review (rec'd by DWR April 19, 2016). Same effect as for Rule 2B .0211.

(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;

With the exception of mercury and selenium, acute and chronic tidal saltwater quality aquatic life standards for metals listed above apply to the dissolved form of the metal and apply as a function of the pollutant's water effect ratio (WER). A WER expresses the difference between the measures of the toxicity of a substance in laboratory waters and the toxicity in site water. 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), free of charge, at http://water.epa.gov/scitech/swguidance/standards/handbook/, hereby incorporated by reference including any subsequent ~~amendments.~~ amendments and editions. Alternative site-specific standards may also be developed when any person submits values that demonstrate to the Commissions' satisfaction that they were derived in accordance with the "Water Quality Standards Handbook: Second Edition, Recalculation Procedure or the Resident Species Procedure", hereby incorporated by reference including subsequent amendments and editions at http://water.epa.gov/scitech/swguidance/standards/handbook/.

This material is available free of charge;

(10) Oils, deleterious substances, 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, 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 pursuant to ~~40 CFR 110.3;~~ 40 CFR 110.3 which are incorporated by reference including any subsequent amendments and editions, This material is available free of charge on the internet at http://www.gpo.gov/fdsys/.

Commented [A8]: Reference update, no effect.

(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 normal for the waters in the area, which range 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:

(a) Combined radium-226 and radium-228: The average annual activity level (based on at least one sample collected per quarter) 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 (based on at least one sample collected per quarter) 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 be required to 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 nor more than 2.2 degrees C (3.96 degrees F) during other months and in no cases to 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 can be 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). BMPs shall be in full compliance with all specifications governing the proper design, installation, operation, and maintenance of such ~~BMPs;~~BMPs.

~~(20) Action Levels for Toxic Substances Applicable to NPDES Permits:~~

~~(a) Copper, dissolved, chronic: 3.1 ug/l;~~

~~(b) Silver, dissolved, chronic: 0.1 ug/l;~~

~~(c) Zinc, dissolved, chronic: 81 ug/l~~

~~If the action levels for any of the substances listed in this Item (which are generally not bioaccumulative and have variable toxicity to aquatic life because of chemical form, solubility, stream characteristics, or associated waste characteristics) shall be determined by the waste load allocation to be exceeded in a receiving water by a discharge under the 7Q10 flow 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 these substances from their effluents. Those substances for which action levels are listed in this Item shall be limited as appropriate in the NPDES permit if sufficient information (to be determined for metals by measurements of that portion of the dissolved instream concentration of the action level parameter attributable to a specific NPDES permitted discharge) exists to indicate that any of those substances may be a causative factor resulting in toxicity of the effluent.~~

Commented [A9]: Actions Levels disapproved by US EPA decision document on 2007-2015 Triennial Review (rec'd by DWR April 19, 2016)

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.

15A NCAC 02B .0221 is proposed for amendment as follows:

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

The following water quality standards apply to surface waters that are used for shellfishing for market purposes and are classified SA. Water quality standards applicable to Class SC and SB waters as described in Rule .0220 and Rule .0222 of this Section, respectively, also apply to Class SA waters.

(1) Best Usage of Waters: shellfishing for market purposes and any other usage specified by the "SB" or "SC" classification;

(2) Conditions Related to Best Usage:

In determining the safety or suitability of Class SA waters to be used for shellfishing for market purposes, the Commission will be guided by 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~~ Waters shall meet the current sanitary and bacteriological standards as adopted by the Commission for Public Health and shall be suitable for shellfish culture. Any source of water pollution which precludes any of these uses, ~~including their functioning as~~ ~~PNAs,~~ Primary Nursery Areas ~~on either a short-term or a long-term basis~~ shall be considered to be violating a water quality standard. Waters will not be classified SA without the written concurrence of the Division of Marine Fisheries.

(3) Quality Standards applicable 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: none shall be allowed that are not effectively treated to the satisfaction of the Commission in accordance with the requirements of the ~~Division of Environmental Health;~~Division;and

(d) Organisms of coliform group: fecal coliform group not to exceed a median MF of 14/100 ml and not more than 10 percent of the samples shall exceed an MF count of 43/100 ml in those areas most probably exposed to fecal contamination during the most unfavorable hydrographic and pollution conditions.

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

Commented [A1]: Merging information from .0101, .0108 and .0301, no effect other than consolidation.

Commented [A2]: Deleting duplicative "functioning as a PNA" because it is covered by the reference in the SC rule, no effect.

Commented [A3]: Deleted unnecessary language, no effect.

