Annual Drinking Water Quality Report for 2022
The Brunswick Area Water System
April 2023
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 to 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 thru 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 x501 between the hours of 7:00 am and 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 6 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 2022**.** 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 this table 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 - The "Maximum Allowed" (MCL) is 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 - The "Goal"(MCLG) is 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.

ND – not detected.

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity Lowest monthly % meeting limit Highest single measurement	N	 100% 0.883	Ntu	n/a	 TT 0.3 1.0	Soil runoff
Inorganic Contaminants						
Copper (2022) (Distribution)	N	ND	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2022) (Distribution)	N	ND	ppb	0	AL= 15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen) (2022)	N	0.26-0.92	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium (2022)	N	0-0.045	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Radioactive Contaminants						
Combined Radium 226/228 (2021)	N	1.8	pCi/L	0	5	Erosion of natural deposits

Total Organic Carbon – The percentage of Total Organic Carbon (TOC) removed was measured each
Month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation
Section.

Unregulated Contaminants						
PFOA (9/2022)	N	1.69	ppt	NA	NA	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.
PFOS (9/2022)	N	2.90	ppt	NA	NA	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.
PFHxS (9/2022)	N	2.04	ppt	NA	NA	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.
PFBS (9/2022)	N	2.25	ppt	NA	NA	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.
Disinfection and Disinfection By-Products						
Chlorine (2022) Distribution	N	1.6	ppm	4	4	Water additive used to control microbes
Stage 2 Disinfection Byproducts:						
TTHM (Distribution) [Total trihalomethanes] Range Highest Locational Running Average (2022)	N	18.47-76.49 51	ppb	0	80	By-product of drinking water disinfection
HAA5 (Haloacetic acids) (distribution) Range Highest Locational Running Average (2022)	N	8.6-32.5 24	ppb	0	60	By-product of drinking water disinfection

Note: All test results are for 2022 unless otherwise noted. Not all contaminants are required to be tested for annually.

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 x501. 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 – or 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.
Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA and PFOS concentrations from samples taken from our water system in 2022 were 1.69 parts per trillion (ppt) and 2.90 ppt, respectively. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs or Hazard Index. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx

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.

Violation:
MONITORING, RTN/RPT MINOR (SWTR- FILTER) 9/01/2022-9/30/2022. We failed to complete all the required monitoring of our drinking water for the contaminant during the period indicated. Corrections and improvements to our monitoring system have been made to prevent another gap in monitoring, including the addition of high speed internet and cellular backup.
The Surface Water Treatment Rule seeks to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires that water systems filter and disinfect water from the surface water from the sources to reduce the occurrence of unsafe levels in these microbes.

Lead & Copper Rule, Follow-up Routine Tap M/R (LCR) 10/01/2022-11/04/2022. We failed to submit our report to MDE within 10 days after the end of the monitoring period. The report was due to MDE by10/10/2022, and the report was received by MDE on 11/4/2022.

Please call Matt Campbell at 301-834-7500 x501 if you have questions about this report.

	IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Reporting Requirements Not Met for the City of Brunswick Water System – Yourtee Springs Filtration Plant

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 September 28th, 2022 we did not take the required number of readings for Chlorine Residual from the finished water and therefore cannot be sure of the quality of your drinking water during that time.

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

What is being done?
Water plant staff has installed an SD card to record all readings. High speed internet was installed at the Yourtee Springs Filtration Plant to reduce the risk of communication loss.

For more information, please contact Matthew Campbell, Director of Utilities at 301-834-7500-x501 or mcampbell@brunswickmd.gov

Water system number: **MD0100005** Date Distributed: 5/8/2023