



Frederick County Division of Water and Sewer Utilities

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

he 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 In 2023, Frederick or underground, it can County produced a total pick up substances of 2.78 billion gallons of water or contaminants at 10 treatment plants. Most (91%) such as microbes, was produced at the New Design Road Water Treatment Plant which inorganic and uses the Potomac River as its source organic chemicals, of water. The remainder and radioactive was produced at numerous substances. The treatment plants using majority of the groundwater sources. County's water system customers receive treated water from surface water supplies, primarily the Potomac River. The remainder of our customers receive

Source of Water Protection

The Maryland Department of the Environment has completed source-water assessments for each of the

County's water supplies.

These assessments are used to implement source-water protection plans, which identify and prevent potential sources of contamination from 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.

treated ground water from deep well

sources.



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

This detailed report contains specific information about your days a week. 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

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.

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.





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

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 To establish a - The highest level of a contaminant Maximum Contaminant Level that is allowed in drinking water. (MCL) for a contaminant, EPA first MCLs are set as close to the determines how much of a contaminant 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 non-enforceable public health goal. The legally ND - Non-Detected - Means enforced MCL may be higher than the MCLG

not detectable (at lowest level for which contaminant can be measured).

lower MCL.

because of analytical limitations measuring small

quantities of contaminant, a lack of treatment

technologies, or if EPA determines that



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

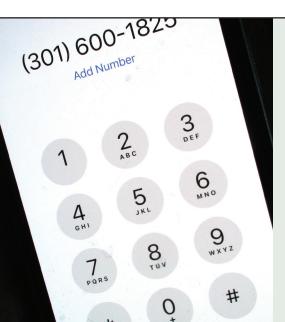
The Frederick County Division of Water and Sewer Utilities (DWSU) offers a more convenient way to receive your quarterly water/sewer bill. We can send your bill directly to your email by visiting www.FrederickCountyMD.gov/paperless to sign up. We can also add an email address and/or phone number to your 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

Please visit www.FrederickCountyMD.

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

supply.

Maryland Department of the Environment (410) 537-3000

U. S. Environmental Protection Agency Safe Drinking Water Act Hotline $(800)\ 426\text{-}4791$

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

LIBERTYTOWN APARTMENTS WATER QUALITY INFORMATION 2023

Your water source came from two (2) deep wells located in the Libertytown Apartments area. These wells withdraw water from the Libertytown Metarhyolite Formation. The Maryland Department of the Environment (MDE) has completed the Source Water Assessment for the Libertytown Apartments community water supply. Should you care to obtain a copy of this report, the Frederick County Library has a copy, MDE has several, and the Division of Water and Sewer Utilities has placed a copy on the Frederick County website. MDE has determined that your water supply is susceptible to contamination by nitrate, radon, volatile organic compounds, and viruses. It is not considered susceptible to synthetic organic compounds. Improvements to the construction of the two wells have made them not susceptible to surface water microorganisms.

REGULATED CONT	REGULATED CONTAMINANTS - Libertytown Apartments Water Treatment Plant - Some testing is not done every year.							
Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources		
Barium ²⁰²¹	2 ppm	2 ppm	0.085 ppm		NO	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries		
Chromium ²⁰²¹	100 ppb	100 ppb	1 ppb		NO	Discharge from steel and pulp mills; Erossion of natural deposits.		
Combined Radium 226/228 ²⁰²¹	5 pCi/L	0 pCi/L	0.5 pCi/L		NO	Erosion of natural deposits		
Nitrate ₁	10 ppm	10 ppm	7.6 ppm	5.8 - 7.6 ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits		

^{1 -} The annual average for 2023 was 6.3 ppm based on 12 samples.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six (6) months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you

UNREGULATED CO	UNREGULATED CONTAMINANTS - Libertytown Apartments Water Treatment Plant - Some testing is not done every year.							
Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources		
Nickel 2021	N/A	N/A	0.005 ppm		NO	Erosion of natural deposits; leaching of Metals from contact with drinking water such as pipes and fittings.		
Sodium 2021	N/A	N/A	75.9 ppm		NO	Erosion of natural deposits		
Sulfate 2021	N/A	N/A	9.1 ppm		NO	Erosion of natural deposits		
Chloromethane	N/A	N/A	1.23 ppb		NO	Naturally present in the environment ; Formed by marine phytoplankton and forest fires		
PFBS	N/A	N/A	1.1 ppt		NO	See Note Below		
PFOS	N/A	N/A	1.3 ppt	1.0 - 1.3 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 iMDE website: https://mde.maryland.gov/Public Health/Pages/PFAS-Landing-Pages.aspx

LEAD AND COPPER - Tested at customer's taps. Testing is done every 3 years and was last completed in 2023.							
Contaminant	EPA's Action Level	Ideal 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	0.551 ppm	0	NO	Corrosion of household plumbing	

REGULATED CONTAMINANTS - Libertytown Apartments Distribution System							
Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Annual Average	Range of Test Results	Violation	Typical Sources	
Chlorine	4 ppm	4 ppm	1.4 ppm	0.7 - 2.0 ppm	NO	Water additive used to control microbes	

DISINFECTION BYPRODUCTS - Libertytown Apartments Distribution System. Testing is done every 3 years and was last completed in 2023.							
Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)		Range of Test Results	Violation	Typical Sources	
Total Trihalomethanes	80 ppb	N/A	1.1 ppb		No	Byproduct of drinking water chlorination	

BACTERIA IN TAP WATER - Libertytown Apartments Distribution System. Minimum of 1 sample per month.								
Contaminant	Highest Level Allowed (EPA's MCL)	Ideal 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			

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.