2024 Consumer Confidence Report (CCR) Certification Form

Water System Name: Town of Princeton

Water System No.: NC0351050 Report Year: 2024 Population Served: 1326

The Community Water System (CWS) named above hereby confirms that all provisions under 40 CFR parts 141 and 142 requiring the development of, distribution of, and notification of a consumer confidence report have been executed. Further, the CWS certifies the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency by their NC certified laboratory. In addition, if this report is being used to meet Tier 3 Public Notification requirements, as denoted by the checked box below, the CWS certifies that public notification has been provided to its consumers in accordance with the requirements of 40 CFR 141.204(d).

Certified by: Elizabeth Sasser Title: Assistant Town Clerk

Signature: _____ Phone #: 919-936-8171

Delivery Achieved Date: _____ Date Reported to State: _____

XX The CCR includes the mandated Tier 3 Public Notice for a monitoring/reporting violation (check box, if yes).

Check **all** methods used for distribution (see instructions on back for delivery requirements and methods):

☐ A copy the full report was sent to all customers via the following method(s):

☐ US Mail ☐ Hand Delivery ☐ Email *(A copy of the email must be submitted with the report.)*

☐ Notification of the availability of the full report was delivered to all customers via the following method(s): (*A copy of the notice must be submitted with the report, and this method cannot be used if a Tier 3 Public Notice is included in the report.*)

☐ US Mail ☐ Hand Delivery ☐ Email ☐ Posting (*location must be specified in the good faith efforts section.*)

X **"Good faith" efforts** (in addition to one of the above required methods) were used to reach non-bill paying consumers such as industry employees, apartment tenants, etc. These efforts included the following methods:

- X posting the CCR on the Internet at URL: Here is the link to take you right to the CCR 2024_CCR-Princeton(3)JC.docx
- ☐ mailing the CCR to postal patrons within the service area
- ☐ advertising the availability of the CCR in news media (attach copy of announcement)
- ☐ publication of the CCR in local newspaper (attach copy of newspaper)
- X posting the CCR in public places such as: (attach list if needed) Town Hall
- ☐ delivering multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers
- ☐ delivery to community organizations such as: (attach list if needed) _____

2024 Annual Drinking Water Quality Report
Town of Princeton
Water System Number: NC 03-51-050

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact Buddy Sanders at 919-936-8171. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Monday of each month at 7PM at Town Hall.**

What EPA Wants You to Know

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

When You Turn on Your Tap, Consider the Source

The water that is used by this system is surface water purchased from Johnston Co-East - PWSID# NC 4051018.
Johnston County's Complete CCR is attached to the end of this document.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for **Johnston County East** was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Neuse River	Higher	September 2020

The complete SWAP Assessment report for **Johnston County East** may be viewed on the Web at: https://www.ncwater.org/?page=600 Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@deq.nc.gov. Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment staff by phone at (919) 707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.). Johnston County CCR attached at the end of Town of Princeton CCR.

Violations that Your Water System Received for the Report Year

We have one violation to report that during the time period of 2024, Monitoring, Routine (DBP) Major. Staff were informed of dates samples were required to be collected. We returned to compliance 5/15/24. This was the only violation that occurred in the time period of 1/1/24 to 12/31/24.

Important Drinking Water Definitions:

- ***Not-Applicable (N/A)*** – Information not applicable/not required for that particular water system or for that particular rule.
- ***Non-Detects (ND)*** - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.
- ***Parts per million (ppm) or Milligrams per liter (mg/L)*** - One part per million corresponds to one minute in two years or a single penny in $10,000.
- ***Parts per billion (ppb) or Micrograms per liter (ug/L)*** - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- ***Parts per trillion (ppt) or Nanograms per liter (nanograms/L)*** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

- ***Parts per quadrillion (ppq) or Picograms per liter (picograms/L)*** - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

- ***Picocuries per liter (pCi/L)*** - Picocuries per liter is a measure of the radioactivity in water.

- ***Million Fibers per Liter (MFL)*** - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

- ***Nephelometric Turbidity Unit (NTU)*** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

- ***Variances and Exceptions*** – State or EPA permission not to meet an MCL or Treatment Technique under certain conditions.

