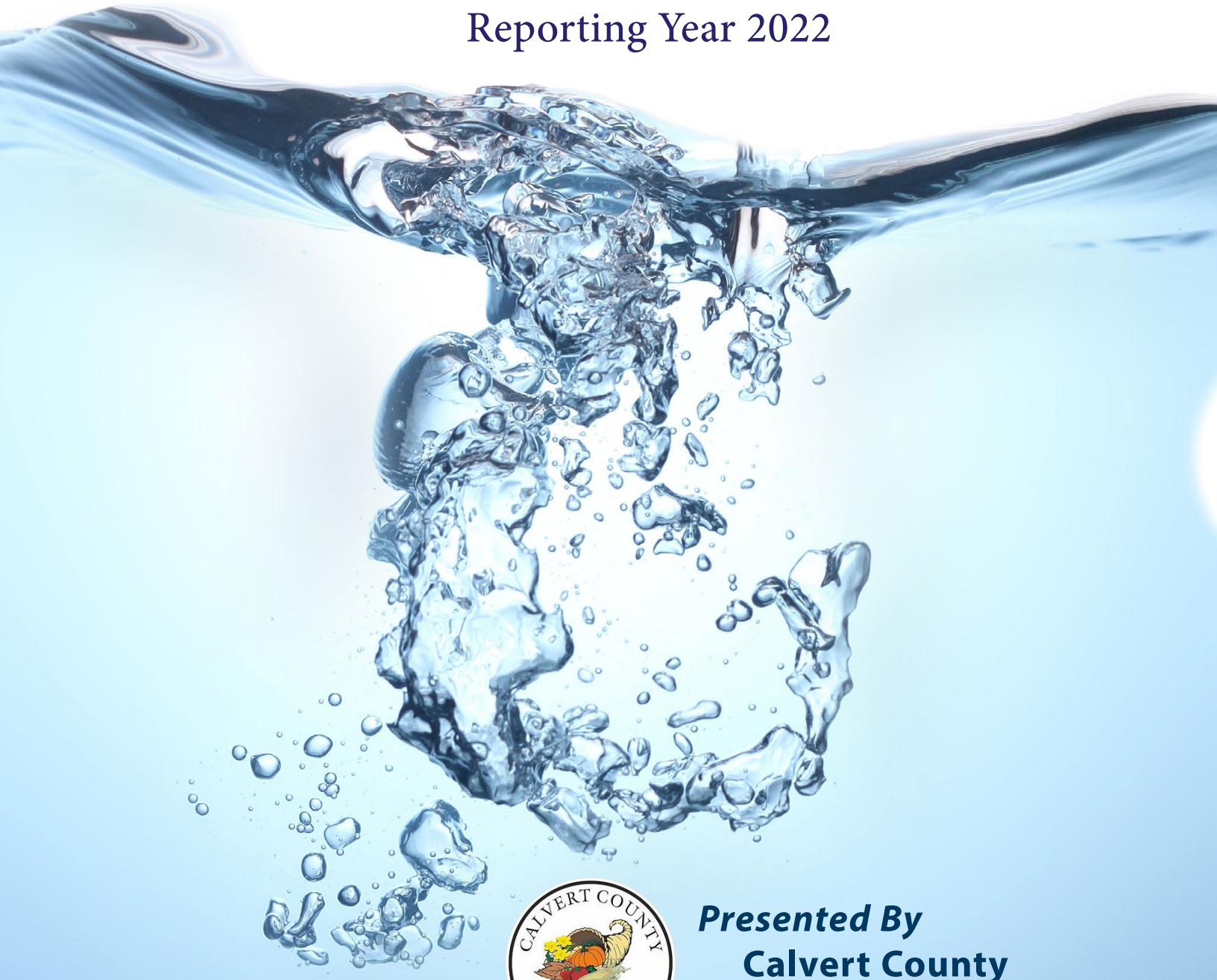
ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By

Calvert County Government

PWS ID#: Various

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between Jan. 1 and Dec. 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

Where Does My Water Come From?

