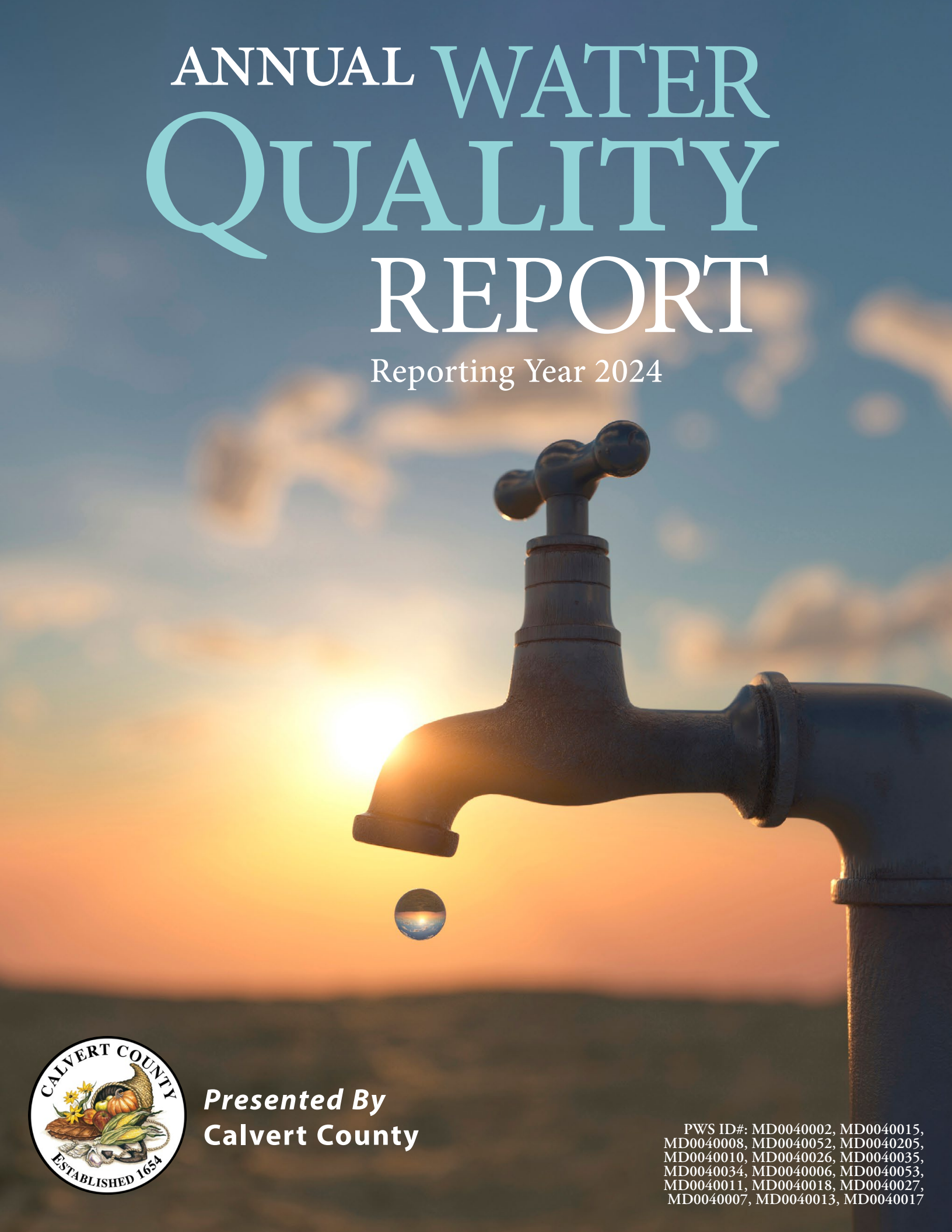
ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By
Calvert County

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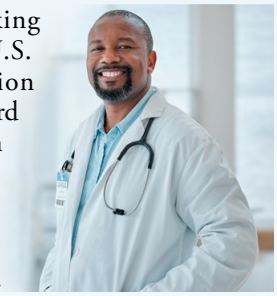
Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between Jan. 1 and Dec. 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does My Water Come From?

