

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019



Presented By
Calvert County

Our Mission Continues

The Calvert County Department of Public Works, Water and Sewerage Division is pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2019. 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. Informed consumers are our best allies in maintaining safe drinking water, so we encourage you to take the time to read this report to learn more about the quality of your drinking water.

Please remember that we are always available should you ever have any questions or concerns about your water.

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 before it was filled with tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Important Health Information

While your drinking water meets the U.S. EPA's standard for arsenic, it may contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The 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 is 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/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 at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



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.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Tracey Luskey, Laboratory Technician II, at (410) 326-4702.

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

2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.



We remain vigilant in delivering the best-quality drinking water

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.

It is delivered to approximately 5,067 customers throughout Calvert County. The water distribution systems are composed of over 100 miles of water mains, 750 fire hydrants, 14 elevated storage tanks, 7 hydro-pneumatic 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.

Source Water Assessment

The Maryland Department of the Environment's Water Supply Program (WSP) 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 (SWAP) 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 analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics.

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, it contains a significant concentration of iron. An iron filtration system was installed in 2018.

Chesapeake Heights (PWSID 0040018) - 4106 Cassell Blvd, 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 contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon 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.

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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon the final MCL that is adopted for this contaminant.



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Source Water Assessment, continued

Hunting Hills (PWSID 0040006) - 27 Well St., 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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon the final MCL that is adopted for this contaminant.

Kenwood Beach (PWSID 0040007) - 3365 North Ave., 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, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

Lakewood (PWSID 0040013) - 11208 Oakwood Dr., 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 upon 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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The Running Annual Average (RAA) for arsenic is reported as 1 ppb for the year. The RAA refers to the highest running average that would include data from the previous year. Although this system's detection amounts were under the action levels, a new Arsenic Removal System was added to the process in October 2017 to reduce arsenic levels. Since the installation of the new removal system, arsenic levels have been in the non-detectable range. During the reporting period for 2019, 1 sample was reported as 10 ppb, while all other samples remained at non-detectable levels. It is believed this sample could have been obtained from the raw water source as opposed to from the treated water after passing through the Arsenic Removal System.

Paris Oaks (PWSID 0040010) - 5th St., 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 upon the final MCL that is adopted for this contaminant.

Prince Frederick (PWSID 0040011) - 755 Solomon's Island Road and 1520 Mason Ct., 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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon the final MCL that is adopted for this contaminant.

Shores of Calvert (PWSID 0040015) - 11637 Rivershore Dr., 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, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

Solomons (PWSID 0040027) - 12655 H.G. Truman Rd. and 13885 Dowell Rd, 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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon the final MCL that is adopted for this contaminant.

St. Leonard (PWSID 0040013) - 200 Calvert Beach Rd., 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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb.

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, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

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Source Water Assessment, continued

Tapestry North (PWSID 0040205) - 2175 Haley's Way, Dunkirk

It was determined that the Tapestry North 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 Dr., Huntingtown

