

1 15A NCAC 02B .0620 is adopted as published in 32:21 NCR 1943 with changes as follows:

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3 **15A NCAC 02B .0620 WATER SUPPLY WATERSHED PROTECTION PROGRAM: PURPOSE**

4 ~~The purpose of this Rule and Rules .0621 .0620 through .0624 of this Section is to implement G.S. 143-214.5, which~~
5 ~~requires the Commission to adopt rules that establish~~ set forth the minimum statewide water supply watershed
6 protection requirements applicable to each Water Supply ~~classification~~ classification, as provided in 15A NCAC 02B
7 .0212 through .0218. ~~to protect the water quality of public surface water supplies. Water Supply classifications are~~
8 ~~set forth in 15A NCAC 02B .0212 through .0218.~~

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10 *History Note: Authority G.S. 143-214.1; 143-214.5; 143-215.3(a)(1);*
11 *Eff. March 1, 2019.*
12

15A NCAC 02B .0621 is adopted as published in 32:21 NCR 1943 with changes as follows:

15A NCAC 02B .0621 WATER SUPPLY WATERSHED PROTECTION PROGRAM: DEFINITIONS

The definition of any word or phrase in Water Supply Watershed Protection Program Rules .0621 through .0624 of this Section shall be the same as given in Rule .0202 of this Subchapter and Article 21, Chapter 143 of the General Statutes of North Carolina, as amended. Other words and phrases used in Rules .0622 through .0624 of this Section are defined as follows: In addition to the definitions set forth in G.S. 143-214.7, the following definitions shall apply to Rules .0622 - .0624.

- (1) "Balance of Watershed" or "-BW" means the area adjoining and upstream of the critical area in a WS-II and WS-III water supply watershed. The "balance of watershed" is comprised of the entire land area contributing surface drainage to the stream, river, or reservoir where a water supply intake is located.
- ~~(2)~~ "Built upon Area" has the same meaning as in G.S. 143-214.7.
- ~~(3)(2)~~ "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. Planned unit developments and mixed use development shall be considered as cluster development has the same meaning as in 15A NCAC 02B .0202.
- ~~(4)(3)~~ "Commission" means the North Carolina Environmental Management Commission has the same meaning as in 15A NCAC 02H .1002.
- ~~(5)(4)~~ "Common plan of development" has the same meaning as in 15A NCAC 02H .1002, which is herein incorporated by reference, as amended. .1002.
- (5) "Critical area" has the same meaning as in 15A NCAC 02B .0202.
- (6) "Curb Outlet System" has the same meaning as in 15A NCAC 02H .1002.
- ~~(7)~~ "Development" means any land disturbing activity that increases the amount of built upon area or that otherwise decreases the infiltration of precipitation into the subsoil.
- ~~(8)(7)~~ "Dispersed flow" has the same meaning as in 15A NCAC 02H .1002.
- ~~(9)(8)~~ "Division" means the Division of Energy, Mineral, and Land Resources or its successors has the same meaning as in 15A NCAC 02H .1002.
- ~~(10)(9)~~ "Erosion and Sedimentation Control Plan" means any plan, amended plan, or revision to an approved plan submitted to the Division of Energy, Mineral, and Land Resources or a delegated authority in accordance with G.S. 113A-57 has the same meaning as in 15A NCAC 02H .1002.
- ~~(11)(10)~~ "Existing development" means 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 ordinance shall specify, based on at least one of the following criteria:
 - ~~(a)~~ substantial expenditure of resources (time, labor, money) based on a good faith reliance upon having received a valid local government approval to proceed with the project;

- (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~~ has the same meaning as in 15A NCAC 02H .1002.
- (12)(11) "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 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~~ has the same meaning as in 15A NCAC 02B .0202.
- (13)(12) "Geotextile fabric" has the same meaning as in 15A NCAC 02H .1002.
- (14)(13) "Intermittent stream" has the same meaning as in 15A NCAC 02B .0610.
- (15)(14) "Major variance" ~~means a variance that is not a "minor variance" as that term is defined in this Rule~~ has the same meaning as in 15A NCAC 02B .0202.
- (16)(15) "Minimum Design Criteria" or "MDC" has the same meaning as in 15A NCAC 02H .1002.
- (17)(16) "Minor variance" ~~means a variance from the minimum statewide watershed protection rules that results in the relaxation of up to 10 percent of any vegetated setback, density, or minimum lot size requirement applicable to low density development, or the relaxation of up to five percent of any vegetated setback, density, or minimum lot size requirement applicable to high density development. For variances to a vegetated setback requirement, the percent variation shall be calculated using the footprint of built upon area proposed to encroach within the vegetated setback divided by the total area of vegetated setback within the project~~ has the same meaning as in 15A NCAC 02B .0202.
- (18)(17) "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 .0624 of this Section~~ has the same meaning as in 15A NCAC 02B .0202.
- (19)(18) "NPDES" ~~means National Pollutant Discharge Elimination System~~ has the same meaning as in 15A NCAC 02H .1002.
- (20)(19) "Perennial stream" has the same meaning as in 15A NCAC 02B .0610.
- (21)(20) "Perennial waterbody" has the same meaning as in 15A NCAC 02B .0610.
- (22)(21) "Primary SCM" has the same meaning as in 15A NCAC 02H .1002.
- (23)(22) "Project" ~~means the proposed development activity for which an applicant is seeking approval in accordance with Rules .0620 through .0624 of this Section. A project shall exclude any land adjacent to the area disturbed by the project that has been counted as pervious by any other development regulated under a federal, State, or local stormwater regulation. Owners and developers of large developments consisting of many linked projects may consider developing a master plan that~~