The county operates multiple public water systems, as illustrated on the map inside this report. The Calvert County water systems are supplied by wells in the Aquia, Piney Point, Nanjemoy, Magothy, and Lower Patapsco Aquifers. The water is chlorinated to ensure bacteriological purity, and in some systems, phosphate is used to sequester nuisance metals such as iron. After treatment, the finished water enters the distribution system and is delivered to approximately 5,100 customers throughout Calvert County. The water distribution systems comprise over 80 miles of water mains, 750 fire hydrants, 14 elevated storage tanks, 12 hydropneumatic tanks, and various components that make it possible for the finished water to be delivered to the county's residential, institutional, industrial, and commercial customers.

Important Health Information



While your drinking water meets the U.S. Environmental Protection Agency's (U.S. EPA) standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and linked to other health effects such as skin damage and circulatory problems.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. 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 at (800) 426-4791 or epa.gov/safewater.

Information on the Internet

The U.S. EPA (epa.gov) and CDC (cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. MDE has a website (https://mde.maryland.gov/Programs/Water/) that provides complete and current information on water issues in Maryland, including valuable information about our watershed.

Water Treatment Process

The treatment process consists of a series of steps:

1. Source Protection & Monitoring – Regular testing helps identify potential contamination risks, including bacteria, nitrates, and metals.

2. Primary Filtration – Depending on water quality, sand or activated carbon filters help remove particles, organic compounds, and minerals.

3. Chlorination – Chlorine is introduced to kill bacteria, viruses, and other harmful microorganisms. This can be done using liquid chlorine, sodium hypochlorite, or calcium hypochlorite.

4. Contact Time – The chlorinated water is held in a tank or reservoir for a specific duration, ensuring the disinfectant effectively neutralizes pathogens.

5. Residual Chlorine Monitoring – Testing ensures a safe chlorine level remains throughout the distribution system, preventing bacterial regrowth.

6. Storage & Distribution – Treated water is stored in reservoirs or tanks before being distributed to consumers.

Chlorine-based disinfection is widely used due to its effectiveness and ability to maintain residual protection in the water supply. However, careful monitoring is essential to prevent excessive chlorine levels and ensure water safety.

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact Chris Hall, Operations Superintendent, Chris Hall, at christopher.hall@calvertcountymd.gov or 443-684-1808.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of more than 4,000 human-made chemicals that have been used since the 1950s in a range of products including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and firefighting foams. These uses 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.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

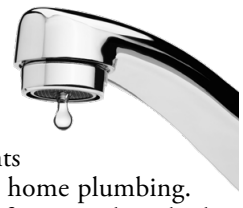
- Some grease-resistant paper, fast food containers/ wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit bit.ly/3Z5AMm8.

PFAS Monitoring Program

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) are two of the most prevalent PFAS. PFOA and PFOS concentrations from samples taken from our water system in 2022 were <0.004 ug/L and <0.004 ug/L parts per trillion (ppt), respectively. The U.S. EPA is expected to establish maximum contaminant levels (MCLs) for PFOA and PFOS later this year. This would require additional monitoring as well as certain actions for systems with levels above the MCL. Additional information about PFAS can be found on the MDE website at mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx.

Lead in Home Plumbing



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. Calvert County is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead and wish to have your water tested, contact Calvert County Water and Sewer office at (410) 535-1600, ext. 2329 or 2554. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

An initial inventory of service line pipe materials located within our service area was required to be submitted to the Maryland Department of the Environment (MDE) by October 16, 2024. Our initial inventory was submitted to MDE by October 16, 2024 for all our Water Systems and is available upon request.

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit bit.ly/3IeRyXy.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water and the use of chlorine are probably the most significant public health advancements in human history.

How chlorination works:

Potent germicide: Reduction of many disease-causing microorganisms in drinking water to almost immeasurable levels.

Taste and odor: Reduction of many disagreeable tastes and odors from foul-smelling algae secretions, sulfides, and decaying vegetation.

Biological growth: Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.

Chemical: Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.

