Lower Neuse Basin Association
P.O. Box 1410
Clayton, North Carolina 27528-1410

Annual Monitoring Report
2024

Submitted By: _____, **Chairman**
Charles Smithwick

Prepared By: Haywood M. Phthisic, III, Executive Director

Lower Neuse Basin Association
Contact Information

Officers of the Lower Neuse Basin Association

Chairman -
Charles Smithwick
Contentnea MSD
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Vice Chairman -
Edward Buchan
City of Raleigh
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Secretary -

Associates:

Executive Director -
Haywood M. Phthisic, III
P.O. Box 1410
Clayton, N.C. 27528-1410
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Association Counsel -
Daniel F. McLawhorn
1706 St. Mary's Street
Raleigh, N.C. 27608
919.612.4520
hgdunn@poynerspruill.com

Coalition Web Site Address - https://www.lnba.net

Lower Neuse Basin Association
April 25, 2025

Members and Contact Information

A complete list of LNBA delegates for 2024 follows in Section I.

Monitoring Stations for 2024

A complete list of the monitoring stations with station numbers, descriptions, coordinates, county, sub basin and stream classification included in Section II.

The Agreement between the LNBA and the Division of Water Resources was renewed in 2024. The effective date was August 1, 2024 through July 31, 2029. There were several sampling stations, added, deleted, or moved to a better location for safety reasons or environmental conditions.

Quality Assurance/Quality Control Issues

Waypoint Analytical has a contract with the LNBA to collect and analysis designated sites from Falls Lake Dam to the Neuse River Estuary under the MOA with DWR. Waypoint Analytical reported no quality assurance or quality control issues in 2024.

Waypoint Analytical reported it completed and passed proficiency testing for its satellite lab (field testing equipment) in 2024.

NCDEQ- DWR did not conduct a field review and inspection in 2024.

On April 3, 2007, the Division of Water Quality suspended the collection and analysis of total recoverable metals as required by the monitoring coalitions. The metals are no longer collected as part of the LNBA MOA agreement.

The Waypoint Analytical contact information and sampling methods/protocols are listed in Section III with the sampling errors and omissions for 2024.

Special Projects

The Lower Neuse Basin Association, in cooperation with its sister organization, the Neuse River Compliance Association, has continued with its partnership with Dr. Hans Pearl of the University of North Carolina at Chapel Hill, Institute of Marine Science. The two associations support the MODMON monitoring program of the Neuse River Estuary. The associations began assisting with this research in July 2006.

Suggested Changes

There are no suggested changes at this time.

Statistical Analysis of Data

Statistical analyses of the data for each monitoring station are included in Section IV.

Section I

LNBA Members and Contact Information

NPDES Permit #	LNBA Permittees Ownership and Facility	Authorized Representative and Title	County	Region	HUC (8 Digit)
NC0003417	Duke Energy Progress, LLC H. F. Lee Energy Complex	Jeffery D. Hines General Manager	Wayne	WaRO	3020201
NC0003760	CovationBio, Inc.	David Suggs WWTF Manager	Lenoir	WaRO	3020202
NC0020389	Town of Benson - Benson WWTP	Kimberly Picket Public Utility Director	Johnston	RRO	3020201
NC0021253	City of Havelock - Havelock WWTP	Chris McGee City Manager	Craven	WaRO	3020204
NC0021644	Town of LaGrange - LaGrange WWTP	Shawn Condon Town Manager	Lenoir	WaRO	3020202
NC0023906	City of Wilson - Wilson WWTP	Grant Goings City Manager	Wilson	RRO	3020203
NC0023949	City of Goldsboro - Goldsboro WWTP	Matthew Livingston City Manager	Wayne	WaRO	3020202
NC0024236	City of Kinston - Kinston Regional WWTF	Steve Miller Director of Public Services	Lenoir	WaRO	3020202
NC0025348	City of New Bern - New Bern WWTP	Foster Hughes City Manager	Craven	WaRO	3020204
NC0025453	Town of Clayton - Little Creek WWTP	Rich Cappola Town Manager	Johnston	RRO	3020201
NC0029033	City of Raleigh - Neuse River WWTP	Edward Buchan Assistant Utility Director	Wake	RRO	3020201
NC0029572	Town of Farmville - Farmville WWTP	David Hodgkins Town Manager	Pitt	WaRO	3020203
NC0030716	Johnston County Central Johnston County Regional WWTP	Rick J. Hester County Manager	Johnston	RRO	3020201
NC0030759	City of Raleigh - Smith Creek WWTP	Edward Buchan Assistant Utility Director	Wake	RRO	3020201
NC0032077	Contentnea Metropolitan Sewerage District Contentnea MSD WWTP	Charles M. Smithwick, Jr. District Manager	Pitt	WaRO	3020203
NC0048879	Town of Cary - North WWTP	Jonathan Bulla North Cary WRF Manager	Wake	RRO	3020201
NC0064050	Town of Apex - Apex WRF	Randal E. Vosburg Town Manager	Wake	RRO	3020201
NC0064891	Town of Kenly - Kenly Regional WWTP	Tony Sears Interim Town Manager	Johnston	RRO	3020201
NC0065102	Town of Cary - South WWTP	Jarrod Buchanan South Cary WRF Manager	Wake	RRO	3020201
NC0066516	Town of Fuquay Varina Terrible Creek WWTP	Michael Wagner Town Manager	Wake	RRO	3020201
NC0020842	Town of Snow Hill Snow Hill WWTF	April Vinson Town Manager	Greene	WaRO	3020203
NC0079316	City of Raleigh - Little Creek WWTP	Edward Buchan Assistant Utility Director	Wake	RRO	3020203
NC0084735	Johnston County Johnston County WTP	Rick J. Hester County Manager	Johnston	RRO	3020201

Lower Neuse Basin Members and Contact Information for 2024

Member	Contact	Address	Phone	Mobile Phone	Email
Duke Energy Progress	Mike Graham	1677 Old Smithfield Rd.	919.580.3983		Mike.Graham2@duke-energy.com
		Goldsboro, NC			
City of Goldsboro	Robert Sherman	PO Drawer A	919.735.6075		RSherman@goldsboronc.gov
	Bobby Edwards	Goldsboro, NC 27533	919.735.3320		bedwards@goldsboronc.gov
City of Havelock	Rick Day	PO Drawer 368	252.444.6409		rday@havelocknc.us
		Havelock, NC 28532			
City of Kinston	Ben Overton	PO Box 339	252.939.3733	910.409.1537	Benjamin.Overton@kinstonnc.gov
		Kinston, NC 28501			
City of New Bern	Jordan Hughes	PO Box 1129	252.639.7527	252.341.5448	hughesj@newbern-nc.org
	Art Hough	New Bern, NC 28563	252.639.7555		hougha@newbernnc.gov
City of Raleigh	Ed Buchan	PO Box 590		919.760.0688	Edward.Buchan@raleighnc.gov
	Erica Bailey	Raleigh, NC 27602	919.996.3713	919.623.9314	Erika.Bailey@raleighnc.gov
City of Wilson	Jimmy Pridgen	PO Box 10	252.399.2374	252.399.2519	jpridgen@wilsonnc.org
	Kyle Manning	Wilson, NC 27894	252.296.3416		kmanning@wilsonnc.org
Contentnea MSD	Chuck Smithwick	PO Box 477	252.524.5584	252.413.8898	cmsd100@embarqmail.com
	Brian Pridgen	Grifton, NC 28530			'brian.pridgen.cmsd@gmail.com'
Johnston County	Chandra Farmer	PO Box 2263	919.209.8333	919.795.6138	chandra.farmer@johnstonnc.com
	Dan Wall	Smithfield, NC 27577	919.209.8333	919.795.1889	dan.wall@johnstonnc.com
CovationBio, Inc.	Shelby Arellano	4693 Highway 11 North	252.643.7124	252.521.6726	Shelby.Arellano@covationbio.com
	Ray Burgos	Grifton, NC 28530	252.643.7002		Ray.Burgos@covationbio.com
Town of Benson	Kim Pickett	PO Box 69	919.894.3553		kpickett@townofbenson.com
	Brian Leavitt	Benson, NC 27504	919.894.2373	919.902.9599	bleavitt@townofbenson.com
Town of Cary	Jonathan Bulla	PO Box 8005	919.677.0850		Jonathan.Bulla@carync.gov
	Jarrod Buchanan	Cary, NC 27512-8005	919.779.0697		jarrod.buchanan@townofcary.org

Member	Contact	Address	Phone	Mobile Phone	Email
Town of Farmville	David Hodgkins	3672 N. Main St.	252.753.6700		dhodgkins@farmville-nc.com
	James Shoulders	Farmville, NC 27828-0086	252.814.6348		James.shoulders@suez.com
Town of Fuquay-Varina	Mike Wagner	401 Old Honeycutt Rd.	919.753.1013	919.625.3524	mwagner@fuquay-varina.org
	Heather Adams	Fuquay-Varina, NC 27526	919.294.7170		htadams@fuquay-varina.org
Town of Kenly	Tony Sears	PO Box 519	919.284.2116		town.manager@townofkenly.com
	Phillip Smith	Kenly, NC 27542		252.955.2423	phillip.smith@townofkenly.com
Town of La Grange	James Sutton	PO Box 368	252.566.3186		jwsutton@lagrangenc.com
	Shawn Condon	La Grange, NC 28551			smcondon@lagrangenc.com
Town of Apex	Lori Avent	PO Box 250	919.387.7055	919.753.8486	lori.avent@apexnc.org
	Michael Deaton	Apex, NC 27502	919.249.3413		Michael.Deaton@apexnc.org
Town of Clayton	Josh Baird	PO Box 879	919.553.1536		jbaird@townofclaytonnc.org
	David White	Clayton, NC 27520	919.553.1530		dwhite@townofclayton.org
Town of Snow Hill	April Vinson	908 SE 2nd Street	252.747.3414		manager@snowhillnc.com
		Snow Hill, N.C. 28580			
Associated Parties					
Executive Director	Haywood Phthisic	PO Box 1410	919.796.8049	919.796.8049	exec.director@lnba.net
		Clayton, N.C. 27528-1410			
Association Counsel	Dan McLawhorn	1706 St. Mary's Street	919.621.8195	919.621.8195	dan@dfm-lawyer.com
		Raleigh, NC 27608			
Waypoint Analytical	Ron Boquist	PO Box 7085, 114 Oakmont D	252.756.6208		rboquist@waypointanalytical.com
		Greenville, NC 27835-7085	252.756.6208		