- ***Action Level (AL)*** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

- ***Treatment Technique (TT) -*** A required process intended to reduce the level of a contaminant in drinking water.

- ***Maximum Residual Disinfection Level (MRDL)*** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

- ***Maximum Residual Disinfection Level Goal (MRDLG)*** – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

- ***Locational Running Annual Average (LRAA)*** – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

- ***Running Annual Average (RAA)*** – The average of sample analytical results for samples taken during the previous four calendar quarters.

- ***Level 1 Assessment -*** *A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.*

- ***Level 2 Assessment -*** *A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.*

- ***Maximum Contaminant Level (MCL)*** - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

- ***Maximum Contaminant Level Goal (MCLG)*** - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we <u>detected</u> in the last round of sampling for each particular contaminant group. The presence of contaminants does <u>not</u> necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2024.** The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Lead and Copper Contaminants

Contaminant (units)	Sample Dates	Your Water (90^{th} Percentile)	Number of sites found above the AL	Range Low	Range High	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90^{th} percentile)	9/5/24 & 9/17/24	.12 (ppm)	0	0	0.127 (ppm)	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits

Lead (ppb) (90^{th} percentile)	9/5/24 & 9/17/24	16 (PPB)	2	0 39 (ppb)	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

The table above summarizes our most recent lead and copper tap sampling data. If you would like to review the complete lead tap sampling data, please email us at esasser@myprincetonnc.com.

We have been working to identify service line materials throughout the water system and prepared an inventory of all service lines in our water system. To access this inventory, Hard copy available at Town Hall.

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Town of Princeton is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Town of Princeton at 919-936-8171. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at *http://www.epa.gov/safewater/lead*.

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Total Trihalomethanes (TTHM) and Haloacetic Acids (five) (HAA5)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb)	2024	N	77 (ppb)	44-77 (ppb)	N/A	80	Byproduct of drinking water disinfection
HAA5 (ppb)	2024	N	42 (ppb)	33-42 (ppb)	N/A	60	Byproduct of drinking water disinfection

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Disinfectant Residuals Summary

	MRDL Violation Y/N	Your Water (RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	N	0.8 (ppm)	0.32 - 1.44 (ppm)	4	4.0	Water additive used to control microbes
Chloramines (ppm)	N	0.84 (ppm)	0.02-1.71 (ppm)	4	4.0	Water additive used to control microbes

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Violation Awareness Date: 5/15/2024

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the compliance period specified in the table below, we ['did not monitor or test' or 'did not complete all monitoring or testing'] for the contaminants listed and therefore cannot be sure of the quality of your drinking water during that time.

CONTAMINANT GROUP**	FACILITY ID NO./ SAMPLE POINT ID	COMPLIANCE PERIOD BEGIN DATE	NUMBER OF SAMPLES/ SAMPLING FREQUENCY	WHEN SAMPLES WERE TAKEN (Returned to Compliance)
TTHM & HAA5	D01/ B01 & B02	1/1/2024	2/QUARTER	**5/15/2024**

(HAA5)- Haloacetic Acids - include Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid.
(
(TTHM) - Total Trihalomethanes - include Chloroform, Bromoform, Bromodichloromethane, and Dibromochloromethane.
(

What should I do? There is nothing you need to do at this time**.**

What is being done? We have reviewed our sampling schedule with staff to ensure that this violation does not occur again.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information about this violation, please contact the responsible person listed in the first paragraph of this document.

2024 Annual Drinking Water Quality Report
Johnston County Public Utilities
Water system number East: 40-51-018
Water system number West: 03-51-070

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about from where your water comes, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information.

Éste informe contiene información muy importante sobre la calidad de su agua potable. Una copia de este reporte en español está disponible en la Oficina de Servicio Público en el Centro de Land Use.

The Johnston County water system has two service areas called **Johnston East** and **Johnston West**. The Johnston East service area is generally described as the area south of I-95. The Little River Water District along with the western portion of the Buffalo Water District and the southeast portion of the O'Neals Water District are included in Johnston East. The Johnston West service area is generally described as the area north of I-95, with the exceptions of the Little River Water District along with the western portion of the Buffalo Water District and the southeast portion of the O'Neals Water District. Please refer to the map. Water supplied to Johnston East has free chlorine as a secondary disinfectant. Water supplied to Johnston West has chloramines (a combination of chlorine and ammonia) as a secondary disinfectant. The quality data for both service areas are provided to all customers.

