

# ANNUAL WATER QUALITY REPORT

Reporting Year 2023



**Presented By  
Calvert County**



## 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, 2023. 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 by the map inside this report. The Calvert County water systems are supplied by wells in the Aquia, Piney Point, Nanjemoy, Magothy and Low 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 5,100 customers throughout Calvert County. The water distribution systems comprise over 80 miles of water main, 750 fire hydrants, 14 elevated storage tanks 12 hydropneumatic tanks, and various other components that make it possible to deliver the finished water to the county's residential, institutional, industrial and commercial customers.

“When the well is dry, we know the worth of water.”  
—Benjamin Franklin

## Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our water source and is chlorinated. Chlorine is widely used for disinfection in drinking water treatment; it helps reduce the risk of microbial contamination. We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste. In systems where there is iron present, we use a phosphate called CP33 to control iron levels. Phosphates serve multiple purposes in potable water treatment. Phosphates control iron and manganese, inhibit scale, remove corrosion and stabilize chlorine in potable water. After treatment, water is pumped to water towers for storage and eventually to your home or business.

## 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or [water.epa.gov/drink/hotline](http://water.epa.gov/drink/hotline).



## Information on the Internet

The U.S. EPA ([goo.gl/TFAMKc](http://goo.gl/TFAMKc)) and CDC ([cdc.gov](http://cdc.gov)) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. The MDE website ([goo.gl/fvotgl](http://goo.gl/fvotgl)) provides complete and current information on water issues in Maryland, including valuable information about our watershed.



## Source Water Assessment

A source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at: [https://mde.maryland.gov/programs/Water/water\\_supply/Source\\_Water\\_Assessment\\_Program/Pages/by\\_county.aspx](https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx)

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

## 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/3leRyXy](http://bit.ly/3leRyXy).

## 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.



## 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.

## 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.

## 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.

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. Our Prince Frederick and Solomon's water systems were tested for PFAs in 2023 but no contaminants were detected. The U.S. EPA is expected to establish maximum contaminant levels (MCLs) for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) later 2024 (PFOA and PFOS are two of the most prevalent PFAS). This would entail additional monitoring as well as certain actions for systems above the MCL. Additional information about PFAS can be found at [mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx](https://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. We are responsible for providing high-quality drinking water and removing lead pipes, but we 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 a public water customer concerned about lead in your water and wish to have your water tested, contact Emma Sciannella, Laboratory Technician I, at (410) 535-1600, ext. 8090. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](https://epa.gov/safewater/lead).

## BY THE NUMBERS



**5.1**  
TRILLION

The dollar value needed to keep water, wastewater and stormwater systems in good repair.



**12**  
THOUSAND

The average amount in gallons of water used to produce one megawatt-hour of electricity.



**2**

How often in minutes a water main breaks.



**47.5**  
TRILLION

The amount in gallons of water used to meet U.S. electric power needs in 2020.



**1.7**  
TRILLION

The gallons of drinking water lost each year to faulty, aging or leaky pipes.



**33**

The percentage of water sector employees who will be eligible to retire in 2033.

## Table Talk

Get the most out of the Testing Results data table with this simple suggestion. 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, 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 and/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. If there is an NA showing, that 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 Calvert County Water and Sewer division 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		Hunting Hills			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE						
Alpha Emitters (pCi/L)	2023	15	0	NA	No	Erosion of natural deposits							
Arsenic (ppb)	2022	10	0	NA	NA	4.57	NA	2	NA	7 <sup>3</sup>	6.6–7 <sup>3</sup>	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2020	2	2	0.059	NA	0.045 <sup>3</sup>	NA	0.045 <sup>4</sup>	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2020	50 <sup>5</sup>	0	4	NA	8.7	NA	7.3 <sup>4</sup>	NA	12.4	NA	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	1.3	0.7–1.3	No	Water additive used to control microbes
Combined Radium (pCi/L)	2020	5	0	NA	NA	0.3	NA	NA	NA	0.4	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	No	Discharge from petroleum refineries							
Fluoride (ppm)	2023	4	4	0.25	NA	0.36	NA	0.21 <sup>7</sup>	NA	NA	NA	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	NA	4.6 <sup>4</sup>	NA	3.3	NA	1.2	NA	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2021	80	NA	14.8	NA	8.7 <sup>4</sup>	NA	1.6	NA	4.6	NA	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		Hunting Hills			
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)	2023	1.3	1.3	0.31	0/5	0.041	0/8	0.125	0/6	0.109	0/8	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppm)	2023	15	0	<0.002	0/5	<0.002	0/8	<0.002	0/6	<0.002	0/8	No	Lead service 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	Violation	Typical Source						
Alpha Emitters (pCi/L)		2023	15	0	NA	NA	No	Erosion of natural deposits								
Arsenic (ppb)		2022	10	0	4	NA	NA	NA	3.1 <sup>3</sup>	3–3.1 <sup>3</sup>	ND <sup>2</sup>	NA	6 <sup>3</sup>	ND–6 <sup>3</sup>	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	0.076 <sup>4</sup>	NA	0.024 <sup>3</sup>	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters (pCi/L)		2020	50 <sup>5</sup>	0	10 <sup>6</sup>	NA	7.5	NA	10.8 <sup>7</sup>	NA	5.5 <sup>4</sup>	NA	11.6	8–11.6	No	Decay of natural and human-made deposits
Chlorine (ppm)		2023	[4]	[4]	1.2	1–1.2	1.3	0.6–1.3	0.7	0.3–0.7	1	0.9–1	0.7	0.6–0.7	No	Water additive used to control microbes
Combined Radium (pCi/L)		2020	5	0	NA	0.4	0.3–0.4	No	Erosion of natural deposits							
Ethylbenzene (ppb)		2022	700	700	NA	ND	NA	No	Discharge from petroleum refineries							
Fluoride (ppm)		2023	4	4	0.34	NA	ND <sup>2</sup>	NA	0.2	NA	0.2 <sup>4</sup>	NA	0.36	NA	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	4.8	NA	1.3	NA	1.7	NA	4.7	NA	3.6 <sup>4</sup>	NA	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)		2021	80	NA	16.5	NA	4	NA	2.5	NA	10.9	NA	13.7 <sup>4</sup>	NA	No	By-product of drinking water disinfection
Tap water samples were collected for lead and copper analyses from sample sites throughout the community																
				Kenwood Beach		Lakewood		Marley Run		Paris Oaks		Prince Frederick				
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	Amount Detected (90th %ile)	Sites Above AL/ Total Sites	Violation	Typical Source	
Copper (ppm)	2023	1.3	1.3	0.08	0/8	0.130	0/5	0.113	0/5	0.085	0/6	0.124	0/12	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead (ppm)	2023	15	0	<0.002	0/8	0.003	0/5	<0.002	0/5	<0.002	0/6	<0.002	0/12	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits	

