Appendix I

DWQ and Other Water Quality Monitoring Programs in the Neuse River Basin

DWQ Water Quality Assessment

- **Benthic Macroinvertebrate Monitoring**
- **Fish Monitoring**
- **Aquatic Toxicity Monitoring**
- **Lakes Assessment Program**
- **Ambient Monitoring System**

Other Water Quality Research
Lower Neuse Basin Association (LNBA)

DWQ Water Quality Monitoring Programs in the Neuse River Basin

Staff in the Environmental Sciences Section (ESS) and Regional Offices of DWQ collect a variety of biological, chemical and physical data. The following discussion contains a brief introduction to each program, followed by a summary of water quality data in the Neuse River basin for that program. For more detailed information on sampling and assessment of streams in this basin, refer to the *Basinwide Assessment Report* for the Neuse River basin, available from the Environmental Sciences Section website at http://www.esb.enr.state.nc.us/bar.html or by calling (919) 733-9960.

DWQ monitoring programs for the Neuse River Basin include:

- Benthic Macroinvertebrates
- Fish Assessments
- Aquatic Toxicity Monitoring
- Lake Assessment
- Ambient Monitoring System

Benthic Macroinvertebrate Monitoring

Benthic macroinvertebrates, or benthos, are organisms that live in and on the bottom substrates of rivers and streams. These organisms are primarily aquatic insect larvae. The use of benthos data has proven to be a reliable monitoring tool, as benthic macroinvertebrates are sensitive to subtle changes in water quality. Since macroinvertebrates have life cycles of six months to over one year, the effects of short-term pollution (such as a spill) will generally not be overcome until the following generation appears. The benthic community also integrates the effects of a wide array of potential pollutant mixtures.

Criteria have been developed to assign a bioclassification to each benthic sample based on the number of different species present in the pollution intolerant groups of Ephemeroptera (Mayflies), Plecoptera (Stoneflies) and Trichoptera (Caddisflies), commonly referred to as EPTs. A Biotic Index (BI) value gives an indication of overall community pollution tolerance. Different benthic macroinvertebrate criteria have been developed for different ecoregions (mountains, piedmont, coastal plain and swamp) within North Carolina and bioclassifications fall into five categories: Excellent, Good, Good-Fair, Fair and Poor.

Assessing Benthic Macroinvertebrate Communities in Small Streams

The benthic macroinvertebrate community of small streams is naturally less diverse than the streams used to develop the current criteria for flowing freshwater streams. The benthic macroinvertebrate database is being evaluated and a study to systematically look at small reference streams in different ecoregions is being developed with the goal of finding a way to evaluate water quality conditions in such small streams.

Presently, a designation of Not Impaired may be used for flowing waters that are too small to be assigned a bioclassification (less than 4 meters in width) but meet the criteria for a Good-Fair or higher bioclassification using the standard qualitative and EPT criteria. This designation will translate into a use support rating of Supporting. However, DWQ will use the monitoring information from small streams to identify potential impacts to small streams even in cases when a use support rating cannot be assigned.

DWQ will use this monitoring information to identify potential impacts to these waters even though a use support rating is not assigned. DWQ will continue to develop criteria to assess water quality in small streams.

Overview of Benthic Macroinvertebrate Community Data

The Neuse River basin has been sampled by DWQ Environmental Sciences Section (ESS) four times for basin monitoring; 1991, 1995, 2000, and 2005. There have also been many special studies to assess specific watershed issue during this same time period. A total of 62 samples (including swamp samples) were collected in 12 subbasins during the 2005 routine basinwide macroinvertebrate assessment. Swamp stream criteria were completed and utilized during this assessment period. In terms of non-swamp sites, there were no Excellent bioclassifications in 2005, which is a decline from 2000. Based on the data collected since 1991, the most significant trend is a shift from Excellent to Good-Fair benthic bioclassification.

Fish Assessments

Historical studies of fish communities in the Neuse River basin were conducted primarily by the North Carolina Wildlife Resources Commission (NCWRC) in the 1960s and late 1970s. Several streams were sampled by DWQ during the last basinwide planning cycle (2000). Scores are assigned to these samples using the North Carolina Index of Biotic Integrity (NCIBI). The NCIBI uses a cumulative assessment of 12 parameters or metrics. Each metric is designed to contribute unique information to the overall assessment. The scores for all metrics are then summed to obtain the overall NCIBI score.

During the late 1990s, application of the NCIBI has been restricted to wadeable streams that can be sampled by a crew of 2-4 persons using backpack electrofishers and following the DWQ Standard Operating Procedures (NCDEHNR, 1997). Work began in 1998 to develop a fish community boat sampling method that could be used in nonwadeable coastal plain streams. Plans are to sample 10-15 reference sites with the boat method once it is finalized. As with other biological monitoring programs, many years of reference site data will be needed before solid criteria can be developed to evaluate biological integrity of large streams and rivers using the fish community assessment. The coastal plain streams sampled during this assessment period are currently not rated (NR).

Overview of Fish Community Data

Fish community samples have been collected at 52 sites in the Neuse River basin during this assessment period, 26 in the Piedmont region and 26 in the Coastal Plain region. Nine of the 26 Piedmont sites were sampled for the first time during the basin cycle. The main basin assessment took place in 2004 and 2005. The following table lists the most recent ratings by subbasin, for all fish community sites. Refer to *2006 Neuse River Basinwide Assessment Report* at http://h2o.enr.state.nc.us/esb/Basinwide/Neuse06BasinReportFinal.pdf for more information on monitoring sites and for past fish community ratings.

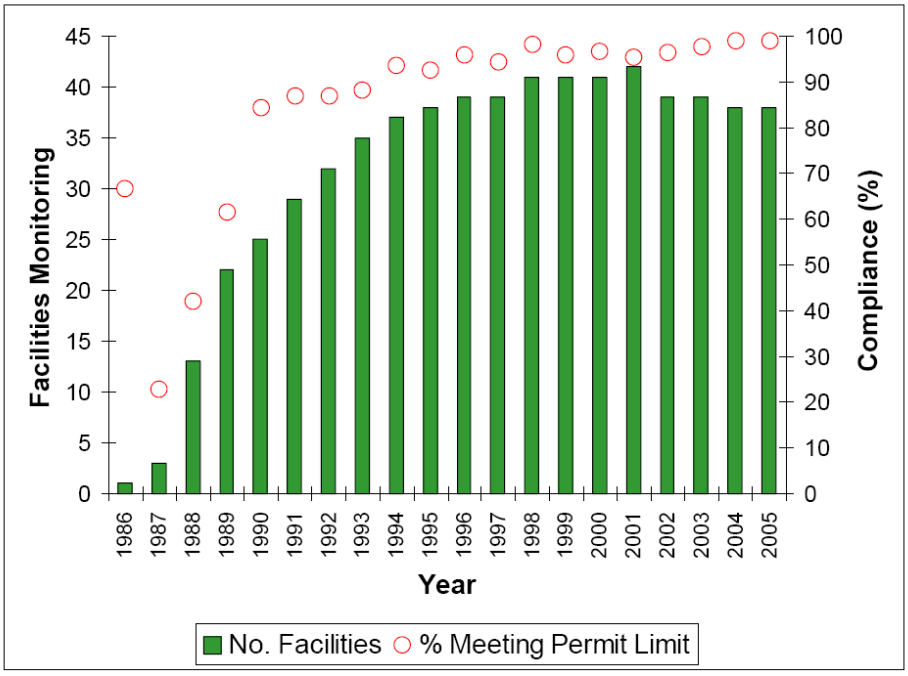
Aquatic Toxicity Monitoring

Acute and/or chronic toxicity tests are used to determine toxicity of discharges to sensitive aquatic species (usually fathead minnows or the water flea, *Ceriodaphnia dubia*). Results of these tests have been shown by several researchers to be predictive of discharge effects on

receiving stream populations. Many facilities are required to monitor whole effluent toxicity (WET) by their NPDES permit or by administrative letter. Other facilities may also be tested by DWQ's Aquatic Toxicology Unit (ATU). Per Section 106 of the Clean Water Act, the ATU is required to test at least 10 percent of the major discharging facilities over the course of the federal fiscal year (FFY). However, it is ATU's target to test 20 percent of the major dischargers in the FFY. This means that each major facility would get evaluated over the course of their five-year permit. There are no requirements or targets for minor dischargers.

The ATU maintains a compliance summary for all facilities required to perform tests and provides monthly updates of this information to regional offices and DWQ administration. Ambient toxicity tests can be used to evaluate stream water quality relative to other stream sites and/or a point source discharge.

Sixty-eight facility permits in the Neuse River basin currently require whole effluent toxicity (WET) monitoring . Forty-two facility permits have a WET limit while twenty-six require monitoring without a limit; the majority of the latter are episodic discharges associated with petroleum storage complexes.



