
# 2024 Drinking Water Quality Report

SUMMARIZING 2023 WATER QUALITY TEST RESULTS

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The 2024 Water Quality Report is available for download at **dcwater.com/waterreport**. Reports from previous years can be viewed at **dcwater.com/testresults**. Please call **202-787-2200** or send an email to **communications@dcwater.com** to request a printed copy.

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## Get Involved

The DC Water Board of Directors conducts regularly scheduled board meetings that are open to the public, generally on the first Thursday of each month, except August, at 9:30 a.m. The meetings are held virtually or at the DC Water Headquarters, 1385 Canal St, SE, Washington DC 20003.

Please visit **dcwater.com** or contact the Office of the Board Secretary at **202-787-2330** or to **Board.Secretary@dcwater.com** confirm a meeting time and location.

# Contact Information

**DC WATER CONTACT INFORMATION**

| | |
|---|---|
| Drinking Water Division | **202-612-3440** |
| Customer Service | **202-354-3600** |
| 24-Hour Command Center | **202-612-3400** |
| Office of Marketing and Communications | **202-787-2200** |
| **dcwater.com** | |

**ADDITIONAL CONTACTS**

| | |
|---|---|
| US Army Corps of Engineers Washington Aqueduct<br>**nab.usace.army.mil/Missions/Washington-Aqueduct/** | **202-764-2753** |
| Department of Energy and Environment<br>**doee.dc.gov** | **202-535-2600** |
| Interstate Commission on the Potomac River Basin<br>**potomacriver.org** | **301-984-1908** |
| EPA Region 3 Customer Service Representative | **215-814-5122** |

**IF YOU HAVE A QUESTION ABOUT THIS REPORT AND REQUIRE ASSISTANCE FROM A TRANSLATOR, PLEASE CONTACT CUSTOMER SERVICE AT 202-354-3600 (8 A.M. TO 5 P.M., MONDAY THROUGH FRIDAY).**

Este reporte contiene información importante sobre su agua potable. Para obtener una traducción del reporte, por favor comuníquese con la Oficina de Asuntos Externos a través del 202-354-3600 o custserv@dcwater.com

Báo cáo này có chứa thông tin quan trọng về nước uống của bạn. Vui lòng liên hệ Phòng Đối Ngoại theo số 202-354-3600 hoặc địa chỉ custserv@dcwater.com nếu bạn muốn có bản dịch báo cáo.

Ce rapport contient des renseignements importants à propos de votre eau potable. Si vous souhaitez vous procurer un rapport traduit, veuillez communiquer avec le Bureau des affaires extérieures en composant le 202-354-3600, ou connectez-vous à custserv@dcwater.com

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该报告包含有关您的饮用水的重要信息。如需翻译版的报告，请联系外事办公室，电话：202-354-3600 电子邮件：custserv@dcwater.com.

# CEO's Message

Dear Customers,

I am pleased to share DC Water's 2024 Drinking Water Quality Report for your review. The report details the exceptional quality of the District's drinking water, which for more than 11 consecutive years has met every federal water standard.

In addition to monitoring water quality, and testing for lead contamination, our report also provides a summary of tests conducted to detect per- and polyfluoroalkyl substances (PFAS), or 'forever chemicals,' present in drinking water. I am proud to say that our test results during 2023 on PFAS reveal that the water we purchase from the U.S. Army Corps of Engineers' Washington Aqueduct was in full compliance with the U.S. Environmental Protection Agency (EPA) new limits on PFAS in drinking water.

Over the course of the year, our water monitoring program tested more than 40,000 samples taken from a variety of sources across the District – more than required – to ensure that the water we deliver to local homes and businesses is clean and reliable. I encourage you to explore the report and learn more about water quality in the District and how DC Water acts as a steward of our natural resources and the environment.

The 2024 Drinking Water Quality Report can be found online at: **dcwater.com/waterreport**. If you do not have internet access, you can call **(202) 787-2200** to request a mailed copy of the report.

Best regards,

David L. Gadis
CEO and General Manager

**"I am proud to say that our test results during 2023 on PFAS reveal that the water we purchase from the U.S. Army Corps of Engineers' Washington Aqueduct was in full compliance with the U.S. Environmental Protection Agency (EPA) new limits on PFAS in drinking water."**

**– DAVID L. GADIS**
**CEO AND GENERAL MANAGER**

# Your Drinking Water Source

### Where does our drinking water come from?

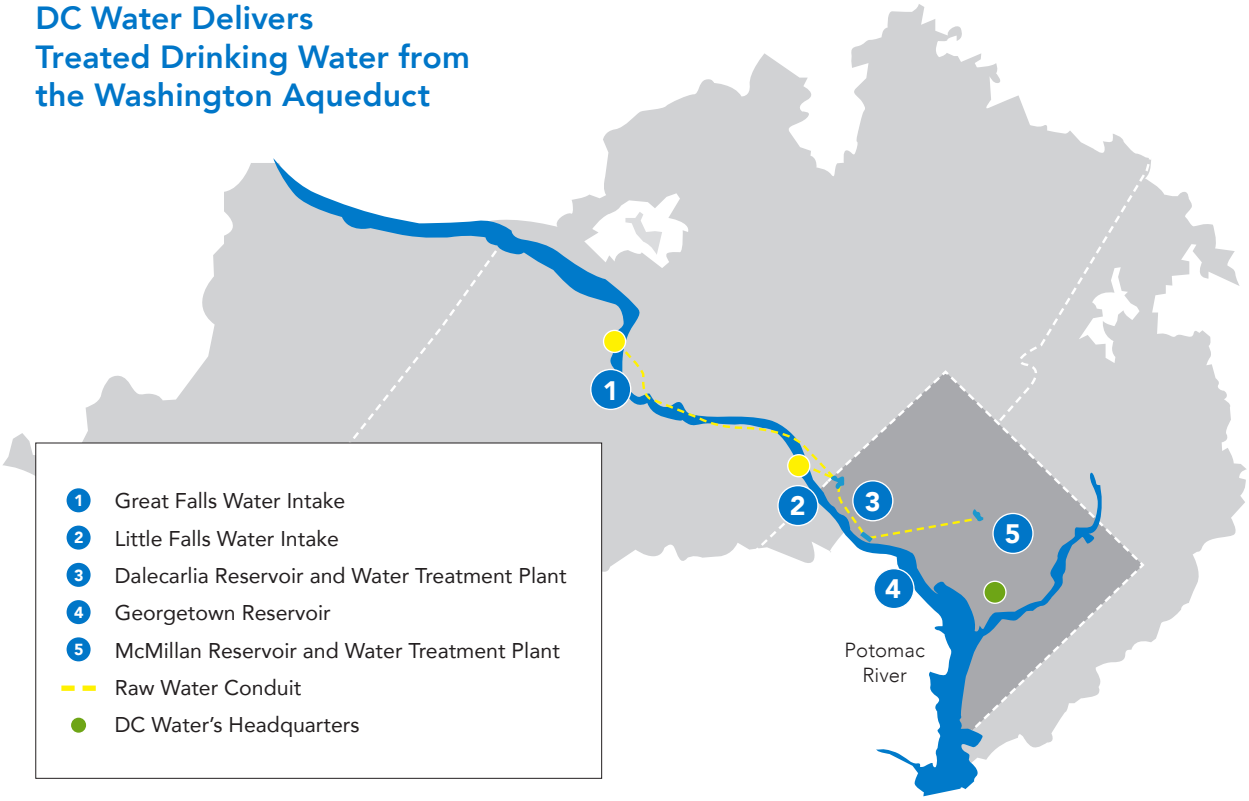
The District of Columbia's drinking water comes from the Potomac River, a "surface water" supply. The Washington Aqueduct (Aqueduct) withdraws about 140 million gallons of water each day from intakes at Great Falls and Little Falls.

