

2025

Water Quality Report



Excellence Expanded

Safeguarding Every Sip

Table of Contents

Message from the General Manager & CEO	1
Where Your Water Comes From	2
Service Area	3
Impacts on Water Quality	4
How and Why We Test Your Drinking Water	8
2025 Water Quality Results	9
Safeguarding Every Sip	14

Message from the General Manager & CEO



To Our Valued Customers,

Every time you turn on the tap, you should feel confident in the quality of your water. At WSSC Water, safeguarding every sip is more than a responsibility - it is our commitment to the nearly two million residents we serve every single day.

Behind the scenes, our dedicated employees work around the clock to monitor, test, treat and deliver safe, high-quality water that meets the strict standards set by the federal Safe Drinking Water Act. In fact, in our 108 years of service, we have never had a single drinking water quality violation. Ever!

From protecting our water sources to maintaining thousands of miles of water mains and advanced treatment facilities, we have it covered, which means you do not have to think twice about the water flowing into your home.

WSSC Water is a not-for-profit public utility focused on serving our 1.9 million customers, not shareholders. Every dollar we collect is reinvested directly into our infrastructure, technology and workforce to strengthen reliability, improve service and protect public health for generations to come.

That means continued investments in the people and systems that make safe, dependable drinking water possible 24 hours a day, 365 days a year.

To uphold this commitment, we continue investing in critical infrastructure. In 2025, we celebrated the opening of our newly expanded, technologically advanced \$38 million water quality laboratory. This expanded laboratory is where science meets service.

Throughout the pages of this report, I invite you to learn more about the quality of the work done in this lab to ensure that when families in Prince George's and Montgomery counties fill a glass, cook a meal or bathe their children, they can trust their taps because of our dedicated employees and steadfast commitment to public health.

This annual Water Quality Report reflects our ongoing commitment to transparency, accountability and excellence in everything we do.

Thank you for trusting WSSC Water to safeguard every sip.

Yours in Service,

A handwritten signature in black ink that reads "K Powell". The signature is fluid and cursive, with the first letter of each name being capitalized and prominent.

Kishia L. Powell, P.E.
General Manager & CEO

Where Your Water Comes From

We draw the water we treat from two sources: the Patuxent and Potomac Rivers. On the Patuxent River, we operate and maintain two reservoirs: Triadelphia and T. Howard Duckett. Our Patuxent Water Filtration Plant (WFP) draws from the Duckett Reservoir. Our Potomac WFP draws water from the Potomac River.

Starting at the Source

As water travels over the land's surface or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from human activity and animal presence. Contaminants may include the following:

Microbial contaminants

Viruses, bacteria and other microbes that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants

Salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, mining, farming or winter road treatments.

Pesticides and herbicides*

Chemical substances resulting from a variety of sources, such as agricultural and urban stormwater runoff, golf courses or residential and urban lands/uses.

Organic chemical contaminants

Substances, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and also may come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminants

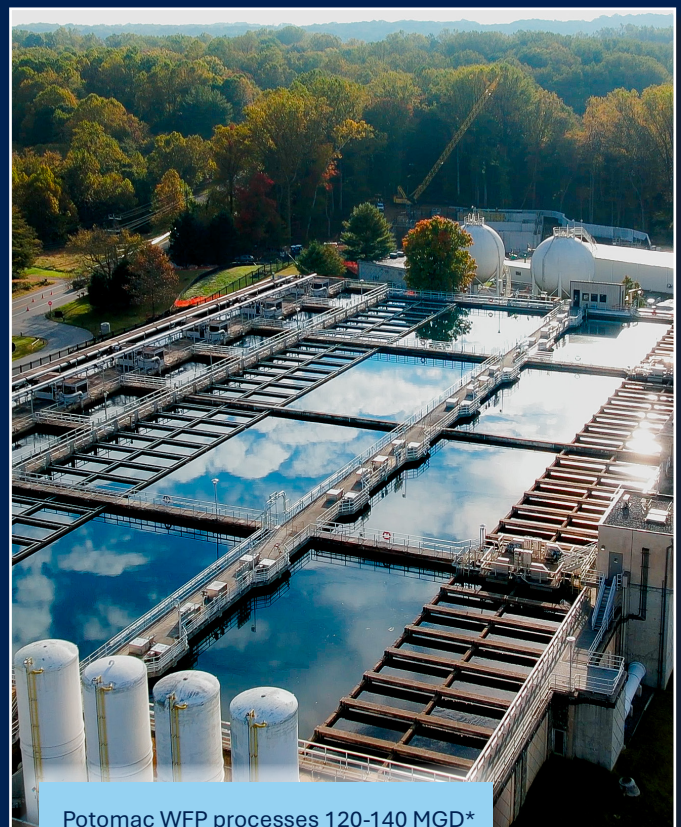
Substances that can be naturally occurring or the result of mining activities.

