



2021 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 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.

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



Barry Suits

President, Maryland
American Water

Dear Maryland American Water Customer,

Having access to safe, reliable water service is something that can be easily taken for granted. At Maryland American Water, it's our top priority.

I am pleased to share with you our 2021 Consumer Confidence Report. As you read through this water quality information, you will see that we continue to supply high quality drinking water service. 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.

Delivering reliable water service to your tap requires significant investment in our water infrastructure. In 2021 alone, Maryland American Water invested more than \$2.5 million in water system improvements. Our job is to provide quality water service not only today, but well into the future. It's part of our commitment to you and all customers we serve. Maryland American Water was recently recognized by the U.S. Environmental Protection Agency 2021 Drinking Water State Revolving Fund's AQUARIUS program for an exceptional focus on sustainability and protection of public health.

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

We are proud to be your local water service provider and thank you for allowing us the privilege to serve you.

Sincerely,

A handwritten signature in blue ink that reads "Barry L. Suits". The signature is written in a cursive 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.



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 \$2.5 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

Water source:

Winters Run, reservoir, and two wells

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:

Microbial Contaminants	such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic Contaminants	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.
Pesticides and Herbicides	which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
Organic Chemical Contaminants	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.
Radioactive Contaminants	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.

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.

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.

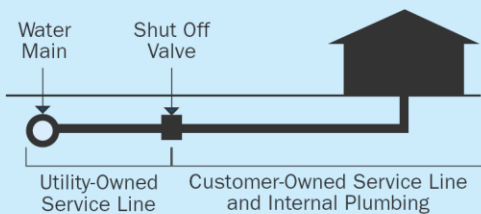


Environmental Grant Program: Each year, we fund projects that improve water resources in our local communities.

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. Your water utility is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your 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 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 contact us at 1-866-641-2131.



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.

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 734 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 optimal fluoride level of 0.54 parts per million (ppm) and a control range of 0.6 ppm to 0.7 ppm to comply with the state's Water Fluoridation Standards. The naturally-occurring fluoride levels in the Bel Air groundwater sources are close to optimal levels (approximately 0.42 ppm). The fluoride levels in the entire system are consistent year-round.

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 2021, 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 2021. 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.

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).

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



in a 10 gallon fish tank

Parts Per Billion



in a 10,000 gallon swimming pool

Parts Per Trillion



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 2021, 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 th Percentile	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead (ppm)	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	2021	Yes	NA	MCL = Less than 5%	0	Naturally present in the environment
E. Coli	2021	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 of the general bacteriological quality of the water. We are reporting the highest number of positive samples in any month.

¹ The Treatment Technique for Total Coliforms requires that if the maximum percentage OR 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)	2021	Yes	NA	80	58.9	8.3 to 122.7	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)	2021	Yes	NA	60	43.2	10.0 to 65.8	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) ¹	2021	Yes	MRDLG = 4	NA	1.9	1.5 to 1.9	Water additive used to control microbes
Chlorine (ppm) Winters Run Treatment Facility ²	2021	Yes	NA	TT: Results \geq 0.2	2.7	1.4 to 2.7	Water additive used to control microbes
Chlorine (ppm) Harford County Treatment Facility ²	2021	Yes	NA	TT: Results \geq 0.2	3.5	0.2 to 3.5	Water additive used to control microbes
Chlorine (ppm) Bynum Well ²	2021	Yes	NA	TT: Results \geq 0.2	1.8	0.3 to 1.8	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	2021	Yes	NA	TT	NA	0.78 to 2.83	NA	Organic matter. It can provide a medium for formation of disinfection byproducts

