BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS

2023 Water Quality Report

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MESSAGE FROM THE DIRECTOR

As the new director of the Baltimore City Department of Public Works (DPW), it is my great pleasure to lead this organization. DPW provides crucial services to the City of Baltimore and the metropolitan region. Providing clean, healthy drinking water to you is not just important to us – it's our mission.

I am so proud of the outstanding work of our DPW team as we continue to deliver life's most precious natural resource to 1.8 million customers in the Baltimore metropolitan area. DPW employs scientists, engineers, plant operators, and environmental police officers who work tirelessly to protect water at our reservoirs and treatment plants. These talented, dedicated individuals support the annual performance of 150,000 analyses of Baltimore's drinking water (exceeds the requirement) to ensure safe, high-quality water. This report details DPW's most recent water testing results, in compliance with federal Environmental Protection Agency (EPA) Water Testing Regulations.

Left to Right: LaToya Curtis, DPW Chief of Staff; Paul Sayan, Acting Head of the Bureau of Water and Wastewater; and Khalil Zaied, Acting DPW Director

As you read this report, you will get to know some of these hard-working people. No matter the job title, everyone at DPW plays a vital role in protecting Baltimore's drinking water supply.
I hope you find this report informative and helpful. Please reference the Stay Connected section of this document and reach out to us with any questions you have.

Yours in service,

Khalil Zaied

Khalil Zaied
Acting Director, Baltimore City Department of Public Works

About the Report

This Annual Water Quality Report covers January 1, 2023, to December 31, 2023, for the DPW water system (PWSID#:MD0300002) and contains data on the quality of drinking water in the Baltimore metro region, educational information, and important public health notices and contacts. This document, also known as the Consumer Confidence Report (CCR), is being provided as required by the U.S. Environmental Protection Agency (EPA).

Sharing This Report

Every Baltimore area resident deserves access to this vital information. DPW invites you to share this report with your neighbors, friends, colleagues, and family members. This is the 26th edition of the DPW Annual Water Quality Report, and it is available on the Department's website: **publicworks.baltimoreCity.gov/waterreport**. To request a printed copy of this report, please contact us:

311: Baltimore City Residents
443-263-2220: Baltimore County Residents

Navigating This Report

We all play a role in keeping our water safe from contaminants, and we want our customers to be educated on the process and make wise choices on actions they can take to support our work. This is why we have included a few guides to help you navigate this report:

Look out for this icon to read a helpful fast fact.

Contact Information:
Questions about this report, drinking water quality and information on source water assessments should be directed to one of the City's Water Quality Laboratories:

Montebello: 410-396-6040
Ashburton: 410-396-0150

To view this report online, scan the QR code or visit: publicworks.baltimoreCity.gov/waterreport

Why We Test Your Water

Every Baltimore metro region resident should have access to the highest quality drinking water. DPW's rigorous, round-the-clock testing process ensures each drop of water that goes to your tap meets or exceeds EPA standards. To accomplish this, it takes a team of highly trained and certified scientists, chemists, and engineers working together to ensure the delivery of high-quality drinking water."

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 and other immune system disorders, and some elderly people and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water.

Laboratory Leaders –

The First Line of Defense in Safekeeping Baltimore's Drinking Water

Deborah Pitts and Deneen Gordon stand in a long hallway inside the massive Ashburton Water Filtration Plant in West Baltimore, fulfilling their decades-long commitment to public service and safe, clean and reliable drinking water.

Deneen Gordon, Laboratory Technical Administrator; and Deborah Pitts, Chief of the Laboratory Operations Division

As heads of the DPW Laboratory Operations Division, Pitts and Gordon are the two women behind the scenes, leading a team of chemists and biologists charged with testing the City's drinking water supply. Pitts is Chief of the Laboratory Operations Division, and Gordon, the Laboratory Technical Administrator, is her second in command. Together, they oversee the testing of 150,000 samples of water each year. Their team looks for such things as pH, iron, chlorine, turbidity, e-coli and other possible contaminants – anything that might get in the way of providing healthy water to the public. Pitts and Gordon say safeguarding Baltimore's drinking water is a full-time job. It doesn't stop for hurricanes. It doesn't stop for snowstorms. It doesn't stop for pandemics.

"Our charge is to ensure that every time you turn on your water, it's the safest water that we can supply," says Pitts. "Our job is to take that raw product and create something that's safe to drink." DPW welcomes feedback on water quality delivered annually to nearly 2 million customers throughout the Baltimore region. Complaints are "minimal, but they matter; if there is a problem, we're always here to support," says Gordon. "When we see something, we're responsible for having to do something."

It's a team effort, says Pitts. "We can't do this without the team."

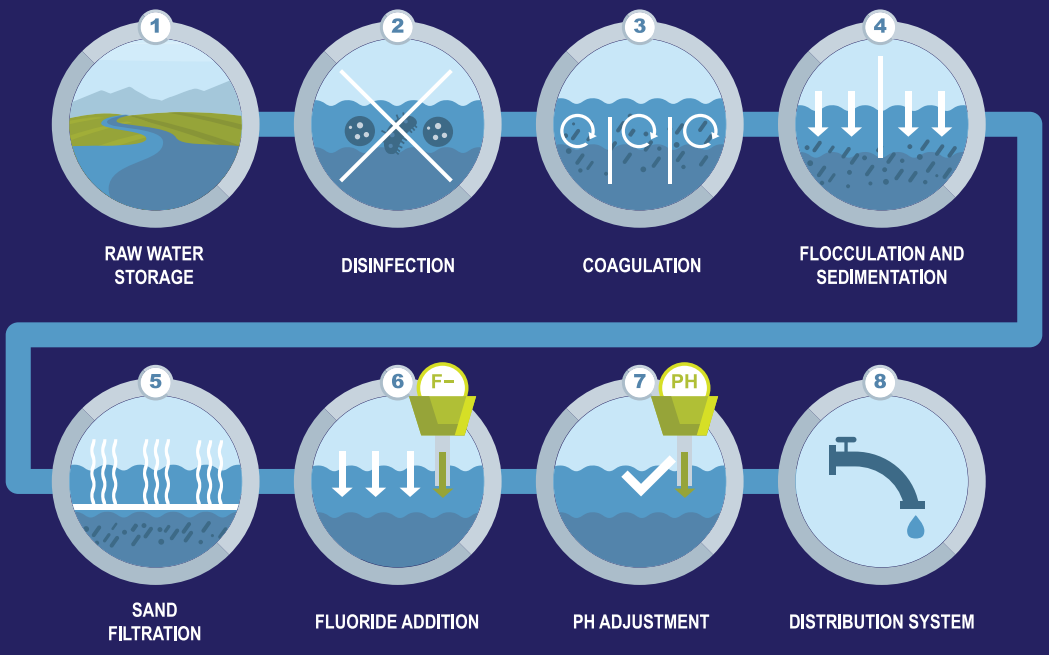
Staff includes, (l-r) Deneen Gordon, Deborah Pitts, Maria Reed, James Carroll III, Scott Rampmeyer, Travis Minott, Brandi Maull, and Timothy Herndon.