1 ~~illustrates how each project fits into the design of the large development~~ has the same meaning as
2 in 15A NCAC 02H .1002.

3 ~~(23)~~ "Protected area" has the same meaning as in 15A NCAC 02B .0202.

4 ~~(24)~~ "Redevelopment" means any land disturbing activity that does not result in a net increase in built
5 upon area and that provides greater or equal stormwater control to that of the previous development.

6 ~~(25)~~(24) "Required storm depth" has the same meaning as in 15A NCAC 02H .1002.

7 ~~(26)~~(25) "Runoff treatment" has the same meaning as in 15A NCAC 02H .1002.

8 ~~(27)~~(26) "Runoff volume match" has the same meaning as in 15A NCAC 02H .1002.

9 ~~(28)~~(27) "Secondary SCM" has the same meaning as in 15A NCAC 02H .1002.

10 ~~(29)~~(28) "Stormwater Control Measure" or "SCM" has the same meaning as in 15A NCAC 02H .1002.

11 ~~(30)~~(29) "Vegetated setback" ~~means an area of natural or established vegetation adjacent to surface waters,~~
12 ~~through which stormwater runoff flows in a diffuse manner to protect surface waters from~~
13 ~~degradation due to development activities.~~ has the same meaning as in 15A NCAC 02H .1002.

14 ~~(31)~~(30) "Vegetated conveyance" ~~means a permanent, designed waterway lined with vegetation that is used~~
15 ~~to convey stormwater runoff at a non-erosive velocity within or away from a developed area~~ has the
16 same meaning as in 15A NCAC 02H .1002.

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18 *History Note:* Authority G.S. 143-214.1; 143-214.5; 143-215.3(a)(1);
19 *Eff. March 1, 2019.*
20

15A NCAC 02B .0622 is adopted as published in 32:21 NCR 1943 with changes as follows:

**15A NCAC 02B .0622 WATER SUPPLY WATERSHED PROTECTION PROGRAM: APPLICABILITY
AND EFFECTIVE DATES EXCLUSIONS AND SPECIAL CASES**

All local governments that have land use authority within classified water supply watersheds are subject to Rules .0621 through .0624 of this Section. Administration and enforcement of Rules .0621 through .0624 of this Section shall be the responsibility of the adopting local government within its jurisdiction. In addition, State-owned projects, silviculture activities, and agricultural activities are subject to these rules pursuant to G.S. 143-214.5 (i) and Items (2), (3), and (4) of this Rule, as applicable. This rule describes exclusions from the water supply watershed program and special case projects in the water supply watershed program.

(1) EXCLUSIONS. The following project types shall be excluded from the requirements of Rules .0620-.0624 of this Section:

(1) EFFECTIVE DATES. For the purposes of implementing the requirements of this Rule, Rules .0621 through .0624 of this Section, and G.S. 143-214.5, the effective dates set forth in 15A NCAC 02B .0104(d) .0104(e) shall apply.

(2) STATE OWNED PROJECTS. State-owned projects, with the exception of North Carolina Department of Transportation (NCDOT) projects, that are located in designated water supply watersheds shall comply with the stormwater management requirements of this Section and G.S. 143-214.5(i). For NCDOT projects, the construction of new roads and bridges shall minimize built-upon area, divert stormwater away from surface water supply waters as much as possible, and employ best management practices to minimize water quality impacts. To the extent practicable, the construction of new roads in a critical area shall be avoided. NCDOT projects shall be in compliance with NPDES Permit No. NCS000250.

