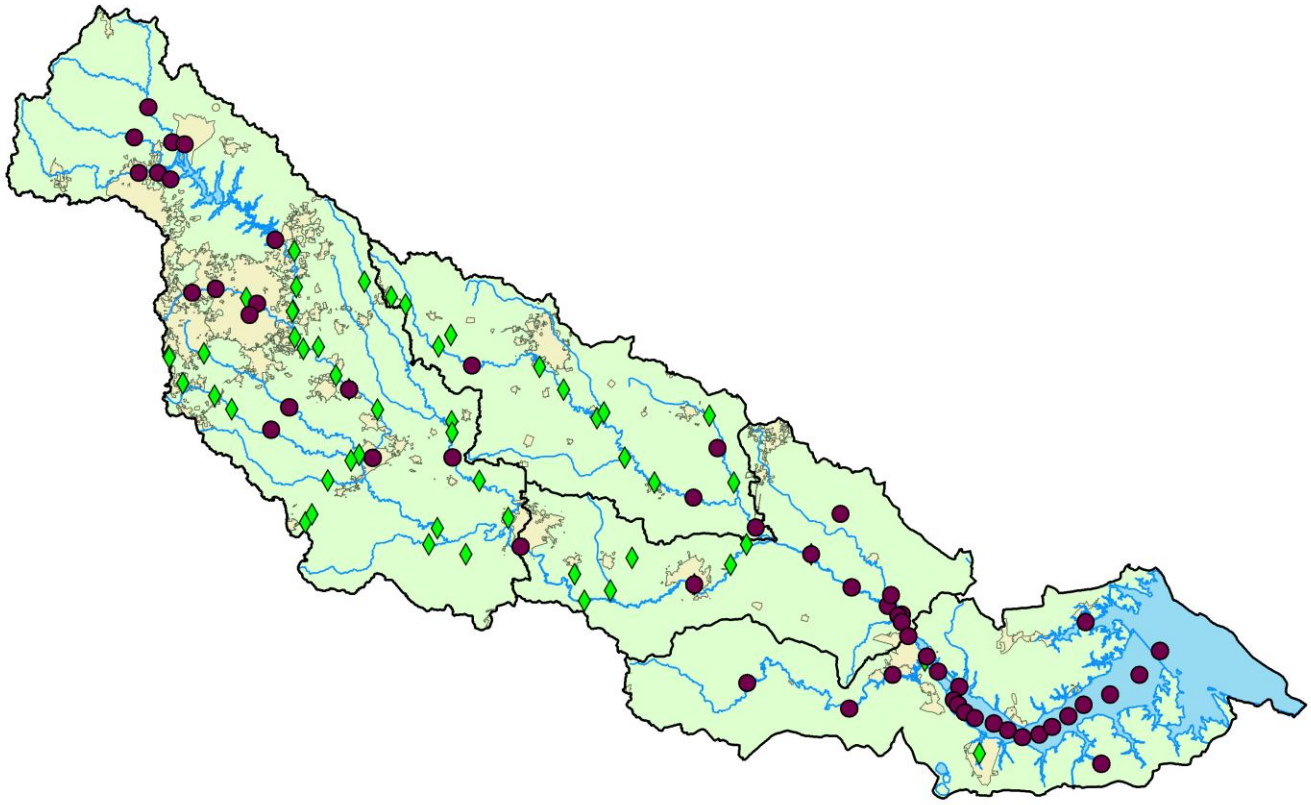
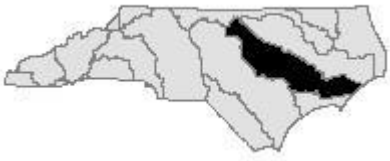


Neuse River Basin
Ambient Monitoring System Report

January 1, 2006 through December 31, 2010



Prepared by:

The North Carolina Department of Environment and Natural Resources
Division of Water Quality
Environmental Sciences Section

For more information on the Ambient Monitoring System
and electronic copies of this publication:

http://portal.ncdenr.org/web/wq/ess/eco/ams

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Evaluation Levels

In order to assist the reader in developing a rapid understanding of the summary statistics provided throughout this data review, concentrations of water quality variables may be compared to an Evaluation Level (EL). Evaluation levels may be a water quality standard, an action level, an ecological threshold, or simply an arbitrary threshold that facilitates a rapid data review. Evaluation levels are further examined for frequency to determine if they have been exceeded in more than 10 percent of the observed samples. This summary approach facilitates a rapid and straightforward presentation of the data but may not be appropriate for making specific use support decisions necessary for identification of impaired waters under the Clean Water Act's requirements for 303(d) listings. The reader is advised to review the state's 303(d) listing methodology for this purpose (http://portal.ncdenr.org/web/wq/ps/mtu/assessment).

TABLES

FIGURES

ACRONYMS

°C – degrees Celsius
colonies/100 mL – colonies [of bacteria] per 100 milliliters
AMS – Ambient Monitoring System
DO – dissolved oxygen
DWQ – Division of Water Quality
EL – evaluation level
EPA – Environmental Protection Agency
HUC – hydrologic unit code
mg/L – milligrams per liter
N – nitrogen
NC – North Carolina
NCAC – North Carolina Administrative Code
NCRWQP – North Carolina Recreational Water Quality Program
NPDES – National Pollutant Discharge Elimination System
NTU – nephelometric turbidity units
RAMS – Random Ambient Monitoring System
SOP – standard operating procedure
SR – secondary road
SSE – statistically significant exceedance
SU – standard units
TMDL – total maximum daily load
µg/L – micrograms per liter
µmhos/cm – micro-ohms per centimeter (equivalent to µS/cm, microsiemens per centimeter)
US – United States
µS/cm – microsiemens per centimeter (equivalent to µmhos/cm, micro-ohms per centimeter)
USGS – United States Geological Survey

EXECUTIVE SUMMARY

A general understanding of human activities and natural forces that affect pollution loads and their potential impacts on water quality can be obtained through routine sampling from fixed water quality monitoring stations. During this assessment period (January 1, 2006 through December 31, 2010) chemical and physical measurements were obtained by the NC Division of Water Quality (DWQ) from 54 stations located throughout the Neuse River basin. The Lower Neuse Basin Association (LNBA) collected chemical and physical measurements from 52 stations. Three of these stations were monitored by both the DWQ and the LNBA.

The DWQ uses a ten percent criterion to determine whether a water body is meeting applicable water quality standards (NC Division of Water Quality, 2012). The water quality evaluation level (EL) for a given parameter may be an ecological evaluation level, a narrative or numeric standard, or an action level as specified in 15A NCAC 2B .0200. If more than 10% of the monitoring results exceed the EL in question then the water body is not meeting the standard. In order to evaluate water quality results, a minimum of ten observations is desired.

For this report, if at least 10 results per parameter were collected for a given site, the results were compared to water quality evaluation levels. If less than 10 results were collected, then no comparison to evaluation levels was made. When more than 10 percent of the results exceeded the EL, a binomial statistical test was employed to determine the level of statistical confidence associated with the conclusion that the results truly exceeded the 10% criterion. If at least 95% confidence was found that a 10% exceedance occurred, then that was termed a statistically significant exceedance (SSE). This criterion was applied to all parameters with an evaluation level, except for fecal coliform bacteria for which a 20% exceedance criterion was applied in the same way.

Table 1 provides a summary of the problem areas identified by using these criteria. While reading the table, please note the following: The majority of the parameters listed are compared directly to water quality standards. There are two exceptions, however. The fecal coliform standard requires that five samples be taken in the span of thirty days, which was not done for this data. Therefore any fecal coliform exceedances should be taken as a recommendation to collect the data required by the standard. The second exception is the dissolved oxygen (< 5 mg/L) standard which applies to salt waters as an instantaneous minimum value, and to fresh waters as a daily average requiring the collection of at least four samples in one day. Since only one dissolved oxygen sample was collected per day at each station, exceedances of the 5 mg/L daily average standard at freshwater stations should be used for informational purposes only. The 4 mg/L standard applies to fresh waters as an instantaneous minimum value, and should be regarded as the primary evaluation level for freshwater stations. Neither standard is applicable to waters with the DWQ supplemental “Swamp Waters” (Sw) classification.

All data were collected between January 1, 2006 and December 31, 2010. The results of data analysis are displayed in tables and maps in this report. Stations with ten percent exceedances (or twenty percent exceedances of screening values for fecal coliform, as appropriate) were found for dissolved oxygen instantaneous minimum standards at ten stations (seven SSEs), pH at seven stations (three SSEs), chlorophyll *a* at five stations (three SSEs), and fecal coliform at twelve stations (three SSEs). For complete summaries on each station, reference the Station Summary Sheets located in Appendix A.

Table 1. Areas of concern in the Neuse River basin (page 1 of 2)

Agency	8-Digit HUC/ Station ID	Location	Class	Parameter/ Evaluation Level	% Exceed	% Confid
	03020201	**Upper Neuse**				
AMS	J1100000	Flat River at SR 1004 near Willardsville	WS-IV NSW CA	Dissolved Oxygen (<4 mg/L)	18.8	98
				Dissolved Oxygen (<5 mg/L)[1]	29.7	>99
AMS	J1330000	Ellerbe Creek at SR 1636 near Durham	WS-IV NSW CA	Fecal coliform (>400 colonies/100 mL)[2]	27.3	85
LNBA	J2363000	Neuse River below Milburnie Dam near Raleigh	C NSW	Dissolved Oxygen (<5 mg/L)[1]	11.1	45
AMS	J2850000	Crabtree Creek at SR 1795 near Umstead State Park	B NSW	Dissolved Oxygen (<5 mg/L)[1]	15.0	79
				Turbidity (>50 NTU)	12.5	63
LNBA	J3210000	Crabtree Creek at Lassiter Mill Dam at Raleigh	C NSW	Dissolved Oxygen (<5 mg/L)[1]	11.9	67
AMS	J3300000	Pigeon House Branch at Dortch Street at Raleigh	C NSW	Fecal coliform (>400 colonies/100 mL)[2]	95.0	>99
				Fecal coliform (geomean >200 col/100 mL)[2]	geomean = 1500.6	
LNBA	J3970000	Walnut Creek at SR 2551 Barwell Road near Raleigh	C NSW	Copper, total (>7 µg/L)	12.5	52
				Iron, total (>1 mg/L)	93.8	>99
LNBA	J4050000	Neuse River at SR 2555 Auburn Knightdale Road near Raleigh	C NSW	Turbidity (>50 NTU)	11.7	75
				Copper, total (>7 µg/L)	18.8	79
				Iron, total (>1 mg/L)	75.0	>99
				Fecal coliform (>400 colonies/100 mL)[2]	21.7	58
LNBA	J4080000	Poplar Creek at SR 2049 Bethlehem Rd near Knightdale	C NSW	Fecal coliform (>400 colonies/100 mL)[2]	24.1	74
LNBA	J4130000	Neuse River at SR 1700 Covered Bridge Road near Archers Lodge	WS-V NSW	Copper, total (>7 µg/L)	12.5	52
				Iron, total (>1 mg/L)	56.2	>99
				Manganese, total (>200 µg/L)	31.2	98
LNBA	J4170000	Neuse River at NC 42 near Clayton	WS-IV NSW	Copper, total (>7 µg/L)	18.8	79
				Iron, total (>1 mg/L)	62.5	>99
				Manganese, total (>200 µg/L)	25.0	93
LNBA	J4414000	Swift Creek at SR 1152 Holly Springs Road near Macedonia	WS-III NSW	Dissolved Oxygen (<5 mg/L)[1]	13.1	78
LNBA	J4619000	UT Middle Creek at Lufkin Road at Apex	C NSW	Dissolved Oxygen (<4 mg/L)	10.9	52
				Dissolved Oxygen (<5 mg/L)[1]	21.8	99
				Turbidity (>50 NTU)	13.5	69
				Fecal coliform (>400 colonies/100 mL)[2]	29.7	90
LNBA	J4620000	UT Middle Creek at Pristine Water Road near Apex	C NSW	Fecal coliform (>400 colonies/100 mL)[2]	40.0	88
LNBA	J4690000	Middle Creek at SR 1152 Holly Springs Road near Holly Springs	C NSW	Turbidity (>50 NTU)	11.7	61
				Fecal coliform (>400 colonies/100 mL)[2]	30.0	96
LNBA	J4868000	Middle Creek at SR 1375 Lake Wheeler Rd near Banks	C NSW	Turbidity (>50 NTU)	11.7	61
				Iron, total (>1 mg/L)	75.0	>99
				Fecal coliform (>400 colonies/100 mL)[2]	23.3	69
LNBA	J4980000	Middle Creek at SR 1006 Old Stage Road near Willow Springs	C NSW	Fecal coliform (>400 colonies/100 mL)[2]	25.0	79
LNBA	J5170000	Black Creek at SR 1162 Black Creek Rd near Four Oaks	C NSW	Dissolved Oxygen (<4 mg/L)	14.1	86
				Dissolved Oxygen (<5 mg/L)[1]	23.5	>99

Table 1 (Continued). Areas of concern in the Neuse River basin (page 2 of 2)

Agency	8-Digit HUC/ Station ID	Location	Class	Parameter/ Evaluation Level	% Exceed	% Confid
	03020201	**Upper Neuse (continued)**				
LNBA	J5250000	Neuse River at SR 1201 Richardson Bridge Road near Cox Mill	WS-IV NSW	Turbidity (>50 NTU)	11.7	61
				Copper, total (>7 µg/L)	18.8	79
				Iron, total (>1 mg/L)	75.0	>99
				Manganese, total (>200 µg/L)	18.8	79
LNBA	J5390000	Hannah Creek at SR 1158 Allens Crossroads Drive near Benson	C NSW	Dissolved Oxygen (<4 mg/L)	34.1	>99
				Dissolved Oxygen (<5 mg/L)[1]	44.7	>99
				pH (<6 SU)	22.4	>99
LNBA	J5390800	Hannah Creek at SR 1227 Ivey Road near Benson	C NSW	Dissolved Oxygen (<4 mg/L)	54.1	>99
				Dissolved Oxygen (<5 mg/L)[1]	61.2	>99
				pH (<6 SU)	12.9	77
LNBA	J5410000	Mill Creek at SR 1200 near Cox Mill	C NSW	Dissolved Oxygen (<5 mg/L)[1]	30.8	>99
				pH (<6 SU)	19.2	89
LNBA	J5500000	Falling Creek at SR 1219 Old Grantham Road near Grantham	WS-IV NSW	Dissolved Oxygen (<4 mg/L)	29.2	99
				Dissolved Oxygen (<5 mg/L)[1]	37.5	>99
LNBA	J5620000	Little River at SR 2333 Smithfield Road near Zebulon	WS-II HQW NSW	Dissolved Oxygen (<4 mg/L)	64.7	>99
				Dissolved Oxygen (<5 mg/L)[1]	72.9	>99
				pH (<6 SU)	14.1	86
	03020202	**Middle Neuse**				
LNBA	J6340000	Neuse River near SR 1802 Braxton Road near Tick Bite	C NSW	Iron, total (>1 mg/L)	93.3	>99
AMS	J8150000	Creeping Swamp at NC 43 near Vanceboro	C Sw NSW	Fecal coliform (>400 colonies/100 mL)[2]	25.4	81
	03020203	**Contentnea**				
LNBA	J6410000	Little Creek at NC 97 at Zebulon	C NSW	Dissolved Oxygen (<5 mg/L)[1]	23.5	>99
LNBA	J6500000	Moccasin Creek at SR 1131 Antioch Church Road near Conner	C NSW	Dissolved Oxygen (<4 mg/L)	12.9	77
				Dissolved Oxygen (<5 mg/L)[1]	27.1	>99
LNBA	J6680000	Turkey Crk at SR 1101 Claude Lewis Rd near Middlesex	C NSW	Dissolved Oxygen (<4 mg/L)	23.5	>99
				Dissolved Oxygen (<5 mg/L)[1]	35.3	>99
LNBA	J6890000	Contentnea Crk at SR 1622 Evansdale Rd near Wilson	C Sw NSW	Fecal coliform (>400 colonies/100 mL)[2]	26.7	87
	03020204	**Lower Neuse**				
AMS	J8570000	Neuse River 0.5 mile upstream of Union Point at New Bern	SC Sw NSW	Chlorophyll *a* (>40 µg/L)	13.4	78
AMS	J8900800	Neuse River at CM 22 near Fairfield Harbour	SC Sw NSW	Chlorophyll *a* (>40 µg/L)	19.4	98
AMS	J8902500	Neuse River at CM 2 at mouth of Broad Creek near Thurman	SB Sw NSW	Chlorophyll *a* (>40 µg/L)	19.7	98
AMS	J8903500	Neuse River at CM 17 near Thurman	SB Sw NSW	pH (>8.5 SU)	13.0	71
AMS	J8903600	Neuse River at CM 15 near Riverdale	SB Sw NSW	pH (>8.5 SU)	30.8	97
LNBA	J9330000	Slocum Creek at Slocum Road at Cherry Point	SC Sw NSW	Chlorophyll *a* (>40 µg/L)	25.0	>99
AMS	J9690000	Black Creek at SR 1300 near Merrimon	SA HQW NSW	Dissolved Oxygen (<5 mg/L)[1]	17.9	95
				pH (<6.8 SU)	19.3	98
				Chlorophyll *a* (>40 µg/L)	10.2	45
				Fecal coliform (>43 colonies/100 mL)[2]	63.3	>99
				Fecal coliform (median >14 col/100 mL)[2]	median = 80	

Notes:

[1] Applies to saltwater (class SA, SB, and SC) primarily, and to freshwater (class B, C, and WS) as a daily average. Not considered critical in freshwater areas.

[2] Fecal coliform results presented here are screening values, rather than EL exceedances, which may warrant further monitoring.

INTRODUCTION

The DWQ's Ambient Monitoring System (AMS) is a network of stream, lake, and estuarine stations strategically located for the collection of physical and chemical water quality data. The stations are located at convenient access points (e.g. bridge crossings) that are sampled on a monthly basis. These targeted locations were chosen for specific reasons, such as to characterize the effects of point source dischargers and nonpoint sources (e.g. agriculture, animal operations and urbanization) within watersheds, to determine the quality of water in water supplies or to elucidate changes over time (i.e. trends).

Also within the Neuse River basin are monitoring stations maintained and sampled by the Lower Neuse Basin Association (LNBA). The LNBA is an organization of municipalities and industries that release treated wastewater into the basin. Since its inception in 1994, the LNBA has taken an active role in monitoring water quality within the basin. As an alternative to typical state and federally required in-stream National Pollutant Discharge Elimination System (NPDES) permit monitoring requirements, the members of the LNBA collect water samples from 52 monitoring stations throughout the basin, under agreement with the DWQ. Three of the stations monitored by the LNBA are also monitored by the DWQ.

The monitoring data are used to identify long term trends within watersheds, to develop Total Maximum Daily Loads (TMDLs) and to compare measured values with water quality standards to identify possible areas of impairment. Core parameters are determined by freshwater or saltwater water body classification and corresponding water quality standards. Under this arrangement, core parameters are based on Class C waters with additional parameters added when justified (Table 2).

Within this document, an analysis of how monitoring results compare with water quality standards and evaluation levels is presented. An educational and conceptual overview of water quality standards is provided at: http://www.epa.gov/waterscience/standards. Specific information on North Carolina water quality standards is provided at: http://portal.ncdenr.org/web/wq/ps/csu. A summary of selected water quality standards is listed in Table 3.

Water quality data are evaluated in five year periods. This basin assessment report summarizes data collected from January 1, 2006 through December 31, 2010. Some stations have little or no data for one or more parameters over the period. However, for the purpose of standardization, data summaries for each station are included in this report. The locations of the sampling stations are depicted in Figure 1 and listed in Table 4 (AMS stations) and Table 5 (LNBA stations).

In January 2007 the DWQ began assessing water quality in NC from a series of randomly selected sites. A description of the Random Ambient Monitoring System (RAMS) can be found here: http://portal.ncdenr.org/web/wq/ess/eco/rams. There are currently five RAMS sites in the Neuse River basin which are being sampled during 2011 and 2012. Because the basinwide reports assess in five-year windows and RAMS stations assess water quality in two-year windows, the RAMS data are not included in the ambient reports. RAMS data will be analyzed on a statewide basis and discussed in a separate report.

Table 2. Parameters collected for the Ambient Monitoring System

Parameter	NC Administrative Code References for Standards	
	Freshwater	**Saltwater**
Dissolved oxygen (s)	15A NCAC 2B.0211(3)(b)	15A NCAC 2B.0220(3)(b)
pH (s)	15A NCAC 2B.0211(3)(g)	15A NCAC 2B.0220(3)(g)
Specific conductance	None	None
Temperature (s)	15A NCAC 2B.0211(3)(j)	15A NCAC 2B.0220(3)(k)
Total suspended solids	effluent limits only, 15A NCAC 2B.0224(1)(b)(ii)	None
Turbidity (s)	15A NCAC 2B.0211(3)(k)	15A NCAC 2B.0220(3)(l)
Fecal coliform bacteria (s)	15A NCAC 2B.0211(3)(e); 15A NCAC 2B.0219(3)(b)	15A NCAC 2B.0221(3)(d)
Nutrients:		
- Total phosphorus	None	None
- Ammonia as N	None	None
- Total Kjeldahl as N	None	None
- Nitrate+nitrite as N (s)	15A NCAC 2B.0212(3)(h)(i)(E)	None
Chlorophyll *a* (s)	15A NCAC 2B.0211(3)(a)	15A NCAC 2B.0220(3)(a)

Notes:
An (s) indicates the parameter has a numeric standard.
Chlorophyll *a* and nutrient sampling are only done in areas of concern, such as NSW, estuaries, lakes and areas with known enrichment issues.

Table 3. Selected Water Quality Standards[1]

	Standards for All Freshwater			Standards to Support Additional Uses		
Parameter	**Aquatic Life**	**Human Health**	**Water Supply Classifications**	**Trout Water**	**HQW**	**Swamp Waters**
Chloride (mg/L)	230	-	250	-	-	-
Chlorophyll *a* (µg/L)	40	-	-	15	-	-
Coliform, fecal (MFFCC/100 mL)[2]	-	200 / 400[2]	-	-	-	-
Dissolved oxygen (mg/L)	4.0 / 5.0[3]	-	-	6.0	6.0	-
Hardness, total (mg/L)	-	-	100	-	-	-
Nitrate nitrogen (mg/L)	-	-	10	-	-	-
pH (standard units)	6.0 - 9.0[4]	-	-	-	-	4.3[4]
Solids, total suspended (mg/L)	-	-	-	10 HQW[5]	20 (10 Tr)[5]	-
Turbidity (NTU)	25 / 50[6]	-	-	10	-	-

Notes:
[1]Standards apply to all classifications. For the protection of water supply and supplemental classifications, standards listed under Standards to Support Additional Uses should be used unless standards for aquatic life or human health are listed and are more stringent. Standards are the same for all water supply classifications (Administrative Code 15A NCAC 2B.0200, eff. May 1, 2007).
- There is not a numeric standard for this parameter in this water use category.
[2]MFFCC = Membrane filter fecal coliform count per 100 mL of sample. Fecal coliform shall not exceed a geometric mean of 200 MFFCC/100 mL, nor exceed 400 MFFCC/100 mL in over 20 percent of samples. Evaluation of each standard requires a minimum of five samples in a 30-day period.
[3]An instantaneous reading may be as low as 4.0 mg/L; the daily average must be 5.0 mg/L or more.
[4]Designated swamp waters may have pH as low as 4.3 if due to natural conditions.
[5]For effluent limits only, see 15A NCAC 2B.0224(1)(b)(ii).
[6]The 50 NTU standard applies to streams not designated as trout waters; the 25 NTU standard applies to lakes and reservoirs not designated as trout waters.

	Standards for All Saltwater		Standards To Support Additional Uses	
Parameter	**Aquatic Life**	**Class SA[1]**	**HQW**	**Swamp Waters**
Chlorophyll *a* (µg/L , corrected)	40[2]	-	-	-
Coliform, fecal (MFFCC/100 mL)	-	14 / 43[3]	-	-
Dissolved oxygen (mg/L)	5.0[2]	-	6.0[6]	[7]
pH (standard units)	6.8 - 8.5[2]	-	-	4.3[4]
Solids, total suspended (mg/L)	-	-	10 PNA[5], 20 other[6]	-
Turbidity (NTU)	25[2]	-	-	-

Notes:
[1]Class SA = shellfishing waters, see 15A NCAC 2B.0101(d)(3) for description. Except as specified in 15A NCAC 2B.0221, standards for all saltwater also apply to SA waters.
[2]See 15A NCAC 2B.0220(3) for narrative description of limits.
[3]See 15A NCAC 2B.0221(3)(d) for narrative description of limits.
[4]Designated swamp waters may have pH as low as 4.3 if due to natural conditions.
[5]PNA = Primary Nursery Areas.
[6]For effluent limits only, see 15A NCAC 2B.0224(1)(b)(ii).
[7]Swamp waters, poorly flushed tidally influenced streams or embayments, or estuarine bottom waters may have lower values if caused by natural conditions.

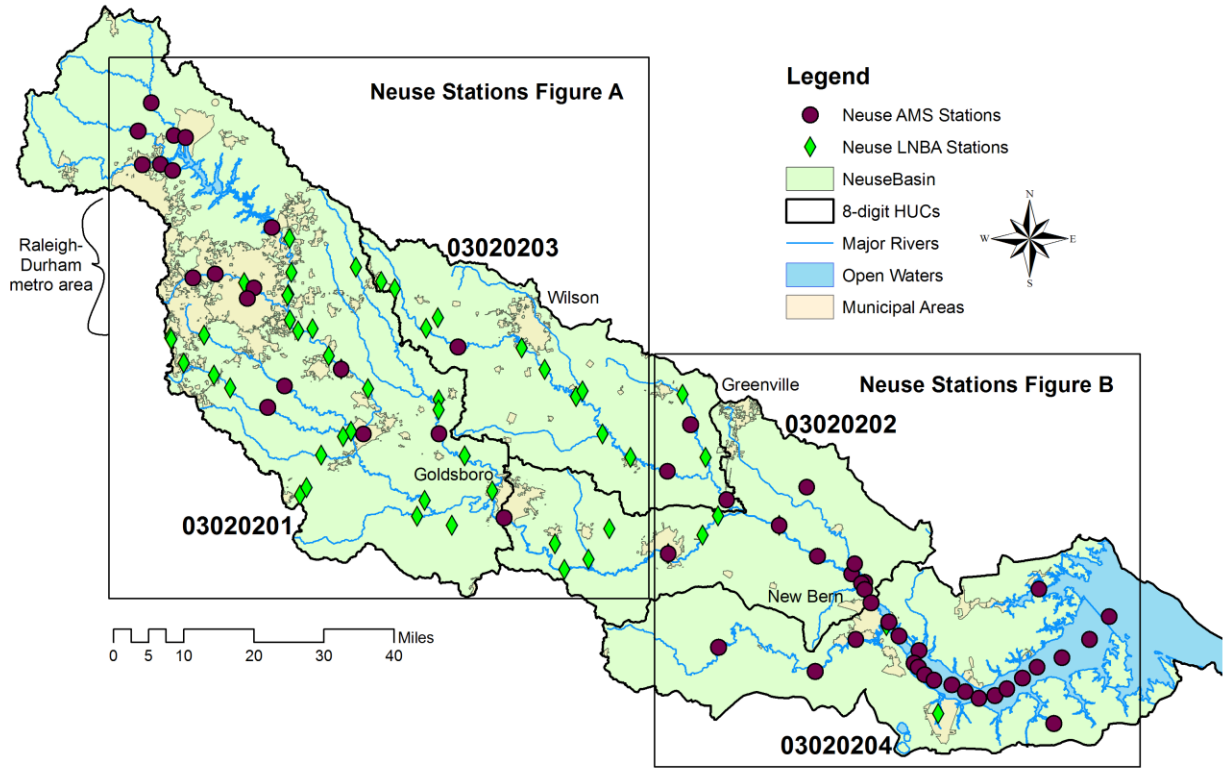

Figure 1. The DWQ Ambient Monitoring System and the LNBA monitoring stations in the Neuse River basin

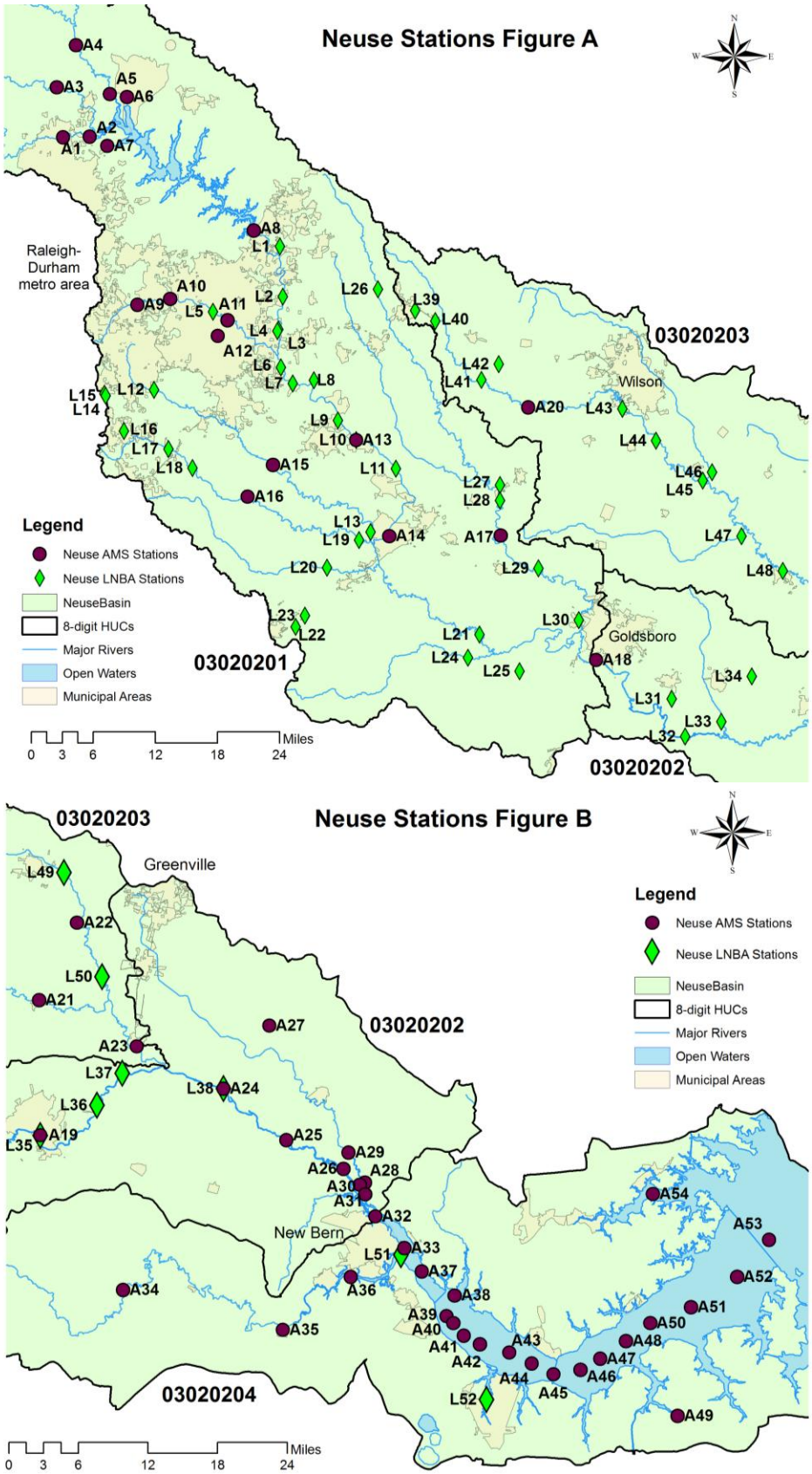

Figure 1 (continued). Detailed views of the DWQ AMS and the LNBA monitoring stations in the Neuse Basin

Table 4. AMS monitoring stations in the Neuse River basin, 2006 - 2010 (1 of 2)

Map ID	8-Digit HUC/ Station ID	Location	Class	Latitude	Longitude
	03020201	**Upper Neuse**			
A1	J0770000	Eno River at US 501 near Durham	WS-IV NSW	36.07197	-78.90864
A2	J0810000	Eno River at SR 1004 near Durham	WS-IV NSW	36.07254	-78.86270
A3	J0820000	Little River at SR 1461 near Orange Factory	WS-II HQW NSW	36.14159	-78.91930
A4	J1070000	Flat River at SR 1614 near Quail Roost	WS-III NSW	36.20021	-78.88615
A5	J1100000	Flat River at SR 1004 near Willardsville	WS-IV NSW CA	36.13186	-78.82784
A6	J1210000	Knap of Reeds Creep at WWTP Outfall near Butner	WS-IV NSW	36.12797	-78.79852
A7	J1330000	Ellerbe Creek at SR 1636 near Durham	WS-IV NSW CA	36.05949	-78.83225
A8	J1890000	Neuse River at SR 2000 near Falls	WS-IV NSW	35.94077	-78.58010
A9	J2850000	Crabtree Creek at SR 1795 near Umstead State Park	B NSW	35.83770	-78.78084
A10	J3000000	Crabtree Creek at SR 1649 near Raleigh	B NSW	35.84545	-78.72444
A11	J3251000	Crabtree Creek at SR 2000 Old Wake Forest Road at Raleigh	C NSW	35.81584	-78.62568
A12	J3300000	Pigeon House Branch at Dortch Street at Raleigh	C NSW	35.79387	-78.64262
A13	*J4170000*	*Neuse River at NC 42 near Clayton*	*WS-IV NSW*	*35.64732*	*-78.40567*
A14	J4370000	Neuse River at US 70 Business at Smithfield	WS-V NSW	35.51283	-78.34988
A15	J4510000	Swift Creek at NC 42 near Clayton	C NSW	35.61314	-78.54863
A16	J5000000	Middle Creek at NC 50 near Clayton	C NSW	35.56894	-78.59230
A17	J5850000	Little River at SR 2320 near Princeton	WS-V NSW	35.51252	-78.15883
	03020202	**Middle Neuse**			
A18	J5970000	Neuse River at SR 1915 near Goldsboro	C NSW	35.33712	-77.99734
A19	*J6150000*	*Neuse River at NC 11 at Kinston*	*C NSW*	*35.25879*	*-77.58353*
A24	*J7850000*	*Neuse River at SR 1470 near Fort Barnwell*	*C Sw NSW*	*35.31389*	*-77.30302*
A25	J7860000[1]	Neuse River at Redhill Landing near Perfection	C Sw NSW	35.24790	-77.20820
A26	J7930000	Neuse River at SR 1400 at Streets Ferry	C Sw NSW	35.21060	-77.12220
A27	J8150000	Creeping Swamp at NC 43 near Vanceboro	C Sw NSW	35.39164	-77.23134
A28	J8210000	Swift Creek at Mouth near Askin	SC Sw NSW	35.19278	-77.08984
A29	J8230000	Swift Creek at NC 43 near Streets Ferry	SC Sw NSW	35.23105	-77.11388
A30	J8250000	Neuse River at CM 68 below Swift Creek near Askin	SC Sw NSW	35.19009	-77.09784
A31	J8270000[2]	Neuse River at CM 64 near Bellair	SC Sw NSW	35.17801	-77.09004
A32	J8290000	Neuse River at CM 52 at mouth of Narrows near Washington Forks	SC Sw NSW	35.15010	-77.07493
	03020203	**Contentnea**			
A20	J6740000	Contentnea Creek at NC 581 near Lucama	WS-V NSW	35.69142	-78.10928
A21	J7450000	Contentnea Creek at NC 123 at Hookerton	C Sw NSW	35.42864	-77.58265
A22	J7739550	Little Contentnea Creek at SR 1125 near Ballards Crossroads	C Sw NSW	35.52490	-77.52271
A23	J7810000	Contentnea Creek near SR 1800 at Grifton	C Sw NSW	35.36852	-77.43412

Table 4 (Continued). AMS monitoring stations in the Neuse River basin, 2006 - 2010 (2 of 2)

Map ID	8-Digit HUC/ Station ID	Location	Class	Latitude	Longitude
	03020204	**Lower Neuse**			
A33	J8570000	Neuse River 0.5 mile upstream of Union Point at New Bern	SC Sw NSW	35.10972	-77.03174
A34	J8690000	Trent River at SR 1129 near Trenton	C Sw NSW	35.06364	-77.46107
A35	J8730000	Trent River at US 17 at Pollocksville	C Sw NSW	35.00993	-77.21891
A36	J8770000	Trent River at CM 14 above Reedy Bridge near Rhems	SB Sw NSW	35.07508	-77.11441
A37	J8900800	Neuse River at CM 22 near Fairfield Harbour	SC Sw NSW	35.07989	-77.00607
A38	J8902500	Neuse River at CM 2 at mouth of Broad Creek near Thurman	SB Sw NSW	35.04898	-76.95687
A39	J8903500[3]	Neuse River at CM 17 near Thurman	SB Sw NSW	35.02335	-76.96950
A40	J8903600[4]	Neuse River at CM 15 near Riverdale	SB Sw NSW	35.01447	-76.95992
A41	J8910000	Neuse River at CM 11 near Riverdale	SB Sw NSW	34.99860	-76.94418
A42	J8920000[5]	Neuse River near Kennel Beach	SB Sw NSW	34.98711	-76.91987
A43	J8925000[6]	Neuse River near Arapahoe	SB Sw NSW	34.97617	-76.87562
A44	J9431500[7]	Neuse River near Cherry Point MCAS	SB Sw NSW	34.96170	-76.84182
A45	J9530000	Neuse River at CM 9 near Minnesott Beach	SA HQW NSW	34.94760	-76.80875
A46	J9540000[8]	Neuse River near Pierce	SA HQW NSW	34.95234	-76.76804
A47	J9590000[9]	Neuse River near Janeiro	SA HQW NSW	34.96601	-76.73751
A48	J9685000[10]	Neuse River near Merrimon	SA HQW NSW	34.98733	-76.69781
A49	J9690000	Black Creek at SR 1300 near Merrimon	SA HQW NSW	34.89201	-76.62200
A50	J9810000	Neuse River at CM 7 near Oriental	SA HQW NSW	35.00888	-76.66037
A51	J9860000[11]	Neuse River near Cockle Point	SA HQW NSW	35.02759	-76.59756
A52	J9900000[12]	Neuse River near Piney Point	SA HQW NSW	35.06442	-76.52654
A53	J9930000	Neuse River at CM at mouth near Pamlico	SA HQW NSW	35.10997	-76.47607
A54	J9950000[13]	Bay River at CM 5 near Vandemere	SA HQW NSW	35.17057	-76.65155

Notes:

Stations in italics are colocated monitoring points for both AMS and LNBA: J4170000, J6150000, J7850000.

