

5 Jun 23

MEMORANDUM

From: Public Works Officer, Naval Support Activity Bethesda
To: Commander, Naval Support Activity Bethesda

Subj: 2022 WSSC WATER QUALITY REPORT AND NAVAL SUPPORT ACTIVITY
BETHESDA SPECIFIC ADDENDUM

Ref: (a) OPNAVINST 5090.1E

Encl: (1) WSSC Water Quality Report
(2) NSAB Water Quality Report Addendum

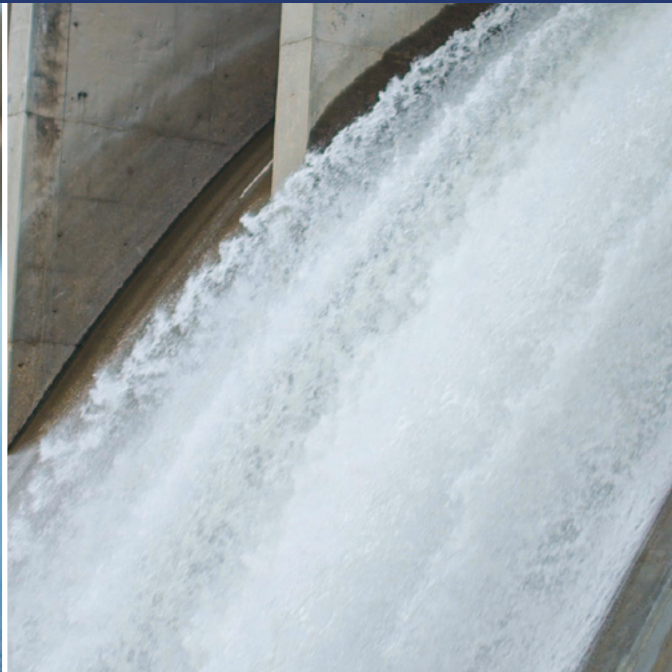
1. Per reference (a), OPNAVINST 5090.1E, the Environmental Programs Division reviews annual Washington Suburban Sanitary Commission (WSSC) water quality reports and conducts supplemental water sampling at Naval Support Activity Bethesda (NSAB).
2. Forwarded for your review is the 2022 WSSC Water Quality Report, enclosure (1). This report details the quality of water supplied to NSAB by WSSC, which meets or exceeds all US Environmental Protection Agency standards for safety and quality.
3. The results of this sampling are summarized in the NSAB Water Quality Report Addendum, enclosure (2), and are consistent with the WSSC report in enclosure (1). These reports may be distributed to all NSAB departments and tenant organizations.
4. If you have any questions or require additional information, please contact the Drinking Water/Waste Water Manager in the Environmental Programs Division at 202-528-1792 or the Installation Environmental Programs Director at 301-295-2482.



R. E. BUECHEL



2022 WATER QUALITY REPORT



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GREETINGS



Dear Valued Customer,

As I write this message, my first as WSSC Water's General Manager and CEO, I'm 65 days on the job. It is an honor of a lifetime to lead one of the nation's largest water utilities in service to you, our 1.9 million customers.

While new to this organization, I'm not new to the water sector, having served in various leadership capacities at four other water/wastewater utilities. But WSSC Water is special. Our employees, Team H₂O, are some of the most dedicated I have ever worked with. I am proud to support these frontline heroes whose work protects public health and the environment and helps provide essential services like fire protection, all so you can focus on your families, jobs and communities.

In this report, you'll meet some of our Team H₂O women and men who work around the clock to ensure the quality of your water – from source to tap. Thanks to their efforts, we have continued our 105-year history of zero drinking water quality violations. Rest assured, our commitment to this exceptional track record of excellence will continue.

Much of this report focuses on the state and federal regulations we must meet to keep your water safe. As clean-water champions, we support the U.S. Environmental Protection Agency's (EPA's) efforts to safeguard public drinking water supplies by addressing emerging contaminants like Per- and Polyfluoroalkyl Substances (PFAS). You can read more about PFAS on pages 4 and 12.

This report explains our proactive testing for PFAS compounds in your drinking water. Test results, which indicate very low levels of PFAS in our drinking water, are posted on our website.

The EPA has proposed new draft PFAS regulations. We don't want these manufactured compounds in our water supplies, and if treatment process changes are necessary to meet these new regulations, we will make them. Still, these changes do not happen without significant financial investment – costs that should be the responsibility of the entities causing PFAS to enter the environment.

Thank you for the opportunity to provide you with life's most precious resource. We love what we do and are proud to share our commitment to safe, clean water in this report.

Yours in service,

Kishia L. Powell
General Manager and 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 water from the Duckett Reservoir and produces approximately 60 million gallons per day (MGD). Our Potomac WFP draws water straight from the Potomac River, producing between 100 and 120 MGD.

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 the presence of animals. 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.

Partnering to Protect

WSSC Water plays a key role in the Potomac River Basin Drinking Water Source Protection Partnership and the Patuxent Reservoirs Watershed Protection Group. This allows us to participate in discussions related to land use policy, promote source water protection, and raise awareness about water quality and safety.

