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

(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 a permanent, designed waterway lined with vegetation that is used to convey stormwater runoff at a non-erosive velocity within or away from a developed area.
- (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) With exception of NC Department of Transportation activities that shall be regulated in accordance with the provisions of that agency's existing NPDES Stormwater Permit, all non-residential development activities within the coastal counties that will add more than 10,000 square feet of built upon area or that require a Sedimentation and Erosion Control Plan or a CAMA Major Development Permit and residential development

activities, as o	defined ir	15A N	CAC 02B .0202(54), within the coastal counties that require a Sedimentation	
and Erosion (Control I	Permit o	r a CAMA Major Development Permit shall manage stormwater runoff as	
follows:				
(1)	Devel	opment	activities within the coastal counties draining to Outstanding Resource Waters	
	(ORW	/) shall r	neet requirements contained in Rule .1007 of this Section and the provisions of	
	SubPa	art (b)(2))(A)(i) of this Paragraph;	
(2)	Devel	opment	activities within one-half mile of and draining to SA waters or within one-half	
	mile o	of SA wa	ters and draining to unnamed freshwater tributaries to SA waters must comply	
	with e	th either the requirements in Parts (b)(2)(A) and (b)(2)(C) of this Rule or the requi		
	in Par	Parts (b)(2)(B) and (b)(2)(C) of this Rule:		
	(A)	Low l	Density Option: Development shall be permitted pursuant to Rule .1003(d)(1)	
		of this	s Section if the development has:	
		(i)	Built-upon area of 12 percent or less (A project with an overall density at or	
			below the low density threshold, but containing areas with a density greater	
			than the overall project density, may be considered low density as long as	
			the project meets or exceeds the requirements for low density development	
			and locates the higher density in upland areas and away from surface waters	
			and drainageways to the maximum extent possible.);	
		(ii)	Development within 575 feet of the mean high water line of areas	
			designated by the Environmental Management Commission as Outstanding	
			Resource Waters (ORW) shall be limited to a built upon area of 25 percent	
			or less, however, development with a built upon area of greater than 12	
			percent must comply with the requirements of SubPart (B) of this	
			SubParagraph;	
		(iii)	Stormwater runoff transported primarily by vegetated conveyances.	
			(Conveyance system shall not include a discrete stormwater collection	
			system as defined in Rule .1002 of this Section); and	
		(iv)	A 50 foot wide vegetative buffer for new development activities and a 30	
			foot wide vegetative buffer for redevelopment activities.	
	(B)		Density Option: Higher density developments shall be permitted pursuant to	
			.1003(d)(2) of this Section if stormwater control systems meet the following	
		criteri		
		(i)	No direct outlet channels or pipes to SA waters unless permitted in	
			accordance with 15A NCAC 02H .0126:	

1			(ii)	Control systems must be infiltration systems, wet detention ponds,
2				bioretention systems, constructed stormwater wetlands, sand filters, or
3				alternative stormwater management systems designed in accordance with
4				Rule .1008 of this Section to control and treat the runoff from all surfaces
5				generated by one and one-half inches of rainfall or the difference in the
6				stormwater runoff from all surfaces from the predevelopment and post-
7				development conditions for a one-year, 24-hour storm, whichever is greater.
8				Alternatives as described in Rule .1008(h) of this Section may also be
9				approved if they meet the requirements of this Part, (b)(2)(B), and Part
10				(b)(2)(C) of this Rule;
11			(iii)	Runoff in excess of the design volume must flow overland through a
12				vegetative filter designed in accordance with Rule .1008 of this Section
13				with a minimum length of 50 feet measured from mean high water of SA
14				waters; and
15			(iv)	A 50 foot wide vegetative buffer for new development activities and a 30
16				foot wide vegetative buffer for redevelopment activities.
17		(C)	In addi	tion to the other measures required in this Rule, all development activities,
18			includi	ng both low and high density projects, shall prohibit new points of
19			stormw	vater discharge to SA waters or expansion (increase in the volume of
20			stormw	vater flow through conveyances or increase in capacity of conveyances) of
21			existing	g stormwater conveyance systems that drain to SA waters. Any modification
22			or rede	sign of a stormwater conveyance system within the contributing drainage
23			basin r	nust not increase the net amount or rate of stormwater discharge through
24				g outfalls to SA waters. Infiltration of stormwater runoff from the one-year,
25			•	r storm or diffuse flow of stormwater at a non-erosive velocity to a vegetated
26			buffer	or other natural area within the property boundary, that is capable of
27				ng effective infiltration of the runoff from the one-year, 24-hour storm shall
28			not be	considered a direct point of stormwater discharge. Permit applicants shall
29				to consideration soil type, slope, vegetation, and existing hydrology when
30				ing infiltration effectiveness.
31	(3)	Develo		activities within the coastal counties except those areas defined in
32	` /		_	(1) and (2) of this Paragraph:
33		(A)	• 1	ensity Option: Development shall be permitted pursuant to Rule .1003(d)(1)
34		` /		Section if the development has:

1		(1	i)	Built-upon area of 24 percent or less (A project with an overall density at or
2				below the low density threshold, but containing areas with a density greater
3				than the overall project density, may be considered low density as long as
4				the project meets or exceeds the requirements for low density development
5				and locates the higher density in upland areas and away from surface waters
6				and drainageways to the maximum extent possible.);
7		(1	ii)	Stormwater runoff transported primarily by vegetated conveyances;
8				(Conveyance system shall not include a discrete stormwater collection
9				system as defined in Rule .1002 of this Section); and
10		(1	iii)	A 50 foot wide vegetative buffer for new development activities and a 30
11				foot wide vegetative buffer for redevelopment activities.
12		(B) H	High D	ensity Option: Higher density developments shall be permitted pursuant to
13		R	Rule .10	003(d)(2) of this Section if stormwater control systems meet the following
14		c	riteria:	
15		(i	i)	Control systems must be infiltration systems, wet detention ponds,
16				bioretention systems, constructed stormwater wetlands, sand filters, or
17				alternative stormwater management systems designed in accordance with
18				Rule .1008 of this Section;
19		(i	ii)	Control systems must be designed to store, control and treat the stormwater
20				runoff from all surfaces generated by one and one-half inch of rainfall; and
21		(i	iii)	A 50 foot wide vegetative buffer for new development activities and a 30
22				foot wide vegetative buffer for redevelopment activities.
23	(4)	Structura	l storm	water controls required under this Rule shall meet the following criteria:
24		(A) R	Remove	e an 85 percent average annual amount of Total Suspended Solids.
25		(B) F	For dete	ention ponds, draw down the treatment volume no faster than 48 hours, but
26		n	o slow	ver than 120 hours.
27		(C) I	Dischar	ge the storage volume at a rate equal to or less than the pre-development
28		d	lischar	ge rate for the one-year, 24-hour storm. and
29		(D) N	Meet th	e General Engineering Design Criteria set forth in 15A NCAC 02H .1008(c).
30	(5)	For the p	urpose	s of this Rule, areas defined as Coastal Wetlands under 15A NCAC 07H
31		<u>.0205</u> all	areas	defined as jurisdictional wetlands (which means those wetlands that are
32		subject to	the ju	risdiction of the US Army Corps of Engineers pursuant to Section 404 of the
33		Clean Wa	<mark>ater Ac</mark>	t) or isolated wetlands (as that term is used in 15A NCAC 02H .1301) shall
34		not be in	nclude	d in the overall project area to calculate impervious surface density.

1		Stormwater runoff from built upon areas that is directed to flow through any wetlands at a
2		non-erosive velocity. must-flow through these wetlands in a diffuse manner with the use of a
3		level spreader.
4	(6)	For structural stormwater controls that are required under this Rule and that require
5		separation from the seasonal high-water table, a minimum separation of two feet is
6		mandated. This separation shall be provided by at least 12 inches of naturally occurring soil
7		above the seasonal high water table with a minimum soil hydraulic conductivity of 0.52
8		inches per hour.
9	(c) Residential of	development activities within the 20 Coastal Counties that are:
10	within o	ne-half mile and draining to SA waters,
11	<u>have a b</u>	built upon area greater than 12 percent,
12	do not re	equire a stormwater management permit under Paragrpah (b) of this Rule, and
13	will add	more than 10,000 square feet of built upon area,
14	shall manage sto	rmwater runoff by obtaining a stormwater management permit to implement the measures
15	specified in Sub	paragraph (1), (2), or (3) of this Paragraph:
16		(1) Install rain cisterns or rain barrels designed to collect all rooftop runoff from the one-
17		year, 24-hour storm. Rain barrels and Cisterns shall be installed in such a manner as to
18		facilitate the reuse of the collected rain water on site and shall be installed in such a manner
19		that any overflow from these devices is directed to a vegetated area in a diffuse flow. In
20		addition all uncovered driveways, uncovered parking areas, uncovered walkways and
21		uncovered patios shall be constructed out of permeable pavement, or other pervious
22		materials. For the purposes of this Rule, permeable pavement is defined as a paving material
23		that allows for the infiltration of stormwater. Permeable pavement materials include porous
24		concrete, permeable interlocking concrete pavers, concrete grid pavers, and porous asphalt.
25		Compacted gravel shall not be considered permeable pavement. Other pervious material
26		includes wooden slatted decks; or
27		(2) Direct rooftop runoff from the one-year, 24-hour storm to an appropriately sized and
28		designed rain garden. In addition all uncovered driveways, uncovered parking areas,
29		uncovered walkways and uncovered patios shall be constructed out of permeable pavement,
30		or other pervious materials. For the purposes of this Rule, permeable pavement is defined as
31		a paving material that allows for the infiltration of stormwater. Permeable pavement
32		materials include porous concrete, permeable interlocking concrete pavers, concrete grid
33		pavers, and porous asphalt. Compacted gravel shall not be considered permeable pavement.
34		Other pervious material includes wooden slatted decks; or