Section II

Monitoring Station Information

List Of Monitoring Stations

Station	Location	County	Lattitude	Longitude	Class	Sub-Basin
J2230000	Smith Creek @ SR 2045 (Burlington Mill Road) near Wake Forest	Wake	35.9182	-78.5348	C NSW	03020201
J2330000	Neuse River at SR 2215 (Buffalo Road) near Neuse	Wake	35.8479	-78.5302	C NSW	03020201
J3310000	Crabtree Creek @ SR 2921, North Raleigh Blvd, Raleigh	Wake	35.8041	-78.6081	C NSW	03020201
J3970000	Walnut Creek at SR 2551 (Barwell Road) near Raleigh	Wake	35.7493	-78.5345	C NSW	03020201
J4050000	Neuse River @ SR 2555 (Auburn Knightdale Road) near Raleigh	Wake	35.7266	-78.5139	C NSW	03020201
J4080000	Poplar Creek @ SR 2049 (Bethlehem Road) near Knightdale	Wake	35.7309	-78.4776	C NSW	03020201
J4115000	Marks Creek @ Neuse River Trail near Archers Lodge	Johnston	35.693264	-78.438694	C NSW	03020201
J4130000	Neuse River @ SR 1700 (Covered Bridge Road) near Archer's Lodge	Johnston	35.6749	-78.4364	WS-V NSW	03020201
J4170000	Neuse River @ at NC 42E of Clayton	Johnston	35.6473	-78.4056	WS-IV NSW	03020201
J4370000	Neuse River at US 70 Business @ Smithfield	Johnston	35.5128	-78.3498	WS-IV NSW	03020201
J4414000	Swift Creek @ SR 1152 (Holly Springs Road) near Macedonia	Wake	35.7187	-78.7527	WS-III NSW	03020201
J4500000	Swift Creek @ Indian Creek former discharge location near Garner, N.C.	Wake	35.6476	-78.6041	C NSW	03020201
J4510500	Swift Creek at SR 1525, Cornwallis Road near Clayton	Johnston	35.5999	-78.5356	C NSW	03020201
J4511000	White Oak Creek @ N.C. 42 Hwy near Clayton, N.C.	Johnston	35.6176	-78.5281	C NSW	03020201
J4520000	Swift Creek @ SR 1562 (Steel Bridge Road) near Smithfield, N.C.	Johnston	35.5515	-78.46	C NSW	03020201
J4580000	Swift Creek @ SR 1501 (Swift Creek Road) near the Johnston County Airport	Johnston	35.5442	-78.397	C NSW	03020201
J4670000	Middle Creek off of Anchor Creek Way at Holly Springs Greenway Bridge in	Wake	35.671389	-78.823333	NSW	03020201
J4690000	Middle Creek @ SR 1152 (Holly Springs Road) near Holly Springs	Wake	35.6609	-78.8042	C NSW	03020201
J4868000	Middle Creek @ SR 1375 (Lake Wheeler Road) near Banks	Wake	35.6356	-78.7279	C NSW	03020201

Station	Location	County	Lattitude	Longitude	Class	Sub-Basin
J4980000	Middle Creek @ SR 1006 (Old Stage Road) near Willow Springs	Wake	35.6091	-78.6866	C NSW	03020201
J5002000	Middle Creek @ SR 1517 (Old Sanders Hse) near Edmonson	Johnston	35.5626	-78.5756	C NSW	03020201
J5007000	Middle Creek at SR 1504, Crantock Road in Johnston County	Johnston	35.52233	-78.46694	NSW	03020201
J5010000	Middle Creek @ NC 210 near Smithfield	Johnston	35.5075	-78.4013	C NSW	03020201
J5170000	Black Creek @ SR 1162 (Black Creek Road) near Four Oaks	Johnston	35.46925	-78.45681	C NSW	03020201
J5250000	Neuse River @ SR 1201 (Richardson Bridge Road) near Cox Mill	Johnston	35.3741	-78.1962	WS-IV NSW	03020201
J5390000	Hannah Creek @ SR 1158 (Allens Crossroads Drive) near Benson	Johnston	35.3868	-78.511	C NSW	03020201
J5390800	Hannah Creek @ SR 1227 (Ivey Road) near Benson	Johnston	35.4025	-78.4952	C NSW	03020201
J5410000	Mill Creek @ SR 1200 (Richardson Bridge Road) near Cox Mill	Johnston	35.342	-78.2162	C NSW	03020201
J5500000	Falling Creek @ SR 1219 (Old Grantham Road) near Grantham	Wayne	35.3224	-78.1282	WS-IV NSW	03020201
J5630000	Little River @ SR 2320, Riley Road near Zebulon	Wake	35.8375	-78.3599	HQW NSW	03020201
J5685000	Little River at Weaver Road near Bagley	Johnston	35.5791	-78.1723	WS-V NSW	03020201
J5750000	Little River at SR 2339 (Bagley Road) near Lowell Mill	Johnston	35.5613	-78.1594	WS-V NSW	03020201
J5790000	Buffalo Creek @ SR 2358 (Lake Glad Road) near Webdell, N.C.	Wake	35.7697	-78.7697	C NSW	03020201
J5930000	Little River @ US 581 near Cherry Hospital	Wayne	35.393	-78.0258	C NSW	03020201
J6010950	Walnut Creek @ SR 1730 (Saint Johns Church Road) near Walnut Creek	Wayne	35.2817	-77.8686	C NSW	03020202
J6024000	Neuse River @ SR 1731 (Piney Grove Road) near Seven Springs	Wayne	35.229	-77.846	C NSW	03020202
J6044400	Bear Creek at SR 1603, Washington Street near LaGrange	Lenoir	35.3137	-77.8153	C Sw NSW	03020202
J6044500	Bear Creek @ SR 1311 (Bear Creek Road) near Kinston	Lenoir	35.2489	-77.7843	WS-IV Sw NSW	03020202
J6055000	Mosley Creek @ SR 1327 (Willey Measley Road) near LaGrange	Lenoir	35.3119	-77.7313	C Sw NSW	03020202
J6150000	Neuse River @ NC 11 Bypass at Kinston	Lenoir	35.2587	-77.5835	C NSW	03020202

Station	Location	County	Lattitude	Longitude	Class	Sub-Basin
J6250000	Neuse River @ NC 55 near Graingers	Lenoir	35.2957	-77.4962	C NSW	03020202
J6410000	Little Creek @ NC 97 near Zebulon	Wake	35.8279	-78.3025	C NSW	03020203
J6450000	Little Creek @ NC 39 near Zebulon	Wake	35.8125	-78.2681	C NSW	03020203
J6500000	Moccasin Creek @ SR 1131 (Antioch Church Road) near Conner	Wilson	35.7301	-78.1895	C NSW	03020203
J6680000	Turkey Creek @ SR 1101 (Claude Lewis Rodd) near Middlesex	Nash	35.7519	-78.1597	C NSW	03020203
J6765000	Contentnea Creek at Willow Springs drive near Dixie	Wilson	35.6838	-77.941	C Sw NSW	03020203
J6890000	Contentnea Creek @ SR 1622 (Evansdale Road) near Wilson	Wilson	35.6429	-77.8902	C Sw NSW	03020203
J7210000	Contentnea Creek @ NC 58 near Stantonsburg	Wilson	35.5861	-77.8111	C Sw NSW	03020203
J7240000	Toisnot Swamp @ SR 1539 (Sand Pit Road) near Stantonsburg	Wilson	35.5976	-77.7947	C Sw NSW	03020203
J7325000	Nahunta Swamp @ NC 58 near Contentnea	Greene	35.5081	-77.7455	C Sw NSW	03020203
J7330000	Contentnea Creek @ US 13 near Snow Hill	Greene	35.4585	-77.6753	C Sw NSW	03020203
J7690000	Little Contentnea Creek @ SR 1218 (Chinquapin Road) near Farmville	Pitt	35.5881	-77.5416	C Sw NSW	03020203
J7740000	Little Contentnea Creek @ SR 1110 (HWY 903) near Scuffleton	Pitt	35.4567	-77.4854	C Sw NSW	03020203
J7850000	Neuse River @ SR 1470 (Maple Cypress Road) at the boat ramp dock upstre	Craven	35.31368	-77.30287	C Sw NSW	03020202
J8870000	Trent River @ the Alfred Cunningham Drawbridge on E. Front Street, New Be	Craven	35.10159	-77.03708	SB Sw NSW	03020204

Section III

Contract Laboratory Information, Audits, MOA Revisions, and Sample Errors and Omissions

Contract Laboratory Providing All Sampling and Analysis

Waypoint Analytical, Inc.
Ron Boquist, General Manger
114 Oakmont Dr.
Greenville, N.C. 27835-7085
252.756.6208
rboquist@waypointanalytical.com

Waypoint Analytical - River Basin Method Codes 2024

Parameter	EPA / SM code	Jan - Aug Rev./ date	Sept - Dec Rev./ date
Chlorophyll_a (ug/l)	EPA 445.0	Rev. 1.2 - 1997	Rev. 1.2 - 1997
Conductivity (umhos/cm)	SM 2510 B	2011	2021
DO (mg/l)	SM 4500 OG	2016	2021
Fecal Coliform	SM 9222 D	2015	2015
Hardness, Total	SM 2340 C	2011	2021
NH3_N (mg/l)	EPA 350.1	Rev. 2.0 - 1993	Rev. 2.0 - 1993
NO2_NO3_N (mg/l)	EPA 353.2	Rev. 2.0 - 1993	Rev. 2.0 - 1993
pH (su)	SM 4500 HB	2011	2021
Suspended Residue, (mg/l)	SM 2540 D	2015	2020
Temp (˚ C)	SM 2550B	2010	2010
TKN_N (mg/l)	EPA 351.2	Rev. 2.0 - 1993	Rev. 2.0 - 1993
TP (mg/l)	EPA 365.4	Rev. 2.0 - 1974	Rev. 2.0 - 1974
Turbidity (NTU)	SM 2130 B	2011	2020

STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF WATER RESOURCES
LABORATORY CERTIFICATION BRANCH

In accordance with the provisions of N.C.G.S. 143-215.3 (a) (1), 143-215.3 (a)(10) and NCAC 2H.0800:

2024

Waypoint Analytical - Greenville

Is hereby certified to perform environmental analysis as listed on the Laboratory's Certified Parameter List and report monitoring data to DEQ for compliance with NPDES effluent, surface water, groundwater, soil and pretreatment regulations.

By reference 15A NCAC 2H .0800 is made a part of this certificate.

This certificate does not guarantee validity of data generated, but indicates the methodology, equipment, quality control procedures, records, and proficiency of the laboratory have been examined and found to be acceptable.

12/31/2024

Certificate No. 10

Todd Crawford

Todd Crawford

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name:	Waypoint Analytical - Greenville	Certificate Number:	10
Address:	114 Oakmont Dr.	Effective Date:	1/1/2024
	Greenville, NC 27858	Expiration Date:	12/31/2024
		Date of Last Amendment:	1/26/2024

The above named laboratory, having duly met the requirements of 15A NCAC 2H.0800, is hereby certified for the measurement of the parameters listed below.