> **"Thousands have lived without love, not one without water."**
>
> *–W.H. Auden*

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016 the U.S. EPA passed a regulation called the Revised Total Coliform Rule, which requires water systems to take additional steps to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and E. coli. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have procedures in place that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment and correct any problems quickly. The U.S. EPA anticipates greater public health protection under this regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Though we are fortunate in having the highest-quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this requirement helps us accomplish that goal.

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include 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. 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 occur naturally in the soil or groundwater 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 can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can occur naturally or as the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater.

Q & A

Why save water?
Although 80% of the Earth's surface is water, only 1% is suitable for drinking. The rest is either saltwater or permanently frozen, and we can't drink it, wash with it, or use it to water plants.

Which household activity wastes the most water?
Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40% of total water use). Toilets use about 4 to 6 gallons per flush, so consider an ultra-low-flow (ULF) toilet, which requires only 1.5 gallons.

Should I be concerned about what I'm pouring down my drain?
If your home is served by a sewage system, your drain is an entrance to your wastewater disposal system and eventually to a drinking water source. Consider purchasing environmentally friendly home products whenever possible, and never pour hazardous materials (e.g., car engine oil) down the drain. Check with your health department for more information on proper disposal methods.

How long can I store drinking water?
The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water can be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

How long does it take a water supplier to produce one glass of treated drinking water?
It can take up to 45 minutes to produce a single glass of drinking water.

Source Water Assessment

Source Water Assessment The Maryland Department of the Environment's (MDE) Water Supply Program has conducted source water assessments for water systems in Calvert County. The required components of this report, as described in Maryland's Source Water Assessment Program, are (1) delineation of an area that contributes water to the source; (2) identification of potential sources of contamination; and (3) determination of the susceptibility of the water supply to contamination. The susceptibility analyses for the following systems were based on a review of the existing water quality data, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. A copy of this report can be found on the MDE website.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people: "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Table Talk

Get the most out of the Testing Results data table with these simple suggestions. In less than a minute, you will know all there is to know about your water.

> For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL or SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting
Verify that there were no violations of the state or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. NA means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends 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 is included, along with the year in which the sample was taken. We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

				Cavalier Country		Chesapeake Heights		Cross Point			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2023	15	0	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	NA	NA	4.57	4.57–4.57	2	2–2	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	0.059	0.059–0.059	0.045[4]	0.045–0.045	0.045[5]	0.045–0.045	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[6]	0	4	4–4	8.7	8.7–8.7	7.3[5]	7.3–7.3	No	Decay of natural and human-made deposits
Chlorine (ppm)	2023	[4]	[4]	1.1	0.7–1.1	1.0	0.7–1	1.0	0.7–1.0	No	Water additive used to control microbes
Chromium (ppb)	2024	100	100	NA	NA	NA	NA	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2020	5	0	NA	NA	0.3	0.3–0.3	NA	NA	No	Erosion of natural deposits
Di(2-ethylhexyl) Adipate (ppb)	2024	400	400	NA	NA	NA	NA	NA	NA	No	Discharge from chemical factories
Ethylbenzene (ppb)	2024	700	700	NA	NA	0.5	0.5–0.5	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2023	4	4	0.25	0.25–0.25	0.36	0.36–0.36	0.23[3]	0.23–0.23	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	7.6	7.6–7.6	1.0	1.0–1.0	5.9	5.9–5.9	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	0.4	0.4–0.4	0.4	0.4–0.4	0.4	0.4–0.4	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	2024	1	1	0.1	0.1–0.1	NA	NA	NA	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	14.9	14.9–14.9	3.2	3.2–3.2	9.8	9.8–9.8	No	By-product of drinking water disinfection

