



2018 Annual Water Quality Report

Bel Air District
PWS ID: MD0120003



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

A Message from the Maryland American Water President



To Our Valued Customers:

Maryland American Water is proud to be your water service provider, and I am pleased to share with you good news about the quality of your drinking water. Each year, we provide you with our Annual Water Quality Report, and in 2018, Maryland American Water continued to supply drinking water that meets or surpasses all state and federal water quality regulations.

Maryland American Water delivers high-quality water to your homes and businesses by maintaining and improving the miles of pipeline hidden below the ground, our facility that draws water from Winters Run and the plant where the water is treated and tested.

Our plant operators, water quality experts, engineers and maintenance crews work 24/7 to ensure that water is always there when you need it, which is why Maryland American Water constructed a raw water impoundment (reservoir) to secure additional water supply for Bel Air. Located on the historic Mt. Soma site, land we purchased from Harford County in 2015, the impoundment is filled with raw water from Winters Run when stream flows are adequate and will provide an essential back-up water supply for the Bel Air community when a secondary supply is needed. Now in service, the 11.2 acre impoundment will provide approximately 1 million gallons per day of additional water supply.

We invest in Bel Air because we deliver more than just water service. We distribute a key resource for public health, fire protection, the economy and overall quality of life. Our job is to ensure that quality water keeps flowing not only today, but well into the future. It's part of our commitment to you and the Bel Air community.

We hope you agree that your water quality is worth every penny, and worth learning more about.

Sincerely,

Barry Suits, P.E.
President

WE CARE ABOUT WATER. IT'S WHAT WE DO.®

Water Information Sources

Maryland American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water services to approximately 13,200 people.

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on [Twitter](#), [Facebook](#), and [LinkedIn](#).

The web sites of U. S. Environmental Protection Agency (USEPA) Office of Water, the Centers for Disease Control and Prevention, and Maryland Department of Environment (MDE) provide a substantial amount of information on many issues relating to water resources, water conservation and public health. You may visit these sites as well as Maryland American Water's website at the following addresses:

Centers for Disease Control and Prevention

www.cdc.gov

United States Environmental Protection Agency (USEPA)

www.epa.gov/safewater

Maryland Department of the Environment

www.mde.state.md.us

Maryland American Water

www.amwater.com/mdaw/

American Water Works Association

www.awwa.org

Safe Drinking Water Hotline: (800) 426-4791

How is Your Water Treated?

Water sources for Bel Air include surface water (Winters Run), ground water and purchased water from Harford County. Current surface water treatment processes include coagulation and settling followed by filtration and disinfection. An inhibitor is added for corrosion control and fluoridation is provided for reduction of dental cavities. Throughout the process, dedicated plant operations and water quality staff continuously monitor and control these plant processes to assure you, our customers, superior quality water.

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:

- Dispose of pharmaceuticals, household chemicals, oils and paints at proper waste collections sites. Materials can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground. Contact your county waste authority to find out how to dispose of these materials properly
- 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.
- Look for local opportunities to take part in watershed activities.
- Report any spills, illegal dumping or suspicious activity to MDE, by calling toll free (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, and other community activities. For more information, visit: <https://amwater.com/mdaw/news-community/community-involvement>.
- **Environmental Grant Program:** Each year, we fund projects that improve water resources in our local communities. For more information on the program, visit : <https://amwater.com/mdaw/about-us/environmental-grant-program>.
- To learn more about your water supply and local activities, please contact Kelly Ryan at (804)446-9822.

Source Water Assessment Completed

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 development of Water Treatment Goals; successful trial run with another coagulant and review of sedimentation design, all to improve and optimize plant performance; and the completion and update of some of the plant operating procedures. More detailed information regarding the CPE for Winters Run can be found by contacting the Maryland Department of the Environment at (800) 633-6101.

Where Does My Water Come From?

The sources of supply for the Town of Bel Air and portions of Harford County are Winters Run (a surface supply) 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.

How much sodium is in your water?

The sodium level for American Water was 39.9 ppm. These concentrations exceed the recommended maximum contaminant level guidance of 20 ppm for persons on a "strict" sodium intake diet.

What is the pH (acidity) range of your water?

Water in the distribution system averages about 7.2 pH units. A pH of 7.0 is considered neutral, neither acidic nor basic.

Is there fluoride in your water?

Maryland American Water adds fluoride to your water at an average dose of about 0.7 ppm.

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important information with water users at their location who are not billed customers of Maryland American Water and therefore do not receive this report directly.

