NPDES Fact Sheet - Addendum

Neuse River Compliance Association (NRCA)

NCC000001 Permit Renewal (Final)
February 14, 2025

1. PERMIT ACTION

By its email of June 27, 2023, the Neuse River Compliance Association (NRCA) and its co-permittee members have applied for renewal of the NPDES group permit governing their discharge of Total Nitrogen to the Neuse River and its tributaries.

The Division finds the Association's application to be acceptable and has made a tentative determination to re-issue the permit. The Division has modified the draft permit to incorporate the initial comments provided by NRCA, as well as Total Nitrogen (TN) allocation changes for certain existing members and the Association's Estuary TN Limit.

The Division published a notice of this determination in the principle newspaper for each county in the river basin on or about November 7, 2024, and accepted comments on the draft permit for 30 days following publication. During the public comment period, the Division received comments from two interested parties. The Division considered all comments and made additional changes to address these comments. The Division made its final decision regarding this permit action and issue the permit with an effective date of March 1, 2025.

2. INTRODUCTION

The Neuse River basin was classified as Nutrient Sensitive Waters (NSW) in 1988 due to long-term nutrient impacts from point, nonpoint, and natural sources of pollution on the river's estuary. In 1994, the Division added the basin to the state's 303(d) list of impaired waters due to exceedance of the chlorophyll a standard at the estuary.

In December 1997, the Environmental Management Commission adopted the Neuse River Basin Nutrient Sensitive Waters (NSW) Management Strategy, a rules package designed to address these nutrient impacts and restore water quality in the basin. The Strategy required that Total Nitrogen (TN) loads to the estuary (1995 baseline) be reduced by 30 percent by the year 2003.

The Division developed a phased Total Nitrogen TMDL for the basin, based upon the NSW Management Strategy. The USEPA approved the TMDL in 1999 (Phase I) and 2002 (Phase II). Subsequent 303(d) lists and Integrated Reports have reflected that the TMDLs are being implemented.

One portion of the NSW Management Strategy, the Wastewater Discharge Requirements rule (T15A NCAC 2B .0713, formerly 2B .0234), establishes specific nutrient control requirements for the point source dischargers in the basin.

- The rule sets forth a system of Total Nitrogen allocations to achieve the stated 30 percent reduction in point source loads to the estuary. Toward this end, it:
  - sets a wasteload allocation (WLA) of 1.64 million pounds TN per year (at the estuary) for all point source dischargers in the basin.
  - further divides the WLA among the existing dischargers.
  - requires that large facilities (those with permitted flows equal to or greater than 500,000 gallons per day) meet TN limits based on their individual TN allocations, beginning in 2003.

- establishes requirements for new and expanding dischargers
- prescribes how allocations will be handled when permitted facilities consolidate (regionalize) their wastewater discharges.

- The rule also prescribes Total Phosphorus limits for the most significant dischargers in the basin.

To provide the dischargers some flexibility in meeting their nitrogen control requirements, the rule provides that interested dischargers can work collectively to achieve nitrogen reductions. Under this approach, the dischargers form a group compliance association and obtain a group NPDES permit. The group permit establishes a group TN limit based on the members' combined TN allocations. The group limit replaces the TN limits in their individual permits. Otherwise, the group permit does not affect requirements in the individual permits.

The subject permit is a group compliance permit as described above. It first became effective January 1, 2003, and is the only such permit to be developed under the Strategy's Wastewater Discharge rule.

3. PERMIT OVERVIEW

The Neuse River Compliance Association ("NRCA," or the "Association") is a not-for-profit corporation established in North Carolina in 2002. The purpose of the Association is to function as a "group compliance association" as provided in the Wastewater Discharge rule.

Co-Permittees

The Association's members include both public and private entities, all of which discharge treated wastewater in the Neuse River basin under existing individual NPDES permits.

The Association and each of its members are co-permittees under the group permit. In general, the Association serves as the contact between the Division and its co-permittee members in matters pertaining to this permit.

