

Annual Water Quality Report for 2023
The Brunswick Area Water System
PWSID 0100005

We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is, and always has been, to provide you a safe and dependable supply of drinking water. Our water sources are the Potomac River and Yourtee Springs in Washington County – a part of Harpers Formation Aquifer.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. This report is also available through the Maryland Department of the Environment (MDE) and the Frederick County Public Library.

I'm pleased to report that our drinking water is safe and meets federal and state requirements.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact **Matt Campbell** at **(301)-834-7500** between the hours of 7:00 am until 3:30 pm Monday through Friday. 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 second Tuesday of each month at Brunswick City Hall, 1 West Potomac Street at 7 pm.

A copy of this report can be accessed on the City of Brunswick's website which is: **www.brunswickmd.gov**.

The Brunswick Water System routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2023. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In the Water Quality Data table shown on the following page, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

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.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water

ND – not detected.

NA – not applicable

WATER QUALITY DATA								
INORGANIC CONTAMINANTS								
Regulated Contaminants	Units	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Typical Sources
Barium	ppm	2023	0.0372	0.0372 - 0.0372	2	2	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (as Nitrogen)	ppm	2023	1	0 - 0.6	10	10	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits
RADIOACTIVE CONTAMINANTS								
Regulated Contaminants	Units	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Typical Sources
Combined Radium 226/228	pCi/L	6/15/2021	1.8	0 - 1.8	0	5	NO	Erosion of natural deposits
DISINFECTION AND DISINFECTION BY PRODUCTS								
Regulated Contaminants	Units	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Typical Sources
Chlorine	ppm	2023	1.6	1.4 - 1.6	4	4	NO	Water additive used to control microbes
Total Trihalomethanes	ppb	2023	58	21 - 93	na	80	NO	By-products of drinking water disinfection process
Haloacetic Acids	ppb	2023	29	5 - 54	na	60	NO	By-products of drinking water disinfection process
Total Organic Carbon	The percentage of Total Organic Carbon removal was measured each month and the system met all TOC requirements							
LEAD AND COPPER: testing is performed on samples from customers tap between June thru September								
Regulated Contaminants	Units	Collection Date	90th Percentile	# Sites Over Action Level	MCLG	AL	Violation	Typical Sources
Lead	ppb	2022	ND	0	0	15	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Copper	ppm	2022	ND	0	1.3	1.3	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
TURBIDITY: is a measurement of the cloudiness of the water caused by suspended particles								
Regulated Parameter	Units	Limit (TT)	Level Detected		Violation	Typical Sources		
Highest Single Measurement	ntu	1.0	1		NO	Soil Runoff		
Lowest Monthly % Meeting Limit	ntu	95% of readings must be less than or equal to 0.3	97%		NO	Soil Runoff		
PFAS INFORMATION								
Contaminant	units	Collection Date	MCL	Level Detected	Violation	Typical Sources		
PFOA	ppt	2022	na	1.69	na	Human made chemicals found in stain and water resistant fabrics, carpeting, cleaning products, paints, cookware, food packaging and fire fighting foams		
PFOS	ppt	2022	na	2.90	na	Human made chemicals found in stain and water resistant fabrics, carpeting, cleaning products, paints, cookware, food packaging and fire fighting foams		
PFHxS	ppt	2022	na	2.04	na	Human made chemicals found in stain and water resistant fabrics, carpeting, cleaning products, paints, cookware, food packaging and fire fighting foams		
PFBS	ppt	2022	na	2.25	na	Human made chemicals found in stain and water resistant fabrics, carpeting, cleaning products, paints, cookware, food packaging and fire fighting foams		

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. Brunswick 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 Matt Campbell at 301-834-7500. 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>.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 at 1-800-426-4791.

PFAS – short for per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: <https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023. The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

At the City of Brunswick we work around the clock to provide top quality water to every tap, said Matt Campbell. 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.

The Maryland Rural Water Association's State Circuit Rider assisted with the completion of this report.

Please Call Matt Campbell at 301-834-7500 if you have any questions about this report.