2024 Water Quality Report

WSSCWATER
DELIVERING THE ESSENTIAL

Ensuring Safe Water for Thriving Communities

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Between food prep and post-meal cleanup, our water is critical to the nearly 170,000 free meals served annually at the Shepherd's Table in Silver Spring.

On the cover: Six-year-old Avery counts on our clean, safe water to flow from her tap in Montgomery County whenever she gets thirsty.

MESSAGE FROM THE GENERAL MANAGER AND CEO

Dear Valued Customer,

This January marked the start of my third year with WSSC Water. It's been an exciting two years, and I'm proud of all we've accomplished in service to you.

As an anchor institution, we are responsible for meeting the needs of our community by delivering safe, reliable, affordable water to all 1.9 million of you. Because all of us on Team H_2O are passionate about what we do, we take that responsibility seriously. We understand that the quality of your water is essential for your health and your peace of mind.

My journey to WSSC Water has taken me from Baltimore to Atlanta to London and a few other places in between. But the one constant throughout those career moves has been my paws-itively perfect canine, Lord Louis Leo London Windsor – Louie for short. He may be small, but doggone it, my 14.5-pound family member is big on love.

As you can imagine, Lord Louie deserves nothing but the best. That's why we are proud to call ourselves WSSC Water customers. I know and trust that the water Louie eagerly laps from his water bowl every day is always safe and reliable. Every drop is of the highest quality.

I demand nothing less for each of you and the important people and pets in your life. The proof of my promise is in the pages of this *2024 Water Quality Report: Ensuring Safe Water for Thriving Communities.*

Thanks to our filtration systems, rigorous testing procedures and commitment to high standards, we deliver water that meets or exceeds all regulatory requirements. In our 107-year history, we have never had a single drinking water quality violation.

Beyond meeting strict federal standards for safety and quality, we know that the taste, odor and visual appearance of our drinking water are very important to you. We are committed to providing you with a product that meets your expectations. Our water is our brand, and you can trust the quality of every drop.

I'm so confident about our water that I'm happy to send you one of our free WSSC Water dog water bowls. These collapsible bowls are easy to transport for walks or travel. Send an email to communications@wsscwater.com to request one.

Thank you for entrusting us to provide you with one of life's most precious resources. Know that we remain relentless about delivering excellence to you and all the members of your family, even the furry, fishy, feathery, slinky and scaly ones!

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. Our Potomac WFP draws water from the Potomac River.

*Million gallons per day

Patuxent River
Patuxent Water Filtration Plant
60
MGD*

Potomac River
Potomac Water Filtration Plant
100-120
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.

