

# Appendix Information

Lower Neuse Basin Association/Neuse River Compliance Association  
Membership

Town of Apex  
Town of Benson  
Town of Cary  
Town of Clayton  
Contentnea MSD  
Town of Farmville  
Dupont-Kinston  
Town of Fuquay-Varina  
City of Goldsboro  
Town of Havelock  
Johnston County  
Town of Kenly  
Town of LaGrange  
City of New Bern  
Progress Energy - Carolinas  
City of Raleigh  
City of Wilson  
City of Kinston  
Aqua, North Carolina  
South Granville Water and Sewer Authority  
Marine Corp Air Station - Cherry Point

# NEUSE RIVER COMPLIANCE ASSOCIATION

## Total Nitrogen Report Summary For 2010

Date: March 16, 2011

NPDES PERMIT NO: NCC000001		END OF PIPE			ESTUARY	
FACILITY	NPDES Permit #	Permit Flow (MGD)	TN Conc. (mg/L)	2010 Avg. Flow (MGD)	Adjusted TN Allocation 2010 (Lbs/Yr.)	2010 TN Discharge (Lbs/Yr.)
Town of Apex	NC0064050	3.600	3.930	2.394	20,274	14,323
Town of Benson	NC0020389	3.000	6.590	1.009	16,535	10,122
SGWASA	NC0026824	5.500	3.690	2.017	5,860	2,263
Cary North	NC0048879	12.000	3.000	5.812	71,623	26,505
Cary South	NC0065102	16.000	1.980	4.981	90,105	15,019
County of Johnston	NC0030716	9.500	1.500	3.923	34,161	8,927
Town of Clayton	NC0025453	2.500	4.110	1.724	11,416	10,791
Contentnea MSD	NC0032077	2.850	8.270	1.762	36,470	31,065
Town of Farmville	NC0029572	3.500	4.000	1.253	21,106	7,625
City of Goldsboro	NC0023949	16.800	3.590	8.505	139,876	65,002
Town of Kenly	NC0064891	0.630	9.900	0.352	5,125	5,302
Progress Energy	NC0003417	NA	0.880	2.927	9,000	5,471
City of Kinston (Regional)	NC0024236	11.850	2.140	5.131	88,697	23,376
Town of LaGrange	NC0021644	0.750	4.350	0.487	5,913	4,519
Neuse Colony (Aqua NC)	NC0064564	0.750	19.960	0.165	5,424	5,015
City of New Bern	NC0025348	6.500	5.250	3.816	64,210	60,992
City of Raleigh -Neuse WWTP	NC0029033	75.000	2.480	43.738	341,242	164,928
Raleigh - Ground Water	NA	NA		NA	NA	57,123
Smith Creek WWTP-Raleigh	NC0030759	6.000	4.940	1.231	35,407	9,259
City of Wilson	NC0023906	14.000	3.180	8.088	78,943	39,202
Little Creek WWTP-Raleigh	NC0079316	1.850	3.100	0.642	11,227	3,026
Dupont-Kinston, Inc.	NC0003760	3.600	1.850	0.246	6,145	967
MCAS Cherry Point	NC0003816	3.500	2.620	1.704	39,421	13,577
Member Reserve Allocations	NA	NA		NA	7,042	
Association Allocation	NA	NA		NA	15,440	0
<b>NRCA TOTALS</b>		<b>199.680</b>		<b>101.909</b>	<b>1,160,662</b>	<b>584,398</b>

NOTES: 1. Average Total Nitrogen Concentration End of Pipe by NRCA Members during 2010: 2.98 mg/L  
2. Average Total Nitrogen Concentration with ground water contribution in 2010: 3.35 mg/L