				Cavalier Country			Chesapeake Heights			Cross Point				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.31	0.037–0.313	0/5	0.042	0.009–0.046	0/8	0.17	0.035–0.209	0/6	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2023	15	0	ND (<2)	ND–ND	0/5	3	ND–3	0/8	ND (<2)	ND–ND	0/6	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	Hunting Hills AMOUNT DETECTED	Hunting Hills RANGE LOW-HIGH	Kenwood Beach AMOUNT DETECTED	Kenwood Beach RANGE LOW-HIGH	Lakewood AMOUNT DETECTED	Lakewood RANGE LOW-HIGH	Marley Run AMOUNT DETECTED	Marley Run RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2023	15	0	NA	NA	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	6.7[3]	6.7–6.7	4	4–4	NA	NA	0.005[3]	0.003–0.008	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[6]	0	12.4	12.4–12.4	10[7]	10–10	7.5	7.5–7.5	10.8[8]	10.8–10.8	No	Decay of natural and human-made deposits
Chlorine (ppm)	2023	[4]	[4]	1.3	0.7–1.3	1.2	1–1.2	1.3	0.6–1.3	0.7	0.3–0.7	No	Water additive used to control microbes
Chromium (ppb)	2024	100	100	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2020	5	0	0.4	0.4–0.4	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Di(2-ethylhexyl) Adipate (ppb)	2024	400	400	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from chemical factories
Ethylbenzene (ppb)	2024	700	700	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2023	4	4	NA	NA	0.34	0.34–0.34	0.21[2]	0.21–0.21	0.2	0.2–0.2	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	2.4	2.4–2.4	10.3	10.3–10.3	7.4	7.4–7.4	1.7	1.7–1.7	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	<0.4	NA	<0.4	NA	<0.4	NA	<0.4	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	2024	1	1	NA	NA	NA	NA	NA	NA	NA	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	4.0	4.0–4.0	13.6	13.6–13.6	7	7–7	3.4	3.4–3.4	No	By-product of drinking water disinfection

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Hunting Hills AMOUNT DETECTED (90TH %ILE)	Hunting Hills RANGE LOW-HIGH	Hunting Hills SITES ABOVE AL/TOTAL SITES	Kenwood Beach AMOUNT DETECTED (90TH %ILE)	Kenwood Beach RANGE LOW-HIGH	Kenwood Beach SITES ABOVE AL/TOTAL SITES	Lakewood AMOUNT DETECTED (90TH %ILE)	Lakewood RANGE LOW-HIGH	Lakewood SITES ABOVE AL/TOTAL SITES	Marley Run AMOUNT DETECTED (90TH %ILE)	Marley Run RANGE LOW-HIGH	Marley Run SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.09	0.035–0.209	0/8	0.08	0.007–0.084	0/8	0.13	0.020–0.130	0/5	0.10	ND–0.113	0/5	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2023	15	0	ND (<2)	ND–ND	0/8	ND (<2)	ND–ND	0/8	ND (<2)	ND–3	0/5	ND (<2)	ND–ND	0/5	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	Paris Oaks AMOUNT DETECTED	Paris Oaks RANGE LOW-HIGH	Prince Frederick AMOUNT DETECTED	Prince Frederick RANGE LOW-HIGH	Shore of Calvert AMOUNT DETECTED	Shore of Calvert RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2023	15	0	NA	NA	NA	NA	2.1	2.1–2.1	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	3[2]	3–3	5.5[3]	0.5–9.9	NA	NA	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	0.076[5]	0.076–0.076	0.048[3]	0.048–0.048	0.061[5]	0.061–0.061	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[6]	0	5.5[5]	5.5–5.5	11.6	8–11.6	4.3[4]	4.3–4.3	No	Decay of natural and human-made deposits
Chlorine (ppm)	2023	[4]	[4]	1	0.9–1	0.7	0.6–0.7	1	0.9–1	No	Water additive used to control microbes
Chromium (ppb)	2024	100	100	NA	NA	6.5	6.5–6.5	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2020	5	0	NA	NA	0.4	0.3–0.4	0.7[4]	0.7–0.7	No	Erosion of natural deposits
Di(2-ethylhexyl) Adipate (ppb)	2024	400	400	NA	NA	1.3	1.3–1.3	NA	NA	No	Discharge from chemical factories
Ethylbenzene (ppb)	2024	700	700	NA	NA	0.61[9]	0.61–0.61	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2023	4	4	0.2[5]	0.2–0.2	0.19[3]	0.19–0.19	0.25[2]	0.25–0.25	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	4.7[8]	4.7–4.7	2.8	2.8–2.8	6	6–6	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	<0.4	NA	<0.4	NA	NA	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	2024	1	1	NA	NA	NA	NA	NA	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	10.9[8]	10.9–10.9	10.4	10.4–10.4	12.3	12.3–12.3	No	By-product of drinking water disinfection

