



# 2022 Annual **WATER QUALITY REPORT**

**BEL AIR**

PWS ID: MD0120003

**QUALITY. ONE MORE WAY  
WE KEEP LIFE FLOWING.**



**MARYLAND  
AMERICAN WATER**

**WE KEEP LIFE FLOWING®**

# What is a Consumer Confidence Report (CCR)

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). CCRs let consumers know what contaminants, if any, were detected in their drinking water as well as related potential health effects. CCRs also include details about where your water comes from and how it is treated. Additionally, they educate customers on what it takes to deliver safe drinking water and highlight the need to protect drinking water sources.

We are committed to delivering high quality drinking water service. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, environmental compliance, sustainability and community education while continuing to serve the needs of all our water users.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-866-641-2131.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al 1-866-641-2131.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau pab ntawm 1-866-641-2131.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電 **1-866-641-2131** 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया **1-866-641-2131** र हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону **1-866-641-2131**.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa 1-866-641-2131.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số 1-866-641-2131.

## TABLE OF CONTENTS

What is a Consumer Confidence Report	2
A message from our President	3
Mark of Excellence	4
About Your Drinking Water Supply	5
What are the Sources of Contaminants?	6
Protecting Your Drinking Water Supply	7
About Lead	8
Determining Service Line Material	9
Important Information About Your Water	10 - 11
• Cryptosporidium	
• Radon	
• Fluoride	
• Sodium	
• Nitrates	
Water Quality Results	12
Definitions of Terms Used in Document	13
Water Quality Results: Detailed Charts	14-20
About Us	21
Contact Us	22

## A message from **Maryland American Water's President**



**Barry Suits**

President, Maryland  
American Water

Dear Maryland American Water Customer,

At Maryland American Water, providing safe, reliable water service is the primary focus of our dedicated team of experts.

Our water is regularly tested and monitored to confirm compliance with state and federal guidelines. In fact, our water quality professionals and treatment plant operators perform thousands of tests annually for about 100 regulated contaminants. Each Spring, we publish those results from the entire year prior in this annual water quality report.

You may not know that we have been providing drinking water service to the Town of Bel Air for nearly 90 years. Our job is to provide quality water service not only today, but well into the future. This requires significant investment in our water infrastructure and in 2022 alone, Maryland American Water invested more than \$3.1 million in water system improvements.

From meeting and surpassing state and federal drinking water standards or investing millions each year to upgrade our infrastructure, our employees are dedicated to serving you.

We're proud of our strong drinking water quality record and we thank you for allowing us the privilege to serve as your local water service provider.

Sincerely,

A handwritten signature in black ink that reads "Barry L. Suits". The signature is written in a cursive, flowing style.

Barry L. Suits, P.E.  
President  
Maryland American Water

**This report contains important information about your drinking water. Translate it or speak with someone who understands it at (866) 641-2131, Monday-Friday, 7 a.m. to 7 p.m.**



### **ATTENTION: Landlords and Apartment Owners**

**Please share a copy of this notice with your tenants. It includes important information about their drinking water quality.**

A close-up photograph of a young boy with dark skin and short, curly hair, wearing an orange shirt. He is holding a clear glass to his lips and drinking water. The background is softly blurred, showing another person's head.

Mark of  
Excellence



### EVERY STEP OF THE WAY.

We monitor and test your water at multiple points throughout our process of drawing it from its source, treating it to meet drinking water standards, and distributing it through our pipeline systems. **In fact, American Water performs over one million tests annually for about 100 regulated contaminants, nationwide.**



### EXPERTISE. RECOGNIZED AT THE HIGHEST LEVEL.

American Water is an expert in water quality testing, compliance and treatment and has established industry-leading water testing facilities. Our dedicated team of scientists and researchers are committed to finding solutions for water quality challenges and implementing new technologies. We are recognized as an industry leader in water quality and work cooperatively with the EPA so that drinking water standards and new regulations produce benefits for customers and public water suppliers. American Water has earned awards from the EPA's Partnership for Safe Water as well as awards for superior water quality from state regulators, industry organizations, individual communities, and government and environmental agencies.



### WATER QUALITY. DOWN TO A SCIENCE.

We also have access to American Water's Central Laboratory in Belleville, Illinois, which conducts sophisticated drinking water testing and analysis. Here, American Water scientists refine testing procedures, innovate new methods, and look for ways to detect potentially new contaminants—even before regulations are in place.