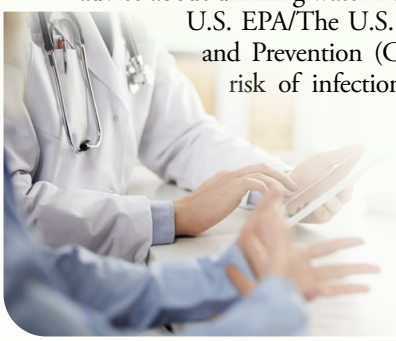
The county operates multiple public water systems, as illustrated on the map on page 3 in this report. The Calvert County water systems are supplied by wells in the Aquia, Piney Point, Nanjemoy, Magothy, and Lower Patapsco aquifers. The water is chlorinated to ensure bacteriological purity, and in some 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 5,470 customers throughout Calvert County. The water distribution systems are comprised of over 100 miles of water mains, 750 fire hydrants, 14 elevated storage tanks, seven 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.

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

Important Health Information

While your drinking water meets U.S. the Environmental Protection Agency'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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/The U.S. EPA/Centers for Disease Control and Prevention (CDC) guidelines for lessoning the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791 or http:// water.epa.gov/drink/ hotline.



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 https://bit.ly/3IeRyXy.

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.

QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Laboratory Technician I, Emma Sciannella at 410-535-1600, ext. 8090.

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. Please call Emma Sciannella to obtain a copy of the report at 410-535-1600, ext. 8090.

Cavalier Country (PWSID 0040002), 1435 Knight Ave, Dunkirk

It was determined that the Cavalier Country water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, the water source in this area contains a significant concentration of iron. An iron filtration system was installed in 2018 to mediate the levels of lead in drinking water.

Chesapeake Heights (PWSID 0040018), 4106 Cassell Boulevard, Prince Frederick

It was determined that the Chesapeake Heights water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic, a naturally occurring substance, poses a risk to the water supply when it exceeds the maximum contaminant level (MCL) of 10 parts per billion (ppb). The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Cross Point (PWSID 0040052), 9716 Cross Point Drive, Dunkirk

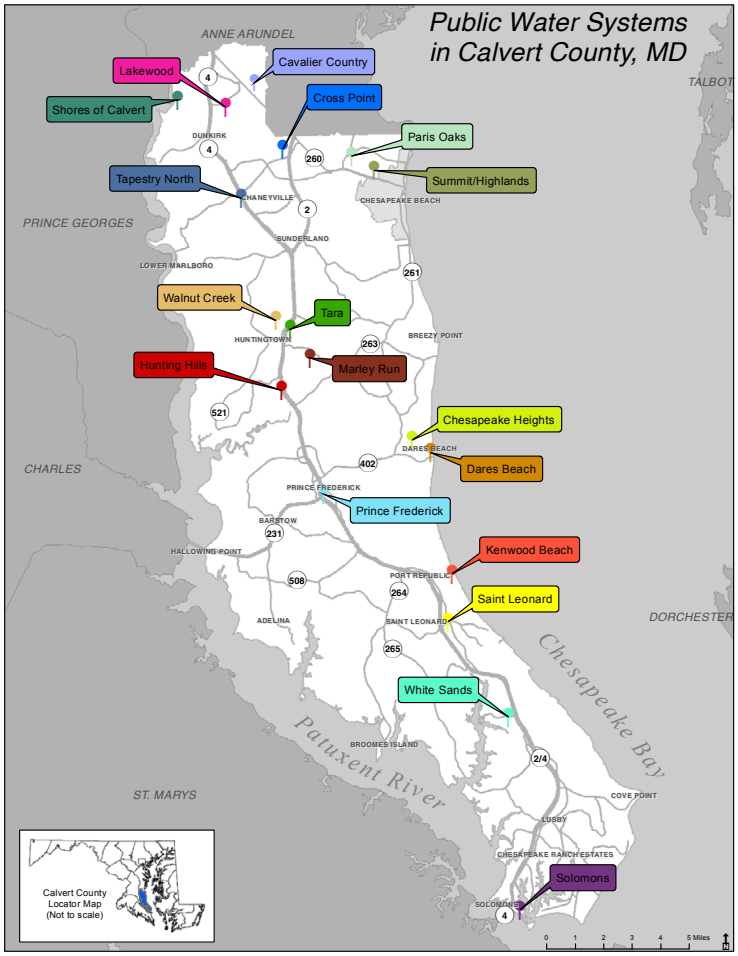
It was determined that the Cross Point subdivision water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Dares Beach (PWSID 0040005), Virginia Street, Prince Frederick

It was determined that the Dares Beach water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. This water system is tested quarterly for arsenic. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Hunting Hills (PWSID 0040006), 27 Well Street, Huntingtown

It was determined that the Hunting Hills water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. This water system is tested quarterly for arsenic. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.



