HYDR8

THE NEXT FEW PAGES ARE A DETAILED REPORT DOCUMENTING WHAT IS IN OUR NEW YORK WATER SUPPLY AND WHERE IT COMES FROM, LET US SUMMARIZE:

NEW YORK TAP WATER IS GOOD IN MODERATION

IT'S CLEARER, SOFTER, AND TASTIER THAN THE WATER FROM NEW JERSEY AND CONNECTICUT

BUT IT CAN BE MUCH BETTER

IT IS NOT A MYSTERY WHAT ACTUALLY IS IN THE WATER ANYMORE

AND NOW WE KNOW ABOUT TOXIC LEAD, PFAS AND MICROPLASTICS

DID YOU KNOW ON AVERAGE IT IS ESTIMATED WE CONSUME 52 CREDIT CARDS A YEAR ???

SO, WHAT'S THE SOLUTION?

WHILE MOST NEW YORKERS SETTLE FOR BOTTLED WATER THERE IS A MORE SUSTAINABLE WAY TO HYDRATE

WATER MACHINES

YOU MAY RECOGNIZE THESE FROM YOUR LOCAL DOCTOR'S OFFICE, DENTAL STUDIO, OR FROM WORK

BUT NOT JUST ANY WATER MACHINE, A HYDRATION STATION

MOST MACHINES ARE NOT SELF-CLEANING, DO NOT REMOVE TOXIC METALS, OR ADD ELECTROLYTES

HYDRATE BETTER AT WORK

DOES YOUR ORGANIZATION HAVE A HYDRATION STATION THAT YOU USE ? DO THEY NEED ONE ?