### MAINTAINING QUALITY FOR FUTURE GENERATIONS.

Just as Maryland American Water is investing in research and testing, we also understand the importance of investing in the infrastructure that provides high-quality water service to you. Last year alone, **we invested more than \$3.1 million to improve our water and wastewater treatment and pipeline systems.**



## About Your Drinking Water Supply

### WHERE YOUR WATER COMES FROM

The sources of supply for the Town of Bel Air and portions of Harford County are Winters Run (a surface supply), reservoir, and two (2) wells. Intakes along the banks of Winters Run bring water into the treatment plant. Our water supply is part of the Bush River Basin, with the watershed for Winters Run covering an area of roughly 35 square miles. Much of the watershed is agricultural. Also adjacent to the banks of Winters Run is a source water well which is also treated at the plant. We have an additional well located on property owned by the Town of Bel Air's Department of Public Works. This well water is treated on site and directly pumped into the distribution system.

There is also an interconnection with the Harford County water system, from which we purchase treated water as needed. The supply sources for Harford County water system are the Loch Raven Reservoir, the Susquehanna River and seven wells in the area. Learn more about local waterways at <https://mywaterway.epa.gov/>.

A Source Water Assessment Program (SWAP) is a result of the 1996 amendments to the Federal Safe Drinking Water Act (SDWA). Those amendments require all states to establish a program to assess the vulnerability of public water systems to potential contamination. The Maryland Department of Environment (MDE) completed the Source Water Assessment for Winters Run in 2004. The assessment found that Winters Run is potentially susceptible to contamination from transportation spills, runoff from roads, parking lots and agricultural land. More detailed information regarding the Source Water Assessment for Winters Run can be found by contacting the Maryland Department of the Environment at (800) 633-6101.

MDE also performed a Comprehensive Performance Evaluation (CPE) in 2007. MD-AW has made progress on many of their recommendations. This included the development of water treatment goals; successful trial run with another coagulant, review of sedimentation design, and update of some of the plant operating procedures, all to improve and optimize plant performance. More detailed information regarding the CPE for Winters Run can be found by contacting the Maryland Department of the Environment at (800) 633-6101.



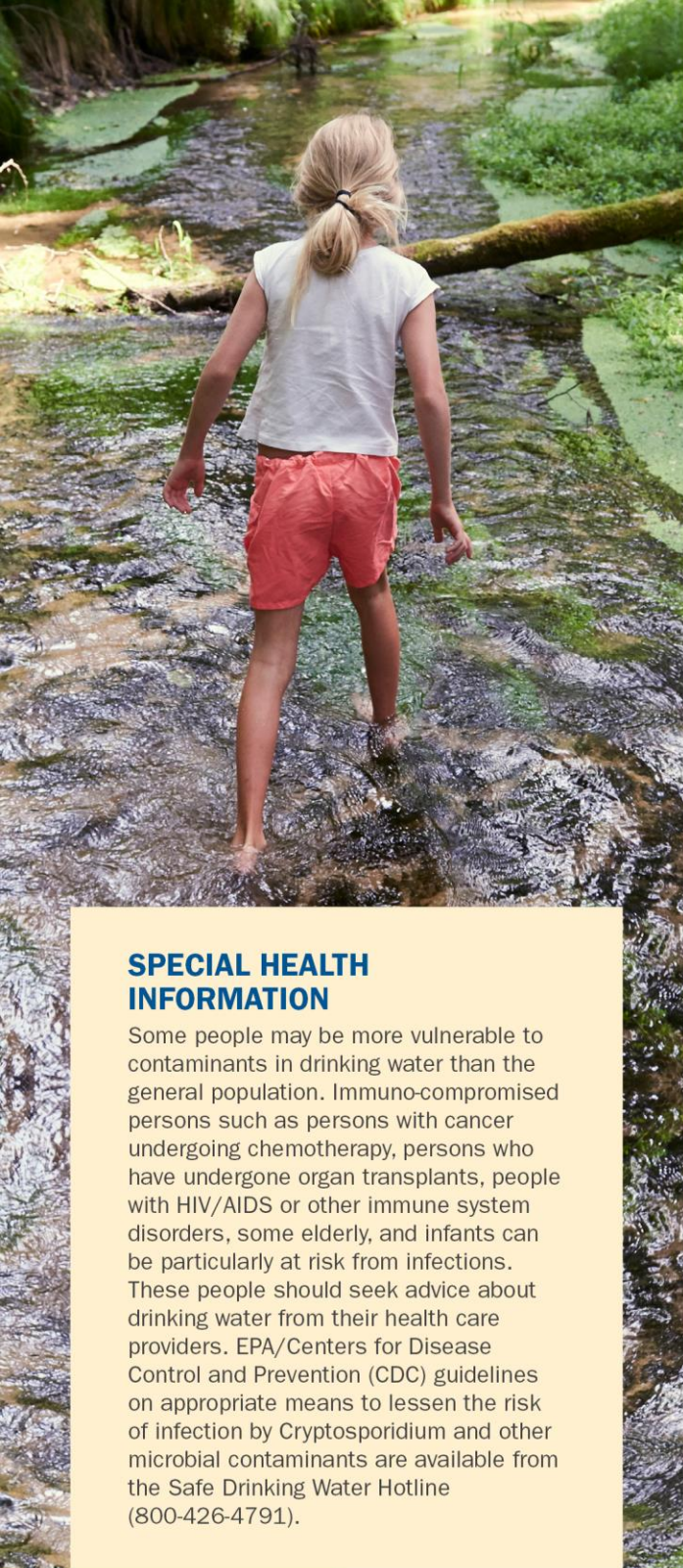
### QUICK FACTS ABOUT THE BEL AIR SYSTEM

