

Annual Drinking Water Quality Report for 2022

The Town of Woodsboro, Maryland

PWSID # 0100027

April, 2023

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The sources of our drinking water are the Frederick Limestone Aquifer and the Grove Limestone Aquifer. An aquifer is a sort of underground reservoir or deposit of water, which is tapped by drilling wells and pumping the water to the surface for distribution. The earth between surface sources of contamination and this underground river helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your water distribution system. We have 5 wells varying in depth from 200 to 600 feet all located within the corporate limits of the town.

We have a source water assessment plan available from our office that provides more information such as potential sources of contamination. This plan is also available from the Frederick County Public Library or from Maryland Department of the Environment (MDE). For more info call 1-800-633-6101.

https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

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This report outlines the quality of our finished drinking water and what that quality means.

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 Marc Angleberger at 301-845-4288. 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 Mayor and Council meetings. They are held on the second Tuesday of every month beginning at 7:00 pm at the Fire Hall on Third Street.

The Town of Woodsboro 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 unless otherwise noted. 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.

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:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

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.

Parts per trillion (ppt) or Microgram per liter - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

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

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.

| TEST RESULTS | | | | | | |
|---------------------------------------------------|---------------|----------------|------------------|------|--------|---------------------------------------------------------------------------------------------------------------------------|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| Inorganic Contaminants | | | | | | |
| Copper – Distribution (2020) | N | 0.12 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead- Distribution (2020) | N | 5 | ppb | 0 | AL=15 | Corrosion of household plumbing system, erosion of natural deposits |
| Chlorine (2022) | N | 1.7 | ppm | 4 | 4 | Water Additive used to control microbes |
| Nitrate (as Nitrogen) (2022) | N | 0.0-4.5 5 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Barium (2021) | N | ND | ppm | 2 | 2 | Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits. |
| Arsenic (2021) | N | ND | ppb | 0 | 10 | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production waste. |
| Chromium (2021) | N | ND | ppb | 100 | 100 | Discharge from steel and pulp mills; Erosion of natural deposits. |
| Fluoride (2021) | N | 0.1 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Radioactive Contaminants | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| Gross alpha excluding radon and uranium (2021) | N | 3.2-6.1 | pCi/L | 0 | 15 | Erosion of natural deposits |
| Beta/photon emitters (2021) | N | 0-7.2 | pCi/L | 0 | 50 | Decay of natural and man-made deposits. |
| Combined Radium 226/228 (2021) | N | 0.9-1.3 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Volatile Organic Contaminants | | | | | | |
| TTHM(distribution) [Total trihalomethanes] (2021) | N | 5.29 | ppb | N/A | 80 | By-product of drinking water chlorination |
| HAA5 [Haloacetic Acids] (distribution) (2021) | N | 2.88 | ppb | N/A | 60 | By-product of drinking water chlorination |
| Dichloromethane (2020) | N | 1.9 | ppb | 0 | 5 | Discharge from pharmaceutical and chemical factories |
| Unregulated Contaminants | | | | | | |

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|----------------------|---|-----------|-----|-----|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PFBS (3/2023) Range | N | 2.93-4.56 | Ppt | N/A | N/A | 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 (3/2023) Range | N | 1.02-1.4 | Ppt | N/A | N/A | 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 (3/2023) Range | N | 2.21-4.78 | Ppt | N/A | N/A | 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. |
| PFOA (3/2023) Range | N | 1.61-3.17 | ppt | N/A | N/A | 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. |

Note: Sources are as follows: B = Well # 2; C = Well # 3; D = Wells # 7, 14, & 2A; Test results are for CY 2022 unless otherwise noted. Some contaminants are not required to be tested for on an annual basis.

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. Woodsboro 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 Woodsboro at 301-845-4288. 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>.

Nitrate [measured as Nitrogen] – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six 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.

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 concentrations from samples taken from our water system in 2022 ranged from 1.61-3.17 parts per trillion (ppt); PFOS concentrations from samples taken from our water system in 2022 ranged from 2.21-4.78 ppt. 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. 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.

Violations:

NITRATE-MONITORING, ROUTINE MAJOR: 04/01/2022-6/30/2022

Violation Explanation: We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

NITRATE-MONITORING, ROUTINE MAJOR: 07/01/2022-9/30/2022

Violation Explanation: We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Revised Total Coliform Rule (RTCR)

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

REVISED TOTAL COLIFORM RULE (RTCR)- MONITORING, ROUTINE, MAJOR (RTCR) 07/1/2022

End 7/31/22. We failed to test our drinking water for the contaminant and period indicated, Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

REVISED TOTAL COLIFORM RULE (RTCR)- MONITORING, ROUTINE, MAJOR (RTCR) 08/1/2022

End 8/31/22. We failed to test our drinking water for the contaminant and period indicated, Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

REVISED TOTAL COLIFORM RULE (RTCR)- MONITORING, ROUTINE, MAJOR (RTCR) 10/1/2022

End 10/31/22. We failed to test our drinking water for the contaminant and period indicated, Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

REVISED TOTAL COLIFORM RULE (RTCR)- MONITORING, ROUTINE, MAJOR (RTCR) 12/1/2022

End 12/31/22. We failed to test our drinking water for the contaminant and period indicated, Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

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

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.