15A	NCAC 02H	.1005	STORMWATER	REOUIREMENTS:	COASTAL	COUNTIES

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- (a) The following definitions are applicable to this rule:
 - (1) "Built upon area" as defined in Session Law 2006-246 means that portion of a project that is covered by impervious or partially impervious surface including, but not limited to, buildings; pavement and gravel areas such as roads, parking lots, and paths; and recreation facilities such as tennis courts. "Built upon area" does not include a wooden slatted deck, the water area of a swimming pool, or pervious or partially pervious paving material to the extent that the paving material absorbs water or allows water to infiltrate through the paving material.
 - (2) "Discrete stormwater collection system" as defined in 15A NCAC 2H .1002(18) 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 or other physical constraints 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 Rule .1003(d)(1) in this Section.
 - (3) "Vegetative buffer" as defined in 15A NCAC 2H .1002(22) means an area of natural or established vegetation directly adjacent to surface waters through which stormwater runoff flows in a diffuse manner to protect surface waters from degradation due to development activities. The width of a buffer is measured horizontally from the normal pool elevation of impounded structures, from the bank of each side of streams or rivers, and from the mean high water line of tidal waters, perpendicular to the shoreline.
 - (4) "Vegetative conveyance" means
 - (5) "Vegetative filter" as defined in 15A NCAC 2H .1002(23) means an area of natural or planted vegetation through which stormwater runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for control of stormwater runoff through infiltration of runoff and filtering of pollutants. The defined length of the filter shall be provided for in the direction of stormwater flow.
- (b) Notwithstanding the provisions of 15A NCAC 02H .1003(b), all non-residential development activities, which means all development that is not defined in 15A NCAC 02B .0202(54), within the coastal counties that will add disturb more than 10,000 square feet of built upon area, including projects that will add disturb less than 10,000 square feet of built upon area land that are part of a larger common plan of development of that disturbs adds more than 10,000 square feet of built upon area and all residential development activities, as defined in 15A NCAC 02B .0202(54), within the coastal counties which require a stormwater

1 management permit in accordance with Rule .1003 of this Section shall manage stormwater runoff as follows, 2 with exception of NC Department of Transportation activities that shall be regulated in accordance with the 3 provisions of that agency's existing NPDES Stormwater Permit: 4 (1) Development activities within the coastal counties draining to Outstanding Resource Waters 5 (ORW) shall meet requirements contained in Rule .1007 of this Section and the provisions of SubPart (2)(A)(i) of this Paragraph; 6 7 (2) Development activities within one-half mile of and draining to SA waters or within one-half 8 mile of SA waters and draining to unnamed freshwater tributaries to SA waters must comply 9 with either the requirements in Parts (a)(2)(A) and (a)(2)(C) of this Rule or the requirements 10 in Parts (a)(2)(B) and (a)(2)(C) of this Rule: Low Density Option: Development shall be permitted pursuant to Rule .1003(d)(1) 11 (A) 12 of this Section if the development has: 13 (i) Built-upon area of 12 percent or less; (ii) Development within 575 feet of the mean high water line of areas 14 15 designated by the Environmental Management Commission as Outstanding Resource Waters (ORW) shall be limited to a built upon area of 25 percent 16 17 or less, however, development with a built upon area of greater than 12 18 percent must comply with the requirements of SubPart (B) of this 19 SubParagraph; 20 (iii) Stormwater runoff transported primarily by vegetated conveyances. 21 (Conveyance system shall not include a discrete stormwater collection 22 system as defined in Rule .1002 of this Section); and 23 (iv) A 50 foot wide vegetative buffer for new development activities and a 30 24 foot wide vegetative buffer for redevelopment activities. 25 (B) High Density Option: Higher density developments shall be permitted pursuant to 26 Rule .1003(d)(2) of this Section if stormwater control systems meet the following 27 criteria: No direct outlet channels or pipes to SA waters unless permitted in 28 (i) 29 accordance with 15A NCAC 02H .0126: 30 (ii) Control systems must be infiltration systems, wet detention ponds, 31 bioretention systems, constructed stormwater wetlands, sand filters, or 32 alternative stormwater management systems designed in accordance with 33 Rule .1008 of this Section to control and treat the runoff from all surfaces 34 generated by one and one-half inches of rainfall or the difference in the