[1]Station J7860000 ceased collection on 01/01/2007.

[2]Station J8270000 ceased collection on 01/01/2007.

[3]Station J8903500 ceased collection on 09/01/2010.

[4]Station J8903600 ceased collection on 01/01/2007.

[5]Station J8920000 ceased collection on 09/01/2010.

[6]Station J8925000 ceased collection on 09/01/2010.

[7]Station J9431500 ceased collection on 09/01/2010.

[8]Station J9540000 ceased collection on 09/01/2010.

[9]Station J9590000 ceased collection on 09/01/2010.

[10]Station J9685000 ceased collection on 09/01/2010.

[11]Station J9860000 ceased collection on 09/01/2010.

[12]Station J9900000 ceased collection on 09/01/2010.

[13]Station J9950000 ceased collection on 09/01/2010.

Table 5. LNBA monitoring stations in the Neuse River basin, 2006 - 2010 (1 of 2)

Map ID	8-Digit HUC/ Station ID	Location	Class	Latitude	Longitude
	03020201	**Upper Neuse**			
L1	J2230000	Smith Creek at SR 2045 Burlington Mill Road near Wake Forest	C NSW	35.91820	-78.53480
L2	J2330000	Neuse River at SR 2215 Buffalo Road near Neuse	C NSW	35.84790	-78.53020
L3	J2360000	Neuse River above Milburnie Dam near Raleigh	C NSW	35.80220	-78.53860
L4	J2363000[1]	Neuse River below Milburnie Dam near Raleigh	C NSW	35.80019	-78.54001
L5	J3210000	Crabtree Creek at Lassiter Mill Dam at Raleigh	C NSW	35.82720	-78.65080
L6	J3970000	Walnut Creek at SR 2551 Barwell Road near Raleigh	C NSW	35.74930	-78.53450
L7	J4050000	Neuse River at SR 2555 Auburn Knightdale Road near Raleigh	C NSW	35.72660	-78.51390
L8	J4080000	Poplar Creek at SR 2049 Bethlehem Rd near Knightdale	C NSW	35.73090	-78.47760
L9	J4130000	Neuse River at SR 1700 Covered Bridge Road near Archers Lodge	WS-V NSW	35.67490	-78.43640
L10	*J4170000*	*Neuse River at NC 42 near Clayton*	*WS-IV NSW*	*35.64730*	*-78.40560*
L11	J4190000	Neuse River at SR 1908 Fire Department Drive near Wilsons Mills	WS-IV NSW	35.60670	-78.33740
L12	J4414000	Swift Creek at SR 1152 Holly Springs Road near Macedonia	WS-III NSW	35.71870	-78.75270
L13	J4590000	Swift Creek at NC 210 near Smithfield	C NSW	35.51860	-78.38190
L14	J4619000	UT Middle Creek at Lufkin Road at Apex	C NSW	35.71311	-78.83807
L15	J4620000[2]	UT Middle Creek at Pristine Water Road near Apex	C NSW	35.71058	-78.83592
L16	J4690000	Middle Creek at SR 1152 Holly Springs Road near Holly Springs	C NSW	35.66090	-78.80420
L17	J4868000	Middle Creek at SR 1375 Lake Wheeler Rd near Banks	C NSW	35.63560	-78.72790
L18	J4980000	Middle Creek at SR 1006 Old Stage Road near Willow Springs	C NSW	35.60910	-78.68660
L19	J5010000	Middle Creek at NC 210 near Smithfield	C NSW	35.50750	-78.40130
L20	J5170000	Black Creek at SR 1162 Black Creek Rd near Four Oaks	C NSW	35.46925	-78.45681
L21	J5250000	Neuse River at SR 1201 Richardson Bridge Road near Cox Mill	WS-IV NSW	35.37410	-78.19620
L22	J5390000	Hannah Creek at SR 1158 Allens Crossroads Drive near Benson	C NSW	35.38677	-78.51096
L23	J5390800	Hannah Creek at SR 1227 Ivey Road near Benson	C NSW	35.40245	-78.49520
L24	J5410000	Mill Creek at SR 1200 near Cox Mill	C NSW	35.34195	-78.21623
L25	J5500000	Falling Creek at SR 1219 Old Grantham Road near Grantham	WS-IV NSW	35.32239	-78.12815
L26	J5620000	Little River at SR 2333 Smithfield Road near Zebulon	WS-II HQW NSW	35.85770	-78.36650
L27	J5690000	Little River at US 301 near Kenly	WS-V NSW	35.58290	-78.15930
L28	J5750000	Little River at SR 2339 Bagley Road near Lowell Mill	WS-V NSW	35.56128	-78.15935
L29	J5900000	Little River at SR 1234 Capps Br Rd near Crossroads	WS-IV NSW	35.46620	-78.09420
L30	J5930000	Little River at NC 581 at Asylum	C NSW	35.39300	-78.02580

Table 5 (Continued). LNBA monitoring stations in the Neuse River basin, 2006 - 2010 (2 of 2)

Map ID	8-Digit HUC/ Station ID	Location	Class	Latitude	Longitude
	03020202	**Middle Neuse**			
L31	J6010950	Walnut Creek at SR 1730 Saint Johns Church Road near Walnut Creek	C NSW	35.28170	-77.86860
L32	J6024000	Neuse River at SR 1731 near Seven Springs	C NSW	35.22900	-77.84600
L33	J6044500	Bear Creek at SR 1311 Bear Creek Road near Kinston	WS IV Sw NSW	35.24890	-77.78430
L34	J6055000	Mosley Creek at SR 1327 Willey Measley Road near LaGrange	C Sw NSW	35.31190	-77.73130
L35	*J6150000*	*Neuse River at NC 11 at Kinston*	*C NSW*	*35.25870*	*-77.58350*
L36	J6250000	Neuse River at NC 55 near Graingers	C NSW	35.29570	-77.49620
L37	J6340000[3]	Neuse River near SR 1802 Braxton Road near Tick Bite	C NSW	35.33527	-77.45702
L38	*J7850000*	*Neuse River at SR 1470 Maple Cypress Road near Fort Barnwell*	*C Sw NSW*	*35.31389*	*-77.30302*
	03020203	**Contentnea**			
L39	J6410000	Little Creek at NC 97 at Zebulon	C NSW	35.82786	-78.30247
L40	J6450000	Little Creek at NC 39 at Zebulon	C NSW	35.81250	-78.26810
L41	J6500000	Moccasin Creek at SR 1131 Antioch Church Road near Conner	C NSW	35.73010	-78.18950
L42	J6680000	Turkey Crk at SR 1101 Claude Lewis Rd near Middlesex	C NSW	35.75190	-78.15970
L43	J6764000	Contentnea Creek at US 301 Ward Blvd near Dixie	C Sw NSW	35.68790	-77.94770
L44	J6890000	Contentnea Crk at SR 1622 Evansdale Rd near Wilson	C Sw NSW	35.64290	-77.89020
L45	J7210000	Contentnea Creek at NC 58 near Stantonsburg	C Sw NSW	35.58610	-77.81110
L46	J7240000	Toisnot Swamp at SR 1539 Sand Pit Road near Stantonsburg	C Sw NSW	35.59760	-77.79470
L47	J7325000	Nahunta Swamp at NC 58 near Contentnea	C Sw NSW	35.50810	-77.74550
L48	J7330000	Contentnea Creek at US 13 at Snow Hill	C Sw NSW	35.45850	-77.67530
L49	J7690000	Little Contentnea Creek at SR 1218 Chinquapin Road near Farmville	C Sw NSW	35.58810	-77.54160
L50	J7740000	Little Contentnea Creek at SR 1110 Highway 903 at Scuffleton	C Sw NSW	35.45670	-77.48540
	03020204	**Lower Neuse**			
L51	J8870000	Trent River at East Front Street at New Bern	SB Sw NSW	35.10159	-77.03708
L52	J9330000	Slocum Creek at Slocum Road at Cherry Point	SC Sw NSW	34.91770	-76.91150

Notes:

Stations in italics are colocated monitoring points for both AMS and LNBA: J4170000, J6150000, J7850000.

[1]Station J2363000 ceased collection on 01/31/2007.

[2]Station J4620000 ceased collection on 01/31/2007.

[3]Station J6340000 ceased collection on 01/31/2009.

Primary Water Use Classifications
C: Aquatic Life
B: Primary Recreation
WS-I, WS-II, WS-III, WS-IV, WS-V: Water Supply
SA: Saltwater Shellfish Harvesting
SB: Saltwater Primary Recreation
SC: Saltwater Aquatic Life

Secondary Water Use Classifications
Sw: Swamp Water
HQW: High Quality Water
ORW: Outstanding Resource Water
Tr: Trout Waters
CA, +: Critical Area
NSW: Nutrient Sensitive Waters

DATA ASSESSMENT AND INTERPRETATION

Monitoring and sampling results considered in this report represent samples collected or measurements taken at less than one-meter depth, except for chlorophyll *a*, which may be collected as a composite over the entire photic depth. The AMS and LNBA data are available online from the US Environmental Protection Agency's Storage and Retrieval (STORET) Data Warehouse. Links to STORET and instructions for accessing data from STORET are provided on the DWQ's AMS website at http://portal.ncdenr.org/web/wq/ess/eco/ams.

Percentile statistics were calculated using JMP statistical software (version 8.0.2; SAS Institute, Cary, NC). Values less than the minimum reporting level (non-detects) were evaluated as equal to the reporting level.

Providing Confidence in the Exceedances of Water Quality Standards

Historically, the DWQ has used guidance provided by the US Environmental Protection Agency (EPA) for determining when the number of results that exceed a water quality standard indicate potential water quality issues (US Environmental Protection Agency, 1997). The EPA has suggested that management actions be implemented when ten percent of the results exceed a water quality standard. This interpretation is the same whether one out of ten, five out of 50, or 25 out of 250 results exceed a standard. Evaluating exceedances in this manner is termed the "raw-score" approach. Although this "ten percent exceedance criterion" defines a point where potential water quality issues may be present, it does not consider uncertainty. Some results are subject to chance or other factors such as calibration errors or sample mishandling. Uncertainty levels change with sample size: the smaller the sample size, the greater the uncertainty. Therefore, applying the raw-score approach to small sample sizes could result in an impairment listing of a stream that is not really impaired.

This document uses a nonparametric procedure (Lin *et al.,* 2000) to identify when a sufficient number of exceedances have occurred that indicate a true exceedance probability of ten percent. Calculating the minimum number of exceedances needed for a particular sample size was done using the BINOMDIST function in Microsoft Excel®. This statistical function suggests that at least three exceedances need to be observed in a sample of ten in order to be about 95 percent confident that the results statistically exceed the water quality standard more than 10% of the time. For example, there is less statistical confidence associated with two exceedance out of ten (74 percent confidence) than when there are three exceedances out of ten (93 percent confidence) (Table 6).

Table 6. Exceedance Confidence

Number of Samples	Number of Exceedances																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
10	35%	74%	93%	99%	100%	100%	100%	100%	100%	100%	100%							
12	28%	66%	89%	97%	100%	100%	100%	100%	100%	100%	100%	100%						
14	23%	58%	84%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%				
16	19%	51%	79%	93%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
18	15%	45%	73%	90%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
20	12%	39%	68%	87%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
22	10%	34%	62%	83%	94%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
24	8%	29%	56%	79%	91%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
26	6%	25%	51%	74%	89%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
28	5%	22%	46%	69%	86%	94%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
30	4%	18%	41%	65%	82%	93%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
32	3%	16%	37%	60%	79%	91%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
34	3%	13%	33%	55%	75%	88%	95%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%
36	2%	11%	29%	51%	71%	85%	94%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%
38	2%	10%	25%	46%	67%	83%	92%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%
40	1%	8%	22%	42%	63%	79%	90%	96%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%
42	1%	7%	20%	38%	59%	76%	88%	95%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%
44	1%	6%	17%	35%	55%	73%	85%	93%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%
46	1%	5%	15%	31%	51%	69%	83%	92%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%
48	1%	4%	13%	28%	47%	65%	80%	90%	95%	98%	99%	100%	100%	100%	100%	100%	100%	100%
50	1%	3%	11%	25%	43%	62%	77%	88%	94%	98%	99%	100%	100%	100%	100%	100%	100%	100%
52	0%	3%	10%	22%	40%	58%	74%	86%	93%	97%	99%	100%	100%	100%	100%	100%	100%	100%
54	0%	2%	8%	20%	36%	54%	71%	83%	91%	96%	98%	99%	100%	100%	100%	100%	100%	100%
56	0%	2%	7%	18%	33%	51%	67%	81%	90%	95%	98%	99%	100%	100%	100%	100%	100%	100%
58	0%	2%	6%	16%	30%	47%	64%	78%	88%	94%	97%	99%	100%	100%	100%	100%	100%	100%
60	0%	1%	5%	14%	27%	44%	61%	75%	86%	93%	97%	99%	99%	100%	100%	100%	100%	100%
62	0%	1%	5%	12%	24%	40%	57%	72%	84%	91%	96%	98%	99%	100%	100%	100%	100%	100%
64	0%	1%	4%	11%	22%	37%	54%	69%	81%	90%	95%	98%	99%	100%	100%	100%	100%	100%
66	0%	1%	3%	9%	20%	34%	51%	66%	79%	88%	94%	97%	99%	99%	100%	100%	100%	100%
68	0%	1%	3%	8%	18%	31%	47%	63%	76%	86%	93%	96%	98%	99%	100%	100%	100%	100%
70	0%	1%	2%	7%	16%	29%	44%	60%	74%	84%	91%	96%	98%	99%	100%	100%	100%	100%
72	0%	0%	2%	6%	14%	26%	41%	57%	71%	82%	90%	95%	97%	99%	100%	100%	100%	100%
74	0%	0%	2%	5%	13%	24%	38%	54%	68%	80%	88%	94%	97%	99%	99%	100%	100%	100%
76	0%	0%	1%	5%	11%	22%	35%	51%	65%	77%	86%	93%	96%	98%	99%	100%	100%	100%
78	0%	0%	1%	4%	10%	20%	33%	48%	62%	75%	85%	91%	95%	98%	99%	100%	100%	100%
80	0%	0%	1%	4%	9%	18%	30%	45%	59%	72%	83%	90%	95%	97%	99%	99%	100%	100%
82	0%	0%	1%	3%	8%	16%	28%	42%	56%	70%	81%	88%	94%	97%	98%	99%	100%	100%
84	0%	0%	1%	3%	7%	14%	25%	39%	53%	67%	78%	87%	93%	96%	98%	99%	100%	100%
86	0%	0%	1%	2%	6%	13%	23%	36%	51%	64%	76%	85%	91%	95%	98%	99%	100%	100%
88	0%	0%	1%	2%	5%	12%	21%	34%	48%	62%	74%	83%	90%	95%	97%	99%	99%	100%
90	0%	0%	0%	2%	5%	10%	19%	31%	45%	59%	71%	81%	89%	94%	97%	98%	99%	100%
92	0%	0%	0%	1%	4%	9%	17%	29%	42%	56%	69%	79%	87%	93%	96%	98%	99%	100%
94	0%	0%	0%	1%	4%	8%	16%	27%	39%	53%	66%	77%	86%	92%	95%	98%	99%	99%
96	0%	0%	0%	1%	3%	7%	14%	24%	37%	50%	64%	75%	84%	90%	95%	97%	99%	99%
98	0%	0%	0%	1%	3%	6%	13%	22%	34%	48%	61%	73%	82%	89%	94%	97%	98%	99%
100	0%	0%	0%	1%	2%	6%	12%	21%	32%	45%	58%	70%	80%	88%	93%	96%	98%	99%

Note: Shaded entries indicate at least 95% confidence that at least 10% of the possible samples exceed the standard/evaluation level.

Methods Used to Summarize Results

Methods used to summarize the results in this report encompass both tabular and graphical formats. Individual summary sheets for each station provide details on station location and stream classification, along with specifics on what parameters were measured, the number of samples taken (i.e. sample size), the number of results below reporting levels, the number of results exceeding a water quality standard or evaluation level, statistical confidence that 10% of results exceeded the evaluation level, and a general overview of the distribution of the results using percentiles. These station summary sheets provide the greatest details on a station-by-station basis. They are included as Appendix A to this report.

Use Support Assessment Considerations

1) The freshwater dissolved oxygen concentrations of 5.0 mg/L and 4.0 mg/L are presented as evaluation levels. Instantaneous concentrations of 4.0 mg/L or less (5.0 mg/L in salt water) are in violation of the standard unless caused by natural (e.g. swampy) conditions. The 5.0 mg/L evaluation level is based upon a freshwater standard which specifies "not less than a daily average of 5.0 mg/L" (15A NCAC 2B.0211(3)(b)).
2) The geometric mean and percentage of results greater than evaluation level threshold values were calculated for fecal coliform results for each station as appropriate for stream class.
3) The accuracy of results is limited by natural variation within a site and by the abilities of analytical equipment. Results that are returned at very close to evaluation levels may be within the margin of error for the accuracy of field equipment or laboratory instrumentation. Meters commonly used for in-field measurements of temperature, specific conductance, dissolved oxygen, and pH of surface waters at AMS stations may have manufacturer accuracy specifications of up to ± 0.2 °C, ± 1% of reading or ± 1 µS/cm (whichever is greater), ± 0.6 mg/L, and ± 0.2 standard pH units, respectively. Results from laboratory analyses are considered reliable when they are at or above practical quantitation limits (PQLs, available at http://portal.ncdenr.org/web/wq/lab/staffinfo/techassist) and meet laboratory quality assurance protocols, including a defined acceptable margin of error (http://portal.ncdenr.org/web/wq/lab/qualityassurance).

Specific information on water quality standards and action levels can be found in 15A NCAC 2B.0200 (available at http://portal.ncdenr.org/web/wq/ps/csu/rules).

PARAMETERS

Dissolved Oxygen

Dissolved oxygen is one of the most important of all of the chemical measurements. Dissolved oxygen provides valuable information about the ability of the water to support aquatic life and the capacity of water to assimilate point and nonpoint discharges. Water quality standards for dissolved oxygen vary depending on the classification of the body of water. For freshwater, 15A NCAC 02B .0211 (3)(b) specifies:

Dissolved oxygen: not less than 6.0 mg/l for trout waters; for non-trout waters, not less than a daily average of 5.0 mg/l with a minimum instantaneous value of not less than 4.0 mg/l; swamp waters, lake coves or backwaters, and lake bottom waters may have lower values if caused by natural conditions.

For saltwater, 15A NCAC 02B .0220 (3)(b) applies instead:

Dissolved oxygen: not less than 5.0 mg/l, except that swamp waters, poorly flushed tidally influenced streams or embayments, or estuarine bottom waters may have lower values if caused by natural conditions.

Many of the surface waters in the lower hydrologic units of the Neuse River basin display physical and chemical characteristics, including low dissolved oxygen and pH values, of swamp waters, and have been assigned a Swamp (Sw) supplemental classification by the DWQ.

pH

The scale for measuring pH is logarithmic (i.e. a pH of 8.0 is ten times less concentrated in hydrogen ions than a pH of 7.0). A pH value of 7.0 Standard Units (SU) is neutral, while lower values are more acidic and higher values are more basic. The pH of ambient waters varies naturally depending upon interaction with soils and in-stream constituents, upstream inputs, and conditions in the surrounding environment. Point source discharges can also influence the pH of a stream. Values much lower than 7.0 SU may be found in waters rich in dissolved organic matter (e.g. swamp lands). Values much greater than 7.0 SU may be observed during algal blooms. The water quality standards for pH in fresh waters consider values less than 6.0 SU or greater than 9.0 SU to warrant attention. For salt waters, the acceptable range is narrower: 6.8 SU to 8.5 SU. In swamp waters, a pH below 4.3 SU is of concern.

Lower pH evaluation levels (<6 SU) were exceeded more than ten percent of the time at four freshwater monitoring stations in the Upper Neuse 8-digit hydrologic unit 03020201. One station exceeded lower (<6.8 SU) and two stations exceeded higher (>8.5 SU) pH evaluation levels more than ten percent of the time in the saltwaters of the Lower Neuse 8-digit hydrologic unit 03020204. No ten percent exceedances were observed in the Middle Neuse or Contentnea 8-digit hydrologic units, 03020202 and 03020203, during the current assessment timeframe.

Conductivity

Specific conductance is a measure of the ability of water to conduct an electric current. It is reported in microsiemens per centimeter (µS/cm) at 25°C. The presence of ions and temperature are major factors in the ability of water to conduct a current. Clean freshwater has a low specific conductance, whereas high specific conductance values may indicate polluted water or saline conditions. Measurements reported are corrected for temperature, thus the range of values reported over a period of time indicate the relative presence of ions in water.

Specific conductance can be used to evaluate variations in dissolved mineral concentrations (ions) among sites with varying degrees of impact resulting from point source discharges. Generally, impacted sites show elevated and widely ranging values for specific conductance. Water bodies that contain saltwater will also have high specific conductance values. Therefore those wishing to use specific conductance as an indicator for problems must first account for salinity.

Turbidity

Turbidity data may denote episodic high values on particular dates or within narrow time periods. These can often be the result of intense or sustained rainfall events; however elevated values can occur at other times. In coastal areas, tidal surges can also disturb shallow estuarine sediments and naturally increase turbidity.

For freshwater, 15A NCAC 02B .0211 (3)(k) specifies:

Turbidity: the turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural conditions, the existing turbidity level shall not be increased.

For saltwater, 15A NCAC 02B .0220 (3)(l) applies instead:

Turbidity: the turbidity in the receiving water shall not exceed 25 NTU; if turbidity exceeds these levels due to natural conditions, the existing turbidity level shall not be increased.

Turbidity results exceeded the relevant evaluation levels more than ten percent of the time at six monitoring stations in the Neuse River basin during the current assessment timeframe.

Metals

A number of metals are essential micronutrients for the support of aquatic life. However, there are threshold concentrations over which metals can be harmful. Traditionally, the DWQ has considered total metals concentrations in surface waters to evaluate potential adverse effects on human and aquatic life. However, metals can exist in many forms within the water column. Scientific investigation has revealed that different forms present different levels of risk to aquatic organisms (US Environmental Protection Agency, 2007). Therefore, as of May 2007, the DWQ suspended routine collection of total metals at AMS stations, and is currently reviewing water quality standards for metals.

Most of the stations in the Neuse basin had less than ten total metals results from quarterly sampling during 2006 and 2007 before the suspension. However, samples were collected monthly and analyzed for total metals from seven LNBA stations during that timeframe, returning 15 to 16 sets of results per station. Iron, which naturally occurs in North Carolina surface waters, was detected at all of the freshwater monitoring stations. Copper and manganese exceeded the evaluation levels (7 µg/L and 200 µg/L, respectively) in place at the time of sampling more than ten percent of the time at five and three LNBA monitoring stations, respectively. Because of the small number of AMS total metals samples collected during the 2006 through 2010 timeframe, the total metals results from those stations are not presented in the tables and figures in this report. All results are summarized in Appendix A on the Station Summary Sheets.

Nutrients

Compounds of nitrogen and phosphorus are major components of living organisms and thus are essential to maintain life. These compounds are collectively referred to as "nutrients." Nitrogen compounds include ammonia-nitrogen (NH_3-N), total Kjeldahl nitrogen (TKN) and nitrite+nitrate nitrogen (NO_2+NO_3-N). Phosphorus is measured as total phosphorus. When nutrients are introduced to an aquatic ecosystem from municipal and industrial treatment processes, or runoff from urban or agricultural land, the excessive growth of algae and other plants may occur.

At neutral pH in water, ammonia normally forms an ionized solution of ammonium hydroxide, with only a small amount of ammonia. However, as pH increases, more ammonia is left unionized. Unionized ammonia is toxic to fish and other aquatic organisms. At higher pH and temperature, the process of nitrification (i.e. two-step conversion of ammonium to nitrite, then nitrate) consumes oxygen. As previously described, oxygen depletion can be detrimental to the health of surface waters and their associated biota.

Chlorophyll *a*

Several high-profile fish kills took place in the Neuse River estuary during 1991 through 1995, which brought attention to such issues as nutrient loading, low dissolved oxygen levels and algal blooms. Algal blooms and low dissolved oxygen levels can be a significant factor in the occurrence of fish kills. Consequently, chlorophyll *a* concentrations (as a surrogate for algal population size) are of great interest. In 1999 and 2001, the first and second phases of a Total Maximum Daily Load (TMDL) for total nitrogen on the Neuse River were implemented. The goal of the TMDL is to reduce chlorophyll *a* by reducing total nitrogen inputs enough that chlorophyll *a* concentrations no longer violate the standard in the Neuse River estuary.

During the current assessment timeframe, five of the saltwater stations in the Lower Neuse hydrologic unit, 03020204, returned ten percent exceedances (three of which were statistically significant).

Bacteria

Concentrations of fecal coliform bacteria can vary greatly. The descriptive statistics used to evaluate fecal coliform bacteria data include the percentage of results above evaluation level threshold values, as well as either the geometric mean or the median colony count per 100 mL, depending upon the

classification of the waterbody. For all freshwater sites within North Carolina in the Neuse River basin, the standard specified in Administrative Code 15A NCAC 02B.0211 (3)(e) is applicable:

"Organisms of the coliform group: fecal coliforms shall not exceed a geometric mean of 200/100ml (MF count) based upon at least five consecutive samples examined during any 30 day period, nor exceed 400/100ml in more than 20 percent of the samples examined during such period; violations of the fecal coliform standard are expected during rainfall events and, in some cases, this violation is expected to be caused by uncontrollable nonpoint source pollution; all coliform concentrations are to be analyzed using the membrane filter technique unless high turbidity or other adverse conditions necessitate the tube dilution method; in case of controversy over results, the MPN 5-tube dilution technique shall be used as the reference method."

For waters where commercial shellfishing is done (Class SA), an additional water quality standard is applied (15A NCAC 02B .0221 (3)(d)):

Organisms of coliform group: fecal coliform group not to exceed a median MF of 14/100 ml and not more than 10 percent of the samples shall exceed and MF count of 43/100 ml in those areas most probably exposed to fecal contamination during the most unfavorable hydrographic and pollution conditions.

Fecal coliform problems are screened using annual summaries of ambient sampling results. If the screening indicates that the station may be exceeding a standard, the station is assessed using the method required by law. All class B (and class SB/SA in coastal basins) waters are assessed, and other waters as resources permit. The required assessment method is known as "5 in 30", collecting a minimum five samples within a span of 30 days. If a water body exceeds the standard more than the specified percentage of the time during the 30-day period, or if the median or geometric mean for the 30-day period is greater than the threshold values described in the relevant standard(s), then that water body is considered impaired and is added to the impaired water list, the 303(d) list.

Both SA class and other waters are present in the Neuse River basin. Freshwater sites where the geometric mean was greater than 200 colonies/100 mL, or where greater than twenty percent of the results exceeded 400 colonies/100 mL are indicated on the respective station summary sheets and summarized in Tables 1, 7 and 8. Three freshwater AMS monitoring stations and eight freshwater LNBA monitoring stations returned fecal coliform concentrations greater than screening levels during the current assessment period. Likewise, one SA class site (J9690000, Black Creek at State Road 1300 near Merrimon) returned a median fecal coliform value greater than 14 colonies/100 mL as well as greater than ten percent of the results exceeding 43 colonies/100 mL.

In addition, for all tidal salt waters, the following is applicable 15A NCAC 02B .0220 (3)(e):

Enterococcus, including Enterococcus faecalis, Enterococcus faecium, Enterococcus avium, and Enterococcus gallinarium: not to exceed a geometric mean of 35 enterococci per 100 ml based upon a minimum of five samples within any consecutive 30 days.

The DWQ does not collect *Enterococcus* samples. The NC Recreational Water Quality Program (NCRWQP), administered by the NC Department of Environment and Natural Resources' Division of Environmental Health, collects *Enterococcus* samples. The NCRWQP mission is to protect the public health by monitoring the quality of NC's coastal recreational waters and notifying the public when bacteriological standards for safe bodily contact are exceeded. The program monitors 240 stations statewide, and meets all the requirements of the EPA national beach rule. Coastal waters monitored include the ocean beaches, sounds, bays and estuarine rivers. Stations in these locations within the Neuse basin were monitored for *Enterococcus* bacteria by the NCRWQP during the current assessment period.

Enterococcus bacteria is an indicator organism found in the intestines of warm-blooded animals. While it may not cause illness itself, its presence is correlated with that of organisms that can cause illness. The program tests 240 ocean and sound-side areas. Swimming season begins on April 1st and ends

September 30th. All ocean beaches and high-use sound-side beaches (Tier 1) are tested weekly. Lower-use beaches (Tier 2 and Tier 3) are tested twice a month. All sites are tested twice a month in October and monthly from November through March. The NCRWQP currently uses a single sample test to determine compliance with their rules (15A NCAC 18A .3402):

(a) The Enterococcus level in a Tier I swimming area shall not exceed either:

(1) A geometric mean of 35 enterococci per 100 milliliter of water, that includes a minimum of at least five samples collected within 30 days; or

(2) A single sample of 104 enterococci per 100 milliliter of water.

(b) The enterococcus level in a tier II swimming area shall not exceed a single sample of 276 enterococci per 100 milliliter of water.

(c) The enterococcus level in a tier III swimming area shall not exceed two consecutive samples of 500 enterococci per 100 milliliter of water"

The results of NCRWQP sampling can be found on their website:
http://portal.ncdenr.org/web/mf/recreational-water-quality.