Commented [A4]: Language moved from .0108, no effect.

15A NCAC 02B .0222 is proposed for amendment as follows:

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

The following water quality standards apply to surface waters that are used for primary contact recreation ~~including frequent or~~ as defined in Rule .0202 of this Section ~~organized swimming,~~ and are classified SB. Water quality standards applicable to Class SC waters are described in Rule .0220 of this Section also apply to SB waters.

(1) ~~Best Usage of waters: primary recreation and any other usage specified by the "SC" classification;~~ Best Usage of Waters: primary contact recreation as defined in Rule .0202 of this Section and any other usage specified by the "SC" classification;

(2) Conditions Related to Best Usage: In assigning the SB classification to waters intended for primary contact recreation, the Commission will take into consideration the relative proximity of sources of water pollution and the potential hazards involved in locating swimming areas close to sources of water pollution and will not assign this classification to waters in which such water pollution could result in a hazard to public health. ~~the~~ The waters shall meet accepted sanitary standards of water quality for outdoor bathing places as specified in Item (3) of this Rule and will be of sufficient size and depth for primary contact recreation purposes. Any source of water pollution which precludes any of these uses, ~~including their functioning as PNAs,~~ Primary Nursery Areas ~~on either a short-term or a long-term basis~~ shall be considered to be violating a water quality ~~standard;~~standard.

(3) Quality Standards applicable 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 effectively treated to the satisfaction of the Commission; in determining the degree of treatment required for such waters discharged into waters which are to be used for bathing, the Commission shall take into consideration 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 may not be allowed if the Director determines that the waste ~~can not~~ cannot be treated to ensure the protection of primary contact recreation;

(c) Enterococcus, including *Enterococcus faecalis*, *Enterococcus faecium*, *Enterococcus avium* and *Enterococcus gallinarium*: not to exceed a geometric mean of 35 enterococci per 100 ml based upon a minimum of five samples within any consecutive 30 days. In accordance with Federal Clean Water Act, 33 U.S.C. 1313 ~~(Federal Water Pollution Control Act)~~ for purposes of beach monitoring and notification, "Coastal Recreation Waters Monitoring, Evaluation and Notification" regulations (15A NCAC 18A .3400) are hereby incorporated by reference including any subsequent ~~amendments.~~ amendments and editions.

(4) Wastewater discharges to waters classified as SB will meet the reliability requirements specified in 15A NCAC 2H .0124. Discharges to waters where a primary contact

Commented [A1]: Added clarity, no effect.

Commented [A2]: Providing rule reference, no effect.

Commented [A3]: Moved from .0106, no effect. Merged from .0101 and .0301, no effect.

Commented [A4]: "functioning as a PNA" is covered by the reference to the SC rule, no effect.

Commented [A5]: Deleted unnecessary language, no effect.

Commented [A6]: Moved from .0106, no effect.

recreational use is determined by the Director to be attainable will 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.

15A NCAC 02B .0223 is proposed for amendment as follows:

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~~ 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 which the Commission determines impair the use of the water for its best usage as determined by the classification applied to such waters.

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

(d) Those waters of the state that are additionally classified as nutrient sensitive shall be identified in the appropriate ~~schedule of classifications as referenced in Section .0300 of this Subchapter.~~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 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.

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

Commented [A1]: Added for consistency with all other water quality rule titles in Section .0200.

Commented [A2]: Add clarity and updates reference material. No effect.

15A NCAC 02B .0224 is proposed for amendment as follows:

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

(a) High Quality Waters (HQW) are a subset of ~~waters~~ "waters with quality higher than the standards" ~~standards and are as described by 15A NCAC 2B .0101(e)(5)~~ as defined in Rule .0202 (59) of this Section. The ~~following~~ procedures in this rule shall be implemented in order to ~~implement~~ meet the requirements of Rule .0201(d) of this Section.

(b) All water supply watersheds which are classified as WS I or WS II, and all waters classified as Class SA waters are HQW. The Commission may classify, if case by case reclassification proceedings are conducted, any surface waters of the state as High Quality Waters (HQW) upon finding that such waters are:

(1) rated excellent based on biological and physical/chemical characteristics through monitoring or special studies, or

(2) primary nursery areas (PNA) and other functional nursery areas designated by the Marine Fisheries Commission or the Wildlife Resources Commission.

~~(1)~~(c) New or expanded wastewater discharges in High Quality Waters shall comply with the following:

~~(a)~~(1) Discharges from new single family residences shall be prohibited. Those existing subsurface systems for single family residences which fail and must discharge shall install a septic tank, dual or recirculating sand filters, disinfection and step aeration.