+**pesticide**: Generally, any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest.

herbicide: Any chemical(s) used to control undesirable vegetation.



Patuxent WFP processes 30-55 MGD*

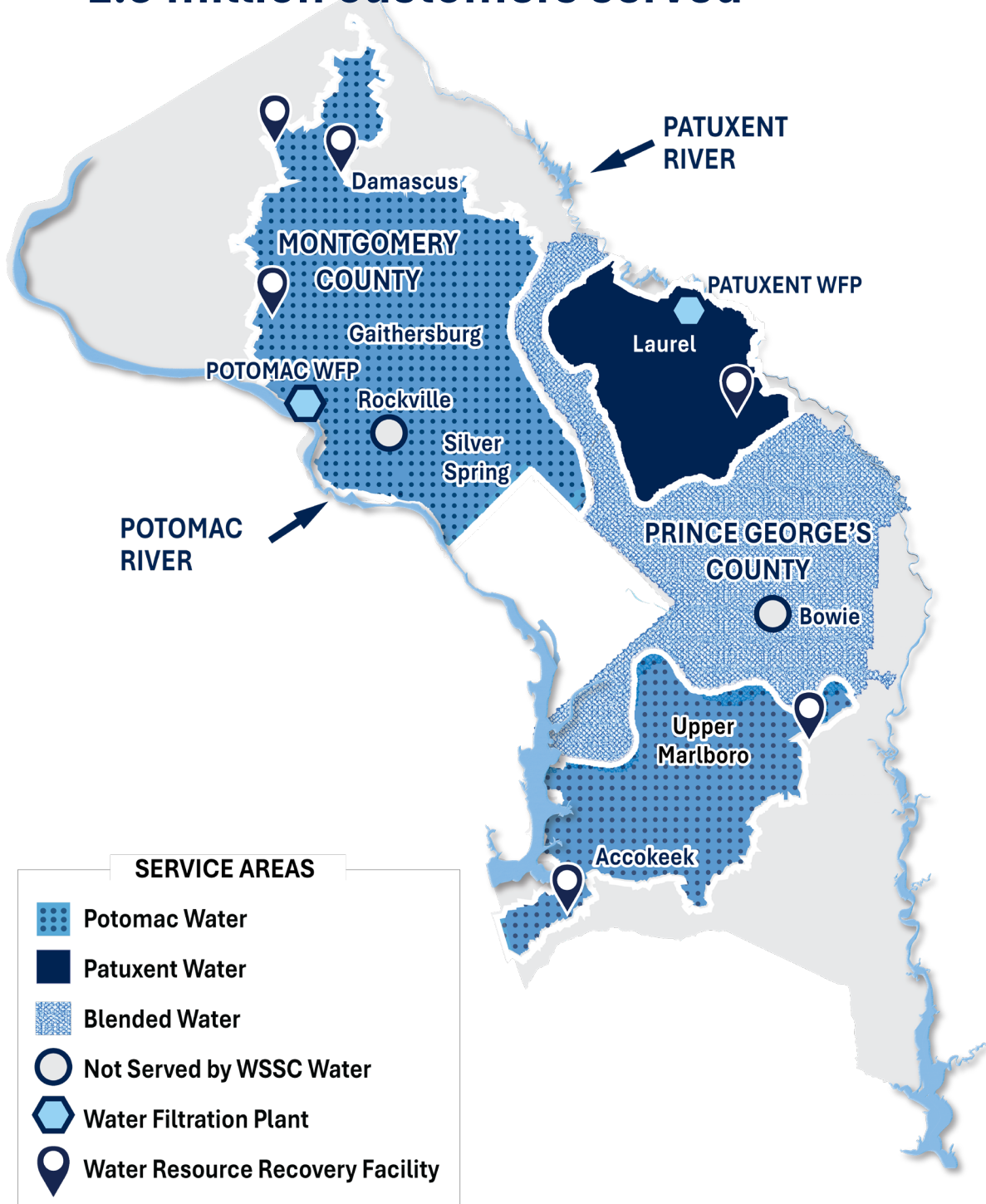


Potomac WFP processes 120-140 MGD*

*Million gallons per day

Service Area

1.9 million customers served



A map of WSSC Water's service area, including water sources and plant locations.