Table 7. Frequency of Evaluation Level Exceedances at AMS Stations (page 1 of 2)

		Percentage of Results that Exceeded the Evaluation Limit									
8-Digit HUC/ Station ID	Class	Dissolved Oxygen (<4 mg/L)[1]	Dissolved Oxygen (<5 mg/L)[2]	pH (lower EL)[3]	pH (higher EL)[4]	Water Temperature (>32 °C)	Chlorophylla (>40 µg/L)	Turbidity (fresh >50, saltwater >25 NTU)	Nitrate (>10 mg/L)	Fecal Coliform (colonies/100 mL)[5]	Fecal coliform (geomean or median)[6]
03020201											
J0770000	WS-IV NSW	0	0	0	0	0	NS	0	0	11.9	
J0810000	WS-IV NSW	0	2.4	0	0	0	NS	2.3	0	9.1	
J0820000	WS-II HQW NSW	1.6	4.7	0	0	0	NS	6.8	0	11.4	
J1070000	WS-III NSW	0	7.5	0	0	0	NS	2.3	NS	7.1	
J1100000	WS-IV NSW CA	18.8	29.7	1.5	0	0	NS	0	0	0	
J1210000	WS-IV NSW	0	1.6	0	0	0	NS	2.3	6.2	9.1	
J1330000	WS-IV NSW CA	0	0	0	0	0	NS	4.5	0	27.3	
J1890000	WS-IV NSW	0	0	0	0	0	NS	0	0	0	
J2850000	B NSW	10.0	15.0	0	0	0	NS	12.5	NA	7.5	
J3000000	B NSW	0	0	0	0	0	NS	7.5	NA	5	
J3251000	C NSW	0	2.5	0	0	0	NS	7.5	NA	17.5	
J3300000	C NSW	0	2.5	0	0	0	NS	0	NA	95	1501
J4170000	WS-IV NSW	0	2.3	0	0	0	NS	4.7	NS	11.6	
J4370000	WS-V NSW	0	0	0	0	0	NS	7	0	11.6	
J4510000	C NSW	0	0	0	0	0	NS	0	NA	11.6	
J5000000	C NSW	0	0	0	0	0	NS	2.3	NA	7	
J5850000	WS-V NSW	0	7	4.8	0	0	NS	0	NS	4.8	
03020202											
J5970000	C NSW	0	0	2.4	0	0	0	4.8	NA	2.4	
J6150000	C NSW	0.8	1.6	1.5	0	0.4	0	3.3	NA	6.6	
J7850000	C Sw NSW	NA	NA	0	0	0.4	0	0	NA	3.4	
J7860000	C Sw NSW	NA	NA	0	0	0	9.1	0	NA	0	
J7930000	C Sw NSW	NA	NA	0	1.6	0	1.6	0	NA	0	
J8150000	C Sw NSW	NA	NA	1.7	0	0	8.6	1.7	NA	25.4	
J8210000	SC Sw NSW	NA	NA	0	0	0	1.6	0	NA	NA	
J8230000	SC Sw NSW	NA	NA	0	0	0	NS	NS	NA	NA	
J8250000	SC Sw NSW	NA	NA	0	0	0	0	0	NA	NA	
J8270000	SC Sw NSW	NA	NA	0	0	0	NS	NS	NA	NA	
J8290000	SC Sw NSW	NA	NA	0	0	0	6.5	0	NA	NA	
03020203											
J6740000	WS-V NSW	0	7	2.4	0	0	NS	0	0	0	
J7450000	C Sw NSW	NA	NA	0	0	0.4	0	0	NA	8.2	
J7739550	C Sw NSW	NA	NA	0	0	0	3.4	0	NA	11.9	
J7810000	C Sw NSW	NA	NA	0	0	0	0	1.7	NA	9.8	

Table 7 (Continued). Frequency of Evaluation Level Exceedances at AMS Stations (page 2 of 2)

		Percentage of Results that Exceeded the Evaluation Limit									
8-Digit HUC/ Station ID	Class	Dissolved Oxygen (<4 mg/L)[1]	Dissolved Oxygen (<5 mg/L)[2]	pH (lower EL)[3]	pH (higher EL)[4]	Water Temperature (>32 °C)	Chlorophylla (>40 µg/L)	Turbidity (fresh >50, saltwater >25 NTU)	Nitrate (>10 mg/L)	Fecal Coliform (colonies/100 mL)[5]	Fecal coliform (geomean or median)[6]
03020204											
J8570000	SC Sw NSW	NA	NA	0	1.6	0	13.4	1.6	NA	NA	
J8690000	C Sw NSW	NA	NA	0	0	0	1.7	0	NA	4.9	
J8730000	C Sw NSW	NA	NA	0	0.4	0	NS	NS	NA	NS	
J8770000	SB Sw NSW	NA	NA	0	0	1.6	6.6	0	NA	NA	
J8900800	SC Sw NSW	NA	NA	0	1.6	0	19.4	0	NA	NA	
J8902500	SB Sw NSW	NA	NA	0	3.3	0	19.7	0	NA	NA	
J8903500	SB Sw NSW	NA	NA	0	13	0	NS	NS	NA	NA	
J8903600	SB Sw NSW	NA	NA	0	30.8	0	NS	NS	NA	NA	
J8910000	SB Sw NSW	NA	NA	0	9.5	0	9.5	0	NA	NA	
J8920000	SB Sw NSW	NA	NA	0	3.6	1.8	NS	NS	NA	NA	
J8925000	SB Sw NSW	NA	NA	0	7.1	1.8	NS	NS	NA	NA	
J9431500	SB Sw NSW	NA	NA	0	3.6	0	NS	NS	NA	NA	
J9530000	SA HQW NSW	NA	0	0	6.3	1.6	9.7	0	NA	3.3	
J9540000	SA HQW NSW	NA	0	0	5.5	1.8	NS	NS	NA	NS	
J9590000	SA HQW NSW	NA	0	0	3.6	0	NS	NS	NA	NS	
J9685000	SA HQW NSW	NA	0	0	5.4	0	NS	NS	NA	NS	
J9690000	SA HQW NSW	NA	17.9	19.3	0	5.2	10.2	3.3	NA	63.3	80
J9810000	SA HQW NSW	NA	0	0	3.3	0	5	0	NA	0	
J9860000	SA HQW NSW	NA	0	0	0	0	NS	NS	NA	NS	
J9900000	SA HQW NSW	NA	0	0	0	0	NS	NS	NA	NS	
J9930000	SA HQW NSW	NA	0	0	0	0	0	0	NA	0	
J9950000	SA HQW NSW	NA	0	1.9	0	0	1.9	0	NA	6	

Notes:

NA: Not Applicable. The evaluation level is not applicable to this station.

NS: Not Sampled. No samples (or less than 10 samples) were collected during the assessment period.

[1] Applies to freshwater (class B, C, and WS) only as an instantaneous value. Swamp waters (supplemental class Sw) may have lower values if caused by natural conditions.

[2] Applies to saltwater (class SA, SB, and SC) primarily, and to freshwater (class B, C, and WS) as a daily average. Swamp waters (supplemental class Sw) may have lower values if caused by natural conditions.

[3] Lower pH EL values are 4.3 SU in Swamp (Sw) waters, 6.0 SU in freshwater (class B, C, and WS), and 6.8 SU in saltwater (class SA, SB, and SC).

[4] Higher pH EL values are 9.0 SU in freshwater (class B, C, and WS) and 8.5 SU in saltwater (class SA, SB, and SC).

[5] Fecal coliform screening EL values are 400 colonies/100 mL in freshwater and 43 colonies/100 mL in saltwater class SA.

[6] Fecal coliform screening EL values are geometric mean of 200 colonies/100 mL in freshwater or median of 14 colonies/100 mL in saltwater class SA. Values in exceedance of the screening EL are indicated.

No samples or less than 10 samples were collected for hardness and total metals at each AMS station during the current assessment period.

Table 8. Frequency of Evaluation Level Exceedances at LNBA Stations (page 1 of 2)

		Percentage of Results that Exceeded the Evaluation Limit																		
8-Digit HUC/ Station ID	Class	Dissolved Oxygen (<4) [1]	Dissolved Oxygen (<5) [2]	pH (lower EL) [3]	pH (higher EL) [4]	Water Temperature	Chlorophyll a	Turbidity	Nitrate	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Zinc	Fecal Coliform [5,6]
03020201																				
J2230000	C NSW	0	0	0	0	0	NS	3.5	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	14
J2330000	C NSW	0	0	0	0	0	NS	8.3	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.7
J2360000	C NSW	0	1.5	0	0	1.5	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.6
J2363000	C NSW	5.6	11.1	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0
J3210000	C NSW	3.6	11.9	0	0	0	NS	5	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.7
J3970000	C NSW	0	0	0	0	0	NS	8.3	NA	0	0	0	12.5	93.8	0	NS	0	0	6.2	20.0
J4050000	C NSW	0	0	0	0	1.2	NS	11.7	NA	0	0	0	18.8	75	0	NS	0	0	6.2	21.7
J4080000	C NSW	0	0	0	0	0	NS	1.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	24.1
J4130000	WS-V NSW	0	0	0	0	0	NS	8.3	0	0	0	0	12.5	56.2	0	31.2	0	0	6.2	18.3
J4170000	WS-IV NSW	0	0	0	0	0	NS	8.3	0	0	0	0	18.8	62.5	0	25.0	0	0	6.2	16.7
J4190000	WS-IV NSW	0	0	0	0	1.2	NS	10.0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.7
J4414000	WS-III NSW	1.2	13.1	0	0	0	NS	5	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.3
J4590000	C NSW	0	1.2	0	0	0	NS	6.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.0
J4619000	C NSW	10.9	21.8	1.8	0	0	NS	13.5	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	29.7
J4620000	C NSW	6.7	6.7	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40.0
J4690000	C NSW	0	0	0	0	0	NS	11.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	30.0
J4868000	C NSW	0	1.2	0	0	0	NS	11.7	NA	0	0	0	0	75	0	NS	0	0	0	23.3
J4980000	C NSW	0	0	0	0	0	NS	3.3	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	25.0
J5010000	C NSW	0	0	0	0	0	NS	6.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.0
J5170000	C NSW	14.1	23.5	2.4	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.3
J5250000	WS-IV NSW	0	0	0	0	1.2	NS	11.7	0	0	0	0	18.8	75	0	18.8	0	0	6.2	8.3
J5390000	C NSW	34.1	44.7	22.4	0	0	NS	5	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.7
J5390800	C NSW	54.1	61.2	12.9	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.3
J5410000	C NSW	7.7	30.8	19.2	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.9
J5500000	WS-IV NSW	29.2	37.5	8.3	0	0	NS	0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17.6
J5620000	WS-II HQW	64.7	72.9	14.1	0	0	NS	0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.2
J5690000	WS-V NSW	2.4	4.7	0	0	0	NS	0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.0
J5750000	WS-V NSW	4.9	4.9	0	0	0	NS	0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.6
J5900000	WS-IV NSW	1.2	8.2	4.7	0	1.2	NS	1.7	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.7
J5930000	C NSW	1.2	2.4	1.2	0	0	NS	1.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.3

Table 8 (Continued). Frequency of Evaluation Level Exceedances at LNBA Stations (page 2 of 2)

		Percentage of Results that Exceeded the Evaluation Limit																		
8-Digit HUC/ Station ID	Class	Dissolved Oxygen (<4) [1]	Dissolved Oxygen (<5) [2]	pH (lower EL) [3]	pH (higher EL) [4]	Water Temperature	Chlorophyll a	Turbidity	Nitrate	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Zinc	Fecal Coliform [5,6]
03020202																				
J6010950	C NSW	0	6	3.5	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.3
J6024000	C NSW	0	1.2	1.2	0	1.2	NS	5	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.0
J6044500	WS IV Sw	NA	NA	0	0	0	NS	0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.7
J6055000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.3
J6150000	C NSW	0	1.2	0	0	1.2	NS	1.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.0
J6250000	C NSW	1.2	1.2	0	0	1.2	NS	3.6	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.7
J6340000	C NSW	2.2	4.4	0	0	0	NS	3.1	NA	0	0	0	0	93.3	0	NS	0	0	6.7	12.5
J7850000	C Sw NSW	NA	NA	0	0	1.2	0	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.0
03020203																				
J6410000	C NSW	8.6	23.5	2.5	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.4
J6450000	C NSW	0	5.9	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.3
J6500000	C NSW	12.9	27.1	0	0	0	NS	5	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.0
J6680000	C NSW	23.5	35.3	2.4	0	0	NS	1.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.7
J6764000	C Sw NSW	NA	NA	0	0	1.2	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.0
J6890000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	26.7
J7210000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.3
J7240000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16.7
J7325000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.0
J7330000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.7
J7690000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18.3
J7740000	C Sw NSW	NA	NA	0	0	0	NS	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.3
03020204																				
J8870000	SB Sw NSW	NA	NA	0	2.4	0	9.8	1.7	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
J9330000	SC Sw NSW	NA	NA	0	0	1.2	25	0	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA

Notes:

NA: Not Applicable. The evaluation level is not applicable to this station.

NS: Not Sampled. No samples (or less than 10 samples) were collected during the assessment period.

[1] Applies to freshwater (class B, C, and WS) only as an instantaneous value. Swamp waters (supplemental class Sw) may have lower values if caused by natural conditions.

[2] Applies to saltwater (class SA, SB, and SC) primarily, and to freshwater (class B, C, and WS) as a daily average. Swamp waters (supplemental class Sw) may have lower values if caused by natural conditions.

[3] Lower pH EL values are 4.3 SU in Swamp (Sw) waters, 6.0 SU in freshwater (class B, C, and WS), and 6.8 SU in saltwater (class SA, SB, and SC).

[4] Higher pH EL values are 9.0 SU in freshwater (class B, C, and WS) and 8.5 SU in saltwater (class SA, SB, and SC).

[5] Fecal coliform screening EL values are 400 colonies/100 mL in freshwater and 43 colonies/100 mL in saltwater class SA.

[6] No fecal coliform results exceeded screening EL values of a geometric mean of 200 colonies/100 mL in freshwater, and no samples were collected at saltwater class SA stations.

WATER QUALITY PATTERNS IN THE NEUSE RIVER BASIN

Maps were used to depict data for a variety of water quality parameters throughout the basin so that the relationship of stations to each other could be seen and regional patterns could become clear. While figures portray information visually, specific and accurate details can only be conveyed in tables. Individual station summary sheets should be consulted when exact information is needed.

Maps were utilized specifically to display the geographic distribution of evaluation level exceedances for dissolved oxygen, chlorophyll *a*, pH and fecal coliform (Figures 2 through 6). Station symbol colors signified the frequency of water quality exceedance at each location.

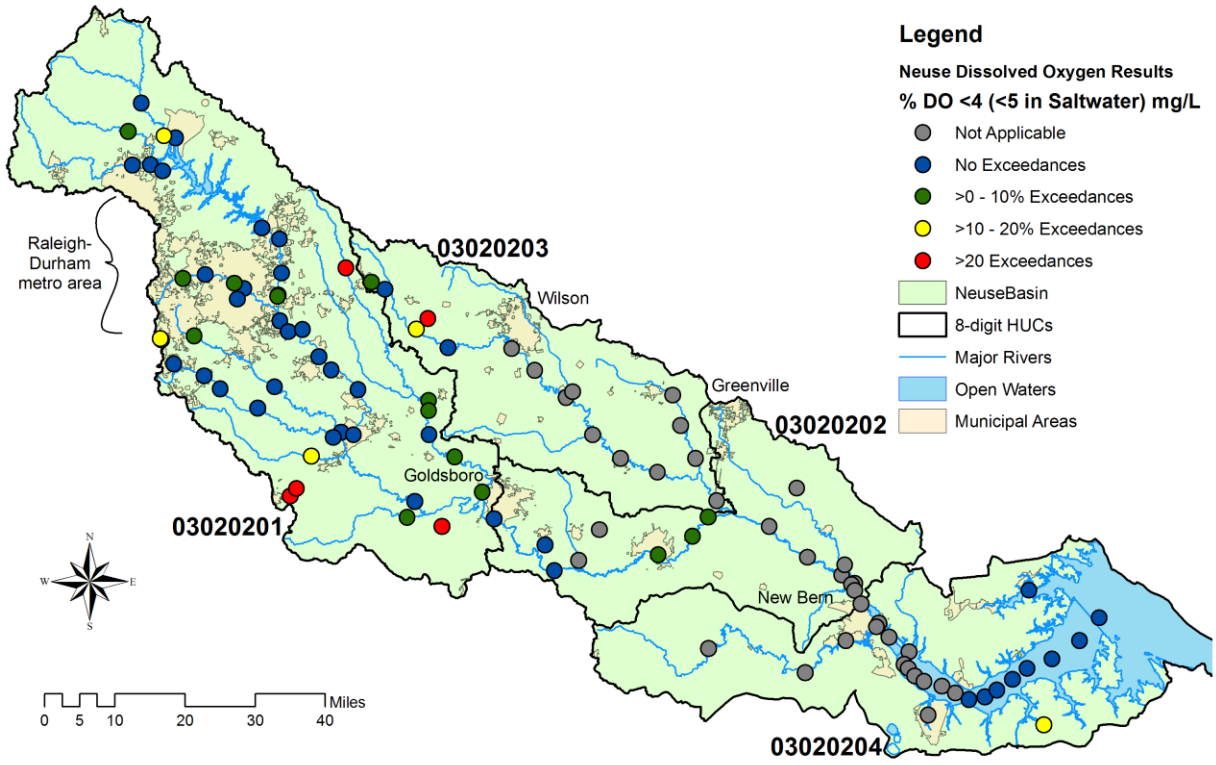

Figure 2. Geographic distribution of dissolved oxygen exceedances in the Neuse River basin, 2006 – 2010 (Evaluation Levels: <4 mg/L in freshwater, <5 mg/L in saltwater, Not Applicable in swamp waters)

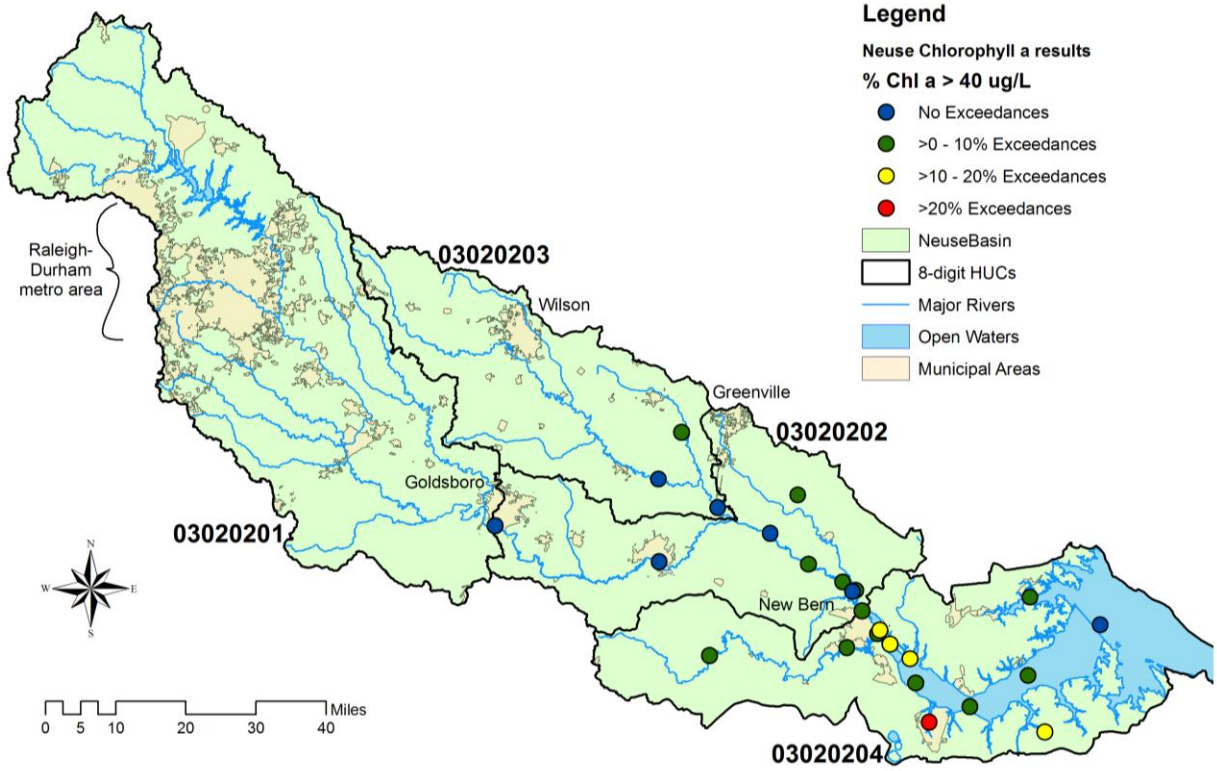

Figure 3. Geographic distribution of chlorophyll *a* exceedances in the Neuse River basin, 2006 – 2010

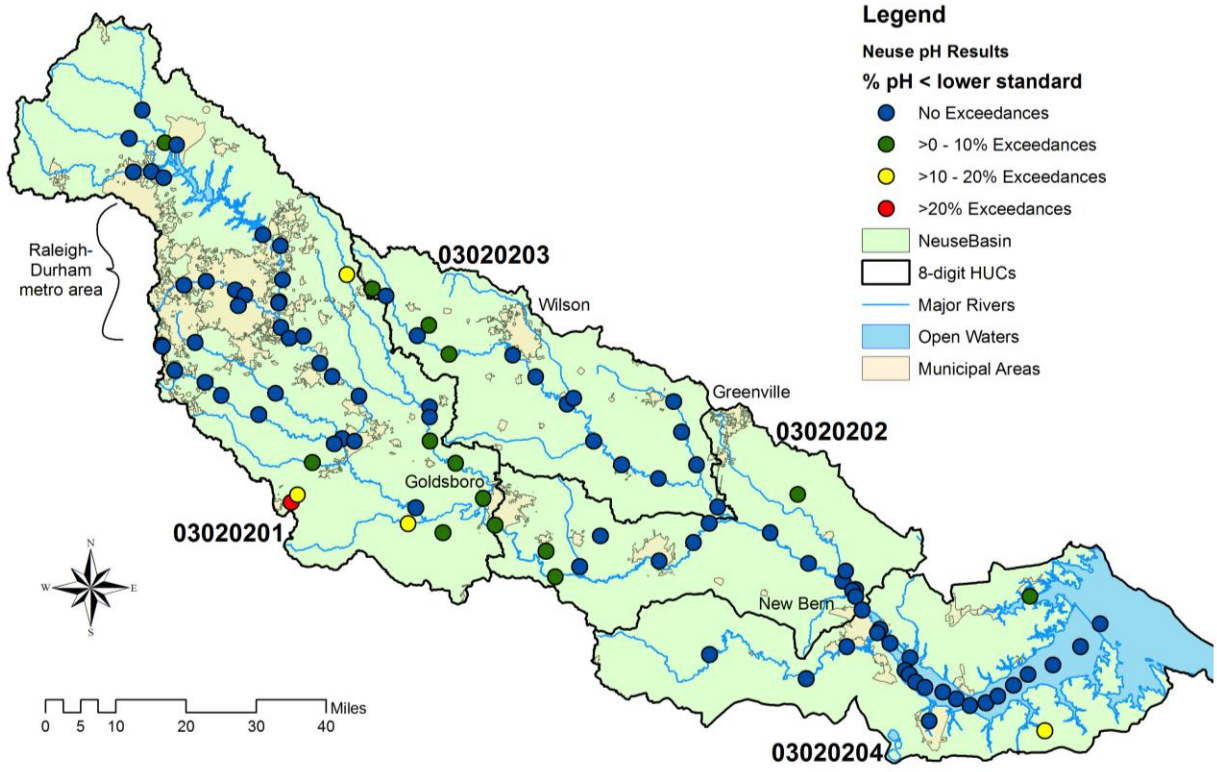

Figure 4. Geographic distribution of pH exceedances of lower Evaluation Levels in the Neuse River basin, 2006 – 2010 (ELs: <4.3 SU in swamp waters, <6.0 SU in freshwater, <6.8 SU in saltwater)

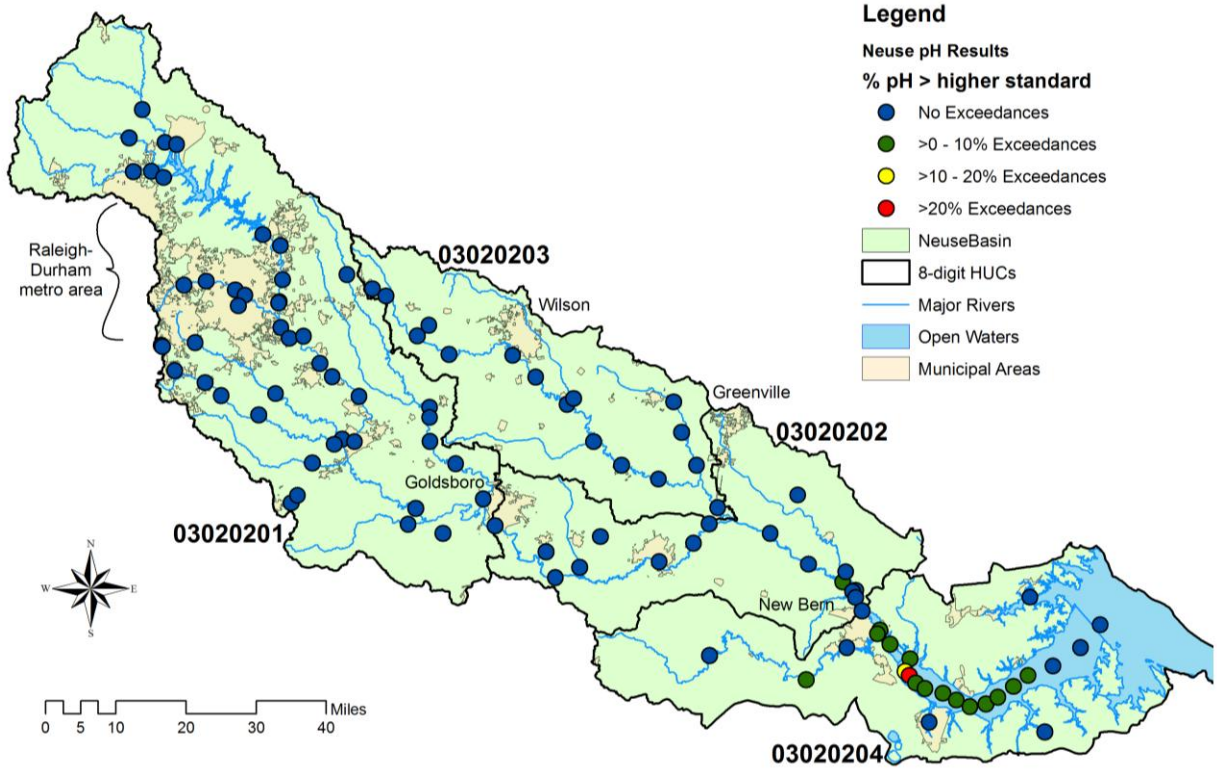

Figure 5. Geographic distribution of pH exceedances of higher Evaluation Levels in the Neuse River basin, 2006 – 2010 (Evaluation Levels: >9.0 SU in freshwater, >8.5 SU in saltwater)

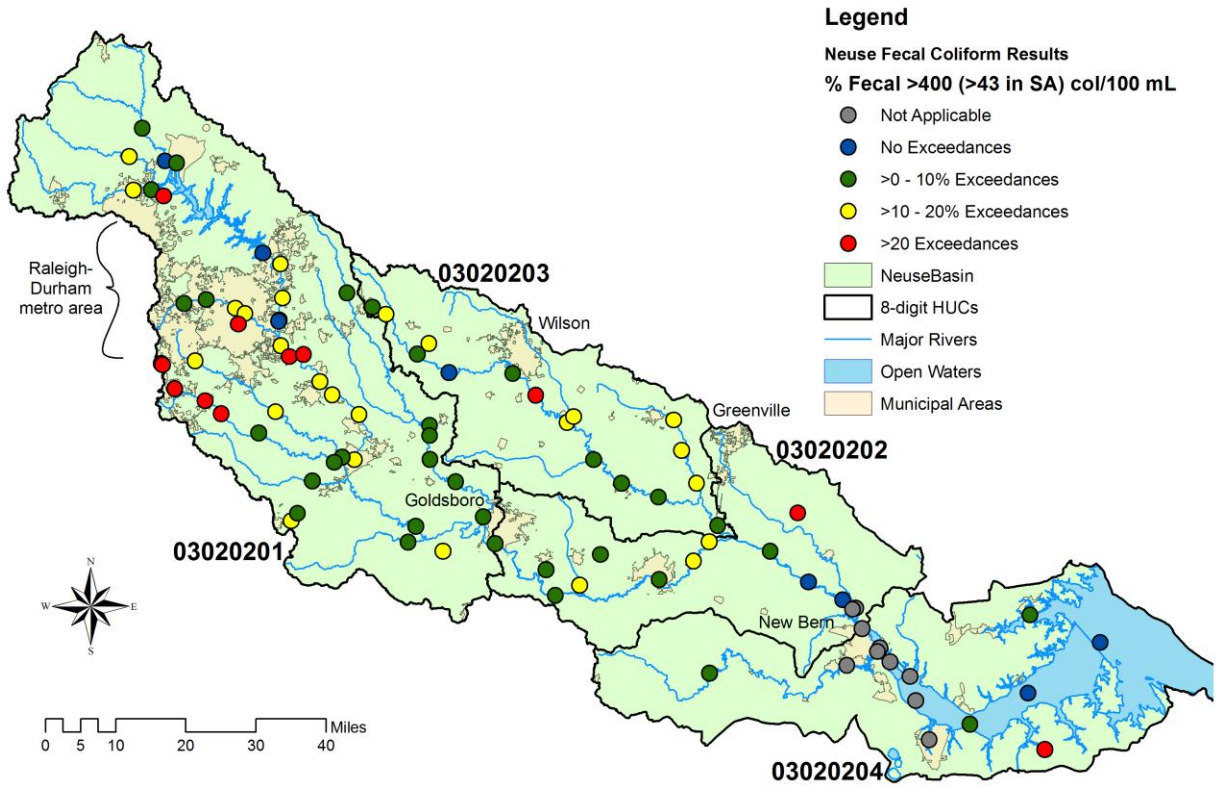

Figure 6. Geographic distribution of fecal coliform exceedances in the Neuse River basin, 2006 – 2010

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APPENDIX A. Station Summary Sheets

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: ENO RIV AT US 501 NR DURHAM
Station #: J0770000 **Hydrologic Unit Code:** 03020201
Latitude: 36.07197 **Longitude:** -78.90864 **Stream class:** WS-IV NSW
Agency: NCAMBNT **NC stream index:** 27-2-(19)

Time period: 01/11/2006 to 10/26/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	64	0	<4	0	0		5.7	6.3	7.1	8.6	11.3	13.2	14.8
	64	0	<5	0	0		5.7	6.3	7.1	8.6	11.3	13.2	14.8
pH (SU)	66	0	<6	0	0		6.3	6.4	6.6	6.9	7.3	7.5	8.7
	66	0	>9	0	0		6.3	6.4	6.6	6.9	7.3	7.5	8.7
Salinity (ppt)	2	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	66	0	N/A				73	83	101	118	140	162	239
Water Temperature (°C)	67	0	>32	0	0		1.5	5.5	9.1	18.3	24.1	26.9	28.4
Other													
Hardness (mg/L)	4	0	>100	0	0		27	27	29	34	36	37	37
TSS (mg/L)	57	19	N/A				2.5	2.7	3.5	6.2	12	18.2	142
Turbidity (NTU)	44	0	>50	0	0		1.9	3	3.6	4.8	12.8	23	28
Nutrients (mg/L)													
NH3 as N	65	36	N/A				0.02	0.02	0.02	0.02	0.02	0.03	0.06
NO2 + NO3 as N	65	5	>10	0	0		0.02	0.02	0.09	0.27	0.4	0.56	1.3
TKN as N	63	1	N/A				0.2	0.24	0.31	0.38	0.42	0.53	0.82
Total Phosphorus	65	0	N/A				0.02	0.02	0.03	0.04	0.05	0.07	0.15
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				76	76	102	125	340	790	790
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	1	16.7		260	260	448	555	958	1400	1400
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	0	0		26	26	29	64	105	120	120
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	6	>50	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
42	50.8	5	11.9	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: ENO RIV AT SR 1004 NR DURHAM
Station #: J0810000 **Hydrologic Unit Code:** 03020201
Latitude: 36.07254 **Longitude:** -78.86270 **Stream class:** WS-IV NSW
Agency: NCAMBNT **NC stream index:** 27-2-(19.5)

Time period: 01/26/2006 to 10/26/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	Percentiles 10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	41	0	<4	0	0		4.8	5.8	6.2	7.7	11.1	12.8	14.1
	41	0	<5	1	2.4		4.8	5.8	6.2	7.7	11.1	12.8	14.1
pH (SU)	43	0	<6	0	0		6.2	6.3	6.7	7.1	7.2	7.5	8
	43	0	>9	0	0		6.2	6.3	6.7	7.1	7.2	7.5	8
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	43	0	N/A				77	88	111	125	143	164	200
Water Temperature (°C)	44	0	>32	0	0		2.3	5.5	10.3	19.4	24.9	27.1	29.2
Other													
Hardness (mg/L)	4	0	>100	0	0		30	30	32	38	41	41	41
TSS (mg/L)	20	10	N/A				2.5	2.8	6.2	6.2	9.2	17	20
Turbidity (NTU)	44	0	>50	1	2.3		2.9	3.8	5.3	9.1	15.5	24	55
Nutrients (mg/L)													
NH3 as N	42	25	N/A				0.02	0.02	0.02	0.02	0.02	0.06	0.36
NO2 + NO3 as N	42	3	>10	0	0		0.02	0.02	0.08	0.22	0.38	0.43	0.69
TKN as N	42	0	N/A				0.21	0.26	0.31	0.35	0.42	0.57	0.92
Total Phosphorus	42	0	N/A				0.02	0.02	0.03	0.04	0.05	0.1	0.23
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				100	100	115	200	458	960	960
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	1	16.7		350	350	530	645	1075	1600	1600
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	0	0		37	37	37	69	106	160	160
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	3	>50	0	0		10	10	10	10	14	22	22

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
44	75.8	4	9.1	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: LITTLE RIV AT SR 1461 NR ORANGE FACTORY
Station #: J0820000 **Hydrologic Unit Code:** 03020201
Latitude: 36.14159 **Longitude:** -78.91930 **Stream class:** WS-II HQW NSW CA
Agency: NCAMBNT **NC stream index:** 27-2-21-(3.5)

Time period: 01/11/2006 to 10/26/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Percentiles Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	64	0	<4	1	1.6		3.3	6.2	7.4	9	11.5	13.6	14.7
	64	0	<5	3	4.7		3.3	6.2	7.4	9	11.5	13.6	14.7
pH (SU)	66	0	<6	0	0		6.3	6.4	6.6	6.9	7.3	7.5	8.2
	66	0	>9	0	0		6.3	6.4	6.6	6.9	7.3	7.5	8.2
Salinity (ppt)	2	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	65	0	N/A				57	72	83	90	104	113	198
Water Temperature (°C)	67	0	>32	0	0		1.4	5.1	8.9	17.3	22.6	25.6	27.8
Other													
Hardness (mg/L)	4	0	>100	0	0		25	25	26	29	33	34	34
TSS (mg/L)	57	28	N/A				2.5	2.5	2.9	6.2	6.5	12.2	53
Turbidity (NTU)	44	0	>50	3	6.8		1.2	2	2.6	4.8	14.5	26	110
Nutrients (mg/L)													
NH3 as N	65	54	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.07
NO2 + NO3 as N	65	12	>10	0	0		0.02	0.02	0.03	0.18	0.32	0.42	0.52
TKN as N	63	1	N/A				0.2	0.24	0.3	0.36	0.47	0.63	1.3
Total Phosphorus	65	2	N/A				0.02	0.02	0.02	0.04	0.06	0.09	0.25
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				85	85	86	205	425	920	920
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	4	>7	0	0		2	2	2	2	3	4	4
Iron, total (Fe)	6	0	>1000	2	33.3		400	400	565	875	1175	1400	1400
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	0	0		19	19	20	30	44	69	69
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	6	>50	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
44	67.6	5	11.4	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: FLAT RIV AT SR 1614 NR QUAIL ROOST
Station #: J1070000 **Hydrologic Unit Code:** 03020201
Latitude: 36.20021 **Longitude:** -78.88615 **Stream class:** WS-III NSW
Agency: NCAMBNT **NC stream index:** 27-3-(1)