Water Treatment Process

Workers at the Ashburton Water Filtration Plant.

Keith Yancey, Water Treatment Tech Supervisor, sits at his computer at the Ashburton Water Treatment Plant, where he takes readings on water content and runs a daily plant operations sheet.

WATER TREATMENT PROCESS



Step 1: Raw Water Storage – Raw water is stored at one of three City-owned reservoirs – Loch Raven and Prettyboy Reservoirs in Baltimore County and Liberty Reservoir in Carroll County. The water is conveyed through tunnels and pipes from the reservoirs to our treatment plants.

Step 2: Disinfection – Disinfection is crucial in killing harmful microorganisms such as bacteria, viruses, and protozoa present in the raw water. For DPW, this is typically done using Sodium Hypochlorite or Chlorine.

Step 3: Coagulation – During coagulation, aluminum sulfate, commonly known as alum, is added to the water to form tiny, sticky particles called floc, which attract and trap suspended particles.

Step 4: Flocculation and Sedimentation – Flocculation involves gentle mixing of the water to promote the growth of larger flocs from the smaller ones formed during coagulation. After flocculation, the water moves to a sedimentation basin where the heavier flocs settle to the bottom due to gravity, forming a layer of sludge.

Step 5: Sand Filtration – In sand filtration, the clarified water from sedimentation passes through layers of sand and gravel. This process removes remaining fine particles, as well as microorganisms, that may have escaped earlier treatment stages.

Step 6: Fluoride Addition – Fluoride is often added to drinking water to prevent tooth decay and promote dental health. It is typically added in the form of fluorosilicic acid, sodium fluoride, or sodium fluorosilicate.

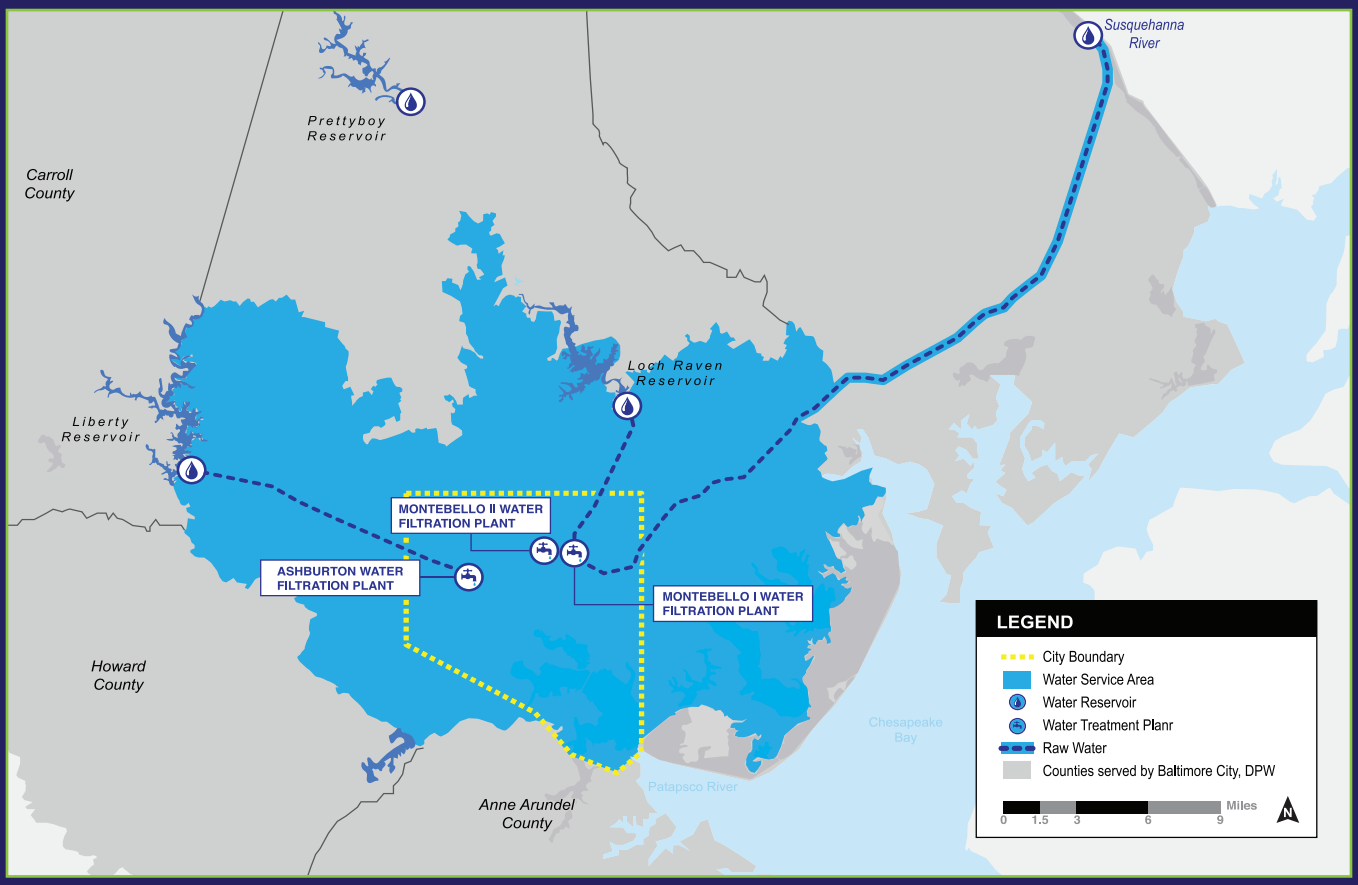
Step 7: pH Adjustment – When alum is added to the water, the acidity (corrosiveness) of the water increases. pH adjustment ensures the water has a suitable pH level for consumption and prevents corrosion in the distribution system. The ideal pH range for drinking water is typically between 6.5 and 8.5. Lime is added to adjust the pH of the water and to precipitate dissolved metals, such as iron and manganese. This step also helps in reducing the hardness of water by precipitating calcium and magnesium ions.