### Who treats our drinking water?

DC Water purchases treated drinking water from the Aqueduct which is owned and operated by the U.S. Army Corps of Engineers. The Aqueduct filters, cleans, and fortifies water at the Dalecarlia and McMillan treatment plants to meet all water quality standards set by the U.S. Environmental Protection Agency (EPA).

During the treatment process, drinking water is enhanced with beneficial compounds like fluoride that improve public health.

## DC Water Delivers Treated Drinking Water from the Washington Aqueduct



# Water Treatment

### What is drinking water treatment?

Like most public water systems around the country, the Aqueduct uses a multi-step treatment process to turn "raw" water from the Potomac River into clean, safe drinking water. The treatment process includes sedimentation, filtration, fluoridation, pH adjustment, disinfection using free chlorine and chloramine (a combination of chlorine and ammonia), and corrosion control using orthophosphate.

### How is chlorine used to clean water?

Chlorine is commonly used by water utilities to kill viruses and bacteria that can be found in rivers and other sources of drinking water. The Aqueduct first adds chlorine and then adds ammonia to create chloramine, a more persistent disinfectant that keeps water clean as it travels through DC Water's pipe system.

DC Water continuously monitors the drinking water to ensure that safe disinfectant levels are maintained in the distribution system. Even at safe levels, it is necessary for chloramine to be removed from water used for kidney dialysis and aquariums. Contact your kidney dialysis center, physician or local pet store about water treatment for removing chloramine. For more information about chloramine, visit **dcwater.com/water-faqs**.

### Why does water have a strong chlorine smell in the spring?

Most of the year, the Aqueduct produces drinking water with chloramine as the residual disinfectant that keeps it clean. For a short time each spring, the Aqueduct temporarily switches from using chloramine to only chlorine. This change is standard practice for utilities that use chloramine—it helps keep pipes clean, and optimizes water quality throughout the year. The level of chlorine is safe for consumption, but you can reduce the chlorine smell and taste by placing an open pitcher of water in the fridge. If you haven't used water in several hours, let the cold water run for 2 minutes before filling the pitcher.

## How is our water treated?

**Screens**
Large debris such as branches and scrap wood are removed from raw water.

**Pre-Sedimentation**
Large particles in untreated water settle out naturally.

**Coagulation**
Coagulants are added to the water to cause particles to stick together when the water is gently mixed (known as flocculation), creating larger, heavier particles

**Sedimentation**
Large particles settle to the bottom of sedimentation tanks.

**Filtration**
Gravity filters, composed of hard coal (anthracite), sand, and gravel layers, remove smaller particles still remaining in the water.

**Fluoridation**
Fluoride is added to protect teeth (as recommended by the American Dental Association).

**Corrosion Control**
Lime and Caustic Soda are added to adjust pH for optimum corrosion control. Orthophosphate is added to prevent corrosion in pipes.

**Primary Disinfection**
Chlorine is added to the water to kill potentially harmful organisms before the water leaves the plant.

**Secondary Disinfection**
Ammonia is added just before the water leaves the plant to create chloramine. Chloramine maintains the disinfection in the distribution system.

# From Treatment to Tap

### How do we get our drinking water?

DC Water distributes about 94 million gallons of clean drinking water every day to more than 700,000 District residents, and our commercial and governmental customers in the District of Columbia, and parts of Maryland and Virginia.

Drinking water travels through a complex system of about 1,350 miles of water mains throughout the District of Columbia. DC Water tests and monitors drinking water quality around the clock as it flows through our system, ensuring tap water continues to meet all safe water standards.

### What are the drinking water regulations?

The Safe Drinking Water Act defines the term "contaminant" as meaning any physical, chemical, biological, or radiological substance or matter in water. Therefore, the law defines "contaminant" very broadly as being anything other than water molecules. Even beneficial compounds like fluoride, essential nutrients, and naturally-occurring minerals are considered "contaminants."

*From Treatment to Tap* →

# From Treatment to Tap continued

In order to ensure that tap water is safe to drink, the EPA promulgated regulations that limit the amount of certain contaminants in water provided by water suppliers. The Food and Drug Administration establishes limits for contaminants in bottled water which must provide similar 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (**800-426-4791**).

For additional information about drinking water regulations, visit **epa.gov/dwstandardsregulations**.