CERTIFIED PARAMETERS

INORGANIC

ALKALINITY
- SM 2320 B-2011 (Aqueous)

BACTERIA - COLIFORM FECAL
- SM 9221 E-2014 (MPN) (Aqueous)
- SM 9221 E-2014 (MPN) (Biosolids)
- SM 9222 D-2015 (MF) (Aqueous)

BACTERIA - COLIFORM TOTAL
- SM 9222 B-2015 (MF) (Aqueous)
- SM 9221 B-2014 (MPN) (Aqueous)

BACTERIA - E. coli
- IDEXX Colilert-18® (MPN) (Aqueous)

BACTERIA - ENTEROCOCCI
- IDEXX Enterolert® (MPN) (Aqueous)

BOD
- SM 5210 B-2016 (Aqueous)

CBOD
- SM 5210 B-2016 (Aqueous)

CHLORIDE
- SM 4500 Cl^- B-2011 (Aqueous)

CHLOROPHYLL a
- EPA 445.0, Rev. 1.2 (Fluorometric) (Aqueous)

COD
- Hach 8000 (Aqueous)

COLOR, ADMI
- SM 2120 F-2011 (ADMI) (Aqueous)

COLOR, PC
- SM 2120 B-2011 (PtCo) (Aqueous)

CONDUCTIVITY
- SM 2510 B-2011 (Aqueous)

CYANIDE
- SM 4500 CN^- E-2016 (Total) (Aqueous)
- SM 4500 CN^- E-2016 (Total) (Non-Aqueous)

DISSOLVED OXYGEN
- SM 4500 O G-2016 (Aqueous)

FLUORIDE
- SM 4500 F^- C-2011 (Aqueous)

HARDNESS TOTAL - WET CHEM
- SM 2340 C-2011 (Aqueous)

NITROGEN, AMMONIA
- EPA 350.1, Rev. 2.0, 1993 (Aqueous)

NITROGEN, NITRATE
- (NO3 + NO2 EPA 353.2, Rev. 2.0, 1993) - (NO2 EPA 353.2, Rev. 2.0, 1993) (Aqueous)

NITROGEN, NITRITE
- EPA 353.2, Rev. 2.0, 1993 (Aqueous)

NITROGEN, NO3 + NO2
- EPA 353.2, Rev. 2.0, 1993 (Aqueous)

NITROGEN, TOTAL KJELDAHL
- EPA 351.2, Rev. 2.0, 1993 (Aqueous)

OIL & GREASE
- EPA 1664 Rev. B (Aqueous)

ORGANIC CARBON, TOTAL
- SM 5310 C-2014 (Aqueous)

pH
- SM 4500 H+B-2011 (Aqueous)

PHOSPHATE, ORTHO
- SM 4500 P E-2011 (Aqueous)

PHOSPHORUS, TOTAL
- EPA 365.4, 1974 (Aqueous)

RESIDUE, DISSOLVED 180 C
- SM 2540 C-2015 (Aqueous)
- ASTM D5907-13 (Aqueous)

RESIDUE, SETTLEABLE
- SM 2540 F-2015 (Aqueous)

RESIDUE, SUSPENDED
- SM 2540 D-2015 (Aqueous)

RESIDUE, TOTAL
- SM 2540 B-2015 (Aqueous)

This certification requires maintance of an acceptable quality assurance program, use of approved methodology, and satisfactory performance on evaluation samples. Laboratories are subject to civil penalties and/or decertification for infractions as set forth in 15A NCAC 2H.0807.

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name:	Waypoint Analytical - Greenville	Certificate Number:	10
Address:	114 Oakmont Dr.	Effective Date:	1/1/2024
	Greenville, NC 27858	Expiration Date:	12/31/2024
		Date of Last Amendment:	1/26/2024

The above named laboratory, having duly met the requirements of 15A NCAC 2H.0800, is hereby certified for the measurement of the parameters listed below.

CERTIFIED PARAMETERS

SM 2540 G-2015 (Non-Aqueous)
SALINITY
SM 2520 B-2011 (Aqueous)
SULFATE
SM 4500 $SO4^{2}$ E-2011 (Aqueous)
SULFIDE
SM 4500 S^{2-} D-2011 (Aqueous)
TEMPERATURE
SM 2550 B-2010 (Aqueous)
TURBIDITY
SM 2130 B-2011 (Aqueous)

METAL

ALUMINUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
ANTIMONY
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
ARSENIC
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
BARIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
BERYLLIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
CADMIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
CALCIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
CHROMIUM TOTAL
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
COBALT
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
COPPER
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
IRON
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
LEAD
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
MAGNESIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
MANGANESE
EPA 200.7, Rev. 4.4, 1994 (Aqueous)

This certification requires maintance of an acceptable quality assurance program, use of approved methodology, and satisfactory performance on evaluation samples. Laboratories are subject to civil penalties and/or decertification for infractions as set forth in 15A NCAC 2H.0807.

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name:	Waypoint Analytical - Greenville	Certificate Number:	10
Address:	114 Oakmont Dr.	Effective Date:	1/1/2024
	Greenville, NC 27858	Expiration Date:	12/31/2024
		Date of Last Amendment:	1/26/2024

The above named laboratory, having duly met the requirements of 15A NCAC 2H.0800, is hereby certified for the measurement of the parameters listed below.

CERTIFIED PARAMETERS

EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
MERCURY
EPA 245.1, Rev. 3.0, 1994 (Aqueous)
SW-846 7471 B (Non-Aqueous)
EPA 1631 E (Aqueous)
MOLYBDENUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
NICKEL
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
POTASSIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SELENIUM
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SILVER
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SODIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
THALLIUM
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
TIN
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
VANADIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
ZINC
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)

ORGANIC

BASE NEUTRAL/ACID, ORGANICS
EPA 625.1, Dec 2016 (Aqueous)
SW-846 8270 E (Aqueous)
CHLORINATED ACID HERBICIDES
SW-846 8151 A (Aqueous)
PESTICIDES, ORGANOCHLORINE
SW-846 8081 B (Aqueous)
PURGEABLE, ORGANICS
EPA 624.1, Dec 2016 (Aqueous)
SW-846 8260 D (Aqueous)

This certification requires maintance of an acceptable quality assurance program, use of approved methodology, and satisfactory performance on evaluation samples. Laboratories are subject to civil penalties and/or decertification for infractions as set forth in 15A NCAC 2H.0807.

Amendment to the Memorandum of Agreement Between the North Carolina Division of Water Resources and the Lower Neuse Basin Association

WHEREAS, the NORTH CAROLINA DIVISION OF WATER RESOURCES (DWR), the LOWER NEUSE BASIN ASSOCIATION (LNBA), and NPDES PERMITTEES have entered into a MEMORANDUM OF AGREEMENT (MOA) dated August 1, 2024; and

WHEREAS, the MOA allows modification to add new monitoring stations to the MOA by written consent of the DWR and the LNBA;

NOW THEREFORE, the MOA is hereby amended as follows:

> The LNBA and its agents shall perform the collection and analyses of instream water quality monitoring data at station J5007000, Middle Creek at SR 1504 Crantock Rd in Johnston County in lieu of J5010000 until the bridge is replaced and sampling can resume there, for the parameters, locations and frequencies specified in Table 2 of the MOA.

IN WITNESS WHEREOF, the parties have caused the execution of this instrument by authority duly given, to be effective as of the date executed by DWR.

LOWER NEUSE BASIN ASSOCIATION

By: Signed by: Charles Smithwick D64BFCFD5508450... (signature)
Charles Smithwick
Chairman
Lower Neuse Basin Association

Date: 1/21/2025

NORTH CAROLINA DIVISION OF WATER RESOURCES

By: DocuSigned by: Richard E. Rogers, Jr. B2B16AB426A64B6... (signature)
Richard E. Rogers, Jr.
Director
North Carolina Division of Water Resources

