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From: Larry F. Baldwin, CPSS/SC [mailto:LBaldwin@ec.rr.com]

Sent: Wednesday, June 11, 2008 5:52 PM

**To:** Reeder, Tom NCDWQ; George Givens (Research) **Subject:** CSRWG Fw: coastal stormwater rules

June 11, 2008

Mr. Reeder and Mr. Givens:

Thank you for your diligence and patience during the 605 process regarding the coastal stormwater rules. We realize this process is in its' final stages and would like to submit the remaining issues that merit additional attention:

1----The limits of S.A. waters need to be defined <u>quantitatively</u> as "shellfish resource waters" in order to be consistent with the Phase 2 rules (definition #15) which is 500 ppm natural chloride content. In addition, a <u>prescriptive or qualitative method</u> should also be allowed as the limits of CAMA vegetation within designated S.A. Waters which by rule is as follows:

#### 15A NCAC 07H .0205 COASTAL WETLANDS

- (a) Description. Coastal wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides. Coastal wetlands contain some, but not necessarily all, of the following marsh plant species:
- (1) Cord Grass (Spartina alterniflora),
- (2) Black Needlerush (Juncus roemerianus),
- (3) Glasswort (Salicornia spp.),
- (4) Salt Grass (Distichlis spicata),
- (5) Sea Lavender (Limonium spp.),
- (6) Bulrush (Scirpus spp.),
- (7) Saw Grass (Cladium jamaicense),
- (8) Cat-tail (Typha spp.),
- (9) Salt Meadow Grass (Spartina patens),
- (10) Salt Reed Grass (Spartina cynosuroides).

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The coastal wetlands AEC includes any contiguous lands designated by the Secretary of ENR pursuant to G.S. 113-230 (a).

- (b) Significance. The unique productivity of the estuarine and ocean system is supported by detritus (decayed plant material) and nutrients that are exported from the coastal marshlands. The amount of exportation and degree of importance appears to be variable from marsh to marsh, depending primarily upon its frequency of inundation and inherent characteristics of the various plant species. Without the marsh, the high productivity levels and complex food chains typically found in the estuaries could not be maintained. Man harvests various aspects of this productivity when he fishes, hunts, and gathers shellfish from the estuary. Estuarine dependent species of fish and shellfish such as menhaden, shrimp, flounder, ovsters, and crabs currently make up over 90 percent of the total value of North Carolina's commercial catch. The marshlands, therefore, support an enormous amount of commercial and recreational businesses along the seacoast. The roots, rhizomes, stems, and seeds of coastal wetlands act as good quality waterfowl and wildlife feeding and nesting materials. In addition, coastal wetlands serve as the first line of defense in retarding estuarine shoreline erosion. The plant stems and leaves tend to dissipate wave action, while the vast network of roots and rhizomes resists soil erosion. In this way, the coastal wetlands serve as barriers against flood damage and control erosion between the estuary and the uplands. Marshlands also act as nutrient and sediment traps by slowing the water which flows over them and causing suspended organic and inorganic particles to settle out. In this manner, the nutrient storehouse is maintained, and sediment harmful to marine organisms is removed. Also, pollutants and excessive nutrients are absorbed by the marsh plants, thus providing an inexpensive water treatment service.
- (c) Management Objective. To conserve and manage coastal wetlands so as to safeguard and perpetuate their biological, social, economic and aesthetic values; to coordinate and establish a management system capable of conserving and utilizing coastal wetlands as a natural resource essential to the functioning of the entire estuarine system.
- (d) Use Standards. Suitable land uses shall be those consistent with the management objective in this Rule. Highest priority of use shall be allocated to the conservation of existing coastal wetlands. Second priority of coastal wetland use shall be given to those types of development activities that require water access and cannot function elsewhere. Unacceptable land uses may include, but would not be limited to, the following examples: restaurants and businesses; residences, apartments, motels, hotels, and trailer parks; parking lots and private roads and highways; and factories. Examples of acceptable land uses may include utility easements, fishing piers, docks, and agricultural uses, such as farming and forestry drainage, as permitted under North Carolina's Dredge and Fill Act or other applicablea laws. In every instance, the particular location, use, and design characteristics shall be in accord with the general use standards for coastal wetlands, estuarine waters, and public trust areas described in Rule .0208 of this Section.

History Note: Authority G.S. 113A-107(a); 113A-107(b); 113A-113(b)(1); 113A-124;

Eff. September 9, 1977;

Amended Eff. August 1, 1998; October 1, 1993; May 1, 1990; January 24, 1978.

In addition, the following existing rule NCAC 15 .02B 301-i 1-B&C already clarifies "un-named stream" designation relative to S.A. Waters which may used:

(i) Unnamed Streams.