Special Monitoring

Monitoring for contaminants in accordance with the Unregulated Contaminant Monitoring Rule (UCMR3) began in 2014.

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 774 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.

Substances Expected to be in Drinking Water

To ensure that tap water is of high quality, U.S. Environmental Protection Agency prescribes regulations limiting the amount of certain substances in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Maryland American Water's advanced water treatment processes are designed to reduce any such substances to levels well below any health concern.

The source of drinking water (both tap water and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. 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.

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 EPA's Safe Drinking Water Hotline at (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, or wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater 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 stormwater runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

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).

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC (Centers for Disease Control and Prevention) 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) or by calling our Customer Service Center at (800) 685-8660.

Information About Lead

Is there lead in my water?

Although we regularly test lead levels in your drinking water, it is possible that lead and/or copper levels at your home are higher because of materials used in your plumbing. If present, elevated levels of lead can cause serious 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. Maryland American Water 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 and copper exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. You can also use cold water for cooking, drinking, or making baby formula; use low lead containing faucets; and when replacing or working on pipes, use lead-free solder. Maryland American Water remains in full compliance with all of the requirements dealing with lead in drinking water. If you are concerned about lead in your drinking 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 National Lead Information Center (800-LEAD-FYI) or the USEPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Cryptosporidium

Cryptosporidium is a microbial pathogen sometimes found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the occasional presence of these organisms in the source water. Current test methods do not allow us to determine whether 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 in order to cause disease. It may be spread through means other than drinking water, such as other people, animals, water, swimming pools, fresh food, soils and any surface that has not been sanitized after exposure to feces.

Maryland American Water completed monitoring for compliance with Round 2 of the EPA Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR Round 2). The EPA created this rule to provide for increased protection against microbial pathogens, such as *Cryptosporidium*, in public water systems that use surface water sources. Maryland American Water's LT2ESWTR Round 2 monitoring program began in April 2015 and involves the collection of one sample from water treatment plant sources each month for a period of two years. In 2018 LT2ESWR Round 2 monitoring, Maryland American Water detected *Cryptosporidium* in the water treatment plant source water.

Substance (units)	Year Sampled	Bel Air Water Treatment Facility		Typical Source
		Amount Detected	Range of Detected Levels	
Cryptosporidium (oocyst/L)	2018	0.455	ND - 0.455	Erosion of natural deposits

How to Read the Data Tables

Maryland American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the tables below. While most monitoring was conducted in 2018, certain substances are required to be monitored less than once per year and represent the most current results available. For help with interpreting this table, see the "Table Definitions" section.

Starting with a **Substance**, read across. **Year Sampled** is usually in 2018 or year prior. **MCL** shows the highest level of substance (contaminant) allowed. **MCLG** is the goal level for that substance (this may be lower than what is allowed). **Average Amount Detected** represents the measured amount (less is better). **Range** tells the highest and lowest amounts measured. A **No** under **Violation** means the amount of the substance met government requirements. **Typical Source** tells where the substance usually originates.

Unregulated substances are measured, but maximum allowed contaminant levels have not been established by the government.



Tables Definitions and Abbreviations

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

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of disinfectant routinely allowed in drinking water. Addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of 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 contamination.

mrem/year: Millirems per year (a measure of radiation absorbed by the body).

NA: Not applicable.

ND: Not detected.

NTU - Nephelometric Turbidity Units: Measurement of the clarity, or turbidity, of water.

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

pH: A measurement of acidity, 7.0 being neutral.

Parts per million (ppm) or Milligrams per liter: 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 Nanograms per liter: one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

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

Water Quality Statement

The staff and management of Maryland American Water are pleased to report that the water provided to you during the past year from our Bel Air water facilities met all the State and Federal standards set for drinking water. We feel it is important that you know exactly what was detected and how much of the substance was present in the drinking water. For more information concerning our results, please contact Water Quality Manager, Christian Volk at (804) 446-9809.

Unregulated Contaminant Monitoring

Definition: Unregulated contaminants are those for which the U.S. Environmental Protection Agency 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 regulation is warranted.

The list of unregulated contaminants applicable for monitoring during 2013-2016 under the unregulated contaminants monitoring rule 3 is located on EPA's website at: <https://www.epa.gov/dwucmr/third-unregulated-contaminant-monitoring-rule>.

The list of unregulated contaminants applicable for monitoring during 2017-2021 under the unregulated contaminants monitoring rule 4 is located on EPA's website at: <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>.