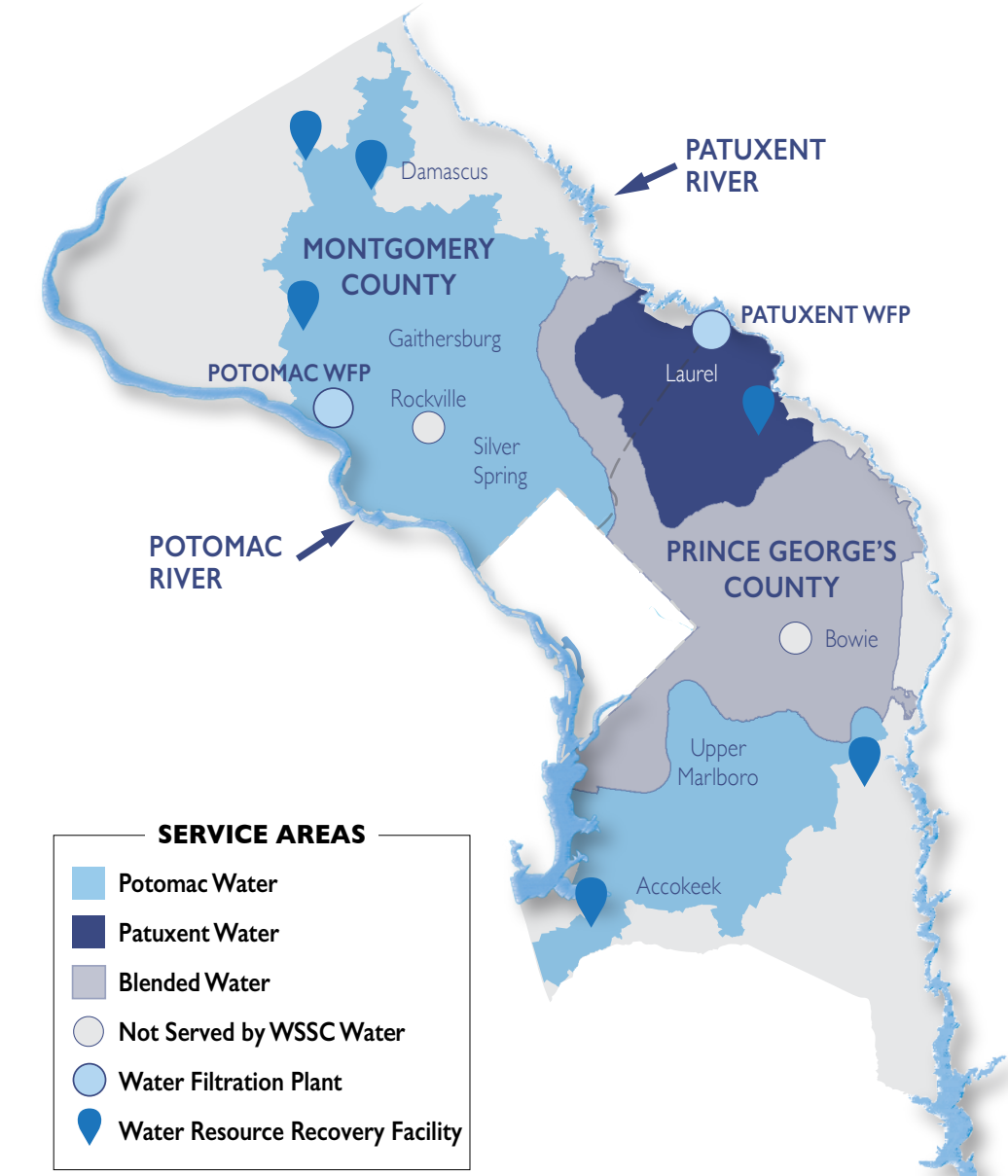


WATERSHED PROTECTION

We set aside \$1 million per year for purchasing watershed property to increase the protective buffer around our two drinking water reservoirs.



SERVICE AREA MAP





WHAT'S IN YOUR DRINKING WATER... AND WHAT'S NOT

Per-and Polyfluoroalkyl Substances (PFAS)

In January 2020, WSSC Water voluntarily resumed quarterly testing of its water for 18 PFAS compounds at its Potomac and Patuxent water filtration plants, which provide drinking water to 1.9 million residents in Montgomery and Prince George's counties. In September 2022, WSSC Water proactively increased PFAS monitoring from 18 to 29 compounds using the latest EPA testing methods. This proactive measure goes above and beyond federal and state requirements. [Test results, which indicate very low levels of PFAS in our drinking water, are posted here.](#) Learn more about PFAS at wsscwater.com/pfas.

In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 parts per trillion (ppt) for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs. The EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx.

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 both our water filtration plants to provide another barrier of protection.

Contaminants and Health Risks

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

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. However, the presence of contaminants does not necessarily indicate that water poses a health risk. Call the EPA's Safe Drinking Water Hotline (800-426-4791) to obtain more information about contaminants and potential health effects.

An Informational Statement From EPA on Lead

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. WSSC Water is responsible for providing high-quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home.