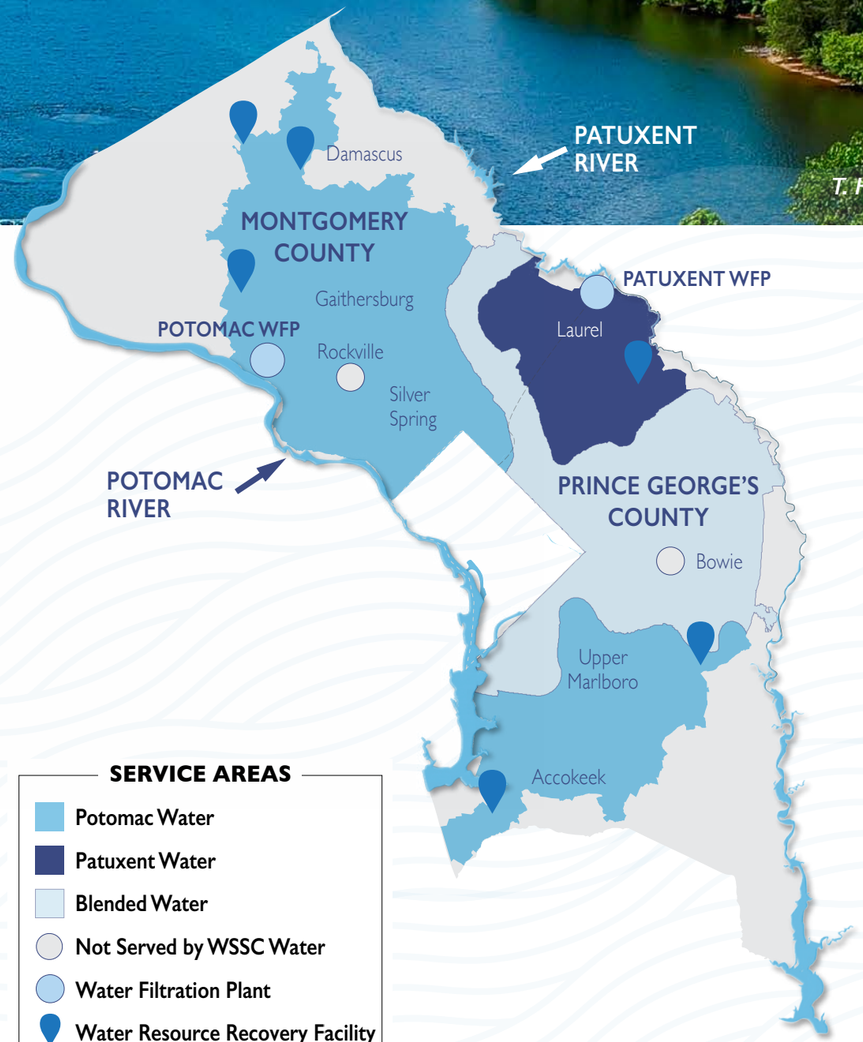
Organic chemical contaminants
Substances including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff and septic systems.

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

SERVICE AREA

1.9 million customers served

T. Howard Ducket Reservior



IMPACTS ON WATER QUALITY

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. In September 2022, WSSC Water proactively increased PFAS monitoring from quarterly to monthly and from 18 to 29 compounds using the latest Environmental Protection Agency (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 on page 13. To view the results and learn more about PFAS: wsscwater.com/pfas.

In April 2024, the EPA announced the final regulation for six PFAS in drinking water, setting Maximum Contaminant Levels (MCLs) of four parts per trillion (ppt) for Perfluorooctanoic Acid (PFOA) and 4 ppt for Perfluorooctane Sulfonic Acid (PFOS), 10 ppt for PFHxS, PFNA, and HFPO-DA individually, and a Group Hazard Index for four PFAS compounds. This regulation requires additional monitoring as well as certain actions for systems above the MCLs. 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 of 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.

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. The EPA/Centers for Disease Control and Prevention 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).

An Informational Statement From the 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. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have 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. 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.

IMPACTS ON WATER QUALITY

Continued

EPA Lead statement continued.

If you are concerned about lead in your water and wish to have your water tested, contact WSSC Water at pipetype@wsscwater.com. 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?

Corrosion of pipes, plumbing fittings and fixtures may cause lead and copper to enter drinking water. To assess corrosion of lead and copper, WSSC Water conducts tap sampling for lead and copper at selected sites every three years. WSSC Water treats water using a corrosion inhibitor called orthophosphate to control corrosion, which was designated as the optimal corrosion control treatment by the Maryland Department of the Environment (MDE). To ensure the treatment is operating effectively, WSSC Water monitors water quality parameters set by the MDE every 6 months.

WSSC Water completed its latest triennial Lead and Copper Rule (LCR) tap sampling in 2023. Ninety percent of the homes we tested had lead levels less than the analytical reporting limit of 2.0 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 October 2024. While WSSC Water removed all known lead pipes within our distribution system in the early 2000s, and the water we deliver to customers is lead-free, this multi-year EPA rule focuses on identifying pipe materials, including those on private property. Per this revision, WSSC Water has developed a user-friendly inventory map where you can see the pipe material which you can find at wsscwater.com/pipetype. For more information visit epa.gov/ground-water-and-drinking-water/review-national-primary-drinking-water-regulation-lead-and-copper.