**Communities served:**  
Bel Air

**Maryland American Water source:**  
Winters Run, reservoir, and two wells

**Harford County Water Source:**  
Susquehanna River  
Loch Raven Reservoir  
Ground water well

**Average amount of water supplied to customers on a daily basis:**  
1.6 million gallons per day



# What are the Sources of Contaminants?

To provide tap water that is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, aquifers and/or groundwater. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## SPECIAL HEALTH INFORMATION

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/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

<b>Microbial Contaminants</b>	such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
<b>Inorganic Contaminants</b>	such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
<b>Pesticides and Herbicides</b>	which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
<b>Organic Chemical Contaminants</b>	including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also, come from gas stations, urban storm water runoff, and septic systems.
<b>Radioactive Contaminants</b>	which can be naturally occurring or may be the result of oil and gas production and mining activities.



# Protecting Your Drinking Water Supply

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

## WHAT CAN YOU DO?

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Properly dispose of pharmaceuticals, household chemicals, oils and paints. Materials can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag in the trash.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Take part in watershed activities.

**Report any spills, illegal dumping or suspicious activity to MDE here: 1-866-633-4686.**

## WHAT ARE WE DOING?

Our vision is Clean Water for Life. Our priority is to provide reliable, quality drinking water for our customers. The source of supply is an important part of that mission. We work to understand and reduce potential risks to your drinking water supply.

**Here are a few of the efforts underway to protect our shared water resources:**



**Community Involvement:** We have a proactive public outreach program to help spread the word and get people involved. This includes school education, contests, and other community activities.



**Environmental Grant Program:** Each year, we fund projects that improve water resources in our local communities.

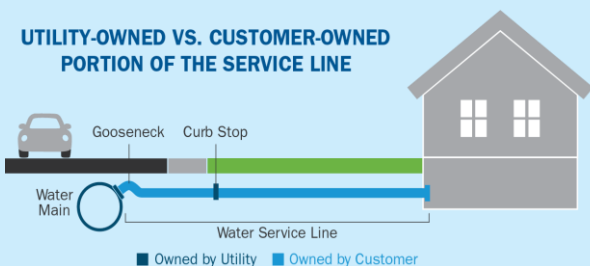
## FOR MORE INFORMATION

To learn more about your water supply and local activities, visit us online at <https://www.amwater.com/mdaw> or contact the regional Source Water Protection Lead, Ayite Amegnikin at 703-706-3867.

# About Lead

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. American Water 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 reducing your family's risk. 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 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 Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## UTILITY-OWNED VS. CUSTOMER-OWNED PORTION OF THE SERVICE LINE



Please note: This diagram is a generic representation. Variations may apply.

## The most common source of lead in tap water is from the customer's plumbing and their service line.

The utility-owned water mains are not made of lead; however, the water service line that carries the water from the water main in the street to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel or plastic. You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve.

### MINIMIZING YOUR POTENTIAL EXPOSURE

You cannot see, smell or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing.

### CHECK YOUR PLUMBING AND SERVICE LINE

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If your service line is made of lead, and you're planning to replace it, be sure to



**1. Flush your taps.** The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to two minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plants.



**2. Use cold water for drinking and cooking.** Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.



**3. Routinely remove and clean all faucet aerators.**



**4. Look for the "Lead Free" label** when replacing or installing plumbing fixtures.



**5. Follow manufacturer's instructions for replacing water filters** in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.



**6. Flush after plumbing changes.** Changes to your service line, meter, or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for 3 to 5 minutes.