Scope of the Permit

The group compliance permit governs the combined discharge of Total Nitrogen from the co-permittees to the estuary. Requirements in this permit supplement those in the co-permittee members' individual NPDES permits but do not replace the requirements in the individual permits except where specifically stated.

Each member's individual NPDES permit remains in effect and continues to govern the other parameters of concern for that discharge.

Organization and Content of the Permit

The Division developed effluent limitations and other special conditions for the original (2002) group permit based on the Neuse River Basin Nutrient Management Strategy, the approved TN TMDLs, and extensive deliberations with the USEPA Region 4 and with the affected dischargers.

As with individual NPDES permits, the group permit contains Special Conditions governing wastewater controls (Part I). However, the content of the group permit is unique:

- Definitions of key terms
- Ground rules and general requirements pertaining to the group compliance approach

- Explanation of group and individual TN limits
- Special reporting requirements
- Compliance standards and procedures in case of limits violations

The selection of standard and general conditions in the permit (Parts II & III) is also tailored to the specific needs of the group permit. Many do not actually apply to the Association or its co-permittee members although they are found in the members' individual permits and do apply there; they are included in the group permit merely for emphasis or a sense of completeness.

Appendix A of the permit contains the definitive list of (1) Co-Permittee Members in the Association, (2) discharge and equivalent estuary TN allocations for each member, and (3) transport factors for each. These values are derived from the allocations assigned in the Wastewater Discharge rule.

The permit establishes TN limits for the Association and for the individual co-permittee members. Individual TN limits equal the members' individual, active allocations, and the Association's Estuary TN Limitation equals the sum total of the members' active allocations. All TN limits in Appendix A are annual mass limits, are expressed in terms of estuary ('delivered') TN, and apply on a calendar-year basis. The appendix also notes which allocations (if any) are held in 'reserve' status and are, therefore, not included in the group TN limit.

The Association is subject to its Estuary TN Limitation throughout the term of this permit.

The TN allocations of the co-permittee members can change as the result of purchases, sales, trades, leases, and other transactions. These changes, in turn, affect the Association's TN allocation. Changes in membership also affect the Association's allocation due to the addition or subtraction of the discharger's allocation from the group total.

Whenever changes in the allocations or the membership occur, Appendix A of the permit must be modified in order to formally incorporate those changes and adjust the enforceable limits in the permit.

The TN allocations and limits are expressed as calendar year values; therefore, any adjustments can become effective only at the beginning of the calendar year (January 1) following the transaction or membership change. The Association will notify the Division each year of proposed changes in Appendix A (see Reporting Requirements, below).

Please note that SL 2020-18 as modified by SL 2023-137 Section 14 stipulates application of 1999 TMDL transport factors in establishment of offset credits in the permits of certain dischargers. It also provides the ability for the Department to use watershed modeling to develop new transport factors, and for the EMC to consider adopting such factors into rule. The EMC may consider rulemaking in the future to adopt the factors currently being developed in watershed modeling by the Department. The Association and permittees will be provided ample notice and opportunity to participate in evaluation of any proposal to modify allocations.

Co-Permittee Members

Table 1 below lists the Association's co-permittee members and facilities.

Appendix A of the permit shows in tabular form the original allocations assigned to each member facility and any transfers or adjustments. It includes discharge and delivered (estuary) values and lists reserve allocations separately from active allocations.

The Association also holds the TN allocation originally assigned to Burlington Industries (formerly NC0001376), which the industry deeded to the Association.

