

Lower Neuse Basin Association®
Neuse River Compliance Association®

Post Office Box 1410
Clayton, North Carolina 27528 - 1410

To: Water Quality Committee
NC Environmental Management Commission
From: Daniel F. McLawhorn
Chair, Neuse River Compliance Association
Date: January 25, 2018
Re: Comments on Nutrient Draft Rules

The Neuse River Compliance Association (NRCA) appreciates the careful review of the draft nutrient rules being provided by the Water Quality Committee (WQC). The NRCA has been a regular participant in the stakeholder process associated with the readoption of these rules and continues to have a strong interest in the readoption process. The Neuse Estuary Strategy rules are now 20 years old. The historic view was that the strategy would have solved the nutrient impairment problems for the Neuse Estuary by now. It is now abundantly clear that was a wrong assumption.

The readoption of the Neuse Estuary rules provides the first opportunity to consider the rules as an ongoing set of restrictions which are having substantial and important impacts on North Carolina's fastest growing metropolitan area. Importantly, the same limitations are of equal importance to small Eastern North Carolina municipalities that are beset by large cost to address the nutrient problem, but scarce resources.

From its review of the most recent version of the draft rules and the responses to prior comments by DEQ, in particular DWR, the NRCA provides these additional comments for consideration by the WQC. The comments are organized into 3 sections. In the first section, the general problems are stated. In the second section, proposed language to address the problem is set forth. [The proposed language shows changes to be made to the draft rule as presented to the WQC at its January 2018 meeting. The only edits shown are to the proposed draft, not to the edits in the proposed draft showing changes recommended by DEQ.] In the final section, there is an explanation of the reason for the request.

STATEMENT OF PROBLEMS

1. The draft rules can be to propose a major expansion and revision of 2B .0240, Nutrient Offset Payments. The draft rule is 2B .0703, Nutrient Offset Credit Trading Program. The NRCA has continuously expressed concern that the new rule is overbroad. The NRCA requests the rule be restricted to regulating entities which provide nutrient credits for sale to entities subject to the nutrient reduction requirements.

2. The draft rules remain inconsistent as to whether time limited nutrient credits can be sold and used by entities subject to the nutrient strategy rules for compliance with their permits and other regulatory obligations.
3. The draft rule proposal to require smaller WWTPs to be issued individual allocations should be approved.
4. The draft rules, and the existing rules, are inconsistent as regards the need for expanding or new WWTPs in the Neuse Basin to have nutrient offsets in hand when making an application for the permit and insufficient nutrient allocation is available to meet the needs of the expanding or new WWTP.
5. The draft rules penalize ONLY Lower Neuse Basin, i.e. below Falls Dam, wastewater dischargers by requiring them to purchase 200% of the nutrient credits necessary to have new facilities or expansion of facilities permitted. The draft rules do not allow Lower Neuse Basin, i.e. below Falls Dam, municipal wastewater dischargers to use credits from the control of nonpoint discharges from existing development to provide nutrient credits for new or expanding wastewater treatment facilities. An illustration of the cost of a 10 million gallon per day expansion at a waste water facility located between Falls Lake Dam and the City of Goldsboro is provided on page 7 to purchase non-point source nitrogen credits.

PROPOSED REVISIONS

1. Amend the first sentence of draft 2B .0703 (a) PURPOSE. to read: “The purpose of this Rule is to establish standards and procedures applicable to providers for approval of nutrient offset credits and associated nutrient reduction projects that will be sold to persons or entities subject to the nutrient strategy rules of this Subchapter. . . .”
2. Amend draft 2B .0703(b) DEFINITIONS. (10) “Temporary nutrient offset credit” as follows: “ ’Temporary nutrient offset credit’ is a nutrient load reduction credit that accounts for annual nutrient load reductions for a term of years. Temporary nutrient credits are expressed in pounds of total nitrogen or total phosphorus. ~~Temporary nutrient credits were generated pursuant to prior versions of this rule.~~”
3. Approve the proposed change to draft 2B .0713 NEUSE RIVER BASIN – NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS. (6)(b).
4. Amend draft 2B .0713 NEUSE RIVER BASIN – NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS. (7)(b) in its first sentence to conform to the proposed draft rule 2B .0703(i)(5), which is identical to the existing 2B .0240(e)(6). The proposed revision would read: “(7) (b) Any person submitting an application shall first obtain sufficient nitrogen allocation or meet the requirements of 2B .0703(i)(5) for the proposed discharge. . . .”
5. Amend draft 2B .0713 NEUSE RIVER BASIN – NUTRIENT SENSITIVE WATERS MANAGEMENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS. (7) and (8) to read:

“ (7) This Item specifies nutrient controls for new facilities.

(a) New facilities proposing to discharge wastewater shall evaluate all practical alternatives to surface water discharge, pursuant to 15A NCAC 02H .0105(c)(2), prior to submitting an application to discharge.