Kenwood Beach (PWSID 0040007), 3365 North Avenue, Port Republic

It was determined that the Kenwood Beach water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Lakewood (PWSID 0040013), 11208 Oakwood Drive, Dunkirk

It was determined that the Lakewood water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Marley Run (PWSID 0040053), 671 Cox Road, Huntingtown

It was determined that the Marley Run water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. The running annual average for arsenic was below the laboratory detection limit (ND) for the year. This refers to the highest running average, which would include data from the previous year. Although results were below the action level, a new removal system was added to the process in October 2017 to reduce arsenic. Since the installation of the new removal system, arsenic levels have been in the ND range. This water system is tested quarterly for arsenic.

Source Water Assessment *continued...*

Paris Oaks (PWSID 0040010), Fifth Street, Owings
It was determined that the Paris Oaks water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Prince Frederick (PWSID 0040011), 755 Solomon's Island Road and 1520 Mason Court, Prince Frederick
It was determined that the Prince Frederick water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. This water system is tested quarterly for arsenic. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Shores of Calvert (PWSID 0040015) 11637 Rivershore Drive, Dunkirk
It was determined that the Shores of Calvert water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Solomons (PWSID 0040027), 12655 H. G. Truman Road and 13885 Dowell Road, Dowell
It was determined that the Solomons water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

St. Leonard (PWSID 0040013), 200 Calvert Beach Road, St. Leonard
It was determined that the St. Leonard water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. This water system is tested quarterly for arsenic levels.

Summit/Highlands (PWSID 0040026), 2812 Waterford Way, Chesapeake Beach
It was determined that the Summit/Highlands water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Tapestry North (PWSID 0040205), 2175 Haley's Way, Dunkirk
It was determined that the Tapestry North subdivision water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers.

Tara (PWSID 0040034), 13 Scarlett Drive, Huntingtown
It was determined that the Tara subdivision water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. This water system is tested quarterly for arsenic. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Walnut Creek (PWSID 0040035), 334 Cross Creek Drive, Huntingtown
It was determined that the Walnut Creek water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. This water system is tested quarterly for arsenic. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

White Sands (PWSID 0040017), 350 Laurel Drive, Lusby
It was determined that the White Sands water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic poses a risk to the water supply when it exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend on the final MCL that is adopted for this contaminant.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 two minutes before using water for drinking or cooking. If you are concerned about lead in your water and wish to have it tested, please contact the Calvert County Department of Public Works, Water and Sewerage Division at 410-535-1600 for a list of laboratories in your area that provide water testing services. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at www.epa.gov/safewater/lead.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic 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 http://bit.ly/3Z5AMm8.

PFAS Monitoring Program

Per- and polyfluoroalkyl substances (PFAS) are a group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging, and 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 the human body and can accumulate in the food chain.

In 2020 MDE initiated a PFAS monitoring program. Our water system was not tested for PFAS in 2022. In March 2023, U.S. EPA announced proposed MCLs of 4 parts per trillion (ppt) for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and a Group Hazard Index for four additional PFAS. Future regulations would require additional monitoring as well as certain actions for systems with levels above the MCL. U.S. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx.

Information on the Internet

The U.S. EPA (https://goo.gl/TFAMKc) and the Centers for Disease Control and Prevention (www.cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. The MDE website (https://goo.gl/fvotgl) provides complete and current information on water issues in Maryland, including valuable information about our watershed.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants 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. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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 U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.