*NPDES facility whole effluent toxicity compliance in the Neuse River basin, 1986-2005. The compliance values were calculated by determining whether facilities with WET limits were meeting their ultimate permit limits during the given time period, regardless of any SOCs in force.

Lakes Assessment Program

Six of the seven lakes sampled in the Neuse River Basin were sampled between 1 October 2001 and 31 September 2005. The West Fork Eno River Reservoir was sampled for the first time as it was only created in 1999. Falls of the Neuse Reservoir (Falls Lake) is the only new impaired lake in the Neuse River basin. Falls of the Neuse Reservoir was monitored between March 2005 and December 2006 as part of a special study for the development of a TMDL. The results

indicated that the entire lake is impaired due to elevated chlorophyll *a* concentration above the state standard of 40 µg/l in more than 10 percent of the samples. The upper portion (above I-85) of the reservoir is also impaired due to elevated turbidity levels above the 25 NTU state standard.

Buckhorn Reservoir/Contentea Creek was designated impaired in 1998 and listed on the 303(d) list due to low dissolved oxygen. While the 10 sample needed to make a full assessment were not completed during this assessment period, the samples collected did not document low dissolved oxygen however, elevated nutrients and severe algal blooms support leaving Buckhorn Reservoir on the list.

Ambient Monitoring System

The Ambient Monitoring System (AMS) is a network of stream, lake and estuarine stations strategically located for the collections of physical and chemical water quality data. North Carolina currently has 365 water chemistry monitoring stations statewide, including 57 stations in the Neuse River basin assessed during this assessment period (January, 2002 through December 31, 2006). Between 23 and 32 parameters are collected monthly at each station. These locations were chosen to characterize the effects of point source dischargers and nonpoint sources such as agriculture, animal operations, and urbanization within watersheds. The locations of these stations are listed in the following table and shown on individual subbasin maps. Notable ambient water quality parameters are discussed in the subbasin chapters. Refer to *2006 Neuse River Basinwide Assessment Report* at http://www.esb.enr.state.nc.us/bar.html for more detailed analysis of ambient water quality monitoring data. See table A-I(a-c) and figure A-I(a-d) for DWQ and LNBA station locations.

Other Water Quality Research

North Carolina actively solicits "existing and readily available" data and information for each basin as part of the basinwide planning process. Data meeting DWQ quality assurance objectives are used in making use support determinations. Data and information indicating possible water quality problems are investigated further. Both quantitative and qualitative information are accepted during the solicitation period.

High levels of confidence must be present in order for outside quantitative information to carry the same weight as information collected from within DWQ. This is particularly the case when considering waters for the Impaired categories in the Integrated Report. Methodology for soliciting and evaluating outside data is presented in *North Carolina's 2002 Integrated Report*

DWQ data solicitation includes the following:

- Information, letters and photographs regarding the uses of surface waters for boating, drinking water, swimming, aesthetics and fishing.
- Raw data submitted electronically and accompanied by documentation of quality assurance methods used to collect and analyze the samples. Maps showing sampling locations must also be included.
- Summary reports and memos, including distribution statistics and accompanied by documentation of quality assurance methods used to collect and analyze the data.

Contact information must accompany all data and information submitted.

http://h2o.enr.state.nc.us/tmdl/Docs_303/2002/2002%20Integrated%20Rept.pdf (Appendix I).

Any data submitted to DWQ from other water sampling programs conducted in the Neuse River basin have been reviewed. Data that meet quality and accessibility requirements were considered for use support assessments and the Impaired Waters list. These data are also used by DWQ to adjust the location of biological and chemical monitoring sites.

DWQ use data collected by North Carolina State University, Center for Applied Aquatic Ecology (CAAE) (http://www.ncsu.edu/wq/) for assessment of Falls Lake and the Neuse River Estuary and from the University of North Carolina, Neuse River Estuary Modeling and Monitoring (ModMon) Project (http://www.unc.edu/ims/neuse/modmon/index.htm). Data from any co-located stations were combined with DWQ for an overall assessment of that segment of the lake, river or estuary. See table A-I(b) and figure A-I(a-d) for station locations.

NC Recreational Water Quality Program assessed 12 stations within the Neuse Estuary for bacterial contamination issues. This program began testing coastal waters in 1997 in order to protect the public health by monitoring the quality of North Carolina's coastal recreational waters and notifying the public when bacteriological standards (enterococcus bacteria) for safe bodily contact are exceeded. For more information on the NC Recreational Water Quality Program see http://www.deh.enr.state.nc.us/shellfish/Water_Monitoring/RWQweb/home.htm.

DWQ also used NC Department of Health and Human Services fish consumption advisories and advice. For more information regarding fish consumption advisories, call (919) 707-5900 or visit the NC DHHS Division of Public Health website at http://www.schs.state.nc.us/epi/fish/current.html. These data were used by DWQ to assign use support ratings.

Lower Neuse Basin Association

Lower Neuse Basin Association (LNBA) an NPDES discharge monitoring coalition program collected chemical and physical measurements from 57 stations. Three stations were monitored by both DWQ and the LNBA. Refer to http://www.lnba.net/who.html for more information on the basin association. See subbasin chapters or the *2006 Neuse River Basinwide Assessment Report* (http://h2o.enr.state.nc.us/esb/Basinwide/Neuse06BasinReportFinal.pdf) for detailed information on data collected at these stations. Also see table A-I(a) and figure A-I(a-d) for DWQ and LNBA station locations.

Table A-I(a) DWQ & LNBA Station and Location Table

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Classification	Field				Samples					
							DO, pH, Spec. Cond., Water Temp.	Field Observations	Secchi Depth	Salinity	Fecal Coliform	Turbidity	Chlorophyll a	Grease and Oil	Nutrients (NH3, TKN, Nox, TP)	Total Suspended Solids
DWQ	J0770000	JA1	1	ENO RIV AT US 501 NR DURHAM	27-2-(19)	WS-IV NSW	M	M			M	M			M	Q1
DWQ	J0810000	JA2	1	ENO RIV AT SR 1004 NR DURHAM	27-2-(19.5)	WS-IV NSW	M	M			M	M			M	Q1
DWQ	J0820000	JA3	1	LITTLE RIV AT SR 1461 NR ORANGE FACTORY	27-2-21-(3.5)	WS-II HQW NSW CA	M	M			M	M			M	Q1
DWQ	J0840000*	JA120	1	LITTLE RIV RESERVOIR AT SR 1628 AT ORANGE FACTORY	27-2-21-(3.5)	WS-II HQW NSW CA	M	M			M	M			M	Q1
DWQ	J1070000	JA4	1	FLAT RIV AT SR 1614 NR QUAIL ROOST	27-3-(1)	WS-III NSW	M	M			M	M				Q1
DWQ	J1100000	JA5	1	FLAT RIV AT SR 1004 NR WILLARDSVILLE	27-3-(9)	WS-IV NSW CA	M	M			M	M			M	Q1
DWQ	J1210000	JA6	1	KNAP OF REEDS CRK AT WWTP OUTFALL NR BUTNER	27-4-(6)	WS-IV NSW	M	M			M	M			M	Q1
DWQ	J1330000	JA7	1	ELLERBE CRK AT SR 1636 NR DURHAM	27-5-(2)	WS-IV NSW CA	M	M			M	M			M	Q1
DWQ	J1890000	JA8	2	NEUSE RIV AT SR 2000 NR FALLS	27-(20.7)	WS-IV NSW	M	M			M	M			M	Q1
LNBA	J2230000	JA9	2	SMITH CRK AT SR 2045 BURLINGTON MILL RD NR WAKE FOREST	27-23-(2)	C NSW	M+2SM				M	M			M	M
LNBA	J2330000	JA10	2	NEUSE RIV AT SR 2215 BUFFALO RD NR NEUSE	27-(22.5)	C NSW	M+2SM				M	M			M	M
LNBA	J2360000	JA11	2	NEUSE RIV ABOVE MILBURNIE DAM NR RALEIGH	27-(22.5)	C NSW	M+2SM				M	M			M	M
LNBA	J2363000*	JA127	2	NEUSE RIV BELOW MILBURNIE DAM NR RALEIGH	27-(22.5)	C NSW	M+2SM				M	M			M	M
DWQ	J2850000	JA12	2	CRABTREE CRK AT SR 1795 NR UMSTEAD STATE PARK	27-33-(3.5)	B NSW	M	M			M	M				Q1
DWQ	J3000000	JA13	2	CRABTREE CRK AT SR 1649 NR RALEIGH	27-33-(3.5)	B NSW	M	M			M	M			M	Q1
LNBA	J3210000	JA14	2	CRABTREE CRK AT LASSITER MILL DAM AT RALEIGH	27-33-(10)	C NSW	M+2SM				M	M			M	M
DWQ	J3251000	JA15	2	CRABTREE CRK AT SR 2000 OLD WAKE FOREST RD AT RALEIGH	27-33-(10)	C NSW	M	M			M	M				Q1
DWQ	J3300000	JA16	2	PIGEON HOUSE BRANCH AT DORTCH ST AT RALEIGH	27-33-18	C NSW	M	M			M	M		M		Q1
LNBA	J3470000*	JA116	2	CRABTREE CRK AT SR 2036 NEW HOPE RD NR WILDERS GROVE	27-33-(10)	C NSW	M+2SM				M	M			M	M
LNBA	J3970000	JA17	2	WALNUT CRK AT SR 2551 BARWELL RD NR RALEIGH	27-34-(4)	C NSW	M+2SM				M	M			M	M