# NRCA Nitrogen Sales and Leases

B-4

Date: 3/25/11

Year	Type of Nitrogen Transaction	Seller/Leaser	Buyer/Leasee	Estuary Lbs. of Nitrogen *	Purchase/Lease Rate Cost/lb.
2004	Sale	Bay River MSD	Town of Butner, N.C.	6,113	\$275.00
2005	Lease	UNIFI, LLC, Kinston, N.C.	Contentnea MSD	1,800	\$2.00
	Lease	Johnston County, N.C.	Town of Kenly, N.C.	1,800	\$3.00
	Lease	NRCA	MCAS Cherry Point	20,000	\$1.50
2006	Lease	UNIFI, LLC, Kinston, N.C.	Contentnea MSD	5,000	\$2.00
	Lease	Johnston County, N.C.	Town of Kenly, N.C.	3,000	\$3.00
	Lease	NRCA	MCAS Cherry Point	10,000	\$2.00
	Sale	SGWASA	Town of Clayton, N.C.	3,668	\$490.73
2007	Lease	Johnston County, N.C.	Town of Kenly, N.C.	1,800	\$8.18
	Lease	NRCA	MCAS Cherry Point	5,000	\$3.00
	Sale	UNIFI, LLC, Kinston, N.C.	Johnston County, N.C.	1,645	\$490.80
	Sale	UNIFI, LLC, Kinston, N.C.	Town of Clayton, N.C.	1,645	\$490.73
2008	Lease	Johnston County, N.C.	Town of Kenly, N.C.	2,100	\$8.18
	Lease	UNIFI, LLC, Kinston, N.C.	Aqua, N.C., Inc.	3,500	\$4.00
	Sale	Town of Benson, N.C.	Johnston County, N.C.	360	\$490.80
2009	Lease	NRCA	Progress Energy	9,000	\$9.00
	Lease	Dupont - Kinston	Aqua, N.C., Inc.	2,500	\$4.00
	Lease	Johnston County	Town of Kenly, N.C.	1,745	\$8.18
2010	Lease	Progress Energy	NRCA	9,000	\$9.00
	Lease	Dupont - Kinston	Aqua, N.C., Inc.	1,200	\$4.00
	Lease	Johnston County, N.C.	Town of Kenly	1,577	\$8.18
	Lease	Dupont - Kinston	Contentnea MSD	15,000	\$4.00
	Sale	UNIFI, LLC, Kinston, N.C.	Contentnea MSD	3,500	\$400.00

**Notes:**

- 1 Town of Butner, N.C. transferred their WWT facilities (and nitrogen allocation) to SGWSA in 2006.
- 2 NRCA - Neuse River Compliance Association
- 3 MCAS Cherry Point - Marine Corp Air Station, Cherry Point, Havelock, N.C. (multiple year lease).
- 4 Bay River MSD - Bay River Metropolitan Sewer District, Bayboro, N.C.
- 5 Contentnea MSD - Metropolitan Sewer District, Grifton, N.C.
- 6 SGWASA - South Granville Water & Sewer Authority, Butner, N.C.
- 7 Nitrogen lease - Temporary annual transfer for individual permit compliance.
- 8 Nitrogen Sale - Permanent transfer of nitrogen allocation between two parties.
- 9 \* Transport factor for "end of pipe" nitrogen value must be calculated for each individual permit holder.



## NRCA Total Phosphorous Data for 2010

Date: 3/1/2011

Member	NPDES #	Annual Avg. (mg/L)
Progress Energy	NC0003417	0.06
MCAS Cherry Point	NC0003816	0.12
City of Kinston (Regional)	NC0024236	0.17
City of Goldsboro	NC0023949	0.19
Little Creek WWTP-Raleigh	NC0079316	0.23
Cary North	NC0048879	0.44
County of Johnston	NC0030716	0.53
Cary South	NC0065102	0.54
Town of LaGrange	NC0021644	0.56
Town of Kenly	NC0064891	0.60
Dupont-Kinston, Inc.	NC0003760	0.65
Smith Creek WWTP-Raleigh	NC0030759	0.65
Town of Apex	NC0064050	0.75
SGWASA	NC0026824	0.78
Town of Farmville	NC0029572	0.81
City of New Bern	NC0025348	0.91
Town of Clayton	NC0025453	0.92
Neuse Colony (Aqua NC)	NC0064564	1.00
City of Wilson	NC0023906	1.08
City of Raleigh- Neuse	NC0029033	1.16
Town of Benson	NC0020389	1.53
Contentnea MSD	NC0032077	1.69

Table. Estimated TN loading to Neuse Estuary by year.				
Year	Estuary TN	NRCA TN to	Ft. Barnwell	Streets Ferry
	TMDL (lbs)	Neuse Estuary	TN (Neuse Plan)	TN (Lebo)
1989				18,438,056
1990				8,836,857
1991				7,999,863
1992				10,197,869
1993				9,425,685
1994				6,023,469
1995		1,784,000	6,814,683	10,903,390
1996		1,741,000	11,861,989	14,221,756
1997		1,653,000	7,198,315	7,103,159
1998	6,750,000	1,388,000	9,352,000	12,457,699
1999	6,750,000	1,123,000	10,847,092	14,783,856
2000	6,750,000	1,056,000	7,567,995	8,502,444
2001	6,750,000	907,000	6,151,596	5,867,594
2002	6,750,000	798,000	5,271,038	5,778,476
2003	6,750,000	772,000	13,212,353	13,885,098
2004	6,750,000	559,000	7,451,271	7,659,793
2005	6,750,000	557,000	7,129,310	6,045,335
2006	6,750,000	542,000	8,544,607	8,810,887
2007	6,750,000	461,000	5,378,700	5,145,600
2008	6,750,000	490,000	5,673,200	5,852,757
2009	6,750,000	497,639	7,620,500	7,135,599