You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

If you are concerned about lead in your water and wish to have your water tested, contact WSSC Water at 301-206-4002. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Does WSSC Water Have any Lead in its Pipes?

WSSC Water completed its latest triennial Lead and Copper Rule (LCR) tap sampling in 2020. Ninety percent of the homes we tested had lead levels less than the analytical reporting limit of 1.0 parts per billion (ppb) and well below the EPA's Action Level of 15 ppb. Information about WSSC Water lead prevention methods can be found at wsscwater.com/lead.

In 2005, WSSC Water conducted an aggressive search to find and replace any lead pipes in its distribution system. These pipes are on public property, owned and maintained by WSSC Water.

The EPA's new LCR was formally made effective in December 2021. Originally published in 1991 to regulate the amount of lead and copper in drinking water, there have been small updates in the past. This is the

first major revision since it was originally published. Per this revision, the initial requirements call for several steps to be completed by October 2024. For more information visit epa.gov/ground-water-and-drinking-water/review-national-primary-drinking-water-regulation-lead-and-copper.

If you are concerned and want to have your water tested, call our Emergency Services Center at 301-206-4002

Notice of Availability of Unregulated Contaminant Monitoring Data

Part of our testing includes looking at contaminants not currently listed under those required for federal and state review. As part of the Unregulated Contaminant Monitoring Rule (UCMR) program, we collected quarterly samples from our source and finished water from our water filtration plants. Certain contaminants were also monitored at 16 sites representing the WSSC Water distribution system.

Per the requirements of Public Utilities Article 28-301(b)(2), WSSC Water continued to monitor for UCMR4 contaminants through the end of 2022. The detected contaminants of the UCMR4 sampling are listed in this report (page 8). The EPA has not established maximum contaminant levels (MCLs) for these unregulated contaminants, and the human health effects of these contaminants at the levels they were found is unclear. WSSC Water will begin monitoring under UCMR5 in March 2023.

If you are interested in learning more about the results, contact us at 301-206-4002 or visit wsscwater.com/ucmr4. More information on UCMR4 is also available at the EPA's website: epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule.

Harmful Algal Blooms

July through October, we monitor our drinking water reservoirs for microscopic organisms known as Cyanobacteria (blue-green algae). They usually multiply and bloom when the water is warm, stagnant and rich in phosphorous and nitrogen from things like fertilizer runoff.

These blooms can sometimes create toxin levels that are dangerous to people, pets, aquatic life and the environment. WSSC Water's drinking water is not affected and continues to meet all Safe Drinking Water Act standards. However, as a precaution, we closely monitor water quality conditions at our Patuxent Water Filtration Plant and post warning signs along the watershed when concentrations of the algae are high. Learn more at wsscwater.com/hab.

HOW AND WHY WE TEST YOUR WATER

Testing is a vital part of our overall 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 88 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. Our rigorous testing protocols work. Once again, we are proud to report that we have never had a drinking water quality violation in our history.



1. COAGULATION/ FLOCCULATION

Raw water is drawn into mixing basins at our filtration plants, where we add alum and polymer. This process causes small particles to stick to one another, forming larger particles.

2. SEDIMENTATION

Over time, the now larger particles become heavy enough to settle to the bottom of a basin from which sediment is removed.

3. FILTRATION

The remaining fine particles, along with many microorganisms, are filtered out as water flows through the levels of the filter.

4. DISINFECTION AND OTHER TREATMENT

Chlorine, Orthophosphate, lime and Fluoride are added to disinfect and any pathogens in the water are inactivated with UV light, rendering the microorganisms harmless to humans.

5. WATER STORAGE

Corrosion control chemicals are added to the finished water, which is sent to elevated tanks for storage and to ensure enough supply is available during high-demand periods. From these tanks, water is sent to customers for drinking, cooking, cleaning and other uses.

2022 WATER QUALITY RESULTS

How to Read the Water Quality Data Tables on the Next Two Pages:

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 2022. Typical sources are shown for each contaminant.

Terms Defined

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 and are non-enforceable public health goals.

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.

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

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

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 contamination.

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.

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

Definitions

¹ - Filtered water, maximum of measurements taken every 15 minutes.

² - EPA considers 50 pCi/L to be the level of concern for beta particles.

³ - Most recent required sampling, between June and September 2020.

⁴ - If more than 10% of sites exceed action level, system is required to take additional steps to control corrosiveness of their water.

⁵ - Highest running annual average (RAA).

⁶ - All samples deemed to have detectable disinfectant residual.

⁷ - Maximum residual disinfectant level (MRDL), the highest level of a disinfectant allowed in drinking water; based on a running annual average (RAA).

n/d - not detected

n/a - not applicable

= equals

< less than detected limits

* Based on yearly average except as noted

mg/L - milligrams per liter, equal to parts per million (ppm). The equivalent of one minute in 2 years or one penny in \$10,000.

µg/L - micrograms per liter, equal to parts per billion (ppb). The equivalent of one minute in 2,000 years or one penny in \$10 million.

ng/L - nanograms per liter, equal to parts per trillion (ppt). The equivalent of one minute in 2 million years or one penny in \$10 billion.