- 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	2021	Yes	NA	TT: Results < 1.0 NTU	0.27	Soil runoff
	2021	Yes	NA	TT: At least 95% of samples <0.3 NTU	100%	
Turbidity (NTU) Harford County Treatment Facility	2021	Yes	NA	TT: Results <1.0 NTU	0.166	Soil runoff
	2021	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	Yes	0	15	ND	NA	4.3	NA	0.366	NA	Erosion of natural deposits
	HC 2020										
	BW 2017										
Beta Emitters (pCi/L)	WR 2020	Yes	0	50	1.68	NA	ND	NA	1.3	NA	Decay of natural and synthetic deposits
	HC 2020										
	BW 2017										
Combined Radium (226 & 228) (pCi/L)	WR 2020	Yes	0	5	0.792	NA	3.2	NA	0.213	NA	Erosion of natural deposits
	HC 2020										
	BW 2017										
Barium (ppm)	2021	Yes	2	2	ND	NA	0.12	0.03 to 0.12	ND	NA	Erosion; drilling waste and metal refineries
Beryllium (ppb)	2021	Yes	4	4	ND	NA	1.00	ND to 1.00	ND	NA	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Fluoride (ppm)	2021	Yes	4	4	0.54	NA	2.96	ND to 2.96	0.42	NA	Added to water to promote healthy teeth
Nitrate (ppm)	2021	Yes	10	10	2.85	NA	6.40	0.6 to 6.40	4.41	NA	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Selenium (ppb)	2021	Yes	50	50	ND	NA	3.00	ND to 3.00	ND	NA	Discharge from petroleum refineries, erosion of natural deposits
Atrazine (ppb)	2021	Yes	3	3	ND	NA	0.26	ND to 0.26	ND	NA	Runoff from herbicide used on row crops
2,4' D (ppb)	2021	Yes	70	70	0.1	ND to 0.1	NA	NA	ND	ND	Runoff from herbicide used on row crops

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) ¹	2021	Yes	NA	0.3	ND	NA	0.07	ND to 0.146	ND	NA	Erosion of natural deposits
Nickel (ppm)	2021	NA	NA	NA	ND	NA	0.004	ND to 0.008	ND	NA	Corrosion of pipes, erosion of natural deposits
Sulfate (ppm) ¹	2021	Yes	NA	250	8.2	NA	NA	NA	28.7	NA	Used in production of fertilizers; fungicides; insecticides
Zinc (ppm) ¹	2021	Yes	NA	5	0.244	NA	NA	NA	0.563	NA	Erosion of natural deposits
Chloride (ppm) ¹	2021	Yes	NA	250	43.6	NA	NA	NA	99.4	NA	Naturally occurring
Aluminum (ppm) ¹	2021	Yes	NA	0.05	0.04	NA	NA	NA	ND	NA	Naturally occurring and water treatment additive
Sodium (ppm) ²	2021	NA	NA	NA	17.1	NA	36.0	14.1 to 96.2	50.3	NA	Erosion of natural deposits; leaching, water treatment chemicals
Calcium (ppm)	2021	NA	NA	NA	14	NA	NA	NA	51	NA	Naturally occurring
Magnesium (ppm)	2021	NA	NA	NA	8	NA	NA	NA	20	NA	Naturally occurring
Manganese (ppb)	2021	NA	NA	50	ND	NA	31	21 to 44	ND	NA	Erosion of natural deposits
Radon (pCi/L)	2021	NA	NA	NA	NA	NA	NA	NA	734	NA	Erosion of natural deposits
Haloacetic Acids (ppb)	2021	NA	NA	NA	NA	NA	20.1	6.3 to 22.8	NA	NA	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	2021	NA	NA	NA	NA	NA	36.0	3.2 to 41.7	NA	NA	Byproduct of drinking water disinfection
Total Hardness (ppm)	2021	NA	NA	NA	67	NA	NA	NA	209	NA	Natural calcium / magnesium content in water
Total Alkalinity (ppm)	2021	NA	NA	NA	29	23 to 29	NA	NA	125	NA	Ability of water to neutralize acid and bases and maintain a stable pH
pH	2021	NA	NA	NA	7.4	6.9 to 7.4	NA	NA	7.7	6.8 to 7.7	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
Bromochloroacetic Acid	2020	ppb	3.8	0.45 to 3.8	NA	NA	By-product of drinking water disinfection
Bromodichloroacetic Acid	2020	ppb	5.8	ND to 5.8	NA	NA	By-product of drinking water disinfection
Bromodichloromethane	2021	ppb	15.2	2.3 to 15.2	NA	NA	By-product of drinking water disinfection
Chlorate	2021	ppm	0.05	ND to 0.05	NA	NA	By-product of drinking water disinfection
Chlorodibromoacetic Acid	2020	ppb	1.3	ND to 1.3	NA	NA	By-product of drinking water disinfection
Chloroform	2021	ppb	104.9	5.2 to 104.9	NA	NA	By-product of drinking water disinfection
Dibromoacetic Acid	2020	ppb	0.80	ND to 0.80	NA	NA	By-product of drinking water disinfection
Dibromochloromethane	2021	ppb	2.6	0.7 to 2.6	NA	NA	By-product of drinking water disinfection
Dichloroacetic Acid	2021	ppb	31.2	5.9 to 31.2	NA	NA	By-product of drinking water disinfection
Monobromoacetic Acid	2020	ppb	1.9	ND to 1.9	NA	NA	By-product of drinking water disinfection
Monochloroacetic Acid	2021	ppb	3.2	ND to 3.2	NA	NA	By-product of drinking water disinfection
Total Haloacetic Acids-Br	2020	ppb	11.0	1.2 to 11.0	NA	NA	By-product of drinking water disinfection
Total Haloacetic Acids-UCMR4	2020	ppb	66.0	1.6 to 66.0	NA	NA	By-product of drinking water disinfection
Trichloroacetic Acid	2021	ppb	31.4	4.1 to 31.4	NA	NA	By-product of drinking water disinfection
Bromide	2020	ppm	0.06	ND to 0.06	NA	NA	Used as a solvent in varnishes, dyes, resins, airplane deicing solutions. It is also used in organometallic chemistry synthesis
Cryptosporidium	2021	oocyst/liter	NA	NA	ND	ND	Human and animal fecal waste
Giardia¹	2021	cyst/liter	NA	NA	NA	ND to 0.2	Human and animal fecal waste