~~(b)~~(2) All new ~~NPDES~~ National Pollutant Discharge Elimination System (NPDES) wastewater discharges (except single family residences) shall be required to provide the treatment described below:

(i) Oxygen Consuming Wastes: Effluent limitations shall be as follows: 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 shall 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 readily available, evaluations shall assume a percent saturation determined by staff to be generally applicable to that hydroenvironment.

(ii) 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 ~~PNA's,~~ and to 20 mg/l for all other High Quality Waters.

(iii) 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. Domestic discharges are prohibited to SA waters.

(iv) Emergency Requirements: Failsafe treatment designs shall be employed, including stand-by power capability for entire treatment works, dual train design for all treatment components, or equivalent failsafe treatment designs.

Commented [A1]: Added language for clarity.

Commented [A2]: Reference added for clarity. No effect.

Commented [A3]: Reference is deleted because this information is now located in this rule.

Commented [A4]: Language from .0101. No effect.

Commented [A5]: Nursery areas will require a reclassification proceeding prior to applying HQW classification. The effect is that there will be a requirement for a public process.

Commented [A6]: Hearing Officer report from 1989 stated that the EMC's intention was not to include all the PNAs as HQW automatically but would have to go through the EMC's rulemaking process to be classified as HQWs

Commented [A7]: PNAs are not automatically HQWs and would have to go through the EMC's rulemaking process to apply this limit. PNA is not an EMC classification, however, "trout" is an EMC classification, thus the distinction.

(v) Volume: The total volume of treated wastewater for all discharges combined shall not exceed 50 percent of the total instream flow under 7Q10 conditions.

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

(vii) 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 hereby incorporated by reference including any subsequent amendments and ~~editions and is available for inspection at the Department of Environment and Natural Resources Library, 512 North Salisbury Street, Raleigh, North Carolina.~~ editions. ~~Copies may be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 at a cost of forty-seven dollars ($47.00).~~

~~(c)~~ (3) All expanded NPDES wastewater discharges in High Quality Waters shall be required to provide the treatment described in Sub-Item ~~(1)(b)~~ (c)(2) of this Rule, except for those existing discharges which expand with no increase in permitted pollutant loading.

~~(2)~~ (d) Development activities which require an Erosion and Sedimentation Control Plan in accordance with rules established by the NC Sedimentation Control Commission ~~or local erosion and sedimentation control program approved in accordance with 15A NCAC 4B .0218,~~ and which drain to and are within one mile of High Quality Waters (HQW) shall be required to follow the stormwater management rules as specified in 15A NCAC 2H ~~.1000.~~ .1019 (coastal county waters) or .1021 (non-coastal county waters). ~~Stormwater management requirements specific to HQW are described in 15A NCAC 2H .1006.~~

~~(3)~~ (e) Listing of Waters Classified HQW with Specific Actions. Waters classified as HQW with specific actions to protect exceptional water quality are listed as follows: Thorpe Reservoir [Little Tennessee River Basin, Index No. 2-79-23-(1)] including all of its tributaries shall be managed with respect to wastewater discharges through Item ~~(1)~~ (c) of this Rule. Item ~~(2)~~ (d) of this Rule shall not be applied in association with this HQW because of the local government implementation of WS-III stormwater management requirements.

Commented [A8]: Deleted obsolete reference. No effect. Applicable by reference are the EPA's 2013 aquatic life criteria for ammonia (freshwater), and the EPA's 1985 aquatic life criteria for ammonia (saltwater).

Commented [A9]: Clarity and reference updates. No effect.

~~If an applicant objects to the requirements to protect high quality waters 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.~~

Commented [A10]: This provision is available to all waters regardless of classification. No effect.

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.

15A NCAC 02B .0225 is proposed for amendment as follows:

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

(a) ~~General.~~ ~~In addition to the existing classifications,~~ ~~the~~ The Commission may classify unique and special surface waters of the state as outstanding resource waters (ORW) upon finding that such waters are of exceptional state or national recreational or ecological significance which require special protection to maintain existing uses and that the waters have exceptional water quality while meeting the following conditions:

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

(2) the characteristics which make these waters unique and special may not be protected by the assigned narrative and numerical water quality standards.

