

REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: February 1, 2010

SUBJECT: Draft Regulations for a Delegated County Stormwater Management Program

ATTACHMENTS:

1. Staff Memorandum
2. Quick Facts Summary Sheet
3. Proposed LDC Text Amendment (TX-2009-01)
4. PowerPoint Presentation

SUMMARY OF REQUEST:

At its meeting on October 5, 2009 the Board of Commissioners directed County staff to draft stormwater management regulations which would allow for development of a countywide delegated stormwater management program. The North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) currently administers the stormwater management program in Henderson County and collects all associated permit revenues.

Staff incorporated the required language from the DWQ's Model Stormwater Management Ordinance into the County's Land Development Code for consideration as a draft text amendment. Staff also modified existing water supply watershed protection regulations, consistent with the State Model Water Supply Watershed Ordinance, to remove duplication in standards, reviews, and approvals between water supply watershed protection and stormwater regulations. These changes simplify and clarify standards, streamline approval processes, and prevent additional unnecessary layers of regulation. Staff has provided an overview of the substantive changes included in the text amendment (see Attachment 3). Staff placed a full copy of Chapter 200A, Land Development Code, with proposed changes in the Office of the Board of Commissioners.

Before taking action on the text amendment, the Board of Commissioners must hold a public hearing. Staff proposes to schedule the hearing for March 1, 2010, at 7:00 P.M., or schedule a special called meeting on or after that date.

BOARD ACTION REQUESTED:

Staff requests direction from the Board of Commissioners as to how to proceed. State law requires a public hearing should the Board wish to move toward adoption of the proposed regulations.

Suggested Motion:

I move that the Board schedule a public hearing on text amendment #TX-2009-01 for Monday, March 1, 2010, at 7:00 P.M.

OR

I move that the Board continue discussion of text amendment #TX-2009-01 at its Monday, March 1, 2010 meeting.

MEMORANDUM

TO: Henderson County Board of Commissioners
Steve Wyatt, County Manager
Selena Coffey, Asst. County Manager
Russ Burrell, County Attorney
Marcus Jones, County Engineer

FROM: Anthony Starr, AICP, Planning Director
Matthew Cable, AICP, Planner

DATE: February 2, 2010

SUBJECT: Delegated County Stormwater Management Program

Background

The North Carolina Division of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) currently administers its stormwater management program in Henderson County and collects the associated permit revenues. The County may develop a countywide delegated stormwater management program similar to its delegated soil erosion and sedimentation control program or continue to allow the State to administer these provisions and collect the revenues. The Henderson County 2020 Comprehensive Plan recommends the County should “identify and incorporate Stormwater Management standards and requirements into County land development ordinances” (CCP: N-02-E). Henderson County Strategic Plan Strategy 4.2 (Protect Water Quality) further lists objectives which support the development of a delegated countywide stormwater program. The Engineering Department indicates this program can be initiated and maintained with existing staff and resources.

Analysis

Stormwater program delegation requires the County to adopt its own regulations consistent with the State rules. DWQ provides a model stormwater management ordinance which Staff incorporated into the Land Development Code (LDC) for consideration as a draft text amendment. The stormwater management regulations, as proposed by Staff, do not result in new requirements or expense to a developer unless he develops in the water supply watershed and chooses to use the “high-density option” (further explained below).

Staff also proposed amendments to existing water supply watershed protection regulations to: simplify, clarify, and remove duplication in standards; streamline approval processes; and prevent additional unnecessary layers of regulation. All modifications made to the existing water supply watershed regulations of the LDC are consistent with the State Model Water Supply Watershed Ordinance.

The proposed water supply watershed amendments incorporate the high-density option, permitting increased built-upon area by implementing stormwater management techniques (provided by the State Model Stormwater Ordinance). Under this optional provision, maximum built-upon area varies by water supply watershed up to a 70% maximum built-upon area. Built-upon area includes impervious materials including buildings, asphalt, concrete, and gravel. To incorporate the high-density option, Special Intensity Allocations (the supply of which is nearly exhausted for the WS-III-BW), and minimum lot size

requirements are eliminated. Staff proposes replacing the minimum lot size requirements with average lot size standards because it:

- is difficult for public and Staff to calculate and track built-upon area for single-family residential lots/developments; and
- would provide consistency with existing base zoning district regulations.

In evaluating the high-density option, NCDENR DWQ recommends the County consider the following questions. Staff provides comments to each question below.

1. *Can the economic development goals of the County be achieved by using the Special Intensity Allocation?*

Staff recognizes the Special Intensity Allocation does not meet County needs as the WS-III-BW 10% limit will soon be exhausted. State regulations limit the use of the Special Intensity Allocations to 10% of each watershed area.

2. *Should the high-density option be available throughout the water supply watershed or be limited to specific areas?*

Allowing the high-density option in all water supply watershed areas facilitates consistent rules and makes administration easier.

3. *Is it now or will infrastructure be available in the future to serve the area under the high-density option?*

Adequate infrastructure, including public water and sewer, is available for significant portions of these water supply watershed areas.

4. *Is additional staff necessary to administer the program (monitor stormwater controls operation and maintenance) and is funding available for new staff and specialized training?*

Existing soil erosion and sedimentation staff are available to administer this program with existing resources.

Recommendation

Staff recommends application of the high-density option throughout the water supply watersheds to provide consistency of regulations, allow for efficient administration of the stormwater and watershed regulations, and responsibly accommodate economic development and growth. Staff proposes the water supply watershed and stormwater regulations be known as the “Water Quality” regulations and the administrator of these provisions be known as the “Water Quality Administrator.”

To provide for the implementation of a countywide delegated stormwater management program, staff recommends the proposed LDC text amendment (TX-2009-01).

The Henderson County Technical Review Committee (TRC) considered text amendment #TX-2009-01 at its special called meeting on December 15, 2009. During that meeting, the TRC voted unanimously to send the Board of Commissioners a favorable recommendation regarding text amendment #TX-2009-01.

The Henderson County Planning Board considered text amendment #TX-2009-01 at its special called meeting on December 3, 2009 and again at its regularly scheduled meeting on December 17, 2009. At its regularly scheduled meeting, the Planning Board voted unanimously to send the Board of Commissioners a favorable recommendation regarding text amendment #TX-2009-01.



Draft Stormwater & Water Supply Watershed Protection Regulations

Quick Facts

1. Incorporates the minimum standards required by the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) Model Stormwater and Model Water Supply Watershed High-Density Option Ordinances
2. Water Supply Watershed High-Density Option:
 - a. Engineered stormwater controls are required;
 - b. Built-upon area limits increased providing greater flexibility for development;
 - c. Existing protections of water quality are maintained or improved;
 - d. Average lot size replaces minimum lot size (density remains the same);
 - e. Special Intensity Allocations/cluster development provisions removed;
 - f. Issued a Watershed High-Density Development Permit.
3. Stormwater Management Permits:
 - a. Not required within a water supply watershed;
 - b. Not required for farming, silviculture, and ranching or any other activity exempt from the Clean Water Act;
 - c. Required for any development activity outside the water supply watershed that disturbs more than 1 acre and is not exempt from the Clean Water Act.
4. Stormwater Controls:
 - a. Not required for water supply watershed Low-Density Option projects;
 - b. Required for water supply watershed High-Density Option projects; and
 - c. May be required for any project elsewhere in the County required to obtain a stormwater management permit.
5. Where required and used, stormwater control measures must control and treat stormwater runoff from the first 1-inch of rain over a 24-hour period.
6. Structural stormwater control measures must remove 85% of average annual total suspended solids (TSS)
7. Stormwater BMP Manual provides general engineering design criteria for all projects.
8. Program would be administered by the Engineering Department using existing Soil Erosion Control staff and resources.
9. Municipalities could allow administration in their jurisdictions as currently setup with the Soil Erosion and Sedimentation Control Program.
10. Fees for Stormwater Permits and Plan would remain the same as currently required by the State.

Proposed Amendments to Chapter 200A, Land Development Code (TX-2009-01) To Allow for Development of a Countywide Delegated Stormwater Management Program

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LDC Text Amendment 1, Article I (General Provisions).

Add the following general provision as indicated in the DWQ Phase II Stormwater Model Ordinance.

§200A-5. Rules of Construction

- G. Text Controls in Event of Conflict. In the event of a conflict or inconsistency between the text of this Chapter and any heading, caption, figure, illustration, table, or map, the text shall control.

LDC Text Amendment 2, Article II (Zoning District Regulations).

Add or modify the following water supply watershed protection overlay district standards and regulations as indicated in the DWQ Water Supply Watershed Model Ordinance, High-Density Option Appendices. A majority of the modifications to the existing water supply watershed regulations are not substantive, but instead are intended to simplify the text and improve ordinance comprehension. For these purposes Staff has proposed Tables 2.14 and 2.15 to include the standards for the WSWP Sub-districts.

Substantive modifications in regulations are related to moving to the high-density option. Using a high-density option eliminates the need for acquiring a Special Intensity Allocation (which are

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currently limited) in the Balance of Watershed and Protected Area subdistricts; and instead would allow for developments built at higher density in each watershed (provided engineered stormwater controls are installed). The high-density option also allows for the elimination of minimum lot size requirements and instead allows for an overall average lot size within a single-family development. This is consistent with other residential base zoning district regulations. Given that this is a density-based approach, existing cluster development standards have been removed due to their being unnecessary given no minimum lot sizes exist.

§200A-61. Water Supply Watershed Protection Overlay District (WSWP)

The purpose of the *Water Supply Watershed* Protection Overlay District (WSWP) is to define the area of *water supply watersheds* within the County. The intent of the overlay district is to manage the *uses* of land and *structures* encompassed by *water supply watersheds* within the County in order to maintain the high quality of surface water in these *watersheds*; this being accomplished by enforcing standards that limit the impact from existing or potential sources of contamination through the regulation of **average lot size** and development intensity.

- A. Scope. Land *use* within the **WSWP** overlay district must comply with all the requirements of both the underlying general *use district* and the applicable *Water Supply Watershed* overlay district classification. If a *use* or class of *use* is not specifically indicated as being permitted in a *watershed* area, such *use* or class of *use* is prohibited.
- B. Establishment. This incorporates by reference the “Official Water Supply Watershed Map for Henderson County,” hereinafter “Official Water Supply Watershed Map,” and subsequent amendments thereto, showing all *water supply watershed* areas designated by the North Carolina Environmental Management Commission, hereinafter *NCEMC*. The Official Water Supply Watershed Map shall be maintained by the *Planning Director* and kept in the Planning Department. The water supply watershed map shall also be shown on and become part of the Official Zoning Map for the County. The rules of interpretation for the boundaries of the map (see §200A-~~213~~207.3 (Interpretation of Boundaries of the Water Supply Watershed Map)) apply. In addition, where any **WSWP** overlay district boundaries lie at a scaled distance of more than 25 feet from any parallel *lot* line, the location of these map boundaries shall be determined by using the scale of the map.
- C. Application of Regulations.
 - (1) General Application. No *structure* or land shall hereafter be used and no development shall take place in the **WSWP** overlay district except in conformity with the regulations herein specified for the *watershed* sub-district in which it is located. All development must minimize built-upon surface area; direct *stormwater* away from surface waters; and incorporate *best management practices* to minimize water quality impacts. No area required for the purpose of complying with the provisions of this Article shall be included in the area required for another *building*.

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(2) Exceptions.

- a. Existing Development. *Existing development* shall be subject to the regulations contained in §200A-263 (Nonconforming Lots). Expansions to *structures* classified as “*existing development*” must meet the requirements of this subsection; however, the *built-upon area* of the *existing development* is not required to be included in density calculations.
- b. Lots Created as Part of Any Ordinance. Any *lot* or parcel created as part of any *subdivision* that is exempt from the requirements of this Chapter shall be subject to the *land use* requirements (including *impervious surface* requirements) of this subsection, except that such *lot* or parcel must meet the minimum stream *buffer* requirements of §200A-~~215-219~~ (Application of Regulations) (C) (Perennial ~~Stream and Intermittent Surface Water~~ Buffers) to the maximum extent practicable.
- c. Cemetery Lots. The division of a *tract* into plots or *lots* used as a cemetery.