Date: 1/20/2025

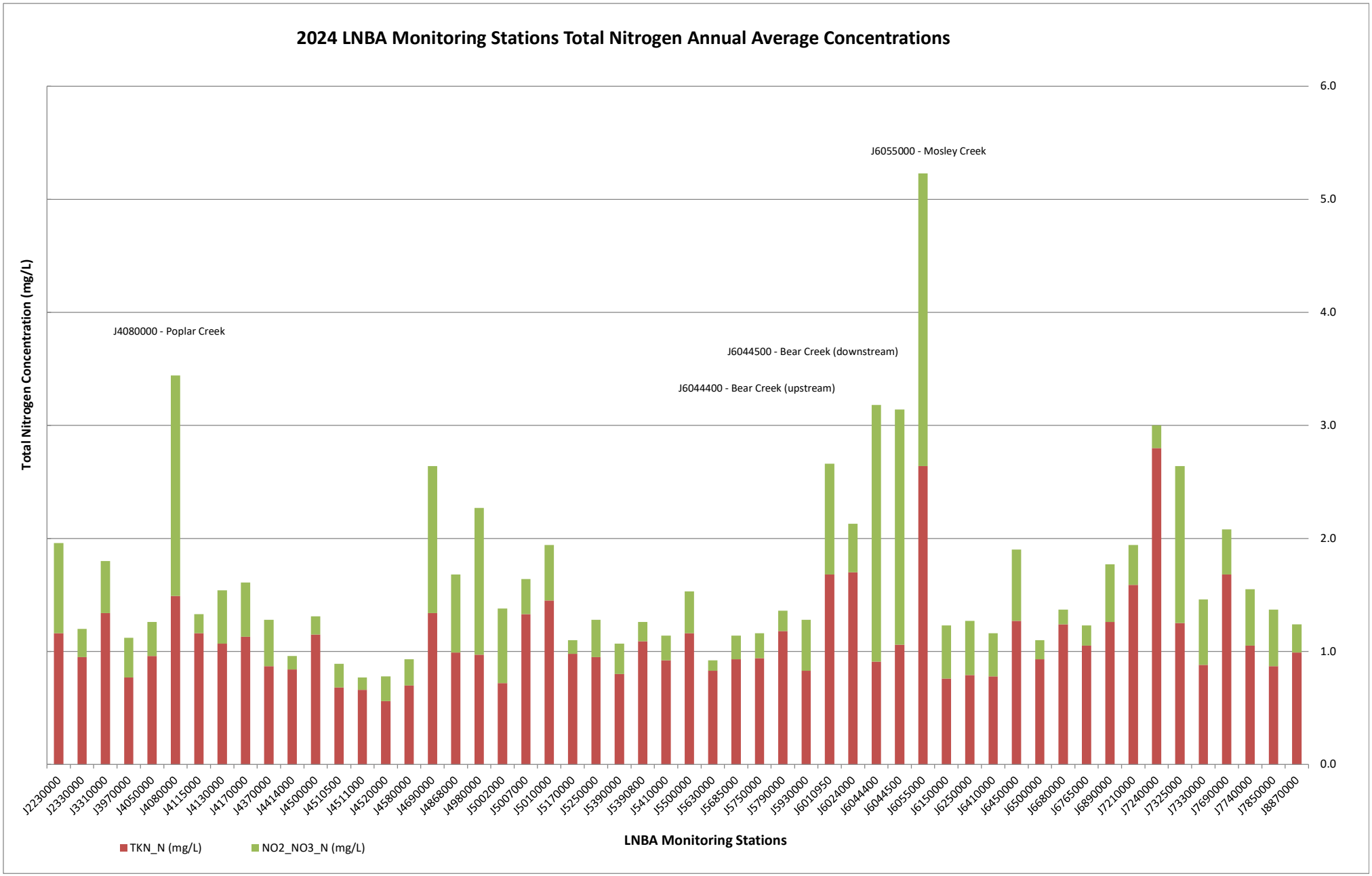
LNBA Sample Errors/Omissions for 2024

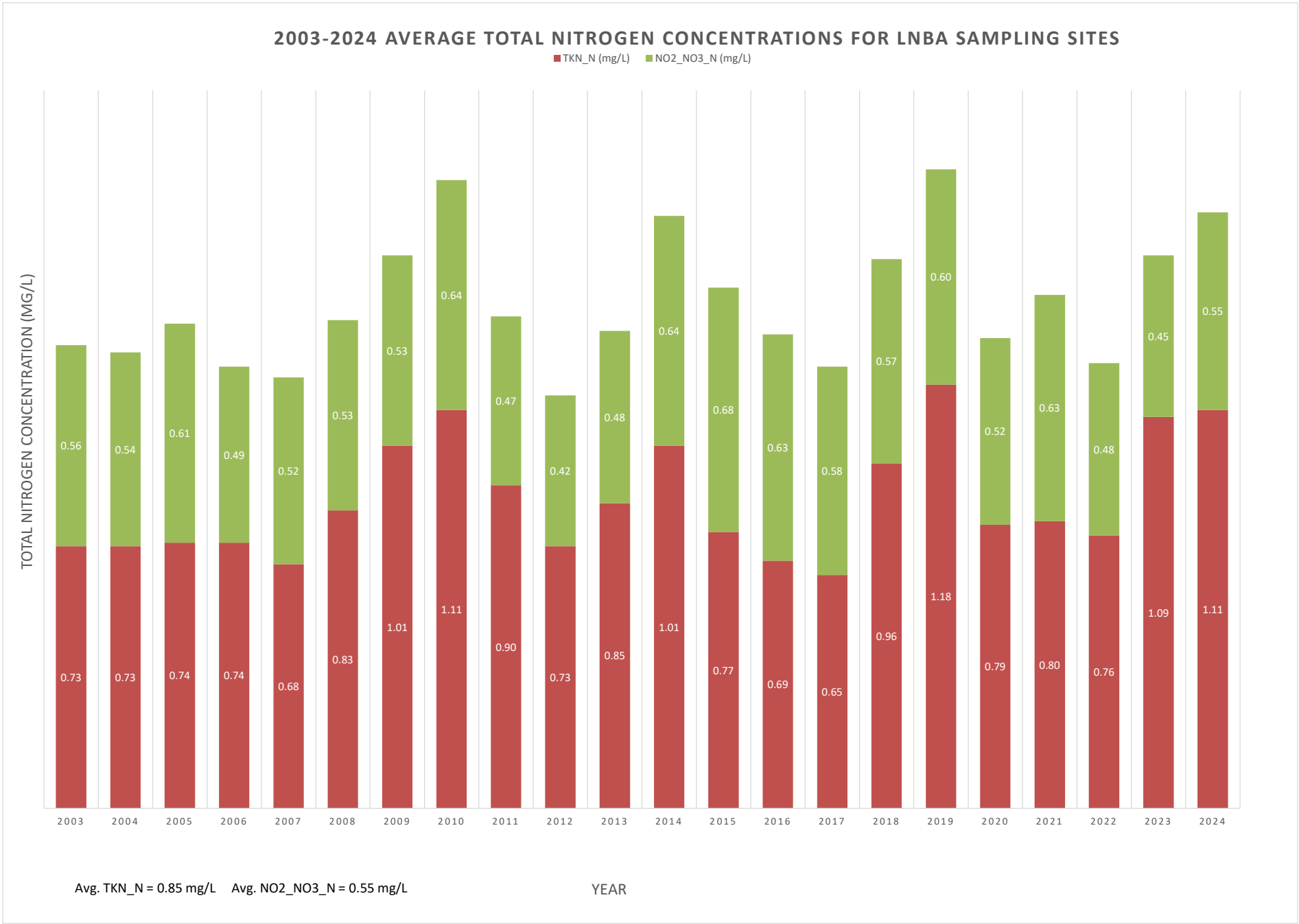
Date: 4/24/2025

January, 2024		
J5630000	1/30/2024	Unable to access- Road Closed
February, 2024		
J4690000	2/8/2024	Unable to access - Bridge construction
March, 2024		
J4520000	3/4/2024	Unable to access - Road construction
J5630000	3/21/2024	Unable to access - Road construction
April, 2023		
J4115000	4/12/2024	Unable to collect sample - low stream flow
J5630000	4/17/2024	Unable to access - Road construction
J5790000	4/17/2024	Unable to access - Road construction
May, 2024		
J4868000	5/23/2024	Unable to access - Road construction
June, 2024		
J4080000	6/10/2024	Unable to collect sample - low stream flow
J4115000	6/10/2024	Unable to collect sample - low stream flow
J4690000	6/6/2024	Unable to access - Road construction
J5010000	6/20/2024	Unable to access - Road construction
J5630000	6/10/2024	Unable to access - Road construction
J5630000	6/20/2024	Unable to access - Road construction
July, 2024		
J4115000	7/3/2024	Unable to access- stream nearly dry
J5010000	7/18/2024	Unable to access - Road construction
J5630000	7/1/2024	Unable to access - Bridge construction
J5630000	7/15/2024	Unable to access - Bridge construction
August, 2024		
J5390800	8/8/2024	Unable to access- flooding
J6890000	8/19/2024	Unable to access - Road construction
October, 2024		
J4690000	10/17/2024	Unable to access - Road construction
J6250000	10/15/2024	Unable to access - Bridge construction
November, 2024		
J4690000	11/16/2024	Unable to access - Road construction
J5002000	11/6/2024	Unable to access - Road construction
December, 2024		
J4690000	12/2/2024	Unable to access - Road construction

Section IV

Statistical Analysis of Sampling Data


2024 LNBA Monitoring Stations Total Nitrogen Annual Average Concentrations
Total Nitrogen Concentration (mg/L)
6.0
5.0
4.0
3.0
2.0
1.0
0.0
J6055000 - Mosley Creek
J4080000 - Poplar Creek
J6044500 - Bear Creek (downstream)
J6044400 - Bear Creek (upstream)
J2230000
J2330000
J3310000
J3970000
J4050000
J4080000
J4115000
J4130000
J4170000
J4370000
J4414000
J4500000
J4510500
J4511000
J4520000
J4580000
J4690000
J4868000
J4980000
J5002000
J5007000
J5010000
J5170000
J5250000
J5390000
J5390800
J5410000
J5500000
J5630000
J5685000
J5750000
J5790000
J5930000
J6010950
J6024000
J6044400
J6044500
J6055000
J6150000
J6250000
J6410000
J6450000
J6500000
J6680000
J6765000
J6890000
J7210000
J7240000
J7325000
J7330000
J7690000
J7740000
J7850000
J8870000
LNBA Monitoring Stations
TKN_N (mg/L)
NO2_NO3_N (mg/L)



Avg. TKN_N = 0.85 mg/L Avg. NO2_NO3_N = 0.55 mg/L

2024 LNBA Monitoring Report

Station **J2230000** Smith Creek @ SR 2045 (Burlington Mill Road) near Wake Forest ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.9182 ***Longitude:*** -78.5348

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.8	27.5	19.2
DO (mg/l)	17	N/A	4	0	6.6	10.0	8.4
****** pH (SU)***	17	N/A	6 to 9	0	6.4	8.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	65	152	111
***** Fecal Coliform (/100 mls)***	10	N/A	400	7	167	5,100	848
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	250.0	31.9
Turbidity (NTU)	12	N/A	50	1	3.3	250.0	33.0
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.30	0.10
TKN_N (mg/l)	12	0	N/A	N/A	0.26	3.71	1.16
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.21	2.68	0.80
TP (mg/l)	12	0	N/A	N/A	0.04	1.48	0.25
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J2330000** Neuse River at SR 2215 (Buffalo Road) near Neuse ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.8479 ***Longitude:*** -78.5302

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.6	31.3	20.6
DO (mg/l)	17	N/A	4	0	6.5	9.3	7.9
**** pH (SU)*	17	N/A	6 to 9	0	6.3	7.8	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	59	170	90
*** Fecal Coliform (/100 mls)*	12	N/A	400	2	8	3,300	105
Suspended Residue (mg/l)	12	0	N/A	N/A	4.2	100.0	23.5
Turbidity (NTU)	12	N/A	50	1	5.6	130.0	23.5
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.33	0.11
TKN_N (mg/l)	12	0	N/A	N/A	0.43	1.71	0.95
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.07	0.45	0.25
TP (mg/l)	12	0	N/A	N/A	0.04	4.72	0.48
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

2024 LNBA Monitoring Report

Station **J3310000** Crabtree Creek @ SR 2921, North Raleigh Blvd, Raleigh ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.8041 ***Longitude:*** -78.6081

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	9.2	30.1	20.5
DO (mg/l)	17	N/A	4	0	6.4	11.2	8.2
****** pH (SU)***	17	N/A	6 to 9	0	6.1	7.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	64	307	159
***** Fecal Coliform (/100 mls)***	11	N/A	400	4	96	2,200	397
Suspended Residue (mg/l)	12	0	N/A	N/A	2.5	150.0	28.2
Turbidity (NTU)	12	N/A	50	2	4.3	140.0	31.4
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.30	0.08
TKN_N (mg/l)	12	0	N/A	N/A	0.33	2.88	1.34
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.23	1.25	0.46
TP (mg/l)	12	0	N/A	N/A	0.03	0.52	0.19
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

Station **J3970000** Walnut Creek at SR 2551 (Barwell Road) near Raleigh ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.7493 ***Longitude:*** -78.5345

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.4	28.1	19.1
DO (mg/l)	17	N/A	4	0	6.4	9.8	7.9
**** pH (SU)*	17	N/A	6 to 9	0	6.5	7.7	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	79	194	127
*** Fecal Coliform (/100 mls)*	11	N/A	400	2	52	1,700	201
Suspended Residue (mg/l)	12	0	N/A	N/A	2.6	20.0	8.8
Turbidity (NTU)	12	N/A	50	0	7.3	36.0	14.3
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.11	0.05
TKN_N (mg/l)	12	0	N/A	N/A	0.26	1.16	0.77
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.15	0.55	0.35
TP (mg/l)	12	0	N/A	N/A	0.03	1.84	0.24
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

2024 LNBA Monitoring Report

Station **J4050000** Neuse River @ SR 2555 (Auburn Knightdale Road) near Raleigh ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.7266 ***Longitude:*** -78.5139

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.6	30.2	20.3
DO (mg/l)	17	N/A	4	0	6.4	9.7	7.9
****** pH (SU)***	17	N/A	6 to 9	0	6.4	7.8	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	63	133	101
***** Fecal Coliform (/100 mls)***	11	N/A	400	0	34	390	140
Suspended Residue (mg/l)	12	0	N/A	N/A	3.9	50.2	18.2
Turbidity (NTU)	12	N/A	50	0	5.0	45.0	18.2
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.35	0.12
TKN_N (mg/l)	12	0	N/A	N/A	0.31	1.95	0.96
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.13	0.52	0.30
TP (mg/l)	12	0	N/A	N/A	0.04	0.28	0.12
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

Station **J4080000** Poplar Creek @ SR 2049 (Bethlehem Road) near Knightdale ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.7309 ***Longitude:*** -78.4776

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	9.2	25.9	18.0
DO (mg/l)	17	N/A	4	0	6.7	10.4	8.4
**** pH (SU)*	17	N/A	6 to 9	0	6.5	8.3	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	85	266	147
*** Fecal Coliform (/100 mls)*	11	N/A	400	5	220	2,600	449
Suspended Residue (mg/l)	11	0	N/A	N/A	2.8	74.0	18.7
Turbidity (NTU)	11	N/A	50	0	4.1	34.0	14.7
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	3	N/A	N/A	0.02	0.42	0.12
TKN_N (mg/l)	11	0	N/A	N/A	0.58	7.28	1.49
NO2_NO3_N (mg/l)	11	0	N/A	N/A	1.03	2.90	1.95
TP (mg/l)	11	0	N/A	N/A	0.12	1.59	0.51
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

Station **J4115000** Marks Creek @ Neuse River Trail near Archers Lodge ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.693264 ***Longitude:*** -78.43869

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.2	26.6	18.2
DO (mg/l)	17	N/A	4	0	6.8	10.0	8.4
****** pH (SU)***	17	N/A	6 to 9	0	6.5	8.2	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	56	112	85
***** Fecal Coliform (/100 mls)***	10	N/A	400	8	310	1,420	626
Suspended Residue (mg/l)	9	0	N/A	N/A	3.8	52.0	18.8
Turbidity (NTU)	9	N/A	50	0	4.4	50.0	16.4
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	9	4	N/A	N/A	0.02	0.13	0.05
TKN_N (mg/l)	9	0	N/A	N/A	0.61	3.43	1.16
NO2_NO3_N (mg/l)	9	0	N/A	N/A	0.08	0.30	0.17
TP (mg/l)	9	1	N/A	N/A	0.02	0.18	0.09
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4130000** Neuse River @ SR 1700 (Covered Bridge Road) near Archer's Lodge ***Stream Class:*** WS-V NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.6749 ***Longitude:*** -78.4364