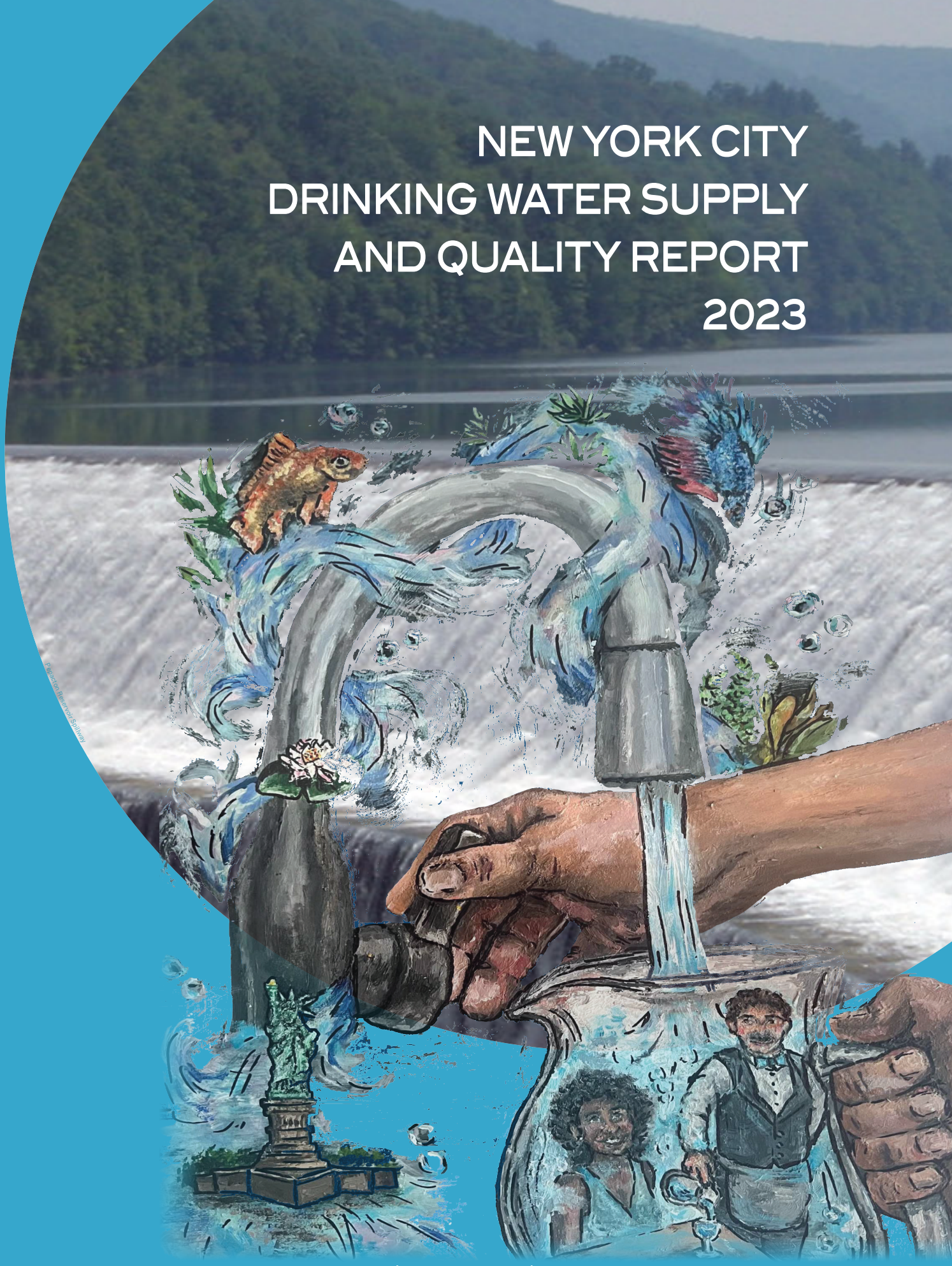
CONTACT US NOW @ WWW.HYDR8.NYC

READ THE OFFICIAL NY STATE ARTICLE BELOW TO LEARN MORE ABOUT WHAT IS REALLY IN NY TAP WATER

HYDR8

New York City Drinking Water Supply and Quality Report - 2023

NEW YORK CITY DRINKING WATER SUPPLY AND QUALITY REPORT 2023



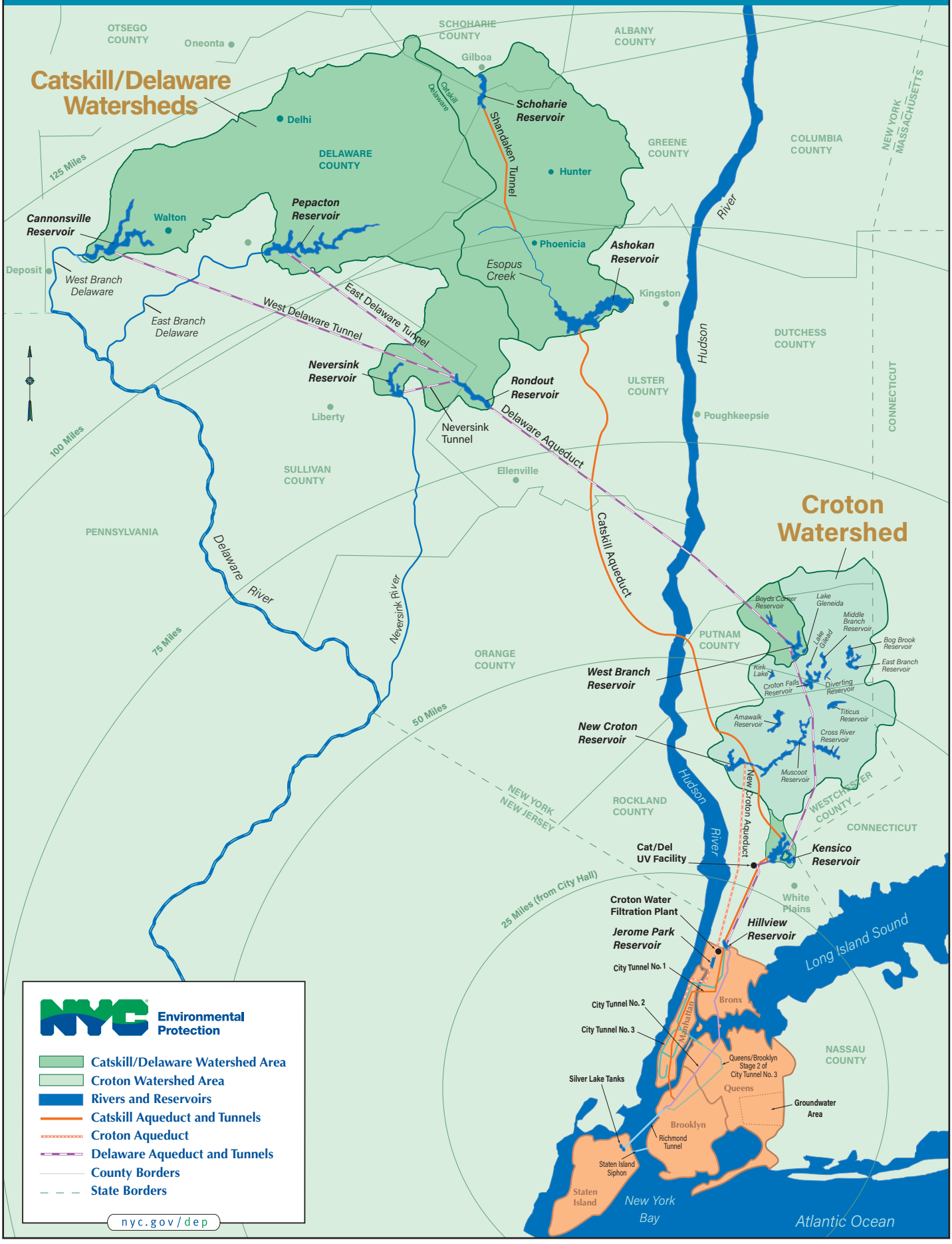
NYC Environmental Protection

Eric Adams
Mayor

Rohit T. Aggarwala
Commissioner

Art by: Karolina O., St. Francis Preparatory HS
2023 Water Resources Art & Poetry Contest

NEW YORK CITY'S WATER SUPPLY SYSTEM



NYC Environmental Protection

Dear Friends:

On behalf of my nearly 6,000 colleagues at the Department of Environmental Protection (DEP), I am proud that DEP continues to deliver one billion gallons of some of the best tap water in the world to more than 9.8 million New Yorkers each and every day. The choice is clear – New York City water is the champagne of tap water! Here in New York we are fortunate to have a water supply that is well protected and managed by dedicated scientists, engineers, and other highly skilled professionals who have earned admiration among their colleagues throughout the world.

DEP continuously monitors the water in the distribution system, upstate reservoirs, feeder streams, and wells that are potential sources for New York City's drinking water supply. We have made substantial investments to upgrade and rehabilitate our water supply infrastructure and protect the quality of our drinking water, with multi-billion dollar projects currently taking place at the Catskill and Delaware aqueducts, among others. More than $1 billion has also been committed to administering a number of watershed protection and pollution prevention programs to maintain the high quality of our drinking water at the source. This report illustrates that New York City's drinking water continued to be of excellent quality in 2023.

DEP scientists collected 44,800 samples throughout our watershed and reservoir system, and from nearly 1,000 street-side sampling stations in every neighborhood across the city, analyzing those samples 589,500 times at our four water quality laboratories. Robotic monitoring stations on our reservoirs and in our streams provided another 2.4 million tests to ensure DEP was sending the best-quality water to New York City at all times.

Sincerely,

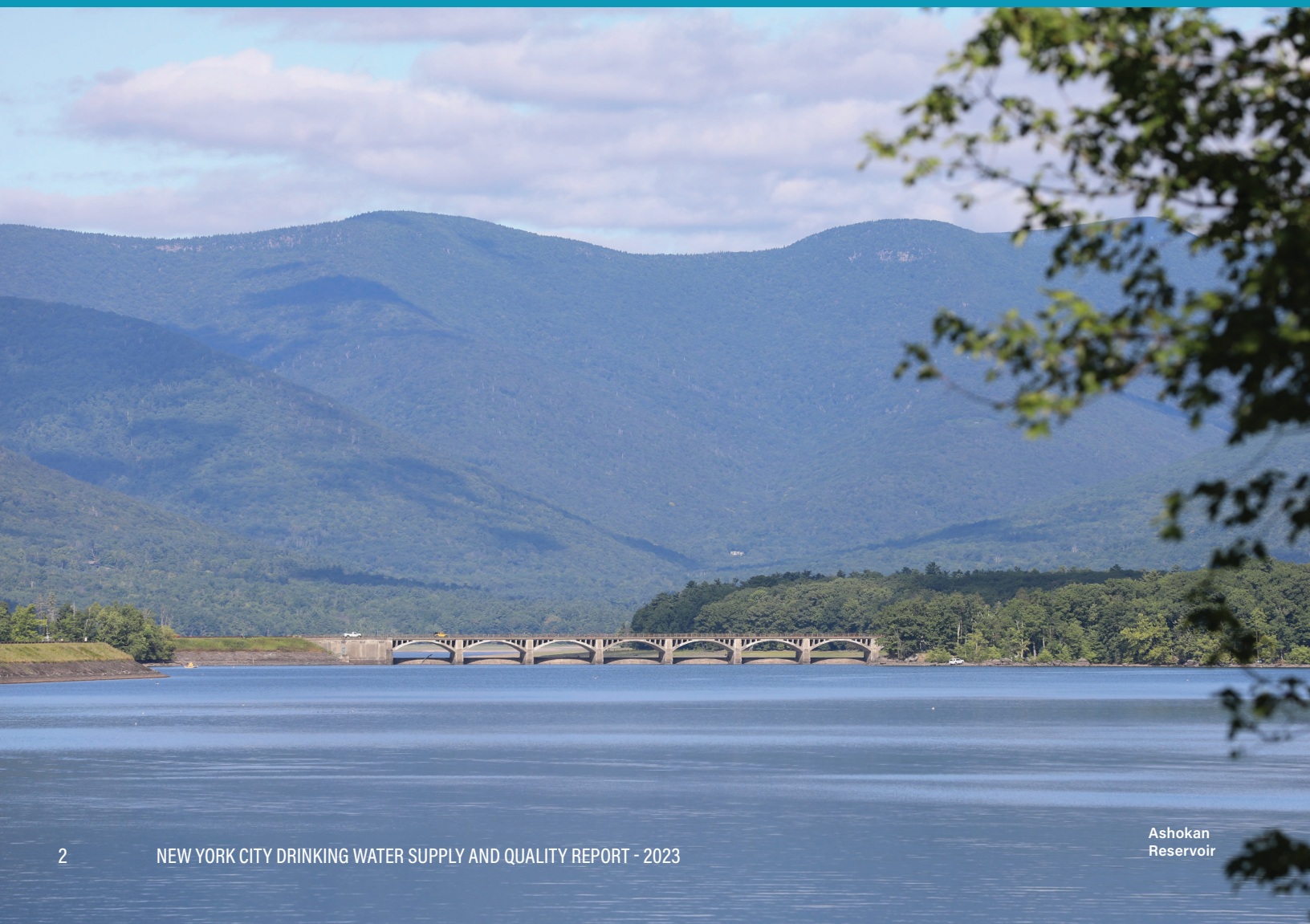
Rohit T. Aggarwala, Commissioner
NYC Department of Environmental Protection