We provide service for communities, towns and cities throughout our county including most unincorporated parts of the County and the towns of Archer Lodge, Four Oaks, Princeton, Kenly, Clayton, and Wilson's Mills. The County system also supplements the towns of Micro, Benson, Pine Level, Smithfield, Selma, and Fuquay Varina with additional water.

When You Turn on Your Tap, Consider the Source

In 2024, our water department produced and provided approximately **3.1** billion gallons of water to our customers. Our water source is surface water from the Neuse River, which forms just above Durham where the Eno and Flat Rivers converge. The Neuse River flows approximately 190 miles through eastern North Carolina to the Pamlico Sound. The Johnston County intake and treatment facility are located one half mile east of Wilson's Mills, N.C. There are two reservoirs on site. Each reservoir contains 35 million gallons. The treatment system has five main steps to remove or reduce harmful contaminants: presedimentation, coagulation, clarification, filtration by multimedia high rate filters, and disinfection. Once treatment is complete, water is pumped into elevated storage tanks for distribution throughout the water system. Johnston County also purchases water from the Town of Smithfield, Harnett County, City of Raleigh, City of Wilson, Sampson County, Northwest Wayne Sanitary District and Southwest Wayne Sanitary District on a bulk basis. The source of the Smithfield and City of Raleigh supply is the Neuse River, and the Harnett County supply is the Cape Fear River. The City of Wilson utilizes Buckhorn Reservoir as their water supply source, while Sampson County and the Wayne Sanitary Districts have ground water supply wells. Their treatment processes are similar to the County's, and water purchased from bulk suppliers mixes with water produced by the County in the distribution system. Annual report(s) for the County's bulk water suppliers can be viewed on each of their websites. ** Please see last page of this report for links to all purchased water systems water quality reports.

Current Map

The U.S. Environmental Protection Agency (EPA) wants you to Know:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm

water runoff and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

In 2021, EPA finalized a major update to rules regarding lead and copper in drinking water. The update, known as the Lead and Copper Rule Revision (LCRR), provides an improved level of public health protection. The revisions focus on providing increased levels of protection from lead exposure in drinking water to children at schools and childcare facilities, identifying and removing lead service lines, and providing information about lead in drinking water to the community. Johnston County has consistently maintained compliance with all water quality requirements, including full compliance with the original Lead and Copper Rule. We have been working to identify service line materials throughout the water system and prepared an inventory of all service lines in our water system. To access this inventory follow the link below: https://www.johnstonnc.gov/ut2/content.cfm?page_desc=LeadCAST

Additional information the LCRR can be found at: https://www.epa.gov/ground-water-and-drinking-water/review-national-primary-drinking-water-regulation-lead-and-copper

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Johnston County Public Utilities is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Johnston County Public Utilities, Chandra Farmer, P.E. Director of Utilities (919)209-8333. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessments are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower. The relative susceptibility rating of the source for Johnston County Public Utilities was determined by combining the contaminant rating (number and location of PCSs within watershed) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the watershed and its delineated assessment area.). It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area. The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)		
Source Name	**Susceptibility Rating**	**SWAP Report Date**
Neuse River	Higher	September 2020

The complete SWAP Assessment report for Johnston County Public Utilities may be viewed on the Web at: https://www.ncwater.org/?page=600. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634, or email request to swap@deq.nc.gov. Please indicate the system name of Johnston County, PWS# 03-51-070, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098. It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.

Help Protect Your Source Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.).

If you have any questions about this report or concerning your water utility, please contact Chandra Farmer, P.E., Director of Utilities, by calling (919) 209-8333 or by writing to this address: Johnston County Public Utilities, PO Box 2263, Smithfield, North Carolina 27577. We want our valued customers to be informed about their water utility. You can attend Board of Commissioners meetings on the first Monday of each month, at 10:00 a.m., in the Johnston County Courthouse, at 212 Market Street, Smithfield, NC. Find out more on the Internet at www.jcutil.com/ccr.