(a) existing development;

(b) redevelopment;

(c) single-family residential redevelopment, even if there is a net increase in built-upon area or if stormwater controls are not equal to that of the previous single-family residential development;

(d) expansions to single-family residential existing development, unless the expansion is part of a larger common plan of development that is subject to this Rule;

(e) nonconforming lot of record that is not contiguous to any other lot owned by the same party and if it is to be developed for single-family residential purposes. However, local governments may require the combination of contiguous nonconforming lots of record owned by the same party in order to establish a lot or lots that meet the development restrictions of Rule .0624 of this Section;

- (f) any lot or parcel created as part of a family subdivision after the effective date of the local watershed ordinance if it is to be developed for one single-family detached residence and if it is exempt from a local subdivision ordinance;
- (g) activities of the North Carolina Department of Transportation (NCDOT) that are regulated in accordance with the provisions of NPDES Permit Number NCS000250;
- (h) linear transportation projects undertaken by an entity other than NCDOT when:
- (i) the project is constructed to NCDOT standards and is in accordance with the NCDOT Stormwater Best Management Practices Toolbox (Version 2, April 2014 Edition) which is here in incorporated by reference, including any subsequent amendments and editions, and may be access at no cost at https://connect.ncdot.gov/resources/hydro/HSPDocuments/2014_BMP_Toolbox.pdf;
- (ii) upon completion, the project will be conveyed either to the NCDOT or another public entity and will be regulated in accordance with that entity's NPDES MS4 stormwater permit; and
- (iii) the project is not part of a common plan of development.
- (i) airport facilities that are deemed permitted in accordance with G.S. 143.214.7 (c4).
- (2) SPECIAL CASES. In lieu of the requirements set forth in Rules .0620-.0624 of this Section, the following shall apply:
- (3)(a) SILVICULTURE. The North Carolina Forest Service (NCFS) shall be the designated agency for oversight of compliance with the water supply watershed protection requirements of this Section, insofar as their authority allows, for silviculture activities occurring within designated water supply watersheds. Silviculture activities that shall comply with the provisions of the Forest Practices Guidelines Related to Water Quality (02 NCAC 60C, herein incorporated by reference with subsequent amendments and editions and available at no cost at <http://www.ncoah.com/rules/>) and other applicable forestry water quality standards as determined by NCFS shall be deemed compliant with the water supply watershed protection requirements of this Section. the North Carolina Forest Service.
- (4)(b) AGRICULTURE. The North Carolina Soil and Water Conservation Commission shall be the designated agency for administration of the applicable water supply watershed protection requirements of this Section for agricultural activities. Agricultural activities are not subject to the stormwater management requirements of this Section, except that agricultural activities occurring after January 1, 1993 within WS-I watersheds and the critical areas of WS-II, WS-III, and WS-IV watersheds are shall be subject to the vegetated setback requirements as set forth in Rule .0624(12)(a)(iv) of this Section. .0624(11) of this Section.

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2 *History Note:* Authority G.S. 143-214.1; 143-214.5; 143-215.3(a)(1);

3 *Eff. March 1, 2019 (The provisions of this Rule were previously codified in 15A NCAC 02B .0104.)*

15A NCAC 02B .0623 is adopted as published in 32:21 NCR 1943 with changes as follows:

**15A NCAC 02B .0623 WATER SUPPLY WATERSHED PROTECTION PROGRAM: PROGRAM
ADMINISTRATION**

This Rule contains provisions for the administration of water supply watershed protection programs.

(1) LOCAL GOVERNMENTS INCLUDED. All local governments that have land use authority within designated water supply watersheds shall adopt and enforce ordinances and watershed maps that meet or exceed the requirements of G.S. 143-214.5 and Rules .0621 through .0624 of this Section. ~~Local governments may adopt and enforce more stringent controls. Local governments shall have the option to~~ may use the Commission's model Watershed Protection Ordinance available at no cost at <http://watersupplywatershed.nc.gov> as the basis for their ordinance, or ~~they may shall have the option to~~ propose an alternative ordinance that meets or exceeds the requirements of ~~this Section~~ Rules .0621 through .0624 of this Section.

~~(2) SCHEDULE OF IMPLEMENTATION. Local governments shall adopt, make effective, and begin implementing the required water supply watershed protection ordinance (or equivalent ordinance) and watershed map in accordance with the effective dates set forth in 15A NCAC 02B .0104(d).~~

~~(3)~~ (2) COMMISSION APPROVAL. Local government water supply watershed protection ordinances ~~(or equivalent ordinances)~~ and watershed maps shall be submitted to the Division for approval by the Commission or its designee no later than 270 days after receiving notice of a water supply reclassification from the Commission. The Commission or its designee shall approve the water supply watershed protection ordinance and map if it meets or exceeds the minimum statewide water supply watershed management requirements adopted pursuant to ~~this Section~~ Rules .0621 through .0624 of this Section and G.S. 143-214.5. The local government may begin implementing the ordinances prior to receiving approval by the Commission. The following items shall be included in the submission in either paper or electronic format:

- (a) one copy of the adopted and effective relevant ordinance;
- (b) a cover letter from the local government's legal counsel, municipal or county clerk, or municipal or county manager certifying that the ordinance meets or exceeds the requirements of this Section and G.S. 143-214.5; and
- (c) one copy of a watershed map showing the local government corporate and extraterritorial jurisdictional boundaries, the Commission's adopted watershed boundaries, the local government's interpreted watershed boundaries, and U.S. Geological Survey 1:24,000 (7.5 minute) scale topographic contour lines and hydrography.