Regulated Substances																	
				Shores of Calvert		Solomons		St. Leonard		Summit/Highland		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)		2023	15	0	2.1	NA	NA	NA	NA	NA	5.5 <sup>1</sup>	NA	1.2 <sup>2</sup>	NA	No	Erosion of natural deposits	
Arsenic (ppb)		2022	10	0	NA	NA	4.5	ND–4.5	7 <sup>3</sup>	4.6–7 <sup>3</sup>	NA	NA	4	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	
Barium (ppm)		2020	2	2	0.061 <sup>4</sup>	NA	NA	NA	0.084 <sup>4</sup>	NA	0.128 <sup>4</sup>	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Beta/Photon Emitters (pCi/L)		2020	50 <sup>5</sup>	0	4.3 <sup>3</sup>	NA	ND	NA	NA	NA	4.6	NA	10.6 <sup>3</sup>	NA	No	Decay of natural and human-made deposits	
Chlorine (ppm)		2023	[4]	[4]	1	0.9–1	0.7	NA	1	0.9–1	1.1	0.9–1.1	1	0.7–1	No	Water additive used to control microbes	
Combined Radium (pCi/L)		2020	5	0	0.7 <sup>3</sup>	NA	0.8	NA	NA	NA	10	NA	1.2 <sup>2</sup>	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)		2023	4	4	ND <sup>4</sup>	NA	0.31 <sup>4</sup>	0.28–0.31 <sup>4</sup>	0.21 <sup>4</sup>	NA	0.023 <sup>4</sup>	NA	ND <sup>4</sup>	NA	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	10.4	NA	3.4 <sup>4</sup>	NA	5 <sup>6</sup>	NA	5.4 <sup>4</sup>	NA	3	NA	No	By-product of drinking water disinfection	
TTHMs [total trihalomethanes]–Stage 2 (ppb)		2021	80	NA	14.1	NA	20.4 <sup>4</sup>	NA	4.9	NA	10.6 <sup>4</sup>	NA	5.8	NA	No	By-product of drinking water disinfection	
Tap water samples were collected for lead and copper analyses from sample sites throughout the community																	
			Shores of Calvert			Solomons			St. Leonard								
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)		2023	1.3	1.3	0.200	0/6	0.03	0/12	0.062	0/6	No	Corrosion of household plumbing systems; Erosion of natural deposits					
Lead (ppm)		2023	15	0	<0.002	0/6	<0.002	0/12	<0.002	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]	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)	2023	15	0	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2022	10	0	8 <sup>3</sup>	7–8 <sup>3</sup>	7 <sup>3</sup>	3–7 <sup>3</sup>	8 <sup>3</sup>	4–8 <sup>3</sup>	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 <sup>5</sup>	0	8.9 <sup>7</sup>	NA	9.2	NA	13.4	NA	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
Combined Radium (pCi/L)	2020	5	0	NA	NA	0.1	NA	1.1	NA	No	Erosion of natural deposits
Ethylbenzene (ppb)	2017	700	700	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries
Fluoride (ppm)	2023	4	4	0.21 <sup>7</sup>	NA	ND <sup>4</sup>	NA	0.27 <sup>4</sup>	NA	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	NA	3.3	NA	3.3	NA	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2021	80	NA	13.3	NA	6	NA	9.5	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	Summit/ Highland				Tapestry North		Tara		Walnut Creek		White Sands		VIOLATION	TYPICAL SOURCE
		AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES										
Copper (ppm)	2023	1.3	1.3	0.267	0/7	0.040	0/8	0.253	0/5	0.441	0/6	0.13	0/9	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppm)	2023	15	0	<0.002	0/7	<0.002	0/8	<0.002	0/5	<0.002	0/6	<0.002	0/9	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

<sup>1</sup> Sampled in 2020.

<sup>2</sup> Sampled in 2019.

<sup>3</sup> Sampled in 2023.

<sup>4</sup> Sampled in 2022.

<sup>5</sup> 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.

<sup>6</sup> Sampled in 2018.

<sup>7</sup> Sampled in 2021.

## 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.

**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.

**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.

**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).