Step 8: Distribution System – After all treatment steps, the treated water is pumped into the distribution system, which consists of pipes, pumps, and storage tanks, for delivery to homes, businesses, and other consumers.

Where Does Your Water Come From?

Baltimore's primary water source is surface water from rainfall and snowmelt, amounting to a capacity of approximately 84 billion gallons. This water is collected and stored in the City's Liberty, Loch Raven, and Prettyboy reservoirs. The Baltimore City water supply is also linked to the Susquehanna River, which flows from Cooperstown, N.Y., to Havre de Grace, Md. Water from the Susquehanna River is only used in times of drought. The reservoirs are surrounded mainly by native woodlands, which filter out pollutants and prevent soil erosion and runoff. These watershed lands were established solely to protect our drinking water supply. Although the reservoirs are the City's property, all surrounding jurisdictions have a stake in their well-being.

WATER SERVICE AREA



Liberty Reservoir has a capacity of 40 billion gallons; Prettyboy Reservoir 20 billion; and Loch Raven Reservoir 24 billion, enough to fill more than 80 Ravens stadiums.

The People Behind Your Water

DPW has a team of highly-qualified individuals dedicated to making sure Baltimore's drinking water is the best it can be. They include engineers, biologists, chemists, maintenance personnel, water and data collectors, outdoorsmen – and police. Here are a few of their stories.

Ryan Mazeska

DPW Manager of Watersheds

Ryan Mazeska, always considers the source. Mazeska oversees the three source reservoirs – Liberty, Prettyboy and Loch Raven – that provide drinking water to the 1.8 million people throughout the Baltimore region.

Responsible for 25,000-acres of water and surrounding land, Mazeska has a lot of source water to keep in mind. Liberty Reservoir has a capacity of about 40 billion gallons; Prettyboy Reservoir 20 billion; and Loch Raven Reservoir 24 billion, enough to fill more than 80 Ravens stadiums.

In addition to monitoring source water quality, his 27-member team is responsible for forestry around the reservoirs.

"The trees," he says, "help maintain water quality and limit soil erosion. Our job is (the) well-being for source water."

Marcus Jordan

Chemist

Marcus Jordan pumps iron – out of the City's water system, that is. As a chemist at the Ashburton Water Filtration Plant, he is part of the team that analyzes 150,000 samples of water a year to make sure the drinking water is safe to consume in the Baltimore region. Jordan checks for iron in raw and treated water. The deeper the red color of the water, the more iron there is.

"The end goal is we have as little iron as possible," he says.

Designed by Professor George Kemmerer nearly a century ago, the Kemmerer bottle is favored by water and fisheries researchers for its easy deployment and safe sample collection at various depths of water.

Kelly Spencer
Pollution Control Analyst

Kelly Spencer has grown professionally and personally while working for the water system. She says she's worked hard to achieve her rank, all while becoming a mom. The soon-to-be mom of two says having a growing family makes taking care of the water more important.

"We're probably the first line of defense for drinking water," says Spencer, who collects water samples for testing by scientists at the City's labs. "This is where it starts. My job is to safeguard the reservoirs."

Ben Shoul
Pollution Control Analyst

During a visit to Loch Raven Dam, Pollution Control Analysts Ben Shoul gave a history lesson. Shoul explained that the long, cylindrical, transparent tube he uses to collect reservoir samples is called a Kemmerer bottle.

Using a special meter attached to the Kemmerer bottle, analysts can take readings at the source. They measure pH balance, total dissolved solids and other possible contaminants. Then, they pack about a liter's worth of water into a cooler and rush it to the testing center at either the Ashburton or Montebello water filtration plants, where water is tested for potentially harmful bacteria.

Some of the guardians of our source water.

Jerry Janos
Environmental Police Officer

Jerry Janos is part of the formidable force that helps the DPW water sampling team safeguard Baltimore's water: the Baltimore Environmental Police. "We protect the reservoirs," says Janos, adding that the 9-member force of fully certified police officers provides public safety at all Baltimore water supply lands and reservoirs, including traffic and watershed regulation enforcement. "We watch for pollution, crime and terrorism."

One of their biggest challenges, he says, is trespassers. Reservoir areas close at dusk, and while fishing is allowed, swimming is not.

"You can't even put your foot in the water," he says. Violators face hefty fines.

Avar Edwards
DPW Laborer

Armed with a trash grabber, Avar Edwards, patrols the roads and banks along the region's reservoirs, collecting debris before it lands in the water. He also sometimes mounts a lawnmower as part of his duties. Recently, he collected assorted wrappers and plastic, including several fast-food restaurant cups.

"Someone has to keep the reservoir clean," he says.

Brandi Maull
Laboratory Technical Supervisor at the Ashburton Water Filtration Plant

Brandi Maull used to exclusively drink bottled water. Then she went to work at the Ashburton Water Filtration Plant, where she oversees a team of microbiologists and chemists who help test 150,000 water samples a year. After experiencing the drinking water testing process at the lab, she would not hesitate to drink from a Baltimore tap. "Until I understood the process ... Knowledge is power. I'm a believer. I just drink water straight from the tap now; and I don't even waste my money."