Table prepared by Martin Lebo, Weyerhaeuser Company July 7, 2010 based on data analysis performed Jan -Jun 2010 Estimate for 2009 based on partial year through September.

## Rainfall Data 95~09

STATE CLIMATE OFFICE OF NORTH CAROLINA

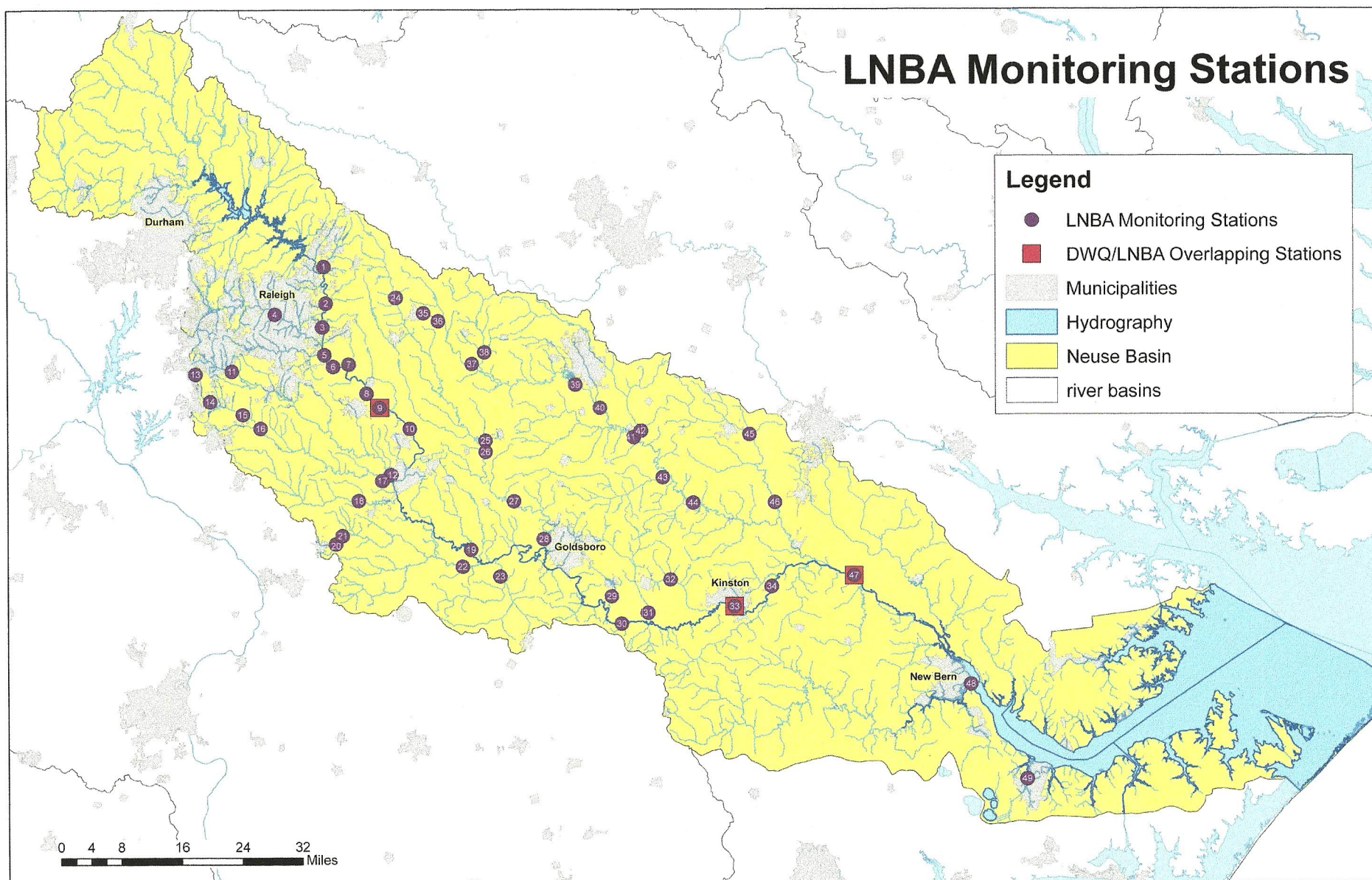
NC CRONOS Database

DIVISIONAL DATA RETRIEVAL FOR THE CENTRAL COASTAL PLAINS OF NC

Date/Time (EST) Sum of Annual Precipitation (in)

