

# 2025 Annual Drinking Water Quality Report

## Town Of Holden Beach

Water System Number: NC 0410060

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

### Introduction

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 Christopher Benton at (910) 842 -6488. 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 at Town Hall 110 Rothchild Street on the third Tuesday of every month.**

### 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

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 number 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.

### Lead in Drinking Water

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 Holden Beach] 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 [Town of Holden Beach Christopher Benton (910) 842-6488]. 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>.

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, [Chris Benton Holden Beach Public Works (910) 842-6488].

**When You Turn on Your Tap, Consider the Source**

This system purchases water from Brunswick County water system [NC0410045] Attached you will find report from Brunswick County Water System. (See pages 5 forward)

**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 Town of Holden Beach [Brunswick County Water System] 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
Cape Fear River	Moderate	September 10, 2020
Wells # 1, 2, 15, 16 & 17	Lower	September 10, 2020
Wells # 3, 5, 8, 11, 12a, 18 & 19	Moderate	September 10, 2020
Wells #5 & 6a	Higher	September 10, 2020

The complete SWAP Assessment report for **Town Of Holden Beach** 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](mailto: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 sources 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).

## Violations that Your Water System Received for the Report Year

During 2025, or during any compliance period that ended in 2025, we received no violations.

### Important Drinking Water Definitions:

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

**Herbicide** – Any chemical(s) used to control undesirable vegetation.

**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.

**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.

**Pesticide** – Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

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**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.

**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.

**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 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.

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

## 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 testing done January 1 through December 31, 2025.** 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

The table 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 [Pworks@hbtownhall.com](mailto:Pworks@hbtownhall.com).

Contaminant (units)	Sample Date	Your Water (90 <sup>th</sup> Percentile)	Number of sites found above the AL	Range		MCLG	AL	Likely Source of Contamination
				Low	High			
Copper (ppm) (90 <sup>th</sup> percentile)	July-Sept 2025	0.061 ppm	0	ND	0.085	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 <sup>th</sup> percentile)	July-Sept 2025	0 ppb	0	ND	ND	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

## Stage 2 Disinfection Byproducts (DBPs) Total Trihalomethanes (TTHM) and Haloacetic Acids (five) (HAA5)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (ppb)	2025	N	40 ppb	26	45	N/A	80	Byproduct of drinking water disinfection
HAA5 (ppb)	2025	N	30 ppb	19	27	N/A	60	Byproduct of drinking water disinfection

## Disinfectant Residuals Summary

	MRDL Violation Y/N	Your Water (RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
			Low	High			
Chlorine (ppm)	N	2.76 ppm	2.70	2.86	4	4.0	Water additive used to control microbes
Chloramines (ppm)	N	2.51 ppm	1.77	2.90	4	4.0	Water additive used to control microbes

## Unregulated Contaminants Monitoring Regulation (UCMR)

Contaminant (units)	Sample Date	Your Water (average)	Range	
			Low	High
PFBS (ppt)	FEB, MAY, AUG, NOV 2024	0.0036 ppt	0.0031	0.0040 ppt
PFHxA (ppt)	FEB, MAY, AUG, NOV 2024	0.0055 ppt	0.0052	0.0068
PFHxS (ppt)	FEB, MAY, AUG, NOV 2024	0.0038 ppt	0.0031	0.0053 ppt
PFOA (ppt)	FEB, MAY, AUG, NOV 2024	0.0050 ppt	0.0042	0.0056 ppt
PFOS (ppt)	FEB, MAY, AUG, NOV 2024	0.0101 ppt	0.0095	0.0109 ppt
PFPEA (ppt)	FEB, MAY, AUG, NOV 2024	0.0052 ppt	0.0046	0.0059 ppt
HFPO-DA (ppt)	FEB, MAY, AUG, NOV 2024	0.0015 ppt	Nd	0.0063 ppt

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 Chris Benton [Pworks@hbtownhall.com](mailto:Pworks@hbtownhall.com).

***2025 Annual Drinking Water Quality Sample Results***  
***Brunswick County Water system***  
Water System Number: NC-04-10045

Brunswick County Public Utilities is providing the following sampling results for the 2025 Annual Drinking Water Report to our Wholesale Customers. Our complete 2025 Annual Report will be posted later. Please contact Art Barnhardt at [art.barnhardt@brunswickcountync.gov](mailto:art.barnhardt@brunswickcountync.gov) with any questions.