NEW YORK CITY'S WATER SUPPLY SYSTEM

New York City's water supply system provides more than one billion gallons of safe, high-quality drinking water every day to more than 8.8 million residents of New York City and one million people living in the counties of Westchester, Putnam, Orange, and Ulster.

New York City gets its drinking water from 19 reservoirs and three controlled lakes spread across a nearly 2,000-square-mile watershed. The watershed is located upstate in portions of the Hudson Valley and Catskill Mountains that are as far as 125 miles north of the city. New York City's water supply system is composed of two primary surface water supplies called the Catskill/Delaware and Croton. The City also has a permit to operate a groundwater supply in southeast Queens, although water from that system has not been delivered to customers in many years. In all, this system serves half the population of New York State.

In 2023, DEP delivered a total of 368.3 billion gallons of drinking water to New York City, withdrawing a total of 385.6 billion gallons from the system. DEP also delivered 36.9 billion gallons to 70 communities and institutions outside NYC. The Catskill/Delaware provided 95 percent of the water and the Croton 5 percent. DEP estimates that 14.7% of water delivered was non-revenue producing in 2023.



Ashokan Reservoir

New York City's water supply system provides more than one billion gallons of safe drinking water every day.

TREATING OUR DRINKING WATER

CATSKILL/DELAWARE SUPPLY

Due to the very high quality of our Catskill/Delaware supply, New York City is one of only five large cities in the country with a surface drinking water supply that does not utilize filtration as a form of treatment. The Catskill/Delaware supply operates under a filtration waiver, referred to as the "Filtration Avoidance Determination" (FAD), and the water from this supply is treated using two forms of disinfection to reduce microbial risk.

Water is disinfected with chlorine, a common disinfectant added to kill germs and stop bacteria from growing on pipes, and then with ultraviolet (UV) light at the Catskill/Delaware UV Disinfection Facility. The facility, located in Westchester County, is the largest of its kind in the world and is designed to disinfect more than two billion gallons of water per day. At this facility, exposure to UV light inactivates potentially harmful microorganisms without changing the water.

DEP also adds food grade phosphoric acid, sodium hydroxide, and fluoride to the water before sending it into distribution. Phosphoric acid is added because it creates a protective film on pipes that reduces the release of metals, such as lead, from service lines and household plumbing. Sodium hydroxide is added to raise the pH, which reduces corrosion of household plumbing. Fluoride is added to improve dental protection at a federally approved level of 0.7 mg/L, because it is effective in preventing cavities. During 2023, 99.9 percent of the water produced by the Catskill/Delaware supply was fluoridated.

CROTON SUPPLY

The Croton supply is filtered at the Croton Water Filtration Plant, located underground in the Bronx. The plant can treat up to 290 million gallons of drinking water each day, which helps to ensure a large enough supply of water for the city to withstand droughts, periodically shut down other parts of the water supply, and respond to the potential effects of climate change. The Croton Water Filtration Plant first began operating in May 2015.

Once water arrives at the filtration plant it undergoes treatment to remove impurities. The treatment processes include coagulation, dissolved air flotation, filtration, and disinfection. During coagulation, chemicals are added to untreated water, causing any particulates to bunch together and become a mass of particles called floc. Then injected air bubbles float the floc to the top where it is skimmed off using a process called dissolved air flotation. Finally, the water flows through a filter bed of granular activated carbon and sand removing any remaining particles. Just like the Catskill/Delaware supply, Croton water is disinfected with chlorine and UV light to protect against potentially harmful microorganisms, and is treated with food grade phosphoric acid, sodium hydroxide, and fluoride. In 2023, 100 percent of the Croton water produced by the plant was fluoridated.

DEP Scientists performed over 357,700 analyses on 31,600 samples from the distribution system in 2023.

TESTING FOR DRINKING WATER QUALITY

SAMPLING AND MONITORING

DEP monitors the water in the distribution system, upstate reservoirs and feeder streams, and wells that are potential sources for New York City's drinking water supply. We continuously sample and conduct analyses for numerous water quality parameters, including microbiological, chemical, and physical measurements, throughout the watershed as the water enters the distribution system, and at nearly 1,000 water quality sampling stations throughout New York City.

In 2023, DEP performed more than 357,700 analyses on over 31,600 samples from the distribution system, meeting all state and federal monitoring requirements. These data are summarized in tables starting on page 11. Additionally, DEP performed approximately 231,800 analyses on about 13,200 samples from the upstate reservoir watersheds and took more than 2.4 million robotic monitoring measurements to support FAD watershed protection programs and to optimize water quality.

REGULATION OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants.

To ensure that tap water is safe to drink, the New York State Department of Health (NYSDOH) and the United States Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The NYSDOH and the federal Food and Drug Administration's (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The presence of contaminants does not necessarily indicate that water poses a health risk. These regulations also establish the minimum amount of testing and monitoring that each system must undertake to ensure that the tap water is safe to drink. Visit **epa.gov/safewater** or **health.ny.gov** for more information about drinking water.

PROTECTING OUR WATER AT THE SOURCE

FILTRATION AVOIDANCE DETERMINATION (FAD)

DEP has funded and administered several watershed protection and pollution prevention programs to maintain the high quality of our drinking water, since 1993. These science-based strategies are designed to protect New York City's drinking water at its source by keeping pollution out of our reservoirs and the streams, creeks, and rivers that feed them.