1995	54.29
1996	59.22
1997	46.04
1998	59.21
1999	60.08
2000	51.9
2001	38.94
2002	52.25
2003	69.23
2004	49.57
2005	58.47
2006	54.69
2007	40.43
2008	46.41
2009	54.05







MAP STATION NUMBER	AGENCY	ACTIVE?	STATION NUMBER	LOCATION	Field Measurements (Water Temp., DO, pH, Conductance)	Fecal Coliform	Turbidity	Nutrients (NH <sub>3</sub> , TKN, NO <sub>x</sub> , TP)	Chlorophyll a	TSS
1	LNBA	yes	J2230000	SMITH CRK AT SR 2045 BURLINGTON MILL RD NR WAKE FOREST	M+2SM	M	M	M		M
2	LNBA	yes	J2330000	NEUSE RIV AT SR 2215 BUFFALO RD NR NEUSE	M+2SM	M	M	M		M
3	LNBA	yes	J2360000	NEUSE RIV ABOVE MILBURNIE DAM NR RALEIGH	M+2SM	M	M	M		M
4	LNBA	yes	J3210000	CRABTREE CRK AT LASSITER MILL DAM AT RALEIGH	M+2SM	M	M	M		M
5	LNBA	yes	J3970000	WALNUT CRK AT SR 2551 BARWELL RD NR RALEIGH	M+2SM	M	M	M		M
6	LNBA	yes	J4050000	NEUSE RIV AT SR 2555 AUBURN KNIGHTDALE RD NR RALEIGH	M+2SM	M	M	M		M
7	LNBA	yes	J4080000	POPLAR CRK AT SR 2049 BETHLEHEM RD NR KNIGHTDALE	M+2SM	M	M	M		M
8	LNBA	yes	J4130000	NEUSE RIV AT SR 1700 COVERED BRIDGE RD NR ARCHERS LODGE	M+2SM	M	M	M		M
9	LNBA	yes	J4170000	NEUSE RIV AT NC 42 NR CLAYTON	M+2SM	M	M	M		M
10	LNBA	yes	J4190000	NEUSE RIV AT SR 1908 FIRE DEPT DR NR WILSONS MILLS	M+2SM	M	M	M		M
11	LNBA	yes	J4414000	SWIFT CRK AT SR 1152 HOLLY SPRINGS RD NR MACEDONIA	M+2SM	M	M	M		M
12	LNBA	yes	J4590000	SWIFT CRK AT NC 210 NR SMITHFIELD	M+2SM	M	M	M		M
13	LNBA	yes	J4619000	Middle Creek at Lufkin Road at Apex	M+2SM	M	M	M		M
14	LNBA	yes	J4690000	MIDDLE CRK AT SR 1152 HOLLY SPRINGS RD NR HOLLY SPRINGS	M+2SM	M	M	M		M
15	LNBA	yes	J4880000	MIDDLE CRK AT SR1375 LAKE WHEELER RD NR BANKS	M+2SM	M	M	M		M
16	LNBA	yes	J4980000	MIDDLE CRK AT SR 1006 OLD STAGE ROAD NR WILLOW SPRINGS	M+2SM	M	M	M		M
17	LNBA	yes	J5010000	MIDDLE CRK AT NC 210 NR SMITHFIELD	M+2SM	M	M	M		M
18	LNBA	yes	J5170000	BLACK CRK AT SR1162 BLACK CREEK RD NR FOUR OAKS	M+2SM	M	M	M		M
19	LNBA	yes	J5250000	NEUSE RIV AT SR 1201 RICHARDSON BRIDGE RD NR COX MILL	M+2SM	M	M	M		M
20	LNBA	yes	J5390000	HANNAH CRK AT SR 1158 ALLENS CROSSROADS DR NR BENSON	M+2SM	M	M	M		M
21	LNBA	yes	J5390800	HANNAH CRK AT SR 1227 IVEY RD NR BENSON	M+2SM	M	M	M		M
22	LNBA	yes	J5410000	Mill Crk at SR 1200 nr Cox Mill	M+2SM	M	M	M		M