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

PFAS MONITORING

PFAS refers to per- and polyfluoroalkyl substances, a class of synthetic chemicals, manufactured for industrial applications and commercial household products such as: non-stick cookware; waterproof and stain resistant fabrics and carpets; firefighting foam and cleaning products. The properties that make these chemicals useful in so many of our every-day products also resist breaking down and therefore persist in the environment. Exposure may be from food, food packaging, consumer products, house dust, indoor and outdoor air, drinking water and at workplaces where PFAS are made or used.

Maryland American Water is currently performing voluntary sampling to better understand certain occurrence of PFAS levels in drinking water sources. This testing allows us to understand how our water compares against the non-enforceable Health Advisory Level set by USEPA of 70 nanograms per liter or parts per trillion for a combination of two PFAS compounds, PFOA and PFOS. Testing also allows Maryland American Water to be better prepared if the USEPA or state environmental regulator develop a drinking water standard for those PFAS for which we have USEPA approved testing methods.

The science and regulation of PFAS and other contaminants is always evolving, and Maryland American Water strives to be a leader in research and development. PFAS contamination is one of the most rapidly changing areas in the drinking water field. We have invested in our own independent research, as well as engaging with other experts in the field to understand PFAS occurrence in the environment. We are also actively assessing treatment technologies that can effectively remove PFAS from drinking water, because we believe that investment in research is critically important to addressing this issue.

This is one of the most rapidly changing landscapes in drinking water contamination. We have invested time and effort on our own independent research, as well as engaging with other experts in the field to understand PFAS occurrence, fate and transport in the environment. We are also actively assessing treatment technologies that can effectively remove PFAS from drinking water, because we believe that investment in research is critical for addressing this issue.