# Determining Your Service Line Material

Homeowners' service lines are most commonly made of lead, copper, galvanized steel or plastic. Homes built before 1930 are more likely to have lead plumbing systems.

## There are different ways that you can determine if you have a lead service line.

- You can access your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve and identify the pipe material using the chart on the right.
- A licensed and insured plumber can inspect your pipes and plumbing.
- Lead test kits can be purchased at local hardware and home improvement stores. These kits are used to test paint, but can also be used to test pipe – not the water inside. Look for an EPA recognized kit. Wash your hands after inspecting plumbing and pipes.

## TYPES OF PIPE

	• Galvanized: A dull, silver-gray color. Use a magnet - strong magnets will typically cling to galvanized pipes.
	• Copper: The color of a copper penny.
	• Plastic: Usually white, rigid pipe that is jointed to water supply piping with a clamp. Note: It can be other colors, including blue and black.
	• Lead: A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will <u>not</u> cling to lead pipes.

## YOUR SERVICE LINE MATERIAL

Please note if your service lines contain lead, it does not mean you cannot use water as you normally do. Virginia American Water regularly tests for lead in drinking water and our water meets state and federal water quality regulations, including those set for lead.

For more information on lead in drinking water, please visit <https://www.amwater.com/mdaw/water-quality/lead-and-drinking-water>.



# Important Information About **Drinking Water**

## **CRYPTOSPORIDIUM**

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

## **RADON**

Radon 222, or radon for short, is a colorless, odorless gas that occurs naturally in soil, air and water. Radon is formed from the radioactive decay products of natural uranium that is found in many soils. Most radon in indoor air comes from the soils below the foundation of the home, and in some locations can accumulate to dangerous levels in the absence of proper ventilation. In most homes, the health risk from radon in drinking water is very small compared to the health risk from radon in indoor air. For more information, call the EPA's Radon Hotline at 1-800-SOS-RADON. We have detected radon in the finished water supply, at the level of 728 pci/L. There is currently no federal regulation for radon levels in drinking water. Exposure to air-transmitted radon over a long period of time may cause adverse health effects.

## **FLUORIDE**

Fluoride is a naturally occurring substance. It can be present in drinking water from two sources:

1. **By nature** when groundwater comes into contact with fluoride-containing minerals naturally present in the earth; or
2. **By a water purveyor** through addition of fluoride to the water they are providing in the distribution system.

The Bel Air System has naturally-occurring fluoride in the groundwater. The fluoride level at Winters Run treatment plant was adjusted to achieve an average fluoride level of 0.47 parts per million (ppm). The naturally-occurring fluoride levels in the Bel Air groundwater sources are close to average levels (approximately 0.41 ppm).

Water additive which promotes strong teeth, Harford County water system added fluoride to achieve an average of 0.57 ppm.

If you have any questions on fluoride, please call Maryland American Water's Customer Service Center at (866) 641-2131.





## Important Information About **Drinking Water**

### **SODIUM**

Sodium was detected in your drinking water. There is presently no established standard for sodium in drinking water. Drinking water does not play a significant role in sodium exposure for most individuals. Those that are under treatment for sodium-sensitive hypertension should consult with their health care provider regarding sodium levels in their drinking water supply and the advisability of using an alternative water source or point-of-use treatment to reduce the sodium. For individuals on a very low sodium diet (500mg/day), the EPA recommends that drinking water sodium not exceed 20 mg/L.

### **NITRATES**

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 or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.



# Water Quality Results

## **WATER QUALITY STATEMENT**

We are pleased to report that during calendar year 2022, the results of testing of your drinking water complied with all state and federal drinking water requirements.

For your information, we have compiled a list in the table below showing the testing of your drinking water during 2022. The Maryland Department of Environment allows us to monitor for some contaminants less than once per year because the concentration of the contaminants does not change frequently. Some of our data, though representative, are more than one year old.

## **OTHER INFORMATION**

This CCR was prepared by A. Amegnikin, Water Quality Supervisor. If you have questions about this report, you want additional information about your drinking water, please contact: Ayite Amegnikin, Water Quality Supervisor, email [ayite.amegnikin@amwater.com](mailto:ayite.amegnikin@amwater.com).

## **Opportunities for Public Participation**

Maryland American Water does not schedule regular meetings for public participation in decisions that affect drinking water quality. However, when public participation is required, meetings would be announced in the local newspaper and information would be posted on our website ([www.amwater.com/mdaw](http://www.amwater.com/mdaw)).

# Definition of Terms

These are terms that may appear in your report.