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**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.

**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 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.

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

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

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

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

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### Lead and Copper Contaminants

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Contaminant (units)	Sample Date	Your Water (90 <sup>th</sup> Percentile)	Number of sites found above the AL	Range		MCLG	AL	Likely Source of Contamination
				Low	High			
Copper (ppm) (90 <sup>th</sup> percentile)	6/1/2023 to 9/30/23	0.1872	0	0.05	0.296	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 <sup>th</sup> percentile)	6/1/2023 to 9/30/23	N/D	1	N/D	68.0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

### Stage 2 Disinfection Byproducts (DBPs) Total Trihalomethanes (TTHM) and Haloacetic Acids (five) (HAA5)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (ppb)	2025	N	51	32	51	N/A	80	Byproduct of drinking water disinfection
HAA5 (ppb)	2025	N	32	15	32	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.*

### Other Disinfection Byproducts Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
			Low	High			
Bromate (ppb)	N/A	N/A	N/A		0	10	Byproduct of drinking water disinfection
Chlorite (ppm)	N	.67	.3	.9	0.8	1.0	Byproduct of drinking water chlorination

### Disinfectant Residuals Summary

	MRDL Violation Y/N	Your Water (RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
			Low	High			
Chlorine (ppm)	N	2.16	0.74	3.2	4	4.0	Water additive used to control microbes
Chloramines (ppm)	N	3.43	1.0	3.69	4	4.0	Water additive used to control microbes
Chlorine dioxide (ppb)	N	N/A	ND	526	800	800	Water additive used to control microbes

### Nitrate/Nitrite Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Nitrate (as Nitrogen) (ppm)	6/3/2025 9/15/2025	N	1.24	N/A		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	6/3/2025 9/15/2025	N	ND	N/A		1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

### Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water (RAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Alpha emitters (pCi/L) (Gross Alpha Excluding Radon and Uranium)	6/3/2025	N	ND	N/A		0	15	Erosion of natural deposits
Beta/photon emitters (pCi/L)	6/3/2025	N	ND	N/A		0	50 *	Decay of natural and man-made deposits
Combined radium (pCi/L)	6/3/2025	N	0.67	N/A		0	5	Erosion of natural deposits
Uranium (pCi/L)	6/3/2025	N	ND	N/A		0	20.1	Erosion of natural deposits

\* Note: The MCL for beta/photon emitters is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

### Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Antimony (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	6/3/2025 9/15/2025	N	N/D	N/A		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	6/3/2025 9/15/2025	N	.69	N/A		4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (inorganic) (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Selenium (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppb)	6/3/2025 9/15/2025	N	N/D	N/A		0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

### Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
2,4-D (ppb)	4/22/2025 7/1/2025	N	ND	N/A		70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)	4/22/2025 7/1/2025	N	ND	N/A		50	50	Residue of banned herbicide
Alachlor (ppb)	4/22/2025 7/1/2025	N	ND	N/A		0	2	Runoff from herbicide used on row crops