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

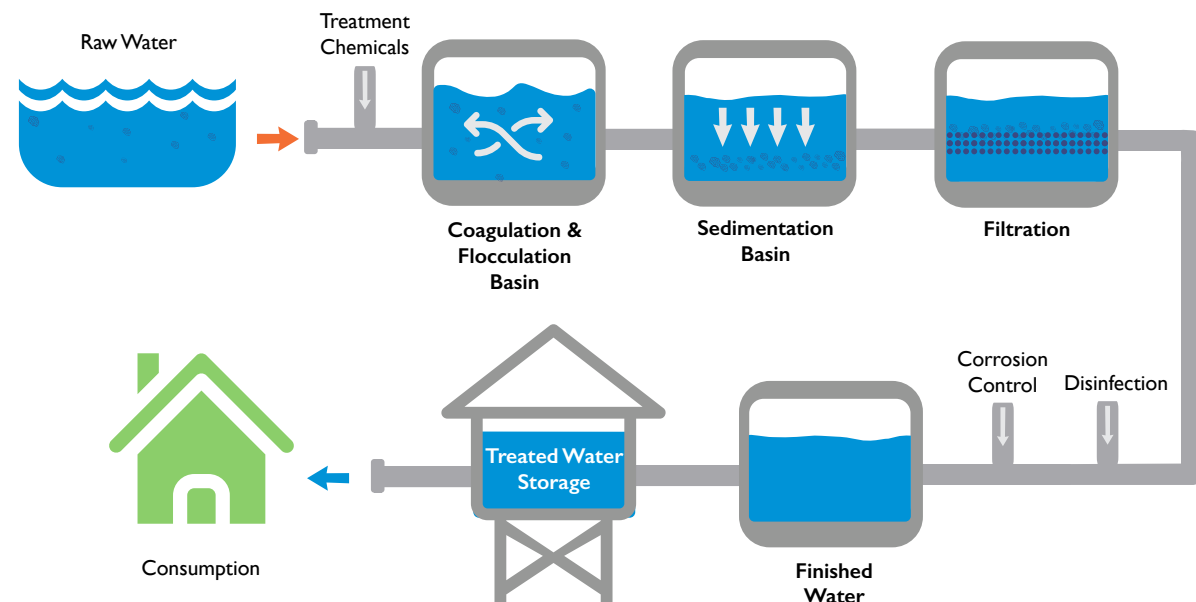
⁸ - Highest locational running annual average (LRAA).

⁹ - Maximum contaminant level based on LRAA.

¹⁰ - Unregulated contaminants were monitored in accordance to State of Maryland legislation requiring WSSC Water to continue the latest cycle of UCMR. Federally required UCMR4 monitoring ended in 2018. For full results please visit: <https://www.wsscwater.com/ucmr4>

¹¹ - 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*.

THE TREATMENT PROCESS



2022 WATER QUALITY RESULTS

DETECTED REGULATED CONTAMINANTS									
SUBSTANCE	UNITS	PATUXENT TAP		POTOMAC TAP		MCL (or TT)	MCLG	VIOLATION	MAJOR SOURCE IN DRINKING WATER
		LEVELS FOUND	RANGE	LEVELS FOUND	RANGE				
METALS									
Barium	mg/L	0.03	0.03-0.03	0.05	0.03-0.05	2	2	No	Discharge of drilling wastes & metal refineries; erosion of natural deposits
INORGANIC CONTAMINANTS									
Fluoride	mg/L	0.7	0.6-0.7	0.8	0.6-0.8	4	4	No	Water additive that promotes strong teeth; erosion of natural deposits
Nitrate	mg/L	1.5	0.4-1.5	1.8	0.4-1.8	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
MICROBIAL CONTAMINANTS									
Turbidity	NTU	0.03	0.02-0.09 ¹	0.05	0.03-0.11 ¹	TT=1 NTU	n/a	No	
	% <0.3 NTU	100%	n/a	100%	n/a	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	0	No	Human and animal fecal waste
<i>Giardia Lamblia</i>	n/a	met TT requirements		met TT requirements		TT=99.9% removal	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 BYPRODUCT (DBP) PRECURSOR									
Total Organic Carbon	n/a	met TT requirements		met TT requirements		TT	n/a	No	Naturally present in the environment
RADIOACTIVE CONTAMINANTS									
Gross Alpha	pCi/L	n/d	n/d-n/d	2.8	n/d-2.8	15	0	No	Erosion of natural deposits
Gross Beta	pCi/L	4.9	n/d-4.9	4.7	n/d-4.7	50 ²	0	No	Decay of natural and man-made deposits
Radium 228	pCi/L	1.2	0.3-1.2	1.4	n/d-1.4	5 ³	03	No	Erosion of natural deposits