Notice of Availability of Unregulated Contaminant Monitoring Data

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 finished water from our water filtration plants.

The detected contaminants of the UCMR5 sampling are listed here on page 13. The EPA has published maximum contaminant levels (MCLs) for six PFAS compounds in April 2024. The EPA has not established MCLs for the remaining UCMR5 contaminants, and the human health effects of these contaminants at the levels they were found is unclear. WSSC Water began 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/ucmr5. More information on UCMR5 is also available at the EPA's website: epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule.

Harmful Algal Blooms (HABs)

July through October, we monitor our 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.

Montgomery and Prince George's counties are home to two significant landmarks, which house multiple shops, restaurants, entertainment venues, hotels and residential spaces: Pike & Rose (above) and National Harbor (below). Their customers are our customers, too. That's why we're relentless about providing safe, clean, reliable water for the millions of visitors they serve annually.

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 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.

How to Read the Water Quality Data Tables on Pages 12 - 13:

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 2024. Typical sources are shown for each contaminant.

Terms Defined

Contaminant. *Any* physical, chemical, biological or radiological substance or matter in water.
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.
Hazard Index or HI. The Hazard Index is an approach that determines the health concerns associated with mixtures of certain PFAS in finished drinking water. Low levels of multiple PFAS that individually would not likely result in adverse health effects may pose health concerns when combined in a mixture. The Hazard Index MCL represents the maximum level for mixtures of PFHxS, PFNA, HFPO-DA, and/or PFBS allowed in water delivered by a public water system. A Hazard Index greater than 1 requires a system to take action.
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.

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).

n/d - not detected
n/a - not applicable
= equals
< less than detected limits
* Based on yearly average except as noted
** Maximum

Chase Southwick is part of our laboratory team responsible for the 500,000 water quality tests we conduct each year.

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 2023.
4 - Copper results ranged from 0.0137 to 0.226 mg/L. Lead results ranged from not detected to 8.11 µg/L.
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 disinfectant allowed in drinking water; based on a RAA.
8 - Highest locational running annual average (LRAA).
9 - Maximum contaminant level based on LRAA.
10 - Unregulated contaminants were monitored in accordance to EPA's 5th cycle of Unregulated Contaminant Monitoring Rule (UCMR5). For full results please visit: https://www.wsscwater.com/ucmr5
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.*
12. – The PFAS Rule was published in April 2024 and will go into effect on April 26th, 2027 at which point public water systems are required to begin ongoing compliance monitoring at all entry points to the distribution system.

2024 WATER QUALITY RESULTS

DETECTED REGULATED CONTAMINANTS

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Level Found*	Range	Level Found*	Range				
METALS									
Barium	mg/L	0.03	0.02-0.03	0.04	0.03-0.04	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	0.4-0.8	4	4	No	Water additive which promotes strong teeth; erosion of natural deposits
Nitrate	mg/L	1.4	0.4-1.4	1.9	0.2-1.9	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
MICROBIAL CONTAMINANTS									
Turbidity	NTU	0.03	0.01-0.09[1]	0.04	0.02-0.17[1]	TT=1 NTU	n/a	No	Soil runoff
	% <0.3 NTU	100%	n/a	100%	n/a	TT=95% min	n/a	No	
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
Giardia lamblia	n/a	met TT requirements		met TT requirements		TT=99.9% removal	0	No	Human and animal fecal waste
Cryptosporidium	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	n/d	n/d - n/d	15	0	No	Erosion of natural deposits
Gross Beta	pCi/L	5.5	n/d - 5.5	5.2	n/d - 5.2	50[2]	0	No	Decay of natural and man-made deposits
Radium 228	pCi/L	1.8	0.1 - 1.8	1.4	0.1 - 1.4	5[3]	0	No	Erosion of natural deposits