Time period: 01/26/2006 to 10/26/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	Percentiles 10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	40	0	<4	0	0		4.3	5.1	6.2	7.8	11	13.2	14.1
	40	0	<5	3	7.5		4.3	5.1	6.2	7.8	11	13.2	14.1
pH (SU)	42	0	<6	0	0		6	6.3	6.6	6.8	7.1	7.3	7.9
	42	0	>9	0	0		6	6.3	6.6	6.8	7.1	7.3	7.9
Salinity (ppt)	1	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	42	0	N/A				61	70	79	84	93	99	104
Water Temperature (°C)	43	0	>32	0	0		1.4	4.7	8.9	17.5	23	26	26.7
Other													
Hardness (mg/L)	4	0	>100	0	0		21	21	23	28	30	30	30
TSS (mg/L)	20	13	N/A				2.5	2.5	4.6	6.2	7.9	12.9	14
Turbidity (NTU)	43	0	>50	1	2.3		1.2	2	2.8	4.9	14	19.6	75
Nutrients (mg/L)													
NH3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	1	1	>10	0	0		0.02	0.02	0.02	0.02	0.02	0.02	0.02
TKN as N	1	0	N/A				0.23	0.23	0.23	0.23	0.23	0.23	0.23
Total Phosphorus	1	0	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				86	86	112	190	500	860	860
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	3	50		620	620	635	1015	1300	1300	1300
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	0	0		26	26	35	50	112	120	120
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	6	>50	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
42	46.5	3	7.1	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: FLAT RIV AT SR 1004 NR WILLARDSVILLE
Station #: J1100000 **Hydrologic Unit Code:** 03020201
Latitude: 36.13186 **Longitude:** -78.82784 **Stream class:** WS-IV NSW CA
Agency: NCAMBNT **NC stream index:** 27-3-(9)

Time period: 01/11/2006 to 10/26/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	64	0	<4	12	18.8	97.6	2.5	3.5	4.4	6.4	10.3	11.2	13.6
	64	0	<5	19	29.7	> 99.9	2.5	3.5	4.4	6.4	10.3	11.2	13.6
pH (SU)	66	0	<6	1	1.5		5.8	6.2	6.5	6.7	6.9	7.1	7.9
	66	0	>9	0	0		5.8	6.2	6.5	6.7	6.9	7.1	7.9
Salinity (ppt)	2	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	66	0	N/A				54	64	68	74	82	86	93
Water Temperature (°C)	67	0	>32	0	0		4.9	6.5	9.9	16.7	24.5	27.6	29.7
Other													
Hardness (mg/L)	4	0	>100	0	0		19	19	20	23	25	26	26
TSS (mg/L)	57	17	N/A				3.2	4.1	5.4	6.2	8.9	15.2	18
Turbidity (NTU)	44	0	>50	0	0		1.2	3	4	6.8	12.8	22	32
Nutrients (mg/L)													
NH3 as N	63	27	N/A				0.02	0.02	0.02	0.03	0.07	0.12	0.29
NO2 + NO3 as N	63	23	>10	0	0		0.02	0.02	0.02	0.05	0.23	0.3	2.7
TKN as N	62	0	N/A				0.29	0.43	0.48	0.56	0.63	0.71	0.91
Total Phosphorus	63	0	N/A				0.02	0.03	0.03	0.04	0.06	0.07	0.09
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				100	100	152	325	608	930	930
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	4	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	1	16.7		410	410	508	665	1065	1500	1500
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	2	33.3		61	61	67	112	365	410	410
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	4	>50	0	0		10	10	10	10	16	28	28

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
44	15	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: KNAP OF REEDS CRK AT WWTP OUTFALL NR BUTNER
Station #: J1210000 **Hydrologic Unit Code:** 03020201
Latitude: 36.12797 **Longitude:** -78.79852 **Stream class:** WS-IV NSW
Agency: NCAMBNT **NC stream index:** 27-4-(6)

Time period: 01/11/2006 to 10/26/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	Percentiles 10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	64	0	<4	0	0		4.3	5.8	6	6.8	9.5	10.4	12.4
	64	0	<5	1	1.6		4.3	5.8	6	6.8	9.5	10.4	12.4
pH (SU)	66	0	<6	0	0		6.1	6.3	6.5	6.8	7	7.1	7.8
	66	0	>9	0	0		6.1	6.3	6.5	6.8	7	7.1	7.8
Salinity (ppt)	2	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	66	0	N/A				64	100	149	277	398	436	606
Water Temperature (°C)	67	0	>32	0	0		4.7	7.9	12	19.4	25.6	27.3	29.1
Other													
Hardness (mg/L)	4	0	>100	0	0		31	31	36	53	58	59	59
TSS (mg/L)	57	25	N/A				2.5	2.5	4.4	6.2	11	18	92
Turbidity (NTU)	44	0	>50	1	2.3		1.1	1.5	2.2	4.5	10.8	17.5	55
Nutrients (mg/L)													
NH3 as N	65	5	N/A				0.02	0.02	0.03	0.04	0.06	0.09	0.7
NO2 + NO3 as N	65	0	>10	4	6.2		0.1	0.62	1.05	3.2	5.2	8.52	26
TKN as N	62	0	N/A				0.29	0.52	0.71	0.82	1	1.2	1.8
Total Phosphorus	65	0	N/A				0.02	0.11	0.26	1.1	2.2	3.3	5.4
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				71	71	74	150	492	710	710
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	3	>7	0	0		2	2	2	2	3	4	4
Iron, total (Fe)	6	0	>1000	2	33.3		440	440	508	790	1150	1300	1300
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	2	33.3		82	82	86	107	265	340	340
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	1	>50	1	16.7		10	10	15	27	46	63	63

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
44	46.5	4	9.1	

Key:
result: number of observations
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: ELLERBE CRK AT SR 1636 NR DURHAM
Station #: J1330000 **Hydrologic Unit Code:** 03020201
Latitude: 36.05949 **Longitude:** -78.83224 **Stream class:** WS-IV NSW CA
Agency: NCAMBNT **NC stream index:** 27-5-(2)

Time period: 01/11/2006 to 10/26/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	64	0	<4	0	0		5.9	6.2	6.9	8	10	11.8	14.4
	64	0	<5	0	0		5.9	6.2	6.9	8	10	11.8	14.4
pH (SU)	66	0	<6	0	0		6.4	6.6	6.8	7.2	7.4	7.6	7.9
	66	0	>9	0	0		6.4	6.6	6.8	7.2	7.4	7.6	7.9
Salinity (ppt)	2	0	N/A				0.2	0.2	0.2	0.2	0.2	0.2	0.2
Spec. conductance (umhos/cm at 25°C)	66	0	N/A				147	228	305	388	437	476	520
Water Temperature (°C)	67	0	>32	0	0		6.1	9.6	13.3	19.3	24.4	27	28.2
Other													
Hardness (mg/L)	4	0	>100	0	0		38	38	38	58	82	84	84
TSS (mg/L)	57	17	N/A				2.5	3.2	4.2	6.2	12	20.8	120
Turbidity (NTU)	44	0	>50	2	4.5		1.7	1.8	3.2	5.1	10.5	28	85
Nutrients (mg/L)													
NH3 as N	65	12	N/A				0.02	0.02	0.02	0.05	0.1	0.36	1.3
NO2 + NO3 as N	65	0	>10	0	0		0.32	1.32	2.05	2.9	4.15	5.5	6.5
TKN as N	64	0	N/A				0.68	0.79	0.88	0.97	1.1	1.35	2.4
Total Phosphorus	65	0	N/A				0.07	0.1	0.15	0.24	0.76	1.3	2.2
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				76	76	102	180	375	840	840
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	0	>7	0	0		2	2	2	3	4	6	6
Iron, total (Fe)	6	0	>1000	1	16.7		160	160	235	395	770	1100	1100
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	0	0		30	30	40	56	85	140	140
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	0	>50	1	16.7		24	24	27	40	55	77	77

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
44	197.5	12	27.3	84.6

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 2000 NR FALLS
Station #: J1890000 **Hydrologic Unit Code:** 03020201
Latitude: 35.94077 **Longitude:** -78.58010 **Stream class:** WS-IV NSW
Agency: NCAMBNT **NC stream index:** 27-(20.7)

Time period: 01/11/2006 to 10/28/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	65	0	<4	0	0		5.7	6.6	7.1	8.8	11.3	12.4	14.1
	65	0	<5	0	0		5.7	6.6	7.1	8.8	11.3	12.4	14.1
pH (SU)	66	0	<6	0	0		6.2	6.3	6.5	6.7	7.1	7.3	8.2
	66	0	>9	0	0		6.2	6.3	6.5	6.7	7.1	7.3	8.2
Salinity (ppt)	2	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	66	0	N/A				70	79	88	101	118	126	132
Water Temperature (°C)	67	0	>32	0	0		4	8.2	10.3	20.1	25.5	28.5	31
Other													
Hardness (mg/L)	4	0	>100	0	0		22	22	22	25	28	28	28
TSS (mg/L)	57	19	N/A				3	3.8	5.8	6.2	7.8	10.2	12
Turbidity (NTU)	44	0	>50	0	0		2.9	3.4	4.2	5.4	9.7	14	15
Nutrients (mg/L)													
NH3 as N	66	25	N/A				0.02	0.02	0.02	0.04	0.15	0.27	0.49
NO2 + NO3 as N	66	30	>10	0	0		0.02	0.02	0.02	0.02	0.09	0.17	0.22
TKN as N	65	0	N/A				0.39	0.46	0.52	0.62	0.69	0.8	1.1
Total Phosphorus	66	0	N/A				0.02	0.02	0.02	0.03	0.04	0.06	0.22
Metals (ug/L)													
Aluminum, total (Al)	6	1	N/A				50	50	95	230	408	640	640
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	6	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	1	16.7		110	110	155	525	1015	1300	1300
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	3	50		45	45	80	222	592	1200	1200
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	6	>50	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
42	8.2	0	0	

Key:
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CRABTREE CRK AT SR 1795 NR UMSTEAD STATE PARK
Station #: J2850000 **Hydrologic Unit Code:** 03020201
Latitude: 35.83770 **Longitude:** -78.78084 **Stream class:** B NSW
Agency: NCAMBNT **NC stream index:** 27-33-(3.5)

Time period: 01/06/2006 to 10/28/2010

	#	#		Results not meeting EL			Percentiles						
	results	ND	EL	#	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	40	0	<4	4	10	42.3	2.1	3.3	6.6	8.5	10.4	11.9	12.2
	40	0	<5	6	15	79.4	2.1	3.3	6.6	8.5	10.4	11.9	12.2
pH (SU)	40	0	<6	0	0		6.1	6.4	6.5	7	7.2	7.4	7.7
	40	0	>9	0	0		6.1	6.4	6.5	7	7.2	7.4	7.7
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	40	0	N/A				62	82	96	116	143	237	315
Water Temperature (°C)	40	0	>32	0	0		3.1	7	10.6	19.7	25.9	28.1	31.5
Other													
Hardness (mg/L)	4	0	N/A				25	25	27	35	40	41	41
TSS (mg/L)	20	2	N/A				5.8	12	12.2	16	20	26.9	38
Turbidity (NTU)	40	0	>50	5	12.5	62.9	6.6	14.1	20.2	25.5	33	69	80
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				560	560	710	1650	2900	3800	3800
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	0	>7	0	0		2	2	3	4	5	6	6
Iron, total (Fe)	6	0	>1000	4	66.7		920	920	950	1650	2650	3100	3100
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	3	>50	1	16.7		10	10	10	12	32	64	64

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
40	34.6	3	7.5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CRABTREE CRK AT SR 1649 NR RALEIGH
Station #: J3000000 **Hydrologic Unit Code:** 03020201
Latitude: 35.84545 **Longitude:** -78.72444 **Stream class:** B NSW
Agency: NCAMBNT **NC stream index:** 27-33-(3.5)

Time period: 01/06/2006 to 10/28/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	40	0	<4	0	0		5.2	5.6	6.5	8	10.1	11.2	12.4
	40	0	<5	0	0		5.2	5.6	6.5	8	10.1	11.2	12.4
pH (SU)	40	0	<6	0	0		6.3	6.5	6.8	7.1	7.2	7.4	7.9
	40	0	>9	0	0		6.3	6.5	6.8	7.1	7.2	7.4	7.9
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	40	0	N/A				84	98	156	210	257	430	484
Water Temperature (°C)	40	0	>32	0	0		3	7.3	11	18.6	24.2	26.7	29
Other													
Hardness (mg/L)	4	0	N/A				30	30	33	46	49	50	50
TSS (mg/L)	20	9	N/A				6	6.2	6.2	6.5	12	23.2	40
Turbidity (NTU)	40	0	>50	3	7.5		2.7	3.1	5.4	11.5	25	49.5	80
Nutrients (mg/L)													
NH3 as N	40	4	N/A				0.02	0.02	0.03	0.05	0.07	0.09	0.13
NO2 + NO3 as N	40	1	N/A				0.02	0.11	0.25	0.51	0.93	1.3	1.8
TKN as N	40	0	N/A				0.46	0.57	0.66	0.77	0.82	0.93	1.2
Total Phosphorus	40	0	N/A				0.06	0.08	0.1	0.14	0.19	0.44	1.4
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				440	440	545	1250	2425	4000	4000
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	1	>7	0	0		2	2	2	3	4	6	6
Iron, total (Fe)	6	0	>1000	4	66.7		700	700	738	1400	2150	3500	3500
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	0	>50	0	0		13	13	14	20	23	24	24

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
40	71.5	2	5	

Key:
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CRABTREE CRK AT SR 2000 OLD WAKE FOREST RD AT RALEIGH
Station #: J3251000 **Hydrologic Unit Code:** 03020201
Latitude: 35.81584 **Longitude:** -78.62568 **Stream class:** C NSW
Agency: NCAMBNT **NC stream index:** 27-33-(10)

Time period: 01/06/2006 to 10/28/2010

	# results	# ND	Results not meeting EL	#	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	40	0	<4	0	0		4.6	5.8	6.8	8.8	10.5	12.5	13.6
	40	0	<5	1	2.5		4.6	5.8	6.8	8.8	10.5	12.5	13.6
pH (SU)	39	0	<6	0	0		6	6.4	6.6	6.9	7.1	7.3	7.7
	39	0	>9	0	0		6	6.4	6.6	6.9	7.1	7.3	7.7
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	40	0	N/A				82	105	139	164	194	287	368
Water Temperature (°C)	40	0	>32	0	0		2.8	6.1	10.9	18.1	23.4	26	28.1
Other													
Hardness (mg/L)	4	0	N/A				27	27	31	43	46	47	47
TSS (mg/L)	20	9	N/A				5.8	6.2	6.2	8	13.5	24.9	42
Turbidity (NTU)	40	0	>50	3	7.5		3.1	3.6	8.4	14	19.8	44.5	100
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				560	560	792	930	2750	4400	4400
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	0	>7	0	0		2	2	2	3	5	6	6
Iron, total (Fe)	6	0	>1000	5	83.3		910	910	1128	1350	2625	4200	4200
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	0	>50	0	0		11	11	11	16	27	32	32

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
40	183.8	7	17.5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: PIGEON HOUSE BRANCH AT DORTCH ST AT RALEIGH
Station #: J3300000 **Hydrologic Unit Code:** 03020201
Latitude: 35.79387 **Longitude:** -78.64262 **Stream class:** C NSW
Agency: NCAMBNT **NC stream index:** 27-33-18

Time period: 01/06/2006 to 10/28/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	40	0	<4	0	0		4.3	5.9	7.1	8.4	9.9	10.6	12.8
	40	0	<5	1	2.5		4.3	5.9	7.1	8.4	9.9	10.6	12.8
pH (SU)	40	0	<6	0	0		6.5	6.5	6.8	7	7.2	7.4	7.9
	40	0	>9	0	0		6.5	6.5	6.8	7	7.2	7.4	7.9
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	40	0	N/A				171	215	280	306	323	343	640
Water Temperature (°C)	40	0	>32	0	0		3.7	6.9	11.6	17.2	22.4	25	27.5
Other													
Hardness (mg/L)	4	0	N/A				46	46	53	87	101	102	102
TSS (mg/L)	20	16	N/A				2.5	2.6	5.3	6.2	6.2	6.2	9
Turbidity (NTU)	40	0	>50	0	0		1.4	1.8	2.2	3.4	6.5	13.6	27
Nutrients (mg/L)													
NH3 as N	5	3	N/A				0.02	0.02	0.02	0.02	0.04	0.04	0.04
NO2 + NO3 as N	5	0	N/A				1.7	1.7	1.75	1.8	2.45	2.7	2.7
TKN as N	4	1	N/A				0.2	0.2	0.2	0.28	0.36	0.37	0.37
Total Phosphorus	5	0	N/A				0.04	0.04	0.04	0.05	0.06	0.06	0.06
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				59	59	72	195	410	590	590
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	0	>7	3	50		4	4	5	6	16	23	23
Iron, total (Fe)	6	0	>1000	0	0		520	520	550	600	732	980	980
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	0	>50	1	16.7		27	27	30	32	59	94	94

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
40	1500.6	38	95	100

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT NC 42 NR CLAYTON
Station #: J4170000 **Hydrologic Unit Code:** 03020201
Latitude: 35.64732 **Longitude:** -78.40567 **Stream class:** WS-IV NSW
Agency: NCAMBNT **NC stream index:** 27-(38.5)

Time period: 01/04/2006 to 10/25/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	43	0	<4	0	0		4.5	5.3	6.4	7.6	10.1	11.5	12.5
	43	0	<5	1	2.3		4.5	5.3	6.4	7.6	10.1	11.5	12.5
pH (SU)	42	0	<6	0	0		6.2	6.4	6.6	6.9	7.2	7.4	7.6
	42	0	>9	0	0		6.2	6.4	6.6	6.9	7.2	7.4	7.6
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	41	0	N/A				100	111	145	208	242	278	293
Water Temperature (°C)	43	0	>32	0	0		4.5	7.9	11.3	18	24.3	27	30.8
Other													
Hardness (mg/L)	4	0	>100	0	0		29	29	30	35	39	39	39
TSS (mg/L)	19	5	N/A				6.2	6.2	6.5	12	18	38	41
Turbidity (NTU)	43	0	>50	2	4.7		1.8	5.9	8.8	13	20	43	100
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				360	360	382	685	2325	2400	2400
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	5	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	1	>7	0	0		2	2	2	3	4	4	4
Iron, total (Fe)	6	0	>1000	2	33.3		780	780	840	940	2575	2800	2800
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	1	16.7		81	81	88	124	225	330	330
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	0	>50	0	0		11	11	12	14	20	22	22

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
43	106.4	5	11.6	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT US 70 BUS AT SMITHFIELD
Station #: J4370000 **Hydrologic Unit Code:** 03020201
Latitude: 35.51283 **Longitude:** -78.34988 **Stream class:** WS-V NSW
Agency: NCAMBNT **NC stream index:** 27-(41.7)

Time period: 01/04/2006 to 10/25/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	43	0	<4	0	0		5.4	5.7	6.3	8	9.7	11.8	12.9
	43	0	<5	0	0		5.4	5.7	6.3	8	9.7	11.8	12.9
pH (SU)	42	0	<6	0	0		6.1	6.3	6.7	7	7.3	7.6	7.6
	42	0	>9	0	0		6.1	6.3	6.7	7	7.3	7.6	7.6
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	41	0	N/A				96	114	125	188	228	269	292
Water Temperature (°C)	43	0	>32	0	0		3.4	8.2	11	17	24.8	27.9	30.6
Other													
Hardness (mg/L)	4	0	>100	0	0		30	30	31	33	38	40	40
TSS (mg/L)	20	2	N/A				6.2	6.4	9.9	12.5	26	44.6	48
Turbidity (NTU)	43	0	>50	3	7		4	7.5	12	16	26	50	95
Nutrients (mg/L)													
NH3 as N	43	13	N/A				0.02	0.02	0.02	0.02	0.05	0.08	0.19
NO2 + NO3 as N	43	0	>10	0	0		0.2	0.21	0.33	0.5	0.67	0.96	1.4
TKN as N	42	0	N/A				0.34	0.41	0.47	0.54	0.65	0.74	0.88
Total Phosphorus	43	0	N/A				0.09	0.11	0.14	0.26	0.33	0.39	0.52
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				300	300	495	595	1975	2200	2200
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	1	>7	0	0		2	2	2	3	4	4	4
Iron, total (Fe)	6	0	>1000	3	50		800	800	800	1100	2575	2800	2800
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	1	16.7		50	50	72	105	218	360	360
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	1	>50	0	0		10	10	12	14	16	18	18

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
43	126.9	5	11.6	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: SWIFT CRK AT NC 42 NR CLAYTON
Station #: J4510000 **Hydrologic Unit Code:** 03020201
Latitude: 35.61314 **Longitude:** -78.54863 **Stream class:** C NSW
Agency: NCAMBNT **NC stream index:** 27-43-(8)

Time period: 01/04/2006 to 10/25/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	43	0	<4	0	0		5	5.7	6.4	7.8	9.9	12	13.2
	43	0	<5	0	0		5	5.7	6.4	7.8	9.9	12	13.2
pH (SU)	42	0	<6	0	0		6	6.3	6.6	6.8	7.1	7.3	7.6
	42	0	>9	0	0		6	6.3	6.6	6.8	7.1	7.3	7.6
Salinity (ppt)	1	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	41	0	N/A				62	71	76	83	94	102	124
Water Temperature (°C)	43	0	>32	0	0		1.4	6.9	10.2	16.3	24.5	26.8	29.7
Other													
Hardness (mg/L)	4	0	N/A				23	23	24	28	29	29	29
TSS (mg/L)	20	11	N/A				2.8	5.1	6.2	12	13.5	23.4	45
Turbidity (NTU)	43	0	>50	0	0		3.7	4.8	6	8.4	14	20.8	33
Nutrients (mg/L)													
NH3 as N	43	6	N/A				0.02	0.02	0.02	0.04	0.05	0.08	0.11
NO2 + NO3 as N	43	2	N/A				0.02	0.03	0.08	0.17	0.26	0.32	0.35
TKN as N	42	0	N/A				0.3	0.32	0.4	0.48	0.58	0.63	0.91
Total Phosphorus	43	0	N/A				0.03	0.04	0.05	0.05	0.08	0.09	0.33
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				120	120	135	255	622	1200	1200
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	4	66.7		620	620	792	1250	2150	2300	2300
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	6	>50	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
43	99.5	5	11.6	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MIDDLE CRK AT NC 50 NR CLAYTON
Station #: J5000000 **Hydrologic Unit Code:** 03020201
Latitude: 35.56894 **Longitude:** -78.59230 **Stream class:** C NSW
Agency: NCAMBNT **NC stream index:** 27-43-15-(4)

Time period: 01/04/2006 to 10/25/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	Percentiles 10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	43	0	<4	0	0		5.7	6	6.5	8.1	9.7	12	13.2
	43	0	<5	0	0		5.7	6	6.5	8.1	9.7	12	13.2
pH (SU)	42	0	<6	0	0		6.2	6.3	6.7	6.9	7.3	7.4	7.7
	42	0	>9	0	0		6.2	6.3	6.7	6.9	7.3	7.4	7.7
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	41	0	N/A				81	108	132	174	226	323	439
Water Temperature (°C)	43	0	>32	0	0		2	6.5	10	15.3	23	26.3	27.4
Other													
Hardness (mg/L)	4	0	N/A				29	29	29	30	34	35	35
TSS (mg/L)	20	9	N/A				4.5	5.1	6.2	6.2	13.5	25.7	34
Turbidity (NTU)	43	0	>50	1	2.3		4.4	5.8	6.9	9.7	19	35.6	55
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				330	330	352	515	1550	2300	2300
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	4	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	5	83.3		770	770	1318	1550	2400	3000	3000
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	1	>50	0	0		10	10	11	12	14	15	15

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
43	118.9	3	7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: LITTLE RIV AT SR 2320 NR PRINCETON
Station #: J5850000 **Hydrologic Unit Code:** 03020201
Latitude: 35.51252 **Longitude:** -78.15883 **Stream class:** WS-V NSW
Agency: NCAMBNT **NC stream index:** 27-57-(8.5)

Time period: 01/04/2006 to 10/25/2010

	# results	# ND	Results not meeting EL: EL	#	%	%Conf	Percentiles: Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	43	0	<4	0	0		4	5.5	6.4	7.8	10.3	12.3	13.9
	43	0	<5	3	7		4	5.5	6.4	7.8	10.3	12.3	13.9
pH (SU)	42	0	<6	2	4.8		5.8	6.2	6.6	6.9	7.1	7.6	8.6
	42	0	>9	0	0		5.8	6.2	6.6	6.9	7.1	7.6	8.6
Salinity (ppt)	1	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	41	0	N/A				61	66	74	83	102	127	143
Water Temperature (°C)	43	0	>32	0	0		1.4	5.9	9.5	17	24.2	27.1	29.9
Other													
Hardness (mg/L)	4	0	>100	0	0		18	18	19	24	26	26	26
TSS (mg/L)	20	13	N/A				2.5	2.9	6.2	6.2	7.2	21.2	24
Turbidity (NTU)	43	0	>50	0	0		1	2.8	4.1	5.3	8.4	16.8	31
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				190	190	228	295	618	1000	1000
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	5	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	6	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	6	100		1300	1300	1375	1750	2400	2700	2700
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	0	0		50	50	63	81	118	140	140
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	3	>50	0	0		10	10	10	10	12	15	15

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
42	52.8	2	4.8	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 1915 NR GOLDSBORO
Station #: J5970000 **Hydrologic Unit Code:** 03020202
Latitude: 35.33712 **Longitude:** -77.99734 **Stream class:** C NSW
Agency: NCAMBNT **NC stream index:** 27-(56)

Time period: 01/04/2006 to 10/25/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	42	0	<4	0	0		5.1	5.5	6.3	7.3	10.1	11.7	13.6
	42	0	<5	0	0		5.1	5.5	6.3	7.3	10.1	11.7	13.6
pH (SU)	41	0	<6	1	2.4		5.8	6.3	6.6	6.9	7.1	7.4	7.7
	41	0	>9	0	0		5.8	6.3	6.6	6.9	7.1	7.4	7.7
Salinity (ppt)	1	0	N/A				0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spec. conductance (umhos/cm at 25°C)	40	0	N/A				80	93	110	142	208	236	276
Water Temperature (°C)	42	0	>32	0	0		3	7.7	10.6	17.8	25.5	28.6	31.2
Other													
Chlorophyll a (ug/L)	40	4	>40	0	0		1	1	2	3	6	9	21
Hardness (mg/L)	4	0	N/A				25	25	26	31	36	37	37
TSS (mg/L)	20	4	N/A				6.2	6.2	12	16	28.5	51.9	60
Turbidity (NTU)	42	0	>50	2	4.8		3.9	8.4	11	16.5	23	41.7	65
Nutrients (mg/L)													
NH3 as N	42	3	N/A				0.02	0.02	0.03	0.04	0.05	0.06	0.08
NO2 + NO3 as N	42	0	N/A				0.07	0.27	0.35	0.44	0.53	0.65	0.85
TKN as N	41	0	N/A				0.42	0.45	0.51	0.55	0.62	0.71	0.76
Total Phosphorus	42	0	N/A				0.08	0.08	0.12	0.14	0.18	0.22	0.28
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				470	470	515	915	1725	1800	1800
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	2	>7	0	0		2	2	2	2	4	4	4
Iron, total (Fe)	6	0	>1000	6	100		1500	1500	1500	1550	2550	3300	3300
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	1	>50	0	0		10	10	12	14	15	15	15

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
42	60.6	1	2.4	

Key:
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ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT NC 11 AT KINSTON
Station #: J6150000 **Hydrologic Unit Code:** 03020202
Latitude: 35.25879 **Longitude:** -77.58353 **Stream class:** C NSW
Agency: NCAMBNT **NC stream index:** 27-(75.7)

Time period: 01/03/2006 to 12/29/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	253	0	<4	2	0.8		2.8	6.3	6.9	8.2	9.9	11.4	14
	253	0	<5	4	1.6		2.8	6.3	6.9	8.2	9.9	11.4	14
pH (SU)	259	0	<6	4	1.5		5.4	6.4	6.7	7	7.2	7.4	8.1
	259	0	>9	0	0		5.4	6.4	6.7	7	7.2	7.4	8.1
Salinity (ppt)	260	0	N/A				0.01	0.03	0.04	0.06	0.08	0.1	0.13
Spec. conductance (umhos/cm at 25°C)	260	0	N/A				55	90	106	134	170	199	263
Water Temperature (°C)	261	0	>32	1	0.4		2.7	7.5	11.3	18.6	26	29	32.6
Other													
Chlorophyll a (ug/L)	60	5	>40	0	0		1	1	2	3	5	9	16
Hardness (mg/L)	4	0	N/A				25	25	27	33	35	35	35
TSS (mg/L)	20	4	N/A				6.2	6.2	9.4	15	21	39.4	42
Turbidity (NTU)	60	0	>50	2	3.3		2.5	4.4	9.2	17	20	33.7	55
Nutrients (mg/L)													
NH3 as N	256	102	N/A				0.02	0.02	0.02	0.02	0.04	0.06	0.1
NO2 + NO3 as N	256	2	N/A				0.02	0.28	0.42	0.52	0.65	0.79	1.1
TKN as N	251	0	N/A				0.28	0.4	0.46	0.55	0.62	0.71	0.89
Total Phosphorus	256	0	N/A				0.05	0.08	0.1	0.12	0.14	0.17	0.25
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				400	400	415	585	1575	2400	2400
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	4	>7	0	0		2	2	2	2	3	4	4
Iron, total (Fe)	6	0	>1000	5	83.3		1000	1000	1150	1300	2425	2500	2500
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	3	>50	0	0		10	10	10	12	16	21	21

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
61	48.3	4	6.6	

Key:
result: number of observations
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CONTENTNEA CRK AT NC 581 NR LUCAMA
Station #: J6740000 **Hydrologic Unit Code:** 03020203
Latitude: 35.69142 **Longitude:** -78.10928 **Stream class:** WS-V NSW
Agency: NCAMBNT **NC stream index:** 27-86-(1)

Time period: 01/04/2006 to 10/25/2010

	# results	# ND	Results not meeting EL: EL	#	%	%Conf	Percentiles: Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	43	0	<4	0	0		4.3	5.1	6.1	8.1	11.1	12	14.4
	43	0	<5	3	7		4.3	5.1	6.1	8.1	11.1	12	14.4
pH (SU)	42	0	<6	1	2.4		5.9	6.4	6.5	6.8	7	7.4	7.6
	42	0	>9	0	0		5.9	6.4	6.5	6.8	7	7.4	7.6
Salinity (ppt)	1	0	N/A				0	0	0	0	0	0	0
Spec. conductance (umhos/cm at 25°C)	41	0	N/A				49	54	60	70	73	78	104
Water Temperature (°C)	43	0	>32	0	0		2.9	8.2	11	19.2	24.5	28.4	31.5
Other													
Hardness (mg/L)	4	0	>100	0	0		13	13	13	15	18	19	19
TSS (mg/L)	20	12	N/A				2.8	3.4	6	6.2	6.2	8.9	12
Turbidity (NTU)	43	0	>50	0	0		1.8	2.2	3	4.5	7.8	14.2	18
Nutrients (mg/L)													
NH3 as N	43	5	N/A				0.02	0.02	0.03	0.05	0.08	0.1	0.12
NO2 + NO3 as N	43	4	>10	0	0		0.02	0.02	0.06	0.1	0.14	0.19	0.26
TKN as N	42	0	N/A				0.42	0.45	0.54	0.62	0.66	0.76	0.88
Total Phosphorus	43	0	N/A				0.02	0.02	0.03	0.04	0.05	0.06	0.08
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				89	89	96	140	318	670	670
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	3	50		480	480	495	880	1425	1800	1800
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Manganese, total (Mn)	6	0	>200	1	16.7		39	39	56	78	192	380	380
Mercury, total (Hg) (ng/L)	5	5	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	6	>50	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
43	20.1	0	0	

Key:
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CONTENTNEA CRK AT NC 123 AT HOOKERTON
Station #: J7450000 **Hydrologic Unit Code:** 03020203
Latitude: 35.42864 **Longitude:** -77.58265 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-86-(7)

Time period: 01/03/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	253	0	N/A				2.4	5.6	6.2	7.2	9.4	10.8	14.5
pH (SU)	259	0	<4.3	0	0		4.9	6.1	6.3	6.6	6.9	7.1	8.1
	259	0	>9	0	0		4.9	6.1	6.3	6.6	6.9	7.1	8.1
Salinity (ppt)	260	0	N/A				0.01	0.03	0.04	0.05	0.06	0.07	0.6
Spec. conductance (umhos/cm at 25°C)	260	0	N/A				41	79	97	114	134	154	224
Water Temperature (°C)	261	0	>32	1	0.4		2	7.3	10.9	17.7	25	27.6	32.1
Other													
Chlorophyll a (ug/L)	60	15	>40	0	0		1	1	1	2	3	5	7
Hardness (mg/L)	4	0	N/A				28	28	28	29	31	32	32
TSS (mg/L)	20	14	N/A				4	5	6.2	6.2	7.2	12	76
Turbidity (NTU)	60	0	>50	0	0		3.3	3.9	4.7	6.6	8.7	14	50
Nutrients (mg/L)													
NH3 as N	257	20	N/A				0.02	0.02	0.03	0.05	0.07	0.09	0.19
NO2 + NO3 as N	257	0	N/A				0.09	0.43	0.53	0.64	0.77	0.9	1.3
TKN as N	251	0	N/A				0.38	0.48	0.54	0.62	0.71	0.81	1.1
Total Phosphorus	257	0	N/A				0.04	0.07	0.1	0.14	0.18	0.2	0.27
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				200	200	230	275	868	2600	2600
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	1	16.7		2	2	2	2	5	14	14
Iron, total (Fe)	6	0	>1000	5	83.3		650	650	1062	1550	2225	2600	2600
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	1	>50	0	0		10	10	11	12	18	20	20

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
61	71	5	8.2	

Key:
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: LITTLE CONTENTNEA CRK AT SR 1125 NR BALLARDS CROSSROADS
Station #: J7739550 **Hydrologic Unit Code:** 03020203
Latitude: 35.52490 **Longitude:** -77.52271 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-86-26

Time period: 01/11/2006 to 12/14/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	59	0	N/A				1.4	3.2	4.3	5.2	8.9	11.3	14.6
pH (SU)	60	0	<4.3	0	0		4.4	5.9	6.3	6.6	6.9	7.1	8.2
	60	0	>9	0	0		4.4	5.9	6.3	6.6	6.9	7.1	8.2
Salinity (ppt)	60	0	N/A				0.02	0.03	0.04	0.07	0.09	0.11	0.13
Spec. conductance (umhos/cm at 25°C)	60	0	N/A				59	80	104	145	188	242	295
Water Temperature (°C)	60	0	>32	0	0		0.2	4.4	9.8	15.6	23.5	26.6	28.6
Other													
Chlorophyll a (ug/L)	59	4	>40	2	3.4		1	1	2	4	12	22	46
Hardness (mg/L)	4	0	N/A				33	33	34	49	60	61	61
TSS (mg/L)	20	14	N/A				3.2	3.6	6.2	6.2	6.2	11.8	17
Turbidity (NTU)	59	0	>50	0	0		2.3	3.1	4.1	5.3	7.3	8.4	40
Nutrients (mg/L)													
NH3 as N	59	17	N/A				0.02	0.02	0.02	0.04	0.07	0.09	0.39
NO2 + NO3 as N	59	15	N/A				0.02	0.02	0.02	0.2	0.43	0.62	1.2
TKN as N	59	0	N/A				0.47	0.57	0.67	0.85	0.92	0.98	1.5
Total Phosphorus	59	0	N/A				0.05	0.11	0.16	0.22	0.32	0.36	0.69
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				160	160	160	205	1018	2000	2000
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	6	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	5	83.3		920	920	1055	1950	2225	2900	2900
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	3	>50	0	0		10	10	10	10	10	12	12