Table A-I(a) DWQ & LNBA Station and Location Table

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Classification	Field				Samples					
							DO, pH, Spec. Cond., Water Temp.	Field Observations	Secchi Depth	Salinity	Fecal Coliform	Turbidity	Chlorophyll a	Grease and Oil	Nutrients (NH3, TKN, Nox, TP)	Total Suspended Solids
LNBA	J4050000	JA18	2	NEUSE RIV AT SR 2555 AUBURN KNIGHTDALE RD NR RALEIGH	27-(22.5)	C NSW	M+2SM				M	M			M	M
LNBA	J4080000	JA19	2	POPLAR CRK AT SR 2049 BETHLEHEM RD NR KNIGHTDALE	27-35	C NSW	M+2SM				M	M			M	M
LNBA	J4130000	JA20	2	NEUSE RIV AT SR 1700 COVERED BRIDGE RD NR ARCHERS LODGE	27-(36)	WS-V NSW	M+2SM				M	M			M	M
DWQ	J4170000	JA21	2	NEUSE RIV AT NC 42 NR CLAYTON	27-(38.5)	WS-IV NSW	M	M			M	M				Q1
LNBA	J4170000	JA21	2	NEUSE RIV AT NC 42 NR CLAYTON	27-(38.5)	WS-IV NSW	M+2SM				M	M			M	M
LNBA	J4190000	JA22	2	NEUSE RIV AT SR 1908 FIRE DEPT DR NR WILSONS MILLS	27-(38.5)	WS-IV NSW	M+2SM				M	M			M	M
DWQ	J4370000	JA23	2	NEUSE RIV AT US 70 AT SMITHFIELD	27-(41.7)	WS-V NSW	M	M			M	M			M	Q1
LNBA	J4414000	JA24	2	SWIFT CRK AT SR 1152 HOLLY SPRINGS RD NR MACEDONIA	27-43-(1)	WS-III NSW	M+2SM				M	M			M	M
DWQ	J4510000*	JA25	2	SWIFT CRK AT NC 42 NR CLAYTON	27-43-(8)	C NSW	M	M			M	M			M	Q1
LNBA	J4590000	JA26	2	SWIFT CRK AT NC 210 NR SMITHFIELD	27-43-(8)	C NSW	M+2SM				M	M			M	M
LNBA	J4620000*	JA27	3	MIDDLE CRK AT PRISTINE WATER RD NR APEX	27-43-15-(1)	C NSW	M+2SM				M	M			M	M
LNBA	J4690000	JA28	3	MIDDLE CRK AT SR 1152 HOLLY SPRINGS RD NR HOLLY SPRINGS	27-43-15-(1)	C NSW	M+2SM				M	M			M	M
LNBA	J4868000	JA128	3	MIDDLE CRK AT SR1375 LAKE WHEELER RD NR BANKS	27-43-15-(4)	C NSW	M+2SM				M	M			M	M
LNBA	J4870000*	JA29	3	MIDDLE CRK AT US 401 NR BANKS	27-43-15-(4)	C NSW	M+2SM				M	M			M	M
LNBA	J4980000	JA30	3	MIDDLE CRK AT SR 1006 OLD STAGE ROAD NR WILLOW SPRINGS	27-43-15-(4)	C NSW	M+2SM				M	M			M	M
DWQ	J5000000	JA31	3	MIDDLE CRK AT NC 50 NR CLAYTON	27-43-15-(4)	C NSW	M	M			M	M				Q1
LNBA	J5010000	JA32	3	MIDDLE CRK AT NC 210 NR SMITHFIELD	27-43-15-(4)	C NSW	M+2SM				M	M			M	M
LNBA	J5170000	JA33	4	BLACK CRK AT SR1162 BLACK CREEK RD NR FOUR OAKS	27-45-(2)	C NSW	M+2SM				M	M			M	M
LNBA	J5185000*	JA117	4	BLACK CRK AT I 95 NR SMITHFIELD	27-45-(14)	C NSW	M+2SM				M	M			M	M
LNBA	J5250000	JA34	2	NEUSE RIV AT SR 1201 RICHARDSON BRIDGE RD NR COX MILL	27-(49.5)	WS-IV NSW	M+2SM				M	M			M	M

Table A-I(a) DWQ & LNBA Station and Location Table

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Classification	Field				Samples					
							DO, pH, Spec. Cond., Water Temp.	Field Observations	Secchi Depth	Salinity	Fecal Coliform	Turbidity	Chlorophyll a	Grease and Oil	Nutrients (NH3, TKN, Nox, TP)	Total Suspended Solids
LNBA	J5390000	JA35	4	HANNAH CRK AT SR 1158 ALLENS CROSSROADS DR NR BENSON	27-52-6	C NSW	M+2SM				M	M			M	M
LNBA	J5390800	JA36	4	HANNAH CRK AT SR 1227 IVEY RD NR BENSON	27-52-6	C NSW	M+2SM				M	M			M	M
LNBA	J5400000*	JA118	4	HANNAH CRK AT I95 NR BENSON	27-52-6	C NSW	M+2SM				M	M			M	M
LNBA	J5620000	JA37	6	LITTLE RIV AT SR 2333 SMITHFIELD RD NR ZEBULON	27-57-(1)	WS-II HQW NSW	M+2SM				M	M			M	M
LNBA	J5630000*	JA112	6	LITTLE RIV AT SR 2320 RILEY HILL RD NR ZEBULON	27-57-(1)	WS II HQW NSW	M+2SM				M	M			M	M
LNBA	J5690000	JA38	6	LITTLE RIV AT US 301 NEAR KENLY	27-57-(8.5)	WS-V NSW	M+2SM				M	M			M	M
LNBA	J5730000*	JA123	6	LITTLE RIV AT I95 NR LOWELL MILL	27-57-(8.5)	WS-V NSW	M+2SM				M	M			M	M
LNBA	J5730300*	JA124	6	LITTLE RIV NR SR 2339 AT LOWELL MILL	27-57-(8.5)	WS-V NSW	M+2SM				M	M			M	M
LNBA	J5750000	JA39	6	LITTLE RIV AT SR 2339 BAGLEY RD NR LOWELL MILL	27-57-(8.5)	WS-V NSW	M+2SM				M	M			M	M
DWQ	J5850000	JA40	6	LITTLE RIV AT SR 2320 NR PRINCETON	27-57-(8.5)	WS-V NSW	M	M			M	M				Q1
LNBA	J5900000	JA41	6	LITTLE RIV AT SR 1234 CAPPS BRIDGE RD NR CROSSROADS	27-57-(20.2)	WS-IV NSW	M+2SM				M	M			M	M
LNBA	J5930000	JA42	6	LITTLE RIV AT NC 581 AT ASYLUM	27-57-(22)	C NSW	M+2SM				M	M			M	M
DWQ	J5970000	JA43	5	NEUSE RIV AT SR 1915 NR GOLDSBORO	27-(56)	C NSW	M	M			M	M	M		M	Q1
LNBA	J6010950	JA44	5	WALNUT CRK AT SR 1730 SAINT JOHNS CHURCH RD NR WALNUT CREEK	27-68	C NSW	M+2SM				M	M			M	M
LNBA	J6024000	JA45	5	NEUSE RIV AT SR 1731 NR SEVEN SPRINGS	27-(56)	C NSW	M+2SM				M	M			M	M
LNBA	J6044500	JA46	5	BEAR CRK AT SR 1311 BEAR CREEK RD NR KINSTON	27-72-(5)	WS IV Sw NSW	M+2SM				M	M			M	M
LNBA	J6055000	JA47	5	MOSLEY CRK AT SR 1327 WILLEY MEASLEY RD NR LAGRANGE	27-77-2	C Sw NSW	M+2SM				M	M			M	M
DWQ	J6150000	JA48	5	NEUSE RIV AT NC 11 AT KINSTON	27-(75.7)	C NSW	W	W		W	M	M	M		W	Q1
LNBA	J6150000	JA48	5	NEUSE RIV AT NC 11 AT KINSTON	27-(75.7)	C NSW	M+2SM				M	M			M	M
LNBA	J6250000	JA49	5	NEUSE RIV AT NC 55 NR GRAINGERS	27-(75.7)	C NSW	M+2SM				M	M			M	M
LNBA	J6340000	JA50	5	NEUSE RIV NR SR 1802 NR BRAXTON RD NR TICK BITE	27-(75.7)	C NSW	M+2SM				M	M			M	M