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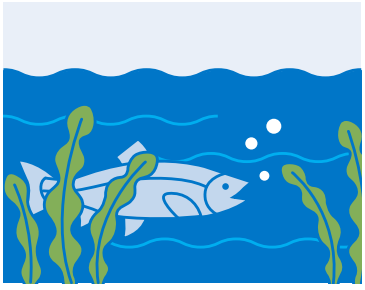
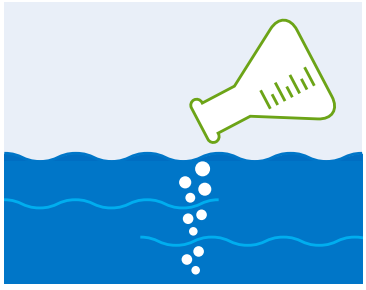
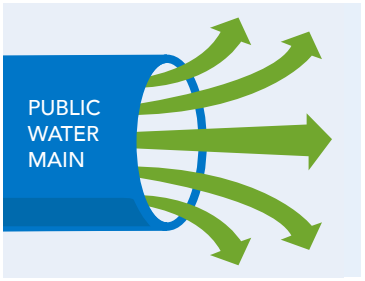
## The Washington Aqueduct, DC Water and Residents Work Together to Ensure Water Quality



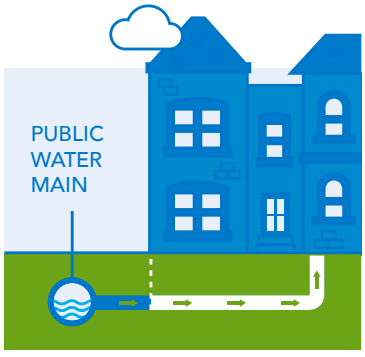
**1.** Drinking water is drawn from the Potomac River by the Washington Aqueduct.



**2.** The Washington Aqueduct treats source (or raw) water to provide clean drinking water.




**3.** DC Water operates a large distribution system and monitors the water quality.




**4.** Customers maintain plumbing in the home to protect water quality.

# Protecting the Potomac

**How does DC Water safeguard our drinking water source?**
High quality tap water starts with a healthy river. Our drinking water comes from a single "surface water" supply, as opposed to an aquifer or groundwater supply. The abundant Potomac River is also a source of water for many other water utilities including the Washington Suburban Sanitation Commission (WSSC), Fairfax Water, and Arlington County. DC Water works with these utilities, environmental groups, government agencies, and other organizations to ensure the Potomac River remains clean and healthy.

DC Water takes an active role in the Potomac River Basin Drinking Water Source Protection Partnership—a cooperative group of 27+ utilities, government agencies and regional stakeholders.

The Partnership strategically addresses the multi-faceted issues that affect the region's drinking water supply. Our work includes minimizing the impact of agriculture on water quality, coordinating response efforts during emergency situations, contributing to the latest environmental assessments, and educating residents about the importance of protecting upstream drinking water sources.

Today, the District of Columbia is part of a watershed that is cleaner and healthier than ever before. EPA Region III, as the drinking water primacy agency for the District of Columbia, funded the update and completion of the Source Water Assessment of the Potomac River watershed in early 2020. Horsley Witten was contracted to consult with public water utilities and state agencies to create this update. This "report" is in the form of an innovative web-based storyboard containing interactive links and a visual representation of the updated information. The intention was to provide the resource managers, scientists, and interested citizens with a more interactive, user friendly way of assessing the data through a GIS platform to better understand source water protection. The storyboard can be found here:
**dcwater.com/EPA-Potomac-Source-Water-Assessment-2020**

*Protecting the Potomac* →


Great Falls

# Protecting the Potomac continued


Georgetown

## How can sources of drinking water become polluted?

Across the nation, rivers, lakes, streams, ponds, reservoirs, springs and wells are sources of drinking water (both tap water and bottled water). Rain and melting snow travels over the surface of the land or through the ground, dissolving naturally occurring minerals and picking up substances resulting from animal and human activity and carrying these pollutants to our drinking water sources. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from agricultural livestock operations, septic systems, wastewater treatment plants and wildlife.
- Inorganic contaminants, such as salts and metals that can be naturally occurring or result from urban stormwater runoff, farming, and industrial or domestic wastewater discharges.
- Pesticides and herbicides that 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 that are by-products of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants that can be naturally-occurring or the result of mining activities.

## What can I do to help?

Take pride in the Potomac! The best way to be a steward of the river is to take care of our watershed —the area of land that drains to the river.

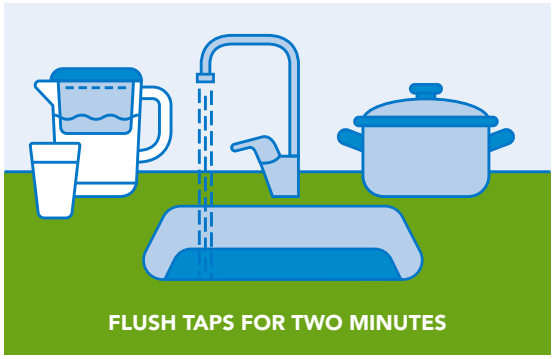
- Prevent litter and pick up pet waste.
- Use only enough pesticides, landscaping chemicals, and fertilizer as necessary. Excess garden and lawn-care materials wash into and pollute waterways during rainfall.
- Consider using Bloom—a safe, Class-A soil conditioner for your garden (**bloomsoil.com**).
- Dispose of household waste, grease and motor oil properly, not down sinks or storm drains.
- Prevent trash and debris from entering storm drains and catch basins. To report a clogged drain or basin, call **202-612-3400**.
- Report spills that could potentially enter the waterways by calling **311**.
- Get rid of unwanted or expired medication at a drug-take back location or throw it in the trash. Flushing pharmaceuticals down the toilet can harm our rivers. Learn more at **protectyourpipes.org**.

# Ensuring the Best

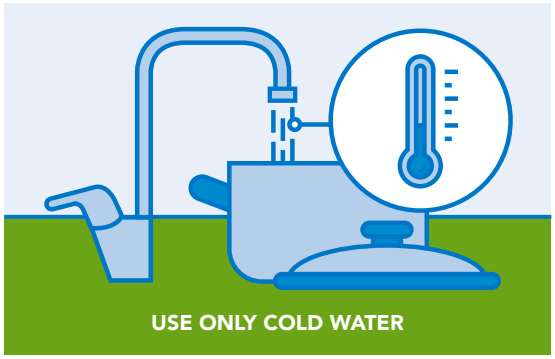

### Keeping Tap Water Fresh at Home

A few simple tips can help ensure clean, fresh water every time you turn on the tap. Get more bilingual tips at **dcwater.com/water-quality-home**.

## Household Water Quality Tips

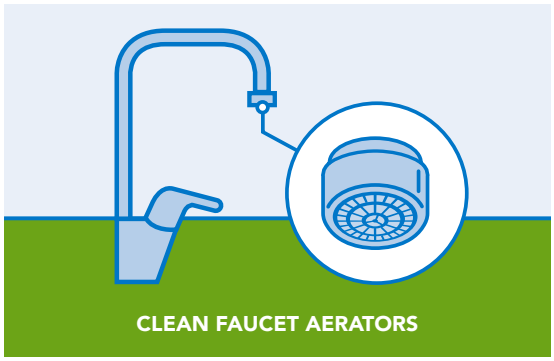



1. **Flush cold taps until you feel a temperature change and continue flushing for two additional minutes** before using water for drinking and cooking when household water has not been used for several hours. When water sits in your pipes for long periods of time, water quality can degrade.