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.7	29.6	20.4
DO (mg/l)	17	N/A	4	0	6.4	9.3	7.7
****** pH (SU)***	17	N/A	6 to 9	0	6.4	8.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	87	257	162
***** Fecal Coliform (/100 mls)***	12	N/A	400	3	46	900	161
Suspended Residue (mg/l)	12	0	N/A	N/A	3.5	83.3	25.3
Turbidity (NTU)	12	N/A	50	1	4.1	60.0	20.2
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.50	0.13
TKN_N (mg/l)	12	0	N/A	N/A	0.48	2.90	1.07
NO2_NO3_N (mg/l)	12	0	10	0	0.19	0.92	0.47
TP (mg/l)	12	0	N/A	N/A	0.08	0.82	0.22
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4170000** Neuse River @ at NC 42E of Clayton ***Stream Class:*** WS-IV NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.6473 ***Longitude:*** -78.4056

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.8	29.1	20.2
DO (mg/l)	17	N/A	4	0	4.7	11.9	7.5
****** pH (SU)***	17	N/A	6 to 9	0	6.5	7.5	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	87	262	161
***** Fecal Coliform (/100 mls)***	12	N/A	400	4	23	2,000	176
Suspended Residue (mg/l)	12	0	N/A	N/A	3.1	103.0	28.1
Turbidity (NTU)	12	N/A	50	2	3.8	75.0	24.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	0.38	0.11
TKN_N (mg/l)	12	0	N/A	N/A	0.53	3.01	1.13
NO2_NO3_N (mg/l)	12	0	10	0	0.25	0.96	0.48
TP (mg/l)	12	0	N/A	N/A	0.10	0.62	0.25
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4370000** Neuse River at US 70 Business @ Smithfield ***Stream Class:*** WS-IV NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5128 ***Longitude:*** -78.3498

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	7.7	30.0	20.7
DO (mg/l)	17	N/A	4	0	5.9	10.2	7.7
****** pH (SU)***	17	N/A	6 to 9	1	5.9	7.6	N/A
Conductivity (umhos/cm)	17	1	N/A	N/A	50	233	130
***** Fecal Coliform (/100 mls)***	12	N/A	400	4	46	4,500	272
Suspended Residue (mg/l)	12	0	N/A	N/A	3.4	130.0	41.5
Turbidity (NTU)	12	N/A	50	3	3.7	100.0	29.8
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.53	0.11
TKN_N (mg/l)	12	2	N/A	N/A	0.20	2.27	0.87
NO2_NO3_N (mg/l)	12	0	10	0	0.19	0.71	0.41
TP (mg/l)	12	0	N/A	N/A	0.06	0.45	0.19
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4414000** Swift Creek @ SR 1152 (Holly Springs Road) near Macedonia ***Stream Class:*** WS-III NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.7187 ***Longitude:*** -78.7527

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	3.0	26.3	18.1
DO (mg/l)	17	N/A	4	0	4.1	13.4	8.0
**** pH (SU)*	17	N/A	6 to 9	0	6.2	8.2	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	69	145	102
*** Fecal Coliform (/100 mls)*	12	N/A	400	3	38	4,100	179
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	13.0	7.6
Turbidity (NTU)	12	N/A	50	0	4.5	27.0	13.0
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.25	0.09
TKN_N (mg/l)	12	1	N/A	N/A	0.20	2.34	0.84
NO2_NO3_N (mg/l)	12	1	10	0	0.02	0.34	0.12
TP (mg/l)	12	0	N/A	N/A	0.06	1.57	0.23
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

2024 LNBA Monitoring Report

Station **J4500000** Swift Creek @ Indian Creek former discharge location near Garner, N.C. ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.6476 ***Longitude:*** -78.6041

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	4.0	27.5	19.1
DO (mg/l)	17	N/A	4	0	4.9	12.4	7.7
****** pH (SU)***	17	N/A	6 to 9	0	6.1	7.8	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	66	116	86
***** Fecal Coliform (/100 mls)***	12	N/A	400	1	4	3,600	106
Suspended Residue (mg/l)	12	0	N/A	N/A	7.2	128.0	33.6
Turbidity (NTU)	12	N/A	50	0	8.2	42.0	23.4
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.19	0.07
TKN_N (mg/l)	12	1	N/A	N/A	0.20	5.82	1.15
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.02	0.31	0.16
TP (mg/l)	12	0	N/A	N/A	0.05	8.10	0.92
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4510500** Swift Creek at SR 1525, Cornwallis Road near Clayton ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5999 ***Longitude:*** -78.5356

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	2.8	26.9	18.3
DO (mg/l)	17	N/A	4	0	6.0	13.1	8.5
****** pH (SU)***	17	N/A	6 to 9	0	6.7	7.3	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	68	354	104
***** Fecal Coliform (/100 mls)***	11	N/A	400	1	52	510	110
Suspended Residue (mg/l)	12	0	N/A	N/A	2.5	140.0	23.3
Turbidity (NTU)	12	N/A	50	0	5.3	30.0	15.8
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.31	0.06
TKN_N (mg/l)	12	1	N/A	N/A	0.20	1.49	0.68
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.04	0.37	0.21
TP (mg/l)	12	1	N/A	N/A	0.02	0.15	0.08
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4511000** White Oak Creek @ N.C. 42 Hwy near Clayton, N.C. ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.6176 ***Longitude:*** -78.5281

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	4.5	28.9	20.5
DO (mg/l)	17	N/A	4	2	2.2	11.3	7.0
****** pH (SU)***	17	N/A	6 to 9	0	6.4	7.5	N/A
Conductivity (umhos/cm)	17	1	N/A	N/A	50	287	87
***** Fecal Coliform (/100 mls)***	10	N/A	400	2	3	2,400	51
Suspended Residue (mg/l)	12	0	N/A	N/A	3.9	34.2	16.0
Turbidity (NTU)	12	N/A	50	0	6.7	38.0	15.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	6	N/A	N/A	0.02	0.37	0.07
TKN_N (mg/l)	12	2	N/A	N/A	0.20	1.65	0.66
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.02	0.24	0.11
TP (mg/l)	12	1	N/A	N/A	0.02	0.23	0.12
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4520000** Swift Creek @ SR 1562 (Steel Bridge Road) near Smithfield, N.C. ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5515 ***Longitude:*** -78.46

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	2.4	27.0	18.5
DO (mg/l)	16	N/A	4	0	5.3	13.3	8.4
****** pH (SU)***	16	N/A	6 to 9	1	5.8	7.5	N/A
Conductivity (umhos/cm)	16	0	N/A	N/A	65	234	101
***** Fecal Coliform (/100 mls)***	11	N/A	400	1	48	7,600	209
Suspended Residue (mg/l)	11	4	N/A	N/A	2.5	32.2	9.4
Turbidity (NTU)	11	N/A	50	0	3.2	33.0	12.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	7	N/A	N/A	0.02	0.21	0.04
TKN_N (mg/l)	11	3	N/A	N/A	0.20	1.05	0.56
NO2_NO3_N (mg/l)	11	0	N/A	N/A	0.03	0.35	0.22
TP (mg/l)	11	1	N/A	N/A	0.02	0.23	0.10
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4580000** Swift Creek @ SR 1501 (Swift Creek Road) near the Johnston County Airport ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5442 ***Longitude:*** -78.397

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	6.2	27.8	19.1
DO (mg/l)	16	N/A	4	0	6.4	10.3	8.0
****** pH (SU)***	16	N/A	6 to 9	1	5.5	7.3	N/A
Conductivity (umhos/cm)	16	1	N/A	N/A	50	134	86
***** Fecal Coliform (/100 mls)***	12	N/A	400	3	60	6,000	249
Suspended Residue (mg/l)	12	2	N/A	N/A	2.5	160.0	29.9
Turbidity (NTU)	12	N/A	50	3	5.3	110.0	28.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.13	0.05
TKN_N (mg/l)	12	0	N/A	N/A	0.29	1.87	0.70
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.04	0.37	0.23
TP (mg/l)	12	1	N/A	N/A	0.02	0.30	0.12
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J4690000** Middle Creek @ SR 1152 (Holly Springs Road) near Holly Springs ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.6609 ***Longitude:*** -78.8042

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	9	N/A	N/A	N/A	3.1	27.8	21.5
DO (mg/l)	9	N/A	4	0	5.7	11.7	7.6
**** pH (SU)*	9	N/A	6 to 9	0	7.1	7.8	N/A
Conductivity (umhos/cm)	9	0	N/A	N/A	81	455	260
*** Fecal Coliform (/100 mls)*	4	N/A	400	2	40	3,200	345
Suspended Residue (mg/l)	5	0	N/A	N/A	2.7	9.9	5.7
Turbidity (NTU)	5	N/A	50	0	10.0	24.0	15.6
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	5	0	N/A	N/A	0.03	0.42	0.16
TKN_N (mg/l)	5	0	N/A	N/A	0.69	3.46	1.34
NO2_NO3_N (mg/l)	5	0	N/A	N/A	0.98	1.52	1.30
TP (mg/l)	5	1	N/A	N/A	0.02	0.45	0.29
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

2024 LNBA Monitoring Report

Station **J4868000** Middle Creek @ SR 1375 (Lake Wheeler Road) near Banks ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.6356 ***Longitude:*** -78.7279

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	5.0	26.7	19.0
DO (mg/l)	16	N/A	4	0	5.7	11.7	8.2
****** pH (SU)***	16	N/A	6 to 9	0	6.9	7.6	N/A
Conductivity (umhos/cm)	16	0	N/A	N/A	90	465	254
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	33	550	146
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	22.0	9.8
Turbidity (NTU)	12	N/A	50	0	3.3	24.0	12.4
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	1.60	0.22
TKN_N (mg/l)	12	1	N/A	N/A	0.20	3.26	0.99
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.28	1.10	0.69
TP (mg/l)	12	0	N/A	N/A	0.06	2.14	0.45
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J4980000** Middle Creek @ SR 1006 (Old Stage Road) near Willow Springs ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.6091 ***Longitude:*** -78.6866

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	4.5	26.2	18.9
DO (mg/l)	17	N/A	4	0	5.4	13.2	8.5
****** pH (SU)***	17	N/A	6 to 9	0	6.8	7.5	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	95	437	238
***** Fecal Coliform (/100 mls)***	12	N/A	400	3	44	1,600	167
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	39.0	20.5
Turbidity (NTU)	12	N/A	50	0	3.2	38.0	16.3
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.28	0.07
TKN_N (mg/l)	12	1	N/A	N/A	0.20	2.03	0.97
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.41	4.11	1.30
TP (mg/l)	12	0	N/A	N/A	0.05	1.54	0.41
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5002000** Middle Creek @ SR 1517 (Old Sanders Hse) near Edmonson ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5626 ***Longitude:*** -78.5756

