

# Water Quality Report

2023 Annual Summary Prepared for Customers of Frederick County Water Systems



#### Contents

Page 1 Introduction Sources of Water Source Water Protection

#### Page 2

**Testing Requirements** Vulnerable Populations Specific Water Quality Data

#### Page 3

Terms, Units & Abbreviations Customers with Multiple Sources Compliance with SDWA Requirements

#### Page 4

Information on Lead Useful Information Additional Resources

Insert Water Quality Data Summary

The Frederick County Division of Water and Sewer Utilities is pleased to present this year's Annual Water Quality Report. Once a year, we present this report to our customers to demonstrate that our drinking water meets or surpasses all State and Federal drinking water standards. This report includes data collected during calendar year 2023 and contains valuable information that we hope you will find interesting and helpful. We want you to understand the efforts and dedication of our employees who work around the clock to provide the reliable and high quality drinking water that our customers have come to expect.

#### Sources of Water

Sources of drinking water, both tap and bottled, include rivers, streams, ponds, reservoirs, springs, and wells. As water travels over the land or underground, it can pick up substances of 2.78 billion gallons of water or contaminants such as microbes, was produced at the New Design inorganic and organic chemicals, and radioactive substances. The majority of the County's water system customers receive treated water from surface water supplies, primarily the Potomac River. The remainder of our customers receive treated ground water from deep well sources.

## Source of Water Protection

The Maryland Department of the Environment has completed source-water

assessments for each of the County's water supplies. In 2023, Frederick These assessments are County produced a total used to implement at 10 treatment plants. Most (91%) source-water protection plans, Road Water Treatment Plant which which identify uses the Potomac River as its source of water. The remainder and prevent was produced at numerous potential sources of treatment plants using contamination from groundwater sources. entering your drinking water supply. More

> information on these assessments can be found on-line at www.frederickcountymd.gov/1284/ water-purification-distribution or by contacting our offices at (301) 600-1825.



#### **Testing Requirements**

The Frederick County Division of Water and Sewer Utilities and the Maryland Department of the Environment routinely monitor the constituents in your drinking water according to Federal and State laws. This report summarizes the results of our monitoring for the period of January 1, 2023 to December 31, 2023. Some parameters are not monitored each year and will be noted as such in the data table.

Frederick County delivers water to over 74,900 customers with our dedicated staff serving you 24 hours a day, seven days a week.

## Vulnerable Populations

Some people may be more vulnerable to contaminants in drinking water than the general population.

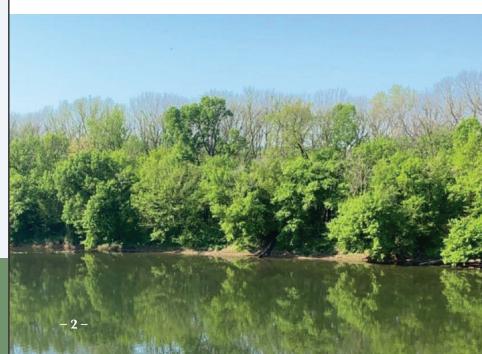
Immuno-compromised persons such as individuals with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/ AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These

people should seek advice from their health care providers about their drinking water.

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. Call (800) 426-4791.

#### Specific Water Quality Data

The data table that accompanies this pamphlet provides specific water quality information regarding your water supply. It also includes other information that is related to the operation of your community's water supply system. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, may be more than one year old.



This detailed report contains specific information about your water quality and what the analyses mean. In addition to the test results shown on the enclosed data table, testing has been performed on well over 100 various regulated and unregulated contaminants. These contaminants, which include volatile and synthetic organic chemicals (industrial chemicals and herbicides/pesticides), metals, other inorganic, and radiological compounds are not listed because they were not detected. Specific information on this additional testing may be obtained by contacting the Frederick County Division of Water and Sewer Utilities.

If you have any questions about this report or concerns about your water quality, please contact Joshua Smith, Regulatory Compliance Department Head, at (301) 600-2581, Monday through Friday, between the hours of 7:30 a.m. and 4:30 p.m.