Maull says working at the lab allows her to apply science to real life. "One of the requirements for the job is that it matters. It makes a difference. This job does not stop if it's blizzarding, or if it's COVID; people need quality water. It's an essential resource."

Khadijah Thornton
Pumping Technician Supervisor

From her computer screen at the Ashburton Water Filtration Plant, Khadijah Thornton keeps her eyes and fingers on the pulsating rush of activity that swirls throughout Baltimore's drinking water process. Behind her is an electronic board – which mimics the area's water elevations and 22 pumping stations. She monitors flows, suction, discharge, and tanks as water navigates Baltimore's hills and valleys after it leaves the City's water filtration plants. Thornton says the job connects her to everyone who consumes Baltimore City water. "I love my job. Every time someone goes in their business or their house and turns on the water, I was part of that."

Brianna Scott
Microbiologist

Brianna Scott relishes serving as a caretaker of Baltimore's drinking water. She says there's room for professional growth at the lab, where she started as a lab assistant in 2020 and was promoted last year. "I find it very important. I feel honored to be part of this process. I take a lot of pride in helping ensure public safety and health."

Tolani Akintayo
Microbiologist

Tolani Akintayo gets to test Baltimore's water for potentially harmful microorganisms. "Working as a microbiologist helps me to ensure clean and safe water for everyone in the community," she says. "Working with a lot of women has inspired me to achieve more and made me realize we can hold spaces in these environments in which we can succeed and learn as well as contribute."

A view from the Prettyboy Reservoir in Baltimore County.

Testing for Water Quality

To ensure tap water is safe to drink, the EPA prescribes regulations that limit the amount of contaminants in water provided by public water systems. Federal Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

- **Microbiological Contaminants,** such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural and livestock operations, and wildlife.
- **Fluoride** is a mineral added to water to prevent tooth decay.
- **Turbidity** is a measure of the cloudiness of the water. It is used to indicate water quality and filtration effectiveness (such as whether disease-causing organisms are present).
- **Inorganic Contaminants,** such as salts and metals, can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Arsenic,** a gray, semi-metallic element that occurs naturally, can be found in certain types of rock and soil. Arsenic can also enter the environment through agricultural and industrial processes.
- **Radioactive Contaminants** can be naturally occurring, or the result of oil and gas production and mining activities.
- **Lead and Copper** enter drinking water primarily through plumbing materials. Exposure to lead and copper may cause health problems ranging from stomach distress to brain damage.
- **Chlorine** is added to water to control the growth of bacteria and viruses.
- **Volatile Organic Chemicals** are byproducts of industrial processes and petroleum production. They come from gas stations, urban stormwater runoff, and septic systems.

How to Read the Water Quality Table

The EPA establishes safe drinking water regulations that limit the number of contaminants in tap water. The table on the following pages shows the concentration of detected substances, in comparison to regulatory limits. Substances not detected are not included in the data table.

Key Water Quality Terms

The following are definitions of key terms referring to standards and goals of water quality noted on the data table.

- **MCL:** Maximum Contaminant Level. The highest level of a contaminant allowed by health regulations established by the EPA.
- **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.
- **AL:** Action Level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a system must follow.
- **PPM:** Parts per million; (or 1 drop in 1 million gallons of water).
- **PPB:** Parts per billion; (or 1 drop in 1 billion gallons of water).
- **PPT:** Parts per trillion; (or 1 drop in 1 trillion gallons of water).
- **HLD:** Highest Level Detected of a substance.
- **NTU:** Nephelometric Turbidity Units. A unit of measurement used to report the level of turbidity or “cloudiness” in the water.
- **ND:** Non-Detection. The concentration of a substance could not be detected at or above the minimum detection limit of that substance.
- **pCi/L:** Picocuries per Liter. A measure of the level of radioactivity in the water.
- **Total Coliforms/E. coli. Indicator bacteria.** This type of bacteriological test is routinely used to determine if contamination has occurred in a drinking water system.
- **LRAA: Locational Running Annual Average (LRAA)** is calculated by averaging the results of all the samples collected at a single site within a quarter and then averaging the quarterly averages for the last four quarters at the same site.
- **HAAs: Haloacetic Acids.** A group of chemicals known as disinfection byproducts. These form when a disinfectant reacts with naturally occurring organic and inorganic matter in the water.
- **HAL: Health Advisory Level.** The EPA establishes a non-regulatory human health-based level of protection from drinking water contaminants that are not regulated under the Safe Drinking Water Act.
- **TTHMs: Total Trihalomethanes.** A group of chemicals that can form when organic matter in water is treated with halogen disinfectants such as chlorine. The most common of these chemicals is trichloromethane (also called chloroform), but others, such as dibromochloromethane, bromodichloromethane, or bromoform can also be found. The sum of these four chemicals is referred to as total trihalomethanes (TTHMs).

Water Quality Results

2023 Consumer Confidence Report (CCR) Detected Regulated Contaminants Table

City of Baltimore Annual Water Quality Report
Baltimore City Department of Public Works
Reporting Period: January 1, 2023 – December 31, 2023
The Baltimore City Department of Public Works (DPW) provides drinking water to 1.8 million people throughout the region.
DPW's 2023 Water Quality Report provides information on the quality of your drinking water.
The report's data provides information on the most recent testing in compliance with U.S. Environmental Protection Agency (EPA) requirements.
A summary of the 2023 testing results is listed below.

LEAD AND COPPER – Tested at customer's taps. Testing is done every 3 years. 2021 was a compliance year for testing. Next round of compliance testing will take place in 2024.