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
59	91.4	7	11.9	

Key:
result: number of observations
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CONTENTNEA CRK NR SR 1800 AT GRIFTON
Station #: J7810000 **Hydrologic Unit Code:** 03020203
Latitude: 35.36852 **Longitude:** -77.43412 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-86-(7)

Time period: 01/10/2006 to 12/14/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	61	0	N/A				2.2	5.5	5.9	7.3	10	10.9	13.6
pH (SU)	61	0	<4.3	0	0		5.8	6.1	6.4	6.7	7.1	7.3	7.7
	61	0	>9	0	0		5.8	6.1	6.4	6.7	7.1	7.3	7.7
Salinity (ppt)	61	0	N/A				0.02	0.03	0.04	0.05	0.06	0.08	0.1
Spec. conductance (umhos/cm at 25°C)	61	0	N/A				60	87	102	127	146	165	212
Water Temperature (°C)	62	0	>32	0	0		2.9	6.2	11.2	18.5	25.6	28.8	29.6
Other													
Chlorophyll a (ug/L)	60	10	>40	0	0		1	1	1	2	3	6	7
Hardness (mg/L)	4	0	N/A				31	31	32	33	39	41	41
TSS (mg/L)	20	14	N/A				3.5	3.9	6.2	6.2	6.2	11.8	16
Turbidity (NTU)	60	0	>50	1	1.7		2.7	4.4	4.8	6.4	8	13.9	80
Nutrients (mg/L)													
NH3 as N	60	4	N/A				0.02	0.02	0.03	0.04	0.07	0.08	0.24
NO2 + NO3 as N	60	0	N/A				0.06	0.31	0.42	0.57	0.75	0.92	1.2
TKN as N	59	0	N/A				0.35	0.46	0.55	0.62	0.74	0.85	1.2
Total Phosphorus	60	0	N/A				0.06	0.09	0.12	0.16	0.21	0.24	0.38
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				220	220	235	275	1170	3600	3600
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	5	83.3		700	700	1075	1500	2575	2800	2800
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	3	>50	0	0		10	10	10	11	14	15	15

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
61	70	6	9.8	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 1470 NR FORT BARNWELL
Station #: J7850000 **Hydrologic Unit Code:** 03020202
Latitude: 35.31389 **Longitude:** -77.30302 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(85)

Time period: 01/03/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	253	0	N/A				3.3	5.7	6.4	7.4	9.6	10.8	13.6
pH (SU)	260	0	<4.3	0	0		5.6	6.4	6.6	6.9	7.1	7.4	8.2
	260	0	>9	0	0		5.6	6.4	6.6	6.9	7.1	7.4	8.2
Salinity (ppt)	261	0	N/A				0.01	0.03	0.04	0.06	0.08	0.09	0.12
Spec. conductance (umhos/cm at 25°C)	261	0	N/A				54	92	109	138	170	199	259
Water Temperature (°C)	262	0	>32	1	0.4		2.1	7.6	11.2	18.2	26	28.5	32.7
Other													
Chlorophyll a (ug/L)	59	7	>40	0	0		1	1	1	3	4	7	12
Hardness (mg/L)	4	0	N/A				26	26	28	35	41	42	42
TSS (mg/L)	20	5	N/A				5.5	6	6.2	7.6	10	16.7	22
Turbidity (NTU)	59	0	>50	0	0		2	4.9	6.9	10	14	24	50
Nutrients (mg/L)													
NH3 as N	256	51	N/A				0.02	0.02	0.02	0.03	0.05	0.07	0.13
NO2 + NO3 as N	256	1	N/A				0.02	0.28	0.41	0.5	0.66	0.81	1.1
TKN as N	250	0	N/A				0.28	0.45	0.5	0.56	0.63	0.71	1
Total Phosphorus	256	0	N/A				0.05	0.08	0.1	0.12	0.14	0.16	0.25
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				270	270	412	490	742	1500	1500
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>7	0	0		2	2	2	2	2	4	4
Iron, total (Fe)	6	0	>1000	5	83.3		800	800	1025	1300	1800	2100	2100
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	4	>50	0	0		10	10	10	10	12	13	13

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
59	42.3	2	3.4	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT REDHILL LANDING NR PERFECTION
Station #: J7860000 **Hydrologic Unit Code:** 03020202
Latitude: 35.24790 **Longitude:** -77.20820 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(85)

Time period: 01/04/2006 to 11/08/2006

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	11	0	N/A				5.1	5.1	5.5	9.2	11.1	12.6	13
pH (SU)	11	0	<4.3	0	0		6.5	6.5	6.8	7.2	7.9	8.4	8.5
	11	0	>9	0	0		6.5	6.5	6.8	7.2	7.9	8.4	8.5
Salinity (ppt)	11	0	N/A				0.02	0.02	0.04	0.05	0.06	0.08	0.08
Spec. conductance (umhos/cm at 25°C)	11	0	N/A				70	71	105	119	131	163	171
Water Temperature (°C)	11	0	>32	0	0		9.5	9.5	10.4	22.2	24.2	28.8	29.3
Other													
Chlorophyll a (ug/L)	11	2	>40	1	9.1		1	1	2	3	4	58	71
TSS (mg/L)	3	0	N/A				4.8	4.8	4.8	8	32	32	32
Turbidity (NTU)	11	0	>50	0	0		7	7.1	7.7	13	16	20.8	22
Nutrients (mg/L)													
NH3 as N	11	1	N/A				0.02	0.02	0.02	0.04	0.04	0.07	0.08
NO2 + NO3 as N	11	0	N/A				0.13	0.14	0.21	0.48	0.77	0.86	0.87
TKN as N	11	0	N/A				0.4	0.41	0.49	0.58	0.68	0.88	0.92
Total Phosphorus	11	0	N/A				0.09	0.09	0.09	0.14	0.16	0.18	0.19
Metals (ug/L)													
Aluminum, total (Al)	3	0	N/A				350	350	350	360	1300	1300	1300
Arsenic, total (As)	3	3	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	3	3	>2	0	0		2	2	2	2	2	2	2
Chromium, total (Cr)	3	3	>50	0	0		25	25	25	25	25	25	25
Copper, total (Cu)	3	2	>7	0	0		2	2	2	2	4	4	4
Iron, total (Fe)	3	0	>1000	3	100		1200	1200	1200	1300	2200	2200	2200
Lead, total (Pb)	3	3	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	3	3	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	3	3	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	3	2	>50	0	0		10	10	10	10	12	12	12

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
9	43.1	0	0	

Key:
result: number of observations
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 1400 AT STREETS FERRY
Station #: J7930000 **Hydrologic Unit Code:** 03020202
Latitude: 35.21060 **Longitude:** -77.12220 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(85)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	62	0	N/A				4.3	5.4	6.2	7	9.6	11.8	14.2
pH (SU)	61	0	<4.3	0	0		6.2	6.6	6.8	7	7.2	7.6	9.4
	61	0	>9	1	1.6		6.2	6.6	6.8	7	7.2	7.6	9.4
Salinity (ppt)	63	0	N/A				0.02	0.03	0.05	0.05	0.07	0.1	0.6
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				69	91	113	131	163	221	1222
Water Temperature (°C)	63	0	>32	0	0		3.9	8.2	11.2	19.6	25.6	29.6	31.3
Other													
Chlorophyll a (ug/L)	62	7	>40	1	1.6		1	1	2	3	7	14	68
Hardness (mg/L)	4	0	N/A				33	33	33	35	38	39	39
TSS (mg/L)	20	8	N/A				4	4.3	6.2	6.2	7.2	13.4	38
Turbidity (NTU)	62	1	>50	0	0		1	4.7	5.7	8.1	11	14	30
Nutrients (mg/L)													
NH3 as N	62	12	N/A				0.02	0.02	0.02	0.03	0.05	0.1	0.16
NO2 + NO3 as N	62	2	N/A				0.02	0.17	0.26	0.4	0.63	0.78	1
TKN as N	61	0	N/A				0.35	0.44	0.5	0.59	0.66	0.74	0.92
Total Phosphorus	61	0	N/A				0.06	0.08	0.1	0.11	0.13	0.14	0.18
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				310	310	320	610	1200	1700	1700
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>2	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>50	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	4	>7	0	0		2	2	2	2	3	4	4
Iron, total (Fe)	5	0	>1000	4	80		880	880	990	1200	2000	2700	2700
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	4	>50	0	0		10	10	10	10	12	15	15

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
61	28.7	0	0	

Key:
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CREEPING SWAMP AT NC 43 NR VANCEBORO
Station #: J8150000 **Hydrologic Unit Code:** 03020202
Latitude: 35.39164 **Longitude:** -77.23134 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-97-5-3

Time period: 01/11/2006 to 12/14/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	59	0	N/A				0.1	0.8	1.4	4.1	7.8	10.5	13.2
pH (SU)	59	0	<4.3	1	1.7		3.9	5.4	5.8	6.1	6.4	6.7	7.5
	59	0	>9	0	0		3.9	5.4	5.8	6.1	6.4	6.7	7.5
Salinity (ppt)	60	0	N/A				0	0.02	0.02	0.04	0.05	0.07	0.15
Spec. conductance (umhos/cm at 25°C)	60	0	N/A				48	58	70	92	129	164	300
Water Temperature (°C)	60	0	>32	0	0		0.1	4.2	8.7	14.2	21.6	25.4	27.1
Other													
Chlorophyll a (ug/L)	58	12	>40	5	8.6		1	1	1	2	7	37	390
Hardness (mg/L)	4	0	N/A				18	18	21	30	39	41	41
TSS (mg/L)	20	10	N/A				2.5	2.5	6.2	6.4	12	50.5	54
Turbidity (NTU)	59	0	>50	1	1.7		2	3	3.6	6.2	11	19	170
Nutrients (mg/L)													
NH3 as N	59	23	N/A				0.02	0.02	0.02	0.04	0.36	1.1	3.4
NO2 + NO3 as N	58	30	N/A				0.02	0.02	0.02	0.02	0.12	0.43	3.1
TKN as N	59	0	N/A				0.39	0.48	0.7	1.1	1.6	2.7	4.4
Total Phosphorus	59	0	N/A				0.02	0.02	0.04	0.08	0.15	0.27	0.42
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				300	300	308	330	1750	1900	1900
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	6	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	4	66.7		480	480	840	1850	2750	4400	4400
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	6	>50	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
59	144.4	15	25.4	81.2

Key:
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: SWIFT CRK AT MOUTH NR ASKIN
Station #: J8210000 **Hydrologic Unit Code:** 03020202
Latitude: 35.19278 **Longitude:** -77.08984 **Stream class:** SC Sw NSW
Agency: NCAMBNT **NC stream index:** 27-97-(6)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	62	0	N/A				0.8	4.1	5.3	6.6	8.3	10	13.5
pH (SU)	61	0	<4.3	0	0		6.1	6.5	6.7	6.9	7.1	7.2	7.8
	61	0	>8.5	0	0		6.1	6.5	6.7	6.9	7.1	7.2	7.8
Salinity (ppt)	63	0	N/A				0.03	0.04	0.06	0.09	0.2	1.36	3.8
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				86	113	138	190	438	2532	6824
Water Temperature (°C)	63	0	>32	0	0		4.2	8.6	12	19.8	26.5	29.4	31.3
Other													
Chlorophyll a (ug/L)	61	13	>40	1	1.6		1	1	1	3	10	21	60
TSS (mg/L)	20	13	N/A				2.8	4.5	6.2	6.2	6.2	6.5	8.8
Turbidity (NTU)	62	0	>25	0	0		1.7	3	3.7	5.5	7.6	10	14
Nutrients (mg/L)													
NH3 as N	62	7	N/A				0.02	0.02	0.02	0.04	0.07	0.09	0.16
NO2 + NO3 as N	62	0	N/A				0.04	0.07	0.18	0.34	0.57	0.69	1
TKN as N	61	0	N/A				0.4	0.48	0.55	0.62	0.7	0.8	0.93
Total Phosphorus	61	0	N/A				0.04	0.05	0.07	0.09	0.12	0.15	0.16
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				380	380	430	500	595	630	630
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	4	>3	1	20		2	2	2	2	3	4	4
Iron, total (Fe)	5	0	N/A				750	750	790	940	1100	1200	1200
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	5	>86	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
61	24.8	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: SWIFT CRK AT NC 43 NR STREETS FERRY
Station #: J8230000 **Hydrologic Unit Code:** 03020202
Latitude: 35.23104 **Longitude:** -77.11388 **Stream class:** SC Sw NSW
Agency: NCAMBNT **NC stream index:** 27-97-(6)

Time period: 01/03/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	251	0	N/A				0.7	2.3	3.1	4.5	6.9	9.6	13.6
pH (SU)	257	0	<4.3	0	0		5.4	6.2	6.4	6.6	6.7	7	8.3
	257	0	>8.5	0	0		5.4	6.2	6.4	6.6	6.7	7	8.3
Salinity (ppt)	257	0	N/A				0.01	0.04	0.06	0.08	0.11	0.58	3.3
Spec. conductance (umhos/cm at 25°C)	258	0	N/A				53	108	133	173	234	937	5982
Water Temperature (°C)	258	0	>32	0	0		2.1	8.4	11.7	18.2	24.4	27	31.5
Nutrients (mg/L)													
NH3 as N	256	56	N/A				0.02	0.02	0.02	0.04	0.06	0.07	0.17
NO2 + NO3 as N	256	23	N/A				0.02	0.02	0.12	0.38	0.63	0.88	1.8
TKN as N	251	0	N/A				0.38	0.49	0.54	0.61	0.71	0.81	1.3
Total Phosphorus	256	0	N/A				0.03	0.05	0.07	0.09	0.12	0.15	0.24

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 68 BELOW SWIFT CRK NR ASKIN
Station #: J8250000 **Hydrologic Unit Code:** 03020202
Latitude: 35.19009 **Longitude:** -77.09784 **Stream class:** SC Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(96)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	62	0	N/A				4.4	5	6	7	9.1	11.4	15
pH (SU)	61	0	<4.3	0	0		6.1	6.5	6.7	7	7.1	7.3	8.1
	61	0	>8.5	0	0		6.1	6.5	6.7	7	7.1	7.3	8.1
Salinity (ppt)	63	0	N/A				0.02	0.04	0.05	0.07	0.11	1.06	2.22
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				74	104	125	148	242	1977	4174
Water Temperature (°C)	63	0	>32	0	0		3.8	8.2	11.6	19.9	26.1	29.5	30.7
Other													
Chlorophyll a (ug/L)	61	5	>40	0	0		1	1	2	4	9	12	26
TSS (mg/L)	20	13	N/A				2.5	4	6.2	6.2	7.4	11.8	26
Turbidity (NTU)	62	0	>25	0	0		3.4	4.1	5	7.3	9.2	12.7	23
Nutrients (mg/L)													
NH3 as N	62	2	N/A				0.02	0.02	0.03	0.06	0.09	0.13	0.2
NO2 + NO3 as N	62	0	N/A				0.04	0.16	0.25	0.42	0.6	0.78	0.94
TKN as N	60	0	N/A				0.36	0.51	0.55	0.62	0.69	0.76	0.93
Total Phosphorus	61	0	N/A				0.05	0.08	0.1	0.12	0.14	0.15	0.19
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				300	300	305	760	1165	1500	1500
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	4	>3	1	20		2	2	2	2	3	4	4
Iron, total (Fe)	5	0	N/A				960	960	1030	1200	1700	2200	2200
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	4	>86	0	0		10	10	10	10	10	11	11

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
61	25.2	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 64 NR BELLAIR
Station #: J8270000 **Hydrologic Unit Code:** 03020202
Latitude: 35.17801 **Longitude:** -77.09004 **Stream class:** SC Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(96)

Time period: 01/04/2006 to 12/05/2006

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	11	0	N/A				4.7	4.8	5.3	7.2	10.5	11	11
pH (SU)	12	0	<4.3	0	0		6.3	6.4	6.8	7	7.4	7.6	7.7
	12	0	>8.5	0	0		6.3	6.4	6.8	7	7.4	7.6	7.7
Salinity (ppt)	12	0	N/A				0.03	0.03	0.04	0.06	0.07	0.14	0.16
Spec. conductance (umhos/cm at 25°C)	12	0	N/A				83	84	96	134	164	286	326
Water Temperature (°C)	12	0	>32	0	0		9.3	9.4	11.5	21.4	24.7	29.7	30.6

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 52 AT MOUTH OF NARROWS NR WASHINGTON FORKS
Station #: J8290000 **Hydrologic Unit Code:** 03020202
Latitude: 35.15010 **Longitude:** -77.07493 **Stream class:** SC Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(96)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	62	0	N/A				3.9	4.5	5.7	6.6	9	11.3	12.8
pH (SU)	61	0	<4.3	0	0		6	6.6	6.8	7	7.1	7.2	7.6
	61	0	>8.5	0	0		6	6.6	6.8	7	7.1	7.2	7.6
Salinity (ppt)	63	0	N/A				0.03	0.04	0.06	0.13	0.96	4.22	5.26
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				76	100	134	278	1774	7565	9810
Water Temperature (°C)	63	0	>32	0	0		3.8	8.6	11.7	19	26.8	29.3	30.7
Other													
Chlorophyll a (ug/L)	62	5	>40	4	6.5		1	1	2	3	10	30	100
TSS (mg/L)	20	11	N/A				2.5	3.3	6.2	7.2	11.8	12	16
Turbidity (NTU)	62	0	>25	0	0		1.9	3.9	4.9	6.8	8.8	12.7	18
Nutrients (mg/L)													
NH3 as N	62	5	N/A				0.02	0.02	0.03	0.06	0.08	0.13	0.25
NO2 + NO3 as N	62	1	N/A				0.02	0.06	0.2	0.37	0.58	0.76	0.83
TKN as N	61	0	N/A				0.34	0.51	0.56	0.62	0.74	0.81	1
Total Phosphorus	61	0	N/A				0.06	0.07	0.09	0.12	0.14	0.18	0.27
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				290	290	295	750	980	1200	1200
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	4	>3	1	20		2	2	2	2	3	4	4
Iron, total (Fe)	5	0	N/A				950	950	975	1100	1500	1800	1800
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	4	>86	0	0		10	10	10	10	10	11	11

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
59	22.4	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV .5 MI UPS UNION POINT AT NEW BERN
Station #: J8570000 **Hydrologic Unit Code:** 03020204
Latitude: 35.10972 **Longitude:** -77.03174 **Stream class:** SC Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(96)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	ND	EL	#	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	62	0	N/A				4.4	6.4	7.4	8.5	10.3	11.8	14.3
pH (SU)	61	0	<4.3	0	0		6.3	6.7	7	7.3	7.7	8	8.6
	61	0	>8.5	1	1.6		6.3	6.7	7	7.3	7.7	8	8.6
Salinity (ppt)	62	0	N/A				0.03	0.05	0.34	1.71	5.15	8.71	13.4
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				76	118	626	3163	9153	15000	22363
Water Temperature (°C)	63	0	>32	0	0		3.6	8.4	12.5	19.9	26.9	29.2	31.2
Other													
Chlorophyll a (ug/L)	67	1	>40	9	13.4	77.6	1	3	5	18	30	42	86
TSS (mg/L)	20	10	N/A				2.5	4.3	6.2	6.8	9.7	12	14
Turbidity (NTU)	62	0	>25	1	1.6		3	4.2	4.6	6.1	8.4	12	26
Nutrients (mg/L)													
NH3 as N	67	28	N/A				0.02	0.02	0.02	0.02	0.06	0.09	0.33
NO2 + NO3 as N	67	17	N/A				0.02	0.02	0.02	0.25	0.39	0.61	0.84
TKN as N	66	0	N/A				0.43	0.53	0.6	0.66	0.74	0.83	1.1
Total Phosphorus	66	0	N/A				0.05	0.07	0.08	0.1	0.15	0.18	0.26
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				210	210	260	640	700	750	750
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	2	>3	2	40		2	2	2	2	3	3	3
Iron, total (Fe)	5	0	N/A				840	840	875	1100	1300	1400	1400
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	4	>86	0	0		10	10	10	10	12	13	13

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
61	26.5	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: TRENT RIV AT SR 1129 NR TRENTON
Station #: J8690000 **Hydrologic Unit Code:** 03020204
Latitude: 35.06364 **Longitude:** -77.46107 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-101-(1)

Time period: 01/10/2006 to 12/14/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	61	0	N/A				3.8	4.3	5.3	6.2	9	11.3	13.2
pH (SU)	61	0	<4.3	0	0		5.8	6.4	6.8	7	7.3	7.5	8.1
	61	0	>9	0	0		5.8	6.4	6.8	7	7.3	7.5	8.1
Salinity (ppt)	61	0	N/A				0.02	0.04	0.05	0.08	0.11	0.13	0.15
Spec. conductance (umhos/cm at 25°C)	61	0	N/A				62	109	128	177	226	282	303
Water Temperature (°C)	62	0	>32	0	0		2.5	6.2	11.8	18	23.9	25.8	26.6
Other													
Chlorophyll a (ug/L)	60	32	>40	1	1.7		1	1	1	1	3	7	64
Hardness (mg/L)	4	0	N/A				40	40	54	96	107	110	110
TSS (mg/L)	20	16	N/A				2.5	2.5	4.7	6.2	6.2	12	28
Turbidity (NTU)	60	2	>50	0	0		1	1.1	1.7	3.2	4.5	5.7	25
Nutrients (mg/L)													
NH3 as N	60	29	N/A				0.02	0.02	0.02	0.02	0.03	0.05	0.33
NO2 + NO3 as N	60	0	N/A				0.02	0.18	0.51	0.74	0.98	1.39	1.9
TKN as N	60	0	N/A				0.32	0.44	0.52	0.64	0.78	0.97	1.3
Total Phosphorus	60	0	N/A				0.03	0.04	0.05	0.07	0.1	0.12	0.28
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				190	190	220	375	810	1500	1500
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>2	0	0		1	1	1	2	2	2	2
Chromium, total (Cr)	6	6	>50	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	6	>7	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	6	0	>1000	2	33.3		390	390	562	715	1100	1100	1100
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	5	>50	0	0		10	10	10	10	11	14	14

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
61	86.6	3	4.9	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: TRENT RIV AT US 17 AT POLLOCKSVILLE
Station #: J8730000 **Hydrologic Unit Code:** 03020204
Latitude: 35.00993 **Longitude:** -77.21891 **Stream class:** C Sw NSW
Agency: NCAMBNT **NC stream index:** 27-101-(1)

Time period: 01/03/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	252	0	N/A				2.7	3.9	4.6	5.5	7.8	10.1	14.5
pH (SU)	259	0	<4.3	0	0		5.2	6.7	6.8	7.1	7.2	7.4	9.2
	259	0	>9	1	0.4		5.2	6.7	6.8	7.1	7.2	7.4	9.2
Salinity (ppt)	258	0	N/A				0	0.05	0.07	0.09	0.11	0.15	2.79
Spec. conductance (umhos/cm at 25°C)	259	0	N/A				34	113	156	198	234	292	5096
Water Temperature (°C)	261	0	>32	0	0		3.2	8.7	12.2	18.8	25.7	28.3	30.2
Nutrients (mg/L)													
NH3 as N	257	95	N/A				0.02	0.02	0.02	0.02	0.04	0.06	0.21
NO2 + NO3 as N	257	0	N/A				0.05	0.19	0.33	0.54	0.72	0.9	1.5
TKN as N	250	0	N/A				0.22	0.36	0.44	0.54	0.63	0.77	1.1
Total Phosphorus	257	0	N/A				0.05	0.07	0.09	0.12	0.15	0.17	0.23

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: TRENT RIV AT CM 14 ABOVE REEDY BR NR RHEMS
Station #: J8770000 **Hydrologic Unit Code:** 03020204
Latitude: 35.07508 **Longitude:** -77.11441 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-101-(31)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	62	0	N/A				2.4	5.3	6.3	7.6	9.5	10.9	14
pH (SU)	61	0	<4.3	0	0		6.4	6.9	7.1	7.3	7.5	7.7	8.3
	61	0	>8.5	0	0		6.4	6.9	7.1	7.3	7.5	7.7	8.3
Salinity (ppt)	61	0	N/A				0.03	0.06	0.22	1.01	4.65	7.56	11.4
Spec. conductance (umhos/cm at 25°C)	62	0	N/A				94	139	469	1787	8202	13092	19066
Water Temperature (°C)	62	0	>32	1	1.6		5.7	9.9	13.5	20.4	27.4	30.1	32.1
Other													
Chlorophyll a (ug/L)	61	9	>40	4	6.6		1	1	2	9	18	31	99
TSS (mg/L)	20	13	N/A				2.5	2.5	6.2	6.2	7.7	12	17
Turbidity (NTU)	61	0	>25	0	0		1.6	2.4	3	3.7	5.4	7	13
Nutrients (mg/L)													
NH3 as N	61	25	N/A				0.02	0.02	0.02	0.03	0.06	0.13	0.18
NO2 + NO3 as N	61	16	N/A				0.02	0.02	0.02	0.28	0.49	0.64	1
TKN as N	60	0	N/A				0.42	0.51	0.54	0.62	0.72	0.87	1.5
Total Phosphorus	60	0	N/A				0.07	0.08	0.1	0.12	0.18	0.24	0.26
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				190	190	215	400	485	490	490
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	4	>3	0	0		2	2	2	2	2	2	2
Iron, total (Fe)	5	0	N/A				420	420	445	540	685	820	820
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	4	>86	0	0		10	10	10	10	10	10	10

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
58	19.6	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 22 NR FAIRFIELD HARBOUR
Station #: J8900800 **Hydrologic Unit Code:** 03020204
Latitude: 35.07989 **Longitude:** -77.00607 **Stream class:** SC Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(96)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	62	0	N/A				4.3	6.8	7.8	9	10.5	11.6	14.3
pH (SU)	61	0	<4.3	0	0		6.2	6.7	7.2	7.5	8	8.3	8.6
	61	0	>8.5	1	1.6		6.2	6.7	7.2	7.5	8	8.3	8.6
Salinity (ppt)	63	0	N/A				0.03	0.12	1.2	3.5	6.8	10.98	15.4
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				87	254	2303	6284	11980	18437	25322
Water Temperature (°C)	63	0	>32	0	0		3.6	8.1	11.5	19.4	26.4	28.8	30
Other													
Chlorophyll a (ug/L)	62	1	>40	12	19.4	98.1	1	4	10	22	37	57	110
TSS (mg/L)	20	9	N/A				2.8	5.6	6.2	6.7	10	13.8	18
Turbidity (NTU)	62	0	>25	0	0		1.8	3.6	4.6	5.8	8.4	11.7	22
Nutrients (mg/L)													
NH3 as N	62	36	N/A				0.02	0.02	0.02	0.02	0.04	0.08	0.32
NO2 + NO3 as N	62	19	N/A				0.02	0.02	0.02	0.18	0.34	0.56	0.83
TKN as N	61	0	N/A				0.46	0.54	0.61	0.71	0.8	0.93	1
Total Phosphorus	61	0	N/A				0.05	0.07	0.08	0.1	0.14	0.2	0.26
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				170	170	230	310	655	670	670
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	2	>3	1	20		2	2	2	2	4	4	4
Iron, total (Fe)	5	0	N/A				600	600	720	900	1150	1300	1300
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	4	>86	0	0		10	10	10	10	10	11	11

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
61	20	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 2 AT MOUTH OF BROAD CRK NR THURMAN
Station #: J8902500 **Hydrologic Unit Code:** 03020204
Latitude: 35.04898 **Longitude:** -76.95687 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(104)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	62	0	N/A				5.7	6.8	8.2	9	10.5	12.5	13.3
pH (SU)	61	0	<4.3	0	0		6.4	7.1	7.4	7.8	8.2	8.4	8.7
	61	0	>8.5	2	3.3		6.4	7.1	7.4	7.8	8.2	8.4	8.7
Salinity (ppt)	63	0	N/A				0.34	0.98	3.83	6.5	11.6	13.37	18.3
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				660	1840	6893	10788	19498	22248	29571
Water Temperature (°C)	63	0	>32	0	0		3.1	8.8	11.7	19.8	26.3	28.9	30.6
Other													
Chlorophyll a (ug/L)	61	0	>40	12	19.7	98.3	1	8	14	20	32	81	120
TSS (mg/L)	19	9	N/A				2.5	6.2	6.2	6.2	12	21	26
Turbidity (NTU)	62	0	>25	0	0		1.8	3.3	4.1	5.1	7.8	11.7	17
Nutrients (mg/L)													
NH3 as N	62	45	N/A				0.02	0.02	0.02	0.02	0.02	0.07	0.14
NO2 + NO3 as N	62	28	N/A				0.02	0.02	0.02	0.02	0.2	0.39	0.57
TKN as N	61	0	N/A				0.42	0.54	0.6	0.68	0.82	0.95	1.6
Total Phosphorus	61	0	N/A				0.04	0.05	0.07	0.09	0.14	0.21	0.27
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				130	130	140	290	645	810	810
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	2	>3	1	20		2	2	2	3	4	4	4
Iron, total (Fe)	5	0	N/A				330	330	335	790	880	920	920
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	4	>86	0	0		10	10	10	10	10	11	11

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	5.7	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 17 NR THURMAN
Station #: J8903500 **Hydrologic Unit Code:** 03020204
Latitude: 35.02335 **Longitude:** -76.96950 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(104)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	54	0	N/A				6	7.4	8.4	9.7	11	12.5	15.3
pH (SU)	54	0	<4.3	0	0		6.5	7.2	7.7	8	8.4	8.7	9.2
	54	0	>8.5	7	13	70.7	6.5	7.2	7.7	8	8.4	8.7	9.2
Salinity (ppt)	56	0	N/A				0.18	0.77	2.8	5.96	10.06	15.38	18.89
Spec. conductance (umhos/cm at 25°C)	56	0	N/A				356	1382	5156	10544	17113	25024	30584
Water Temperature (°C)	56	0	>32	0	0		5.8	9.3	12.8	19.6	26.5	29.4	31.6
Other													
Chlorophyll a (ug/L)	4	0	>40	2	50		15	15	20	39	55	59	59
Nutrients (mg/L)													
NH3 as N	5	5	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	5	3	N/A				0.02	0.02	0.02	0.02	0.08	0.15	0.15
TKN as N	5	0	N/A				0.49	0.49	0.62	0.8	1.42	2	2
Total Phosphorus	5	0	N/A				0.07	0.07	0.08	0.09	0.14	0.17	0.17

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 15 NR RIVERDALE
Station #: J8903600 **Hydrologic Unit Code:** 03020204
Latitude: 35.01447 **Longitude:** -76.95992 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(104)

Time period: 01/04/2006 to 12/05/2006

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	11	0	N/A				6.6	7.1	9.5	10.5	11.9	12.8	13
pH (SU)	13	0	<4.3	0	0		6.5	6.7	7.5	8.3	8.6	8.7	8.8
	13	0	>8.5	4	30.8	96.6	6.5	6.7	7.5	8.3	8.6	8.7	8.8
Salinity (ppt)	13	0	N/A				0.27	0.6	3.45	6.1	7	8.6	9.2
Spec. conductance (umhos/cm at 25°C)	13	0	N/A				515	1128	6256	10761	12238	14761	15680
Water Temperature (°C)	13	0	>32	0	0		9.6	9.8	11.1	21.1	26.6	30	31

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 11 NR RIVERDALE
Station #: J8910000 **Hydrologic Unit Code:** 03020204
Latitude: 34.99860 **Longitude:** -76.94418 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(104)

Time period: 01/04/2006 to 12/20/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	61	0	N/A				6.9	7.8	8.2	9.5	11.1	12.1	14.6
pH (SU)	63	0	<4.3	0	0		6.8	7.3	7.8	8.1	8.3	8.6	8.9
	63	0	>8.5	6	9.5		6.8	7.3	7.8	8.1	8.3	8.6	8.9
Salinity (ppt)	63	0	N/A				0.49	1.84	5.1	8.3	13.29	15.78	19.78
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				933	3417	9008	14194	22160	25825	31925
Water Temperature (°C)	63	0	>32	0	0		3.5	8.8	12.3	20.6	26.7	29.5	31.5
Other													
Chlorophyll a (ug/L)	63	0	>40	6	9.5		2	8	11	20	25	39	56
TSS (mg/L)	20	7	N/A				3	4.7	6.2	6.4	9.9	11.9	14
Turbidity (NTU)	62	0	>25	0	0		1.8	2.8	3.5	4.4	6.4	9.6	17
Nutrients (mg/L)													
NH3 as N	62	52	N/A				0.02	0.02	0.02	0.02	0.02	0.05	0.12
NO2 + NO3 as N	62	39	N/A				0.02	0.02	0.02	0.02	0.09	0.3	0.7
TKN as N	61	0	N/A				0.32	0.49	0.57	0.65	0.74	0.8	0.92
Total Phosphorus	61	0	N/A				0.03	0.04	0.06	0.07	0.1	0.18	0.24
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				100	100	105	230	535	760	760
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	2	2	2
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	2	>3	2	40		2	2	2	5	8	10	10
Iron, total (Fe)	5	0	N/A				180	180	185	820	2700	4200	4200
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	2	>86	0	0		10	10	10	10	14	18	18

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	2.6	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR KENNEL BEACH
Station #: J8920000 **Hydrologic Unit Code:** 03020204
Latitude: 34.98711 **Longitude:** -76.91987 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(104)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	54	0	N/A				6.5	7.6	8.5	9.5	10.9	12.2	14.1
pH (SU)	56	0	<4.3	0	0		7	7.5	7.9	8.1	8.3	8.4	8.9
	56	0	>8.5	2	3.6		7	7.5	7.9	8.1	8.3	8.4	8.9
Salinity (ppt)	56	0	N/A				0.68	1.96	5.62	8.85	13.55	16.47	19.74
Spec. conductance (umhos/cm at 25°C)	56	0	N/A				1290	3597	9992	15308	22576	26821	31847
Water Temperature (°C)	56	0	>32	1	1.8		6.1	9.7	12.1	20.8	26.8	29.7	34.1
Other													
Chlorophyll a (ug/L)	1	0	>40	1	100		41	41	41	41	41	41	41
Nutrients (mg/L)													
NH3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
TKN as N	1	0	N/A				0.91	0.91	0.91	0.91	0.91	0.91	0.91
Total Phosphorus	1	0	N/A				0.07	0.07	0.07	0.07	0.07	0.07	0.07