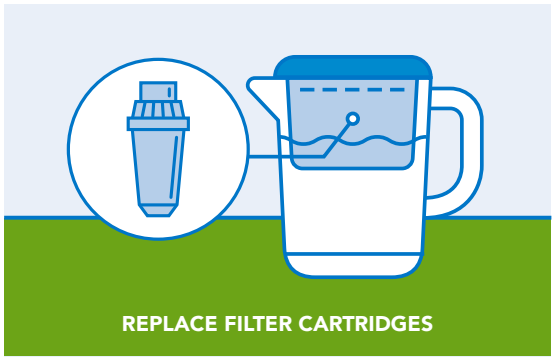

2. **Use only cold water** for drinking and cooking.

   Build-up of metals, sediment and bacteria in your hot water heater can enter your tap water when it runs through the water heater.



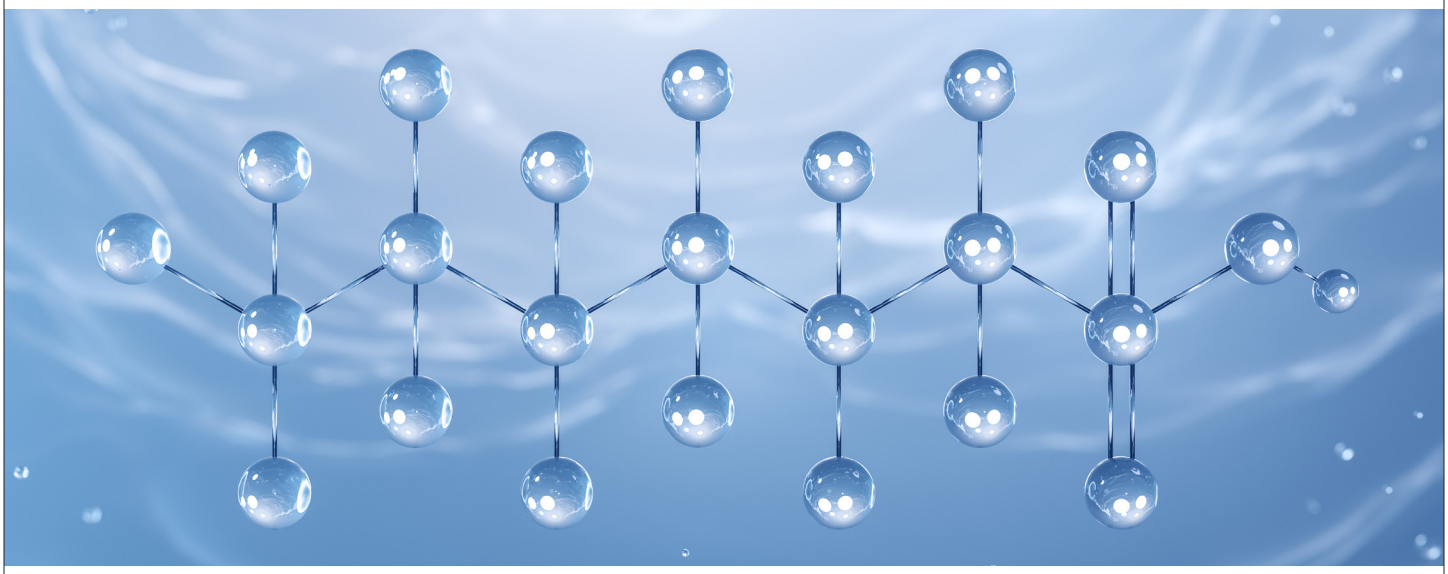

3. **Clean faucet aerators** every three months

   Sediment and metals can collect in the aerator screen located at the tip of your faucets. Replace aerators that are in poor condition. (available at local hardware stores).




4. **Routinely replace filter cartridges** according to manufacturer's instructions.

# PFAS and Drinking Water



## What are PFAS?

PFAS are a group of over 6,000 man-made chemicals that have been manufactured and used in home consumer products such as carpets, clothing, food packaging, and cookware since the 1940s. PFOA and PFOS have been the most extensively produced and studied.

PFAS are used in many applications because of their unique physical properties such as resistance to high and low temperatures, resistance to degradation, and nonstick characteristics. PFAS have been detected worldwide in the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. U.S. EPA has determined there is evidence that continued exposure above specific levels to certain PFAS may cause adverse health effects.

Scientists are working to better understand the chemicals, their risk to human health, and how to mitigate that risk.

## Steps to reduce exposure to PFAS

- Cook with stainless steel, cast-iron, glass, or ceramics. Don't use nonstick cookware.
- Look for coats, hats, and boots labeled water-resistant. They're less likely to have PFAS than waterproof products.
- Make popcorn on the stove or in an air popper instead of microwave bags.
- Steer clear of ordering food in grease-resistant wrappers or containers.
- Avoid carpets and upholstery treated to be stain or water-resistant; decline stain treatment.

# Lead in Drinking Water

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

### How does lead get into water?

Lead pipe in the individual service lines to the house and lead solder used to join copper pipes prior to 1987 are the significant contributors to lead in drinking water. Galvanized iron pipe downstream of lead pipe attracted lead over time and is also a source of lead. Water comes in contact with these lead sources as it travels through your service line and indoor plumbing. As the water sits in the pipe when not in use, the lead can release into the water. Lead particles inside plumbing can also release sporadically into the water and can accumulate on faucet aerator screens.


Lead in Drinking Water →

# Lead in Drinking Water continued

LEAD FREE DC

**How can I get rid of lead?**

Identify and remove all sources of lead to eliminate the risk of lead in water.

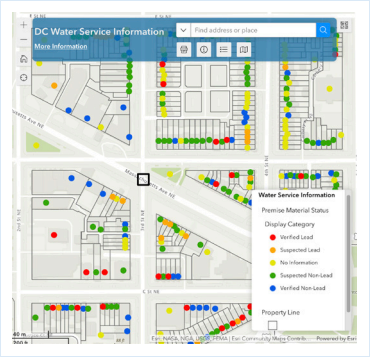
1. Check DC Water's interactive map to identify the material of your service line. This information is based on available historic records and may not be up to date. (**dcwater.com/servicemap**)

2. Identify your pipe material by checking your household water service connection inside the home, typically located in the basement. A helpful guide and videos are posted at **dcwater.com/lead**.