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	2.7	27.4	18.6
DO (mg/l)	16	N/A	4	1	3.6	13.2	8.5
****** pH (SU)***	16	N/A	6 to 9	1	3.2	7.5	N/A
Conductivity (umhos/cm)	16	0	N/A	N/A	89	347	181
***** Fecal Coliform (/100 mls)***	10	N/A	400	2	39	3,600	138
Suspended Residue (mg/l)	11	0	N/A	N/A	2.7	71.6	18.6
Turbidity (NTU)	11	N/A	50	1	5.6	75.0	21.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	2	N/A	N/A	0.02	0.24	0.07
TKN_N (mg/l)	11	1	N/A	N/A	0.20	1.12	0.72
NO2_NO3_N (mg/l)	11	0	N/A	N/A	0.33	1.08	0.66
TP (mg/l)	11	0	N/A	N/A	0.05	0.46	0.18
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

Station **J5007000** Middle Creek at SR 1504, Crantock Road in Johnston County ***Stream Class:*** NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.52233 ***Longitude:*** -78.46694

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	5	N/A	N/A	N/A	10.6	21.8	18.3
DO (mg/l)	5	N/A	4	0	6.1	9.8	8.3
****** pH (SU)***	5	N/A	6 to 9	1	5.8	6.9	N/A
Conductivity (umhos/cm)	5	0	N/A	N/A	57	219	136
***** Fecal Coliform (/100 mls)***	4	N/A	400	1	82	3,500	246
Suspended Residue (mg/l)	4	0	N/A	N/A	2.6	37.8	14.9
Turbidity (NTU)	4	N/A	50	0	5.0	40.0	18.4
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	4	3	N/A	N/A	0.02	0.07	0.03
TKN_N (mg/l)	4	0	N/A	N/A	0.71	2.16	1.33
NO2_NO3_N (mg/l)	4	0	N/A	N/A	0.11	0.54	0.31
TP (mg/l)	4	0	N/A	N/A	0.06	0.33	0.18
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5010000** Middle Creek @ NC 210 near Smithfield ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5075 ***Longitude:*** -78.4013

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	10	N/A	N/A	N/A	6.4	24.7	18.1
DO (mg/l)	10	N/A	4	0	6.2	10.4	8.1
****** pH (SU)***	10	N/A	6 to 9	0	6.0	7.4	N/A
Conductivity (umhos/cm)	10	0	N/A	N/A	67	192	127
***** Fecal Coliform (/100 mls)***	8	N/A	400	2	34	3,600	157
Suspended Residue (mg/l)	8	0	N/A	N/A	3.3	87.3	24.8
Turbidity (NTU)	8	N/A	50	2	8.1	85.0	30.2
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	8	2	N/A	N/A	0.02	0.58	0.18
TKN_N (mg/l)	8	0	N/A	N/A	0.46	4.84	1.45
NO2_NO3_N (mg/l)	8	0	N/A	N/A	0.29	0.66	0.49
TP (mg/l)	8	0	N/A	N/A	0.07	2.16	0.43
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5170000** Black Creek @ SR 1162 (Black Creek Road) near Four Oaks ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.46925 ***Longitude:*** -78.45681

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	6.1	26.9	19.0
DO (mg/l)	17	N/A	4	0	5.3	10.6	7.1
****** pH (SU)***	17	N/A	6 to 9	3	5.4	6.9	N/A
Conductivity (umhos/cm)	17	1	N/A	N/A	50	87	70
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	40	3,800	141
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	91.0	17.1
Turbidity (NTU)	12	N/A	50	0	3.5	28.0	12.1
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	0.45	0.08
TKN_N (mg/l)	12	1	N/A	N/A	0.20	2.22	0.98
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.04	0.24	0.12
TP (mg/l)	12	1	N/A	N/A	0.02	0.16	0.09
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5250000** Neuse River @ SR 1201 (Richardson Bridge Road) near Cox Mill ***Stream Class:*** WS-IV NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.3741 ***Longitude:*** -78.1962

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.0	30.1	21.0
DO (mg/l)	17	N/A	4	0	5.0	9.5	7.1
****** pH (SU)***	17	N/A	6 to 9	0	6.0	7.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	66	254	130
***** Fecal Coliform (/100 mls)***	12	N/A	400	3	44	2,400	191
Suspended Residue (mg/l)	12	0	N/A	N/A	10.6	152.0	45.3
Turbidity (NTU)	12	N/A	50	2	10.0	150.0	40.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	6	N/A	N/A	0.02	0.57	0.09
TKN_N (mg/l)	12	0	N/A	N/A	0.53	1.44	0.95
NO2_NO3_N (mg/l)	12	0	10	0	0.14	0.48	0.33
TP (mg/l)	12	0	N/A	N/A	0.07	0.38	0.19
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5390000** Hannah Creek @ SR 1158 (Allens Crossroads Drive) near Benson ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.3868 ***Longitude:*** -78.511

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	6.1	26.1	19.1
DO (mg/l)	17	N/A	4	2	0.9	10.8	6.7
****** pH (SU)***	17	N/A	6 to 9	10	4.9	7.5	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	51	201	100
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	27	3,700	163
Suspended Residue (mg/l)	12	0	N/A	N/A	3.6	26.2	10.2
Turbidity (NTU)	12	N/A	50	0	3.0	33.0	13.8
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	1	N/A	N/A	0.02	0.38	0.12
TKN_N (mg/l)	12	1	N/A	N/A	0.20	1.88	0.80
NO2_NO3_N (mg/l)	12	2	N/A	N/A	0.02	0.47	0.27
TP (mg/l)	12	1	N/A	N/A	0.02	0.21	0.10
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

Station **J5390800** Hannah Creek @ SR 1227 (Ivey Road) near Benson ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.4025 ***Longitude:*** -78.4952

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	6.1	25.8	18.9
DO (mg/l)	16	N/A	4	2	2.0	11.2	6.5
**** pH (SU)*	16	N/A	6 to 9	2	5.3	6.9	N/A
Conductivity (umhos/cm)	16	1	N/A	N/A	50	231	127
*** Fecal Coliform (/100 mls)*	11	N/A	400	0	13	320	91
Suspended Residue (mg/l)	11	0	N/A	N/A	3.7	15.1	7.9
Turbidity (NTU)	11	N/A	50	0	5.6	16.0	10.6
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	2	N/A	N/A	0.02	1.59	0.28
TKN_N (mg/l)	11	1	N/A	N/A	0.20	2.02	1.09
NO2_NO3_N (mg/l)	11	0	N/A	N/A	0.02	0.46	0.17
TP (mg/l)	11	0	N/A	N/A	0.07	1.22	0.39
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

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Station **J5410000** Mill Creek @ SR 1200 (Richardson Bridge Road) near Cox Mill ***Stream Class:*** C NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.342 ***Longitude:*** -78.2162

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	6.9	28.1	19.7
DO (mg/l)	17	N/A	4	0	4.2	10.0	7.0
****** pH (SU)***	17	N/A	6 to 9	2	5.4	7.1	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	59	107	86
***** Fecal Coliform (/100 mls)***	12	N/A	400	4	60	3,800	209
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	24.0	10.0
Turbidity (NTU)	12	N/A	50	0	3.5	24.0	9.5
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	1.08	0.13
TKN_N (mg/l)	12	2	N/A	N/A	0.20	1.57	0.92
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.08	0.48	0.22
TP (mg/l)	12	1	N/A	N/A	0.02	0.30	0.11
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5500000** Falling Creek @ SR 1219 (Old Grantham Road) near Grantham ***Stream Class:*** WS-IV NSW

County: Wayne ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.3224 ***Longitude:*** -78.1282

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	6.8	26.4	19.0
DO (mg/l)	17	N/A	4	5	2.0	9.6	5.4
****** pH (SU)***	17	N/A	6 to 9	5	5.3	7.7	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	80	185	118
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	21	800	87
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	94.0	14.4
Turbidity (NTU)	12	N/A	50	0	2.4	15.0	7.4
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.32	0.11
TKN_N (mg/l)	12	0	N/A	N/A	0.53	3.22	1.16
NO2_NO3_N (mg/l)	12	0	10	0	0.11	1.00	0.37
TP (mg/l)	12	1	N/A	N/A	0.02	0.39	0.17
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5630000** Little River @ SR 2320, Riley Road near Zebulon ***Stream Class:*** HQW NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.8375 ***Longitude:*** -78.3599

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	8	N/A	N/A	N/A	10.1	24.7	17.4
DO (mg/l)	8	N/A	4	0	4.6	11.7	7.5
****** pH (SU)***	8	N/A	6 to 9	1	5.5	7.5	N/A
Conductivity (umhos/cm)	8	1	N/A	N/A	50	114	78
***** Fecal Coliform (/100 mls)***	5	N/A	400	0	40	340	91
Suspended Residue (mg/l)	5	1	N/A	N/A	2.5	4.9	3.5
Turbidity (NTU)	5	N/A	50	0	2.8	11.0	5.8
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	5	3	N/A	N/A	0.02	0.07	0.03
TKN_N (mg/l)	5	1	N/A	N/A	0.20	2.12	0.83
NO2_NO3_N (mg/l)	5	0	10	0	0.04	0.20	0.09
TP (mg/l)	5	2	N/A	N/A	0.02	0.11	0.05
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5685000** Little River at Weaver Road near Bagley ***Stream Class:*** WS-V NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5791 ***Longitude:*** -78.1723

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.3	27.7	18.8
DO (mg/l)	17	N/A	4	0	5.5	10.6	7.7
****** pH (SU)***	17	N/A	6 to 9	2	5.7	7.5	N/A
Conductivity (umhos/cm)	17	3	N/A	N/A	50	99	73
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	44	618	121
Suspended Residue (mg/l)	12	2	N/A	N/A	2.5	22.0	9.0
Turbidity (NTU)	12	N/A	50	0	5.3	40.0	14.5
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	0.40	0.10
TKN_N (mg/l)	12	0	N/A	N/A	0.50	1.84	0.93
NO2_NO3_N (mg/l)	12	0	10	0	0.07	0.37	0.21
TP (mg/l)	12	0	N/A	N/A	0.06	0.21	0.13
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

Station **J5750000** Little River at SR 2339 (Bagley Road) near Lowell Mill ***Stream Class:*** WS-V NSW

County: Johnston ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.5613 ***Longitude:*** -78.1594

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.4	27.6	18.8
DO (mg/l)	17	N/A	4	0	4.9	11.3	7.8
****** pH (SU)***	17	N/A	6 to 9	3	5.1	9.7	N/A
Conductivity (umhos/cm)	17	3	N/A	N/A	50	129	79
***** Fecal Coliform (/100 mls)***	12	N/A	400	3	56	773	170
Suspended Residue (mg/l)	12	3	N/A	N/A	2.5	26.0	9.6
Turbidity (NTU)	12	N/A	50	0	5.8	45.0	15.2
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	6	N/A	N/A	0.02	0.42	0.07
TKN_N (mg/l)	12	0	N/A	N/A	0.58	1.64	0.94
NO2_NO3_N (mg/l)	12	0	10	0	0.08	0.32	0.22
TP (mg/l)	12	0	N/A	N/A	0.06	0.31	0.14
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J5790000** Buffalo Creek @ SR 2358 (Lake Glad Road) near Webdell, N.C. ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.7697 ***Longitude:*** -78.7697