2022 WATER QUALITY RESULTS

SUBSTANCE	UNITS	CUSTOMER TAP ³		AL	MCLG	VIOLATION	MAJOR SOURCE IN DRINKING WATER		
		90 TH PERCENTILE ⁴	#OF SITES ABOVE AL						
METALS									
Copper	mg/L	0.12	0 of 55 sites	1.3	1.3	No	Corrosion of household plumbing systems		
Lead	µg/L	<1.0	0 of 55 sites	15	0	No	Corrosion of household plumbing systems		
SUBSTANCE	UNITS	DISTRIBUTION SYSTEM		MCL	MCLG	VIOLATION	MAJOR SOURCE IN DRINKING WATER		
		LEVEL FOUND*	RANGE						
BACTERIOLOGICAL CONTAMINANTS									
Total Coliform	%Positive per month	0.02	0-0.25	TT	0	No	Naturally present in the environment		
# of <i>E. Coli</i> Positive Samples	Count	0	0-0	0 ¹¹	0	No	Human and animal fecal waste		
DISINFECTANT & DBPs									
Residual Chlorine	mg/L	1.2 ⁵	0.02-2.5 ⁶	4.0 ⁷	4.0 ⁷	No	Water additive used to control microbes		
Haloacetic Acids (HAA5)	µg/L	46 ⁸	17-70	60 ⁹	n/a	No	Byproduct of drinking water chlorination		
Total Trihalomethanes (TTHMs)	µg/L	65 ⁸	13-113	80 ⁹	n/a	No	Byproduct of drinking water chlorination		
DETECTED UNREGULATED CONTAMINANTS									
SUBSTANCE	UNITS	PATUXENT TAP		POTOMAC TAP		MCL (or TT)	MCLG	VIOLATION	MAJOR SOURCE IN DRINKING WATER
		LEVELS FOUND*	RANGE	LEVELS FOUND*	RANGE				
METALS									
Manganese ¹⁰	µg/L	0.5	n/d-1.4	2.7	n/d-6.8	n/a	n/a	n/a	Erosion of natural deposits
Sodium	mg/L	17	13-25	26	17-71	n/a	n/a	n/a	Urban activity
PFAS (PER- AND POLYFLUOROALKYL SUBSTANCES)									
PFOA	ng/L	2.4	n/d-2.4	5.3	n/d-5.3	n/a	n/a	n/a	Consumer and industrial products
PFOS	ng/L	2.6	n/d-2.6	6.2	n/d-6.2	n/a	n/a	n/a	Consumer and industrial products
PFBS	ng/L	n/d	n/d-n/d	3.5	n/d-3.5	n/a	n/a	n/a	Consumer and industrial products
PFHxS	ng/L	n/d	n/d-n/d	3	n/d-3.0	n/a	n/a	n/a	Consumer and industrial products
PFNA	ng/L	n/d	n/d-n/d	n/d	n/d-n/d	n/a	n/a	n/a	Consumer and industrial products
GenX/HFPO-DA	ng/L	n/d	n/d-n/d	n/d	n/d-n/d	n/a	n/a	n/a	Consumer and industrial products
SUBSTANCE	UNITS	DISTRIBUTION SYSTEM		MCL	MCLG	VIOLATION	MAJOR SOURCE IN DRINKING WATER		
		LEVEL FOUND*	RANGE						
HAA5 ¹⁰	µg/L	38	22-50	n/a	n/a	n/a	Byproduct of drinking water chlorination		
HAA6Br ¹⁰	µg/L	15	10-21	n/a	n/a	n/a	Byproduct of drinking water chlorination		
HAA9 ¹⁰	µg/L	52	32-66	n/a	n/a	n/a	Byproduct of drinking water chlorination		



JEFF BELL / SOURCE WATER

Maintenance Mechanic - Brighton Dam/Triadelphia and Duckett Reservoirs

When you own 6,000 acres of the watershed surrounding your source water, plenty of work goes into protecting and maintaining that land, especially when everything on the land affects the water.

Jeff Bell is one of several employees at Brighton Dam who manage the Triadelphia and Duckett Reservoirs watersheds. However, his title of maintenance mechanic belies the extent of his responsibilities. While he repairs lawnmowers and equipment - "we have 54 miles of access road to maintain," he says - he's also a keeper of fish, bees, chestnut trees and hiking trails.

Jeff says he's learned so much in his 20-plus years at WSSC Water. "You've got to have a good habitat for all wildlife and to keep our source water protected," he says.



SADE DUNNOCK / FILTRATION

Water O&M Technician II - Patuxent Water Filtration Plant

Sade Dunnock loves her job because of the challenges and opportunities it provides and because she knows how valuable her work is to customers. "I genuinely care about what I do," she says, "and I enjoy seeing the product from start to finish."

Sade's primary job is to keep the plant running, but there are multiple steps and duties within that role. It is not a responsibility she takes lightly.

"Having quality drinking water and being able to take a shower is a luxury," she says. "I take great pride in knowing I'm doing a service for my fellow man."