Important Drinking Water Definitions:

AL – Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL – Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG – Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MRDLG - Maximum Residual Disinfection Level Goal – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL - Maximum Residual Disinfection Level – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
90th Percentile – 90% of samples are equal to or less than the number in the chart.
ND – Non-Detects – Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.
NTU – Nephelometric Turbidity Units – A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
N/A – Not-applicable – Information not applicable/not required for that particular water system or for that particular rule.
Picocuries per liter (pCi/L) – Picocuries per liter is a measure of the radioactivity in the water.
ppb – parts per billion – micrograms per liter (ug/l) – One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
ppm – parts per million – milligrams per liter (mg/l) – One part per million corresponds to one minute in two years or a single penny in $10,000.

RAA – Running annual average-The average of sample analytical results for samples taken during the previous four calendar quarters.
TT – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
LRAA – Locational Running Annual Average (LRAA) – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.
Level 1 Assessment - A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment - A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Variances and Exceptions – State or EPA permission not to meet an MCL or Treatment Technique under certain conditions.

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from analyses completed from January 1 through December 31, 2024.** The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Water Quality Data Table(s) Johnston County WEST PWS# 03-51-070: 2024

Disinfectant Residuals Summary 2024

Contaminant(units)	Year Sampled	MRDL Violation Y/N	Your Water (RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2024	N	0.9	0.09 – 3.67	4	4.0	Water additive used to control microbes
Chloramines (ppm)	2024	N	2.59	1.05 – 3.97	4	4.0	Water additive used to control microbes

Stage 2 Disinfection Byproduct Compliance – Based on Locational Running Annual Average (LRAA) 2024

Disinfection Byproduct	Units	MCLG	MCL	Your Water (highest LRAA)	Range Low High	Year Sampled	MCL Violation (Yes / No)	Likely Source of Contamination
TTHM (ppb)	ppb	N/A	80	49	19 - 63	2024	No	Byproduct of drinking water disinfection
HAA5 (ppb)	ppb	N/A	60	38	11 -66	2024	No	Byproduct of drinking water chlorination

For TTHM: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems, and may have and increased risk of getting cancer.
For HAA5: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased chance of getting cancer

Turbidity* 2024 Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU) - Highest single turbidity measurement	N	0.034 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits	N	100 %	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	

*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

Lead and Copper Contaminants: Pregnant women, infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791). **In 2024, we completed two rounds of monitoring. (May and September)**

Contaminant (units)	Sample Date	Your Water (90th Percentile)	Number of sites found above the AL	Range Low High	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90th percentile)	5/2024	0.12	0	ND – 0.211	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	5/2024	0	1	4.0 - 89	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) (90th percentile)	9/2024	0.097	0	ND – 0.231	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	9/2024	0	0	ND - ND	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

The table above summarizes our most recent lead and copper tap sampling data. If you would like to review the complete lead tap sampling data, please email us at : publicutilities@johnstonnc.gov
We have been working to identify service lines throughout the water system and prepared an inventory of all service lines in our water system. To access this inventory, https://www.johnstonnc.gov/ut2/content.cfm?page_desc=LeadCAST

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before and during pregnancy can have an increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Total Organic Carbon (TOC) **2024**

Contaminant (units)	TT Violation Yes/No	Your Water (lowest RAA)	Range Monthly Removal Ratio Low - High	MCLG	Likely Source of Contamination	Treatment Technique (TT) violation if:
Total Organic Carbon (TOC) Removal Ratio (no units)	No	1.30	1.20 – 1.52	N/A	Naturally present in the environment	Removal Ratio RAA <1.00 and alternative criteria was not met

Water Characteristics Contaminants: The PWS section requires monitoring of other misc contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic or aesthetic effects (such as taste, odor, and or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Contaminant (units)	Sample Date	Your Water	Range Low High	Secondary MCL
Sodium (ppm)	March 2024	36.93	N/A	N/A
pH	March 2024	7.4	N/A	6.5 to 8.5

Water Quality Data Table(s) Johnston County East PWS# 40-51-018: 2024

Stage 2 Disinfectant Byproduct Compliance- Based on Locational Running Average (LRAA) 2024

Disinfection Byproduct	Units	MCLG	MCL	Your Water (highest LRAA)	Range Low High	Year Sampled	MCL/ Violation (Yes / No)	Likely Source of Contamination
TTHM	ppb	N/A	80	59	1.0 -93	2024	No	Byproduct of drinking water disinfection
HAA5	ppb	N/A	60	30	0.0 - 53	2024	No	Byproduct of drinking water chlorination

For TTHM: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
For HAA5: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased chance of getting cancer.

