Maryland Water Service, Inc.
Highland Estates Water System

PWS ID: **MD0010049**

Annual Water Quality Report 2023

Message from Nate Spriggs, President

Dear Maryland Water Service, Inc. Customers,

I am pleased to present your Annual Water Quality Report for 2023. Transparency, health, and safety are key priorities in our company's efforts to provide a high-quality, reliable water supply. Included in this report are details about where your water comes from, what it contains, and how it compares to regulatory standards.

We are proud to share this report which is based on water quality testing through December 2023. We continually strive to supply water that meets and/or exceeds all federal and state water quality regulations at your tap.

Treating and maintaining a safe and reliable water supply is not only hard work, but it is rewarding. Our team of local water experts are proudly dedicated to providing safe, reliable, and cost-effective service every day. This commitment includes acting with integrity, protecting the environment, and enhancing the local community.

Best regards,

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

We ask that all our customers help us protect our water sources which are the heart of our future community, our way of life and our children's future

To access your utility account anytime, anywhere, please register for our customer portal & download
My Utility Account *at*
https://account.myutility.us

Source of Drinking Water

We purchase your water from the City of Cumberland. Their water source is treated surface water obtained from the Lake Koon and Gordon reservoirs (surface water) located in the Cumberland Valley Township, Bedford County Pennsylvania. The primary tributaries supplying water to the reservoirs are Evitts Creek, Growden Run, Oster Run, as well as several unnamed tributaries.

How is Water Treated?

Surface water treatment plants are designed to take a raw water source of variable quality and produce consistent high quality drinking water. Multiple treatment processes are provided in series and each process represents a barrier to prevent the passage of particulate matter, cysts and other microbial contaminants. The Water Treatment Facility utilizes barriers which include clarification, filtration, and disinfection.

Source Water Assessment (SWA)

In accordance with the Drinking Water Act Amendments, Maryland Department of the Environment and Pennsylvania Department of Environmental Protection has prepared a Source Water Assessment Plan for the Evitts Creek Watershed. The Plan(s) evaluate the existing land use and water quality conditions, describes potential contamination threats as well as providing background to support ongoing efforts to protect the watershed through the Evitts Creek Steering Committee.

The source for City of Cumberland's water supply is Lake Koon and Lake Gordon in which the watershed area consists of mixed land use with the majority consisting of forested land. The SWA area for the City of Cumberland's watershed was delineated using U.S. EPA approved methods specifically designed for each source. Potential sources of contamination within the assessment area were identified based on site visits, database reviews, and land use maps. Watershed information and water quality data were also reviewed. Figures showing land use and potential contaminant sources within the SWA area and aerial photographs of the watershed locations are enclosed in the full (SWA) report. The susceptibility analysis of the City of Cumberland's water supply was based on the review of the water quality data, potential sources of contamination, and other factors. At the time the report was compiled, it was determined that the City of Cumberland's water supply is susceptible to contamination by microbiological contaminants, protozoa, viruses, disinfection byproducts, and turbidity, but not susceptible to volatile organic compounds (VOCs), synthetic organic compounds (SOCs), radionuclides, and other regulated inorganic compounds (IOCs).

If you would like to review the report or have any other questions or concerns regarding it please call our office at (844) 310-6660 or you can contact the City of Cumberland – Environmental Technician at (301) 759-6604 for additional information regarding the water quality results in this report.

This information is also available at the City of Cumberland's web site at www.ci.cumberland.md.us.

Other water distribution systems in your area include the LaVale Sanitary Commission (301) 729-1638 and Allegany County Sanitary Districts at (301) 777-5942.

EPA Wants You To Know

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

A. ***Microbial contaminants,*** *such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.*
B. ***Inorganic contaminants****, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.*
C. ***Pesticides and herbicides,*** *which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.*
D. ***Organic chemical contaminants****, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.*
E. ***Radioactive contaminants,*** *which can be naturally occurring or be the result of oil and gas production and mining activities.*

What measures are in place to ensure water is safe to drink?