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

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**LRAA:** Locational Running Annual Average

**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. See also Secondary Maximum Contaminant Level (SMCL).

**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.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**MFL:** Million fibers per liter.

**micromhos per centimeter ( $\mu\text{mhos/cm}$ ):** A measure of electrical conductance.

**NA:** Not applicable

**ND:** Not detected

**Nephelometric Turbidity Units (NTU):** Measurement of the clarity, or turbidity, of the water.

**pH:** A measurement of acidity, 7.0 being neutral.

**picocuries per liter (pCi/L):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

**parts per billion (ppb):** One part substance per billion parts water, or micrograms per liter.

**parts per million (ppm):** One part substance per million parts water, or milligrams per liter.

**parts per trillion (ppt):** One part substance per trillion parts water, or nanograms per liter.

**Secondary Maximum Contaminant Level (SMCL):** Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**TON:** Threshold Odor Number

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**%:** Percent

## MEASUREMENTS

### Parts Per Million



1 drop  
in a 10 gallon fish tank

### Parts Per Billion



1 drop  
in a 10,000 gallon swimming pool

### Parts Per Trillion



1 drop  
in 35 junior size Olympic pools

# Water Quality Results

Maryland American Water conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2022, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the “Definition of Terms” on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

## LEAD AND COPPER MONITORING PROGRAM - At least 30 tap water samples collected at customers' taps every three years

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead (ppb)	2020	Yes	0	15	1.0	30	0	Corrosion of household plumbing systems
Copper (ppm)	2020	Yes	1.3	1.3	0.329	30	0	Corrosion of household plumbing systems

## REVISED TOTAL COLIFORM RULE - At least 15 samples collected each month in the distribution system

Substance	Year Sampled	Compliance Achieved	MCLG	MCL	Highest No. of Positive Samples	Typical Source
Total Coliform	2022	Yes	NA	MCL = Less than 5%	0	Naturally present in the environment
E. Coli	2022	Yes	0	TT = No confirmed samples	0	Human and animal fecal waste

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We are reporting the highest number of positive samples in any month.

1. The Treatment Technique for Total Coliforms requires that if the maximum number of total coliform positive samples are exceeded a system assessment must be conducted, any sanitary defects identified, and corrective actions completed. Additional Level 1 Assessments or Level 2 Assessments are required depending on the circumstances.
2. The Treatment Technique for E. Coli requires that for any total coliform positive routine sample with one or more total coliform positive check samples and an E. coli positive result for any of the samples a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed. The E. Coli MCL is exceeded if routine and repeat samples are total coliform-positive and either is E. coli-positive, or the system fails to take repeat samples following an E. coli-positive routine sample, or the system fails to analyze total coliform-positive repeat samples for E. coli.

### DISINFECTION BYPRODUCTS - Collected in the Distribution System

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest LRAA	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2022	Yes	NA	80	60.7	13.2 to 82.4	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)	2022	Yes	NA	60	45.2	13.8 to 71.5	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples used to calculate the running annual averages. Some people who drink trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of cancer.

### DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Chlorine (ppm) (Distribution System) <sup>1</sup>	2022	Yes	MRDLG = 4	NA	1.7	1.2 to 1.7	Water additive used to control microbes
Chlorine (ppm) Winters Run Treatment Facility <sup>2</sup>	2022	Yes	NA	TT: Results $\geq$ 0.2	1.4	1.4 to 2.7	Water additive used to control microbes
Chlorine (ppm) Harford County Treatment Facility <sup>2</sup>	2022	Yes	NA	TT: Results $\geq$ 0.2	0.1	0.1 to 3.1	Water additive used to control microbes
Chlorine (ppm) Bynum Well <sup>2</sup>	2022	Yes	NA	TT: Results $\geq$ 0.2	0.6	0.6 to 3.1	Water additive used to control microbes

1 - Data represents the highest monthly average of chlorine residuals measured throughout our distribution system.

2 - Data represents the lowest residual entering the distribution system from our surface water treatment plant.

### TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Range of % Removal Required	Range of % Removal Achieved	Number of Quarters Out of Compliance	Typical Source
Total Organic Carbon (TOC) Harford County Treatment Facility	2022	Yes	NA	TT	NA	0.96 to 2.57	NA	Organic matter. It can provide a medium for formation of disinfection by-products

- Alternative compliance criteria were met such that required removal of TOC to control reduced formation of chlorinated by-products is not applicable for the Winters Run treatment plant. Organic matter present in the source water can react with the disinfectants used at the treatment facility to form these by-products. TOC (Total Organic Carbon): The value reported under "Range Detected " is the average ratio between the percentage of TOC actually removed and the TOC required to be removed. A value of greater than or equal to 1.0 indicates that the water system is in compliance with TOC removal requirements. TOC is covered by a treatment technique (TT).