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR ARAPAHOE
Station #: J8925000 **Hydrologic Unit Code:** 03020204
Latitude: 34.97617 **Longitude:** -76.87562 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(104)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	54	0	N/A				6.6	7.6	8.6	9.7	11	12.4	15.1
pH (SU)	56	0	<4.3	0	0		6.9	7.6	7.9	8.1	8.3	8.5	8.9
	56	0	>8.5	4	7.1		6.9	7.6	7.9	8.1	8.3	8.5	8.9
Salinity (ppt)	56	0	N/A				0.86	2.75	6.39	9.5	14.6	17.1	20.37
Spec. conductance (umhos/cm at 25°C)	56	0	N/A				1623	5035	11328	16218	24136	27712	32744
Water Temperature (°C)	56	0	>32	1	1.8		5.9	9.7	12.2	20.4	27.1	29.6	32.2
Other													
Chlorophyll a (ug/L)	1	0	>40	0	0		26	26	26	26	26	26	26
Nutrients (mg/L)													
NH3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
TKN as N	1	0	N/A				0.7	0.7	0.7	0.7	0.7	0.7	0.7
Total Phosphorus	1	0	N/A				0.04	0.04	0.04	0.04	0.04	0.04	0.04

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR CHERRY POINT MCAS
Station #: J9431500 **Hydrologic Unit Code:** 03020204
Latitude: 34.96170 **Longitude:** -76.84182 **Stream class:** SB Sw NSW
Agency: NCAMBNT **NC stream index:** 27-(104)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	54	0	N/A				6.6	7.3	8	9.7	10.9	12.5	14.6
pH (SU)	56	0	<4.3	0	0		7	7.7	7.8	8.1	8.3	8.5	8.9
	56	0	>8.5	2	3.6		7	7.7	7.8	8.1	8.3	8.5	8.9
Salinity (ppt)	56	0	N/A				1.1	3.17	6.81	10.47	15.45	17.27	21.11
Spec. conductance (umhos/cm at 25°C)	56	0	N/A				2006	5713	12012	17644	25442	28006	33825
Water Temperature (°C)	56	0	>32	0	0		5.9	9.8	12.2	20.6	27	29.8	31.9
Nutrients (mg/L)													
NH3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
TKN as N	1	0	N/A				0.69	0.69	0.69	0.69	0.69	0.69	0.69
Total Phosphorus	1	0	N/A				0.16	0.16	0.16	0.16	0.16	0.16	0.16

Key:
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ND: number of observations reported to be below detection level (non-detect)
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Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 9 NR MINNESOTT BEACH
Station #: J9530000 **Hydrologic Unit Code:** 03020204
Latitude: 34.94760 **Longitude:** -76.80875 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	61	0	<5	0	0		5.8	7.1	8	9.4	10.8	12.6	13.9
pH (SU)	63	0	<6.8	0	0		7.1	7.6	7.9	8	8.2	8.4	8.8
	63	0	>8.5	4	6.3		7.1	7.6	7.9	8	8.2	8.4	8.8
Salinity (ppt)	63	0	N/A				1.4	4.14	8.4	11.6	15.9	17.16	20.93
Spec. conductance (umhos/cm at 25°C)	63	0	N/A				2666	7113	14546	19654	26075	27894	33590
Water Temperature (°C)	63	0	>32	1	1.6		3.4	8.6	12	19.3	26.7	29	32.1
Other													
Chlorophyll a (ug/L)	62	0	>40	6	9.7		3	8	13	18	26	41	100
TSS (mg/L)	20	9	N/A				2.8	6.2	6.2	7.6	11.5	16.9	24
Turbidity (NTU)	62	0	>25	0	0		1.4	2.1	2.9	4	6.1	13.1	18
Nutrients (mg/L)													
NH3 as N	62	57	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.08
NO2 + NO3 as N	62	47	N/A				0.02	0.02	0.02	0.02	0.02	0.15	0.45
TKN as N	61	0	N/A				0.38	0.44	0.52	0.6	0.68	0.88	2.2
Total Phosphorus	61	0	N/A				0.02	0.04	0.04	0.06	0.09	0.14	0.18
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				90	90	105	120	475	760	760
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	6	10	10
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	3	>3	2	40		2	2	3	10	12	15	15
Iron, total (Fe)	5	0	N/A				65	65	66	750	2450	3500	3500
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	2	>86	0	0		10	10	10	12	17	21	21

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:	Media	# > 43	% > 43	%Conf
61	1.9	2	3.3		1	2	3	

Key:
result: number of observations
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Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR PIERCE
Station #: J9540000 **Hydrologic Unit Code:** 03020204
Latitude: 34.95234 **Longitude:** -76.76804 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	53	0	<5	0	0		6.4	7.3	8.2	9	10.7	12.5	15.4
pH (SU)	55	0	<6.8	0	0		7.4	7.7	7.9	8	8.2	8.4	8.9
	55	0	>8.5	3	5.5		7.4	7.7	7.9	8	8.2	8.4	8.9
Salinity (ppt)	55	0	N/A				4	5	9.5	12.6	17.5	19.01	21.65
Spec. conductance (umhos/cm at 25°C)	55	0	N/A				7226	8992	16129	21024	28463	30681	34606
Water Temperature (°C)	55	0	>32	1	1.8		5.8	9.1	11.7	19.6	27	29.4	32.3

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR JANEIRO
Station #: J9590000 **Hydrologic Unit Code:** 03020204
Latitude: 34.96601 **Longitude:** -76.73751 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	54	0	<5	0	0		6.4	7.3	8	8.9	10.6	12.6	14.8
pH (SU)	56	0	<6.8	0	0		7.5	7.7	7.9	8	8.2	8.3	8.8
	56	0	>8.5	2	3.6		7.5	7.7	7.9	8	8.2	8.3	8.8
Salinity (ppt)	56	0	N/A				3.9	6.15	10.2	13.35	18.21	19.44	21.89
Spec. conductance (umhos/cm at 25°C)	56	0	N/A				7005	10808	17383	22160	29368	31214	34950
Water Temperature (°C)	56	0	>32	0	0		5.8	9.7	11.9	19.7	27	29.1	30.9
Other													
Chlorophyll a (ug/L)	2	0	>40	2	100		91	91	91	92	92	92	92
Nutrients (mg/L)													
NH3 as N	2	2	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	2	1	N/A				0.02	0.02	0.02	0.05	0.08	0.08	0.08
TKN as N	2	0	N/A				1.1	1.1	1.1	1.45	1.8	1.8	1.8
Total Phosphorus	2	0	N/A				0.08	0.08	0.08	0.1	0.11	0.11	0.11

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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR MERRIMON
Station #: J9685000 **Hydrologic Unit Code:** 03020204
Latitude: 34.98733 **Longitude:** -76.69781 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	54	0	<5	0	0		6.1	7.5	8.1	8.8	10	12.5	14.2
pH (SU)	56	0	<6.8	0	0		7.4	7.8	7.9	8	8.2	8.4	8.8
	56	0	>8.5	3	5.4		7.4	7.8	7.9	8	8.2	8.4	8.8
Salinity (ppt)	56	0	N/A				3.8	6.6	10.98	14	19.03	20.15	22.49
Spec. conductance (umhos/cm at 25°C)	56	0	N/A				6913	11590	18631	24296	30810	32292	35817
Water Temperature (°C)	56	0	>32	0	0		5.6	9.5	12.1	19.4	26.7	28.9	30.8

Key:
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ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: BACK CRK AT SR 1300 NR MERRIMON
Station #: J9690000 **Hydrologic Unit Code:** 03020204
Latitude: 34.89201 **Longitude:** -76.62200 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-128-3

Time period: 01/03/2006 to 12/13/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	56	0	<5	10	17.9	95.1	2.6	3.9	5.6	6.9	8.4	10.8	12.8
pH (SU)	57	0	<6.8	11	19.3	97.6	6.3	6.5	6.8	7.2	7.4	7.8	8.4
	57	0	>8.5	0	0		6.3	6.5	6.8	7.2	7.4	7.8	8.4
Salinity (ppt)	58	0	N/A				0.26	0.72	2.35	9.09	17.11	23.03	26.24
Spec. conductance (umhos/cm at 25°C)	58	0	N/A				514	1356	4305	15620	28016	36186	40939
Water Temperature (°C)	58	0	>32	3	5.2		5.5	9.7	13.6	20.9	28.2	31.4	35.6
Other													
Chlorophyll a (ug/L)	59	1	>40	6	10.2	45.4	1	3	6	15	23	43	130
TSS (mg/L)	21	6	N/A				6.2	6.2	6.2	9.2	13	21.2	61
Turbidity (NTU)	60	0	>25	2	3.3		2.1	3.7	5.1	6.8	9.4	13.8	110
Nutrients (mg/L)													
NH3 as N	60	27	N/A				0.02	0.02	0.02	0.03	0.11	0.29	1.6
NO2 + NO3 as N	60	18	N/A				0.02	0.02	0.02	0.06	0.45	1.4	3.3
TKN as N	58	0	N/A				0.23	0.57	0.72	0.84	1.2	1.5	3.4
Total Phosphorus	60	0	N/A				0.04	0.05	0.07	0.1	0.16	0.26	0.44
Metals (ug/L)													
Aluminum, total (Al)	6	0	N/A				200	200	208	350	740	1100	1100
Arsenic, total (As)	6	6	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	6	6	>5	0	0		1	1	1	2	4	10	10
Chromium, total (Cr)	6	6	>20	0	0		10	10	10	25	25	25	25
Copper, total (Cu)	6	5	>3	0	0		2	2	2	2	5	10	10
Iron, total (Fe)	6	0	N/A				380	380	395	470	725	920	920
Lead, total (Pb)	6	6	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	5	5	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	6	6	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	6	1	>86	0	0		10	10	11	11	12	14	14

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:	Media	# > 43	% > 43	%Conf
60	80.6	9	15		80	38	63	100

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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM 7 NR ORIENTAL
Station #: J9810000 **Hydrologic Unit Code:** 03020204
Latitude: 35.00888 **Longitude:** -76.66037 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	58	0	<5	0	0		5.8	6.8	7.5	8.8	10.2	11.8	13.6
pH (SU)	61	0	<6.8	0	0		7.5	7.7	7.8	8	8.1	8.2	8.7
	61	0	>8.5	2	3.3		7.5	7.7	7.8	8	8.1	8.2	8.7
Salinity (ppt)	61	0	N/A				5.5	7.33	11.9	14.7	18.89	20.66	23.11
Spec. conductance (umhos/cm at 25°C)	61	0	N/A				9759	12657	20004	24236	30482	32966	36670
Water Temperature (°C)	61	0	>32	0	0		4.1	8.8	12	19.3	26.5	28.7	30.8
Other													
Chlorophyll a (ug/L)	60	0	>40	3	5		3	5	8	11	16	27	73
TSS (mg/L)	19	7	N/A				3.2	6.2	6.2	7	14	24	33
Turbidity (NTU)	60	1	>25	0	0		1	1.6	2.3	3	3.9	5.6	8.2
Nutrients (mg/L)													
NH3 as N	60	58	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.09
NO2 + NO3 as N	60	50	N/A				0.02	0.02	0.02	0.02	0.02	0.06	0.28
TKN as N	59	1	N/A				0.2	0.37	0.42	0.51	0.6	0.72	0.95
Total Phosphorus	59	1	N/A				0.02	0.03	0.03	0.04	0.06	0.09	0.13
Metals (ug/L)													
Aluminum, total (Al)	4	0	N/A				98	98	101	125	268	310	310
Arsenic, total (As)	4	4	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	4	4	>5	0	0		1	1	1.2	2	8	10	10
Chromium, total (Cr)	4	4	>20	0	0		10	10	14	25	25	25	25
Copper, total (Cu)	4	4	>3	0	0		2	2	2	6	10	10	10
Iron, total (Fe)	4	1	N/A				50	50	50	181	1128	1400	1400
Lead, total (Pb)	4	4	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	3	3	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	4	4	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	4	2	>86	0	0		10	10	10	11	14	15	15

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:	Media	# > 43	% > 43	%Conf
59	1.3	0	0		1	0	0	

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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR COCKLE POINT
Station #: J9860000 **Hydrologic Unit Code:** 03020204
Latitude: 35.02759 **Longitude:** -76.59756 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	43	0	<5	0	0		6.5	7.2	7.9	8.9	10.1	11.3	13.1
pH (SU)	47	0	<6.8	0	0		7.6	7.8	7.9	8	8.1	8.3	8.5
	47	0	>8.5	0	0		7.6	7.8	7.9	8	8.1	8.3	8.5
Salinity (ppt)	47	0	N/A				6.58	8.53	13.4	16.4	20.44	21.92	23.3
Spec. conductance (umhos/cm at 25°C)	47	0	N/A				11508	14664	22341	26896	32724	34876	36999
Water Temperature (°C)	47	0	>32	0	0		5.5	8.9	11.2	19.6	26.8	29	30.4
Other													
Chlorophyll a (ug/L)	1	0	>40	0	0		12	12	12	12	12	12	12
Nutrients (mg/L)													
NH3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	1	1	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
TKN as N	1	0	N/A				0.47	0.47	0.47	0.47	0.47	0.47	0.47
Total Phosphorus	1	0	N/A				0.07	0.07	0.07	0.07	0.07	0.07	0.07

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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR PINEY POINT
Station #: J9900000 **Hydrologic Unit Code:** 03020204
Latitude: 35.06442 **Longitude:** -76.52654 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 07/15/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	40	0	<5	0	0		6.5	6.9	7.6	8.7	10	11.4	13.2
pH (SU)	44	0	<6.8	0	0		7.6	7.8	7.9	8	8.1	8.2	8.3
	44	0	>8.5	0	0		7.6	7.8	7.9	8	8.1	8.2	8.3
Salinity (ppt)	44	0	N/A				7.57	9.75	12.95	16.45	21.5	22.98	24.4
Spec. conductance (umhos/cm at 25°C)	44	0	N/A				13127	16676	21721	26848	34380	36416	38510
Water Temperature (°C)	44	0	>32	0	0		5.4	8.6	11.3	20	26.7	28.5	29.4

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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT CM NR AT MOUTH NR PAMLICO
Station #: J9930000 **Hydrologic Unit Code:** 03020204
Latitude: 35.10997 **Longitude:** -76.47607 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-(118)

Time period: 01/04/2006 to 09/21/2010

	# results	# ND	Results not meeting EL EL	#	%	%Conf	Percentiles Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	41	0	<5	0	0		5.6	6.9	7.3	8.3	10	11.1	12.8
pH (SU)	45	0	<6.8	0	0		7.5	7.7	7.8	7.9	8	8.1	8.2
	45	0	>8.5	0	0		7.5	7.7	7.8	7.9	8	8.1	8.2
Salinity (ppt)	45	0	N/A				8.94	10.11	14.4	18.13	22.1	24.2	25.2
Spec. conductance (umhos/cm at 25°C)	45	0	N/A				15378	17246	24108	29350	35175	38125	39711
Water Temperature (°C)	45	0	>32	0	0		5.4	8.6	11.4	20.5	26.6	28.5	29.1
Other													
Chlorophyll a (ug/L)	44	0	>40	0	0		2	4	6	8	11	15	32
TSS (mg/L)	13	3	N/A				6.2	6.2	6.2	6.5	18	22	24
Turbidity (NTU)	44	1	>25	0	0		1	1.6	2.1	2.8	3.6	4.4	8
Nutrients (mg/L)													
NH3 as N	44	42	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO2 + NO3 as N	44	39	N/A				0.02	0.02	0.02	0.02	0.02	0.02	0.03
TKN as N	43	3	N/A				0.2	0.28	0.37	0.44	0.52	0.57	1
Total Phosphorus	43	1	N/A				0.02	0.03	0.03	0.04	0.06	0.08	0.1
Metals (ug/L)													
Aluminum, total (Al)	4	0	N/A				96	96	110	165	188	190	190
Arsenic, total (As)	4	4	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	4	4	>5	0	0		1	1	1.2	6	10	10	10
Chromium, total (Cr)	4	4	>20	0	0		10	10	14	25	25	25	25
Copper, total (Cu)	4	3	>3	1	25		2	2	2	2	4	5	5
Iron, total (Fe)	4	1	N/A				50	50	57	100	3855	5100	5100
Lead, total (Pb)	4	4	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	3	3	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	4	4	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	4	2	>86	0	0		10	10	10	12	15	16	16

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:	Media	# > 43	% > 43	%Conf
43	1.2	0	0		1	0	0	

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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: BAY RIV AT CM 5 NR VANDEMERE
Station #: J9950000 **Hydrologic Unit Code:** 03020204
Latitude: 35.17057 **Longitude:** -76.65155 **Stream class:** SA HQW NSW
Agency: NCAMBNT **NC stream index:** 27-150-(9.5)

Time period: 01/19/2006 to 06/23/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	50	0	<5	0	0		5.8	6.3	7.5	9	9.9	11.5	13.1
pH (SU)	52	0	<6.8	1	1.9		6.5	7.5	7.6	7.8	7.9	8	8.3
	52	0	>8.5	0	0		6.5	7.5	7.6	7.8	7.9	8	8.3
Salinity (ppt)	51	0	N/A				3.4	9.62	13.4	17.49	20.4	22.22	24.7
Spec. conductance (umhos/cm at 25°C)	51	0	N/A				6211	16377	22344	28032	32683	35240	38779
Water Temperature (°C)	52	0	>32	0	0		3.4	8.4	11.5	16.8	26.9	29.2	31.8
Other													
Chlorophyll a (ug/L)	52	0	>40	1	1.9		3	4	7	10	17	28	54
TSS (mg/L)	18	4	N/A				6.2	6.2	7.2	9.2	12.2	27.7	34
Turbidity (NTU)	53	0	>25	0	0		1.1	1.6	2.3	4.1	6.3	7.7	14
Nutrients (mg/L)													
NH3 as N	52	41	N/A				0.02	0.02	0.02	0.02	0.02	0.04	0.06
NO2 + NO3 as N	52	32	N/A				0.02	0.02	0.02	0.02	0.04	0.12	0.34
TKN as N	50	2	N/A				0.2	0.33	0.5	0.59	0.74	0.94	1.1
Total Phosphorus	52	0	N/A				0.02	0.03	0.03	0.04	0.06	0.07	0.09
Metals (ug/L)													
Aluminum, total (Al)	5	0	N/A				180	180	210	370	675	750	750
Arsenic, total (As)	5	5	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	5	5	>5	0	0		1	1	1.5	2	6	10	10
Chromium, total (Cr)	5	5	>20	0	0		10	10	18	25	25	25	25
Copper, total (Cu)	5	4	>3	0	0		2	2	2	2	6	10	10
Iron, total (Fe)	5	0	N/A				57	57	71	190	240	250	250
Lead, total (Pb)	5	5	>25	0	0		10	10	10	10	10	10	10
Mercury, total (Hg) (ng/L)	4	4	>25	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	5	5	>8.3	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	5	2	>86	0	0		10	10	10	12	23	24	24

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:	Media	# > 43	% > 43	%Conf
52	2.5	0	0		2	3	6	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries

NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: SMITH CRK AT SR 2045 BURLINGTON MILL RD NR WAKE FOREST
Station #: J2230000 **Hydrologic Unit Code:** 03020201
Latitude: 35.91820 **Longitude:** -78.53480 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-23-(2)

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	82	0	<4	0	0		5.5	6.2	7	7.8	9.7	11.1	13.7
	82	0	<5	0	0		5.5	6.2	7	7.8	9.7	11.1	13.7
pH (SU)	83	0	<6	0	0		6.4	6.7	6.9	7.1	7.2	7.3	7.5
	83	0	>9	0	0		6.4	6.7	6.9	7.1	7.2	7.3	7.5
Spec. conductance (umhos/cm at 25°C)	83	0	N/A				73	98	117	135	162	185	255
Water Temperature (°C)	83	0	>32	0	0		3.8	7	11.6	20.9	24.7	26	28.7
Other													
TSS (mg/L)	57	2	N/A				1	2.8	3.8	6.4	9.9	22.8	432
Turbidity (NTU)	57	0	>50	2	3.5		2.3	3.5	5.7	9.4	13	27	65
Nutrients (mg/L)													
NH3 as N	57	13	N/A				0.01	0.01	0.01	0.04	0.08	0.17	0.67
NO2 + NO3 as N	57	0	N/A				0.1	0.35	0.53	0.82	0.97	1.23	1.52
TKN as N	57	8	N/A				0.2	0.2	0.3	0.43	0.64	1.07	2.32
Total Phosphorus	57	4	N/A				0.02	0.03	0.05	0.08	0.1	0.22	0.64

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
57	119.6	8	14	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 2215 BUFFALO RD NR NEUSE
Station #: J2330000 **Hydrologic Unit Code:** 03020201
Latitude: 35.84790 **Longitude:** -78.53020 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(22.5)

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	0	0		5.3	5.8	6.4	7.4	9.3	10.5	12.6
	84	0	<5	0	0		5.3	5.8	6.4	7.4	9.3	10.5	12.6
pH (SU)	85	0	<6	0	0		6.5	6.7	6.9	7	7.2	7.3	7.5
	85	0	>9	0	0		6.5	6.7	6.9	7	7.2	7.3	7.5
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				70	97	105	129	164	187	251
Water Temperature (°C)	85	0	>32	0	0		4.5	7.3	12.2	21.6	26.1	27.9	31.1
Other													
TSS (mg/L)	60	0	N/A				3.5	5	7.6	11	16	43.8	357
Turbidity (NTU)	60	0	>50	5	8.3		4.5	6.9	11	14.5	18.8	48.9	380
Nutrients (mg/L)													
NH3 as N	60	4	N/A				0.01	0.01	0.04	0.06	0.12	0.16	0.29
NO2 + NO3 as N	60	1	N/A				0.01	0.09	0.13	0.24	0.32	0.4	1.02
TKN as N	60	4	N/A				0.2	0.24	0.44	0.6	0.93	1.03	1.7
Total Phosphorus	60	4	N/A				0.02	0.03	0.05	0.08	0.11	0.19	0.87

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	97.2	10	16.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV ABOVE MILBURNIE DAM NR RALEIGH
Station #: J2360000 **Hydrologic Unit Code:** 03020201
Latitude: 35.80222 **Longitude:** -78.53861 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(22.5)

Time period: 02/26/2007 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	66	0	<4	0	0		4	5.4	5.8	6.5	8.4	10.1	11.2
	66	0	<5	1	1.5		4	5.4	5.8	6.5	8.4	10.1	11.2
pH (SU)	67	0	<6	0	0		6.4	6.6	6.8	6.9	7.1	7.4	8.1
	67	0	>9	0	0		6.4	6.6	6.8	6.9	7.1	7.4	8.1
Spec. conductance (umhos/cm at 25°C)	67	0	N/A				71	99	105	144	207	230	312
Water Temperature (°C)	67	0	>32	1	1.5		4.7	7.3	12	22	25.9	28.9	32.5
Other													
TSS (mg/L)	47	0	N/A				2.6	4.2	5.7	6.9	9.7	18.2	24
Turbidity (NTU)	47	0	>50	0	0		3.1	5.4	6.9	11	17	23.4	33
Nutrients (mg/L)													
NH3 as N	47	9	N/A				0.01	0.01	0.02	0.04	0.09	0.18	1.25
NO2 + NO3 as N	47	16	N/A				0.01	0.01	0.01	0.05	0.25	0.43	0.81
TKN as N	47	1	N/A				0.2	0.38	0.58	0.78	1.02	1.26	1.73
Total Phosphorus	47	4	N/A				0.02	0.03	0.04	0.08	0.1	0.14	0.55

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
47	33.4	5	10.6	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV BELOW MILBURNIE DAM NR RALEIGH
Station #: J2363000 **Hydrologic Unit Code:** 03020201
Latitude: 35.80019 **Longitude:** -78.54001 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(22.5)

Time period: 01/20/2006 to 01/29/2007

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	18	0	<4	1	5.6		3.8	4.4	5.4	7	9	10.2	11.4
	18	0	<5	2	11.1	45.0	3.8	4.4	5.4	7	9	10.2	11.4
pH (SU)	18	0	<6	0	0		6.3	6.6	6.9	7.1	7.4	7.6	7.6
	18	0	>9	0	0		6.3	6.6	6.9	7.1	7.4	7.6	7.6
Spec. conductance (umhos/cm at 25°C)	18	0	N/A				81	84	115	130	198	238	286
Water Temperature (°C)	18	0	>32	0	0		5.2	6.5	11.6	20.3	26.3	26.9	29.9
Other													
TSS (mg/L)	13	0	N/A				4.4	4.6	5.4	6.4	9.2	15	17
Turbidity (NTU)	13	0	>50	0	0		4.7	4.8	5.7	8.3	10.9	13.6	14
Nutrients (mg/L)													
NH3 as N	13	2	N/A				0.01	0.01	0.01	0.03	0.04	0.11	0.14
NO2 + NO3 as N	13	5	N/A				0.01	0.01	0.01	0.16	0.28	0.36	0.37
TKN as N	13	0	N/A				0.32	0.37	0.48	0.56	0.84	1.03	1.09
Total Phosphorus	13	0	N/A				0.06	0.06	0.07	0.07	0.12	0.78	1.1

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
13	18.6	0	0	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CRABTREE CRK AT LASSITER MILL DAM AT RALEIGH
Station #: J3210000 **Hydrologic Unit Code:** 03020201
Latitude: 35.82722 **Longitude:** -78.65083 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-33-(10)

Time period: 01/20/2006 to 12/20/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	Percentiles 10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	84	0	<4	3	3.6		3.4	4.6	5.8	6.7	8.8	10.5	12.2
	84	0	<5	10	11.9	67.0	3.4	4.6	5.8	6.7	8.8	10.5	12.2
pH (SU)	85	0	<6	0	0		6.6	6.8	7	7.1	7.2	7.3	7.6
	85	0	>9	0	0		6.6	6.8	7	7.1	7.2	7.3	7.6
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				83	113	144	186	221	273	391
Water Temperature (°C)	85	0	>32	0	0		4.8	7.5	12.4	22.5	25.7	27.3	30.3
Other													
TSS (mg/L)	60	0	N/A				2.8	4.6	7.9	13	25	55.5	404
Turbidity (NTU)	60	0	>50	3	5		4.2	7.4	9.6	14	24	44.4	170
Nutrients (mg/L)													
NH3 as N	60	9	N/A				0.01	0.01	0.02	0.06	0.1	0.15	0.22
NO2 + NO3 as N	60	0	N/A				0.1	0.25	0.37	0.51	0.84	1.2	2.82
TKN as N	60	3	N/A				0.2	0.24	0.37	0.63	0.82	1.23	4.39
Total Phosphorus	60	2	N/A				0.02	0.06	0.1	0.16	0.29	0.41	2.51

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	107.2	10	16.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: WALNUT CRK AT SR 2551 BARWELL RD NR RALEIGH
Station #: J3970000 **Hydrologic Unit Code:** 03020201
Latitude: 35.74930 **Longitude:** -78.53450 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-34-(4)

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL				Percentiles					
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	0	0		5.4	6.2	6.9	7.5	9.8	10.8	12.1
	84	0	<5	0	0		5.4	6.2	6.9	7.5	9.8	10.8	12.1
pH (SU)	85	0	<6	0	0		6.2	6.6	6.8	7	7.2	7.4	7.5
	85	0	>9	0	0		6.2	6.6	6.8	7	7.2	7.4	7.5
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				58	98	132	163	188	206	271
Water Temperature (°C)	85	0	>32	0	0		4	7	12	21.3	24.2	25.5	28.8
Other													
TSS (mg/L)	60	2	N/A				1.6	2.8	3.5	5.7	9.9	22.9	171
Turbidity (NTU)	60	0	>50	5	8.3		4.6	7.1	9.1	11	19.8	34.5	160
Nutrients (mg/L)													
NH3 as N	60	10	N/A				0.01	0.01	0.02	0.06	0.09	0.14	0.45
NO2 + NO3 as N	60	0	N/A				0.09	0.15	0.24	0.37	0.48	0.53	0.64
TKN as N	60	8	N/A				0.2	0.2	0.26	0.44	0.63	1.16	2.03
Total Phosphorus	60	2	N/A				0.02	0.03	0.05	0.06	0.09	0.16	0.5
Metals (ug/L)													
Aluminum, total (Al)	16	0	N/A				113	134	178	336	926	3469	4164
Arsenic, total (As)	16	16	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	16	16	>2	0	0		1	1	1	1	1	1	1
Chromium, total (Cr)	16	13	>50	0	0		5	5	5	5	5	8	9
Copper, total (Cu)	16	2	>7	2	12.5	51.5	2	2	2	3	5	13	13
Iron, total (Fe)	16	0	>1000	15	93.8	> 99.9	139	822	1300	1425	1871	5507	7480
Lead, total (Pb)	16	14	>25	0	0		5	5	5	5	5	12	14
Mercury, total (Hg) (ng/L)	16	16	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	16	16	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	16	1	>50	1	6.2		10	11	13	17	22	53	68

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	145.6	12	20	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 2555 AUBURN KNIGHTDALE RD NR RALEIGH
Station #: J4050000 **Hydrologic Unit Code:** 03020201
Latitude: 35.72660 **Longitude:** -78.51390 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(22.5)

Time period: 01/20/2006 to 12/20/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	84	0	<4	0	0		5.8	6.2	6.6	7.4	9.8	10.8	12.5
	84	0	<5	0	0		5.8	6.2	6.6	7.4	9.8	10.8	12.5
pH (SU)	85	0	<6	0	0		6.6	6.8	6.9	7.1	7.2	7.3	7.5
	85	0	>9	0	0		6.6	6.8	6.9	7.1	7.2	7.3	7.5
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				51	97	111	131	154	171	236
Water Temperature (°C)	85	0	>32	1	1.2		4.4	6.9	11.5	21.4	25.4	27.3	32.4
Other													
TSS (mg/L)	60	0	N/A				2.6	4.5	7.3	11	17	73	321
Turbidity (NTU)	60	0	>50	7	11.7	60.6	4.7	7.5	11	14	28.5	55	340
Nutrients (mg/L)													
NH3 as N	60	4	N/A				0.01	0.01	0.03	0.07	0.11	0.16	0.27
NO2 + NO3 as N	60	0	N/A				0.05	0.14	0.18	0.26	0.36	0.42	0.61
TKN as N	60	0	N/A				0.21	0.31	0.47	0.6	0.88	1.16	1.5
Total Phosphorus	60	2	N/A				0.02	0.03	0.05	0.07	0.1	0.18	0.75
Metals (ug/L)													
Aluminum, total (Al)	16	0	N/A				257	272	366	824	2333	11467	16909
Arsenic, total (As)	16	16	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	16	16	>2	0	0		1	1	1	1	1	1	1
Chromium, total (Cr)	16	14	>50	0	0		5	5	5	5	5	14	17
Copper, total (Cu)	16	2	>7	3	18.8	78.9	2	2	3	3	5	15	23
Iron, total (Fe)	16	0	>1000	12	75	> 99.9	730	848	1004	1365	3465	11005	13605
Lead, total (Pb)	16	13	>25	0	0		5	5	5	5	5	8	10
Mercury, total (Hg) (ng/L)	16	16	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	16	16	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	16	9	>50	1	6.2		10	10	10	10	19	41	54

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	124	13	21.7	57.6

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: POPLAR CRK AT SR 2049 BETHLEHEM RD NR KNIGHTDALE
Station #: J4080000 **Hydrologic Unit Code:** 03020201
Latitude: 35.73090 **Longitude:** -78.47760 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-35

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	83	0	<4	0	0		5.4	6.5	7.2	7.8	10.2	11.3	12.7
	83	0	<5	0	0		5.4	6.5	7.2	7.8	10.2	11.3	12.7
pH (SU)	84	0	<6	0	0		6.4	6.8	6.8	7	7.2	7.4	7.5
	84	0	>9	0	0		6.4	6.8	6.8	7	7.2	7.4	7.5
Spec. conductance (umhos/cm at 25°C)	84	0	N/A				85	104	120	142	176	204	250
Water Temperature (°C)	84	0	>32	0	0		3	5.9	10.8	19.9	23.3	24.5	28.6
Other													
TSS (mg/L)	58	2	N/A				2.1	2.9	4.5	6.3	10.2	18.3	191
Turbidity (NTU)	58	0	>50	1	1.7		3.3	4.3	6.3	9.5	14	18.2	130
Nutrients (mg/L)													
NH3 as N	58	10	N/A				0.01	0.01	0.03	0.06	0.12	0.18	0.51
NO2 + NO3 as N	58	0	N/A				0.46	0.79	1.42	1.8	2.25	2.71	3.86
TKN as N	58	5	N/A				0.2	0.27	0.39	0.51	0.74	1.14	1.79
Total Phosphorus	58	0	N/A				0.04	0.08	0.11	0.13	0.17	0.22	3.03

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
58	184.4	14	24.1	74.0

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 1700 COVERED BRIDGE RD NR ARCHERS LODGE
Station #: J4130000 **Hydrologic Unit Code:** 03020201
Latitude: 35.67490 **Longitude:** -78.43640 **Stream class:** WS-V NSW
Agency: LNBA **NC stream index:** 27-(36)

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	0	0		5.5	6.2	6.5	7.2	9.8	10.8	12.4
	84	0	<5	0	0		5.5	6.2	6.5	7.2	9.8	10.8	12.4
pH (SU)	85	0	<6	0	0		6.6	6.8	6.9	7	7.2	7.3	7.5
	85	0	>9	0	0		6.6	6.8	6.9	7	7.2	7.3	7.5
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				77	121	142	169	220	249	299
Water Temperature (°C)	85	0	>32	0	0		4.3	6.4	11.6	20.5	25.2	26.9	31.6
Other													
TSS (mg/L)	60	1	N/A				1	3.6	7.6	14	24.5	67.6	340
Turbidity (NTU)	60	0	>50	5	8.3		3.6	8.3	10.2	16	29.8	50	294
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.03	0.06	0.11	0.17	0.31
NO2 + NO3 as N	60	0	>10	0	0		0.09	0.31	0.42	0.63	0.91	1.24	1.74
TKN as N	60	1	N/A				0.2	0.37	0.53	0.69	0.99	1.21	1.51
Total Phosphorus	60	0	N/A				0.06	0.09	0.16	0.26	0.42	0.61	0.97
Metals (ug/L)													
Aluminum, total (Al)	16	0	N/A				281	287	376	788	1957	8417	15437
Arsenic, total (As)	16	16	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	16	16	>2	0	0		1	1	1	1	1	1	1
Chromium, total (Cr)	16	14	>50	0	0		5	5	5	5	5	12	18
Copper, total (Cu)	16	4	>7	2	12.5	51.5	2	2	2	4	7	15	26
Iron, total (Fe)	16	0	>1000	9	56.2	> 99.9	811	829	852	1106	2138	11792	16590
Lead, total (Pb)	16	14	>25	0	0		5	5	5	5	5	10	10
Manganese, total (Mn)	16	0	>200	5	31.2	98.3	74	75	83	135	289	835	1358
Mercury, total (Hg) (ng/L)	16	16	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	16	16	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	16	5	>50	1	6.2		10	10	10	13	24	43	52

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	119.7	11	18.3	

Key:
result: number of observations
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Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT NC 42 NR CLAYTON
Station #: J4170000 **Hydrologic Unit Code:** 03020201
Latitude: 35.64732 **Longitude:** -78.40567 **Stream class:** WS-IV NSW
Agency: LNBA **NC stream index:** 27-(38.5)