We want our valued customers to be informed about their water utility. Periodically, legislative issues pertaining to your water system may be addressed at regularly scheduled County Council meetings. Meeting schedules with agendas and other pertinent information concerning your water system can be found online at the Frederick County Government website:

> www.FrederickCountyMD.gov Please e-mail your questions to: wsops@FrederickCountyMD.gov



#### **Customers With Multiple Water Sources**

Some of our water system customers receive water from multiple sources of supply. This typically occurs when water systems located next to each other share water between their respective distribution systems. Because the flow and movement of water in the distribution system can be non-uniform, it is difficult to accurately identify the proportion of water that comes from each water system.

If your community is supplied by multiple sources of water, you may find data from more than one water source in this report. Your specific water quality can be a combination of the multiple sources. Regardless of how many sources of water the water system uses, each source met or exceeded the standards set by the EPA.

#### Compliance with Safe Drinking Water Act Requirements

Last year, as in years past, your tap water was regularly tested to determine if it met EPA and State drinking water health standards. Frederick County vigilantly safeguards its water supply by monitoring both source water and treated water. 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, or 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 (800) 426-4791.

#### Terms, Units & Abbreviations

**PPM** - Parts per Million - Analogous to one penny in \$10,000.

**PPB** - Parts per Billion - Analogous to one penny in \$10,000,000.

**PPT** - Parts per Trillion - Analogous to one penny in \$10,000,000,000.

pCi/L - Picocuries per Liter - A measure of radiation.

TT - Treatment Technique - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

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

NTU - Nephelometric Turbidity Unit - A measure of the clarity of water.

SDWA - Safe Drinking Water Act - Federal Law which regulates the water quality for public water supplies.

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.

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 may be present with no adverse health effects. the best available treatment This establishes what is called the Maximum technology. Contaminant Level Goal (MCLG), which is a

> ND - Non-Detected - Means not detectable (at lowest level for which contaminant can be measured).

- 3 -

To establish a

Maximum Contaminant Level

(MCL) for a contaminant, EPA first

determines how much of a contaminant

non-enforceable public health goal. The legally

enforced MCL may be higher than the MCLG

because of analytical limitations measuring small

quantities of contaminant, a lack of treatment

technologies, or if EPA determines that

the cost of treatment outweighs the

public health benefit of the

lower MCL.

## An Information Statement from the EPA on Lead

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. Frederick County Division of Water and Sewer Utilities (DWSU) 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 Joshua Smith, Regulatory Compliance Department Head, at 301-600-2581. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

### Sources of Lead in Drinking Water

Water is lead-free when it leaves the treatment plant, but lead can be released when the water comes in contact with pipes and plumbing fixtures that contain lead.

**Lead Solder** - This connects the piping. In 1987, lead solder was banned from use in household plumbing. If your home was built prior to 1987, it may contain lead solder.

**Brass Faucets, Valves, or Fittings -** Almost all faucets, valves, and fittings have brass components. Until 2014, brass faucets and fittings sold in the U.S. and labeled as 'lead free' could contain up to 8% lead.



## Paperless Billing and Payment Due Reminders

The Frederick County Division of Water and Sewer Utilities (DWSU) offers a more convenient way to receive your quarterly water/sewer bill. We can send your bill directly to your email by visiting <u>www.FrederickCountyMD.gov/paperless</u> to sign up. We can also add an email address and/or phone number to your account so that you receive "Payment Due" reminders. Simply contact the billing department at (301) 600-2354.

## Payment Options

The Frederick County Division of Water and Sewer Utilities strives to provide our customers with a safe, uninterrupted water supply. We hope that all of our customers recognize the need to protect our most precious resource, our community water supply.

Please visit <u>www.FrederickCountyMD.</u>

gov/wspaybill for a list of all payment options, including registering for automatic payments from your checking or savings account. You can also register your account to make payments online with a credit/debit card or e-check.



## Additional Information & Resources

For more information on your water supply or the information contained in this report you may want to contact the following agencies:

**Frederick County Division of Water and Sewer Utilities** (301) 600-1825

**Maryland Department of the Environment** (410) 537-3000

**U. S. Environmental Protection Agency Safe Drinking Water Act Hotline** (800) 426-4791

**Division of Water and Sewer Utilities Emergency Telephone Numbers** Monday thru Friday 7:00 AM - 3:30 PM - (301) 600-2187 Weekends, Holidays, and After-Hours - (301) 600-2194

#### **ROSEMONT WATER QUALITY INFORMATION 2023**

During calendar year 2023, your water was produced by the City of Brunswick. Although the City of Brunswick utilizes two sources of water and operates two treatment plants, your water is produced at the Brunswick Potomac River Filter Plant. The Frederick County Division of Water and Sewer Utilities assumed operational control of the newly constructed water distribution system for the Rosemont Community in December 2013. However, water for this system is obtained through an agreement with the City of Brunswick.