Table A-I(a) DWQ & LNBA Station and Location Table

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Classification	Field				Samples					
							DO, pH, Spec. Cond., Water Temp.	Field Observations	Secchi Depth	Salinity	Fecal Coliform	Turbidity	Chlorophyll a	Grease and Oil	Nutrients (NH3, TKN, Nox, TP)	Total Suspended Solids
LNBA	J6370000*	JA125	5	NEUSE RIV NR SR 1803 NR TICK BITE	27-(75.7)	C NSW	M+2SM				M	M			M	M
LNBA	J6410000	JA51	7	LITTLE CRK AT NC 97 AT ZEBULON	27-86-2-4	C NSW	M+2SM				M	M			M	M
LNBA	J6450000	JA52	7	LITTLE CRK AT NC 39 AT ZEBULON	27-86-2-4	C NSW	M+2SM				M	M			M	M
LNBA	J6500000	JA53	7	MOCCASIN CRK AT SR 1131 ANTIOC CHURCH RD NR CONNER	27-86-2	C NSW	M+2SM				M	M			M	M
LNBA	J6680000	JA54	7	TURKEY CRK AT SR 1101 CLAUDE LEWIS RD NR MIDDLESEX	27-86-3-(1)	C NSW	M+2SM				M	M			M	M
DWQ	J6740000	JA55	7	CONTENTNEA CRK AT NC 581 NR LUCAMA	27-86-(1)	WS-V NSW	M	M			M	M			M	Q1
LNBA	J6764000	JA56	7	CONTENTNEA CRK AT US 301 WARD BLVD NR DIXIE	27-86-(7)	C Sw NSW	M+2SM				M	M			M	M
LNBA	J6890000	JA57	7	CONTENTNEA CRK AT SR 1622 EVANSDALE RD NR WILSON	27-86-(7)	C Sw NSW	M+2SM				M	M			M	M
LNBA	J7210000	JA58	7	CONTENTNEA CRK AT NC 58 NR STANTONSBURG	27-86-(7)	C Sw NSW	M+2SM				M	M			M	M
LNBA	J7240000	JA59	7	TOISNOT SWAMP AT SR 1539 SAND PIT RD NR STANTONSBURG	27-86-11-(5)	C Sw NSW	M+2SM				M	M			M	M
LNBA	J7325000	JA60	7	NAHUNTA SWAMP AT NC 58 NR CONTENTNEA	27-86-14	C Sw NSW	M+2SM				M	M			M	M
LNBA	J7330000	JA61	7	CONTENTNEA CRK AT US 13 AT SNOW HILL	27-86-(7)	C Sw NSW	M+2SM				M	M			M	M
DWQ	J7450000	JA62	7	CONTENTNEA CRK AT NC 123 AT HOOKERTON	27-86-(7)	C Sw NSW	W	W		W	M	M	M		W	Q1
LNBA	J7690000	JA63	7	LITTLE CONTENTNEA CRK AT SR 1218 CHINQUAPIN RD NR FARMVILLE	27-86-26	C Sw NSW	M+2SM				M	M			M	M
DWQ	J7739550	JA64	7	LITTLE CONTENTNEA CRK AT SR 1125 NR BALLARDS CROSSROADS	27-86-26	C Sw NSW	M	M		M	M	M	M		M	Q1
LNBA	J7740000	JA65	7	LITTLE CONTENTNEA CRK AT SR 1110 (HWY 903) AT SCUFFLETON	27-86-26	C Sw NSW	M+2SM				M	M			M	M
DWQ	J7810000	JA66	7	CONTENTNEA CRK NR SR 1800 AT GRIFTON	27-86-(7)	C Sw NSW	M	M		M	M	M	M		M	Q1
DWQ	J7850000	JA67	8	NEUSE RIV AT SR 1470 NR FORT BARNWELL	27-(85)	C Sw NSW	W	W		W	M	M	M		W	Q1
LNBA	J7850000	JA67	8	NEUSE RIV AT SR 1470 MAPLE CYPRESS RD NR FORT BARNWELL	27-(85)	C Sw NSW	M+2SM				M	M	M		M	M
DWQ	J7860000*	JA68	8	NEUSE RIV AT LANE LANDING NR PERFECTION	27-(85)	C Sw NSW	M	M	M	M	M	M	M		M	Q3

Table A-I(a) DWQ & LNBA Station and Location Table

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Classification	Field				Samples					
							DO, pH, Spec. Cond., Water Temp.	Field Observations	Secchi Depth	Salinity	Fecal Coliform	Turbidity	Chlorophyll a	Grease and Oil	Nutrients (NH3, TKN, Nox, TP)	Total Suspended Solids
DWQ	J7930000	JA69	8	NEUSE RIV AT SR 1400 AT STREETS FERRY	27-(85)	C Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8150000	JA70	9	CREEPING SWAMP AT NC 43 NR VANCEBORO	27-97-5-3	C Sw NSW	M	M		M	M	M	M		M	Q1
DWQ	J8210000	JA71	9	SWIFT CRK AT MOUTH NR ASKIN	27-97-(6)	SC Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8230000	JA72	9	SWIFT CRK AT NC 43 NR STREETS FERRY	27-97-(6)	SC Sw NSW	W	W		W					W	
DWQ	J8250000	JA73	8	NEUSE RIV AT CM 68 BELOW SWIFT CRK NR ASKIN	27-(96)	SC Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8270000*	JA74	8	NEUSE RIV AT CM64 NR BELLAIR	27-(96)	SC Sw NSW	M	M	M	M						
DWQ	J8290000	JA75	8	NEUSE RIV AT CM 52 AT MOUTH OF NARROWS NR WASHINGTON FORKS	27-(96)	SC Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8570000	JA76	10	NEUSE RIV .5 MI UPS UNION POINT AT NEW BERN	27-(96)	SC Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8690000	JA77	11	TRENT RIV AT SR 1129 NR TRENTON	27-101-(1)	C Sw NSW	M	M		M	M	M	M		M	Q1
DWQ	J8730000	JA78	11	TRENT RIV AT US 17 AT POLLOCKSVILLE	27-101-(1)	C Sw NSW	W	W		W					W	
DWQ	J8770000	JA79	11	TRENT RIV AT CM 14 ABOVE REEDY BR NR RHEMS	27-101-(31)	SB Sw NSW	M	M	M	M	M	M	M		M	Q3
LNBA	J8870000	JA80	10	TRENT RIV AT SHERATON MARINA DOCK A	27-101-(39)	SB Sw NSW	M+2SM				M	M	M		M	M
DWQ	J8900800	JA81	10	NEUSE RIV AT CM 22 NR FAIRFIELD HARBOUR	27-(96)	SC Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8902500	JA82	10	NEUSE RIV AT CM 2 AT MOUTH OF BROAD CRK NR THURMAN	27-(104)	SB Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8903500	JA83	10	NEUSE RIV AT CM 17 NR THURMAN	27-(104)	SB Sw NSW	M	M	M	M						
DWQ	J8910000	JA85	10	NEUSE RIV AT CM 11 NR RIVERDALE	27-(104)	SB Sw NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J8920000	JA86	10	NEUSE RIV NR KENNEL BEACH	27-(104)	SB Sw NSW	M	M	M	M						
DWQ	J8925000	JA87	10	NEUSE RIV NR ARAPAHOE	27-(104)	SB Sw NSW	M	M	M	M						
LNBA	J9330000	JA88	10	SLOCUM CRK AT SLOCUM RD AT CHERRY POINT	27-112	SC Sw NSW	M+2SM				M	M	M		M	M
DWQ	J9431500	JA89	10	NEUSE RIV NR CHERRY POINT MCAS	27-(104)	SB Sw NSW	M	M	M	M						
DWQ	J9530000	JA90	10	NEUSE RIV AT CM 9 NR MINNESOTT BEACH	27-(118)	SA HQW NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J9540000	JA91	10	NEUSE RIV NR PIERCE	27-(118)	SA HQW NSW	M	M	M	M						
DWQ	J9590000	JA92	10	NEUSE RIV NR JANEIRO	27-(118)	SA HQW NSW	M	M	M	M						
DWQ	J9685000	JA93	10	NEUSE RIV NR MERRIMON	27-(118)	SA HQW NSW	M	M	M	M						