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	0	0		5.7	6.1	6.5	7.4	9.6	11.2	12.8
	84	0	<5	0	0		5.7	6.1	6.5	7.4	9.6	11.2	12.8
pH (SU)	85	0	<6	0	0		6.5	6.8	7	7	7.2	7.3	7.9
	85	0	>9	0	0		6.5	6.8	7	7	7.2	7.3	7.9
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				90	112	130	174	221	256	304
Water Temperature (°C)	85	0	>32	0	0		4.2	6.4	11.2	20.6	24.7	27.1	31
Other													
TSS (mg/L)	60	0	N/A				2.4	4.6	6.8	13.5	23.5	93	388
Turbidity (NTU)	60	0	>50	5	8.3		3.6	7.6	9.2	13.5	27	49.5	298
Nutrients (mg/L)													
NH3 as N	60	6	N/A				0.01	0.01	0.03	0.08	0.11	0.15	0.39
NO2 + NO3 as N	60	0	>10	0	0		0.07	0.31	0.4	0.52	0.7	0.92	1.33
TKN as N	60	1	N/A				0.2	0.32	0.46	0.62	0.88	1.24	2.49
Total Phosphorus	60	1	N/A				0.02	0.07	0.15	0.23	0.36	0.52	0.89
Metals (ug/L)													
Aluminum, total (Al)	16	0	N/A				250	271	417	819	1846	9830	19902
Arsenic, total (As)	16	16	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	16	16	>2	0	0		1	1	1	1	1	1	1
Chromium, total (Cr)	16	14	>50	0	0		5	5	5	5	5	13	21
Copper, total (Cu)	16	2	>7	3	18.8	78.9	2	2	2	4	6	19	34
Iron, total (Fe)	16	0	>1000	10	62.5	> 99.9	767	806	840	1184	2308	11263	19960
Lead, total (Pb)	16	14	>25	0	0		5	5	5	5	5	10	11
Manganese, total (Mn)	16	0	>200	4	25	93.2	64	68	78	149	218	758	899
Mercury, total (Hg) (ng/L)	16	16	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	16	15	>25	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	16	3	>50	1	6.2		10	10	10	14	35	71	121

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	106.8	10	16.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 1908 FIRE DEPT RD NR WILSON MILLS
Station #: J4190000 **Hydrologic Unit Code:** 03020201
Latitude: 35.60670 **Longitude:** -78.33740 **Stream class:** WS-IV NSW
Agency: LNBA **NC stream index:** 27-(38.5)

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	0	0		5.9	6.3	6.6	7.4	9.8	11.2	12.6
	84	0	<5	0	0		5.9	6.3	6.6	7.4	9.8	11.2	12.6
pH (SU)	85	0	<6	0	0		6.5	6.8	6.9	7.1	7.2	7.3	7.8
	85	0	>9	0	0		6.5	6.8	6.9	7.1	7.2	7.3	7.8
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				86	103	126	155	208	240	273
Water Temperature (°C)	85	0	>32	1	1.2		4	6.2	11	20.2	24.9	27.6	32.1
Other													
TSS (mg/L)	60	1	N/A				1.8	4.3	7	12	23.8	52.6	551
Turbidity (NTU)	60	0	>50	6	10	43.7	2.1	6.2	8.8	13.5	30	58.5	450
Nutrients (mg/L)													
NH3 as N	60	12	N/A				0.01	0.01	0.02	0.06	0.09	0.12	0.59
NO2 + NO3 as N	60	0	>10	0	0		0.13	0.27	0.37	0.49	0.68	0.92	1.49
TKN as N	60	1	N/A				0.2	0.29	0.44	0.65	0.87	1.35	2.41
Total Phosphorus	60	0	N/A				0.03	0.1	0.13	0.22	0.34	0.44	1.33

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	109.6	10	16.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: SWIFT CRK AT SR 1152 HOLLY SPRINGS RD NR MACEDONIA
Station #: J4414000 **Hydrologic Unit Code:** 03020201
Latitude: 35.71877 **Longitude:** -78.75270 **Stream class:** WS-III NSW
Agency: LNBA **NC stream index:** 27-43-(1)

Time period: 01/20/2006 to 12/20/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	1	1.2		1.9	4.6	5.6	7	8.8	10.2	12.4
	84	0	<5	11	13.1	78.4	1.9	4.6	5.6	7	8.8	10.2	12.4
pH (SU)	85	0	<6	0	0		6.6	6.7	6.8	7	7.2	7.4	7.7
	85	0	>9	0	0		6.6	6.7	6.8	7	7.2	7.4	7.7
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				57	85	110	161	208	236	321
Water Temperature (°C)	85	0	>32	0	0		4.3	7.5	12.7	21.9	25.2	26.9	29.4
Other													
TSS (mg/L)	60	3	N/A				1	2.9	4.8	8	12	30.3	193
Turbidity (NTU)	60	0	>50	3	5		3.7	5.1	7.5	10	17.2	33	160
Nutrients (mg/L)													
NH3 as N	60	8	N/A				0.01	0.01	0.02	0.06	0.11	0.18	0.33
NO2 + NO3 as N	60	2	>10	0	0		0.01	0.09	0.21	0.48	1.05	1.45	1.99
TKN as N	60	3	N/A				0.2	0.27	0.38	0.5	0.75	1.36	4.48
Total Phosphorus	60	2	N/A				0.02	0.04	0.06	0.08	0.13	0.24	2.84

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	112.1	8	13.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: SWIFT CRK AT NC 210 NR SMITHFIELD
Station #: J4590000 **Hydrologic Unit Code:** 03020201
Latitude: 35.51860 **Longitude:** -78.38190 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-43-(8)

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	0	0		4.8	6.2	6.5	7.2	8.6	10.7	12.5
	85	0	<5	1	1.2		4.8	6.2	6.5	7.2	8.6	10.7	12.5
pH (SU)	85	0	<6	0	0		6.1	6.6	6.8	6.9	7	7.2	7.4
	85	0	>9	0	0		6.1	6.6	6.8	6.9	7	7.2	7.4
Spec. conductance (umhos/cm at 25°C)	85	1	N/A				50	74	89	121	161	177	218
Water Temperature (°C)	85	0	>32	0	0		3.9	7.6	12.9	22.3	25.6	27.4	29.9
Other													
TSS (mg/L)	60	3	N/A				1	2	3.4	6.2	10	28.4	2060
Turbidity (NTU)	60	0	>50	4	6.7		4.2	5.7	7	10.5	15.8	38.8	1500
Nutrients (mg/L)													
NH3 as N	60	13	N/A				0.01	0.01	0.02	0.04	0.09	0.21	0.44
NO2 + NO3 as N	60	2	N/A				0.01	0.05	0.13	0.18	0.24	0.35	0.52
TKN as N	60	1	N/A				0.2	0.37	0.42	0.56	0.87	1.21	8.09
Total Phosphorus	60	1	N/A				0.03	0.05	0.07	0.1	0.16	0.28	1.89

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	111.4	6	10	

Key:
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: UT TO MIDDLE CRK AT LUFKIN RD AT APEX
Station #: J4619000 **Hydrologic Unit Code:** 03020201
Latitude: 35.71311 **Longitude:** -78.83807 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-43-15-(1)

Time period: 02/28/2007 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	55	0	<4	6	10.9	52.4	1.7	3.8	5.4	6.5	7.9	9.5	12.1
	55	0	<5	12	21.8	99.3	1.7	3.8	5.4	6.5	7.9	9.5	12.1
pH (SU)	55	0	<6	1	1.8		5.5	6.2	6.4	6.6	6.7	6.8	7.3
	55	0	>9	0	0		5.5	6.2	6.4	6.6	6.7	6.8	7.3
Spec. conductance (umhos/cm at 25°C)	55	0	N/A				52	82	102	128	205	291	391
Water Temperature (°C)	55	0	>32	0	0		3	6.7	12.8	18.9	22.7	25.6	28
Other													
TSS (mg/L)	37	0	N/A				3.3	4.2	5.5	9	15.5	62	109
Turbidity (NTU)	37	0	>50	5	13.5	69.1	4.8	6.9	10	14	29.5	71.8	80
Nutrients (mg/L)													
NH3 as N	37	3	N/A				0.01	0.02	0.04	0.09	0.16	0.3	0.95
NO2 + NO3 as N	37	2	N/A				0.01	0.08	0.21	0.68	0.99	1.62	2.22
TKN as N	37	0	N/A				0.38	0.5	0.7	0.92	1.09	1.92	12.94
Total Phosphorus	37	0	N/A				0.07	0.09	0.18	0.31	0.65	1.11	1.92

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
37	167.5	11	29.7	89.5

Key:
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: UT TO MIDDLE CRK AT PRISTINE WATER RD NR APEX
Station #: J4620000 **Hydrologic Unit Code:** 03020201
Latitude: 35.71058 **Longitude:** -78.83592 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-43-15-(1)

Time period: 01/18/2006 to 01/17/2007

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	15	0	<4	1	6.7		1.7	4	6	6.7	9.4	10.3	10.4
	15	0	<5	1	6.7		1.7	4	6	6.7	9.4	10.3	10.4
pH (SU)	15	0	<6	0	0		6.5	6.6	6.7	6.9	7.1	7.3	7.4
	15	0	>9	0	0		6.5	6.6	6.7	6.9	7.1	7.3	7.4
Spec. conductance (umhos/cm at 25°C)	15	0	N/A				73	74	86	112	146	172	187
Water Temperature (°C)	15	0	>32	0	0		6.8	7.8	10.9	19.5	22.5	25.3	27
Other													
TSS (mg/L)	10	1	N/A				1	1.3	5	9.6	17	53.3	57
Turbidity (NTU)	10	0	>50	0	0		3.6	3.8	9.8	15.5	23.2	24	24
Nutrients (mg/L)													
NH3 as N	10	2	N/A				0.01	0.01	0.01	0.05	0.09	0.17	0.17
NO2 + NO3 as N	10	0	N/A				0.01	0.01	0.04	0.25	0.75	0.85	0.86
TKN as N	10	0	N/A				0.41	0.41	0.46	0.61	0.75	1.08	1.1
Total Phosphorus	10	0	N/A				0.07	0.07	0.09	0.13	0.17	0.24	0.25

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
10	154.6	4	40	87.9

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MIDDLE CRK AT SR 1152 HOLLY SPRINGS RD NR HOLLY SPRINGS
Station #: J4690000 **Hydrologic Unit Code:** 03020201
Latitude: 35.66090 **Longitude:** -78.80420 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-43-15-(1)

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	0	0		5.3	6.1	6.5	7.1	8.8	10.2	12.7
	85	0	<5	0	0		5.3	6.1	6.5	7.1	8.8	10.2	12.7
pH (SU)	85	0	<6	0	0		6.3	6.6	6.7	6.9	7.1	7.4	7.6
	85	0	>9	0	0		6.3	6.6	6.7	6.9	7.1	7.4	7.6
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				86	121	161	229	327	421	532
Water Temperature (°C)	85	0	>32	0	0		3.1	7.2	11.5	20	22.9	24.7	26.9
Other													
TSS (mg/L)	60	4	N/A				1.5	2.5	3.6	5.6	10.8	40.4	136
Turbidity (NTU)	60	0	>50	7	11.7	60.6	3.8	4.7	6.7	9.8	21	78	200
Nutrients (mg/L)													
NH3 as N	60	11	N/A				0.01	0.01	0.02	0.06	0.1	0.2	0.67
NO2 + NO3 as N	60	0	N/A				0.23	0.58	0.92	1.26	1.71	3.16	4.62
TKN as N	60	0	N/A				0.49	0.6	0.74	0.88	1.03	1.2	12.94
Total Phosphorus	60	0	N/A				0.08	0.21	0.32	0.46	0.94	2.15	8.46

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	188.6	18	30	95.7

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MIDDLE CRK AT SR 1375 LAKE WHEELER RD NR BANKS
Station #: J4868000 **Hydrologic Unit Code:** 03020201
Latitude: 35.63560 **Longitude:** -78.72791 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-43-15-(4)

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	0	0		4.4	6	6.4	6.9	9.1	10.8	12.8
	85	0	<5	1	1.2		4.4	6	6.4	6.9	9.1	10.8	12.8
pH (SU)	85	0	<6	0	0		6.7	6.8	6.9	7.1	7.2	7.4	7.6
	85	0	>9	0	0		6.7	6.8	6.9	7.1	7.2	7.4	7.6
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				72	105	122	167	240	333	436
Water Temperature (°C)	85	0	>32	0	0		3.7	7.5	12.2	21.3	24.3	26	27.9
Other													
TSS (mg/L)	60	1	N/A				1	3.9	5.8	8	13.5	31.9	116
Turbidity (NTU)	60	0	>50	7	11.7	60.6	4.3	6	7.6	12	22.5	60	220
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.04	0.07	0.13	0.2	0.49
NO2 + NO3 as N	60	0	N/A				0.21	0.33	0.42	0.62	0.8	1.11	1.58
TKN as N	60	1	N/A				0.2	0.48	0.62	0.82	1.03	1.17	1.48
Total Phosphorus	60	0	N/A				0.05	0.11	0.18	0.37	0.83	1.48	2.98
Metals (ug/L)													
Aluminum, total (Al)	16	0	N/A				153	162	218	326	556	826	1192
Arsenic, total (As)	16	16	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	16	16	>2	0	0		1	1	1	1	1	1	1
Chromium, total (Cr)	16	16	>50	0	0		5	5	5	5	5	5	5
Copper, total (Cu)	16	7	>7	0	0		2	2	2	2	3	4	5
Iron, total (Fe)	16	0	>1000	12	75	> 99.9	93	344	999	1222	1589	1769	1804
Lead, total (Pb)	16	16	>25	0	0		5	5	5	5	5	5	5
Mercury, total (Hg) (ng/L)	16	16	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	16	16	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	16	0	>50	0	0		11	12	14	18	24	32	40

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	163.5	14	23.3	69.4

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MIDDLE CRK AT SR 1006 OLD STAGE RD NR WILLOW SPRINGS
Station #: J4980000 **Hydrologic Unit Code:** 03020201
Latitude: 35.60910 **Longitude:** -78.68660 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-43-15-(4)

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	0	0		5.2	6.3	6.5	7.2	9	10.4	12.7
	85	0	<5	0	0		5.2	6.3	6.5	7.2	9	10.4	12.7
pH (SU)	85	0	<6	0	0		6.5	6.7	6.9	7	7.2	7.3	7.4
	85	0	>9	0	0		6.5	6.7	6.9	7	7.2	7.3	7.4
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				81	119	137	177	224	310	417
Water Temperature (°C)	85	0	>32	0	0		3.5	7.3	12.4	20.4	24.3	25.8	28.2
Other													
TSS (mg/L)	60	0	N/A				2.5	3.5	5	7.3	14.5	28.9	109
Turbidity (NTU)	60	0	>50	2	3.3		4.5	5.9	8.1	12	17.8	38.2	100
Nutrients (mg/L)													
NH3 as N	60	8	N/A				0.01	0.01	0.03	0.06	0.12	0.22	0.38
NO2 + NO3 as N	60	0	N/A				0.1	0.18	0.23	0.36	0.53	0.69	1.55
TKN as N	60	0	N/A				0.42	0.54	0.6	0.78	0.99	1.22	1.98
Total Phosphorus	60	0	N/A				0.06	0.08	0.13	0.22	0.49	0.64	2.99

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	149.4	15	25	79.4

Key:
result: number of observations
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MIDDLE CRK AT NC 210 NR SMITHFIELD
Station #: J5010000 **Hydrologic Unit Code:** 03020201
Latitude: 35.50750 **Longitude:** -78.40139 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-43-15-(4)

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	0	0		5.5	6.1	6.5	7.1	9	10.8	12.8
	85	0	<5	0	0		5.5	6.1	6.5	7.1	9	10.8	12.8
pH (SU)	85	0	<6	0	0		6.1	6.7	6.8	6.9	7	7.2	7.4
	85	0	>9	0	0		6.1	6.7	6.8	6.9	7	7.2	7.4
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				92	110	130	156	185	241	310
Water Temperature (°C)	85	0	>32	0	0		3.7	7.7	13.2	21.9	24.7	26.9	29
Other													
TSS (mg/L)	60	3	N/A				1	1.9	3	6.4	9.7	15	55
Turbidity (NTU)	60	0	>50	4	6.7		3.7	5.7	7.7	11	15.8	37.6	260
Nutrients (mg/L)													
NH3 as N	60	11	N/A				0.01	0.01	0.02	0.05	0.07	0.11	0.38
NO2 + NO3 as N	60	1	N/A				0.01	0.19	0.25	0.35	0.43	0.51	0.67
TKN as N	60	0	N/A				0.23	0.34	0.46	0.61	0.72	0.98	1.76
Total Phosphorus	60	0	N/A				0.04	0.08	0.1	0.16	0.21	0.24	0.62

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	100.4	6	10	

Key:
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ND: number of observations reported to be below detection level (non-detect)
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: BLACK CRK AT SR 1162 BLACK CREEK RD NR FOUR OAKS
Station #: J5170000 **Hydrologic Unit Code:** 03020201
Latitude: 35.46925 **Longitude:** -78.45681 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-45-(2)

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	12	14.1	86.0	0.7	3	5.2	6.2	8.4	10.3	12.6
	85	0	<5	20	23.5	> 99.9	0.7	3	5.2	6.2	8.4	10.3	12.6
pH (SU)	85	0	<6	2	2.4		5.3	6.3	6.5	6.6	6.8	6.9	7.7
	85	0	>9	0	0		5.3	6.3	6.5	6.6	6.8	6.9	7.7
Spec. conductance (umhos/cm at 25°C)	85	2	N/A				50	67	82	107	160	208	295
Water Temperature (°C)	85	0	>32	0	0		3.5	7.3	13	21.7	25	26.4	30.1
Other													
TSS (mg/L)	60	3	N/A				1	2.2	2.8	4.2	6	8	18
Turbidity (NTU)	60	0	>50	0	0		2.8	4.2	5.6	9.3	12	16	29
Nutrients (mg/L)													
NH3 as N	60	14	N/A				0.01	0.01	0.01	0.04	0.09	0.25	0.91
NO2 + NO3 as N	60	14	N/A				0.01	0.01	0.01	0.04	0.08	0.14	0.21
TKN as N	60	1	N/A				0.2	0.44	0.62	0.83	1.22	1.73	3.37
Total Phosphorus	60	0	N/A				0.02	0.05	0.06	0.08	0.12	0.22	0.6

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	76.3	2	3.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 1201 RICHARDSON BRIDGE RD NR COX MILL
Station #: J5250000 **Hydrologic Unit Code:** 03020201
Latitude: 35.37410 **Longitude:** -78.19620 **Stream class:** WS-IV NSW
Agency: LNBA **NC stream index:** 27-(49.5)

Time period: 01/20/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	0	0		5.6	6	6.5	7.2	9.8	11.2	12.8
	85	0	<5	0	0		5.6	6	6.5	7.2	9.8	11.2	12.8
pH (SU)	85	0	<6	0	0		6.3	6.7	6.8	6.9	7.2	7.3	7.4
	85	0	>9	0	0		6.3	6.7	6.8	6.9	7.2	7.3	7.4
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				66	96	112	137	184	240	270
Water Temperature (°C)	85	0	>32	1	1.2		3.7	6.4	12.3	20.2	25.3	27.7	33.1
Other													
TSS (mg/L)	60	0	N/A				3.2	6.9	12	24	37	88.8	520
Turbidity (NTU)	60	0	>50	7	11.7	60.6	4.5	12	14.5	25	39.2	64	130
Nutrients (mg/L)													
NH3 as N	60	13	N/A				0.01	0.01	0.02	0.06	0.09	0.13	0.22
NO2 + NO3 as N	60	0	>10	0	0		0.09	0.21	0.31	0.44	0.58	0.7	1.1
TKN as N	60	1	N/A				0.2	0.33	0.44	0.64	0.89	1.31	2.49
Total Phosphorus	60	1	N/A				0.02	0.08	0.11	0.18	0.24	0.33	2.37
Metals (ug/L)													
Aluminum, total (Al)	16	0	N/A				130	298	474	718	1940	5155	7432
Arsenic, total (As)	16	16	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	16	16	>2	0	0		1	1	1	1	1	1	1
Chromium, total (Cr)	16	14	>50	0	0		5	5	5	5	5	10	13
Copper, total (Cu)	16	3	>7	3	18.8	78.9	2	2	3	3	5	10	13
Iron, total (Fe)	16	0	>1000	12	75	> 99.9	367	647	996	1410	2393	6848	9620
Lead, total (Pb)	16	13	>25	0	0		5	5	5	5	5	9	11
Manganese, total (Mn)	16	0	>200	3	18.8	78.9	36	59	82	108	194	672	1340
Mercury, total (Hg) (ng/L)	16	16	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	16	15	>25	0	0		10	10	10	10	10	12	18
Zinc, total (Zn)	16	9	>50	1	6.2		10	10	10	10	17	43	60

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	87.8	5	8.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: HANNAH CRK AT SR 1158 ALLEN CROSSROADS RD NR BENSON
Station #: J5390000 **Hydrologic Unit Code:** 03020201
Latitude: 35.38677 **Longitude:** -78.51096 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-52-6

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	29	34.1	> 99.9	0.1	0.4	2.5	5.2	7.9	9.5	12.4
	85	0	<5	38	44.7	> 99.9	0.1	0.4	2.5	5.2	7.9	9.5	12.4
pH (SU)	85	0	<6	19	22.4	99.9	4.3	5.7	6	6.4	6.6	6.8	7.9
	85	0	>9	0	0		4.3	5.7	6	6.4	6.6	6.8	7.9
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				64	76	86	115	150	205	285
Water Temperature (°C)	85	0	>32	0	0		3.2	7.4	13.1	21.5	24.4	25.8	27.6
Other													
TSS (mg/L)	60	5	N/A				1	1.3	2.4	4	7.6	20.9	83
Turbidity (NTU)	60	0	>50	3	5		1.3	2.9	4.5	7.4	15.5	29.9	160
Nutrients (mg/L)													
NH3 as N	60	9	N/A				0.01	0.01	0.02	0.07	0.17	0.33	2.36
NO2 + NO3 as N	60	6	N/A				0.01	0.01	0.04	0.2	0.44	0.6	1.26
TKN as N	60	1	N/A				0.2	0.32	0.47	0.63	0.78	1.14	3.63
Total Phosphorus	60	1	N/A				0.02	0.04	0.05	0.07	0.1	0.23	2.04

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	87.7	10	16.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: HANNAH CRK AT SR 1227 IVEY RD NR BENSON
Station #: J5390800 **Hydrologic Unit Code:** 03020201
Latitude: 35.40245 **Longitude:** -78.49520 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-52-6

Time period: 01/18/2006 to 12/10/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	46	54.1	> 99.9	0.1	0.5	1.9	3.2	6.5	9.4	12.1
	85	0	<5	52	61.2	> 99.9	0.1	0.5	1.9	3.2	6.5	9.4	12.1
pH (SU)	85	0	<6	11	12.9	77.2	5.4	5.8	6.3	6.5	6.7	7	7.7
	85	0	>9	0	0		5.4	5.8	6.3	6.5	6.7	7	7.7
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				71	93	116	164	244	310	438
Water Temperature (°C)	85	0	>32	0	0		3.3	7	12.2	21.5	24.5	26	27.8
Other													
TSS (mg/L)	60	3	N/A				1	1.7	2.9	5.6	11	19.7	32
Turbidity (NTU)	60	0	>50	0	0		1.5	2.7	4.5	10.4	16.8	27.7	50
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.03	0.1	0.18	0.49	1.59
NO2 + NO3 as N	60	24	N/A				0.01	0.01	0.01	0.02	0.44	0.62	2.22
TKN as N	60	0	N/A				0.33	0.45	0.62	0.82	1.45	1.81	3.07
Total Phosphorus	60	0	N/A				0.06	0.1	0.14	0.3	0.63	1.08	2.31

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	58.2	5	8.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MILL CRK AT SR 1200 AT COX MILL
Station #: J5410000 **Hydrologic Unit Code:** 03020201
Latitude: 35.34195 **Longitude:** -78.21623 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-52-(1)

Time period: 06/20/2009 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	26	0	<4	2	7.7		2.5	4.1	4.7	5.5	7.1	10	10.6
	26	0	<5	8	30.8	99.7	2.5	4.1	4.7	5.5	7.1	10	10.6
pH (SU)	26	0	<6	5	19.2	88.8	5.8	5.9	6.3	6.5	6.6	6.8	7
	26	0	>9	0	0		5.8	5.9	6.3	6.5	6.6	6.8	7
Spec. conductance (umhos/cm at 25°C)	26	0	N/A				7	66	88	104	135	181	194
Water Temperature (°C)	26	0	>32	0	0		2.6	6.5	13.2	22	25.8	28.3	30.7
Other													
TSS (mg/L)	17	1	N/A				1	1.2	2.6	3.7	4.9	8.3	8.3
Turbidity (NTU)	17	0	>50	0	0		2.5	3.1	4.2	6.7	7.8	12	16
Nutrients (mg/L)													
NH3 as N	17	2	N/A				0.01	0.01	0.02	0.06	0.1	0.2	0.47
NO2 + NO3 as N	17	0	N/A				0.01	0.05	0.07	0.1	0.35	0.44	0.49
TKN as N	17	0	N/A				0.45	0.57	0.81	0.98	1.11	1.56	1.87
Total Phosphorus	17	1	N/A				0.02	0.03	0.04	0.05	0.07	0.1	0.15

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
17	134.7	1	5.9	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
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Location: FALLING CRK AT SR 1219 OLD GRANTHAM RD NR GRANTHAM
Station #: J5500000 **Hydrologic Unit Code:** 03020201
Latitude: 35.32239 **Longitude:** -78.12815 **Stream class:** WS-IV NSW
Agency: LNBA **NC stream index:** 27-54-(3.5)

Time period: 08/17/2009 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	24	0	<4	7	29.2	99.3	2.3	2.9	3.6	5.5	7.4	9.7	10.5
	24	0	<5	9	37.5	> 99.9	2.3	2.9	3.6	5.5	7.4	9.7	10.5
pH (SU)	24	0	<6	2	8.3		5.5	6	6.2	6.5	6.6	6.7	6.8
	24	0	>9	0	0		5.5	6	6.2	6.5	6.6	6.7	6.8
Spec. conductance (umhos/cm at 25°C)	24	0	N/A				101	108	117	128	161	206	219
Water Temperature (°C)	24	0	>32	0	0		2.7	6.9	12.8	20.8	25.3	27.2	28.8
Other													
TSS (mg/L)	17	5	N/A				1	1.2	2.4	3.1	3.9	15.8	58
Turbidity (NTU)	17	0	>50	0	0		2	2.6	4.7	5.3	8.2	16	16
Nutrients (mg/L)													
NH3 as N	17	0	N/A				0.01	0.02	0.02	0.06	0.16	0.46	0.47
NO2 + NO3 as N	17	0	>10	0	0		0.07	0.08	0.12	0.37	1.04	1.96	2.22
TKN as N	17	0	N/A				0.49	0.54	0.89	1.09	1.28	1.94	1.97
Total Phosphorus	17	0	N/A				0.02	0.02	0.05	0.1	0.13	0.16	0.24

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
17	117.7	3	17.6	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
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Location: LITTLE RIV AT SR 2333 SMITHFIELD RD NR ZEBULON
Station #: J5620000 **Hydrologic Unit Code:** 03020201
Latitude: 35.85770 **Longitude:** -78.36650 **Stream class:** WS-II HQW NSW
Agency: LNBA **NC stream index:** 27-57-(1)

Time period: 01/30/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	55	64.7	> 99.9	0.2	0.7	1.7	3.2	5.5	8.1	10.3
	85	0	<5	62	72.9	> 99.9	0.2	0.7	1.7	3.2	5.5	8.1	10.3
pH (SU)	85	0	<6	12	14.1	86.0	5.3	5.8	6.2	6.3	6.5	6.6	7.1
	85	0	>9	0	0		5.3	5.8	6.2	6.3	6.5	6.6	7.1
Spec. conductance (umhos/cm at 25°C)	85	3	N/A				50	59	69	85	105	127	164
Water Temperature (°C)	85	0	>32	0	0		3	7.1	11.7	20.2	23.6	26	30.9
Other													
TSS (mg/L)	58	3	N/A				1	2.2	2.9	4.9	6.8	13.2	25
Turbidity (NTU)	58	0	>50	0	0		1.4	3.7	6	8.6	14	26.6	50
Nutrients (mg/L)													
NH3 as N	58	9	N/A				0.01	0.01	0.02	0.04	0.08	0.14	0.42
NO2 + NO3 as N	58	13	>10	0	0		0.01	0.01	0.01	0.04	0.11	0.27	4.74
TKN as N	58	1	N/A				0.2	0.33	0.43	0.66	0.94	1.16	1.92
Total Phosphorus	58	1	N/A				0.02	0.05	0.06	0.09	0.14	0.19	0.78

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
58	50.8	3	5.2	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
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Location: LITTLE RIV AT US 301 NR KENLY
Station #: J5690000 **Hydrologic Unit Code:** 03020201
Latitude: 35.58290 **Longitude:** -78.15930 **Stream class:** WS-V NSW
Agency: LNBA **NC stream index:** 27-57-(8.5)

Time period: 01/30/2006 to 12/30/2010

	# results	# ND	Results not meeting EL: EL	#	%	%Conf	Min	Percentiles: 10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	85	0	<4	2	2.4		3.2	5.4	6.2	7.1	9.2	10.6	12.5
	85	0	<5	4	4.7		3.2	5.4	6.2	7.1	9.2	10.6	12.5
pH (SU)	85	0	<6	0	0		6.2	6.6	6.7	6.8	6.9	7.1	7.5
	85	0	>9	0	0		6.2	6.6	6.7	6.8	6.9	7.1	7.5
Spec. conductance (umhos/cm at 25°C)	85	1	N/A				50	64	80	97	126	184	772
Water Temperature (°C)	85	0	>32	0	0		2.8	7.3	12.6	20.5	24.7	27.3	30.9
Other													
TSS (mg/L)	60	1	N/A				1.3	2.9	3.8	5.9	8.3	12	26
Turbidity (NTU)	60	0	>50	0	0		1.8	5.6	7	9.8	13	18.9	34
Nutrients (mg/L)													
NH3 as N	60	11	N/A				0.01	0.01	0.01	0.04	0.09	0.17	0.26
NO2 + NO3 as N	60	0	>10	0	0		0.03	0.07	0.1	0.18	0.27	0.37	1.6
TKN as N	60	2	N/A				0.2	0.33	0.53	0.69	0.92	1.39	1.74
Total Phosphorus	60	2	N/A				0.02	0.05	0.07	0.09	0.12	0.17	1.31

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	83	6	10	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
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Location: LITTLE RIV AT SR 2339 BAGLEY RD NR LOWELL MILL
Station #: J5750000 **Hydrologic Unit Code:** 03020201
Latitude: 35.56128 **Longitude:** -78.15935 **Stream class:** WS-V NSW
Agency: LNBA **NC stream index:** 27-57-(8.5)

Time period: 01/30/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	82	0	<4	4	4.9		2.3	5.6	6.4	7.2	9.1	10.7	12.5
	82	0	<5	4	4.9		2.3	5.6	6.4	7.2	9.1	10.7	12.5
pH (SU)	82	0	<6	0	0		6.2	6.6	6.7	6.8	7	7.2	7.4
	82	0	>9	0	0		6.2	6.6	6.7	6.8	7	7.2	7.4
Spec. conductance (umhos/cm at 25°C)	82	0	N/A				54	70	87	104	125	161	289
Water Temperature (°C)	82	0	>32	0	0		3	7	12.2	20.2	23.7	26.8	31.9
Other													
TSS (mg/L)	58	2	N/A				1	2.3	3.4	5.4	10.2	16	33
Turbidity (NTU)	58	0	>50	0	0		1.8	4.7	7.1	9.8	14	19.1	45
Nutrients (mg/L)													
NH3 as N	58	13	N/A				0.01	0.01	0.01	0.04	0.09	0.12	0.3
NO2 + NO3 as N	58	0	>10	0	0		0.01	0.09	0.14	0.2	0.29	0.41	0.59
TKN as N	58	1	N/A				0.2	0.38	0.51	0.61	0.86	1.17	1.64
Total Phosphorus	58	1	N/A				0.02	0.05	0.07	0.11	0.13	0.18	0.25

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
58	75.5	5	8.6	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
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Location: LITTLE RIV AT SR 1234 CAPPS BRIDGE RD NR CROSSROADS
Station #: J5900000 **Hydrologic Unit Code:** 03020201
Latitude: 35.46620 **Longitude:** -78.09420 **Stream class:** WS-IV NSW
Agency: LNBA **NC stream index:** 27-57-(20.2)

Time period: 01/30/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	1	1.2		3.9	5.1	6	6.9	8.8	10.2	12.2
	85	0	<5	7	8.2		3.9	5.1	6	6.9	8.8	10.2	12.2
pH (SU)	85	0	<6	4	4.7		5.8	6.3	6.6	6.9	7	7.2	8.3
	85	0	>9	0	0		5.8	6.3	6.6	6.9	7	7.2	8.3
Spec. conductance (umhos/cm at 25°C)	85	1	N/A				50	72	89	116	153	207	340
Water Temperature (°C)	85	0	>32	1	1.2		3.2	7.6	12.9	21.3	25.4	27.9	32.1
Other													
TSS (mg/L)	60	0	N/A				1.7	2	3.8	6	9.7	13.9	82
Turbidity (NTU)	60	0	>50	1	1.7		1.3	3.8	5.9	8.7	13.8	18.9	85
Nutrients (mg/L)													
NH3 as N	60	8	N/A				0.01	0.01	0.02	0.04	0.08	0.13	0.28
NO2 + NO3 as N	60	0	>10	0	0		0.05	0.1	0.25	0.31	0.43	0.52	0.61
TKN as N	60	2	N/A				0.2	0.35	0.51	0.58	0.88	1.41	1.83
Total Phosphorus	60	2	N/A				0.02	0.03	0.06	0.08	0.11	0.16	0.22

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	75.6	4	6.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
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Location: LITTLE RIV AT NC 581 AT ASYLUM
Station #: J5930000 **Hydrologic Unit Code:** 03020201
Latitude: 35.39300 **Longitude:** -78.02580 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-57-(22)

Time period: 01/30/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	1	1.2		3.5	5.8	6.3	7.2	8.5	10.4	12.6
	84	0	<5	2	2.4		3.5	5.8	6.3	7.2	8.5	10.4	12.6
pH (SU)	85	0	<6	1	1.2		5.5	6.6	6.7	6.8	7	7.1	7.3
	85	0	>9	0	0		5.5	6.6	6.7	6.8	7	7.1	7.3
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				62	84	104	127	162	195	290
Water Temperature (°C)	85	0	>32	0	0		3.4	7.8	12.9	21.6	25.2	27.3	31.1
Other													
TSS (mg/L)	60	1	N/A				1	1.8	2.9	4.9	8.1	12	43
Turbidity (NTU)	60	0	>50	1	1.7		2.2	3.6	5.6	7.5	12	19.8	60
Nutrients (mg/L)													
NH3 as N	60	9	N/A				0.01	0.01	0.02	0.04	0.09	0.19	0.64
NO2 + NO3 as N	60	2	N/A				0.01	0.14	0.23	0.38	0.47	0.6	0.69
TKN as N	60	3	N/A				0.2	0.29	0.46	0.69	0.89	1.23	1.64
Total Phosphorus	60	1	N/A				0.02	0.04	0.06	0.08	0.1	0.15	0.26