### TURBIDITY - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Typical Source
Turbidity (NTU) Winters Run Treatment Facility	2022	Yes	NA	TT: Results < 1.0 NTU	0.19	Soil runoff
	2022	Yes	NA	TT: At least 95% of samples <0.3 NTU	100%	
Turbidity (NTU) Harford County Treatment Facility	2022	Yes	NA	TT: Results <1.0 NTU	0.276	Soil runoff. Average = 0.04 NTU
	2022	Yes	NA	TT: At least 95% of samples <0.3 NTU	100%	

REGULATED SUBSTANCES - Collected at the Treatment Plant											
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result Winters Run (WR)	Range Detected Winters Run	Highest Compliance Result Harford County (HC)	Range Detected Harford County	Highest Compliance Result Bynum Well (BW)	Range Detected Bynum Well	Typical Source
Gross Alpha emitters (pCi/L)	WR 2020  HC 2020  BW 2017	Yes	0	15	ND	NA	4.3	NA	0.366	NA	Erosion of natural deposits
Beta Emitters (pCi/L)	WR 2020  HC 2020  BW 2017	Yes	0	50	1.68	NA	ND	NA	1.3	NA	Decay of natural and synthetic deposits
Combined Radium (226 & 228) (pCi/L)	WR 2020  HC 2020  BW 2017	Yes	0	5	0.792	NA	3.2	NA	0.213	NA	Erosion of natural deposits
Barium (ppm)	2022	Yes	2	2	ND	NA	0.11	ND to 0.11	ND	NA	Erosion; drilling waste and metal refineries
Antimony (ppb)	2022	Yes	6	6	ND	NA	0.5	ND to 0.5	ND	NA	Discharge from petroleum refineries, fire retardants, ceramics and electronic solder
Fluoride (ppm)	2022	Yes	4	4	0.47	NA	0.8	ND to 0.8	0.41	NA	Added to water to promote healthy teeth
Nitrate (ppm)	2022	Yes	10	10	2.37	NA	3.5	1.3 to 3.5	4.82	NA	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Chromium (ppb)	2022	Yes	100	100	ND	NA	2.0	ND to 2.0	ND	NA	Discharge from steel and pulp mills, erosion of natural deposits
Atrazine (ppb)	2022	Yes	3	3	ND	NA	0.25	ND to 0.25	ND	NA	Runoff from herbicide used on row crops
2,4' D (ppb)	2022	Yes	70	70	0.1	ND to 0.1	NA	NA	ND	NA	Runoff from herbicide used on row crops
Arsenic (ppb)	2022	Yes	10	10	2.0	NA	NA	NA	ND	NA	Naturally occurring

## UNREGULATED CONTAMINANT MONITORING RULE

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant											
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	SMCL	Highest Result Winters Run	Range Detected Winters Run	Average Result Harford County	Range Detected Harford County	Highest Result Bynum Well	Range Detected Bynum Well	Comments
Iron (ppm) <sup>1</sup>	2022	Yes	NA	0.3	ND	NA	<0.10	ND to 0.151	ND	NA	Erosion of natural deposits
Nickel (ppm)	2022	NA	NA	NA	ND	NA	0.003	ND to 0.006	ND	NA	Corrosion of pipes, erosion of natural deposits
Sulfate (ppm) <sup>1</sup>	2022	Yes	NA	250	7.7	NA	NA	NA	29.3	NA	Used in production of fertilizers; fungicides; insecticides
Zinc (ppm) <sup>1</sup>	2022	Yes	NA	5	0.231	NA	NA	NA	0.362	NA	Erosion of natural deposits
Chloride (ppm) <sup>1</sup>	2022	Yes	NA	250	43.5	NA	NA	NA	88.0	NA	Naturally occurring
Aluminum (ppm) <sup>1</sup>	2022	Yes	NA	0.05	0.04	NA	NA	NA	ND	NA	Naturally occurring and water treatment additive
Sodium (ppm) <sup>2</sup>	2022	NA	NA	NA	17.0	NA	31.6	13.5 to 75.2	45.3	NA	Erosion of natural deposits; leaching, water treatment chemicals
Calcium (ppm)	2022	NA	NA	NA	16	NA	NA	NA	48	NA	Naturally occurring
Magnesium (ppm)	2022	NA	NA	NA	8	NA	NA	NA	18	NA	Naturally occurring
Manganese (ppb)	2022	NA	NA	50	ND	NA	19	18 to 20	ND	NA	Erosion of natural deposits
Radon (pCi/L)	2022	NA	NA	NA	NA	NA	NA	NA	728	NA	Erosion of natural deposits
Haloacetic Acids (ppb)	2022	NA	NA	NA	NA	NA	28.0	9.9 to 37.3	NA	NA	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	2022	NA	NA	NA	NA	NA	40.0	8.9 to 56.0	NA	NA	Byproduct of drinking water disinfection
Total Hardness (ppm)	2022	NA	NA	NA	72	NA	NA	NA	195	NA	Natural calcium / magnesium content in water
Total Alkalinity (ppm)	2022	NA	NA	NA	31	24 to 31	NA	NA	112	NA	Ability of water to neutralize acid and bases and maintain a stable pH
pH	2022	NA	NA	NA	7.3	6.9 to 7.3	NA	NA	8.7	6.6 to 8.7	Measure of acid/ base properties of water