Table 1. NRCA Members and Discharge Points

#	Owner	Facility	Permit	Receiving Stream	Outfall	Latitude	Longitude
1	Town of Apex	Apex WRF	NC0064050	UT Middle Cr.[1]	1	35° 42' 30"	-78° 50' 03"
2	Aqua NC	Neuse Colony WWTP	NC0064564	Neuse River	1	35° 38' 44"	-78° 24' 20"
3	Town of Benson	Benson WWTP	NC0020389	Hannah Cr.	1	35° 39' 02"	-78° 50' 58"
4	Town of Cary						
	4.1	North Cary WRF	NC0048879	Crabtree Cr.	1	35° 50' 16"	-78° 46' 50"
	4.2	South Cary WRF	NC0065102	Middle Cr.	1	35° 38' 48"	-78° 45' 28"
5	Town of Clayton	Sam's Branch WRF	NC0025453	Neuse River	1	35° 39' 50"	-78° 25' 26"
6	Contentnea MSD	CMSD WWTP	NC0032077	Contentnea Cr.	1	35° 21' 06"	-77° 24' 59"
7	CWS Systems, Inc.	Fairfield Harbour WWTP	NC0033111	Neuse River	1	35° 03' 27 '	-76° 57' 27"
8	Craven County	Craven WTP	NC0089460	Neuse River	1	34° 58' 35"	-76° 56' 01"
9	Duke Energy	Lee Steam Electric Plant	NC0003417	Neuse River	1	35° 22' 16"	-78° 04' 09"
10	City of Durham	North Durham WRF	NC0023841	Ellerbe Creek	1	36° 01' 47"	-78° 51' 49"
11	Covation Biomaterials LLC	Covation Biomaterials Kinston Site	NC0003760	Neuse River	1	35° 19' 28"	-77° 27' 58"
12	Town of Farmville	Farmville WWTP	NC0029572	Little Contentnea Cr.	1	35°35' 11"	-77° 32' 30"
13	City of Goldsboro	Goldsboro WRF	NC0023949	Neuse River	1	35° 20' 44"	-77° 59' 59"
					2	35° 20' 14"	-77° 59' 53"
14	City of Havelock	Havelock WWTP	NC0021253	Neuse River	1	34° 57' 11"	-76° 52' 37"
15	Town of Hillsborough	Hillsborough WWTP	NC0026433	Eno River	1	36° 04' 33"	-79° 05' 14"
16	Johnston County	Central Johnston Co. WWTP	NC0030716	Neuse River	1	35° 30' 04"	-78° 22' 32"
					2	35° 29' 56"	-78° 22' 36"
17	Town of Kenly	Kenly Regional WWTP	NC0064891	Little River	1	35° 34' 58"	-78° 09' 33"
18	City of Kinston	Johnnie Mosley Regional WRF	NC0024236	Neuse River	1	35° 17' 13"	-77° 30' 04"
19	Town of La Grange	La Grange WWTP	NC0021644	UT Moseley Cr.[1]	1	35° 18' 35"	-77° 46' 31"
20	City of New Bern	New Bern WWTP	NC0025348	Neuse River	1	35° 08' 20"	-77° 03' 37"
21	City of Raleigh						
	21.1	Neuse River RRF	NC0029033	Neuse River	1	35° 43' 04"	-78° 29' 49"
	21.2	Smith Creek RRF	NC0030759	Smith Cr.	1	35° 54' 23"	-78° 32' 15"
	21.3	Little Creek RRF	NC0079316	Little Cr.	1	35° 48' 49"	-78° 16' 22"
22	Town of Snow Hill	Snow Hill WWTP	NC0020842	Contentnea Cr.	1	35° 27' 28"	-77° 39' 55"
23	South Granville WASA	SGWASA WWTP	NC0026824	Knap of Reeds Cr.	1	36° 07' 39"	-78° 47' 57"
24	MCAS - Cherry Point	Cherry Point WWTP	NC0003816	Neuse River	1	34° 57' 11"	-76° 53' 13"
25	City of Wilson	Hominy Creek WRF	NC0023906	Contentnea Cr.	1	34° 40' 37"	-77° 53' 51"

[1] UT = Unnamed Tributary

Additional Falls Lake Allocation Held in Reserve

Due to the more stringent TN limit applied in the Falls Lake nutrient strategy, which became effective with CY2016, this portion of the allocation is not available for the permittee's use for its existing discharge, and is being held in reserve by the co-permittee member.