(b) Any person submitting an application shall first obtain sufficient nitrogen estuary allocation or meet the requirements of 2B .0703(i)(5) make every reasonable effort to obtain estuary allocation for the proposed wastewater discharge from existing dischargers. If estuary allocation cannot be obtained from the existing facilities, new facilities may purchase a portion of the nonpoint source load allocation for a ~~period of 30 years at a rate of 200 percent~~ of the cost as set in 15A NCAC 02B .0703, Nutrient Offset Trading Program. If the nutrient credits will not be for permanent nutrient credits, then payment ~~Payment~~ for each ~~30-year~~ at least a 10-year portion of the nonpoint source nutrient credits shall be made prior to the ensuing permit issuance. In addition, local governments have the option of using credits created from the retrofit of existing development with stormwater controls to meet their reduction needs for the new NPDES discharges. At the time of application, the local government must provide, as a part of the application, a copy of contract(s) for the construction of the stormwater controls and the credits from the stormwater controls must be approved by DEQ before the authorization to construct can be issued. The authorization to construct will be limited to the nitrogen loading capacity available from all sources including the stormwater controls. The local governments must show annually the value of the reductions from the stormwater controls to meet the nutrient controls applicable to the new facilities. The new discharge shall be limited to the mass equivalent of the allocation ~~or~~ and any credits to be obtained, or the applicable mass equivalent specified in Sub-Item (d) or (e) of this Item, whichever is more stringent.

(c) – (g) NO PROPOSED CHANGES

(8) This Item specifies nutrient controls for expanding facilities.

(a) Expanding facilities shall evaluate all practical alternatives to surface water discharge, pursuant to 15A NCAC 02H .0105(c)(2), prior to submitting an application to discharge.

(b) Facilities submitting an application for increased discharge shall make every reasonable effort to minimize increases in their nitrogen discharges, such as reducing sources of nitrogen to the facility or increasing the nitrogen treatment capacity of the facility; or to obtain estuary allocation from existing dischargers. Facilities which have been allowed to increase discharge since the permitted flow was established for the facility may make application for an increased nitrogen discharge limit when the need for an additional discharge limit arises.

(c) No application for an expanding facility shall be made or accepted without written documentation demonstrating that the requirements of Sub-Items (a) and (b) of this Item have been met.

(d) If these measures do not produce adequate estuary allocation for the expanded flows, facilities may purchase a portion of the nonpoint source load allocation for a ~~period of 30 years at a rate of 200 percent~~ of the cost as set in 15A NCAC 02B .0703, Nutrient Offset Trading Program. If the purchased nutrient credits will not be for permanent nutrient credits, then payment ~~Payment~~ for each ~~30-year~~ at least

a 10-year of the nonpoint source load allocation shall be made prior to the ensuing permit issuance. In addition, local governments have the option of using credits created from the retrofit of existing development with stormwater controls to meet their reduction needs for expansion of NPDES discharges. At the time of application, the local government must provide, as a part of the application, a copy of contract(s) for the construction of the stormwater controls and the credits from the stormwater controls must be approved by DEQ before the authorization to construct can be issued. The authorization to construct will be limited to the nitrogen loading capacity available from all sources including the stormwater controls. The local governments must show annually the value of the reductions from the stormwater controls to meet the nutrient controls applicable to the new facilities.

(e) – (g) NO PROPOSED CHANGES.

REASONS

1. In its response to NRCA comments sent on September 28th, DEQ stated that “DWR’s intent was not to change the scope of the existing nutrient offset rule.” Other changes were made in the Purpose statement to address this concern. This proposed change will remove the remaining statement in the draft rule that could be used to broaden the rule from the intent stated by DWR.
2. In its response to comments dated January 9, 2018, DEQ indicates that the draft proposed rule will allow for the use of temporary credits. The changes proposed to the definition for “Temporary nutrient offset credit” will remove any question with regard to the ability to continue the use of nutrient credits on a temporary basis.
3. In the box insert for this proposed draft rule change, DEQ set out the rationale for making the change, especially the substantial additional nutrient loading in excess of the collective cap, from this set of dischargers. In its January 9, 2018 response to comments, DEQ suggests that any such change will be premature as it is not shown to be needed to address the problems in the Estuary. DEQ ignores the status of the Neuse Estuary Strategy and significant failure to achieve the 30% reduction goal by its misleading response to comments. DWR so reported to the January 2018 meeting in the Basin Planning update. “Water quality analysis of the Neuse River Basin finds that the overall NSW goal to reduce total nitrogen by 30 percent has not been achieved. The original nutrient reduction efforts were successful in reducing loads from both municipal and agricultural sources. The required riparian buffers have helped to limit additional nutrient-laden stormwater runoff from new and existing development throughout the basin. However, despite these efforts and reductions that have been made, DWR has identified an increase in the organic nitrogen load. This increase is currently offsetting the reductions made as result of the NSW rules.” Annual Report to the General Assembly Environmental Review Commission Basinwide Water Management Planning July 2016 to June 2017, p 31.

These smaller WWTPs are largely public utilities. The Utilities Commission will not allow them to include the cost of upgrades of their plants in their rate requests unless State law mandates the upgrade. The best way to overcome this large source of loading is to adopt the recommended rule change. A review of the 2016 discharge data for this group (<0.5 mgd) indicated the group as a whole discharged 95,000 lbs. of nitrogen, approximately 15,000 lbs. more than assigned in the Neuse Rule, 1997.