NYSDOH issued mid-term revisions to the 2017 FAD on December 29, 2022, that allow DEP to continue operating the Catskill/Delaware supply without filtration through at least 2027. DEP has committed an estimated $1 billion to comply with the FAD, which goes towards our watershed programs that conserve watershed lands, upgrade wastewater infrastructure, implement clean water strategies on watershed farms, and manage streams, forests, and other natural resources that affect water quality.

SOURCE WATER ASSESSMENT PROGRAMS

Federal regulations require states to develop and implement source water assessment programs to identify the areas that supply public tap water, inventory contaminants, assess water system susceptibility to contamination, and inform the public of the results. The states are given a great deal of flexibility on how to implement source water assessment programs. These assessments are created using available information to help estimate the potential for source water contamination. Because of DEP's extensive watershed protection and pollution prevention programs, NYSDOH does not find it necessary to perform a source water assessment on the New York City water supply.

DEP Scientist collecting water samples at the Ashokan Reservoir

The Delaware Aqueduct Bypass Tunnel is the largest repair project in the 180-year history of New York City's water supply system

CAPITAL UPGRADES

In 2023 DEP continued moving forward with substantial capital investments throughout our water supply infrastructure, stretching as far as 125 miles from the five boroughs deep into the Catskill Mountains.

We are nearing the end of the largest and most complex project in the history of New York City's water supply as we prepare to complete the repair of the Delaware Aqueduct. The aqueduct is the longest tunnel in the world and is a primary water supply artery from our reservoirs in the Catskills to New York City. In 2023, we partially unwatered the aqueduct, work that was a critical part of testing ahead of the planned shutdown in 2024. The shutdown will enable the final connection of a newly completed 2.5-mile tunnel, which sits 600 feet below the Hudson River, to bypass a leaking section of the aqueduct. It will also allow workers to enter the aqueduct to repair smaller leaks in the tunnel in Ulster County. With this $1 billion bypass project, DEP will be completing the first new tunnel under the Hudson River since the south tube of the Lincoln Tunnel was completed in 1957.

This year, DEP also made significant progress on planning, design, and construction bidding for two large infrastructure projects in Westchester County mandated by the Hillview Consent Decree and Judgment, which are both slated to break ground in 2024. The Hillview Reservoir Improvements Project in Yonkers is an overhaul of the water treatment and chemical storage facilities at the reservoir and includes upgrades to the site's water management infrastructure. The 100-year-old reservoir continues to play an essential role as the balancing reservoir that ensures drinking water is continuously available to all parts of New York City as consumption changes throughout the day.

After years of careful planning, DEP is in the final stages of preparation to break ground on a new $1.9 billion 27-foot-diameter two-mile long water tunnel connecting the Kensico Reservoir with the Catskill Delaware Ultraviolet Treatment Facility. The project, as mandated by the Hillview Consent Decree and Judgment, will improve flexibility between vital water supply facilities that serve more than 10 million people in New York City and Westchester County.

Workers are also putting finishing touches on more than a decade's worth of major capital improvements to New York City's northernmost infrastructure, the Schoharie Reservoir. At a cost of nearly $400 million, DEP upgraded and fortified the reservoir's dam and built new water tunnels, water management infrastructure and a unique new water release system.

CONSERVING OUR SUPPLY

Although New York City has grown by more than 1.3 million people since 1980, demand for water has dropped by approximately 35 percent—making it one of the most water-efficient large cities in the country.

The average single-family household in New York City uses approximately 70,000 gallons of water each year at a cost of $4.49 per 100 cubic feet of water (748 gallons), or about $420 a year. Since nearly all customers also receive wastewater collection and treatment services, which cost about $668, the combined annual water and sewer charge for the typical New York City household using 70,000 gallons per year is $1,088, calculated at fiscal year 2024 rates, effective July 1, 2023.

Advances in technology have played a key role in the drop in water use, from the replacement of thousands of inefficient toilets through DEP's toilet replacement program, to an automated leak detection program, which helps our customers save both money and water by alerting homeowners to unusual spikes in water consumption. In 2023 we continued our partnership with NYC's Health and Hospitals Corporation (HHC) to complete a water-saving retrofit project at Bellevue Hospital. DEP funded the replacement of six vacuum pumps that serve two medical vacuum systems. The retrofits are expected to greatly improve efficiency and result in significant water savings.

Our partnership with the City University of New York (CUNY) included more than 1,000 fixture upgrades at City College, resulting in a savings of 40,000 gallons of water per day, and we extended this important partnership to replace inefficient fixtures at Queens College. We plan to replace more than 1,000 fixtures across the college's four campus buildings for an additional savings of 30,000 gallons per day.

These, and other recent investments, have reduced overall demand for water by more than 22 million gallons per day, with an anticipated total water savings of 2.8 million gallons per day through new and ongoing initiatives. We will continue to implement innovative water conservation strategies and projects to meet DEP's sustainability goals and plan to release the next Water Demand Management Plan Annual Update in June 2024.

DOs & DON'Ts of Water Conservation

In or out of a drought, every New Yorker can save hundreds of gallons of water each week by following these simple water-saving tips.

BATHROOM

- ✔ Do take short showers and save 5 to 7 gallons a minute.
- ✔ Do fill the tub halfway and save 10 to 15 gallons.
- ✔ Do install water-saving toilets, shower heads and faucet aerators. Place a plastic bottle filled with water in your toilet tank if you can't switch to a low flow toilet.
- ✗ Don't run the water while shaving, washing your hands or brushing your teeth. Faucets use 2 to 3 gallons a minute.
- ✗ Don't use the toilet as a wastebasket, and don't flush it unnecessarily.

OUTDOORS

- ✔ Do use a self-closing nozzle on your hose.
- ✗ Don't water your sidewalk or driveway–sweep them clean.
- ✗ Don't over water your lawn or plants. Water before 9 a.m. or after 7 p.m.

KITCHEN & LAUNDRY

- ✔ Do run the dishwasher and washing machine only when full. Save even more by using the short cycle.
- ✔ Do install faucet aerators.
- ✗ Don't let the water run while washing dishes. Kitchen faucets use 2 to 3 gallons a minute. Filling a basin only takes 10 gallons to wash and rinse.
- ✗ Don't run water to make it cold. Have it chilled in the refrigerator, ready to drink.

EVERYWHERE

- ✔ Do repair leaky faucets and turn taps off tightly. A slow drip wastes 15 to 20 gallons each day.
- ✗ Don't open fire hydrants.

TO LEARN MORE, CALL 311.