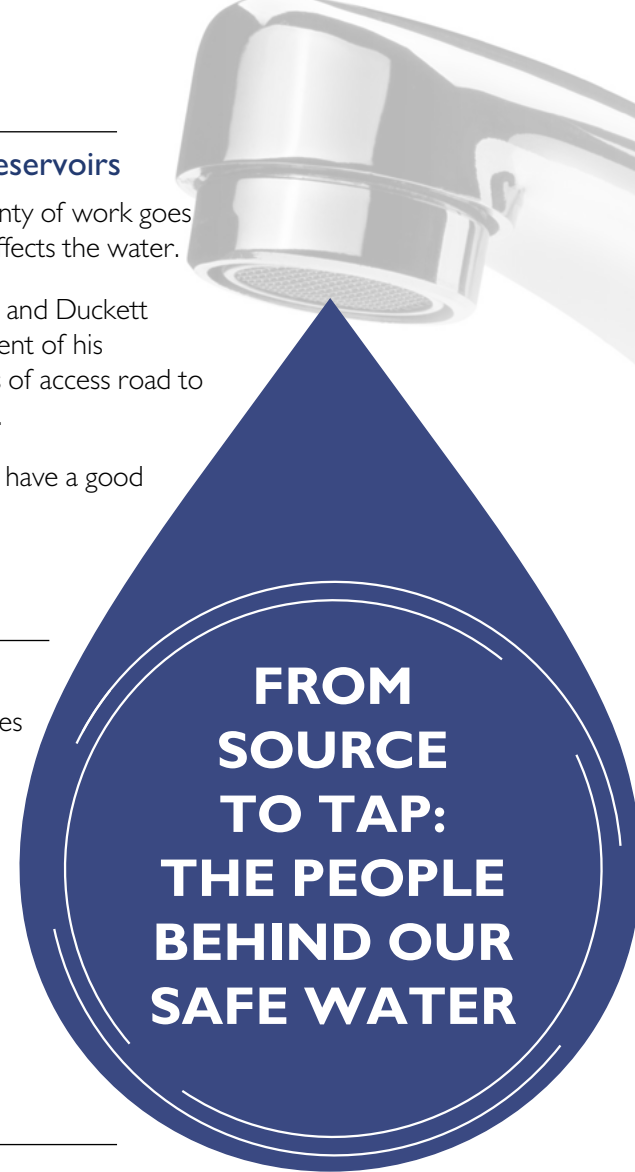


JEFF KUCHER / MAINTENANCE

Utility Technician II - Gaithersburg Depot

What's a retired New Jersey State Trooper doing at WSSC Water? Loving his job on the front lines of water main repair and replacement projects.

At the Gaithersburg Depot, three different teams tackle the work orders. Armed with a maintenance truck, dump truck and a backhoe, Jeff's team heads out to find and repair water main breaks. And with more than 5,800 miles of water mains, breaks are bound to happen. Most of the time, maintenance jobs are planned, but between November and February, emergency breaks dominate. This past December, when a wave of bitter cold sent the Potomac River temperatures plummeting, Jeff says his crew was handling two to three emergency breaks a day. Despite the busy winters, Jeff says, "This job is a lot of fun. I don't think there's a day when I'm not happy to get up and go to work."



FROM
SOURCE
TO TAP:
THE PEOPLE
BEHIND OUR
SAFE WATER

PRISCILLA TO / WATER QUALITY

Senior Scientist - Engineering & Environmental Services Division

You could call Priscilla To a drinking water detective. As an environmental engineer, she's constantly sleuthing and problem-solving to ensure clean, safe water comes out of your tap.

"Water dissolves a little bit of everything, and as it's flowing over the land, I'm looking at what's changing," says Priscilla. "If there's an issue, I do the digging."

Priscilla's job includes fine-tuning the treatment process, running tests and experiments and future planning. She's also determining ways to use less water or energy and be more cost-efficient while remaining current with changes in technology, regulations, environmental issues, and new water quality and treatment research. Priscilla loves that what she does affects customers. "It's as simple as helping the community."



DALMAR RUSHING / SEWER COLLECTION

Collection Technician III - Seneca Water Resource Recovery Facility

From baby dolls to tennis balls to blobs of wipes or grease, Dalmar has seen it all in his 16 years maintaining sewer lines. Using special tools and equipment, he removes blockages from pipes, helping to prevent backups and keep the wastewater flowing to the water resource recovery facilities.

"We're the frontline of the sewer department," says Dalmar, who does emergency and preventative maintenance on some of our more than 5,600 miles of sewer mains. Using a truck equipped with a camera that can "see" inside the pipes, he checks the integrity of the pipes and looks for structural damages or blockages. Dalmar is proud of the role he plays in helping prevent sewer overflows, which helps protect our waterways and, eventually, our drinking water supplies.



ANTHONY BELLAMY / RESOURCE RECOVERY

Wastewater O&M Technician I - Seneca Water Resource Recovery Facility

"My job is to clean the wastewater," says Anthony. It's a simple statement about a very technical and detailed job.

There are multiple stages in the wastewater treatment process. Anthony's daily responsibilities include checking each step of the process to ensure the equipment is working correctly. He also gathers samples three times a day per EPA Clean Water Act standards aimed at limiting pollutants discharged into the waterways. Then there are the solids samples he collects and measures for ammonia, phosphorous, chlorine, pH and temperature - every two hours.

"I love having a job that helps the public, even if they don't know about my job."



WHAT YOU CAN DO TO HELP PROTECT WATER



As customers, there are simple steps you can take to help protect the watershed and sources of your drinking water. Partnering with you is crucial to our efforts. On this page are just a few of the many ways you can help.