1 - Substances with Secondary MCLs do not have MCLGs and are not legally enforceable; these limits are primarily established to address aesthetic concerns.

2 - For healthy individuals the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

# **ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST - Water Leaving the Treatment Facility and the Distribution System**

Parameter	Year Sampled	Units	Highest Result Winters Run	Range Detected Winters Run	Average Result Harford County	Range Detected Harford County	Typical Source
<b>Bromochloroacetic Acid</b>	2020	ppb	3.8	0.45 to 3.8	NA	NA	By-product of drinking water disinfection
<b>Bromodichloroacetic Acid</b>	2020	ppb	5.8	ND to 5.8	NA	NA	By-product of drinking water disinfection
<b>Bromodichloromethane</b>	2022	ppb	12.5	3.2 to 12.5	NA	NA	By-product of drinking water disinfection
<b>Chlorate</b>	2022	ppm	0.02	ND to 0.02	NA	NA	By-product of drinking water disinfection
<b>Chlorodibromoacetic Acid</b>	2020	ppb	1.3	ND to 1.3	NA	NA	By-product of drinking water disinfection
<b>Chloroform</b>	2022	ppb	67.7	8.8 to 67.7	NA	NA	By-product of drinking water disinfection
<b>Dibromochloromethane</b>	2022	ppb	2.2	1.1 to 2.2	NA	NA	By-product of drinking water disinfection
<b>Dichloroacetic Acid</b>	2022	ppb	33.7	7.2 to 33.7	NA	NA	By-product of drinking water disinfection
<b>Monochloroacetic Acid</b>	2022	ppb	3.0	ND to 3.0	NA	NA	By-product of drinking water disinfection
<b>Total Haloacetic Acids-Br</b>	2020	ppb	11.0	1.2 to 11.0	NA	NA	By-product of drinking water disinfection
<b>Total Haloacetic Acids-UCMR4</b>	2020	ppb	66.0	1.6 to 66.0	NA	NA	By-product of drinking water disinfection
<b>Trichloroacetic Acid</b>	2022	ppb	33.6	6.7 to 33.6	NA	NA	By-product of drinking water disinfection
<b>Cryptosporidium</b>	2022	oocyst/liter	NA	NA	ND	ND	Human and animal fecal waste
<b>Giardia<sup>1</sup></b>	2022	cyst/liter	NA	NA	NA	ND to 1.3	Human and animal fecal waste

1- Giardia data is from raw water, highest result is displayed

## PER- AND POLYFLUOROALKYL SUBSTANCES

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 [1.64]-[6.80] parts per trillion (ppt); PFOS concentrations from samples taken from our water system in 2022 ranged from [2.80]-[7.41] 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](https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx).