CRYPTOSPORIDIUM AND *GIARDIA*

DEP maintains a comprehensive program to monitor in source waters and key streams for the presence of *Cryptosporidium* and *Giardia*, microscopic organisms that can cause disease. Disease and syndromic surveillance continue to indicate that there have been no outbreaks of the diseases they cause, cryptosporidiosis and giardiasis, attributed to consuming tap water in New York City. *Cryptosporidium* and *Giardia* data are presented on page 14 of this report.

Federal and state law requires all water suppliers to notify their customers about the potential risks from *Cryptosporidium* and *Giardia*. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Some people may be more vulnerable to disease causing microorganisms, or pathogens 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 individuals, and infants, can be particularly at risk from infections. These people should seek advice from their health care providers about their drinking water.

EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia*, and other microbial contaminants are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

HILLVIEW RESERVOIR CONSENT JUDGMENT

The Hillview Reservoir is the final stop for drinking water from the Catskill/Delaware System before it enters the city's distribution system. The City and DEP entered into a Consent Decree and Judgment with the United States and New York State, effective May 15, 2019, which sets forth a schedule of compliance for the City to cover the Hillview Reservoir as required by the Long Term 2 Enhanced Surface Water Treatment Rule (40 C.F.R §141.714). DEP and the City complied with all 2023 commitments due under the Decree.

Hillview Reservoir

IS THERE LEAD IN MY DRINKING WATER?

New York City's award-winning tap water is delivered lead-free through 7,000 miles of lead-free aqueducts, tunnels, and water mains in the city's water supply system. However, homes built prior to 1961 may have lead service lines (which connect your house to the city's water main in the street), and some homes, regardless of the year they were built, could have household plumbing and internal fixtures that contain lead. Although New York City takes extensive steps to protect water in homes that may have lead in their plumbing, lead from plumbing may still be released into a home's drinking water. Lead levels at your home may be higher than at other homes in the community because of materials used in your home's plumbing. DEP is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components.

HOW CAN I FIND OUT IF I HAVE A LEAD SERVICE LINE?

Visit **nyc.gov/leadfree** to view an interactive map. This map offers historical information largely based on third party plumbing records, supplemented in some cases by information gathered during inspections.

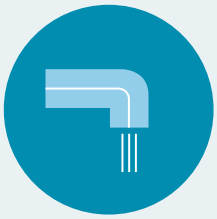
HOW CAN I TEST THE WATER IN MY HOME?

DEP offers free lead test kits to all New York City residents. Call 311 or visit **nyc.gov/apps/311** to request a free lead test kit. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at **epa.gov/safewater/lead**.

WHAT ARE THE HEALTH EFFECTS OF LEAD?

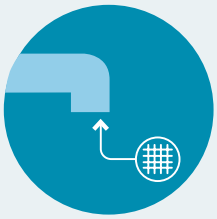
Exposure to lead can cause serious health problems, especially for pregnant women, infants, and young children. For more information, visit **nyc.gov/lead**.

HOW CAN I LIMIT MY LEAD EXPOSURE?



RUN YOUR TAP
for 30 seconds to 2 minutes before using water for drinking or cooking, when your water has been sitting for several hours.

Use Cold Water
for cooking, drinking, or preparing infant formula. Hot tap water is more likely to contain lead and other metals.



Remove & Clean
the faucet screen monthly (also called an aerator), where small particles can get trapped.

Hire
a licensed plumber to identify and replace plumbing fixtures and/or service line that contain lead.

DEP Scientists continuously sample and conduct analyses for hundreds of water quality parameters

HOW TO READ THE NEW YORK CITY 2023 DRINKING WATER QUALITY TESTING RESULTS

The following section of this report compares the quality of your tap water to federal and state standards for each parameter (if applicable). The monitoring results show that New York City's drinking water continues to be of excellent quality.

The following tables reflect the compliance monitoring results for all regulated and non-regulated parameters, the number of samples collected, the range of values detected, the average of the values detected, and the possible sources of the parameters, unless otherwise footnoted. The monitoring frequency of each parameter varies and is parameter specific. Data presented are for the Catskill/Delaware and Croton supplies, which were the only sources of water in 2023.

The table on page 15 represents those parameters monitored for, but not detected in any sample. Most of our data are representative of 2023 testing. Concentrations of parameters or contaminants do not change frequently.

THE NEW YORK CITY 2023 DRINKING WATER QUALITY TESTING RESULTS

Detected Conventional Physical and Chemical Parameters

This table summarizes the monitoring results for all detected parameters in 2023

PARAMETER	NYSDOH MCL (Highest Level Allowed)	EPA MCLG (Ideal Goal)	# SAMPLES	RANGE	AVERAGE	MCL VIOLATION	LIKELY SOURCES IN DRINKING WATER
Alkalinity (mg/L $CaCO_3$)	-		308	14 - 74	22	No	Erosion of natural deposits
Aluminum (µg/L)	50 - 200 (1)		309	8 - 57	15	No	Erosion of natural deposits
Barium (mg/L)	2	2	309	0.01 - 0.04	0.02	No	Erosion of natural deposits
Bromide (µg/L)	- (2)		8	8 - 35	20	No	Naturally occurring
Calcium (mg/L)	-		309	5 - 26	7	No	Erosion of natural deposits
Chloride (mg/L)	250		308	10 - 71	19	No	Naturally occurring; road salt
Chlorine Residual, Free (mg/L)	4 (3)		15,217	ND - 1.3	0.5	No	Water additive for disinfection
Chromium (µg/L)	100	100	309	ND - 2	ND	No	Erosion of natural deposits
Color - distribution system (color units - apparent)	-		13,894	3 - 350	7	No	Presence of iron, manganese, and organics in water
Color - entry points (color units - apparent)	15		1,320	3 - 11	6	No	Presence of iron, manganese, and organics in water
Copper (mg/L)	1.3 (4)	1.3	309	ND - 0.053	0.007	No	Corrosion of household plumbing; erosion of natural deposits
Corrosivity (Langelier index)	- (5)		279	-2.77 to -1.19	-2.22	No	
Fluoride (mg/L)	2.2	4	2,166	ND - 0.8	0.7	No	Water additive which promotes strong teeth; erosion of natural deposits
Hardness (mg/L $CaCO_3$)	-		308	17 - 102	26	No	Erosion of natural deposits
Hardness (grains/gallon[US]$CaCO_3$) (6)	-		308	1 - 6	2	No	Erosion of natural deposits
Iron (µg/L)	300 (7)		309	ND - 108	31	No	Naturally occurring
Lead (µg/L)	15 (4)	0	309	ND - 3 (8)	ND	No	Erosion of natural deposits; lab contamination
Magnesium (mg/L)	-		309	1 - 8.8	1.9	No	Erosion of natural deposits

Continued on next page

Detected Conventional Physical and Chemical Parameters (continued)