23	LNBA	yes	J5500000	Falling Crk at SR 1219 Old Grantham Rd nr Grantham	M+2SM	M	M			M
24	LNBA	yes	J5620000	LITTLE RIV AT SR 2333 SMITHFIELD RD NR ZEBULON	M+2SM	M	M	M		M
25	LNBA	yes	J5690000	LITTLE RIV AT US 301 NR KENLY	M+2SM	M	M	M		M
26	LNBA	yes	J5750000	LITTLE RIV AT SR 2339 BAGLEY RD NR LOWELL MILL	M+2SM	M	M	M		M
27	LNBA	yes	J5900000	LITTLE RIV AT SR 1234 CAPPS BRIDGE RD NR CROSSROADS	M+2SM	M	M	M		M
28	LNBA	yes	J5930000	LITTLE RIV AT NC 581 AT ASYLUM	M+2SM	M	M	M		M
29	LNBA	yes	J6010950	WALNUT CRK AT SR 1730 SAINT JOHNS CHURCH RD NR WALNUT CREEK	M+2SM	M	M	M		M
30	LNBA	yes	J6024000	NEUSE RIV AT SR 1731 NR SEVEN SPRINGS	M+2SM	M	M	M		M
31	LNBA	yes	J6044500	BEAR CRK AT SR 1311 BEAR CREEK RD NR KINSTON	M+2SM	M	M	M		M
32	LNBA	yes	J6055000	MOSLEY CRK AT SR 1327 WILLEY MEASLEY RD NR LAGRANGE	M+2SM	M	M	M		M
33	LNBA	yes	J6150000	NEUSE RIV AT NC 11 AT KINSTON	M+2SM	M	M	M		M
34	LNBA	yes	J6250000	NEUSE RIV AT NC 55 NR GRAINGERS	M+2SM	M	M	M		M
35	LNBA	yes	J6410000	LITTLE CRK AT NC 97 AT ZEBULON	M+2SM	M	M	M		M
36	LNBA	yes	J6450000	LITTLE CRK AT NC 39 AT ZEBULON	M+2SM	M	M	M		M
37	LNBA	yes	J6500000	MOCCASIN CRK AT SR 1131 ANTIOCH CHURCH RD NR CONNER	M+2SM	M	M	M		M
38	LNBA	yes	J6680000	TURKEY CRK AT SR 1101 CLAUDE LEWIS RD NR MIDDLESEX	M+2SM	M	M	M		M
39	LNBA	yes	J6764000	CONTENTNEA CRK AT US 301 WARD BLVD NR DIXIE	M+2SM	M	M	M		M
40	LNBA	yes	J6890000	CONTENTNEA CRK AT SR 1622 EVANSDALE RD NR WILSON	M+2SM	M	M	M		M
41	LNBA	yes	J7210000	CONTENTNEA CRK AT NC 58 NR STANTONSBURG	M+2SM	M	M	M		M
42	LNBA	yes	J7240000	TOISNOT SWAMP AT SR 1539 SAND PIT RD NR STANTONSBURG	M+2SM	M	M	M		M
43	LNBA	yes	J7325000	NAHUNTA SWAMP AT NC 58 NR CONTENTNEA	M+2SM	M	M	M		M
44	LNBA	yes	J7330000	CONTENTNEA CRK AT US 13 AT SNOW HILL	M+2SM	M	M	M		M
45	LNBA	yes	J7690000	LITTLE CONTENTNEA CRK AT SR 1218 CHINQUAPIN RD NR FARMVILLE	M+2SM	M	M	M		M
46	LNBA	yes	J7740000	LITTLE CONTENTNEA CRK AT SR 1110 (HWY 903) AT SCUFFLETON	M+2SM	M	M	M		M
47	LNBA	yes	J7850000	NEUSE RIV AT SR 1470 MAPLE CYPRESS RD NR FORT BARNWELL	M+2SM	M	M	M	M	M
48	LNBA	yes	J8870000	Trent Riv at E Front Street at New Bern	M+2SM	M	M	M	M	M
49	LNBA	yes	J9330000	SLOCUM CRK AT SLOCUM RD AT CHERRY POINT	M+2SM	M	M	M	M	M

M = Monthly

M + 2SM = Monthly October - April and Twice Monthly May - September