~~(4)~~ (3) WATERSHED BOUNDARY INTERPRETATION. Major ~~landmarks~~ landmarks, such as highways or property ~~lines~~ lines, may be used to delineate the outer boundary of the critical areas, balance of watershed areas, and protected areas if these landmarks are ~~immediately~~ adjacent to the ~~appropriate~~ outer boundary of 1/2 mile for the critical areas, the balance of watershed areas, or five

1 ~~or ten miles~~ for the protected areas as specified in 15A NCAC 02B .0202. Local governments may
2 extend the critical, balance of watershed, and protected area boundaries beyond the minimum
3 distance required; however, these extended local boundaries shall not affect administration of state
4 permits unless the boundaries are also adopted by the Commission. Local governments shall
5 delineate the approximate normal pool elevation for backwaters of water supply reservoirs for the
6 purposes of determining the critical and protected area boundaries as appropriate. Local
7 governments shall rely ~~primarily~~ on U.S. Geological Survey topographic maps, land surveys
8 conducted by licensed surveyors, Lidar data, or information from the U.S. Army Corps of Engineers
9 in approximating the location of backwaters.

10 ~~(5)(4)~~ REVISIONS TO ORDINANCES AND MAPS. Revisions to local watershed supply watershed
11 protection ordinances and watershed maps shall be submitted to the Commission or its designee for
12 approval. The submission requirements set forth in Item (3) of this Rule shall apply to all subject
13 revisions. In addition, revisions to ordinances shall be submitted in a format that identifies the
14 changes adopted or being proposed, as applicable. The local government may adopt and begin
15 implementing the revised ordinance prior to receiving approval by the Commission or its designee;
16 ~~however except~~, revisions ~~(expansions or deletions)~~ regarding expansions or deletions to watershed
17 maps shall be approved by the Commission or its designee prior to local government adoption.

18 ~~(6)(5)~~ VARIANCES. For all proposed major and minor variances, as those terms are defined in Rule .0621
19 ~~of this Section~~, from the minimum statewide watershed protection rules, the local Watershed Review
20 Board, or equivalent quasi-judicial ~~body~~, body shall make findings of fact in accordance with the
21 procedures of ~~S.L. 2013-126 and Article 18 of G.S. 153A or~~ G.S. 160A-393, as appropriate, showing
22 that:

- 23 (a) there are ~~practical~~ difficulties or ~~unnecessary~~ hardships that prevent compliance with the
24 ~~strict letter of~~ the ordinance;
- 25 (b) the variance is in ~~harmony~~ accordance with the general purpose and intent of the local
26 watershed protection ordinance ~~and preserves its spirit~~; and
- 27 (c) ~~in granting the variance, the public safety and welfare have been assured and substantial~~
28 ~~justice has been done~~ the project will ensure equal or better protection of waters of the State
29 than the requirements of Rules .0621-.0624 of this Section and that the stormwater controls
30 will function in perpetuity.

31 For all proposed major and minor variances, the local government considering or requesting the
32 variance shall notify and allow a ~~reasonable~~ comment period for all other local governments having
33 jurisdiction within the watershed area governed by these Rules and the entity using the water supply
34 for consumption. The local Watershed Review ~~Board~~ Board, or equivalent local quasi-judicial body,
35 hereafter referred to as "the Board," may attach conditions to the major or minor variance approval
36 that support the purpose of the local watershed protection ordinance. The ~~local Watershed Review~~
37 ~~Board, or equivalent local quasi-judicial body, Board~~ shall have the power to may authorize minor

variances for development activities on a case-by-case basis. For major variances, if the local Watershed Review Board decides in favor of granting the major variance, ~~the Board then it~~ shall ~~then~~ prepare a preliminary record of the hearing and submit it to the Commission for review. If the Commission approves the major variance or approves the variance with conditions or stipulations added, then the Commission shall prepare a decision that authorizes the local Watershed Review Board to issue a final decision that includes any conditions or stipulations added by the Commission. If the Commission denies the major variance, then the Commission shall prepare a decision to be sent to the local Watershed Review Board. The local Watershed Review Board shall prepare a final decision denying the major variance. Appeals from the local government decision on a major or minor variance request shall be made on certiorari to the local Superior Court. Appeals from the Commission decision on a major variance request are made on judicial review to Superior Court. When local ordinances are more stringent than the state's minimum watershed protection requirements, a variance to the local government's ordinance is not considered a major variance as long as the result of the variance is not less stringent than the state's minimum watershed protection requirements.

~~(7)~~(6) RECORDKEEPING REQUIREMENTS. Local governments shall maintain the following records and furnish a copy of these records to the Division upon request:

- (a) a copy of all variance requests and associated documents;
- (b) findings of fact on all variance requests;
- (c) a description of all projects for which the local government has granted a variance to the requirements of ~~this Section~~ Rules .0621-.0624 of this Section;
- (d) an accounting of projects approved under the local government's 10/70 Option (as described in Rule .0624 of this Section), as applicable; and
- (e) records of inspections of SCMs pursuant to Item (8) of this Rule.