PARAMETER	NYSDOH MCL (Highest Level Allowed)	EPA MCLG (Ideal Goal)	# SAMPLES	RANGE	AVERAGE	MCL VIOLATION	LIKELY SOURCES IN DRINKING WATER
Manganese (µg/L)	300 [7]		309	ND - 58	19	No	Naturally occurring
Nitrate (mg/L nitrogen)	10	10	308	0.05 - 0.39	0.13	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
pH (pH units)	6.8 - 8.2 [9]		15,218	6.7- 8.8 [9]	7.3	No	
Phosphate, Ortho- (mg/L)	1 - 4 [9]		12,244	1.2 - 3.6	2.2	No	Water additive for corrosion control
Potassium (mg/L)	-		309	0.5 - 2.5	0.7	No	Erosion of natural deposits
Sodium (mg/L)	NDL [10]		309	8 - 49	13	No	Naturally occurring; road salt; water softeners; animal waste
Specific Conductance (µS/cm)	-		15,214	83 - 482	111	No	
Strontium (µg/L)	-		309	17 - 81	24	No	Erosion of natural deposits
Sulfate (mg/L)	250		308	3 - 35	7	No	Naturally occurring
Temperature (°F)	-		15,218	38 - 83	56	No	
Total Dissolved Solids (mg/L)	500 [1]		308	40 - 245	68	No	Metals and salts naturally occurring in the soil; organic matter
Total Organic Carbon (mg/L)	-		309	0.9 - 2.0	1.6	No	Organic matter naturally present in the environment
Total Organic Carbon - source water (mg/L)	- [2]		8	2.1 - 4.2	3.1	No	Organic matter naturally present in the environment
Turbidity [11] - distribution system (NTU)	5 [12]		13,388	ND - 5.4	1.0 [12]	No	Soil runoff
Turbidity [11] - source water (NTU)	5 [13]		-	-	2.3 [13]	No	Soil runoff
Turbidity [11] - filtered water (NTU)	0.3 [14]		-	-	0.5 [14]	No	Soil runoff
UV 254 (absorbance/cm)	-		360	0.013 - 0.043	0.031	No	Organic matter naturally present in the environment
Zinc (mg/L)	5		309	ND - 0.009	ND	No	Naturally occurring

Continued on next page

Detected Organic Parameters

PARAMETER	NYSDOH MCL (Highest Level Allowed)	EPA MCLG (Ideal Goal)	# SAMPLES	RANGE	AVERAGE	MCL VIOLATION	LIKELY SOURCES IN DRINKING WATER
Acetone (µg/L)	50		312	ND - 25[15]	ND	No	Occurs naturally and is used in production of paints, varnishes, plastics, adhesives, organic chemicals and alcohol.
Bromochloroacetic Acid (µg/L)	50		304	ND - 2.5	1.4	No	By-product of drinking water chlorination
Bromodichloroacetic Acid (µg/L)	50 [2]		80	1 - 5	3	No	By-product of drinking water chlorination
t-Butyl alcohol (µg/L)	50		312	ND-D[16]	ND	No	Used in dyes, drugs, and explosives
Chlorodibromoacetic Acid (µg/L)	50 [2]		80	ND - 0.6	ND	No	By-product of drinking water chlorination
Diethyl phthalate (µg/L)	50		42	ND - 0.7	ND	No	Plasticizer used in toothbrushes, toys, cosmetics, food packaging and aspirin
Haloacetic Acid 5 (HAA5) (µg/L)	60 [17]		304	6 - 63	45[17]	No	By-product of drinking water chlorination
Haloacetic Acid Brominated (HAA6Br) (µg/L)	- [2]		80	2 - 9	4	No	By-product of drinking water chlorination
Haloacetic Acid 9 (HAA9) (µg/L)	- [2]		80	31 - 82	53	No	By-product of drinking water chlorination
Hexachlorocyclopentadiene (µg/L)	5		20	ND-0.05	ND	No	Used in production of rubber adherents, flame retardants and pesticides
Methyl t-butyl ether (µg/L)	10		312	ND - 1.0[15]	ND	No	Releases from gasoline storage tanks
Methylene chloride (µg/L)	5		311	ND - 3.4	ND	No	Solvent in paint strippers and drug manufacturing, and propellant in aerosols
Total Organic Halogen (µg/L)	-		154	57 - 250	175	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) (µg/L)	80 [17]		329	1 - 77	42 [17]	No	By-product of drinking water chlorination

Detected Microbial Parameters

PARAMETER	TT (Highest Level Allowed)	EPA MCLG (Ideal Goal)	# SAMPLES	RANGE	# SAMPLES POSITIVE	AVERAGE	HIGHEST MONTH % POSITIVE	ASSESSMENT TRIGGERED	LIKELY SOURCES IN DRINKING WATER
Total Coliform Bacteria (% of samples positive/month)	5% [18]	0	9,650	-	76	-	3.1%	No	Naturally present in the environment
Heterotrophic Plate Count (CFU/mL)	-	-	11,875	ND - 135	220	ND	-	-	Naturally present in the environment

Continued on next page

Lead and Copper Rule Residential Tap Sampling

PARAMETER	NYSDOH AL	EPA MCLG (Ideal Goal)	90% OF YOUR LEVELS WERE LESS THAN	RANGE	# SAMPLES EXCEEDING AL	EXCEEDANCE	LIKELY SOURCES IN DRINKING WATER
Copper (mg/L)	1.3	1.3	0.183	0.008 - 0.374	0 out of 341	No	Corrosion of household plumbing
Lead (µg/L)	15	0	11	ND - 200	20 out of 341	No	Corrosion of household plumbing

Cryptosporidium and *Giardia* Source Water Sampling (19)

PARAMETER	EPA MCLG (Ideal Goal)	RESERVOIR	# SAMPLES	# SAMPLES POSITIVE	RANGE	LIKELY SOURCES IN DRINKING WATER
Cryptosporidium (oocysts/50L)	0	Kensico	52	6	0 - 3	Animal fecal waste
		Hillview	52	2	0 - 1	
		Croton	4	0	0	
Giardia (cysts/50L)	0	Kensico	52	25	0 - 10	Animal fecal waste
		Hillview	52	5	0 - 2	
		Croton	4	2	0 - 1	

UNITS AND ABBREVIATIONS

$CaCO_3$ = calcium carbonate

CFU/mL = colony forming units per milliliter

/cm = per centimeter

D = parameter is detected

°F = degrees Fahrenheit

µg/L = micrograms per liter (10^{-6} grams per liter)

µS/cm = microsiemens per centimeter

mg/L = milligrams per liter (10^{-3} grams per liter)

MPN/100mL = most probable number per 100 mils

ND = parameter is not detected

NDL = no designated limits

NTU = nephelometric turbidity units

/50L = per 50 liters

DEFINITIONS

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

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

Maximum Contaminant Level Goal (MCLG):
The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL):
The highest level of a disinfectant allowed in drinking water. The addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG):
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.