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/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 (1-800-426-4791).

Information Concerning Lead in Water

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. Maryland Water Service, Inc. is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Maryland Water Service, Inc. at (844) 310-6660. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

Drain Disposal Information

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps / solids for disposal.

Prescription Medication and Hazardous Waste

Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Do not flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: www.epa.gov/hw/household-hazardous-waste-hhw.

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Understanding This Report In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.	
Action level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Action level goal (ALG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.
Compliance Level (CL)	Is the value used to determine compliance with MCL or TT. The CL for contaminants can be a maximum test value, an average, or meeting a condition for a certain percentage of the time.
EPA	Environmental Protection Agency.
Intestinal Parasites	Microorganisms like Cryptosporidium and Giardia lamblia can cause gastrointestinal illness (e.g., diarrhea, vomiting, cramps). In 2004, two samples of untreated river water showed the presence of Giardia lamblia and Cryptosporidium. None were found in the treated drinking water.
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG)	The "goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
Maximum Residual Disinfectant Level (MRDL)	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.
Maximum Residual Disinfectant Level Goal (MRDLG)	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.
Not applicable (N/A)	Not applicable.
Not Detected (ND)	Analysis or test results indicate the constituent is not detectable at minimum reporting limit.
Parts per million (ppm) or Milligrams per liter (mg/l)	One part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) or Micrograms per liter (ug/l)	One part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.
Picocuries per liter (pCi/L)	A measure of radioactivity in the water.
Running Annual Average (RAA)	Calculated running annual average of all contaminant levels detected.
Standard units (S.U.)	Is a measurement of that particular regulated contaminant
Nephelometric Turbidity Units (NTU)	A measure of water clarity. Turbidity in excess of 5 NTU is just noticeable to the average person
Treatment Technique (TT)	A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Help Protect our Resources

Help put a stop to the more than **1 trillion gallons of water lost annually** nationwide due to household leaks. These easy to fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year. Plumbing leaks can run up your family's water bill an extra 10 percent or more, but chasing down these water and money wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

⇒ **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.

⇒ **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!

⇒ **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

For more information visit www.epa.gov/watersense.

Monitoring Your Water

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The tables below lists all the drinking water contaminants that were detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in the table is from testing done January 1 through December 31, 2023.** The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, maybe more than one year old.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Water Quality Test Results - Highland Estates Distribution System

Disinfection By-Product Contaminants

Contaminant (units)	Sample Date	MCL/ MRDL Violation Y/N	Highest Level Detected	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	2023	N	58	58 - 58	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	2023	N	34	33.8 - 33.8	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)	2023	N	2.5	2.3 - 2.5	MRDLG =4	MRDL= 4	Water additive used to control microbes

PFAS Testing - Maryland Department of the Environment (MDE)

PFAS – short for per- and polyfluoroalkyl substances – refers to a large 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 fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023. The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

PFAS Testing

Maryland Water Service, Inc. continues efforts to conduct statewide drinking water testing for Per- and Polyfluoroalkyl Substances (PFAS). These man-made compounds are used in the manufacturing of products resistant to water, grease or stains including firefighting foams, cleaners, cosmetics, paints, adhesives and insecticides. PFAS can migrate into the soil, water, and air and is likely present in the blood of humans and animals all over the world. The Environmental Protection Agency (EPA) has established Health Advisory Levels (HALs) for GenX, PFBS, PFOA, and PFOS. EPA is taking a key step to protect public health by proposing a National Primary Drinking Water Regulation (NPDWR) to establish legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS known to occur in drinking water including PFOA, PFOS, PFNA, PFHxS, PFBS, and GenX Chemicals. EPA anticipates finalizing the rule in 2024. We will take appropriate actions to meet new regulations.

Our focus will remain, as always, on supplying our customers with quality, reliable water service.