~~(8)~~(7) OPERATION AND MAINTENANCE OF SCMS. Wherever in this Section it is provided that local governments assume responsibility for operation and maintenance of engineered SCMs, this shall be construed to require responsible local governments to either inspect such SCMs or require the owners of such SCMs to inspect such SCMs at least once per year to determine whether the SCMs are performing as designed and intended. Records of inspections shall be maintained on forms made available by the Division at <http://watersupplywatershed.nc.gov/> or the local government. The inspection form shall include the following:

- (a) project name;
- (b) owner name and address;
- (c) name and classification of the water supply watershed where the project is located;
- (d) type(s) of SCMs at the project site;
- (e) summary of repairs or maintenance needed; and
- (f) estimated timeframe for completion of the repairs or maintenance.

1 In the event an inspection shows that an SCM is not performing as designed and intended, the local
2 government shall order the owning entity to take corrective actions. If the entity fails to take
3 corrective actions, the local government may impose civil penalties and pursue other available
4 remedies in accordance with State and local law, including without limitation: G.S. 14-4; G.S. 77-
5 13; G.S. 77-14; G.S. 143-214.7; G.S. 143-215.6A; G.S. 153A-123; G.S. 160A-459; and G.S. 160A-
6 175.

7 ~~(9)(8) Local governments shall, as the existing laws allow, develop, implement, and enforce~~
8 ~~comprehensive nonpoint source and stormwater discharge control programs to reduce water~~
9 ~~pollution from activities within water supply watersheds such as development, landfills, mining, on-~~
10 ~~site sanitary sewage systems which utilize ground adsorption, toxic and hazardous materials,~~
11 ~~transportation, and water based recreation.~~

12 ~~(10)(9)~~ ENFORCEMENT. In the event that the Commission determines that a local government program
13 has failed to adopt or implement its program in compliance with the water supply watershed
14 protection requirements of this Section and G.S. 143-214.5, the Commission shall take appropriate
15 enforcement action in accordance with G.S. 143-214.5 and G.S. 143-215.6A(e). When the
16 Commission assumes a local water supply watershed protection program as specified under G.S.
17 143-214.5(e), all local permits authorizing construction and development activities as regulated by
18 the statewide minimum water supply watershed protection requirements of this Section shall be
19 approved by the Commission or its designee prior to local government issuance.

20 ~~(11)(10)~~ DELEGATION. The Commission may delegate such matters as variance approval, extension of
21 deadlines for submission of ordinances, and assessment of civil penalties pursuant to G.S. 143-
22 214.5(e) to the Director.

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24 *History Note:* Authority G.S. 143-214.1; 143-214.5; 143-215.3(a)(1);
25 Eff. March 1, 2019 (The provisions of this Rule were previously codified in 15A NCAC 2B .0104.)
26

15A NCAC 02B .0624 is adopted as published in 32:21 NCR 1943 with changes as follows:

**15A NCAC 02B .0624 WATER SUPPLY WATERSHED PROTECTION PROGRAM: NONPOINT
SOURCE AND STORMWATER POLLUTION CONTROL**

~~The purpose of this Rule is to minimize the impact of stormwater runoff from development on the water quality of public surface water supplies and to protect their designated uses as public water supplies. This Rule sets forth requirements for projects that are subject to water supply watershed regulations.~~

(1) IMPLEMENTING AUTHORITY. The requirements of this Rule shall be implemented by local governments with land use authority in one or more designated water supply watersheds. State agencies shall also comply with this Rule insofar as required by G.S. 143-214.5 and in accordance with Rule .0622 of this Section.

(2) APPLICABILITY. This Rule shall apply to all new development projects, including state owned projects, that lie within a designated water supply watershed, except in a Class WS-IV watershed where this Rule applies only to new development projects that require an Erosion and Sedimentation Control Plan. Rule .0622 of this Section includes project types to which rules do not apply.

~~(3) EXCLUSIONS. The following shall not be subject to this Rule:~~

~~(a) existing development;~~

~~(b) redevelopment, as that term is defined in Rule .0621 of this Section;~~

~~(c) single family residential redevelopment even if there is a net increase in built upon area or if stormwater controls are not equal to that of the previous single family residential development;~~

~~(d) expansions to single family residential existing development unless the expansion is part of a larger common plan of development that is subject to this Rule;~~

~~(e) nonconforming lot of record that is not contiguous to any other lot owned by the same party and if it is to be developed for single family residential purposes. Local governments may require the combination of contiguous nonconforming lots of record owned by the same party in order to establish a lot or lots that meet or nearly meet the development restrictions of this Section;~~