Table 2. Additional Falls Lake Allocation in Reserve

#	Owner	Facility	Permit	Reserve Estuary TN Allocation
1	South Granville WASA	SGWASA WWTP	NC0026824	3,618
2	City of Durham	North Durham WRF	NC0023841	23,777
3	Town of Hillsborough	Hillsborough WWTP	NC0026433	3,981

Monitoring Requirements

All members of the Association are required under their individual NPDES permits to monitor TN on a regular basis and report the results in their Discharge Monitoring Reports (DMRs). The group permit does not duplicate these monitoring requirements or require additional TN monitoring.

Instream monitoring is not required under this permit. However, it is required of the co-permittee members through their individual NPDES permits and, for most, is conducted by the Lower Neuse Basin Association, a coalition of dischargers that, by agreement with the Division, conducts instream monitoring for its members.

Reporting Requirements

Each member will continue to report its TN monitoring results on its individual DMRs. The Association is not required to duplicate these detailed reports.

Under the current permit, the Association submits year-end, mid-year, and 5-year reports on its activities to the Division. The year-end report includes an accounting of the Association's and its members' TN discharges for the previous calendar year for compliance purposes. It also includes a list of transactions during that period affecting TN allocations, an assessment of progress made, and planned activities for the coming year. The mid-year report (due September 30 of each year) includes an updated accounting of TN discharges for informational purposes. It also identifies any changes in TN allocations or in membership for the following year and serves as a request to modify Appendix A to incorporate those changes. The 5-year report is intended to ensure that the Division and the Association agree on the group and individual allocations at the end of the permit term.

Compliance

The Association is in compliance with its TN limit when the group does not exceed the Estuary TN Limitation in Appendix A.

Members are deemed to be in compliance with their individual TN limits in this permit when the Association as a whole complies with its Estuary TN Limitation. Individual members of the Association will be subject to individual TN limits only in those years in which the Association exceeds its limit. In that case, each co-permittee member is subject to its individual TN limit from Appendix A.

The Association is required by rule to make offset payments to the Wetlands Restoration Fund for any calendar year in which it exceeds its TN limit. In addition, the Division may take appropriate enforcement action against the Association or its co-permittee members or both in the event that they exceed applicable TN limits in the permit.

The Association has not exceeded its TN limit since its formation. The group's combined nitrogen reduction has been exemplary, reaching approximately 70% reduction from 1995 baseline levels as compared to the mandated 30% reduction for point source discharges in the basin.

Please note that for some facilities, the individual TN transactions and the facility's initial loadings don't add up to the facility's total allocation due to rounding issue. Please refer to the facility's total allocation in Appendix A for compliance purpose.

4. PERMIT REVISIONS – MEMBERSHIP, NITROGEN HOLDINGS, ESTUARY TN LIMITS

The Division shared a courtesy draft permit for the Association's review in January 2024, and the Association provided written comments on the courtesy draft in May 2024. The Division has reviewed the comments from the NRCA and made some updates in the permit in response to the comments. There have also been some nutrient transfers for certain existing members and the changes have been included in the permit.

The modified permit includes the following changes to Part I and Appendix A:

- Updated rule reference to match the recodified rule throughout the permit. For example, T15A NCAC 02B .0234 has been updated to T15A NCAC 02B .0713, and T15A NCAC 02B .0240 has been updated to T15A NCAC 02B .0703.
- Added rule reference in Section A.(1.), A.(2.), A.(3.), A.(4.), A.(5.), and A.(6.).
- Updated the language in Section A.(1.)(o.) and A.(1.)(r.) to clarify the definitions of Reserve TN Allocation and Transport Factor.
- Updated the due date for the Five-Year Report to July 1, 2028 in Section A. (5.)(e.).
- Updated facility names for NC0003417, NC0024236, NC0029033, NC0030759, NC0079316, and NC0023906 in Appendix A.
- Updated ownership and facility name for NC0003760 in Appendix A.
- Corrected the TN transaction for Town of Farmville – Farmville WWTP (NC0029572). The connection with Wayne County Board of Education - C.B. Aycock HS WWTP (NC0034819) is actually a transaction between C.B. Aycock HS WWTP and the City of Goldsboro – Goldsboro WRF (NC0023949). This TN transaction has been removed from Farmville WWTP's allocation and added in Goldsboro WRF's allocation. The facility total allocations for both Farmville WWTP and Goldsboro WRF are correct and remain the same.
- Updated the TN allocation for Town of Clayton – Sam's Branch WRF (NC0025453) in Appendix A. The Town of Clayton has requested modification to their permit to increase the TN load limit at the existing 2.5 MGD to 26,636 lb/yr, which is equivalent to the Neuse rule's technology-based cap of 3.5 mg/L. The individual permit modification and the updated total TN allocation became effective on January 1, 2024.
- Updated the TN allocation for Johnston County – Central Johnston County WWTP (NC0030716) in Appendix A. On October 13, 2023, Johnston County purchased 10,000 lb/year of estuary TN allocations from International Paper Company (NC0003191). The County also purchased additional nutrient offset credits from Restoration Systems, LLC to accommodate their future nutrient needs. A Statements of Availability certified that nutrient offset credits in the amount of 309,044.648 lbs (or 10,301.488 lb/yr for 30 years)were approved by the Division on May 23, 2024. After considering transport losses and the uncertainty ratio, the amount of offset credits available is 6,868 lb/yr of estuary TN allocation. The updated total estuary TN allocation is 53,607 lb/year, which will become effective on January 1, 2025.
- Updated the TN allocation for City of Raleigh – Neuse River RRF (NC0029033) in Appendix A. The City of Raleigh purchased 15,000 lb/year of estuary TN allocations from International Paper Company (NC0003191) on March 19, 2024. The individual permit

modification became effective on August 5, 2024. The updated total estuary TN allocation is 371,687 lb/year, which will become effective on January 1, 2025.

- Updated the reserve allocation purchased by Town of Clayton – Sam's Branch WRF (NC0025453) from SGWASA (NC0026824) in Appendix A since this portion has been partially activated.
- Removed the reserve allocation purchased by Town of Clayton – Sam's Branch WRF (NC0025453) from UNIFI Kinston (NC0003760) in Appendix A since this portion has been activated.
- Updated the Associations's total TN allocations in Appendix A.
- Updated the terms "Reserve Estuary Allowance" and "Total Estuary Allowance" to "Estuary Reserve" and "Estuary Total" respectively in Appendix A and updated footnote 6 accordingly.

With these revisions, the Association's holdings and its Estuary TN Limit increases as follows, effective on the permit effective date:

Association Estuary TN Limit	**1,248,609 lb/yr**
Estuary Reserve	62,979 lb/yr
Estuary Total	1,311,588 lb/yr

For the purposes of this permit, "Estuary Reserve" means the reserved TN allocations and nitrogen offset credits held by the Association and its Co-Permittee Members, and "Estuary Total" means the combination of active and reserved TN allocations and nitrogen offset credits held by the Association and its Co-Permittee Members.

5. RESPONSE TO COMMENTS RECEIVED ON DRAFT PERMIT

During the public comment period, the Division received two public comments, one from the Neuse River Compliance Association, and the other one is a combined comment from American Rivers, Sound Rivers, and North Carolina Conservation Network. The Comments are summarized below, with the Division's responses:

1) Comment: Permit limits are set based on data from 30-year-old baselines. The nitrogen allocations in this permit are based on data from over 30 years ago and that do not properly reflect changes to the watershed in the ensuing years.