Maryland-American Water Company – Bel Air 2018

Regulated Substances (from the treatment facilities)

Substance (units)	Year Sampled ¹	MCL	MCLG	Bel Air Water Treatment Facility		Harford County Water Authority Treatment Facility		Bynum Run Well ²		Violation	Typical Source
				Amount Detected	Range of Detected Levels	Amount Detected	Range of Detected Levels	Amount Detected	Range of Detected Levels		
Radiological Contaminants											
Gross Alpha emitters (pCi/L)	HC ³ :2017 MDAW: 2017	15	0	0.228	NA	8.1	NA	0.366	NA	No	Erosion of natural deposits
Beta emitters (pCi/L) ⁴	HC:2017 MDAW: 2017	50	0	1.65	NA	NA	NA	1.3	NA	No	Decay of natural and man-made deposits
Combined Radium (226 & 228) (pCi/L)	HC:2017 MDAW: 2017	5	0	0.778	NA	1.7	NA	0.213	NA	No	Erosion of natural deposits
Inorganic Contaminants											
Barium (ppm)	2018	2	2	NA	NA	0.09	0.03 – 0.09	NA	NA	No	Erosion. Drilling waste and metal refineries.
Fluoride (ppm)	2018	4	4	0.69	NA	0.95	0.04 – 0.95	0.69	NA	No	Added to water to promote healthy teeth
Chromium (ppb)	2018	100	100	NA	NA	<2	NA	NA	NA	No	Discharge from steel and pulp mills. Erosion of natural deposits.
Nitrate (ppm)	2018	10	10	2.29	NA	3.66	1.14 – 3.66	4.26	NA	No	Erosion of natural deposits; Runoff from fertilizer use
Beryllium (ppm)	2018	0.004	0.004	NA	NA	<0.001	NA	NA	NA	No	Discharge from metal refineries and coal burning factories, discharge from electrical, aerospace and defense industries.
Organic Contaminants											
Tetrachloroethene (ppb)	2018	5	0	NA	NA	NA	NA	2.4	ND – 2.4	No	Discharge from factories and dry cleaners
Trichloroethene (ppb)	2018	5	0	NA	NA	0.52	<0.5 – 0.52	ND	NA	No	Discharge from metal degreasing sites and other factories
TOC	2018	TT	NA	NA ⁵	NA	NA	0.8 – 3.0 ⁶	NA ⁵	NA	No	Naturally present in the environment
Turbidity (NTU) ⁷	2018	TT (<1 NTU)	NA	0.29	NA	0.268	NA	NA	NA	No	Soil erosion and runoff
		95% of readings ≤0.3 NTU on a monthly basis	NA	100% of readings ≤0.3 NTU	NA	100% of readings ≤0.3 NTU	NA	NA	NA		
Chlorine ⁸	2018	MRDL=4	MRDL G= 4	1.9	0.7 – 2.8	1.46	0.4 – 2.5	0.87	0.6 – 1.30	No	Additive to control microbes

Disinfection By-products (from the Bel Air distribution system)

Substance (units)	Year Sampled	MCL	MCLG	Amount Detected	Range of Detected Levels	Violation	Typical Source
Haloacetic acids (HAAs) (ppb)	2018	60	NA	60.4	13.1 – 72.9	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) ⁹ (ppb)	2018	80	NA	61.0	13.3 – 63.7	No	By-product of drinking water disinfection

Lead and Copper Results: Tap Water Samples from Bel Air Water Distribution System

Substance (units)	Year Sampled	MCL	MCLG	Amount Detected (90th %tile)	Number of Samples Over Action Level	Violation	Typical Source
Copper (ppm)	2017	AL = 1.3	1.3	0.2	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	AL = 15	0	1	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

Bacteriological Results (from the distribution system)

Substance (units)	Year Sampled	MCL	MCLG	Highest Level Detected	Compliance Achieved	Typical Source
Total Coliform (number of positive samples)	2018	0	0 positive monthly sample	0	Yes	Bacteria naturally present in the environment
Chlorine Residual	2018	MRDL = 4	MRDLG = 4	Range: 0.4 - 2.8 Average: 1.7	Yes	Additive used to control microbes

Unregulated Substances (from the treatment facilities)