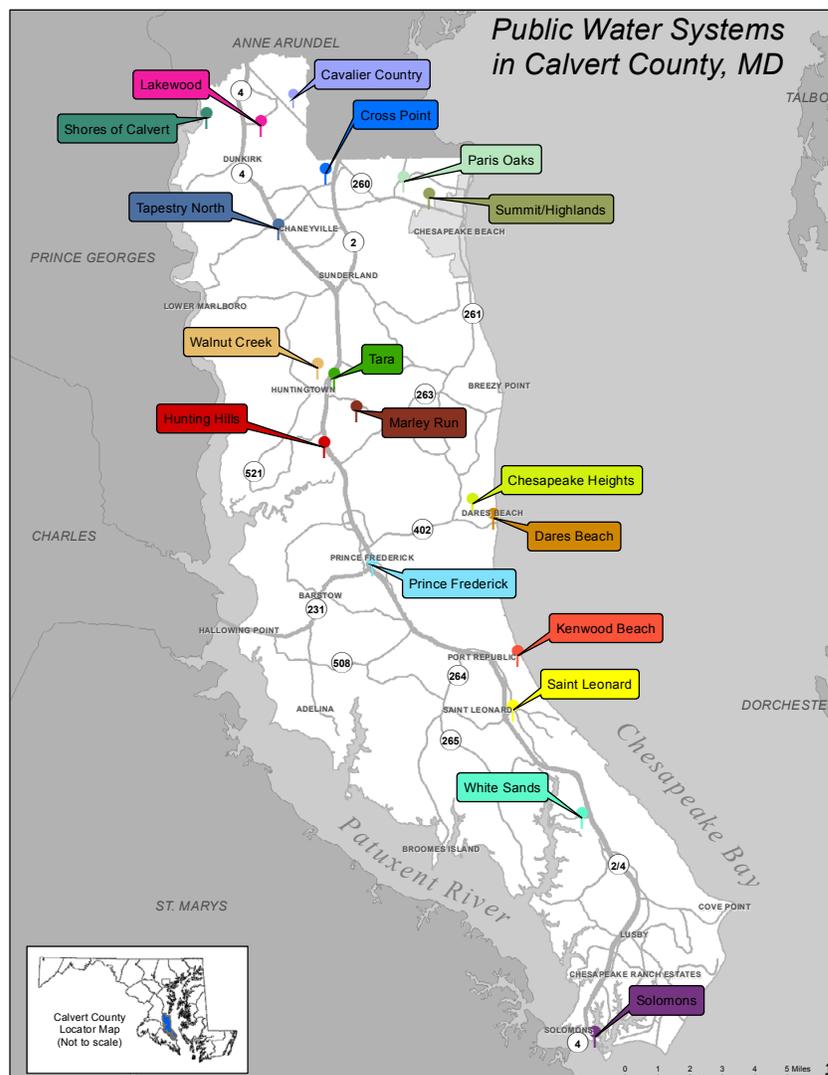
It was determined that the Tara Subdivision water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it has been determined that arsenic, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon the final MCL that is adopted for this contaminant.

Walnut Creek (PWSID 0040035) - 334 Cross Creek Dr., 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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon the final MCL that is adopted for this contaminant.

White Sands (PWSID 0040017) - 350 Laurel Dr., 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, a naturally occurring contaminant, does pose a risk to the water supply when the arsenic concentration exceeds the MCL of 10 ppb. The susceptibility of the water supply to radon will depend upon the final MCL that is adopted for this contaminant.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only 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 often 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		Hunting Hills			
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)	2014	15	0	6	6–6	NA	NA	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2017	10	0	NA	NA	5	5–5	2 ²	2–2 ²	8 ¹	7.8–8 ¹	7 ¹	6.7–7 ¹	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2017	2	2	0.006	0.006–0.006	0.046	0.046–0.046	0.055 ²	0.055–0.055 ²	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters³ (pCi/L)	2014	50	0	8.4	8.4–8.4	NA	NA	6.9 ⁴	6.9–6.9 ⁴	NA	NA	NA	NA	No	Decay of natural and man-made deposits
Chlorine (ppm)	2018	[4]	[4]	1.1	1.1–1.1	1 ¹	0.8–1 ¹	1.4 ¹	1–1.4 ¹	0.9 ¹	0.7–0.9 ¹	1.4 ¹	1.2–1.4 ¹	No	Water additive used to control microbes
Combined Radium (pCi/L)	2014	5	0	1.7	1.7–1.7	NA	NA	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2017	4	4	0.26	0.26–0.26	0.22	0.22–0.22	0.2 ²	0.2–0.2 ²	0.25 ¹	0.25–0.25 ¹	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2018	60	NA	5.7	5.7–5.7	2 ¹	1.6–1.6 ¹	6.2	6.2–6.2	2 ¹	1.5–1.5 ¹	2.5	2.5–2.5	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	7.9	7.9–7.9	3 ¹	2.5–2.5 ¹	8.4	8.4–8.4	4 ¹	3.8–3.8 ¹	4	4–4	No	By-product of drinking water disinfection
Tap water samples were collected for lead and copper analyses from sample sites throughout the community.															
				Cavalier Country		Chesapeake Heights		Cross Point							
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	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE		
Copper (ppm)	2017	1.3	1.3	0.129	0/5	0.096	0/10	0.429	0/5	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Lead (ppb)	2017	15	0	NA	NA	ND	0/10	NA	NA	NA	NA	No	Lead services lines; Corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits		