~~(f) any lot or parcel created as part of a family subdivision after the effective date of the local watershed ordinance if it is to be developed for one single family detached residence and if it is exempt from a local subdivision ordinance. Any lot or parcel created as part of any other type of subdivision that is exempt from a local subdivision ordinance shall be subject to this Rule, except that such a lot or parcel shall meet the vegetated setback requirements set forth in Item (12) of this Rule to the maximum extent practicable. In determining whether this criteria has been met, the local government shall take into account site specific factors including technical and cost considerations as well as protection of water quality;~~

- (g) ~~silviculture activities except as required by Rule .0622(3) of this Section;~~
- (h) ~~agricultural activities except as required by Item (12) of this Rule and Rule .0622(4) of this Section; and~~
- (i) ~~North Carolina Department of Transportation (NCDOT) activities that are regulated in accordance with the provisions of NPDES Permit No. NCS000250.~~

~~(4)(3)~~ PROJECT DENSITY. The following maximum allowable project densities and minimum lot sizes shall apply to a project according to the classification of the water supply watershed where it is located (~~WS-I, WS-II, WS-III, WS-IV, WS-V~~), its relative location in the watershed (~~Critical Area versus Balance of Watershed or Protected Area~~), its project density (~~low density versus high density~~), and the type of development (~~single family detached residential versus all other types~~):

Water Supply Classification	Location in the Watershed	Maximum Allowable Project Density or Minimum Lot Size		
		Low Density Development		High Density Development
		Single-family detached residential	Non-residential and all other residential	All types
WS-I	Not Applicable: Watershed shall remain undeveloped except for the following uses when they cannot be avoided: power transmission lines, restricted access roads, and structures associated with water withdrawal, treatment, and distribution of the WS-I water. Built-upon area shall be designed and located to minimize stormwater runoff impact to receiving waters.			
WS-II	Critical Area	1 dwelling unit per 2 acres or 80,000 square foot lot excluding roadway right-of-way or 6% built-upon area	6% built-upon area	6 to 24% built-upon area
	Balance of Watershed	1 dwelling unit per 1 acre or 40,000 square foot lot excluding roadway right-of-way or 12% built-upon area	12% built-upon area	12 to 30% built-upon area
WS-III	Critical Area	1 dwelling unit per 1 acre or 40,000	12% built-upon area	12 to 30% built-upon area

		square foot lot excluding roadway right-of-way or 12% built-upon area		
	Balance of Watershed	1 dwelling unit per one-half acre or 20,000 square foot lot excluding roadway right-of- way or 24% built- upon area	24% built-upon area	24 to 50% built- upon area
	Critical Area	2 dwelling units per acre or 20,000 square foot lot excluding roadway right-of-way or 24% built-upon area	24% built-upon area	24 to 50% built- upon area
WS-IV	Protected Area	2 dwelling units per acre or 20,000 square foot lot excluding roadway right-of-way or 24% built-upon; or 3 dwelling units per acre or 36% built- upon area without curb and gutter street system	24% built-upon area; or 36% built-upon area without curb and gutter street system	24 to 70% built- upon area
WS-V	Not Applicable			

(5)(4) CALCULATION OF PROJECT DENSITY. The following requirements shall apply to the calculation of project density:

- (a) Project density shall be calculated as the total built-upon area divided by the total project area;
- (b) A project with "existing development," as that term is defined in Rule .0621 of this Section, may use the calculation method in Sub-Item (a) of this Item ~~or shall have the option of calculating or may calculate~~ project density as the difference of total built-upon area minus

existing built-upon area divided by the difference of total project area minus existing built-upon area. Expansions to existing development shall be subject to this Rule except as excluded in Sub-Item (3)(d) of this Rule. Where there is a net increase of built-upon area, only the area of net increase shall be subject to this Rule. Where existing development is being replaced with new built-upon area, and there is a net increase of built-upon area, only the area of net increase shall be subject to this Rule;

(c) Total project area shall exclude the following:

- (i) areas below the Normal High Water Line (NHWL); and
- (ii) areas defined as "coastal wetlands" pursuant to 15A NCAC 07H .0205, herein incorporated by reference, including subsequent amendments and editions, and available at no cost at <http://reports.oah.state.nc.us/ncac.asp>, as measured landward from the NHWL; and

(d) Projects under a common plan of development shall be considered as a single project for purposes of density calculation except that on a case-by-case basis, local governments ~~shall have the option to allow~~ may allow projects to be considered to have both high and low density areas based on one or more of the following criteria:

- (i) natural drainage area boundaries;
- (ii) variations in land use throughout the project; or
- (iii) construction phasing.

~~(6)(5)~~ LOW DENSITY PROJECTS. In addition to complying with the project density requirements of Item (4) of this Rule, low density projects shall comply with the following:

(a) VEGETATED CONVEYANCES. Stormwater runoff from the project shall be released to vegetated areas as dispersed flow or transported by vegetated conveyances to the maximum extent practicable. In determining whether this criteria has been met, the local government shall take into account site-specific factors such as topography and site layout as well as protection of water quality. Vegetated conveyances shall be maintained in perpetuity to ensure that they function as designed. Vegetated conveyances that meet the following criteria shall be deemed to satisfy the requirements of this Sub-Item:

- (i) Side slopes shall be no steeper than 3:1 (horizontal to vertical) unless it is demonstrated to the local government that the soils and vegetation will remain stable in perpetuity based on engineering calculations and on-site soil investigation; and
- (ii) The conveyance shall be designed so that it does not erode during the peak flow from the 10-year storm event as demonstrated by engineering calculations.