Substance (units)	Year Sampled	Bel Air Water Treatment Facility		Hartford County Treatment Facility		Bynum Run Well		Typical Source
		Amount Detected	Range of Detected Levels	Amount Detected	Range of Detected Levels	Amount Detected	Range of Detected Levels	
Aluminum (ppm)	2018	ND	NA	NA	NA	0.02	NA	Naturally occurring and water treatment additive
Calcium (ppm)	2018	49	NA	NA	NA	51	NA	Naturally occurring
Magnesium (ppm)	2018	20	NA	NA	NA	20	NA	Naturally occurring
Chloride (ppm)	2018	47.3	NA	NA	NA	47.3	NA	Naturally occurring
Sulfate (ppm)	2018	7.8	NA	NA	NA	7.8	NA	Used in the production of fertilizers, fungicides, insecticides.
Manganese (ppm)	2018	NA	NA	0.015	0.001 - 0.024	NA	NA	Erosion of natural deposits
Zinc (ppm)	2018	0.472	NA	NA	NA	0.449	NA	Erosion of natural deposits
Radon (pCi/L)	2018	NA	NA	NA	NA	774	NA	Erosion of natural deposits
Anatoxin-a (ppb)	2018	NA	NA	0.073	<0.03 - 0.073	NA	NA	Cyanobacteria bloom in fresh water
Haloacetic Acids (HAA6BR) (ppb) ¹⁰	2018	NA	NA	9.9	3.4 - 9.9	NA	NA	Byproduct of drinking water disinfection
Haloacetic Acids (HAA9) (ppb) ¹⁰	2018	NA	NA	63.4	12.4 - 63.4	NA	NA	Byproduct of drinking water disinfection
Perfluorooctanoic Acid (ppm)	2018	NA	NA	61.0	ND - 61.0	NA	NA	Firefighting foams, industrial waste sites
Sodium (ppm) ¹¹	2018	36.6	NA	79.3	13.0 - 79.3	39.9	NA	Erosion of natural deposits; Leaching; Water treatment chemicals

Other Unregulated Substances (from the Bel Air distribution system)

Substance (units)	Year Sampled	Amount Detected	Range of Detected Levels	Typical Source
Chloroform (ppb)	2018	50.2	9.4 - 50.2	By-product of drinking water disinfection
Trichloroacetic Acid (ppb)	2018	27.8	6.3 - 27.8	By-product of drinking water disinfection
Dichloroacetic Acid (ppb)	2018	40.9	6.8 - 40.9	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2018	2.7	0.9 - 2.7	By-product of drinking water disinfection
Bromoform (ppb)	2018	0.5	ND - 0.5	By-product of drinking water disinfection
Chlorate (ppm)	2018	0.06	ND - 0.06	By-product of drinking water disinfection
Monobromoacetic acid (ppb)	2018	4.3	ND - 4.3	By-product of drinking water disinfection

Unregulated Substances (from the Bel Air distribution system and treatment facilities) UCMR3¹²

Substance (units)	Year Sampled	Amount Detected	Range of Detected Levels	Typical Source
Strontium (ppb)	2015	126.7	88.8 – 126.7	Soil runoff
Vanadium (ppb)	2015	8.9	ND – 8.9	Discharge from power plants; erosion of natural deposits
1, 4 Dioxane (ppb)	2015	0.11	ND – 0.11	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos
Chlorate (ppb)	2015	530	24 – 530	By product of disinfection
Chromium (ppb)	2015	6.3	0.3 – 6.3	Discharge from steel and pulp mills
Hexavalent Chromium (ppb)	2015	0.13	0.08 – 0.11	Discharge from steel and pulp mills

¹ Year Sampled: The state requires monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

² Bynum Well was taken out of service due to levels of MTBE.

³ HC: Harford County Water

⁴ Beta/Photon emitters: The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

⁵ TOC: Alternative compliance criteria were met such that required removal of TOC to control reduced formation of chlorinated by-products is not applicable for the MD-AW 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 is NA for well water.

⁶ TOC: The value reported under "Range of Detected Levels" 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).

⁷ Turbidity: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. During the reporting year, a minimum of 100% of all samples taken to measure turbidity met water quality standards.

⁸ Chlorine: Amount detected are monthly averages. Also, MRDL (maximum residual disinfectant level) applies.

⁹ Trihalomethanes: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

¹⁰ Samples were collected from the Harford County Distribution System

¹¹ Sodium: The sodium concentration in the sample collected from Bynum Run Well in 2018 exceeds the recommended maximum contaminant level guideline of 20 ppm for persons on a "strict" sodium intake diet

¹² Unregulated Contaminant Monitoring Rule 3