3. Replace your lead pipes and plumbing. DC Water has several programs for lead service line replacement, and DC Water has several programs for lead service line replacement, most offering free replacements. (**dcwater.com/replacelead**)

4. Order a free lead test kit by contacting the Drinking Water Division at **202-612-3440** or email **leadtest@dcwater.com**. Lead test kits are provided to both single and multifamily residences as well as commercial customers. These tests can indicate the presence of lead in the service line or household plumbing. (**dcwater.com/leadtest**)

5. Learn more about our lead program and download or request hard copies of lead information in both English and Spanish. (**dcwater.com/lead** and **dcwater.com/lead-brochures**)




## Service Line Map

Use our map to identify the material of the service lines on your property.

Lead service lines were predominately installed prior to the mid-1950s in the District of Columbia, but there are records of lead service lines being installed as late as 1977. You can use our service line map to see the information DC Water has about your service line at **dcwater.com/servicemap**.

# Lead in Drinking Water continued

LEAD FREE DC

### How can I reduce my risk of lead exposure?

If you have lead pipes, fixtures, or are unsure about the pipe material type, take steps to minimize possible exposure until all sources of lead are removed.

1. Flush your pipes before using any tap water for drinking or cooking. Run cold water until the temperature changes and then allow it to run for an additional two minutes.

2. Use only cold water for drinking and cooking including water used for infant formula, beverages, and ice.

3. Filter your water if there are known or suspected lead sources. The filter should be certified to meet NSF/ANSI Standard 53 for lead reduction and Standard 42 for particle reduction.

4. Remove and clean faucet aerators every 3 months.

5. Request a free lead test kit to identify potential sources of lead (**202-612-3440** or **leadtest@dcwater.com**).

### How can DC Water help replace lead service pipes?

DC Water operates several programs for lead service line replacement. District and federal funds are now available to help customers pay for replacement on private property. For more information on these programs, visit **dcwater.com/lead**.

## Types of Water Pipes (Service Lines)

**Lead** – A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will not cling to lead pipes.

**Galvanized** – A dull, silver-gray color. Use a magnet - strong magnets will typically cling to galvanized pipes.

**Copper** – The color of a penny.

**Plastic** – White, rigid pipe.

**Brass** – Bronze to gold color. Older pipes may be corroded and may contain lead.

# Lead in Drinking Water continued

LEAD FREE DC

### Private-side Only Replacements

For residents with lead pipe on private property, and non-lead pipe in public space, the District's **Lead Pipe Replacement Assistance Program (LPRAP)** provides a **100% discounted replacement**. All eligible homeowners enrolled in the program will receive a 100% discount on their private service line replacement paid for with a combination of Department of Energy and Environment (DOEE) and DC Water Bipartisan Infrastructure Law (BIL) Funds. Property owners can visit **dcwater.com/LPRAP** to learn about this assistance program and how to get a cost proposal from a approved plumber before they apply with the DOEE.

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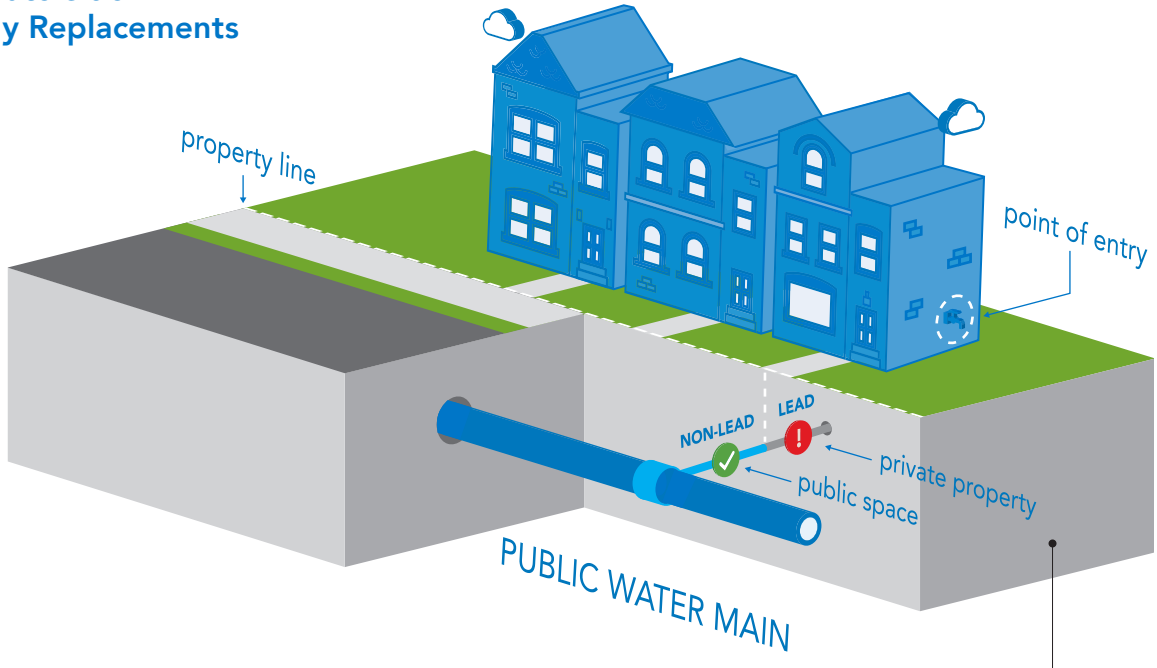
## Private-side Only Replacements




If only the portion on private property is lead, 100% of private-side costs will be paid through a combination of District and BIL funds.



*Lead in Drinking Water* →

# Lead in Drinking Water continued

LEAD FREE DC

### Voluntary Full Replacements

If both the public and private portions of service line are lead, and no capital improvement projects are planned for the neighborhood, customers can enroll in the **Voluntary Replacement Program**.

DC Water will pay for all work in public space, and coordinate work so both portions are replaced at the same time. The property owner pays for work on private property. For more information visit **dcwater.com/voluntary-replacement** or email **lead@dcwater.com**.