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	9.5	27.2	19.1
DO (mg/l)	16	N/A	4	0	4.1	9.5	7.5
**** pH (SU)*	16	N/A	6 to 9	1	5.7	7.8	N/A
Conductivity (umhos/cm)	16	1	N/A	N/A	50	177	85
*** Fecal Coliform (/100 mls)*	10	N/A	400	1	39	2,100	197
Suspended Residue (mg/l)	11	1	N/A	N/A	2.5	19.0	7.1
Turbidity (NTU)	11	N/A	50	0	5.5	24.0	10.1
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	4	N/A	N/A	0.02	1.75	0.23
TKN_N (mg/l)	11	0	N/A	N/A	0.49	1.79	1.18
NO2_NO3_N (mg/l)	11	0	N/A	N/A	0.04	0.57	0.18
TP (mg/l)	11	1	N/A	N/A	0.02	0.26	0.12
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

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Station **J5930000** Little River @ US 581 near Cherry Hospital ***Stream Class:*** C NSW

County: Wayne ***Sub-Basin:*** 03020201 ***Lattitude:*** 35.393 ***Longitude:*** -78.0258

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	7.4	29.6	20.6
DO (mg/l)	17	N/A	4	0	5.7	10.3	7.5
****** pH (SU)***	17	N/A	6 to 9	3	5.5	7.3	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	52	190	100
***** Fecal Coliform (/100 mls)***	12	N/A	400	3	9	5,600	165
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	69.0	15.7
Turbidity (NTU)	12	N/A	50	1	2.4	60.0	16.7
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	0.14	0.05
TKN_N (mg/l)	12	0	N/A	N/A	0.40	1.85	0.83
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.13	0.92	0.45
TP (mg/l)	12	1	N/A	N/A	0.02	0.31	0.15
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J6010950** Walnut Creek @ SR 1730 (Saint Johns Church Road) near Walnut Creek ***Stream Class:*** C NSW

County: Wayne ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.2817 ***Longitude:*** -77.8686

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	12.5	28.8	20.3
DO (mg/l)	17	N/A	4	0	4.5	9.3	6.6
****** pH (SU)***	17	N/A	6 to 9	4	5.4	7.6	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	75	141	98
***** Fecal Coliform (/100 mls)***	12	N/A	400	1	2	845	30
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	38.2	10.5
Turbidity (NTU)	12	N/A	50	0	2.1	10.0	5.0
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.81	0.18
TKN_N (mg/l)	12	1	N/A	N/A	0.40	6.39	1.68
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.17	1.90	0.98
TP (mg/l)	12	0	N/A	N/A	0.03	0.62	0.13
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J6024000** Neuse River @ SR 1731 (Piney Grove Road) near Seven Springs ***Stream Class:*** C NSW

County: Wayne ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.229 ***Longitude:*** -77.846

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	9.1	29.6	21.2
DO (mg/l)	17	N/A	4	0	4.7	11.2	7.2
****** pH (SU)***	17	N/A	6 to 9	0	6.3	8.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	68	227	129
***** Fecal Coliform (/100 mls)***	12	N/A	400	1	13	3,300	61
Suspended Residue (mg/l)	12	0	N/A	N/A	3.7	900.0	99.9
Turbidity (NTU)	12	N/A	50	2	5.2	650.0	71.8
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.56	0.09
TKN_N (mg/l)	12	1	N/A	N/A	0.20	9.97	1.70
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.21	0.80	0.43
TP (mg/l)	12	0	N/A	N/A	0.07	1.03	0.29
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J6044400** Bear Creek at SR 1603, Washington Street near LaGrange ***Stream Class:*** C Sw NSW

County: Lenoir ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.3137 ***Longitude:*** -77.8153

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	13.0	30.1	19.6
DO (mg/l)	17	N/A	4	0	5.0	9.7	7.4
****** pH (SU)***	17	N/A	6 to 9	2	5.8	8.1	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	87	147	128
***** Fecal Coliform (/100 mls)***	12	N/A	400	1	46	7,000	132
Suspended Residue (mg/l)	12	0	N/A	N/A	3.4	56.6	17.3
Turbidity (NTU)	12	N/A	50	0	4.5	45.0	10.1
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.87	0.14
TKN_N (mg/l)	12	0	N/A	N/A	0.45	1.39	0.91
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.29	3.14	2.27
TP (mg/l)	12	0	N/A	N/A	0.07	0.46	0.17
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J6044500** Bear Creek @ SR 1311 (Bear Creek Road) near Kinston ***Stream Class:*** WS-IV Sw N

County: Lenoir ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.2489 ***Longitude:*** -77.7843

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	13.2	28.8	19.6
DO (mg/l)	17	N/A	4	0	5.5	9.4	7.7
****** pH (SU)***	17	N/A	6 to 9	3	5.8	8.5	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	98	136	119
***** Fecal Coliform (/100 mls)***	12	N/A	400	1	33	6,000	84
Suspended Residue (mg/l)	12	2	N/A	N/A	2.5	60.8	12.0
Turbidity (NTU)	12	N/A	50	0	3.3	40.0	8.7
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.28	0.11
TKN_N (mg/l)	12	1	N/A	N/A	0.20	2.05	1.06
NO2_NO3_N (mg/l)	12	0	10	0	1.39	2.72	2.08
TP (mg/l)	12	0	N/A	N/A	0.05	4.13	0.57
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	25	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J6055000** Mosley Creek @ SR 1327 (Willey Measley Road) near LaGrange ***Stream Class:*** C Sw NSW

County: Lenoir ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.3119 ***Longitude:*** -77.7313

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	13.1	30.2	19.3
DO (mg/l)	17	N/A	4	0	5.9	9.5	7.7
****** pH (SU)***	17	N/A	6 to 9	1	5.9	8.3	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	73	141	114
***** Fecal Coliform (/100 mls)***	12	N/A	400	10	220	5,500	654
Suspended Residue (mg/l)	12	0	N/A	N/A	2.6	100.0	16.0
Turbidity (NTU)	12	N/A	50	2	2.6	95.0	18.8
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.31	0.11
TKN_N (mg/l)	12	0	N/A	N/A	0.52	12.16	2.54
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.73	4.16	2.59
TP (mg/l)	12	0	N/A	N/A	0.09	2.77	0.51
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J6150000** Neuse River @ NC 11 Bypass at Kinston ***Stream Class:*** C NSW

County: Lenoir ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.2587 ***Longitude:*** -77.5835

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	9.2	31.6	21.3
DO (mg/l)	17	N/A	4	0	4.0	10.8	6.9
****** pH (SU)***	17	N/A	6 to 9	0	6.3	9.0	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	70	219	134
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	26	845	92
Suspended Residue (mg/l)	12	0	N/A	N/A	5.4	120.0	41.9
Turbidity (NTU)	12	N/A	50	1	7.8	55.0	21.0
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.64	0.09
TKN_N (mg/l)	12	1	N/A	N/A	0.20	1.59	0.76
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.23	0.71	0.47
TP (mg/l)	12	1	N/A	N/A	0.02	0.36	0.16
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J6250000** Neuse River @ NC 55 near Graingers ***Stream Class:*** C NSW

County: Lenoir ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.2957 ***Longitude:*** -77.4962

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	8.7	28.8	21.0
DO (mg/l)	16	N/A	4	0	5.5	9.3	7.4
****** pH (SU)***	16	N/A	6 to 9	2	6.2	11.4	N/A
Conductivity (umhos/cm)	16	0	N/A	N/A	62	218	134
***** Fecal Coliform (/100 mls)***	11	N/A	400	1	11	3,500	75
Suspended Residue (mg/l)	11	0	N/A	N/A	5.6	52.3	19.8
Turbidity (NTU)	11	N/A	50	0	7.8	50.0	20.6
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	4	N/A	N/A	0.02	0.24	0.07
TKN_N (mg/l)	11	1	N/A	N/A	0.20	1.36	0.79
NO2_NO3_N (mg/l)	11	0	N/A	N/A	0.26	0.89	0.48
TP (mg/l)	11	1	N/A	N/A	0.02	1.21	0.21
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J6410000** Little Creek @ NC 97 near Zebulon ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.8279 ***Longitude:*** -78.3025

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.4	24.9	17.8
DO (mg/l)	17	N/A	4	0	4.5	9.8	7.2
****** pH (SU)***	17	N/A	6 to 9	1	5.8	7.3	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	45	120	98
***** Fecal Coliform (/100 mls)***	10	N/A	400	4	210	946	428
Suspended Residue (mg/l)	12	0	N/A	N/A	2.7	34.5	9.7
Turbidity (NTU)	12	N/A	50	0	4.4	32.0	10.0
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.16	0.06
TKN_N (mg/l)	12	2	N/A	N/A	0.20	1.49	0.78
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.24	0.52	0.38
TP (mg/l)	12	2	N/A	N/A	0.02	0.17	0.09
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J6450000** Little Creek @ NC 39 near Zebulon ***Stream Class:*** C NSW

County: Wake ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.8125 ***Longitude:*** -78.2681

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	10.7	26.8	19.6
DO (mg/l)	17	N/A	4	0	6.3	10.0	8.1
****** pH (SU)***	17	N/A	6 to 9	0	6.5	7.6	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	94	519	288
***** Fecal Coliform (/100 mls)***	11	N/A	400	2	52	560	189
Suspended Residue (mg/l)	12	2	N/A	N/A	2.5	34.0	11.6
Turbidity (NTU)	12	N/A	50	3	3.2	370.0	47.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	6	N/A	N/A	0.02	0.11	0.04
TKN_N (mg/l)	12	0	N/A	N/A	0.33	3.93	1.27
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.37	1.10	0.63
TP (mg/l)	12	1	N/A	N/A	0.02	1.56	0.31
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J6500000** Moccasin Creek @ SR 1131 (Antioch Church Road) near Conner ***Stream Class:*** C NSW

County: Wilson ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.7301 ***Longitude:*** -78.1895

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	9.8	26.0	18.8
DO (mg/l)	17	N/A	4	1	3.3	11.2	7.4
****** pH (SU)***	17	N/A	6 to 9	0	6.5	7.3	N/A
Conductivity (umhos/cm)	17	1	N/A	N/A	50	104	86
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	68	5,300	218
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	252.0	29.1
Turbidity (NTU)	12	N/A	50	0	6.0	39.0	14.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	0.17	0.07
TKN_N (mg/l)	12	0	N/A	N/A	0.25	1.98	0.93
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.05	0.49	0.17
TP (mg/l)	12	0	N/A	N/A	0.04	0.27	0.12
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

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Station **J6680000** Turkey Creek @ SR 1101 (Claude Lewis Rodd) near Middlesex ***Stream Class:*** C NSW

County: Nash ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.7519 ***Longitude:*** -78.1597

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	9.2	26.1	19.2
DO (mg/l)	17	N/A	4	2	2.5	8.2	6.1
**** pH (SU)*	17	N/A	6 to 9	1	5.7	7.1	N/A
Conductivity (umhos/cm)	17	1	N/A	N/A	46	94	70
*** Fecal Coliform (/100 mls)*	12	N/A	400	1	38	1,000	97
Suspended Residue (mg/l)	12	0	N/A	N/A	3.4	130.0	16.2
Turbidity (NTU)	12	N/A	50	0	9.1	34.0	14.4
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	0.24	0.08
TKN_N (mg/l)	12	0	N/A	N/A	0.41	4.58	1.24
NO2_NO3_N (mg/l)	12	1	N/A	N/A	0.02	0.21	0.13
TP (mg/l)	12	1	N/A	N/A	0.02	6.63	0.63
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

Station **J6765000** Contentnea Creek at Willow Springs drive near Dixie ***Stream Class:*** C Sw NSW

County: Wilson ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.6838 ***Longitude:*** -77.941