D. Sub-Districts and Sub-District Regulations.

- (1) General. The regulations of this subsection shall apply uniformly to each class or kind of *structure* or land located within any of the enumerated sub-district classifications. Within the sub-districts as established below, the requirements set forth in this subsection shall be complied with in addition to any other applicable general or special requirements of this Chapter.
- (2) Impact on Water Quality and Public Health. No activity, situation, *structure* or *land use* shall be allowed within a **WSWP** overlay sub-district that poses a threat to water quality and/or the public health, safety and welfare. Such conditions may arise from inadequate on-site sewage systems which utilize ground absorption; inadequate *sedimentation* and *erosion* control measures; the improper storage or disposal of *junk*, trash or other refuse within a *buffer* area; the improper management of *stormwater runoff*; or any other situation found to pose a threat to water quality. The *Water Quality Administrator* shall monitor *land use* activities within the *watershed* areas to identify situations that may pose a threat to water quality. Where such activities are found, the *Water Quality Administrator* shall take any appropriate action or proceeding to restrain, correct or abate the condition and/or *violation*.
- (3) Water Supply Watershed Protection Sub-Districts **and District Purposes**.
~~The s~~Sub-districts include:
 - a. WP-WS-I North Fork of Mills river and Bradley Creek Watershed Overlay Sub-District. **The intent of the sub-district is to provide maximum protection for water supplies within essentially natural and undeveloped watersheds in public ownership by allowing only**

low-intensity *uses*. Impacts from nonpoint source pollution shall be minimized.

- b. WP-WS-II-CA Mills River Critical Area Watershed Overlay Sub-District. The intent of the sub-district is to maintain a predominately undeveloped land *use* intensity pattern allowing only very low-density developments.
- c. WP-WS-II-BW Colt Creek and Mills River Balance of the Watershed Overlay Sub-Districts. The purpose of the sub-district is to maintain a predominately undeveloped land *use* intensity. Projects in this sub-district must, to the maximum extent practicable, minimize built-upon surface area; direct *stormwater* away from surface waters; and incorporate *best management practices* to minimize water quality impacts.
- d. WP-WS-III-CA Lower Mills River Critical Area Watershed Overlay Sub-District. The purpose of the sub-district is to maintain a predominantly undeveloped land *use* intensity pattern.
- e. WP-WS-III-BW Lower Mills River Balance of Watershed Overlay Sub-District. The intent of the sub-district is to maintain a predominantly underdeveloped land *use* intensity. Projects in this sub-district must, to the maximum extent practicable, minimize built-upon surface area; direct *stormwater* away from surface waters; and incorporate *best management practices* to minimize water quality impacts.
- f. WP-WS-IV-CA Upper French Broad River Critical Area Watershed Overlay Sub-District. Only new development activities that are required by this Chapter to submit a soil erosion and sedimentation control plan because one or more acres of land have been disturbed are required to meet the provisions of this Chapter related to *water supply watershed* when located in a WS-IV watershed. New *development* activities within this sub-district that do not require a soil *erosion* and *sedimentation* control plan are not required to meet the water supply watershed provisions of this sub-district.
- g. WP-WS-IV-PA Upper French Broad River Protected Area Watershed Overlay Sub-District. The intent of the WP-WS-IV-PA Upper French Broad River *watershed* overlay sub-district is to provide protection for water quality while accommodating moderate to high land *use* intensity. Development projects undertaken within this sub-district may qualify for an exemption from the density and built-upon limits as set out in this section if the project meets the criteria outlined in §200A-61 (Water Supply Watershed Protection Overlay District (WSWP)) D (Sub-Districts and Sub-District Regulations) 6 (Sedimentation and Erosion Control Exemption). For

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projects implementing a *natural drainage and filtering system* the density and built-upon limitations indicated herein below shall apply without the utilization of engineered *stormwater* controls. If *stormwater runoff* is filtered naturally and is not passed by gutters, drains, pipes, paved swales or other similar conduits, qualification for a *natural drainage and filtering system* bonus shall not impose a more stringent requirement than the provisions of this Chapter regulating the subdivision of land, or the North Carolina *erosion* and *sedimentation* control permit requirements.

(4) Water Supply Watershed Protection Sub-District Regulations on Density, Built-Upon Area, and Setbacks.

a. Low Density Option.

1. Engineered Stormwater Controls. Not required.
2. Average Lot Size. Average *lot size* shall apply to single-family development and shall be calculated excluding *road right-of-way* as per Table 2.14.
3. Maximum Percent Built-Upon Limits. Maximum percent built-upon limits shall apply to *multifamily residential* and *nonresidential development* as per Table 2.14. For the purpose of calculating *built-upon area*, total project area shall include total acreage in the tract on which the project is to be developed.
4. Perennial and Intermittent Surface Water Buffers. 30 feet (See §200A-219).

b. High-Density Option. Where new *development* exceeds average lot size requirements or percent *built-upon area* under the low-density option, the development shall be considered high-density.

1. Engineered Stormwater Controls. High-density projects are required to control runoff from the first inch of rainfall over a 24-hour period. Stormwater controls shall adhere to the requirements of §200A-208 (Stormwater Management Regulations) and §200A-209 (Structural and Nonstructural Stormwater BMPs Maintenance).
2. Maximum Percent Built-Upon Limits. New high-density development shall not exceed the prescribed percent *built-upon area* as per Table 2.14.
3. Perennial and Intermittent Surface Water Buffers. The requirements of §200A-219 (Perennial and Intermittent Surface Water Buffers) shall apply and shall be expanded to a minimum of 100 feet landward of all perennial surface waters.

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4. Total Suspended Solids Removal Requirement. Stormwater controls shall be designed to remove 85% of TSS.

Table 2.14 provides ~~general information regarding~~ sub-district *average lot size, density* and *built-upon area* limitations.

Table 2.14. Water Supply Watershed Protection Sub-District Regulations on Density and Built-Upon Area				
Sub-District	Low-Density Option		High-Density Option	Natural Drainage & Filtering Bonus
	Average Lot Size	Maximum Percent Built-Upon Limits	Maximum Percent Built-Upon Limits	
WP-WS-I	Not Applicable	Not Applicable	Not Applicable	Not Applicable
WP-WS-II-CA	80,000 sq.ft.	6%	24%	Not Applicable
WP-WS-II-BW	40,000 sq.ft.	12%	30%	Not Applicable
WP-WS-III-CA	40,000 sq.ft.	12%	30%	Not Applicable
WP-WS-III-BW	20,000 sq.ft.	24%	50%	Not Applicable
WP-WS-IV-CA	20,000 sq.ft.	24%	50%	Not Applicable
WP-WS-IV-PA (Drainage & Filtering Bonus)	20,000 sq.ft. (14,250 sq.ft.)	24% (36%)	70% (36%)	Yes

(5) Water Supply Watershed Protection Sub-District Permitted Uses. Table 2.15 provides permitted uses within each sub-district. If a *use* or class of *use* is not specifically indicated as being allowed in a *watershed* area, such *use* or class of *use* is prohibited. The proposed use must also be permitted by the underlying general use district(s) (See §200A-62 (Table of Permitted and Special Uses)).

Table 2.15. Water Supply Watershed Protection Sub-District Permitted Use Table							
USE TYPE*		WP WS SUB-DISTRICT P = Permitted					
		I	II CA	II BW*	III CA	III BW*	IV CA
Agriculture	Subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 and all rules and regulations of the Soil and Water Conservation Commission.	P	P		P		P
	Subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990.			P		P	P
Nondischarging Landfills				P		P	
Nonresidential Development							P
Nonresidential Development	Excluding <i>landfills</i> and sites for land application of <i>residuals</i> or petroleum-contaminated soils.		P		P		P
	Excluding discharging <i>landfills</i> .			P			
	Excluding leachate-discharging <i>landfills</i> .				P		

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Power Transmission Lines	P						
Residential Development		P	P	P	P	P	P
Residuals Application Sites			P		P		
Restricted Road Access	P						
Silviculture (Subject to the provisions of the Forest Practices Guidelines Related to Water Quality.)	P	P	P	P	P	P	P
Sludge Application Sites			P				
Water Withdrawal, Treatment and Distribution Facilities	P						
* No use which is not permitted by the underlying general use district(s) shall be permitted within the WSWP sub-district (See §200A-62 (Table of Permitted and Special Uses).							

Table 2.14. Water Supply Watershed Protection Sub-District Regulations on Lot Size and Built-Up-on Area

Sub-District	Minimum Lot Size (Square Feet) ¹	Percent Built-upon Limits		Special Intensity Allocation	Natural Drainage and Filtering Bonus
	Single-Family Residential Limits	Multifamily Residential Development	Nonresidential Development		
WP-WS I	NA	NA	NA	NA	NA
WP-WS II-CA	80,000	6	6	NA	NA
WP-WS II-BW	40,000	12	12	Yes	NA
WP-WS III-CA	40,000	12	12	NA	NA
WP-WS III-BW	20,000	24	24	Yes	NA
WP-WS IV-CA	20,000	24	24	NA	NA
WP-WS IV-PA (Drainage & Filtering Bonus)	20,000 (14,250)	24 (36)	24 (36)	Yes	Yes

¹ Calculated excluding road right-of-way, except in an approved cluster development

~~(6) WP-WS I North Fork of Mills River and Bradley Creek Watershed Overlay Sub-District:~~

- ~~a. Purpose. The intent of the WP-WS I North Fork/Mills River and Bradley Creek watershed overlay sub-district is to provide maximum protection for water supplies within essentially natural and undeveloped watersheds in public ownership by allowing only low intensity uses. No residential or nonresidential uses are allowed except those listed below. Impacts from nonpoint source pollution shall be minimized.~~
- ~~b. Permitted Uses. The following uses are permitted in the WP-WS I North Fork/Mills River and Bradley Creek watershed overlay sub-districts:

 - ~~1. Agriculture. Agriculture, subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 and all rules and regulations of the Soil and Water Conservation Commission.~~
 - ~~2. Silviculture. Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality.~~
 - ~~3. Water Withdrawal, Treatment and Distribution Facilities.~~
 - ~~4. Restricted Road Access.~~
 - ~~5. Power Transmission Lines.~~~~

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- ~~c.—Density and Built Upon Limits. Additional density and *built upon area* limits do not apply.~~
- ~~(7) WP-WS-II-CA Mills River Critical Area Watershed Overlay Sub-District.~~
 - ~~a.—Purpose. The intent of the WP-WS-II-CA Mills River *watershed* overlay sub-district is to maintain a predominately undeveloped land *use* intensity pattern allowing only very low density developments.~~
 - ~~b.—Permitted Uses. The following *uses* are permitted in the WP-WS-II-CA Mills River *watershed* overlay sub-district:~~
 - ~~1.—Agriculture. *Agriculture*, subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 and all rules and regulations of the Soil and Water Conservation Commission.~~
 - ~~2.—Silviculture. *Silviculture*, subject to the provisions of the Forest Practices Guidelines Related to Water Quality.~~
 - ~~3.—Residential Development.~~
 - ~~4.—Nonresidential Development. *Nonresidential development*, excluding *landfills* and sites for land application of *residuals* or petroleum-contaminated soils.~~
 - ~~c.—Density and Built Upon Limits.~~
 - ~~1.—Single Family Residential Development. Single family residential development shall not exceed one (1) *dwelling unit* per 80,000 square feet of *lot size* on a project by project basis. No residential *lot* shall be less than 80,000 square feet, excluding *road right-of-way*, except within an approved *cluster development*.~~
 - ~~2.—Multifamily Residential Development. All multifamily residential development shall not exceed six (6) percent *built upon area* on a project by project basis. For the purpose of calculating *built upon area*, total project area shall include total acreage in the *tract* on which the project is to be developed.~~
 - ~~3.—Nonresidential Development. All *nonresidential development* shall not exceed six (6) percent *built upon area* on a project by project basis. For the purpose of calculating *built upon area*, total project area shall include total acreage in the *tract* on which the project is to be developed.~~
- ~~(8) WP-WS-II-BW Colt Creek and Mills River Balance of Watershed Overlay Sub-Districts.~~
 - ~~a.—Purpose. The purpose of the WP-WS-II-BW Colt Creek and Mills River *watershed* overlay sub-district is to maintain a predominately undeveloped land *use* intensity. Projects in this sub-district must, to the maximum extent practicable, minimize built-upon surface area; direct stormwater away from surface waters; and incorporate *best management practices* to minimize water quality impacts.~~
 - ~~b.—Permitted Uses. (NOTE: Approved *uses* requiring a state *NPDES* permit for point source discharges should consult the NCDEM regarding the restrictions applicable in the *watershed*).~~
 - ~~1.—Agriculture. *Agriculture*, subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990.~~