Keep the Wipes out of the Pipes

Don't use your toilet as a trash can. Only flush the three Ps: pee, poop and [toilet] paper! Non-flushable items can get stuck in your pipes or our pipes. If that happens, sewage will back up in your basement or overflow from one of our manholes, impacting the environment.



WATCH IT!

Learn more at wsscwater.com/wipes.

Can the Grease

Putting grease down the drain can eventually clog pipes, potentially causing sewage to back up in your basement or overflow in the environment. Please do your part by properly disposing of fats, oils and grease.



WATCH IT!

To get more information about the Can It, Cool It, Toss It method, visit wsscwater.com/canthe grease.

Be Salt Wise - It's Easy as 1-2-3

Over the last 30 years, we've seen a tremendous increase in salt levels in the water we pull from the Patuxent and Potomac rivers. Once salt enters these drinking water sources, we cannot remove it during the filtration process.



WATCH IT!

Get details at wsscwater.com/saltwise.

Patuxent Protectors

It started with a walk along the reservoir, but it was hard to miss all the trash along the trail. Now Silver Spring residents Nicholas Clements and Larry Morales are on a mission to clean up the Patuxent River one bag – or 30 – at a time. Watch their inspiring story and learn how you can become a watershed protector at wsscwater.com/protectors.



WATCH IT!

Reduce Use of PFAS-containing Products

PFAS, often referred to as forever chemicals, are a large group of chemicals used since the 1940s in common household and commercial products. Having unique chemical properties, PFAS are often used to keep food from sticking to cookware and make clothes, carpets and furniture resistant to water and stains. The manufacturing and use of products with PFAS put these chemicals into the environment, where, over time, they may end up in drinking water supplies. Learn what you can do to reduce the use of products containing PFAS at wsscwater.com/pfas.

OUR ENVIRONMENTAL STEWARDSHIP BY THE NUMBERS



Energy Efficiency

\$900,000

The amount of money we saved our customers when we retrofitted our water resource recovery facilities with energy-saving equipment. The energy saved is the equivalent of the electricity used by **1,186 homes** in one year.



Water Conservation

820 million

The gallons of water a year we saved at our Potomac Plant by cleaning our filters using air and water instead of water only (equivalent to the water used by about **45,000 residents** in a year - estimating 50 gallons per day per person).



Sustainable Business Practices

2.125 million

The sheets of paper we saved last year by using our ePermit process, and adoption of DocuSign. That's equivalent to more than **250 trees**.



Materials Management

495 tons

We kept this amount of scrap metal out of landfills between June 2021 and May 2022 through scrap metal recycling. That's the equivalent of **66 school buses**.



Source Water Protection

180 million

The number of gallons of clean water we return to local waterways after treating it at our water resource recovery facilities - supporting the health of the Chesapeake Bay watershed.



Join Us

We invited you to join us in incorporating **environmental stewardship** into your everyday water-related activities. Visit www.wsscwater.com/es2 for more information.

SAVING ENERGY, MONEY AND THE ENVIRONMENT.

Thinking Green has been a way of life for WSSC Water since our 1918 founding, with our mission of returning clean water to the environment. But our green commitment has expanded to include using renewable energy such as hydropower, solar and wind power. Thinking Green also saves energy, which saves money for WSSC Water and our customers.



\$3.5+ Million

The annual savings of WSSC Water's diverse energy management program over the last decade.



Greenhouse Gas Action Plan

WSSC Water cares about its carbon footprint and has seen an 18 percent decrease in Greenhouse Gas (GHG) Action Plan since 2005. These reductions are attributed to several factors, including the overall greening of the electrical grid and decommissioning of incinerators. However, several strategies have been implemented that provide a year-to-year reduction in emissions, including upgrading process and fleet equipment and using agriculturally derived chemicals for wastewater treatment processes. The main focus areas of GHG reduction strategies are:

- Optimizing the efficiency of the water and wastewater treatment processes and distribution system
- Reducing emissions associated with vehicles and transportation via electrical vehicle purchasing and anti-idling policy
- Optimizing building services (lighting, HVAC)
- Implementing renewable energy



Solar Power

Currently, a 20-year contract for solar energy provides WSSC Water with 9,000 Mega Watt hours (MWh) of power a year, roughly equivalent to five percent of our annual electricity consumption. In addition, we continue to explore opportunities to develop solar energy, including the recently awarded development of an 11.8 MW solar facility, projected for completion in 2024. We intend to purchase all power (approximately 20,000 MWh) from this site and receive carbon and renewable energy credits starting in year four of operations.



Wind Power

WSSC Water procures approximately 70,000 MW hours of power per year from the 83 MW Sandy Ridge wind farm located in Southwestern Pennsylvania. Each of the 36 wind turbines produces 2.3 MW. This use of wind power contributes to the reduction of greenhouse gases released into the Washington area by 38,000 tons per year - the equivalent of taking 100,000 cars off the Capital Beltway.



Future Plans

Future projects and strategies in WSSC Water's long-term GHG mitigation in our planning include the startup of the Piscataway Bioenergy project, a biogas production facility nearing completion at Piscataway WRRF. WSSC Water is also pursuing strategies such as optimizing treatment processes to reduce energy needs, replacing gasoline fleet vehicles with electric vehicles, and exploring wastewater thermal exchange technology for renewable heating and cooling facilities.