Table A-I(a) DWQ & LNBA Station and Location Table

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Classification	Field				Samples					
							DO, pH, Spec. Cond., Water Temp.	Field Observations	Secchi Depth	Salinity	Fecal Coliform	Turbidity	Chlorophyll a	Grease and Oil	Nutrients (NH3, TKN, Nox, TP)	Total Suspended Solids
DWQ	J9690000	JA94	10	BACK CRK AT SR 1300 NR MERRIMON	27-128-3	SA HQW NSW	M	M		M	M	M	M		M	Q3
DWQ	J9810000	JA95	10	NEUSE RIV AT CM 7 NR ORIENTAL	27-(118)	SA HQW NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J9860000	JA96	10	NEUSE RIV NR COCKLE POINT	27-(118)	SA HQW NSW	M	M	M	M						
DWQ	J9900000	JA97	10	NEUSE RIV NR PINEY POINT	27-(118)	SA HQW NSW	M	M	M	M						
DWQ	J9930000	JA98	14	NEUSE RIV AT CM NR AT MOUTH NR PAMLICO	27-(118)	SA HQW NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J9938000*	JA126	14	W THOROFARE BASY AT CM10WB NR ATLANTIC	27-148-2	SA HQW NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J9940000*	JA127	14	THOROFARE CANAL AT NC 12 NR ATLANTIC	27-149-1-1	SA HQW NSW	M	M	M	M	M	M	M		M	Q3
DWQ	J9950000	JA99	13	BAY RIV AT CM 5 NR VANDEMERE	27-150-(9.5)	SA HQW NSW	M	M	M	M	M	M	M		M	Q3

* Station discontinued (Most stations discontinued due to station location change or was part of a time limited special study)

M= Monthly

M+2SM=Monthly (October-April), Twice a Month Summer (May-September)

W= Weekly

Q1= Quarterly; January, April, July, October

Q3= Quarterly; March, June, September, December

Table A-I(b) Other Monitoring Program Stations.

Monitoring Program	Programs Station Number	Map Number	Subbasin Number	Location	Index Number	Stream Class
CAAE	34	JA100	10	Neuse River near Cherry Point	27-(104)b	SB Sw NSW
CAAE	BRD/36	JA101	10	Neuse River near Beard Creek	27-(104)b	SB Sw NSW
CAAE	BOA	JA102	10	Neuse River near Broad Creek	27-(104)a	SB Sw NSW
CAAE	BOM	JA103	10	Neuse River near Broad Creek - Middle	27-(104)a	SB Sw NSW
CAAE	33	JA104	10	Neuse River near Cherry Point WWTP Discharge Point	27-(104)b	SB Sw NSW
CAAE	CLP	JA105	10	Neuse River near Carolina Pines	27-(104)a	SB Sw NSW
CAAE	CHM	JA107	10	Neuse River near Cherry Point - Middle	27-(104)b	SB Sw NSW
CAAE	FSH	JA108	10	Neuse River near Fisher Point	27-(104)a	SB Sw NSW
CAAE	FLM	JA109	10	Neuse River near Flanners Beach - Middle	27-(104)a	SB Sw NSW
CAAE	37	JA110	10	Neuse River near Kennel Beach	27-(104)a	SB Sw NSW
CAAE	35	JA111	10	Neuse River near Minnesott Beach	27-(104)b	SB Sw NSW
CAAE	MB2	JA112	10	Neuse River near Mills Branch - Middle	27-(96)b1	SC Sw NSW
CAAE	MB3	JA113	10	Neuse River near Mills Branch - North	27-(96)b1	SC Sw NSW
CAAE	MB1	JA114	10	Neuse River near Mills Branch - South	27-(96)b1	SC Sw NSW
CAAE	BB	JA115	10	Neuse River near Black Beacon Point	27-(96)b2	SC Sw NSW
ModMon	0	JA69	8	Neuse River at SR 1400 at Streets Ferry	27-(85)	C Sw NSW
ModMon	20	JA75	10	Neuse River at CM52 at mouth of Narrows NR Washington Forks	27-(96)b1	SC Sw NSW
ModMon	30	JA76	10	Neuse River 0.5miles Ups Union Point at New Bern	27-(96)b2	SC Sw NSW
ModMon	50	JA81	10	Neuse River at CM22 near Fairfield Harbor	27-(96)b2	SC Sw NSW
ModMon	60	JA82	10	Neuse River at CM2 at mouth of Broad Creek near Thurman	27-(104)a	SB Sw NSW
ModMon	70	JA84	10	Neuse River at Channel Marker 15	27-(104)a	SB Sw NSW
ModMon	90	JA86	10	Neuse River near Kennel Beach	27-(104)a	SB Sw NSW
ModMon	100	JA87	10	Neuse River near Arapahoe	27-(104)b	SB Sw NSW
ModMon	110	JA89	10	Neuse River near Cherry Point MCAS	27-(104)b	SB Sw NSW
ModMon	120	JA90	10	Neuse River at CM9 Near Minnesott Beach	27-(118)a1	SA HQW NSW
ModMon	130	JA91	10	Neuse River near Pierce	27-(118)a1	SA HQW NSW
ModMon	140	JA92	10	Neuse River near Janeiro	27-(118)a1	SA HQW NSW
ModMon	160	JA95	10	Neuse River at CM7 near Oriental	27-(118)a1	SA HQW NSW
ModMon	170	JA96	10	Neuse River near Cockle Point	27-(118)a1	SA HQW NSW
ModMon	180	JA97	10	Neuse River near Piney Point	27-(118)a1	SA HQW NSW

CAAE = NCSU Center for Applied Aquatic Ecology
ModMon = UNC Neuse River Estuary Modeling and Monitoring Program

Table A-I(c) DWQ Random Ambient Monitoring System (2007-2008).

Random Ambient Monitoring System (RAMS)
Sampled 2007-2008 (Outside of data window for this basin plan.
Data will be use to assess these stream for the 2010 IR)

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Classification
DWQ	J5403000	NA	4	UT TO JUNIPER SWAMP AT ALLEN ST AT FOUR OAKS	27-52-6-6	C NSW
DWQ	J6045000	NA	5	NEUSE RIV AT SR 1152 NR STRABANE	27-(70.5)	WS-IV NSW
DWQ	J7301000	NA	7	MOCCASIN RUN AT SR 1543 NR PIKEVILLE	27-86-14-1-2	C SW NSW

At the RAMS stations, the following parameters are collected once per month for a total of 24 times in two years: field meter parameters such as dissolved oxygen, specific conductance, temperature and pH; alkalinity, chloride, fluoride, sulfate, dissolved organic carbon, turbidity, total metals, dissolved metals, mercury (by method 1631), and volatile organics. The following parameters are collected once every other month for a total of 12 times in two years: cyanide, sulfide, semi-volatile organics, pesticides, and PCBs.

Table A-I(d) DWQ & LMBA Station ID and Map ID Cross Reference Table.

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Class
DWQ	J0770000	JA1	1	ENO RIV AT US 501 NR DURHAM	27-2-(19)	WS-IV NSW
DWQ	J0810000	JA2	1	ENO RIV AT SR 1004 NR DURHAM	27-2-(19.5)	WS-IV NSW
DWQ	J0820000	JA3	1	LITTLE RIV AT SR 1461 NR ORANGE FACTORY	27-2-21-(3.5)	WS-II HQW NSW CA
DWQ	J0840000*	JA120	1	LITTLE RIV RESERVOIR AT SR 1628 AT ORANGE FACTORY	27-2-21-(3.5)	WS-II HQW NSW CA
DWQ	J1070000	JA4	1	FLAT RIV AT SR 1614 NR QUAIL ROOST	27-3-(1)	WS-III NSW
DWQ	J1100000	JA5	1	FLAT RIV AT SR 1004 NR WILLARDSVILLE	27-3-(9)	WS-IV NSW CA
DWQ	J1210000	JA6	1	KNAP OF REEDS CRK AT WWTP OUTFALL NR BUTNER	27-4-(6)	WS-IV NSW
DWQ	J1330000	JA7	1	ELLERBE CRK AT SR 1636 NR DURHAM	27-5-(2)	WS-IV NSW CA
LNBA	J2330000	JA10	2	NEUSE RIV AT SR 2215 BUFFALO RD NR NEUSE	27-(22.5)	C NSW
LNBA	J2360000	JA11	2	NEUSE RIV ABOVE MILBURNIE DAM NR RALEIGH	27-(22.5)	C NSW
LNBA	J3470000*	JA116	2	CRABTREE CRK AT SR 2036 NEW HOPE RD NR WILDERS GROVE	27-33-(10)	C NSW
DWQ	J2850000	JA12	2	CRABTREE CRK AT SR 1795 NR UMSTEAD STATE PARK	27-33-(3.5)	B NSW
LNBA	J2363000*	JA127	2	NEUSE RIV BELOW MILBURNIE DAM NR RALEIGH	27-(22.5)	C NSW
DWQ	J3000000	JA13	2	CRABTREE CRK AT SR 1649 NR RALEIGH	27-33-(3.5)	B NSW
LNBA	J3210000	JA14	2	CRABTREE CRK AT LASSITER MILL DAM AT RALEIGH	27-33-(10)	C NSW
DWQ	J3251000	JA15	2	CRABTREE CRK AT SR 2000 OLD WAKE FOREST RD AT RALEIGH	27-33-(10)	C NSW
DWQ	J3300000	JA16	2	PIGEON HOUSE BRANCH AT DORTCH ST AT RALEIGH	27-33-18	C NSW
LNBA	J3970000	JA17	2	WALNUT CRK AT SR 2551 BARWELL RD NR RALEIGH	27-34-(4)	C NSW
LNBA	J4050000	JA18	2	NEUSE RIV AT SR 2555 AUBURN KNIGHTDALE RD NR RALEIGH	27-(22.5)	C NSW
LNBA	J4080000	JA19	2	POPLAR CRK AT SR 2049 BETHLEHEM RD NR KNIGHTDALE	27-35	C NSW
LNBA	J4130000	JA20	2	NEUSE RIV AT SR 1700 COVERED BRIDGE RD NR ARCHERS LODGE	27-(36)	WS-V NSW
DWQ	J4170000	JA21	2	NEUSE RIV AT NC 42 NR CLAYTON	27-(38.5)	WS-IV NSW
LNBA	J4170000	JA21	2	NEUSE RIV AT NC 42 NR CLAYTON	27-(38.5)	WS-IV NSW
LNBA	J4190000	JA22	2	NEUSE RIV AT SR 1908 FIRE DEPT DR NR WILSONS MILLS	27-(38.5)	WS-IV NSW
DWQ	J4370000	JA23	2	NEUSE RIV AT US 70 AT SMITHFIELD	27-(41.7)	WS-V NSW
LNBA	J4414000	JA24	2	SWIFT CRK AT SR 1152 HOLLY SPRINGS RD NR MACEDONIA	27-43-(1)	WS-III NSW
DWQ	J4510000	JA25	2	SWIFT CRK AT NC 42 NR CLAYTON	27-43-(8)	C NSW
LNBA	J4590000	JA26	2	SWIFT CRK AT NC 210 NR SMITHFIELD	27-43-(8)	C NSW
LNBA	J5250000	JA34	2	NEUSE RIV AT SR 1201 RICHARDSON BRIDGE RD NR COX MILL	27-(49.5)	WS-IV NSW
DWQ	J1890000	JA8	2	NEUSE RIV AT SR 2000 NR FALLS	27-(20.7)	WS-IV NSW
LNBA	J2230000	JA9	2	SMITH CRK AT SR 2045 BURLINGTON MILL RD NR WAKE FOREST	27-23-(2)	C NSW