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

90th Percentile Value:
The values reported for lead and copper represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below the value. The 90th percentile is equal to or greater than 90 percent of the lead and copper values detected at your water system.

Not Detected Parameters

This table lists all parameters monitored for but not detected in 2023

Conventional Physical, Chemical and Microbial Parameters:

Antimony, Arsenic, Asbestos [20], Beryllium, Cadmium, Cyanide, *E. coli*, Gross alpha [20], Mercury, Nickel, Nitrite, Radium 228 [20], Selenium, Silver, Thallium, Uranium [20]

Principal Organic Contaminants:

Benzene, Bromobenzene, Bromochloromethane, Bromomethane, tert-Butylbenzene, n-Butylbenzene, sec-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 2,2-Dichloropropane, 1,2-Dichloropropane, 1,3-Dichloropropane, 1,1-Dichloropropene, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, p-Isopropyltoluene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, m,p-Xylene, o-Xylene

Specified Organic Contaminants:

Di(2-ethylhexyl)adipate, Alachlor, Aldicarb (Temik), Aldicarb sulfone, Aldicarb sulfoxide, Aldrin, Atrazine, Benzo(a)pyrene, Butachlor, Carbaryl, Carbofuran (Furadan), Chlordane, 2,4-D, Dalapon, 1,2-Dibromo-3-chloropropane, Di(2-ethylhexyl)phthalate, Dicamba, Dieldrin, Dinoseb, 1,4-Dioxane, Diquat, Endothall, Endrin, Ethylene dibromide (EDB), Glyphosate, Heptachlor epoxide, Heptachlor, Hexachlorobenzene, 3-Hydroxycarbofuran, Lindane, Methomyl, Methoxychlor, Metolachlor, Metribuzin, Oxamyl (Vydate), Pentachlorophenol, Perfluorooctanesulfonic acid (PFOS), Picloram, Polychlorinated biphenyls (PCBs), PCB 1016 Aroclor, PCB 1221 Aroclor, PCB 1232 Aroclor, PCB 1242 Aroclor, PCB 1248 Aroclor, PCB 1254 Aroclor, PCB 1260 Aroclor, Propachlor, Simazine, 2,3,7,8-TCDD (Dioxin), Toxaphene, 2,4,5-TP (Silvex), Vinyl chloride

Unspecified Organic Contaminants:

Acenaphthene, Acenaphthylene, Acetochlor, Acifluorfen, Allyl chloride, Ametryn, t-Amyl ethyl ether, tert-Amyl methyl ether, Anthracene, Atraton, Propoxur (Baygon),Bentazon, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Butylbenzylphthalate, alpha-BHC, beta-BHC, delta-BHC, Bromacil, Bromoform, 1,3-Butadiene, tert-Butyl ethyl ether, Butylate, Butylated hydroxytoluene (BHT), Caffeine, Carbon Disulfide, alpha-Chlordane, gamma-Chlordane, trans-Chlordane, Chlorfenvinphos, Chlorobenzilate, 2-Chlorobiphenyl, 4-Chlorobiphenyl, 1-Chlorobutane, Chlorodifluoromethane, 9-Chlorohexadecafluoro-3-oxanonesulfonic acid, Chloroneb, Chlorothalonil (Draconil, Bravo), Chlorpropham, Chlorpyrifos (Dursban), Chrysene, Cyanazine, Cycloate, DCPA(Dacthal), 2,4-DB, 2,4-DDD, 4,4'-DDD, 2,4-DDE, 4,4'-DDE, 2,4-DDT, 4,4'-DDT, DEET, delta-HCH, Diazinon, Dibenz[a,h]anthracene, Dibromoacetic acid, 3,5-Dichlorobenzoic acid, 2,4'-Dichlorobiphenyl, Dichlorprop, Dichlorvos (DDVP), Diethyl ether, Di-isopropyl ether, Diisopropyl methylphosphonate, Dimethipin, Dimethoate, Dimethylphthalate, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, Diphenamid, Disulfoton, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin aldehyde, EPTC, Ethion, Ethoprophos, Ethyl methacrylate, N-ethyl Perfluorooctanesulfonamidoacetic acid, Etridiazole, Fenarimol, Fluoranthene, Fluorene, Fluridone, 2,2',3,4,4',5,5'-Heptachlorobiphenyl, 2,2',3,4,4',5-Hexachlorobiphenyl, 2,2',3,4',5',6-Hexachlorobiphenyl, 2,2',4,4',5,5'-Hexachlorobiphenyl, Hexachloroethane, alpha-HCH, beta-HCH, gamma-HCH, Hexazinone, Indeno[1,2,3-cd]pyrene, Isophorone, Malathion, Methiocarb, Methyl acetate, Methyl iodide, Methyl parathion, N-methyl Perfluorooctanesulfonamidoacetic acid, Mevinphos, MGK-264 isomer a & b, Molinate, Naphthalene, Napropamide, Di-n-Butylphthalate, Nitrofen, Di-N-octylphthalate, trans-Nonachlor, Norflurzon, Oxyfluorfen, Paraquat, Parathion, Pebulate, Pendimethalin, 2,3,3',4',6-Pentachlorobiphenyl, 2,3',4,4',5-Pentachlorobiphenyl, Pentachloroethane, cis-Permethrin, trans-Permethrin, Permethrin (mixed isomers), Phenanthrene, Phorate, Phosphamidon, Profenofos, Prometon, Prometryn, Pronamide, Propazine, Pyrene, Simetryn, 2,4,5-T, Tebuconazole, Tebuthiuron, Terbacil, Terbuthylazine, Terbutryn, 2,2',3,5'-Tetrachlorobiphenyl, 2,2',5,5'-Tetrachlorobiphenyl, 2,3',4',5-Tetrachlorobiphenyl, Tetrachlorovinphos, Tetrahydrofuran, Thiobencarb, Triademefon, Tribufos, 2,4,4'-Trichlorobiphenyl, 2,2',5-Trichlorobiphenyl, Trifluralin, Vernolate, Vinclozolin

Fourth Unregulated Contaminant Monitoring Rule (UCMR4) [2] Parameters:

Anatoxin-a, 1-Butanol, Butylated hydroxyanisole, Cylindrospermopsin, Germanium Total ICAP/ MS, 2-Methoxyethanol, Monobromoacetic acid, 2-Propen-1-ol, Quinoline, o-Toluidine, Total Microcystins, Tribromoacetic acid

Fifth Unregulated Contaminant Monitoring Rule (UCMR5) [21] Parameters:

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS), 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS), 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS), 1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS), Hexafluoropropylene Oxide Dimer Acid (HFPO-DA), Lithium, Nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorobutanesulfonic acid (PFBS), Perfluorobutanoic acid (PFBA), Perfluorodecanoic acid (PFDA), Perfluorododecanoic acid (PFDoA), Perfluoroheptanesulfonic acid (PFHpS), Perfluoroheptanoic acid (PFHpA), Perfluorohexanesulfonic acid (PFHxS), Perfluorohexanoic acid (PFHxA), Perfluorononanoic acid (PFNA), Perfluorooctanesulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), Perfluoropentanesulfonic acid (PFPeS), Perfluoropentanoic acid (PFPeA), Perfluoroundecanoic acid (PFUnA), N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA), N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA), Perfluorotetradecanoic acid (PFTA),Perfluorotridecanoic acid (PFTrDA)

2023 MONITORING DATA FOOTNOTES

(1) EPA Secondary MCL: NYSDOH has not set an MCL for this parameter.