Contaminant	EPA's Action Level	Ideal Goal (EPA's MCLG)	90% of Test Levels Were Less Than	# of Test with Levels AboveEPA's Action Level	Violation	Typical Sources
Lead	90% of homes less than 15 ppb	0 ppb	3.53 ppb	0	No	Corrosion of household plumbing
Copper	90% of homes less than 1,3000 ppb	1,300 ppb	268 ppb	0	No	Corrosion of household plumbing

INORGANIC CHEMICALS

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Ashburton Plant		Montebello Plant		Violation	Typical Sources
			Highest Result	Range of Test Results	Highest Result	Range of Test Results		
Arsenic	10 ppb	0 ppb	ND	<3 ppb	ND	<3 ppb	No	Erosion of natural deposits
Barium	2 ppm	2 ppm	0.0234	0.0192 - 0.0234	0.0353	0.0297 - 0.0353	No	Discharges from drilling wastes
Chlorine	4 ppm	4 ppm	1.17	0..50 - 1.17	1.25	0.55 - 1.25	No	Water additive to disinfect supply
Fluoride	4 ppm	4 ppm	0.94	0.06 - 0.94	1.07	0.05 - 1.07	No	Water additive that promotes strong teeth
Nitrate	10 ppm	10 ppm	1.54	1.05 - 1.54	1.82	0.59 - 1.82	No	Runoff from fertilizer use

ORGANIC CHEMICALS

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Ashburton Plant	Montebello Plant	Violation	Typical Sources
			Highest Level Detected	Highest Level Detected		
2,4-D	70 ppb	70 ppb	ND	0.30 ppb	No	Runoff from herbicide use

RADIOACTIVE CONTAMINANTS

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Level Detected	Range of Levels Detected	Violation	Major Sources
Combined Radium 226/228	5pCi/L	0	1.6	0.2 - 1.6	No	Erosion of natural deposits

VOLATILE ORGANIC CHEMICALS

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	City of Baltimore Distribution System		Violation**	Major Sources
			Highest Result (Locational Running Annual Average)	Range		
Total THMs	80 ppb	NA	73	23 - 88	No	By-product of drinking water chlorination
HAA (5)	60 ppb	NA	52	8 - 56	No	By-product of drinking water chlorination

TURBIDITY

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Ashburton Plant		Montebello Plant		Violation	Major Sources
Turbidity	Treatment Technique (TT)	None	Highest Result	Lowest %	Highest Result	Lowest %		Soil Run-off
	Filtration	NA	0.13 NTU	100%	0.24 NTU	100%	No	Soil Run-off

BACTERIA IN TAP WATER

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Monthly Percentage of Samples with Total Coliform Present	Violation	Typical Sources
Total Coliform (for systems that collect ≥ 40 samples/month	5% of monthly samples are positive	0	1.75%	No	Naturally present in the environment
CHLORINE	4 ppm	4 ppm	Running Annual Average of Samples Computed Quarterly 0.54 ppm (Based on 5,020 distribution system samples collected in 2023)	No	Water additive to disinfect supply

How to read the Water Quality Data Table
EPA establishes the safe drinking water regulation that limits the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances notdetected are not included in the table.

Maximum Contaminant Level (MCL): 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.
The concentration o f a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.

Maximum Contaminant Level Goal (MCLG): 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.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.

Non-Detection (ND): The concentration of a substance could not be detected at or above the minimum detection limit of that substance.

Units in the Table: ppm is parts per million (or 1 drop in 1 million gallons), ppb is parts per billion (or 1 drop in 1 billion gallons), ppt is parts per trillion (or 1 drop in 1 trillion gallons); NTU is Nephelometric Turbidity Units which is a unit of measure used to report the level of turbidity or "cloudiness" in the water.

Health Effects

Barium: Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Cryptosporidium Results Range

Liberty: 0.00 – 0.00 Oocyst/Liter

Lake Ashburton Reservoir: 0.00 – 0.00 Oocyst/Liter

Loch Raven: 0.00 – 0.00 Oocyst/Liter

Druid Lake Reservoir: 0.00 – 0.09 Oocyst/Liter

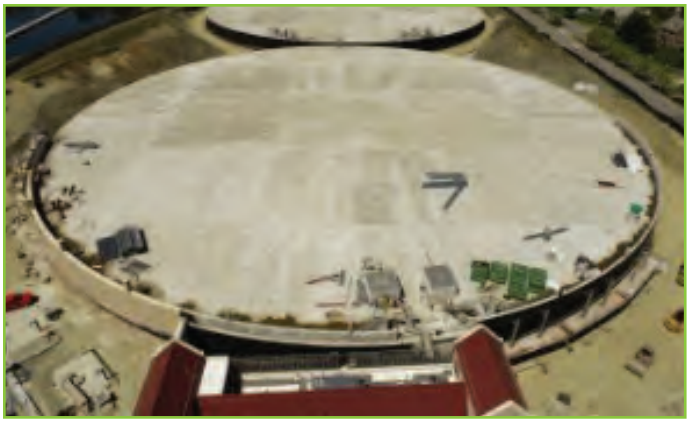
Susquehanna River: 0.00 – 0.09 Oocyst/Liter

Secondary Contaminants

Sodium levels in the water supply are often of concern to consumers who contact our facilities. Sodium naturally occurs in raw waters, but the concentration can be increased due to the influence of run-off from road surfaces treated with rock salt during snow and ice removal efforts. During 2023, the average sodium concentrations measured in the finished water from the Ashburton and Montebello Water Filtration Plants were 18.9 ppm and 17.5 ppm, respectively.

Each year, DPW performs 150,000 analyses of Baltimore's drinking water to ensure it is of the highest possible quality.

Protecting Treated Water Reservoirs



The tanks at Lake Ashburton.

DPW recently added another shield of protection to your water supply with the completion of the Druid Lake and the Lake Ashburton reservoir water tanks in December of 2023. We pursued these projects to comply with the federal Safe Drinking Water Act, which mandates that treated drinking water storage must either be covered, or it must receive additional treatment before entering the water distribution system. DPW opted for a long-term solution — converting all open-air drinking water lakes into covered underground tanks. The remaining site work, such as park enhancements, green space creation, and landscape improvements is scheduled for completion this year.