REGULATED SUBSTANCES

				Kenwood Beach		Lakewood		Marley Run		Paris Oaks		Prince Frederick			
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	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2014	15	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2017	10	0	3 ¹	3–3 ¹	NA	NA	1 ¹	0–10 ¹	3 ¹	3–3 ¹	8 ¹	4–8.2 ¹	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2017	2	2	NA	NA	NA	NA	NA	NA	0.137 ¹	0.137–0.137 ¹	0.021 ¹	0.021–0.021 ¹	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters³ (pCi/L)	2014	50	0	10 ²	10–10 ²	NA	NA	NA	NA	6.7 ⁴	6.7–6.7 ⁴	NA	NA	No	Decay of natural and man-made deposits
Chlorine (ppm)	2018	[4]	[4]	1.7 ¹	1.5–1.7 ¹	2.3 ¹	2–2.3 ¹	0.6 ¹	0.1–0.6 ¹	2.4 ¹	2.1–2.4 ¹	0.7 ¹	0.6–0.7 ¹	No	Water additive used to control microbes
Combined Radium (pCi/L)	2014	5	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	NA	NA	0.61	0.61–0.61	No	Discharge from petroleum refineries
Fluoride (ppm)	2017	4	4	0.34 ¹	0.34–0.34 ¹	0.21	0.21–0.21	0.17 ¹	0.17–0.17 ¹	0.25 ¹	0.25–0.25 ¹	0.24 ¹	0.24–0.24 ¹	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2018	60	NA	9.6	9.6–9.6	4.5	4.5–4.5	3.4	3.4–3.4	8.1	8.1–8.1	2 ¹	1.6–1.6 ¹	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	28.9	28.9–28.9	3.9	3.9–3.9	2.6	2.6–2.6	8.9	8.9–8.9	4 ¹	4.2–4.2 ¹	No	By-product of drinking water disinfection

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

				Dares Beach		Hunting Hills		Kenwood Beach			
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)	2017	1.3	1.3	0.191	0/11	0.233	0/6	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	15	0	NA	NA	NA	NA	NA	NA	No	Lead services 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.

				Prince Frederick		Shores of Calvert		Solomons			
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)	2017	1.3	1.3	0.089	0/10	0.167	0/6	0.025	0/11	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	15	0	NA	NA	NA	NA	NA	NA	No	Lead services lines; Corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits

REGULATED SUBSTANCES

				Shores of Calvert		Solomons		St. Leonard		Summit/Highlands		Tapestry North			
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	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2014	15	0	2.7 ¹	2.7–2.7 ¹	NA	NA	NA	NA	NA	NA	1.2 ¹	1.2–1.2 ¹	No	Erosion of natural deposits
Arsenic (ppb)	2017	10	0	NA	NA	5 ¹	4–5 ¹	6 ¹	5–6 ¹	NA	NA	4 ²	4–4 ²	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2017	2	2	0.044 ¹	0.044–0.044 ¹	NA	NA	0.056 ¹	0.056–0.056 ¹	0.113 ¹	0.113–0.113 ¹	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters³ (pCi/L)	2014	50	0	4.9 ⁵	4.9–4.9 ⁵	4.9 ²	4.9–4.9 ²	15.9 ⁴	15.9–15.9 ⁴	NA	NA	NA	NA	No	Decay of natural and man-made deposits
Chlorine (ppm)	2018	[4]	[4]	2.3 ¹	1.4–2.3 ¹	1.1 ¹	0.9–1.1 ¹	1.5 ¹	1.2–1.5 ¹	2.1 ¹	1.3–2.1 ¹	1.2 ¹	1–1.2 ¹	No	Water additive used to control microbes
Combined Radium (pCi/L)	2014	5	0	2.6 ¹	2.6–2.6 ¹	1 ²	1–1 ²	NA	NA	NA	NA	1.2 ¹	1.2–1.2 ¹	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2017	4	4	0.25 ¹	0.25–0.25 ¹	0.36 ¹	0.35–0.36 ¹	0.27 ¹	0.27–0.27 ¹	0.36 ¹	0.36–0.36 ¹	0.2 ²	0.2–0.2 ²	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2018	60	NA	8.5	8.5–8.5	1 ¹	1.4–1.4 ¹	5	5–5	5 ¹	4.7–4.7 ¹	2.3	2.3–2.3	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	9.1	9.1–9.1	6 ¹	5.7–5.7 ¹	12.1	12.1–12.1	7 ¹	6.5–6.5 ¹	0.9	0.9–0.9	No	By-product of drinking water disinfection

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

				Lakewood		Marley Run		Paris Oaks			
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)	2017	1.3	1.3	0.188	0/5	0.179	0/5	0.16	0/5	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	15	0	NA	NA	NA	NA	NA	NA	No	Lead services 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.

				St. Leonard		Summit/Highlands		Tapestry North			
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)	2017	1.3	1.3	0.068	0/6	0.502	0/11	0.063	0/5	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	15	0	NA	NA	2	0/11	2	0/5	No	Lead services 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]	Tara		Walnut Creek		White Sands		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Alpha Emitters (pCi/L)	2014	15	0	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2017	10	0	8 ¹	7–8 ¹	7 ¹	6–7 ¹	5 ¹	0–5 ¹	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2017	2	2	NA	NA	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters ³ (pCi/L)	2014	50	0	NA	NA	NA	NA	NA	NA	No	Decay of natural and man-made deposits
Chlorine (ppm)	2018	[4]	[4]	1.3 ¹	1–1.3 ¹	1.4 ¹	1.4–1.4 ¹	1 ¹	0.9–1 ¹	No	Water additive used to control microbes
Combined Radium (pCi/L)	2014	5	0	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2017	4	4	NA	NA	NA	NA	0.34 ¹	0.3–0.34 ¹	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2018	60	NA	5.1	5.1–5.1	4	4–4	NA	NA	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	2.5	2.5–2.5	4.6	4.6–4.6	NA	NA	No	By-product of drinking water disinfection

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Tara		Walnut Creek		White Sands		VIOLATION	TYPICAL SOURCE		
		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
Copper (ppm)	2017	1.3	1.3	0.302	0/5	0.138	0/5	0.138	0/6	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	15	0	NA	NA	NA	NA	NA	NA	No	Lead services lines; Corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Cavalier Country		Chesapeake Heights		Cross Point		Dares Beach		Hunting Hills		VIOLATION	TYPICAL SOURCE
		SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Copper (ppm)	2017	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Kenwood Beach		Lakewood		Marley Run		Paris Oaks		Prince Frederick		VIOLATION	TYPICAL SOURCE
		SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Copper (ppm)	2017	1.0	NA	0.042	0.007–0.059	NA	NA	NA	NA	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

				Shores of Calvert		Solomons		St. Leonard		Summit/Highlands		Tapestry North			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE								
Copper (ppm)	2017	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

				Tara		Walnut Creek		White Sands							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE				
Copper (ppm)	2017	1.0	NA	NA	NA	NA	NA	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits				

¹ Sampled in 2019

² Sampled in 2018

³ The MCL for beta particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

⁴ Sampled in 2015

⁵ Sampled in 2016

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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

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).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.