(b) CURB OUTLET SYSTEMS. In lieu of vegetated conveyances, low density projects shall have the option to use curb and gutter with outlets to convey stormwater to grassed swales or vegetated areas. Requirements for these curb outlet systems shall be as follows:

- (i) The curb outlets shall be located such that the swale or vegetated area can carry the peak flow from the 10-year storm and at a non-erosive velocity;
- (ii) The longitudinal slope of the swale or vegetated area shall not exceed five percent except where not practical due to physical constraints. In these cases, devices to slow the rate of runoff and encourage infiltration to reduce pollutant delivery shall be provided;
- (iii) The swale's cross section shall be trapezoidal with a minimum bottom width of two feet;
- (iv) The side slopes of the swale or vegetated area shall be no steeper than 3:1 (horizontal to vertical);
- (v) The minimum length of the swale or vegetated area shall be 100 feet; and
- (vi) Low density projects may use treatment swales designed in accordance with 15A NCAC 02H .1061 in lieu of the requirements specified in Sub-Items (i) through (v) of this Sub-Item.
- ~~(7)~~(6) HIGH DENSITY PROJECTS. In addition to complying with the project density requirements of Item (4) of this Rule, high density projects shall comply with the following:
- (a) SCMs shall be designed, constructed, and maintained so that the project achieves either "runoff treatment" or "runoff volume match" as those terms are defined in Rule .0621 of this Section;
- (b) ~~REQUIRED STORM DEPTH.~~ For high density projects designed to achieve runoff treatment, the required storm depth shall be one inch. Applicants shall have the option to design projects to achieve runoff volume match in lieu of runoff ~~treatment.~~ treatment;
- (c) ~~OFF SITE STORMWATER.~~ Stormwater runoff from off-site areas and "existing development," as that term is defined in Rule .0621 of this Section, shall not be required to be treated in the SCM. Runoff from off-site areas or existing development that is not bypassed shall be included in sizing of on-site SCMs;
- (d) ~~MDC FOR SCMS.~~ SCMs shall meet the relevant MDC set forth in 15A NCAC 02H .1050 through ~~.1062.~~ .0162; and
- (e) ~~STORMWATER OUTLETS.~~ Stormwater outlets shall be designed so that they do not cause erosion downslope of the discharge point during the peak flow from the 10-year storm event as shown by engineering calculations.
- ~~(8)~~(7) OPTIONS FOR IMPLEMENTING PROJECT DENSITY. Local governments shall have the following options when developing or revising their ordinances in place of or in addition to the requirements of Item (4) of this Rule, as appropriate:
- (a) Local governments ~~shall have the option to allow~~ may allow only low density development in their water supply watershed areas in accordance with this Section.

- (b) Local governments ~~shall have the option to~~ may regulate low density single-family detached residential development using the minimum lot size requirements, dwelling unit per acre requirements, built-upon area percentages, or some combination of these.
- (c) 10/70 OPTION. Outside of WS-I watersheds and the critical areas of WS-II, WS-III, and WS-IV watersheds, local governments ~~shall have the option to~~ may regulate new development under the "10/70 option" in accordance with the following requirements:
- (i) A maximum of 10 percent of the land area of a water supply watershed outside of the critical area and within a local government's planning jurisdiction may be developed with new development projects and expansions of existing development of up to 70 percent built-upon area.
 - (ii) In water supply watersheds classified on or before August 3, 1992, the beginning amount of acreage available under this option shall be based on a local government's jurisdiction as delineated on July 1, 1993. In water supply watersheds classified after August 3, 1992, the beginning amount of acreage available under this option shall be based on a local government's jurisdiction as delineated on the date the water supply watershed classification became effective. The acreage within the critical area shall not be counted towards the allowable 10/70 option acreage;
 - (iii) Projects that are covered under the 10/70 option shall comply with the low density requirements set forth in Item (6) of this Rule unless the local government allows high density development, in which case the local government ~~shall have the option to~~ may require these projects to comply with the high density requirements set forth in Item (7) of this Rule;
 - (iv) The maximum built-upon area allowed on any given new development project shall be 70 percent;
 - (v) A local government having jurisdiction within a designated water supply watershed may transfer, in whole or in part, its right to the 10/70 land area to another local government within the same water supply watershed upon submittal of a joint resolution and approval by the Commission; and
 - (vi) 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.
- (d) New development shall meet the development requirements on a project-by-project basis except local governments may submit ordinances that use density or built-upon area criteria averaged throughout the local government's watershed jurisdiction instead of on a project-by-project basis within the watershed. Prior to approval of the ordinance, the local

government shall demonstrate to the Commission that the provisions as averaged meet or exceed the statewide minimum requirements and that a mechanism exists to ensure the ~~orderly~~ and planned distribution of development potential throughout the local government's jurisdiction within the watershed.