Impacts on Water Quality

An Informational Statement From the Environmental Protection Agency (EPA) on Lead:

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. The children of women who are exposed to lead before or during pregnancy can have an increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

You share the responsibility for protecting yourself and your family from the lead in your home plumbing. By identifying and removing lead materials within your home plumbing you reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. 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 pipetype@wsscwater.com. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead

Does WSSC Water Have any Lead in its Pipes?

In the early 2000s, WSSC Water removed all known lead pipes within our distribution system. We carefully filter and expertly treat all drinking water to ensure safety and quality.

Water leaving our two filtration plants is free of lead. To minimize the risk of lead dissolving into the water from plumbing materials, we add a corrosion inhibitor, orthophosphate, to the water supply to create a protective coating on the inside of pipes (including those on the customer's property).

For more than 108 years, WSSC Water has taken proactive steps to ensure water quality and safety. These public safety measures are showing clear results. Our water meets all the EPA's Safe Drinking Water Act standards. We have never had a drinking water quality violation in our history. Additionally, in our latest round of lead and copper testing from homes throughout our service area, our results were well below the action levels set by the EPA.

We are proud to be part of the EPA's enhanced Lead and Copper Rule, an important national public health initiative to remove lead from America's drinking water. This multi-year EPA rule focuses on identifying pipe materials, including those on private property. To learn more, visit www.wsscwater.com/pipetype. WSSC Water has a service line inventory that is available at wsscwater.com/LCR-map

For more information from the EPA, visit www.epa.gov/ground-water-and-drinking-water/lead-and-copper-rule-improvements



Impacts on Water Quality

Harmful Algal Blooms (HABs)

During summer and autumn, we monitor our source water from the Potomac River for the presence of microscopic organisms known as Cyanobacteria (blue-green algae). They can multiply and bloom when the water is warm, stagnant and rich in nutrients from sources like fertilizer runoff. These blooms can sometimes produce toxins at levels that are harmful to people, pets, aquatic life and the environment.

WSSC Water's drinking water has not been affected by HABs and continues to meet all Safe Drinking Water Act standards. However, as a precaution, we closely monitor water quality at both water filtration plants and post warning signs at our recreation areas for our reservoirs when Cyanobacteria concentrations or toxin levels exceed safe thresholds. Learn more at www.wsscwater.com/hab.

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS are a large family of human-made chemicals used since the 1940s to make products resistant to heat, oil, stains and water. Because they don't break down easily, PFAS are often called "forever chemicals." In 2024, the EPA finalized the first national drinking water standards for PFAS. The new rule sets legally enforceable levels, called maximum contaminant levels (MCLs), for five key compounds:

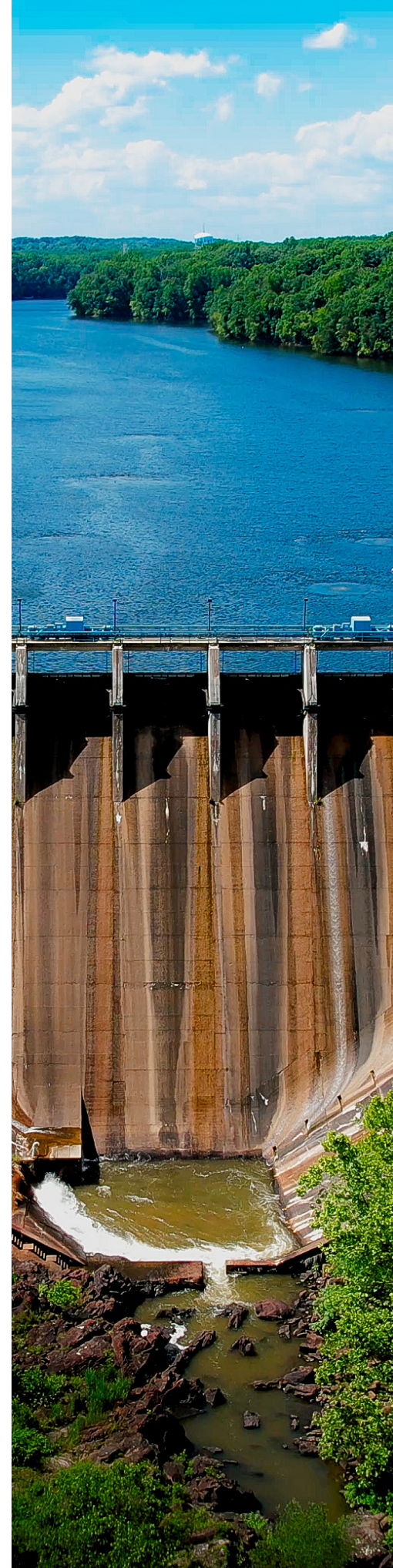
- Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS): Four parts per trillion (ppt) each
- Perfluorohexanesulfonic acid (PFHxS), perfluorononanoic acid (PFNA) and hexafluoropropylene oxide dimer acid (HFPO-DA; also called GenX): 10 ppt each