(b) ~~Outstanding Resource Values.~~Best Usage of Waters: In order to be classified as ORW, a water body must exhibit one or more of the following ~~values or~~ ORW uses to demonstrate it is of exceptional state or national recreational or ecological significance:

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

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

(3) the waters have already received some special designation such as a North Carolina or National Wild and Scenic River, ~~Native or Special Native Trout Waters~~ or 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 special 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. 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 or an appropriate local erosion and sedimentation control program shall be required to follow the stormwater provisions as specified in 15A NCAC 02H .1000. Specific stormwater requirements for ORW areas are described in 15A NCAC 02H .1007.

(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. New development shall comply with the stormwater provisions as specified in 15A NCAC 02H .1000. Specific stormwater management requirements for saltwater ORWs are described in 15A NCAC 02H .1007. ~~New non-discharge permits shall meet reduced loading rates and increased buffer zones, to be determined on a case-by-case basis.~~ No dredge or fill activities shall be allowed if those activities would result in

Commented [A1]: Added language for clarity.

Commented [A2]: Merged from .0101. No effect.

Commented [A3]: Updated language for consistency with CWA and other state classifications. No effect.

Commented [A4]: Deleted obsolete designation. No effect.

Commented [A5]: Unnecessary and obsolete because the 02T rules address all nondischarge permitting. 02T rules did not exist when .0225 was originally written.

a reduction of the beds of ~~submerged~~ "submerged aquatic vegetation habitat" or ~~a reduction of shellfish~~ "shellfish producing habitat habitat" ~~as~~ that are defined in 15A NCAC 03I ~~.0101(b)(20)(A) and (B),~~ .0101, hereby 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.

A public hearing is mandatory for any proposed permits to discharge to waters classified as ORW. Additional actions to protect resource values shall be considered on a site specific basis during the proceedings to classify waters as ORW and shall be specified in Paragraph ~~(e)~~ (d) of this Rule. These actions may include anything within the powers of the Commission. The Commission shall also consider local actions which have been taken to protect a water body in determining the appropriate state protection options. ~~Descriptions of boundaries of waters classified as ORW are included in Paragraph (e) of this Rule and in the Schedule of Classifications (15A NCAC 02B .0302 through 02B .0317) as specified for the appropriate river basin and shall also be described on maps maintained by the Division of Water Quality.~~

~~(d) Petition Process. Any person may petition the Commission to classify a surface water of the state as an ORW. The petition shall identify the exceptional resource value to be protected, address how the water body meets the general criteria in Paragraph (a) of this Rule, and the suggested actions to protect the resource values. The Commission may request additional supporting information from the petitioner. The Commission or its designee shall initiate public proceedings to classify waters as ORW or shall inform the petitioner that the waters do not meet the criteria for ORW with an explanation of the basis for this decision. The petition shall be sent to:~~

~~Director~~
~~DENR/Division of Water Quality~~
~~1617 Mail Service Center~~
~~Raleigh, North Carolina 27699~~

~~The envelope containing the petition shall clearly bear the notation: RULE-MAKING PETITION FOR ORW CLASSIFICATION.~~

~~(e)~~(d) Listing of Waters Classified ORW with Specific Actions. Waters classified as ORW with specific actions to protect exceptional resource values are listed as follows:

(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 shall have only new development which complies with the low density option in the stormwater rules as specified in 15A NCAC 2H .1005(2)(a) within 575 feet of the Roosevelt Natural Area (if the development site naturally drains to the Roosevelt Natural Area);

(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 Paragraph (c) of this Rule in order to protect the designated waters as per Rule .0203 of this Section.

Commented [A6]: Updated references to Marine Fisheries Commission rule. No effect.

Commented [A7]: The division now keeps these maps electronically and the river basin rules (.0300s) provide the weblink to the maps and classifications.

Commented [A8]: A petition is handled by the EMC's petition rules. This language is deleted because it preexisted the EMC's petition rules, 15A NCAC 02I .0500.

However, expansions of existing discharges to these segments shall be allowed if there is no increase in pollutant loading:

(A) North and South Fowler Creeks;

(B) Green and Norton Mill Creeks;

(C) Cane Creek;

(D) Ammons Branch;

(E) Glade Creek; and

(F) Associated tributaries;

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

(A) Ivy Creek;

(B) Rock Creek; and

(C) 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 specified in Subparagraph (c)(1) of this Rule, shall be applied to protect 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~~ (NPDES) permitted wastewater discharges located upstream of the designated ORW (for the North Fork New River ORW ~~are~~ 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 15A NCAC 02B .0206)~~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 (more stringent) percentage effluent determined under design conditions ~~(pursuant to 15A NCAC 02B .0206)~~ 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 shall be as follows: BOD = 5 mg/1, and NH3-N = 2 mg/1;

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

(iii) Emergency Requirements: Failsafe treatment designs shall be employed, including stand-by power capability for entire treatment works, dual train design for all treatment components, or equivalent failsafe treatment designs;

(iv) Nutrients: Where nutrient overenrichment is projected to be a concern, effluent limitations shall be set for phosphorus or 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 Paragraph (c) 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 less than 10 slips, having no boats over 21 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) 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, 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.