Atrazine (ppb)	4/22/2025 7/1/2025	N	ND	N/A	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH) (ppt)	4/22/2025 7/1/2025	N	ND	N/A	0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	4/22/2025 7/1/2025	N	ND	N/A	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	4/22/2025 7/1/2025	N	ND	N/A	0	2	Residue of banned termiticide
Dalapon (ppb)	4/22/2025 7/1/2025	N	ND	N/A	200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate (ppb)	4/22/2025 7/1/2025	N	ND	N/A	400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate (ppb)	4/22/2025 7/1/2025	N	ND	N/A	0	6	Discharge from rubber and chemical factories
DBCP [Dibromochloropropane] (ppt)	4/22/2025 7/1/2025	N	ND	N/A	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	4/22/2025 7/1/2025	N	ND	N/A	7	7	Runoff from herbicide used on soybeans and vegetables
Endrin (ppb)	4/22/2025 7/1/2025	N	ND	N/A	2	2	Residue of banned insecticide
EDB [Ethylene dibromide] (ppt)	4/22/2025 7/1/2025	N	ND	N/A	0	50	Discharge from petroleum refineries
Heptachlor (ppt)	4/22/2025 7/1/2025	N	ND	N/A	0	400	Residue of banned pesticide
Heptachlor epoxide (ppt)	4/22/2025 7/1/2025	N	ND	N/A	0	200	Breakdown of heptachlor
Hexachlorobenzene (ppb)	4/22/2025 7/1/2025	N	ND	N/A	0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclo-pentadiene (ppb)	4/22/2025 7/1/2025	N	ND	N/A	50	50	Discharge from chemical factories
Lindane (ppt)	4/22/2025 7/1/2025	N	ND	N/A	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	4/22/2025 7/1/2025	N	ND	N/A	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	4/22/2025 7/1/2025	N	ND	N/A	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls] (ppt)	4/22/2025 7/1/2025	N	ND	N/A	0	500	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)	4/22/2025 7/1/2025	N	ND	N/A	0	1	Discharge from wood preserving factories
Picloram (ppb)	4/22/2025 7/1/2025	N	ND	N/A	500	500	Herbicide runoff
Simazine (ppb)	4/22/2025 7/1/2025	N	ND	N/A	4	4	Herbicide runoff
Toxaphenc (ppb)	4/22/2025 7/1/2025	N	ND	N/A	0	3	Runoff/leaching from insecticide used on cotton and cattle

### Volatile Organic Chemical (VOC) Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Benzene (ppb)	6/3/2025	N	ND	N/A		0	5	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	6/3/2025	N	ND	N/A		0	5	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)	6/3/2025	N	ND	N/A		100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	6/3/2025	N	ND	N/A		600	600	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	6/3/2025	N	ND	N/A		75	75	Discharge from industrial chemical factories
1,2 – Dichloroethane (ppb)	6/3/2025	N	ND	N/A		0	5	Discharge from industrial chemical factories
1,1 – Dichloroethylene (ppb)	6/3/2025	N	ND	N/A		7	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	6/3/2025	N	ND	N/A		70	70	Discharge from industrial chemical factories

trans-1,2-Dichloroethylene (ppb)	6/3/2025	N	ND	N/A	100	100	Discharge from industrial chemical factories
Dichloromethane (ppb)	6/3/2025	N	ND	N/A	0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	6/3/2025	N	ND	N/A	0	5	Discharge from industrial chemical factories
Ethylbenzene (ppb)	6/3/2025	N	ND	N/A	700	700	Discharge from petroleum refineries
Styrene (ppb)	6/3/2025	N	ND	N/A	100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	6/3/2025	N	ND	N/A	0	5	Discharge from factories and dry cleaners
1,2,4 -Trichlorobenzene (ppb)	6/3/2025	N	ND	N/A	70	70	Discharge from textile-finishing factories
1,1,1 - Trichloroethane (ppb)	6/3/2025	N	ND	N/A	200	200	Discharge from metal degreasing sites and other factories
1,1,2 -Trichloroethane (ppb)	6/3/2025	N	ND	N/A	3	5	Discharge from industrial chemical factories
Trichloroethylene (ppb)	6/3/2025	N	ND	N/A	0	5	Discharge from metal degreasing sites and other factories
Toluene (ppm)	6/3/2025	N	ND	N/A	1	1	Discharge from petroleum factories
Vinyl Chloride (ppb)	6/3/2025	N	ND	N/A	0	2	Leaching from PVC piping; discharge from plastics factories
Xylenes (Total) (ppm)	6/3/2025	N	ND	N/A	10	10	Discharge from petroleum factories; discharge from chemical factories

**Turbidity\***

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	.536 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (%) - Lowest monthly percentage (%) of samples meeting turbidity limits	N	1%	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.

**Total Organic Carbon (TOC)**

Contaminant (units)	TT Violation Y/N	Your Water (lowest RAA)	Range Monthly Removal Ratio Low - High	MCLG	Treatment Technique (TT) violation if:	Likely Source of Contamination
Total Organic Carbon (TOC) Removal Ratio (no units)	N	1.02	1.02 - 1.29	N/A	Removal Ratio RAA < 1.00 and alternative compliance criteria was not met	Naturally present in the environment

**Microbiological Contaminants in the Distribution System**

Contaminant (units)	MCL Violation Y/N	Number of Positive/Present Samples	MCLG	MCL	Likely Source of Contamination
<i>E. coli</i> (presence or absence)	N	0	0	Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i>  Note: If either an original routine sample and/or its repeat samples(s) are <i>E. coli</i> positive, a Tier 1 violation exists.	Human and animal fecal waste

*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

actions. We failed to conduct the required assessment. We failed to correct all sanitary defects that were identified during the assessment that we conducted.