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- ~~2.—Silviculture. Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 11.6101-0209).~~
- ~~3.—Residential Development.~~
- ~~4.—Nonresidential Development. Nonresidential development excluding discharging landfills.~~
- ~~5.—Other. Nondischarging landfills, residuals application sites and sludge application sites.~~

~~e.—Density and Built Upon Limits.~~

- ~~1.—Single Family Residential Development. Single family development shall not exceed one (1) dwelling unit per 40,000 square feet excluding road right-of-way, except within an approved cluster development.~~
- ~~2.—Multifamily Residential Development. All multifamily residential development shall not exceed 12 percent built upon area on a project by project basis. For the purpose of calculating built upon area, total project area shall include total acreage in the tract on which the project is to be developed.~~
- ~~3.—Nonresidential Development. All nonresidential development shall not exceed 12 percent built upon area on a project by project basis. For the purpose of calculating built upon area, total project area shall include total acreage in the tract on which the project is to be developed.~~
- ~~4.—All Other Residential and Nonresidential Development. All other residential and nonresidential development shall not exceed 12 percent built upon area on a project by project by project basis, except that up to 10 percent of the balance of the watershed may be developed at up to 70 percent built upon area on a project by project basis as a Special Intensity Allocation (SIA) (see §200A-324 (Special Intensity Allocation (SIA))). The Watershed Administrator is authorized to approve SIA's consistent with the provisions of this Chapter. For the purpose of calculating built upon area, the total project area shall include total acreage in the tract on which the project is to be developed.~~

~~(9) WP-WS-III-CA Lower Mills River Critical Area Watershed Overlay Sub-District.~~

- ~~a.—Purpose. The purpose of the WP-WS-III-CA Lower Mills River watershed overlay sub-district is to maintain a predominantly undeveloped land use intensity pattern. New residuals application sites and landfills are specifically prohibited.~~
- ~~b.—Permitted Uses. The following uses are permitted in the WP-WS-III-CA Lower Mills River watershed overlay sub-district:~~
 - ~~1.—Agriculture. Agriculture, subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 and all rules and regulations of the Soil and Water Conservation Commission.~~
 - ~~2.—Silviculture. Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality.~~
 - ~~3.—Residential Development.~~
 - ~~4.—Nonresidential Development. Nonresidential development, excluding landfills and sites for land application of residuals or petroleum-contaminated soils.~~

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~~c.—Density and Built Upon Limits.~~

- ~~1.—Single Family Residential Development. Single family residential development shall not exceed one (1) *dwelling unit* per 40,000 square feet of *lot size* on a project by project basis. No residential *lot* shall be less than 40,000 square feet, excluding *road right-of-way*.~~
- ~~2.—Multifamily Residential Development. All multifamily residential development shall not exceed 12 percent *built upon area* on a project by project basis. For the purposes of calculating *built upon area*, total project area shall include total acreage in the *tract* on which the project is to be developed.~~
- ~~3.—Nonresidential Development. All *nonresidential development* shall not exceed 12 percent *built upon area* on a project by project basis. For the purposes of calculating *built upon area*, total project area shall include total acreage in the *tract* on which the project is to be developed.~~

~~(10) WP WS III BW Lower Mills River Balance of Watershed Overlay Sub-District.~~

- ~~a.—Purpose. The intent of the WP WS III BW Lower Mills River *watershed* overlay sub-district is to maintain a predominantly underdeveloped land *use* intensity. Projects in this sub-district must, to the maximum extent practicable, minimize built-upon surface area; direct stormwater away from surface waters; and incorporate *best management practices* to minimize water quality impacts. *Nondischarging landfills* and *residuals* application sites are allowed.~~
- ~~b.—Permitted Uses. (NOTE: Approved *uses* requiring a state *NPDES* permit for point source discharges should consult the NCDDEM, regarding the restrictions applicable in the *watershed*).~~
 - ~~1.—Agriculture. *Agriculture*, subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990.~~
 - ~~2.—Silviculture. *Silviculture*, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 11.6101-0209).~~
 - ~~3.—Residential Development.~~
 - ~~4.—Nonresidential Development. *Nonresidential development* excluding leachate discharging *landfills*.~~
- ~~c.—Density and Built Upon Limits.~~

- ~~1.—Single Family Residential Development. Single family development shall not exceed one (1) *dwelling unit* per 20,000 square feet of *lot size* on a project by project basis. No residential *lot* shall be less than 20,000 square feet, excluding *road right-of-way*, except within an approved *cluster development*.~~
- ~~2.—Multifamily Residential Development. All multifamily residential development shall not exceed 24 percent *built upon area* on a project by project basis. For the purpose of calculating *built upon area*, total project area shall include total acreage in the *tract* on which the project is to be developed.~~
- ~~3.—Nonresidential Development. All *nonresidential development* shall not exceed 24 percent *built upon area* on a project by project basis. For the purpose of calculating *built upon area*, total project area shall include total acreage in the *tract* on which the project is to be developed.~~

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~~4.—Additional New Development and Expansions to Existing Development. All other residential and nonresidential development shall not exceed 24 percent *built upon area* on a project by project by project basis, except that up to 10 percent of the balance of the watershed may be developed at up to 70 percent *built upon area* on a project by project basis as a Special Intensity Allocation (SIA) (see §200A-324 (Special Intensity Allocation (SIA))). The Watershed Administrator is authorized to approve SIA's consistent with the provisions of this Chapter. For the purpose of calculating *built upon area*, the total project area shall include total acreage in the tract on which the project is to be developed.~~

~~(11) WP-WS-IV-CA Upper French Broad River Critical Area Watershed Overlay Sub-District.~~

~~a.—Purpose. Only new development activities that are required by this Chapter to submit a soil erosion and sedimentation control plan are required to meet the provisions of this Chapter related to water supply watershed when located in a WS-IV watershed. In order to address a moderate to high land use intensity pattern, single family residential uses are allowed at a maximum of two (2) dwelling units per acre. All other residential and nonresidential development shall be allowed at a maximum of 24 percent *built upon area*. New residuals application sites and landfills are specifically prohibited.~~

~~b.—Permitted Uses. The following uses are permitted in the WP-WS-II-CA Mills River watershed overlay sub-district:~~

- ~~1.—Agriculture. Agriculture, subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 and all rules and regulations of the Soil and Water Conservation Commission.~~
- ~~2.—Silviculture. Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality.~~
- ~~3.—Residential Development.~~
- ~~4.—Nonresidential Development. Nonresidential development, excluding landfills and sites for land application of residuals or petroleum-contaminated soils.~~

~~c.—Density and Built Upon Limits.~~

- ~~1.—Single Family Residential Development. Single family residential development shall not exceed two (2) dwelling units per acre on a project by project basis. No residential lot shall be less than one-half (1/2) acre (or 20,000 square feet excluding road right of way), except within an approved cluster development.~~
- ~~2.—Multifamily Residential Development. All multifamily residential development shall not exceed 24 percent *built upon area* on a project by project basis. For the purpose of calculating *built upon area*, total project area shall include total acreage in the tract on which the project is to be developed.~~
- ~~3.—Nonresidential Development. All nonresidential development shall not exceed 24 percent *built upon area* on a project by project basis. For the purpose of calculating *built upon area*, total project area shall include total acreage in the tract on which the project is to be developed.~~

~~(12) WP-WS-IV-PA Upper French Broad River Protected Area Watershed Overlay Sub-District.~~

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Text in **Blue** would be **added** with proposed changes.

~~Purpose. The intent of the WP-WS-IV-PA Upper French Broad River watershed overlay sub-district is to provide protection for water quality while accommodating moderate to high land use intensity.~~

~~Permitted Uses. The following uses are permitted in the WP-WS-IV-PA Upper French Broad River watershed overlay sub-district:~~

~~Agriculture. Agriculture, subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990.~~

~~Silviculture. Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 116101-0209).~~

~~Residential Development.~~

~~Nonresidential Development.~~

~~Density and Built-Up Limits. Unless qualifying for a bonus or subject to a sedimentation and erosion control exemption, permitted development in the WP-WS-IV-PA Upper French Broad River watershed overlay sub-district shall be subject to the following density and built-upon limits:~~

~~Single Family Residential Development. Single family residential development shall not exceed one (1) dwelling unit per 20,000 square feet of lot size, as defined on a project by project basis, unless such development qualifies for a natural drainage and filtering system bonus (see a below). No residential lot shall be less than 20,000 square feet, excluding road right-of-way, except within an approved cluster development, unless such lot qualifies for a natural drainage and filtering system bonus, in which case the lot shall not be less than one third (1/3) acre (14,520 square feet).~~

~~Multifamily Residential Development. All multifamily residential development shall not exceed 24 percent built-upon area on a project by project basis unless such development qualifies for a natural drainage and filtering system bonus (see a below). For the purpose of calculating built-upon area, total project area shall include acreage in the tract on which the project is to be developed.~~

~~Nonresidential Development. All nonresidential development shall not exceed 24 percent built-upon area on a project by project basis unless such development qualifies for a natural drainage and filtering system bonus (see a below). For the purpose of calculating built-upon area, total project area shall include acreage in the tract on which the project is to be developed.~~

~~Additional New Development and Expansions to Existing Development. In addition to the development allowed in 0 and 0 above, new development and expansions to existing development may occupy up to 10 percent of the protected area with up to 70 percent built-upon area when approved as a special intensity allocation (SIA) (see §200A-324 (Special Intensity Allocation (SIA))). The Watershed Administrator is authorized to approve SIA's consistent with the provisions of this Chapter. Projects must, to the maximum extent practicable, minimize built-upon surface area; direct stormwater away from surface waters; and incorporate best management practices to minimize water quality impacts.~~

~~Natural Drainage and Filtering System Bonus. For projects implementing a natural drainage and filtering system, the project may be developed in accordance with the following density and built-upon limitations without the utilization of engineered stormwater controls.~~

- ~~a.—Single Family Residential Development. Single family residential development shall not exceed three (3) dwelling units per acre (or one (1) dwelling unit per 14,250 square feet of lot size).~~
- ~~b.—Other Residential and Nonresidential Development. All other residential and nonresidential development shall not exceed 36 percent built-upon area.~~
- ~~c.—Regulation Limitations. If stormwater runoff is filtered naturally and is not passed by gutters, drains, pipes, paved swales or other similar conduits, qualification for a natural drainage and filtering system bonus shall not impose a more stringent requirement than the provisions of this Chapter regulating the subdivision of land, or the North Carolina erosion and sedimentation control permit requirements.~~

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~~Where the mixed use development contains any clustering, such clustering shall adhere to the standards outlined in subsection E below.~~

~~E.—Cluster Development. Cluster developments are allowed in WP-WS-II-BW Colt Creek and Mills River, WP-WS-III-BW Lower Mills River, WP-WS-IV-CA Upper French Broad River and WP-WS-IV-PA Upper French Broad River sub-districts under the following conditions:~~

