

***Annual Drinking Water Quality Report for 2021***  
***The Brunswick Area Water System***  
***March 2022***  
***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. Yourtee Springs was taken offline in June 2018. Additional treatment of the spring is being considered in order to be in compliance with the Surface Water Treatment Rule.

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 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 7 pm.

A copy of this report can be accessed on the City of Brunswick's website which is: [www.brunswickmd.gov](http://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 1<sup>st</sup> to December 31<sup>st</sup> 2021. 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.

<b>TEST RESULTS</b>						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Turbidity	N	0.3	Ntu	n/a	TT	Soil runoff
<b>Inorganic Contaminants</b>						
Chlorine (2021) (distribution)	N	1.5	ppm	4	4	Water Additive used to control microbes
Copper (2019) (Distribution)	N	0.08	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen) (2021)	N	1	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium (2021)	N	0.0344	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
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.

<b>Volatile Organic Contaminants</b>						
<b>Stage 2 Disinfection Byproducts:</b>						
TTHM (Distribution) [Total trihalomethanes] Range Highest Locational Running Average (2021)	N	11.25-83.69 57	ppb	0	80	By-product of drinking water disinfection
HAA5 (Haloacetic acids) (distribution) Range Highest Locational Running Average (2021)	N	6.4-45 23	ppb	0	60	By-product of drinking water disinfection

*Note: All test results are for 2021 unless otherwise noted. Not all contaminants are required to be tested for annually.*

If present, elevated levels of 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. The City of Brunswick is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>. As can be seen by results listed in the above tables, lead, which is tested for every 3 years, has not been detected in collected samples.

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 4000 human made chemicals that have been used since the 1940's 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 the 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.

Currently, there are no federal regulations (i.e. Maximum Contaminant Levels (MCLs) for PFAS in drinking water. However, the US Environmental Protection Agency (EPA) has issued a health advisory level (HAL) of 70 parts per trillion (PPT) for the sum of PFOA and PFOS concentrations in drinking water. While not enforceable regulatory standard, when followed, the EPA HAL does provide drinking water customers, even the most sensitive populations, with a margin of protection from lifetime exposure to PFOA and PFOS in drinking water. Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. In 2020, results from samples taken at the City of Brunswick's drinking water treatment plant showed a combined PFOA and PFAS concentration of 1.29 ppt. No additional actions are planned at this time. MDE anticipates that EPA will establish an MCL for PFOA and PFOS in the near future. This would entail additional monitoring. Additional information about PFAS can be found on the MDE website: [mde.maryland.gov](http://mde.maryland.gov)

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.

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