Lead and Copper Contaminants: Pregnant women, infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Contaminant	Units	Sample Date	Your Water	Number of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (90^{th} percentile)	ppm	July 2023	0.08	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (90^{th} percentile)	ppb	July 2023	0	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Turbidity* 2024 Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCL G	Treatment Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU) - Highest single turbidity measurement	N	0.039 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits	N	100 %	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	

*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

Disinfectant Residuals Summary 2024

Contaminant (units)	Year Sampled	MRDL Violation Y/N	Your Water (RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2024	N	1.09	0.2 – 3.2	4	4.0	Water additive used to control microbes

Total Organic Carbon (TOC): 2024

Contaminant (units)	TT Violation Yes/No	Your Water (lowest RAA)	Range Monthly Removal Ratio Low - High	MCLG	Likely Source of Contamination	Treatment Technique (TT) violation if:
Total Organic Carbon (TOC) Removal Ratio (no units)	No	1.30	1.12 – 1.59	N/A	Naturally present in the environment	Removal Ratio RAA <1.00 and alternative compliance criteria was not met

Water Characteristics Contaminants: The PWS section requires monitoring of other misc contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic or aesthetic effects (such as taste, odor, and or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Contaminant (units)	Sample Date	Your Water	Range Low High	Secondary MCL
Sodium (ppm)	April 2024	35.14	N/A	N/A
pH	April 2024	7.5	N/A	6.5 to 8.5

Synthetic Organic Chemical (SOC) Contaminants including Pesticides and Herbicides 2024

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Simazine (ppb)	2024	N	0.18	N/A	4	4	Herbicide runoff

Nitrate/Nitrite Contaminants 2024

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	May 2024	N	2.60	1.46-2.60	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	May 2024	N	ND	ND	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Unregulated Contaminants (UCMR5)

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. If you are interested in examining the results, please contact us at: publicutilities@johnstonnc.gov

Johnston County WTP East PWS# 40-51-018 (2024)

Contaminant (units) ug/L	Sample Date	Your Water (average)	Range Low High
PFBA	March, June, September	0.00446	0.0 – 0.00689
PFPeA	March, June, September	0.00497	0.00422 – 0.00594
PFBS	March, June, September	0.00107	0.0 – 0.00321
PFHxA	March, June, September	0.00460	0.00386 – 0.00596
PFHxS	March, June, September	0.00123	0.0 – 0.00371
PFOA	March, June, September	0.00345	0.0 – 0.00622
PFOS	March, June, September	0.00597	0.0 – 0.00971

Johnston County WTP West PWS# 0351070 (2024)

Contaminant (units) ug/L	Sample Date	Your Water (average)	Range Low High
PFBA	October	0.00858	0.00488 – 0.0156
PFPeA	October	0.00461	0.00301 – 0.00556
PFBS	October	0.00261	0.0 – 0.00445
PFHxA	October	0.00510	0.00339 – 0.00667
PFHxS	October	0.00223	0.0 – 0.00371
PFOA	October	0.00347	0.0 – 0.00630
PFOS	October	0.00828	0.00723 – 0.0101

Purchased Water Links:

City of Raleigh: https://www.raleighnc.gov/water-and-sewer/Raleigh-water-reports

Wilson County: https://www.wilsonnc.org/residents/all-departments/water-resources/water-treatment/water-quality-report

Sampson County: https://www.sampsonnc.com/departments/public_works/water/public_notices.php

Wayne Water Districts: https://www.waynewaterdistricts.com/water-quality-report

Harnett County: https://www.harnettwater.org/water-quality-report/

Town of Smithfield: https://www.smithfield-nc.com/page/utilities_annual_reports

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in the water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Our staff in the Johnston County Utility Department work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

www.johnstonnc.com/ccr