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 are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

				Cavalier Country		Chesapeake Heights		Cross Point		Dares Beach			
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	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2019	15	0	NA	NA	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	9	6–14	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	0.047	0.047–0.047	0.045[3]	0.045–0.045[3]	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[4]	0	4	4–4	8.7	8.7–8.7	7.3[3]	7.3–7.3[3]	4.7	4.7–4.7	No	Decay of natural and human-made deposits
Chlorine (ppm)	2022	[4]	[4]	1.2	1–1.2	1.2	1–1.2	1.1	0.9–1.1	1	0.8–1	No	Water additive used to control microbes
Combined Radium (pCi/L)	2020	5	0	NA	NA	0.3	0.3–0.3	NA	NA	0.6	0.6–0.6	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2020	4	4	0.22	0.22–0.22	0.22[7]	0.22–0.22[7]	0.21[6]	0.21–0.21[6]	0.25[2]	0.25–0.25[2]	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2021	60	NA	6.4	6.4–6.4	4.6[3]	4.6–4.6[3]	3.3	3.3–3.3	4.6[3]	4.6–4.6[3]	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2021	80	NA	14.8	14.8–14.8	8.7[3]	8.7–8.7[3]	1.6	1.6–1.6	9[3]	9–9[3]	No	By-product of drinking water disinfection

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

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	Lakewoood AMOUNT DETECTED	Lakewoood RANGE LOW-HIGH	Marley Run AMOUNT DETECTED	Marley Run RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2019	15	0	NA	NA	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	7	5–8	4	4–4	NA	NA	5	3–8	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[4]	0	12.4	12.4–12.4	10[5]	10–10[5]	7.5	7.5–7.5	10.8[6]	10.8–10.8[6]	No	Decay of natural and human-made deposits
Chlorine (ppm)	2022	[4]	[4]	1.5	1–1.5	1.2	1–1.2	1.5	1.1–1.5	0.9	0.7–0.9	No	Water additive used to control microbes
Combined Radium (pCi/L)	2020	5	0	0.4	0.4–0.4	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2020	4	4	NA	NA	0.25[3]	0.25–0.25[3]	0.21[2]	0.21–0.21[2]	0.17[2]	0.17–0.17[2]	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2021	60	NA	1.2	1.2–1.2	4.8	4.8–4.8	1.3	1.3–1.3	1.7	1.7–1.7	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2021	80	NA	4.6	4.6–4.6	16.5	16.5–16.5	4	4–4	2.5	2.5–2.5	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout each water system's community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Cavalier Country AMOUNT DETECTED (90TH %ILE)	Cavalier Country SITES ABOVE AL/ TOTAL SITES	Chesapeake Heights AMOUNT DETECTED (90TH %ILE)	Chesapeake Heights SITES ABOVE AL/ TOTAL SITES	Cross Point AMOUNT DETECTED (90TH %ILE)	Cross Point SITES ABOVE AL/ TOTAL SITES	Dares Beach AMOUNT DETECTED (90TH %ILE)	Dares Beach SITES ABOVE AL/ TOTAL SITES	Hunting Hills AMOUNT DETECTED (90TH %ILE)	Hunting Hills SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.12	0/6	0.093	0/10	0.386	0/7	0.062	0/11	0.107	0/6	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	<0.002	0/6	<0.002	0/10	4	0/7	<0.002	0/11	1	0/6	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