#### Unregulated Contaminants Monitoring Regulation (UCMR)

Contaminant (units)	Sample Date	Your Water (average)	Range	
			Low	High
1-4, Dioxane	Monthly	.27	ND	.51

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 [chris.giesting@brunswickcountync.gov](mailto:chris.giesting@brunswickcountync.gov)

#### Other Miscellaneous Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range		SMCL
			Low	High	
Iron (ppm)	6/3/25	ND	ND		0.3
Manganese (ppm)	6/3/25	ND	ND		0.05
Nickel (ppm)	6/3/25	ND	ND		N/A
Sodium (ppm)	6/3/25 9/15/25	18.5	17.3	18.5	N/A
Sulfate (ppm)	6/3/25 9/15/25	89	ND	89	250
pH	6/3/25 9/15/25	7.2	7.1	7.3	6.5 to 8.5

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects 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.

#### Additional Monitoring of Other Contaminants

Unregulated contaminants are those which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. The EPA website (<https://www.epa.gov/sdwa>) may provide additional information.

Unregulated Contaminant Monitoring Rule 5 (UCMR 5) sampling at Northwest WTP and 211 WTP was completed in calendar year 2023. For more information on UCMR 5 please visit: <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>.

**Voluntary Sampling - PFAS RESULTS FOR 2025**

All Results in Parts Per Trillion (ppt)

52 Samples (weekly intervals) for 2025

PFAS Substances	EPA MCL	EPA MCLG	Brunswick Co. Average	Low	High	Violation Y/N	Likely Source of Contamination
PFPrA	Non-Regulated	N/A	114.451	0.046	535	N	By-Product of Chemical Manufacturer
PFBA	Non-Regulated	N/A	3.252	1.23	9.21	N	By-Product of Chemical Manufacturer
PFPeA	Non-Regulated	N/A	6.172	2.68	10.7	N	By-Product of Chemical Manufacturer
PFHxA	Non-Regulated	N/A	6.792	2.49	89.4	N	By-Product of Chemical Manufacturer
PFHpA	Non-Regulated	N/A	2.581	1.29	5.85	N	By-Product of Chemical Manufacturer
PFOA	Non-Regulated	N/A	4.991	2.8	7.85	N	By-Product of Chemical Manufacturer
PFNA	Non-Regulated	N/A	0.608	0.346	1.09	N	By-Product of Chemical Manufacturer
PFDA	Non-Regulated	N/A	0.251	0.00597	0.702	N	By-Product of Chemical Manufacturer
PFUnDA	Non-Regulated	N/A	0.017	0.00666	0.118	N	By-Product of Chemical Manufacturer
PFDoDA	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
PFTTrDA	Non-Regulated	N/A	0.009	0.00871	0.0146	N	By-Product of Chemical Manufacturer
PFTeDA	Non-Regulated	N/A	0.009	0.00884	0.00911	N	By-Product of Chemical Manufacturer
PFHxDA	Non-Regulated	N/A	0.210	0.21	0.21	N	By-Product of Chemical Manufacturer
PFBS	Non-Regulated	N/A	3.199	1.43	5.92	N	By-Product of Chemical Manufacturer
PFPeS	Non-Regulated	N/A	0.549	0.18	0.88	N	By-Product of Chemical Manufacturer
PFHxS	Non-Regulated	N/A	3.721	1.76	6.56	N	By-Product of Chemical Manufacturer
PFHpS	Non-Regulated	N/A	0.136	0.0129	0.247	N	By-Product of Chemical Manufacturer
PFOS	Non-Regulated	N/A	9.985	5.98	20	N	By-Product of Chemical Manufacturer
PFNS	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
PFDS	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
4:2 FTS	Non-Regulated	N/A	3.720	3.72	3.72	N	By-Product of Chemical Manufacturer
6:2 FTS	Non-Regulated	N/A	0.107	0.00309	0.563	N	By-Product of Chemical Manufacturer
8:2 FTS	Non-Regulated	N/A	0.019	0.00101	0.818	N	By-Product of Chemical Manufacturer
10:2 FTS	Non-Regulated	N/A	0.125	0.125	0.125	N	By-Product of Chemical Manufacturer