General Manager and CEO Kishia L. Powell, right, observing one of our new electric fleet vehicles and charging stations.

ENSURING ANOTHER CENTURY OF SAFE WATER

We're relentless about safety and take great pride in having zero drinking water quality violations in our 105 years of service. As the demand for water quality analysis continues to increase, we're investing \$36.7 million to upgrade our Maryland Department of the Environment-certified lab.



Scenes from the groundbreaking ceremony, including a water-filled beaker toast to expansion.

We officially kicked off the expansion project on June 28, 2022, with a groundbreaking ceremony at our Silver Spring-based laboratory. This enhancement ensures another century of safe water for our 1.9 million customers in Montgomery and Prince George's counties.

The expansion will add 19,720 square feet of workspace to the existing 27,193 square-foot facility. Once completed, the new space will be LEED (Leadership in Energy and Environmental Design) Silver certified under the U.S. Green Building Council rating system.

Before our current lab's existence, we conducted our water and wastewater analyses at facilities throughout our service area. To streamline our processes, increase staff efficiency and reduce redundancies, we consolidated into the existing laboratory in 2001. More than 500,000 water quality tests are performed annually at the lab, including analysis of drinking water, source water, wastewater, stormwater, landfill effluent and biosolids.

Over the past two decades, our laboratory division has experienced an increased analytical workload, number of employees and instruments, and additional functions. With new federal water quality regulations on the horizon, yearly analyses are expected to increase to more than 750,000 in the next two decades.

Construction completion is expected in 2024.



500,000	19,720	750,000
The number of water quality tests performed annually at the lab	The number of square feet of workspace the expansion will add	The number of expected water quality analyses performed each year in the next two decades

CONNECT

Stay Informed

WSSC Water Commissioners hold monthly meetings, which are open to the public and typically take place the third Wednesday of each month, beginning at 10 a.m. Meetings are held virtually or at the WSSC Water headquarters building, 14501 Sweitzer Lane, Laurel, MD 20707.

Visit 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, 7:30 a.m. to 7 p.m.
customerservice@wsscwater.com

Water/Sewer Emergencies/Water Testing
301-206-4002
24/7/365
emergencycenter@wsscwater.com

The 2022 Water Quality Report is available for download at 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.

Ìjábò' yii ní iftonileti tí ó ̄ se pataki pupọ̀ nipa omi tí o nmu. Jọwọ̀ wá ̄nikan lati túmọ̀' rẹ̀' fún ọ̀ tabi kí o bá ̄nikan tí ó yé sọ̀rọ̀.

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.

2022 WATER QUALITY REPORT



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2022 Water Quality Report

Naval Support Activity Bethesda, Maryland



In accordance with Navy Policy, Naval Support Activity (NSA) Bethesda is providing you with the 2022 Annual Drinking Water Quality Report.



NSA Bethesda purchases drinking water from the Washington Suburban Sanitary Commission (WSSC). The water originates from the Potomac River and the Patuxent River and is treated in two water treatment plants, the Potomac and Patuxent Water Filtration Plants. WSSC uses chlorine as a disinfectant. NSA Bethesda distributes WSSC water to its tenants, including the Walter Reed National Military Medical Center, without further treatment.

WSSC tests the drinking water it produces for nearly 200 substances. Detections are reported in the 2022 WSSC Annual Water Quality Report (appended). Additional information can be found at WSSC's website at: www.wsscwater.com

In addition to State mandated monitoring conducted by WSSC, NSA Bethesda monitors the drinking water distribution system for specific substances according to Navy Policy (OPNAVINST 5090.1E Chapter 21). The data from the monitoring is provided in the table below.

NSA Bethesda 2022 Water Quality Data

Microbial Indicators							
Substance	Unit	MCLG	MCL (or TT)	Distribution System		Violation?	Major Sources in Drinking Water
				Level Found	Range		
Residual Chlorine	mg/L	n/a	TT>=0.2	Met TT Requirements	Met TT Requirements	No	Water additive used to control microbes
Total Coliform	# of positive samples per month	0	No more than 1 positive monthly sample	0	0-0	No	Naturally present in the environment
No. of E. coli positive routine samples		n/a	n/a	0	0-0	No	Bacteria whose presence indicates that the water may be contaminated with human or animal wastes
No. of E. coli positive repeat samples		0	0	0	0-0	No	
Disinfection By-Products							
Substance	Unit	MCLG	MCL	Distribution System		Violation?	Major Sources in Drinking Water
				Level Found*	Range		
Total Trihalomethanes	µg/L	n/a	80	58	17-101	No	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5)	µg/L	n/a	60	50	29-68	No	

Terms Defined:

*****: Highest locational running average.

TT: Treatment Technique

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 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 which, if exceeded, triggers treatment or other requirements which a water system must follow.

µg/L : micrograms per liter, equal to parts per billion (ppb). The equivalent of a minute in 2,000 years or a penny in \$10 million.

ND: Not detected

n/a : Not applicable

Questions? Contact NSA Bethesda, Environmental Program Division (EPD), at 202-528-1792.