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Paris Oaks AMOUNT DETECTED (90TH %ILE)	Paris Oaks RANGE LOW-HIGH	Paris Oaks SITES ABOVE AL/ TOTAL SITES	Prince Frederick AMOUNT DETECTED (90TH %ILE)	Prince Frederick RANGE LOW-HIGH	Prince Frederick SITES ABOVE AL/ TOTAL SITES	Shore of Calvert AMOUNT DETECTED (90TH %ILE)	Shore of Calvert RANGE LOW-HIGH	Shore of Calvert SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.09	0.042–0.090	0/6	0.11	0.016–0.144	0/12	0.20	0.081–0.204	0/6	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2023	15	0	ND (<2)	ND–ND	0/6	ND (<2)	ND–ND	0/12	ND (<2)	ND–ND	0/6	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	Solomons AMOUNT DETECTED	Solomons RANGE LOW-HIGH	St. Leonard AMOUNT DETECTED	St. Leonard RANGE LOW-HIGH	Summit/Highland AMOUNT DETECTED	Summit/Highland RANGE LOW-HIGH	Tapestry North AMOUNT DETECTED	Tapestry North RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2023	15	0	NA	NA	NA	NA	5.5[1]	5.5–5.5	1.2[2]	1.2–1.2	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	4.5	ND–4.5	4.6	4.4–4.9[3]	NA	NA	4	4–4	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	NA	NA	0.084[5]	0.084–0.084	0.128[5]	0.128–0.128	NA	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[6]	0	4.9[7]	4.9–4.9	NA	NA	4.6	4.6–4.6	10.6[4]	10.6–10.6	No	Decay of natural and human-made deposits
Chlorine (ppm)	2023	[4]	[4]	0.7	0.7–0.7	1	0.9–1	1.1	0.9–1.1	1	0.7–1	No	Water additive used to control microbes
Chromium (ppb)	2024	100	100	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2020	5	0	0.8	0.8–0.8	NA	NA	10	10–10	1.2[2]	1.2–1.2	No	Erosion of natural deposits
Di(2-ethylhexyl) Adipate (ppb)	2024	400	400	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from chemical factories
Ethylbenzene (ppb)	2024	700	700	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2023	4	4	0.31[5]	0.28–0.31	0.21[5]	0.21–0.21	0.023[5]	0.023–0.023	0.2[3]	0.2–0.2	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	1.5	1.5–1.5	1	1–1	2.5	2.5–2.5	3.3	3.3–3.3	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	<0.4	NA	NA	NA	<0.4	NA	<0.4	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	2024	1	1	NA	NA	NA	NA	NA	NA	NA	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	3.7	3.7–3.7	2.1	2.1–4.9	4.4	4.4–4.4	6	6–6	No	By-product of drinking water disinfection

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Solomons AMOUNT DETECTED (90TH %ILE)	Solomons RANGE LOW-HIGH	Solomons SITES ABOVE AL/ TOTAL SITES	St. Leonard AMOUNT DETECTED (90TH %ILE)	St. Leonard RANGE LOW-HIGH	St. Leonard SITES ABOVE AL/TOTAL SITES	Summit/Highland AMOUNT DETECTED (90TH %ILE)	Summit/Highland RANGE LOW-HIGH	Summit/Highland SITES ABOVE AL/ TOTAL SITES	Tapestry North AMOUNT DETECTED (90TH %ILE)	Tapestry North RANGE LOW-HIGH	Tapestry North SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.03	0.003-0.031	0/12	0.07	0.006 -0.081	0/6	0.33	0.042–0.484	0/7	0.05	0.007–0.094	0/8	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2023	15	0	ND (<2)	ND–ND	0/12	ND (<2)	ND–ND	0/6	ND (<2)	ND–ND	0/7	4	ND–5	0/8	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	Tara AMOUNT DETECTED	Tara RANGE LOW-HIGH	Walnut Creek AMOUNT DETECTED	Walnut Creek RANGE LOW-HIGH	White Sands AMOUNT DETECTED	White Sands RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2023	15	0	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	7[3]	7–7[3]	5.5[3]	2.0–6.8	4.5[3]	4.4–4.6	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	NA	NA	NA	NA	NA	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[6]	0	8.9[8]	8.9–8.9	9.2	9.2–9.2	13.4	13.4–13.4	No	Decay of natural and human-made deposits
Chlorine (ppm)	2023	[4]	[4]	1.3	0.7–1.3	1.4	0.7–1.4	1	0.6–1	No	Water additive used to control microbes
Chromium (ppb)	2024	100	100	NA	NA	NA	NA	NA	NA	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2020	5	0	NA	NA	0.1	0.1–0.1	1.1	1.1–1.1	No	Erosion of natural deposits
Di(2-ethylhexyl) Adipate (ppb)	2024	400	400	NA	NA	NA	NA	NA	NA	No	Discharge from chemical factories
Ethylbenzene (ppb)	2024	700	700	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2023	4	4	0.19[3]	0.19–0.19	0.2[2]	0.2–0.2	0.27[5]	0.27–0.27	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	2.5	2.5–2.5	2.9	2.9–2.9	1.7	1.7–1.7	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	<0.4	NA	<0.4	NA	<0.4	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	2024	1	1	NA	NA	NA	NA	NA	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	4.1	4.1–4.1	5.1	5.1–5.1	7.7	7.7–7.7	No	By-product of drinking water disinfection