   Response: The Division is working with consultants to develop a watershed model for the Neuse River Watershed to support the Department's adaptive management efforts to protect and restore the estuary, as required by SL 2020-18 Section 15.(c). This model will determine transport zones and delivery factors for point source discharges and nutrient offset credits, which can provide a more scientifically defensible base for nutrient trading and drive systemic water quality improvements in the Neuse River Estuary.

2) Comment: The Neuse estuary is still not out of impairment. An integrated water management approach that takes into account current data be the basis of the regulatory framework moving forward.

   Response: The Neuse River Watershed model that is underway uses a dynamic watershed model to obtain detailed information on nonpoint source and stormwater nutrient loads across the watershed using recent spatial and temporal data. This model will support

systemic water quality improvements in the Neuse River Estuary and provide a strong scientific basis for structuring the regulatory framework.

3) Comment: The definitions for "Active TN Allocation", "Estuary TN Limitation", and "Reserve TN Allocation" in Section A.(1.) are wrongly included in the draft permit.

   Response: The same definitions have been used in the previous versions of the permit, and G.S. 143- 215.1(b) has given the Director the regulatory authority over this permit. After further discussion with the NRCA, the Division has clarified the regulatory authority over "Reserve TN Allocation". The Neuse Wastewater Discharge Rule 15A NCAC 02B.0713 states that "The Director shall modify an existing facility's permit to establish more stringent limits for nitrogen or phosphorus upon finding that such limits are necessary to protect water quality standards in localized areas.". The term "Reserve TN Allocation" in this permit is used to distinguish inactive allocation that is not currently being used but still available for the Association and the Co-Permittees to use when needed, the Division doesn't have additional regulatory power over the Reserve Allocation in this Association's permit. Since Section A.(3.)(n.) of the permit has already established that the Division do have the regulatory authority to "determines that a Co-Permittee Member's TN discharge has reasonable potential to cause localized water quality impacts, it may determine an individual water quality-based TN Limit for the Member pursuant to Neuse rule", to avoid further confusion on this concept, the definition of "Reserve TN Allocation" has been updated in Section A.(1.)(o.) to remove the language that states the Division "may designate allocation as reserve when water quality-based limits established to prevent localized impacts; when treatment of the allocation as active would be inconsistent with the Neuse Wastewater rule.", but similar language still exist in Section A.(3.)(n.) of this permit and in 15A NCAC 02B.0713.

4) Comment: The Tar-Pamlico Nutrient Strategy Rule 15A NCAC 2B .0733 is being amended, one of the amendments is to include the definitions of "Active Allocation", "Limit", and "Reserve Allocation". The NRCA recommends that similar terms should be added to the Nutrient Strategies Definitions rule 15A NCAC 02B .0701.

   Response: The Division appreciates the comment and has relayed it to the appropriate unit, but this is outside of the scope of this Association's NPDES permit renewal.

5) Comment: The Total Nitrogen definition in this permit is inconsistent with the definition in the Co-Permittee's individual NPDES permit.

   Response: The Division has considered this comment and updated the language in Section A.(3.)(a.)(i.) and Section A.(5.)(d.)(i.). The calculation of TN Loads in this Association's NPDES permit is consistent with the definition established in the respective individual NPDES permits.

6. CHANGES FROM DRAFT TO FINAL PERMIT

- Updated language for the definition of Reserve TN Allocation in Section A.(1.)(o.).
- Updated language to clarify how Co-Permittee's Estuary TN loads should be calculated in Section A.(3.)(a.)(i.).
- Updated language to clarify how Co-Permittee's Estuary TN loads should be calculated in Section A.(5.)(d.)(i.).

7. PROPOSED SCHEDULE FOR PERMIT ISSUANCE

Draft Permit to Public Notice:	November 7, 2024
End of Comment Period:	December 7, 2024
Permit Scheduled for Issuance:	January 31, 2025
Permit Effective Date:	March 1, 2025

8. DIVISION/ STAFF CONTACT

Questions regarding the above information can be directed to Siying Chen at siying.chen@deq.nc.gov or Matthew Nevills at matthew.nevills@deq.nc.gov.

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