REGULATED CONTAMINANTS - City of Brunswick Potomac River Filter Plant								
Contaminant	Highest Level Allowed (EPA's MCL)	ldeal Goal (EPA's MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources		
Barium	2 ppm	2 ppm	0.037 ppm		NO	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries		
Nitrate	10 ppm	10 ppm	0.6 ppm	0 - 0.6 ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits		
Turbidity	1 NTU maximum	0 NTU	1.0 NTU		NO	Soil runoff		
Combined Radium 226/228 <sup>2021</sup>	5 pCi/L	0 pCi/L	1.8 pCi/L		NO	Erosion of natural deposits		

Total Organic Carbon - The percentage of Total Organic Carbon (TOC) removed was measured each quarter and the system met all TOC removal requirements.

UNREGULATED CONTAMINANTS - City of Brunswick Potomac River Filter Plant								
Contaminant	Highest Level Allowed (EPA's MCL)	ldeal Goal (EPA's MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources		
<b>PFOA</b> 2022	N/A	N/A	1.69 ppt		NO	See Note Below		
PFOS 2022	N/A	N/A	2.90 ppt		NO	See Note Below		
PFBS 2022	N/A	N/A	2.25 ppt		NO	See Note Below		
PFHxS 2022	N/A	N/A	2.04 ppt		NO	See Note Below		

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 lead 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 Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in Mach 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 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 website: <a href="https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Pages.aspx">https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Pages.aspx</a>

#### ROSEMONT WATER QUALITY INFORMATION 2023 REGULATED CONTAMINANTS - Rosemont Distribution System

#### **PWSID 0100045**

Contaminant	Highest Level Allowed (EPA's MCL)	ldeal Goal (EPA's MCLG)	Annual Average	Range of Test Results	Violation	Typical Sources
Chlorine	4 ppm	4 ppm	1.2 ppm	0.3 - 2.1 ppm	NO	Water additive used to control microbes

DISINFECTION BYPRODUCTS - Rosemont Distribution System						
Contaminant	Highest Level Allowed (EPA's MCL)	ldeal Goal (EPA's MCLG)	Highest Result LRRA₁	Range of Test Results	Violation	Typical Sources
Total Haloacetic Acids	60 ppb	N/A	33.3 ppb	12.8 - 50.2 ppb	NO	Byproduct of drinking water chlorination
Total Trihalomethanes	80 ppb	N/A	59.2 ppb	21.5 - 84.2 ppb	NO	Byproduct of drinking water chlorination

1- Compliance is based on the Locational Running Annual Average (LRAA) for each sample site and is calculated quarterly.

BACTERIA IN TAP WATER - Rosemont Distribution System. Minimum of 1 sample per month.								
Contaminant	Highest Level Allowed (EPA's MCL)	ldeal Goal (EPA's MCLG)	Highest Monthly Number of Samples With Total Coliform Present	Violation	Typical Sources			
Total Coliform	1 sample contains Total Coliform	0	0	NO	Naturally present in the environment			

LEAD AND COPPE						
Contaminant	EPA's Action Level	ldeal Goal (EPA's MCLG)	90% of Test Levels Were Less Than	# of Tests With Levels Above EPA's Action Level	Violation	Typical Sources
Lead	90% of homes less than 15 ppb	0 ppb	1 ppb	0	NO	Corrosion of household plumbing
Copper	90% of homes less than 1.3 ppm	1.3 ppm	0.042 ppm	0	NO	Corrosion of household plumbing

How to Read the Water Quality Data Table

EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. <u>Substances not detected are not included in the table</u>.

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.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.

Units in the Table: ppm is parts per million (or 1 gallon in 1 million gallons), ppb is parts per billion (or 1 gallon in 1 billion gallons)

Health Effects:

Fluoride is not currently added to your water supply. Please consult with your dentist regarding this matter. We will provide you with advance notice of the date when fluoridation of your water supply will begin.