Substance	Units	Customer Tap[3]		AL	MCLG	Violation	Major Source in Drinking Water
		90th Percentile[4]	# of Sites Above AL				
METALS							
Copper	mg/L	0.12	0 of 69 sites	1.3	1.3	No	Corrosion of household plumbing systems
Lead	µg/L	<2.0	0 of 69 sites	15	0	No	Corrosion of household plumbing systems

DETECTED REGULATED CONTAMINANTS

Substance	Units	Distribution System		MCL (or TT or MRDL)	MCLG (or MRDLG)	Violation	Major Source in Drinking Water
		Level Found*	Range				
BACTERIOLOGICAL CONTAMINANTS							
Total Coliform	% Positive per month	0.06	0 - 0.50	TT	0	No	Naturally present in the environment
No. of *E. coli* Positive Samples	Count	0	0 - 0	0[11]	0	No	Human and animal fecal waste
DISINFECTANT & DBPs							
Residual Chlorine	mg/L	1.4[5]	0.08 - 2.9[6]	4.0[7]	4.0[7]	No	Water additive used to control microbes
Haloacetic Acids (HAA5)	µg/L	49[8]	12 - 96	60[9]	n/a	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	µg/L	66[8]	20 - 115	80[9]	n/a	No	By-product of drinking water chlorination

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Level Found*	Range	Level Found*	Range				
PFAS (Per- and Polyfluoroalkyl Substances)									
PFOA	ng/L	0.6	n/d - 2.3	2.8	n/d - 3.1	4	0	n/a[12]	Consumer and industrial products
PFOS	ng/L	n/d	n/d - n/d	3.0	n/d - 3.6	4	0	n/a[12]	Consumer and industrial products
PFHxS	ng/L	n/d	n/d - n/d	1	n/d - 2.0	10	10	n/a[12]	Consumer and industrial products
PFBS	ng/L	0.5	n/d - 2.1	2.6	n/d - 3.0	n/a	n/a	n/a	Consumer and industrial products

DETECTED UNREGULATED CONTAMINANTS

Substance	Units	Patuxent Tap		Potomac Tap		MCL (or TT)	MCLG	Violation	Major Source in Drinking Water
		Level Found*	Range	Level Found*	Range				
METALS									
Sodium	mg/L	13	11 - 15	18	11 - 23	n/a	n/a	n/a	
PFAS (Per- and Polyfluoroalkyl Substances)									
PFBA	ng/L	2.8**	n/d - 2.8	4.6**	n/d - 4.6	n/a	n/a	n/a	Consumer and industrial products
PFHxA	ng/L	2.7**	n/d - 2.7	5.8**	n/d - 5.8	n/a	n/a	n/a	Consumer and industrial products
PFPeA	ng/L	2.7**	n/d - 2.7	6.9**	n/d - 6.9	n/a	n/a	n/a	Consumer and industrial products
PFHpA	ng/L	n/d**	n/d - n/d	1.9**	n/d - 1.9	n/a	n/a	n/a	Consumer and industrial products

Dash-in car wash in Prince George's County

Firefighters from Station 810 in Prince George's County

WATER, WATER EVERYWHERE!

Beyond water for drinking, thriving communities count on WSSC Water for public health, safety and a host of other needs. Imagine what your day would look like without water. From making coffee to washing laundry to enjoying time at the pool, water is the key ingredient.

Siyan is a customer from Prince George's County

Tropix Laundromat in Montgomery County

Kash is a customer from Montgomery County

Fairland Sports & Aquatics Center in Prince George's County

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 Support Center
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, 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 2024 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.

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

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.

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。

Ìjábọ̀ yii ní ifitonileti tí ó ṣe pataki pupọ nipa omi tí o nmu. Jọwọ wá ẹnikan lati túmọ̀ rẹ̀ fún ọ tabi kí o bá ẹnikan tí ó yé sọrọ.

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

Fishing on Triadelphia Reservoir