For the latest PFAS results, visit our website at www.myutility.us/maryland and click Water Quality Reports under Water Safety. For more information visit https//www.epa.gov/pfas.

If You Have Questions Or Want To Get Involved

Maryland Water Service, Inc. does not currently hold regular public meetings. Should the Utility hold a public meeting, you will be notified through the mail or public notice. Please call customer service at (844) 310-6660.

Violations

In 2023, Maryland Water Service, Inc. performed all required monitoring for contaminants and did not exceed any allowable levels of these contaminants. In addition, we received **no violations** from MDE and PDE and was in compliance with applicable testing and reporting requirements.

Visit us online at www.uiwater.com/maryland to view the Water Quality Report.
Also visit our website for water conservation tips and other educational material.

City of Cumberland 2023 Water Quality Data Chart
Maryland Public Water Service # 0010008 / Pennsylvania Public Water Service Identification # 4050028
Data for both MD and PA water distribution systems unless otherwise noted.

Regulated Parameters	Units	Results	Range	MCLG	MCL	Violation	Typical Sources of Contaminant
Water Treatment Facility (Point of Entry)							
Turbidity (max)	NTU	0.06	0.02 - 0.06	NA	1	NO	Soil run-off. Turbidity is a measurement of cloudiness of the water caused by suspended particles and is monitored as an indicator of water quality and effectiveness of filtration
Turbidity Samples <0.3	%	100	100	NA	<95	NO	
Barium	ppm	0.0316	0.0316 - 0.0316	2	2	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (avg)	ppm	0.61	0.57 - 0.63	4	4*	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (as N)	ppm	<1.0	<1.0	10	10	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Dalapon	Ppb	1	1-1	200	200	NO	Runoff from herbicide used on rights of ways
**PA DEP maximum contaminant level for Fluoride is 2 ppm*							
Maryland Distribution System							
Chloramines (as Chlorine)	ppm	2.3	2.1 - 2.3	4	4	NO	Water additive used to control microbes
Copper (2023)	ppm	0.099	<0.0125 - 0.319	1.3	1.3	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead (2023)	ppb	0.541	<0.5 - 8.04	0	15	NO	
Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.							
Total Trihalomethanes (LRAA)	ppb	45	33.2 - 60	NA	80	NO	By-product of drinking water disinfection
Haloacetic Acids (LRAA)	ppb	34	12.5 - 39.9	NA	60	NO	
Total Coliform Bacteria	count	0	0	0	>1	NO	Naturally present in the environment
Pennsylvania Distribution System							
Chloramines (Chlorine)	ppm	2.9	2.4 - 2.9	4	4	NO	Water additive used to control microbes
Copper (2022)	ppm	0.373	<0.0125 - 0.527	1.3	1.3	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2022)	ppb	0.501	<0.50 - 3.1	0	15	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Total Trihalomethanes	ppb	55	55	NA	80	NO	By-product of drinking water disinfection
Haloacetic Acids	ppb	31	31	NA	60	NO	By-product of drinking water disinfection
Total Coliform Bacteria	count	0	0	0	>1	NO	Naturally present in the environment
Unregulated Parameters - Maryland & Pennsylvania							
Sodium	ppm	7.1	7.1	NA	NA	NO	Naturally occurring in environment
Source Water Supply (Lake Gordon)							
E. Coli (avg) 2018	mpn	88.3	<1.0 - 1986	0	NA	NA	Human and animal fecal waste
Cryptosporidium (avg) 2018	oocysts /L	0.042	0 - 0.5	0	NA	NA	Naturally present in the environment

The 5th UNREGULATED CONTAMINANT MONITORING RULE (UCMR5)

Results for all 30 contaminants analyzed under UCMR5 are available at the City's website link. Results recieved for UCMR5 in 2023 were non-detect at the method detection levels (Methods EPA 533, EPA 537.1 & EPA 200.7)	https://www.ci.cumberland.md.us/731/UCMR-5-Public-Notification