1				stormwater runoff from all surfaces from the predevelopment and post-
2				$development\ conditions\ for\ a\ one-year,\ 24-hour\ storm,\ whichever\ is\ greater.$
3				Alternatives as described in Rule .1008(h) of this Section may also be
4				approved if they meet the requirements of this Part, (a)(2)(B), and Part
5				(a)(2)(C) of this Rule;
6			(iii)	Runoff in excess of the design volume must flow overland through a
7				vegetative filter designed in accordance with Rule .1008 of this Section
8				with a minimum length of 50 feet measured from mean high water of SA
9				waters; and
10			(iv)	A 50 foot wide vegetative buffer for new development activities and a 30
11				foot wide vegetative buffer for redevelopment activities.
12		(C)	In addi	tion to the other measures required in this Rule, all development activities,
13			includi	ng both low and high density projects, shall prohibit new points of
14			stormw	ater discharge to SA waters or expansion (increase in the volume of
15			stormw	ater flow through conveyances or increase in capacity of conveyances) of
16			existing	g stormwater conveyance systems that drain to SA waters. Any modification $% \left\{ \mathbf{S}_{1}^{A}\right\} =\left\{ \mathbf{S}_{2}^{A}\right\} =\left\{ \mathbf{S}_{1}^{A}\right\} =\left\{ \mathbf{S}_{2}^{A}\right\} =\left\{ \mathbf{S}_{3}^{A}\right\} =\left\{ \mathbf{S}_{3}$
17			or rede	sign of a stormwater conveyance system within the contributing drainage
18			basin n	nust not increase the net amount or rate of stormwater discharge through
19			existing	g outfalls to SA waters. Infiltration of stormwater runoff from the one-year,
20			24-hou	r storm or diffuse flow of stormwater at a non-erosive velocity to a vegetated
21			buffer	or other natural area within the property boundary, that is capable of
22			providi	ng effective infiltration of the runoff from the one-year, 24-hour storm shall
23			not be	considered a direct point of stormwater discharge. Permit applicants shall
24			take int	to consideration soil type, slope, vegetation, and existing hydrology when
25			evaluat	ing infiltration effectiveness.
26	(3)	Develo	pment a	activities within the coastal counties except those areas defined in
27		Subparagraphs (1) and (2) of this Paragraph:		
28		(A)	Low Do	ensity Option: Development shall be permitted pursuant to Rule .1003(d)(1)
29			of this	Section if the development has:
30			(i)	Built-upon area of 24 percent or less;
31			(ii)	Stormwater runoff transported primarily by vegetated conveyances;
32				(Conveyance system shall not include a discrete stormwater collection
33				system as defined in Rule .1002 of this Section); and

1			(iii)	A 50 foot wide vegetative buffer for new development activities and a 30
2				foot wide vegetative buffer for redevelopment activities.
3		(B)	High D	ensity Option: Higher density developments shall be permitted pursuant to
4			Rule .1	003(d)(2) of this Section if stormwater control systems meet the following
5			criteria	:
6			(i)	Control systems must be infiltration systems, wet detention ponds,
7				bioretention systems, constructed stormwater wetlands, sand filters, or
8				alternative stormwater management systems designed in accordance with
9				Rule .1008 of this Section;
10			(ii)	Control systems must be designed to store, control and treat the stormwater
11				runoff from all surfaces generated by one and one-half inch of rainfall; and
12			(iii)	A 50 foot wide vegetative buffer for new development activities and a 30
13				foot wide vegetative buffer for redevelopment activities.
14	(4)	Structu	ral storr	nwater controls required under this Rule shall meet the following criteria:
15		(A)	Remov	e an 85 percent average annual amount of Total Suspended Solids.
16		(B)	For det	ention ponds, draw down the treatment volume no faster than 48 hours, but
17			no slov	ver than 120 hours.
18		(C)	Discha	rge the storage volume at a rate equal to or less than the pre-development
19			dischar	ge rate for the one-year, 24-hour storm. and
20		(D)	Meet th	ne General Engineering Design Criteria set forth in 15A NCAC 02H .1008(c).
21	(5)	For the	purpose	s of this Rule, all areas defined as jurisdictional wetlands (which means those
22		wetlands that are subject to the jurisdiction of the US Army Corps of Engineers pursuant to		
23		Section	404 of	the Clean Water Act) or isolated wetlands (as that term is used in 15A NCAC
24		02H .1	301) sha	ll not be included in the overall project area to calculate impervious surface
25		density	. Storn	nwater runoff from built upon areas that is directed to flow through any
26		wetland	ds must	flow through these wetlands in a diffuse manner with the use of a level
27		spreade	er.	
28	(6)	For str	uctural	stormwater controls that are required under this Rule and that require
29		separat	ion fron	n the seasonal high-water table, a minimum separation of two feet is
30		mandat	ed. <mark>Thi</mark>	s separation shall be provided by at least 12 inches of naturally occurring soil
31		above :	he seas	onal high water table with a minimum soil hydraulic conductivity of 0.52
32		inches	<mark>per hou</mark> i	<u>.</u>
33	(c) Residential	develo	pment a	ctivities within the 20 Coastal Counties that are within one-half mile and
34	draining to SA	waters th	at have	a built upon area greater than 12 percent and that do not require a stormwater

management permit in accordance with Rule .1003 of this Section but that <u>will add disturb</u> more than 10,000 square feet <u>of built upon area land</u> shall manage stormwater runoff by implementing the following measures specified in Subparagraph (1), (2), or (3) of this Paragraph:

- (1) Install rain cisterns or rain barrels designed to collect all rooftop runoff from the one-year, 24-hour storm. Rain barrels and cisterns shall be installed in such a manner as to facilitate the reuse of the collected rain water on site and shall be installed in such a manner that any overflow from these devices is directed to a vegetated area in a diffuse flow. In addition all uncovered driveways, uncovered parking areas, uncovered walkways and uncovered patios shall be constructed out of permeable pavement, or other pervious materials. For the purposes of this Rule, permeable pavement is defined as a paving material that allows for the infiltration of stormwater. Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, and porous asphalt. Compacted gravel shall not be considered permeable pavement. Other pervious material includes wooden slatted decks; or
- (2) Direct rooftop runoff from the one-year, 24-hour storm to an appropriately sized and designed rain garden. In addition all uncovered driveways, uncovered parking areas, uncovered walkways and uncovered patios shall be constructed out of permeable pavement, or other pervious materials. For the purposes of this Rule, permeable pavement is defined as a paving material that allows for the infiltration of stormwater. Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, and porous asphalt. Compacted gravel shall not be considered permeable pavement. Other pervious material includes wooden slatted decks; or
- (3) Install any other stormwater best management practice that meets the requirements of 15A NCAC 02H .1008 to control and treat the difference in the stormwater runoff from all built upon areas of the site from the predevelopment and post-development conditions for a one-year, 24-hour storm.
- (c) Residential development activities within the 20 Coastal Counties that are not within one half mile and draining to SA waters that have a built upon area greater than 24 percent and that do not require a stormwater management permit in accordance with Rule .1003 of this Section but that disturb more than 10,000 square feet of land shall manage stormwater runoff by implementing the following measures specified in Subparagraph (1), (2), or (3) of this Paragraph:
 - (1) Install rain cisterns or rain barrels designed to collect all rooftop runoff from the first 1.5 inches of rainfall. Rain barrels and cisterns shall be installed in such a manner as to facilitate the reuse of the collected rain water on site and shall be installed in such a manner that any

1	overflow from these devices is directed to a vegetated area in a diffuse flow. In addition all
2	uncovered driveways, uncovered parking areas, uncovered walkways and uncovered patios
3	shall be constructed out of permeable pavement, or other pervious materials. For the
4	purposes of this Rule, permeable pavement is defined as a paving material that allows for the
5	infiltration of stormwater. Permeable pavement materials include porous concrete,
6	permeable interlocking concrete pavers, concrete grid pavers, and porous asphalt.
7	Compacted gravel shall not be considered permeable pavement. Other pervious material
8	includes wooden slatted decks; or
9	(2) Direct rooftop runoff from the first 1.5 inches of rain to an appropriately sized and designed
10	rain garden. In addition all uncovered driveways, uncovered parking areas, uncovered
11	walkways and uncovered patios shall be constructed out of permeable pavement, or other
12	pervious materials. For the purposes of this Rule, permeable pavement is defined as a paving
13	material that allows for the infiltration of stormwater. Permeable pavement materials include
14	porous concrete, permeable interlocking concrete pavers, concrete grid pavers, and porous
15	asphalt. Compacted gravel shall not be considered permeable pavement. Other pervious
16	material includes wooden slatted decks; or
17	(3) Install any other stormwater best management practice that meets the requirements of 15A
18	NCAC 02H .1008 to control and treat the stormwater runoff from the first 1.5 inches of
19	rainfall for all built upon areas of the site.
20	(d) Exclusions. The requirements of this rule shall not apply to the following:
21	(1) Development activities that are conducted pursuant to and consistent with one of the following
22	authorizations, shall be regulated by those provisions and requirements of 15A NCAC 2H .1005 that were
23	effective at the time of the issuance of the following authorizations:
24	(A) A valid State Stormwater Permit or Stormwater Certification, or
25	(B) Those authorizations contained in Section 8.1 of Session Law 2006-246.
26	(2) Redevelopment activities which have no net increase in built upon area and provide equal
27	stormwater control than the previous development.
28	(e) Exemptions from vegetative buffer requirements. The following activities are exempt from the vegetative
29	buffer requirements specified in Paragraphs (b)(2)(A)(iv), (b)(2)(B)(iv), (b)(3)(A)(iii), and (b)(3)(B)(iii) of
30	this Rule:
31	(1) Urban waterfronts that meet the requirements of 15A NCAC 07H .0209(g),
32	(2) Those activities listed in 15A NCAC 07H .0209(d)(10)(A) through 15A NCAC .07H
33	<u>.0209(d)(10)(H)</u> .

(f) In addition to the requirements specified in this Rule, activities regulated under this Rule must also comply 1 2 with any requirements of any other applicable rule or statute, for example, activities regulated under this rule that occur in the Neuse or Tar-Pamlico River Basins must also comply with the applicable requirements of the 3 Neuse and Tar-Pamlico Riparian Buffer Rules, which are specified in 15A NCAC 2B .0233 and 15A NCAC 4 5 2B .0259, respectively. 6 7 History Note: Authority G.S. 143-214.1; 143-214.7; 143-215.1; 143-215.3 (a); Eff. September 1, 1995; 8 9 Amended Eff. Pending Legislative Review.

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