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	10.1	30.8	21.9
DO (mg/l)	17	N/A	4	0	5.8	10.3	7.8
**** pH (SU)*	17	N/A	6 to 9	0	6.3	7.5	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	50	85	73
*** Fecal Coliform (/100 mls)*	12	N/A	400	2	7	1,300	57
Suspended Residue (mg/l)	12	0	N/A	N/A	3.5	76.5	21.9
Turbidity (NTU)	12	N/A	50	0	4.5	20.0	9.1
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	4	N/A	N/A	0.02	0.39	0.08
TKN_N (mg/l)	12	1	N/A	N/A	0.20	2.35	1.05
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.03	0.40	0.18
TP (mg/l)	12	2	N/A	N/A	0.02	0.17	0.08
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

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Station **J6890000** Contentnea Creek @ SR 1622 (Evansdale Road) near Wilson ***Stream Class:*** C Sw NSW

County: Wilson ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.6429 ***Longitude:*** -77.8902

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	11.5	30.7	21.3
DO (mg/l)	16	N/A	4	0	4.9	9.4	7.4
****** pH (SU)***	16	N/A	6 to 9	0	6.4	7.2	N/A
Conductivity (umhos/cm)	16	0	N/A	N/A	55	263	135
***** Fecal Coliform (/100 mls)***	10	N/A	400	0	11	240	52
Suspended Residue (mg/l)	11	0	N/A	N/A	2.6	78.3	13.3
Turbidity (NTU)	11	N/A	50	1	4.1	70.0	13.9
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	2	N/A	N/A	0.02	0.35	0.11
TKN_N (mg/l)	11	0	N/A	N/A	0.57	4.09	1.26
NO2_NO3_N (mg/l)	11	1	N/A	N/A	0.02	0.92	0.51
TP (mg/l)	11	0	N/A	N/A	0.04	0.27	0.10
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

Station **J7210000** Contentnea Creek @ NC 58 near Stantonsburg ***Stream Class:*** C Sw NSW

County: Wilson ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.5861 ***Longitude:*** -77.8111

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	11.2	30.6	21.7
DO (mg/l)	17	N/A	4	0	4.7	9.1	7.2
**** pH (SU)*	17	N/A	6 to 9	0	6.4	7.6	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	63	275	130
*** Fecal Coliform (/100 mls)*	11	N/A	400	2	42	879	99
Suspended Residue (mg/l)	12	2	N/A	N/A	2.5	42.0	9.1
Turbidity (NTU)	12	N/A	50	0	4.3	13.0	8.3
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.13	0.06
TKN_N (mg/l)	12	0	N/A	N/A	0.55	8.20	1.59
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.13	0.62	0.35
TP (mg/l)	12	1	N/A	N/A	0.02	0.26	0.12
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

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Station **J7240000** Toisnot Swamp @ SR 1539 (Sand Pit Road) near Stantonsburg ***Stream Class:*** C Sw NSW

County: Wilson ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.5976 ***Longitude:*** -77.7947

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	10.6	28.0	19.7
DO (mg/l)	17	N/A	4	1	3.3	9.2	7.0
****** pH (SU)***	17	N/A	6 to 9	0	6.1	7.3	N/A
Conductivity (umhos/cm)	17	1	N/A	N/A	50	207	99
***** Fecal Coliform (/100 mls)***	12	N/A	400	0	39	280	82
Suspended Residue (mg/l)	12	5	N/A	N/A	2.5	36.0	7.4
Turbidity (NTU)	12	N/A	50	0	5.2	40.0	10.3
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	5	N/A	N/A	0.02	0.17	0.07
TKN_N (mg/l)	12	1	N/A	N/A	0.20	23.77	2.80
NO2_NO3_N (mg/l)	12	1	N/A	N/A	0.02	0.42	0.20
TP (mg/l)	12	1	N/A	N/A	0.02	0.28	0.12
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J7325000** Nahunta Swamp @ NC 58 near Contentnea ***Stream Class:*** C Sw NSW

County: Greene ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.5081 ***Longitude:*** -77.7455

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	10.5	27.5	19.6
DO (mg/l)	17	N/A	4	0	4.3	10.1	7.6
**** pH (SU)*	17	N/A	6 to 9	1	5.9	7.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	71	133	108
*** Fecal Coliform (/100 mls)*	12	N/A	400	2	42	2,300	205
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	120.0	14.1
Turbidity (NTU)	12	N/A	50	1	4.2	80.0	13.3
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.18	0.08
TKN_N (mg/l)	12	1	N/A	N/A	0.20	3.26	1.25
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.32	2.00	1.39
TP (mg/l)	12	1	N/A	N/A	0.02	0.54	0.14
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

2024 LNBA Monitoring Report

Station **J7330000** Contentnea Creek @ US 13 near Snow Hill ***Stream Class:*** C Sw NSW

County: Greene ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.4585 ***Longitude:*** -77.6753

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	10.9	30.4	21.5
DO (mg/l)	17	N/A	4	0	4.7	11.0	7.4
**** pH (SU)*	17	N/A	6 to 9	0	6.1	7.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	68	169	116
*** Fecal Coliform (/100 mls)*	12	N/A	400	1	21	460	54
Suspended Residue (mg/l)	12	3	N/A	N/A	2.5	9.4	5.4
Turbidity (NTU)	12	N/A	50	0	5.1	13.0	7.5
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.17	0.07
TKN_N (mg/l)	12	1	N/A	N/A	0.20	2.00	0.88
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.27	0.97	0.58
TP (mg/l)	12	1	N/A	N/A	0.02	0.28	0.11
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

2024 LNBA Monitoring Report

Station **J7690000** Little Contentnea Creek @ SR 1218 (Chinquapin Road) near Farmville ***Stream Class:*** C Sw NSW

County: Pitt ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.5881 ***Longitude:*** -77.5416

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	16	N/A	N/A	N/A	10.9	27.1	19.7
DO (mg/l)	16	N/A	4	2	2.4	9.3	6.3
****** pH (SU)***	16	N/A	6 to 9	0	6.0	7.4	N/A
Conductivity (umhos/cm)	16	0	N/A	N/A	58	461	162
***** Fecal Coliform (/100 mls)***	12	N/A	400	4	36	4,400	263
Suspended Residue (mg/l)	12	0	N/A	N/A	4.0	132.0	17.6
Turbidity (NTU)	12	N/A	50	0	5.7	35.0	13.2
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	11	0	N/A	N/A	0.04	0.94	0.34
TKN_N (mg/l)	11	0	N/A	N/A	0.65	4.46	1.68
NO2_NO3_N (mg/l)	11	1	N/A	N/A	0.02	0.61	0.40
TP (mg/l)	11	0	N/A	N/A	0.09	0.74	0.35
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J7740000** Little Contentnea Creek @ SR 1110 (HWY 903) near Scuffleton ***Stream Class:*** C Sw NSW

County: Pitt ***Sub-Basin:*** 03020203 ***Lattitude:*** 35.4567 ***Longitude:*** -77.4854

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	11.6	25.8	20.2
DO (mg/l)	17	N/A	4	2	2.5	8.5	6.2
****** pH (SU)***	17	N/A	6 to 9	0	6.3	7.4	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	58	260	158
***** Fecal Coliform (/100 mls)***	12	N/A	400	2	56	2,600	155
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	355.0	46.5
Turbidity (NTU)	12	N/A	50	0	5.1	50.0	10.7
Chlorophyll-a (ug/l)	0	0	40	0			
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.20	0.07
TKN_N (mg/l)	12	1	N/A	N/A	0.20	1.82	1.05
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.02	0.93	0.50
TP (mg/l)	12	0	N/A	N/A	0.06	1.11	0.32
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***

2024 LNBA Monitoring Report

Station **J7850000** Neuse River @ SR 1470 (Maple Cypress Road) at the boat ramp dock upstream of the bridge. ***Stream Class:*** C Sw NSW

County: Craven ***Sub-Basin:*** 03020202 ***Lattitude:*** 35.31368 ***Longitude:*** -77.30287

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	8.3	31.3	21.0
DO (mg/l)	17	N/A	4	0	4.0	11.4	7.2
**** pH (SU)*	17	N/A	6 to 9	1	6.1	9.7	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	68	220	136
*** Fecal Coliform (/100 mls)*	12	N/A	400	1	7	1,800	45
Suspended Residue (mg/l)	12	0	N/A	N/A	4.0	58.7	20.0
Turbidity (NTU)	12	N/A	50	0	5.6	29.0	14.0
Chlorophyll-a (ug/l)	8	0	40	0	1.26	15.00	6.75
NH3_N (mg/l)	12	2	N/A	N/A	0.02	0.80	0.14
TKN_N (mg/l)	12	0	N/A	N/A	0.20	1.38	0.87
NO2_NO3_N (mg/l)	12	0	N/A	N/A	0.24	0.90	0.50
TP (mg/l)	12	0	N/A	N/A	0.06	0.58	0.18
Cadmium (ug/l)	0	0	2	0			
Chromium (ug/l)	0	0	50	0			
Copper (ug/l)	0	0	7	0			
Nickel (ug/l)	0	0	88	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	50	0			
*****Aluminum (ug/l)*	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	N/A	N/A			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.012	N/A			

*Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.*
*** The Fecal Coliform average is a geometric mean.*
**** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions*
***** The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.*

2024 LNBA Monitoring Report

Station **J8870000** Trent River @ the Alfred Cunningham Drawbridge on E. Front Street, New Bern ***Stream Class:*** SB Sw NSW

County: Craven ***Sub-Basin:*** 03020204 ***Lattitude:*** 35.10159 ***Longitude:*** -77.03708

	N	N<RL	Ref	N >Ref or N< Ref	Minimum	Maximum	* Average
Temperature (C)	17	N/A	N/A	N/A	9.3	31.2	21.3
DO (mg/l)	17	N/A	5	3	3.3	9.6	6.5
****** pH (SU)***	17	N/A	6.8 to 8.5	1	6.7	7.9	N/A
Conductivity (umhos/cm)	17	0	N/A	N/A	547	18,944	6,213
***** Fecal Coliform (/100 mls)***	12	N/A	400	0	19	159	53
Suspended Residue (mg/l)	12	1	N/A	N/A	2.5	150.0	17.4
Turbidity (NTU)	12	N/A	25	0	2.5	8.1	5.0
Chlorophyll-a (ug/l)	8	0	40	1	2.00	46.00	14.57
NH3_N (mg/l)	12	3	N/A	N/A	0.02	0.39	0.09
TKN_N (mg/l)	12	0	N/A	N/A	0.49	1.85	0.99
NO2_NO3_N (mg/l)	12	0	10	0	0.08	0.40	0.25
TP (mg/l)	12	0	N/A	N/A	0.05	1.00	0.23
Cadmium (ug/l)	0	0	5	0			
Chromium (ug/l)	0	0	20	0			
Copper (ug/l)	0	0	3	0			
Nickel (ug/l)	0	0	8	0			
Lead (ug/l)	0	0	25	0			
Zinc (ug/l)	0	0	86	0			
*******Aluminum (ug/l)***	0	0	87	0			
Iron (ug/l)	0	0	1,000	0			
Manganese (ug/l)	0	0	200	0			
Arsenic (ug/l)	0	0	10	0			
Mercury (ug/l)	0	0	0.025	N/A			

Notes: * Results below the laboratory reporting limit (<RL) are included in the calculation as if they were at the reporting level.
***** The Fecal Coliform average is a geometric mean.***
****** Tidal salt waters classified as swamp waters may have a pH as low as 4.3 if it is the result of natural conditions***
******* The aluminum reference level (Ref) is from the EPA's national recommended water quality criteria.***