- ~~(1)—Subdivisions with Lot Sizes Smaller Than Minimums. Where cluster development is proposed for use in subdivision design and where actual lot sizes do not meet the minimum provided for in this subsection, a developer may meet the requirements of the watershed district in one (1) of the following ways:
 - ~~a.—The average lot size of all building lots in the proposed subdivision is not less than the minimum required herein, and the total number of lots does not exceed the number of lots allowed for single family detached development under the terms of this Chapter; or~~
 - ~~b.—The average lot size of all building lots in the proposed subdivision is less than the minimum required herein but sufficient land is otherwise designated in accordance with subsection (3) below, to offset any such deficiency. Additionally, the total number of lots must not exceed the number of lots allowed for single family detached developments under the terms of this subsection.~~~~
- ~~(2)—Phased Development Subdivisions. Where subdivisions are proposed for phased development, no approval may be given where a deficiency in lot size has not been offset, in accordance with subsection (3) below, on the recorded plat or by a previously recorded plat.~~
- ~~(3)—Land Used to Offset Deficiencies. All land which is used to offset deficiencies in lot sizes or is used to offset built-upon areas which exceed the minimums allowed by this subsection for cluster developments shall meet the following requirements:
 - ~~a.—The land must remain in a natural or vegetated state;~~
 - ~~b.—The land must be located within the same watershed district as the development and must be on the same lot or project site;~~
 - ~~c.—The land must be identified on a plat with the following language: "Natural Area—Not Subject To Development" (such plat shall be recorded in the office of the Register of Deeds of Henderson County); and~~
 - ~~d.—The remainder of the tract shall remain in a vegetated or natural state. The title to the open space area shall be conveyed to a property owners' association for management, to a local government for preservation as a park or open space or to a conservation organization for preservation in a permanent easement. A maintenance agreement shall be filed with the property deeds and a copy submitted to the North Carolina Division of Environmental Management.~~~~
- ~~(4)—Land Not to Be Used to Offset Deficiencies. Road rights-of-way, utility station sites or common recreation areas may not be used to offset lot size deficiencies or built-upon areas that exceed the minimum built-upon limits.~~
- ~~(5)—Design of Built-upon area. All built-upon area shall be designed and located to minimize stormwater runoff impact to the receiving waters and to minimize concentrated stormwater flow.~~
- ~~(6)—Other Terms. All cluster development shall be subject to the terms, conditions and procedures of applicable local, state and federal laws, including but not limited to the other portions of this Chapter.~~

~~F.—Buffer Areas Required. See §200A-219 (Perennial and Intermittent Surface Water Buffers).~~

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LDC Text Amendment 3, Article VIII (Natural Resources).

Add or modify the following standards as indicated in the DWQ Model Ordinances for: Phase II Stormwater and Water Supply Watershed, High-Density Option Appendices. The majority of the regulations required for the delegation of the County Stormwater Management Program are identified within this Article VIII.

This Article reflects and incorporates the Flood Damage Prevention, Water Supply Watershed Protection, Perennial and Intermittent Surface Water Buffers, Protected Mountain Ridges, and Soil Erosion and Sedimentation Control Ordinances previously adopted by the County. The purpose of this Article is to consolidate these existing ordinances into one article of the Land Development Code. *This Article also includes stormwater management regulations for the purposes of improving the County's water quality and quantity.*

Subpart B. Water Quality

§200A-206. General Provisions

§200A-206.1 Statutory Authorization

This Subpart B is adopted pursuant to North Carolina law, including but not limited to Article 14, Section 5 of the Constitution of North Carolina; *NCGS 143-214.7* and rules promulgated by the North Carolina Environmental Management Commission (*NCEMC*) thereunder; Session Law 2004-163; *NCGS 160A*, Article 19; *NCGS 160A-174* and 185; *NCGS 113A*, Article 4; *NCGS 143*, Article 21, Part 6; *NCGS 153A*, Article 18 (including Parts 1, 2, and 3); *NCGS 153A-324*, 330, 331, and 340; and the authority vested by *NCGS Chapter 153A*, Article 6, Section 121 and Chapter 143, Article 21 (Watershed and Air Resources).

Further, the Federal Water Pollution Control Act of 1972 ("Clean Water Act") and federal Water Quality Rules promulgated under it, as well as rules of the *NCEMC* promulgated in response to federal Phase II requirements, compel certain urbanized areas, including this jurisdiction, to adopt minimum *stormwater* controls such as those included in this Subpart B.

§200A-206.2 Effect on Other Laws and Agreements

This Subpart B shall not be construed to repeal or modify applicable local, state and federal laws, except that to the extent that the provisions of this Subpart B conflict with any applicable local, state or federal laws, the most stringent of all applicable laws shall govern. It is not intended that these regulations interfere with any *easement*, covenants or other agreements between parties. However, if the provisions of these regulations impose greater restrictions or higher standards for the *use* of a *structure* or land, then the provisions of these regulations shall control.

§200A-206.3 Findings.

- A. *Development and redevelopment alter the hydrologic response of local watersheds and as reduce groundwater recharge increase:*

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- (1) *Stormwater runoff* rates and volumes,
 - (2) *Flooding*,
 - (3) *Soil erosion*,
 - (4) *Stream channel erosion*,
 - (5) *Nonpoint and point source pollution*, and
 - (6) *Sediment* transport and deposition.
- B. Changes in *stormwater runoff* contribute to increased quantities of water-borne pollutants and alterations in hydrology that are harmful to public health and safety and the natural environment; and
- C. These effects can be managed and minimized by applying proper design and well-planned controls to manage *stormwater runoff* from *development* sites.

§200A-206.4 Purpose.

- A. **General.** The provisions established in this Subpart B are designed to protect, maintain, and enhance public health, safety, environment and general welfare by:
- (1) ~~Manage~~ Managing (by enforcing standards which shall limit the impact from existing or potential sources of contamination through the regulation of *lot sizes* and development intensity) the *uses* of land and *structures* encompassed by *watersheds within the County* in order to maintain the high quality of surface water in these *watersheds* ~~by enforcing standards which shall limit the impact from existing or potential sources of contamination through the regulation of *lot sizes* and development intensity~~;
 - (2) Managing (by establishing minimum requirements and procedures to control the adverse effects of increased post-*development stormwater runoff* and nonpoint and point source pollution associated with new *development* and *redevelopment*) construction-related and post-*development stormwater runoff* to minimize damage to public and private property and infrastructure;
- B. **Specific.** This Subpart B seeks to meet its general purpose by:
- (1) Establishing decision-making processes for *development* that protect the integrity of *watersheds* and preserve the health of water resources;
 - (2) Requiring new *development* and *redevelopment* maintain the pre-*development* hydrologic response in their post-*development* state as nearly as practicable for the applicable design storm to reduce flooding, streambank *erosion*, nonpoint and point source pollution and increases in stream temperature, and to maintain the integrity of stream channels and aquatic habitats;
 - (3) Establishing minimum post-*development stormwater* management standards and design criteria for the regulation and control of *stormwater runoff* quantity and quality;

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- (4) Establishing design and review criteria for the construction, function, and use of *structural stormwater BMPs* that may be used to meet the minimum *post-development stormwater* management standards;
- (5) Encouraging the use of better management and site design practices, such as the use of vegetated conveyances for *stormwater* and the preservation of greenspace, *riparian buffers* and other conservation areas to the maximum extent practicable;
- (6) Establishing provisions for the long-term responsibility for and maintenance of *structural stormwater BMPs* and nonstructural *stormwater BMPs* to ensure that they continue to function as designed, are maintained appropriately, and pose no threat to public safety;
- (7) Establishing administrative procedures for the submission, review, approval and disapproval of *stormwater* management plans, for the inspection of approved projects, and to assure appropriate long-term maintenance.

§200A-206.5. Lands to Which This Subpart B Applies.

This Subpart B shall apply to all land-disturbing activity, *development* and *redevelopment* including, but not limited to, site plan applications, *subdivision* applications, and grading applications within the unincorporated areas of Henderson County and its municipalities as allowed by agreement between local governments, other appropriate legal instrument or law. ~~The provisions of this subpart shall apply within (1) the unincorporated areas of Henderson County lying outside the extraterritorial jurisdiction of any municipality and (2) the incorporated areas of any city or town~~ *Water supply watershed* regulations shall apply within any municipal jurisdictions specifically requesting ~~its~~ enforcement by Henderson County upon the consent of the Commissioners, and which ~~are~~ *have been* designated as a public *water supply watershed* by NCEMC and delineated on the map titled "Henderson County Water Supply Watershed Protection Map," herein referred to as the "*Watershed Map*," as amended. (In making such a request, the city or town must comply with the requirements of *NCGS §153A-122*.) The *Watershed Map* and all explanatory matter contained thereon accompany and are hereby made a part of this Chapter. This Chapter shall be permanently kept, along with subsequent amendments thereto, on file in the office of the Clerk to the Board of Commissioners.

§200A-208. Stormwater Management Regulations

§200A-208.1. Stormwater BMP Manual

- A. Stormwater BMP Manual. The *Water Quality Administrator* shall use the policy, criteria, and information, including technical specifications and standards, in the *Stormwater BMP Manual* as the basis for decisions about *Stormwater Management Permits* and about the design, implementation and performance of *structural stormwater BMPs* and non-structural *stormwater BMPs*. The *Stormwater BMP Manual* includes a list of acceptable *stormwater* treatment practices, including specific design criteria for each *stormwater* practice. *Stormwater* treatment practices that are designed, constructed, and maintained in accordance with these

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design and sizing criteria will be presumed to meet the minimum water quality performance standards of the Phase II laws.

- B. Relationship of Stormwater BMP Manual to Other Laws and Regulations. If the specifications or guidelines of the *Stormwater BMP Manual* are more restrictive or apply a higher standard than other laws or regulations, that fact shall not prevent application of the specifications or guidelines in the *Stormwater BMP Manual*.

§200A-208.2. Establishment of Stormwater Management Permit

A Stormwater Management Permit (see §200A-325 (Stormwater Management Permit)) shall not be required for *development* and *redevelopment* that: (1) cumulatively disturbs less than one (1) acre and is not part of a *larger common plan of development or sale* is exempt from the provisions of this Subpart B; (2) occurs within a designated *water supply watershed*; or (3) occurs within a larger development for which a stormwater management permit has been issued, provided the property owner complies with the requirements of the overall project's stormwater management permit.

- A. A Stormwater Management Permit (see §200A-325 (Stormwater Management Permit)) shall be required in conformance with the provisions of this Chapter for:

- (1) *Development* and *redevelopment* that cumulatively disturbs more than one (1) acre and is not part of a *larger common plan of development or sale*;
- (2) *Development* and *redevelopment* that disturb less than one (1) acre where such activities are part of a *larger common plan of development or sale*, even though multiple, separate or distinct activities take place at different times on different schedules; or
- (3) Any activity not exempt from permit requirements of Section 404 of the federal Clean Water Act as specified in 40 CFR 232 (primarily, ongoing *agriculture* and *forestry* activities).

- B. Where a Stormwater Management Permit is required for a high-density project as noted in §200A-208.5 (Standards for High-Density Projects), *stormwater* control measures shall be implemented that comply with each of the following standards:

- (1) The measures shall control and treat *stormwater runoff* from the first inch of rain over a 24-hour period. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (2) All structural *stormwater* treatment systems used to meet these requirements shall be designed to have a minimum of 85% average annual removal for Total Suspended Solids (TSS).
- (3) General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c), as explained in the *Stormwater BMP Manual*.

No *development* or *redevelopment* shall occur except in compliance with the provisions of this Subpart B or unless exempted. No *development* for which a permit is required pursuant to this Subpart B shall occur except in compliance with the provisions, conditions, and limitations of the permit.

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The approval of the *Stormwater Management Permit* shall require an enforceable restriction on property usage that runs with the land, such as a recorded deed restriction or protective covenants, to ensure that future *development* and *redevelopment* maintains the site consistent with the approved project plans.

§200A-208.3. Determining Project Density Type

A low-density project:

- A. Has no more than two (2) *dwelling units per acre* or 24 percent *built-upon area* for all *residential* and *non-residential development*; and
- B. The overall *density* of a project is at or below the relevant low-density threshold (and which may contain areas with a *density* greater than the overall project *density*, provided the project meets or exceeds the post construction model practices for *low-density projects* and, to the maximum extent practicable, locates the higher-density portion in upland areas and away from surface waters and drainageways).

A high-density project is anything that exceeds the thresholds outlined herein above.