The Druid Lake and Lake Ashburton tanks were the last in DPW's 10-year, $500 million program to eliminate all open-air drinking water reservoirs. The completion of the Druid Lake and Lake Ashburton tank projects marks the end of uncovered, open-air treated water reservoirs in Baltimore City. After facing several challenges due to the impact of COVID-19, we can now add these water tanks to our list of completed reservoir projects, which include the Towson, Montebello II, Pikesville, and Guilford reservoirs.

Such investments embody our commitment to protecting the area's drinking water from harmful contaminants like cryptosporidium, a parasite that can cause respiratory and gastrointestinal illnesses.

Cryptosporidium

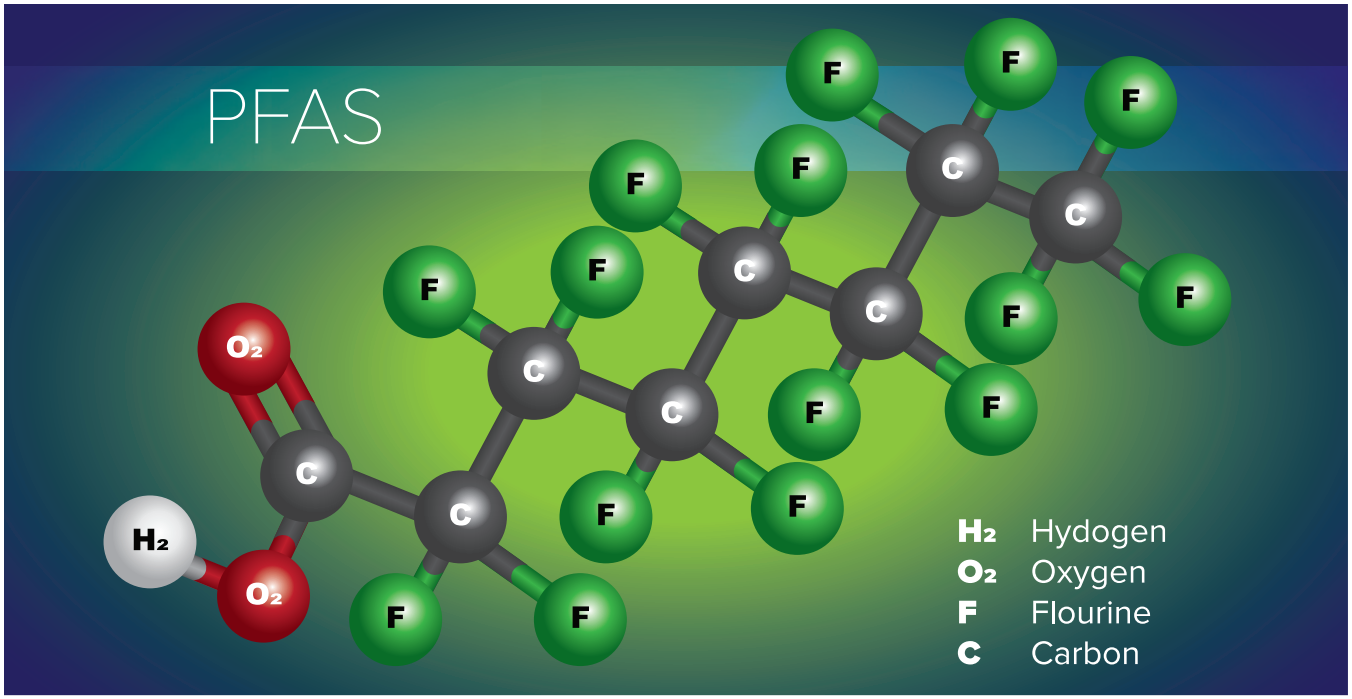
Under an EPA Administrative Order, the City was required to test its two finished water reservoirs, Lake Ashburton and Druid Lake, for cryptosporidium and giardia while construction of the underground tanks was ongoing. Sampling of the finished water reservoirs, Lake Ashburton and Druid Lake started July 24, 2023 and recurred monthly until September 19, 2023. On that date, analysis of the sample from Druid Lake resulted in 1 Oocyst of cryptosporidium detected in 10.67 liters of sample which yielded 0.09 Oocyst/L. Public notification was provided, and sampling of the finished water reservoirs increased to weekly testing.

No additional positive results were detected during the sampling period. The City ceased sampling at Lake Ashburton on December 7, 2023, and Druid Lake on December 21, 2023, when the underground tanks were placed into service with Maryland Department of the Environment (MDE) approval.

If you notice suspicious activities in or around local water utilities, such as persons cutting or climbing facility fencing, loitering, tampering with equipment, or similar activities, please dial 911.

Monitoring PFAS

DPW takes protective measures to detect organic and human-made contaminants in your drinking water, including what are called per- and poly-fluoroalkyl substances (PFAS).



What are PFAS?

PFAS are a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, such as:

- **Stain- and water-resistant fabrics and carpeting**
- **Cleaning products**
- **Paints**
- **Cookware**
- **Food packaging**
- **Fire-fighting foams**

Over time, these PFAS have entered the environment, where they have been detected by authorities in 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.

EPA finalized regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are each 4.0 ppt. The MCLs for HFPO-DA (GenX), PFNA and PFHxS are 10 ppt. Additionally, a mixture of two or more of the following chemicals (PFNA, PFHxS, HFPO-DA, and PFBS) will be regulated with a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

One large swimming pool can hold one million gallons of water, but the Druid Lake and Lake Ashburton underground tanks can hold 96 million gallons of water combined!

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023. The City of Baltimore will begin testing for the UCMR5 in August 2024. Testing will run through 2025. The UCMR5 should test all community water systems serving populations of at least 3,300 people. Three randomly selected systems in Maryland with populations less than 3,300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

Additional information about PFAS can be found on the MDE website: mde.maryland.gov PublicHealth/Pages/PFAS-Landing-Page.aspx

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring/Reporting Requirements Not Met for City of Baltimore

The City of Baltimore was in violation of monitoring and reporting requirements for quarterly Phase II/V Synthetic Organic Contaminants (SOCs) at the Ashburton and Montebello Filtration Plants for the second quarter of 2023. The required reports were submitted to MDE; however, the report was missing three analytes. The City has since collected the samples and submitted the results to MDE. These were not emergencies, but as our customers, you have a right to know what happened and what we are doing (did) to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. During April 1, 2023 – June 30, 2023, we did not complete all monitoring for Chlordane, Toxaphene, and PCBs and therefore cannot be sure of the quality of your drinking water during that time. However, subsequent testing found no detection of any contaminants.