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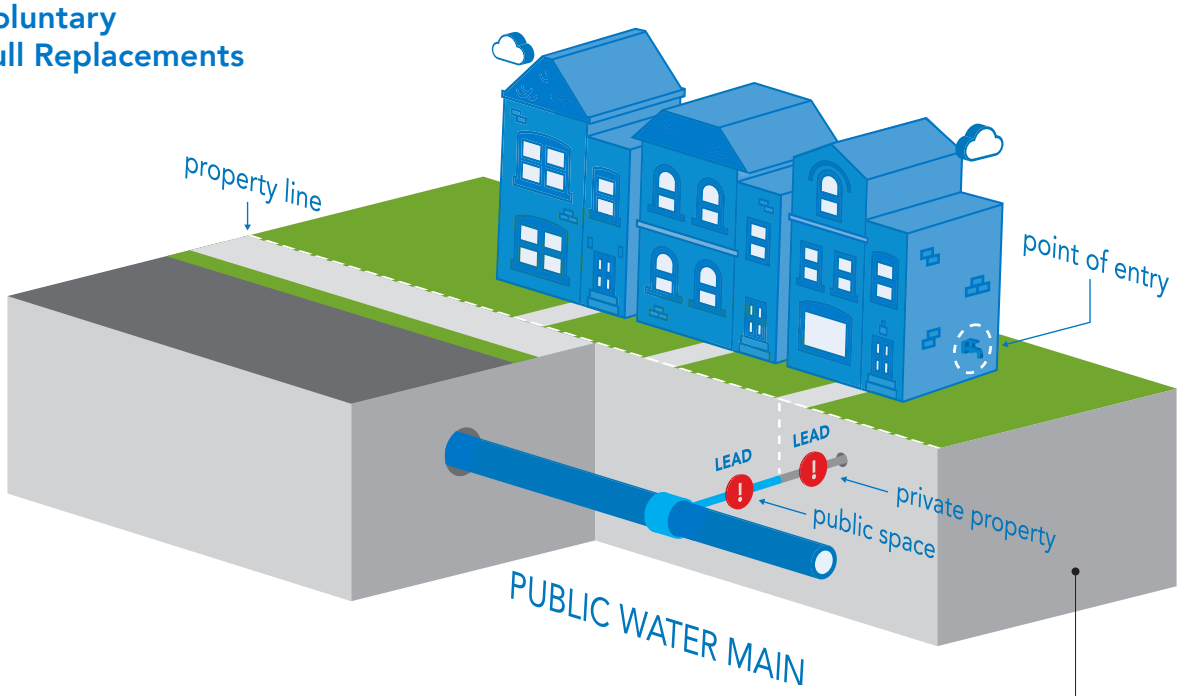
## Voluntary Full Replacements




If both portions are lead, and NO work is planned by DC Water, the homeowner pays for private-side costs.



*Lead in Drinking Water* →

# Lead in Drinking Water continued

LEAD FREE DC

### Construction Project Full Replacements

Each year, DC Water replaces lead service pipes in conjunction with other construction projects. These projects include water main replacements, by-block service line replacements, emergency repairs and District Department of Transportation (DDOT) projects. **DC Water will contact you if there are any planned projects in your neighborhood**. During these projects, replacement on private property is FREE for all residents—regardless of income. We strongly encourage property owners to take advantage of this opportunity so that we can replace the entire lead pipe at one time.

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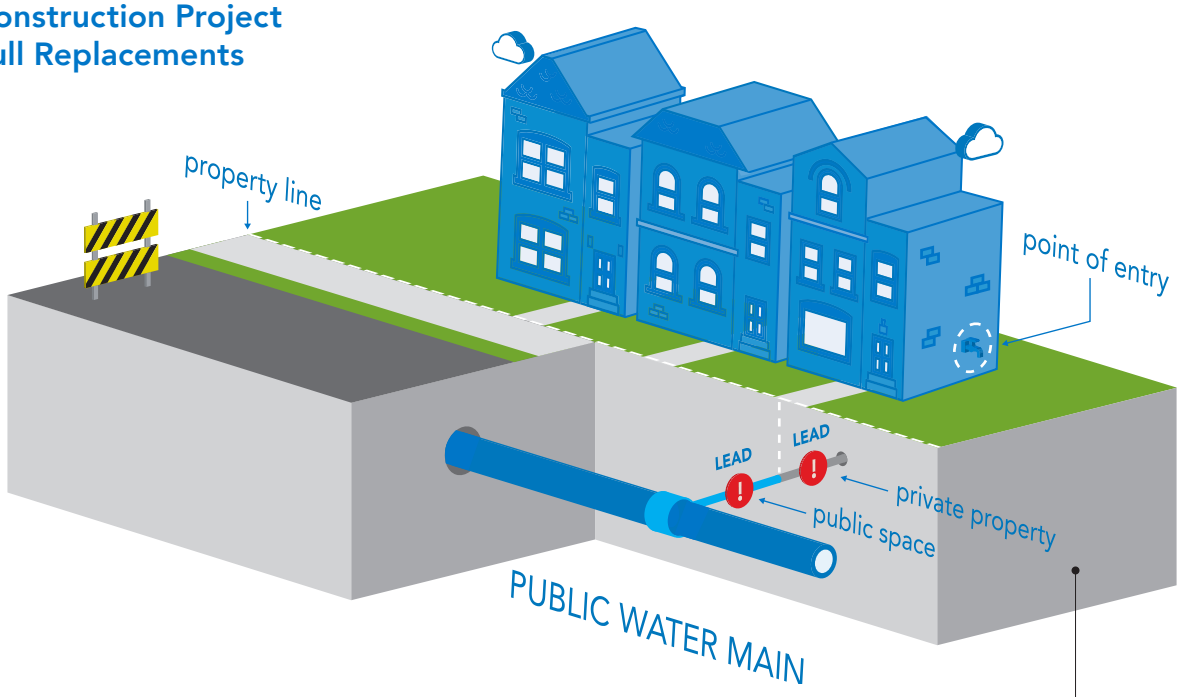
## Construction Project Full Replacements




If DC Water is replacing or repairing the public side, then the lead pipe on the private side will be paid 100% by the District.

# Water Quality Analysis Data

Drinking water for the District of Columbia comes from the Potomac River, a surface water supply. DC Water purchases the treated drinking water from the US Army Corps of Engineers, Washington Aqueduct (Aqueduct). The Aqueduct withdraws approximately 140 million gallons of water each day from the Potomac River at the Great Falls and Little Falls intakes and treats the water at two treatment plants, Dalecarlia and McMillan. The Aqueduct filters and disinfects water from the Potomac River to meet safe drinking water standards. The treatment process includes sedimentation, filtration, fluoridation, pH adjustment, primary disinfection using free chlorine, secondary disinfection with chloramines through the addition of ammonia, and corrosion control with orthophosphate.