<b>PFAS Substances</b>	<b>EPA MCL</b>	<b>EPA MCLG</b>	<b>Brunswick Co. Average</b>	<b>Low</b>	<b>High</b>	<b>Violation Y/N</b>	<b>Likely Source of Contamination</b>
FBSA	Non-Regulated	N/A	0.381	0.0311	0.789	N	By-Product of Chemical Manufacturer
N-EtFOSA	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
N-EtFOSAA	Non-Regulated	N/A	0.021	0.00756	0.292	N	By-Product of Chemical Manufacturer
N-EtFOSE	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
N-MeFOSA	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
N-MeFOSAA	Non-Regulated	N/A	0.079	0.078	0.131	N	By-Product of Chemical Manufacturer
N-MeFOSE	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
PFOSA	Non-Regulated	N/A	0.072	0.0113	0.827	N	By-Product of Chemical Manufacturer
ADONA	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
EVE Acid	Non-Regulated	N/A	0.018	0.000415	0.563	N	By-Product of Chemical Manufacturer
HFPO-DA	Non-Regulated	N/A	2.968	0.495	5.95	N	By-Product of Chemical Manufacturer
Hydro-EVE Acid	Non-Regulated	N/A	0.100	0.0118	0.492	N	By-Product of Chemical Manufacturer
NFDHA	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
PEPA	Non-Regulated	N/A	3.283	0.359	20.4	N	By-Product of Chemical Manufacturer
PFECA-G	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
PFMOAA	Non-Regulated	N/A	10.005	0.828	47.7	N	By-Product of Chemical Manufacturer
PFMOBA	Non-Regulated	N/A	0.087	0.0865	0.0865	N	By-Product of Chemical Manufacturer
PFMOPrA	Non-Regulated	N/A	0.043	0.0234	0.384	N	By-Product of Chemical Manufacturer
PFO2HxA	Non-Regulated	N/A	3.227	0.536	7.95	N	By-Product of Chemical Manufacturer
PFO3OA	Non-Regulated	N/A	0.745	0.0654	2.65	N	By-Product of Chemical Manufacturer
PFO4DA	Non-Regulated	N/A	0.103	0.0823	0.462	N	By-Product of Chemical Manufacturer
PFO5DA	Non-Regulated	N/A	0.016	0.0158	0.0217	N	By-Product of Chemical Manufacturer
PMPA	Non-Regulated	N/A	5.906	0.853	15.3	N	By-Product of Chemical Manufacturer
R-EVE	Non-Regulated	N/A	5.182	0.675	16.8	N	By-Product of Chemical Manufacturer
11CI-PF3OUdS	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
9CI-PF3ONS	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
Hydrolyzed PSDA	Non-Regulated	N/A	2.906	0.0807	9.61	N	By-Product of Chemical Manufacturer

<b>PFAS Substances</b>	<b>EPA MCL</b>	<b>EPA MCLG</b>	<b>Brunswick Co. Average</b>	<b>Low</b>	<b>High</b>	<b>Violation Y/N</b>	<b>Likely Source of Contamination</b>
Nafion Byproduct 1 (PS Acid)	Non-Regulated	N/A	0.147	0.0475	1.75	N	By-Product of Chemical Manufacturer
Nafion Byproduct 2 (Hydro-PS Acid)	Non-Regulated	N/A	0.315	0.0539	0.686	N	By-Product of Chemical Manufacturer
NVHOS	Non-Regulated	N/A	1.977	0.269	7.67	N	By-Product of Chemical Manufacturer
PFEESA	Non-Regulated	N/A	0.000	0	0	N	By-Product of Chemical Manufacturer
R-PSDA	Non-Regulated	N/A	4.725	0.656	14.1	N	By-Product of Chemical Manufacturer
R-PSDCA	Non-Regulated	N/A	0.029	0.029	0.029	N	By-Product of Chemical Manufacturer