(2) Monitored for under the Fourth Unregulated Contaminant Monitoring Rule (UCMR4) in 2018 and 2019. UCMR4 included source water monitoring for bromide and total organic carbon; EPA has not established an MCL for these parameters.

(3) Value represents MRDL, which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. The MRDL is enforceable in the same manner as an MCL and is the calculated running annual average. Data presented are the range of individual sampling results and the highest of the four quarterly running annual averages.

(4) Action Level (not an MCL) measured at-the-tap. The data presented in this table were collected from sampling stations at the street curb. For at-the-tap monitoring, see the Lead and Copper Rule Residential Tap Sampling table.

(5) A Langelier Index of less than zero indicates corrosive tendencies.

(6) Hardness of up to 3 grains per gallon is considered soft water; between 3 and 9 is moderately hard water.

(7) If iron and manganese are present, the total concentration of both should not exceed 500 μg/L.

(8) Lead was only detected in one sample on 12/5/23 at site 1S07 (Highbridge, 10452) but likely due to lab contamination.

(9) NYSDOH established Optimal Water Quality Parameters (OWQP) under the Lead and Copper Rule which includes a range for pH and ortho-phosphate which are presented here. The reported average value for pH is the median value. One low pH value of 6.7 was collected from site 3ISL3 (Ward's Island, 10035) on 1/12/23. The pH was above 8.2 in 3 samples collected from site 1SCHA (Van Cortlandt Village, 10463): 8.3 on 2/13/23, 8.4 on 2/14/23, and 8.4 on 2/15/23, one sample from site 77650 (Queens Village, 11429) 8.4 on 10/20/23, and one sample from site 3ISL4 (Randall's Island, 10035) 8.8 on 3/9/23.

(10) Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.

(11) Turbidity is a measure of cloudiness of the water. Turbidity is monitored because it is a good indicator of water quality, because high turbidity can hinder the effectiveness of disinfection, and because it is a good indicator of the effectiveness of our filtration system.

(12) This MCL for turbidity is the monthly average rounded off to the nearest whole number. Data presented are the range of individual sampling results and the highest monthly average from distribution sites which was in July 2023.

(13) This MCL for turbidity is on individual readings taken every four hours at the unfiltered Catskill/Delaware source water entry point. Value presented is the highest individual sampling result which occurred on 6/30/23.

(14) This is a TT (performance standard) for the Croton Filtration Plant that > 5% of measurements/month must not exceed. The value presented is the highest single combined filter effluent turbidity measurement which occurred on 10/16/23. In 2023, 99.999% of turbidity results were <0.3 NTU.

(15) Acetone and Methyl t-butyl ether were only detected in one sample on 7/5/23 at site 26850 (Seagate, 11224).

(16) t-Butyl alcohol was only detected in one sample on 5/2/23 at site 77650 (Queens Village, 11429) but believed to be lab contamination. Results are only reported as detected (D) or not detected (ND).

(17) The MCLs for HAA5 and TTHMs are the calculated locational running annual average (LRAA). The data in the Range column are the minimum and maximum values of all sample sites monitored in the distribution system whether for compliance purposes or not. The values in the Average column are the highest LRAA.

(18) This is a TT that triggers a Level 1 assessment if exceeded.

(19) DEP collected samples of water leaving New Croton Reservoir and Kensico Reservoir, prior to chlorination and UV disinfection, and leaving Hillview Reservoir, prior to secondary disinfection with chlorine, and analyzed using EPA Method 1623.1.

(20) NYSDOH allows monitoring for these contaminants less frequently than once per year. These data, though representative, are from 2020 except for radium 228 which were from 2021.

(21) Monitoring for the Fifth Unregulated Contaminant Monitoring Rule (UCMR5) commenced in the 4th quarter of 2023.

CONTACT INFORMATION

Public Water System Identification Number (PWSID) NY7003493

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
Rohit T. Aggarwala, Commissioner // 718-595-3000 // nyc.gov/dep
59-17 Junction Blvd, Flushing, NY 11373

NEW YORK CITY WATER BOARD
Visit nyc.gov/waterboard for a list of upcoming meetings and information about opportunities to participate in decisions that affect water quality.

CONTAMINANTS QUESTIONS
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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

CRYPTOSPORIDIUM AND *GIARDIA* QUESTIONS
DOHMH Bureau of Communicable Diseases // 347-396-2600

CUSTOMER BILLING QUESTIONS
DEP Customer Service // 718-595-7000 // nyc.gov/dep

LEAD IN DRINKING WATER QUESTIONS
DEP Lead Unit // 718-595-5364 // nyc.gov/dep/leadindrinkingwater

HEALTH QUESTIONS (WATER SUPPLY-RELATED)
DOHMH // Call 311 or 212-NEW YORK (639-9675) // nyc.gov/apps/311
NYSDOH Bureau of Water Supply Protection // 518-402-7650 // health.ny.gov

REPORT UNUSUAL COLOR, TASTE OR ODOR OF DRINKING WATER
Call 311 or 212-NEW YORK (639-9675) // nyc.gov/apps/311

REPORT POLLUTION, CRIME, OR TERRORISM IN THE WATERSHED
DEP Police and Security // 888-H2O-SHED (426-7433) // nyc.gov/dep

REQUEST ADDITIONAL COPIES OF THIS REPORT OR VIEW REPORT ONLINE
Call 311 or 212-NEW YORK (639-9675) // nyc.gov/waterqualityreport

TTY SERVICES
Call 212-504-4115

TEXT 311
311-692

This report contains important information about your drinking water.

Translate it, or speak with someone who understands it.

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

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

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

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

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

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

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

এই প্রতিবেদনে আপনার পানীয় জল সম্পর্কে গুরুত্বপূর্ণ তথ্য রয়েছে

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

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

NYC Environmental Protection

Visit us at **nyc.gov/dep**

Follow us @**NYCWATER** on Facebook, Instagram, and X (Twitter)

STILL QUESTIONING YOUR OFFICE TAP-WATER?

Call us now and schedule your FREE water TDS test & consultation with one of our water purification specialists.

CALL 718-313-0113

or Simply scan the QR code above!

HYDR8