§200A-208.4. Standards for Low-Density Projects

Stormwater runoff from the *development* shall be transported from the *development* by vegetated conveyances to the maximum extent practicable.

§200A-208.5. Standards for High-Density Projects

High-density projects shall implement *stormwater* control measures that comply with each of the standards outlined in §200A-208.2 (Establishment of Stormwater Management Permit) B.

§200A-208.6. Standards for Stormwater Control Measures

- A. Evaluation According to Contents of Stormwater BMP Manual. All *stormwater* control measures and *structural stormwater BMPs* required under this Subpart B shall be evaluated by the *Water Quality Administrator* according to the policies, criteria, and information, including technical specifications and standards and the specific design criteria for each *stormwater* practice, in the *Stormwater BMP Manual*. The *Water Quality Administrator* shall determine whether proposed *stormwater BMPs* will be adequate to meet Subpart B requirements.
- B. Determination of Adequacy; Presumptions and Alternatives. *Stormwater* treatment practices that are designed, constructed, and maintained in accordance with the criteria and specifications in the *Stormwater BMP Manual* will be presumed to meet the minimum water quality and quantity performance standards of Subpart B. Whenever an *applicant* proposes to utilize a practice or practices not designed and constructed in accordance with the criteria and specifications in the *Stormwater BMP Manual*, the *applicant* shall have the burden of demonstrating that the practice(s) will satisfy the minimum water quality and quantity performance standards of Subpart B. The *Water Quality Administrator* may require the *applicant* to provide the documentation, calculations, and examples necessary so he/she may determine whether such an affirmative showing is made.

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- C. Separation from Seasonal High Water Table. For *stormwater BMPs* that require a separation from the seasonal high water table, the separation shall be provided by at least 12 inches of naturally occurring soil above the seasonal high water table.

§200A-208.7. Standards for Trout Waters

In addition to the standards for handling *stormwater* set out in the *Stormwater BMP Manual*, *development* and *redevelopment* that drains in whole or part to class TR waters shall design and implement the best *stormwater* practices that do not result in a sustained increase in receiving water temperature, while still meeting the other requirements of Subpart B.

§200A-208.8. Transitional Provisions

- A. Final Approvals, Complete Applications. All *development* and *redevelopment* projects for which complete and full applications were submitted and approved by the *County* prior to the effective date of Subpart B and which remain valid, unexpired, unrevoked and not otherwise terminated at the time of *development* or *redevelopment* shall be exempt from complying with all provisions of this subpart dealing with the control and/or management of post-construction runoff, but shall be required to comply with all other applicable provisions.

A phased *development* plan shall be deemed approved prior to the effective date of Subpart B if it has been approved by all necessary government units, it remains valid, unexpired, unrevoked and not otherwise terminated, and it shows for:

- (1) The initial or first phase of *development*, the type and intensity of use for a specific parcel or parcels, including at a minimum, the boundaries of the project and a *subdivision* plan that has been approved.
 - (2) Any subsequent phase of *development*, sufficient detail so that implementation of the requirements of Subpart B to that phase of *development* would require a material change in that phase of the plan.
- B. Violations Continue. Any violation of provisions existing on the effective date of Subpart B shall continue to be a violation under this Subpart B and be subject to penalties and enforcement under this subpart unless the *use*, *development*, construction, or other activity complies with the provisions of this Subpart B.

§200A-208.9. Onsite Wastewater

- A. Operation and Maintenance Requirements. New and replaced onsite systems for domestic *wastewater* installed after the effective date of Subpart B shall be subject to the same requirements for operation and maintenance as *structural stormwater BMPs* for *stormwater*, including, at a minimum, annual inspection reports and a recorded operation and maintenance agreement, pursuant to §200A-245 (Maintenance).
- B. Standards for Operation and Maintenance. Onsite systems for domestic *wastewater* covered by Subpart B shall be operated and maintained so as to avoid adverse effects on surface water and groundwater, including eutrophication of surface water

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and microbial or nitrate contamination of groundwater. Septic tank residuals shall be pumped whenever necessary to assure the proper operation of the system to meet these standards, and the septage shall be reused or disposed of in a manner that does not present significant risks to human health, surface water or groundwater.

§200A-208.10. Statutory Exceptions (See §200A-334 Variances)

Exceptions shall be granted from the 30 foot landward location of *built-upon area* requirement and deed restrictions/protective covenants requirements in any of the following instances:

A. When there is a lack of practical alternatives for a:

- (1) *Road* crossing,
- (2) *Railroad* crossing,
- (3) Bridge,
- (4) Airport facility,
- (5) Utility crossing
- (6) *Stormwater* management facility,
- (7) *Stormwater* management pond, or
- (8) Utility (including, but not limited to, water, sewer, or gas construction and maintenance corridor)

And such are located, designed, constructed, and maintained to:

- (1) Minimize disturbance,
- (2) Provide maximum nutrient removal,
- (3) Protect against *erosion* and *sedimentation*,
- (4) Have the least adverse effects on aquatic life and habitat,
- (5) Protect water quality to the maximum extent practicable through the use of *BMPs*, and
- (6) Remain 15 feet landward of all perennial and intermittent surface waters (this provision applies only to *stormwater* management facilities, *stormwater* management ponds, and *stormwater* utility).

B. Showing a Lack of Practical Alternatives. A lack of practical alternatives may be shown by demonstrating that, considering the potential for a reduction in size, configuration, or *density* of the proposed activity and all alternative designs, the basic project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impact to surface waters.

§200A-209. Structural and Nonstructural Stormwater BMPs Maintenance

§200A-209.1. Dedication of BMPs, Facilities and Improvements

The *County* may, but is not obligated to, accept dedication of any existing or future *stormwater* management facility for maintenance, provided such facility meets all the requirements of Subpart B and includes adequate and perpetual access and sufficient area, by *easement* or otherwise, for inspection and regular maintenance.

§200A-209.2. General Standards for Maintenance

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- A. Function of Stormwater BMPs As Intended. The owner of each *structural stormwater BMP* installed pursuant to Subpart B shall maintain and operate it so as to preserve and continue its function in controlling *stormwater* quality and quantity at the degree or amount of function for which the *structural stormwater BMP* was designed.
- B. Annual Maintenance Inspection and Report. The person responsible for maintenance of any *structural stormwater BMP* installed pursuant to Subpart B shall submit to the *Water Quality Administrator* an inspection report from either a qualified registered North Carolina professional engineer or landscape architect. The inspection report shall contain all of the following:
- (1) The name and address of the land owner;
 - (2) The recorded book and page number of the *lot* of each *structural BMP*;
 - (3) A statement that an inspection was made of all *structural stormwater BMPs*;
 - (4) The date the inspection was made;
 - (5) A statement that all inspected *structural stormwater BMPs* are performing properly and are in compliance with the terms and conditions of the approved maintenance agreement required by Subpart B; and
 - (6) The original signature and seal of the engineer or landscape architect.

All inspection reports shall be on forms supplied by the *Water Quality Administrator*. An original inspection report shall be provided to the *Water Quality Administrator* beginning one (1) year from the date of as-built certification and each year thereafter on or before the date of the as-built certification.

§200A-209.3. Operation and Maintenance Agreement

- A. In General. Prior to the conveyance or transfer of any *lot* or *building* site to be served by a *structural stormwater BMP* pursuant to Subpart B, and prior to issuance of any permit for *development* or *redevelopment* requiring a *structural stormwater BMP* pursuant to Subpart B, the *applicant* or owner of the site must execute an operation and maintenance agreement that shall be binding on all subsequent owners of the site, portions of the site, and *lots* or parcels served by the *structural BMP*. Until the transference of all property, sites, or *lots* served by the *structural BMP*, the original owner or *applicant* shall have primary responsibility for carrying out the provisions of the maintenance agreement.

The operation and maintenance agreement shall require the owner or owners maintain, repair and, if necessary, reconstruct the *structural BMP*, and shall state the terms, conditions, and schedule of maintenance for the *structural BMP*. In addition, it shall grant the *County* a right of entry in the event that the *Water Quality Administrator* has reason to believe it has become necessary to inspect, monitor, maintain, repair, or reconstruct the *structural BMP*; however, in no case shall the right of entry, of itself, confer an obligation on the *County* to assume responsibility for the *structural BMP*.

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The operation and maintenance agreement must be approved by the *Water Quality Administrator* prior to plan approval, and it shall be referenced on the *final plat* and shall be recorded with the *County Register of Deeds* upon *final plat* approval. A copy of the recorded maintenance agreement shall be given to the *Water Quality Administrator* within 14 days following its recordation.

B. Special Requirement for Homeowners' and Other Associations. For all *structural stormwater BMPs* required pursuant to Subpart B and that are to be or are owned and maintained by a homeowners' association, property owners' association, or similar entity, the required operation and maintenance agreement shall include all of the following provisions:

- (1) Acknowledgment that the association shall continuously operate and maintain the *stormwater* control and management facilities.
- (2) Granting to the *County* a right of entry to inspect, monitor, maintain, repair, and reconstruct *structural stormwater BMPs*.
- (3) Allowing the *County* to recover from the association and its members any and all costs the *County* expends to maintain or repair the *structural stormwater BMPs* or to correct any operational deficiencies. Failure to pay the *County* all of its expended costs, after 45 days written notice, shall constitute a breach of the agreement. In case of a deficiency, the *County* shall thereafter be entitled to bring an action against the association and its members to pay, or foreclose upon the lien hereby authorized by the agreement against the property, or both. Interest, collection costs, and attorney fees shall be added to the recovery.
- (4) A statement that this agreement shall not obligate the *County* to maintain or repair any *structural stormwater BMPs*, and the *County* shall not be liable to any *person* for the condition or operation of *structural stormwater BMPs*.
- (5) A statement that this agreement shall not in any way diminish, limit, or restrict the right of the *County* to enforce any of its ordinances as authorized by law.
- (6) A provision indemnifying and holding harmless the *County* for any costs and injuries arising from or related to the *structural stormwater BMP*, unless the *County* has agreed in writing to assume the maintenance responsibility for the *BMP* and has accepted dedication of any and all rights necessary to carry out that maintenance.

§200A-209.4. Inspection Program

Inspections and inspection programs by the *County* may be conducted or established on any reasonable basis, including but not limited to routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to, reviewing maintenance and repair records; sampling

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discharges, surface water, groundwater, and material or water in *stormwater BMPs*; and evaluating the condition of *stormwater BMPs*.

If the owner or occupant of any property refuses to permit such inspection, the *Water Quality Administrator* shall proceed to obtain an administrative search warrant pursuant to *NCGS 15-27.2* or its successor. No *person* shall obstruct, hamper or interfere with the *Water Quality Administrator* while carrying out his/her official duties.

§200A-209.5. Reserved

§200A-209.6. Notice to Owners

- A. Deed Recordation and Indications on Plat. The applicable operations and maintenance agreement, conservation easement, or dedication and acceptance into public maintenance (whichever is applicable) pertaining to every *structural stormwater BMP* shall be referenced on the *final plat* and shall be recorded with the County Register of Deeds upon *final plat* approval. If no *subdivision plat* is recorded for the site, the operations and maintenance agreement, conservation easement, or dedication and acceptance into public maintenance, whichever is applicable shall be recorded with the *County Register of Deeds* so as to appear in the chain of title of all subsequent purchasers under generally accepted searching principles.
- B. Signage. Where appropriate in the determination of the *Water Quality Administrator* to assure compliance with this Subpart B, *structural stormwater BMPs* shall be posted with a conspicuous *sign* stating who is responsible for required maintenance and annual inspection. The *sign* shall be maintained so as to remain visible and legible.

§200A-209.7. Records of Installation and Maintenance Activities

The *owner* of each *structural stormwater BMP* shall keep records of inspections, maintenance, and repairs for at least five (5) years from the date of creation of the record and shall submit the same upon reasonable request to the *Water Quality Administrator*.

§200A-209.8. Nuisance

The *owner* of each *stormwater BMP*, whether *structural stormwater BMP* or non-structural *BMP*, shall maintain it so as not to create or result in a nuisance condition.