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	Shores of Calvert AMOUNT DETECTED	Shores of Calvert RANGE LOW-HIGH	Solomons AMOUNT DETECTED	Solomons RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2019	15	0	NA	NA	NA	NA	2.7	2.7–2.7	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	3[2]	3–3[2]	7	4.32–12	NA	NA	4.5	ND–4.5	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	0.076[3]	0.076–0.076[3]	0.008[3]	ND–0.008[3]	0.061[3]	0.061–0.061[3]	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[4]	0	5.5[3]	5.5–5.5[3]	11.6	8–11.6	NA	NA	4.9[5]	4.9–4.9[5]	No	Decay of natural and human-made deposits
Chlorine (ppm)	2022	[4]	[4]	1.3	0.8–1.3	0.8	0.7–0.8	1.1	0.8–1.1	0.8	0.7–0.8	No	Water additive used to control microbes
Combined Radium (pCi/L)	2020	5	0	NA	NA	0.4	0.3–0.4	2.6[2]	2.6–2.6[2]	0.8	0.8–0.8	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	0.61	0.61–0.61	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2020	4	4	0.2[3]	0.2–0.2[3]	0.21[6]	0.21–0.21[6]	0.25[2]	0.25–0.25[2]	0.36[2]	0.35–0.36[2]	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2021	60	NA	4.7	4.7–4.7	3.6[3]	3.6–3.6[3]	10.4	10.4–10.4	3.4[3]	3.4–3.4[3]	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2021	80	NA	10.9	10.9–10.9	13.7[3]	13.7–13.7[3]	14.1	14.1–14.1	20.4[3]	20.4–20.4[3]	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout each water system's community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Kenwood Beach AMOUNT DETECTED (90TH %ILE)	Kenwood Beach SITES ABOVE AL/ TOTAL SITES	Lakewoood AMOUNT DETECTED (90TH %ILE)	Lakewoood SITES ABOVE AL/ TOTAL SITES	Marley Run AMOUNT DETECTED (90TH %ILE)	Marley Run SITES ABOVE AL/ TOTAL SITES	Paris Oaks AMOUNT DETECTED (90TH %ILE)	Paris Oaks SITES ABOVE AL/ TOTAL SITES	Prince Frederick AMOUNT DETECTED (90TH %ILE)	Prince Frederick SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.050	0/6	0.148	0/7	0.225	0/5	0.130	0/5	0.094	0/22	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	<0.002	0/6	3	0/7	<0.002	0/5	<0.002	0/5	<0.002	0/22	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	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	Tara AMOUNT DETECTED	Tara RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2019	15	0	NA	NA	5.5[1]	5.5–5.5[1]	1.2	1.2–1.2	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	9	5–18	NA	NA	4	4–4	8	6–8	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	0.084[3]	0.084–0.084[3]	0.128[3]	0.115–0.128[3]	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[4]	0	NA	NA	4.6	4.6–4.6	NA	NA	8.9[6]	8.9–8.9[6]	No	Decay of natural and human-made deposits
Chlorine (ppm)	2022	[4]	[4]	1.1	1–1.1	1.1	1–1.1	1.4	1–1.4	1.5	1.2–1.5	No	Water additive used to control microbes
Combined Radium (pCi/L)	2020	5	0	NA	NA	10	10–10	1.2[2]	1.2–1.2[2]	NA	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2020	4	4	0.21[3]	0.21–0.21[3]	0.023[3]	0.023–0.023[3]	0.2[5]	0.2–0.2[5]	0.21[6]	0.21–0.21[6]	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2021	60	NA	5[5]	5–5[5]	5.4[3]	5.4–5.4[3]	3	3–3	4	4–4	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2021	80	NA	4.9	4.9–4.9	10.6[3]	10.6–10.6[3]	5.8	5.8–5.8	13.3	13.3–13.3	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout each water system's community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Shores of Calvert AMOUNT DETECTED (90TH %ILE)	Shores of Calvert SITES ABOVE AL/ TOTAL SITES	Solomons AMOUNT DETECTED (90TH %ILE)	Solomons SITES ABOVE AL/ TOTAL SITES	St. Leonard AMOUNT DETECTED (90TH %ILE)	St. Leonard SITES ABOVE AL/ TOTAL SITES	Summit/Highland AMOUNT DETECTED (90TH %ILE)	Summit/Highland SITES ABOVE AL/ TOTAL SITES	Tapestry North AMOUNT DETECTED (90TH %ILE)	Tapestry North SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.279	0/5	0.023	0/24	0.054	0/5	0.260	0/11	0.055	0/8	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	<0.002	0/5	<0.002	0/24	<0.002	0/5	<0.002	0/11	4	0/8	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

REGULATED SUBSTANCES

				Walnut Creek		White Sands			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2019	15	0	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	7	6–7	6	6–6	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50[4]	0	9.2	9.2–9.2	13.4	13.4–13.4	No	Decay of natural and human-made deposits
Chlorine (ppm)	2022	[4]	[4]	2.1	1.6–2.1	1.1	0.8–1.1	No	Water additive used to control microbes
Combined Radium (pCi/L)	2020	5	0	0.1	0.1–0.1	1.1	1.1–1.1	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2020	4	4	0.2[2]	0.2–0.2[2]	0.27[3]	0.27–0.27[3]	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2021	60	NA	3.3	3.3–3.3	3.3	3.3–3.3	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2021	80	NA	6	6–6	9.5	9.5–9.5	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout each water system's community

				Tara		Walnut Creek		White Sands			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.231	0/5	0.103	0/5	0.0512[3]	0/5[3]	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	<0.002	0/5	<0.002	0/5	<0.002[3]	0/5[3]	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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

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

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