Chlordane, Toxaphene, and PCBs are man-made chemicals that are commonly found in pesticides, herbicides, insecticides, and some manufacturing processes. People who may have been exposed to these chemicals over long periods may experience disruptions to the central nervous system, endocrine system, immune system and reproductive system. These individuals should seek advice from their health care provider.

What Should I Do?

There is nothing you need to do. You do not need to boil your water or take other corrective actions.

What Is Being Done?

The City has since collected samples and submitted reports for the Phase II/V Synthetic Organic Contaminants according to the rule to MDE to return to compliance.
For more information, please contact Deborah Pitts at 410-396-0539, or 3001 Druid Park Drive, Baltimore, Maryland 21215.

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

This notice is being sent to you by the City of Baltimore. State Water System ID#: MD0300002.

Reporting Requirement(s) Not Met for City of Baltimore

The City of Baltimore received a Notice of Monitoring and Reporting Violation for the Nitrate Rule, which requires that the water system sample and test for nitrates and report those results annually for each filtration plant. Results of regular monitoring are an indicator of whether your drinking water meets health standards. During January 1, 2023 – December 31, 2023, the City did not report all the results for the monitoring of Nitrates. One of the reports was omitted from the submittal, and the identification numbers for the filtration plants did not match the MDE database.

Although public health was not impacted, as our customers, you have a right to know what happened and what we did to correct the situation.

What Should I Do?
There is nothing you need to do. You do not need to boil your water or take other corrective actions.

What Is Being Done?
The City samples and tests for nitrates monthly. The required report has since been submitted to the MDE, and all results have met Safe Drinking Water requirements.

For more information, please contact Deborah Pitts at 410-396-0539, or 3001 Druid Park Drive, Baltimore, Maryland 21215.

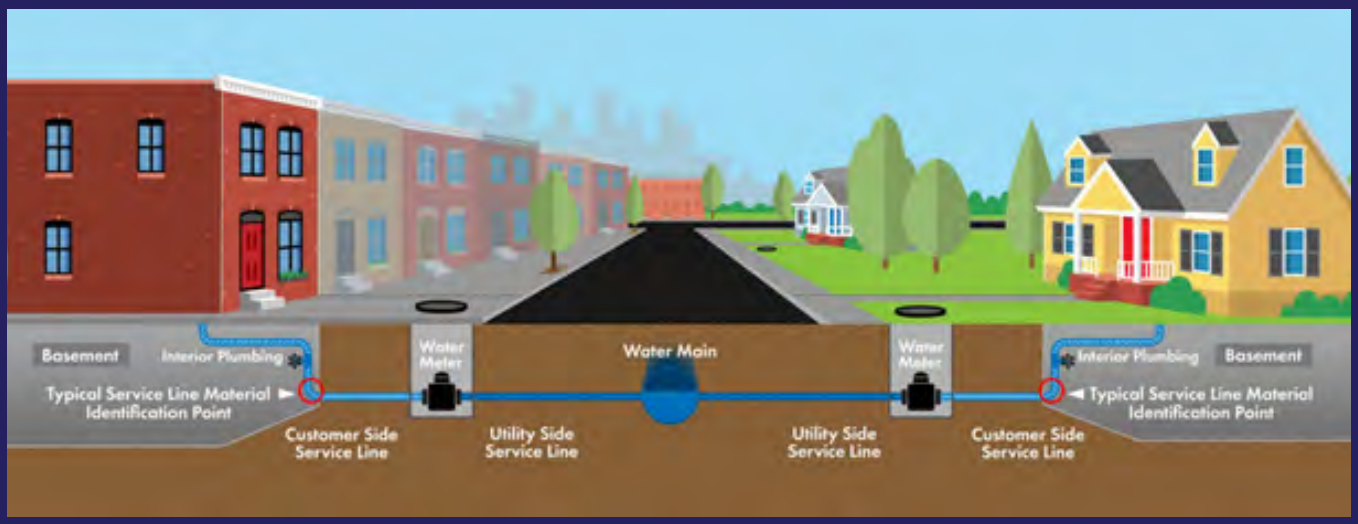
Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses).
You can do this by posting this notice in a public place or distributing copies by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

This notice is being sent to you by the City of Baltimore. State Water System ID# MD0300002.

What is water? A water molecule is comprised of two parts Hydrogen with one part Oxygen: H+H+O = H2O (Water)

Get to Know Your Water Service Line

A service line is a water pipe that connects your home to the public water main and transports water to your faucets, toilets, and other fixtures. We are committed to monitoring Baltimore service lines to ensure we are delivering safe and high-quality water to homes and businesses across the metro area. Our water is essentially lead-free when it leaves the water filtration plant, but this water may encounter lead materials as it flows through your service lines. This is why it is crucial that we work together to safeguard the area's water supply.



DPW has partnered with the Baltimore County Department of Public Works and Transportation (DPWT) to form the Baltimore Service Line Partnership, a collaboration to protect residents from lead exposure in drinking water. This partnership was formed to comply with the Lead and Copper Rule Revisions (LCRR) that were introduced by EPA in 2021. These rules require water providers to monitor and replace service lines that contain high levels of lead. The State of Maryland banned the installation of lead water service lines in 1972, reducing the likelihood of finding lead. However, there are still many service lines with unknown materials. To combat this, we ask that residential, commercial, and industrial property owners take a self-reporting survey to help us identify service lines that contain lead.

How to Take the Service Line Survey

The self-reporting survey is available through a new one-stop portal created to serve as a resource for the service line inventory process. To complete the survey, you will need the following tools to identify your service line material: keys, a magnet, coins, a cell phone or camera, and a flashlight.