§200A-209.9. Maintenance Easement

Every *structural stormwater BMP* installed pursuant to Subpart B shall be made accessible for adequate maintenance and repair by a maintenance *easement*. The easement shall be recorded and its terms shall specify who may make use of the *easement* and for what purposes.

§200A-210. Responsible Persons/Entities

Any *person* who erects, constructs, reconstructs, alters (whether actively or passively), or fails to erect, construct, reconstruct, alter, repair or maintain any *structure, BMP, practice, or condition* in violation of this Subpart B shall be subject to the remedies, penalties, and/or

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enforcement actions in accordance with this §200A-345 (Violations). *Persons* subject to the remedies and penalties set forth herein may include any architect, engineer, builder, contractor, developer, agency, or any other *person* who participates in, assists, directs, creates, causes, or maintains a condition that results in or constitutes a violation of this Subpart B, or fails to take appropriate action, so that a violation of the same results or persists; or an *owner*, any tenant or occupant, or any other person, who has control over, or responsibility for, the use or *development* of the property on which the violation occurs. Responsible person(s) shall include but not be limited to:

- A. Person Maintaining Condition Resulting In or Constituting Violation. An architect, engineer, builder, contractor, developer, agency, or any other person who participates in, assists, directs, creates, causes, or maintains a condition that constitutes a violation of this Subpart B or fails to take appropriate action, so that a violation of the same results or persists.
- B. Responsibility For Land or Use of Land. The owner of the land on which the violation occurs, any tenant or occupant of the property, any *person* who is responsible for *stormwater* controls or practices pursuant to a private agreement or public document, or any *person*, who has control over, or responsibility for, the use, *development* or *redevelopment* of the property.

§200A-211. Fees

The Board of Commissioners shall establish permit review fees as well as policies regarding refund of any fees upon withdrawal of an application, and may amend and update the fees and policies from time to time.

§200A-212. Effective Date

This stormwater regulations of this Subpart B shall take effect _____, 2010.

§200A-213. Severability

If the provisions of any section, subsection, paragraph, subdivision or clause of Subpart B shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this subpart.

§200A-214. Reserved

§200A-215. Reserved

§200A-216. Reserved

§200A-217. Reserved

§200A-218. Reserved

§200A-219. Perennial and Intermittent Surface Water Buffers

~~All built-upon area shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters.~~ A surface water shall be deemed present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture

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or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geological Survey (*USGS*). An exception to this requirement may be allowed when surface waters are not present in accordance with the provisions of 15A NCAC 2B .0233 (3)(a) or similar site-specific determination made using methodology approved by *NCDENR* Division of Water Quality. All *built-upon area* shall be at a minimum of:

- C. 30 feet landward of all perennial and intermittent surface waters; or
- D. 100 feet landward of any perennial surface waters located within a *water supply watershed* when using the *high-density option*.

Desirable artificial stream bank or shoreline stabilization is permitted. No new development is allowed in the *buffer* except for *water dependent structures*, other *structures* such as flag poles, *signs* and security lights which result in only minimal increases in *impervious surface* area and public projects, such as *road* crossings and *greenways* where no practical alternative exists. These activities should minimize *built-upon area*; direct runoff away from the surface waters; and maximize the utilization of *stormwater best management practices*.

§200A-237. Penalties

A. Civil Penalties

- (1) Civil Penalty for a Violation. Any *person* who violates any of the provisions of this subpart, or rule or order adopted or issued pursuant to this subpart, or who initiates or continues a *land-disturbing activity* for which an Erosion and Sedimentation Control Plan or Permit is required except in accordance with the terms, conditions, and provisions of an approved Erosion and Sedimentation Control Plan or Permit, is subject to a civil penalty. The maximum civil penalty amount that the *Soil Erosion and Sedimentation Control Administrator* may assess per *violation* is 5,000 dollars. A civil penalty may be assessed from the date of the *violation*. Each day of a continuing *violation* shall constitute a separate *violation*.
- (2) Civil Penalty Assessment Factors. The *Soil Erosion and Sedimentation Control Administrator* shall determine the amount of the civil penalty based upon the following factors:
 - a. the degree and extent of harm caused by the *violation*,
 - b. the cost of rectifying the damage,
 - c. the amount of money the violator saved by noncompliance,
 - d. whether the *violation* was committed willfully, and
 - e. the prior record of the violator in complying or failing to comply with this subpart.
- (3) Notice of Civil Penalty Assessment. The ~~*Henderson County Board of Adjustment*~~ *Soil Erosion and Sedimentation Control Administrator* shall provide notice of the civil penalty amount and basis for assessment to the *person* assessed. The notice of assessment shall be served by any means authorized under *NCGS* 1A-1, Rule 4, and shall direct the violator to either

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pay the assessment or contest the assessment, within 30 days after receipt of the notice of assessment, by written demand for a hearing.

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LDC Text Amendment 4, Article X (Decision-Making, Administrative and Advisory Bodies).

Add or modify the following standards as indicated in the DWQ Model Ordinances for: Phase II Stormwater and Water Supply Watershed, High-Density Option Appendices. The Powers and Duties of the Boards and Administrators reflect the requirements of both model ordinances.

§200A-273. Henderson County Zoning Board of Adjustment

A. Powers and Duties Pursuant to This Chapter. Without limiting any authority granted to the Zoning Board of Adjustment by law or by regulations, the Zoning Board of Adjustment shall have the following powers and duties with respect to this Chapter, to be carried out in accordance with the terms of this Chapter:

~~(6) Notice of Civil Penalty Assessment. To provide notice of the civil penalty amount and basis for the assessment as related to the portions of this Chapter related to Soil Erosion and Sedimentation Control.~~

§200A-274. Henderson County ~~Watershed Review~~ Water Quality Board

A. Powers and Duties Pursuant to This Chapter. Without limiting any authority granted to the ~~Watershed Review~~ Water Quality Board by law or by regulations, the ~~Watershed Review~~ Water Quality Board shall have the following powers and duties with respect to this Chapter, to be carried out in accordance with the terms of this Chapter:

(4) Administrative Review. To hear and decide *appeals* from any decision or determination made by the *Water Quality Administrator* in the enforcement of any sections of this Chapter which relate to *water supply watershed* protection and *stormwater* management.

(5) Stormwater Management Permits. To grant *stormwater* management permits as authorized by this Chapter.

~~(6) Special Intensity Allocation. To grant special intensity allocations as authorized by this Chapter; and to refer special intensity allocations to the Board of Commissioners as appropriate.~~

(7) Water Supply Watershed Use Permits. To grant *water supply watershed use* permits as authorized by this Chapter.

(8) Watershed Protection Compliance Permits. To grant *watershed* protection compliance permits as authorized by this Chapter.

(9) Watershed High-Density Development Permits. To grant *watershed high-density* development permits as authorized by this Chapter.

§200A-282. Henderson County Water Quality Administrator

A. Powers and Duties Pursuant to This Chapter. The *Water Quality Administrator* shall have the following duties with respect to this Chapter, to be carried out in accordance with the terms of this Chapter:

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- (1) Interpretation. To interpret the terms and provisions of this Chapter related to *water supply watershed* protection and *stormwater* management. Any person may request a *stormwater* management interpretation by submitting a written request to the *Water Quality Administrator*, who shall respond in writing within 30 days.
- (2) Enforcement. To enforce the provisions of this Chapter related to *water supply watershed* protection and *stormwater* management regulations including properly investigating complaints from persons who allege that violations of this Chapter have occurred and initiating appropriate action as necessary to prevent, enjoin, abate or remove any violations found. The *Water Quality Administrator*, or his/her duly authorized representative, may enter any building, structure or premises, as provided by law, to perform any duty imposed upon him/her by this Chapter.
- (3) Record of Written Interpretation. To keep on file a record of all written interpretations of provisions of this Chapter related to *stormwater* management.
- (4) Staff Support. To provide staff support to the Water Quality Board.
- (5) Application Requirements. To establish requirements for the content and form of all applications; amend and update application requirements from time to time; establish schedules for submittal and review of applications and appeals; review and make recommendations to the Water Quality Board.
- (6) Submission Schedule. To establish a submission schedule with deadlines by which complete applications must be submitted for the purpose of ensuring there is adequate time to review applications, and that the various stages in the review process are accommodated.
- (7) Stormwater Management Permits. To grant *stormwater* management permits as authorized by this Chapter.
- (8) Watershed Permits. To administer the provisions of this Chapter relating to water supply watersheds and grant *water supply watershed use* permits, *watershed* protection compliance permits, and *watershed high-density development* permits.
- (9) Record of Watershed Permits. To keep a record of all permits on file and available for public inspection during regular office hours of the *Water Quality Administrator*.
- (10) Watershed Compliance Inspections. To administer the provisions of this Chapter relating to *watershed* compliance inspections.
- (10) Bonuses and Allocations. To review requests for *natural drainage and filtering system* bonuses.
- ~~(2) Special Intensity Allocations. To issue special intensity allocations.~~

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~~Record of Special Intensity Allocations. To keep records of the jurisdiction's utilization of the special intensity allocation provision. Records for each watershed shall include the total acres of noncritical watershed area, total acres eligible to be developed under this option, total acres approved for this development option, and individual records for each project with the following information: location, total acres, built-upon acres and type of land use.~~

~~Calculation of Special Intensity Allocation. To calculate the acreage available for an SIA (by multiplying the eligible area of the watershed (in acres) by the factors established in the categories as listed in §200A-324 (Special Intensity Allocation (SIA)), whereby no more than ten (10) percent may initially be established for SIA use.~~

- (11) Plan Review. To review and approve, approve with conditions, or disapprove applications for approval of plans pursuant to the *stormwater* management regulations of this Chapter.
- (12) Stormwater Management Inspections. To enter and inspect any land, *building, structure*, or premises to ensure compliance with the *stormwater* management regulations of this Chapter, upon presentation of proper credentials.
- (13) Amendments to Water Supply Watershed Protection Regulations. To provide copies of all amendments to the *water supply watershed* protection regulations of this Chapter (upon adoption) to the Water Quality Section of the Division of Environmental Management.
- (14) Record of Water Supply Watershed Protection Amendments. To keep records of all amendments pertaining to *water supply watershed* protection.
- (15) Variance. To administer the provisions of this Chapter relating to *Watershed Variances*.
- (16) Record of Variances. To keep a record of *variances* to the sections of this Chapter dealing with *water supply watershed* protection. This record shall be submitted for each calendar year to the Water Quality Section of the North Carolina Division of Environmental Management on or before January 1 of the following calendar year and shall provide a description of each project receiving a *variance* and the reasons for granting the *variance*.
- (17) Monitoring Land Use Activities. The *Water Quality Administrator* shall monitor *land use* activities within the *watershed* areas to identify situations that may pose a threat to water quality. Where such activities are found, the *Water Quality Administrator* shall take any appropriate action or proceeding to restrain, correct or abate the condition and/or *violation*.
- (18) Stormwater Management Administrative Manual. To compile the application requirements, submission, schedule, fee schedule, a copy of the regulations, and information on how and where to obtain the *Stormwater*

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BMP Manual in a Stormwater Management Administrative Manual, which shall be made available to the public and *persons* filing applications required under the *stormwater* management regulations of this Chapter.

- (19) Maintenance. To maintain records, maps, forms and other official materials as relate to the adoption, amendment, enforcement, and administration of the *stormwater* management regulations of this Chapter.

LDC Text Amendment 5, Article XI (Review Processes and Procedures).

Add or modify the following standards as indicated in the DWQ Model Ordinances for: Phase II Stormwater and Water Supply Watershed, High-Density Option Appendices. The modified review processes and procedures reflect the requirements of both model ordinances. The Special Intensity Allocation Permit has been eliminated based on the incorporation of the high-density option.