Table A-I(d) DWQ & LMBA Station ID and Map ID Cross Reference Table.

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Class
LNBA	J4868000	JA128	3	MIDDLE CRK AT SR1375 LAKE WHEELER RD NR BANKS	27-43-15-(4)	C NSW
LNBA	J4620000*	JA27	3	MIDDLE CRK AT PRISTINE WATER RD NR APEX	27-43-15-(1)	C NSW
LNBA	J4690000	JA28	3	MIDDLE CRK AT SR 1152 HOLLY SPRINGS RD NR HOLLY SPRINGS	27-43-15-(1)	C NSW
LNBA	J4870000*	JA29	3	MIDDLE CRK AT US 401 NR BANKS	27-43-15-(4)	C NSW
LNBA	J4980000	JA30	3	MIDDLE CRK AT SR 1006 OLD STAGE ROAD NR WILLOW SPRINGS	27-43-15-(4)	C NSW
DWQ	J5000000	JA31	3	MIDDLE CRK AT NC 50 NR CLAYTON	27-43-15-(4)	C NSW
LNBA	J5010000	JA32	3	MIDDLE CRK AT NC 210 NR SMITHFIELD	27-43-15-(4)	C NSW
LNBA	J5185000*	JA117	4	BLACK CRK AT I 95 NR SMITHFIELD	27-45-(14)	C NSW
LNBA	J5400000*	JA118	4	HANNAH CRK AT I95 NR BENSON	27-52-6	C NSW
LNBA	J5170000	JA33	4	BLACK CRK AT SR1162 BLACK CREEK RD NR FOUR OAKS	27-45-(2)	C NSW
LNBA	J5390000	JA35	4	HANNAH CRK AT SR 1158 ALLENS CROSSROADS DR NR BENSON	27-52-6	C NSW
LNBA	J5390800	JA36	4	HANNAH CRK AT SR 1227 IVEY RD NR BENSON	27-52-6	C NSW
LNBA	J6370000*	JA125	5	NEUSE RIV NR SR 1803 NR TICK BITE	27-(75.7)	C NSW
DWQ	J5970000	JA43	5	NEUSE RIV AT SR 1915 NR GOLDSBORO	27-(56)	C NSW
LNBA	J6010950	JA44	5	WALNUT CRK AT SR 1730 SAINT JOHNS CHURCH RD NR WALNUT CREEK	27-68	C NSW
LNBA	J6024000	JA45	5	NEUSE RIV AT SR 1731 NR SEVEN SPRINGS	27-(56)	C NSW
LNBA	J6044500	JA46	5	BEAR CRK AT SR 1311 BEAR CREEK RD NR KINSTON	27-72-(5)	WS IV Sw NSW
LNBA	J6055000	JA47	5	MOSLEY CRK AT SR 1327 WILLEY MEASLEY RD NR LAGRANGE	27-77-2	C Sw NSW
DWQ	J6150000	JA48	5	NEUSE RIV AT NC 11 AT KINSTON	27-(75.7)	C NSW
LNBA	J6150000	JA48	5	NEUSE RIV AT NC 11 AT KINSTON	27-(75.7)	C NSW
LNBA	J6250000	JA49	5	NEUSE RIV AT NC 55 NR GRAINGERS	27-(75.7)	C NSW
LNBA	J6340000	JA50	5	NEUSE RIV NR SR 1802 NR BRAXTON RD NR TICK BITE	27-(75.7)	C NSW
LNBA	J5630000*	JA112	6	LITTLE RIV AT SR 2320 RILEY HILL RD NR ZEBULON	27-57-(1)	WS II HQW NSW
LNBA	J5730000*	JA123	6	LITTLE RIV AT I95 NR LOWELL MILL	27-57-(8.5)	WS-V NSW
LNBA	J5730300*	JA124	6	LITTLE RIV NR SR 2339 AT LOWELL MILL	27-57-(8.5)	WS-V NSW
LNBA	J5620000	JA37	6	LITTLE RIV AT SR 2333 SMITHFIELD RD NR ZEBULON	27-57-(1)	WS-II HQW NSW
LNBA	J5690000	JA38	6	LITTLE RIV AT US 301 NEAR KENLY	27-57-(8.5)	WS-V NSW
LNBA	J5750000	JA39	6	LITTLE RIV AT SR 2339 BAGLEY RD NR LOWELL MILL	27-57-(8.5)	WS-V NSW
DWQ	J5850000	JA40	6	LITTLE RIV AT SR 2320 NR PRINCETON	27-57-(8.5)	WS-V NSW
LNBA	J5900000	JA41	6	LITTLE RIV AT SR 1234 CAPPS BRIDGE RD NR CROSSROADS	27-57-(20.2)	WS-IV NSW
LNBA	J5930000	JA42	6	LITTLE RIV AT NC 581 AT ASYLUM	27-57-(22)	C NSW
LNBA	J6410000	JA51	7	LITTLE CRK AT NC 97 AT ZEBULON	27-86-2-4	C NSW
LNBA	J6450000	JA52	7	LITTLE CRK AT NC 39 AT ZEBULON	27-86-2-4	C NSW

Table A-I(d) DWQ & LMBA Station ID and Map ID Cross Reference Table.