Additionally, the EPA established a Hazard Index that creates an enforceable drinking water standard for any mixture of two or more of the following four PFAS compounds: PFNA, PFHxS, PFBS and HFPO-DA (GenX). The final rule requires public water systems, such as WSSC Water, to complete initial monitoring by 2027 and comply with the new MCLs by 2029.

Since January 2020, WSSC Water has been regularly monitoring for PFAS at our Potomac and Patuxent Water Filtration Plants. To view our quarterly PFAS results—showing very low levels in our drinking water—visit www.wsscwater.com/pfas.

Cryptosporidium

Found in surface water throughout the U.S., *Cryptosporidium* is a microbial pathogen that must be ingested to cause disease. It may spread through means other than drinking water. WSSC Water monitored *Cryptosporidium* for two years (March 2015 through February 2017), and the results show our source water is not affected. As an extra precaution, we have installed ultraviolet (UV) disinfection at our water filtration plants to provide another barrier of protection.



Impacts on Water Quality

Contaminants and Health Risks

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers.

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protections 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 mean that water poses a health risk. EPA/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 (800-426-4791) or on the EPA's website epa.gov/safewater.



Since
January 2020,
WSSC Water has
been regularly
monitoring for
PFAS at our Water
Filtration Plants.



PRESTO solid phase extraction system



Liquid Chromatography autosampler



View of PFAS lab

How and Why We Test Your Drinking Water

Testing is a vital part of our water treatment process. Beyond meeting EPA standards, our testing is just one more step in ensuring our water is always safe, clean and satisfying.

Water quality is our top priority. That's why we test water quality at the reservoir, in the rivers near the point where water enters our filtration system, and from 102 locations throughout our service area.

At our water quality laboratory, we have chemists, lab analysts and microbiologists who conduct 500,000 laboratory tests on our water every year.



2025 Water Quality Results

Detected Regulated Contaminants

How to Read the Water Quality Data Tables

The EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The tables show the concentrations of detected substances compared to regulatory limits. The results in the tables were collected during 2025.

Metals

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Highest Level Found	Range	Highest Level Found	Range				
Barium	mg/L	0.04	0.02-0.04	0.05	0.03-0.05	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Inorganic Contaminants

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Highest Level Found	Range	Highest Level Found	Range				
Fluoride	mg/L	0.95	0.5 - 0.95	0.95	0.6-0.8	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	mg/L	1.4	0.4-1.4	1.6	0.5-1.6	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

2025 Water Quality Results

Detected Regulated Contaminants

Microbial Contaminants

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Highest Level Found	Range	Highest Level Found	Range				
Monthly Average Turbidity ^[1]	NTU	0.05	0.02-0.36 ²	0.06	0.02-0.24 ²	TT<1 NTU	N/A	No	Soil runoff
Monthly % of Values <=0.3 NTU	%	100%	99.97-100%	100%	100-100%	TT=95% min	N/A	No	Soil runoff
Residual chlorine	mg/L	Met TT Requirements		Met TT Requirements		TT>=0.2	N/A	No	Water additive used to control microbes
Viruses	N/A	Met TT Requirements		Met TT Requirements		TT=99.99% removal and/or inactivation	0	No	Human and animal fecal waste
<i>Giardia lamblia</i>	N/A	Met TT Requirements		Met TT Requirements		TT=99.9% removal and/or inactivation	0	No	Human and animal fecal waste
<i>Cryptosporidium</i>	N/A	Met TT Requirements		Met TT Requirements		TT=99% removal	0	No	Human and animal fecal waste