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

1	(1) Development activities that are conducted pursuant to and consistent with one of the following
2	authorizations, shall be regulated by those provisions and requirements of 15A NCAC 2H .1005 that were
3	effective at the time of the issuance of the following authorizations:
4	(A) A State Stormwater Permit issued under the provisions of 15A NCAC 2H .1005,
5	(B) A Stormwater Certification issued pursuant to 15A NCAC 2H .1000 prior to December
6	<u>1, 1995,</u>
7	(C) Those authorizations contained in Section 8.1 of Session Law 2006-246, or.
8	(D) A 401 Certification that contains an approved Stormwater Management Plan.
9	(2) Redevelopment activities which have no net increase in built upon area and provide equal
10	stormwater control than the previous development.
11	(3) Development activities for which a complete Stormwater Permit Application has been accepted
12	by the Division of Water Quality prior to the effective date of this Rule, shall be regulated by the
13	provisions and requirements of 15A NCAC 2H .1005 that were effective at the time that this
14	application was accepted as complete by the Division of Water Quality.
15	(4) Development activities requesting a minor modification of an existing State Stormwater Permit
16	shall be regulated by the provisions and requirements of 15A NCAC 2H.1005 that were effective at
17	the time of the original issuance of the State Stormwater Permit. For the purposes of this Rule, a
18	minor modification of a State Stormwater Permit is defined as a modification that does not increase
19	the net area of impervious surfaces within the project site or does not increase the overall size of the
20	stormwater controls that have been previously approved for the development activity,
21	
22	(e) Exemptions from vegetative buffer requirements. The following activities are exempt from the vegetative
23	buffer requirements specified in Paragraphs (b)(2)(A)(iv), (b)(2)(B)(iv), (b)(3)(A)(iii), and (b)(3)(B)(iii) of
24	this Rule:
25	(1) Urban waterfronts that meet the requirements of 15A NCAC 07H .0209(g),
26	(2) Those activities listed in 15A NCAC 07H .0209(d)(10)(A) through 15A NCAC .07H
27	<u>.0209(d)(10)(H)</u> .
28	(f) In addition to the requirements specified in this Rule, activities regulated under this Rule must also comply
29	with any requirements of any other applicable rule or statute, for example, activities regulated under this rule
30	that occur in the Neuse or Tar-Pamlico River Basins must also comply with the applicable requirements of the
31	Neuse and Tar-Pamlico Riparian Buffer Rules, which are specified in 15A NCAC 2B .0233 and 15A NCAC
32	2B .0259, respectively.
33	(g) Division of Water Quality implementation of the requirements specified in this Rule within a local
34	government's jurisdiction satisfies the Post-Construction Practices mandated in Section 9 of Session Law

CSRWG 9 June 2008 Reeder

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1	2006-246 for any local government within the 20 Coastal Counties that is designated as a Phase
2	municipality by the Environmental Management Commission under Section 5 of SL 2006-246 after Augus
3	<u>16, 2006.</u>
4	(h) The provisions contained in the July 24, 2006 Memorandum from Alan Klimek to the Honorable Bonne
5	Stiller also apply to this Rule.
6	(i) The effective date of this Rule is January 1, 2009.
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8	History Note: Authority G.S. 143-214.1; 143-214.7; 143-215.1; 143-215.3 (a);
9	Eff. September 1, 1995;
10	Amended Eff. Pending Legislative Review.