- Once you have accessed the survey site, type in your address to determine if your property has been identified as having an unknown service line.
- If your property comes back as “survey required,” proceed to locate your water service line in your basement or utility area.
- Identify your water service line material using the method shown in the table below.
- Take a picture of your water service line and upload the photo to the self-reporting survey.

IDENTIFYING SERVICE LINE MATERRIAL

	 Copper	 Galvanized	 Lead	 Plastic/HDPE/PVC
Scratch Result	Copper or orange Result	Dull gray	Shiny silver	Matches pipe surface
Magnet Result	No	Yes	No	No
Tapping Result	Metallic, ringing noise	Metallic, ringing noise	Dull noise	Dull, plastic noise

The above graphic reveals a few characteristics to look out for when identifying the material of your service line.

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. DPW 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. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry, or doing 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 DPW. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Take the water line survey here

https://bit.ly/BaltimoreSelfReportingSurvey

Glossary

TERM	DEFINITION
AL	Action Level
Arsenic	A gray, semi metallic element that occurs naturally, which can be found in certain types of rock and soil.
CCR	Consumer Confidence Report
Chlorine	Added to water to control the growth of bacteria and viruses.
DPW	Department of Public Works
E. coli	Escherichia coli
EPA	Environmental Protection Agency
Fluoride	A mineral added to water to prevent tooth decay.
FOG	Fats, Oils, and Grease
HAL	Health Advisory Level
HLD	Highest Level Detected
Inorganic Contaminants	Contaminants such as salts and metals that can be either naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
LCRR	Lead and Copper Rule Revisions
Lead and Copper	Enter drinking water primarily through plumbing materials.
LRAA	Locational Running Annual Avera ge
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDE	Maryland Department of the Environment
MDH	Maryland Department of Health
Microbiological Contaminants	Viruses and bacteria that come from sewage treatment plants, septic systems, agricultural and livestock operations, and wildlife.
ND	Non-Detection
NTU	Nephelometric Turbidity Units
pCi/L	Picocuries per Liter
PFAS	Per- and Poly-fluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanoic Sulfonic Acid
pH	Potential of Hydrogen
PPB	Parts per billion
PPM	Parts per million
PPT	arts per trillion
Radioactive Contaminants	Contaminants that can be naturally occurring, or the result of oil and gas production and mining activities.
SOCs	Synthetic Organic Contaminants
Turbidity	A measure of the cloudiness of the water, used to indicate water quality and filtration effectiveness.
UCMR5	5th Unregulated Contaminant Monitoring Rule
Volatile Organic Chemicals	Byproducts of industrial processes and petroleum production, which come from gas stations, urban stormwater runoff, and septic systems.

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Website: https://publicworks.baltimoreCity.gov/

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X: @BaltimoreDPW
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NextDoor: Nextdoor.com/gov/BaltimoreDPW

Abel Wolman Building
200 Holliday Street
Baltimore, MD 21202

This report contains important information about your drinking water.

Translate it, or speak with someone who understands it.

Este reporte contiene información muy importante sobre el agua que usted toma. Haga que se la traduzcan o hable con alguien que la entienda.

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

Rapò sa a gen enfòmasyon ki enpòtan anpil sou dlo w'ap bwè a. Fè tradwi-l pou ou, oswa pale ak yon moun ki konprann sa ki ekri ladan-l.

Ten raport zawiera bardzo istotną informacje o twojej wodzie pitnej. Przetłumacz go albo porozmawiaj z kimś kto go rozumie.

В этом материале содержится важная информация относительно вашей питьевой воды. Переведите его или поговорите с кем-нибудь из тех, кто понимает его содержание.

這個報告中包含有關你的飲用水的重要信息。請將此報告翻譯成你的語言或者詢問懂得這份報 告的人。

이 보고서는 귀하의 식수에 관한 매우 중요한 정보를 포함하고 있습니다. 이 정보에 대해 이해하는 사람에게 그 정보를 번역하거나 통역해 받으십시오.

এই প্রতিবেদনে আপনার পানীয় জল সম্পর্কে গুরুত্বপূর্ণ তথ্য রয়েছে

يتضمن هذا التقرير معلومات هامة حول مياه الشرب الخاصة بك. ترجمه أو تحدث مع شخص يفهمه.

یہ رپورٹ آپ کے پینے کے پانی کے بارے میں اہم معلومات پر مشتمل ہے۔ اس کا ترجمہ کریں یا انسے بات کریں جو یہ رپورٹ سمجھتے ہیں۔

Need Help Paying Your Water Bill?

PromisePay Payment Plans have helped thousands of customers get out of debt and avoid negative financial consequences through flexible and interest-free payment plans! To learn more about this program and enroll, please visit us online at Baltimore.Promise-Pay.com, scan the QR code, or call us at 410-779-9808.

Water4All

Water4All is a water bill discount program designed to reduce the monthly water bill for eligible Baltimore City residents. To learn more about this program and enroll, please visit us online at Cityservices.baltimoreCity.gov/water4all/, scan the QR code, or call us at 410-396-5555.

Paperless Billing

Customers will receive their bills faster and more securely with the ability to view and access their bill anytime and anywhere. You can sign up for paperless billing in the DPW Customer Service Portal. https://waterbillportal.baltimoreCity.gov/#Login

Join Our Team

If you believe in our mission to provide clean, healthy drinking water, you are invited to apply for work with us.

Reporting Service Issues

To report any concerns about your drinking water, call 311.
Water customers outside of Baltimore City may dial 410-396-5352 for assistance.

Filtration Plant Tours

The Baltimore City Department of Public Works provides tours for our consumers, students, businesses, or anyone interested in the water filtration plants. We encourage the people we serve to come meet our staff, who dedicate their lives to public service. We want you to better understand the self-rewarding thrill that attracts us to our work and the importance of our work to provide life-sustaining drinking water to our communities. For a tour at the Montebello Plant call 410-396-6040, and for a tour at the Ashburton Plant call 410-396-0150.