§200A-325. Stormwater Management Permits

- A. Purpose. A Stormwater Management Permit is required for all *development* and *redevelopment* unless exempt pursuant to Article VIII (Natural Resources) Subpart B (Water Quality).
- B. Permit Issuance. A Stormwater Management Permit may only be issued subsequent to a properly submitted and reviewed Stormwater Management Permit application, pursuant to this section.
- C. Application.
 - (1) Concept Plan and Consultation Meeting. The *Water Quality Administrator* or developer may request a consultation on a concept plan for the post-construction *stormwater* management system to be utilized in the proposed development project. This consultation meeting should take place at the time of *subdivision development plan* pre-application, site plan development, or other early step in the development process. The purpose of this meeting is to discuss the post-construction *stormwater* management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential approaches to *stormwater* management designs before formal site design engineering is commenced. Local watershed plans and other relevant resource protection plans should be consulted in the discussion of the concept plan. The concept plan should be submitted in advance of the meeting and should include:
 - a. Existing Conditions/Proposed Site Plans. Existing conditions and proposed site layout sketch plans, which illustrate at a minimum: (1) existing and proposed topography; (2) perennial and intermittent streams; (3) mapping of predominant soils from soil surveys (if available); (4) boundaries of existing predominant vegetation; (5) proposed limits of clearing and grading; and (6) location of existing and proposed *roads, buildings*, parking areas and other impervious surfaces.
 - b. *Stormwater* Management System Concept Plan. A written or graphic concept plan of the proposed post-development *stormwater* management system including: (1) preliminary selection and location of proposed structural *stormwater* controls; (2) low-impact design elements; (3) location of existing and proposed conveyance systems such as grass channels, swales, and storm drains; (4) flow paths; location of *floodplain/floodway* limits; (5) relationship of site to upstream and downstream properties and drainages; and (6) preliminary location of

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any proposed stream channel modifications, such as bridge or culvert crossings.

- (2) Application. All applications required pursuant to Article VIII (Natural Resources) Subpart B (Water Quality) shall be submitted to the *Water Quality Administrator* by the land owner or the land owner's duly authorized agent. Applications shall be submitted pursuant to the application submittal schedule in the form established by the *Water Quality Administrator*, along with the appropriate fee established by the Board of Commissioners pursuant to this section.

An application shall be considered as timely submitted only when it contains all elements of a complete application pursuant to Article VIII (Natural Resources) Subpart B (Water Quality), along with the appropriate fee. If the *Water Quality Administrator* finds that an application is incomplete, the *applicant* shall be notified of the deficient elements and shall be provided with an opportunity to submit a complete application. However, the submittal of an incomplete application shall not suffice to meet a deadline contained in the established submission schedule.

At a minimum, the Stormwater Management Permit application shall describe in detail how post-development *stormwater runoff* will be controlled and managed, the design of all *stormwater* facilities and practices, and how the proposed project will meet the requirements of Article VIII (Natural Resources) Subpart B (Water Quality). Plans shall be prepared by a qualified registered North Carolina professional engineer or landscape architect whom shall: (1) perform services only in their area of competence; (2) verify that the design of all *stormwater* management facilities and practices meets the submittal requirements for complete applications; (3) verify that the designs and plans are sufficient to comply with applicable standards and policies found in the *Design Manual*; and (4) verify the designs and plans ensure compliance with Article VIII (Natural Resources) Subpart B (Water Quality).

The submittal shall include all of the information required in the submittal checklist established by the *Water Quality Administrator*.

- D. Staff Review. The *Water Quality Administrator* shall review the application and determine whether the application complies with the standards of Article VIII (Natural Resources) Subpart B (Water Quality). The *Water Quality Administrator* may take the following action when reviewing an application:
 - (1) Approval. The proposal complies with the standards of Article VIII (Natural Resources) Subpart B (Water Quality), and is approved.
 - (2) Conditional Approval. The proposal exhibits only minor deficiencies with regard to Article VIII (Natural Resources) Subpart B (Water Quality), and is approved subject to the completion of certain conditions.
 - (3) Fails to Comply. The proposal fails to comply with the standards of Article VIII (Natural Resources) Subpart B (Water Quality). The *Water Quality*

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Administrator shall notify the *applicant* and shall indicate how the application fails to comply. The *applicant* shall have an opportunity to submit a revised application. If a revised application is not re-submitted within 30 calendar days from the date the *applicant* was notified, the application shall be considered withdrawn, and a new submittal for the same or substantially the same project shall be required along with the appropriate fee for a new submittal.

(4) Denial. The proposal cannot be approved as it exhibits deficiencies and/or is not in compliance with this Article VIII (Natural Resources) Subpart B (Water Quality) or other statutes, ordinances and regulations of the *County*.

E. Effect of Permit. A *Stormwater* Management Permit shall govern the design, installation, and construction of *stormwater* management and control practices on the site, including *structural stormwater BMPs* and elements of site design for *stormwater* management other than *structural stormwater BMPs*.

The permit is intended to provide a mechanism for the review, approval, and inspection of the approach to be used for the management and control of *stormwater* for the *development* or *redevelopment* site consistent with the requirements of Article VIII (Natural Resources) Subpart B (Water Quality), whether the approach consists of *structural stormwater BMPs* or other techniques such as low-impact or low-density design.

F. Permit Validity. The permit does not continue in existence indefinitely after the completion of the project; rather, compliance after project construction is assured by the maintenance provisions of Article VIII (Natural Resources) Subpart B (Water Quality).

An approved plan shall become null and void if the applicant fails to make *substantial progress* on the site within one (1) year after the date of approval. The *Water Quality Administrator* may grant a single, one-year extension of this time limit, for good cause shown, upon receiving a written request from the *applicant* before the expiration of the approved plan.

In granting an extension, the *Water Quality Administrator* may require compliance with standards adopted since the original application was submitted unless there has been substantial reliance on the original permit and the change in standards would infringe the *applicant's* vested rights.

G. Effect of Approval. Approval authorizes the *applicant* to go forward with only the specific plans and activities authorized in the permit. The approval shall not be construed to exempt the *applicant* from obtaining other applicable approvals from local, state, and federal authorities.

H. As-Built Plans and Final Approval. Upon completion of a project, and before a certificate of occupancy shall be granted, the *applicant* shall certify that the completed project is in accordance with the approved *stormwater* management plans and designs, and shall submit actual "as built" plans for all *stormwater* management facilities or practices after final construction is completed.

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The plans shall show the final design specifications for all *stormwater* management facilities and practices and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed. The designer of the *stormwater* management measures and plans shall certify, under seal, that the as-built *stormwater* measures, controls, and devices are in compliance with the approved *stormwater* management plans and designs and with the requirements of this ordinance. A final inspection and approval by the *Water Quality Administrator* shall occur before the release of any performance securities.

- I. Exceptions. No certificate of compliance or occupancy shall be issued nor performance guarantees released without final as-built plans and final inspection by the *Water Quality Administrator*, except where multiple units are served by the *stormwater* practice or facilities in which case the Building Services Department may elect to withhold a percentage of permits or certificates of occupancy until as-built plans are submitted and final inspection and approval has occurred.

§200A-329. Watershed High-Density Development Permit

- A. Purpose. A Watershed High-Density Development Permit shall be required for new *development* exceeding the requirements of the low-density option.
- B. Application.

- (1) Application. An application for a Watershed High-Density Development Permit shall be submitted to the *Water Quality Administrator* on the proper form and shall include the following information:

- a. A completed application signed by the owner of the property or his/her authorized agent;
 - b. Two (2) reproducible copies of the *development plan* or *site plan* including information required by this Chapter and other documents as necessary concerning *built-upon area*;
 - c. Two (2) reproducible copies of the plans and specifications of the *stormwater control structure(s)* consistent with the requirements of this Chapter and the *Stormwater BMP Manual*; and
 - d. When required by law, written verification that a *soil erosion and sedimentation control plan* has been approved by the appropriate state or local agency.

- (2) Review Schedule. The *Water Quality Administrator* shall process and take action on all applications for Watershed High-Density Development Permits within 65 days.

- (3) Fees. Any review fee established by the Board of Commissioners shall be submitted with the application.

- C. Staff/Formal Review. Prior to taking final action on any application, the *Water Quality Administrator* may provide an opportunity to public agencies affected by the development proposal to review and make recommendations on the application. The

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Water Quality Administrator shall either approve or disapprove each application for a Watershed High-Density Development Permit based on the applicable criteria contained in this Chapter related to *water supply watershed* regulations.

If the *Water Quality Administrator* approves the application, such approval shall be indicated on the permit and both copies of the *site plan* and both copies of the plans and specifications of the *stormwater control structure*. A Watershed High-Density Development Permit shall be issued after the *applicant* posts a performance bond acceptable security as required by Article VIII (Natural Resources) Subpart B (Water Quality) and executes an Operation and Maintenance Agreement as required by Article VIII (Natural Resources) Subpart B (Water Quality). A copy of the permit and one (1) copy of each set of plans shall be kept on file in the office of the *Water Quality Administrator*. The original permit and one (1) copy of each set of plans shall be delivered to the *applicant* either by personal service or registered mail, return receipt requested.

If the *Water Quality Administrator* disapproves the application based on his/her findings, the reasons for such action shall be provided to the *applicant* in writing by mail, return receipt requested. The *applicant* may make changes and submit a revised plan which shall be considered as a new matter. All revisions shall be submitted, reviewed, and acted upon by the *Water Quality Administrator* pursuant to the procedures of this section.

§200A-335. Variances

- A. Purpose. *Variances* are intended to provide limited relief from the requirements of this Chapter in those cases where the strict application of the provisions of this Chapter would result in unnecessary hardship. Any *use* which requires a *Variance* shall not be permitted without the approval of the Zoning Board of Adjustment (ZBA) in accordance with the requirements and procedures set forth in this section.
- B. Application.
 - (1) Pre-application Conference. Each *applicant* for a *Variance* shall meet with the appropriate Administrator (within this section “Administrator” shall refer to any of the following: *Communication Facilities, Manufactured Home Park, Soil Erosion and Sedimentation Control, Water Quality, Subdivision, or Zoning Administrator*) in a pre-application conference no later than one (1) calendar week prior to the date the application is due. The purposes of this conference are to provide additional information regarding the review process and assistance in the preparation of the application.

LDC Text Amendment 6, Article XII (Enforcement, Violations and Appeals).

Add the following enforcement standards as indicated in the DWQ Phase II Stormwater Model Ordinance.

§200A-349. Computation of Time.

The time in which an act is to be done shall be computed by excluding the first day and including the last day. If a deadline or required date of action falls on a Saturday, Sunday, or holiday observed by the *County*, the deadline or required date of action shall be the next day that is not a Saturday, Sunday or holiday observed by *County*. References to days are calendar days unless otherwise stated.

LDC Text Amendment 7, Article XIII (Legal Status).

Add the following legal standards as indicated in the DWQ Phase II Stormwater Model Ordinance.

§200A-354. References to Statutes, Regulations, and Documents.

Whenever reference is made to a resolution, ordinance, statute, regulation, manual (including the *Stormwater BMP Manual*), or document, it shall be construed as a reference to the most recent edition of such that has been finalized and published with due provision for notice and comment, unless otherwise specifically stated.

LDC Text Amendment 8, Article XIV (Definitions).

Add or modify the following definitions as provided in the DWQ Model Ordinances for: Phase II Stormwater and Water Supply Watershed, High-Density Option Appendices.

Administrator, Water Quality . The individual (Administrator or his/her designee) appointed and authorized to administer and enforce those regulations related to *water supply watershed* protection and *stormwater management* under the terms and conditions of this Chapter.

Bankfull. The flow stage of a river in which the stream completely fills its channel and the elevation of the water surface coincides with the bank margins.

Best Management Practices (BMP), Stormwater. 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.

Best Management Practices (BMP), Structural Stormwater. A physical device designed to achieve any combination of the following:

- (1) Trap, settle out, or filter pollutants from *stormwater runoff*;
 - (2) Alter or reduce *stormwater runoff* velocity, amount, timing, or other characteristics;
- or

Text in **Red** with ~~strikethrough~~ would be **deleted** with proposed changes.
Text in **Blue** would be **added** with proposed changes.

(3) Approximate the pre-development hydrology on a developed site. These include physical practices such as constructed wetlands, vegetative practices, filter strips, grassed swales, and other methods installed or created on real property. Synonyms include: structural practice, *stormwater* control facility, *stormwater* control practice, *stormwater* treatment practice, *stormwater* management practice, *stormwater* control measures, structural *stormwater* treatment systems, etc.