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Class
LNBA	J6500000	JA53	7	MOCCASIN CRK AT SR 1131 ANTIOC CHURCH RD NR CONNER	27-86-2	C NSW
LNBA	J6680000	JA54	7	TURKEY CRK AT SR 1101 CLAUDE LEWIS RD NR MIDDLESEX	27-86-3-(1)	C NSW
DWQ	J6740000	JA55	7	CONTENTNEA CRK AT NC 581 NR LUCAMA	27-86-(1)	WS-V NSW
LNBA	J6764000	JA56	7	CONTENTNEA CRK AT US 301 WARD BLVD NR DIXIE	27-86-(7)	C Sw NSW
LNBA	J6890000	JA57	7	CONTENTNEA CRK AT SR 1622 EVANSDALE RD NR WILSON	27-86-(7)	C Sw NSW
LNBA	J7210000	JA58	7	CONTENTNEA CRK AT NC 58 NR STANTONSBURG	27-86-(7)	C Sw NSW
LNBA	J7240000	JA59	7	TOISNOT SWAMP AT SR 1539 SAND PIT RD NR STANTONSBURG	27-86-11-(5)	C Sw NSW
LNBA	J7325000	JA60	7	NAHUNTA SWAMP AT NC 58 NR CONTENTNEA	27-86-14	C Sw NSW
LNBA	J7330000	JA61	7	CONTENTNEA CRK AT US 13 AT SNOW HILL	27-86-(7)	C Sw NSW
DWQ	J7450000	JA62	7	CONTENTNEA CRK AT NC 123 AT HOOKERTON	27-86-(7)	C Sw NSW
LNBA	J7690000	JA63	7	LITTLE CONTENTNEA CRK AT SR 1218 CHINQUAPIN RD NR FARMVILLE	27-86-26	C Sw NSW
DWQ	J7739550	JA64	7	LITTLE CONTENTNEA CRK AT SR 1125 NR BALLARDS CROSSROADS	27-86-26	C Sw NSW
LNBA	J7740000	JA65	7	LITTLE CONTENTNEA CRK AT SR 1110 (HWY 903) AT SCUFFLETON	27-86-26	C Sw NSW
DWQ	J7810000	JA66	7	CONTENTNEA CRK NR SR 1800 AT GRIFTON	27-86-(7)	C Sw NSW
DWQ	J7850000	JA67	8	NEUSE RIV AT SR 1470 NR FORT BARNWELL	27-(85)	C Sw NSW
LNBA	J7850000	JA67	8	NEUSE RIV AT SR 1470 MAPLE CYPRESS RD NR FORT BARNWELL	27-(85)	C Sw NSW
DWQ	J7860000*	JA68	8	NEUSE RIV AT LANE LANDING NR PERFECTION	27-(85)	C Sw NSW
DWQ	J7930000	JA69	8	NEUSE RIV AT SR 1400 AT STREETS FERRY	27-(85)	C Sw NSW
DWQ	J8250000	JA73	8	NEUSE RIV AT CM 68 BELOW SWIFT CRK NR ASKIN	27-(96)	SC Sw NSW
DWQ	J8290000	JA75	8	NEUSE RIV AT CM 52 AT MOUTH OF NARROWS NR WASHINGTON FORKS	27-(96)	SC Sw NSW
DWQ	J8150000	JA70	9	CREEPING SWAMP AT NC 43 NR VANCEBORO	27-97-5-3	C Sw NSW
DWQ	J8210000	JA71	9	SWIFT CRK AT MOUTH NR ASKIN	27-97-(6)	SC Sw NSW
DWQ	J8230000	JA72	9	SWIFT CRK AT NC 43 NR STREETS FERRY	27-97-(6)	SC Sw NSW
DWQ	J8270000*	JA74	8	NEUSE RIV AT CM64 NR BELLAIR	27-(96)	SC Sw NSW
DWQ	J8570000	JA76	10	NEUSE RIV .5 MI UPS UNION POINT AT NEW BERN	27-(96)	SC Sw NSW
LNBA	J8870000	JA80	10	TRENT RIV AT SHERATON MARINA DOCK A	27-101-(39)	SB Sw NSW
DWQ	J8900800	JA81	10	NEUSE RIV AT CM 22 NR FAIRFIELD HARBOUR	27-(96)	SC Sw NSW
DWQ	J8902500	JA82	10	NEUSE RIV AT CM 2 AT MOUTH OF BROAD CRK NR THURMAN	27-(104)	SB Sw NSW
DWQ	J8903500	JA83	10	NEUSE RIV AT CM 17 NR THURMAN	27-(104)	SB Sw NSW
DWQ	J8910000	JA85	10	NEUSE RIV AT CM 11 NR RIVERDALE	27-(104)	SB Sw NSW
DWQ	J8920000	JA86	10	NEUSE RIV NR KENNEL BEACH	27-(104)	SB Sw NSW
DWQ	J8925000	JA87	10	NEUSE RIV NR ARAPAHOE	27-(104)	SB Sw NSW
LNBA	J9330000	JA88	10	SLOCUM CRK AT SLOCUM RD AT CHERRY POINT	27-112	SC Sw NSW
DWQ	J9431500	JA89	10	NEUSE RIV NR CHERRY POINT MCAS	27-(104)	SB Sw NSW
DWQ	J9530000	JA90	10	NEUSE RIV AT CM 9 NR MINNESOTT BEACH	27-(118)	SA HQW NSW

Table A-I(d) DWQ & LMBA Station ID and Map ID Cross Reference Table.

Monitoring Program	Program Station Number	Map Station Number	Subbasin Number	Location	Index	Stream Class
DWQ	J9540000	JA91	10	NEUSE RIV NR PIERCE	27-(118)	SA HQW NSW
DWQ	J9590000	JA92	10	NEUSE RIV NR JANEIRO	27-(118)	SA HQW NSW
DWQ	J9685000	JA93	10	NEUSE RIV NR MERRIMON	27-(118)	SA HQW NSW
DWQ	J9690000	JA94	10	BACK CRK AT SR 1300 NR MERRIMON	27-128-3	SA HQW NSW
DWQ	J9810000	JA95	10	NEUSE RIV AT CM 7 NR ORIENTAL	27-(118)	SA HQW NSW
DWQ	J9860000	JA96	10	NEUSE RIV NR COCKLE POINT	27-(118)	SA HQW NSW
DWQ	J9900000	JA97	10	NEUSE RIV NR PINEY POINT	27-(118)	SA HQW NSW
DWQ	J8690000	JA77	11	TRENT RIV AT SR 1129 NR TRENTON	27-101-(1)	C Sw NSW
DWQ	J8730000	JA78	11	TRENT RIV AT US 17 AT POLLOCKSVILLE	27-101-(1)	C Sw NSW
DWQ	J8770000	JA79	11	TRENT RIV AT CM 14 ABOVE REEDY BR NR RHEMS	27-101-(31)	SB Sw NSW
DWQ	J9950000	JA99	13	BAY RIV AT CM 5 NR VANDEMERE	27-150-(9.5)	SA HQW NSW
DWQ	J9930000	JA98	14	NEUSE RIV AT CM NR AT MOUTH NR PAMLICO	27-(118)	SA HQW NSW
DWQ	J9938000*	JA126	14	W THOROFARE BASY AT CM10WB NR ATLANTIC	27-148-2	SA HQW NSW
DWQ	J9940000*	JA127	14	THOROFARE CANAL AT NC 12 NR ATLANTIC	27-149-1-1	SA HQW NSW

* Stations Discontinued

Figure A-I(a)