Lauren Weinrich
Principal Scientist,
Water Research and Development

UNREGULATED PERFLUORINATED COMPOUNDS

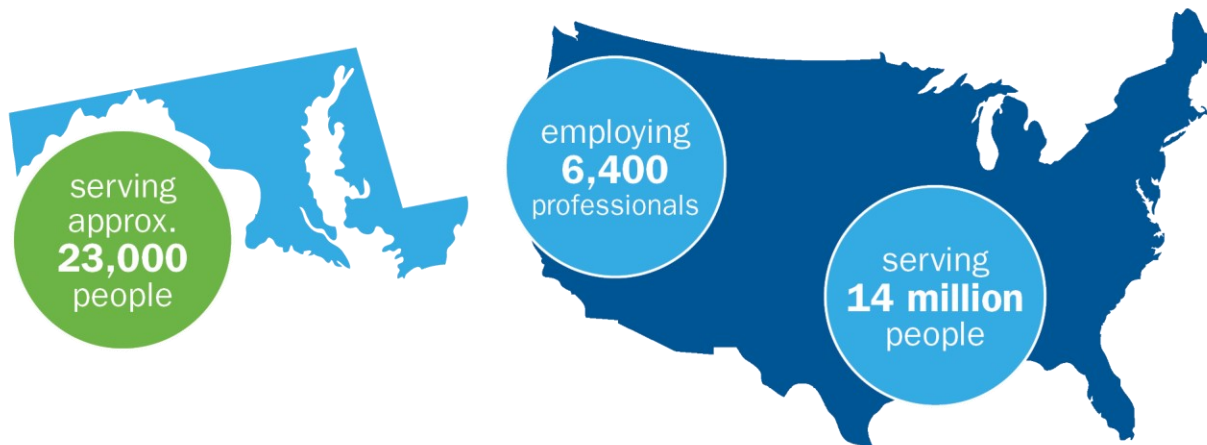
Parameter	Units	Average Result Winters Run Effluent	Range Detected Winters Run	Average Result Bynum well Effluent	Range Detected Bynum well	Average Result Harford County	Range Detected Harford County	Typical Source
Perfluorooctanoic Acid (PFOA)	ppt	ND	NA	7.6	NA	NA	NA	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance
Perfluorooctanesulfonic Acid (PFOS)	ppt	2.5	NA	8.2	NA	NA	NA	
PFOA + PFOS	ppt	NA	NA	NA	NA	2.7	ND to 6.0	
Perfluorobutyrate (PFBA)	ppt	ND	NA	6.1	NA	NA	NA	
Perfluorobutane sulfonic Acid (PFBS)	ppt	2.7	NA	6.2	NA	NA	NA	
Perfluoroheptanoic Acid (PFHpA)	ppt	ND	NA	3.5	NA	NA	NA	
Perfluorohexanoic Acid (PFHxA)	ppt	ND	NA	6.7	NA	NA	NA	
Perfluorovaleric Acid (PFPeA)	ppt	ND	NA	7.1	NA	NA	NA	
Perfluorohexane sulfonate (PFHxS)	ppt	2.4	NA	2.3	NA	NA	NA	



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 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 more than 6,400 dedicated professionals who provide regulated and regulated-like drinking water and wastewater services to more than 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

- **PEOPLE SERVED**
Approximately 23,000 people
(85% residential, 12% commercial,
2.5% fire service and 0.8% other)
- **EMPLOYEES**
Approx. 13
- **TREATMENT FACILITIES**
One surface water treatment plant
and two active groundwater sources
(average daily delivery including surface
water and groundwater is 1.3 million
gallons per day (MGD))
- **MILES OF PIPELINE**
76 miles of water pipe
- **STORAGE AND TRANSMISSION**
Three water storage facilities;
Three water pumping stations
- **HYDRANTS**
520
- **SOURCE OF SUPPLY**
92% surface water
8% groundwater

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

Maryland Department of the Environment:
www.mde.state.md.us

United States Environmental Protection Agency (USEPA):
www.epa.gov/safewater

Safe Drinking Water Hotline: (800) 426-4791

Centers for Disease Control and Prevention: www.cdc.gov

American Water Works Association: www.awwa.org

Water Quality Association: www.wqa.org

National Library of Medicine/National Institute of Health:
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.