4. This is a new comment by the NRCA. Until this review of the draft proposed rules, the NRCA had not found the inconsistency between the two rules on this subject. Under the Neuse Estuary rule 2B .0234 [as renumbered .0713], Lower Neuse Basin WWTPs must have the whole amount of nitrogen allocation and/or nutrient credits to make application for a new WWTP. Under the existing 2B .0240 [as renumbered .0703], the applicant may make application with either allocation and/or credits in hand **or with a letter of commitment from a provider**. This is a substantial cost difference to public utilities and no environmental benefit is achieved by forcing the purchase many years before the WWTP can be operational. The Neuse Estuary rule 2B .0713(7) should be amended to avoid this unnecessary expense which obtains no environmental benefit.
5. In its January 9 response to comments, DEQ stated that it was open to discussing the 200% issue, but it was reluctant due to uncertainty about the value of nonpoint source credits that would be used by the applicant. Based on the criteria set forth in draft proposed rule 2B .0703(d) for quantifying the value of nutrient offset credits, DEQ will make adjustments to credits to assure that the uncertainty factor is taken into account in the determination of eligible credits. By retaining the 200% multiplier for uncertainty, DEQ is punishing the Lower Neuse Estuary point sources and requiring more of them than any other set of point source dischargers into nutrient impaired waters. The Falls rules do not include the multiplier, so the Upper Neuse Basin point sources can expand without the uncertainty factor being applied a second time to them. This inequity should be removed. It violates the spirit, if not the letter, of the law as set forth in NC Gen. Stat. 143-215.8B: “ (b) Each basinwide water quality management plan shall: (1) Provide that all point sources and nonpoint sources of pollutants jointly share the responsibility of reducing the pollutants in the State's waters in a fair, reasonable, and proportionate manner, using computer modeling and the best science and technology reasonably available and considering future anticipated population growth and economic development.”

In its January 9 response, DEQ states that it “is open to providing the nutrient trading option described.” DWR then observes that it had too few resources to provide language adequate for this purpose in the draft rules when the presentation was made to the WQC. This proposal is taken from the Falls and Jordan rules. 2B .0282, options for nutrient reduction offsets, provides that in the Falls sub-basin of the Neuse Basin, “(4) Local governments have the option of combining their reduction needs from NPDES dischargers assigned allocations in 15A NCAC 02B .0279 and existing development as described in 15A NCAC 02B .0278, including loads from properly functioning and malfunctioning septic systems and discharging sand filters, into one reduction and allocation requirement and meet them jointly.” As this is an existing program, the appropriate rule language can clearly be derived from this rule that has been in effect since 2011.

The need for this element of flexibility in the Lower Neuse Basin is acute. Raleigh and Johnston County both have a need for more capacity in the next decade. Especially in light of the additional complexity added by the Neuse nutrient requirements, there is no meaningful amount of existing allocation to purchase in the basin. The additional capacity must come from nutrient credits. Creation of a wholistic program by a local government to tackle a completely unregulated source of nitrogen loading in the basin, i.e. existing development retrofits, is a ready source of credits for development and a pressing need for the basin as DEQ acknowledged in the basin report. This is a classic win-win and it should be seized.

By its response, DEQ appears to misunderstand the objection to continuing the 30 year limit on the nutrient credits purchased for expansion or new WWTPs. The objection is to having to repurchase credits at the end of 30 years. This restriction is inconsistent with the amendments being proposed in 2B .0703. If the WWTP purchases permanent credits, then the credit duration for purposes of 2B .0713 should also be permanent without the cost or need to again acquire more credits at the end of 30 years. This is another special requirement imposed on the Lower Neuse WWTPs and it operates as another increase in the cost of the nitrogen credits with no justification based on the loading by the WWTPs.

CC: Linda Culpepper, Interim Director, DWR
Jim Gregson, Interim Deputy Director, DWR

10 Million Gallon per Day New or Expanding Wastewater Facility Cost Under the Current Rule

A new or expanding facility if required to purchase nitrogen (TN) credits from the Division of Mitigation Services (non-point source) the formula is: **Off-set rate at discharge point x 200% x 30 years**

This example is in Neuse – 03020201 (HUC): \$21.34 per lb. of nitrogen (this rate was valid until December 31, 2017).

1 lb. of TN = \$21.34 lb./TN in Neuse – 03020201 (HUC)

10 MG x 3.5 mg/L (TN) x 8.34 = 292 lbs./ day TN*

292 lbs./ day x 365 days/year x 30 yrs. = 3,197,400 lbs. TN required for 30 years' worth of credits

200% x \$21.34 /lb. of TN = \$42.68 required purchase rate

3,197,400 lbs. x \$42.68 /lb. of TN = **\$136,465,032 in offset payments** (this must be paid before an authorization to construct is issued by the Division).

* New facilities by rule was meet 3.5 mg/L of total nitrogen in the treated effluent.