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- (1) Any stream which is not named in the schedule of stream classifications carries the same classification as that assigned to the stream segment to which it is tributary except:
- (A) unnamed streams specifically described in the schedule of classifications; or
- (B) unnamed freshwaters tributary to tidal saltwaters will be classified "C"; or
- (C) after November 1, 1986, any newly created areas of tidal saltwater which are connected to Class SA waters by approved dredging projects will be classified "SC" unless case-by-case reclassification proceedings are conducted.
- (2) The following river basins have different policies for unnamed streams entering other states or for specific areas of the basin:

Hiwassee River Basin (Rule .0302); Little Tennessee River Basin and Savannah River Drainage Area (Rule .0303); French Broad River Basin (Rule .0304); Watauga River Basin (Rule .0305); Broad River Basin (Rule .0306); New River Basin (Rule .0307); Catawba River Basin (Rule .0308); Yadkin-Pee Dee River Basin (Rule .0309); Lumber River Basin (Rule .0310); Roanoke River Basin (Rule .0313); Tar-Pamlico River Basin (Rule .0316); Pasquotank River Basin (Rule .0317).

History Note: Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);

Eff. February 1, 1976;

Amended Eff. August 1, 1995; August 3, 1992; August 1, 1990; October 1, 1989.

- 2----Proposed Rule b-6 regarding separation from seasonal high water table for infiltration systems. This should be lowered from 2 ft separation to 1 ft separation to be consistent with Phase 2 stormwater rules. The 2 ft water table separation criteria for stormwater infiltration is exceedingly difficult to meet in coastal counties. In addition, none of DWQ's recommended infiltration BMP's such as permeable pavement could be utilized in most areas.
- 3----A 30 ft vegetative <u>buffer</u> is sufficient for low & high density development, and which makes it consistent with Phase 2 rules. It also needs to be stated a vegetative <u>buffer</u> can be within wetland areas. When engineered stormwater systems are installed the stormwater is treated and a 50 ft vegetative <u>filter</u> is already required, which should also be the vegetative buffer, thus within the proposed rules the "<u>and</u>" between b-2-B-iii and b-2-B-iv should be deleted.
- 4----Within 1/2 mile of S.A. Waters, detention ponds should be kept as a tool for stormwater treatment solutions. There is no data showing that detention pond systems adversely impact coastal water quality any more than other stormwater treatment and control system. It is critical to the regulated community that the detention pond tool remain available for stormwater treatment and control within ½ mile of SA waters.
- 5----Minimum lot sizes for "12% low density subdivisions" will increase to >0.83 acre from the current ~0.40 acre. Affordable low density coastal housing within 1/2 mile of S.A. waters may be a thing of the past. Recognizing that natural

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wetlands are the best biofilters, we need to allow a landowner prorated credits for their wetland acreage, relative to built upon area density limits, such as 18 to 25% density if the tract has >50% wetlands, to 12% density if the tract has 0% wetlands. This is already being done to some degree with NCDWQ's current internal guidance policy that has been discussed at length in defining "pocket of high density".

6----Proposed Rule b-2-C. This part requires low and high density projects within 1/2 mile of S.A. Waters to effectively infiltrate all stormwater within the vegetative buffers up to the annual 24 hr storm event or 3.8 inches. It further states you cannot increase the net amount or volume of water that leaves your tract. This is an impossibility on most sites. We can control the <u>rate and velocity of discharge</u>, but not the total volume or amount. All water runs down hill or laterally which has to increase the volume of water to any drainage conveyance. Please change this wording to mean, "Stormwater will diffuse <u>flow through</u> the vegetative filter at a non-erosive velocity at a <u>rate</u> not to exceed the drawdown time of the designed stormwater structure".

7----The effective date of any compromised rules needs to allow sufficient time for landowners to evaluate their circumstances in order to complete the necessary evaluations and engineering design for permit submittals (+6 - 9 months). In addition, these rules could reduce currently planned and financed projects by 1/2 which would make them economically unfeasible, leaving the banking industry with a multitude of bankruptcies. The effective date should be +9 to 12 months from any date these rules should be approved by the General Assembly. Even this may not be sufficient time with current economical conditions.

8----"Pocket of high density" needs to be defined as meeting the rules and criteria for a high density project. Otherwise, it is very discretionary and arbitrarily applied.

9----Vested rights, exemptions, and grandfathering clauses need to be written as clearly and liberally as possible to allow vested landowners and the banking industry reasonable due usage for their investments.

Again, thank you for your time and efforts in this process. Hopefully with these items addressed and agreed upon, that a compromise can be attained within the limited time available.

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