- (e) Local governments may administer oversight of future development activities in single-family detached residential developments that exceed the applicable low density requirements by tracking dwelling units rather than percentage built-upon area, as long as the SCM is sized to capture and treat runoff from all pervious and built-upon surfaces shown on the development plan and any off-site drainage from pervious and built-upon surfaces, and when an additional safety factor of 15 percent of built-upon area of the project site is figured in.

~~(9)~~(8) CLUSTER DEVELOPMENT. Cluster development shall be allowed on a project-by-project basis as follows:

- (a) Overall density of the project shall meet the requirements of Item (4) of this Rule;
- (b) Vegetated setbacks shall meet the requirements of Item (12) of this Rule;
- (c) Built-upon areas are designed and located to minimize stormwater runoff impact to receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas;
- (d) Areas of concentrated development shall be located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways. In determining whether these criteria have been met, the local government shall take into account site-specific factors such as topography and site layout as well as protection of water quality;
- (e) The remainder of tract shall remain in a vegetated or natural state;
- (f) The 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;
- (g) A maintenance agreement for the vegetated or natural area shall be filed with the Register of Deeds; and
- (h) Cluster development that meets the applicable low density requirements shall comply with Item (6) of this Rule.

~~(10)~~(9) DENSITY AVERAGING OF NONCONTIGUOUS PARCELS. Density averaging of two noncontiguous parcels for purposes of complying with this Rule shall be allowed in accordance with G.S. 143-214.5 (d2).

~~(11)~~(10) RESPONSIBILITY FOR SCM OPERATION & MAINTENANCE. Operation and maintenance agreements and plans are required for SCMs in accordance with 15A NCAC 02H .1050. Local governments that allow high density development shall assume ~~ultimate~~ responsibility for operation and maintenance of the SCMs that they approve.

(12)(11) VEGETATED SETBACKS. Vegetated setbacks shall be required along perennial waterbodies and perennial streams that are indicated on the most recent versions of the United States Geological Survey (USGS) 1:24,000 scale (7.5 minute) quadrangle topographic maps, which are herein incorporated by reference and are available at no cost at <http://www.usgs.gov/pubprod/>, or other maps developed by the Department or a local government and approved by the Commission. Where USGS topographic maps do not distinguish between perennial and intermittent streams, an on-site stream determination may be performed by an individual qualified to perform such stream determinations. A qualified individual is one who has been certified to perform stream determinations by completing and passing the Surface Water Identification Training and Certification (SWITC) Course offered by the North Carolina Division of Water Resources and North Carolina State University. Vegetated setbacks shall also be in accordance with the following:

- (a) MINIMUM VEGETATION WIDTHS. The following minimum widths shall apply:
 - (i) low density projects – 30 feet;
 - (ii) high density projects – 100 feet;
 - (iii) projects covered under the 10/70 option – 100 feet; and
 - (iv) agricultural activities – 10 feet, or equivalent control as determined by the designated agency as set forth in Rule .0622 of this Section; and
- (b) The width of a vegetated setback shall be measured horizontally from the normal pool elevation of impounded structures, from the top of bank of each side of streams or rivers, and from the mean high waterline of tidal waters, perpendicular to the shoreline;
- (c) Vegetated setbacks may be cleared or graded, but shall be replanted and maintained in grass or other vegetation;
- (d) No new built-upon area shall be allowed in the vegetated setback except for the following uses where it is not practical to locate the built-upon area elsewhere:
 - (i) publicly-funded linear projects such as roads, greenways, and sidewalks;
 - (ii) water dependent structures such as docks; and
 - (iii) minimal footprint uses such as poles, signs, utility appurtenances, and security lights.Built-upon area associated with these uses shall be minimized and the channelization of stormwater runoff shall be avoided; and
- (e) Artificial streambank and shoreline stabilization shall not be subject to the requirements of this Item.
- (f) For minor variances to a vegetated setback requirement, the percent variation shall be calculated using the footprint of built upon area proposed to encroach within the vegetated setback divided by the total area of vegetated setback within the project.
- (g) Non-family subdivisions that are exempt from local subdivision ordinances shall implement the requirements of this item to the maximum extent practicable considering

1 site-specific factors including technical and cost consideration as well as protection of
2 water quality.

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4 ~~(13)~~(12) VARIANCES. Variances to this Rule may be considered in accordance with Rule .0623 of this
5 Section.

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7 *History Note: Authority G.S. 143-214.1; 143-214.5; 143-215.3(a)(1);*
8 *Eff. March 1, 2019 (The provisions of this Rule were previously codified in 15A NCAC 02B .0104*
9 *and 02B .0212 through .0218.)*
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