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Tara AMOUNT DETECTED (90TH %ILE)	Tara RANGE LOW-HIGH	Tara SITES ABOVE AL/TOTAL SITES	Walnut Creek AMOUNT DETECTED (90TH %ILE)	Walnut Creek RANGE LOW-HIGH	Walnut Creek SITES ABOVE AL/TOTAL SITES	White Sands AMOUNT DETECTED (90TH %ILE)	White Sands RANGE LOW-HIGH	White Sands SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.20	0.080–0.253	0/5	0.46	0.026–0.499	0/6	0.13	0.015– 0.153	0/9	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2023	15	0	ND (<2)	ND–ND	0/5	ND (<2)	ND– 3	0/6	2	ND–2	0/9	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

UNREGULATED SUBSTANCES

		Prince Frederick		Tara		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2024	0.58	0.58–0.58	0.79	0.79–0.79	NA
Chloroform (ppb)	2024	NA	NA	1.89	1.89–1.89	NA
Dibromochloromethane (ppb)	2024	0.5	0.5–0.5	NA	NA	NA

[1] Sampled in 2020. [2] Sampled in 2019. [3] Sampled in 2024. [4] Sampled in 2023. [5] Sampled in 2022. [6] The MCL for beta particles is 4 millirems per year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.
[7] Sampled in 2018. [8] Sampled in 2021. [9] Sampled in 2017.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

BY THE NUMBERS

3.4 BILLION

The daily volume in gallons of water recycled and reused in the U.S., reducing waste and conserving resources.

28%

The percent reduction in per capita water use in the U.S. since 1980, thanks to efficiency improvements.

99.99%

The percent effectiveness of modern water treatment plants in removing harmful bacteria and viruses from drinking water.

1.7 MILLION

The number of jobs supported by the U.S. water sector.

1.2 MILLION

The length in miles of drinking water pipes in the U.S. delivering clean water to millions of homes and businesses daily.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Monitoring Requirements Not Met for:

Prince Frederick

6/10/2025
Date of notice

Routine monitoring for specific contaminants is required by the Safe Drinking Water Act. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the **April 1, 2024 to June 30, 2024** monitoring period, Radionuclide monitoring and reporting requirements were not fulfilled. Therefore, we cannot be sure of the quality of our drinking water during that time.

Provide additional explanation as needed:

This is a sample that was collected and sampled by Maryland Department of the Environment.

Our Water System was brought back into compliance during the 3rd quarter when

Radionuclide was not present in the sample.

What should I do?
There is nothing you need to do at this time.

What is being done?
Additional testing will be conducted by the Maryland Department of the Environment during 2025.

For additional information, contact: Chris Hall (contact name) at 410-535-1600 (telephone number)

Please share this information with all other people who drink this water, especially those who do not receive this notice directly (for example: people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place, distributing copies by hand, or mail.

Date distributed: 6/10/2025

MD0040011