Ambient Monitoring Stations in the Neuse Basin

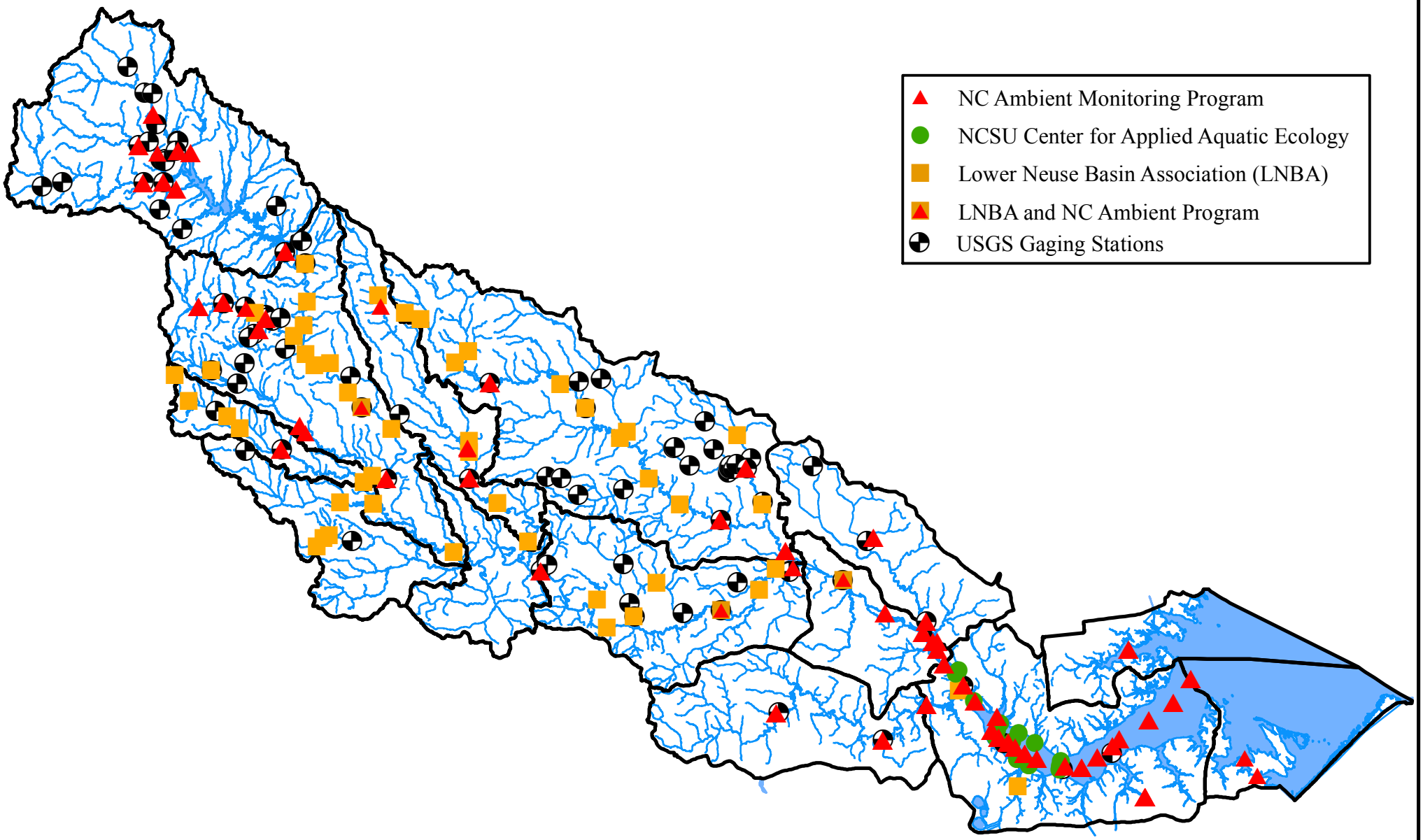


Figure A-I(b) Ambient Monitoring Stations in the Upper Neuse Basin

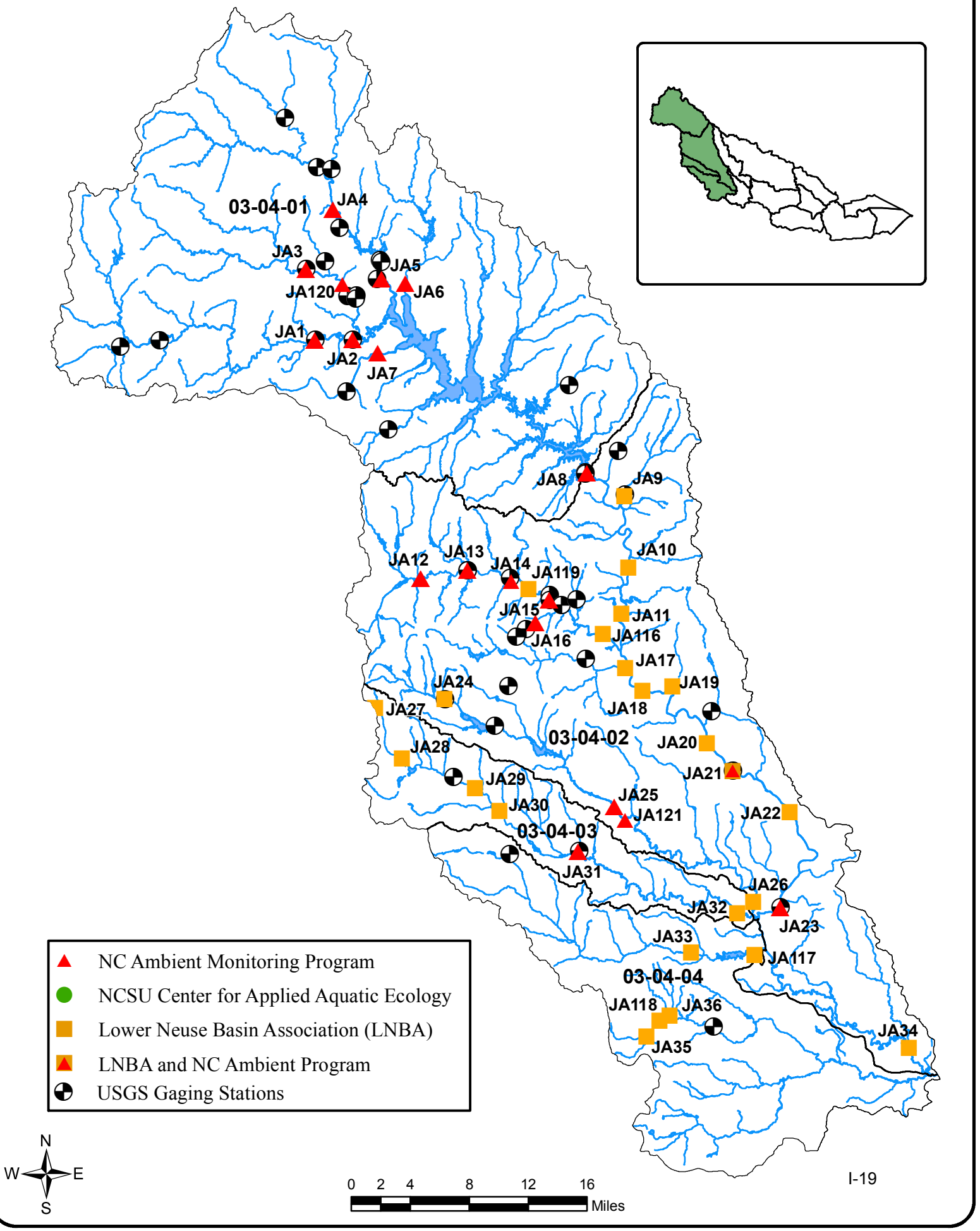


Figure A-I(c)

Ambient Monitoring Stations in the Middle Neuse Basin

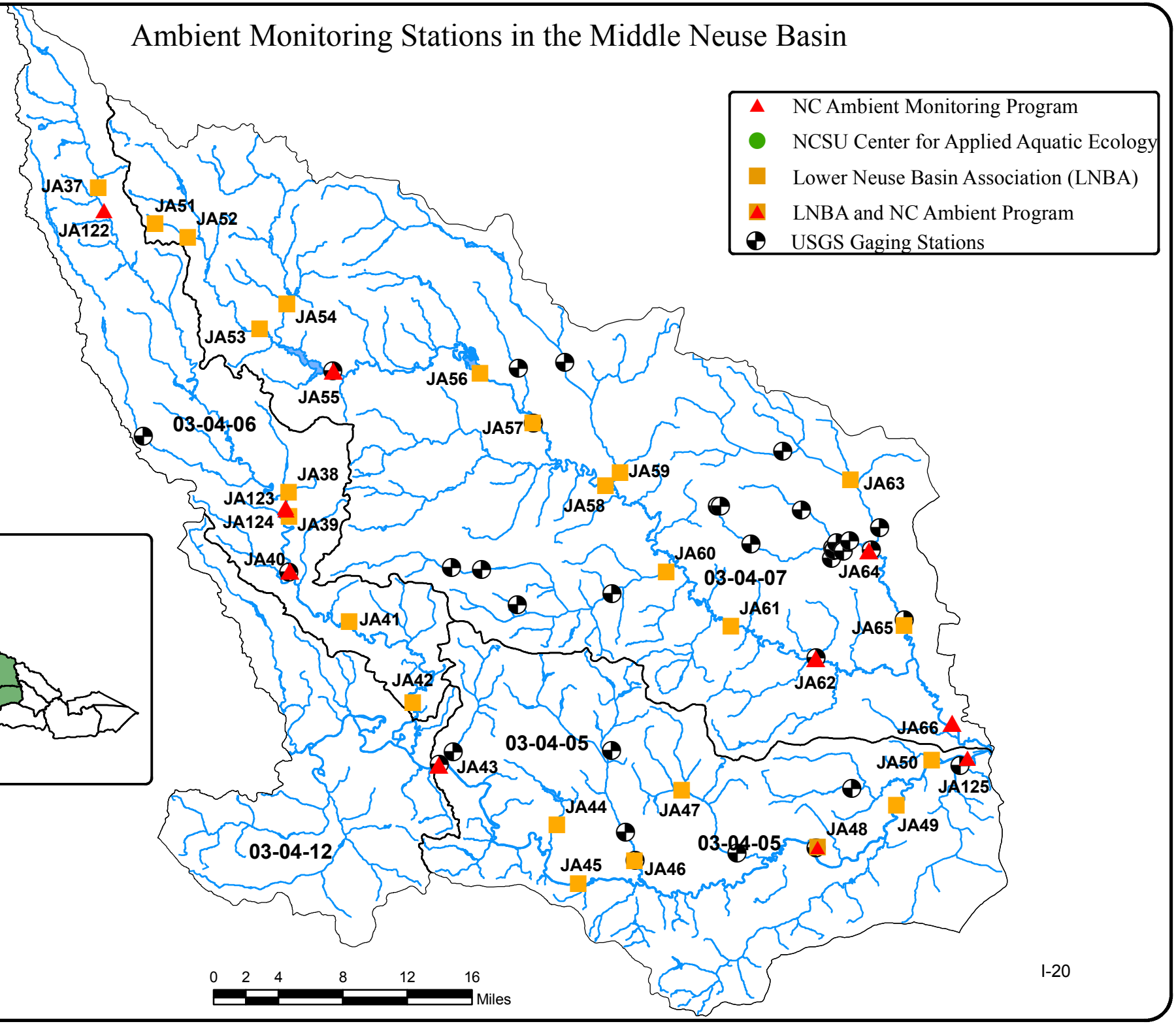


Figure A-I(d)

Ambient Monitoring Stations in the Lower Neuse Basin