BMP Manual, Stormwater. The manual approved for use in Phase II jurisdictions by *NCDENR* for the proper implementation of the requirements of the federal Water Quality program. All references herein to the *Stormwater BMP Manual* are to the latest published edition or revision. The County adopted manual that provides comprehensive guidelines and practices for controlling *stormwater*. Unless a manual is adopted by the County, the State manual shall serve as the *Stormwater BMP Manual*.

Built-Up Area. The portion of a development project that is covered by impervious/partially impervious cover (including, but not limited to, *structures*, roofs, *driveways*, *roads*, concrete slabs, walkways, paved (asphalt, concrete, etc.)/compacted stone parking lots, recreational facilities, etc). Wooden slatted decks, ~~and the~~ water area of a swimming pool or pond, ~~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)~~ are considered pervious.

Design Manual, Erosion and Sedimentation Control. The County adopted manual that provides comprehensive guidelines and practices for controlling *erosion* and *sedimentation*. Unless a manual is adopted by the County, the State manual shall serve as the *Design Manual*.

Development (Water Quality ~~Watershed~~). A *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.

Erosion and Sedimentation Control Design Manual. (See Design Manual, Erosion and Sedimentation Control).

High-Density Project. Any project that exceeds the *low-density* threshold for *dwelling units* per acre or *built-upon area*.

Larger Common Plan of Development or Sale. Any area where multiple separate and distinct construction or *land-disturbing activities* will occur under one (1) plan. A plan is any announcement or piece of documentation (including but not limited to a *sign*, public notice or hearing, sales pitch, advertisement, loan application, drawing, permit application, zoning request, or computer design) or physical demarcation (including but not limited to boundary signs, *lot* stakes, or surveyor markings) indicating that construction activities may occur on a specific plot.

Lot Area. The amount of horizontal land area contained inside the *lot* lines of a *lot* or site.

Low-Density Project. Any project that falls within the *low-density* threshold for *dwelling units* per acre or *built-upon area*.

Text in **Red** with ~~strikethrough~~ would be **deleted** with proposed changes.
Text in **Blue** would be **added** with proposed changes.

Owner. The legal or beneficial owner of land, including but not limited to a mortgagee or vendee in possession, receiver, executor, trustee, or long-term or commercial lessee, or any other *person* or entity holding proprietary rights in the property or having legal power of management and control of the property. This shall include long-term commercial tenants; management entities, such as those charged with or engaged in the management of properties for profit; and every person or entity having joint ownership of the property. A secured lender not in possession of the property does not constitute an owner, unless the secured lender is included within the meaning of owner under another description herein, such as a management entity.

Redevelopment. Any *development* on previously-developed land, other than a rebuilding activity that results in no net increase in *built-upon area* and provides equal or greater *stormwater* control than the previous development.

Shellfish Resource Waters. Class SA waters that contain an average concentration of 500 parts per million of natural chloride ion. Average concentration is determined by averaging the chloride concentrations of five (5) water samples taken one half (½) mile downstream from the project site that are taken on separate days, within one (1) hour of high tide, and not within 48 hours following a rain event. The chloride ion concentrations are to be determined by a State certified laboratory.

Stormwater Best Management Practices (BMP). (See Best Management Practices (BMP), Stormwater).

Stormwater BMP Manual. (See BMP Manual, Stormwater).

Structural Stormwater Best Management Practices (BMP). (See Best Management Practices (BMP), Structural Stormwater).

Substantial Progress. To determine whether sufficient progress has been made on an approved plan (site or subdivision), one (1) or more of the following construction activities toward the completion of a plan shall occur: (1) obtaining a grading permit and conducting grading activity on a continuous basis and not discontinued for more than 30 days; (2) installation and approval of on-site infrastructure; or (3) obtaining a building permit for the construction and approval of a building foundation. This is not equivalent to the substantial expenditures test used for determining vested rights.

Top of Bank. The ordinary high water level for a water basin or wetland, and the break in slope for a watercourse.

LDC Text Amendment 9, Chapter 200A.

References throughout the document have been modified to reflect changes in terms/titles and any difference in section numbering. Changes to terminology include: “Watershed Administrator” to “Water Quality Administrator” and “Watershed Review Board” to “Water Quality Board”. Please refer to the full text of the LDC with tracked changes for a complete review of these non-substantive text amendments.

Text in **Red** with ~~strikethrough~~ would be **deleted** with proposed changes.
Text in **Blue** would be **added** with proposed changes.

Henderson County Delegated Stormwater Management Program

LDC Text Amendments
TX-2009-01

Henderson County Planning Department

NCDENR Division of Water Quality Stormwater Management Program

- Program administered from Raleigh
- Permit revenues collected by the State
- Developers required to obtain stormwater permits and install stormwater controls for certain development and redevelopment projects
- State stormwater approvals directly impact certain County issued approvals
- Requires Henderson County apply for stormwater permits for its facilities

Henderson County Planning Department

Delegated Countywide Stormwater Management Program

- Delegation:
 - Supported by the Henderson County 2020 Comprehensive Plan (CCP) and Strategic Plan
 - Reduces reviewing agencies (now at least 4)
 - Puts reviewing agencies here (not in Raleigh)
 - Allows County to collect permit revenue
- Delegated program standards established by:
State Model Stormwater Ordinance

Henderson County Planning Department

Stormwater & Water Supply Watershed Protection Regulations

- Proposed amendments to the water supply watershed regulations:
 - Simplify, clarify & limit duplication in standards
 - Streamline approval processes
 - Prevent additional unnecessary layers of regulation
- Alternative to currently selected option (special intensity allocation) established by:
State Model Water Supply Watershed Ordinance High-Density Option

Henderson County Planning Department

Existing Watershed Low-Density Stormwater Standards

- Stormwater must be directed away from surface waters,
- Concentrated stormwater flow should be minimized, and
- Engineered stormwater controls are not required but might be necessary in certain cases to comply with watershed regulations and standards

Henderson County Planning Department

Watershed Low-Density Option Amendments

- Lot Size Regulations:
 - Minimum lot size (*existing*)
 - Average lot size (*proposed*)
 - Effects of proposed amendment
 - No change to overall density
 - Cluster development provisions removed (*proposed*)
- No Other Modifications Proposed

Henderson County Planning Department

Option to Exceed Watershed Low-Density Standards

Special Intensity Allocation Option (*existing*)

- Available in: WS-II-BW, WS-III-BW, & WS-IV-PA
- Available to: 10% of acreage in each subdistrict
- Permitted increase: Up to 70% built-upon area
- How Approved: First-come, first serve basis
- Stormwater Controls: Not required—may be necessary
- Perennial Surface Water Buffer Required: 100 feet
- SIA Application Fee: \$250.00
- Issued by: Watershed Administrator or Board of Commissioners

Henderson County Planning Department

Option to Exceed Watershed Low-Density Standards

Proposed High Density Option

- Available in: All subdistricts
- Available to: All acreage in each subdistrict
- Permitted increase: Varies by subdistrict (70% built-upon area maximum)
- Stormwater Controls: Required (*Stormwater BMP Manual*)
- Perennial Surface Water Buffer Required: 100 feet
- Watershed High-Density Development Permit Application Fee: To Be Determined
- Issued by: Water Quality Administrator

Benefits

- Increased development potential with more effective water quality control

Henderson County Planning Department

The Effect: WS-II-CA (1000 acres as an example)

- Current Regulations
 - Using no Special Intensity Allocation (SIA not available in critical areas):
 - Maximum built-upon area = 6%
 - **60 acres** (1000 x 6%) may be built-upon area
- Text Amendment
 - Using the High-Density Option:
 - Maximum built-upon area for 1000 acres = 24%
 - **240 acres** may be built-upon area

Henderson County Planning Department

The Effect: WS-II-BW (1000 acres as an example)

- Current Regulations
 - Using no Special Intensity Allocation:
 - Maximum built-upon area = 12%
 - **120 acres** (1000 x 12%) may be built-upon area
 - Using all allotted Special Intensity Allocation:
 - Maximum built-upon area for 100 acres = 70%
 - Maximum built-upon area for 900 acres = 12%
 - **178 acres** ((100 x 70%) + (900 x 12%)) may be built-upon area
- Text Amendment
 - Using the High-Density Option:
 - Maximum built-upon area for 1000 acres = 30%
 - **300 acres** may be built-upon area

Henderson County Planning Department

Stormwater Regulations

- Stormwater Management Permits
- Stormwater Low-Density and High-Density Projects
- Stormwater Controls
- Structural Stormwater BMPs
- Maintenance of Stormwater Controls
- Inspection of Stormwater Controls

Henderson County Planning Department

Stormwater Management Permits

Required for development/redevelopment disturbing:

- 1+ acres (not part of larger common plan of development/sale)
- <1 acre (part of a larger common plan of development/sale)

Not Required for:

- Agriculture,
- Development in the water supply watershed, or
- An individual lot within a subdivision or project operating under a total project stormwater management permit.

Issued by: Water Quality Administrator

Henderson County Planning Department

Stormwater Project Types

Low-Density Project

- Up to 1 unit per ½ acre or 24% built-upon area
- Structural stormwater controls not required
- Stormwater runoff transported by vegetated conveyances to the maximum extent possible

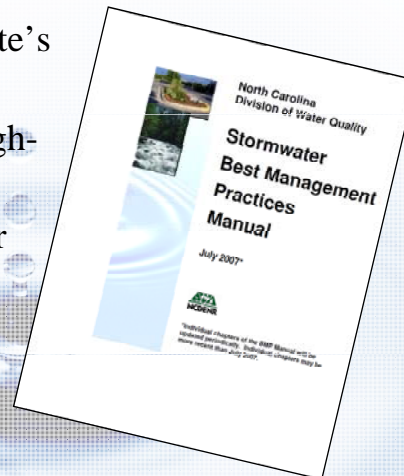
High-Density Project

- Anything over 1 unit per ½ acre or 24% built-upon area
- Control & treat runoff from 1st inch of rain over a 24-hour period
- Drawdown time a minimum of 48 hours (not more than 120)
- Remove a minimum of 85% of total suspended solids

Henderson County Planning Department

Stormwater Controls

- Standards outlined in the State's *Stormwater BMP Manual*
- Required for Stormwater High-Density Projects
- Not Required for Stormwater Low-Density Projects



Henderson County Planning Department

Structural Stormwater BMPs

Practices meant to:

- Trap, settle out or filter pollutants from stormwater,
- Alter or reduce stormwater velocity, amount, timing or characteristics, or
- Approximate pre-development hydrology once developed

Practices Include...

Bioretention • Sand Filter • Stormwater Wetlands • Wet Detention Basin • Filter Strip • Grassed Sw

Henderson County Planning Department

Maintenance of Stormwater Controls

Operation and Maintenance Agreement

- Binding on current and subsequent owners
- Requires maintenance, repair and reconstruction of Structural BMP
- Recorded with the County Register of Deeds

Annual inspection report must be submitted to County

Henderson County Planning Department

Inspection of Stormwater Controls

Water Quality Administrator authorized by operation and maintenance agreements to:

- Enter the site, and
- Inspect, monitor, maintain, repair or reconstruct the stormwater BMP

County authorized to conduct inspections or establish inspection programs (ex: inspection a minimum of every 5 years)

Henderson County Planning Department

Water Quality Administrator

- Administers:
 - Stormwater regulations and standards
 - Water supply watershed regulations and standards
- Coordinated watershed & stormwater reviews
- Formal title for the LDC and other common titles are often used (i.e. Subdivision Administrator, Flood Damage Prevention Administrator, etc.)

Henderson County Planning Department

Next Steps

- Set & hold public hearing: March 1, 2010?
- Adopt text amendments with effective date (established to allow for DWQ review)
- Submit text for DWQ review & approval
- BOC approval of County resolution authorizing administration within Henderson County municipalities
- Municipal approval of resolutions authorizing County administration

Henderson County Planning Department

Questions

Henderson County Planning Department