Disinfection By Product (DBP) Precursor

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Highest Level Found	Range	Highest Level Found	Range				
Total Organic Carbon	N/A	Met TT Requirements		Met TT Requirements		TT	N/A	No	Naturally present in the environment

Radioactive Contaminants

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Highest Level Found	Range	Highest Level Found	Range				
Gross Alpha	pCi/L	ND	ND-ND	3.2	ND-3.2	15	0	No	Erosion of natural deposits
Gross Beta	pCi/L	4.4	ND - 4.4	6.1	ND - 6.1	50 ³	0	No	Decay of natural and man-made deposits
Radium 228	pCi/L	0.2	0.1 - 0.2	0.5	0.3 - 0.5	5	0	No	Erosion of natural deposits
Tritium	pCi/L	213.6	ND-213.6	124.3	ND-124.3	20,000 ¹³	N/A	No	Erosion of natural deposits

2025 Water Quality Results

Detected Regulated Contaminants

Metals

Substance	Units	Customer Tap			AL	MCLG	Violation	Major Source in Drinking Water
		90 th Percentile	# of sites above AL	Range				
Copper ⁴	mg/L	0.12	0 of 69 sites	0.014-0.23	1.3	1.3	No	Corrosion of household plumbing systems
Lead ⁴	µg/L	<2.0	0 of 69 sites	ND - 8.11	15 ⁴	0	No	Corrosion of household plumbing systems

Bacteriological Contaminants

Substance	Units	Distribution System		MCL (or TT or MRDL)	MCLG (or MRDLG)	Violation	Major Source in Drinking Water
		Highest Level Found	Range				
Total Coliform	% Positive per month	0.5%	0 - 0.5%	5%	0	No	Naturally present in the environment
No. of E. coli Positive Samples	Count	0	0 - 0	0 ⁵	0	No	Human and animal fecal waste

Disinfectant & Disinfection By Products (DBP)

Substance	Units	Distribution System		MCL (or TT or MRDL)	MCLG (or MRDLG)	Violation	Major Source in Drinking Water
		Highest Level Found	Range				
Free Residual Chlorine	mg/L	1.05 ⁶	0.02 - 2.11 ⁷	4 ⁸	4	No	Water additive used to control microbes
Haloacetic Acids (HAA5)	µg/L	48 ⁹	16-79 ⁷	60 ¹⁰	N/A	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	µg/L	66 ⁹	14-102 ⁷	80 ¹⁰	N/A	No	By-product of drinking water chlorination

2025 Water Quality Results

Detected Regulated Contaminants

PFAS (Per- and Polyfluoroalkyl Substances)¹¹

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Highest Level Found	Range	Highest Level Found	Range				
PFOA	ng/L	1.8	<1.6-1.8	3.7	1.8-3.7	4.0	0	N/A ¹²	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
PFOS	ng/L	1.8	ND-1.8	4.2	1.9-4.2	4.0	0	N/A ¹²	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
PFHxS	ng/L	1.6	ND - 1.6	1.9	ND - 1.9	10	10	N/A ¹²	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
PFNA	ng/L	ND	ND-ND	1.7	ND - 1.7	10	10	N/A ¹²	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
PFBS	ng/L	2	<1.6 - 2.0	3.0	2.4 - 3.0	N/A	N/A	N/A ¹²	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities

Definitions

= Equals

< Less than detected

% Percentage

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

Contaminant. Any physical, chemical, biological, or radiological substance or matter in water.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG: Maximum Contaminant Level Goal.

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

µg/L. Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

mg/L. Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

MRDL: Maximum Residual Disinfectant Level.

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal.

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A. Not applicable.

ND. Not detected.

ng/L nanograms per liter or parts per trillion. A single drop of food coloring in 18 million gallons of water.

NTU: Nephelometric Turbidity Unit. The level of sediments suspended in the water.

pCi/L. Picocuries per liter (a measure of radiation).

TT: Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.

Turbidity. A measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our treatment process.