For more information on the drinking water treatment process, visit the Aqueduct's website at: **http://www.nab.usace.army.mil/Missions/WashingtonAqueduct.aspx**.

DC Water distributes the treated drinking water to more than 700,000 District residents, and our commercial and governmental customers in the District of Columbia, and parts of Maryland and Virginia.



*Important Health Information* →

# Water Quality Analysis Data continued

## Water Quality Analysis Data

***Giardia*** – The Aqueduct monitored for *Giardia* in the source water (Potomac River) quarterly in 2023. *Giardia* cysts were detected in two samples collected in January and October at concentrations of 1.40 and 1.36 cysts per liter, respectively.

***Cryptosporidium*** – The Aqueduct monitored for *Cryptosporidium* in the source water (Potomac River) quarterly in 2023. *Cryptosporidium* oocysts were not detected in any samples.

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these microorganisms in the Potomac River. Current test methods do not allow us to determine if the microorganisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

***Per- and polyfluoroalkyl substances (PFAS) compounds*** – The Aqueduct voluntarily tested per- and polyfluoroalkyl substances (PFAS) compounds in finished water from its two treatment plants quarterly in 2023 using approved methodologies to assess concentrations ahead of EPA's new regulation. **(https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas)**.

# Water Quality Monitoring Violation

## MONITORING REQUIREMENTS NOT MET

On February 13, 2023, we became aware that our system failed to collect the minimum number of drinking water samples in December 2022 and January 2023 due to alleged falsification of samples collected by the sample collector. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During December 2022 and January 2023 we did not complete all testing for coliform and chlorine residual and therefore cannot be sure of the quality of your drinking water during that time.

We are required to collect at least 240 samples each month and test for total coliform and chlorine residual. In February, we became aware that some samples collected in November and December 2022 and January and February 2023 might not have been collected and reported correctly. DC Water requested and received invalidation from EPA for 14 samples collected in December and 24 samples collected in January. Removing the samples resulted in a total of 235 valid samples collected in December 2022 and 234 samples collected in January 2023, both below the minimum of 240 samples. DC Water replaced the improper samples collected in February 2023 and maintained compliance with EPA's monitoring requirements.

**What should I do?**
There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

**What is being done?**
DC Water updated its supervisory operating procedures and improved routine audits for tracking vehicles and field reports.

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.

# District of Columbia Drinking Water Analysis Data for 2023



The following tables present the regulated and unregulated detected contaminants in the treated drinking water. The test results for these parameters were detected above EPA's analytical method reporting limit from samples collected in the source from the Potomac River or finished water for the District of Columbia.

The water quality test results for the samples collected indicate that your drinking water complied with all of the EPA's drinking water standards in 2023.

For testing results from previous years, visit **dcwater.com/testresults**.

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# Abbreviations & Definitions

**AL** (Action Level) - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow. Other requirements may include additional testing, public notification or capital improvements. The AL is not equivalent to a maximum contaminant level or MCL (see definition below).

**HAA** - Haloacetic Acid.

**HAA5** (Haloacetic Acids (5)) - The five haloacetic acid species regulated by EPA.

**HFPO-DA/GenX** - Hexafluoropropylene Oxide Dimer Acid

**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. MDRLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**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.

**NA** - Not applicable.

**ND** - Non-Detectable.

**NTU** - Turbidity is measured with an instrument called a nephelometer, which measures the intensity of light scattered by suspended matter in the water. Measurements are given in nephelometric turbidity units (NTUs).

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

**PFOA** - Perfluorooctanoic acid

**PFOS** - Perfluorooctanesulfonic acid

**PFHxS** - Perfluorohexanesulfonic acid

**PFNA** - Perfluorononanoic acid

**$PO_4$** - Phosphate.

**ppm** - Parts per million.

**ppb** - Parts per billion.

**ppt** - Parts per trillion.

**TT** (Treatment Technique) - A required process intended to reduce the level of a contaminant in drinking water.

**TTHMs** - Total Trihalomethanes.

**Turbidity** - A measure of the cloudiness of water. We measure turbidity because it is a good indicator of the effectiveness of the water treatment system. Turbidity in excess of 5 NTU is just noticeable to the average person.

**2,4-D** - 2,4-Dichlorophenoxyacetic acid

# Per- and Polyfluoroalkyl Substances (PFAS)

| TEST RESULTS OF WASHINGTON AQUEDUCT OCTOBER 2023 TREATED WATER SAMPLES (MEASURED AS PARTS PER TRILLION – PPT) | | | | | |
|---|---|---|---|---|---|
| Chemical Group | Average | Range | Method Reporting Limit | EPA's Maximum Contaminant Level Goal (MCLG) | EPA's Maximum Contaminant Level (MCL) |
| Perfluorooctanoic acid (PFOA) | 1.5 ppt | Non-detect to 3.8 ppt | 1.9 - 2.0 ppt | Zero | 4.0 ppt |
| Perfluorooctanesulfonic acid (PFOS) | 2.1 ppt | Non-detect to 3.8 ppt | 1.9 - 2.0 ppt | Zero | 4.0 ppt |
| Perfluorohexanesulfonic acid (PFHxS) | 0.2 ppt | Non-detect to 2.1 ppt | 1.9 - 2.0 ppt | 10 ppt | 10 ppt |
| Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS | 0.001 ppt | 0 - 0.001 ppt | N/A | Hazard Index = 1 (unitless) | Hazard Index = 1 (unitless) |

1 - Parts per trillion
2 - The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures. The hazard index for PFAS is the combination of Perfluorononanoic acid (PFNA), Perfluorobutanesulfonic acid (PFBS), Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (GenX) ratios of concentration in the sample to the level determined not to cause health effects and is 1.0.