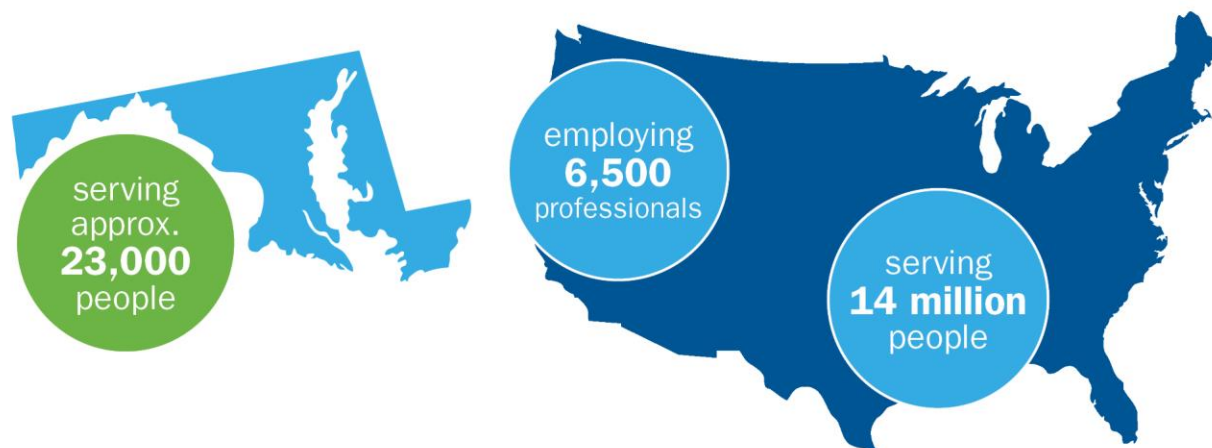
UNREGULATED PERFLUORINATED COMPOUNDS : MDE sampling results 2022								
Parameter	Units	Result Winters Run Effluent	Range Detected Winters Run	Result Bynum well Effluent	Range Detected Bynum well	Average Result Harford County	Range Detected Harford County	Typical Source
Perfluorooctanoic Acid (PFOA)	ppt	1.64	NA	6.80	NA	<1.0	ND to 1.6	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance
Perfluorooctanesulfonic Acid (PFOS)	ppt	2.80	NA	7.41	NA	<1.0	ND to 2.5	
Perfluorobutane sulfonic Acid (PFBS)	ppt	2.74	NA	5.14	NA	<1.0	ND to 2.1	
Perfluoroheptanoic Acid (PFHpA)	ppt	1.05	NA	3.49	NA	NA	NA	
Perfluorohexanoic Acid (PFHxA)	ppt	2.19	NA	8.57	NA	NA	NA	
Perfluorohexane sulfonate (PFHxS)	ppt	2.65	NA	2.28	NA	<1.0	ND to 2.2	



## About Us

**Maryland American Water**, a subsidiary of American Water, provides high-quality and reliable water services to approximately 23,000 people. For more information, visit [marylandamwater.com](http://marylandamwater.com) and follow us on Twitter, Facebook.

With a history dating back to 1886, **American Water (NYSE: AWK)** is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs approximately 6,500 dedicated professionals who provide regulated and regulated-like drinking water and wastewater services to an estimated 14 million people in 24 states. American Water provides safe, clean, affordable, and reliable water services to our customers to help keep their lives flowing.



## MARYLAND AMERICAN WATER FACTS AT A GLANCE

- **COMMUNITIES SERVED**  
Bel Air, Forest Hill and Fallston
- **CUSTOMERS SERVED**  
More than 5,000 water connections serving approximately 23,000 people (85% residential, 12% commercial, 2.5% fire service and 0.8% other)
- **EMPLOYEES**  
10
- **TREATMENT FACILITIES**  
One surface water treatment plant and two active groundwater sources located in Bel Air off Winters Run
- **SOURCE OF SUPPLY**  
92% surface water  
8% groundwater
- **MILES OF PIPELINE**  
76 miles of water pipe
- **FIRE HYDRANTS**  
526
- **STORAGE**  
Three water storage facilities with capacity of 1.6 million gallons; three water pumping facilities

# How to Contact Us

If you have any questions about this report, your drinking water, or service, please contact Maryland American Water's Customer Service Center Monday to Friday, 7 a.m. to 7 p.m. at 1-866-641-2131.

## WATER INFORMATION SOURCES

**Maryland American Water**

[www.amwater.com/mdaw](http://www.amwater.com/mdaw)

**Maryland Department of the Environment:**

[www.mde.state.md.us](http://www.mde.state.md.us)

**United States Environmental Protection Agency (USEPA):**

[www.epa.gov/safewater](http://www.epa.gov/safewater)

**Safe Drinking Water Hotline:** (800) 426-4791

**Centers for Disease Control and Prevention:** [www.cdc.gov](http://www.cdc.gov)

**American Water Works Association:** [www.awwa.org](http://www.awwa.org)

**Water Quality Association:** [www.wqa.org](http://www.wqa.org)

**National Library of Medicine/National Institute of Health:**

[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)

**This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-866-641-2131.**

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-866-641-2131.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al 1-866-641-2131.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau peb ntawm 1-866-641-2131.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電 **1-866-641-2131** 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया **1-866-641-2131** र हमें काल करें।

**Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону 1-866-641-2131.**

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa 1-866-641-2131.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số 1-866-641-2131.