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	84	2	3.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
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Location: WALNUT CRK AT SR 1730 SAINT JOHNS CHURCH RD NR WALNUT CREEK
Station #: J6010950 **Hydrologic Unit Code:** 03020202
Latitude: 35.28170 **Longitude:** -77.86860 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-68

Time period: 01/30/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	<4	0	0		4.1	5.2	5.7	6.5	8.2	9.9	12.1
	84	0	<5	5	6		4.1	5.2	5.7	6.5	8.2	9.9	12.1
pH (SU)	85	0	<6	3	3.5		5.4	6.2	6.4	6.6	6.8	7	7.1
	85	0	>9	0	0		5.4	6.2	6.4	6.6	6.8	7	7.1
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				54	79	84	108	138	165	208
Water Temperature (°C)	85	0	>32	0	0		3.2	8.3	14	22.1	25.8	26.8	29.4
Other													
TSS (mg/L)	60	8	N/A				1	1	1.3	2	3.2	4.9	22
Turbidity (NTU)	60	4	>50	0	0		1	1.9	2.6	3.9	5.5	7.4	11
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.03	0.06	0.13	0.17	0.32
NO2 + NO3 as N	60	0	N/A				0.12	0.4	0.69	0.94	1.55	2.41	2.88
TKN as N	60	8	N/A				0.2	0.2	0.32	0.5	0.79	1.04	1.91
Total Phosphorus	60	6	N/A				0.02	0.02	0.03	0.06	0.07	0.13	0.18

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	39.7	2	3.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
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Location: NEUSE RIV AT SR 1731 NR SEVEN SPRINGS
Station #: J6024000 **Hydrologic Unit Code:** 03020202
Latitude: 35.22900 **Longitude:** -77.84600 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(56)

Time period: 01/30/2006 to 12/30/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	84	0	<4	0	0		4.8	5.8	6.3	7	8.4	10.3	12.3
	84	0	<5	1	1.2		4.8	5.8	6.3	7	8.4	10.3	12.3
pH (SU)	85	0	<6	1	1.2		5.8	6.7	6.8	6.9	7	7.1	7.6
	85	0	>9	0	0		5.8	6.7	6.8	6.9	7	7.1	7.6
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				79	96	115	132	160	199	240
Water Temperature (°C)	85	0	>32	1	1.2		3.3	8.5	13.9	22.3	26.4	28.6	32.8
Other													
TSS (mg/L)	60	0	N/A				1.7	4.9	8.3	13.5	24.2	42.9	65
Turbidity (NTU)	60	0	>50	3	5		3.8	6.8	11	16.5	29	37.9	230
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.03	0.07	0.12	0.16	0.33
NO2 + NO3 as N	60	0	N/A				0.07	0.23	0.34	0.46	0.57	0.69	1.71
TKN as N	60	2	N/A				0.2	0.28	0.43	0.61	0.86	1.07	1.44
Total Phosphorus	60	0	N/A				0.03	0.06	0.09	0.11	0.15	0.19	0.67

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	65.9	6	10	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: BEAR CRK AT SR 1311 BEAR CREEK RD NR KINSTON
Station #: J6044500 **Hydrologic Unit Code:** 03020202
Latitude: 35.24890 **Longitude:** -77.78430 **Stream class:** WS IV Sw NSW
Agency: LNBA **NC stream index:** 27-72-(5)

Time period: 01/30/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	N/A				5.1	6.2	6.7	7.8	9.2	10.4	12.5
pH (SU)	85	0	<4.3	0	0		5.8	6.3	6.5	6.8	6.9	7.1	7.2
	85	0	>9	0	0		5.8	6.3	6.5	6.8	6.9	7.1	7.2
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				61	93	99	108	124	145	181
Water Temperature (°C)	85	0	>32	0	0		2.9	8.2	13.2	20.3	23.6	25.5	28.6
Other													
TSS (mg/L)	60	2	N/A				1.2	2.2	3.9	7.3	13.8	18	38
Turbidity (NTU)	60	0	>50	0	0		2.6	3.5	5	8.6	15	25.6	45
Nutrients (mg/L)													
NH3 as N	60	6	N/A				0.01	0.01	0.04	0.08	0.16	0.26	0.7
NO2 + NO3 as N	60	0	>10	0	0		1.31	1.63	1.76	2.13	2.5	2.89	3.6
TKN as N	60	3	N/A				0.2	0.22	0.33	0.64	0.88	1.24	1.67
Total Phosphorus	60	1	N/A				0.02	0.06	0.07	0.1	0.18	0.23	5.15

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	85.8	7	11.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MOSLEY CRK AT SR 1327 WILLEY MEASLEY RD NR LAGRANGE
Station #: J6055000 **Hydrologic Unit Code:** 03020202
Latitude: 35.31194 **Longitude:** -77.73139 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-77-2

Time period: 01/30/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	83	0	N/A				4.4	5.5	6.3	7.1	8.8	10	12
pH (SU)	85	0	<4.3	0	0		6	6.4	6.6	6.7	6.9	7	7.2
	85	0	>9	0	0		6	6.4	6.6	6.7	6.9	7	7.2
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				69	94	110	125	160	195	253
Water Temperature (°C)	85	0	>32	0	0		2.7	8.4	13.2	20.6	23.7	25.8	28.9
Other													
TSS (mg/L)	60	0	N/A				1.6	2.2	3.1	5.8	9.9	16.9	59
Turbidity (NTU)	60	0	>50	0	0		1.8	2.9	4.1	5.8	9.4	14.9	24
Nutrients (mg/L)													
NH3 as N	60	6	N/A				0.01	0.01	0.04	0.08	0.12	0.22	0.54
NO2 + NO3 as N	60	0	N/A				0.27	0.97	1.24	1.46	2.15	2.76	3.19
TKN as N	60	8	N/A				0.2	0.2	0.3	0.55	0.84	1.24	2.38
Total Phosphorus	60	2	N/A				0.02	0.04	0.05	0.08	0.11	0.15	0.24

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	45.8	5	8.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT NC 11 AT KINSTON
Station #: J6150000 **Hydrologic Unit Code:** 03020202
Latitude: 35.25879 **Longitude:** -77.58353 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(75.7)

Time period: 01/30/2006 to 12/30/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	83	0	<4	0	0		4	5.8	6.3	6.9	8.8	10.3	12.3
	83	0	<5	1	1.2		4	5.8	6.3	6.9	8.8	10.3	12.3
pH (SU)	85	0	<6	0	0		6	6.7	6.8	6.9	7	7.2	8.5
	85	0	>9	0	0		6	6.7	6.8	6.9	7	7.2	8.5
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				80	103	122	150	170	193	218
Water Temperature (°C)	85	0	>32	1	1.2		3.7	8.8	14.2	22.7	26.7	29.3	33.3
Other													
TSS (mg/L)	60	0	N/A				2.7	5.5	6.9	10.5	17	25.8	229
Turbidity (NTU)	60	0	>50	1	1.7		5.3	7.9	10	15	20	26	75
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.02	0.04	0.09	0.15	0.47
NO2 + NO3 as N	60	1	N/A				0.01	0.23	0.36	0.52	0.66	0.81	0.92
TKN as N	60	1	N/A				0.2	0.3	0.42	0.59	0.8	0.97	2.03
Total Phosphorus	60	0	N/A				0.02	0.06	0.08	0.11	0.13	0.17	0.23

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	60.5	3	5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT NC 55 NR GRAINGERS
Station #: J6250000 **Hydrologic Unit Code:** 03020202
Latitude: 35.29570 **Longitude:** -77.49620 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(75.7)

Time period: 01/30/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	80	0	<4	1	1.2		3.8	5.9	6.4	6.8	8.6	10.3	12.4
	80	0	<5	1	1.2		3.8	5.9	6.4	6.8	8.6	10.3	12.4
pH (SU)	81	0	<6	0	0		6	6.9	7	7	7.1	7.3	7.8
	81	0	>9	0	0		6	6.9	7	7	7.1	7.3	7.8
Spec. conductance (umhos/cm at 25°C)	81	0	N/A				74	110	123	140	167	201	248
Water Temperature (°C)	81	0	>32	1	1.2		2.6	8.8	15.1	23.5	26.5	28.9	32.4
Other													
TSS (mg/L)	56	0	N/A				1.8	3.6	6.6	11.5	17.8	40.3	79
Turbidity (NTU)	56	0	>50	2	3.6		4	6.7	9.9	14.5	20.8	33.5	95
Nutrients (mg/L)													
NH3 as N	56	9	N/A				0.01	0.01	0.02	0.05	0.08	0.16	0.62
NO2 + NO3 as N	56	0	N/A				0.07	0.28	0.35	0.47	0.66	0.76	0.89
TKN as N	56	1	N/A				0.2	0.35	0.48	0.64	0.89	1	1.69
Total Phosphorus	56	0	N/A				0.03	0.08	0.09	0.12	0.15	0.19	0.45

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
56	60	6	10.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV NR SR 1802 BRAXTON RD NR TICK BITE
Station #: J6340000 **Hydrologic Unit Code:** 03020202
Latitude: 35.33527 **Longitude:** -77.45702 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-(75.7)

Time period: 01/30/2006 to 09/29/2008

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	45	0	<4	1	2.2		1.4	5.2	5.8	6.4	8.2	9.7	10.1
	45	0	<5	2	4.4		1.4	5.2	5.8	6.4	8.2	9.7	10.1
pH (SU)	45	0	<6	0	0		6.4	6.5	6.8	7	7.2	7.4	7.8
	45	0	>9	0	0		6.4	6.5	6.8	7	7.2	7.4	7.8
Spec. conductance (umhos/cm at 25°C)	45	0	N/A				90	97	127	161	205	241	278
Water Temperature (°C)	45	0	>32	0	0		7.7	8.8	14.7	23	26.7	28.2	31.4
Other													
TSS (mg/L)	32	0	N/A				1.7	2.9	8.2	14.5	25.8	38.7	104
Turbidity (NTU)	32	0	>50	1	3.1		3.4	5.9	12	17	28	37.4	55
Nutrients (mg/L)													
NH3 as N	32	7	N/A				0.01	0.01	0.03	0.04	0.06	0.13	0.47
NO2 + NO3 as N	32	0	N/A				0.11	0.24	0.35	0.41	0.5	0.74	0.79
TKN as N	32	2	N/A				0.2	0.22	0.33	0.56	0.63	0.9	1.27
Total Phosphorus	32	0	N/A				0.07	0.08	0.09	0.12	0.15	0.18	0.5
Metals (ug/L)													
Aluminum, total (Al)	15	0	N/A				266	276	555	767	960	1385	1573
Arsenic, total (As)	15	15	>10	0	0		5	5	5	5	5	5	5
Cadmium, total (Cd)	15	15	>2	0	0		1	1	1	1	1	1	1
Chromium, total (Cr)	15	15	>50	0	0		2	4	5	5	5	5	5
Copper, total (Cu)	15	5	>7	0	0		2	2	2	2	3	4	5
Iron, total (Fe)	15	0	>1000	14	93.3	> 99.9	811	960	1297	1618	1760	2000	2160
Lead, total (Pb)	15	15	>25	0	0		5	5	5	5	5	5	5
Mercury, total (Hg) (ng/L)	15	15	>12	0	0		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel, total (Ni)	15	15	>88	0	0		10	10	10	10	10	10	10
Zinc, total (Zn)	15	6	>50	1	6.7		10	10	10	10	14	238	534

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
32	61.1	4	12.5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
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%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: LITTLE CRK AT NC 97 AT ZEBULON
Station #: J6410000 **Hydrologic Unit Code:** 03020203
Latitude: 35.82786 **Longitude:** -78.30247 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-86-2-4

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	81	0	<4	7	8.6		1.2	4	5.1	6.4	8.7	10.5	11.6
	81	0	<5	19	23.5	> 99.9	1.2	4	5.1	6.4	8.7	10.5	11.6
pH (SU)	81	0	<6	2	2.5		5.4	6.2	6.4	6.6	6.7	6.9	7.5
	81	0	>9	0	0		5.4	6.2	6.4	6.6	6.7	6.9	7.5
Spec. conductance (umhos/cm at 25°C)	81	0	N/A				62	82	93	106	125	132	180
Water Temperature (°C)	81	0	>32	0	0		3	6.9	12.2	19.3	21.9	23.5	25.6
Other													
TSS (mg/L)	53	1	N/A				1.5	3.4	4.2	6.2	9.4	24.6	99
Turbidity (NTU)	53	0	>50	0	0		1.4	6.2	7.1	9	13.5	18.2	45
Nutrients (mg/L)													
NH3 as N	53	7	N/A				0.01	0.01	0.02	0.05	0.12	0.17	0.53
NO2 + NO3 as N	53	5	N/A				0.01	0.02	0.09	0.26	0.56	0.96	1.54
TKN as N	53	2	N/A				0.2	0.36	0.53	0.68	0.86	1.23	1.52
Total Phosphorus	53	1	N/A				0.04	0.05	0.07	0.1	0.16	0.31	0.82

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
53	104.7	5	9.4	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: LITTLE CRK AT NC 39 AT ZEBULON
Station #: J6450000 **Hydrologic Unit Code:** 03020203
Latitude: 35.81250 **Longitude:** -78.26810 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-86-2-4

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	0	0		4.6	5.3	5.9	6.6	9.2	10.6	12.1
	85	0	<5	5	5.9		4.6	5.3	5.9	6.6	9.2	10.6	12.1
pH (SU)	85	0	<6	0	0		6	6.6	6.7	6.8	7	7.1	7.3
	85	0	>9	0	0		6	6.6	6.7	6.8	7	7.1	7.3
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				93	118	131	161	308	504	637
Water Temperature (°C)	85	0	>32	0	0		3.3	5.9	11.9	20.1	23.1	25.4	28
Other													
TSS (mg/L)	60	2	N/A				1.9	2.7	4	5	8.2	11.9	23
Turbidity (NTU)	60	0	>50	0	0		4.1	5	5.7	9	13.8	17.8	38
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.03	0.07	0.11	0.24	0.79
NO2 + NO3 as N	60	3	N/A				0.01	0.12	0.27	0.47	0.96	1.46	2.02
TKN as N	60	1	N/A				0.2	0.42	0.55	0.7	0.96	1.28	1.69
Total Phosphorus	60	1	N/A				0.02	0.06	0.08	0.12	0.24	0.35	11.76

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	75.2	8	13.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: MOCCASIN CRK AT SR 1131 ANTIOC CHURCH RD NR CONNER
Station #: J6500000 **Hydrologic Unit Code:** 03020203
Latitude: 35.73010 **Longitude:** -78.18950 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-86-2

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	11	12.9	77.2	2	3.7	4.8	6.1	8.7	10.5	11.8
	85	0	<5	23	27.1	> 99.9	2	3.7	4.8	6.1	8.7	10.5	11.8
pH (SU)	85	0	<6	0	0		6	6.4	6.6	6.7	6.9	7.1	7.5
	85	0	>9	0	0		6	6.4	6.6	6.7	6.9	7.1	7.5
Spec. conductance (umhos/cm at 25°C)	85	2	N/A				50	74	86	102	120	144	183
Water Temperature (°C)	85	0	>32	0	0		3.1	5.8	11.9	20.1	23.2	24.8	27.4
Other													
TSS (mg/L)	60	3	N/A				1.4	2.2	2.8	4.7	7.9	13	72
Turbidity (NTU)	60	1	>50	3	5		1	4	7	8.6	16	24.5	70
Nutrients (mg/L)													
NH3 as N	60	15	N/A				0.01	0.01	0.01	0.04	0.1	0.17	0.25
NO2 + NO3 as N	60	10	N/A				0.01	0.01	0.04	0.11	0.17	0.23	1.48
TKN as N	60	1	N/A				0.2	0.35	0.49	0.66	0.93	1.36	2.14
Total Phosphorus	60	1	N/A				0.02	0.04	0.07	0.1	0.14	0.51	2.92

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	104.4	6	10	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: TURKEY CRK AT SR 1101 CLAUDE LEWIS RD NR MIDDLESEX
Station #: J6680000 **Hydrologic Unit Code:** 03020203
Latitude: 35.75190 **Longitude:** -78.15970 **Stream class:** C NSW
Agency: LNBA **NC stream index:** 27-86-3-(1)

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	<4	20	23.5	> 99.9	1.5	2.9	4	5.7	8.5	10.3	11.7
	85	0	<5	30	35.3	> 99.9	1.5	2.9	4	5.7	8.5	10.3	11.7
pH (SU)	85	0	<6	2	2.4		5.4	6.4	6.5	6.6	6.7	6.8	7.1
	85	0	>9	0	0		5.4	6.4	6.5	6.6	6.7	6.8	7.1
Spec. conductance (umhos/cm at 25°C)	85	1	N/A				50	63	76	97	124	153	192
Water Temperature (°C)	85	0	>32	0	0		3	5.9	12.2	20.8	24	26.2	28.7
Other													
TSS (mg/L)	60	1	N/A				1.3	2.7	3.5	5	7.5	13.9	33
Turbidity (NTU)	60	0	>50	1	1.7		3.6	6.5	7.6	9.3	15	26.6	65
Nutrients (mg/L)													
NH3 as N	60	11	N/A				0.01	0.01	0.02	0.05	0.1	0.22	0.85
NO2 + NO3 as N	60	16	N/A				0.01	0.01	0.01	0.04	0.12	0.19	0.3
TKN as N	60	1	N/A				0.2	0.4	0.52	0.8	1.09	1.32	2.01
Total Phosphorus	60	0	N/A				0.03	0.05	0.06	0.08	0.1	0.17	0.66

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	70.6	7	11.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CONTENTNEA CRK AT US 301 WARD BLVD NR DIXIE
Station #: J6764000 **Hydrologic Unit Code:** 03020203
Latitude: 35.68790 **Longitude:** -77.94770 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-(7)

Time period: 01/13/2006 to 12/02/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	85	0	N/A				4.2	5.9	6.5	7.4	9.5	10.8	12.7
pH (SU)	85	0	<4.3	0	0		5.7	6.7	6.8	6.9	7	7.1	7.6
	85	0	>9	0	0		5.7	6.7	6.8	6.9	7	7.1	7.6
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				60	67	74	106	120	139	217
Water Temperature (°C)	85	0	>32	1	1.2		3.9	6.5	12.7	22.1	25.1	27.9	32.9
Other													
TSS (mg/L)	60	1	N/A				1	3.5	3.9	4.6	6.2	7.5	278
Turbidity (NTU)	60	0	>50	0	0		3.4	4.8	5.9	7.9	13	20	38
Nutrients (mg/L)													
NH3 as N	60	14	N/A				0.01	0.01	0.01	0.04	0.08	0.12	0.23
NO2 + NO3 as N	60	16	N/A				0.01	0.01	0.01	0.09	0.22	0.35	0.61
TKN as N	60	1	N/A				0.2	0.42	0.58	0.7	1	1.32	2.06
Total Phosphorus	60	0	N/A				0.02	0.04	0.06	0.07	0.1	0.22	0.83

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	38.4	3	5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CONTENTNEA CRK AT SR 1622 EVANSDALE RD NR WILSON
Station #: J6890000 **Hydrologic Unit Code:** 03020203
Latitude: 35.64290 **Longitude:** -77.89020 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-(7)

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	N/A				3.1	5.1	6.2	6.8	9	10.3	12.6
pH (SU)	85	0	<4.3	0	0		5.7	6.7	6.8	6.9	7	7.2	7.5
	85	0	>9	0	0		5.7	6.7	6.8	6.9	7	7.2	7.5
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				87	113	128	150	177	318	473
Water Temperature (°C)	85	0	>32	0	0		4.1	6.9	12.8	21.3	25	27.3	30.1
Other													
TSS (mg/L)	60	1	N/A				2.6	3.6	4.7	7.1	12	17	73
Turbidity (NTU)	60	0	>50	0	0		4	5.2	7.4	10	21	25	50
Nutrients (mg/L)													
NH3 as N	60	4	N/A				0.01	0.02	0.06	0.11	0.24	0.34	1.42
NO2 + NO3 as N	60	0	N/A				0.18	0.26	0.41	0.55	0.95	1.79	4.66
TKN as N	60	1	N/A				0.2	0.51	0.63	0.87	1.1	1.49	2.85
Total Phosphorus	60	1	N/A				0.02	0.07	0.09	0.17	0.36	0.82	1.29

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	117.2	16	26.7	86.9

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CONTENTNEA CRK AT NC 58 NR STANTONSBURG
Station #: J7210000 **Hydrologic Unit Code:** 03020203
Latitude: 35.58610 **Longitude:** -77.81110 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-(7)

Time period: 01/13/2006 to 12/02/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	85	0	N/A				4.2	5.4	6.3	6.7	9.4	10.7	12.9
pH (SU)	85	0	<4.3	0	0		6.2	6.8	6.9	7	7.1	7.1	8.1
	85	0	>9	0	0		6.2	6.8	6.9	7	7.1	7.1	8.1
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				86	98	114	128	156	238	388
Water Temperature (°C)	85	0	>32	0	0		4.5	7.4	13.1	21.7	25	26.8	30.1
Other													
TSS (mg/L)	60	3	N/A				1.3	2	3.2	4.5	6.6	13	25
Turbidity (NTU)	60	1	>50	0	0		1	4.2	5.1	8	11.8	17.9	39
Nutrients (mg/L)													
NH3 as N	60	10	N/A				0.01	0.01	0.03	0.08	0.12	0.15	0.83
NO2 + NO3 as N	60	0	N/A				0.12	0.18	0.28	0.4	0.56	0.82	2.89
TKN as N	60	0	N/A				0.26	0.47	0.56	0.74	0.96	1.37	2.33
Total Phosphorus	60	0	N/A				0.05	0.06	0.08	0.14	0.28	0.55	0.74

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	98.2	8	13.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: TOISNOT SWAMP AT SR 1539 SAND PIT RD NR STANTONSBURG
Station #: J7240000 **Hydrologic Unit Code:** 03020203
Latitude: 35.59760 **Longitude:** -77.79470 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-11-(5)

Time period: 01/13/2006 to 12/02/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	85	0	N/A				1.5	4.1	5.4	6.1	8.4	10.2	12.3
pH (SU)	85	0	<4.3	0	0		4.8	6.4	6.5	6.7	6.8	6.8	7.1
	85	0	>9	0	0		4.8	6.4	6.5	6.7	6.8	6.8	7.1
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				60	79	92	112	138	169	225
Water Temperature (°C)	85	0	>32	0	0		3.9	7.1	12.9	20.6	23.8	25.1	27.2
Other													
TSS (mg/L)	60	3	N/A				1.2	2.4	3.1	4.9	8.3	12	26
Turbidity (NTU)	60	0	>50	0	0		3.3	5.9	8.2	10.5	14	24.8	45
Nutrients (mg/L)													
NH3 as N	60	5	N/A				0.01	0.01	0.02	0.05	0.11	0.17	0.59
NO2 + NO3 as N	60	2	N/A				0.01	0.02	0.08	0.16	0.25	0.5	0.84
TKN as N	60	1	N/A				0.2	0.42	0.62	0.81	1.01	1.28	6.91
Total Phosphorus	60	1	N/A				0.02	0.06	0.08	0.12	0.17	0.24	0.56

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	101.6	10	16.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NAHUNTA SWAMP AT NC 58 NR CONTENTNEA
Station #: J7325000 **Hydrologic Unit Code:** 03020203
Latitude: 35.50810 **Longitude:** -77.74550 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-14

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	N/A				5.2	6.2	6.5	7.3	8.9	10.6	12.8
pH (SU)	85	0	<4.3	0	0		5.7	6.6	6.8	6.9	7	7.1	7.3
	85	0	>9	0	0		5.7	6.6	6.8	6.9	7	7.1	7.3
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				85	95	102	116	133	149	178
Water Temperature (°C)	85	0	>32	0	0		4.8	8.1	13.9	21.2	24.5	26.1	27.7
Other													
TSS (mg/L)	60	3	N/A				1.5	2.6	3.2	5	7.9	13.9	26
Turbidity (NTU)	60	1	>50	0	0		1	4.5	5.3	7.2	13	20.7	36
Nutrients (mg/L)													
NH3 as N	60	8	N/A				0.01	0.01	0.03	0.08	0.14	0.19	0.47
NO2 + NO3 as N	60	0	N/A				0.21	0.31	0.39	0.51	0.71	0.95	1.38
TKN as N	60	3	N/A				0.2	0.3	0.51	0.67	0.98	1.46	2.64
Total Phosphorus	60	1	N/A				0.02	0.07	0.1	0.16	0.24	0.34	0.79

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	71.6	3	5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
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Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: CONTENTNEA CRK AT US 13 AT SNOW HILL
Station #: J7330000 **Hydrologic Unit Code:** 03020203
Latitude: 35.45850 **Longitude:** -77.67530 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-(7)

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	N/A				2.4	5.7	6.2	6.8	8.7	10.3	12.9
pH (SU)	85	0	<4.3	0	0		6	6.6	6.8	6.9	7	7.1	7.3
	85	0	>9	0	0		6	6.6	6.8	6.9	7	7.1	7.3
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				80	100	120	133	152	171	234
Water Temperature (°C)	85	0	>32	0	0		4.9	8.3	14	22	25.3	27.2	29.4
Other													
TSS (mg/L)	60	3	N/A				1.2	2	3.1	5.1	7.1	10.9	16
Turbidity (NTU)	60	1	>50	0	0		1	4.8	5.8	7.5	11.8	17.9	39
Nutrients (mg/L)													
NH3 as N	60	6	N/A				0.01	0.01	0.03	0.07	0.12	0.15	0.27
NO2 + NO3 as N	60	0	N/A				0.17	0.39	0.52	0.62	0.82	1.01	1.37
TKN as N	60	3	N/A				0.2	0.25	0.51	0.63	0.97	1.26	3.46
Total Phosphorus	60	0	N/A				0.04	0.06	0.09	0.14	0.18	0.25	0.56

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	60.3	4	6.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: LITTLE CONTENTNEA CRK AT SR 1218 CHINQUAPIN RD NR FARMVILLE
Station #: J7690000 **Hydrologic Unit Code:** 03020203
Latitude: 35.58810 **Longitude:** -77.54160 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-26

Time period: 01/13/2006 to 12/02/2010

	# results	# ND	EL	Results not meeting EL #	%	%Conf	Min	Percentiles 10th	25th	50th	75th	90th	Max
Field													
D.O. (mg/L)	85	0	N/A				0.5	2.4	4.2	5.5	7.7	9.7	11
pH (SU)	85	0	<4.3	0	0		5.9	6.2	6.4	6.5	6.7	6.9	7.4
	85	0	>9	0	0		5.9	6.2	6.4	6.5	6.7	6.9	7.4
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				79	96	140	172	218	357	775
Water Temperature (°C)	85	0	>32	0	0		4.5	7.5	13.6	21.1	24.2	25.8	26.9
Other													
TSS (mg/L)	60	1	N/A				1.3	2.8	3.7	5	7.5	8.5	15
Turbidity (NTU)	60	0	>50	0	0		3	4.8	6.4	8.6	12	15	25
Nutrients (mg/L)													
NH3 as N	60	2	N/A				0.01	0.04	0.11	0.24	0.43	0.61	0.81
NO2 + NO3 as N	60	5	N/A				0.01	0.08	0.2	0.4	0.65	3.6	9.6
TKN as N	60	0	N/A				0.39	0.62	0.87	1.13	1.51	2.04	2.43
Total Phosphorus	60	0	N/A				0.05	0.09	0.15	0.28	0.45	0.92	2.5

Fecal Coliform Screening(#/100mL)

# results:	Geomea	# > 400:	% > 400:	%Conf:
60	140.4	11	18.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: LITTLE CONTENTNEA CRK AT NC 903 SR 1110 AT SCUFFLETON
Station #: J7740000 **Hydrologic Unit Code:** 03020203
Latitude: 35.45670 **Longitude:** -77.48540 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-86-26

Time period: 01/13/2006 to 12/02/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	85	0	N/A				3.6	5.1	5.6	6.4	8.2	10.1	12.5
pH (SU)	85	0	<4.3	0	0		6	6.6	6.7	6.9	7	7.1	7.3
	85	0	>9	0	0		6	6.6	6.7	6.9	7	7.1	7.3
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				80	110	137	163	185	201	235
Water Temperature (°C)	85	0	>32	0	0		5.2	8.1	14	21.8	25.3	26.7	28.6
Other													
TSS (mg/L)	60	2	N/A				1	1.5	2	3.3	5.3	7.9	21
Turbidity (NTU)	60	1	>50	0	0		1	3.5	5	6.1	10.8	13.9	29
Nutrients (mg/L)													
NH3 as N	60	11	N/A				0.01	0.01	0.02	0.06	0.12	0.19	0.59
NO2 + NO3 as N	60	5	N/A				0.01	0.01	0.12	0.31	0.61	0.88	1.56
TKN as N	60	3	N/A				0.2	0.32	0.57	0.75	1.03	1.26	1.97
Total Phosphorus	60	0	N/A				0.06	0.09	0.16	0.21	0.3	0.39	7.34

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	104.8	8	13.3	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: NEUSE RIV AT SR 1470 NR FORT BARNWELL
Station #: J7850000 **Hydrologic Unit Code:** 03020202
Latitude: 35.31389 **Longitude:** -77.30302 **Stream class:** C Sw NSW
Agency: LNBA **NC stream index:** 27-(85)

Time period: 01/30/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	N/A				3.9	5.6	6.3	6.9	8.6	10.2	12.4
pH (SU)	85	0	<4.3	0	0		6	6.8	6.9	7	7.2	7.4	8
	85	0	>9	0	0		6	6.8	6.9	7	7.2	7.4	8
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				74	110	131	149	169	191	227
Water Temperature (°C)	85	0	>32	1	1.2		2.7	8.6	14.3	23.3	26.8	29	32.4
Other													
Chlorophyll a (ug/L)	42	2	>40	0	0		1	1	2	3	5	7	16
TSS (mg/L)	60	3	N/A				1.5	2.2	3	4	6.2	10.8	20
Turbidity (NTU)	60	0	>50	0	0		3.4	4.7	6.2	8.1	11.5	16.9	32
Nutrients (mg/L)													
NH3 as N	60	7	N/A				0.01	0.01	0.03	0.06	0.12	0.16	1.15
NO2 + NO3 as N	60	0	N/A				0.07	0.3	0.44	0.56	0.68	0.88	1.28
TKN as N	60	1	N/A				0.2	0.32	0.48	0.68	0.83	1.12	1.66
Total Phosphorus	60	1	N/A				0.02	0.07	0.09	0.12	0.18	0.21	0.35

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	62.7	3	5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: TRENT RIV AT E FRONT STREET AT NEW BERN
Station #: J8870000 **Hydrologic Unit Code:** 03020204
Latitude: 35.10159 **Longitude:** -77.03708 **Stream class:** SB Sw NSW
Agency: LNBA **NC stream index:** 27-101-(39)

Time period: 01/05/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	84	0	N/A				2.7	5	6.2	7	8.7	10.8	12.9
pH (SU)	85	0	<4.3	0	0		5.8	6.6	6.8	7.1	7.4	7.7	9.3
	85	0	>8.5	2	2.4		5.8	6.6	6.8	7.1	7.4	7.7	9.3
Spec. conductance (umhos/cm at 25°C)	85	0	N/A				103	315	1788	4972	10194	15127	18032
Water Temperature (°C)	85	0	>32	0	0		2.5	8.1	13.8	23.2	26.8	29.9	31.3
Other													
Chlorophyll a (ug/L)	41	2	>40	4	9.8		1	1	9	17	28	45	49
TSS (mg/L)	60	1	N/A				1	2.2	4.1	6.6	8.8	11.9	19
Turbidity (NTU)	60	0	>25	1	1.7		1.1	2.9	4	5.4	7.5	10.9	32
Nutrients (mg/L)													
NH3 as N	60	8	N/A				0.01	0.01	0.03	0.06	0.12	0.16	0.26
NO2 + NO3 as N	60	12	N/A				0.01	0.01	0.04	0.25	0.38	0.61	0.89
TKN as N	60	0	N/A				0.3	0.66	0.84	1.08	1.26	1.58	3.76
Total Phosphorus	60	2	N/A				0.02	0.06	0.09	0.12	0.18	0.25	0.61

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
60	67.4	4	6.7	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence

Ambient Monitoring System Station Summaries
NCDENR, Division of Water Quality
Basinwide Assessment Report

Location: SLOCUM CRK AT SLOCUM RD AT CHERRY POINT
Station #: J9330000 **Hydrologic Unit Code:** 03020204
Latitude: 34.91770 **Longitude:** -76.91150 **Stream class:** SC Sw NSW
Agency: LNBA **NC stream index:** 27-112

Time period: 01/05/2006 to 12/29/2010

	#	#		Results not meeting EL			Percentiles						
	results	**ND**	**EL**	**#**	**%**	**%Conf**	**Min**	**10th**	**25th**	**50th**	**75th**	**90th**	**Max**
Field													
D.O. (mg/L)	83	0	N/A				3.8	5.5	6.1	7	8.6	10.5	12.2
pH (SU)	84	0	<4.3	0	0		5.8	6.7	6.8	7.2	7.4	7.9	8.3
	84	0	>8.5	0	0		5.8	6.7	6.8	7.2	7.4	7.9	8.3
Spec. conductance (umhos/cm at 25°C)	84	0	N/A				89	516	2154	6885	11262	15106	21080
Water Temperature (°C)	84	0	>32	1	1.2		4.1	8	14.2	23.7	27.1	30.4	32.2
Other													
Chlorophyll a (ug/L)	40	2	>40	10	25	99.5	1	1	9	19	41	62	122
TSS (mg/L)	59	1	N/A				1	3.5	5.5	10	15	20	33
Turbidity (NTU)	59	0	>25	0	0		2.5	4.8	5.7	7	8.8	12	15
Nutrients (mg/L)													
NH3 as N	59	14	N/A				0.01	0.01	0.01	0.05	0.08	0.13	0.17
NO2 + NO3 as N	59	23	N/A				0.01	0.01	0.01	0.03	0.09	0.17	0.81
TKN as N	59	0	N/A				0.3	0.71	0.89	1.11	1.45	1.77	2.56
Total Phosphorus	59	0	N/A				0.03	0.06	0.08	0.11	0.15	0.24	0.7

Fecal Coliform Screening(#/100mL)

# results:	**Geomea**	**# > 400:**	**% > 400:**	**%Conf:**
59	51.3	5	8.5	

Key:
result: number of observations
ND: number of observations reported to be below detection level (non-detect)
EL: Evaluation Level; applicable numeric or narrative water quality standard or action level
Results not meeting EL: number and percentages of observations not meeting evaluation level
%Conf : States the percent statistical confidence that the actual percentage of exceedances is at least 10% (20% for Fecal Coliform)
Stations with less than 10 results for a given parameter were not evaluated for statistical confidence