2025 Water Quality Results

Detected Unregulated Contaminants

Metals

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Average Level Found	Range	Average Level Found	Range				
Sodium	mg/L	16	13-22	22	11 - 34	N/A	N/A	N/A	

PFAS (Per- and Polyfluoroalkyl Substances)

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Average Level Found	Range	Average Level Found	Range				
PFBA	ng/L	2.5	<1.7 - 3.3	3.3	2.5 - 4.2	N/A	N/A	N/A	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
PFHxA	ng/L	1.9	1.7 - 2.2	3.7	2.8-4.6	N/A	N/A	N/A	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
PFPeA	ng/L	2.3	2.0 - 2.8	3.8	3.4 - 4.3	N/A	N/A	N/A	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
PFHpA	ng/L	0.6	ND - 1.7	1.0	ND - 2.1	N/A	N/A	N/A	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities

Footnotes

1. Filtered water turbidity measured continuously, average of values taken every 15 minutes.
2. Range of individual turbidity readings.
3. The EPA considers 50 pCi/L to be the level of concern for beta particles.
4. Most recent required compliance sampling conducted between June and September 2023. The Action Level (AL) in 2023 for lead was 15 µg/L. Beginning November 1, 2027, the action level for lead will be lowered to 10 µg/L.
5. Violation occurs if routine and repeat samples are total coliform-positive and either E. coli positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.
6. Highest Running Annual Average (RAA), calculated quarterly.
7. Range of individual sample results.
8. Maximum Residual Disinfectant Level (MRDL), the highest level of disinfectant allowed in drinking water, based on RAA, not individual sample results.
9. Highest Locational Running Annual Average (LRAA), calculated quarterly.
10. Maximum contaminant level based on Locational Running Annual Average (LRAA), not individual sample results.
11. For more detailed PFAS data, visit www.wsscwater.com/pfas.
12. The PFAS Rule was published in April 2024. MCL compliance determinations are scheduled to go into effect beginning April 26, 2029..
13. SWDA does not directly establish an MCL for tritium. 20,000 pCi/L corresponds to particle/photon radiopacity and its MCL of 4 mrem/year.

Safeguarding Every Sip:

Stats and Facts on WSSC Water's Newly Expanded Laboratory



Tests Annually:
500,000+

Increasing to **750,000** annually
in the next 20 years



Laboratory Space:
46,000SF

Nearly doubled the previous
footprint



LEED Certified:
Gold

Energy efficient and
sustainable

New Capabilities



Taste & Odor
Testing System



Algal Toxin
Analyzer



Automated
Bacteria Tester



Seal Flow System
Nutrient Analyzer



Advanced PFAS
Testing System



Sample
Processor

PFAS Testing

From Weeks To Hours

PFAS “forever chemical”
testing time:

reduced from weeks to hours by
bringing testing in house.

Before: Weeks



Now: Hours





In October 2025, WSSC Water employees joined state and local leaders to toast the grand opening of our newly expanded, technologically advanced **\$38 million water quality laboratory**.

Stay Informed

Public Meetings

WSSC Water Commissioners hold monthly meetings, which are open to the public and typically take place on the third Wednesday of each month, beginning at 10 a.m.

Meetings are held virtually or at the **WSSC Water Support Center**
14501 Sweitzer Lane
Laurel, MD 20707

Visit www.wsscwater.com or contact the Corporate Secretary's Office at 301-206-8200 to confirm meeting times and locations.

Contact information

Customer Service

301-206-4001
Weekdays, 8 a.m. to 6 p.m.
customerservice@wsscwater.com

Water/Sewer Emergencies

Water Testing

301-206-4002
24/7/365
emergencycallcenter@wsscwater.com

The 2025 Water Quality Report is available for download at

www.wsscwater.com/wqr

Call 301-206-8100 or send an email to communications@wsscwater.com to request a printed copy.

This report contains very important information about your drinking water. Please find someone to translate it for you, or speak to someone who understands.

Ce rapport contient des informations très importantes sur votre eau potable. Demandez à quelqu'un de vous le traduire ou adressez-vous à une personne capable de le comprendre.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

这份报告包含有关您的饮用水的十分重要的信息。请找人帮您翻译报告的内容或找了解报告内容的人交谈。

이 보고서에는 여러분이 마시는 물에 대한 아주 중요한 정보가 포함되어 있습니다. 이 보고서를 번역해 줄 사람을 찾아보거나 그 내용을 잘 아는 사람에게 물어보십시오.

Ìjábọ̀ yìí ní ifitonileti tí ó ̀̀ se pataki pupọ̀ nipa omi tí o nmu. Jọwọ̀ wá ẹnikan lati túmọ̀ ̀̀ re' fún ọ̀ tabi kí o bá ẹnikan tí ó yé sọrọ̀.