*Regulated Contaminants* →

# Regulated Contaminants

| WASHINGTON AQUEDUCT WATER TREATMENT PLANT PERFORMANCE | | | | | |
|---|---|---|---|---|---|
| | Units | EPA Limits | | DC Drinking Water | Description / Typical Sources of Contaminants |
| | | MCLG | MCL or TT | | |
| Turbidity | NTU | NA | TT = 1 (maximum) | (maximum hourly) 0.07 | Turbidity is often caused by soil runoff |
| | % of monthly turbidity readings ≤ 0.3 NTU | NA | TT = 95% (minimum) | 100% | |
| Total Organic Carbon (TOC) | removal ratio | NA | TT = > 1 (annual average) | 1.37 (lowest annual average). Annual average must be greater than 1.00 to be in compliance | Naturally present in the environment |

| WATER ENTERING DC WATER'S DISTRIBUTION SYSTEM | | | | | | |
|---|---|---|---|---|---|---|
| | Units | EPA Limits | | DC Drinking Water | | Description / Typical Sources of Contaminants |
| | | MCLG | MCL | Highest | Range | |
| **Inorganic Metals** | | | | | | |
| Arsenic | ppb | 0 | 10 | 0.4 | 0.4 to 0.4 | Erosion of natural deposits; Runoff from orchards |
| Barium | ppm | 2 | 2 | 0.04 | 0.04 to 0.04 | Erosion of natural deposits |
| **Inorganic Anions** | | | | | | |
| Fluoride | ppm | 4.0 | 4.0 | 0.7 | 0.6 to 0.7 | Water additive which promotes strong teeth |
| Nitrate as Nitrogen | ppm | 10 | 10 | 2 | ND to 2 | Runoff from fertilizer use; Erosion of natural deposits |

*Regulated Contaminants* →

# Regulated Contaminants continued

| WATER ENTERING DC WATER'S DISTRIBUTION SYSTEM | | | | | | |
|---|---|---|---|---|---|---|
| | Units | EPA Limits | | DC Drinking Water | | Description / Typical Sources of Contaminants |
| | | MCLG | MCL | Highest | Range | |
| **Synthetic Organics** | | | | | | |
| 2, 4-D | ppb | 70 | 70 | 0.6 | ND to 0.6 | Runoff from herbicide used on row crops |
| Dalapon | ppb | 200 | 200 | 1 | ND to 1 | Runoff from herbicide used on rights of way |
| **Volatile Organic Contaminants** – None detected other than trihalomethanes as shown below | | | | | | |
| **Radionuclides**[1] – None detected above minimum detection limits. | | | | | | |

| DC WATER'S DISTRIBUTION SYSTEM | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Units | EPA Limits | | Running Annual Average | Range | Violation | Description / Typical Sources of Contaminants |
| | | MCLG | MCL | | | | |
| **Disinfectants and Disinfection Byproducts** | | | | | | | |
| Chlorine | ppm | 4 (MRDLG) (annual average) | 4 (MRDL) (annual average) | 3.0 (Highest running annual average) | 0.2 to 4.3 (Range of single site results) | No | Water additive used to control microbes; Chlorine is combined with ammonia to form chloramine. |
| Total Trihalomethanes (TTHMs) | ppb | NA | 80 (4-quarter locational running average) | 58 (Highest locational running annual average) | 19 to 86 (Range of single site results) | No | By-product of drinking water disinfection. |
| Haloacetic Acids (HAA5) | ppb | NA | 60 (4-quarter locational running average) | 37 (Highest location running annual average) | 12 to 59 (Range of single site results) | No | By-product of drinking water disinfection. |

1 - Triennial radionuclide monitoring was performed in 2023.



*Regulated Contaminants* →

# Regulated Contaminants continued

| LEAD AND COPPER (AT THE CUSTOMER'S TAP) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Units | EPA Limits | | DC Drinking Water | | Violation | Description / Typical Sources of Contaminants |
| | | MCLG | Action Level | Samples above AL | 90th Percentile | | |
| **Lead** | | | | | | | |
| January-June Monitoring Period | ppb | 0 | 15 | 3 of 106 | 2 | No | Corrosion of household plumbing systems; erosion of natural deposits |
| July-December Monitoring Period | ppb | 0 | 15 | 0 of 107 | 2 | | |
| **Copper** | | | | | | | |
| January-June Monitoring Period | ppm | 1.3 | 1.3 | 0 of 106 | 0.099 | No | Corrosion of household plumbing systems; erosion of natural deposits |
| July-December Monitoring Period | ppm | 1.3 | 1.3 | 0 of 107 | 0.080 | | |



*Regulated Contaminants* →

DISTRICT OF COLUMBIA DRINKING WATER ANALYSIS DATA FOR 2023

# Detected Contaminants

| DETECTED CONTAMINANTS WITHOUT PRIMARY MCLS OR TREATMENT TECHNIQUES ENTERING DC WATER'S DISTRIBUTION SYSTEM | | | |
|---|---|---|---|
| Parameter | Units | Average | Range |
| Aluminum | ppb | 39 | 14 to 98 |
| Calcium | ppm | 39 | 25 to 61 |
| Chloride | ppm | 32 | 20 to 42 |
| Diethylphthalate | ppb | 1 | ND to 5 |
| Iron | ppb | ND | ND to 12 |
| Lithium | ppb | 2 | 1 to 4 |
| Magnesium | ppm | 9 | 6 to 15 |
| Manganese | ppb | 0.3 | ND to 1 |
| Molybdenum | ppb | ND | ND to 1 |
| Nickel | ppb | 0.3 | ND to 0.6 |
| Orthophosphate (as $PO_4$) | ppm | 2.5 | 2.2 to 3.5 |
| Perchlorate | ppb | 0.2 | ND to 0.8 |
| Potassium | ppm | 3 | 2 to 3 |
| Sodium | ppm | 22 | 13 to 30 |
| Strontium | ppb | 187 | 120 to 266 |
| Sulfate | ppm | 47 | 32 to 71 |
| HAA5 at Point of Entry[1] | ppb | 28 | 12 to 43 |
| Total Ammonia | ppm | 1 | ND to 1 |
| Total Hardness | ppm | 135 | 98 to 198 |
| Total Hardness | grains/gal | 8 | 6 to 12 |
| TTHM at Point of Entry[1] | ppb | 41 | 14 to 76 |
| Vanadium | ppb | ND | ND to 0.8 |
| Zinc | ppb | ND | ND to 0.8 |

1 - Monitoring for these parameters is not required at entry points, but is required in the distribution system

# Download helpful water quality tips.

Download our Household Water Quality Guide or call **202-787-2200** to request a mailed copy.



## The Value of Water

- Bottled water is 6,000% more expensive than tap water
- One gallon of bottled water costs $1.23 per gallon on average
- One gallon of DC Water costs $0.02 per gallon

Visit **dcwater.com/customer-assistance**. DC Water, in partnership with District Government and Mayor Bowser, has expanded water and sewer bill discounts and relief programs to help non-profits and low-to-moderate income residents.

## Want to lower your water bill?

DEPARTMENT OF ENERGY & ENVIRONMENT

GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

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