(F) The Topsail Sound and Middle Sound Area (Cape Fear River Basin) including all estuarine waters from New Topsail Inlet to Mason Inlet, 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 less than 10 slips, having no boats over 21 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 Bay, 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) to Drum Point and also excluding the Blowout Canal, Hydeland Canal, Juniper Canal and Quarter Canal.

(B) The Back Sound Section of the Southeast Pamlico, Core and Back Sound Area (White Oak River Basin) including that area of Back Sound extending from Core Sound west along Shackleford Banks, then north to the western most 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.

(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, in addition to the discharge requirements specified in Subparagraph (c)(1) of this Rule, shall be applied to protect 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 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 = 5 mg/l and NH3-N = 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: Failsafe treatment designs shall be employed, including stand-by power capability for entire treatment works, dual train design for all treatment components, or equivalent failsafe treatment designs;

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

(v) Toxic substances: In cases where 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 15A NCAC 02B .0206);~~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 specified 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) avoid areas to the maximum extent practical 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 for any period thereafter not less than 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 ~~National Pollutant Discharge Elimination System~~ 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 generated from all surfaces generated by one inch of rainfall in accordance with 15A NCAC 02H. 1008; and

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

(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 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 throughout the watershed. However,

new domestic wastewater discharges and expansions of existing wastewater discharges may be allowed provided that:

(A) Oxygen Consuming Wastes: Effluent limitations shall be as follows: BOD = 5 mg/l, and NH3-N = 2 mg/l;

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

(C) Nutrients: Where nutrient overenrichment is projected to be a concern, effluent limitations shall be set for phosphorus or 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, which are 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.

15A NCAC 02B .0226 is proposed for adoption as follows:

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

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

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

15A NCAC 02B .0227 is proposed for adoption as follows:

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. 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 2H .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. A public hearing shall be mandatory for any proposed (new or expanded) NPDES permit to this protected area.

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

(D) No dredge or fill activities shall be allowed if those activities would result in a reduction of the beds of "submerged aquatic vegetation habitat" or "shellfish producing habitat" that are defined in 15A NCAC 03I .0101, except for maintenance dredging, such as that required to maintain access to existing channels and facilities located within the protected area or maintenance dredging for activities such as agriculture.

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

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

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

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

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

15A NCAC 02B .0228 is proposed for adoption as follows:

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 which 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, such that the channels shall:

(1) be contained entirely on property owned (or otherwise controlled) by the discharger (to be demonstrated by the discharger);

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

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

(4) be identified and designated on a case-by-case basis prior to permit issuance.

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

15A NCAC 02B .0230 is proposed for adoption as follows:

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 2B .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 must 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 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;

(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 regulations also must comply with relevant portions of those regulations;

(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 Sediment and Erosion 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;

(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.*

15A NCAC 02B .0231 is proposed for amendment as follows:

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.

(2) Class SWL: waters that meet the definition of coastal wetlands as defined by 15A NCAC 7H .0205, which are landward of the mean high water line, and wetlands contiguous to estuarine waters as defined by 15A NCAC 7H .0206.

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

~~(a)~~(b) ~~General.~~ 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 and the moderation of extreme water level fluctuations;

(2) 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;

(3) Filtration or storage of sediments, nutrients, toxic substances, or other pollutants that would otherwise adversely impact the quality of other waters of the state;

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

(5) Habitat for the propagation of resident wetland-dependent aquatic organisms including, but not limited to 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

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

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

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

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

(3) Materials producing color, odor, taste or unsightliness may not be present in amounts which may cause adverse impacts on existing wetland uses;

Commented [A1]: Merging information from .0101 and .0301 into this rule. No effect

Commented [A2]: Deleted unnecessary language as shown. "to the satisfaction of the Commission" is deleted because .0101 already describes the classification procedure.

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

(5) Hydrological conditions necessary to support the biological and physical characteristics naturally present in wetlands shall be protected to prevent adverse 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.

(6) The populations of wetland flora and fauna shall be maintained to protect biological integrity as defined at ~~15A NCAC 2B .0202.~~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.